Infor Quality Management User Guide

Release 10.24.7.X

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About this guide

This guide describes the features and functions of Infor Quality Management.

Intended audience

This guide is intended for any user of IQM.

Contacting Infor

If you have questions about Infor products, go to Infor Concierge at https://customerportal.infor.com/csmcore/ and create a support incident.

The latest documentation is available from the Infor Documentation Central. To access documentation on the Infor Documentation Central, select All Products > Visual. We recommend that you check this portal periodically for updated documentation https://docs.infor.com.

Chapter 1: Common features

This section describes how to use the interface. It also describes common functions found in multiple areas of IQM.

Signing in

1 In a browser, navigate to the URL for IQM..

2 Specify this information:

User Name
Specify your user ID.

Password
Specify your password.

Configuration
Click the arrow and select the configuration that you are signing in to.

3 Click **Sign In**.

Signing out

You should always formally sign out of IQM. If you close the browser without signing out, orphan records can be created in session management.

The process to use to sign out depends upon the layout that you select. Either select **System > Form > Sign Out** or **Form > Sign Out**.

Preparing the interface

Perform the procedures in this section to prepare the interface for use.

Pinning the IQM menus

You access IQM forms from menus. We recommend that you pin the menus to the top of the window.

To pin the menus, select **Master Explorer > Pin**.

Selecting the IQM theme

To display the interface correctly, you must select the IQM theme.

1. Select **System > View > User Preferences**.
2. Click **Layout**.
3. In the Theme field, select **IQM**.
4. Click **OK**.
5. Sign out of IQM and then sign back into IQM.

Selecting a default language

Perform this task to view the interface in a language other than English.

To fully display translations for the interface, you must also specify the default language on the Users form. If you do not have access to the Users form, contact a system administrator for assistance.

1. Select **Administration > Users**.
2. Open the record for your user ID.
3. Click the **Login Information** tab.
4. In the **Default Language** field, specify the ID of the language.
5. Click **Save**.
6. Select **System > View > User Preferences**.
7. In the Language section, select the language that you specified in step 4.
8. Click **OK**.
9. Sign out of IQM and then relaunch it. The language translation is applied.

Personalizing IQM

Use personalization features for these tasks:

- Setting up your viewable sites
- Setting up default Internet settings

Selecting viewable sites

After the system administrator determines which sites you are allowed to use, you can choose which sites you want to use in the system. The sites you choose to use are referred to as viewable sites. When you click a Site ID arrow, only the sites you have specified as viewable are presented.

1. Select **Administration > My Viewable Sites**.
2. Select the **Viewable** check box to view the site in IQM.
3. Click the **Save** button.

Configuring the browser

Use the Web Setup form to specify browser settings. The information that you specify is used when you click the Internet button on the toolbar in many IQM forms.

When you use IQM in the web interface, the browser that you used to access IQM is used as your Internet browser. You can specify a default address to open when you click the Internet button. The website is opened in a new tab.

If you are using the WinClient interface for automatic data collection, specify the browser name and location in addition to the default address. When you click the Internet button, the default address is opened in the browser that you selected.

1. Select **Administration > Web Setup**.
2. Specify this information:

   Browser Name
   Specify the name of the browser.

   Location
   Specify the file location of the browser executable. To search for a location, click the Browse button.

   Default Address
   Specify the default URL to open.

3. Click the **Save** button.

Opening existing records

You can use these methods to open an existing record:

- Filter in Place. Use this function to search for a record based on any field in the form. For example, you can find a record based on criteria that you specify in the Customer ID field.
- Primary collection. Use this function to select a record from a list. By default, the primary collection displays the first 200 records for a form. You can display more records.

Using Filter in Place

1. Open the form where the record is created.
2. Click **Filter in Place**.
3. Specify search criteria in the form fields. You can specify information in more than one field. Optionally, you can use an asterisk as a wild card.
4. Click **Filter in Place**. The matching records are displayed in the collection.
5. Select the record to open.

Using the primary collection to open records

1. Open the form where the record is created.
2. Ensure that the Filter in Place function is not active.
3. Click **Refresh**. The first 200 records in the database are displayed in the primary collection. To display additional records, click **Get More Rows**.
4. Select the record.

Finding information to enter into fields

For certain fields, you can find the ID to use in the field. To see if a field supports this function, right-click in the field. If **Find** is an option in the right-click menu, select it to open the **Query** form.

When you access the **Query** form, the primary criteria used to find the ID for the field is displayed. Primary criteria are the most common criteria that you would use to find the ID.

If the primary criteria do not include the terms you want to use for your search, use the **Additional Criteria** tab. The Additional Criteria tab contains all possible criteria that you could use to find a particular ID.

If you specify information in both primary and additional criteria, then both the primary and additional criteria are used when you run the query.

You can use logic operators in your search. These operators are supported:

Like
Use this operator if you are unsure of the exact value. When you select this operator, you can use an asterisk as a wildcard. For example, if you know that this value begins with the letter B, specify **`B*`**.

=
Use this operator if you know the exact value.

>
Use this operator to search for values greater than the value that you specify.

<
Use this operator to search for values less than the value that you specify.

<>
Use this operator to search for values greater than or less than the value that you specify. When you execute your query, all values other than the value you specify are displayed.

Using the query form

1. In a field that supports the use of query, right-click and select **Find**.
2. In the Primary Criteria tab, specify search terms in the fields that you want to use to find an ID. You can use these operators:

   Like
   Use this operator if you are unsure of the exact value. When you select this operator, you can use an asterisk as a wildcard. For example, if you know that this value begins with the letter B, specify **B***.

   =
   Use this operator if you know the exact value.

   >
   Use this operator to search for values greater than the value that you specify.

   <
   Use this operator to search for values less than the value that you specify.

   <>
   Use this operator to search for values greater than or less than the value that you specify. When you execute your query, all values other than the value you specify are displayed.

3. Optionally, click the **Additional Criteria** tab. Use this tab if the Primary Criteria tab does not contain the fields that you want to use in your search. If you enter information on both tabs, then the query results match the criteria on both tabs.
4. To add the search criteria with an OR statement, select the **OR instead of AND with previous clause check** box. To add the search criteria with an AND statement, clear the **OR instead of AND with previous clause** check box. If you select the check box, the search result can meet either the first criteria you specify or the second criteria. If you clear the check box, the search result must meet both criteria.
5. Click **Add**.
6. Click **Refresh**. The results of your query are displayed.
7. To select a value, select the table row and then click **Ok**.

   To clear the query and return the full set of results, click the **Clear** button and then click the **Refresh** button.

Adding information on the fly

On most IQM forms, you specify information that you define on other forms in the system. If the information you want to use in a field does not exist, you can right-click the field to open the form that you use to create the information.

1 Right-click in the field and select **Add**.
2 The maintenance form used to create the ID is opened. Create the ID, and then click **Save**.
3 The ID you created is inserted in the field.

Viewing details

After you specify a code or ID in a field, you can open the maintenance form used to create the code or ID to review complete information. To open the maintenance form associated with a code or ID, right-click in the field and select **Details**.

Attaching documents

To provide additional detail about records in IQM, you can attach one or more documents. Many file types are supported. Supported file types include PowerPoint presentations, Word files, Excel spreadsheets, graphics files, sound files, and videos.

In many IQM forms, you can attach documents to the main record or to a particular portion of the record. To attach a document at a particular level, you must first place your cursor in the correct location before you click the Document Attachments button. For example, in Product Maintenance, you can attach a document to the product at the entity level or at the site level. To attach a document to the product at the site level, your cursor must be in the Site tab. To attach a document to the product at the entity level, your cursor must NOT be in the Site tab.

When you attach a document, you can either embed the document or link the document. If you embed the document, a copy of the document is imported into your database. If you change the document outside of IQM or move the original file location, the embedded document in IQM is not affected. When you embed documents, you can browse for the document to embed.

If you link the document, then the file path to the document is imported into your database. If you change the document outside of IQM, the changes you make are displayed in IQM the next time you access the document. If you move the file location of the document, the link to IQM is broken and you can no longer access the document in IQM. When you link documents, you must manually specify the file path for the link.

Embedding documents

An embedded document is imported into your database.

1. Open the record to which you want to attach a document. If you are attaching the document to a particular portion of the record, place your cursor in the appropriate location.
2. Click the **Documents** button.
3. Click the **New** button.
4. Click **Embed**.
5. Click **Import**.
6. Click **Browse**, and locate the file to embed.
7. Click **Upload**.
8. In the Attached Documents form, specify this information:

   Document Name
   Specify a name for the document.

   Description
   Specify a description of the document.

   Document Type
   Specify the type of document. After you specify a document type, the File Extension and Media Type are inserted. The document type must be defined in **Administration > Codes > System Document Types**.

9. Click the **Save** button.

Linking documents

When you link a document, a reference to the document is stored in your database instead of the document itself. If you move the document to a new location in your file system, the link is broken.

1. Open the record to which you want to attach a document. To attach the document to a particular portion of the record, such as at the site level, place your cursor in the appropriate location.
2. Click the **Documents** button.
3. Click **Link**.
4. In the Link field, specify the link to the document. You can specify a URL or a file path. You must manually type the path. You cannot browse for the path.
5. Specify this information:

   Document Name
   Specify a name for the document.

   Description
   Specify a description of the document.

Document Type
Specify the type of document. After you specify a document type, the File Extension and Medial Type are inserted. The document type must be defined in **Administration > Codes > System Document Types**.

6 Click the **Save** button.

Viewing documents

To view the documents attached to a record:

1 Open the record.
2 Click the **Documents** button.
3 In the collection, select the document to view.
4 Click **View**.
   - If the document is embedded, then the document is opened in the application associated with the file extension.
   - If the document is linked with an HTTP or FTP path, then the document is opened in a new browser tab.
   - If the document is linked with a UNC or mapped drive path, then a new browser tab is opened. Click the link in the new browser tab to open the document.
   - If the document is linked with a local file path, then a new browser tab is opened. Click the **Copy Link** button and paste it into the browser address field to open the document.

Attaching existing documents

If you have attached a document to a record, you can attach the same document to a second record without re-uploading the document. You can use this procedure with documents that have been embedded. You cannot use this procedure with linked documents.

1 Open the record to which you want to attach an existing document.
2 Click **Documents**.
3 In the Find Documents section, click the **Filter** button next to the table.
4 Specify the filter criteria to use.
5 In the toolbar, click **Filter in Place**.
6 Select the row that contains the document that you are attaching to the current record.
7 Click the **Link** button next to the table.
8 Click **Save**.

Jump feature

Use the Jump feature to access forms that are related to the current form. For example, if you are working with a document record in Document Maintenance, you can open Document Audits Maintenance or Document Change Request Maintenance.

When you use the Jump feature to open another form, the ID you are working with is inserted into the new form. For example, presume that you are viewing a document with an ID of DOC123 in Document Maintenance. If you use the Jump feature to open the Document Audits Maintenance form, the form is opened with DOC123 specified in the Document ID field.

My To Do list

When you assign a record to an employee, the record is added to the employee's To Do list. You can use the To Do list to monitor tasks and mark them complete. You can open records directly from the My To Do list.

When you assign an employee responsibility in these forms, an item is added to the To Do List:

- APQP Maintenance
- APQP Step 1
- APQP Step 2
- APQP Step 3
- APQP Step 4
- APQP Step 5
- Check In by Inspection Plan
- Check In/Out Maintenance
- Check Out by Inspection Plan
- Corrective Actions Maintenance
- Course Schedules Maintenance
- Customer Feedback Maintenance
- Device Maintenance
- Document Change Request
- Document Check In/Out Maintenance
- Document Maintenance
- Equipment Maintenance
- Equipment Type Maintenance
- FMEAs Maintenance
- Input Maintenance
- Nonconformance Maintenance
- PPAP Maintenance
- Process Audit Maintenance
- Process Change Request
- Process Data Collection

- Process Data Collection Archive
- Process Maintenance
- Product Audit Maintenance
- Product Change Request
- Product Data Collection
- Product Data Collection Archive
- Product Maintenance
- Project Maintenance
- Supplier Feedback Maintenance
- Usage Maintenance
- Work Order Maintenance

Using My To Do list

To view items on your To Do list:

1 Select **Administration > My To Do List**.

2 Specify this information:

Entity ID
Specify the entity where the employee works.

Employee ID
Specify your employee ID, or specify ID of the employee whose tasks you want to view.

Start Date and End Date

To view tasks due during a certain time range, specify a Start Date and an End Date. Tasks that are due between the two dates you specify, inclusive, are displayed in the table. Tasks due within the advanced notice interval are also displayed. To determine whether a task is due within the advanced notice interval, the number of days specified for the advanced notice is subtracted from the due date of the task. If the result is on or before the end date that you specified, the task is included in the table.

To view all tasks assigned to an employee, leave the Start Date and End Date blank.

To view tasks due after a certain date, specify a Start Date only.

To view tasks due before a certain date, specify an End Date only.

If tasks do not have a due date, they are only displayed if you leave either the Start Date, the End Date, or both blank.

3 This information is displayed in the table:

Reviewed
If you have previously viewed the task during the current session, this check box is selected. This check box is read-only.

Module
The module where the task was created is displayed.

Name
The name of the task. Generally, the name is the same as the name of the form where the task was assigned. Sometimes, additional information is displayed. For example, if the employee was assigned to the verification in Nonconformance Maintenance, then Nonconformance - Verification is displayed.

ID
The ID of the record is displayed.

Due Date
The date the task is due is displayed.

Description
A description of the task is displayed.

4 To review a task, double-click it. The task is opened in the form that is used to maintain the record. After you double-click an item, the **Reviewed** check box is selected.

5 To complete a task, close or complete the record. The task is removed from My To Do List.

Specifying preferences for the To Do List

Use this form to set up advanced warning intervals for tasks. A task with advanced warning interval is displayed in the To Do List before the task's due date. To determine when a task is displayed in the My To Do List, the advanced warning interval is subtracted from the task's due date. If the date is before the End Date filter specified on the My To Do List, then the task is displayed in the list.

1 Select **Administration > My To Do List**.

2 Right-click and select **Preferences**.

3 For each record type, specify the amount of advanced notice. To set all records to the same value, specify a value in the **Set All Advance Notices To** field.

4 Click **Ok**.

Interaction

Use these features to interact with your customers, suppliers, and co-workers.

Emailing a contact

Use the Email Address link to prepare an email addressed to the contact. This link is available in Contacts Maintenance, Customer Maintenance, and Supplier Maintenance.

When you click the Email Address link, an email that is addressed to the contact is opened. The validity of the email address is not verified.

If you have selected the **Do Not Email** check box in Contact Maintenance for this email address, you can still address an email to the contact. The **Do Not Email** check box is informational only.

Emailing an IQM record

Before you can send an email, a system administrator must set up the function.

See "Email Configuration" in the *Infor Quality Management System Administration Guide.* and chapter 6 of the *Infor Quality Management Installation Guide.*

To email a record to a contact:

1. With the record open in its maintenance form, right-click and select **Email**. Do not select the **Email for current** menu item.
2. Specify this information:

   To
   Specify the contacts to whom you are sending the email. To view a list of contacts, click the **To** button. A list of emails that have been added to customer, supplier, and employee records is displayed. You can also manually specify an email.

   CC
   Specify the contacts to whom you are sending a copy of the email.

   Subject
   Specify the subject of the email. If you are using the default configuration, the name of the form is inserted.

   Message
   Specify the message. If you are using the default configuration, basic information from the record is inserted.

3. To attach a file, right-click and select **Attach File**
4. Specify the file to attach. Click **Browse** to locate a file. Ensure that the type of file that you select has been set up in Mongoose system documents.
5. To send the message, click **Send Message**. To send the message and close the form, click **Send Message and Close**.

Reporting

IQM features over 60 standard reports. Use the procedures described in this section to generate them.

Viewing My Reports

Use the My Reports form to access all IQM reports.

Before you can view reports, a system administrator must complete setup procedures.

See chapter 6 in the *Infor Quality Management Installation Guide*.

You can access reports in these ways:

- Click the **My Reports** toolbar button.
- Right-click and select **My Reports**.

When you access the My Reports form, the form is filtered to the module you were viewing when you accessed the form. To view reports for a different module, click the **Module ID** arrow and select the module.

To generate a report, click the report link. Specify the criteria for the report, and the click the **Print** button.

Selecting multiple entities and sites

If you have access to multiple entities and sites, you can generate reports for more than one entity or more than one site. To select more than one entity or site, press the CTRL key and then click the entity or site to include in the report.

Canceling reports

If you cancel a report before the report is displayed, then the Infor Framework TaskMan service must be restarted before you can generate another report.

Saving default report settings

After you specify the criteria for the report, you can save the criteria as the default setting for the report. After you specify the criteria, select the **Save as Default** check box. When you next access the report, your default settings are selected. To specify different default settings, specify the new criteria and then select the **Save as Default** check box again.

Quick reports

In a form that uses quick reports, select a record. Click the **Quick Print** button.

Use the Quick Reports form to generate a report for a single record in your database.

Chapter 2: Setting up

Use the procedures in this section to set up common codes, specify global tenant settings, create entities, and create sites.

Codes

Codes are used in IQM to classify and describe records. For example, you use customer type codes to classify your customers. For each code type, you define the codes to use.

Certain code types are user-defined. User-defined code types have a suggested use, but you can redefine these code types to be used for any purpose. For example, the suggested use of the Business Unit code type is to identify the business unit associated with a particular record. You can change the label of the Business Unit code type and use the code for a different purpose.

Use User Defined Label Maintenance to change code labels.

This table shows the codes, how they are used, and where they are used:

Code	Description	Where used
Action Type	Categorizes corrective actions	Corrective Actions Maintenance
Attribute	Identifies characteristics of the product in an input or output.	Process Maintenance Project Maintenance
Audit Type	Classifies audits. For example, the audit type identifies how an audit is conducted or the subject matter of the audit.	Audits Maintenance
Breakdown Cause	Identifies the reason that a piece of equipment requires repair.	Work Order Maintenance
Business Unit	User-defined code type. By default, identifies areas of your company.	Multiple forms

Code	Description	Where used
Calibration Major Location	User-defined code type. By default, identifies where a device is calibrated. Examples of calibration major locations are building names or floors within buildings. Use calibration major locations in conjunction with calibration minor locations to describe a specific location.	Calibration Maintenance
Calibration Minor Location	User-defined code. By default, identifies where a device is calibrated. Examples of calibration minor locations include rooms within buildings or particular locations on shop floors. Use calibration minor locations in conjunction with calibration major locations to describe a specific location.	Calibration Maintenance
Category	Defines product characteristics.	Product Maintenance
Cause	Defines the cause of the nonconformance	Nonconformance Maintenance
Change Reason	Identifies the reason that a change to a document, product, or process is required.	PPAP Maintenance Document Change Request Product Change Request Process Change Request
Change Type	Identifies the type of change to make to a document, product, or process.	PPAP Maintenance Document Change Request Product Change Request Process Change Request
Chart Type	Identifies the type of chart to use in product inspection plans and process worksheets	Product Inspection Plan Process Maintenance
Classes	Identifies characteristics that can use the same sampling plan.	FMEA Maintenance Customer Maintenance Product Maintenance Sampling Plans NCM Statistics
Commodity Type	Groups products with similar characteristics.	Product Maintenance

Code	Description	Where used
Country	Identifies the countries that you use in addresses.	Anywhere addresses are used
Customer Type	Categorizes customers, for example, by industry.	Customer Maintenance
Degree	Identifies academic credentials.	Employee Maintenance
Design Responsible	Identifies the department responsible for designing failure mode processes.	FMEA Maintenance
Disposition Type	Identifies how to resolve a nonconformance.	Nonconformance Maintenance
Document Type	Categorizes documents. You can also create document types in Document Type Maintenance.	Document Maintenance Document Type Maintenance
Status Maintenance	Identifies the current status of a device.	Device Maintenance
Equipment Status	Identifies the current status of a piece of equipment.	Equipment Maintenance
Feedback Type	Classifies the input that you receive from customers and vendors.	Customer Feedback Maintenance Supplier Feedback Maintenance
Finding Type	Classifies audit results.	Audit Maintenance
Frequency	Identifies usage units of measure, such as weeks, pieces, shifts, and work orders.	Inspection Plans Sampling Plans Device Maintenance Device Type Maintenance Equipment Maintenance

Code	Description	Where used
Function	Identifies an employee's role in your company. Also used to identify the audience for a dictionary term, document, or course.	Job Description Maintenance Employee Maintenance Document Maintenance Document Type Maintenance Product Maintenance Product Type Maintenance Process Maintenance Dictionary Terms Maintenance Course Maintenance
Honorifics	Identifies terms of address.	Contact Maintenance
Input Type	Categorizes the input that you receive from customers, suppliers, and employees.	Input Maintenance
Inspection Plan Level	Identifies characteristic information for product inspection plans.	Product Inspection Plans Maintenance
ISO Unit of Measure	Identifies units of measure.	Multiple pages
Job	Identifies jobs performed in your company, for example, manager, associate, and engineer.	Job Description Maintenance Employee Maintenance Document Maintenance Document Type Maintenance Product Maintenance Product Type Maintenance Dictionary Terms Maintenance Course Maintenance
Location Found	Identifies where a nonconformance is found.	Nonconformance Maintenance
Location Generated	Identifies where a nonconformance is generated.	Nonconformance Maintenance

Code	Description	Where used
Major Location	User-defined code. By default, identifies when an object is located or a course is held, for example, building names or floors within buildings. Used in conjunction with minor locations.	Course Maintenance Document Maintenance Equipment Maintenance Lot Maintenance PPAP Maintenance Product Maintenance Projects Maintenance Spare Part Maintenance
Major	Identifies a course of study.	Employee Maintenance
Measurement Base	Identifies the base against which you compare actual quality costs, for example, unit, labor, and sales.	Measurement Base Maintenance
Minor Location	Identifies where an object is located or a course is held, for example a room number in a building or a particular location on a shop floor. Used in conjunction with major locations.	Course Maintenance Document Maintenance Equipment Maintenance Lot Maintenance PPAP Maintenance Product Maintenance Projects Maintenance Spare Part Maintenance
NCM Type	Classifies nonconformance records.	Nonconformance Maintenance
Priority Code	Classifies the importance of a change to make to a process, product, or document. Also classifies the importance of a project.	PPAP Maintenance Document Change Request Product Change Request Process Change Request Project Maintenance
Product Code	Identifies the inputs and outputs of a process or project.	Process Maintenance Project Maintenance
Product Document Type	Identifies categories of files that you can attach to forms or records.	
Product Type	Categorizes products.	Product Maintenance Product Type Maintenance
Project Status	Identifies stages of projects.	Project Maintenance

Code	Description	Where used
Project Type	Categorizes projects.	Project Maintenance
Reason for Leaving	Identifies the reason that an employee left a previous job.	Employee Maintenance
Relationship	Identifies an employee's personal relationship with another person.	Employee Maintenance
Source	Categorizes the source of a relationship with a customer or supplier, for example, referral, direct mail, or internet.	Customer Maintenance Supplier Maintenance
State	Used in addresses.	Anywhere addresses are used
Sub System	Identifies the portion of the system that is analyzed for failure modes.	FMEA Maintenance
Subject	Identifies the topic of an item.	Customer Feedback Supplier Feedback Employee Input Document Maintenance Corrective Action Maintenance Nonconformance Maintenance
Supplier Type	Categorizes suppliers.	Supplier Maintenance
System	Identifies the system that is analyzed for failure modes.	FMEA Maintenance
System Document Type	Identifies the types of documents that you link to or embed in records. This is a Mongoose framework code.	Anywhere where documents are attached or embedded.
Terminating Character Code	Identifies the character that indicates the end of a message sent by a device.	Device Driver Maintenance
Territory	Identifies the general geographic location of suppliers and customers.	Customer Maintenance Supplier Maintenance
Tool ID	Identifies project tools, for example, software, hand tools, and flow charts	Project Maintenance
Unit	Identifies units of measure in product characteristics.	Customer Maintenance Supplier Maintenance Bias Studies

Code	Description	Where used
Usage Frequency	Identifies types of usage, for example, hourly, weekly, and work orders performed.	Device Type Maintenance PM Work Orders

Adding codes

Use the forms available in the Codes menu to set up basic codes used throughout IQM.

Most codes consist of an ID and a description. This table shows the codes that require additional information:

Code	Additional information
Business Unit	Select a status. You can select Open or Closed. You cannot select Deleted
Country	Add ISO country codes from the drop-down list to the Country table. You cannot create user-defined country codes. Only country codes formally added to the Country table are available for selection in IQM.
Equipment Status	Select the **Process PM Work Orders** check box if work orders for preventive maintenance activities can be generated for equipment with the status.
Product Type	Select **Administration > Codes > Product Types** to define the ID and description. Select **Documentation > Product** to complete the product record.
Subject	In the Applies to section, specify the forms where the subject can be used. You can select these options: Customer, Supplier, Employee, Collect, Document. Add rows to the table to specify additional forms.
Usage Frequency	Specify a value in the **Usage Type** field if you use the usage frequency to generate work orders for preventive maintenance activities. If you use a usage frequency that does not have a usage type, then work orders cannot be generated.

1. Select **Administration > Codes**, and then select the code type to set up.
2. Click the **New** button.
3. Specify the code and the description.

4 If necessary, specify additional information.
5 Click the **Save** button.

Deleting codes

1 Select **Administration > Codes** and then select the type of code to delete.
2 Select the code.
3 Click **Delete**.
4 Click **Save**.

Selecting currencies to use in IQM

Use Currency Maintenance to select the currencies that are available for use in IQM. Selecting currencies in currency maintenance is the first step in the process. After you set up currencies, you must assign them to your entities as tracking currencies. Then, you must specify which tracking currency the entity's child sites use.

1 Select **Administration > Currency**.
2 In the Currency ID field, select the currency to use. You must select an ISO currency code from the list. You cannot specify a custom code.
3 Click the **Save** button.

Specifying entity tracking currencies

A tracking currency is a currency that an entity uses. The sites that belong to the entity can only use one of the entity's tracking currency as the site currency.

You must first specify the currencies to use in IQM before you can assign tracking currencies.

See Specifying currencies to use in IQM on page 46.

Use the Tracking Currency window in Currency Maintenance to assign the same currency to multiple entities. For example, if Entity A and Entity B both use USD as a tracking currency, use the Tracking Currency window in Currency Maintenance to assign both Entity A and Entity B to USD.

To assign multiple currencies to a single entity, use the Tracking Currency window available in Entity Maintenance. For example, if Entity A uses both USD and EUR as tracking currencies, you can more easily set up this relationship in Entity Maintenance.

See Specifying the entity tracking currency on page 58.

1 Select **Administration > Currency**.
2 In the header, specify the currency ID to use as a tracking currency.

3 Right-click and select **Currency Tracking**.
4 In the Entity ID field, specify the entity that tracks this currency.
5 Exit the linked form to return to the parent form.

Specifying exchange rates

After you select the currencies to use in IQM, you can specify exchange rates between the currencies. You are not required to set up exchange rates.

When you set up an exchange rate, the reciprocal exchange rate is calculated for you.

To specify exchange rates:

1 Select **Administration > Currency**.
2 In the header, specify the currency ID whose rates you are setting up. The currency you select is the "from" currency in the exchange rate. In the Exchange Rates section, specify this information:

Effective Date
Specify the date the exchange rate takes effect.

To Currency ID
Specify the "to" currency for the exchange rate. This is the currency to which you are converting the currency in the header. For example, if the currency ID in the header is USD, and the To Currency ID is EUR, you are setting up the conversion of U.S. dollars to Euros.

Exchange Rate
Specify the number of units of currency in the header it takes to create one unit of the To Currency. For example, if the currency ID in the header is USD, and the To Currency ID is EUR, you would specify the number of dollars it takes to make one Euro.

3 Click the **Save** button.

Viewing exchange rate history

Exchange rates change over time. To view a complete history of your exchange rates, click the **Rate History** tab. You cannot edit the information on this tab.

The Rate History tab displays this information:

From Currency
The ID of the currency being converted to another currency.

To Currency
The ID of the currency to which the From Currency is converted.

Effective Date
The date the currency exchange rate took effect.

Exchange Rate
The number of units of the From Currency it takes to make one unit of the To Currency.

About the tenant, accounting entities, and sites

Information in IQM is divided into three categories: tenant, accounting entity, and site.

The tenant level is the top level. Information that you define at the tenant level can be used by all accounting entities and sites in the IQM database.

The middle level is the accounting entity level. An accounting entity is an independent financial entity within your company. You can define multiple accounting entities. Each accounting entity can have multiple sites. In IQM, you set up most of the master data at the entity level. For example, suppliers, system documents, and processes are all defined at the entity level. Entities do not share information with each other. For example, if you have two entities that both conduct business with the same supplier, you must set up a separate supplier record in each of the entities.

The third level is the site level. A site is a specific physical location. Transactions occur primarily at the site level. For example, supplier feedback, system document change requests, and process inspection plans are defined at the site level. Each site can have only one parent accounting entity, but an accounting entity can have multiple child sites. If two sites share the same parent entity, they share all of the parent accounting entity's information. For example, sites with the same parent accounting entity have access to all of the parent's suppliers, system documents, and processes.

When you run reports for information defined at the entity or site level, you can choose which entities and sites to include in the report. For example, if you run the Supplier Feedback report, you can include multiple sites in the report. If you run the Supplier Detail report, you can include multiple entities in the report.

You can use reports to analyze information across entities and sites.

Note: Infor Mongoose uses the terms site and multi-site in a different way than IQM. Although IQM can have multiple sites in its database, the IQM database is considered to be a single site. The Mongoose documentation and online help that refer to setting up multiple sites do not apply to IQM.

Tenant, accounting entity, and site-level records

This information is defined at the tenant level:

- All codes in the **Administration > Codes** menu
- Cost categories
- Course Attendance records. You must specify the accounting entity for the employee.
- Course records
- Course Schedule records
- Customer, Supplier, and Employee Audits

- Information that is specified in Application Global Maintenance, including APQP checklists and Sigma value
- Job descriptions
- Skills
- User Groups
- Users

Information Defined at the Accounting Entity Level

This information is defined at the accounting entity level:

- Contacts
- Customers (you can define a site-specific customer type)
- Device types
- Devices
- Dictionary terms
- Document types
- Employee Input
- Employees (you can define site-specific salary information)
- Equipment types
- Processes
- Product types
- Products (bill of material, audit information, and bought from information is defined at the site level)
- Projects
- Suppliers
- System documents

Information Defined at the Site Level

This information is defined at the site level:

- APQP projects
- Audit Manager audits
- Bias Studies
- Calibration Maintenance records
- Control Plans
- Corrective Actions
- Custom studies and charts
- Customer Feedback
- Customer Results Maintenance
- Device Check In/Check Out records
- Document Audits
- Document change requests
- Document Check In/Out
- Employee results maintenance
- Equipment
- FMEA records
- Linearity Studies

- Lot History Maintenance records
- Lot Maintenance records
- Measurement base maintenance
- Measurement Base Maintenance records
- Nonconformance records
- Pareto studies and charts
- PPAP records
- Preventive Maintenance records
- Priority products
- Process Audits
- Process Change Requests
- Process data collection records
- Product Audits
- Product Change Requests
- Product Data Collection records
- Product Inspection Plans
- Product No Inspection records
- Quality cost ledger
- Quality cost ledger charts
- Quality costs
- RR ANOVA studies
- RR Attribute Studies
- RR Range Studies
- Sampling Plans
- Stability Studies
- Supplier Feedback
- Supplier results
- Term change requests
- Work Orders

Application Global Maintenance

Use **Application Global Maintenance** to specify general information about your company. If you use multiple sites and entities, the information you enter in **Application Global Maintenance** applies to the tenant level of your organization. Information that you define at the tenant level applies to all of your entities and sites.

Specifying the corporate address

Use Application Global Maintenance to specify the address of your parent company.

1 Select **Administration > Application Global Maintenance**.

2 Click the **General** tab.

3 In the Address section, specify this information:

Company Name
Specify the name of your company.

Address
Specify the street address.

City
Specify the city where your company is located.

State
Specify the state where your company is located.

Zip
Specify the zip code.

Country
Specify the country where your company is located. We recommend that you use an ISO code for the country.

4 Click the **Save** button.

Specifying the IQM application path

If you intend to include links to IQM records in email that you send from IQM, specify the application path where IQM is located. This path is used to generate the URL links included in the email body.

1 Select **Administration > Application Global Maintenance**.

2 Click the **General** tab.

3 Specify this information:

Click Once Application Path
If you are using the one-click client, specify the location of the application. Use this format:

```
http://myservername.domain.com/ClientDeploy/mongoose.application
```

Note: Note that the client is only supported for automatic data collection, form customization, and certain administrative functions.

Web Application Path
If you are using the web application, specify the location of the application. Use this format:

```
http://myservername.domain.com/WSWebClient/default.aspx
```

4 Click the **Save** button.

Specifying default APQP checklists

The Automotive Industry Action Group (AIAG) designed Advanced Product Quality Planning (APQP) to deliver products that meet or exceed customer expectations. APQP checklists are used in portions of this process to record information regarding FMEAs, processes, and production.

Default checklists are provided. You can edit the default questions and add custom questions.

Checklists are provided in these areas:

- 2.1 Design FMEA
- 2.10 New Equipment, Tooling, and Facilities Requirements
- 2.13 Team Feasibility Commitment and Management Support - Design Information
- 2.13 Team Feasibility Commitment and Management Support - Team Feasibility Commitment
- 3.2 Quality System Review
- 3.3 Process Flow Chart
- 3.4 Floor Plan Layout
- 3.6 Process FMEA
- 4.7 Production Control Plan

1. Select **Administration > Application Global Maintenance**.
2. Click the **General** tab.
3. Click **Checklists**.
4. Select the APQP checklist to customize.
5. Customize the questions:
   - To edit a question, place your cursor in the table cell and edit the text.
   - To add a question, click the last row in the table and add your question.
   - To delete question, select the appropriate row and click the **Delete row in current collection** button.
6. Click the **Save** button.

Specifying the RRANOVA standard deviation

Use Application Global Maintenance to specify the standard deviation to use in Repeatability and Reproducibility Analysis of Variance (RR ANOVA) calculations.

To select a standard deviation:

1. Select **Administration > Application Global Maintenance**.
2. Click the **General** tab.
3. In the RRANOVA section, select one option:
   - Sigma 5.15
   - Sigma 6.00
4. Click the **Save** button.

Specifying approval settings

In several areas of IQM, you specify a group of approvers. Use Application Global Maintenance to specify if the approvers must be registered users of IQM.

You also use Application Global Maintenance to specify whether a password is required when a user approves or rejects a record.

1. Select **Administration > Application Global Maintenance**.
2. Click the **General** tab.
3. Select the **Allow Non App User in Approval** check box to allow employee IDs, customer IDs, and supplier IDs to be used as approvers, even if the IDs are not associated with a IQM user ID. To restrict approval lists to individuals with user IDs, clear the check box.
4. To require the signed-in users to provide passwords when they change the approval status to Approved or Not Approved, select the **Always Require Password** check box. To specify the users who can change approval statuses, use the Application User Form.
5. Click the **Save** button.

Specifying control limit permissions

Use the **Collect** tab in Application Global Maintenance to define who can set control limits.

To specify control limit permissions:

1. Select **Administration > Application Global Maintenance**.
2. Click the **Collect** tab.
3. In the Calculate Control Limits Security section, specify who can calculate control limits. Click **All users can calculate control limits** if all users in your IQM database can calculate control limits. Click **Only users on this list can calculate control limits** if only the users that you specify can calculate control limits:
   - To specify an employee, select **Internal** as the Origin, then specify this information:

     Entity ID
     Specify the entity in which the employee can calculate control limits.

     Employee ID
     Specify the employee's ID.

     Function
     Specify the employee's Function code

     Job
     Specify the employee's Job code.

   - To specify a customer, select **Customer** as the Origin, then specify this information:

     Entity ID
     Specify the entity in which this customer can calculate control limits.

Customer ID
Specify the ID of the customer.

Cust Contact No
Specify the contact number of the individual that can calculate control limits.

- To specify a supplier, select **Supplier** as the Origin, then specify this information:

  Entity ID
  Specify the entity in which this supplier can calculate control limits.

  Supplier ID
  Specify the ID of the supplier.

  Supp Contact No
  Specify the contact number of the individual that can calculate control limits.

4 Click the **Save** button.

Specifying receiving inspection settings

Use the Collect tab in Application Global Maintenance to define how often to check the status of lots in Receiving Inspection.

To specify this information:

1 Select **Administration > Application Global Maintenance**.
2 Click the **Collect** tab.
3 In the Settings section, specify whether to check the status of lots automatically. Specify this information:

Auto refresh receiving inspection
Select this check box to automatically refresh the status of lots. If you clear this check box, you must manually refresh the status of lots.

Default refresh interval (minutes)
If you selected the Auto refresh receiving inspection check box, specify in minutes how frequently to refresh the lot status. The maximum value that you can enter is 10. The minimum value is 1.

4 Click the **Save** button.

Specifying BOD settings

Use BOD settings to specify the tenant ID and logical ID for the IQM database. BODs are processed with Infor ION. You can use BODs to integrate IQM with an ERP.

1 Select **Administration > Application Global Maintenance**.

2 Specify this information:

Tenant ID
Specify the tenant ID to use for your integration. Contact your Infor representative for the value to specify in this field. If you specified this information during the IQM installation process, the value you specified is displayed.

Message Bus Logical ID
The logical ID is made up of lid://infor.visual plus an instance ID of your choosing. If you specified this information during the IQM installation process, the value you specified is displayed.

Do not allow delete of SOR records

If IQM is integrated to an ERP or other system, select this check box to keep the IQM database and the integrated databases in sync.

When you select this check box, users cannot delete records that were created using BODs. Currently, IQM is the system of record for the InspectionOrder BOD, which maps to Lot Maintenance and Lot Maintenance History. Selecting this check box prevents users from deleting Lot Maintenance records and Lot History Maintenance records. If a user attempts to delete a Lot Maintenance or Lot History Maintenance record, a message is displayed informing the user that the record cannot be deleted.

If you clear this check box, a message is displayed warning you that your IQM and other system databases could become out of sync. Click **Yes** in the message to clear the check box. Click **No** to select the check box. It is highly recommended that you select the check box. If the IQM and other system databases become out of sync, issues can arise in the database.

3 The table displays the BODs that are imported into IQM and the BODs that IQM sends. You cannot edit this information.

4 Click the **Save** button.

Accounting entities

An accounting entity is an independent financial entity within your company. The accounting entity is the middle level of the organizational structure in a multi-site, multi-entity environment. Each accounting entity is summarized to the Tenant level. Sites are summarized to the Entity level.

You can create new entities using either the New Entity Wizard or Entity Maintenance.

Using the New Entity wizard

Use the New Entity wizard to create basic entity and site records.

Before you can create an entity and its sites, you must set up users and currencies. If you have not yet created any users or currencies, you can use the buttons on the New Entity wizard to open User Maintenance and Currency Maintenance.

1. Select **Administration > New Entity Wizard**.
2. Click **Next**.
3. On the **Entity** tab, specify this information:

   Entity ID
   Specify an identifier for this entity.

   Description
   Specify a description.

   Company Name
   Specify the entity's corporate name.

   Address information
   Specify the entity's street address.

4. Click **Next**.
5. In the **Site** tab, specify information about this entity's sites. You can create more than one site. For each site, specify this information:

   Entity ID
   Specify the parent entity for the site.

   Site ID
   Specify an identifier for this site.

   Name
   Specify the full name of the site

   Address information
   Specify the site's location.

6. Click **Next**.
7. Specify the tracking currencies that this entity uses. You can specify more than one currency. When you enter quality cost information for this entity, the costs are calculated in all currencies you specify. You can then analyze costs across sites, no matter what currency was used when the quality cost was entered.
8. Click **Next**.
9. In the **Site Setup** tab, specify this information for each site:

   Currency ID
   Specify the currency that this site uses. All quality costs for this site are entered in the currency that you specify in this field.

   Users
   Specify the users that can access and enter information for this site. To add a user, select the user ID in the left pane and click **Add**. To allow the user to view the site, select the **Viewable** check box. To remove a user from a site, select the **Selected** check box and then click **Remove**. You cannot remove the sa user.

10. To enter information for another site, use the **Prev** and **Next** buttons to select the site.

11 When you have finished entering information for sites, click **Next**.

12 Click **Close**. Complete the entity record in Entity Maintenance. Complete the site record in Site Maintenance.

Adding entities with Entity Maintenance

Use Entity Maintenance to add entities to your multi-entity, multi-site structure and to specify the entity's address.

To add an entity:

1 Select **Administration > Entity Maintenance**.

2 Click the **New** button.

3 Specify this information:

Entity ID
Specify an identifier for this entity.

Description
Specify a description for this entity.

Company Name
Specify the entity's corporate name.

Address
Specify the entity's street address.

City
Specify the entity's city.

State
Specify the entity's state.

Zip
Specify the entity's zip code.

4 Click the **Save** button.

To complete the entity record, specify this information for the entity:

- Tracking currencies
  See Specifying the tracking currencies for the entity on page 58.
- Default currency
  See Specifying the default currency for the entity on page 58.

If IQM is integrated to an ERP with BODs, use the Location ID field to link the IQM entity address to an ERP entity.

See Linking the IQM entity address to an ERP entity address on page 59.

Specifying the entity's tracking currencies

A tracking currency is a currency that an entity uses. The sites that belong to the entity can only use one of the entity's tracking currency as the site currency.

You must first specify the currencies to use in IQM before you can assign tracking currencies.

See Specifying currencies to use in IQM on page 46.

To assign multiple currencies to a single entity, use the Tracking Currency window available in Entity Maintenance. For example, if Entity A uses both USD and EUR as tracking currencies, you can more easily set up this relationship in Entity Maintenance.

You can also assign tracking currencies to entities in the Tracking Currency window in Currency Maintenance.

To assign multiple currencies to a single entity:

1. Select **Administration > Entities**.
2. Select the entity to which you are assigning tracking currencies.
3. Right-click and select **Currency Tracking**.
4. Specify the Currency ID to add as a tracking currency.
5. Click the **Save** button.

Specifying the entity's default currency

After you specify an entity's tracking currencies, you can specify the default currency for the entity. This information is not required. When you create sites for this entity, the currency you specify is inserted in the site record by default. On the Site record, you can change the default currency to any of the entity's tracking currencies.

To specify the default currency:

1. Select **Administration > Entity Maintenance**.
2. In the Entity ID field, specify the entity for which you are defining a default currency.
3. In the Currency field, specify the default currency that is used when you create sites that belong to this entity. You can specify any of the entity's tracking currencies.
4. Click the **Save** button.

Specifying default product revision settings

Use these settings if your installation of IQM is integrated with an ERP.

If a new revision for a product is created in the ERP, specify whether to import the revision information into IQM. The settings you specify here are the default settings. You can override these settings on a product-by-product basis in Product Maintenance.

1. Select **Administration > Entity Maintenance**.

2 In the Entity ID field, specify the entity.
3 To import the new revision level from the ERP, select the **Import Product Revision Level** check box. To retain the revision level defined in IQM, clear this check box.
4 To create a product change history when importing new revision information from an ERP, select the **Create product change history when importing new revision information** check box. If you select this check box, a new entry is created in the Product Change History subform when revision information is imported from an ERP. If you do not want to create product change history, clear this check box.
5 Click the **Save** button.

Linking the IQM entity address to an ERP entity address

If you link IQM to an ERP or other system through BODs, you can associate the entities in IQM with similar records in the ERP. Use the Location ID field to establish the link.

When SyncLocation BODs are received into IQM, the drop-down list for the Location ID field in Entity Maintenance is populated. Only BOD Location IDs with the attribute "Office" are inserted in the drop-down list. Select an ID from the drop-down list to link the IQM Entity Address with an address in your ERP system. After you select an address ID, the address details are inserted. When you change the address in the ERP system, an updated BOD is sent, and the linked entity address in IQM is also updated.

Sites

Sites are specific physical locations. Many records are stored at the site level, including NCMs, Control module records, and Collect module records. Database users are assigned to specific sites.

A site belongs to an entity. The same entity can be the parent entity to multiple sites, but each site can have only one parent entity.

Use Site Maintenance to create and set up basic information about your site.

Adding sites

Before you can add sites, you must first create entities.

See Adding Entities on page 57.

To add a site:

1 Select **Administration > Site Maintenance**. You can also access Site Maintenance directly from Entity Maintenance. In Entity Maintenance, right-click and select **Sites**.
2 Specify this information:

Entity ID
Specify the parent entity for this site.

Site ID
Specify the ID for the site.

3 In the address section, specify this information:

Name
Specify the full name of the site

Address
Specify the site's street address

City
Specify the site's city.

State
Specify the site's state

Zip
Specify the site's zip code.

Country
Specify the site's country.

4 In the Calibrate section, specify whether to prompt users to update device information when the device is checked in or out or when a calibration record is saved. If you select the **Update Device after Calibration and Check In** check box, the **Change Device Record from Calibrations** dialog is displayed when a user saves a calibration record or checks a device in or out. The user is prompted to update the device's status, assigned to, and detail information. Users are not required to update the device. Clear the check box if you do not want to prompt users to update devices.

5 In the Prevent section, specify this information:

Enable ERP Work Order Generation
Select the **Enable ERP Work Order Generation** check box to activate the preventive maintenance-scheduling interface between IQM and your ERP. When you select this check box, you can schedule preventive maintenance work orders in your ERP.
If you select this check box, specify the default prefix for work orders that IQM generates. The prefix helps you identify which work orders are related to IQM. The default is PM, for Preventive Maintenance.

6 In the Settings section, specify this information:

Enable Skip-lot Receiving Inspection
Select the **Enable Skip-lot Receiving Inspection** check box to activate integrated skip-lot receiving. Specify a default receiving inspection operation number.

Currency ID
Specify the currency this site uses. The currency you specify is used when you specify quality costs for this site.

Location ID

If you link IQM to an ERP or other system through BODs, you can associate the sites in IQM with sites in the ERP. Use the Location ID field to establish the link.

When SyncLocation BODs are received into IQM, the drop-down list for the Location ID field in Site Maintenance is populated. Only BOD Location IDs with the attribute "Site" are inserted in the drop-down list. Select an ID from the drop-down list to link the IQM Site Address with an address in your ERP system. When you change the address in the ERP system, an updated BOD is sent, and the linked site address in IQM is also updated.

7 **Inspection Order Integration**
If you link IQM to an ERP that supports In-Process, Production Order Receiving, and/or Transfer Inspections, you can select the type of Inspection that IQM will process.

8 Click the **Save** button.

Deleting sites

You can delete a site provided that the site is not used in any record or assigned to any user.

To delete a site:

1 Select **Administration > Site Maintenance**.

2 Select the site, then click the **Delete** button.

3 Click the **Save** button.

Chapter 3: Involve modules

Use the Involve modules to create and maintain an employee involvement system. These modules help you to complete these tasks:

- Focus on technical matters while the computer performs the time-consuming tasks of human resource management
- Improve overall communications and effectively manage employee feedback, training, skills, and project teams
- Encourage employees to contribute innovative ideas
- Assign employees with the appropriate skills to a project team, then manage all aspects of the project cycle
- Develop job skill descriptions so employees can attain the necessary skills required to successfully perform their jobs. Managers can assemble teams of employees who already possess the skills that are required for specific projects.

Certain records you define in the Involve modules are prerequisites to other records. We recommend defining Skills and Job Descriptions first. Then, define Employees.

You can use the Jump feature to navigate between related forms.

See Jump feature on page 34.

Tasks are added to employee To Do lists after you create records in these Involve forms:

- Course Schedules Maintenance
- Employee Results Maintenance
- Input Maintenance
- Project Maintenance

See My To Do list on page 34.

Skills

Use Skills Maintenance to define the capabilities that are important in your business. When an employee acquires a skill, you can attach the skill to the employee's record in Employee Maintenance. An employee can acquire a skill through personal experience, for example, experience in a previous job, or through taking a course. You also use skills to define the requirements of a job.

Optionally, employees can approve skills. You must designate which employees can approve skills in Application User Maintenance.

Adding skills

1 Select **Communication > Involve > Skill Maintenance**.

2 Specify this information:

Skill ID
Specify an ID for this skill.

Skill Name
Specify a name for this skill.

Revision Level
Specify the revision level for this skill. You can use any revision level scheme you like. For example, you could use alphabetical revision levels, with A as the first revision. If you are creating a skill, either specify the revision level that is first in your scheme, or leave this field blank.
When you change the information in this field, you have the option of specifying change history text when you save the record.

Status
Specify the status of this skill. The skill can be used in other records, such as Employee records, regardless of the status you select. Select one of these options:

- Current. Select this option if the skill is in use.
- Obsolete. Select this option if the skill is not in use and is no longer required in your company.
- Revision. Select this option if the skill definition is undergoing changes and is not yet complete.

Business Unit
Specify the default business unit where this skill is used. You can use this skill in other business units.

Issue Date
Specify the date that this version of the skill was completed.
When you change the information in this field, you have the option of specifying change history text when you save the record.

Skill Description
Specify a detailed description of the skill.

3 Click the **Save** button.

4 If you specified updated information in the Revision Level field or Issue Date field, you are prompted to add change history information. Click **Yes** to specify change history, and then click **Save**.

Approving a skill

Use the Approved By tab to specify the employees that approved the skill for use. Specifying approvers is not required.

Skills can be used in other records, such as Employee records, even if they are not approved.

1. Select **Communication > Involve > Skill Maintenance**.
2. Select the skill to approve.
3. Click the **Approved By** tab.
4. Specify this information:

   Entity ID
   Specify the entity where the employee works.

   Employee ID
   Specify the ID of the employee who approved this skill. The employee you select must also be an authorized IQM user.
   See the *Infor Quality Management Administration Guide*.

5. If the employee you specified is required to provide a password to grant approval, specify the password. Click **Ok** to return to Skills Maintenance.

Copying skills

You can create a new skill from an existing skill.

1. Select **Communication > Involve > Skill Maintenance**.
2. Select the skill.
3. Right-click and select **Copy Skill**.
4. To copy the approval list, select the **Approved By** check box.
5. Click **Ok**.
6. In the Skill ID field, specify the ID of the new skill.
7. Click the **Save** button.

Viewing change history for skills

When users revise a skill, they can enter a description of the revision. Use the Change History tab to review the descriptions of revisions.

1. Select **Communication > Involve > Skill Maintenance**.
2. Select the skill.
3. Click the **Change History** tab.

4 To view text only, click **Combined**. To view comments by date or revision level, click **Detail**. If you click detail, a table with the revision level and issue date is displayed. Select a row in the table to view the associated comments.

Editing change history for skills

You can edit the text that users entered when they revised skill records.

1 Select **Communication > Involve > Skill Maintenance**.
2 Select the skill.
3 Right-click and select **Change History**.
4 Select the revision.
5 Edit or add text in the Change History section.
6 Click the **Save** button. The ID of the currently signed in user, the date, and the time are inserted.

Job descriptions

Use Job Descriptions Maintenance to create and maintain descriptions of the jobs within your company. You can use Job Descriptions Maintenance to specify the skills and education required to perform the job.

Before you can set up a job description, you must first specify function codes and job codes. Job Descriptions are a combination of function codes and job codes.

See Adding codes on page 45.

Adding job descriptions

Before you can set up a job description, you must first specify function codes and job codes.

Optionally, you can also set up Skills, Degrees, Majors, and Business Units. These codes are not required to save a job description record.

1 Select **Communication > Involve > Job Description Maintenance**.
2 Specify this information:

Function
Specify a function code for this job description. When you save the record, the function code description comprises the first half of the job description code.

Job
Specify a job code for this job description. When you save the record, the job code description comprises the second half of the job description code.

Revision Level
Specify the revision level for this job description. You can use any revision level scheme you like. For example, you could use alphabetical revision levels, with A as the first revision. If you are creating a new job description, either specify the revision level that is first in your scheme, or leave this field blank.
When you change the information in this field, you have the option of specifying change history text when you save the record.

Status
Specify the status of this job description. The job description can be used in other records, such as Employee records, regardless of the status you select. Select one of these options:

- Current. Select this option if the job description is in use.
- Obsolete. Select this option if the job description is not in use and is no longer required in your company.
- Revision. Select this option if the job description definition is undergoing changes and is not yet complete.

Business Unit
Specify the default business unit where this job description is used. You can use this job description in other business units.

Issue Date
Specify the date that this version of the job description was completed. When you change the information in this field, you have the option of specifying change history text when you save the record.

Job Description
Specify a detailed job description.

3 To specify the skills an individual with this job should have, click the **Skills** tab. Specify this information:

Skill ID
Select the skill ID. The description of the skill is inserted in the Description field.

Required
If an individual must have this skill to perform the job, select this check box. If the skill is desirable but not required, clear this check box.

4 To specify the education credentials an individual with this job should have, click the **Education** tab. Specify this information:

Degree
Specify the degree the individual should possess.

Major
Specify the major course of study the individual should have pursued.

Required
If this education credential is required, select this check box. If this education credential is desirable but not required, clear this check box.

5 Click the **Save** button. The job description ID is inserted in the Job Desc field.

Approving job descriptions

Use the Approved By tab to specify the employees that approved the job description for use. Specifying approvers is not required.

1 Select **Communication > Involve > Job Description Maintenance**.
2 Select the job description to approve.
3 Click the **Approved By** tab.
4 Specify this information:

Entity ID
Specify the entity where the employee works.

Employee ID
Specify the ID of the employee who approved this job description. The employee you select must also be an authorized IQM user.
See the *Infor Quality Management Administration Guide*.

5 If the employee you specified is required to provide a password to grant approval, specify the password. Click **Ok** to return to Job Description Maintenance.

Viewing change history for job descriptions

When users revise a job description, they can enter a description of the revision. Use the Change History tab to review the descriptions of revisions.

1 Select **Communication > Involve > Job Description Maintenance**.
2 Select the job description.
3 Click the **Change History** tab.
4 To view text only, click **Combined**. To view comments by date or revision level, click **Detail**. If you click detail, a table with the revision level and issue date is displayed. Select a row in the table to view the associated comments.

Editing change history for job descriptions

You can edit the text that users entered when they revised job descriptions.

1 Select **Communication > Involve > Job Description Maintenance**.
2 Select the job description.
3 Right-click and select **Change History**.

4 Select the revision.
5 Edit or add text in the Change History section.
6 Click the **Save** button. The ID of the currently signed in user, the current date, and the current time are inserted.

Copying job descriptions

You can create a new job description record from an existing record.

1 Select **Communication > Involve > Job Description Maintenance**.
2 Specify the job description.
3 Right-click and select **Copy Job Description**.
4 Specify the information to copy:

Skills
Select this check box to copy the skills associated with this job description.

Education
Select this check box to copy the educational credentials associated with this job description.

Approved By
Select this check box to copy the approval information.

5 Click **Ok**.
6 Specify this information:

Function
Specify the function code for this job description.

Job
Specify the job code for this job description.

7 Click **Save**.

Employees

Use Employee Maintenance to keep records for all your employees. You can track information such as salary, benefits, skills the employee has acquired, family members, job history, and education credentials.

Adding employee records

1 Select **Communication > Involve > Employee Maintenance**.

2 Specify this information:

Entity ID
Specify the entity where this employee works. The employee can work in sites that belong to the entity that you specify.

Employee ID
Specify the employee's ID.

First/MI/Last
Specify the employee's first name, middle initial, and last name.

Status
Specify the status of this employee. Select one of these options:

Option	Description
Open	Select this status if you have not yet classified this employee. Use this status for records that are in progress but not yet complete. When you complete the record, update the status to Terminated, Prospect, Retired, or Working.
Terminated	Select this status if the employee no longer works for the company.
Prospect	Select this status if the individual has not yet been hired by your company. This individual is a prospective employee.
Retired	Select this status if the employee has retired from your company.
Working	Select this status if the employee is currently working for your company.
Deleted	You cannot select this status. The Deleted status is selected by the system if it receives a BOD changing the status to Deleted.

Business Unit
Specify the business unit where this employee primarily works.

3 Use the General tab to specify information about this employee's role in your company. Click the **General** tab and specify this information:

Function
Specify this employee's function. A function categorizes the types of tasks this employee performs, such as quality assurance, documentation, or accounting.

Job
Specify this employee's job. A job is the specific role this employee has within the function code, such as engineer, writer, or chief financial officer.

Shift
Specify the shift this employee works. For example, if this employee is assigned to your second shift, specify 2.

Level
Specify this employee's level in your organization chart. For example, if this employee is your CEO, specify 1. If this employee directly reports to your CEO, specify 2.

Department
Specify the department where this employee works.

Location
Specify the employee's work location.

Supervisor ID
Specify the employee's supervisor. You can select any employee that is assigned to the entity that you specified in the Entity ID field.

Start Date
Specify the date this employee began working at your company.

End Date
If this individual no longer works at your company, specify the last day of this individual's employment.
If this individual is currently employed at your company, leave this field blank.

Email Address
Specify this employee's work email address. The email is added to the address list that is displayed when you click the **To** button or **CC** button on an email that you create in IQM.

4 Use the Site tab to specify the sites where the employee is eligible to work. Specify the cost of the employee's labor at each site. These costs are used in quality cost records; they are not necessarily the same as the employee's salary. Labor costs can be incurred at different rates in different sites. Click the **Site** tab and specify this information:

Site ID
Specify the site ID. You can select any site that belongs to the entity you specified in the Entity ID field.

Hourly Cost/Salary
Specify either the hourly labor cost or salary incurred for this employee when the employee works in the specified site. If you specify an hourly rate, the salary is calculated. If you specify a salary, the hourly rate is calculated. The salary is equal to the hourly rate multiplied by 40 multiplied by 52.

5 Click the **Comments** tab and specify any general comments about this employee.

6 Use the Personal Info tab to specify the employee's home contact information and salary information. Click the **Personal Info** tab and specify this information:

Address
Specify this employee's home street address.

City
Specify this employee's home city.

State
Specify this employee's home state.

Zip
Specify this employee's home zip code.

Home Phone
Specify this employee's home phone.

Social Security
Specify this employee's social security number.

Seniority Date
Specify the date by which you calculate this employee's seniority. For example, the seniority date could be the date that the employee started to work for your company. It could also be the date that the employee began work in the current department or job.

Birth Date
Specify the employee's date of birth.

Special Date
Specify any other notable date for the employee. A special date could be the date of the employee's last performance bonus or raise, or any other milestone.

Email Address
Specify the employee's home email address.

7 In the Pay Type and Labor Cost sections, specify either the hourly labor cost or salary incurred for this employee. If you specify an hourly rate, the salary is calculated. If you specify a salary, the hourly rate is calculated. The salary is equal to the hourly rate multiplied by 40 multiplied by 52.

8 Click the **Benefits** tab and specify the benefits package this employee earns, such as health insurance or 401K matching.

9 Use the Skills tab to specify this employee's capabilities. Before you can specify skills, specify skill codes in Skills Maintenance. If this employee acquired skill through taking courses, you must also specify course codes in Courses Maintenance. To manually add a skill, click the **Skills** tab and specify this information:

Skill ID
Specify the skill.

Skill Source
Specify where the employee acquired this skill.

Approved By
Specify the employee who certified that this skill was acquired. Approval could be granted as a result of a proficiency test administered by the employee's supervisor or a meeting of minimum requirements.

Approval Date
Specify the date the approval was granted.

Expiration Date
If this skill expires, specify an expiration date. Specify a date in this field if the employee must be recertified in this skill periodically. This date indicates when the employee must be recertified.

Course ID
If this skill was acquired through taking a course, specify the course ID.

Completion Date
If this skill was acquired through taking a course, specify the date the course was completed. You can also post skills to employee records in **Course Attendance**.

10 Use the Family tab to specify information about the employee's family members. Click the **Family** tab and specify this information:

First Name
Specify the family member's first name.

Middle Initial
Specify the family member's middle initial.

Last Name
Specify the family member's last name.

Relationship
Specify the relationship code for this family member. Add relationship codes in Relationship Code Maintenance.

Gender
Specify the gender of this family member.

Social Security Number
Specify the social security number of this family member.

Birth Date
Specify the date of birth for this family member.

11 Use the Job History tab to specify information about this employee's work experience. Click the **Job History** tab and specify this information:

Company
Specify the name of the company where this employee worked.

Function
Specify the function code for this position.

Job
Specify the job code for this position.

Start Date
Specify the date the employee started this position.

End Date
Specify the date the employee left this position.

Description
Specify a description of this position or any other notes about this work history entry.

Reason for Leaving
Specify the reason the employee left this position.

12 Use the Education tab to specify the employee's academic credentials. Click the **Education** tab and specify this information:

Institution
Specify the name of the institution that the employee attended.

Degree
Specify the code for the degree that the employee pursued.

Major
Specify the code for the employee's major.

Start Date
Specify the date the employee started this course of study.

End Date
Specify the date the employee left this course of study.

Completed
If the employee completed the degree, select this check box. If the employee did not complete the degree, leave this check box blank.

Description
Specify any additional text about this credential.

13 Click the **Save** button.

Copying an employee record

You can create a new employee record from an existing employee record.

1 Select **Communication > Involve > Employee Maintenance**.
2 Select the employee.
3 Right-click and select **Copy Employee**.

4 Specify the ID of the new employee.
5 To copy quality cost information, select the **Quality Costs** check box.
6 Click **Ok**.

Courses

Use Courses Maintenance to create and maintain records for the courses your employees take. These courses can be offered by your company or by a third-party. You can define this information:

- Skills that employees gain when they pass the course
- Target audience
- Prerequisites
- Syllabus
- Materials that are required for the course

To specify course audiences, you must first define job descriptions in Job Description Maintenance. To specify the skills gained by taking a course, you must first define skills in Skills Maintenance.

Adding courses

1 Select **Communication > Involve > Courses Maintenance**.
2 Specify this information:

Course ID
Specify an ID for this course.

Name
Specify the full name for this course.

Hours
Specify the number of hours it takes to complete this course. You can also use this field to specify the number of credits employees receive upon completion of the course.

Business Unit
If this course is most useful to employees in a particular part of your business, specify the business unit. Employees in any business unit can take the course.

3 Click the **Objective** tab and specify the goal of this course.
4 Click the **Prerequisites** tab and specify the courses that must be completed before employees can take this course.
5 Click the **Syllabus** tab and specify the course outline. You can specify the topics that are covered in each class, homework requirements, and any other milestones within the course.
6 Click the **Materials** tab and specify the materials students are required to use in this course, such as a laptop or a textbook.

7 Click the **Save** button.

After you define a course, you can specify the course audience and the skills that the employees acquire upon completion of the course.

Defining audiences for courses

Use the Course Audience form to specify who in your company should attend a course. You specify this information by supplying Job and Function code combinations.

1 Select **Communication > Involve > Courses Maintenance**.
2 Select the course.
3 Right-click and select **Audience**.
4 Specify this information:

Function
Select the function of individuals who should attend this course.

Job
Select the job of individuals who should attend this course.

Required
If individuals with this function and job combination are required to attend this course, select the check box. If individuals with this function and job combination are not required to attend this courses, clear this check box.

5 Exit the Audiences form to return to Course Maintenance.

Defining skills gained by attending a course

Employees attend courses to learn skills.

1 Select **Communication > Involve > Courses Maintenance**.
2 Select the course for which you are defining skills.
3 Right-click and select **Skills**.
4 Specify the skills earned upon completion of the course.
5 Click the **Save** button.
6 Exit the Course Skills Maintenance form to return to Course Maintenance.

Course schedules

Use Course Schedules Maintenance to specify the time, date, and place a course is offered and to enroll employees in courses.

Adding course schedules

Use Course Schedules Maintenance to specify the time, place, and instructor for a course.

1 Select **Communication > Involve > Course Schedules Maintenance**.

2 Specify this information:

Schedule ID
Leave this field blank. The schedule ID is generated when you save the record based on your numbering scheme.

Course ID
Specify the course being offered.

Date
Specify the date of the class. If this class lasts more than one day, specify the date of the first class.

Start Time
Specify the time the class starts.

Institution
If this course is offered off site, specify the name of the institution where the course is held.

Instructor
Specify the name of the individual who teaches the course.

Class Size
Specify the maximum number of individuals who can enroll in this courses.

Major Location
Specify the major location where this class is offered. For example, the major location could be a particular building on a university campus.

Minor Location
Specify the minor location where this class is offered. For example, the minor location could be a classroom within a particular building.

Business Unit
If this schedule is primarily offered to employees in a particular part of your business, specify the business unit. Employees in any business unit can enroll in this offering of the course.

Description
Specify a detailed description of this schedule. For example, you could specify the agenda for the course.

3 Click the **Save** button.

Enrolling employees in courses

1 Select **Communication > Involve > Course Schedules Maintenance**.
2 Select the schedule ID for the course.
3 **Sign Up**. Right-click and select
4 Specify this information:

Right-click and select Entity ID
Specify the entity where the employee works.

Employee ID
Specify the employee's ID. After you specify an ID, the employee's Name and Work Phone Number are inserted.

5 Click the **Save** button. The course is added as a task to the employee's My To Do list.
6 Exit the form to return to Course Schedules Maintenance.

Copying course schedules

You can copy an existing course schedule to create a new course schedule.

1 Select **Communication > Involve > Course Schedules Maintenance**.
2 Specify the course schedule to copy.
3 Right-click and select **Copy Schedule**.
4 Specify this information:

Copy to Course ID
The Course ID of the schedule you are copying is inserted. To copy a different schedule, specify the ID of the schedule to copy.

Date
Specify the date of the class. If this class lasts more than one day, specify the date of the first class.

Start Time
Specify the time the class starts.

Signup
To copy the list of employees enrolled for the course, select this check box. Clear this check box if you do not want to copy the enrollment for the course.

5 Click **Ok**.

Course attendance

Use Course Attendance Maintenance to record information about the courses that your employees attend. You can specify whether the employee passed the course and whether the employee is reimbursed for the cost of the course.

Adding course attendance records

You must create courses in Courses Maintenance before you can create attendance records.

See Adding courses on page 74.

1. Select **Communication > Involve > Course Attendance Maintenance**.
2. Specify this information:

   Course ID
   Specify the course that the employee attended.

   Business Unit
   Specify the business unit where this employee works.

3. In the Employee section, specify this information:

   Entity ID
   Specify the entity ID where this employee works.

   Employee ID
   Specify the employee who attended the course.

4. In the General section, specify this information:

   Date
   Specify the date that the employee attended the course.

   Time
   Specify the time that the course was held.

   Duration
   Specify the number of hours of coursework completed by the employee.

   Institution
   Specify the name of the institution where the course was held.

   Instructor
   Specify the name of the individual who taught the course.

   Competency
   Specify the level of competency achieved by the employee. A competency score should be a general measure of the employee's readiness after completing the course to use this knowledge in the workplace. Use a scale that is easy to implement and understand, such as a 1-10 range, with 1 being poor and 10 being superior.

5 In the Result section, specify whether the employee passed or failed the course. If you select **Passed**, you can attach the skills to the employee's record when you save the course attendance.

6 In the Reimburse section, specify whether the employee is reimbursed for out-of-pocket expenses. Select one of these options:

Yes
Select this option if the employee is eligible for reimbursement. If you have partially reimbursed the employee, specify the amount in the Amount field.

No
Select this option if the employee is not eligible for reimbursement.

Complete
Select this option if you have reimbursed the employee. Specify the total amount of reimbursement in the Amount field.

7 In the Expiration section, specify enter the number of days until the course must be taken again. This field is useful if the course requires periodic recertification to maintain the skill.

8 In the Comments section, specify any additional information.

9 Click the **Save** button.

10 If skills have been defined for the course and the employee passed the course, specify whether to attach the skills to the employee's record. Click **Yes** to attach the skills.

Using My To Do List to manage course completion

When you enroll an employee in a course, the course is added as a task to the employee's My To Do List. The due date of the tasks is the date that is specified in the **Date** field in Course Schedules Maintenance.

The task is removed from the My To Do List when these conditions are met:

- The current date is after the scheduled date of the course.
- A course attendance record is created for the employee.

Copying course attendance records

You can create a new course attendance record from an existing record. If multiple employees take the same course, you can use this function to streamline the data entry process.

1 Select **Communication > Involve > Course Attendance Maintenance**.

2 Select the record to copy.

3 Right-click and select **Copy Course Attendance**.

4 Specify the information to copy:

Post Skills to Employee
Select this option to post the skills gained in the course to the employee's record.

Quality Costs
Select this option to copy the quality cost information.

5 Click **Ok**.
6 In the **Employee ID** field, specify the ID of the employee who attended the course.
7 Click **Save**.

Input

Use Input Maintenance to record a wide range of information related to your employees. Types of information include employee suggestions and action items from projects or meetings. You can also specify the output items that the employee input generated.

Adding input items

1 Select **Communication > Involve > Input Maintenance**.
2 Specify this information:

Entity ID
Specify the entity ID for this input item.

Input ID
Leave this field blank. An input ID is generated based on your numbering scheme when you save the record.

Date
The current date is inserted. You can change the date after you save the record.

Input Type
Specify the input type for this input item.

Employee ID
Specify the ID of the employee who provided this input item. You can select any employee who is assigned to the entity you specified in the Entity ID field.

Due Date
Specify the date by which this input item must be addressed or resolved. This date is used as the due date for the tasks that are added to the My To Do List for this input item.

Reference
Specify information that is unique to this input item. For example, use this field to enter job numbers, purchase order numbers, or the names of applicable documents.

Cost Savings
Specify the estimated or actual cost savings to your company if an employee input item is implemented. For example, if an employee suggests an input item that eliminates a wasteful step in a production process, specify the estimated cost savings.

Subject
Specify the subject of this input item.

User Defined Fields
Specify the user defined information your company uses with input records.

Business Unit
Specify the business unit for this input item.

3 In the Assigned to section, specify the employee ID who is responsible for addressing this input item. After you save the record, a task for the input record is added to the employee's My To Do list. The due date of the task is the same as the due date of the input record.

4 Click the **Input** tab and specify a detailed description of the input item.

5 Click the **Acknowledgement** tab and specify this information:

Acknowledged By
Specify the ID of the employee who is responsible for acknowledging receipt of the input item.

Date
Leave this field blank. The employee who acknowledges the input specifies this date.

Acknowledgement
Optionally, add notes about the acknolwedgement of the feedback. The employee who acknowledges the input can also specify this information.

6 Click the **Response** tab and specify this information:

Responded By
Specify the employee who is responsible for providing the response to the input item.

Date
Leave this field blank. The employee who responds to the input specifies this date.

Response
Optionally, add notes about the response to the input. The employee who responds to the input can also specify this information.

7 Click the **Follow Up** tab and specify this information:

Followed Up By
Specify the employee who is responsible for following up with the employee who provided the input.

Date
Leave this field blank. The employee who follows up on the input specifies this date.

Follow Up
Optionally, add notes about the follow-up actions for the input item. The employee who follows up on the input can also specify this information.

8 Click the **Save** button. Tasks are added to the My To Do list for the employees that are specified in the Assigned To, Acknowledged By, Responded By, and Followed Up By fields. The due date of the tasks is the date specified in the **Due Date** field.

Attaching output items to input records

If an employee's input results in specific, concrete items, you can attach these items to the input record as outputs.

Before you can add outputs items, you must specify Product Codes in Product Codes Maintenance. Product Codes are not the same as products. You must also specify attributes in Attributes Maintenance.

1 Select **Communication > Involve > Input Maintenance**.
2 Select the record to which to add outputs.
3 Right-click and select **Output**.
4 Specify this information:

Product Code
Specify the product code for this output item.

Attribute
If the input is related to a particular attribute of the output item, specify the attribute.

5 Click the **Save** button.
6 Exit the Output Maintenance form to return to the Input form.

Using My To Do List to manage input items

When you create an input item, tasks are added to the My To Do List. The due date of the tasks is the date that is specified in the **Due Date** field on the input record. When a task is complete, it is removed from the My To Do List.

This table shows each task, who the task is assigned to, and how to complete the task:

Task	Assigned to	Completion steps
Input (Acknowledge)	Employee in **Acknowledged By** field	1 Optionally, specify text that describes how the input item was acknowledged. Right-click the Input form and select **Acknowledgement Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Acknowledgement** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.
Input (Followup)	Employee in **Followup By** field	1 Optionally, specify text that describes the follow-up steps. Right-click the Input form and select **Followup Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Follow Up** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.
Input (Response)	Employee in **Responded By** field	1 Optionally, specify text that describes the response to the input item. Right-click the Input form and select **Response Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Response** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.

Task	Assigned to	Completion steps
Input	Employee in **Employee ID** field in the Assigned To section	Close the input record. See Closing input items on page 84.

To use the My To Do List to complete an input task:

1 Select **Administration > My To Do List**.
2 Specify this information:

Entity ID
Specify the ID of the entity where the input record was created.

Employee ID
Specify the ID of the employee who is assigned to an input task.

Start Date
Specify a date that is the same as or earlier than the due date of the input record.

End Date
Specify a date that is the same as or later than the due date of the input record.

3 Double-click the task. The Input Maintenance form is opened.
4 Complete the task as described in the table.
5 Click **Save**.

Closing input items

After you address an employee input item, close the record to indicate that work on the input item is complete.

1 Select **Communication > Involve > Input Maintenance**.
2 Select the input record to close.
3 Click the **Closed** check box. The current date is inserted in the Closed Date field.
4 Optionally, change the date you closed the input record.
5 Click the **Save** button. Tasks that are related to the input record are removed from employee My To Do lists.

Copying input records

You can create a new input record from an existing record. After you copy the record, you can edit the new record as needed.

1 Select **Communication > Involve > Input Maintenance**.

2 Select the input record to copy.
3 Right-click and select **Copy Input**.
4 Select the information to copy:

Output
To copy the output items that are attached to the record, select this check box. Clear this check box if you do not want to copy the output items.

Quality Costs
To copy the quality costs that are attached to the record, select this check box. Clear this check box if you do not want to copy the quality cost information.

Document Links
To copy the document links that are associated with the record, select this option. Clear this check box if you do not want to copy document links.

5 Click **Ok**. In addition to the information that you selected in step 4, all of the information in the main window is copied, except for the Closed check box and the Closed Date

Audits

Use Audits Maintenance to develop questionnaires or surveys that you can issue to your employees, customers, or suppliers. You can use audits to obtain feedback, evaluate performance, or gather other information.

Setting up audits

1 Perform one of these tasks:
- To set up a customer audit, select **Communication > Customers > Audit Maintenance**
- To set up an employee audit, select **Communication > Involve > Audit Maintenance**
- To set up a supplier audit, select **Communication > Supplier > Audit Maintenance**

2 In the Audits section, specify this information:

Audit ID
Specify an ID for this audit.

Name
Specify a name for this audit.

Type
Specify the type of audit.

Description
Specify a description of the audit. You can type a description directly in the table cell, or click the **Description** button to specify a longer description.

Total Score
This field is read-only. The total possible score for the audit is calculated after you specify headings and questions.

3 In the Headings section, specify the categories for the questions to ask. For example, an employee review audit could include headings such as Sales Metrics, Interpersonal Skills, and Attendance. Specify this information:

Name
Specify a name for the heading.

Questions
Leave this field blank. The value is calculated after you add questions to each section heading.

Lower
Specify the default lowest possible rating for the heading. You can override this setting on a question-by-question basis when you specify questions.

Nominal
Specify the default nominal rating for the heading. This number indicates average performance. You can override this setting on a question-by-question basis when you specify questions.

Upper
Specify the default highest possible rating for heading. This number indicates average performance. You can override this setting on a question-by-question basis when you specify questions.

Description
Specify a description for the heading. You can type a description directly in the table cell, or click the Description button to specify a longer description.

Total Score
This is a read-only field. To calculate the total score for the heading, the number of questions in the heading is multiplied by the highest possible rating.

4 Click the **Save** button.

5 For each heading, specify the questions to ask. Select a heading, then click **Questions**.

6 Specify this information:

Question
Specify the question. For example, for a managerial evaluation, a question in the Communication heading might be "Does the manager provides consistent performance feedback to subordinates?"

Lower
The lower limit is the lowest score allowed for the question. The limit you specified for the heading is inserted. You can specify a different value.

Nominal
The nominal value is the score used for average performance. The value you specified for the heading is inserted. You can specify a different value.

Upper
The upper limit is the highest score allowed for the question. The limit you specified for the heading is inserted. You can specify a different value.

Description
Specify a description of the question. You can type a description directly in the table cell, or click the Description button to specify longer text.

Total Score
The value you specified in the Upper cell is inserted. This is the maximum score that can be received for this question.

7 Exit the Question form to return to Audit Maintenance.

Employee results

Use the Audit Results form to specify the responses to your employee audits. Before you can specify results, you must first set up audits in Audit Maintenance.

See Setting up audits on page 85.

Creating an audit result record

1 Select **Communication > Involve > Employee Results Maintenance**.
2 Specify this information:

Site ID
Specify the site in which the employee works. After you select a site, the site's parent entity is inserted in the Entity ID field.

Results ID
Leave this field blank. The ID is generated based on your number generation settings after you save the record.

Date
Specify the date the audit was conducted.

Audit ID
Specify the ID of the audit you conducted.

Business Unit
Specify the business unit ID associated with this audit.

3 In the Employee section, specify the employee that is the subject of the audit.
4 In the User Defined section, specify any user-defined information that your company requires.

5 In the Comments section, specify general comments regarding this audit. Comments could include recommendations that you developed from the results of the audit.

6 After you specify scores for each audit question, the total possible score for the audit is inserted in the Total Score field. The score the employee earned is inserted in the Total Score field.

7 Click **Save**. After you set up the audit record, right-click and select **Headings/Questions** to specify the score the employee received for each audit question.

Viewing summary results by heading

After you save audit results, you can view the result total for each heading. The individual scores for each question in a heading are added to calculate the heading result.

1 Select the audit result record.
   - To select an Employee Audit result record, select **Communication > Involve > Employee Results Maintenance**. Then, specify the audit result record in the Results ID field.
   - To select a Customer Audit result record, select **Communication > Customer > Customer Results Maintenance**. Then, specify the audit result record in the Results ID field.
   - To select Supplier Audit result record, select **Communication > Supplier > Supplier Results Maintenance**. Then, specify the audit result record in the Results ID field.

2 Right-click and select **Questions/Headings**.

3 Right-click and select **Headings Summary**.

4 Each heading is listed. For each heading, the number of questions, name of the heading, total score, and total possible score are listed.

Projects

Use Project Maintenance to complete these tasks:

- Manage company projects
- Assign employees with relevant skills to projects
- Store information about project status, project meetings, team members, outputs, and tools

Adding projects

Before you add a project, you may find it useful to add these codes:

- Project Type
- Project Status
- Business Unit
- Priority Codes

- Product Codes
- Attribute Codes
- Tool Codes

You are not required to use these codes in a project record, but including these codes makes the project record more descriptive.

Depending on the makeup of the project team, you should also add Employee IDs, Customer IDs, and Supplier IDs.

1 Select **Communication > Involve > Project Maintenance**.

2 Specify this information:

Entity ID
Specify the entity that owns this project.

Project ID
Specify an ID for this project.

Name
Specify the full name for this project.

Project Type
Specify the type for this project. To add project types, right-click in the field and select **Add**.

Project Status
Specify the current status for this project. To add project status codes, right-click in the field and select **Add**.

Project Leader
Specify the employee who is the leader of this project.

Priority
Specify the priority code for this project. Add priority codes in Priority Code Maintenance. Select **Admin > Codes**, or right-click in the field and select **Add** to access this maintenance form.

Due Date
Specify the date that this project is due.

Cost Savings
Specify the amount of money that you anticipate saving when you implement this project.

Business Unit
Specify the business unit associated with this project.

3 Click the **Description** tab and specify a full description of this project.

4 Use the Team tab to specify the members of this project team. Team members can include employees, customers, and suppliers. Click the **Team** tab and specify this information:

Origin
Specify whether this team member is an internal resource, a customer, or a supplier. Depending on your selection in this field, other fields become available.

Employee ID
If you selected Internal in the Origin field, specify the Employee ID.

Customer ID and Contact No
If you selected Customer in the Origin field, specify the Customer ID. Then, specify the contact number of the team member.

Supplier ID and Contact No
If you selected Supplier in the Origin field, specify the Supplier ID. Then, specify the contact number of the team member.

Time
Specify an estimated time commitment that is required from each team member. This information can help you determine the length and cost of the project.

5 Use the Output tab to specify the outcome of the project. For example, if the purpose of the project is to improve the finish quality of materials, an output might be improved customer satisfaction. To specify the output of the project, click the **Output** tab and specify this information:

Product
Specify the code for the output item. The product codes you use here are different from the product IDs you define in Product Maintenance. Define these product codes in Product Code Maintenance. After you select a product code, the description of the code is inserted in the Description field.

Attribute
If this output item relates to a particular attribute of the product code, specify the attribute code. Define attribute codes in Attribute Code Maintenance. After you select an attribute code, the description of the code is inserted in the Description field.

6 Use the Tools tab to specify the tools to use in this project. A tool can be a piece of software, a workflow chart, or a piece of equipment. To specify the tools for this project, click the **Tools** tab and specify the ID of the tool in the Tool ID field. Add tool IDs in Tool ID Maintenance.

7 Use the Sites tab to specify the sites that are involved with this project. You can specify the sites that are affected by the project or the sites where the project is implemented. Click the **Sites** tab, then specify the site ID. You can select any site ID that belongs to the entity specified in the header.

8 Click the **Save** button. The project is added as a task to the My To Do list of the employee who is specified in the **Project Leader** field. The date that is specified in the **Due Date** field is the due date of the task.

9 Optionally, add action items to this project.

See Attaching Action Items on page 92.

Creating project meetings

Use the Project Meetings form to record information about the meetings you hold to accomplish the goals of a project. You can define the purpose and agenda for a meeting, specify a start and stop time, record minutes, and create an attendance list for project team members. If employees are scheduled to attend a meeting, the meeting is displayed in their My To Do Lists.

1. Select **Communication > Involve > Project Maintenance**.
2. Select the project.
3. Right-click and select **Meetings**.
4. Specify this information:

   Meeting ID
   Optionally, specify a meeting ID. To automatically generate an ID, leave this field blank. An ID that is based on your next number generation settings is created when you save the record.

   Business Unit
   If this meeting relates to a particular business unit, specify the business unit ID.

   Meeting Date
   Specify the date of this meeting.

   Time
   Specify the start and end times for this meeting.

   Subject
   Specify the subject for the meeting. Add subject codes in Subject Code Maintenance.

   Secretary
   Specify the employee who serves as the secretary for this meeting. This employee may be responsible for logging attendance, taking notes, and compiling a comprehensive packet of meeting minutes for distribution after the meeting.

   Major Location
   Specify the major location where this meeting is held. A major location could be a particular building or floor in a building. Add major locations in Major Location Maintenance.

   Minor Location
   Specify the minor location where this meeting is held. A minor location could be a room in a building. Add minor locations in Minor Location Maintenance.

5. Click the **Agenda** tab and specify the meeting's agenda.
6. Click the **Minutes** tab and specify what was discussed at the meeting.
7. Click the Attendance tab and specify who attended the meeting. By default, the team members you specified for this project are inserted in the Attendance tab. You can add and remove attendees as necessary. To add an attendee:

   Origin
   Specify whether this individual is an internal resource, a customer, or a supplier. Depending on your selection in this field, other fields become available.

   Employee ID
   If you selected Internal in the Origin field, specify the Employee ID.

   Customer ID and Contact No
   If you selected Customer in the Origin field, specify the Customer ID. Then, specify the contact number of the individual.

Supplier ID and Contact No
If you selected Supplier in the Origin field, specify the Supplier ID. Then, specify the contact number of the individual.

Attended
If the individual attended the meeting, select this check box. If the individual did not attend the meeting, clear this check box.

8 Click **Save**.

Attaching action items

You can attach action items to Projects and to Project Meetings. When you select the Action Items option, the Input Maintenance form is opened. In the Reference field for the input item, PROJECT plus the project ID is inserted.

1 Select **Communication > Involve > Project Maintenance**.
2 Select the project.
3 Right-click and select **Action Items**.
4 Specify information about the action item.
See Adding Input Items on page 80.

To add an action item to a particular meeting, right-click and select Meetings after step 2. Then, complete the procedure.

Using My To Do List to manage projects

When you create a project, a task is added to the My To Do List of the project leader. The due date of the task is the date that is specified in the **Due Date** field on the project record. When the project is closed, the task is removed from the My To Do List.

See Closing projects on page 93.

When you create project meetings, a task is added to the My To Do List of the employees who are specified on the **Attendance** tab in the Meetings sub-form of Project Maintenance. The due date of the task is the date that is specified in the **Meeting Date** field. The task is removed from the employee's My To Do List when one of these conditions is met:

- The **Attended** check box is selected for the employee in the **Attendance** tab.
- The current date is later than the meeting date.

Closing projects

After you complete work on a project, close the project.

1 Select **Communication > Involve > Project Maintenance**.
2 Select the project.
3 Click the Closed check box. The current date is inserted in the Closed Date field. Adjust the date if necessary.
4 Click the **Save** button.

Copying projects

Use this function to create a new project from an existing project.

1 Select **Communication > Involve > Project Maintenance**.
2 Select the project.
3 Right-click and select **Copy Project**.
4 Specify this information:

Copy To Project
Specify the ID for the new project.

Options
Specify the information to copy. Select from these options:

Teams
Select this check box to copy the list of team members specified on the Teams tab.

Tools
Select this check box to select the tools you plan to use in the project specified on the Tools tab.

Meetings
Select this check box to copy the meetings associated with the project. Note that this does not create new meeting records. This attaches the existing meeting records to the new project. The meeting records remain attached to the existing project.

Output
Select this check box to copy the expected outcomes of the project specified on the Output tab..

Quality Costs
Select the **Quality Costs** check box to copy the quality costs information for the project.

Action Items
Select the **Action Items** check box to copy the list of tasks necessary to complete the project. Note that this does not create new input records. This attaches the existing input records to the new project. The input records remain attached to the existing project.

5 Click **Ok**.

Involve reports

Use the reports in the Involve module to collect and analyze information about your employees and internal projects.

Course attendance list

Use this report to print a list of courses that your employees have attended. The report shows this information:

- Course ID
- Course name
- Number of hours that are required to complete the course
- Employee who attended the course
- Employee's function
- Employee's job
- Result of the course
- Expiration date of the credentials that the employee earned in the course

Generating the course attendance list

1. Select **Communication > Involve > My Reports**.
2. Click the Course Attendance List link.
3. Specify the information to include in the report. Perform one of these steps:
   - To view the course attendance list for a specific course, specify the ID of the course in the **Course ID** field or the name of the course in the **Course Name** field.
   - To view the course attendance list for a specific employee, specify the ID of the employee in the **Employee ID** field.
   - To view the course attendance list for a specific function, specify the ID of the function in the **Function ID** field.
   - To view the course attendance list for a specific job, specify the ID of the job in the **Job ID** field.
4. Specify the sort order for the report. Select one of these options:

Option	Description
Course ID + Date + Employee ID	Select this option to sort the report first by course ID, then by date, and then be employee ID. Use this option to view all employees who attended a particular session of a course.
Employee ID + Course Name + Date	Select this option to sort the report first by employee ID, then by course name, and then by date. Use this option to view all courses that a particular employee attended.

Option	Description
Date + Course ID + Employee ID	Select this option to sort the report first by date, then by course ID, and then by employee ID. Use this option to view a schedule of courses previously held.

5 Click the **Print Report** button.

Course detail report

Use this report to print a detailed description of courses. The report shows this information:

- Course ID
- Course name
- Number of hours that are required to complete the course
- Course objective
- Prerequisites
- Syllabus
- Materials that are required for the course
- Course audience
- Skills that are gained by taking the course

Generating the course detail report

1 Select **Communication > Involve > My Reports**.
2 Click the Course Detail link.
3 Specify the information to include in the report:
   - To view the course detail for a specific course, specify the ID of the course in the **Course ID** field or the name of the course in the **Course Name** field.
   - To view the course detail for a specific function, specify the ID of the function in the **Function ID** field.
   - To view the course detail for a specific job, specify the ID of the job in the **Job ID** field.
4 Specify the sort order for the report. Select Course ID or Course Name.
5 Click the **Print Report** button.

Detailed course schedule

Use this report to print information about course schedules and a list of employees who have signed up for the course. The report includes this information:

- Course ID

- Course name
- Date and time of the course
- Institution where course is conducted
- Name of the instructor
- Class size
- Major and minor locations
- Course description
- Employees who have enrolled in the course

Generating a detailed course schedule report

1. Select **Communication > Involve > My Reports**.
2. Click the Detailed Course With Sign List link.
3. Specify the information to include in the report. Perform one of these steps:
   - To view the course schedule for a specific course, specify the ID of the course in the **Course ID** field or the name of the course in the **Course Name** field.
   - To view the courses that are scheduled during a particular date range, specify the date range in the **From Date** and **To Date** fields.
4. Click the **Print Report** button.

Detailed projects listing

Use this report to print detailed information about your projects. The report shows this information:

- Entity ID that is associated with the project
- Project ID
- Project name
- Project type
- Status
- Due date
- Closed status
- Closed date
- Project leader
- Team members
- Project tools
- Project output
- Sites that are associated with the project

Generating a detailed projects listing report

1 Select **Communication > Involve > My Reports**.
2 Click the Detailed Project Listing link.
3 Click the entities to use for the report. To select all available entities, click **Select All**.
4 Specify the information to include in the report:
   - To view project details for a particular project, specify the name of the project in the **Project Name** field. Project names are case-sensitive.
   - To view projects of a particular type, specify the project type in the **Project Type** field.
   - To view projects of a particular status, specify the status in the **Project Status** field.
   - To view projects that are assigned to a particular project leader, specify the leader's employee ID in the **Employee ID** field.
   - To view projects with a particular project code, specify the project code in the **Project Code** field.
   - To view projects that output a particular product, specify the product code in the **Product Code** field.
   - To view projects that output a particular attribute, specify the attribute code in the **Attribute Code** field.
   - To view closed projects, select the **Closed** check box. To view open projects, select the **Open** check box.
5 Click the **Print Report** button.

Employee analysis

Use this report to analyze the frequency of certain criteria in your employee records. When you generate this report, you select a criterion to use as the basis of the analysis. For example, if you select Supervisor ID in the **Analysis Field** field, the report shows how many employees are assigned to each of your supervisors. The value is shown as either a number or percentage.

If a criterion ID is not specified on at least one employee record, the criterion ID is not included in the report. For example, if the function code FINANCE is not used on any employee record, then FINANCE is not displayed in the report.

You can use these criteria to analyze employee records:

- Function Code
- Job Code
- Status
- Supervisor ID

You can apply a Supervisor ID or Status filter to the report. When you apply a filter to the report, only employee records that match the filter are considered for the report. For example, if you specify BSMITH in the **Supervisor ID** field and select Job Code in the **Analysis Field** field, then the report would show the job codes of all employees reporting to BSMITH.

Generating an employee analysis report

1 Select **Communication > Involve > My Reports**.
2 Click Employee Analysis.
3 Click the entities to use for the report. To select all available entities, click **Select All**.
4 Specify the report filters:
   - To view information for all employees reporting to a particular supervisor, specify the ID of the supervisor in the **Supervisor ID** field.
   - To view information for all employee records with a particular status, specify the ID of the status in the **Status** field.
5 In the **Analysis Field** field, specify the criterion to use for the analysis.
6 In the **Show Detail** field, specify **Yes** to view a table of results under the chart. Specify **No** to view the chart only. If you specify No, you must select a chart type to view data in the report.
7 In the Chart Type section, click the type of chart to view. You can select **Pie Chart**, **Bar Chart**, or **Column Chart**. Click **No Chart** if you do not want to include the chart in the report. If you select No Chart, you must specify **Yes** in the Show Detail field to view data in the report.
8 Click the **Print Report** button.

Employee audit form

Use this report to print out the questions that you use in employee surveys. This report shows the title of the survey, the survey ID, the survey name, the heading, and the description of the survey. Each question in the survey is listed, along with the lower and upper values for the questions. A space is provided for you to record the result of each survey question.

Generating the employee audit form

1 Select **Communication > Involve > My Reports**.
2 Click Employee Audit Form.
3 To print the questions for a particular survey, specify the ID of the survey in the **Survey ID** field.
4 Click the **Print Report** button.

Employee audits analysis

Use this report to view the number of percentage of employee audits by audit type.

Generating the employee audits analysis report

1 Select **Communication > Involve > My Reports**.

2 Click Employee Audits Analysis.
3 In the Show Detail field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
4 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
5 Click the **Print Report** button.

Detailed employee report

Use this report to print a detailed list of employee records. The report shows this information:

- Entity ID that is associated with the employee record
- Employee ID
- Employee name
- Function
- Job
- Shift
- Department
- Location
- Level
- Work phone
- Other phone number
- Supervisor
- Start date
- Status
- End date
- Comments

Generating a detailed employee report

1 Select **Communication > Involve > My Reports**.
2 Click the Employee Detail link.
3 Click the entities to use for the report. To select all available entities, click Select All.
4 Specify the information to include in the report.
   - To view details for a particular employee, specify the employee's ID in the Employee ID field or the employee's last name in the Employee Last Name field.
   - To view details for employees with a particular function, specify the function code in the Function Code field.
   - To view details for employees with a particular job, specify the job code in the Job Code field.
   - To view details for employees who report to a particular supervisor, specify the supervisor's employee ID in the Supervisor ID field.

- To view details for employees who work at a particular location, specify the location in the Location ID field.
- To view details for employees with particular employment statuses, select the appropriate check boxes in the Status section. You can select more than one status.

5 Specify the sort order for this report. Select one of these options:

Option	Description
Employee ID	Select this option to sort the report by employee ID.
Last Name + First Name + Middle Initial	Select this option to sort the report first by employee last name, then by employee first name, and then by the middle initial.
Function Code + Job Code + Last Name + First Name	Select this option to sort the report by employee function. Within each function grouping, the employees are sorted by job, then by last name, and then by first name.

6 Click the **Print Report** button.

Employee input list

Use this report to view the input that your employees have provided. This information is included in the report:

- Entity ID associated with the feedback record
- Record creation date
- Employee who provided the input
- Employee to whom the input task is assigned
- Due date of the task
- Input type

Generating the employee input list

1 Select **Communication > Involve > My Reports**.
2 Click the Employee Input List link.
3 Click the entities to use for the report. To select all available entities, click Select All.
4 Specify the information to include in the report:
   - To view input reported by a particular employee, specify the ID of the employee in the **Employee ID** field.
   - To view input records with particular reference information, specify the text in the **Reference** field.
   - To view input records that are assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID)** field.
   - To view a range of input records, specify the starting and ending input record IDs in the **Input ID From** and **Input ID To** fields.

- To view input records that were created during a particular time frame, specify the starting and ending dates in the **Create Date From** and **Create Date To** fields.
- To view input records of a particular type, specify the type in the **Input Type** field.
- To view closed feedback records, select the **Yes** check box. To view open feedback records, select the **No** check box.

5 Specify the sort order for the report. Select one of these options:

Option	Description
Input ID	Select this option to sort the report by input ID.
Employee ID + Input ID	Select this option to sort the report first by employee ID and then by input ID. This groups together all input records that were reported by a particular employee.
Assigned To + Input ID	Select this option to sort the report first by assigned to ID and then by input ID. This groups together all input records that are assigned to a particular employee.

6 Click the **Print Report** button.

Employee list

Use this report to print a list of employee records. The report shows this information:

- Entity ID that is associated with the employee record.
- Employee ID
- Employee name
- Function
- Job
- Location
- Work phone
- Other phone number
- Supervisor
- Employee email address

Generating the employee list

1 Select **Communication > Involve > My Reports**.
2 Click the Employee List link.
3 Click the entities to use for the report.
4 Specify the information to include in the report.
- To view details for a particular employee, specify the employee's ID in the **Employee ID** field or the employee's last name in the **Employee Last Name** field.

- To view details for employees with a particular function, specify the function code in the **Function Code** field.
- To view details for employees with a particular job, specify the job code in the **Job Code** field.
- To view details for employees who report to a particular supervisor, specify the supervisor's employee ID in the **Supervisor ID** field.
- To view details for employees who work at a particular location, specify the location in the **Location ID** field.
- To view details for employees with particular employment statuses, select the appropriate check boxes in the Status section. You can select more than one status.

5 Specify the sort order for this report. Select one of these options:

Option	Description
Employee ID	Select this option to sort the report by employee ID.
Last Name + First Name + Middle Initial	Select this option to sort the report first by employee last name, then by employee first name, and then by the middle initial.
Function Code + Job Code + Last Name + First Name	Select this option to sort the report by employee function. Within each function grouping, the employees are sorted by job, then by last name, and then by first name.

6 Click the **Print Report** button.

Employee resume

Use this report to print information from an employee's resume. The report includes this information:

- Entity ID that is associated with the employee record
- Employee ID
- Employee Name
- Function and job codes
- Work location
- Work phone number
- Other phone number
- Supervisor
- Email address
- Skills
- Job history
- Education credentials
- Course attendance history

Generating an employee resume report

1. Select **Communication > Involve > My Reports**.
2. Click the Employee List link.
3. Click the entities to use for the report. To select all available entities, click Select All.
4. In the **Employee ID** field, specify the ID of the employee to view in the report. Leave this field blank to view all employees' resumes.
5. Click the **Print Report** button. If you printed this report for more than one employee, the report is sorted by employee ID.

Full employee input listing

Use this report to view detailed information about employee input. The report shows this information:

- Entity ID associated with the input record
- Input ID
- Description
- Create date
- Input type
- Employee who provided the input
- Employee who is assigned to the input task
- Due date
- Reference text
- Subject of the input
- User defined information
- Cost savings
- Closed status
- Date that the record was closed
- Acknowledgment information
- Follow up information
- Response information

Generating the full employee input list report

1. Select **Communication > Involve > My Reports**.
2. Click Full Employee Input List.
3. Click the entities to use for the report.
4. Specify the information to include in the report:
   - To view input reported by a particular employee, specify the ID of the employee in the **Employee ID** field.
   - To view input records with particular reference information, specify the text in the **Reference** field.

- To view input records that are assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID**) field.
- To view a range of input records, specify the starting and ending input record IDs in the **Input ID From** and **Input ID To** fields.
- To view input records that were created during a particular time frame, specify the starting and ending dates in the **Create Date From** and **Create Date To** fields.
- To view input records of a particular type, specify the type in the **Input Type** field.
- To view closed feedback records, select the **Yes** check box. To view open feedback records, select the **No** check box.

5 Specify the sort order for the report. Select one of these options:

Option	Description
Input ID	Select this option to sort the report by input ID.
Employee ID + Input ID	Select this option to sort the report first by employee ID and then by input ID. This groups together all input records that were reported by a particular employee.
Assigned To + Input ID	Select this option to sort the report first by assigned to ID and then by input ID. This groups together all input records that are assigned to a particular employee.

6 Click the **Print Report** button.

Input analysis

Use this report to analyze the frequency of certain criteria in your input records. When you generate this report, you select a criterion to use as the basis of the analysis. For example, if you select Employee ID in the **Analysis Field** field, the report displays the number or percentage of input records reported by each employee. You can see which employees have made the most suggestions.

To be included on the report, a criterion ID must be specified on at least one employee record. For example, if BSMITH is not used in the employee ID field on any input records, then BSMITH is not displayed in the report.

You can use these criteria to analyze input records:

- Acknowledged By
- Assigned To
- Closed
- Employee ID
- Followed Up By
- Input Type
- Responded By
- Subject
- User Defined 1
- User Defined 2

You can apply Closed, Input Type, and Assigned To filters to the report. When you apply a filter to the report, only input records that match the filter are considered for the report. For example, if you specify SJONES in the **Assigned To** field and select Subject in the **Analysis Field** field, then the report would show the number of input records with each subject code assigned to SJONES.

Generating the input analysis report

1. Select **Communication > Involve > My Reports**.
2. Click Input Analysis.
3. Click the entities to use for the report. To select all available entities, click Select All.
4. To view input records that are due during a particular time range, specify the starting and ending dates in the **Due Date from** and **Due Date to** fields.
5. Specify the report filters:
   - To view information for closed input records only, specify Y. To view information for open input records only, specify N.
   - To view input records of a particular input type, specify the type ID in the **Input Type** field.
   - To view input records that are assigned to a particular employee, specify the ID of the employee in the **Assigned to** field.
6. In the **Analysis Field** field, specify the criterion to use for the analysis.
7. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
8. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
9. Click the **Print Report** button.

Input due date list

Use this report to view when responses to employee input are due. The report shows this information:

- Entity ID
- Date that the input record was created
- ID of the employee who submitted the input
- ID of the employee who is assigned to the input record
- Due date
- Reference information

Generating the input due date list

1. Select **Communication > Involve > My Reports**.
2. Click Input Due Date List.

3 Click the entities to use for the report.

4 Specify the report filters:
- To view input records with particular reference information, specify the text in the **Reference** field.
- To view input records that are assigned to a particular employee, specify the ID of the employee in the **Assigned to** field.
- To view a range of input records, specify the starting ID and ending ID in the **Input ID From** and **Input ID To** fields.
- To view input records that are due during a particular time frame, specify the starting and ending dates in the **Due Date From** and **Due Date To** fields.
- To view input records of a particular input type, specify the type ID in the **Input Type** field.
- To view open input records, click the **No** check box. To view closed input records, click the **Yes** check box.

5 Specify a sort order for the report. Select one of these options:

Option	Description
Input ID	Select this option to sort the report by input ID.
Employee ID + Input ID	Select this option to sort the report first by employee ID and then by input ID. This groups together all input records that were reported by a particular employee.
Assigned To + Input ID	Select this option to sort the report first by assigned to ID and then by input ID. This groups together all input records that are assigned to a particular employee.

6 Click the **Print Report** button.

Job description detail report

Use this report to view detailed information about job descriptions. This report displays the function code, job code, revision level, revision issue date, status, job description, skills, education, and the individual who approved the description.

Generating the job description detail report

1 Select **Communication > Involve > Reports**.

2 Click the Job Descriptions Detail link.

3 Specify the information to include in the report:
- To view job descriptions for a particular function, specify the function code in the **Function Code** field.
- To view job descriptions for a particular job code, specify the job code in the **Job Code** field.

- To view job descriptions approved by a particular employee, specify the employee ID in the **Approved By (Employee ID)** field.
- To view job descriptions with particular statuses, select the appropriate check boxes in the Status section. You can select more than one status.

4 Click the **Print Report** button.

Job description list

Use this report to view a list of job descriptions. This report displays the function code, job code, revision level, revision issue date, and status.

Generating the job description list report

1 Select **Communication > Involve > My Reports**.
2 Click the Job Description List link.
3 Specify the information to include in the report:
- To view job descriptions for a particular function, specify the function code in the **Function Code** field.
- To view job descriptions for a particular job code, specify the job code in the **Job Code** field.
- To view job descriptions with particular statuses, select the appropriate check boxes in the Status section. You can select more than one status.

4 Specify the sort order for the report:

Option	Description
Function Code + Job Code	Select this option to sort the report first by function code and then by job code.
Job Code + Function Code	Select this option to sort the report first by job code, and then by function code.

5 Click the **Print Report** button.

Projects analysis

Use this report to analyze the frequency of certain criteria in your project records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of project records that have each criterion ID. For example, if you select Leader in the **Analysis Field** field, the report shows how many projects are assigned to each leader. The values are shown as either a number or a percentage.

If a criterion is not used on at least one project record, the criterion is not included in the report. For example, if the employee ID BSMITH is not specified in the **Leader** field on any project record, then BSMITH is not displayed in the report.

You can use these criteria to analyze projects:

- Leader
- Priority
- Project Status
- Project Type

You can apply Project Type, Project Status, and Closed filters to the report. When you apply a filter to the report, only project records that match the filter are considered for the report. For example, if you specify INPROCESS in the **Project Status** field and select Leader in the **Analysis Field** field, then the report would how many INPROCESS projects are assigned to each leader.

Generating the projects analysis report

1. Select **Communication > Involve > My Reports**.
2. Click Project Analysis.
3. Click the entities to use for the report. To select all available entities, click Select All.
4. Specify the report filters:
   - To view information for project records with a particular project type, specify the ID of the type in the Project Type field.
   - To view information for project records with a particular status, specify the ID of the status in the Project Status field.
   - To view information for closed projects, specify Y in the Closed field. To view information for open projects, specify N in the Closed field.
5. In the Analysis Field field, specify the criterion to use for the analysis.
6. In the Show Detail field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8. Click the **Print Report** button.

Project Meetings Minutes and Attendance

Use this report to view details about your project meetings. The report shows this information:

- Entity ID of the project
- Project ID
- Project name
- Project type

- Status
- Due date
- Closed status
- Closed date
- Project leader
- Meeting ID
- Meeting date
- Meeting start and end time
- Secretary
- Agenda
- Minutes
- Meeting attendees

Generating the project meeting minutes and attendance report

1. Select **Communication > Involve > My Reports**.
2. Click the Project Meeting Minutes and Attendance link.
3. Click the entities to use for the report. To select all available entities, click Select All.
4. Specify the information to include in the report.
   - To view project meetings for a particular project, specify the ID of the project in the **Project ID** field or the name of the project in the **Project Name** field. Project names are case-sensitive.
   - To view project meetings for projects with a particular status, specify the status in the **Project Status** field.
   - To view projects that are assigned to a particular project leader, specify the leader's employee ID in the **Employee ID** field.
   - To view closed projects, select the **Yes** check box. To view open projects, select the **No** check box.
5. Click the **Print Report** button.

Skills planning sorted by employee

Use this report to print a list of employees and the skills associated with their jobs. You can use this report to see if the employees' skills are out-of-date. The report shows this information:

- Entity ID that is associated with the employee record
- Employee ID
- Name
- Job
- Description
- Function
- Job
- Skills

For each skill, the name of the skill, whether the skill is required for the job, and whether the employee has the skill are displayed.

Generating the skills planning report sorted by employee

1. Select **Communication > Involve > My Reports**.
2. Click the Skills Planning Sorted by Employee link.
3. Click the entities to use for the report. To select all available entities, click Select All.
4. Specify the information to include in the report.
   - To view information for a particular skill, specify the skill ID in the **Skill ID** field.
   - To view information for a particular employee, specify the employee's ID in the **Employee ID** field.
   - To view information for employees with a particular function, specify the function code in the **Function Code** field.
   - To view information for employees with a particular job, specify the job code in the **Job Code** field.
5. Click the **Print Report** button.

Skills planning sorted by skill

Use this report to print a list of skills, the jobs where the skills are used, and the employees who have the skills. For each skill, the employees whose job descriptions include the skill are listed. In addition, the report shows this information:

- Entity ID that is associated with the employee
- The employee's name and ID
- Function
- Job

For each employee, whether the skill is required for the job and whether the employee has the skill are displayed.

Generating the skills planning report sorted by skill

1. Select **Communication > Involve > My Reports**.
2. Click the Skills Planning Sorted by Skill link.
3. Click the entities to use for the report.
4. Specify the information to include in the report.
   - To view information for a particular skill, specify the skill ID in the **Skill ID** field.
   - To view information for a particular employee, specify the employee's ID in the **Employee ID** field.

- To view information for employees with a particular function, specify the function code in the **Function Code** field.
- To view information for employees with a particular job, specify the job code in the **Job Code** field.

5 Click the **Print Report** button.

Chapter 4: Customer modules

Use the modules in the Customer menu to record information about your customers and your relationships with them. These records can include the products you sell to the customer, the product characteristics most important to the customer, and customer rating information.

You can use the Jump feature to navigate between related forms.

See Jump feature on page 34.

Tasks are added to employees' My To Do lists after you create records in Customer Feedback Maintenance.

See My To Do list on page 34.

Contacts

Use Contacts Maintenance to enter information about the individuals with whom you do business. A contact can represent a customer or a supplier. You can also create stand-alone contacts.

Before you create a contact, create honorific codes.

See Adding codes on page 45.

Adding contacts

1. Select **Communication > Customer > Contacts Maintenance** or **Communication > Supplier > Contacts Maaintenance**.
2. In the header, specify basic information about the contact. Specify this information:

   Entity ID
   Specify the entity where this contact can be used.

   Honorific/First/Last Name
   Specify the honorific, first, and last name of the contact.

   Middle Name/Initial
   Specify the contact's middle name. After you exit the middle name field, the contact's middle initial is inserted. Alternatively, specify a middle initial only.

Position
Specify the title or position of the contact person.

Salutation
Click the arrow and select the salutation to use when sending correspondence to this contact.

Function
Specify this contact's function.

Job
Specify this contact's job.

3 Click the Communication tab and specify this information:

Phone/Extension
Specify the telephone number, with area code, for the contact.
If the contact prefers not to be contacted by this phone number, select the Do Not Call check box.

Mobile Phone
Specify the telephone number, with area code, for the contact's cellular phone.
If the contact prefers not to be contacted by this phone number, select the Do Not Call check box.

Fax
Specify the number, with the area code, for the fax machine where you can reach your contact. This is not a required field.

Country Dial Code
If your contact has an international number, specify the country dial code of the country.

Email Address

Specify the contact's email address. After you specify an email address, you can click the Email Address link to open an email that is addressed to the contact. The email is added to the address list that is displayed when you click the **To** button or **CC** button on an email that you create in IQM.

If the contact prefers not to be contacted by email, select the **Do Not Email** check box. Selecting this check box does not prevent you from using the Email Address link. This check box is informational only.

Social Network URL
Specify the URLs of the contact's social network websites. Click the arrow and select the type of social network website, then specify the URL. Repeat this process to specify additional social network URLs. After you specify the URL, click the Open Link button to go to the contact's social network page.

4 To specify the contact's work address, click the Work Address tab. Specify this information:

Street Address
Specify the street address of the contact.

City
Specify the city.

State
Specify the state. You must select a code from the drop-down list. You cannot specify a custom code.

Zip
Specify the zip code.

Country
Specify the country. You must select a code from the drop-down list. You cannot specify a custom code.

5 To specify the contact's home phone, fax, personal email address, click the **Home Communication** tab. Specify this information:

Phone
Specify the contact's home phone number.

Fax
Specify the contact's home fax number.

Email Address
Specify the contact's home email address.

Other Address
If this contact has an alternate home address, specify the address in this field.

Other Number
If this contact has an alternate phone number, specify the number in this field.

6 To specify the contact's home address, click the Home Address tab. Specify this information:

Street Address
Specify the street address of the contact.

City
Specify the city.

State
Specify the state. You must select a code from the drop-down list. You cannot specify a custom code.

Zip
Specify the zip code.

Country
Specify the country. You must select a code from the drop-down list. You cannot specify a custom code.

7 To specify personal information about the contact, click the Profile tab. Specify this information:

Date of Birth
Specify the contact's date of birth.

Marital Status
Specify the contact's marital status.

Preferred method of contact
Specify the method of contact that the contact prefers you to use.

Gender
Click the Gender arrow and select your contact's gender.

Reference
Specify any additional text for the contact. Use this field to enter a secondary phone number or other explanatory notes.

8 Use the Customers and Suppliers tabs to attach this contact to customer and supplier records.

See Attaching Contacts to Customers on page 115.

See Attaching Contacts to Suppliers on page 116.

9 To specify customized information for the contact, click the **User Defined** tab. To set up the labels, edit the form. After you set up the labels, specify the appropriate information.

10 To enter additional information about the contact, click the **Comments** tab and enter the text.

11 Click the **Save** button.

Attaching contacts to customers

You can use Contacts Maintenance to attach a contact to a customer.

To attach a contact to a customer in Contacts Maintenance:

1 Select **Communication > Customer > Contacts Maintenance** or **Communication > Supplier > Contacts Maintenance**.

2 Specify the contact ID.

3 Click the **Customers** tab.

4 Click in the table on the Customers tab.

5 Click the **New** button.

6 Specify the ID of the customer to which you are attaching the contact.

7 If this contact is the customer's main contact, select the **Primary** check box. If this contact is an alternate contact for the customer, clear the **Primary** check box. Each customer can have only one primary contact. If the customer already has a primary contact and you select the Primary check box for a second contact, the second contact becomes the customer's primary contact. The previous primary contact becomes an alternate contact for the customer.

The same contact can be the primary contact for more than one customer or supplier.

8 Click the **Save** button.

You can also use Customer Maintenance to attach a contact to a customer.

Attaching contacts to suppliers

You can use Contacts Maintenance to attach a contact to a supplier.

1. Select **Communication > Customer > Contacts Maintenance** or **Communication > Supplier > Contacts Maintenance**.
2. Specify the contact ID.
3. Click the **Suppliers** tab.
4. Click in the table on the Suppliers tab.
5. Click the **New** button.
6. Specify the ID of the supplier to which you are attaching the contact.
7. If this contact is the supplier's main contact, select the **Primary** check box. If this contact is an alternate contact for the supplier, clear the **Primary** check box. Each supplier can have only one primary contact. If the supplier already has a primary contact and you select the Primary check box for a second contact, the second contact becomes the supplier's primary contact. The previous primary contact becomes an alternate contact for the supplier.

   The same contact can be the primary contact for more than one customer or supplier.
8. Click the **Save** button.

   You can also use Supplier Maintenance to attach a contact to a supplier.

Deleting contacts

To delete a contact, you must first remove the contact from customer and supplier records.

1. To remove a contact from a customer, select **Communication > Customer > Customer Maintenance**. To remove a contact from a supplier, select **Communication > Supplier > Supplier Maintenance**.
2. Right-click and select **Contacts**.
3. Select the contact, then click the **Delete** button.
4. Click the **Save** button.
5. Repeat steps 1 through 4 until the contact that you want to delete has been removed from all customer and supplier records.
6. Select **Communication > Customer > Contact Maintenance** or **Communication > Supplier > Contact Maintenance**.
7. Select the contact to delete.
8. Click the **Delete** button.
9. Click the **Save** button. Provided that the contact is not linked to any customer or supplier, the contact is removed from the database.

Customers

Use Customer Maintenance to manage your relationships with your customers. You can maintain contact information, list products that you typically sell to the customer, and maintain customer ratings information.

Adding customers

To add a customer:

1 Select **Communication > Customer > Customer Maintenance**.

2 Specify this information:

Entity ID
Specify the entity that has a relationship with this customer.

Business Unit
Specify the business unit associated with this customer.

Customer ID
Specify an ID for this customer.

Name
Specify the full name of the customer.

Address
Specify the customer's street address.

City
Specify the customer's city.

State
Specify the customer's state.

Zip
Specify the customer's zip code

Country
Specify the customer's country.

Status
Specify a status for this customer. Select one of these options:

Open
Select this option if the customer is active and available for use in other records.

Closed
Select this option if you no longer do business with this customer.

Hold
Select this option if your relationship with this customer is temporarily suspended.

Prospect
Select this option if this is prospective customer with whom you do not do business yet.

Rejected
Select this option if your proposal to this customer has been rejected.

Deleted
You cannot select this option. The Deleted status is selected by the system if it receives a BOD changing the status to Deleted.

3 Click the **Contact** tab and specify this information:

Phone
Specify the company's main phone number

Fax
Specify the company's main fax number.

Email Address
Specify the company's general email address.

Primary Contact
Information for the primary contact for this customer is displayed.
In addition, the total number of contacts for this customer is displayed. If this number is greater than one, then the customer has alternate contacts. Right-click and select **Contacts** to view the alternate contact information.

4 Click the **Comments** tab and specify general information about the customer.

5 Use the **Trends** tab to specify information to help you build demographic or statistical trend analyses about the customer. Specify this information:

Customer Type
Specify the Type ID that classifies this customer. This type ID classifies the customer at the accounting entity level. If you have multiple sites, you can specify a different customer type ID in each site. See step 6.

Assigned To
Specify the employee to whom this customer is assigned.

Source
Specify a Source ID to indicate where you first heard about the customer.

Territory
Specify a Territory code to indicate where the customer is located.

User Defined Fields
Specify the user defined information your company uses.

6 Use the Site tab to specify the customer type code that each of your sites uses for this customer. Specify this information:

Site ID
Specify the site ID.

Customer Type Code
Specify the customer type code that the site uses to classify the customer. After you specify the code, the description of the code is displayed in the Description column.

7 Click the **Save** button.

Adding customer contacts

Before you can add contacts to a customer, you must first create the contacts.

See Contact Maintenance on page 112.

1 Select **Communication > Customer > Customer Maintenance**.
2 Select the customer.
3 Right-click and select **Contacts**.
4 Specify the name of the contact. The contact you select must be available for use in the Customer Entity ID.
5 If this is the customer's primary contact, select the **Primary Contact** check box. Each customer can have only one primary contact. After you specify the primary contact, the contact's information is displayed in the Contact tab in Customer Maintenance.
6 Click the **Save** button.

Adding customer products

Before you can add products to a customer record, add products in Product Maintenance.

Specify the products that the customer buys from you.

1 Select **Communication > Customer > Customer Maintenance**.
2 Select the customer.
3 Right-click and select **Products**.
4 Specify this information:

Entity ID
The entity ID that is specified for the customer is inserted. You cannot change this value.

Product ID
Specify the product to assign to this customer. You can specify any product that is assigned to the entity in the Entity ID field.

Customer Product ID
Specify the ID the customer uses to identify this product.

Customer Product Name
Specify the name the customer uses to identify this product.

Rev Level
Specify the revision level for this product.

5 To view the characteristics for this product, click the **Characteristics** button. This read-only information is displayed:

Char No
The characteristic number.

Characteristic Name
The name of the characteristic.

Type
The characteristic type.

Standard Type
The standard used to measure this characteristic. These standards are used:

- Attribute. The characteristic is evaluated on a yes or no basis.
- Variable. The standard can be met if the characteristic measurement falls within a specified range. The variable standard and unit of measure are also displayed.
- Text. The characteristic standard is not known until inspection is performed. A text characteristic standard is recorded during data collection.

Class
The class code for this characteristic. Class codes can be used to define sampling plans.

Category
The category code for this characteristic.

Page
The page number in the product specification where this characteristic is described.

Zone
The section or zone of the product specification where this characteristic is described.

6 Exit the form to return to Customer Maintenance.

Adding customer ratings

You can view ratings that have been posted from the Customer Audits feature in this form, or you can manually add ratings.

1 Select **Communication > Customers > Customer Maintenance**.

2 Select the customer.
3 Right-click and select **Ratings**.
4 Specify this information:

Ratings ID
Leave this field blank. A ratings ID is generated when you save the record.

Rating Subject
Specify a subject for the rating. For example, to rate this customer's purchase frequency, specify a Rating Subject of Purchase Frequency.

Rating
Specify a numeric rating for the Rating Subject. For example, if you use a scale of 1-10, and you have been pleased with the purchase habits of this customer, specify an appropriately high score.

Possible
Specify the highest possible rating. For example, to set up a 10-point scale, specify 10 in this field.

Date
Specify the date you entered this rating.

Comments
Specify any comments that relate to this rating. For example, you can specify information about where the rating data came from, who contributed to the Rating score, and under what circumstances the test data was gathered.

5 Exit the Ratings form to return to Customer Maintenance.

Copying customer records

You can copy an existing customer record to create a new customer record.

1 Select **Communication > Customers > Customer Maintenance**.
2 Select the customer.
3 Right-click and select **Copy Customers...**.
4 In the **Copy to Customer ID** field, specify the ID of the new customer.
5 In the Copy Options section, specify the information to copy to the new customer record. Select one or more of these check boxes:

Contacts
If the new customer has the same contacts as the existing customer, select this check box to copy the contacts.

Ratings
If you rate the new customer by the same criteria as the existing customer, select this check box to copy ratings information.

Products
If the new customer purchases the same products as the existing customer, select this check box to copy the products information.

Quality Costs
If the new customer has the same quality cost information as the existing customer, select this check box to copy the quality costs information.

6 Click **Ok**. The new customer record is created.

Customer feedback

Use Customer Feedback Maintenance to document and track all communications with your customers. Communications can include telephone calls, faxes, e-mails, compliments, questions, suggestions, information requests, problems, quotes and sales orders.

Adding customer feedback

To add a customer feedback record:

1 Select **Communication > Customer > Customer Feedback Maintenance**.
2 Specify this information:

Site ID
Specify the site with which the customer conducts business.

Feedback ID
Leave this field blank. When you save the record, a feedback ID is generated based on your number generation settings.

Date
Specify the date the feedback was received.

Feedback Type
Select the type of feedback from the list.

Due Date
Specify the date that a response to the feedback is due.

Reference
Specify any additional information about this feedback record.

Closed and Closed Date
See Closing Feedback on page 126.

Business Unit
Select the business unit that is receiving this feedback from the list.

3 In the Customer section, specify this information:

Customer ID
Specify the ID for the customer providing the feedback.

Contact No
Specify the contact number of the customer providing the feedback.

Contact Phone No
The phone number of the contact is inserted after you select a contact number.

4 In the Assigned to section, specify the employee who is responsible for the resolution of this feedback record. After you save the record, a task for the feedback record is added to the employee's My To Do list. The due date of the task is the same as the due date of the customer feedback record.

5 Click the **Feedback** tab and specify the feedback input reported by the customer. If you generate a Customer Feedback Letter report, this text is used as the body of the letter.

6 Click the **Acknowledgement** tab and specify this information:

Acknowledged By
Specify the employee who is responsible for acknowledging the receipt of this feedback information. After you save the record, a task for the feedback record is added to the employee's My To Do list. The due date of the task is the same as the due date of the customer feedback record.

Date
Leave this field blank. The employee who acknowledges the feedback record specifies the date.

Acknowledgement
Optionally, add notes about the acknolwedgement of the feedback. The employee who acknowledges the feedback record can also specify this information.

7 Click the **Response** tab and specify this information:

Responded By
Specify the employee who is responsible for responding to the feedback. After you save the record, a task for the feedback record is added to the employee's My To Do list. The due date of the task is the same as the due date of the customer feedback record.

Date
Leave this field blank. The employee who responds to the feedback specifies the date.

Response
Optionally, add notes about the response to the feedback. The employee who responds to the feedback can also specify this information.

8 Click the **Follow Up** tab and specify this information:

Followed Up By
Specify the employee who is responsible for following up with the customer. After you save the record, a task for the feedback record is added to the employee's My To Do list. The due date of the task is the same as the due date of the customer feedback record.

Date
Leave this field blank. The employee who follows up with the customer specifies the date.

Follow Up
Optionally, add notes about follow up activities. The employee who follows up on the feedback record can also specify this information.

9 Click the **Subject** tab and specify this information:

Subject
Specify the subject code that classifies this feedback.

User Defined 1 and User Defined 2
Specify the user defined information your company uses with feedback records.

10 Click the **Save** button.

Using My To Do List to manage customer feedback

When you create a customer feedback record, tasks are added to the My To Do List. The due date of the tasks is the date that is specified in the **Due Date** field on the customer feedback record. When a task is complete, it is removed from the My To Do List.

This table shows each task, who the task is assigned to, and how to complete the task:

Task	Assigned to	Completion steps
Customer Feedback (Acknowledge)	Employee in **Acknowledged By** field	1 Optionally, specify text that describes how the customer feedback was acknowledged. Right-click the Input form and select **Acknowledgement Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Acknowledgement** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.

Task	Assigned to	Completion steps
Customer Feedback (Followup)	Employee in **Followup By** field	1 Optionally, specify text that describes the follow-up steps. Right-click the Input form and select **Followup Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Follow Up** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.
Customer Feedback (Response)	Employee in **Responded By** field	1 Optionally, specify text that describes the response to the customer feedback. Right-click the Customer Feedback form and select **Response Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Response** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.
Customer Feedback	Employee in **Employee ID** field in the Assigned To section	Close the customer feedback record. See Closing customer feedback on page 126.

To use the My To Do List to complete a customer feedback task:

1 Select **Administration > My To Do List**.

2 Specify this information:

Entity ID
Specify the ID of the entity where the customer feedback record was created.

Employee ID
Specify the ID of the employee who is assigned to an customer feedback task.

Start Date
Specify a date that is the same as or earlier than the due date of the customer feedback record.

End Date
Specify a date that is the same as or later than the due date of the customer feedback record.

3 Double-click the task. The Customer Feedback Maintenance form is opened.
4 Complete the task as described in the table.
5 Click **Save**.

Closing customer feedback

After you resolve a customer feedback record, close the record to indicate that work on the feedback is complete.

To close a customer feedback record:

1 Select **Communication > Customer > Customer Feedback Maintenance**.
2 Select the customer feedback record to close.
3 Click the **Closed** check box. The current date is inserted in the Closed Date field.
4 Optionally, change the date you closed the customer feedback record.
5 Click the **Save** button. Tasks that are related to the customer feedback record are removed from employee My To Do lists.

Copying customer feedback records

You can create a new customer feedback record by copying an existing record.

1 Select **Communication > Customers > Customer Feedback**.
2 Select the record to copy.
3 Right-click and select **Copy Feedback...**.
4 Specify the information to copy:

Quality Costs
Select this check box to copy quality cost information.

Linked Documents
Select this check box to copy the documents that are linked to the record.

5 Click **Ok**.

Setting up audits

1 Perform one of these tasks:
- To set up a customer audit, select **Communication > Customers > Audit Maintenance**
- To set up an employee audit, select **Communication > Involve > Audit Maintenance**
- To set up a supplier audit, select **Communication > Supplier > Audit Maintenance**

2 In the Audits section, specify this information:

Audit ID
Specify an ID for this audit.

Name
Specify a name for this audit.

Type
Specify the type of audit.

Description
Specify a description of the audit. You can type a description directly in the table cell, or click the **Description** button to specify a longer description.

Total Score
This field is read-only. The total possible score for the audit is calculated after you specify headings and questions.

3 In the Headings section, specify the categories for the questions to ask. For example, an employee review audit could include headings such as Sales Metrics, Interpersonal Skills, and Attendance. Specify this information:

Name
Specify a name for the heading.

Questions
Leave this field blank. The value is calculated after you add questions to each section heading.

Lower
Specify the default lowest possible rating for the heading. You can override this setting on a question-by-question basis when you specify questions.

Nominal
Specify the default nominal rating for the heading. This number indicates average performance. You can override this setting on a question-by-question basis when you specify questions.

Upper
Specify the default highest possible rating for heading. This number indicates average performance. You can override this setting on a question-by-question basis when you specify questions.

Description
Specify a description for the heading. You can type a description directly in the table cell, or click the Description button to specify a longer description.

Total Score
This is a read-only field. To calculate the total score for the heading, the number of questions in the heading is multiplied by the highest possible rating.

4 Click the **Save** button.

5 For each heading, specify the questions to ask. Select a heading, then click **Questions**.

6 Specify this information:

Question
Specify the question. For example, for a managerial evaluation, a question in the Communication heading might be "Does the manager provides consistent performance feedback to subordinates?"

Lower
The lower limit is the lowest score allowed for the question. The limit you specified for the heading is inserted. You can specify a different value.

Nominal
The nominal value is the score used for average performance. The value you specified for the heading is inserted. You can specify a different value.

Upper
The upper limit is the highest score allowed for the question. The limit you specified for the heading is inserted. You can specify a different value.

Description
Specify a description of the question. You can type a description directly in the table cell, or click the Description button to specify longer text.

Total Score
The value you specified in the Upper cell is inserted. This is the maximum score that can be received for this question.

7 Exit the Question form to return to Audit Maintenance.

Customer results

Use the Audit Results form to specify the responses to your customer audits. Before you can specify results, you must first set up audits.

See Setting up audits on page 85.

Creating an audit result record

To create an audit result record:

1. Select **Communication > Customer > Customer Results Maintenance**.
2. Specify this information:

   Site ID
   Specify the site with which the customer conducts business. After you select a site, the site's parent entity is inserted in the Entity ID field.

   Results ID
   Leave this field blank. The ID is generated based on your number generation settings after you save the record.

   Date
   Specify the date the audit was conducted.

   Audit ID
   Specify the ID of the audit you conducted.

   Business Unit
   Specify the business unit ID associated with this audit.

3. In the Customer section, specify this information:

   Customer ID
   Specify the customer that is the subject of the audit.

   Contact No
   If a particular individual provided the responses for the audit, specify the contact number for the individual.

4. In the User Defined section, specify the user-defined information that your company requires.
5. In the Comments section, specify general comments regarding this audit. Comments could include recommendations that you developed from the results of the audit.
6. After you specify scores for each audit question, the total possible score for the audit is inserted in the Total Score field. The score the customer earned is inserted in the Total Score field.
7. Click **Save**. After you set up the audit record, right-click and select **Headings/Questions** to specify the score the customer received for each audit question.
8. Right-click and select **Headings/Questions**.
9. Specify this information:

   Result
   Specify the numeric score the subject received for this question.

   Comments
   Specify any comments about the score or the subject's response to the question.

10. Click **Save**.
11. A dialog box is displayed that prompts you to mark the result for posting. Click **Yes**.
12. Exit the Headings/Questions form.

13 In the Customer Results Maintenance form, the **Post** check box is selected, indicating that the result is ready to be posted. To post the result, click **Save**. The **Posted** check box is selected and the results are added to the customer's ratings.

Viewing summary results by heading

After you save audit results, you can view the result total for each heading. The individual scores for each question in a heading are added to calculate the heading result.

1 Select the audit result record.
   - To select an Employee Audit result record, select **Communication > Involve > Employee Results Maintenance**. Then, specify the audit result record in the Results ID field.
   - To select a Customer Audit result record, select **Communication > Customer > Customer Results Maintenance**. Then, specify the audit result record in the Results ID field.
   - To select Supplier Audit result record, select **Communication > Supplier > Supplier Results Maintenance**. Then, specify the audit result record in the Results ID field.
2 Right-click and select **Questions/Headings**.
3 Right-click and select **Headings Summary**.
4 Each heading is listed. For each heading, the number of questions, name of the heading, total score, and total possible score are listed.

Customer reports

You can generate reports about your customers.

Customer analysis

Use this report to analyze information about the attributes of your customers. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of customers for each criterion ID. For example, if you select Source in the **Analysis Field** field, the report displays the percentage of customers from each source. You can see which sources are most responsible for bringing in customers.

The report does not show an ID if it is not used on any customer record. For example, if the source ID TRADESHOW is not specified on a customer record, it is not included in the report.

You can use these criteria to analyze customers:

- Assigned To
- Country
- Customer Type

- Source
- State
- Status
- Territory
- User Defined 8
- User Defined 9

You can apply Assigned To, Customer Type, State, and Territory filters to the report. When you apply a filter to the report, only customer IDs that match the filter are considered for the report. For example, if you specify VA in the **State** field and select Customer Type in the **Analysis Field** field, then the report would show the percentage of each customer type for customers in Virginia.

Generating the customer analysis report

1. Select **Communication > Customers > My Reports.**.
2. Click the **Customer Analysis** link.
3. Click the entities to include in the report.
4. Specify the filters for the report:
   - To analyze customers who are assigned to a particular employee, specify the ID of the employee in the **Assigned To** field.
   - To analyze customers of a particular customer type, specify the type in the **Customer Type** field.
   - To analyze customers who are located in a particular state, specify the state in the **State** field.
   - To analyze customers who are located in a particular territory, specify the ID of the territory in the **Territory** field.
5. In the **Analysis Field** field, specify the criterion to use for the analysis.
6. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the **Show Detail** field to view data in the report.
8. Click the **Print Report** button.

Customer audits analysis

Use this report to view the percentage of each survey type administered to your customer base.

1. Select **Communication > Customer > My Reports**.
2. Click the **Customer Audits Analysis** link.
3. In the Show Detail field, specify Yes to view a table of results under the chart. The table shows the total number of times each survey type was administered and the percentage the total represents. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.

4 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
5 Click the **Print Report** button.

Generating the customer audits analysis report

1 Select **Communication > Customers > My Reports.**.
2 Click the **Customer Audits Analysis** link.
3 In the **Show Detail** field, specify Yes to view a table of results under the chart. The table shows the total number of times each survey type was administered and the percentage the total represents. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
4 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
5 Click the **Print Report** button.

Customer contacts analysis

Use this report to analyze information about the attributes of your customer contacts. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of customer contacts for each criterion ID. For example, if you select Function Code in the **Analysis Field** field, the report displays the percentage of customer contacts that have each function code. You can see which functions your customer contacts are most likely to perform within their companies.

Zero values are not displayed in the report. For example, if the function ID FINANCE was not specified on a customer contact record, it is not included in the report.

You can use these criteria to analyze customers:

- Country (the contact's work address country is used)
- Function
- Job Code
- State (the contact's work address state is used)
- Status

You can apply Country, Customer Type, State, Status, and Territory filters to the report. When you apply a filter to the report, only customer contact IDs that match the filter are considered for the report. For example, if you specify VA in the **State** field and select Job Code in the **Analysis Field** field, then the report shows the percentage of contacts with each job code whose companies are located in Virginia.

Generating the customer contact analysis report

1. Select **Communication > Customers > My Reports**.
2. Click the **Customer Contacts Analysis** link.
3. Click the entities to include in the report.
4. Specify the filters for the report:
   - To analyze contacts of customers of a particular customer type, specify the type in the **Customer Type** field.
   - To analyze customers that are located in a particular state, specify the state in the **State** field.
   - To analyze customer contacts with a particular status, specify the ID in the **Status** field.
   - To analyze customers that are located in a particular territory, specify the ID of the territory in the **Territory** field.
5. In the **Analysis Field** field, specify the criterion to use for the analysis.
6. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8. Click the **Print Report** button.

Customer detail report

Use this report to print detailed information about your customers. The report shows this information:

- Entity ID
- Customer ID
- Address
- Phone number
- Fax number
- Primary contact name
- Customer type as defined on the **Customer Maintenance Trend Info** tab
- Territory
- Source
- Employee who is assigned to the customer
- User defined fields 8 and 9 from the **Trend Info** tab
- List of customer contacts

Generating the customer detail report

1. Select **Communication > Customers > My Reports**.
2. Click the **Customer Detail** link.

3 Click the entities to include in the report.

4 Specify the information to include in the report. Perform one of these steps:
   - To view information for a specific customer, specify the ID of the customer in the **Customer ID** field or the name of the customer in the **Customer Name** field.
   - To view the details for all customers who are located in a particular city, specify the city in the **City** field.
   - To view the details for all customers who are located in a particular state, specify the state in the **State** field.
   - To view the details for all customer of a particular type, specify the type in the **Customer Type** field.
   - To view the details for all customers who were provided by a particular source, specify the ID in the **Source ID** field.
   - To view the details for all customers who are located in a particular territory, specify the code in the **Territory** field.
   - To view the details for all customers with a particular contact, specify the contact's name in the **Contact Last Name** and **Contact First Name** fields.
   - To view the details for all customers with particular statuses, select the appropriate check boxes in the Status section.

5 Click the **Print Report** button.

Customer feedback analysis

Use this report to analyze information about the feedback your customers provide to you. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of customer feedback records for each criterion ID. For example, if you select Subject in the Analysis Field field, the report displays the percentage of customer feedback records about each subject. You can see the subjects about which customers most frequently provide feedback.

You can analyze customer feedback based on these criteria:

- Acknowledged By
- Assigned To
- Closed
- Customer ID
- Feedback Type
- Followed Up By
- Subject
- User Defined 2
- Responded By

You can apply Customer ID, Feedback Type, and Assigned To filters to the report. When you apply a filter to the report, only customer feedback records that match the filter are considered for the report. For example, if you specify ABLMAN in the Customer ID field and select Feedback Type in the Analysis

Field field, then the report shows the percentage of each feedback type reported by the customer ABLMAN.

Generating the customer feedback analysis report

1. Select **Communication > Customers > My Reports**.
2. Click the **Customer Feedback Analysis** link.
3. Click the sites to include in the report.
4. To view feedback records due during a particular time period, specify the date range in the **Due Date From** and **Due Date to** fields.
5. Specify the filters for the report:
   - To analyze customer feedback provided by a particular customer, specify the ID of the customer in the Customer ID field.
   - To analyze customer feedback of a particular feedback type, specify the type in the Feedback Type field.
   - To analyze customer feedback assigned to a particular employee, specify the ID of the employee in the Assigned To field.
6. In the **Analysis Field** field, specify the criterion to use for the analysis.
7. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
8. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
9. Click the **Print Report** button.

Customer feedback due date

Use this report to review information about customer feedback records due during a time range that you specify. The report shows this information:

- Entity ID and site ID where the feedback was created
- ID of the feedback record
- ID of the customer who provided the feedback
- Customer contact number and name
- ID of the employee who is assigned to the feedback record
- Date that a response to the feedback is due
- Type of feedback provided
- Reference text that was specified on the feedback record

Generating the customer feedback due date report

1. Select **Communication > Customers > My Reports**.
2. Click the **Customer Feedback Due Date** link.
3. Click the sites to include in the report.
4. Specify the information to include in the report.
   - To view feedback records for a specific customer, specify the ID of the customer in the **Customer ID** field or the name of the customer in the **Customer Name** field.
   - To view feedback records that are assigned to a specific employee, specify the ID of the employee in the **Assigned To** field.
   - To view feedback records that are due during a particular time range, specify the starting and ending dates of the range in the **Due Date From** and the **Due Date To** fields.
   - To view feedback records of a specific feedback type, specify the ID of the type in the **Feedback Type** field.
   - To view feedback records with specific reference information, specify the text in the **Reference** field.
5. Specify the sort order for the report. Select one of these options:

Option	Description
Feedback ID	Select this option to sort the report in ascending order by feedback ID.
Customer Name + Feedback ID	Select this option to sort the report first by customer name, and then by feedback ID. This groups together all feedback provided by a particular customer.
Assigned To + Feedback ID	Select this option to sort the report first by assigned to ID, and then by feedback ID. This groups together all feedback records that are assigned to a particular employee.

6. Click the **Print Report** button.

Customer feedback letter

Use this report to generate the heading for a letter about customer feedback. The report shows this information:

- Your address as defined in **Application Global Maintenance**
- Customer's address
- Reference to the feedback ID
- Text specified on the **Feedback** tab in **Customer Feedback Maintenance**
- Date of the feedback record

Generating the customer feedback letter

1. Select **Communication > Customers > My Reports**.
2. Click the **Customer Feedback Letter** link.
3. Click the sites to include in the report.
4. To generate a letter regarding a specific feedback record, specify the record ID in the **Feedback ID** field.
5. Click the **Print Report** button.

Customer feedback list

Use this report to print a list of your customer feedback records. The report shows this information:

- Entity ID
- Site ID
- Feedback ID
- Feedback date
- ID of the customer who provided the feedback
- Customer contact number
- Customer contact name
- Employee who is assigned to the feedback record.
- Due date
- Type
- Reference
- Status

Generating the customer feedback list

1. Select **Communication > Customer > My Reports**.
2. Click the **Customer Feedback List** link.
3. Click the sites to include in the report.
4. Specify the information to include in the report. Perform one of these steps:
   - To view feedback provided by a specific customer, specify the ID of the customer in the **Customer ID** field or the name of the customer in the **Customer Name** field.
   - To view feedback records that are assigned to a particular employee, specify the ID in the **Employee ID** field.
   - To view a particular range of feedback records, specify the starting and ending ID of the range in the **Feedback ID from** and **Feedback ID to** fields. The report displays the IDs you specified and every ID that falls between the two IDs you specified.
   - To view feedback records that are due during a particular time range, specify the starting and ending dates of the range in the **Due Date From** and the **Due Date To** fields.

- To view feedback records of a specific feedback type, specify the ID of the type in the **Feedback Type** field.
- To view feedback records with specific reference information, specify the text in the **Reference** field.

5 Select the status of the feedback records to include in the report. Select Closed to view closed feedback records. Select Open to view open feedback records.

6 Specify the sort order for the report. Select one of these options:

Option	Description
Feedback ID	Select this option to sort the report in ascending order by feedback ID.
Customer Name + Feedback ID	Select this option to sort the report first by customer name, and then by feedback ID. This groups together all feedback provided by a particular customer.
Assigned To + Feedback ID	Select this option to sort the report first by assigned to ID, and then by feedback ID. This groups together all feedback records that are assigned to a particular employee.

7 Click the **Print Report** button.

Customer list

Use this report to print a list of your customers. The report shows the entity ID, customer ID, name, city, state, status, assigned to, customer type, and territory.

Generating the customer list report

1 Select **Communication > Customer > My Reports**.

2 Click the **Customer List** link.

3 Click the entities to include in the report.

4 Specify the information to include in the report. Perform one of these steps:

- To view the details for a specific customer, specify the ID of the customer in the **Customer ID** field or the name of the customer in the **Customer Name** field.
- To view customers who are located in a particular city, specify the city in the **City** field.
- To view customers who are located in a particular state, specify the state in the **State** field.
- To view customers who are assigned to a particular employee, specify the ID in the **Employee ID** field.
- To view customers of a particular type, specify the type in the **Customer Type** field.
- To view customers who were provided by a particular source, specify the ID in the **Source ID** field.
- To view customers who are located in a particular territory, specify the code in the **Territory** field.

- To view customers with particular statuses, select the appropriate check boxes in the **Status** section.

5 Specify the sort order for the report. Select one of these options:

Option	Description
Customer Name + City	Select this option to sort the list first by customer name, and then by city.
City + Customer Name	Select this option to sort the list first by city, and then by customer name.
Customer ID	Select this option to sort the list by customer ID.

6 Click the **Print Report** button.

Customer questionnaire

Use this report to print the questionnaire for a customer audit. This report lists the questions in the audit, the lowest possible score, and the highest possible score. An area is provided for you to record the customer's score for each question.

Generating the customer questionnaire

1 Select **Communication > Customer >** My. My Reports
2 Click the **Customer Questionnaire** link.
3 In the **Survey ID** field, specify the ID of the customer audit.
4 Click the **Print Report** button.

Detailed customer feedback report

Use this report to view detailed customer feedback information. The report shows this information:

- Entity ID and site ID associated with the feedback
- Feedback ID
- Description that is specified on the Feedback tab in Customer Feedback Maintenance
- Feedback date
- Feedback type
- Customer who provided the feedback
- Customer contact
- Due date of the response to the feedback
- Employee who is assigned to the feedback
- Reference

- Subject code
- User Defined Field 1 and 2
- Closed status
- Closed date
- Acknowledgment text
- Response text
- Follow-up text

Generating the detailed customer feedback report

1 Select **Communication > Customers > My Reports**.

2 Click the **Detailed Customer Feedback** link.

3 Click the sites to include in the report.

4 Specify the information to include in the report. Perform one of these steps:

- To view feedback records for a specific customer, specify the ID of the customer in the **Customer ID** field or the name of the customer in the **Customer Name** field.
- To view feedback records that are assigned to a particular employee, specify the ID in the **Employee ID** field.
- To view a range of feedback records, specify the starting and ending feedback record IDs in the **Feedback ID From** and **Feedback ID To** fields.
- To view feedback records that were collected during a particular time frame, specify the starting and ending dates in the **Feedback Date From** and **Feedback Date To** fields.
- To view feedback records of a particular type, specify the type in the **Feedback Type** field.
- To view feedback records with a particular reference, specify the text in the **Reference** field.
- To view closed feedback records, select the **Closed** check box. To view open feedback records, select the **Open** check box.

5 Specify the sort order for the report. Select one of these options:

Option	Description
Feedback ID	Select this option to sort the report by feedback ID.
Customer Name + Feedback ID	Select this option to sort the report first by customer name and then by feedback ID. This groups the feedback records by customer.
Assigned To + Feedback ID	Select this option to sort the report first by assigned to ID and then by feedback ID. This groups the feedback records by employee.

6 Click the **Print Report** button.

Chapter 5: Supplier modules

Use the modules in the Supplier menu to record information about your suppliers and your relationships with them. These records can include the products you buy from the supplier, the product characteristics most important to your company, and supplier rating information.

You can use the Jump feature to navigate between related forms.

See Jump feature on page 34.

Tasks are added to employees' My To Do lists after you create records in Supplier Feedback Maintenance.

See My To Do list on page 34.

Contacts

Use Contacts Maintenance to enter information about the individuals with whom you do business. A contact can represent a customer or a supplier. You can also create stand-alone contacts.

Before you create a contact, create honorific codes.

See Adding codes on page 45.

Adding contacts

1. Select **Communication > Customer > Contacts Maintenance** or **Communication > Supplier > Contacts Maaintenance**.
2. In the header, specify basic information about the contact. Specify this information:

   Entity ID
   Specify the entity where this contact can be used.

   Honorific/First/Last Name
   Specify the honorific, first, and last name of the contact.

   Middle Name/Initial
   Specify the contact's middle name. After you exit the middle name field, the contact's middle initial is inserted. Alternatively, specify a middle initial only.

Position
Specify the title or position of the contact person.

Salutation
Click the arrow and select the salutation to use when sending correspondence to this contact.

Function
Specify this contact's function.

Job
Specify this contact's job.

3 Click the Communication tab and specify this information:

Phone/Extension
Specify the telephone number, with area code, for the contact.
If the contact prefers not to be contacted by this phone number, select the Do Not Call check box.

Mobile Phone
Specify the telephone number, with area code, for the contact's cellular phone.
If the contact prefers not to be contacted by this phone number, select the Do Not Call check box.

Fax
Specify the number, with the area code, for the fax machine where you can reach your contact. This is not a required field.

Country Dial Code
If your contact has an international number, specify the country dial code of the country.

Email Address

Specify the contact's email address. After you specify an email address, you can click the Email Address link to open an email that is addressed to the contact. The email is added to the address list that is displayed when you click the **To** button or **CC** button on an email that you create in IQM.

If the contact prefers not to be contacted by email, select the **Do Not Email** check box. Selecting this check box does not prevent you from using the Email Address link. This check box is informational only.

Social Network URL
Specify the URLs of the contact's social network websites. Click the arrow and select the type of social network website, then specify the URL. Repeat this process to specify additional social network URLs. After you specify the URL, click the Open Link button to go to the contact's social network page.

4 To specify the contact's work address, click the Work Address tab. Specify this information:

Street Address
Specify the street address of the contact.

City
Specify the city.

State
Specify the state. You must select a code from the drop-down list. You cannot specify a custom code.

Zip
Specify the zip code.

Country
Specify the country. You must select a code from the drop-down list. You cannot specify a custom code.

5 To specify the contact's home phone, fax, personal email address, click the **Home Communication** tab. Specify this information:

Phone
Specify the contact's home phone number.

Fax
Specify the contact's home fax number.

Email Address
Specify the contact's home email address.

Other Address
If this contact has an alternate home address, specify the address in this field.

Other Number
If this contact has an alternate phone number, specify the number in this field.

6 To specify the contact's home address, click the Home Address tab. Specify this information:

Street Address
Specify the street address of the contact.

City
Specify the city.

State
Specify the state. You must select a code from the drop-down list. You cannot specify a custom code.

Zip
Specify the zip code.

Country
Specify the country. You must select a code from the drop-down list. You cannot specify a custom code.

7 To specify personal information about the contact, click the Profile tab. Specify this information:

Date of Birth
Specify the contact's date of birth.

Marital Status
Specify the contact's marital status.

Preferred method of contact
Specify the method of contact that the contact prefers you to use.

Gender
Click the Gender arrow and select your contact's gender.

Reference
Specify any additional text for the contact. Use this field to enter a secondary phone number or other explanatory notes.

8 Use the Customers and Suppliers tabs to attach this contact to customer and supplier records.

See Attaching Contacts to Customers on page 115.

See Attaching Contacts to Suppliers on page 116.

9 To specify customized information for the contact, click the **User Defined** tab. To set up the labels, edit the form. After you set up the labels, specify the appropriate information.

10 To enter additional information about the contact, click the **Comments** tab and enter the text.

11 Click the **Save** button.

Attaching contacts to suppliers

You can use Contacts Maintenance to attach a contact to a supplier.

1 Select **Communication > Customer > Contacts Maintenance** or **Communication > Supplier > Contacts Maintenance**.

2 Specify the contact ID.

3 Click the **Suppliers** tab.

4 Click in the table on the Suppliers tab.

5 Click the **New** button.

6 Specify the ID of the supplier to which you are attaching the contact.

7 If this contact is the supplier's main contact, select the **Primary** check box. If this contact is an alternate contact for the supplier, clear the **Primary** check box. Each supplier can have only one primary contact. If the supplier already has a primary contact and you select the Primary check box for a second contact, the second contact becomes the supplier's primary contact. The previous primary contact becomes an alternate contact for the supplier.

The same contact can be the primary contact for more than one customer or supplier.

8 Click the **Save** button.

You can also use Supplier Maintenance to attach a contact to a supplier.

Attaching contacts to customers

You can use Contacts Maintenance to attach a contact to a customer.

To attach a contact to a customer in Contacts Maintenance:

1. Select **Communication > Customer > Contacts Maintenance** or **Communication > Supplier > Contacts Maintenance**.
2. Specify the contact ID.
3. Click the **Customers** tab.
4. Click in the table on the Customers tab.
5. Click the **New** button.
6. Specify the ID of the customer to which you are attaching the contact.
7. If this contact is the customer's main contact, select the **Primary** check box. If this contact is an alternate contact for the customer, clear the **Primary** check box. Each customer can have only one primary contact. If the customer already has a primary contact and you select the Primary check box for a second contact, the second contact becomes the customer's primary contact. The previous primary contact becomes an alternate contact for the customer.

   The same contact can be the primary contact for more than one customer or supplier.
8. Click the **Save** button.

You can also use Customer Maintenance to attach a contact to a customer.

Deleting contacts

To delete a contact, you must first remove the contact from customer and supplier records.

1. To remove a contact from a customer, select **Communication > Customer > Customer Maintenance**. To remove a contact from a supplier, select **Communication > Supplier > Supplier Maintenance**.
2. Right-click and select **Contacts**.
3. Select the contact, then click the **Delete** button.
4. Click the **Save** button.
5. Repeat steps 1 through 4 until the contact that you want to delete has been removed from all customer and supplier records.
6. Select **Communication > Customer > Contact Maintenance** or **Communication > Supplier > Contact Maintenance**.
7. Select the contact to delete.
8. Click the **Delete** button.
9. Click the **Save** button. Provided that the contact is not linked to any customer or supplier, the contact is removed from the database.

Suppliers

Use Supplier Maintenance to keep records of your suppliers. You can maintain contact information, list products that you typically purchase from the supplier, and maintain supplier ratings information.

Adding suppliers

1 Select **Communication > Supplier > Supplier Maintenance**.

2 Specify this information:

Entity ID
Specify the entity that has a relationship with this supplier.

Business Unit
Specify the business unit associated with this supplier.

Supplier ID
Specify an ID for this supplier.

Name
Specify the full name of the supplier.

Address
Specify the supplier's street address.

City
Specify the supplier's city.

State
Specify the supplier's state.

Zip
Specify the supplier's zip code

Country
Specify the supplier's country.

Status
Specify a status for this supplier. Select one of these options:

Open
Select this option if the supplier is active and available for use in other records.

Closed
Select this option if you no longer do business with this supplier.

Prospect
Select this option if this is prospective supplier with whom you do not do business yet.

Deleted
You cannot select this option. The Deleted status is selected by the system if it receives a BOD changing the status to Deleted.

3 Click the **Contact** tab and specify this information:

Phone
Specify the company's main phone number

Fax
Specify the company's main fax number.

Email
Specify the company's general email address.

Primary Contact
The primary contact for this supplier is displayed.

4 Click the **Comments** tab and specify general information about the supplier.

5 Use the **Trends** tab to specify the information that you use to build demographic or statistical trend analyses about the supplier. Specify this information:

Supplier Type
Specify the Type ID that classifies this supplier.

Assigned To
Specify the employee to whom this supplier is assigned. This employee is primarily responsible for maintaining the relationship with this supplier.

Source
Specify a Source ID to indicate where you first heard about the supplier.

Territory
Specify a Territory code to indicate where the supplier is located.

User Defined Fields
Specify the user defined information your company uses.

6 Click the **Save** button.

Adding supplier contacts

1 Select **Communication > Supplier > Supplier Maintenance**.

2 Select the supplier

3 Right-click and select **Contacts**.

4 Specify the name of the contact. The contact you select must belong to the entity that is specified in the Supplier Entity ID field.

5 If this is the supplier's primary contact, select the **Primary Contact** check box. Each supplier can have only one primary contact. After you specify the primary contact, the contact's information is displayed in the Contact tab in Supplier Maintenance.

6 Click the **Save** button.

Adding supplier products

Before you can add products to a supplier record, add products in Product Maintenance.

Use Supplier Products to list the products you purchase from this supplier.

1 Select **Communication > Supplier > Supplier Maintenance**.

2 Select the supplier.

3 Right-click and select **Products**.

4 Specify this information:

Entity ID
The entity ID that is specified for the supplier is inserted. You cannot change this value.

Product ID
Specify the product to assign to this supplier. You can specify any product that is assigned to the entity in the Entity ID field.

Supplier Product ID
Specify the ID the supplier uses to identify this product.

Supplier Product Name
Specify the name the supplier uses to identify this product.

Rev Level
Specify the revision level for this product.

5 To view the characteristics for this product, click the **Characteristics** button. This read-only information is displayed:

Char No
The characteristic number.

Characteristic Name
The name of the characteristic.

Type
The characteristic type.

Standard Type
The standard used to measure this characteristic. These standards are used:

- Attribute. The characteristic is evaluated on a yes or no basis.
- Variable. The standard can be met if the characteristic measurement falls within a specified range. The variable standard and unit of measure are also displayed.

- Text. The characteristic standard is not known until inspection is performed. A text characteristic standard is recorded during data collection.

Class
The class code for this characteristic. Class codes can be used to define sampling plans.

Category
The category code for this characteristic.

Page
The page number in the product specification where this characteristic is described.

Zone
The section or zone of the product specification where this characteristic is described.

6 Exit the form to return to Supplier Maintenance.

Adding supplier ratings

Use the Ratings Maintenance feature to quantitatively document your history with a supplier. Create ratings to keep track of a supplier's order fulfillment habits, special requests, satisfaction with your enterprise, and any other experience.

You can manually add supplier ratings, or you can post the results of a supplier audit to this form. To post the results of a supplier audit, use Supplier Results Maintenance.

See Creating an audit results record for a supplier on page 157.

To manually add ratings information:

1 Select **Communication > Supplier > Supplier Maintenance**.
2 Select the supplier
3 Right-click and select **Ratings**.
4 Specify this information:

Ratings ID
Leave this field blank. A ratings ID is generated when you save the record.

Rating Subject
Specify a subject for the rating. For example, to rate this supplier's order fulfillment reliability as opposed to another supplier's, specify a Rating Subject of Fulfillment Reliability.

Rating
Specify a numeric rating for the Rating Subject. For example, if you use a scale of 1-10, and you have been pleased with the supplier's performance, specify an appropriately high score.

Possible
Specify the highest possible rating. For example, to set up a traditional 10-point scale, specify 10 in this field.

Date
Specify the date you entered this rating.

Comments
Specify any comments that relate to this rating. For example, you can specify information about where the rating data came from, who contributed to the Rating score, and under what circumstances the test data was gathered.

5 Exit the Ratings form to return to Supplier Maintenance.

Copying supplier records

You can copy an existing supplier record to create a new supplier record.

1 Select **Communication > Supplier > Supplier Maintenance**.
2 Select the supplier.
3 Right-click and select **Copy Suppliers**.
4 In the **Copy to Supplier ID** field, specify the ID of the new supplier.
5 In the Copy Options section, specify the information to copy to the new supplier record:

Contacts
If the new supplier has the same contacts as the existing supplier, select this check box to copy the contacts.

Ratings
If you rate the new supplier by the same criteria as the existing supplier, select this check box to copy ratings information.

Products
If the new supplier sells the same products as the existing supplier, select this check box to copy the products information.

Quality Costs
If the new supplier has the same quality cost information as the existing supplier, select this check box to copy the quality costs information.

6 Click **Ok**. The new supplier record is created.

Supplier feedback

Use Supplier Feedback Maintenance to document and track all communications with your suppliers. Communications can include telephone calls, faxes, e-mails, compliments, questions, suggestions, information requests, problems, quotes and purchase orders.

Use the Supplier Feedback Maintenance form to complete these tasks:

- Record supplier feedback
- Close supplier feedback records
- Copy supplier feedback records

Adding supplier feedback

1 Select **Communication > Supplier > Supplier Feedback Maintenance**.

2 Specify this information:

Site ID
Specify the site with which the supplier conducts business.

Feedback ID
Leave this field blank. When you save the record, a feedback ID is generated based on your number generation settings.

Date
Specify the date the feedback was received.

Feedback Type
Select the type of feedback from the list. Add feedback types in Feedback Type Maintenance.

Due Date
Specify the date that a response to the feedback is due.

Reference
Specify any additional information about this feedback record.

Closed and Closed Date
See Closing Feedback on page 126.

Business Unit
Select the business unit that is receiving this feedback from the list.

3 In the Supplier section, specify this information:

Supplier ID
Specify the ID for the supplier providing the feedback.

Contact No
Specify the contact number of the supplier providing the feedback.

Contact Phone No
The phone number of the contact is inserted after you select a contact number.

4 In the Assigned to section, specify the employee who is responsible for the resolution of this feedback record. After you save the record, a task for the feedback record is added to the employee's My To Do list. The due date of the task is the same as the due date of the supplier feedback record.

5 Click the **Feedback** tab and specify the feedback input reported by the supplier.

6 Click the **Acknowledgement** tab and specify this information:

Acknowledged By
Specify the employee who is responsible for acknowledging the receipt of this feedback information. After you save the record, a task for the feedback record is added to the employee's My To Do list. The due date of the task is the same as the due date of the supplier feedback record.

Date
Leave this field blank. The employee who acknowledges the feedback record specifies the date.

Acknowledgement
Optionally, add notes about the acknolwedgement of the feedback. The employee who acknowledges the feedback record can also specify this information.

7 Click the **Response** tab and specify this information:

Responded By
Specify the employee who is responsible for the response to the feedback. After you save the record, a task for the feedback record is added to the employee's My To Do list. The due date of the task is the same as the due date of the supplier feedback record.

Date
Leave this field blank. The employee who responds to the feedback specifies the date.

Response
Optionally, add notes about the response to the feedback. The employee who responds to the feedback can also specify this information.

8 Click the **Follow Up** tab and specify this information:

Followed Up By
Specify the employee who is responsible for following up with the supplier. After you save the record, a task for the feedback record is added to the employee's My To Do list. The due date of the task is the same as the due date of the supplier feedback record.

Date
Leave this field blank. The employee who follows up with the supplier specifies the date.

Follow Up
Optionally, add notes about follow up activities. The employee who follows up on the feedback record can also specify this information.

9 Click the **Subject** tab and specify this information:

Subject
Specify the subject code that classifies this feedback.

User Defined 1 and User Defined 2
Specify the user defined information your company uses with feedback records.

10 Click the **Save** button.

Using My To Do List to manage supplier feedback

When you create a supplier feedback record, tasks are added to the My To Do List. The due date of the tasks is the date that is specified in the **Due Date** field on the supplier feedback record. When a task is complete, it is removed from the My To Do List.

This table shows each task, who the task is assigned to, and how to complete the task:

Task	Assigned to	Completion steps
Supplier Feedback (Acknowledge)	Employee in **Acknowledged By** field	1 Optionally, specify text that describes how the supplier feedback was acknowledged. Right-click the Input form and select **Acknowledgement Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Acknowledgement** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.
Supplier Feedback (Followup)	Employee in **Followup By** field	1 Optionally, specify text that describes the follow-up steps. Right-click the Input form and select **Followup Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Follow Up** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.

Task	Assigned to	Completion steps
Supplier Feedback (Response)	Employee in **Responded By** field	1 Optionally, specify text that describes the response to the supplier feedback. Right-click the Supplier Feedback form and select **Response Notations**. Specify text, and then click **Ok**. 2 Specify a date in the **Date** field on the **Response** tab. You must specify a date to remove the task from the My To Do List. 3 Click **Save**. The task is also removed when the record is closed.
Supplier Feedback	Employee in **Employee ID** field in the Assigned To section	Close the supplier feedback record. See Closing input items on page 84.

To use the My To Do List to complete a supplier feedback task:

1 Select **Administration > My To Do List**.

2 Specify this information:

Entity ID
Specify the ID of the entity where the supplier feedback record was created.

Employee ID
Specify the ID of the employee who is assigned to a supplier feedback task.

Start Date
Specify a date that is the same as or earlier than the due date of the supplier feedback record.

End Date
Specify a date that is the same as or later than the due date of the supplier feedback record.

3 Double-click the task. The Supplier Feedback Maintenance form is opened.

4 Complete the task as described in the table.

5 Click **Save**.

Closing supplier feedback

After you resolve a supplier feedback record, close the record to indicate that work on the feedback is complete.

1. Select **Communication > Supplier > Supplier Feedback Maintenance**.
2. Select the supplier feedback record to close.
3. Click the **Closed** check box. The current date is inserted in the Closed Date field.
4. Optionally, change the date you closed the supplier feedback record.
5. Click the **Save** button. Tasks that are related to the supplier feedback record are removed from employee My To Do lists.

Copying supplier feedback records

You can copy an existing supplier feedback record to create a new supplier feedback record.

1. Select **Communication > Supplier > Supplier Feedback Maintenance**.
2. Select the record to copy.
3. Right-click and select **Copy Feedback**.
4. To copy the quality cost information that is attached to the original record, select the **Quality Cost** check box.
5. Click **Ok**. The new record is opened in the Supplier Feedback Maintenance window.

Audits

Use Audits Maintenance to develop questionnaires or surveys that you can issue to your employees, customers, or suppliers. You can use audits to obtain feedback, evaluate performance, or gather other information.

Setting up audits

1. Perform one of these tasks:
   - To set up a customer audit, select **Communication > Customers > Audit Maintenance**
   - To set up an employee audit, select **Communication > Involve > Audit Maintenance**
   - To set up a supplier audit, select **Communication > Supplier > Audit Maintenance**
2. In the Audits section, specify this information:

   Audit ID
   Specify an ID for this audit.

Name
Specify a name for this audit.

Type
Specify the type of audit.

Description
Specify a description of the audit. You can type a description directly in the table cell, or click the **Description** button to specify a longer description.

Total Score
This field is read-only. The total possible score for the audit is calculated after you specify headings and questions.

3 In the Headings section, specify the categories for the questions to ask. For example, an employee review audit could include headings such as Sales Metrics, Interpersonal Skills, and Attendance. Specify this information:

Name
Specify a name for the heading.

Questions
Leave this field blank. The value is calculated after you add questions to each section heading.

Lower
Specify the default lowest possible rating for the heading. You can override this setting on a question-by-question basis when you specify questions.

Nominal
Specify the default nominal rating for the heading. This number indicates average performance. You can override this setting on a question-by-question basis when you specify questions.

Upper
Specify the default highest possible rating for heading. This number indicates average performance. You can override this setting on a question-by-question basis when you specify questions.

Description
Specify a description for the heading. You can type a description directly in the table cell, or click the Description button to specify a longer description.

Total Score
This is a read-only field. To calculate the total score for the heading, the number of questions in the heading is multiplied by the highest possible rating.

4 Click the **Save** button.

5 For each heading, specify the questions to ask. Select a heading, then click **Questions**.

6 Specify this information:

Question
Specify the question. For example, for a managerial evaluation, a question in the Communication heading might be "Does the manager provides consistent performance feedback to subordinates?"

Lower
The lower limit is the lowest score allowed for the question. The limit you specified for the heading is inserted. You can specify a different value.

Nominal
The nominal value is the score used for average performance. The value you specified for the heading is inserted. You can specify a different value.

Upper
The upper limit is the highest score allowed for the question. The limit you specified for the heading is inserted. You can specify a different value.

Description
Specify a description of the question. You can type a description directly in the table cell, or click the Description button to specify longer text.

Total Score
The value you specified in the Upper cell is inserted. This is the maximum score that can be received for this question.

7 Exit the Question form to return to Audit Maintenance.

Audit results

Use the Audit Results form to specify the responses to your supplier audits. Before you can specify results, you must first set up audits in Audit Maintenance.

See Setting up audits on page 85.

Creating an audit results record for a supplier

1 Select **Communication > Supplier > Supplier Results Maintenance**.
2 Specify this information:

Site ID
Specify the site with which the supplier conducts business. After you select a site, the site's parent entity is inserted in the Entity ID field.

Results ID
Leave this field blank. The ID is generated based on your number generation settings after you save the record.

Date
Specify the date the audit was conducted.

Audit ID
Specify the ID of the audit you conducted.

Business Unit
Specify the business unit ID associated with this audit.

3 In the Supplier section, specify the supplier that is the subject of the audit. After you specify the supplier in the **Supplier ID** field, the default contact for the supplier is inserted in the **Contact No** field.

4 In the User Defined section, specify the user-defined information that your company requires.

5 To add comments, right-click and select **Comments**. In the Comments section, specify general comments regarding this audit. Comments could include recommendations that are based on the results of the audit.

6 After you specify scores for each audit question, the total possible score for the audit is inserted in the Total Score field. The score the supplier earned is inserted in the Total Score field.

7 Click **Save**. After you set up the audit record, right-click and select **Headings/Questions** to specify the score the supplier received for each audit question.

8 A dialog box is displayed that prompts you to mark the result for posting. Click **Yes**.

9 Exit the Headings/Questions form.

10 In the Supplier Results Maintenance form, the **Post** check box is selected, indicating that the result is ready to be posted. To post the result, click **Save**. The **Posted** check box is selected and the results are added to the supplier's ratings.

Viewing summary results by heading

After you save audit results, you can view the result total for each heading. The individual scores for each question in a heading are added to calculate the heading result.

1 Select the audit result record.
   - To select an Employee Audit result record, select **Communication > Involve > Employee Results Maintenance**. Then, specify the audit result record in the Results ID field.
   - To select a Customer Audit result record, select **Communication > Customer > Customer Results Maintenance**. Then, specify the audit result record in the Results ID field.
   - To select Supplier Audit result record, select **Communication > Supplier > Supplier Results Maintenance**. Then, specify the audit result record in the Results ID field.

2 Right-click and select **Questions/Headings**.

3 Right-click and select **Headings Summary**.

4 Each heading is listed. For each heading, the number of questions, name of the heading, total score, and total possible score are listed.

Supplier reports

Use supplier reports to collect and analyze information about your suppliers.

Detailed supplier feedback report

Use this report to view detailed supplier feedback information. This report displays the entity ID and site ID associated with the feedback record, the feedback record ID, the description of the feedback specified on the Feedback tab in Supplier Feedback Maintenance, feedback date, feedback type, the supplier reporting the feedback, the supplier contact, the date a response to the feedback is due, the employee assigned to the feedback, reference text, subject code, user defined 1 and 2 text, closed status, and closed date.

Generating the detailed supplier feedback report

1. Select **Communication > Supplier > My Reports**.
2. Click the Detailed Supplier Feedback link.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view feedback records for a specific supplier, specify the ID of the supplier in the **Supplier ID** field or the name of the supplier in the **Supplier Name** field.
   - To view feedback records assigned to a particular employee, specify the ID in the **Employee ID** field.
   - To view a range of feedback records, specify the starting and ending feedback record IDs in the **Feedback ID From** and **Feedback ID** To fields.
   - To view feedback records collected during a particular time frame, specify the starting and ending dates in the **Feedback Date From** and **Feedback Date To** fields.
   - To view feedback records of a particular type, specify the type in the **Feedback Type** field.
   - To view feedback records with a particular reference, specify the text in the **Reference** field.
   - To view closed feedback records, select the **Closed** check box. To view open feedback records, select the **Open** check box.
5. Specify the sort order for the report:

Option	Description
Feedback ID	Select this option to sort the report by feedback ID.
Supplier Name + Feedback ID	Select this option to sort the report first by supplier name and then by feedback ID. This groups the feedback records by supplier.
Assigned To + Feedback ID	Select this option to sort the report first by assigned to ID and then by feedback ID. This groups the feedback records by employee.

6 Click the **Print Report** button.

Supplier analysis

Use this report to analyze information about the attributes of your suppliers. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of suppliers for each criterion ID. For example, if you select State in the Analysis Field field, the report displays the percentage and number of suppliers located in each state. You can identify the state where most of your suppliers are located.

To be included on the report, a criterion ID must be specified on at least one supplier record. For example, if the state ID MA was not specified on a supplier record, then MA is not included in the report.

You can analyze suppliers based on these criteria:

- Assigned To
- Country
- Supplier Type
- Source
- State
- Status
- Territory
- User Defined 8
- User Defined 9

You can apply Assigned To, Supplier Type, State, and Territory filters to the report. When you apply a filter to the report, only supplier IDs that match the filter are considered for the report. For example, if you specify VA in the State field and select Supplier Type in the Analysis Field field, then the report would show the percentage of each supplier type for all suppliers in Virginia.

Generating the supplier analysis report

1 Select **Communication > Supplier > My Reports**.
2 Click Supplier Analysis.
3 Click the entities to use for the report.
4 Specify the filters for the report:
   - To analyze suppliers assigned to a particular employee, specify the ID of the employee in the **Assigned To** field.
   - To analyze suppliers of a particular supplier type, specify the type in the **Supplier Type** field.
   - To analyze suppliers located in a particular state, specify the state in the **State** field.
   - To analyze suppliers located in a particular territory, specify the ID of the territory in the **Territory** field.
5 In the **Analysis Field** field, specify the criterion to use for the analysis.

6 In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8 Click the **Print Report** button.

Supplier audits analysis

Use this report to view the percentage of each type of survey that has been administered to your supplier base.

Generating the supplier audit analysis report

1 Select **Communication > Supplier > My Reports**.
2 Click **Supplier Audits Analysis**.
3 In the **Show Detail** field, specify Yes to view a table of results under the chart. The table shows the total number of times each survey type was administered and the percentage the total represents. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
4 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
5 Click the **Print Report** button.

Supplier contacts analysis

Use this report to analyze information about the attributes of your supplier contacts. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of supplier contacts for each criterion ID. For example, if you select Function Code in the Analysis Field field, the report displays the percentage of supplier contacts that have each function code. You can see which functions your supplier contacts are most likely to perform within their companies.

To be included on the report, a criterion ID must be specified on at least one supplier contact record. For example, if the function ID FINANCE was not specified on a supplier contact record, it will not be included in the report.

You can analyze suppliers based on these criteria:

- Country (the contact's work address country is used)
- Function
- Job Code

- State (the contact's work address state is used)
- Status

You can apply Country, Supplier Type, State, Status, and Territory filters to the report. When you apply a filter to the report, only supplier contact IDs that match the filter are considered for the report. For example, if you specify VA in the State field and select Job Code in the Analysis Field field, then the report would show the percentage of contacts with each job code whose companies are located in Virginia.

Generating the supplier contacts analysis report

1. Select **Communication > Supplier > My Reports**.
2. Click Supplier Contacts Analysis.
3. Click the entities to use for the report.
4. Specify the filters for the report:
   - To analyze contacts of suppliers of a particular supplier type, specify the type in the **Supplier Type** field.
   - To analyze supplier contacts who are located in a particular state, specify the state in the **State** field.
   - To analyze supplier contacts with a particular status, specify the ID in the **Status** field.
   - To analyze supplier contacts who are located in a particular territory, specify the ID of the territory in the **Territory** field.
5. In the **Analysis Field** field, specify the criterion to use for the analysis.
6. In the **Show Detai**l field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8. Click the **Print Report** button.

Supplier detail report

Use this report to print detailed information about your suppliers. This report shows the entity ID associated with the supplier record, the supplier ID, address, phone number, fax number, status, primary contact name, supplier type as defined on the Supplier Maintenance Trend Info tab, territory, source, assigned to employee, user defined fields 8 and 9 from the Trend Info tab, and a list of the supplier's contacts.

Generating the supplier detail report

1. Select **Communication > Supplier > My Reports**.

2 Click Supplier Detail.
3 Click the entities to use for the report.
4 Specify the information to include in the report:
   - To view information for a specific supplier, specify the ID of the supplier in the **Supplier ID** field or the name of the supplier in the **Supplier Name** field.
   - To view the details for all suppliers located in a particular city, specify the city in the **City** field.
   - To view the details for all suppliers located in a particular state, specify the state in the **State** field.
   - To view the details for all supplier of a particular type, specify the type in the **Supplier Type** field.
   - To view the details for all suppliers provided by a particular source, specify the ID in the **Source ID** field.
   - To view the details for all suppliers in a particular territory, specify the code in the **Territory** field.
   - To view the details for all suppliers with a particular contact, specify the contact's name in the **Contact Last Name** and **Contact First Name** fields.
   - To view the details for all suppliers with particular statuses, select the appropriate check boxes in the Status section.
5 Click the **Print Report** button.

Supplier feedback analysis

Use this report to analyze information about your supplier feedback records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of supplier feedback records for each criterion ID. For example, if you select Subject in the Analysis Field field, the report displays the percentage of supplier feedback records about each subject. You can see the subjects that are mentioned most often in feedback records.

The report does not show an ID if it is not used on any supplier feedback record. For example, if the subject ID RESPONSETIME was not specified on a supplier feedback record, the subject ID is not included in the report.

You can analyze supplier feedback based on these criteria:

- Acknowledged By
- Assigned To
- Closed
- Supplier ID
- Feedback Type
- Followed Up By
- Subject
- User Defined 2
- Responded By

You can apply Supplier ID, Feedback Type, and Assigned To filters to the report. When you apply a filter to the report, only supplier feedback records that match the filter are considered for the report. For example, if you specify BOSSEL in the Supplier ID field and select Feedback Type in the Analysis Field field, then the report would show the percentage of each feedback type for the supplier ABLMAN.

Generating the supplier feedback analysis report

1. Select **Communication > Supplier > My Reports**.
2. Click Supplier Feedback Analysis.
3. Click the sites to use for the report. To select all available sites, click Select All.
4. To view feedback records due during a particular time period, specify the date range in the Due Date From and Due Date to fields.
5. Specify the filters for the report:
   - To analyze supplier feedback about a particular supplier, specify the ID of the supplier in the **Supplier ID** field.
   - To analyze supplier feedback of a particular feedback type, specify the type in the **Feedback Type** field.
   - To analyze supplier feedback assigned to a particular employee, specify the ID of the employee in the **Assigned To** field.
6. In the **Analysis Field** field, specify the criterion to use for the analysis.
7. In the **Show Detai**l field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
8. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
9. Click the **Print Report** button.

Supplier feedback due date report

Use this report to view when responses to supplier feedback are due. This report displays the entity ID and site ID associated with the feedback record, the feedback record ID, feedback date, the supplier reporting the feedback, the supplier contact, the employee assigned to the feedback, the date a response to the feedback is due, the feedback type, and reference text.

Generating the supplier feedback due date report

1. Select **Communication > Supplier > My Reports**.
2. Click the Supplier Feedback Due Date link.
3. Click the sites to use for the report.
4. Specify the information to include in the report:

- To view feedback records for a specific supplier, specify the ID of the supplier in the **Supplier ID** field or the name of the supplier in the **Supplier Name** field.
- To view feedback records that are assigned to a particular employee, specify the ID in the **Employee ID** field.
- To view feedback records that are due during a particular time frame, specify the starting and ending dates in the **Due Date From** and **Due Date To** fields.
- To view feedback records of a particular type, specify the type in the **Feedback Type** field.
- To view feedback records with a particular reference, specify the text in the **Reference** field.

5 Specify the sort order for the report:

Option	Description
Feedback ID	Select this option to sort the report by feedback ID.
Supplier Name + Feedback ID	Select this option to sort the report first by supplier name and then by feedback ID. This groups the feedback records by supplier.
Assigned To + Feedback ID	Select this option to sort the report first by assigned to ID and then by feedback ID. This groups the feedback records by employee.

6 Click the **Print Report** button.

Supplier feedback letter

Use this report to generate the heading for a letter about supplier feedback. The report shows this information:

- Your address as defined in **Application Global Maintenance**
- Supplier's address
- Reference to the feedback ID
- Text specified on the **Feedback** tab in **Supplier Feedback Maintenance**
- Date of the feedback record

Generating the supplier feedback letter

1 Select **Communication > Supplier > My Reports**.

2 Click Supplier Feedback Letter.

3 Click the sites to use for the report.

4 To generate a letter regarding a specific feedback record, specify the record ID in the **Feedback ID** field.

5 Click the **Print Report** button.

Supplier feedback list

Use this report to view a list of supplier feedback records. The report shows this information:

- Entity ID and site ID associated with the feedback record
- Feedback record ID
- Feedback date
- Supplier who provided the feedback
- Supplier contact
- Employee who is assigned to the feedback
- Date that the response to the feedback is due
- Feedback type
- Reference text
- Closed status

Generating the supplier feedback list report

1. Select **Communication > Supplier > My Reports**.
2. Click Detailed Supplier Feedback.
3. Click the sites to use for the report. To select all available sites, click Select All.
4. Specify the information to include in the report. Perform one of these steps:
   - To view feedback records for a specific supplier, specify the ID of the supplier in the **Supplier ID** field or the name of the supplier in the **Supplier Name** field.
   - To view feedback records that are assigned to a particular employee, specify the ID in the **Employee ID** field.
   - To view a range of feedback records, specify the starting and ending feedback record IDs in the **Feedback ID From** and **Feedback ID To** fields.
   - To view feedback records that were collected during a particular time frame, specify the starting and ending dates in the **Feedback Date From** and **Feedback Date To** fields.
   - To view feedback records of a particular type, specify the type in the **Feedback Type** field.
   - To view feedback records with a particular reference, specify the text in the **Reference** field.
   - To view closed feedback records, select the Closed check box. To view open feedback records, select the Open check box.
5. Specify the sort order for the report:

Option	Description
Feedback ID	Select this option to sort the report by feedback ID.
Supplier Name + Feedback ID	Select this option to sort the report first by supplier name and then by feedback ID. This groups the feedback records by supplier.
Assigned To + Feedback ID	Select this option to sort the report first by assigned to ID and then by feedback ID. This groups the feedback records by employee.

6 Click the **Print Report** button.

Supplier list

Use this report to print a list of your suppliers. The report shows the entity ID, supplier ID, name, city, state, status, assigned to, supplier type, and territory.

Generating the supplier list

1 Select **Communication > Supplier > My Reports**.
2 Click Supplier List.
3 Click the entities to use for the report.
4 Specify the information to include in the report. Perform one of these steps:
   - To view the details for a specific supplier, specify the ID of the supplier in the **Supplier ID** field or the name of the supplier in the **Supplier Name** field.
   - To view suppliers located in a particular city, specify the city in the **City** field.
   - To view suppliers located in a particular state, specify the state in the **State** field.
   - To view suppliers of a particular type, specify the type in the **Supplier Type** field.
   - To view suppliers assigned to a particular employee, specify the ID in the **Employee ID** field.
   - To view suppliers in a particular territory, specify the code in the **Territory** field.
   - To view suppliers with particular statuses, select the appropriate check boxes in the Status section.
5 Specify the sort order for the report:

Option	Description
Supplier Name + City	Select this option to sort the list first by supplier name, and then by city.
City + Supplier Name	Select this option to sort the list first by city, and then by supplier name.
Supplier ID	Select this option to sort the list by supplier ID.

6 Click the **Print Report** button.

Supplier questionnaire

Use this report to print the questionnaire for a supplier audit. This report lists the questions in the audit, the lowest possible score, and the highest possible score. An area is provided for you to record the supplier's score for each question.

Generating the supplier questionnaire

1. Select **Communication > Supplier > My Reports**.
2. Click Supplier Questionnaire.
3. In the **Survey ID** field, specify the ID of the supplier audit.
4. Click the **Print Report** button.

Chapter 6: Product modules

Use the products modules to record information about your products, maintain a history of product changes, set up product audits, and develop failure mode and effects analyses. These features help you to conform to standards such as ISO9001, ISO/TS16949, ISO13485, AS9100, FDA, and cGMP.

You can use the Jump feature to navigate between related forms.

See Jump feature on page 34.

Tasks are added to employee To Do lists after you create records in these forms:

- Product Change Requests
- Product Audit Maintenance
- FMEA Maintenance

See My To Do list on page 34.

Product types

Use Product Types Maintenance to define default audit information for products that share similar characteristics. When you assign a product type to a product, the product inherits information from the product type record, including audit process and retention information.

You can override information that a product inherits from its product type in Products Maintenance.

Adding product types

1 Select **Documentation > Product > Product Types Maintenance**.

2 Specify this information:

Entity ID
Specify the entity ID where this product type is used.

Product Type
Specify an ID for this product type.

Product Type Name
Specify the full name for this product type.

Retention (Days)
Specify the number of days this product type should be retained. Use this field to establish the maximum length the product type is considered current. After the retention period elapses, the product type and any documents associated with it should be reevaluated.

Change Req Adv Notice (days)
Specify the number of days in advance to display a task in My To Do List for change requests for products of this type.

3 In the Responsible section, specify who is responsible for auditing products with this product type.
- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field. Then, specify the employee's function and job codes.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

4 In the Audit Info section, specify this information:

Standard Interval (Days)
Specify the number of days that should normally pass between audits for products of this type.

Audit Adv Notice (Days)
Specify the number of days in advance to display a task in My To Do List for audits for products of this type.

Time Estimate (Hours)
Specify the number of hours it should take to conduct audits for products of this type.

5 In the Audit Instructions section, specify this information:

Audit Procedure
Select the document that contains the detailed audit procedures for products of this type. You can select any document attached to the product type record.

Audit Instructions
Describe how to conduct audits for products of this type.

6 Click the **Save** button.

Updating product records with changes to product types

If you edit a product type, you have the option to update products assigned to the type.

1 Select **Documentation > Product > Product Types Maintenance**.
2 Edit the product type.

3 Click the **Save** button.

4 Specify the information to update in the product records:

Retention
Select this check box to update the information in the product record Retention (Days) field.

Audit Information
Select this check box to update the information in the product record Audit Information section.

Audit Instructions
Select this check box to update the information in the product record Audit Instructions field.

Audit Link
Select this check box to update the information in the product record Audit Procedure field.

Product Document Links
Select this check box to update the list of documents attached to the product.

5 Click **Ok**.

6 Click the **Save** button in Product Types Maintenance.

If the product type is specified for a product on the product Site tab, then the product site information is updated. If you copy the product document links, the documents are attached to the product record at the site level.

If the product type is specified for a product on the General tab, then the product entity information is updated. If you copy the product document links, the documents are attached to the product record at the entity level.

Products

Use Product Maintenance to keep records of the products that your company uses or manufactures. Before you create products, we recommend that you create product types.

You can use Product Maintenance to track a product through its life cycle, maintain records of blueprints and other design documents, list companies you buy or sell the product to, describe the product's characteristics, assign employees to the team responsible for maintaining the product, and review changes made to the product.

Adding products

1 Select **Documentation > Product > Product Maintenance**.

2 Specify this information:

Entity ID
Specify the entity where this product is used.

Product ID
Specify an ID for this product

Product Name
Specify the name of this product.

Status
Specify the status of this product. Select one of these options:

Open
Select this status if the product is available for use.

Do Not Order
Select this status if you still use the product, but no longer order it. Use this status to indicate that the remaining inventory should be used, but the product should not be replaced.

Obsolete
Select this status if you no longer use the product.

Hold
Select this status if use of the product is temporarily suspended.

Deleted
You cannot select this status. The Deleted status is selected by the system if it receives a BOD changing the status to Deleted.

Business Unit
Select the default business unit for this product. You can use the product in any business unit.

3 Click the **Save** button.

To complete the record, specify information on the General, Characteristics, Site, and Settings tabs.

Specifying site-specific information

1 Select **Documentation > Product > Product Maintenance**.
2 Open the product record.
3 Click the **Site** tab.
4 Specify this information:

Product Type
Specify the type for this product. When you select a product type, you have the option of copying the product type's retention information, audit information, audit instructions, audit procedure link, document links, and advanced notice intervals to the product record. If you copy documents, the documents are attached to the product record at the site level. You can attach different documents to a second site or to the entity level of the product record.
See Attaching Documents to Products on page 179.

Change Req Advance Notice (Days)
This field shows the number of days in advance that a task is displayed in My To Do List for change requests. The value specified for the product type is displayed. You can specify a different value.

Reference
Specify any additional information about this product.

5 To specify site-specific instructions for this product, click the **Special Instructions** sub tab of the Site tab. Specify instructions regarding the use of this product.

6 To specify site-specific reference information for this product, click the **Reference** sub tab of the Site tab. Specify this information:

Document Type
Specify a document type code for the product.

User Defined Fields
Specify the user-defined information your company uses with products.

7 To specify site-specific audit information for this product, click the **Audit Info** sub tab of the Site tab.

8 In the Responsibility section, specify the individual responsible for auditing this product.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field. Then, specify the employee's function and job codes.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

9 In the Info section, specify information about the audit procedure. Specify this information:

Standard Interval (Days)
The standard interval is defined on the Product Type record. After you select a product type for this product, the standard interval is inserted.

Special Interval (Days)
Optionally, specify a special interval. Specify a special interval if you know that the product will require auditing before the standard interval elapses. The special interval overrides the standard interval when calculating the date of the next audit.

Audit Adv Notice (Days)
This field shows the number of days in advance that a task is displayed for audits in My To Do List. The value specified for the product type is displayed. You can specify a different value.

Last Audit
The date that the last audit was performed on this product is inserted. This information is generated when you create an audit record for this product in product Audits Maintenance.

Next Audit
The date that the next audit for this product is due is inserted. If a special interval has been specified, then this date is calculated by adding the special interval to the date of the last successful

audit. If a special interval has not been specified, then this date is calculated by adding the standard audit interval specified on the Product Type record to the date of the last successful audit.

Time Estimate (Hours)
Specify the amount of time required to complete the audit of this product.

Audit Procedure
If you store detailed audit procedures for this product in a separate document, select the document ID in this field. You can select any document attached to the product site record. To view the document, click **View**.

10 In the Instructions section, specify information about how to conduct the audit.
11 Click the **Save** button.

Specifying revision control settings

Use these settings if your installation of IQM is integrated with an ERP.

If a new revision for a product is created in the ERP, specify whether or not to import the revision information into IQM. The settings you specify here are for the selected product only. To specify default settings, use Entity Maintenance.

See Specifying Default Product Revision Settings on page 58.

Use these settings in conjunction with the ERP Controls Revision check box on the General tab.

See Specifying General Information on page 175.

To specify the default settings:

1 Select **Documentation > Product > Product Maintenance**.
2 Select the product record.
3 Click the **Settings** tab.
4 Specify this information:

Import product revision level
Specify whether the revision level specified in the ERP is imported into IQM. To import the product revision level from the ERP, select Yes. If you do not want to import the product revision level from the ERP, specify No. If you specify No, then you should clear the ERP Controls Revision check box on the General Tab. If you specify No in the Import Revision Level field and select the ERP Controls Revision check box, then you cannot create revision levels for this product.
To use the default setting specified in Entity Maintenance, select Default.

Create product change history when importing new revision information
To create a product change history when importing new revision information from the ERP, select Yes. If you select Yes, a new entry is created in the Product Change History tab when revision information is imported from the ERP. If you do not want to create product change history, select No.
To use the default setting specified in Entity Maintenance, select Default.

5 Click the **Save** button.

Specifying General Information

Use the General tab to specify information about products that is shared across all of the sites in the entity you selected in the header. To specify general information for this product:

1. Select **Documentation > Product > Product Maintenance**.
2. Select the product record.
3. Click the **General** tab.
4. Specify this information:

Product Type
Specify the type for this product. The product type on the Entity tab is informational only. To use a product type's audit information, audit instructions, retention duration, and document links in this product record, specify the product type on the Site tab.

Stage

Specify the life cycle stage for this product. Select one of these options:

Prototype
The building of a prototype is usually the first step of product production.

Pre-Production
After the prototype is developed, pre-production activities, such as design modification and testing, can begin.

Production
Select this option if the product is being manufactured.

Service
Select this option if the product is currently in use.

ERP Controls Revision
If you are integration with an ERP, specify whether the ERP or IQM controls the revision level of this product. If the ERP controls the revision level, select this check box. If you select the check box, then the Revision Level field is not available. You cannot create a new revision for this product in IQM.
If IQM controls the revision level, clear this check box.
To determine whether change histories are created when you import revision information from an ERP, use the Settings tab.
See Specifying Revision Control Settings on page 174.

Revision Level
Specify the revision level for this product. When you specify a new revision level, you have the option of specifying change history text when you save the record.

Issue Date
Specify the date that this revision of the product was issued. When you specify a new issue date, you have the option of specifying change history text when you save the record.

Drawing Number
Specify the drawing number for this product.

Reference
Specify any additional information about this product.

5 To specify entity-specific general instructions for this product, click the **Special Instructions** sub tab of the General tab. Specify instructions regarding the use of this product.

6 To specify entity-specific reference information for this product, click the **Reference** sub tab of the General tab. Specify this information:

Document Type
Specify a document type code for the product.

Commodity Type
Specify a commodity type code for the product. Use commodity codes to group products with similar characteristics. For example, you may maintain a commodity code called PLASTIC for products that contain plastic pieces.

Major Location
Specify the primary storage location for this product or the general location where this product is used.

Minor Location
Specify the secondary storage location for this product or the specific location where this product is used.

User Defined Fields
Specify the user-defined information your company uses with products.

7 To review the inspection plans for this product, click the Inspection Plan tab. The information on this tab is read-only. When you create an inspection plan for the product, the plan information is displayed on this tab.

8 To review the text entered when a new revision of this product is saved, click the Change History tab. See Viewing Product Change History Text on page 183.

9 Click the **Save** button.

Product characteristics

Use the Product Characteristics tab to define the product characteristics that you measure. The characteristics that you define can be used in the product's inspection plan.

Measurement formats for variable standards

These formats are supported for variable measurement standards:

[Nominal]+-[#]
Specify the nominal value, then specify +-, then a number or percentage value that represents both the upper and lower specifications. For example, if you specified 100+-5, then the nominal specification

is 100. The lower specification is 95. The upper specification is 105. If you specified 100+-10%, then the nominal specification is 100. The lower specification is 90. The upper specification is 100.
This format is the recommended format. It is used in SPC charting, which requires a nominal, upper, and lower value.

[Lower]/[Upper]
Specify the lower and upper limits. For example, if you specified 95/105, the lower specification is 95 and the upper specification is 105. The nominal specification is calculated as the mid-point between the upper and lower specifications. In this example, the nominal specification is 100.

[Nominal]+[Upper]/-[Lower]
Specify the nominal value. Enter +, then specify the upper limit by entering an amount or percentage above the nominal specification. Enter /-, then specify the lower limit by entering an amount or percentage below the nominal specification. For example, if you specified 100 +5/-5, then the nominal specification is 100. The lower specification is 95. The upper specification is 105. If you specified 100+10%/-10%, then the nominal specification is 100. The lower specification is 90. The upper specification is 100.

[#]MAX
If any value up to a certain specification is acceptable, specify the upper specification and then enter MAX. For example, 12MAX indicates that any value up to 12 is acceptable. Any value above 12 is not acceptable.

[#]MIN
If any value including or above a certain specification is acceptable, specify the lower specification and then enter MIN. For example, 14MIN indicates that 14 and any value above 14 is acceptable. Any value below 14 is unacceptable.

Specifying product characteristics

Use the Product Characteristics tab to defined the characteristics that you measure. The characteristics that you define on this tab can be used in the product's inspection plan.

1. Select **Documentation > Product > Product Maintenance**.
2. Select the product.
3. Click the **Characteristics** tab.
4. Click the **Detail** tab and specify this information:

   Char No
   The characteristic number is inserted when you save the record.

   Insp Seq. No
   Use the arrows to arrange the characteristics in the order that you want to inspect them.

   Characteristic Name
   Specify a name for this characteristic.

   Type
   Specify the characteristic type.

Standard Type
Specify the standard that you use to measure this characteristic. Depending on the standard that you select, fields on this form become available.

Class
Specify a class code for this characteristic. Class codes can be used to define inspection sampling plans. Use class codes to group together characters that have the same sampling plan.

Category
Specify a category code for this characteristic.

Page
Specify the page number in the product specification where this characteristic is described.

Zone
Specify the section or zone of the product specification where this characteristic is described.

Product ID
The product ID is displayed. You cannot edit this field.

Entity ID
The entity ID is displayed. You cannot edit this field.

5 If you selected Variable as the standard type, specify this information:

Significant Digits
Specify the number of digits after the decimal point to display for this characteristic in SPC charts.

Variable Standard
Specify the variable standard range for this characteristic. The variable standard can be a range, a maximum value, or a minimum value.

Units
Specify the unit of measurement used for this characteristic.

6 To specify any special instructions to use when inspecting this characteristic, click the Special Instructions tab and specify the text.

7 To specify information regarding how to inspect this characteristic, click the Inspection Plan tab.

8 In the Equipment section, specify the piece of equipment used to inspect this product characteristic in the Equipment ID field. When you select an equipment ID, the equipment's type is inserted in the Equipment Type field.

9 In the Device section, specify the device used to measure this characteristic. When you select a device ID, the device's type is inserted in the Device Type field.

10 In the Options section, specify this information:

Measure By
Specify the job code of the individuals who are responsible for measuring this characteristic.

Chart Type
Specify the chart type to use to analyze the measurement of this characteristic.

Chart By
Specify the job code of the individuals who are responsible for creating charts for this characteristic.

Frequency
Specify the frequency code for this characteristic. The frequency code indicates how often this characteristic should be analyzed.

Plan Level
Specify a general level inspection code. To add a new level code, select the Maintenance check box.

AQL Ref
Specify the Acceptable Quality Level reference for this characteristic.

11 In the Sampling Plan section, specify the sampling plans to use for this characteristic. You can specify sampling plans for each site in the product's entity. Specify this information:

Sample Size
Specify the number of samples to be taken for data collection.

Sampling Plan
Specify reference text for this sampling plan.

Site ID
Specify the site that uses this sampling plan.

Init Sampling Plan

Specify the initial sampling plan to use when you first use Skip-lot Receiving Inspection for this characteristic. You can select any sampling plan defined for the site ID that you specified.

To specify a sampling plan for a different site, specify the site in the Site ID field, then specify information in the remaining fields.

12 Click the **Save** button.

Attaching documents to products

In Product records, you can attach documents at the entity level or at the site level.

To attach a document at the entity level, place your cursor in the header of the Product Maintenance or in any non-site tab before clicking the **Documents** button.

To attach a document at the site level, click the Site tab. In the table, select the site to which to attach documents. Then, click the **Documents** button.

Setting up product teams

Use the Product Teams function to build lists of individuals responsible for developing and approving the product. You can also build a list of individuals who are notified when a product's design changes. You can add employees, customers, and suppliers to product teams.

1 Select **Documentation > Product > Product Maintenance**.
2 Select the product.
3 Right-click and select **Product Team**.
4 In the Product Team field, select one of these options:

Option	Description
Developed By	Select this option to add members to the product's development team.
Approved By	Select this option to add members to the team responsible for approving the product. When product change requests are created for the product, these team members are added to the request record.
Distributed To	Select this option to specify individuals who are notified when a product's design changes.

5 In the table, specify this information:
- To add an employee to the product team, select the **Employee** option. Specify the employee's ID in the **Employee ID** field. Then, specify the employee's function and job codes.
- To add a customer to the product team, select the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact responsible for the audit in the **Contact No** field.
- To add a supplier to the product team, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the audit in the **Contact No** field.

6 Click the **Save** button.

Specifying suppliers for products

Use the Bought From form to specify the suppliers who sell this product to you.

To use receiving inspection for the product, you must add suppliers to the Bought From form.

Specify bought from information at the site level. If you access this form without selecting a site, then the suppliers will be attached to the first site in the table on the Site tab.

1 Select **Documentation > Product > Product Maintenance**.
2 Select the product.
3 Click the **Site** tab.
4 Click in the site table.
5 Right-click and select **Bought From**.
6 Specify this information:

Supplier ID
Specify the ID of the supplier who sells this product to you.

Supplier Product ID
If the Supplier's ID for the product is different from your ID, specify the ID.

Product Name
If the Supplier's name for the product is different from yours, specify the name.

Revision Level
If the Supplier's revision level for the product is different from yours, specify the revision level.

7 Click the **Save** button.

Specifying customers who buy products

Use the Sold To function to specify the customers who purchase this product from you.

1 Select **Documentation > Product > Product Maintenance**.
2 Select the product.
3 Right-click and select **Sold To**.
4 Specify this information:

Customer ID
Specify the ID of the customer who purchases this product from you.

Customer Product ID
If the customer's ID for the product is different from your ID, specify the ID.

Product Name
If the customer's name for the product is different from yours, specify the name.

Revision Level
If the customer's revision level for the product is different from yours, specify the revision level.

5 Click the **Save** button.

Building the bill of material

If this product is a manufactured product made up of other products, use the Bill of Material function to specify the raw material products and sub-assemblies used in the manufacture of this product.

Specify bills of material at the site level. If you access this form without selecting a site, then the bill of material will be attached to the first site in the table on the Site tab.

1 Select **Documentation > Product > Product Maintenance**.
2 Select the product.

3 Click the **Site** tab.
4 Highlight the row for the site whose bill of material you are specifying.
5 Right-click and select **Bill of Material**.
6 In the Product ID column, specify the product used in the manufacture of the product you selected in Product Maintenance.
7 Click the **Save** button.

Revising products

When you create a new revision for a product by changing the information in the Revision field or the Issue Date field, these actions occur:

- You are prompted to specify change history text
- You are notified that a copy of the revision will be stored in Product Revision History
- You have the option of updating any attached product inspection plans.
- If this product is used in any FMEA records, the Review Needed check box on the FMEA record is selected.

To formally revise a product:

1 Select **Documentation > Product > Product Maintenance**.
2 Select the product to revise.
3 Make your product revisions
4 In the **Revision Level** field, specify a new value.
5 In the **Issue Date** field, specify the date this revision was made.
6 Click the **Save** button.
7 You are prompted enter change history text. To add change history text, click **Yes**.
8 You are informed that the product information will be stored when you save the revision. This product information is stored in Product Revision History. Click **Ok**.
9 On the Change History tab, specify a description of the change.
10 Click **Save**.
11 The system prompts you to update the revision level of the inspection plans defined for the product. To update the plans, click **Yes**. On the Inspection Plan tab, specify a new revision level and revision date for each plan.
12 Click the **Save** button.

Updating the product type

If you change the product type in the Site tab on a product record, you are given the option to update retention information, audit information, audit instructions, and attached documents.

1 Select **Documentation > Product > Product Maintenance**.
2 Open the product record.

3 Click the **Save** button.

4 Specify the information to update in the product records:

Retention
Select this check box to update the information in the product record Retention (Days) field.

Audit Information
Select this check box to update the information in the product record Audit Information section.

Audit Instructions
Select this check box to update the information in the product record Audit Instructions field.

Audit Link
Select this check box to update the information in the product record Audit Procedure field.

Product Document Links
Select this check box to update the list of documents attached to the product.

5 Click **Ok**.

6 Click the **Save** button in Product Types Maintenance. If you copied the product document links, these documents are attached to the product record at the site level. To view the list of links, you must select the site to view in the Site tab and place your cursor in one of the Site tab fields.

Viewing product change history text

You can view a list of the comments entered when a new product revision is saved. All of the comments are displayed on the Change History tab. You can view change history comments in a combined view and a detail view. To view text only, click Combined. To view comments by date or revision level, click Detail. If you click detail, a table with the revision level and issue date is displayed. Select a row in the table to view the associated comments.

You cannot edit product change history on this tab.

Viewing and editing product revision history text

1 Select **Documentation > Product > Product Maintenance**.

2 Open the product whose change history you want to view.

3 Right-click and select **Change History**.

4 In the Revision section, a list of the revisions and dates they were issued is displayed. Select a row to view the change history text.

5 To edit the change history text, specify text in the Change History section.

6 Click the **Save** button. The ID of the currently signed in user, the current date, and the current time are inserted.

Copying products

Use this function to create a new product from an existing product.

1. Select **Documentation > Product > Product Maintenance**.
2. Open the product record to copy.
3. Right-click and select **Copy Product**.
4. In the **Copy to Product ID** field, specify the ID of the new product.
5. Select the information to copy:

   Characteristics
   Select this check box to copy the product's characteristics.

   Sold To
   Select this check box to copy the product's customers.

   Approved By
   Select this check box to copy the product's approved by team members.

   Distributed To
   Select this check box to copy the product's distributed to team members.

   Developed By
   Select this check box to copy the product's developed by team members.

   Quality Costs
   Select this check box to copy the product's quality costs.

   Document Links
   Select this check box to copy the documents that are attached to the product document header. This option does not copy documents that are attached to the product at the site level.

   Sites
   Select this check box to copy the information on the Site tab. If you select this check box, the Bought From and Bill of Material check boxes become available.
   Note: This option does not copy documents attached to the product at the site level. It also does not copy the information specified in the **Audit Procedure** field.

   Bought From
   If you selected the Sites check box, this check box becomes active. Select this check box to copy the product's supplier information.

   Bill of Material
   If you selected the Sites check box, this check box becomes active. Select this check box to copy the product's bill of material.

6. Click **Ok**. The new product is created.

Product change requests

Use Product Change Requests to formally record requests to change products. Employees, customers, and suppliers can originate requests.

After you approve and close a product change request, you can update the product's revision level and the revision level of any inspection plans associated with the product.

The change you specify in the Product Change Request form is not automatically made. You must manually change the product record to implement a change request.

Adding product change requests

1 Select **Documentation > Product > Product Change Request Maintenance**.

2 Specify this information:

Site ID
Select the site where this change request was made. When you select a site, the site's parent entity ID is inserted in the Entity ID field.

Date
Specify the date this change request was made.

Due Date
Specify the date that action taken based on this request should be completed.

Product ID
Specify the product that is the subject of this change request.

Char No
If this change request affects a particular characteristic, specify the characteristic ID.

Assigned To
Specify the employee responsible for managing this change request. A task for the change request is added to the employee's My To Do list. The due date of the task is the same as the due date of the change request.

Change Type
Specify the type of change requested.

Change Reason
Specify the reason for this change.

Priority
Specify the priority level for this change request.

Decision
Specify the decision made for this change request. Select one of these options:

Pending
Select this option if the change request is under review and no final decision has been made.

Approved
Select this option if the change request is approved. After approval, the product can be updated based on the requirements in the change request.

Not Approved
Select this option if the change request is not approved and will not be implemented.

Decision Date
Specify the date the decision was made. The current date is inserted by default.

Business Unit
If this change request is related to a business unit, specify the business unit ID.

3 Use the Origin tab to specify who made the change request. Click the **Origin** tab and specify this information:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the **Employee ID** field. Then, specify the employee's function and job codes.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the **Customer ID** field, then select the contact who requested the change in the **Contact No** field.
   - To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the **Supplier ID** field, then select the contact who requested the change in the **Contact No** field.
4 Click the **Change Request** tab and specify a description of the requested change.
5 Click the **Response** tab and specify a response to a change request. For example, you can provide specific instructions of the actions to take if the request is approved, or provide an explanation why a request was not approved.
6 Click the **Save** button.

Approving change requests

After you add a change request, specify the individuals who are responsible for approving the request.

1 Select **Documentation > Product > Product Change Request Maintenance**.
2 Select the change request.
3 Right-click and select **Approved By**.
4 Specify this information:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact responsible for the audit in the Contact No column.

- To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact responsible for the audit in the Contact No column.

5 In the Decision column, specify the decision made for this change request. When you select a decision, the current date and the ID of the currently signed-in user are inserted in the Decision Date field. Depending on the settings specified in Application Global Maintenance and Application User Maintenance, you may be required to provide your password when you change the approval status. Select one of these options:

Pending
Select this option if the change request is under review and no final decision has been made.

Approved
Select this option if the change request is approved. An approved request is ready to be implemented. Select this status when all individuals on the Approval team have approved the request.

Not Approved
Select this option if the change request is not approved and will not be implemented.

6 Click the **Save** button.

Adding product change request distribution teams

After you add a change request, specify the individuals who should be notified of the change.

1 Select **Documentation > Product > Product Change Request Maintenance**.

2 Select the change request.

3 Right-click and select **Distributed To**.

4 Specify this information:

- To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
- To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact responsible for the audit in the Contact No column.
- To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact responsible for the audit in the Contact No column.

5 In the Decision column, specify the decision made for this change request. When you select a decision, the current date and the ID of the currently signed in user are inserted in the **Decision Date** field. Select one of these options:

Pending
Select this option if the change request is under review and no final decision has been made.

Approved
Select this option if the change request is approved. An approved request is ready to be implemented. Select this status when all individuals on the Approval team have approved the request.

Not Approved
Select this option if the change request is not approved and will not be implemented.

6 Click the **Save** button.

Copying a product change request

You can copy an existing change request to create a new change request.

1 Select **Documentation > Product > Product Change Request Maintenance**.
2 Select the change request.
3 Right-click and select **Copy Product Change Request**
4 Select the information to copy:

Approved By
Select this check box to copy the approval team.

Distributed To
Select this check box to copy the distribution team.

Quality Costs
Select this check box to copy the quality cost information.

5 Click **Ok**. All of the information on the main form is copied to create the new request, except for the Change Request ID. The additional information you selected is also copied. The new request has a status of Open.

Closing a product change request

After you complete work on a change request, close the request. You can close a change request if it has a decision status of Approved or Not Approved. You cannot close a change request with a decision status of pending.

1 Select **Documentation > Product > Product Change Request Maintenance**.
2 Select the change request.
3 In the Status field, select **Closed**.
4 Click the **Save** button. If you are closing an approved change request, you can update the product revision level and the revision level of any attached inspection plans. To update revision levels.
5 After you click save, specify the new revision information for the product. The existing revision level is displayed. Specify this information:

New Revision Level
Specify the new revision level.

New Revision Date
Specify the date you are issuing this new revision.

6 Click **Ok**.

7 If the product has product inspection plans, you are prompted to update the product inspection plan revision level. To update the revision, click Yes. The Inspection Plan tab is made available. Specify this information:

New Revision Level
Specify the new revision level for the inspection plan.

New Rev Date
Specify the date that you are issuing this new revision.

8 Click the **Save** button.

Viewing product revision history

Use Product Revision History to review changes made to your products over time. Each time you create a new revision for a product by changing its revision level, a copy of key information from the previous revision level is retained.

You can only view information about previous revisions. You cannot edit information in Product Revision History.

1 Select **Documentation > Product > Product Revision History**.

2 Select the product revision to view. This information is displayed:

Entity ID
The entity where this product is used.

Product ID
The ID of the product.

Product Name
The name of this revision of the product.

Document Type
The document type for this revision of the product. This is the document type specified on the Entity ID tab in Products Maintenance.

Commodity Type
The commodity type for this revision of the product.

Revision Level
The revision level for this revision of the product.

Issue Date
The date this revision was issued.

Char No
The number of the characteristic for this revision of the product.

Characteristic Name
The name of the characteristic

Standard Type
The standard used to evaluate this characteristic. A T is inserted for a text characteristic. A V is inserted for a variable characteristic. An A is inserted for an attribute characteristic.

Variable Standard
If the standard type is variable, the standard range is inserted.

Units
If the standard type is variable, the unit used to measure the characteristic.

Product audits

Use Product Audits Maintenance to assess your product's performance. If a product fails an audit, you can link the audit record to a nonconformance record.

Adding product audits

1 Select **Documentation > Product > Audits**.
2 Specify this information:

Site ID
Specify the site conducting this audit. When you select a site ID, the site's parent entity is inserted in the Entity field.

Audit ID
Leave this field blank. An ID based on your auto-numbering scheme is created when you save the record.

Product ID
Specify the product ID that is the subject of this audit. When you select a product ID, the audit information from the product record is inserted in the Current Product Master Record section. The information inserted is the entity-level information.

Due Date
Specify the date that this audit is due to be complete. By default, the date in the Next Audit field is inserted.

Business Unit
If this audit is performed by a particular business unit, specify the business unit ID.

3 In the Audited By section, specify who performed the audit.
- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

4 In the Options section, specify the current status of this audit. Specify this information:

Result
Specify the result of this audit. Select one of these options:

Passed
If the product passed the audit, select this option.

Status
If the product audit is in progress, but the results are not available, select this option.

Pending
If the product audit has not yet started, specify this option.

Failed
If the product failed the audit, select this option. After you save the record, you have the option of linking this failed audit to a Nonconformance record.

Completion Date
If you selected Passed or Failed in the Result field, specify the date the audit was completed. If you specified Pending in the Result field, the Completion Date field is unavailable. A pending audit is not complete.

5 In the Current Product Master Record section, review audit information for this product. You cannot edit this information. This information is displayed:

Product Type
The type for this product is displayed.

Status
The current status is displayed. This table shows descriptions of the statuses:

Status	Description
Open	This product is available for use.
Do Not Order	This product is still used, but it is no longer ordered. This status indicates that the remaining inventory should be used, but the product should not be replaced.
Obsolete	This product is no longer used.

Status	Description
Hold	The use of the product is temporarily suspended.
Deleted	This status is used a BOD is received that changes the status to Deleted.

Standard Interval (Days)
The frequency with which audits are performed is displayed.

Special Interval (Days)
The special audit interval is displayed. A special interval is used if a product requires an audit before the standard interval elapses.

Last Audit
The date that the last audit was performed on this product is displayed.

Next Audit
The date that the next audit is due for this product is displayed. If a special interval has been specified, then this date is calculated by adding the special interval to the date of the last successful audit. If a special interval has not been specified, then this date is calculated by adding the standard audit interval to the date of the last successful audit.

Time Estimate (Hours)
The amount of time required to complete the audit is displayed.

Audit Procedure/Product Documents/Product Site Documents
To view the document specified as the audit procedure for the product, select Audit Procedure and then click view. To view the documents attached to the product record, select Product Documents. To view the documents attached to the product record at the site level, select Product Site Documents.

Revision Level
The current revision level of the product is displayed.

Issue Date
The date that this revision of the product was issued is displayed.

6 In the Comments section, specify general comments about the audit process or result.
7 Click the **Save** button.

Posting failed audits to NCMs

When you save a failed audit, you have the option to post the failure to a nonconformance record. To post a failed audit to an NCM:

1 Select **Documentation > Product > Audits**.
2 Select the audit.

3 In the **Result** field, specify Failed.
4 Click the **Save** button.
5 You are prompted to post the failed audit to an NCM. Click **Yes** to post the audit.
6 Click the **Save** button. You must click the **Save** button to generate the NCM. The NCM is added to the table.
7 To view the NCM, right-click the NCM ID in the grid and select **Details**.

Attaching nonconformance records to a product audit

Use this procedure to attach an existing nonconformance record to a failed product audit.

1 Select **Documentation > Product > Audits**.
2 Open the audit.
3 **Nonconformance**. Right-click and select
4 If you posted the failed audit to a nonconformance record, the record is listed. To add other nonconformance records:
   a Click **New**.
   b Click the **NCM ID** arrow and select the NCM ID. This information is displayed:

Date
The date the NCM was created is displayed.

Time
Right-click and select The time the NCM was created is displayed.

Reported By
The source of the NCM is inserted. The source is either internal, a customer, or a supplier.

Reported By Name
For an internal source, the ID of the employee is displayed. For a customer, the customer ID is displayed. For a supplier, the supplier ID is displayed.

Contact Name
For a customer or supplier source, the name of the contact is displayed.

Assigned To
The employee assigned to address the NCM record is displayed.

Due Date
The date that the NCM is due is displayed.

Status
The status of the NCM date is displayed.

Closed Date
If the NCM is closed, the date the record was closed is displayed.

Copying product audits

You can create a new product audit by copying an existing product audit.

1. Select **Documentation > Product > Audits**.
2. Select the audit.
3. Right-click and select **Copy Product Audit**
4. Specify the information to copy:

   Nonconformance
   Select this check box to copy any attached nonconformance records.

   Quality Costs
   Select this check box to copy the quality costs information.

5. Click **Ok**. The new product audit is created. In addition the information you selected, all of the information on the main form is copied except for the information in the Options area. The new product audit has a status of Pending.

Failure mode and effects analysis (FMEA)

Use FMEA Maintenance to assess the potential failure modes and their effects for your products or processes. For each product or process, you can specify the particular items to analyze.

Setting up next system IDs for FMEAs

You can specify unique prefixes or suffixes for system-generated IDs. If you use multiple sites or entities, specifying a unique numbering scheme for each entity or site can make it easier to identify which records belong to a particular entity or site.

1. Select **Documentation > Product > FMEAs Maintenance**.
2. Right-click and select **Next System ID**.
3. To set up numbering for Process FMEAs, select **Process**. To set up numbering for Design FMEAs, select **Design**.
4. Specify the prefix or suffix to use. You can specify either a prefix or a suffix, or you can specify both a prefix and suffix. The entity and site for which you are setting up auto-numbering is displayed. Specify this information:

   Prefix
   To use a special prefix for this site's lots, specify the prefix in this field.

   Suffix
   To use a special suffix for this site's lots, specify the suffix in this field.

5 Click **Ok**. When you next create a record for the specified site, the prefix and suffix you specified is attached to the ID.

Adding FMEA records

1 Select **Documentation > Product > FMEAs Maintenance**.

2 Specify this information:

FMEA Type
Specify the type of FMEA. If this FMEA relates to the design of the product, click **Design**. If this FMEA relates to the manufacture of a product, click **Process**.

Site ID
Specify the site where the analysis is conducted.

Status
Specify the status for this FMEA. Select one of these options:

Open
Select this status if the FMEA is current.

Do Not Reorder
Select this option if the product specified on this FMEA should not be reordered.

Obsolete
Select this status if you no longer use the FMEA.

Hold
Select this status if use of the FMEA is temporarily suspended.

Revision
Select this status if this FMEA is currently being revised.

Deleted
You cannot select this status. The Deleted status is selected by the system if it receives a BOD changing the status to Deleted.

Product ID
Specify the product to which you are issuing the FMEA.

Product Type
The product type associated with the product ID is inserted.

Revision Level
Specify the revision level for this FMEA. When you change the revision level, you are prompted to specify a description of the change when you save the record.

Issue Date
Specify the date you are issuing this FMEA. When you change the revision level, you are prompted to specify a description of the change when you save the record.

FMEA Name
Specify the name of this FMEA.

System
Specify a system code for this FMEA. Use system codes to specify the system you are analyzing. Base system codes on the types of products your organization manufactures.

Sub System
Specify a sub system code for this FMEA. Use sub system codes to specify the component of the system you are analyzing. Base subsystem codes on system codes, which represent the types of products your organization manufactures.

Design Responsibility/Process Responsibility
If this is a Design FMEA, then specify the department responsible for the design. If this is a Process FMEA, then specify the department responsible for the process.

Key Date
Specify the due date of the FMEA. This date should not be later than the release date.

Model Year(s)/Program(s)
Specify the model year or program for this FMEA. For example, if the FMEA is for an automotive design or process, an entry such as 2003/Ford may be appropriate. 2003 is the model year, and Ford is the automotive manufacturer.

Prepared By
Specify the employee who is preparing the FMEA. After you save the record, a task for the FMEA is added to the employee's My To Do List. The key date of the FMEA is used as the due date.

3 To specify the core team members for this FMEA, click the **Core Team** tab. Specify the names of core team members or departments who have permission to perform tasks on the FMEA.
4 To specify the suppliers or plants that this FMEA may affect, click the **Supplier/Plants Affected** tab and specify the suppliers and plans.
5 Click the **Save** button.

Finding existing FMEA records

Use this procedure to specify the type of FMEA records to show in the collection.

1 Select **Documentation > Product > FMEAs Maintenance**.
2 Click the **Filter in Place** button.
3 Click the type of FMEA to view.
4 Click the **Filter in Place** button. FMEAs of the type that you selected are displayed in the collection.

Adding FMEA items

Use this form to list specific potential failure modes and effects. You can specify potential failure modes and effects for characteristics of the product you specified in FMEA Maintenance. You can also specify potential failure modes and effects for products related to the design or manufacture of the product you specified in FMEA maintenance.

1 Select **Documentation > Product > FMEAs Maintenance**.

2 Select the type of FMEA to edit.

3 Open the FMEA.

4 Perform one of these steps:
- To add an FMEA item for a product different from the product specified on the FMEA Maintenance form, specify the ID in the **Product ID** field. If you specify an ID in the Product ID field, you cannot select a characteristic.
- To add an FMEA item for a characteristic of the product specified on the FMEA Maintenance form, specify the characteristic ID in the **Characteristic ID** field.

5 Specify this information:

Product Type
Specify the product type for this FMEA item. You can specify a product type even if you did not specify a product ID for this FMEA item.

Severity
Specify a number between 1 and 10 to indicate the seriousness of the effects of the potential failure mode. A severity of 7 or higher should be reserved for serious and potentially hazardous situations.

Class
Specify the class code. Use class codes to categorize characteristics.

Occurrence
Specify a number between 1 and 10 to indicate the likelihood that the specific failure cause is likely to happen. The higher the number, the more likely the failure will occur.

Detection
Specify a number between 1 and 10 to indicate the ability of the proposed controls to detect the failure before the product leaves the manufacturing operation or assembly location. The higher the number, the more likely it is that the control will not detect a potential failure.

RPN (Risk Priority Number)
This number is calculated by multiplying the severity value, occurrence value, and detection value.

6 Click the **Part Function** tab to specify the function of the FMEA item. Include information detailing the environment in which the system operates (temperature, pressure, humidity ranges). If the item has more than one function with different potential modes of failure, list all functions.

7 Click the **Requirement** tab to specify any special requirements for the FMEA. These requirements could be developed by your customer or internally.

8 Click the **Potential Failure Mode** tab to specify the manner in which a component, system, or subsystem could potentially fail to meet a design specification. Use this area to document potential

failure modes triggered by certain conditions and under certain usage conditions. For an automotive component, system, or subsystem, conditions such as heat, dust, terrain, city driving, and mileage may be appropriate potential failure modes. Describe potential failure modes in technical terms.

9 Click the **Potential Effects of Failure** tab to describe potential effects of failure. Failure could include noise, instability, and erratic operation.

10 Click the **Potential Causes of Failure** tab to record a design weakness, the consequence of which is a potential failure mode. Use this area to develop a comprehensive list of failure causes and/or mechanisms. Typical Failure Causes could be incorrect material specification, overstressing, poor environmental protection, fatigue, wear, and corrosion.

11 Click the **Current Controls Prevent** tab to develop a comprehensive list of prevention activities that help to assure the design adequacy of the failure modes and/or potential failure causes. For example, current prevention controls could be road testing, design reviews, and mathematical studies.

12 Click the **Current Controls Detection** tab to develop a comprehensive list of detection activities that help to assure the design adequacy of the failure modes and/or potential failure causes.

13 Click the **Save** button.

Specifying FMEA action results

Use the Action Results form to record the actions you take to reduce the RPN of FMEA items.

1 Select **Documentation > Product > FMEAs Maintenance**.

2 Select the type of FMEA to edit.

3 Open the FMEA record.

4 Right-click and select **FMEA Items**.

5 Select the FMEA item, and click **Action Results**.

6 Specify this information:

Action Result ID
If you are creating a new action result, leave this field blank. If you are modifying an existing action result, specify the ID to edit.

Responsibility
Specify the individual responsible for completing this action item.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field. Then, specify the employee's function and job codes.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

7 In the Options section, specify this information:

Project ID
Specify the project ID for this action. Use the project to define the specific goals for this action and the steps to take to achieve the goals.

Target Completion
Specify the date that this action item is scheduled to be complete.

Severity
The value specified in the FMEA Items form is inserted. Adjust the value if necessary.

Occurrence
The value specified in the FMEA Items form is inserted. Adjust the value if necessary.

Detection
The value specified in the FMEA Items form is inserted. Adjust the value if necessary.

RPN
This value is calculated by multiplying the severity, occurrence, and detections values.

8 In the Recommended Actions section, specify the actions that should be taken to reduce the RPN value.
9 In the Actions taken section, specify the actions that you actually took to reduce the RPN value.
10 Click the **Save** button.

Closing FMEA action results

After you complete an FMEA action, close the record.

1 Select **Documentation > Product > FMEAs Maintenance**.
2 Select the type of FMEA to close.
3 Select the FMEA.
4 Right-click and select **FMEA Items**.
5 Select the FMEA item, and click **Action Results**.
6 In the **Action Results ID** field, specify the action to close.
7 Select the **Closed** check box.
8 In the **Closed Date** field, specify the date you are closing the action. The current date is inserted.
9 Click the **Save** button.

Reviewing FMEA records

If the revision level or issue date on a product ID is changed, the Review Needed check box is selected on any associated FMEA records. When a product is changed, review the changes made to the product to see if they impact the FMEA. To review an FMEA record:

1 Select **Documentation > Product > FMEAs Maintenance**.
2 Select the type of FMEA to review.
3 Select the FMEA.

4 After your review is complete, specify information about the review on the Review Comments tab.
5 Clear the **Review Needed** check box.
6 Click the **Save** button.

Revising FMEA records

To formally revise a FMEA:

1 Select **Documentation > Product > FMEAs Maintenance**.
2 Select the type of FMEA to revise.
3 Select the FMEA to revise.
4 Make your revisions
5 In the **Revision Level** field, specify a new value.
6 In the **Issue Date** field, specify the date this revision was made.
7 Click the **Save** button.
8 You are prompted enter change history text. To add change history text, click **Yes**.
9 You are informed that the product information will be stored when you save the revision. This product information is stored in Product Revision History. Click **Ok**.
10 On the Change History tab, specify a description of the change.
11 Click **Save**.

Viewing FMEA change history text

You can view a list of the comments entered when a new FMEA revision is saved. All of the comments are displayed on the Change History tab. You can view change history comments in a combined view and a detail view. To view text only, click Combined. To view comments by date or revision level, click Detail. If you click detail, a table with the revision level and issue date is displayed. Select a row in the table to view the associated comments.

You cannot edit FMEA change history on this tab.

Viewing and editing FMEA change history

You can edit change history text. Change history text is created when either the Issue Date or Revision Level of an FMEA has been changed.

1 Select **Documentation > Product > FMEAs Maintenance**.
2 Select the type of FMEA.
3 Select the FMEA whose change history you want to view.
4 Right-click and select **Change History**.

5 In the Revision section, a list of the revisions and dates they were issued is displayed. Select a row to view the change history text.

6 To edit the change history text, specify text in the Change History section. After you click the **Save** button, the ID of the currently sign in user and the current date and time are inserted.

Copying FMEA records

Use this function to create a new FMEA from an existing FMEA .

1 Select **Documentation > Product > FMEAs Maintenance**.

2 Select the type of FMEA.

3 Open the FMEA that you are copying.

4 Right-click and select **Copy FMEA**.

5 Specify the information to copy:

FMEA Items
Select this check box to copy the attached FMEA items.

Action Results
This check box is available only if you selected the FMEA Items check box. Select this check box to copy the action results linked to the FMEA items.

Quality Costs
Select this check box to copy the quality cost information.

Document Links
Select this check box to copy the documents attached to the FMEA record.

6 Click **Ok**. In addition to the copy options you selected, all the information on the main form except for the issue date and revision date is also copied.

Product reports

Use the reports in the Product module to analyze information about your products.

Product bill of material report

Use this report to review the raw materials that make up a product. This report shows the accounting entity and site associated with the bill of material, the parent product ID, and the products that make up the parent product ID.

Generating the product bill of material report

1. Select **Documentation > Product > My Reports**.
2. Click the Bill of Material link.
3. Click the sites to use for the report.
4. To view the bill of material for a particular product, specify the ID of the product in the **Product ID** field.
5. Click the **Print Report** button.

Process FMEA - potential failure mode and effects analysis

Use this report to review details about process FMEAs. This report shows the accounting entity and site where the analysis occurred, the FMEA ID, the product that is the subject of the analysis, the function responsible for the design, the employee who prepared the FMEA, model year/programs affected by the FMEA, the key date, the original date of the FMEA, the revision level, and the core team. In addition, the items attached to the FMEA, the failure modes for each item, the current process, and the action results are displayed.

Generating the process FMEA - potential failure mode and effects analysis report

1. Select **Documentation > Product > My Reports**.
2. Click the Process FMEA - Potential Failure Modes and Effects Analysis link.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a single FMEA, specify the ID of the FMEA in the **FMEA ID** field.
   - To view FMEAs associated with a product, specify the ID in the **Product ID** field.
   - To view FMEAs associated with a product type, specify the ID of the type in the **Product Type** field.
5. Click the **Print Report** button.

Product FMEA - potential failure modes and effects analysis

Use this report to review details about product FMEAs. This report shows the accounting entity and site where the analysis occurred, the FMEA ID, the product that is the subject of the analysis, the function responsible for the design, the employee who prepared the FMEA, model year/programs affected by the FMEA, the key date, the original date of the FMEA, the revision level, and the core team. In addition, the items attached to the FMEA, the failure modes for each item, the current process, and the action results are displayed.

Generating the product FMEA - potential failure modes and effects analysis report

1. Select **Documentation > Product > My Reports**.
2. Click the Product FMEA - Potential Failure Modes and Effects Analysis link.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a single FMEA, specify the ID of the FMEA in the **FMEA ID** field.
   - To view FMEAs associated with a product, specify the ID in the **Product ID** field.
   - To view FMEAs associated with a product type, specify the ID of the type in the **Product Type** field.
5. Click the **Print Report** button.

Product approval/distribution list

Use this report to review the approval and distribution teams for your products. This report shows the accounting entity associated with the product ID, the product ID, the name of the product, the revision level, the issue date of the revision, the status, the approved by list, and the distributed to list.

Generating the product approval and distribution list

1. Select **Documentation > Product > My Reports**.
2. Click the Product Approval/Distribution List link.
3. Click the entities to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular product, specify the ID of the product in the **Product ID** field.
   - To view information for a product with a particular name, specify the name of the product in the **Product Name** field.
   - To view information for products of a particular type, specify the type in the **Product Type** field.
   - To view the products that have a particular employee on the approval or distribution list, specify the ID of the employee in the **Employee ID** field.
   - To view the products that have a particular customer on the approval or distribution list, specify the ID of the customer in the **Customer ID** field.
   - To view the products that have a particular supplier on the approval or distribution list, specify the ID of the supplier in the **Supplier ID** field.
   - To view products with a particular status, select the appropriate check box. You can select more than one check box.

5 In the **Sort Order** field, specify how to organize the report. Select Product ID to sort the report by product ID. Select Employee Last Name + Employee First Name + Product ID to sort the report first by the employee's last name, then the first name, and then the product ID.
6 Click the **Print Report** button.

Product audit details

Use this report to review a list of product audits. This report shows the accounting entity and site where the audit occurred, the audit ID, the product ID, the product name, the product's revision level, the revision issue date, the date the audit is due, the party who conducted the audit, the result of the audit, the date the audit was completed, and audit comments.

Generating the product audit details report

1 Select **Documentation > Product > My Reports**.
2 Click the Product Audit Details link.
3 Click the sites to use for the report.
4 Specify the information to include in the report:
   - To view audits for a particular product, specify the ID of the product in the **Product ID** field.
   - To view audits for a product with a particular name, specify the name of the product in the **Product Name** field.
   - To view audits conducted by a particular employee, specify the ID of the employee in the **Employee ID** field.
   - To view audits with a particular result, select the appropriate check box. You can select more than one check box.
5 Click the **Print Report** button.

Products audit due date

Use this report to view when product audits are due. This report shows the entity ID, site ID, ID and name of the product that is being audited, the revision level of the product, the date that the revision was issued, the product's status, stage, drawing number, product type, commodity type, the individual who conducts the audit, and the next audit date.

Generating the product audits due date report

1 Select **Documentation > Product > My Reports**.
2 Click Product Audits Due Date List.
3 Click the sites to use for the report.

4 Specify the information to include in the report:
- To view audits that are due for a particular product, specify the ID of the product in the **Product ID** field or the name of the product in the **Product Name** field.
- To view audits that are due for a products of a particular type, specify the product type in the **Product Type** field.
- To view audits that are due for a products of a particular commodity, specify the commodity in the **Commodity Type** field.
- To view audits that are due during a particular time range, specify the start date and the end date in the **From Next Date** and **To Next Date** fields.
- To view audits that are assigned to a particular employee, specify the ID of the employee in the **Audited By** field.
- To view audits for products with particular statuses, select the status to use in the Status section.

5 Specify the sort order for the report:

Option	Description
Product ID	The report is sorted by product ID.
Next Audit + Product ID	The report is sorted by next audit due date, then by product ID. This groups together all audits due on a particular day.
Audited By + Next Audit ID	The report is sorted by the person responsible for the audit, then the audit due date. This groups together all audits for which an employee is responsible.

6 Click the **Print Report** button.

Product change request detail report

Use this report to view information about requested changes to your products. This report displays the entity and site where the change request was made, the change request ID, the date the change was requested, the ID of the party who is assigned to the request, the due date, the product that is the subject of the request, the characteristic that is the subject of the request, the change type, the change reason, the decision made about the request, the date of the decision, the status of the change request, the date the change request was closed, the party who requested the change, the change requested, the ID of the party who responded to the request, the content of the response, and a list of the individuals who approved the request.

Generating the product change request detail report

1 Select **Documentation > Product > My Reports**.
2 Click the Product Change Request Detail link.
3 Click the sites to use for the report.

4 Specify the information to include in the report:
   - To view information for a particular change request, specify the ID of the request in the **Request ID** field.
   - To view change requests made for a particular product, specify the ID of the product in the **Product ID** field.
   - To view change requests approved by a particular employee, specify the ID of the employee in the **Approved By (Employee ID)** field.
   - To view change requests assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID)** field.
   - To view change requests made during a particular time period, specify the starting and ending dates in the **Request Date From** and **Request Date To** fields.
   - To view change requests due to be complete during a particular time period, specify the starting and ending dates in the **Due Date From** and **Due Date To** fields.
   - To view change requests with a particular status, select the appropriate check boxes. You can select more than one check box.
   - To view change requests with a particular decision status, select the appropriate check boxes. You can select more than one check box.
5 Click the **Print Report** button.

Product characteristics list

Use this report to view a list of characteristics your products have. This report displays the entity associated with the product, the product ID, the product name, the product type, the commodity type, the product's revision level, the revision issue date, the status of the product, the stage of the product, and a list of the product's characteristics.

Generating the product characteristics list

1 Select **Documentation > Product > My Reports**.
2 Click the Product Characteristics List link.
3 Click the entities to use for the report.
4 Specify the information to include in the report:
   - To view characteristics for a particular product, specify the ID of the product in the **Product ID** field.
   - To view characteristics for a product with a particular name, specify the name in the **Product Name** field.
   - To view characteristics for products of a particular type, specify the type in the **Product Type** field.
   - To view characteristics for products of a particular commodity, specify the commodity code in the **Commodity** field.
5 In the **Sort By** field, specify how to organize the report:

Option	Description
Product ID + Characteristics No	Select this option to sort the report first by product ID an then by characteristic number.
Product Name	Select this option to sort the report by product name.
Product Type + Product ID + Characteristics No	Select this option to group products with the same product type together. Within each product type, the product IDs are listed in alphabetical order.

6 Click the **Print Report** button.

Product master list

Use this report to view a list of your products. This report displays the entity associated with the product, the product ID, the product name, the product's revision level, the revision issue date, the status of the product, the stage of the product, drawing number, the product type, and the commodity type,

Generating the product master list

1 Select **Documentation > Product > My Reports**.
2 Click the Product Master List link.
3 Click the entities to use for the report.
4 Specify the information to include in the report:
   - To view information for a particular product, specify the ID of the product in the **Product ID** field.
   - To view information for a product with a particular name, specify the name in the **Product Name** field.
   - To view information for products of a particular type, specify the type in the **Product Type** field.
   - To view information for products of a particular commodity, specify the commodity code in the **Commodity** field.
   - To view information for products with a particular status, select the appropriate check box. You can select more than one check box.
5 In the Sort By field, specify how to organize the report. Select Product ID, Product Name, or Drawing Number.
6 Click the **Print Report** button.

Product revision history list

Use this report to view a list of revisions made to your products. You can analyze how your products have changed over time. For each revision, this report displays the entity associated with the product, the product ID, the product name, the revision level, the revision issue date, and a list of the product's characteristics.

Generating the product revision history list

1. Select **Documentation > Product > My Reports**.
2. Click the Product Revision History List link.
3. Click the entities to use for the report.
4. Specify the information to include in the report:
   - To view characteristics for a particular product, specify the ID of the product in the **Product ID** field.
   - To view characteristics for a product with a particular name, specify the name in the **Product Name** field.
5. Click the **Print Report** button.

Product type List

Use this report to view a list of your product types. This report displays the entity associated with the product type, the product type ID, the product type name, the retention period for the product type, the party responsible for the product type, the party's function, the party's job, the standard audit interval, and the estimate of the audit duration.

Generating the product type list

1. Select **Documentation > Product > My Reports**.
2. Click the Product Type List link.
3. Click the entities to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular product type, specify the ID of the type in the **Product Type ID** field.
   - To view information for a product type with a particular name, specify the name in the **Product Type Name** field.
5. Click the **Print Report** button.

Chapter 7: Process modules

Use the Process Management modules to develop your manufacturing processes and administrative tasks. Process Management helps you achieve the proper focus needed by every organization to satisfy customers. It provides a powerful, proven approach to true process-driven quality improvement.

You can:

- Store and track an unlimited number of administrative and manufacturing processes.
- Change requests, audits against processes, and revision histories.
- Develop "playbooks" for manufacturing and administration, based on the general overview of how products and services flow from you to the customer.
- Track and manage detail information for control, process standards, tools, equipment, sample sizes, procedures, corrective action on processes, disposition of nonconforming products, and the individuals who developed and approved the processes.
- Automate the scheduling of process audits and track associated details.
- Ensure continued adherence to quality standards.

Tasks are added to employee To Do lists after you create records in these forms:

- Process Change Requests
- Process Audit Maintenance

See My To Do list on page 34.

Processes

Use Process Maintenance to develop the processes you use to conduct activities such as product manufacture. A process model consists of a series of steps. Components of process models are areas, activities, and elements. Areas are major functions within the process model. Activities are control points within the area. Elements are controls for the activity.

Infor suggests that elements adhere to these four general guidelines:

- Express elements numerically.
- Express elements as text.
- Express elements as yes or no.
- Express elements as a calculation.

An element should have these characteristics:

- Controllable
- Measurable or can it be measured
- Objective specifications or standards
- An individual with direct control over the element
- If rigidly controlled, a significant positive effect on a Key Output Variable (KOV)

Adding processes

1 Select **Documentation > Process > Process Maintenance**.

2 Specify this information:

Process ID
Specify an ID for this process.

Process Name
Specify a name for this process.

Location
Specify a location where this process is performed.

Business Unit
If this process relates to a particular business unit, specify the business unit.

3 In the Responsible for Control section, specify the individual who is responsible for the process. This employee does not necessarily carry out the entire process. This individual manages the process. Specify this information:

Employee ID
Specify the employee's ID.

Function
Specify the function code for this employee.

Job
Specify the job code for this employee.

Change Req Adv Notice (Days)
Specify the number of days in advance that tasks for change requests are displayed in My To Do List.

4 In the Mission section, specify a mission statement or goal for this process.

5 Click the **Save** button.

To complete the process record, add this information:

- Model
- Customers
- Suppliers
- Input

- Output

Process models

Use the process model to define the steps of the process. The process model is an outline made up of three levels: the process area, the process activity number, and the process element number. The process area is the top level of the outline. You must define the process area first before you can define an activity number within the area. You must define a process activity number before you can define an element within the process activity. A "Parent record not found" message is displayed if you attempt to define activities and elements out of order.

For example, if you are developing a process for painting a wooden door, the first process area could be Surface Preparation. An activity within Surface Preparation could be Sanding. Within the Sanding activity, the first element could be to sand the door with 80 grit sandpaper. The second element could be to sand the door with 120 grit sandpaper. The third element could be to sand the door with 200 grit sandpaper.

Adding process models

1. Select **Documentation > Process > Process Maintenance**.
2. Select the process.
3. Right-click and select **Model**.
4. To add a process area, click **Insert**. Specify this information:

   Area Number
   Specify the number for this area. For example, if this is the first area in the process, specify 1.

   Activity No and Element No
   Leave these fields at 0.

   Name
   Specify a name for this process area.

5. Click **Ok**
6. To add an activity, click **Insert**. Specify this information:

   Area Number
   Specify the area number for this activity. For example, if this activity is performed as part of area 2 in your process, specify 2. You must create the Area Number before you can create an Activity Number within the area.

   Activity No
   Specify the number for this activity. For example, if this is the first activity within a particular area, specify 1.

Element No
Leave this field at 0.

Name
Specify a name for this activity.

7 To add an element, click **Insert**. Specify this information:

Area Number
Specify the area number for this element. For example, if this element is performed as part of area 2 in your process, specify 2.

Activity No
Specify the activity number for this element. For example, if this is element is performed as part of the third activity, specify 3.

Element No
Specify the element number.

Name
Specify a name for this element.

8 Click **Ok**.

9 For each area, activity, and element, specify this information:

Employee ID
Specify the ID of the employee responsible for this part of the process.

Function
Specify the employee's function.

Job
Specify the employee's job.

Description
Specify a description of this process component.

10 Click the **Save** button.

Adding process element worksheets

You can create a worksheet for each element in your process. Use the worksheet to ensure that the process element is completed correctly.

1 Select **Documentation > Process > Process Maintenance**.
2 Select the process.
3 Right-click and select **Model**.
4 Select the process element. You cannot add worksheets to process areas or activities.

5 Click the **Worksheet** button. If a worksheet has not been created yet, you are prompted to create the worksheet.

6 Specify this information:

Orig Issue Date
Specify the date this worksheet was first issued.

Revision Level
Specify the revision level for this worksheet. If you specify new information in this field, you are prompted to enter a description of the changes made to the worksheet when you save the record.

Issue Date
Specify the date that this revision of the worksheet was issued. If you specify new information in this field, you are prompted to enter a description of the changes made to the worksheet when you save the record.

Status
If this worksheet is available for use, select **`Current`**. If this worksheet is currently being revised and is not available for use, select **`Revision`**. If you no longer use this worksheet, select **`Obsolete`**.

Last
The date that this worksheet was last audited is inserted. You cannot edit this field.

Next
The date of the next audit for this worksheet is inserted. This is calculated based on the standard audit interval information provided in the Audit Info dialog. To determine the next audit date, the standard interval is added to the completion date of the last audit.

7 To specify control information for this element, click the **Control Info** tab. Specify this information:

Employee ID
Specify the ID of the employee responsible for controlling this worksheet.

Function ID
Specify the function of this employee.

Job ID
Specify the job of this employee.

Control Task
Specify the tasks to complete to properly control this worksheet's element.

Reason for Control
Specify the reason that this element must be controlled.

8 Click the **Critical Procedure** tab. Specify information about the control tasks that are critical to completing the element correctly.

9 Click the **Corrective Action** tab. Specify information about the actions to take when this element is not completed correctly.

10 If this element is not completed correctly, you can propose a solution. These solutions are referred to as dispositions. To specify a solution, click the **Disposition** tab. Specify a description of the solution to the issues.

11 To specify an additional information about this element or worksheet, click the **Comments** tab.

12 Click the **Save** button.

13 If you updated the information in the Revision field or Issue Date field, you are prompted to add a description of the change. Click Yes to add a description. Specify the text on the Change History tab. You can review the change history text in the Change History dialog. You can view a history of revisions made to this worksheet and the process in Process Revision Maintenance.

Adding worksheet teams

Use the Worksheet Teams function to build lists of individuals responsible for developing and approving the worksheet. You can also build a list of individuals who are notified when a worksheet changes. You can add employees, customers, and suppliers to worksheet teams

1 Select **Documentation > Process > Process Maintenance**.

2 Select the process.

3 Right-click and select **Model**.

4 Select the element that uses the worksheet to which you are adding teams.

5 Click **Worksheet**.

6 Right-click and select **Worksheet Team**.

7 In the Worksheet Team field, select one of these options:

Option	Description
Developed By	Select this option to add members to the worksheet's development team.
Approved By	Select this option to add members to the team responsible for approving the worksheet. When change requests are created for the process, these team members are added to the process change request record.
Distributed To	Select this option to specify individuals who are notified when a worksheet changes.

8 Perform one of these tasks:

- To add an employee to the worksheet team, select the **Employee** option. Specify the employee's ID in the Employee ID field. Then, specify the employee's function and job codes.
- To add a customer to the worksheet team, select the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To add a supplier to the worksheet team, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

9 Click the **Save** button.

Specifying measurement standards

If the worksheet element is measurable, specify the measurement standards and how to measure the element.

1 Select **Documentation > Process > Process Maintenance**.
2 Select the process.
3 Right-click and select **Model**.
4 Select the element that uses the worksheet to which you are adding measurement standards.
5 Click **Worksheet**.
6 Right-click and select **Standard Info**.
7 Specify the standard type. Select one of these standards:

Option	Description
Attribute	Select this option if the standard is an absolute standard. If you select this option, the element is evaluated on a yes or no basis. An element is either present or not present.
Variable	Select this option if the standard can be met if the element measurement falls within a specified range. The variable standard has an upper, lower, and nominal specification and numeric results for data entry.
Text	Select this option if the element standard is not known until inspection is performed. A text standard is recorded during data collection.

8 If you selected the Variable standard type, specify this information:

Variable Standard
Specify the variable standard range for this element. The variable standard can be a range, a maximum value, or a minimum value. Specify the standard using one of these formats:

[Nominal]+-[#]
Specify the nominal value, then specify +-, then a number or percentage value that represents both the upper and lower specifications. For example, if you specified 100+-5, then the nominal specification is 100. The lower specification is 95. The upper specification is 105. If you specified 100+-10%, then the nominal specification is 100. The lower specification is 90. The upper specification is 100.

This format is the recommended format. It is used in SPC charting, which requires a nominal, upper, and lower value.

[Lower]/[Upper]
Specify the lower and upper limits. For example, if you specified 95/105, the lower specification is 95 and the upper specification is 105. The nominal specification is calculated as the mid-point between the upper and lower specifications. In this example, the nominal specification is 100.

[Nominal]+[Upper]/-[Lower]
Specify the nominal value. Enter +, then specify the upper limit by entering an amount or percentage above the nominal specification. Enter /-, then specify the lower limit by entering an amount or percentage below the nominal specification. For example, if you specified 100 +5/-5, then the nominal specification is 100. The lower specification is 95. The upper specification is 105.

If you specified 100+10%/-10%, then the nominal specification is 100. The lower specification is 90. The upper specification is 100.

[#]MAX
If any value up to a certain specification is acceptable, specify the upper specification and then enter MAX. For example, 12MAX indicates that any value up to 12 is acceptable. Any value above 12 is not acceptable.

[#]MIN
If any value including or above a certain specification is acceptable, specify the lower specification and then enter MIN. For example, 14MIN indicates that 14 and any value above 14 is acceptable. Any value below 14 is unacceptable.
To view the variable standard you specify expressed in all formats, specify the standard and then click **Limits**. If possible, your variable is expressed in the other formats. If you have entered your standard using an incorrect format, a form is displayed listing the acceptable formats.

Units
Specify the unit or measurement used for this element.

9 In the Inspection Plan section, specify the tools to use to measure this element. Specify this information:

Equipment ID and Equipment Type
Specify the piece of equipment used to inspect this element in the Equipment ID field. When you select an equipment ID, the equipment's type is inserted in the Equipment Type field.

Device ID and Device Type
Specify the device used to measure this element. When you select a device ID, the device's type is inserted in the Device Type field.

Measure By
Specify the job code of the individuals responsible for measuring this element.

Form/Form No
Specify the name or number of the hard copy form you use to collect information about this element.

Report By
Specify the job code of the individuals responsible for reporting the measurement results for this element.

Chart Type
Specify the chart type to use to analyze the measurement of this element.

Chart By
Specify the job code of the individuals responsible for creating the chart for this element.

Sample Size
Specify the number of samples to be taken for data collection for this element.

Frequency
Specify the frequency code for this element. The frequency code indicates how often this element should be analyzed.

10 In the Process Standard section, specify the exact requirement to meet during data collection. Process standard should be clear, brief, and measurable.

11 Click the **Save** button.

Adding worksheet audit information

Specify who is responsible for auditing the worksheet and the instructions for completing the audit.

1 Select **Documentation > Process > Process Maintenance**.

2 Select the process.

3 Right-click and select **Model**.

4 Select the element that uses the worksheet to which you are adding teams.

5 Click **Worksheet**.

6 Right-click and select **Audit Info**.

7 In the Responsibility section, specify the individual who is responsible for auditing this worksheet.

- To specify an employee, click **Internal**. In the **Employee ID** field, specify the employee's ID. Then, specify the employee's function and job codes.
- To specify a customer, click **Customer**. In the **Customer ID** field, specify the customer's ID. In the **Contact No** field, select the contact responsible for the audit.
- To specify a vendor, click **Vendor**. In the **Vendor ID** field, specify the vendor's ID. In the **Contact No** field, specify the contact responsible for the audit.

8 In the Info section, describe the audit procedure. Specify this information:

Standard Interval (Days)
Specify the standard amount of time that passes between audits.

Last Date
The date that the last audit was performed is displayed.

Next Date
The date that the next audit for this worksheet is due is displayed. The date is calculated by adding the standard audit interval to the date of the last audit. When a task for the audit is added to the employee's My To Do List, the date in this field is used as the due date for the task.

Time Estimate (Hours)
Specify the amount of time that is required to complete the audit.

Audit Adv Notice
Specify the number of days in advance that a task is displayed in My To Do List for audits.

Audit Procedure
Select the document that contains detailed audit instructions for this worksheet. You can select any document that is attached to the worksheet.

9 In the Instructions section, specify information about how to conduct the audit.

10 Click **Save**.

Adding input items to worksheets

Use the Input form to specify products that you need to complete the worksheet.

1. Select **Documentation > Process > Process Maintenance**.
2. Select the process.
3. Right-click and select **Model**.
4. Select the process element.
5. Click the **Worksheet** button.
6. Right-click and select **Input**.
7. Specify this information:

   Product
   Specify the code for the input item. The product codes you use in this field are different from the product IDs you define in Product Maintenance. Define these product codes in Product Code Maintenance. After you select a product code, the description of the code is inserted in the Description field.

   Attribute
   If this input item relates to a particular attribute of the product code, specify the attribute code. Define attribute codes in Attribute Code Maintenance. After you select an attribute code, the description of the code is inserted in the Description field.

8. Click **Save**.

Adding output items to worksheets

Use the Output form to specify the products that are produced when the worksheet is completed.

1. Select **Documentation > Process > Process Maintenance**.
2. Select the process.
3. Right-click and select **Model**.
4. Select the process element.
5. Click the **Worksheet** button.
6. Right-click and select **Output**.
7. Specify this information:

   Product
   Specify the code for the output item. The product codes you use in this field are different from the product IDs you define in Product Maintenance. Define these product codes in Product Code Maintenance. After you select a product code, the description of the code is inserted in the Description field.

   Attribute
   If this output item relates to a particular attribute of the product code, specify the attribute code. Define attribute codes in Attribute Code Maintenance. After you select an attribute code, the description of the code is inserted in the Description field.

8 Click **Save**.

Viewing and editing process worksheet change history

You can view and edit the history of changes made to a process worksheet.

1 Select **Documentation > Process > Process Maintenance**.
2 Select the process
3 Right-click and select **Model**.
4 Select the element that uses the worksheet whose history you want to review.
5 Click **Worksheet**.
6 In the Revision section, a list of the changes and the dates that they were issued is displayed. Select a row to view the change history text.
7 Optionally, edit the change history.
8 If you edited the change history, click **Save**. The ID of the currently signed in user, the current date, and the current time are inserted.

Adding customers to a process

Use this form to specify the customers that require you to use a process. These customers can be internal or external. An internal customer is a particular function within your company.

1 Select **Documentation > Process > Process Maintenance**.
2 Select the process.
3 Right-click and select **Customers**.
4 Specify this information:

Origin Type
If this customer is an external customer, select External. If this customer is an internal customer, select Internal.

Function
If you selected Internal in the Origin Type column, specify the function within your company that requires you to use this process. If you selected External in the Origin Type column, this column is unavailable.

Customer ID
If you selected External in the Origin Type column, specify the customer that requires you to use this process. If you selected Internal in the Origin Type column, this column is unavailable.

5 Click the **Save** button.

Adding suppliers to a process

Use this form to specify which suppliers require you to use a process. These suppliers can be internal or external. An internal supplier is a particular function within your company.

1 Select **Documentation > Process > Process Maintenance**.
2 Select the process.
3 Right-click and select **Suppliers**.
4 Specify this information:

Origin Type
If this supplier is an external supplier, select External. If this supplier is an internal supplier, select Internal.

Function
If you selected Internal in the Origin Type column, specify the function within your company that requires you to use this process. If you selected External in the Origin Type column, this column is unavailable.

Supplier ID
If you selected External in the Origin Type column, specify the supplier that requires you to use this process. If you selected Internal in the Origin Type column, this column is unavailable.

5 Click the **Save** button.

Adding input items to a process

Use the Input form to specify product codes required to complete a process.

1 Select **Documentation > Process > Process Maintenance**.
2 Select the process.
3 Right-click and select **Input**.
4 Specify this information:

Product
Specify the code for the input item. The product codes you use here are different from the product IDs you define in Product Maintenance. Define these product codes in Product Code Maintenance. After you select a product code, the description of the code is inserted in the Description field.

Attribute
If this input item relates to a particular attribute of the product code, specify the attribute code. Define attribute codes in Attribute Code Maintenance. After you select an attribute code, the description of the code is inserted in the Description field.

5 Click the **Save** button.

Adding output items to a process

Use the Output form to specify the items that are produced when the process is complete.

1. Select **Documentation > Process > Process Maintenance**.
2. Select the process.
3. Right-click and select **Output**.
4. Specify this information:

   Product
   Specify the code for the output item. The product codes you use in this field are different from the product IDs you define in Product Maintenance. Define these product codes in Product Code Maintenance. After you select a product code, the description of the code is inserted in the Description field.

   Attribute
   If this output item relates to a particular attribute of the product code, specify the attribute code. Define attribute codes in Attribute Code Maintenance. After you select an attribute code, the description of the code is inserted in the Description field.

5. Click the **Save** button.

Copying a process

You can copy an existing process to create a new process.

1. Select **Documentation > Process > Process Maintenance**.
2. Select the process.
3. Right-click and select **Copy Process**.
4. In the Copy To Process ID field, specify the ID for the new process.
5. Select the information to copy:

   Suppliers
   Select this option to copy the suppliers attached to the process record.

   Customers
   Select this option to copy the customers attached to the process record.

   Input
   Select this option to copy the input product codes attached to the process record.

   Output
   Select this option to copy the output product codes attached to the process record.

   Model
   Select this option to copy the process model. If you select this option, the process outline is copied only. Process worksheets are not copied.

6 Click **Ok**. In addition to the information you selected, all of the information in the main form is copied.

Attaching documents to processes

You can attach documents to process master records and to individual process element worksheets.

To attach a document to a process master record, place your cursor anywhere in the main Process Maintenance form. Then, click the **Documents** button.

To attach a document to a worksheet, place your cursor anywhere in the worksheet sub-form. Then, click the **Documents** button.

Viewing process revision history

Use this form to review a history of the revisions made to your processes. An entry is created in Process Revision History each time that a process worksheet is saved with a new revision level or a new issue date.

1 Select **Documentation > Process > Process Revision History**.

2 Select the revision to view. This information is displayed:

Process ID
The ID for this process is displayed.

Process Name
The name of this process is displayed.

Location
The location where this process is performed is displayed.

Business Unit
If this process relates to a particular business unit, the business unit is displayed.

Responsible for Control
The individual who is responsible for the process is displayed. This employee does not necessarily carry out the entire process. This individual manages the process. This information is displayed:

Employee ID
The ID of the employee is displayed.

Function
The function code for this employee is displayed.

Job
The job code for this employee is displayed.

Mission
The mission statement or goal for this process is displayed.

3 To review the process worksheets associated with this revision, right-click and select **Process Model**. This information is displayed:

Model ID
The element number is displayed.

Element Name
The name of the element is displayed.

Revision Level
The revision level of the element worksheet is displayed.

Issue Date
The date the revision was issued is displayed.

Original Issue Date
The date the worksheet was first issued is displayed.

Employee ID
The ID of the employee responsible for this element is displayed.

Function
The function code of the employee is displayed.

4 To review the worksheet for an element, select the element and click **Worksheet**. This information is displayed:

Orig Issue Date
The date the worksheet was first issued is displayed.

Revision Level
The revision level of the element worksheet is displayed.

Issue Date
The date the revision was issued is displayed.

Status
The status of this worksheet revision. These statuses are used:

Current
This option is used if the worksheet is available for use.

Revision
This option is used if this worksheet is being revised.

Obsolete
This option is used if the worksheet is no longer in use.

Last
The date that this worksheet was last audited is displayed.

Next
The date of the next audit for this worksheet is displayed. This is calculated based on the standard audit interval information provided in the Audit Info dialog. The standard interval is added to the last audit date to determine the next audit date.

5 Click the **Control Info** tab to review this information:

Employee ID
The ID of the employee responsible for controlling this worksheet is displayed

Function ID
The employee's function is displayed.

Job ID
The employee's job is displayed.

Control Task
The tasks required to properly control this worksheet's element are displayed.

Reason for Control
The reason that this element must be controlled is displayed.

6 Click the **Critical Procedure** tab to review information about the control tasks that are critical to completing the element correctly.
7 Click the **Corrective Action** tab to review the actions to take to correct issues with this element.
8 Click the **Disposition** tab to review suggested solutions to issues or problems with this element.
9 Click the **Comments** tab to view additional information specified on the record.

Process change requests

Use Process Change Requests to formally record requests to change elements of your process models. Employees, customers, and suppliers can originate requests.

After you approve and close a process change request, you can update the revision levels of the process element worksheet and any inspection plans associated with the process.

The change you specify in the Process Change Request form is not automatically made. You must manually change the process record to implement a change request.

Adding process change requests

1 Select **Documentation > Process > Process Change Request Maintenance**.
2 Specify this information:

Site ID
Select the site where this change request was made. When you select a site, the site's parent entity ID is inserted in the Entity ID field.

Date
Specify the date this change request was made.

Due Date
Specify the date that action taken based on this request should be completed.

Process ID
Specify the process that is the subject of this change request.

Area Number
Specify the process model area that this change request affects.

Activity No
Specify the process model activity that this change request affects. You can select any activity within the area you specified in the Area Number field.

Element No
Specify the process element that this change request affects. You can select any element within the activity number you specified, provided that the element has a worksheet.

Assigned To
Specify the employee responsible for managing this change request. A task for the change request is added to the employee's My To Do list. The due date of the task is the same as the due date of the change request.

Change Type
Specify the type of change requested.

Change Reason
Specify the reason for this change.

Priority
Specify the priority level for this change request.

Decision
Specify the decision made for this change request. Select one of these options:

Pending
Select this option if the change request is under review and no final decision has been made.

Approved
Select this option if the change request is approved. After approval, the process can be updated based on the requirements in the change request.

Not Approved
Select this option if the change request is not approved and will not be implemented.

Decision Date
Specify the date the decision was made. The current date is inserted by default.

Business Unit
If this change request is related to a business unit, specify the business unit ID.

3 Use the Origin tab to specify who made the change request. Click the **Origin** tab and specify this information:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID field. Then, specify the employee's function and job codes.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
   - To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.
4 Click the **Change Request** tab and specify a description of the requested change.
5 Click the **Response** tab and specify a response to a change request. For example, you can provide specific instructions of the actions to take if the request is approved, or provide an explanation of why a request was not approved.
6 Click the **Save** button.

Adding an approval team for a process change request

After you add a change request, specify the individuals who are responsible for approving the request.

1 Select **Documentation > Process > Process Change Request Maintenance**.
2 Select the change request.
3 Right-click and select **Approved By**.
4 Add the members of the approval team:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact responsible for the audit in the Contact No column.
   - To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact responsible for the audit in the Contact No column.
5 In the Decision column, specify the decision made for this change request. When you select a decision, the current date and the ID of the currently signed-in user are inserted in the Decision Date field. Select one of these options:

Option	Description
Pending	Select this option if the change request is under review and no final decision has been made.

Option	Description
Approved	Select this option if the change request is approved. An approved request is ready to be implemented. Select this status when all individuals on the Approval team have approved the request.
Not Approved	Select this option if the change request is not approved and will not be implemented.

6 Click the **Save** button.

Adding a distribution team for a process change request

After you add a change request, specify the individuals who should be notified of the change.

1 Select **Documentation > Process > Process Change Request Maintenance**.
2 Select the change request.
3 Right-click and select **Distributed To**.
4 Add members to the distribution team:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact responsible for the audit in the Contact No column.
   - To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact responsible for the audit in the Contact No column.
5 In the Decision column, specify the decision made for this change request. When you select a decision, the current date and the ID of the user is inserted in the Decision Date field. Select one of these options:

Option	Description
Pending	Select this option if the change request is under review and no final decision has been made.
Approved	Select this option if the change request is approved. An approved request is ready to be implemented. Select this status when all individuals on the Approval team have approved the request.
Not Approved	Select this option if the change request is not approved and will not be implemented.

6 Click the **Save** button.

Copying a process change request

You can copy an existing change request to create a new change request.

1 Select **Documentation > Process > Process Change Request**.
2 Select the change request.
3 Right-click and select **Copy Process Change Request**
4 Select the information to copy:

Approved By
Select this check box to copy the approval team.

Distributed To
Select this check box to copy the distribution team.

Quality Costs
Select this check box to copy the quality cost information.

5 Click **Ok**. All of the information on the main form is copied to create the new request, except for the Change Request ID. The additional information you selected is also copied. The new request has a status of Open.

Closing a process change request

After you complete work on a change request, close the request. You can close a change request if it has a decision status of Approved or Not Approved. You cannot close a change request with a decision status of pending.

1 Select **Documentation > Process > Process Change Request Maintenance**.
2 Select the change request.
3 In the **Status** field, select **Closed**.
4 Click the **Save** button. If you are closing an approved change request, you can update the revision level of the element worksheet and the revision level of any attached inspection plans. To update revision levels.
5 After you click **Save**, specify the new revision information for the process worksheet. The existing revision level is displayed. Specify this information:

New Revision Level
Specify the new revision level.

New Revision Date
Specify the date you are issuing this new revision.

6 Click **Ok**.
7 If the process has process inspection plans, you are prompted to update the process inspection plan revision level. To update the revision, click Yes. The Inspection Plan tab is made available. Specify this information:

New Revision Level
Specify the new revision level for the inspection plan.

New Rev Date
Specify the date that you are issuing this new revision.

8 Click the **Save** button.

Process audits

Use process audits to assess the performance of your process worksheets. If a process worksheet fails an audit, you can link the audit record to a nonconformance record.

Adding process audits

To add a process audit:

1 Select **Documentation > Process > Process Audits Maintenance**.
2 Specify this information:

Site ID
Specify the site conducting this audit. When you select a site ID, the site's parent entity is inserted in the Entity field.

Audit ID
Specify an audit ID, or leave this field blank to create an ID based on your auto-numbering scheme.

Process ID
Specify the process ID that is the subject of this audit.

Element ID
Specify the process element that is the subject of this audit. You can select an element only if it has a worksheet. When you select an element ID, the audit information specified on the worksheet is inserted in the Current Process Worksheet Master Record section.

Due Date
Specify the date that this audit is due to be complete. By default, the date in the Next Audit field is inserted.

Business Unit
If this audit is performed by a particular business unit, specify the business unit ID.

3 In the Audited By section, specify who performed the audit.
- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.

- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact responsible for the audit in the **Contact No** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the audit in the **Contact No** field.

4 In the Result section, specify the outcome of this audit. Specify this information:

Result
Specify the result of this audit. Select one of these options:

Passed
If the process worksheet passed the audit, select this option.

Status
If the process worksheet audit is complete, but the results are not available, select this option.

Pending
If the process worksheet audit has not yet started, specify this option.

Failed
If the process worksheet failed the audit, select this option. After you save the record, you have the option of linking this failed audit to a Nonconformance record.

Completion Date
If you selected Passed or Failed in the Result field, specify the date the audit was completed. If you specified Pending in the Result field, the Completion Date field is unavailable. A pending audit is not complete.

5 In the Current Process Worksheet Master Record section, review audit information for this process. You cannot edit this information. This information is displayed:

Original Issue Date
The date this process worksheet was first issued is displayed.

Last Date
The date that the last audit was performed on this process worksheet is displayed.

Standard Interval (Days)
The standard amount of time that elapses between audits is displayed.

Audit Procedure/Process Worksheet Documents
Use this field to view documents attached to the process worksheet. To view the document specified as the audit procedure for the process worksheet, select Audit Procedure and then click View. To view all other documents attached to the process worksheet, select Process Worksheet Documents and then click View.
You cannot add audit procedure or worksheet documents in Process Audit Maintenance. To add these documents, use Process Maintenance.

Revision Level
The current revision level of the process worksheet is displayed.

Status
The worksheet's current status is displayed. These statuses are used:

Current
This worksheet is available for use.

Revision
This worksheet is currently being revised.

Obsolete
This worksheet is no longer used.

Next Date
The date that the next audit for this process is due is displayed. This information is calculated by adding the standard audit interval to the date of the last audit.

Issue Date
The date that the current revision of the worksheet was issued.

6 In the Comments section, specify general comments about the audit process or result.
7 Click the **Save** button.

Posting failed process audits to NCMs

When you save a failed audit, you can post the failure to a nonconformance record. To post a failed audit to an NCM:

1 Select **Documentation > Process > Process Audits Maintenance**.
2 Select the audit.
3 In the Result field, specify Failed.
4 Click the **Save** button.
5 You are prompted to post the failed audit to an NCM. Click **Yes** to post the audit.
6 Click the **Save** button. You must click the Save button to generate the NCM.
7 To view the NCM, right-click the NCM ID in the grid and select **Details**.

Attaching a nonconformance record to a failed process audit

If a process fails an audit, you can attach an existing nonconformance records to the audit.

1 Select **Documentation > Process > Process Audits Maintenance**.
2 Select the audit ID.
3 Right-click and select **Nonconformance**.
4 Click **New**.
5 Click the **NCM ID** arrow and select the NCM. This information about the NCM is displayed:

Date
The date the NCM was created is displayed.

Time
The time the NCM was created is displayed.

Reported By
The source of the NCM is inserted. The source is either internal, a customer, or a supplier.

Reported By Name
For an internal source, the ID of the employee is displayed. For a customer, the customer ID is displayed. For a supplier, the supplier ID is displayed.

Contact Name
For a customer or supplier source, the name of the contact is displayed.

Assigned To
The employee assigned to address the NCM record is displayed.

Due Date
The date that the NCM is due is displayed.

Status
The status of the NCM date is displayed.

Closed Date
If the NCM is closed, the date the record was closed is displayed.

Copying process audits

You can create a new process audit by copying an existing process audit.

1. Select **Documentation > Process > Process Audits Maintenance.**.
2. Select the audit.
3. Right-click and select **Copy Process Audit**.
4. To copy the quality cost information, select the **Quality Costs** check box.
5. Click **Ok**. The new process audit is created. All of the information on the main form is copied.

Process reports

Use process reports to analyze information about your processes.

Process audits analysis report

Use this report to analyze the frequency of certain criteria in your process audits records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of process audit records that have each criterion ID. For example, if you select Process ID in the Analysis Field field, the report displays the number or percentage of process audit records created for each process ID. You can see which processes have been audited most frequently.

To be included on the report, a criterion ID must be specified on at least one project record. For example, if the process ID SANDING is not specified in the Leader field on any process audit record, then SANDING is not displayed in the report.

You can analyze process audit records based on these criteria:

- Audited By
- Audited By ID
- Process ID
- Result

Generating the process audits analysis report

1. Select **Documentation > Process > My Reports**.
2. Click Process Audits Analysis.
3. Click the sites to use for the report.
4. In the **Analysis Field** field, specify the criterion to use for the analysis.
5. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
6. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
7. Click the **Print Report** button.

Process change request analysis report

Use this report to analyze the frequency of certain criteria in your process change request records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of process change request records that have each criterion ID. For example, if you select Process ID in the Analysis Field field, the report displays the number or percentage of process change requests created for each process ID. You can see which processes have received the most requests for change.

To be included on the report, a criterion ID must be specified on at least one project record. For example, if the process ID SANDING is not specified in the Leader field on any process change request record, then SANDING is not displayed in the report.

You can analyze process change request records based on these criteria:

- Assigned To
- Change Reason
- Change Type
- Status
- Decision
- Priority
- Process ID
- Request Origin

You can apply Assigned To and Status filters to the report. When you apply a filter to the report, only process change request records that match the filter are considered for the report. For example, if you specify BSMITH in the Assigned To field and select Process ID in the Analysis Field field, then the report would show the percentage or number of process IDs on change requests assigned to BSMITH.

Generating the process change requests analysis report

1. Select **Documentation > Process > My Reports**.
2. Click Process Change Requests Analysis
3. Click the sites to use for the report. To select all available sites, click Select All.
4. Specify the filters for the report:
   - To view only process change requests assigned to a particular individual, specify the ID of the individual in the **Assigned To** field.
   - To view only process change requests with a particular status, specify the ID of the status in the **Status** field.
   - To view process change requests due during a particular time period, specify the start date of the period in the **Due Date From** field and the end date in the **Due Date To** field.
5. In the **Analysis Field** field, specify the criterion to use for the analysis.
6. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8. Click the **Print Report** button.

Process change request detail report

Use this report to view information about requested changes to your processes. This report displays the entity and site where the change request was made, the change request ID, the date the change was requested, the ID of the party who is assigned to the request, the due date, the process that is the subject of the request, the portion of the process model that is the subject of the request, the change type, the change reason, the decision made about the request, the date of the decision, the status of

the change request, the date the change request was closed, the party who requested the change, the change requested, the ID of the party who responded to the request, the content of the response, and a list of the individuals who approved the request.

Generating the process change request detail report

1 Select **Documentation > Process > My Reports**.
2 Click Process Change Request Detail.
3 Click the sites to use for the report.
4 Specify the information to include in the report:
   - To view information for a particular change request, specify the ID of the request in the **Request ID** field.
   - To view change requests made for a particular process, specify the ID of the process in the **Process ID** field.
   - To view change requests approved by a particular employee, specify the ID of the employee in the **Approved By (Employee ID)** field.
   - To view change requests assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID**) field.
   - To view change requests made during a particular time period, specify the starting and ending dates in the **Request Date From** and **Request Date To** fields.
   - To view change requests due to be complete during a particular time period, specify the starting and ending dates in the **Due Date From** and **Due Date To** fields.
   - To view change requests for processes that occur at a particular location, specify the location in the **Location ID** field.
   - To view change requests with a particular priority, specify the priority code in the **Priority** field.
   - To view change requests with a particular status, select the appropriate check boxes. You can select more than one check box.
   - To view change requests with a particular decision status, select the appropriate check boxes. You can select more than one check box.
5 Click the **Print Report** button.

Process model detail report

Use this report to view process models. This report displays the entity associated with the model, the process ID, the process name, the location where the process takes place, the ID of the employee responsible for controlling the process, the employee's function, and the employee's job. The Detail table shows the elements of the process.

Generating the process model detail report

1 Select **Documentation > Process > My Reports**.

2 Click Process Model Detail.
3 Click the entities to use for the report.
4 Specify the information to include in the report:
   - To view the model for a particular process, specify the ID of the process in the **Process ID** field or the name of the process in the **Process Name** field.
   - To view models for processes that occur at a particular location, specify the location in the **Location** field.
5 Click the **Print Report** button.

Processes detail report

Use this report to view information about your processes. This report displays the entity associated with the process, the process ID, the process name, the location where the process takes place, the ID of the employee responsible for controlling the process, the employee's function, the employee's job, the process mission, the customers that require you to use the process, the suppliers that require you to use the process, the process inputs, and the process outputs. .

Generating the processes detail report

1 Select **Documentation > Process > My Reports**.
2 Click Processes Detail.
3 Click the entities to use for the report.
4 Specify the information to include in the report:
   - To view information for a particular process, specify the ID of the process in the **Process ID** field or the name of the process in the **Process Name** field.
   - To view information for processes that occur at a particular location, specify the location in the **Location** field.
5 Click the **Print Report** button.

Process worksheet detail report

Use this report to view the worksheets models. This report shows the entity associated with the model, the process ID, the process name, the location where the process takes place, the element ID, the date the worksheet for the element was originally issued, the status of the worksheet, the current revision level, and the revision issue date. The report shows detailed worksheet information, including the control task, the reason for the control, the employee assigned to the control task, the function of the employee, the job of the employee, the measurement standard for the element, the critical procedure, the corrective action, the disposition, the worksheet audit information, the worksheet inputs, the worksheet outputs, and the list of parties who approved the worksheet.

Generating process worksheet detail reports

Use this report to view the worksheets models. This report shows the entity associated with the model, the process ID, the process name, the location where the process takes place, the element ID, the date the worksheet for the element was originally issued, the status of the worksheet, the current revision level, and the revision issue date. The report shows detailed worksheet information, including the control task, the reason for the control, the employee assigned to the control task, the function of the employee, the job of the employee, the measurement standard for the element, the critical procedure, the corrective action, the disposition, the worksheet audit information, the worksheet inputs, the worksheet outputs, and the list of parties who approved the worksheet.

1. Select **Documentation > Process > My Reports**.
2. Click the **Process Worksheet Detail** link.
3. Click the entities to include in the report.
4. Specify the information to include in the report:
   - To view worksheet information for a particular process, specify the ID of the process in the **Process ID** field or the name of the process in the **Process Name** field.
   - To view worksheet information for processes that occur at a particular location, specify the location in the **Location** field.
5. Click the **Print Report** button.

Chapter 8: System documentation

Use the System Documentation modules to maintain the terms and documents your organization uses. You can define dictionary terms and retain a history of changes made to the terms. Use the documents features to create records of the documents you use, audit them periodically to ensure that they meet your needs, and retain a history of changes made to your documents.

You can use the Jump feature to navigate between related forms.

See Jump feature on page 34.

Tasks are added to employee To Do lists after you create records in these forms:

- Terms Change Requests
- Document Check In/Out Maintenance
- Document Change Requests

See My To Do list on page 34.

Dictionary

Use Dictionary Maintenance to add definitions for terms that you commonly use. Defining terms helps to improve communication by ensuring that everyone involved in your enterprise understands the terms you use.

Adding dictionary terms

1 Select **Documentation > Sysdoc > Dictionary Maintenance**.

2 Specify this information:

Entity ID
Specify the ID of the entity where you use this term.

Business Unit
Specify the business unit where this term is primarily used.

Term ID
Specify the ID of this term.

Name
Specify the full name of this term.

Revision Level
Specify a revision level for this term. When you specify a revision level, you are prompted to enter information about the changes you made to the term when you save the record.

Issue Date
Specify the date you issued this term for use. When you specify an issue date, you are prompted to enter information about the changes you made to the term when you save the record.

Function
Specify the function within your company that primarily uses this term.

Approved By
Specify the ID of the employee who approved the use of this term.

Status
Specify the current status of the term. Specify Current if the term is ready for use. Specify Revision if the term is undergoing changes and is not in current use. Select Obsolete if you no longer use the term.

Change Req Adv Notice (Days)
Specify the number of days in advance that change request tasks for this term are displayed in My To Do list.

Definition
Specify the full definition of the term.

3 Click the **Save** button.

If you changed the information in the Revision Level or Issue Date fields, you are prompted to add a description of the changes that you made.

See Revising Dictionary Terms on page 239.

Revising dictionary terms

When you revise a dictionary term, you are prompted to specify information about the changes that you make. You can review these changes in Change History.

1 Select **Documentation > Sysdoc > Dictionary Maintenance**.
2 Select the term.
3 Make the changes to the term.
4 In the **Revision Level** field, specify a new revision level.
5 In the **Issue Date** field, specify a new issue date.
6 Click the **Save** button.
7 In the Definition History form, specify a description of your changes.

8 Click the **Save** button.

Viewing and editing change history for dictionary terms

When you specify text after you save a new term revision, the text is stored in the Dictionary Term Change History form. Use this form to review and edit the change history text.

1 Select **Documentation > Sysdoc > Dictionary Maintenance**.
2 Select the term
3 Right-click and select **Change History**. The list of revisions is inserted in the table. To view the text associated with a revision, select the revision in the table.
4 To edit the change history text, click the **Edit** button. Edit the existing text or add new text, and then click **Ok**. Your changes are made to the text. A date-time stamp that lists the ID of the user who made the change and the date and time the change was made is inserted.

Deleting dictionary terms

Consider changing the status of term to obsolete instead of deleting a term. An obsolete term is not approved for use, but a record of the term is still retained in the database. If you delete a term, the term is permanently removed from your database.

1 Select **Documentation > Sysdoc > Dictionary Maintenance**.
2 Select the term.
3 Click **Delete** button.
4 Click the **Save** button.

Terms change request

Use Terms Change Requests to formally record requests to change dictionary terms. Employees, customers, and suppliers can originate requests.

After you approve and close a terms change request, you can update the term's revision level.

The change you specify in the Term Change Request form is not automatically made. You must manually change the term record to implement a change request.

Adding a change request for a term

1 Select **Documentation > Sysdoc > Term Change Request Maintenance**.

2 Specify this information:

Site ID
Specify the ID of the site requesting the change. Terms are defined at the entity level. Any site that belongs to the entity specified on the term record can request a change to the term. After you specify a Site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Term ID
Specify the ID of the term to change.

Request Date
Specify the date that the request was made.

Due Date
Specify the date by which a decision must be made for this change request.

Assigned To
Specify the employee responsible for managing this change request. A task for the change request is added to the employee's My To Do list. The due date of the task is the same as the due date of the change request.

Change Type
Specify the type of change requested.

Change Reason
Specify the reason for this change.

Priority
Specify the priority level for this change request.

Decision
Specify the decision made for this change request. For a new change request, specify Pending.

The other status are Approved and Not Approved.

See Approving change requests on page 243.

See Rejecting change requests on page 243.

Decision Date
Specify the date the decision was made. The current date is inserted by default.

Status
For a new change request, specify Open. When you complete a change request, change the status to Closed. You cannot select the Deleted status. The Deleted status is selected by the system if it receives a BOD changing the status to Deleted.

See Approving change requests on page 243.

See Rejecting change requests on page 243.

Business Unit
If this change request is related to a business unit, specify the business unit ID.

3 To specify who requested the change to the term, click the **Origin** tab. Specify this information:

- To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID field. Then, specify the employee's function and job codes.
- To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

4 To specify a description of the request, click the **Change Request** tab.

5 Right-click and select **Change Request Notes**.

6 Specify a description of the requested change, and then click **Ok**. The text you specified is inserted in the Change Request tab. The ID of the currently signed in user, the date, and the time are also inserted.

7 To specify the response to the request, click the **Response** tab.

8 Right-click and select **Change Request Response Notes**.

9 Specify the response to the change request, and then click **Ok**. The text you specified is inserted in the Response tab. The ID of the currently signed in user, the date, and time are also inserted.

10 Click the **Save** button.

Adding approval teams for change requests to terms

After you add a change request, specify the individuals who are responsible for approving the request.

1 Select **Documentation > Sysdoc > Term Change Request Maintenance**.

2 Select the change request.

3 Right-click and select **Approved By**.

4 Specify this information:

- To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
- To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact responsible for the audit in the Contact No column.
- To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact responsible for the audit in the Contact No column.

5 Click the **Save** button.

Approving change requests

After the individuals on the approval team approve a change request, approve and close the change request record. After you close the approved change request, you can update the revision level of the term.

1. Select **Documentation > Sysdoc > Term Change Request Maintenance**.
2. Select the change request.
3. In the **Decision** field, select **Approved**.
4. In the **Decision Date** field, the current date is inserted. Edit this date if necessary.
5. Select **Documentation > Sysdoc > Dictionary Maintenance**.
6. Edit the term as described in the change request.

   See Adding Dictionary Terms on page 238.
7. Select **Documentation > Sysdoc > Term Change Request**.
8. Select the change request.
9. In the **Status** field, select **Closed**.
10. In the **Closed Date** field, the current date is inserted. Optionally, change the date.
11. Click the **Save** button.
12. In the Revision Change form, the current revision level and issue date of the term is displayed. Specify this information:

    New Revision Level
    Specify the new revision level for the term.

    New Issue Date
    Specify the new issue date for the term.
13. Click **Ok**.
14. In the Term Change Request form, click **Save**. The term record is updated with the new revision level and issue date you specified.

Rejecting change requests

To reject a change request:

1. Select **Documentation > Sysdoc > Term Change Request Maintenance**.
2. Select the change request.
3. In the **Decision** field, select Not Approved.
4. In the **Decision Date** field, the current date is inserted. Edit this date if necessary.
5. In the **Status** field, select Closed.
6. In the **Closed Date** field, the current date is inserted. Edit this date if necessary.
7. Click the **Save** button.

8 In the Revision Change form, the current revision level and issue date of the term is displayed. Click the X to close the form without updating revision information.

Copying change requests

Use this feature to create a new change request from an existing change request.

1 Select **Documentation > Sysdoc > Term Change Request Maintenance**.
2 Select the change request to copy.
3 Right-click and select **Copy Request**.
4 Specify the information to copy:

Approved By
Select this check box to copy the list of approval team members.

Quality Cost
Select this check box to copy quality cost information.

5 Click **Ok**. In addition to the information you selected, the information in the header, Origin tab, Change Request tab, and Response tab is also copied. The decision status of the new request is set to Pending. The status of the change request is set to Open.

Document types

Use Document Types Maintenance to set up categories of documents. Documents with a particular document type share audit procedures and retention time periods.

Defining document types

1 Select **Documentation > Sysdoc > Document Types**.
2 In the header, specify this information:

Entity ID
Specify the ID of the entity that uses this document type.

Document Type
Specify the document type code. You cannot enter a new code in this window. You must add document type codes in Document Type Codes Maintenance. After you specify the document type code, the name of the document type is inserted in the Name field.
See Adding codes on page 45.

Retention
Specify the number of days that a document of this type should be retained in your files.

Change Req Adv Notice (days)
Specify the number of days in advance to display a task in My To Do List for change requests for documents of this type.

3 In the Responsible section, specify the individual who is typically responsible for auditing documents of this type. When you create a document using this document type, the contact information you specify here is inserted on the document record by default. You can override the contact information on individual documents. Specify this information:
   - To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field. Then, specify the employee's function and job codes.
   - To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact responsible for the audit in the **Contact No** field.
   - To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the audit in the **Contact No** field.

4 In the Audit Info section, specify how frequently documents of this type should be audited and how long the audit should take. Specify this information:

   Standard Interval (Days)
   Specify the number of days that normally pass between audits for documents of this type.

   Audit Adv Notice (Days)
   Specify the number of days in advance to display a task in My To Do List for audits for documents of this type.

   Time Estimate (Hours)
   Specify the number of hours it typically takes to audit documents of this type.

5 In the **Audit Procedure** field, select the document ID that contains the audit procedure. You can select any document attached to the document type record.
6 In the Audit Instructions section, specify how to conduct audits for documents of this type.
7 Click the **Save** button.

Revising document types

If you revise a document type, you have the option to update documents assigned to the type with retention information, audit information, audit instructions, and attached documents.

1 Select **Documentation > Sysdoc > Document Types**.
2 Edit a document type.
3 Click the **Save** button. This message is displayed: "A change has been made to this document type. Would you like to update documents assigned to this type?"
4 Click **Yes** to update the documents.
5 Specify the information to update.
6 Click **Ok**.

7 Click the **Save** button in Document Types Maintenance. All documents of the document type are updated.

Copying document types

Use this procedure to create a new document type record from an existing document type record.

1 Select **Documentation > Sysdoc > Document Types**.
2 In the **Document Type ID** field, specify the ID of the document type to copy.
3 Right-click and select **Copy**. The document type ID field is cleared. All other information in the window is copied.
4 In the **Document Type ID** field, specify the document type code you created for this new document type.
5 Edit the information in the Document Type Maintenance form as necessary.
6 Click the **Save** button.

Deleting document types

You can delete a document type only if it is not used on another record, such as a document record.

1 Select **Documentation > Sysdoc > Document Types**.
2 In the collection, select the document type to delete.
3 Click the **Delete** button.
4 Click the **Save** button.

Documents

Use Document Maintenance to maintain the documents you use in your enterprise. You can record the contents of the document, establish document teams responsible for the maintenance of the document, and record the audit procedures to use to evaluate the document.

Before you can create a document, you must create at least one document type. The document type controls the auditing information for the document.

Adding documents

1 Select **Documentation > Sysdoc > Document Maintenance**.
2 In the header, specify this information:

Entity ID
Specify the ID of the entity where this document is used.

Document ID
Specify an ID for this document.

Document Name
Specify the full name of the document.

Status
Specify the current status of the document. Specify one of these options:

Option	Description
Open	If this document is currently available for use, specify this option.
Hold	If this document is temporarily not available for use, specify this option.
Revision	If this document is currently being revised, specify this option.
Obsolete	If this document is no longer used, specify this option. Use the Obsolete option to retain a record of this document in the database.

3 Click the **General** tab. Use the general tab to specify entity-specific information about the document. Specify this information:

Document Type
Specify the document type for this document. The document type you specify here is for informational purposes only. When you specify a document type in this field, no audit information is added to the document record. Specify a document type at the site level to insert audit information into the document record.

Business Unit
Specify the business unit associated with this document.

Revision Level
Specify the current revision level of this document. If you enter a new revision level, you are prompted to enter change history details when you save the record.

Issue Date
Specify the issue date of the current revision. If you enter a new issue date, you are prompted to enter change history details when you save the record.

Reference
Specify any reference information related to this document.

4 Specify the content of the document. You can specify the content directly in the Document tab, attach a document, or do both.

- To specify the content directly in the Document tab, right-click and select **Document Entity**. Specify the content of the document, and then click **Ok**.
- To attach a document to the Document record, right-click and select **Documents for Current**. Attach the document as you would to any other record.

5 Click the **References** tab. Use the references tab to specify information related to this document record. Use this tab to specify how and where this document is used. Specify this information:

Function
Specify the job function of the individuals who use this document. Use the function code to identify the audience for this document.

Subject
Specify the subject code for this document. Use the subject code to identify the topic of the document.

Major Location
Specify the major location for this document. You can use the major location field to indicate where the document is stored or where the document is used.

Minor Location
Specify the minor location for this document. You can use the minor location field to indicate where the document is stored or where the document is used.

User Defined 1 through 3
Use the user defined fields to specify any information about the document that your company requires.
See Setting Up User Defined Labels.

6 Click the **Site** tab. Use the site tab to specify site-specific information about this document. You must specify at least one site. Specify this information:

Site ID
Specify the site where this document is used.

Document Type
Specify the document type that the site uses for this document. The document type determines the standard auditing procedure for this document.

7 After you specify a Site ID and a Document type, you are prompted to update the document record with information from the document type. If you had not yet selected a document type for this document in this site, it is recommended that you select all check boxes. Retention information and Standard Interval information can only be inserted based on the document type. Since you cannot manually enter this information in the document record, you must select the Audit Information and the Retention check boxes in the dialog box. Specify the information to insert in the document record:

Audit Information
Select this check box to insert the information from the document type record into the Responsibility and Info sections.

Audit Instructions
Select this check box to insert the information from the document type record into the Audit Instructions field.

Document Links
Select this check box to insert any documents attached to the document type.

Retention
Select this check box to insert the number of days documents of this type should be retained.

Change Request Advanced Notice
Select this check box to insert the number of days of advanced notice for change request tasks.

Audit Advanced Notice
Select this check box to insert the number of days of advanced notice for audit tasks.

8 Click the **Ok** button.

9 Click **Save**. The information you selected from the document type record is inserted into the document record.

10 Specify or review this information:

Business Unit
Specify the business unit associated with this document.

Reference
Specify any reference information specific to the selected site.

Retention
You cannot manually edit this field. This information is determined by the document type. When you specify the document type, you can elect to insert the retention information from the document type. If you did not elect to insert the retention information, you must reselect the document type ID. Change the document type to a different ID, and then change the document type ID back to the original ID.

Change Req Adv Notice (Days)
This field shows the number of days in advance that a task is displayed in My To Do List for change requests. The value specified for the document type is displayed. You can specify a different value.

11 Specify the site-specific content of the document. Right-click and select **Document Site**. Specify the content of the document, and then click **Ok**.

12 Click the **References** tab. Use the references tab to specify site-specific information related to this document record. Use this tab to specify how and where this document is used. Specify this information:

Function
Specify the job function of the individuals who use this document. Use the function code to identify the audience for this document.

Subject
Specify the subject code for this document. Use the subject code to identify the topic of the document.

Major Location
Specify the major location for this document. You can use the major location field to indicate where the document is stored or where the document is used.

Minor Location
Specify the minor location for this document. You can use the minor location field to indicate where the document is stored or where the document is used.

User Defined 1 through 3
Use the user defined fields to specify any information about the document that your company requires.
See Setting Up User Defined Labels.

13 Click the **Audit Info** tab. Use the Audit Info tab to specify how to conduct an audit of this document. The information on this tab is inserted based on the document's type. Review or specify this information:

Responsibility
Use the responsibility section to specify who is responsible for conducting the audit. If you selected the Audit Info check box when you specified the document type, the responsibility information from the document type is inserted. You can edit the information. Specify this information:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field. Then, specify the employee's function and job codes.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

Info
Use the Info section to specify how frequently to perform the audit and how long the audit typically takes. If you selected the Audit Info check box when you specified the document type, the audit information from the document type record is inserted. You can edit all of the information except for the Standard Interval. Specify or review this information:

Standard Interval (Days)
The number of days that typically pass between audits is inserted. This information is defined on the document type record associated with this document. You cannot directly edit this field.

Special Interval (Days)
If the document requires an audit before the standard interval elapses, specify the interval.

Audit Adv Notice (Days)
This field shows the number of days in advance that a task is displayed for audits in My To Do List. The value specified for the document type is displayed. You can specify a different value.

Time Estimate (Hours)
The amount of time it typically takes to conduct the audit is inserted. This information is defined on the document type record associated with this document, but you can specify a different value.

Audit Procedure
If you attached a document that contains the audit procedure, select the document ID in this field. You can select any document attached to the document site record. To view the document, click **View**.

Last Audit
The date of the last audit is inserted. You cannot edit this field. This field is updated when you complete an audit record for the document.

Next Audit
The date that the next audit for this document is due is inserted. This information is calculated by adding the standard audit interval to the date of the last audit.

Instructions
Use the Instructions field to record the process for conducting the audit. If you selected the Audit Instructions check box when you specified the document type, the instructions from the document type is inserted. To edit the information in this field, right-click and select Audit Instructions.

14 Click the **Save** button.

Assembling documentation teams

A document team is a group of people who are in charge of the development, approval, and distribution of a document. A document team's primary objective is to make sure documents are accurate and accessible. When assembling a document team, make sure to include the appropriate personnel, whether they are internal, customers, or suppliers.

1 Select **Documentation > Sysdoc > Document Maintenance**.
2 Select the document to which you are adding a team.
3 Right-click and select **Document Team**.
4 In the Document Team field, select one of these options:

Option	Description
Developed By	Select this option to add members to the document's development team.
Approved By	Select this option to add members to the team responsible for approving the product. When document change requests are created, these team members are added to the request.
Distributed To	Select this option to specify individuals who are notified when a document changes.

5 In the table, add the team members. Perform one of these tasks:
- To add an employee to the team, select the **Employee** option. Specify the employee's ID in the **Employee ID** field. Then, specify the employee's function and job codes.
- To add a customer to the team, select the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact responsible for the audit in the **Contact No** field.

- To add a supplier to the team, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the audit in the **Contact No** field.

6 Click the **Save** button.

Revising documents

When you revise a document, you are prompted to specify information about the changes you make. You can review these changes in Change History.

To revise a document:

1 Optionally, check the document out. When you check out a document, the Checked Out check box is selected on the document record. This indicates that the document is in use.

See Checking out documents on page 256.

2 Select **Documentation > Sysdoc > Document Maintenance**.
3 Select the document.
4 Make the changes to the document.
5 In the **Revision Level** field, specify a new revision level.
6 In the **Issue Date** field, specify a new issue date.
7 Click the **Save** button.
8 In the Change History tab, specify a description of your changes.
9 Click the **Save** button.

Changing the document type

If you change the document type on the Site tab of a document record, you are prompted to update information on the document record with the information on the document type record. If you change the document type on the General tab, you are not prompted to update information. The document type on the General tab is informational only.

1 Select **Documentation > Sysdoc > Document Maintenance**.
2 Select the document.
3 Click the **Site** tab.
4 Click the **Save** button.
5 Select the information to update. For the check boxes you select, the information on the document record will be overwritten with the information on the document type record.

Audit Information
Select this check box to update the information in the Info section on the Audit Info tab.

Audit Instructions
Select this check box to update the audit instructions on the Audit Info tab.

Document Links
Select this check box to update the documents attached to the device record.

Retention
Select this check box to update the document retention information.

6 Click **Ok**.
7 Click the **Save** button.

Viewing change history text for documents

You can view a list of the comments that were entered when a document was formally revised.

1 Select **Documentation > Sysdoc > Document Maintenance**.
2 Select the document.
3 Click the **Change History** tab.
4 To view text only, click **Combined**. To view comments by date or revision level, click **Detail**. If you click detail, a table with the revision level and issue date is displayed. Select a row in the table to view the associated comments.

Updating document records with document type information

This form is displayed when you change the document type on the Site tab in Document Maintenance.

Use this form to specify the information from the document type record to insert in the document record.

Specify this information:

Audit Information
Select this check box to insert the information from the document type record into the Responsibility and Info sections.

Audit Instructions
Select this check box to insert the information from the document type record into the Audit Instructions field.

Document Links
Select this check box to insert any documents attached to the document type.

Retention
Select this check box to insert the number of days documents of this type should be retained.

Click the **Ok** button.

Editing change history for documents

You can edit the change history comments made when a new revision level or issue date is saved.

1. Select **Documentation > Sysdoc > Document Maintenance**.
2. Select the document.
3. Right-click and select **Change History**.
4. In the Revision section, a list of the revisions and dates they were issued is displayed. Select a row to view the change history text.
5. To edit the change history text, specify text in the Change History section. After you click the **Save** button, the ID of the currently signed in user, the current date, and the current time are inserted.

Changing the status of a document

Use the document status field to specify how a document should be used. If your use of a document changes, update the status of the document.

1. Select **Documentation > Sysdoc > Document Maintenance**.
2. Select the document.
3. In the Status field, specify the current status of the document. Specify one of these options:

   Open
   If this document is currently available for use, specify this option.

   Hold
   If this document is temporarily not available for use, specify this option.

   Revision
   If this document is currently being revised, specify this option.

   Obsolete
   If this document is no longer used, specify this option. Use the Obsolete option to retain a record of this document in the database.

4. Click the **Save** button.

Attaching Documents to Document Records

For Document records, you have the option of attaching documents at the entity level or at the site level.

To attach a document at the entity level, place your cursor in the header of the Document Maintenance or in any non-site tab before clicking the **Documents** button.

To attach a document at the site level, click the Site tab and then select the site to which to attach documents. Then, click the **Documents** button.

Copying documents

Use this function to create a new document record from an existing document record.

1 Select **Documentation > Sysdoc > Document Maintenance**.
2 Select the document.
3 Right-click and select **Copy Document**.
4 Specify this information:

Copy to Document ID
Specify the ID of the new document.

Copy Options
When you copy a document, the information on the General tab is copied. You can copy additional information. Select one or more of these check boxes:

Approved By
Select this check box to copy the document approval team.

Distributed To
Select this check box to copy the team to whom the document is distributed.

Developed By
Select this check box to copy the document development team.

Sites
Select this check box to copy the site information for the document. This includes audit information.

Quality Costs
Select this check box to copy the quality cost information for the document.

Document Links
Select this check box to link the attachments to the new document.

5 Click the **Ok** button.

Deleting documents

If you no longer need to retain a record of a document in your database, you can delete the document. You can delete a document only if these conditions are met:

- The document has no check in or check out records associated with it.
- The document does not have a change history.
- The document is not associated with sites.

To retain a record of a document that you no longer use, change the document's status to Obsolete.

See Changing a Document's Status on page 254.

1 Select **Documentation > Sysdoc > Document Maintenance**.

2 Select the document.
3 Click the **Site** tab.
4 Delete each row in the site table. To delete a row, select the row and then click the **Delete** button.
5 Click the **Save** button.
6 Click the **Delete** button.
7 Click the **Save** button.

Document check in/out

Use Document Check In/Out Maintenance to track where your documents are at any given time. You can use Document Check In/Out Maintenance to record who has a document and when the document is due to be returned.

Checking out documents

Check out a document to indicate that it is in use. You can check a document out before you audit or revise it. When you check a document out, the Checked Out check box is selected on the document record in Document Maintenance.

1 Select **Documentation > Sysdoc > Document Check In/Out Maintenance**.
2 Specify this information:

Site ID
Specify the site where the document is located.

Document ID
Specify the document to check out. After you specify a document ID, information about the document is inserted in the Document Master section.

Business Unit
If you are checking this document out for a particular business unit, specify the ID of the unit.

Checked Out By
Specify the ID of the employee who is checking out the document. A task is added to the employee's My To Do list. The due date of the task is the value in the Due Back Date field.

Checkout Date
When you select the employee who is checking out the document, the current date is inserted by default. You can edit the date.

Due Back Date
If the document is due to be returned by a certain date, specify the date in this field.

Comments
Optionally, specify information about why you are checking out this document.

3 Click the **Save** button.

Checking in documents

Check in a document when you are finished using it. You can check in a document only if it has already been checked out. When you check a document in, the Checked Out check box is cleared on the document record in Document Maintenance.

1 Select **Documentation > Sysdoc > Document Check In/Out Maintenance**.
2 Specify this information:

Site ID
Specify the site where the document is located.

Document ID
Specify the document to check in. After you specify a document ID, information about the document is inserted in the Document Master section. Information specified when the document was checked out is inserted.

Checked In By
When you click in this field, the ID of the employee who checked the document out is inserted. You can edit this ID if necessary.

Checkout Date
The current date is inserted. You can edit the date if necessary.

Reference
Optionally, specify reference information about this document.

Comments
Optionally, specify information about why you are checking out this document.

3 Click the **Save** button.

Document change requests

Use Document Change Requests to formally record requests to change documents. Employees, customers, and suppliers can originate requests.

After you approve and close a document change request, you can update the document's revision level.

The change you specify in the Document Change Request form is not automatically made. You must manually change the document record to implement a change request.

Adding documentation change requests

1 Select **Documentation > Sysdoc > Document Change Request Maintenance**.

2 Specify this information:

Site ID
Specify the ID of the site requesting the change. After you specify a Site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Document ID
Specify the ID of the document to change.

Request Date
Specify the date that the request was made.

Due Date
Specify the date by which a decision must be made for this change request.

Assigned To
Specify the employee responsible for managing this change request. A task for the change request is added to the employee's My To Do list. The due date of the task is the same as the due date of the change request.

Change Type
Specify the type of change requested.

Change Reason
Specify the reason for this change.

Priority
Specify the priority level for this change request.

Decision
Specify the decision made for this change request. For a new change request, specify Pending.

The other status are Approved and Not Approved.

See Approving and closing change requests on page 261.

See Rejecting and closing change requests on page 261.

Decision Date
Specify the date the decision was made. The current date is inserted by default.

Status
For a new change request, specify Open. When you complete a change request, change the status to Closed. You cannot select the Deleted status. The Deleted status is selected by the system if it receives a BOD changing the status to Deleted.

Business Unit
If this change request is related to a business unit, specify the business unit ID.

3 To specify who requested the change to the document, click the **Origin** tab. Specify this information:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the **Employee ID** field. Then, specify the employee's function and job codes.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the field, then select the contact responsible for the audit in the **Contact No** field.
   - To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the audit in the **Contact No** field.
4 To specify a description of the request, click the **Change Request** tab.
5 Right-click and select **Change Request Notes**.
6 **Ok**. The text you specified is inserted in the Change Request tab. The ID of the currently signed in user, the date, and the time are also inserted.
7 To specify the response to the request, click the **Response** tab.
8 Right-click and select **Change Request Response Notes**.
9 Specify the response to the change request, and then click **Ok**. The text you specified is inserted in the Response tab. The ID of the currently signed in user, the date, and time you entered the text are also inserted.
10 Click the **Save** button.

Adding approval teams for document change requests

After you add a change request, specify the individuals who are responsible for approving the request. To add an approval team:

1 Select **Documentation > Sysdoc > Document Change Request Maintenance**.
2 Select the change request.
3 Right-click and select **Approved By**.
4 Specify the team members:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact responsible for the audit in the Contact No column.
   - To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact responsible for the audit in the Contact No column.
5 In the Decision column, specify the decision made for this change request. When you select a decision, the current date and the ID of the currently signed in ID are inserted in the Decision Date

field. Depending on the settings specified in Application User Maintenance and Application Global Maintenance, you may be required to specify your password when you change the decision to Approved or Not Approved. Select one of these options:

Option	Description
Pending	Select this option if the change request is under review and no final decision has been made.
Approved	Select this option if the change request is approved. An approved request is ready to be implemented. Select this status when all individuals on the Approval team have approved the request.
Not Approved	Select this option if the change request is not approved and will not be implemented.

6 Click the **Save** button.

Adding distribution teams for document change requests

After you add a change request, specify the individuals who are notified of the change.

1 Select **Documentation > Sysdoc > Document Change Request Maintenance.**.
2 Select the change request.
3 Right-click and select **Distributed To**.
4 Specify the team members:
- To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
- To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact responsible for the audit in the Contact No column.
- To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact responsible for the audit in the Contact No column.

5 In the Decision column, specify the decision made for this change request. When you select a decision, the current date and the ID of the user is inserted in the Decision Date field.

Option	Description
Pending	Select this option if the change request is under review and no final decision has been made.
Approved	Select this option if the change request is approved. An approved request is ready to be implemented. Select this status when all individuals on the Approval team have approved the request.
Not Approved	Select this option if the change request is not approved and will not be implemented.

6 Click the **Save** button.

Approving and closing change requests

After the individuals on the approval team approve a change request, approve and close the change request record. After you close the approved change request, you can update the revision level of the document.

To approve the change request record:

1 Select **Documentation > Sysdoc > Document Change Request Maintenance**.
2 Select the change request.
3 In the **Decision** field, select Approved.
4 In the **Decision Date** field, the current date is inserted. Optionally, change the date.
5 Select **Documentation > Sysdoc > Document Maintenance**.
6 Edit the changes as described in the change request.
See Adding Documents on page 246.
7 Select **Documentation > Sysdoc > Document Change Request Maintenance**.
8 Select the change request.
9 In the **Status** field, select Closed.
10 In the **Closed Date** field, the current date is inserted. Optionally, change this date.
11 Click the **Save** button.
12 In the Revision Change form, the current revision level and issue date of the document is displayed. Specify this information:

New Revision Level
Specify the new revision level for the document.

New Issue Date
Specify the new issue date for the document.

13 Click **Ok**.
14 In the Document Change Request form, click **Save**. The document record is updated with the new revision level and issue date that you specified.

Rejecting and closing change requests

To reject a change request:

1 Select **Documentation > Sysdoc > Document Change Request Maintenance**.
2 Select the change request.
3 In the **Decision** field, select Not Approved.
4 In the **Decision Date** field, the current date is inserted. Edit this date if necessary.

5 In the **Status** field, select Closed.
6 In the **Closed Date** field, the current date is inserted. Edit this date if necessary.
7 Click the **Save** button.
8 In the Revision Change form, the current revision level and issue date of the term is displayed. Click the X to close the form without updating revision information.

Copying document change requests

Use this feature to create a new change request from an existing change request.

1 Select **Documentation > Sysdoc > Document Change Request Maintenance**.
2 Select the change request to copy.
3 Right-click and select **Copy Request**.
4 Specify the information to copy:

Approved By
Select this check box to copy the list of approval team members.

Distributed To
Select this check box to copy the list of distribution team members.

Quality Cost
Select this check box to copy quality cost information.

5 Click **Ok**. In addition to the information you selected, the information in the header, Origin tab, Change Request tab, and Response tab is also copied. The decision status of the new request is set to Pending. The status of the change request is set to Open.

Document audits

Use Document Audits Maintenance to evaluate a document's performance. If a document fails an audit, you can link the audit record to a nonconformance record.

Adding document audits

1 Select **Documentation > Sysdoc > Document Audits Maintenance**.
2 Specify this information:

Site ID
Specify the site conducting this audit. When you select a site ID, the site's parent entity is inserted in the Entity field.

Audit ID
Leave this field blank. When you save the record, an ID is created based on your auto-numbering scheme.

Document ID
Specify the document ID that is the subject of this audit.

Due Date
Specify the date that this audit is due to be complete. If a standard interval is defined for the audit, and the date of the previous audit is known, the date inserted in the Next Date field in Current Document Master Record is inserted in this field. Otherwise, the current date is inserted by default. You can edit the date.

Business Unit
If this audit is performed by a particular business unit, specify the business unit ID.

3 In the Audited By section, specify who performed the audit.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact responsible for the audit in the **Contact No** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the audit in the **Contact No** field.

4 In the Result section, specify the outcome of this audit. Specify this information:

Result
Specify the result of this audit. Select one of these options:

Passed
If the document passed the audit, select this option.

Status
If the document audit is in progress, select this option.

Pending
If the document audit has not yet started, specify this option.

Failed
If the document failed the audit, select this option. After you save the record, you have the option of linking this failed audit to a Nonconformance record.

Completion Date
If you selected Passed or Failed in the Result field, specify the date the audit was completed. If you specified Pending in the Result field, the Completion Date field is unavailable. A pending audit is not complete.

5 In the Current Document Master Record section, review audit information for this document. The information in this section is defined at the Site level. You cannot edit this information. This information is displayed:

Document Type
The document's type is displayed. The document type determines the audit procedures for this document.

Status
The document's current status is displayed. These statuses are used:

Open
If this document is currently available for use, this option is displayed.

Hold
If this document is temporarily not available for use, this option is displayed.

Revision
If this document is currently being revised, this option is displayed.

Obsolete
If this document is no longer used, this option is displayed.

Standard Interval (Days)
The frequency with which audits are performed is displayed.

Special Interval (Days)
If a special interval was specified for this document in Document Maintenance, the interval is displayed in this field. A special interval is used when an audit must be completed before the standard interval elapses. The special interval overrides the standard interval.

Last Date
The date that the last audit was performed on this document is displayed.

Next Date
The date that the next audit for this document is due is displayed. This information is calculated by adding the standard audit interval or the special audit interval to the date of the last successful audit.

Audit Procedure/Product Documents/Product Site Documents
To view the document specified as the audit procedure for the product, select Audit Procedure and then click view. To view the documents attached to the document record, select Documents (current entity). To view the documents attached to the document record at the site level, select Documents (current site).

Revision Level
The current revision level of the document is displayed.

Issue Date
The date that the current revision of the document was issued is displayed.

6 In the Comments section, specify general comments about the audit process or result. To specify comments, right-click and select **Comments**.

7 Click the **Save** button.

Posting failed document audits to NCMs

When you save a failed audit, you have the option to post the failure to a nonconformance record.

1. Select **Documentation > Sysdoc > Document Audits Maintenance**.
2. Select the audit.
3. In the **Result** field, specify Failed.
4. Click the **Save** button.
5. You are prompted to post the failed audit to an NCM. Click **Yes** to post the audit.
6. Click the **Save** button. You must click the Save button to generate the NCM. The NCM is added to the table.
7. To view the NCM, right-click the NCM ID in the table and select **Details**.

Attaching nonconformance records to document audits

If a document audit failed, you can attach existing nonconformance records to the failed audit.

1. Select **Documentation > Sysdoc > Document Audits Maintenance**.
2. Select the audit ID.
3. Right-click and select **Nonconformance**.
4. If you posted the failed audit to a nonconformance record, the record is listed. To add additional nonconformance records click **New**, then click the **NCM ID** arrow and select the record. This information about the NCM is displayed:

   Date
   The date the NCM was created is displayed.

   Time
   The time the NCM was created is displayed.

   Reported By
   The source of the NCM is inserted. The source is either internal, a customer, or a supplier.

   Reported By Name
   For an internal source, the ID of the employee is displayed. For a customer, the customer ID is displayed. For a supplier, the supplier ID is displayed.

   Contact Name
   For a customer or supplier source, the name of the contact is displayed.

   Assigned To
   The employee assigned to address the NCM record is displayed.

   Due Date
   The date that the NCM is due is displayed.

   Status
   The status of the NCM date is displayed.

Closed Date
If the NCM is closed, the date the record was closed is displayed.

Copying document audits

You can create a new document audit by copying an existing document audit. To copy an existing document audit:

1. Select **Documentation > Sysdoc > Document Audits Maintenance**.
2. Select the audit.
3. Right-click and select **Copy Audit**.
4. When you copy an audit, all information in the main window is copied except for the result. The Audit Result field is set to Pending. Select the additional information to copy:

   Nonconformance
   Select this check box to copy nonconformance information to the new record.

   Quality Costs
   Select this check box to copy quality cost information to the new record.

5. Click **Ok**. The new document audit is created.

System document reports

Use the system document reports to review and analyze information about dictionary terms and documents.

Dictionary list report

Use this report to print a list of terms from your dictionary. This report shows the entity where the term is used, the term ID, the term name, the definition, the function that uses the term, the term's status, and the name of the individual who approved the term.

Dictionary List Report

1. Select **Documentation > Sysdoc > My Reports**.
2. Click Dictionary List.
3. Click the entities to use for the report. Data from the entities you select will be included. To select all available entities, click Select All.

4 Specify the information to include in the report:
   - To view information for a particular term, specify the ID of the term in the **Term ID** field. Or, specify the name of the term in the **Name** field.
   - To view terms approved by a particular employee, specify the ID of the employee in the **Approved By** field.
   - To view terms used by a particular function, specify the ID of the function in the **Function Code** field.

5 Specify the sort order for the report. Select one of these options:

   Term ID
   Select this option to sort the list by Term ID.

   Name
   Select this option to sort the list by term name.

   Function + Name
   Select this option to sort the list first by function code and then by term name. This groups together all terms used by a particular function code..

6 Click the **Print Report** button.

Document analysis report

Use this report to analyze the attributes of your documents. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of documents that have each criterion ID. For example, if you select Function Code in the Analysis Field field, the report displays the percentage of documents that have each function code. You can see which of your functions uses the most documents.

To be included on the report, a criterion ID must be specified on at least one document record. For example, if the function code FINANCE was not specified on a document record, then that function code would not be included in the report.

You can analyze documents based on these criteria:

- Document Type
- Function Code
- Major Location
- Minor Location
- Status
- User Defined 1

You can apply Document Type, Function Code, and Status filters to the report. When you apply a filter to the report, only documents that match the filter are considered for the report. For example, if you specify QA in the Function Code field, then only document records that contain the QA function code would be included in the report. The analysis you perform is for the QA documents only.

Generating the document analysis report

1. Select **Document > Sysdoc > My Reports**.
2. Click the Document Analysis link.
3. Click the entities to use for the report. To select all available entities, click Select All.
4. Specify the filters for the report:
   - To analyze documents of a particular document type, specify the type in the **Document Type** field.
   - To analyze documents used by a particular function, specify the ID of the function in the **Function Code** field.
   - To analyze documents of a particular status, specify the status code in the **Status** field.
5. In the **Analysis Field** field, specify the criterion to use for the analysis.
6. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8. Click the **Print Report** button.

Document audits analysis

Use this report to analyze information about your document audits. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of document audits that have each criterion ID. For example, if you select Document Type in the Analysis Field field, the report displays the percentage of document audits for each document type. You can see which of your document types is audited most frequently.

To be included on the report, a criterion ID must be specified on at least one document audit record. For example, if the document type TESTPLAN was not specified on a document audit record, then that document type would not be included in the report.

You can analyze document audits based on these criteria:

- Audit By
- Document Type
- Result

Generating the document audits analysis report

1. Select **Documentation > Sysdoc > My Reports**.
2. Click the **Document Audits Analysis** link.
3. Click the sites to use for the report.
4. To view audits due during a particular date range, specify the starting and ending dates in the **Due Date from** and **Due Date to** fields.

5 In the **Analysis Field** field, specify the criterion to use for the analysis.

6 In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.

7 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.

8 Click the **Print Report** button.

Document audits detail

Use this report to review detailed information about your document audits. This report shows the entity and site where the audit is taking place, the ID of the audit, the ID of the document that is the subject of the audit, the name of the document, the current revision level of the document, the date that the revision was issued, the date that the next audit is due, the individual conducting the audit, the result of the audit, and the date that the audit was completed.

Generating the document audits detail report

1 Select **Documentation > Sysdoc > My Reports**.

2 Click the Document Audits Detail link.

3 Click the sites to use for the report.

4 Specify the information to include in the report:
- To view audit information for a particular document, specify the ID of the document in the **Document ID** field or the name of the document in the **Document Name** field.
- To view audits assigned to a particular employee, specify the ID of the employee in the **Assigned To** field.
- To view audits with a particular result, select the results to include in the Result section. You can select more than one result.

5 Click the **Print Report** button.

Document audits due date list

Use this report to view when document audits are due. This report shows the entity ID, site ID, function code of the document, ID and name of the document that is being audited, the revision level of the document, the date that the revision was issued, the document's status, document type, reference, the individual who conducts the audit, and the next audit date.

Generating the document audits due date list

1 Select **Documentation > Sysdoc > My Reports**.
2 Click Document Audits Due Date List.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view audits that are due for a particular document, specify the name of the document in the Document Name field.
   - To view audits that are due for a documents of a particular type, specify the document type in the Document Type field.
   - To view audits that are due for a documents with a particular function, specify the function in the Function field.
   - To view audits that are due during a particular time range, specify the start date and the end date in the From Next Date and To Next Date fields.
   - To view audits that are assigned to a particular employee, specify the ID of the employee in the Audited By field.
   - To view audits for documents with particular statuses, select the status to use in the Status section.
5 Specify the sort order for the report:

Option	Description
Document ID	The report is sorted by document ID.
Next Audit + Document ID	The report is sorted by next audit due date, then by document ID. This groups together all audits due on a particular day.
Audited By + Next Audit ID	The report is sorted by the person responsible for the audit, then the audit due date. This groups together all audits for which an employee is responsible.

6 Click the **Print Report** button.

Document change requests analysis

Use this report to analyze the frequency of certain criteria in your document change requests. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of document change requests that have each criterion ID. For example, if you select Change Type in the Analysis Field field, the report displays the percentage of document change requests for each change type. You can see which change types are most frequently used in your document change requests.

To be included on the report, a criterion ID must be specified on at least one document change request record. For example, if the change type NEWREG was not specified on a document change request record, then that change type would not be included in the report.

You can analyze document change requests based on these criteria:

- Assigned To
- Change Reason
- Change Type
- Status
- Decision
- Priority
- Request By

You can apply an Assigned To or a Status filter to the report. When you apply a filter to the report, only document change requests that match the filter are considered for the report. For example, if you specify BSMITH in the Assigned To field and select Status in the Analysis Field field, then the report would show the statuses of all document change requests assigned to BSMITH.

Generating the document change request analysis report

1. Select **Documentation > Sysdoc > My Reports**.
2. Click the Document Change Requests Analysis link.
3. Click the sites to use for the report.
4. To view change requests due during a particular date range, specify the starting and ending dates in the Due Date from and Due Date to fields.
5. In the **Analysis Field** field, specify the criterion to use for the analysis.
6. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8. Click the **Print Report** button.

Document change request detail report

Use this report to view information about requested changes to your documents. This report displays the entity and site where the change request was made, the change request ID, the date the change was requested, the ID of the party who is assigned to the request, the due date, the document that is the subject of the request, the change type, the change reason, the priority of the request, the decision made about the request, the date of the decision, the status of the change request, the date the change request was closed, the party who requested the change, the change requested, the content of the response, and a list of the individuals who approved the request.

Generating the document change request detail report

1. Select **Documentation > Sysdoc > My Reports**.
2. Click the Document Change Request Detail link.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular change request, specify the ID of the request in the **Request ID** field.
   - To view change requests made for a particular document, specify the ID of the document in the **Document ID** field.
   - To view change requests approved by a particular employee, specify the ID of the employee in the **Approved By (Employee ID)** field.
   - To view change requests assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID)** field.
   - To view change requests made during a particular time period, specify the starting and ending dates in the **Request Date From** and **Request Date To** fields.
   - To view change requests due to be complete during a particular time period, specify the starting and ending dates in the **Due Date From** and **Due Date To** fields.
   - To view change requests with a particular status, select the appropriate check boxes. You can select more than one check box.
   - To view change requests with a particular decision status, select the appropriate check boxes. You can select more than one check box.
5. Click the **Print Report** button.

Document change request list

Use this report to view a list of document change requests. This report shows the entity ID, site ID, function code, document ID, document name, document revision level, revision issue date, change request ID, change request date, the change request decision, the change request status, the date that the change request was closed, the date that the change request was due, and the individual responsible for the change request.

Generating the document change request list

1. Select **Documentation > Sysdoc > My Reports**..
2. Click Document Change Request List.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view change requests for documents that have a particular function, specify the function ID in the **Function** field.
   - To view change requests for a document with a particular ID, specify the ID in the **Document ID** field.

- To view change requests that are assigned to a particular employee, specify the employee ID in the **Assigned To (Employee ID** field.
- To view change requests that were closed during a particular time period, specify the start and end dates of the time period in the **Closed Date From** and **Closed Date To** fields.
- To view change requests that were made a particular time period, specify the start and end dates of the time period in the **Request Date From** and **Request Date To** fields.
- To view change requests that were due during a particular time period, specify the start and end dates of the time period in the **Due Date From** and **Due Date To** fields.
- To view change requests with a particular status, select the appropriate check boxes. You can select more than one check box.
- To view change requests with a particular decision status, select the appropriate check boxes. You can select more than one check box.

5 Click **Print Report**.

Document master list

Use this report to review a list of the system documents in your database. This report shows the entity ID, document ID, document name, document type, function where the document is used, current revision level, date the revision was issued, document status, and the reference text specified on the document record.

Generating the document master list

1 Select **Documentation > Sysdoc > My Reports**.

2 Click Document Master List.

3 Click the entities to use for the report.

4 Specify the information to include in the report:

- To view information for a particular document, specify the ID of the document in the **Document ID** field. Or, specify the name of the document in the **Document Name** field.
- To view documents of a particular document type, specify the ID of the type in the **Document Type** field.
- To view documents used by a particular function, specify the ID of the function code in the **Function** field.
- To view documents with particular reference text, specify the text in the **Reference** field.

5 Specify the sort order for the report.

Option	Description
Document ID	Select this option to sort the list by Document ID.
Document Name	Select this option to sort the list by document name.
Function + Document ID	Select this option to sort the list first by function code and then by document ID. This groups together all documents used by a particular function code.

6 Click the **Print Report** button.

Document types list

Use this report to review a list of the document types in your database along with basic audit information for each type. The report shows this information:

- Entity ID
- Document type and type name
- Retention duration
- Individual responsible for document audits
- Function and job code of the auditor
- Standard audit interval
- Expected duration of the audit

Generating the document types list

1 Select **Documentation > Sysdoc > My Reports**.
2 Click **Document Types List**.
3 Click the entities to use for the report.
4 To view information for a particular document type, specify the ID of the document type in the **Document ID** field. Or, specify the name of the document type in the **Name** field.
5 Click the **Print Report** button.

Document approval/distribution list

Use this report to review the approval and distribution teams for your documents. This report shows the accounting entity associated with the document ID, the document ID, the name of the document, the revision level, the issue date of the revision, the status, the approved by list, and the distributed to list.

Generating the documents approval/distribution list

1 Select **Documentation > Sysdoc > My Reports**.
2 Click the **Documents Approval/Distribution List** link.
3 Click the entities to use for the report.
4 Specify the information to include in the report:
   - To view information for a particular document, specify the ID of the document in the **Document ID** field.

- To view information for a document with a particular name, specify the name of the document in the **Document Name** field.
- To view information for documents of a particular type, specify the type in the **Document Type** field.
- To view information for documents with a particular reference, specify the text in the **Reference** field.
- To view information for documents that are associated with a particular function, specify the code in the **Function** field.
- To view documents with a particular status, select the appropriate check box. You can select more than one check box.

5 Click the **Print Report** button.

Chapter 9: Audit manager

Audit Manager is a tool that provides continuous improvement by routinely comparing actual activities with planned activities. You can manage, evaluate, and communicate audit information including quality, financial, environmental, and health and safety data.

Tasks are added to auditor and auditee To Do lists after you create audit records.

See My To Do list on page 34.

Adding audit records

1 Select **Documentation > Audit Manager > Audits**.

2 Specify this information:

Site ID
Specify the site that is conducting this audit.

Audit ID
Leave this field blank. An ID is generated based on your auto-numbering scheme when you save the record.

Audit Name
Specify a name for this audit.

Standard
Specify the type of audit, quality system, or quality control to use for this audit.

Subject
Specify the subject of the standard or standard section you are auditing.

Schedule Date
Specify the date that this audit is scheduled to take place.

Completion Date
When the audit is complete, specify the date that this audit was completed.

Score
Specify the score received for this audit.

Business Unit
If this audit relates to a particular business unit, specify the business unit.

3 In the Result section, specify the result of the audit. Select one of these options:

Passed
Select this option if the audit result passed.

Failed
Select this option if the audit result failed. If you select this option, you can post the audit to a nonconformance record. See Posting a Failed Audit to Nonconformance Maintenance.

Pending
Select this option if the audit is not yet complete.

4 Use the Auditor tab to specify who is conducting the audit. Tasks for the audit are added to the My To Do list for the employees that you specify on this tab. The due date of the task is the date in the **Scheduled** field. Click the **Auditor** tab and specify this information:

Lead Auditor
Specify the employee who is leading this audit.

Asst Auditor1, Asst Audit2, Asst Audit3
Specify up to three employees who are helping to conduct this audit.

5 Use the Auditee tab to specify the employees who are the subjects of the audit. Tasks for the audit are added to the My To Do list for the employees that you specify on this tab. The due date of the task is the date in the **Scheduled** field. Click the **Auditee** tab and specify this information:

Auditee 1 and Auditee 2
Specify up to two employees who are the subjects of this audit.

Function
Specify the function of these employees.

6 Use the Comments tab to record additional information about the audit. Click the **Comments** tab and specify the text.

7 Click the **Save** button.

Adding audit checklists

Audit checklists consist of references, questions, and results and help you ensure that you are meeting all internal system requirements. You can design checklists based on one or multiple standards or elements.

1 Select **Documentation > Audit Manager > Audits**.

2 Select the audit record.

3 Right-click and select **Checklists**. The entity ID, Site ID, and Audit Manager record ID is displayed.

4 Specify this information:

Checklist ID
Leave this field blank. When you save the record, this ID is generated based on your number generation scheme.

Subject
Specify the subject of this checklist.

5 Click the **Reference** tab and specify reference information for the checklist. Information could include documents, standards (ISO) or process elements.
6 Click the **Questions** tab and specify all questions related to the subject of the checklist.
7 Click the **Observations** tab and specify a list of observations made as a result of performing the audit.
8 Click the **Save** button.

Closing checklists

After you complete a checklist, close the checklist record.

1 Select **Documentation > Audit Manager > Audits**.
2 Select the audit record.
3 Right-click and select **Checklists**.
4 Select the checklist.
5 Click the **Closed** button.
6 In the **Closed Date** field, specify the date you closed this checklist. The current date is inserted by default.
7 Click the **Save** button.

Adding audit findings

Use the Audit Findings form to report audit results through auditor feedback, both positive and negative. You can then use this feedback to improve the process or system and initiate a follow up.

1 Select **Documentation > Audit Manager > Audits**.
2 Select the audit record.
3 Right-click and select **Findings**. The entity ID, Site ID, and Audit Manager record ID is displayed.
4 Specify this information:

Finding ID
Leave this field blank. When you save the record, this ID is generated based on your number generation scheme.

Finding Type
Specify the finding type. Use findings type codes to categorize the types of possible findings. For example, you could maintain a findings type code to indicate faulty devices.

5 In the Findings section, specify answers to the audit checklist questions and enter comments about the checklist observations.
6 In the **Follow Up** field, specify the employee who is responsible for following up on the audit findings.
7 In the **Closed Date** field, specify the date that all follow up actions are complete.
8 In the **Follow Up** section, specify the actions to take to follow up on the audit findings.
9 Click the **Save** button.

Copying audit records

1 Select **Documentation > Audit Manager > Audits**.
2 Select the audit to copy.
3 Right-click and select **Copy Audit**.
4 Select the information to copy:

Findings
Select this check box to copy the audit findings.

Checklists
Select this check box to copy the audit checklists.

Document Links
Select this check box to copy the audit's document links.

5 Click **Ok**. The new audit record is created. In addition to information you selected to copy, the information in the main form is also copied.

Audit reports

Use the audit reports to analyze information about the audits that you have conducted.

Audit detail report

Use this report to review detailed information about your audits, including the audit checklist and findings. This report displays the entity and site that conducted the audit, the audit ID, audit name, standard,

subject, the date the audit was scheduled to occur, the date the audit was completed, the audit result, the lead auditor, the assistant auditors, the individuals who were audited, the function of the individuals who were audited, any audit comments, the audit checklist, and the audit findings.

Generating the audit detail report

1. Select **Documentation > Audit Manager > My Reports**.
2. Click Audit Detail.
3. Click the sites to use for the report. To select all available sites, click **Select All**.
4. Specify the information to include in the report. Perform one of these steps:
   - To view information for a particular audit ID, specify the ID of the audit in the **Audit ID** field or the name of the audit in the **Audit Name** field.
   - To view audit information for a particular standard, specify the standard in the **Standard** field.
   - To view information for audits led by a particular lead auditor, specify the employee ID of the auditor in the **Lead Auditor** field.
   - To view information for audits scheduled to be conducted during a particular time frame, specify the starting and ending dates in the **Scheduled Date From** and **Scheduled Date To** fields.
   - To view findings for audits with a particular audit subject, specify the employee ID in the **Auditee** field.
   - To view findings for audits with a particular result, select the appropriate check box in the Result section. You can select more than one result.
5. Click the **Print Report** button.

Audit detail finding report

Use this report to print the details of your audit results. This report displays the entity and site that conducted the audit, the audit ID, audit name, standard, subject, the date the audit was scheduled to occur, the date the audit was completed, the audit result, the lead auditor, the assistant auditors, the individuals who were audited, the function of the individuals who were audited, and the audit findings.

Generating the audit detailed finding report

1. Select **Documentation > Audit Manager > My Reports**.
2. Click Audit Detailed Finding.
3. Click the sites to use for the report.
4. Specify the information to include in the report. Perform one of these steps:
   - To view audit findings for a particular audit ID, specify the ID of the audit in the **Audit ID** field or the name of the audit in the **Audit Name** field.
   - To view audit findings for a particular standard, specify the standard in the **Standard** field.
   - To view findings for audits led by a particular lead auditor, specify the employee ID of the auditor in the **Lead Auditor** field.

- To view findings for audits scheduled to be conducted during a particular time frame, specify the starting and ending dates in the **Scheduled Date From** and **Scheduled Date To** fields.
- To view findings for audits with a particular audit subject, specify the employee ID in the **Auditee** field.
- To view findings for audits with a particular result, select the appropriate check box in the Result section. You can select more than one result.

5 Click the **Print Report** button.

Audit detailed checklist report

Use this report to print the details of your audit checklists. This report displays the entity and site that conducted the audit, the audit ID, audit name, standard, subject, the date the audit was scheduled to occur, the date the audit was completed, the audit result, the lead auditor, the assistant auditors, the individuals who were audited, the function of the individuals who were audited, and the audit checklists.

Generating the audit detailed checklist report

1 Select **Documentation > Audit Manager > My Reports**.

2 Click Audit Detailed Checklist.

3 Click the sites to use for the report. To select all available sites, click Select All.

4 Specify the information to include in the report. Perform one of these steps:

- To view audit checklists for a particular audit ID, specify the ID of the audit in the **Audit ID** field or the name of the audit in the **Audit Name** field.
- To view audit checklists for a particular standard, specify the standard in the **Standard** field.
- To view checklists for audits led by a particular lead auditor, specify the employee ID of the auditor in the **Lead Auditor** field.
- To view checklists for audits scheduled to be conducted during a particular time frame, specify the starting and ending dates in the **Scheduled Date From** and **Scheduled Date To** fields.
- To view checklists for audits with a particular audit subject, specify the employee ID in the **Auditee** field.
- To view checklists for audits with a particular result, select the appropriate check box in the Result section. You can select more than one result.

5 Click the **Print Report** button.

Chapter 10: Production part approval process

Use the Product Part Approval Process (PPAP) form to manage and control the entire PPAP process, including Submission Warrant, Appearance Approval, Sample Parts, Design Records, Change Requests, Test Results, Checking Aids, Equipment/Tooling, FMEAs, Process Flow Charts, Control Plans, and Measurement Studies. The PPAP form covers the general requirements for Production Part Approval for all production and service commodities, including bulk materials.

Tasks are added to the My To Do List of employees who are assigned to PPAP records.

See My To Do list on page 34.

Adding PPAP master records

Use this procedure to create the basic PPAP record.

To create the record:

1 Select **Documentation > PPAP > PPAP Maintenance**.

2 Specify this information:

Site ID
Specify the site where the approval process is taking place. When you select a site, the site's parent entity ID is inserted in the Entity ID field.

Product ID
Specify the ID of the part that is the subject of the approval process.

PPAP Rev Level
Specify the current revision level for this plan. If you specify a new level, you are prompted to add change history text when you save the record.

See Revising PPAPs on page 298.

Issue Date
Specify the date you are issuing this revision. If you specify a new date, you are prompted to add change history text when you save the record.

Due Date
Specify the date that this approval process is due.

Assigned To
Specify the ID of the employee responsible for this approval process record. This employee manages the approval process. A task is added to the employee's My To Do List. The due date of the task is the value in the **Due Date** field. The task is removed when the PPAP record is closed.

If a particular business unit is developing this approval plan, specify the ID of the business unit.

Status
For a new PPAP record, specify Pending.

See Business UnitChanging the status of PPAP records on page 299.

3 Click the **Save** button.

After you specify the information in the PPAP header, build the approval plan using the tabs.

Adding submission warrant information

Before you can assign responsibility for submission warrant information, you must first create the PPAP master record.

See Adding PPAP Master Records on page 282.

Use the Submission Warrant tab to assign responsibility for preparing and submitting the warrant. To assign responsibility:

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 In the PPAP ID field, specify the ID of the approval process record.
3 Click the **Submission Warrant** tab.
4 In the tab, specify who is responsible for preparing the submission warrant.
   - To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact responsible for the submission warrant in the **Contact No** field.
   - To specify a customer, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the submission warrant in the **Contact No** field.
5 In the **Due Date** field, specify the date the warrant is due to be submitted.
6 To specify the details of the warrant, click **Submission Warrant**.
   See Adding submission warrant details on page 283.

Adding submission warrant details

Use Part Submission Warrant Maintenance to specify the details of the submission warrant.

1 Select **Documentation > PPAP > PPAP Maintenance**.

2 In the PPAP ID field, specify the ID of the approval process record.

3 Click the **Submission Warrant** tab.

4 Click the **Submission Warrant** button.

5 Click the **Part One** tab.

6 Click the **General** tab. Use the General tab to specify basic information about the submission warrant. The Product ID is inserted in the Org Part ID field. The description of the product is inserted in the Part Name field. Specify this information:

Safety and/or Government Regulation
If you are submitting this warrant to comply with safety or government regulations, select this check box. If you the warrant submission is not related to safety or government regulations, clear this check box.

Eng Drawing Change
Specify the change level of the engineering drawing described in this submission warrant.

Dated
Specify the date of the engineering drawing change.

Shown On Drawing Number
If a drawing number is specified for the product in Product Maintenance, the number is inserted. You can specify a different drawing number in this field.

PO No
If applicable, specify the customer's purchase order ID for this product.

Weight (kg)
Specify the weight of the product in kilograms.

7 Click the **Organization** tab. Use this tab to specify information about the supplier of this product. The supplier is usually your company. Specify this information:

Supplier Code
If applicable, specify the code that indicates where this product was manufactured.

Supplier Name
Specify the name of the supplier who manufactured the product. The name of your company as specified in Application Global Maintenance is inserted by default.

Address
Specify the street address of the supplier. The address of your company as specified in Application Global Maintenance is inserted by default.

City/Region/Zip/Country
Specify the city, state, zipcode and country of the supplier. The information for your company as specified in Application Global Maintenance is inserted by default.

8 Click the **Customer** tab. Use this tab to specify information about the customer to whom you are submitting this warrant. Specify this information:

Customer Name/Division
Specify the ID of the customer to whom you are submitting this warrant.

Contact No
Specify the contact number of the individual at your customer site to whom you are submitting this warrant.

Application
Specify how this product is used by the customer. For example, you can enter a car model, or a component of a car such as transmission. This field is most commonly used for automotive customers.

Record ID
Specify the record ID for this submission warrant.

Customer Part Information
The product name and current revision level that the customer uses for this product are inserted. This information is specified in Customer Maintenance.

9 Click the **Materials Reporting** tab. Use this tab to specify information about the materials used in the product. Specify this information:

Has customer-required Substances of concern information been reported?
If the customer requires you to report whether certain substances have been used in the product, select Yes if you have reported the substances. Select No if you have not reported the substances of concern or if the customer does not require you to report any substances.

Are polymeric parts identified with proper ISO markings?
If your product contains plastic parts, and these parts are properly labeled with ISO markings, select Yes. If your product does not contain plastic parts, or the plastic parts are not labeled with ISO markings, select No.

Submitted by IMDS or other Customer Format
Use this field to specify the format you use to report the materials in your product. You can also use this field to list the materials used in your product.

10 Click the **Reason for Submission** tab. Use this tab to identify the reasons you are submitting this part for approval. Select one or more of these check boxes:

Initial Submission
Select this check box if this submission is the first submission of the product to the customer.

Engineering Change
Select this check box if this submission is the result of a product engineering change.

Tooling: Transfer, Replacement, Refurbishment, or Additional
Select this check box if this submission is the result of a change in product production tooling.

Correction of Discrepancy
Select this check box if this submission is the result of a discrepancy that required correction.

Tooling Inactive > than 1 year
Select this check box if this submission is the result of product tooling inactivity for a period of more than one year.

Change to Optional Construction or Material
Select this check box if this submission is the result of a change to an optional construction or material.

Sub-Supplier or Material Source Change
Select this check box if this submission is the result of a sub-supplier or material source change.

Change in Part Processing
Select this check box if this submission is the result of a change in the way you process the part.

Parts Produced at Additional Location
Select this check box if this submission is the result of a change in the manufacturing location of the part.

Other
Select this check box if this submission is the result of a change not described by the other check boxes. Specify a description of the change in the field.

11 Click the **Requested Submission Level** tab. Use this tab to specify the submission level of this warrant. Click one of these options:

Level 1
Click this option if you are submitting the warrant and any required appearance approval reports.

Level 2
Click this option if you are submitting the warrant with product samples and minimal supporting information.

Level 3
Click this option if you are submitting the warrant with product samples and full supporting information.

Level 4
Click this option if you are submitting the warrant and any customer-defined requirements.

Level 5
Click this option if you are submitting the warrant, product samples, and the supporting information is reviewed by the customer at the customer site.

12 Click the **Submission Results** tab. Use this tab to specify the results of the part approval process. Specify this information:

Submission Results
In this section, specify the components of the submission and whether these components met your customer's requirements. Select from these check boxes:

Dimensional Requirements
Select this check box if the product's dimensions are submitted for approval.

Result Appearance
Select this check box if the product's appearance parameters are submitted for approval.

Material and Functional Tests
Select this option if the product underwent material and functional tests.

Statistical Process Package
Select this check box if you collected any statistical information during the part approval process.

These results meet all design requirements
Specify the results of the submitted items. If all submitted product meets all design requirements, click Yes. If the submitted product does not meet all design requirements, click No. If you click No, specify the reason for non-compliance in the Explanation/Comments field.

Mold/Cavity/Production Process
Specify the process used to manufacture the product samples.

13 Click the **Declaration** tab. Use this tab to specify the number of samples produced and complete the warranty statement. Specify this information:

Production Rate/Hours
Specify the number of parts produced and the number of hour it took to produce them. After you specify the production rate, the values you specify are inserted in the warranty statement.

Is each customer tool properly tagged and numbered?
If your customer required you to tag and number the tools used in the manufacture of the product, and you have properly tagged the tools, select Yes. If your customer does not require you to tag and number the tools used in the manufacture of the product, or you have not properly tagged the tools, select No.

Explanation/Comments
Use this field to specify any deviation from the warranty statement or any other comments.

14 Click the **Save** button.

Adding design records

Use the Design Records tab to attach the design documents for the product. The product you are submitting for approval should conform to the design records. Also use the Design Records tab to specify the individual responsible for the documents.

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Open the PPAP record to which you are attaching design documents.
3 Click the **Design Records** tab.
4 Specify this information:

Assigned To
Specify who is responsible for the design records.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the design documents in the Contact No field.

- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the design documents in the Contact No field.

Due Date
Specify the date that the design records must be complete.

Closed Date
If you have received the final version of the design records, specify the date you received the records. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 Use the table to specify the IDs and descriptions of the design records. To add a row, click in the table and then click the New button. Specify this information:

Design ID
Specify an identification code for the design document.

Description
Specify a description of the design document.

6 To attach a document, select the row in the design records table, and then click the Documents button.
7 Link or embed the document.
8 After you finish attaching documents, close the Attached Documents form.
9 In PPAP Maintenance, click the **Save** button.

Adding checking aids

Use the Checking Aids tab to list devices used specifically for verifying that a part meets its standards.

To specify information on this tab, you must define a product ID to use as the device drawing in Product Maintenance.

See Adding products on page 171.

You must also define the device used as a checking aid in Device Maintenance. When you set up the checking aid in device maintenance, use the Trend Info tab to specify the product ID you created to use as the device drawing.

See Adding devices on page 308.

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Open the PPAP record to which you are attaching design documents.
3 Click the **Checking Aids** tab.
4 Specify this information:

Assigned To
Specify who is responsible for the checking aids:
- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.

- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact responsible for the checking aids in the **Contact No** field.
- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the checking aids in the **Contact No** field.

Due Date
Specify the date by which the checking aids must be identified.

Closed Date
If you have identified all checking aids, specify the date that you completed this portion of the approval process. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 In the table, specify the devices to use as checking aids. Specify this information:

Device ID
Specify the device to use as the checking aid. When you specify an ID, the device name is inserted in the Device Name field.

Device Drawing
Specify the product to use as the device drawing. When you select the product, the current revision level and issue date for the product is inserted. You can edit the revision level and issue date.

6 Click the **Save** button.

Adding process flow charts

Use the Process Flow Charts tab to attach the process flow charts you use to manufacture the product to the PPAP record.

Before you can attach a document to the Process Flow Charts tab, you must define the document in Document Maintenance.

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Open the PPAP record to which you are attaching process flow charts.
3 Click the **Process Flow Charts** tab.
4 Specify this information:

Assigned To
Specify who is responsible for the process flow charts.
- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the design documents in the Contact No field.
- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the design documents in the Contact No field.

Due Date
Specify the date that the process flow charts must be complete.

Closed Date
If you have received the final version of the process flow charts, specify the date you received the records. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 Use the table to specify information about the process flow documents. To add a row to the table, click in the table and then click the New button. Specify this information:

Flow ID
Specify an identification code for the process flow.

Document ID
Specify the ID of the system document to attach. After you specify an ID, the details from the document ID record are inserted.

6 Click the **Save** button.

Adding appearance approvals

Use the Appearance Approval tab to define any special color, texture, and other appearance qualities that are subject to approval.

To define appearance information:

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Open the PPAP record to which you are attaching process flow charts.
3 Click the **Appearance Approvals** tab.
4 Specify this information:

Assigned To

Specify who is responsible for the appearance approval information.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the appearance approval information in the Contact No field.
- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the appearance approval information in the Contact No field.

Due Date
Specify the date that the appearance approvals must be complete.

Closed Date
If you have received the final version of the appearance approvals, specify the date you received the appearance approvals. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 Click the **Appearance Approval** button.

6 Information about the part is inserted in the Part Information section. Specify this information:

Customer ID
Specify the ID of the customer who is requiring part approval.

Contact ID
Specify the ID of the customer contact with whom you are working on the approval.

7 In the Reason for Submission section, specify why you are submitting the appearance approval. Select one or more of these check boxes:

Part Submission Warrant
Select Part Submission Warrant if you are submitting the request for appearance approval in conjunction with a Part Submission Warrant.

Pre Texture
Select this check box if you are submitting the request for appearance approval before beginning any surface treatments.

Special Sample
Select this check box if you are submitting a special sample for the customer€™s review.

First Production Shipment
Select this check box if you are sending a sample of your first production run for review.

Re-Submission
Select this check box if you are resubmitting a sample for review.

Engineering Change
Select this check box if you are submitting a sample that has been changed due to an engineering request.

Other
Select this check box if this submission is the result of a change not described by the other selections.

8 In the Appearance Evaluation section, specify any data applicable to the sample's appearance.

9 In the Comments section, specify any additional information about the part's appearance or the approval process.

10 Click the Color Evaluation tab. Use the Color Evaluation tab to specify the differences in color between the part sample you are submitting for approval and the color standard.

11 Specify this information:

Color Suffix
Specify the ID for the color.

DL*
Specify the difference in lightness compared to the sample.

Da*
Specify the difference in red/green value compared to the sample.

Db*
Specify the difference in yellow/blue value compared to the sample.

DE
Specify the total difference in color.

CMC
Specify the difference in color using the CMC calculation.

Master Number
Specify the ID for the master against which you are comparing the sample.

Master Date
Specify the date that the master was approved for use.

Material Type
Specify the type of material used. For example, specify the surface material and the substrate.

Material Source
Specify the manufacturer of the material type.

Color Suffix Shipping
Specify the ID for the color.

12 Click the **Save** button.

Viewing product change requests

Use this tab to view product change requests for the part you are submitting for approval. You can also specify who is responsible for managing the change requests for purposes of the PPAP. You cannot edit any of the change requests on this tab.

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Open the PPAP record for which you are viewing product change requests.
3 Click the **Product Change Requests** tab.
4 Specify this information:

Assigned To
Specify who is responsible for the product change request information.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact responsible for the product change request information in the **Contact No** field.
- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact responsible for the product change request information in the **Contact No** field.

Due Date
Specify the date that the product change requests must be processed.

Closed Date
If you have completed the product change requests process for purposes of this PPAP, specify the date you completed the process. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 In the Change Requests section, all product change requests submitted for the product are listed. This information about each change request is displayed:

Number
The ID of the change request is displayed.

Request Date
The date on which the change request was issued is displayed.

Assigned To
The person to whom the change request was assigned is displayed.

Due Date
The date by which a decision on the change request is due is displayed.

Characteristic No
The product characteristic specified in the change request is displayed.

Change Type
The change type code specified in the change request is displayed.

Change Reason
The change reason code specified in the change request is displayed.

Priority
The priority code specified in the change request is displayed.

6 Click the **Save** button

Adding equipment and tooling information

Use the Equipment/Tooling tab to specify the pieces of equipment or tools used to manufacture the production part. Before you can add a piece of equipment or a tool to this tab, the piece of equipment must exist in your database.

See Adding Equipment Records on page 360.

To specify the pieces of equipment or tools used to manufacture the production part:

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Open the PPAP record to which you are attaching equipment or tools.
3 Click the **Equipment/Tooling** tab.

4 Specify this information:

Assigned To
Specify who is responsible for gathering the equipment or tooling information.
- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the equipment or tooling information in the Contact No field.
- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the equipment or tooling information in the Contact No field.

Due Date
Specify the date that the equipment or tooling information is due.

Closed Date
If you have gathered all equipment and tooling information for this PPAP, specify the date you completed the process. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 In the Equipment / Tooling section, specify the ID of the piece of equipment or tool used to manufacture the production part. After you select an equipment ID, information about the product as defined in Product Maintenance is inserted in the table.

6 Click the **Save** button.

Adding control plans

Use the Control Plans tab to list the control plans used in conjunction with manufacturing the production part. Set up control plans in Control Plan Maintenance.

1 Select **Documentation > PPAP > PPAP Maintenance**.

2 Open the PPAP record to which you are attaching control plans.

3 Click the **Control Plans** tab.

4 Specify this information:

Assigned To
Specify who is responsible for gathering the control plans:
- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the control plans in the Contact No field.
- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the control plans in the Contact No field.

Due Date
Specify the date that the control plan information is due.

Closed Date
If you have gathered all control plan information for this PPAP, specify the date you completed the process. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 In the Control Plans section, specify the IDs of the control plans used to manufacture the production part. After you select a control plan ID, information about the product as defined in Control Plan Maintenance is inserted in the table.
6 Click the **Save** button.

Adding sample parts

Use the Sample Parts tab to record the samples you are sending to your customer.

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Open the PPAP record to which you are attaching control plans.
3 Click the **Sample Parts** tab.
4 Specify this information:

Assigned To
Specify who is responsible for gathering the sample parts.
- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the sample parts in the Contact No field.
- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the sample parts in the Contact No field.

Due Date
Specify the date that the sample parts are due.

Closed Date
If you have gathered all sample parts for this PPAP, specify the date you completed the process. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 In the Sample Parts Maintenance section, specify identifying information for each sample. Specify this information:

Major Location
Specify a major location code. You can specify an actual location for the part, such as a warehouse, or any other identifying information your customer requires. After you specify the major location code, the description of the code is inserted in the Description field.

Minor Location
Specify a minor location code. You can specify an actual location for the part, such as an area within a warehouse, or any other identifying information your customer requires. After you specify the minor location code, the description of the code is inserted in the Description field.

Comments
Specify additional comments about the sample part. To view a larger comments dialog, right-click in the Comments field and select **Details**.

6 Click the **Save** button.

Adding test results

Use the Test Results tab to list the results of the product inspections conducted on the sample parts. The product inspections ensure that the sample parts meet your customer's requirements.

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Open the PPAP record to which you are attaching control plans.
3 Click the **Test Results** tab.
4 Specify this information:

Assigned To

Specify who is responsible for gathering the product data collection records.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the product data collection records in the Contact No field.
- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the product data collection records in the Contact No field.

Due Date
Specify the date that the product data collection information is due.

Closed Date
If you have gathered all product data collection records for this PPAP, specify the date you completed the process. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 In the Test Results section, list the product data collection IDs related to the sample parts. In the Product Collect ID column, specify the ID of each product data collection record. After you specify an ID, information about the product data collection record is inserted in the table.
6 Click the **Save** button.

Adding FMEAs

Use the FMEAs tab to add failure modes and effects analysis records for the production part to the PPAP record.

1. Select **Documentation > PPAP > PPAP Maintenance**.
2. Open the PPAP record to which you are attaching control plans.
3. Click the **FMEAs** tab.
4. Specify this information:

   Assigned To
   Specify who is responsible for gathering the FMEA records.
   - To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
   - To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the FMEA records in the Contact No field.
   - To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the FMEA records in the Contact No field.

   Due Date
   Specify the date that the FMEA information is due.

   Closed Date
   If you have gathered all FMEA records for this PPAP, specify the date you completed the process. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5. In the FMEA Maintenance section, list the FMEAs related to the production part. In the FMEA Number column, specify the ID of each FMEA record. After you specify an ID, information about the FMEA is inserted in the table.
6. Click the **Save** button.

Adding measurement studies

Use the Measurement Studies tab to record the tests you conducted on your measurement processes and devices. You can add RR ANOVA, RR Attribute, and RR Range studies.

1. Select **Documentation > PPAP > PPAP Maintenance**.
2. Open the PPAP record to which you are attaching control plans.
3. Click the **Measurement Studies** tab.
4. Specify this information:

   Assigned To
   Specify who is responsible for gathering the measurement studies.
   - To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
   - To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the measurement studies in the Contact No field.

- To specify a customer, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the measurement studies in the Contact No field.

Due Date
Specify the date that the measurement study information is due.

Closed Date
If you have gathered all measurement studies for this PPAP, specify the date you completed the process. If you specify a date in this field, then this portion of the approval process is considered to be complete.

5 Add the measurement studies:
- To add an RR ANOVA study, click the **ANOVA** tab. Then, specify the ID of the RR ANOVA study.
- To add an RR Attribute study, click the **Attribute** tab. Then, specify the ID of the RR Attribute study.
- To add an RR Range study, click the **Range** tab. Then, specify the ID of the RR Range study.

6 Click the **Save** button.

Editing PPAP records

When you edit a PPAP record, you can track the changes you make in the Change History dialog box. After you edit the PPAP record, specify a new Revision or a new Issue Date, and then save the record. You are prompted to add comments.

After you specify comments and click Ok, save the PPAP record.

To view the complete change history for the PPAP record, right-click in PPAP Maintenance and select Change History.

Creating a change history for PPAP records

When you edit a PPAP record, you can track the changes you make in the Change History dialog box.

1 Select **Documentation > PPAP > PPAP Maintenance**.
2 Edit a PPAP record.
3 In the **Revision** field, specify a new revision level. Or, in the **Issue Date** field, update the issue date.
4 Click **Save**.
5 Specify comments about your changes.
6 Click **Save**.

Viewing and editing PPAP change history

When you specify text after you save a PPAP revision, the text is stored in the PPAP Change History form. Use this form to review and edit the change history text.

1. Select **Documentation > PPAP > PPAP Maintenance**.
2. Select the PPAP record.
3. Right-click and select **Change History**. The list of revisions is inserted in the table. To view the text associated with a revision, select the revision in the table.
4. To edit the change history text, click in the text field and edit the text.
   a. Click in the text field and edit the text.
   b. Click **Save** . A date-time stamp that lists the ID of the user who made the change and the date and time the change was made is inserted.
   c. Exit the Change History form.
   d. In the PPAP Maintenance form, click **Save**.

Changing the status of a PPAP record

After you submit the PPAP to your customer, use the Status field in PPAP Maintenance to record your customer's decision. If the customer's decision is final, you can close the PPAP record.

1. Select **Documentation > PPAP > PPAP Maintenance**.
2. Open the PPAP record.
3. In the Status field, specify the customer's decision. Select one of these options:

   Approved
   If the customer approved your submission, select this option. The part is eligible for shipment.

   Rejected
   If the customer rejected your submission, select this option. The part cannot be shipped or used.

   Interim Approval
   If the customer has granted interim approval, select this option. The part can be used for a limited period of time, or a limited quantity of the part can be shipped.

4. If the customer's decision is final, close the record. Specify the date of the final decision in the **Closed Date** field.
5. Click the **Save** button.

PPAP reports

Use the PPAP reports to review information about your PPAP records and to generate the part submission warrant.

Appearance approval

Use this report to print an appearance approval form to submit to your customer. This report shows the information specified in Appearance Approval Maintenance.

Generating the appearance approval report

1. Select **Documentation > PPAP > My Reports**.
2. Click Appearance Approval.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view appearance approval information for a single PPAP record, specify the ID of the PPAP record in the **PPAP ID** field.
   - To view all appearance approvals for a product, specify the ID in the **Product ID** field.
5. Click the **Print Report** button.

Part submission warrant

Use this report to print the part submission warrant to send to your customer. This report includes the information specified in Part Submission Warrant Maintenance.

Generating the part submission warrant report

1. Select **Documentation > PPAP > My Reports**.
2. Click Part Submission Warrant.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view the submission warrant for a single PPAP record, specify the ID of the PPAP record in the **PPAP ID** field.
   - To view all submission warrants for a product, specify the ID in the **Product ID** field.
   - To view submission warrants issued during a particular time period, specify the starting and ending dates in the **Issue Date From** and **Issue Date To** fields.
5. Click the **Print Report** button.

PPAP analysis report

Use this report to analyze information about your PPAP records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of PPAPs for each criterion. For example, if you select Assigned to ID in the Analysis By field, the report displays the percentage of PPAP records assigned to the employee ID you selected.

To be included on the report, a criterion ID must be specified on at least one PPAP. For example, if the employee ID MJONES was not specified on a PPAP record, that PPAP record would not be included on the report.

You can analyze PPAPs based on these criteria:

- Assigned To
- Status

Generating the PPAP analysis report

1. Select **Documentation > PPAP > My Reports**.
2. Click PPAP Analysis.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To analyze PPAPs assigned to a particular employee, specify the ID of the employee in the **Employee ID** field. If you select an employee ID, select Status in the **Analysis Field** field. Otherwise, the report will not show meaningful data.
   - To analyze PPAPs of a particular status, specify the status in the **Status** field. If you select a status, select Employee ID in the **Analysis Field** field. Otherwise, the report will not show meaningful data.
   - To analyze PPAPs due during a particular time period, specify the date range in the **Due Date From** and **Due Date To** fields.
5. In the **Analysis Field** field, specify the criterion to use for the analysis.
6. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8. Click the **Print Report** button.

PPAP comprehensive report

Use this report to print all information specified on the main PPAP form.

Generating the PPAP comprehensive report

1. Select **Documentation > PPAP > My Reports**.
2. Click PPAP Comprehensive.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view the comprehensive information for a single PPAP record, specify the ID of the PPAP record in the **PPAP ID** field.
   - To view comprehensive PPAP information for a product, specify the ID in the **Product ID** field.
5. Click the **Print Report** button.

Chapter 11: Calibration modules

Use the calibration modules to manage the devices that you use in your organization. You can use the modules to document, schedule, and track calibrations for the devices that you use to take measurements and to test equipment. You can also track detailed data for completed calibrations, including the date and time of the calibration, who performed it, and the conditions of the room where the calibration took place. You can design studies to analyze the performance of your devices.

You can use the Jump feature to navigate between related forms.

See Jump feature on page 34.

Tasks are added to employee To Do lists after you create records in these forms:

- Device Maintenance
- Check Out by Product Inspection Plan (kits)
- Device Check In/Out Maintenance

See My To Do list on page 34.

Device types maintenance

Use Device Types Maintenance to categorize your devices. When you assign a device type to a device, the device inherits the characteristics of the device type.

Adding device types

1 Select **Equipment > Calibrate > Device Types**.

2 Specify this information:

Entity ID
Specify the entity that uses this device type. Each device type is associated with a single entity. You cannot share device types among multiple entities.

Type
Specify a device type code. For example, a device type code for a specific type of caliper could be CAL01.

Calibration Standard
Select this check box if devices of this type are used as calibration standards.

Name
Specify the full name for the device type code.

Business Unit
Specify the default business unit. You can change this value when you add a device in Device Maintenance.

3 Click the Calibration tab. Specify how often the devices of this type should be calibrated. Specify this information:

Calibration Due by
Specify how calibration frequency is calculated. Select one of these options:

Days
Select this option if this device type should be calibrated once every x number of days. Choose Days for device types that are subject to error even when not in use.

Usage
Select this option if this device type should be calibrated once after it has been a used a specific number of times. Choose Usage for device types that are subject to wear.

Both
Select this option to calibrate by either measure, days or usage.

Standard Interval
If you selected Days or Both, specify the number of days between calibrations for this device type.

Usage Frequency
If you select Usage or Both, specify the usage frequency code. Usage frequency codes categorize types of usage, such as Hours, Pieces, or Work Orders. Set up usage frequency codes in Frequency maintenance.

Standard Usage Limit
After specifying a usage frequency code, specify a usage limit. For example, if a usage frequency code for a device type is PIECES (meaning calibration occurs once per x number of pieces measured), specify the actual number of pieces this device type can measure before it needs calibration.

Time Estimate
Specify an estimate in hours of how long it typically takes to complete the calibration of devices of this type.

Calibration Procedure
Select the document that contains the calibration procedure for this device type. You can select any document that is attached to the device type record.

Instructions
Specify instructions for performing the calibration.

4 Click the **RR Info** tab. Use the RR Info tab to specify repeatability and reproducibility study information for the device type. Specify this information:

RR Time Estimate
Specify the estimated amount of time in hours it takes to complete a RR Study for devices of this type.

RR Standard Interval
Specify the interval in days between RR studies for devices of this type.

RR Procedure
Select the document that contains the RR procedure for this device type. You can select any document that is attached to the device type record.

Instructions
Specify instructions for completing the RR Study.

5 Click the **Characteristics** tab. Specify the characteristics to measure when calibrating devices of this type. You can maintain characteristic controls for physical appearance, or more specific measurements. Specify this information:

Characteristic No
Leave this field blank. When you save the record, a number is generated by the system.

Name
Specify the full name.

Standard Type
Specify the standard type used when measuring this characteristic. Select one of these options:

Attribute
Select this option if the characteristic must meet a certain criterion. Characteristic attributes are evaluated on a true/false basis.

Variable
Select this option if the characteristic must fall into acceptable range. If you select Variable, specify the acceptable range in the Variable Standard field. You can specify a variable standard in these formats:

Format	Description
[Nominal]+-[#]	Specify the nominal value, then specify +-, then a number or percentage value that represents both the upper and lower specifications. For example, if you specified 100+-5, then the nominal specification is 100. The lower specification is 95. The upper specification is 105. If you specified 100+-10%, then the nominal specification is 100. The lower specification is 90. The upper specification is 100.

Format	Description
[Lower]/[Upper]	Specify the lower and upper limits. For example, if you specified 95/105, the lower specification is 95 and the upper specification is 105. The nominal specification is calculated as the mid-point between the upper and lower specifications. In this example, the nominal specification is 100.
[Nominal]+[Upper]/-[Lower]	Specify the nominal value. Enter +, then specify the upper limit by entering an amount or percentage above the nominal specification. Enter /-, then specify the lower limit by entering an amount or percentage below the nominal specification. For example, if you specified 100 +5/-5, then the nominal specification is 100. The lower specification is 95. The upper specification is 105. If you specified 100+10%/-10%, then the nominal specification is 100. The lower specification is 90. The upper specification is 100.
[#]MAX	If any value up to a certain specification is acceptable, specify the upper specification and then enter MAX. For example, 12MAX indicates that any value up to 12 is acceptable. Any value above 12 is not acceptable.
[#]MIN	If any value including or above a certain specification is acceptable, specify the lower specification and then enter MIN. For example, 14MIN indicates that 14 and any value above 14 is acceptable. Any value below 14 is unacceptable.

After you specify the variable standard, click the **Limits** button to calculate the values of the upper, lower, and nominal specifications.

Units
Specify the unit of measurement for the variable.

Calib Std Device Type
To use a device type as the calibration standard, specify the ID of the device type. If you specify a device type, the Calib Standard Device ID field is unavailable.

Calib Standard Device ID
To use a device as the calibration standard, specify the ID of the device. if you specify a device as the calibration standard, the Calib Std Device Type field is unavailable. All standards must be traceable to the NIST (National Institute of Standards and Technology).

Fixed
To receive a warning when you enter a measurement that falls outside the specified range during calibration, select this check box.

If you clear this check box, you can set the status of the calibration to Passed even if you specify a value that does not meet the standard.

6 Click the **Save** button.

Updating devices with device type information

If you edit a device type, you can update all devices that use the device type when you save the device type record.

1 Select **Equipment > Calibrate > Device Types**.
2 Select the device type.
3 Edit the device type.
4 Click the **Save** button. A message is displayed that prompts you to update the devices assigned to this device type. Specify the information to update:

Device Characteristics
Select this check box to update the measurable characteristics for this device.

Calibration Instructions
Select this check box to update the calibration instructions.

Calibration Document Link
Select this check box to update the document specified in the Calibration Procedure field.

RR Instructions
Select this check box to update the RR Instructions.

RR Info Document Link
Select this check box to update the document specified in the RR Procedure field.

Other Document Links
Select this check box to update all other documents attached to the device type record.

5 Click **Ok**.

Copying device types

You can copy an existing device type to create a new device type.

1 Select **Equipment > Calibrate > Device Types**.
2 Select the device type to copy.

3 Right click and select **Copy Device Type**. Make sure you select Copy Device Type. If you select Copy, a new device type entry is prepared, but only the entity ID is copied.

4 Specify this information:

Copy to Device
Specify the ID of the new device type.

Entity ID
Specify the entity where this device type is used.

5 Select the information to copy

Characteristics
Select this check box to copy the device type characteristics.

Calibration Document Link
Select this check box to copy the document specified in the Calibration Procedure field.

RR Info Document Link
Select this check box to copy the document specified in the RR Procedure field.

Other Document Links
Select this check box to copy all other documents attached to the device type record.

6 Click **Ok**.

Deleting device types

1 Select **Administration > Codes > Device Type**.
2 Select the code.
3 Click the **Delete** button.
4 Click the **Save** button.

Devices

Use Device Maintenance to define the devices you use. You can assign measurable characteristics, provide calibration instructions, specify repeatability and reproducibility information, and list the suppliers who sell you this device. In addition, you can designate a device as the calibration standard for a device type. You can also see at-a-glance if the device has been checked out.

Adding devices

1 Select **Equipment > Calibrate > Device Maintenance**.

2 Specify this information:

Device ID
Specify an ID for this device.

Name
Specify the name of the device.

Device Type
Specify the type of device. After you specify a device, information from the device type record is inserted into the device record. The information from the device type record is noted in this procedure.

Status
Specify the status of this device.

Business Unit
If this device is used primarily by a particular business unit, specify the business unit.

Calibration Std
See Designating devices as calibration standards on page 317.

3 Use the General tab to specify who is responsible for this device, where the device is located, and when the device should be calibrated. Click the **General** tab and specify this information:

Assigned to
Specify who is responsible for this device.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

Major Location
Specify the major location where this device is found.

Minor Location
Specify the minor location where this device is found.

User Defined 1 and User Defined 2
Specify the user defined information required by your company.

Customer ID
Specify the customer who primarily purchases the products you check with this device.

Product ID
Specify the product you primarily check with this device.

Reference
Specify any required reference text.

Last Date
The date that this device was last calibrated is displayed. This field is read-only.

Next Date
Specify the date that this device is next scheduled to be calibrated. After the first successful calibration, this date is calculated based on the calibration interval you specified on the device type record.

The next date and warning interval are used to determine the traffic light setting. This table shows how the traffic light is updated:

Light/Position	Description
Red/Top light emphasized	The calibration is overdue. The current date is greater than the next date.
Yellow/Middle light emphasized	The calibration is due soon. The next date is within the warning interval.
Green/Bottom light emphasized	The calibration is not due. The next date is greater than the current date and does not fall within the warning interval.

Warning Interval
To be warned of an impending calibration, specify a warning interval in days. For example, if you specify 4 in this field, you are warned four days in advance that a calibration is due.

Warning Clock
See Working with the calibration clock on page 318.

4 Use the Calibration tab to specify who is responsible for calibrating the device. You can also specify special calibration intervals. Define the default calibration interval on the device type record. Click the **Calibration** tab, and specify this information:

Calibrated By
Specify who is responsible for calibrating this device.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field. A task is added to the employee's My To Do List. The due date of the task is the value in the **Next Date** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

Calibration Due by
The calibration information from the device's type is inserted. You can override the default information.

This table shows the options for the **Calibration Due by** field:

Option	Description
Days	Select this option if this device should be calibrated once every specified number of days. Choose Days for devices that are subject to error even when not in use.
Usage	Select this option if this device should be calibrated after the specified number of usages. Choose Usage for devices that are subject to wear
Both	

Special Interval
If you selected Days or Both, use this field if the device requires calibration before the standard interval time elapses. Specify a value in days. Select this option to calibrate by either measure, days or usage. If you select Both, the calibration is due when the first interval is reached. For example, if you specify that calibration is due after 7 days or 10 uses, and you use the device 10 times on the third day, then the device is due for calibration. Or, if after 7 days pass you have used the device only once, then the device is due for calibration.

Next Date
The next date that this device is due to be calibrated is displayed. This date is calculated by adding the standard interval or special interval to the date that the device was last calibrated.

Usage Frequency
If you select Usage or Both, specify the usage frequency code for the special interval. Usage frequency codes categorize types of usage, such as Hours, Pieces, or Work Orders.

Special Usage Limit
If you selected Usage or Both, use this field if the device requires calibration before the standard number of usages. This value overrides the standard usage frequency.

Increment Used
Specify the number of times this device has been used. Each time you update this number, the tally of total uses is calculated in the **Has Been Used** field. When the value in the **Select this option to calibrate by either measure,Has Been Used** field equals the value in the **Standard Usage Limit** or **Special Usage Limit** field, the device is ready for calibration.

Incr Times As Of
Specify the date that you last used the device. If you specify a new value in the **Increment Used** field, specify the date that you updated the value in the **Incr Times As Of** field.

Time Estimate
Specify an estimate in hours of how long it typically takes to complete the calibration of devices of this type.

Standard Interval
The standard interval defined on the device type record is displayed.

Last Date
The date that this device was last calibrated is displayed.

Standard Usage Limit
The usage limit defined on the device type record is displayed.

Has Been Used
The number of times this device has been used as of the date specified in the As Of Date field is displayed. Use this number to assess when the next calibration is due.
You can manually specify the number of times the device has been used by entering a value in the Increment Used field. You can also specify the number of times the device has been used when you check the device in after use.

Times As Of
The date that the device was last used is inserted.

Time Estimate
Specify an estimate in hours of how long it typically takes to complete the calibration of this device.

Calibration Procedure
Select the document that contains the calibration procedure for this device. You can select any document that is attached to the device record.

Calibration Instructions
Specify instructions for performing the calibration. The calibration instructions from the device type record are inserted. You can specify additional text for this device.

5 Use the RR Info tab to specify repeatability and reproducibility study information for the device type. Click the **RR Info** tab, and specify this information:

Standard Interval
The standard interval defined on this device's device type record is displayed.

Special Interval
If necessary, specify a special interval for RR studies for this device.

Time Estimate
Specify the estimated amount of time in hours it takes to complete a RR Study for this device.

Last Date
The date the last RR study for this device was conducted is inserted.

Next Date
The date that the next RR study for this device is due is inserted. If you have defined a special interval, this date is calculated by adding the special interval to the date of the last RR study. If no special interval is defined, then this date is calculated by adding the standard interval to the date of the last RR study.

RR Procedure
Select the document that contains the RR procedure for this device. You can select any document that is attached to the device record.

Instructions
Specify instructions for completing the RR Study. The instructions defined on the device type record are inserted. You can specify additional text for this device.

6 Use the Bought From tab to specify information about the supplier who sells you this device. Click the **Bought From** tab and specify this information:

Supplier ID
Specify the ID of the supplier who sells you this device.

Supplier Device ID
Specify the ID that the supplier uses to identify this device.

Supp Dev Name
Specify the name that the supplier uses for this device.

Purchase Price
Specify the amount you paid to purchase this device.

Purchase Date
Specify the date you purchased this device.

Ext. Warranty Date
If you purchased an extended warranty, specify the date this warranty expires.

Manufacturer Name
Specify the name of the manufacturer who made this device.

Model
Specify the model number of this device.

Serial Number
Specify the serial number of this device.

Warranty Date
Specify the date that the standard warranty expires.

Resolution
Specify the smallest increment this device can measure.

Low Range
Specify the lowest measurement this device can take.

High Range
Specify the highest measurement this device can take.

Units
Specify the unit of measure this device uses.

Metric
If this device can make metric measurements, select this check box. If this device cannot make metric measurements, clear this check box.

Digital
If this device is a digital device, select this check box. If this device is an analog device, clear this check box.

7 Use the Characteristics tab to specify the characteristics used to calibrate this device. By default, the characteristics defined in the device type record are inserted in the table. You can specify additional characteristics for this device. Click the **Characteristics** tab, and specify this information:

Characteristic No
Leave this field blank. A number is generated when you save the record.

Name
Specify the full name of the characteristic.

Standard Type

Specify the standard type used when measuring this characteristic. Select one of these options:

Attribute
Select this option if the characteristic must meet a certain criterion. Characteristic attributes are evaluated on a true/false basis.

Variable

Select this option if the characteristic must fall into an acceptable range. If you select Variable, specify the acceptable range in the Variable Standard field. You can specify a variable standard in these formats:

Format	Description
[Nominal]+-[#]	Specify the nominal value, then specify +-, then a number or percentage value that represents both the upper and lower specifications. For example, if you specified 100+-5, then the nominal specification is 100. The lower specification is 95. The upper specification is 105. If you specified 100+-10%, then the nominal specification is 100. The lower specification is 90. The upper specification is 100.
[Lower]/[Upper]	Specify the lower and upper limits. For example, if you specified 95/105, the lower specification is 95 and the upper specification is 105. The nominal specification is calculated as the mid-point between the upper and lower specifications. In this example, the nominal specification is 100.

Format	Description
[Nominal]+[Upper]/-[Lower]	Specify the nominal value. Enter +, then specify the upper limit by entering an amount or percentage above the nominal specification. Enter /-, then specify the lower limit by entering an amount or percentage below the nominal specification. For example, if you specified 100 +5/-5, then the nominal specification is 100. The lower specification is 95. The upper specification is 105. If you specified 100+10%/-10%, then the nominal specification is 100. The lower specification is 90. The upper specification is 100.
[#]MAX	If any value up to a certain specification is acceptable, specify the upper specification and then enter MAX. For example, 12MAX indicates that any value up to 12 is acceptable. Any value above 12 is not acceptable.
[#]MIN	If any value including or above a certain specification is acceptable, specify the lower specification and then enter MIN. For example, 14MIN indicates that 14 and any value above 14 is acceptable. Any value below 14 is unacceptable.

After you specify the variable standard, click the Limits button to calculate the values of the upper, lower, and nominal specifications.

Units
Specify the unit of measurement for the variable.

Calibration Std Device Type
Specify the device type that is used as the calibration standard for this device.

Calibration Std Device ID
Specify the device that is used as the calibration standard. During calibration, the device in the **Device ID** field is compared to the device in the **Calibration Std Device ID** field.

Fixed
To receive a warning when you enter a measurement that falls outside the specified range during calibration, select this check box.

If you clear this check box, you can set the status of the calibration to Passed even if you specify a value that does not meet the standard.

8 Use the Trend Info tab to specify trend information for this device. The trend information fields are user-defined. You can record any information you deem pertinent. Also use the Trend Info tab to specify the products that this device measures, attach device drawings, specify the product

characteristic studies that use this device, and view inspection plans that use this device. Click the **Trend Info** tab, and specify this information:

Reference 2 and Reference 3
Specify the reference information as required by your company.

Ca UD3 through Ca UD8
Specify the calibration user defined information as required by your company.

Equipment
If this device is also a piece of equipment, create the equipment record for the device:

a Right-click in the Equipment field and select **Add**. The Equipment Maintenance form is opened. The site ID and the device ID from Device Maintenance are inserted into the Site ID field and Equipment ID field in Equipment Maintenance.
b Enter a name, type, and status for the equipment.
c Click **Save**.
d Close the Equipment Maintenance form.
e When prompted to use the new equipment ID in the Equipment field in Device Maintenance, click **Yes**.

9 To specify the products that this device measures, click the **Products** button. To use inspection plans to build a list of products, click **Build List from Inspection Plans**. Any inspection plan that uses the device is examined, and the products that are the subject of the inspection plans are inserted in the table. To manually add a product, specify this information:

Entity ID
The entity ID specified on the device record is inserted. You can select any product that the entity uses.

Product ID
Specify the ID of the product that this device can measure. The product name and product type are inserted in the Name and Product Type fields.

Dedicated Device
If this product is only measured by this device, select this check box. If this product can be measured by other devices, clear this check box.

Product Inspection Plan
If the device is used to measure a product characteristic in an inspection plan, then this check box is selected. If this device is not used to measure a product characteristic in an inspection plan, then this check box is cleared. You cannot manually select this check box.

10 To associate product drawings with this device, click the **Device Drawings** button. In the Product ID field, specify the product record to link to this device.

11 To specify the product characteristics to use in tests for this device, click the **Prod Char Studies** button. To use inspection plans to build a list of characteristics, click **Build List from Control Plans**. Any inspection plan that uses the device is examined, and the products and characteristics that are the subject of the inspection plans are inserted in the table. To manually add a product characteristic, specify this information:

Product ID
Specify the product to use in the study.

Char No
Specify the characteristic to use in the study.

Study Type
Specify the study type. Specify R&R to use this characteristic in RR ANOVA studies. Specify Capability to use this characteristic is capability studies.
When you request an RR ANOVA study, a study is performed using the Product ID and characteristic values. The value specified in the Interval (Days) field is added to the study date to determine the Next Date.
If you select Capability, you must specify the Next Date manually.

Next Date
If you selected Capability in the Study Type column, specify the date of the next study. If you selected RR ANOVA, this date is calculated for you.

Interval (Days)
Specify the number of days that elapse between characteristic studies.

Product Control Plan
If the product characteristic was added using the Build List from Control Plans feature, then this check box is selected. If this characteristic was added manually, then this check box is cleared. You cannot manually select this check box.

12 To view product and process inspection plans that use this device, click the **Inspection Plans** button. A list of plans that use this device is displayed.
13 Click the **Save** button.

Designating devices as calibration standards

A calibration standard is a device, such as a gauge block, that other devices are measured against during calibration. The calibration standard is considered the ideal example of the device.

If the device type that you selected for the device is a calibration standard, then the Calibration Standard check box is selected. If the device type that you selected for the device is not a calibration standard, use this procedure to identify the device as a calibration standard.

1 Select **Equipment > Calibrate > Device Maintenance**.
2 Select the device.
3 Select the **Calibration Standard** check box.
4 Click the **Save** button.

Use devices designated as calibration standards on the Characteristics tab in Device Maintenance. For each characteristic, specify the calibration standard.

Changing the device type

If you change the device type on a device record, you are prompted to update information on the device record with the information on the device type record.

1 Select **Equipment > Calibrate > Device Maintenance**.
2 Select the device.
3 In the Device Type field, change the device type.
4 Click the **Save** button.
5 Select the information to update. For the check boxes you select, the information on the device record will be overwritten with the information on the device type record.

Device Characteristics
Select this check box to update the measurable characteristics for this device.

Calibration Instructions
Select this check box to update the calibration instructions.

Calibration Document Link
Select this check box to update the document specified in the Calibration Procedure field.

RR Instructions
Select this check box to update the RR Instructions.

RR Info Document Link
Select this check box to update the document specified in the RR Procedure field.

Other Document Links
Select this check box to update all other documents attached to the device type record.

6 Click **Ok**.
7 Click the **Save** button.

Working with the calibration clock

If a device is not in use, you can stop the calibration clock. For example, presume you calibrate a device after every 10 days of use, and the last calibration date is April 15. You did not use the device on April 17, April 18, and April 19. The setting you choose for the calibration clock determines when the device is next calibrated. If you do not stop the calibration clock, then the device is due for calibration on April 25th. If you stop the calibration clock when the device is not in use, and restart the clock when you begin to use the device again on April 19th, then the next calibration date is April 28th.

1 Select **Equipment > Calibrate > Device Maintenance**.
2 Select the device.
3 On the General tab, click the **Clock** button.
4 Specify this information:

Stop the Clock Switch
To activate the clock feature, specify On. The remaining fields in the dialog become available. To deactivate the clock feature, specify Off. The setting you specify in this field only applies to all of your devices.

Clock Status
Specify Started if the calibration clock is running. Specify Stopped if the calibration clock is not running. This setting applies only to the device you selected in Device Maintenance.

Stop Clock Date
If you specified Stopped in the **Clock Status** field, specify the date that you stopped the clock.

Days Remaining
If you specified Stopped in the **Clock Status** field, the number of days remaining before calibration of this device is due is inserted.

Usage Remaining
If you specified Stopped in the **Clock Status** field, the number of uses remaining before calibration of this device is due is inserted.

5 Click **Ok**.

Copying devices

You can create a new device record from an existing device record.

1 Select **Equipment > Calibrate > Device Maintenance**.
2 Select the device.
3 Right-click and select **Copy Device**.
4 In the Copy to Device field, specify the ID of the new device.
5 Specify the information to copy:

Characteristics
Select this option to copy the information specified on the Characteristics tab.

Quality Costs
Select this option to copy the quality cost information.

Calibration Document Link
Select this check box to copy the document specified in the Calibration Procedure field.

RR Info Document Link
Select this check box to copy the document specified in the RR Procedure field.

Other Documents
Select this option to copy the documents linked to the device record.

Products
Select this option to copy the information specified in the Products sub-form.

Device Drawings
Select this option to copy the information specified in the Device Drawings sub-form.

Product Char Studies
Select this option to copy the information specified in the Product Char Studies sub-form.

6 Click **Ok**. The new device is created. In addition to the information you selected, the information in the header, the General tab, the Calibration tab, the RR Info tab, and the Trend Info tab is also copied.

Checking devices in and out

Use the Check In/Check Out features to check out devices when you are ready to use them, and to check the devices back in when you are done. When you check out a device, the Checked Out check box is selected for the device in Device Maintenance. This alerts others in your company that the device is in use. You can use the Check In/Check Out features to see who has the device checked out.

When you check in a device, you can specify how many times you used the device. This number you specify when you check the device in is added to the Has Been Used total for the device in Device Maintenance. You can use this information to determine when the device is next due to be calibrated.

You can check a device in or out individually, or you can check in or check out devices by product inspection plan. If you choose to check devices in or out by product inspection plan, the devices specified on the product characteristic inspection plans are inserted in the check out table. You can choose which of the devices to check out.

Check out by product inspection plan

Use this form to check out all of the devices used to inspect a product. When you select an inspection plan in this form, all of the devices defined for the characteristics in the plan are inserted in the table on the form. You can then select which of these devices to check out.

Checking devices out by inspection plan

1 Select **Equipment > Calibrate > Check In/Check Out > Check Out by Product Inspection Plan (kits)**.
2 Specify this information:

Site ID
Specify the ID of the site where the devices are used.

Inspection Plan ID
Specify the ID of the inspection plan whose devices you are checking out. After you select an inspection plan, this information is inserted:

Product ID
The product evaluated in the inspection plan is displayed.

Operation Number
The operation number of the inspection plan is displayed.

Made By
The made by ID of the inspection plan is displayed.

Checked Out By
Specify the ID of the employee who is checking out these devices. The individual checking out the devices can be the person who is using the devices, or the individual can check the devices out on behalf of another employee, customer, or supplier.

A task is added to the employee's My To Do List. The due date of the task is the date in the **Due Back Date** field. The task is removed from the list when the devices are checked in.

Check Out Date
Specify the date you are checking out these devices.

Due Back Date
Specify the date these devices should be checked in.

Checked Out To

Specify who is using these devices.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact in the Contact No field.

Reference 1 and Reference 2
Specify the reference information required by your company.

User Defined 9
Specify the user-defined information required by your company.

Comments
Specify any additional information about this check out.

3 In the table, specify which devices to check out. The devices used in the product inspection plan are inserted. You can insert additional devices.

If the device is available, the Check Out check box is selected. Clear the check box if you do not want to check the device out.

If the device is not available, the Check Out check box is cleared. You cannot check out a device that has already been checked out.

4 Click the **Save** button. A message is displayed that states that the device is now checked out.

Check in by product inspection plan

Use this form to check in all of the devices used to inspect a product. Before you can check in devices, you must first check them out.

Checking in devices by product inspection plan

1 Select **Equipment > Calibrate > Check In/Check Out > Check In By Product Inspection Plan (Kits)**.

2 In the Inspection Plan ID field, specify the inspection plan whose devices you are checking in. This information about the inspection plan and the check out record is displayed:

Product ID
The product evaluated in the inspection plan is displayed.

Operation Number
The operation number of the inspection plan is displayed.

Made By
The individual who created the inspection plan is displayed.

Checked Out By
The ID of the employee who checked out the devices is displayed.

Check Out Date
The date the devices were checked out is displayed.

Due Back Date
The date these devices were due to be checked in is displayed.

Checked Out To
The name of the individual who is using the devices is displayed.

Reference 1 and Reference 2
The reference information is displayed.

User Defined 9
The user-defined information is displayed.

Comments
Any additional comments about the check out record are displayed.

3 Specify this information:

Check In By
Specify the ID of the employee who is checking in the devices.

Check In Date
Specify the date that the devices are checked in.

Increment Used
Specify how many times the devices were used. This number you specify is added to the Has Been Used total for the devices in Device Maintenance.

4 In the table, select the **Checked In** check box for each device you are checking in.
5 Click **Save**.
6 If the Update Device after Calibration and Check In check box is selected for the site in Site Maintenance, you are prompted to update additional information about the device.

Check in/check out by individual device

Use this form to check in or check out a single device.

When you check in a device, you can specify how many times you used the device. This number you specify when you check the device in is added to the Has Been Used total for the device in Device Maintenance. You can use this information to determine when the device is next due to be calibrated.

If the Update Device after Calibration and Check In check box is selected for the site, you can update location and other information about the device when you check it out or check it in.

See Site Maintenance on page 59.

Checking out a device

To check out a device:

1 Select **Equipment > Calibrate > Check In/Check Out > Device Check In/Out Maintenance**.
2 Specify this information:

Site ID
Specify the ID of the site where the device is used. When you select a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Business Unit
Specify the business unit where this device is used.

Device ID
Specify the ID of the device you are checking out. After you select a device, the check in/check out history is displayed in the table, and information about the device is inserted in the Device Info section.

Device Info
This information about the device is displayed:

Device Type
The type of device is displayed.

Major Location
The major location defined on the device record is displayed.

Minor Location
The minor location defined on the device record is displayed.

Checked Out By
Specify the ID of the employee who is checking out this device.

A task is added to the employee's My To Do List. The due date of the task is the date in the **Due Back Date** field. The task is removed from the list when the devices are checked in.

Check Out Date
Specify the date this device is being checked out.

Due Back By
Specify the date this device is due to be checked back in.

Reference 1 and Reference 2
Specify reference text as required by your company.

User Defined 9
Specify user-defined information as required by your company.

Comments
Specify any additional information about this device or the check out record.

3 Click the **Save** button.

4 If the Update Device after Calibration and Check In check box is selected for the site in Site Maintenance, you are prompted to update additional information about the device.

Checking in a device

1 Select **Equipment > Calibrate > Check In/Check Out > Device Check In/Out Maintenance**.

2 Specify this information:

Site ID
Specify the ID of the site where the device is used. When you select a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Business Unit
Specify the business unit where this device is used.

Device ID
Specify the ID of the device you are checking out. After you select a device, the check in/check out history is displayed in the table, and information specified on the check out record is inserted.

Device Info
This information about the device is displayed:

Device Type
The type of device is displayed.

Major Location
The major location defined on the device record is displayed.

Minor Location
The minor location defined on the device record is displayed.

Checked Out By
The ID of the employee who is checked out this device is displayed.

Check Out Date
The date this device was checked out is displayed.

Due Back By
The date this device was due to be checked back in is displayed.

Check In By
Specify the ID of the employee who is checking in the devices.

Check In Date
Specify the date that the devices are checked in.

Increment Used
Specify how many times the devices were used. This number you specify is added to the Has Been Used total for the device in Device Maintenance.

Reference 1 and Reference 2
The information specified on the check out record is displayed. Edit this information if necessary.

User Defined 9
The information specified on the check out record is displayed. Edit this information if necessary.

Comments
The comments specified on the check out record are displayed. Edit these comments or add additional information if necessary.

3 Click the **Save** button.

4 If the Update Device after Calibration and Check In check box is selected for the site in Site Maintenance, you are prompted to update additional information about the device.

Updating device information at check in or check out

If the Update Device after Calibration and Check In check box is selected for the site, you can update location and other information about the devices when you check them in.

1 Complete one of these tasks:
   - Select **Equipment > Calibrate > Check In/Out > Device Check In/Out Maintenance**
   - Select **Equipment > Calibrate > Check In/Out > Check In By Product Inspection Plan (Kits)**
   - Select **Equipment > Calibrate > Check In/Out > Device Check In/Out**

2 Check out or check in devices.

3 Specify this information:

Status
Specify the status of this device.

Assigned to section
Specify who is responsible for this device.
- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact responsible for the audit in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact responsible for the audit in the Contact No field.

Major Location
Specify the major location where this device is found.

Minor Location
Specify the minor location where this device is found.

User Defined 1 and User Defined 2
Specify the user defined information required by your company.

Next Date
Specify the date that this device is next scheduled to be calibrated.

4 Click **Ok**.

Calibrations

Use Calibration Maintenance to record information about device calibrations. You can record the results of the calibration measurements and specify the conditions of the room during calibration. If a device fails the calibration, you can create a nonconformance record.

If the Update Device after Calibration and Check In check box is selected for the site, you can update location and other information about the device when it passes calibration.

See Site Maintenance on page 59.

Adding calibration information

To add a calibration record:

1 Select **Equipment > Calibrate > Calibration Maintenance**.

2 Specify this information:

Site ID
Specify the ID of the site where this calibration is being performed. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Calibration ID
Leave this field blank. An ID is generated when you save the record.

Device ID
Specify the ID of the device you are calibrating.

Date
Specify the date you are calibrating this device.

Business Unit
Specify the business unit where you are calibrating this device.

Result
Specify the result of the calibration.

This table shows the options:

Option	Description
Pending	Select this option if the calibration has not started.
Status	Select this option if the calibration is in progress.
Passed	Select this option if the device is calibrated correctly.
Failed	Select this option if the device is not calibrated correctly.

Calibrated By

Specify who is calibrating this device:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact in the Contact No field.

3 After you select a device ID, this information is displayed in the Current Device Master field:

Device Type
The type of device is displayed.

Status
The current status of the device is displayed.

Procedure
Click the procedure button to view detailed information about calibrating this device.

Std Interval
The standard interval between calibrations is displayed.

Spl Interval
The special interval between calibrations is displayed.

Next Date
The date that the next calibration is due is displayed.

Calibration Procedure/Device Documents/Device Type Documents
To view documents associated with the device, select the type of document to view and then click View. To view the calibration procedure document attached to the device, select Calibration Procedure. To view the documents attached to the device record, select Device Documents. To view the documents attached to the device type record, select Device Type Documents.

4 Use the Characteristics tab to specify the calibration measurements for each device characteristic. The characteristics tab displays the characteristics for the device. For variable characteristics, the variable standard is displayed. For both variable and attribute characteristics, the device specified as the calibration standard is displayed. Click the **Characteristics** tab to specify information for each characteristic. Perform one of these steps:

- Specify this information for variable characteristics:

  Var Actual
  Specify the measurement taken for this characteristic.

  Var Adjustment
  If the actual measurement did not meet the specification and required adjustment, specify the measurement for this characteristic after the adjustment was made.

  Calib Std Device Type
  Optionally, specify the device type to use as the calibration standard. You can select any device type designated as calibration standard on the device type record.

  Calib Standard Device ID
  Specify the device to use as the calibration standard. You can select any device designated as calibration standard on the device record. If you selected a Calib Std Device Type, then the device ID that you select must have the device type that you specified in the Calib Std Device Type field.

- Specify this information for attribute characteristics:

  Att Actual
  Specify the actual result for this characteristic. This table shows the options:

Option	Description
Pending	Select this option of the result has not yet been determined.
Yes	Select this option if the characteristic has the specified attribute.
No	Select this option if the characteristic does not have the specified attribute.

Att Adjustment
If the characteristic did not have the attribute and an adjustment was required, specify the result for this characteristic after the adjustment was made. This table shows the options:

Option	Description
Pending	Select this option of the result has not yet been determined.
Yes	Select this option if the characteristic has the specified attribute.
No	Select this option if the characteristic does not have the specified attribute.

Characteristic Name
The name of the characteristic from the device record is displayed.

If a characteristic is a fixed characteristic, the results you specify in the Var Actual and Att Actual fields must meet the criteria specified for the characteristic. For variable characteristics, the measurement must fall within the characteristic standard. For attribute characteristics, the result must be yes. If a characteristic does not meet the criteria, a message is displayed asking you if you want to change the calibration record status to Failed. Click **Yes** to set the status to Failed. Click **No** if you do not want to set the status to failed.

If the characteristic is not set to a fixed specification, a characteristic outside the specified range will not prompt the failed message.

5 Use the Room Conditions tab to specify the conditions under which the device was measured. Click the **Room Conditions** tab and specify this information:

Temperature
Specify the air temperature.

Temperature Units
Specify the unit used to measure the temperature.

Humidity
Specify the humidity percentage.

6 Use the **Comments** tab to specify any additional information about the calibration. Click the Comments tab and specify the information as necessary.

7 Click **Save**.

8 If the device failed the calibration, you are prompted to create a nonconformance record. Click Yes to create the record.

Posting nonconformance records for failed calibrations

If you set the status of a calibration to Failed, you are prompted to create a nonconformance record for the calibration. After you save the failed calibration, click Yes to begin entering information for the nonconformance record.

1 Select **Equipment > Calibrate > Calibration Maintenance**.
2 Specify calibration information that results in a failure.
3 Click **Save**.
4 In the dialog, click **Yes**.
5 Specify this information:

Site ID
Specify the site where you are posting the nonconformance record. After you select a site, the ID of the site's parent entity is inserted in the Entity ID field.

Post to NCM
Leave this field blank. An ID based on your NCM numbering scheme is generated when you save the record.

NCM Type
Specify the type of NCM.

Subject
Specify the subject of the NCM.

Assigned To
Specify the employee who is responsible for resolving the NCM record.

Checked By
Specify the individual who verified the nonconformance. The ID you specified in the Calibrated By section in the calibration record is inserted by default. You can change this value.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact in the Contact No field.

Reported By
Specify the individual who reported the nonconformance. The ID you specified in the Calibrated By section in the calibration record is inserted by default. You can change this value.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.

- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact in the Contact No field.

Location
Specify where this nonconformance was found.

Nonconformance Description
This text is inserted: "The following device failed Calibration ID [ID] (as recorded in IQM CALIBRATE(tm)): [Device ID]," where [ID] is the ID of the calibration record and [Device ID] is the ID of the device. You can edit this text, or add more information.

6 Complete one of these steps:
- Click **Post to NCM** to post the record to Nonconformance Maintenance.
- Click **Post to NCM and E-mail** to post the record to Nonconformance Maintenance and e-mail notification. If you select this option, specify the employee IDs and e-mail addresses of the individuals who should receive notification of the NCM record.

7 To view the nonconformance record, on the calibration record click the **Nonconformance** tab. Then, click the **Nonconformance** button.

Updating device records after successful calibrations

If the Update Device after Calibration and Check In check box is selected for the site, you can update location and other information about the device after the device passes the calibration.

See Site Maintenance on page 59.

1 Select **Equipment > Calibrate > Calibration Maintenance**.
2 Specify calibration information that results in a successful calibration.
3 Click **Save**.
4 Specify this information:

Status
Specify the status of this device.

Assigned to section
Specify who is responsible for this device.
- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact in the **Contact No** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact in the **Contact No** field.

Major Location
Specify the major location where this device is found.

Minor Location
Specify the minor location where this device is found.

User Defined 1 and User Defined 2
Specify the user defined information required by your company.

Next Date
Specify the date that this device is next scheduled to be calibrated.

5 Click **Ok**.

Copying calibration records

You can create a new calibration record from an existing record.

1 Select **Equipment > Calibrate > Calibration Maintenance**.
2 Select the record to copy.
3 Right-click and select **Copy Calibration**.
4 In the Copy To Date, specify the date of the new calibration record.
5 Select the information to copy:

Calibration Results
Select this option to copy the characteristic results.

Quality Costs
Select this option to copy the quality cost information.

Calculate Last and Next Date
Select this option to determine the last calibration date and the date of the next calibration.

6 Click **Ok**.

Creating calibration charts

Use the Charts tab in Calibration Maintenance to analyze device characteristics over time. Calibration charts are built by entity. The calibration results for the device in all sites within the entity specified on the header are included in the chart.

To build a chart:

1 Select **Equipment > Calibrate > Calibration Maintenance**.
2 Click the **Charts** tab.
3 Specify this information:

Device ID
Specify the device to use in the charts. If you selected a device ID in the header, the ID is inserted in this field by default. You can select a different device ID.

Char No
Select the characteristic to use in the charts. For XmR and Line charts, you must select a variable characteristic. For a Conformance chart, you can select any characteristic.

From Date and To Date
Specify the date range to use for the chart. To view all results, leave these fields blank.

4 Select the type of chart to generate. Click one of these options:

XmR
Click this option to generate an individual values chart and moving range chart. The individual values chart shows the measurements for each sample taken. The moving range chart shows the range of measurements taken.

Conformance
Click this option to generate a conformance chart. This chart shows what percentage of samples met the characteristic standards.

Line
Click this option to generate a line chart. This chart shows the measurements taken for each sample along with the upper limit and lower limit for the characteristic standard.

5 Click **Generate**.

Bias studies

Use Bias Studies to test the accuracy of your devices.

Setting up bias studies

To set up a bias study:

1 Select **Equipment > Calibrate > Bias Studies**.
2 Specify this information:

Site ID
Specify the ID of the site conducting the study. When you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Bias ID
Leave this field blank. An ID is generated when you save the record.

Device ID
Specify the device that is the subject of this study.

Study Date
Specify the date this study is being conducted.

Study Name
Specify the name of the study.

Reference Value
Specify the standard value for this study. This is the measurement value against which the device will be evaluated. The reference value is the correct value.

Process Variation
Specify the process deviation for this measurement.

Units
Specify the unit of measure for this study.

Business Unit
Specify the business unit that is conducting the study.

3 Click the **Comments** tab and specify any additional information about this study.
4 Click the **Observations** tab.
5 In the Employee ID field, specify the ID of the employee conducting the bias study.
6 Click the **Save** button.

Entering bias study measurements

1 Select **Equipment > Calibrate > Bias Studies**.
2 Specify the study ID.
3 Click the **Observations** tab.
4 Click **Results**.
5 For each sample, specify the measurement taken in the Trial column.
6 Click the **Save** button. The measurements you specify are used to calculate the study results.

Viewing bias study results

After you enter bias study measurements, you can view the results of the study.

1 Select **Equipment > Calibrate > Bias Studies**.
2 Specify the study ID.
3 Click the **Results** tab. This information is displayed:

Observed Average
The average of all measurements taken in the study is displayed.

Bias
The reference value is subtracted from the observed average.

%Bias
The absolute value of the bias is divided by the Process Variation value and multiplied by 100.

Observed Average Formula
The formula used to calculate the observed average is displayed.

Bias
The formula used to calculate the bias is displayed.

%Bias
The formula used to calculate the percentage of bias is displayed.

Linearity studies

Use linearity studies to assess how well a device measures items of various sizes.

Linearity is the difference in the bias values through the expected operating range of the gage. The linearity of the gage is calculated by identifying the slope of the regression line that best fits the bias average versus the reference values, and multiplying the slope by the process variation, or tolerance.

The linearity chart is plotted between the bias and reference values throughout the operating range. The goodness of fit, or R2, of the regression line determines if the bias and reference values have a good linear relationship. If the relationship is not linear, then these factors are possible causes:

- Uncalibrated instrumentation
- Error in minimum master, maximum master, or both
- Worn instrumentation

Setting up linearity studies

1 Select **Equipment > Calibrate > Linearity Studies**.

2 Specify this information:

Site ID
Specify the ID of the site conducting the study. When you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Linearity ID
Leave this field blank. An ID is generated when you save the record.

Device ID
Specify the device that is the subject of this study.

Study Date
Specify the date this study is being conducted.

Trials
Specify the number of measurements to take for each part. You can specify up to 12 trials.

Parts
Specify the number of parts to measure in the study. You can specify up to 5 parts.

Use ADI
Select this check box to collect measurements using an automatic data collection device.

Process Variation
Specify the process deviation for this study.

Study Name
Specify the name of the study.

Business Unit
Specify the business unit that is conducting the study.

3 Click the **Comments** tab and specify any additional information about this study.
4 Click the **Observations** tab.
5 In the Employee ID field, specify the ID of the employee conducting the linearity study.
6 Click the **Save** button.

Entering linearity study measurements

1 Select **Equipment > Calibrate > Linearity Studies**.
2 Specify the linearity ID.
3 Click the **Observations** tab.
4 Click **Results**.
5 A column is created for each part you specified in Linearity Studies. A row is created for each trial you specified. Specify this information:

Ref Value
Specify the reference value for this part. This is the measurement value against which the device will be evaluated.

Trial
For each trial number, specify the actual measurement taken. As you specify trial results, these values are calculated:

Part Average
The total measurement for the part is divided by the total number of trials.

Bias
The part average is subtracted from the reference value.

Range
The lowest trial result is subtracted from the highest trial result.

6 Click the **Save** button.

Viewing linearity charts

After you complete a linearity study, you can view an analysis of the results.

1 Select **Equipment > Calibrate > Linearity Studies**.
2 Specify the linearity ID.
3 Right-click and select **Charts**.
4 View this information:

Device ID
The ID for the device that is the subject of the study is displayed.

Study Date
The date of the study is displayed.

Employee ID
The ID of the employee who conducted the trials is displayed.

Study Name
The name of the study is displayed.

Chart
In the chart, the bias for each part in the study is plotted on the y-axis. The reference value for each part is plotted on the x-axis.

Goodness of Fit
The goodness of fit is calculated.

Pct Linearity
The percentage linearity is calculated.

RR ANOVA studies

Analysis of variance (ANOVA) is a statistical technique that can be used to analyze measurement error and other sources of variability in data. Variance is classified in these categories:

- Parts

- Appraisers
- Interaction between parts and appraisers
- Replication error due to the gage

Use these guidelines to analyze the results of the ANOVA study:

Result	Recommendation
Under 10% error	Measurement system is acceptable
10% to 30% error	Measurement system might be accessible based on application, cost, or both.
Over 30% error	Measurement system needs improvement

Setting up RR ANOVA studies

To set up an RR ANOVA study:

1 Select **Equipment > Calibrate > RR ANOVA Studies**.

2 Specify this information:

Site ID
Specify the ID of the site conducting the study. When you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

RR ANOVA ID
Leave this field blank. An ID based on the auto-numbering scheme is generated when you save the record.

Device ID
Specify the device that is the subject of this study.

Study Date
Specify the date this study is being conducted.

Num of Employees
Specify the number of employees who are taking measurements. You can specify up to four employees. After you specify the number of employees, the appropriate number of Employee tabs becomes available. For example, if you specify 2 in this field, the Employee1 tab and Employee2 tab become available.

Number of Samples
Specify the number of measurements each employee takes.

Number of Trials
Specify the number of measurement trials in each sample.

Study Name
Specify a name for this study.

Product ID
Specify the product that the device is measuring in this study.

Char No
Specify the number of the product characteristic to measure. Specify a variable characteristic.

Variable Standard
After you select a characteristic, the variable standard specified for the characteristic in the product record is displayed. You cannot edit this information. To view detailed information about the variable standard, click **Limits**.

Sigma Factor
The sigma factor you use is displayed. You cannot edit this information. Specify the sigma factor to use in Application Global Maintenance.

Enable ADI
To collect measurements using an automated device, select the Enable ADI check box.

Business Unit
Specify the business unit that is conducting this study.

3 Click the **Comments** tab to specify additional information about this study.
4 Click the **Save** button.

Entering RR ANOVA measurements

1 Select **Equipment > Calibrate > RR ANOVA Studies**.
2 Specify the RR Anova ID.
3 Click the appropriate **Employee** tab.
4 In the Employee ID field, specify your employee ID.
5 Click the **Results** button.
6 For each sample, specify the measurement for each trial. As you enter results, the range for each sample is calculated. In addition, the average of each trial, the average range, and the upper control limit of the range is calculated.
7 Click the **Save** button.

Viewing RR ANOVA study results

After you enter measurements, view the results of the study.

1 Select **Equipment > Calibrate > RR ANOVA Studies**.
2 Specify the RR Anova ID.
3 Click the **Results** tab.
4 To view measurement information, click the **Measurement Unit** tab. This information is displayed:

- Repeatability equipment variance and sigma
- Reproducibility variance and sigma
- Repeatability and Reproducibility variance and sigma
- Part variance and sigma
- Total variance and sigma

The formulas used to calculate these values are displayed on the Formulas tab.

5 To view the percentage tolerance information, click the **% Tolerance Analysis** tab. This information is displayed:
- Percentage equipment variance
- Percentage appraiser variance
- Percentage repeatability and reproducibility

6 To view the percentage process analysis information, click the **% Process Analysis** tab. This information is displayed:
- Percentage equipment variance
- Percentage appraiser variance
- Percentage repeatability and reproducibility
- Percentage part variance

Manually entering RR ANOVA study results

You can override the calculated results on the % Tolerance Analysis and % Process Analysis tabs in RR ANOVA Studies.

1 Select **Equipment > Calibrate > RR ANOVA Studies**.
2 Specify the RR Anova ID.
3 Click the **Results** tab.
4 Click **Enter Results**.
5 Specify new values for % Tolerance Analysis and % Process Analysis information.
6 Click **Ok**. Your new results are displayed in the appropriate fields on the Results sub-tabs. To remove your overrides and recalculate the results based on the collected data, click **Recalculate Results**.

Recalculating manually entered RR ANOVA study results

If you manually entered RR ANOVA study results, use this procedure to replace the manually entered results with the results based on the measurements reported in the study.

1 Select **Equipment > Calibrate > RR ANOVA Studies**.
2 Specify the RR Anova ID.
3 Click the **Results** tab.
4 Click **Enter Results**.

5 Specify new values for % Tolerance Analysis and % Process Analysis information.

6 Click **Ok**. Your new results are displayed in the appropriate fields on the Results sub-tabs. To remove your overrides and recalculate the results based on the collected data, click **Recalculate Results**.

Viewing XbarR charts

Use XbarR charts to chart averages and ranges. An average measures variation between subgroups over time. A range measures variation within subgroups over time. XbarR charts display variable data only.

1 Select **Equipment > Calibrate > RR ANOVA Studies**.

2 Specify the RR Anova ID.

3 Click the **Results** tab.

4 Click **Charts**.

5 Click **XBarR**, and then click **Ok**.

6 This information is displayed in the header:

Study Name
The name of the study is displayed.

Study Date
The date the study was conducted is displayed.

Device ID
The ID of the device that is the subject of the study is displayed.

Employees
The number of employees involved in the study is displayed.

Trials
The number of trials in the study is displayed.

Samples
The number of samples taken per trial is displayed.

Variable Standard
The variable standard for the product characteristic measured is displayed.

7 You can view XBarR information by employee. On each tab, the name of the employee who conducted the study is displayed. The upper chart shows information about the measurement values taken. The lower chart displays information about the range of measurements taken.

Viewing plot by operator charts

Use Plot by Operator charts to view the average measurement taken for each sample by employee.

1. Select **Equipment > Calibrate > RR ANOVA Studies**.
2. Specify the RR Anova ID.
3. Click the **Results** tab.
4. Click **Charts**.
5. Click **Plot by Operator**, and then click **Ok**.
6. This information is displayed in the header:

   Study Name
   The name of the study is displayed.

   Study Date
   The date the study was conducted is displayed.

   Device ID
   The ID of the device that is the subject of the study is displayed.

   Employees
   The number of employees involved in the study is displayed.

   Trials
   The number of trials in the study is displayed.

   Samples
   The number of samples taken per trial is displayed.

   Variable Standard
   The variable standard for the product characteristic measured is displayed.

7. The chart includes one line for each employee. Each line shows the average measurement taken for each sample.

Viewing histograms

Use histograms to view the distribution of measurements taken by employee.

1. Select **Equipment > Calibrate > RR ANOVA Studies**.
2. Specify the RR Anova ID.
3. Click the **Results** tab.
4. Click **Charts**.
5. Click **Histogram**, and then click **Ok**.
6. This information is displayed in the header:

   Study Name
   The name of the study is displayed.

   Study Date
   The date the study was conducted is displayed.

Device ID
The ID of the device that is the subject of the study is displayed.

Employees
The number of employees involved in the study is displayed.

Trials
The number of trials in the study is displayed.

Samples
The number of samples taken per trial is displayed.

Variable Standard
The variable standard for the product characteristic measured is displayed.

7 The charts show the distribution of measurements by each employee. Click the **All Employees** tab to view the information cumulatively.

RR attribute studies

In an attribute gage study, parts are compared to a specific set of limits. If the limits are satisfied, then the parts are accepted. Otherwise, the parts are rejected.

Setting up RR attribute studies

1 Select **Equipment > Calibrate > RR Attribute Studies**.
2 Specify this information:

Site ID
Specify the ID of the site conducting this study. When you select a Site ID, the ID of the site's parent entity is inserted in the Entity ID field.

RR Attribute ID
Leave this field blank. An ID based on your numbering scheme is generated when you save the record.

Device ID
Specify the ID of the device that is the subject of this study.

Study Date
Specify the date of this study.

Study Name
Specify the name of this study.

Business Unit
Specify the business unit conducting this study.

3 Click the **Comments** tab and specify additional information about this study.
4 Click the **Employee1** tab, and then specify the ID of the first employee collecting data for this study in the Employee ID field.
5 Click the **Employee2** tab, and then specify the ID of the second employee collecting data for this study in the Employee ID field.
6 Click the **Save** button.

Entering RR attribute results

1 Select **Equipment > Calibrate > RR Attribute Studies**.
2 Specify the RR attribute ID.
3 Click the appropriate **Employee** tab.
4 Click the **Results** button.
5 For each sample and trial, select the check box if the device has the attribute. Clear the check box if the device does not have the attribute.
6 Click the **Save** button.

Viewing study results

After the employees enter the results for the attribute samples, view the results of the study.

1 Select **Equipment > Calibrate > RR Attribute Studies**.
2 Specify the RR attribute ID.
3 Click the **Results** tab.
4 The attribute results entered by the employees are displayed. If the result is not the same for all four trials of a particular sample, Failed is inserted in the Remark column.

RR range studies

Use RR Range studies to analyze the range of measurements taken by employees using the same device.

Setting up RR range studies

1. Select **Equipment > Calibrate > RR Range Studies**.
2. Specify this information:

   Site ID
   Specify the ID of the site conducting the study. When you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

   Range Study ID
   Leave this field blank. After you save the record, an ID is generated based on the numbering scheme set up for RR Range studies.

   Device ID
   Specify the device that is the subject of this study.

   Date
   Specify the date this study is being conducted.

   Study Name
   Specify a name for this study.

   Process Variation
   Specify the standard deviation for this measurement.

   Business Unit
   Specify the business unit that is conducting this study.

3. Click the **Comments** tab to specify additional information about this study.
4. Click the **Employee1** tab, and then specify the ID of the first employee collecting data for this study in the Employee ID field.
5. Click the **Employee2** tab, and then specify the ID of the second employee collecting data for this study in the Employee ID field.
6. Click the **Save** button.

Entering RR range measurements

1. Select **Equipment > Calibrate > RR Range Studies**.
2. Specify the range study ID.
3. Click the appropriate **Employee** tab.
4. Click **Results**.
5. For each sample, enter the measurement result. As you enter results, the average measurement is calculated.
6. Click **Save**.

Viewing RR range study results

After employees specify device measurements, you can view the results of the study.

To view the results of the study:

1. Select **Equipment > Calibrate > RR Range Studies**.
2. Specify the range study ID.
3. Click the **Results** tab. The measurement results from each employee are displayed, along with the range between each sample. These values are calculated:
   - Average Range
   - R & R
   - %R&R

   The formulas used to calculate these values are displayed next to the values.

Manually entering study results

1. Select **Equipment > Calibrate > RR Range Studies**.
2. Specify the range study ID.
3. Click the **Results** tab.
4. Click **Enter Results**.
5. You are asked to confirm that you want to overwrite the study results. Click **Yes** to continue.
6. After you click Yes, the information from the employee measurements is removed from the tab. The Average Range, R & R, and %R&R fields become available. Specify the results in these fields.
7. Click the **Save** button.

To remove your custom results and replace them with results based on employee measurements, click **Recalculate Results**.

Recalculating RR range study results

If you manually entered RR Range study results, you can remove your manually entered results and replace them with results based on the measurements reported in the study.

To recalculate the results, click **Recalculate Results**. You are notified that your manually entered results will be overwritten. Click **Yes** to overwrite your manually entered results.

Stability studies

Use stability studies to analyze the performance of devices. In a stability study, the same employee uses a device to measure samples at different times. Use the variation in measurement to assess the performance of the device.

After you complete the study, you can generate an Xbar-R chart and an Xbar-S chart. The Xbar portion of both charts shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each date, the average measurement is plotted.

The R chart shows information about the range of measurements taken. The x-axis shows the date that the samples were measured. The y-axis shows the range of values taken. For each date, the difference between the largest and smallest measurements is plotted.

The S chart shows information about the mean of measurements taken. The x-axis shows the date that the samples were measured. The y-axis shows the mean.

Setting up stability studies

1 Select **Equipment > Calibrate > Stability Studies**.

2 In the header, specify this information:

Site ID
Specify the ID of the site that is conducting the stability study. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Stability ID
Leave this field blank. When you save the record, an ID is generated based on the auto-numbering scheme.

Device ID
Specify the ID of the device that is the subject of this study.

Study Date
Specify the date you are conducting this study. The current date is inserted by default. You can specify a different date.

Number of Samples
Specify the number of items to be measured. The default value is 2. You can specify a different value.

Study Name
Specify the full name of this study.

Business Unit
If a particular business unit is conducting this study, specify the ID of the business unit.

3 To specify instructions or general comments, click the **Comments** tab. Enter the text.

4 Click the **Observations** tab.
5 In the Employee ID field, specify the ID of the employee who is taking the measurements.
6 Click the **Save** button.

Entering measurements for stability studies

1 Select **Equipment > Calibrate > Stability Studies**.
2 Specify the stability ID.
3 Click the **Observations** tab.
4 Click **Results**.
5 In the table at the top of the form, specify the date and time the measurements are taken. The current date and time are inserted. Edit the date and time if necessary.
6 In the table at the bottom of the form, specify the measurements for each sample. After you enter measurements, the average measurements, range of measurements, and sum of the measurements are inserted in the table at the top.
7 To enter a second set of measurements, create a new row in the table at the top of the form. Repeat steps 5 and 6.
8 Click the **Save** button.

Generating stability study charts

After you complete the stability study, you can generate stability study charts. You can generate an Xbar-R chart or an Xbar-S chart.

1 Select **Equipment > Calibrate > Stability Studies**.
2 Specify the stability ID.
3 Right-click and select **Charts**.
4 Click the option for the chart to generate.
5 Click **Ok**.

Xbar-R charts

Xbar-R charts show this information:

The upper chart is the Xbar chart. It shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each date, the average measurement is plotted.

The lower chart is the R chart. It displays information about the range of measurements taken. The x-axis shows the date that the samples were measured. The y-axis shows the range of values taken. For each date, the difference between the largest and smallest measurements is plotted.

In addition, the chart shows the upper control limit, the lower control limit, and the center line. To hide any of these lines, click the value in the chart key. For example, to hide the upper control limit line, click UCL in the chart key.

Viewing Xbar-S charts

Xbar-S charts show this information:

The upper chart is the Xbar chart. It shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each date, the average measurement is plotted.

The lower chart is the S chart. It displays information about the mean of measurements taken. The x-axis shows the date that the samples were measured. the y-axis shows the mean of values taken.

In addition, the chart shows the upper control limit, the lower control limit, and the center line. To hide any of these lines, click the value in the chart key. For example, to hide the upper control limit line, click UCL in the chart key.

Copying stability studies

You can create a new stability study from an existing stability study.

1. Select **Equipment > Calibrate > Stability Studies**.
2. Specify the stability study ID to copy.
3. Right-click and select **Copy Stability Study**.
4. A new study is created. All of the information in the form is copied. You must enter new study results.

Calibration reports

Use calibration reports to review information about your devices.

Calibration listing due date

Use this report to view a list of devices due to be calibrated during a date range that you specify. This report shows the entity where the device is used, the device that is due to be calibrated, the device type, the device status, the major and minor locations of the device, the date that the next calibration is due, and the individual responsible for calibrating the device.

Generating the calibration listing due date report

1 Select **Equipment > Calibrate > My Reports**.
2 Click Calibration Listing Due Date
3 Click the entities to include in the report.
4 Specify the information to include in the report:
- To view a particular device, specify the ID of the device in the **Device ID** field.
- To view devices with a particular name, specify the name of the device in the **Device Name** field.
- To view devices in a particular major location, specify the location in the **Major Location** field.
- To view devices in a particular minor location, specify the location in the **Minor Location** field.
- To view devices whose calibrations are assigned to a particular individual, specify the ID of the individual in the **Assigned To** field.
- To view devices whose calibrations are due during a particular date range, specify the date range in the **From Next Date** and **To Next Date** fields.
- To view devices with a particular device type, specify the ID of the device type in the **Device Type** field.
- To view devices with a particular status, select the status in the **Status** field.

5 Specify how to sort the report:

Option	Description
Next Date + Device ID	Select this option to sort the report by calibration due date and then device ID. Use this option to group together all calibrations due on a particular date.
Major Location + Next Date + Device ID	Select this option to sort the report by major location, then calibration due date, then device ID. Use this option to group together all calibrations for a major location.
Minor Location + Next Date + Device ID	Select this option to sort the report by minor location, then calibration due date, then device ID. Use this option to group together all calibrations for a minor location.

6 Click **Print Report**.

Calibration records detail report

Use this report to view detailed information about your device calibrations. This report displays the entity and site that conducted the calibration, the calibration ID, the device that was calibrated, the date the device was calibrated, the individual who calibrated the device, the calibration result, and the characteristics measured in the calibration.

Generating the calibration records detail report

1 Select **Equipment > Calibrate > My Reports**.
2 Click Calibration Records Detail.
3 Click the sites to use for the report.
4 Specify the information to include in the report:
   - To view information for a particular calibration record, specify the ID of the record in the **Calibration ID** field.
   - To view calibration information for a particular device, specify the ID of the device in the **Device ID** field.
   - To view information for devices calibrated by a particular employee, specify the ID of the employee in the **Calibrated By (Employee ID)** field.
   - To view information for devices calibrated by a particular customer, specify the ID of the customer in the **Calibrated By (Customer ID)** field.
   - To view information for devices calibrated by a particular supplier, specify the ID of the supplier in the **Calibrated By (Supplier ID)** field.
   - To view calibrations conducted during a particular time frame, specify the starting and ending dates in the **Calibrate Date From** and **Calibrate Date To** fields.
   - To view calibration records with a particular status, select the appropriate check box in the Result section. You can select more than one check box.
5 Click the **Print Report** button.

Calibration records list

Use this report to view a list of calibration records. This report shows the entity and site that conducted the calibration, the calibration ID, the device that was calibrated, the date the device was calibrated, the individual who calibrated the device, and the calibration result.

Generating the calibration records list report

1 Select **Equipment > Calibrate > My Reports**.
2 Click Calibration Records List.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular calibration record, specify the ID of the record in the **Calibration ID** field.
   - To view calibration information for a particular device, specify the ID of the device in the **Device ID** field.
   - To view information for devices calibrated by a particular employee, specify the ID of the employee in the **Calibrated By (Employee ID)** field.
   - To view information for devices calibrated by a particular customer, specify the ID of the customer in the **Calibrated By (Customer ID)** field.

- To view information for devices calibrated by a particular supplier, specify the ID of the supplier in the **Calibrated By (Supplier ID)** field.
- To view calibrations conducted during a particular time frame, specify the starting and ending dates in the **Calibrate Date From** and **Calibrate Date To** fields.
- To view calibration records with a particular status, select the appropriate check box in the Result section. You can select more than one check box.

5 Click **Print Report**.

Device characteristics detail

Use this report to view detailed information about the characteristics used to calibrate your devices. This report displays the entity associated with the device record, the device ID, device name, device type, current status, the employee responsible for the device, the major location, the minor location, the date of the next calibration. The device characteristics and characteristic standard information are also displayed.

Generating the device characteristics detail report

1 Select **Equipment > Calibrate > My Reports**.

2 Click Device Characteristics Detail.

3 Click the entities to use for the report.

4 Specify the information to include in the report:

- To view characteristics for a particular device, specify the ID of the device in the **Device ID** field or the name of the device in the **Device Name** field.
- To view characteristics for devices located at a particular major location, specify the location ID in the **Major Location** field.
- To view characteristics for devices located at a particular minor location, specify the location ID in the **Minor Location** field.
- To view characteristics for devices assigned to a particular employee, specify the employee ID in the **Assigned To** field.
- To view characteristics for devices of a particular type, specify the type ID in the **Device Type ID** field.
- To view characteristics for devices of a particular status, specify the status in the **Status** field.

5 Specify how to sort the report:

Option	Description
Device ID + Characteristic No	Select this option to sort the report first by device ID and then by characteristic number.
Device Name + Characteristic No	Select this option to sort the report first by device name and then by characteristic number.
Major Location + Device ID + Characteristic No	Select this option to sort the report first by major location, then by device ID, and then by characteristic number.

6 Click the **Print Report** button.

Device type detail

Use this report to view detailed information about your device types. This report displays the entity ID associated with the device type, the device type ID, the device type name, the RR study, the standard interval for the RR study, the RR study instructions, the RR study time estimate, the calibration information, the calibration due by method (usage, days, or both), the standard interval, the usage frequency code, the usage limit, the calibration time estimate, calibration instructions, and characteristics measured in the calibration.

Generating the device type detail report

1 Select **Equipment > Calibrate > My Reports**.
2 Click Device Types Detail.
3 Click the entities to use for the report.
4 Specify the device type to view in the report. Either specify the device type ID in the **Device Type ID** field or the device type name in the **Device Type Name** field.
5 Click the **Print Report** button.

Devices analysis

Use this report to analyze the attributes of your devices. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of devices for each criterion ID. For example, if you select Product ID in the Analysis By field, the report displays the percentage of devices used to measure each product ID. You can see which products have the most device IDs associated with them.

To be included on the report, a criterion ID must be specified on at least one device record. For example, if the product ID 1/4PLATE was not specified on a device record, it will not be included on the report.

You can analyze devices based on these criteria:

- Assigned To
- Customer ID
- Checked Out
- Device Type
- Digital
- Major Location
- Metric
- Minor Location
- Product ID

- Status
- Supplier ID
- User Defined 1
- Units

You can apply an Assigned To, Device Type, and Status filter to the report. When you apply a filter to the report, only devices that match the filter you specify are included in the report. For example, if you specify ACTIVE in the Status field and select Checked Out in the Analysis Field field, then the report would show the percentage of active devices that are checked out.

Generating the devices analysis report

1. Select **Equipment > Calibrate > My Reports**.
2. Click Devices Analysis.
3. Click the entities to use for the report.
4. Specify the information to include in the report:
   - To analyze devices assigned to a particular employee, specify the ID of the employee in the **Assigned To** field.
   - To analyze devices of a particular type, specify the ID of the type in the **Device Type** field.
   - To analyze devices with a particular status, specify the ID of the status in the **Status** field.
5. In the **Analysis Field** field, specify the criterion to use for the analysis.
6. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
7. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
8. Click the **Print Report** button.

Devices check in/out list

Use this report to view a list of devices that have been checked in and checked out. This report displays the entity and site associated with the device, the device ID, device name, individual who checked the device out, the date the device was checked out, the date that the device was due to be checked in, the date the device was checked in, and any reference text specified during check out or check in.

Generating the devices check in/out list

1. Select **Equipment > Calibrate > My Reports**.
2. Click Device Check In/Out List
3. Click the sites to use for the report.
4. Specify the information to include in the report:

- To view information for a particular device, specify the ID of the device in the **Device ID** field.
- To view information for devices checked out a particular employee, specify the ID of the employee in the **Checked Out By** field.
- To view information for devices calibrated by a particular customer, specify the ID of the customer in the **Calibrated By (Customer ID)** field.
- To view information for devices checked out during a particular time period, specify the starting and ending dates in the **Checked Out Date From** and **Checked Out Date To** fields.
- To view information for devices that have been checked out, select the **Yes** check box. To view information for devices that have been checked in, select the **No** check box. You can select more than one check box.

5 Specify how to sort the report:

Option	Description
Device ID + Check Out Date	Select this option to sort the report first by device ID, and then by check out date.
Due Back Date	Select this option to sort the report by Due Back Date. You can use this option to see which devices are overdue for check in.

6 Click the **Print Report** button.

Devices list report

Use this report to view a list of your devices. This report shows the entity ID, device Id, device name, device type, status, major location, minor location, next calibration date, and assigned to information.

Generating the device list report

1 Select **Equipment > Calibrate > My Reports**.

2 Click Devices List.

3 Click the entities for the report.

4 Specify the information to include in the report:

- To view characteristics for a particular device, specify the ID of the device in the **Device ID** field or the name of the device in the **Device Name** field.
- To view characteristics for devices located at a particular major location, specify the location ID in the **Major Location** field.
- To view characteristics for devices located at a particular minor location, specify the location ID in the **Minor Location** field.
- To view characteristics for devices assigned to a particular employee, specify the employee ID in the **Assigned To** field.
- To view devices of a particular type, specify the device type ID in the **Device Type** field.
- To view devices of a particular status, specify the status in the **Status** field.

5 Click **Print Report**.

Chapter 12: Prevent modules

Use the Prevent modules to record information about the manufacturing equipment you use. You can define the preventive maintenance activities you use to keep the equipment in good working order. You can also track the spare parts used to maintain your equipment.

You can use the Jump feature to navigate between related forms.

See Jump feature on page 34.

Tasks are added to employee To Do lists after you create records in these forms:

- Equipment Maintenance
- Equipment Usage
- Work Orders

See My To Do list on page 34.

Equipment types

Use equipment types to classify the equipment that you use. Pieces of equipment with the same equipment type share preventive maintenance activities.

Adding equipment types

1 Select **Equipment > Prevent > Equipment Types**.

2 Specify this information:

Entity ID
Specify the ID of the entity where this equipment type is used. Any site within the entity can use this equipment type.

Equipment Type
Specify an ID for this equipment type.

Name
Specify the name of this equipment type.

Business Unit
Specify the business unit that uses this equipment type.

3 In the PM Activities tab, specify the preventive maintenance activities required to maintain equipment of this type. When you create an equipment record and specify the equipment type, the preventive maintenance activities you define on the equipment type record are inserted into the equipment record. To add a preventive maintenance activity, specify this information:

PM Activity Number
Leave this field blank. A number is generated when you save the record.

PM Activity Name
Specify a name for this PM activity.

Preventive Due by
Specify how preventive maintenance frequency is calculated. Select one of these options:

Days
Select **Days** if this preventive maintenance activity should be performed once every specified number of days.

Usage
Select **Usage** if this preventive maintenance activity should be performed every specified number of uses.

Both
Select **Both** to perform this preventive maintenance activity by either measure, days or usage.

Standard Interval
If you selected Days or Both, specify the number of days that pass between the performance of this preventive maintenance activity. For example, if you specify 14, then you perform this maintenance activity every 14 days.

Warning Interval
If you selected Days or Both, specify when to be warned that this preventive maintenance activity is coming due. Specify the number of days before the next standard interval time period elapses. For example, if you specify 2 in this field, you are warned two days before the standard interval time period elapses. During the warning period, the status is yellow for pieces of equipment of this equipment type.

Usage Frequency
If you select Usage or Both, specify the usage frequency code. Usage frequency codes categorize types of usage, such as Hours, Pieces, or Work Orders. Set up usage frequency codes in Frequency maintenance.

Standard Usage Limit
After specifying a usage frequency code, specify a usage limit. For example, if a usage frequency code for an equipment type is PIECES (meaning preventive maintenance occurs once per x number of pieces manufactured), specify the actual number of pieces this equipment type can manufacture before it needs preventive maintenance.

Warning Limit
If you selected Usage or Both, specify when to be warned that preventive maintenance activity is coming due. Specify the warning limit number of uses in this field. After you use a piece of equipment of this equipment type this many times, the status of the piece of equipment is yellow.

User Defined3
Specify user-defined information as required by your company.

Reference1
Specify reference information as required by your company.

Time Estimate
Specify an estimate in hours of how long it typically takes to complete this preventive maintenance activity.

Manual
Select this check box to manually create preventive maintenance records. Clear this check box to generate the preventive maintenance work order using your ERP system.

Maintained By

In the Maintained By section, specify who is responsible for maintaining this preventive maintenance activity information.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact in the Contact No field.

Instructions
Specify instructions for performing this preventive maintenance activity.

4 Click the **Save** button.

5 To add another preventive maintenance activity for this equipment type, place your cursor in any field in the Preventive Maintenance tab, and then click the **New** button. Add preventive maintenance activity details as specified in step 3.

6 Click the **Save** button.

Updating equipment records with after changing equipment types

If you edit an equipment type record, you can automatically update any equipment record that uses the equipment type.

1 Select **Equipment > Prevent > Equipment Types**.

2 Select the equipment type.

3 Edit the equipment type.
4 Click the **Save** button.
5 A message is displayed that prompts you to update the equipment assigned to this equipment type. Select the information to update:

PM Activities
Select this option to update preventive maintenance activities.

Document Links
Select this option to update the documents attached to the equipment record.

6 Click **Ok**.

Deleting preventive maintenance activities

1 Select **Equipment > Prevent > Equipment Types**.
2 Specify the equipment type.
3 In the **PM Activities** tab, use the arrow buttons next to the PM Activity No field to select the activity delete.
4 Place your cursor in any field on the PM Activities tab, and then click the **Delete** button. Make sure you place your cursor in a field on the tab. If you do not, you could accidentally delete the entire equipment type record instead.
5 Click the **Save** button.

Deleting equipment types

1 Select **Equipment > Prevent > Equipment Types**.
2 Specify the equipment type.
3 Place your cursor in any field in the equipment type header. If you place your cursor in a field on the PM Activities tab, you will delete the PM activity instead.
4 Click the **Save** button.

Copying equipment types

You can copy an existing equipment type to create a new equipment type. To copy an equipment type:

1 Select **Equipment > Prevent > Equipment Types**.
2 Select the equipment type.
3 Place your cursor in any field in the header.
4 Right-click and select **Copy Equipment Type**.
5 Specify this information:

Entity ID
Specify the ID of the entity that uses the new equipment type.

Copy to Equipment Type
Specify the ID of the new equipment type record.

Copy Options
Specify the information to copy. Select from these options:

PM Activities
Select this check box to copy the preventive maintenance activities.

Document Links
Select this check box to copy the documents linked to the equipment type record.

6 Click **Ok**

Equipment

Use Equipment Maintenance to keep records of the equipment you use. You can list the vendors from whom you purchase the equipment, create preventive maintenance activities to keep the equipment in good working order, and list spare parts you may need to repair the equipment.

Before you can create an equipment record, you must first define at least one equipment type.

See Adding equipment types on page 356.

Adding equipment records

1 Select **Equipment > Prevent > Equipment Maintenance**.
2 Specify this information:

Entity ID
Specify the ID of the entity where this piece of equipment is used.

Equipment ID
Specify the ID for this piece of equipment.

Name
Specify the name of this piece of equipment.

Business Unit
Specify the business unit where this piece of equipment is used.

In Use
You cannot select or clear this check box. This check box is selected when a piece of equipment has been "check out" in Equipment Usage. A piece of equipment is considered "checked out" if the equipment usage record has a usage Start Date but no usage End Date. This check box is cleared if this piece of equipment has no associated equipment usage record, or if the equipment usage record has a usage End Date.

3 Use the General tab to specify information about where this piece of equipment is located and who is responsible for it. Click the **General** tab and specify this information:

Type
Specify the equipment type for this piece of equipment. After you specify an equipment type, preventive maintenance information from the equipment type record is inserted on the PM Activities tab.

Status
Specify the current status of this piece of equipment.

Assigned To
Specify the employee to whom this piece of equipment is assigned. This is the individual who is responsible for this piece of equipment.

When the usage limit for the equipment has been reached, a task is added to the Assigned To employee's My To Do List. The date in the **Next Date** field is the due date of the task. The task is removed when maintenance on the equipment is complete.

Major Location
Specify the major location where this piece of equipment is located. A major location could be a particular building or floor within a building.

Minor Location
Specify the minor location where this piece of equipment is located. A minor location could be a particular room within a building.

User Defined 1
Specify the user defined information required by your company.

Customer ID
If a customer owns this piece of equipment, or if you primarily sell items made on this machine to a particular customer, specify the ID of the customer.

Product ID
If this piece of equipment is used to manufacture a particular product, specify the ID of the product.

Device ID
Specify the ID of the device used to calibrate this piece of equipment.

Comments
Specify additional text about this piece of equipment.

4 Use the Bought From tab to specify information about your purchase of this piece of equipment. Click the **Bought From** tab and specify this information:

Supplier ID
Specify the ID of the supplier from whom you bought this piece of equipment.

Equipment ID
Specify the ID that the supplier uses for this piece of equipment.

Equipment Name
Specify the name that the supplier uses for this piece of equipment.

Purchase Price
Specify the price you paid for this piece of equipment.

Purchase Date
Specify the date you purchased this piece of equipment.

Ext Warranty Date
If you purchased an extended warranty for this piece of equipment, specify the date that the extended warranty expires.

Manufacturer
Specify the company that manufactures this piece of equipment.

Model Number
Specify the model number of this piece of equipment.

Serial Number
Specify the serial number of this piece of equipment.

Warranty Date
Specify the date that the standard warranty expires.

5 Use the PM Activities tab to specify information about the preventive maintenance activities required for this piece of equipment. A piece of equipment inherits the preventive maintenance activities of its equipment type. When you specify an equipment type on the General tab, the preventive maintenance activities for the equipment type are inserted in this tab. You can specify additional information for these activities. You can also add preventive maintenance activities that are specific to this piece of equipment. To add or edit a PM activity, click the **PM Activity** tab and specify this information:

PM Activity No
To edit a PM activity, specify the PM Activity No using the buttons to the right of the field. To create a PM activity, leave this field blank.

PM Activity Name
Specify the name of the PM activity.

Manual
To manually create records for this preventive maintenance activity, select this check box. Clear this check box to generate the preventive maintenance work order using your ERP system.

Preventive Due By

If this preventive maintenance activity has a special interval, specify how to measure when this preventive maintenance activity is due. For preventive maintenance activities generated by the equipment type record, use the special interval to override the standard interval set up on the equipment type record. For preventive maintenance activities that are unique to this piece of equipment, you can only specify a special interval. Specify one of these options:

Days
Specify this option if this preventive maintenance activity should be performed after the equipment has been used a certain number of days.

Usage
Specify this option if this preventive maintenance activity should be performed after the equipment has been used a certain number of times.

Both
Specify this option if this preventive maintenance activity should be performed either after the equipment has been used a certain number of days or after it has been used a certain number of times. If you select this option, the preventive maintenance activity is due based on which Due By measure is achieved first.

Special Interval (Days)
If you selected Days or Both, specify the number of days a piece of equipment is used before the preventive maintenance activity must be performed.

Warning Interval
If you selected Days or Both, specify when to be warned that this preventive maintenance activity is coming due. Specify the number of days before the next standard interval time period elapses. For example, if you specify 2 in this field, you are warned two days before the standard interval time period elapses. During the warning period, the status is yellow for pieces of equipment of this equipment type.

Next Date
The next date that this preventive maintenance activity is due to occur is displayed. For activities specified on the equipment type record, this date is calculated by adding the standard interval or special interval to the date that the preventive maintenance activity was most recently completed successfully. You can specify a different date.

Usage Frequency
If you select Usage or Both, specify the usage frequency code for the special interval. Usage frequency codes categorize types of usage, such as Pieces or Work Orders.

Set up usage frequency codes in Frequency maintenance.

See Codes on page 39.

Special Usage Limit
Use this field to override the standard usage limit. Specify the number of times this piece of equipment can be used before the preventive maintenance activity is due.

Increment Used
Specify the number of times this piece of equipment has been used. Each time you update this number, the tally of total uses is calculated in the Has Been Used field. When the value in the Has

Been Used field equals the value in the Standard Usage Limit field or Special Usage Limit field, this preventive maintenance activity is due.

Time Used as Of
Specify the date that you last updated the usage amount.

Time Estimate
Specify an estimate in hours of how long it typically takes to complete this preventive maintenance activity.

Standard Interval
If this preventive maintenance activity is specified on the equipment type record, the standard interval defined on the record is displayed.

Last Date
The date that this preventive maintenance activity was last performed is displayed.

Standard Usage Limit (Times)
If this preventive maintenance activity is specified on the equipment type record, the usage limit defined on the record is displayed.

Has Been Used
The total amount of usage for the piece of equipment as of the date specified in the Times As Of field is displayed. Use this number to assess when the preventive maintenance activity should be performed based on the standard of special limit.

Times As Of
The date that usage was last entered is displayed.

Time Estimate
Specify an estimate in hours of how long it typically takes to complete this preventive maintenance activity.

User Defined 3
Specify the user-defined information required by your company.

Reference 1
Specify the reference information required by your company.

Maintained By

Specify the individual who is responsible for maintaining this preventive maintenance activity information.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact in the **Contact No** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact in the **Contact No** field.

Instructions
Specify instructions for performing this preventive maintenance activity. If this preventive maintenance activity is specified on the equipment type record, then the instructions specified on the equipment type record are displayed. You can specify additional information. If this preventive maintenance activity is specific to this piece of equipment, then specify the instructions.

6 Use the Spare Parts tab to specify the parts you may need to fix this piece of equipment. Add spare parts in Spare Part Maintenance. To specify spare parts for this piece of equipment, click the **Spare Parts** tab. Specify the spare part ID in the Part ID field.
7 Click the **Save** button.

Deleting preventive maintenance activities

To delete a preventive maintenance activity from an equipment record:

1 Select **Equipment > Prevent > Equipment Maintenance**.
2 Specify the equipment ID.
3 Click the **PM Activities** tab.
4 Place your cursor in any editable field on the PM activities tab.
5 Click the **Delete** button.
6 Click the **Save** button.

Deleting equipment records

1 Select **Equipment > Prevent > Equipment Maintenance**.
2 Specify the equipment ID.
3 Place your cursor in any field in the equipment header. If you place your cursor in a field on the PM Activities tab, you will delete the PM activity instead.
4 Click the **Save** button.

Copying equipment records

You can copy an existing equipment record to create a new equipment record.

1 Select **Equipment > Prevent > Equipment Maintenance**.
2 Select the equipment record to copy.
3 Place your cursor in any field in the header.
4 Right-click and select **Copy Equipment**.
5 In the **Copy to Equipment** field, specify the ID of the new pieces of equipment.
6 In the Copy Options section, specify the information to copy:

PM Activities
Select this check box to copy all preventive maintenance activities.

Spare Parts
Select this check box to copy the spare parts used during equipment maintenance.

Quality Costs
Select this option to copy quality cost information.

Document Link
Select this option to copy the documents linked to the equipment record.

7 Click **Ok**.

Attaching documents to equipment records

In Equipment records, you have the option of attaching documents to the equipment record and to the preventive maintenance activity.

To attach a document at the equipment record, place your cursor in the header of the Equipment Maintenance form or in any non-PM Activities tab before clicking the **Documents** button.

To attach a document to a preventive maintenance activity, click the PM Activity tab and then select the activity to which to attach documents. Then, click the **Documents** button.

When you create a preventive maintenance record in the Preventive Maintenance form, you have the option of viewing documents attached to the equipment record and documents attached to the preventive maintenance activity.

Spare parts

Use Spare Parts Maintenance to specify information about the spare parts you use to repair and maintain equipment. You can specify the suppliers you buy the part from and how much the part costs to purchase. You can also specify which pieces of equipment use the spare part.

Adding spare parts

To add a spare part:

1 Select **Equipment > Prevent > Spare Parts**.
2 Specify this information:

Entity ID
Specify the ID of the entity where this part is used.

Business Unit
Specify the business unit where this spare part is used.

Part ID
Specify the ID of the part.

Name
Specify the full name of the spare part.

3 Use the General tab to specify information about where this part is stored and information about inventory management. Click the **General** tab and specify this information:

Major Location
Specify the major location where this part is stored. A major location could be a warehouse.

Minor Location
Specify the minor location where this part is stored. A minor location could be a location within a warehouse or a particular storage bin.

User Defined 2
Specify the user defined information required by your company.

Normal Stock
Specify the number of units of this spare part that you normally keep on hand.

Reorder Point
Specify when to reorder this spare part. When the inventory level reaches the value you specify in this field, you should reorder the part

Available
Specify the number of units of this spare part that are currently available. If you use a spare part in a preventive maintenance procedure or in a work order for other maintenance, the spare parts used are deducted from this value by the system.

Average/Supplier
If you have not specified a default supplier for this spare part, the average unit price charged by all suppliers is inserted in this field. If you have specified a default supplier, then the ID of the supplier is inserted in this field. The unit price charged by the default supplier is inserted in the field below the supplier field.

4 Use the Description tab to specify detailed information about the spare part and its use. Click the **Description** tab and specify the information.

5 Use the Bought From tab to specify the suppliers from whom you purchase this spare part. Click the **Bought From** tab and specify this information:

Supplier ID
Specify the ID of the supplier from whom you purchase this part.

Part ID
Specify the ID that the supplier uses for this part.

Part Name
Specify the name that the supplier uses for this part.

Unit Price
Specify the price per unit that the supplier charges for this part.

Manufacturer
Specify the manufacturer who makes this part.

Model
Specify the model number of this part.

Default
If this supplier is your default supplier, select this check box. The default supplier is the supplier from whom you usually purchase the part. When you select this check box, the ID of the supplier and the unit price the supplier charges is inserted in the General tab.

6 Use the Equipment tab to specify which pieces of equipment use this spare part. When you specify an equipment ID in this tab, the spare part ID is also added to the equipment record. Click the **Equipment** tab and specify the equipment ID.

7 Click the **Save** button.

Copying a spare part

You can copy an existing spare part record to create a new spare part record. To copy a spare part record:

1 Select **Equipment > Prevent > Spare Parts**.

2 Select the ID of the spare part to copy.

3 Right-click and select **Copy Spare Part**. Before you access the copy spare part function, make sure your cursor is not in one of the fields in the Bought From or Equipment tabs.

4 In the Copy Options section, specify the information to copy:

Bought From
Select this check box to copy the supplier information for the spare part.

Equipment
Select this check box to copy the equipment information for the spare part.

5 Click **Ok**. In addition to the information you selected in the Copy Options section, the information in the General tab and the Description tab is copied to the new record.

Deleting a spare part

Delete a spare part if you no longer use it to maintain equipment.

1. Select **Equipment > Prevent > Spare Parts**.
2. Select the ID of the spare part to delete.
3. Click the **Delete** button.
4. Click the **Save** button.

Equipment usage

Use Equipment Usage Maintenance to check out a piece of equipment for use, and check the equipment back in after it has been used. When a piece of equipment is checked out, the In Use check box on the equipment record is selected. When a piece of equipment has been checked back in, the In Use check box is cleared.

Checking out a piece of equipment

1. Select **Equipment > Prevent > Equipment Usage**.
2. Specify this information:

   Entity ID
   Specify the ID of the entity where this piece of equipment is used.

   Business Unit
   Specify the business unit where this piece of equipment is used.

   Equipment ID
   Specify the ID of the equipment that is being checking out. After you select an ID, a dialog box is displayed. Click **Yes** to add new usage for the equipment. This additional information about the piece of equipment is displayed in the Current Equipment Master Record section:
   - Equipment Type
   - Assigned To
   - Major Location
   - Minor Location

   Usage Start By
   Specify the ID of the employee who is checking out this piece of equipment.

   A task is added to the employee's My To Do List. The due date of the task is the date in the Due Back Date field. When the equipment is checked in, the task is removed.

   Start Date
   Specify the date that this piece of equipment is checked out.

   Due Back Date
   Specify the date that this piece of equipment is due to be checked in.

Comments
Specify any comments related to the equipment's use.

Reference
Specify any reference information related to the equipment's use.

3 Click the **Save** button.

Checking in a piece of equipment

1 Select **Equipment > Prevent > Equipment Usage**.
2 Specify the ID of the equipment that you are checking in. In the message dialog box, click **No** to add check in usage information. .
3 Specify this information:

Usage End By
Specify the ID of the employee who is checking in this piece of equipment.

End Date
Specify the date that this piece of equipment is checked in.

Increment Used
Specify the number of uses for this piece of equipment.

Comments
Specify any comments related to the equipment's use. Comments specified at check out are displayed. You can edit the existing comments or add new comments.

Reference
Specify any reference information related to the equipment's use. Reference information specified at check out is displayed. You can edit the existing reference information or add new reference information.

4 Click the **Save** button.

Preventive maintenance

Use Preventive Maintenance to track your preventive maintenance activities. You can record the amount of downtime created by the preventive maintenance activity, track the work order issued to conduct the preventive maintenance, specify spare parts used in the preventive maintenance, and assign an individual to be responsible for the preventive maintenance activity.

Adding preventive maintenance records

1 Select **Equipment > Prevent > Preventive Maintenance**.

2 Specify this information:

Site ID
Specify the ID of the site where the preventive maintenance activity is performed. When you select a Site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Business Unit
Specify the business unit where this term is preventive maintenance activity takes place.

Preventive ID
Leave this field blank. An ID based on your numbering scheme is generated when you save the record.

Equipment ID
Specify the ID of the equipment you are maintaining.

PM Activity
Specify the preventive maintenance activity being performed.

Date
Specify the date the preventive maintenance activity is performed.

Due Date
Specify the date that the equipment is due for maintenance.

Result
Specify the result of the preventive maintenance activity. Specify one of these statuses:

Pending
Specify this result if the activity is incomplete.

Status
Specify this result if the activity has begun, but is not yet finished.

Passed
Specify this result if the activity has been completed successfully. When you pass a preventive maintenance activity, you can specify information about equipment downtime.
See Passing preventive maintenance activities on page 373.

Failed
Specify this result if the activity cannot be completed successfully.

3 Use the General tab to specify who is responsible for the preventive maintenance activity and to review information about the preventive maintenance activity. Click the **General** tab and specify this information:

Maintained By

Specify the individual who is responsible for maintaining this preventive maintenance activity information. The information from the equipment record is inserted, but you can override the information.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact in the Contact No field.

Current Equipment Master Record
This information from the equipment master record is displayed:

Type
The equipment type for this piece of equipment is inserted.

Status
The current status of this piece of equipment is inserted.

Equipment Procedure/PM Procedure
To view the documents attached to the equipment record, select Equipment Procedures and then click **View**. To view the documents attached to the preventive maintenance activity record, select PM Procedures and then click **View**.

Standard Interval
For Days or Both activity types, the number of days a piece of equipment is typically used before the preventive maintenance activity must be performed is inserted. This information is defined on the equipment type record.

Special Interval
For Days or Both activity types, the special interval is inserted. The special interval overrides the standard interval. This information is defined on the equipment record.

Last Date
The date this activity was last performed is inserted.

Next Date
The next date that this preventive maintenance activity is due to occur is inserted.

User Defined 3
The user-defined information specified on the equipment record is inserted.

Reference 1
The reference information specified on the equipment record is inserted.

Manual
If records for this preventive maintenance activity are generated manually, this check box is selected. If work orders are created automatically, this check box is cleared. This information is specified on the equipment type record.

Comments
Specify any comments about this preventive maintenance activity.

4 Use the Down Time tab to specify how long the piece of equipment was out of service due to the preventive maintenance activity. Specify the Down Time duration when you pass the preventive maintenance record.

5 Use the ERP Info tab to review information about the work order generated in your ERP system for this preventive maintenance activity.

6 Use the Spare Parts Used tab to specify the spare parts used in this preventive maintenance activity. Click the **Spare Parts Used** tab and specify this information:

Part ID
Specify the ID of the spare part.

Quantity Used
Specify the quantity you used. To view the number of parts currently in your inventory, click the **Save** button.

7 Click the **Save** button.

Passing preventive maintenance activities

If a preventive maintenance activity is performed successfully, change the status of the preventive maintenance record to Passed. When you pass a preventive maintenance activity, specify the amount of time the equipment was unavailable for use.

1 Select **Equipment > Prevent > Preventive Maintenance**.

2 Specify the preventive ID.

3 In the Date field, specify the date that this preventive maintenance activity was completed.

4 In the Result field, specify Passed.

5 Click the **Save** button. After you click the Save button, the date you specified in the date field is inserted in the Last Date field in the Current Equipment Master Record section. For preventive maintenance performed by an interval of days, the next date that the preventive maintenance is due is inserted in the Next Date field. This value is calculated by adding the standard interval or special interval to the date specified in the date field.

6 To specify the amount of down time, click the Down Time tab. Specify this information:

Start Date
Specify the date that the preventive maintenance activity started. The date that you first saved this preventive maintenance record is inserted. Adjust this date if necessary.

Start Time
Specify the time that the preventive maintenance activity started. The time that you first saved this preventive maintenance record is inserted. Adjust this time if necessary.

End Date
Specify the date that you completed this preventive maintenance activity. When you clicked the Save button after you specified Passed in the Result field, the current date is inserted. Adjust this date if necessary.

End Time
Specify the time that you completed this preventive maintenance activity. When you clicked the Save button after you specified Passed in the Result field, the current time is inserted. Adjust this time if necessary.

Total
To calculate the total amount of time spent on this activity, the Start Date and Time is subtracted from the End Date and Time. To specify a different amount of time, select the Override Total check box and specify the amount of time in the Total field.

Time Estimate
The estimated amount of time required to perform this preventive maintenance activity is inserted. Specify this information on the Equipment record.

Comments
Specify any comments about the down time.

7 Click the **Save** button.

Copying preventive maintenance records

You can copy an existing preventive maintenance record to create a new preventive maintenance record.

1 Select **Equipment > Prevent > Preventive Maintenance**.
2 Specify the preventive ID.
3 Right-click and select **Copy Preventive**.
4 Specify the information to copy:

Spare Parts Used
Select this check box to copy the spare parts used for this preventive maintenance activity. The parts and quantities used are copied.

Quality Costs
Select this check box to copy the quality costs information for this preventive maintenance activity.

5 Click **Ok**. In addition to the information you selected, all information in the header, General tab, Down Time tab, and ERP Info tab is copied.

Deleting preventive maintenance records

1 Select **Equipment > Prevent > Preventive Maintenance**.
2 Specify the preventive ID.
3 Click the **Delete** button.
4 Click the **Save** button.

The preventive maintenance record is deleted, but no changes are made to the Equipment Record. If you delete a preventive record with the status of Passed, the information inserted into the equipment record based on the preventive maintenance record is not deleted. The equipment record retains the Next Due Date information from the passed preventive maintenance record. In addition, spare parts used in the preventive maintenance activity are not restored to your inventory. You must manually adjust the inventory to the proper level.

Work orders

Use Work Order Maintenance to assign work related to a piece of equipment that falls outside normal preventive maintenance activities. For example, if a piece of equipment unexpectedly breaks, use Work Order Maintenance to assign the repair work to an individual. You can attach the spare parts you need to complete the task and view basic information about the piece of equipment.

Adding Work Orders

1 Select **Equipment > Prevent > Work Order Maintenance**.

2 Specify this information:

Site ID
Specify the ID of the site where the work order is performed. After you select a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Business Unit
Specify the business unit associated with this work order.

Work Order ID
Leave this field blank. An ID based on your numbering scheme is generated when you save the record.

Date
Specify the date you are creating this work order.

Equipment ID
Specify the ID piece of equipment to be repaired or maintained. After you select an ID, the name of the piece of equipment is displayed.

3 Use the General tab to specify information about the issues with the piece of equipment. Click the **General** tab and specify this information:

Reported By
Specify the ID of the employee who reported the issue with the piece of equipment.

Assigned By
Specify the ID of the employee who is assigning the work order to the maintenance team.

Assigned To
Specify the ID of the employee who is responsible for overseeing work on this work order. This is not necessarily the same as the employee who is performing the work.

A task is added to the employee's My To Do List. The due date of the task is the due date of the work order. When the work order is closed, the task is removed from the list.

Due Date
Specify the date by which work on this work order must be complete.

Received Date
Specify the date that this work order was assigned to the employee ID in the Assigned To field.

Breakdown Cause
Specify a breakdown cause code for this work order. Use breakdown cause codes to classify the reason a piece of equipment needs repair.

Problems/Instructions
Specify a detailed description of the problem with the piece of equipment and instructions for repairing the piece of equipment.

Performed By

Specify who is performing the repair on the piece of equipment.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact in the **Contact No** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact in the **Contact No** field.

Solution
Specify ideas about how to solve the problem.

4 Use the Bought From tab to review information about the supplier for this piece of equipment. The information on the tab is read-only. To edit any of this information, use Equipment Maintenance. Click the **Bought From** tab and review this information:

Supplier ID
The ID of the supplier from whom you bought this piece of equipment is inserted.

Equipment ID
The ID that the supplier uses for this piece of equipment is inserted

Equipment Name
The name that the supplier uses for this piece of equipment is inserted.

Purchase Price
The price you paid for this piece of equipment is inserted.

Purchase Date
The date you purchased this piece of equipment is inserted.

Ext Warranty Date
If you purchased an extended warranty for this piece of equipment, the date that the extended warranty expires is inserted

Manufacturer
The company that manufactures this piece of equipment is inserted

Model Number
The model number of this piece of equipment is inserted.

Serial Number
The serial number of this piece of equipment is inserted.

Warranty Date
The date that the standard warranty expires is inserted.

5 Use the Spare Parts tab to specify the spare parts used to repair this piece of equipment. Click the **Spare Parts** tab and specify this information:

Part ID
Specify the ID of the spare part.

Quantity
Specify the quantity of part used for the repair. The current number of parts in your inventory is displayed in the Available column. You must specify a value in the Quantity column that is less than or equal to the value in the Available column. After you save this work order, the quantity you used is subtracted from your inventory.

6 Click the **Save** button.

Viewing equipment documents

1 Select **Equipment > Prevent > Work Order Maintenance**.
2 Specify the work order.
3 Right-click and select **View Equipment Documents**.
4 A list of documents attached to the equipment record is displayed. To view a document, select the row and click **View**.

You cannot add or remove documents from this form. To revise the list of documents attached to the equipment record, use Equipment Maintenance.

Closing work orders

After work on a work order is complete, close the work order.

1 Select **Equipment > Prevent > Work Order Maintenance**.

2 Specify the work order.
3 Select the **Closed** check box.
4 In the **Closed Date** field, specify the date that you closed the work order. The current date is inserted.
5 In the Solution section, specify information about how the piece of equipment was fixed.
6 If necessary, click the **Spare Parts** tab and specify the spare parts used to make the repair. Specify this information:

Part ID
Specify the ID of the spare part.

Quantity
Specify the quantity of part used for the repair. The current number of parts in your inventory is displayed in the Available column. You must specify a value in the Quantity column that is less than or equal to the value in the Available column. After you save this work order, the quantity you used is subtracted from your inventory.

7 Click the **Save** button.

Copying work orders

1 Select **Equipment > Prevent > Work Order Maintenance**.
2 Specify the work order.
3 Right-click and select **Copy Work Order**.
4 Select the information to copy:

Spare Parts Used
Select this check box to copy the spare parts used for this work order. The parts and quantities used are copied.

Quality Costs
Select this check box to copy the quality costs information for this work order.

5 Click **Save**. In addition to the information you selected, the information in the header, General tab, and Bought From tab is also copied.

Deleting work orders

1 Select **Equipment > Prevent > Work Order**.
2 Specify the work order ID.
3 Click the **Delete** button.
4 Click the **Save** button. The work order record is deleted. If spare part quantities were specified on the work order, the spare parts are not restored to your inventory. You must manually adjust the inventory to the proper level in Spare Parts Maintenance.

PM work orders

Use the Generate PM Work Orders form to generate preventive maintenance work orders and send them to your ERP.

Prerequisites for generation of PM work orders

Before you can generate PM work orders, you must meet the prerequisites.

To generate PM work orders for a piece of equipment, the equipment cannot have any pending preventive maintenance IDs. Complete all outstanding preventive maintenance records.

See Passing preventive maintenance activities on page 373.

The equipment ID must exist in the ERP.

Certain information must be set up correctly in IQM. This table shows the information that must be set up and where to find more information about completing the setup requirements:

Form	Required information	Procedure
Site Maintenance	**Enable ERP Work Order Generation** check box must be selected	Setting up sites for PM work orders on page 380
Equipment Status	**Process PM Orders** check box must be selected for at least one equipment status code	Setting up equipment status codes for PM work orders on page 381
Usage Frequency	These code IDs must be set up: • HRS • PCS	Setting up and assigning usage frequency codes for PM work orders on page 381

Form	Required information	Procedure
Equipment Maintenance	On the **General** tab, specify an equipment status code that has the **Process PM Orders** check box selected in the **Status** field. On the **PM Activities** tab, specify this information: • The **Manual Work Order** check box must be cleared. • If `Usage` is selected in the **Preventive Due By** field, specify `PCS` or `HRS` in the **Usage Frequency** field. Ensure that a value is specified in the **Last Date** field. • If `Days` is selected in the **Preventive Due By** field, then ensure that values are specified in the **Last Date** and **Next Date** fields. • If `Both` is selected in the **Preventive Due By** field, specify `PCS` or `HRS` in the **Usage Frequency** field. Ensure that values are specified in the **Last Date** and **Next Date** fields.	Setting up equipment records for PM work orders on page 382

Setting up sites for PM work orders

You must select the **Enable ERP Work Order Generation** check box.

1. Select **Administration > Site Maintenance**.
2. Open the record for the site where you are generating PM work orders.
3. Select the **Enable ERP Work Order Generation** check box.
4. Optionally, specify a prefix in the **Default Work Order Prefix** field. You can use the prefix to identify preventive maintenance work orders in the ERP.
5. Click **Save**.

Setting up equipment status codes for PM work orders

To generate PM work orders for a piece of equipment, its status code must be set up to process PM work orders.

1. Select **Administration > Codes > Equipment Status**.
2. Click **New**, or open an existing code.
3. Select the **Process PM Orders** check box.
4. Click **Save**.

Setting up and assigning usage frequency codes for PM work orders

The preventive maintenance activities that you use with PM work orders must have a usage code of PCS or HRS.

1. Select **Administration > Codes > Usage Frequency**.
2. Click **New**.
3. Create the HRS code. Specify this information:

   Usage Frequency
   Specify **`HRS`**.

   Description
   Specify a description, such as **`Hours`**.

   Usage Type
   Select **`Hours`**.

4. Click **Add**.
5. Create the PCS code. Specify this information:

   Usage Frequency
   Specify **`PCS`**.

   Description
   Specify a description, such as **`Pieces`**.

   Usage Type
   Select **`Pieces`**.

6. Click **Save**.
7. Assign the usage codes to preventive maintenance activities:
   a. Select **Prevent > Equipment > Equipment Maintenance**.
   b. Open the equipment record that you are setting up.
   c. Click the **PM Activities** tab.
   d. Select an activity with a Preventive Due By value of Usage or Both.
   e. In the **Usage Frequency** field, select either HRS or PCS as appropriate for the preventive maintenance activity.

f Click **Save**.

Setting up equipment records for PM work orders

To generate preventive maintenance work orders for a piece of equipment, you must specify certain information on the equipment record.

This procedure describes the information that must be set up before PM work order can be generated. Additional information about the Equipment Maintenance form is available in the Equipment section of this chapter.

See Adding equipment records on page 360.

1. Select **Equipment > Prevent > Equipment Maintenance**.
2. In the **Site ID** field, select a site that has been set up for PM work order generation.
   See Setting up sites for PM work orders on page 380.
3. Open the record for the piece of equipment that you are setting up.
4. Click the **General** tab.
5. In the **Status** field, select an equipment status that has been set up for work order generation.
   See Setting up equipment status codes for PM work orders on page 381.
6. Click the **PM Activities** tab.
7. In the table, select the activity that generates PM work orders.
8. Clear the **Manual Work Order** check box.
9. Complete one of these tasks:
   - If **`Usage`** is selected in the **Preventive Due By** field, specify this information:

     Usage Frequency
     Specify **`PCS`** or **`HRS`**.

     Last Date
     This field must contain a value. To populate this field, create a Preventive Maintenance record for the activity and set its status to Passed.

     See Passing preventive maintenance activities on page 373.

   - If **`Days`** is selected in the **Preventive Due By** field, then specify this information:

     Last Date
     This field must contain a value. To populate this field, create a Preventive Maintenance record for the activity and set its status to Passed.

     See Passing preventive maintenance activities on page 373.

     Next Date
     The date in this field is calculated by adding the standard interval or special interval to the date in the **Last Date** field.

   - If **`Both`** is selected in the **Preventive Due By** field, then you must specify this information:

Usage Frequency
Specify **PCS** or **HRS**.

Last Date
This field must contain a value. To populate this field, create a Preventive Maintenance record for the activity and set its status to Passed.

See Passing preventive maintenance activities on page 373.

Next Date
The date in this field is calculated by adding the standard interval or special interval to the date in the **Last Date** field.

10 Click **Save**.

Generating PM work orders

You can generate preventive maintenance work orders for a single site, a single entity, or all sites and entities.

1 Select **Equipment > Prevent > Generate PM Work Orders**.

2 Complete one of these steps:
- To generate work orders for all entities and sites, leave the **Entity ID** and **Site ID** fields blank.
- To generate work orders for all sites within a particular entity, specify the parent entity in the **Entity ID** field.
- To generate work orders for a particular site, specify the ID in the **Site ID** field.

3 Right-click and select **Run**. In the Output field, a description of the actions taken is displayed. After the process is completed successfully, a Preventive ID is created in IQM and a work order is created in the ERP.

Closing PM work orders

To close a PM work order, set the status of the preventive maintenance record to Passed in IQM. This procedure describes the minimum requirements for passing a preventive maintenance record. You can specify additional information.

See Passing preventive maintenance activities on page 373.

1 Select **Equipment > Prevent > Preventive Maintenance**.

2 Specify the preventive ID.

3 In the Result field, specify Passed.

4 Click the **Save** button. A dialog box is displayed that prompts you to close the associated ERP work order. Click **Yes**.

The ERP work order status is set to Canceled.

Prevent reports

Use prevent reports to analyze information about the equipment that you use.

Equipment analysis

Use this report to analyze the frequency of certain criteria in your equipment records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of equipment records that have each criterion ID. For example, if you select Equipment Type ID in the Analysis Field field, the report displays the number or percentage of equipment records that have each equipment type. You can see which equipment type is the most used in your equipment records.

To be included on the report, a criterion ID must be specified on at least one equipment record. For example, if the equipment type PRESS is not used on any equipment record, then PRESS is not displayed in the report.

You can analyze equipment records based on these criteria:

- Assigned To
- Customer ID
- Equipment Type
- Major Location
- Minor Location
- Product ID
- Status
- Supplier ID
- User Defined 1

You can apply Equipment Type and Status filters to the report. When you apply a filter to the report, only equipment records that match the filter are considered for the report. For example, if you specify DRILL in the Equipment Type field and select Major Location in the Analysis Field field, then the report would show the major location of all pieces of equipment with the type DRILL.

Generating the equipment analysis report

1. Select **Equipment > Prevent > My Reports**.
2. Click Equipment Analysis.
3. Click the entities to use for the report.
4. Specify the report filters:
   - To view information for equipment records with a particular equipment type, specify the ID of the type in the **Equipment Type** field.
   - To view information for equipment records with a particular status, specify the ID of the status in the **Status** field.

5 In the **Analysis Field** field, specify the criterion to use for the analysis.

6 In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.

7 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.

8 Click the **Print Report** button.

Equipment list with spare parts

Use this report to view a list of your pieces of equipment along with the spare parts required for maintenance. This report shows the entity ID and site ID where the equipment is used, the equipment ID, the equipment name, the equipment type, the status, the employee assigned to the equipment, the major location, the minor location, the user defined 1 information, the ID of the spare part used to maintain the equipment, and the name of the spare part.

Generating the equipment list with spare parts report

1 Select **Equipment > Prevent > My Reports**.

2 Click **Equipment List with Spare Parts**.

3 Click the sites to use for the report.

4 Specify the information to include in the report:
- To view information for a particular piece of equipment, specify the ID of the equipment in the **Equipment ID** field.
- To view information for equipment with a particular name, specify the name of the equipment in the **Equipment Name** field.
- To view information for equipment of a particular type, specify the ID of the type in the **Equipment Type** field.
- To view information for equipment of a particular status, specify the ID of the status in the **Status** field.
- To view information for equipment assigned to a particular employee, specify the ID of the employee in the **Assigned To** field.
- To view information for equipment located at a particular major location, specify the ID in the **Major Location** field.
- To view information for equipment located at a particular minor location, specify the ID in the **Minor Location** field.
- To view information for equipment that uses a particular spare part ID, specify the ID of the part in the **Spare Part ID** field.
- To view information for equipment that uses a spare part with a particular name, specify the name of the part in the **Spare Part Name** field.

5 Specify the sort order for the report:

Option	Description
Equipment ID + Spare Part ID	Select this option to sort the report first by equipment ID and then by spare part ID. This groups together the spare parts used by each piece of equipment.
Major Location + Equipment ID + Spare Part ID	Select this option to sort the report first by major location, then by equipment ID, and then by spare part ID. This groups together the spare parts used for equipment at a particular major location.

6 Click the **Print Report** button.

Equipment PM activities list

Use this report to view a list of the preventive maintenance activities performed on pieces of equipment. This report displays the entity and site where the preventive maintenance activity is performed, the equipment ID, equipment name, equipment type, status, the employee assigned to the device, the major location, the minor location, user defined field 1 information, and the preventive maintenance activities typically performed on the piece of equipment.

Generating the equipment PM activities list report

1 Select **Equipment > Prevent > My Reports**.
2 Click **Equipment PM Activities List**.
3 Click the sites to use for the report.
4 Specify the information to include in the report:
- To view information for a particular piece of equipment, specify the ID of the equipment in the **Equipment ID** field or the name of the equipment in the **Equipment Name** field.
- To view equipment of a particular type, specify the ID of the type in the **Equipment Type** field.
- To view equipment with a particular status, select the status in the **Status** field.
- To view equipment assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID)** field.
- To view equipment located in a particular major location, specify the ID of the location in the **Major Location** field.
- To view equipment located in a particular minor location, specify the ID of the location in the **Minor Location** field.
- To view a particular preventive maintenance activity, specify the activity number in **PM Activity No** field or the name of the activity in the **PM Activity Name** field.

5 Click the **Print Report** button.

Equipment types detail report

Use this report to view information about your equipment types. This report displays the entity that uses the equipment type, the equipment type ID, equipment type ID, equipment type name, and the preventive maintenance activities for the type.

Generating the equipment types detail report

1. Select **Equipment > Prevent > My Reports**.
2. Click **Equipment Types Detail**.
3. Click the entities to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular equipment type, specify the ID of the type in the **Equipment Type** field.
   - To view information for a particular equipment type name, specify the name in the **Equipment Name** field.
5. In the Sort Order field, specify whether to organize the information by Equipment Type ID or Equipment Name.
6. Click the **Print Report** button.

PM activities due date detail

Use this report to view information about preventive maintenance activities and when they are due to be performed. You can provide a printout of this report to the individual responsible for maintaining the equipment to guide the preventive maintenance activity. This report shows the entity ID, equipment ID, name of the equipment, the equipment type, the status, the ID of the employee assigned to the piece of equipment, the major location where the equipment is located, the minor location where the equipment is located, and user defined field 1 information. Each preventive maintenance activity for the equipment is listed, along with the name of the activity, the last date the activity was performed, the next date the activity is due, and the instructions for the preventive maintenance activity. Space is provided for you to fill out who performed the maintenance activity, the spare parts used, the duration of the maintenance activity, the cost of the maintenance activity, and any additional comments.

Generating the PM activities due date detail report

1. Select **Equipment > Prevent > My Reports**.
2. Click **PM Activities Due Date Detail**.
3. Click the entities to use for the report.
4. To view preventive maintenance activities due during a particular time period, specify the start and end date in the Due Date From and Due Date To fields.
5. Specify the information to include in the report:

- To view information for a particular piece of equipment, specify the ID of the equipment in the **Equipment ID** field or the name of the equipment in the **Equipment Name** field.
- To view equipment of a particular type, specify the ID of the type in the **Equipment Type** field.
- To view equipment with a particular status, select the status in the **Status** field.
- To view equipment assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID)** field.
- To view equipment located in a particular major location, specify the ID of the location in the **Major Location** field.
- To view equipment located in a particular minor location, specify the ID of the location in the **Minor Location** field.
- To view a particular preventive maintenance activity, specify the activity number in **PM Activity No** field or the name of the activity in the **PM Activity Name** field.

6 Click the **Print Report** button.

Preventive analysis

Use this report to analyze the frequency of certain criteria in your preventive records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of preventive records that have each criterion ID. For example, if you select Equipment Type ID in the Analysis Field field, the report displays the number or percentage of times that each equipment type is used in preventive records. You can see which equipment type has the most preventive maintenance records associated with it.

To be included on the report, a criterion ID must be specified on at least one equipment record. For example, if the equipment type PRESS is not used on any preventive record, then PRESS is not displayed in the report.

You can analyze preventive records based on these criteria:

- Customer ID
- Equipment Type
- Maintained By
- Result
- Supplier ID

Generating the preventive analysis report

1 Select **Equipment > Prevent > My Reports**.

2 Click **Preventive Analysis**.

3 Click the sites to use for the report.

4 To view preventive records for a particular equipment ID only, specify the ID of the equipment in the **Equipment ID** field. To view preventive records for all equipment IDs, leave this field blank.

5 In the **Analysis Field** field, specify the criterion to use for the analysis.

6 In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.

7 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.

8 Click the **Print Report** button.

Preventive records detail report

Use this report to view information about preventive maintenance activities you have conducted. This report displays the entity and site where the preventive maintenance activity occurred, the preventive ID, the equipment ID, the PM activity, the date of the activity, the result, the employee who performed the preventive maintenance, comments about the preventive maintenance, and the spare parts used.

Generating the preventive records detail report

1 Select **Equipment > Prevent > My Reports**.

2 Click **Preventive Records Detail**.

3 Click the entities to use for the report.

4 Specify the information to include in the report:

- To view information for a particular preventive maintenance record, specify the ID of the type in the **Preventive ID** field.
- To view preventive maintenance activities performed on a particular piece of equipment, specify the ID of the equipment in the **Equipment ID** field.
- To view preventive maintenance activities performed by a particular employee, specify the ID of the employee in the **Performed By** field.
- To view preventive maintenance activities that used a particular spare part, specify the ID of the part in the **Part ID** field.
- To view preventive maintenance activities that occurred during a particular date range, specify the dates in the **Preventive Date From** and **Preventive Date To** fields.
- To view preventive maintenance activities with a particular status, select the appropriate check box. You can select more than one status.

5 Click the **Print Report** button.

Prevent records list report

Use this report to view information about preventive maintenance records. This report shows entity ID, site ID, equipment ID, equipment name, equipment type, preventive ID, date, result, and performed by information.

Generating the prevent records list report

1 Select **Equipment > Prevent > My Reports**.
2 Click Prevent Records List.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular preventive maintenance record, specify the ID of the type in the **Preventive ID** field.
   - To view preventive maintenance activities that were performed on a particular piece of equipment, specify the ID of the equipment in the **Equipment ID** field.
   - To view preventive maintenance activities that were performed by a particular employee, specify the ID of the employee in the **Performed By** field.
   - To view preventive maintenance activities that occurred during a particular date range, specify the dates in the **Preventive Date From** and **Preventive Date To** fields.
   - To view preventive maintenance activities with a particular status, select the appropriate check box. You can select more than one status.
5 Click **Print Report**.

Spare parts analysis

Use this report to analyze the frequency of certain criteria in your spare parts records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of spare part records that have each criterion ID. For example, if you select Major Location in the Analysis Field field, the report displays the number or percentage of spare parts located at each major location. You can see where your spare parts are most frequently used.

To be included on the report, a criterion ID must be specified on at least one equipment record. For example, if the major location WAREHOUSE-A is not used on any spare part record, then WAREHOUSE-A is not displayed in the report.

You can analyze spare part records based on these criteria:

- Major Location
- Minor Location
- User Defined 1

Generating the spare part analysis report

1 Select **Equipment > Prevent > My Reports**.
2 Click **Spare Parts Analysis**.
3 Click the entities to use for the report.
4 In the **Analysis Field** field, specify the criterion to use for the analysis.

5 In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.

6 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.

7 Click the **Print Report** button.

Spare Parts List

Use this report to view a list of the spare parts that you use with equipment. This report shows the entity ID, the spare part ID, spare part name, major location, minor location, user-defined field 2 information, unit price, normal stock, reorder point, available quantity, supplier name, supplier phone, the supplier's ID for the part, and the manufacturer.

Generating the spare parts list report

1 Select **Equipment > Prevent > My Reports**.

2 Click Spare Parts List.

3 Click the entities to use for the report.

4 Specify the information to include in the report:

- To view information for a particular spare part, specify the ID of the part in the **Spare Part ID** field.
- To view information for spare parts with a particular name, specify the name of the part in the **Spare Part Name** field.
- To view information for spare parts purchased from a particular supplier, specify the ID of the supplier in the **Bought From ID** field or the name of the supplier in the **Bought From Name** field.

5 Specify the sort order for the report:

Option	Description
Spare Part ID	Select this option to sort the report by spare part ID.
Bought From ID + Spare Part ID	Select this option to sort the report by bought from ID and then spare part ID. Select this option to view the spare parts that you purchase from each supplier.
Major Location + Spare Part ID	Select this option to sort the report by major location and then spare part ID. Select this option to view the spare parts that are used in each major location.

6 Click **Print Report**.

Work order detail report

Use this report to view information about work orders created for maintenance activities. This report displays the entity and site where the work order occurred, the work order ID, the equipment ID, the individual who reported the issue, the individual who assigned the work order, the individual to whom the work order was assigned, the due date, the received date, the breakdown cause, the problem reported, the individual who performed the work order, the solution to the issue, and the spare parts used.

Generating the work order detail report

1. Select **Equipment > Prevent > My Reports**.
2. Click **Work Order Detail**.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular work order, specify the ID of the work order in the **Work Order ID** field.
   - To view work orders for a particular piece of equipment, specify the ID of the equipment in the **Equipment ID** field.
   - To view work order activities performed by a particular employee, specify the ID of the employee in the **Performed By** field.
   - To view work orders activities that used a particular spare part, specify the ID of the part in the **Part ID** field.
   - To view work orders created during a particular date range, specify the dates in the **Work Order Date From** and **Work Order Date To** fields.
   - To view preventive maintenance activities with a particular status, select the appropriate check box. You can select more than one status.
5. Click the **Print Report** button.

Work orders analysis

Use this report to analyze the frequency of certain criteria in your work order records. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage or number of work order records that have each criterion ID. For example, if you select Breakdown Cause in the Analysis Field field, the report displays the number or percentage of work order records with each breakdown cause. You can see which breakdown causes are resulting in the most work orders.

To be included on the report, a criterion ID must be specified on at least one equipment record. For example, if the breakdown cause MECHANICAL is not used on any work order record, then MECHANICAL is not displayed in the report.

You can analyze work orders based on these criteria:

- Breakdown Cause
- Customer ID
- Equipment ID
- Performed By
- Assigned By
- Assigned To
- Reported By
- Supplier ID

You can apply Equipment ID, Closed status, and Assigned To filters to the report. When you apply a filter to the report, only work order records that match the filter are considered for the report. For example, if you specify DRILL-1 in the Equipment ID field and select Breakdown Cause in the Analysis Field field, then the report would show the breakdown causes for all work orders with the equipment DRILL-1.

Generating the work order analysis report

1. Select **Equipment > Prevent > My Reports**.
2. Click **Work Order Analysis**.
3. Click the sites to use for the report.
4. To view work order records due during a particular time period, specify the start date in the **Due Date From** field and the end date in the **Due Date To** field.
5. Specify the report filters:
   - To view work orders for a particular piece of equipment, specify the ID of the equipment in the **Equipment ID** field.
   - To view closed work orders, specify Y in the **Closed** field. To view open work orders, specify N in the **Closed** field.
   - To view work order assigned to a particular employee, specify the ID of the employee in the **Employee ID** field.
6. In the **Analysis Field** field, specify the criterion to use for the analysis.
7. In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.
8. In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.
9. Click the **Print Report** button.

Chapter 13: Collect modules

Use the Collect modules to collect data about any product, process, or vendor. Use the data collection features to help you create timely and effective quality control measures that lead to customer satisfaction.

You can also use the collect modules to inspect products as you receive them. You can specify which products always require inspection and which products should be inspected next. You can also specify which products do not require inspection.

Tasks are added to employee To Do lists after you create records in Product Data Collection.

See My To Do list on page 34.

Product inspection plans

Use Product Inspection Plan Maintenance to create thorough instructions for assessing how well a product conforms to its intended design. You can specify the characteristics you would like to examine, the sample size of each inspection, and the date the inspection should occur.

Adding product inspection plans

To add a product inspection plan:

1. Select **Control > Collect > Product > Product Inspection Plan Maintenance**.
2. Specify this information:

   Site ID
   Specify the site that is conducting this product inspection. When you select a site, the site's parent entity ID is inserted in the Entity ID field.

   Insp Plan ID
   Leave this field blank. When you save the record, an ID is generated using the numbering scheme set up for product inspections.

   Insp Plan Oper
   Specify the operation the inspection plan is designed to control.

If you are creating an inspection plan to use in receiving inspection, specify the default receiving inspection operation number that is specified in Site Maintenance.

See Adding sites on page 59.

Inspection Plan Name
Specify the name of the inspection plan.

Plan Rev Level
Specify the current revision level for this plan. If you specify a new level, you are prompted to add change history text when you save the record.

Plan Issue Date
Specify the date you are issuing this revision. If you specify a new date, you are prompted to add change history text when you save the record.

Business Unit
If this plan relates to a particular business unit, specify the business unit.

Inspection Type
Select the type of Inspection. The options will depend on the Inspection Plan Integration settings in Site Maintenance.

3 In the Product ID field in the Product section, specify the product that is the subject of this inspection plan. After you select an ID, you are prompted to load all of the product's characteristics into the inspection plan window. Click **Yes** to insert the characteristics into the Characteristics table. Click **No** if you do not want to load the product's characteristics. If you click No, you can manually add the product's characteristics to the table.

4 The Made By section is available only if you have enabled receiving inspection in Site Maintenance. Use this section to specify who created the inspection plan or for whom the plan is used. The information in this section applies to both in-process and receiving inspection plans. Specify this information:

For in-process inspections, specify who made the plan:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

For receiving inspection, specify the supplier whose products are inspected with the plan. If the inspection plan is used with multiple suppliers, leave the Made By section blank.

5 The Recertification section is available only if you have enabled receiving inspection in Site Maintenance. Use this section to specify whether supplier inspection plans must be periodically recertified. To require recertification, select the **Required** check box. Then, specify how often suppliers must be recertified in the Interval Days field. The next scheduled certification date is inserted in the Next Cert Date field.

6 In the Characteristics table, specify the product characteristics to inspect with this inspection plan. In the Char No field, specify the characteristic number to include in the inspection plan. Use the arrows to change the order of the characteristics.

7 In the Inspect By section, specify how to sort the characteristics in the Product Data Collection

window. Click **Char No** to sort the characteristics by characteristic number, then by sample number. Click **Sample No** to sort the characteristics first by sample number, then by characteristic number. Click **Insp Seq No** to sort the characteristics by inspection plan sequence.

8 To specify inspection plan information for a characteristic, select the characteristic in the table, then right-click and select **Inspection Plan Info**.

9 To specify any special instructions for this inspection plan, right-click and select **Special Instructions**. After you specify the instructions, click **Ok**. The instructions you specified are inserted in the Special Instruction tab.

10 Click the **Save** button.

Adding inspection plan information for characteristics

Specify how to inspect each product characteristic in the sampling plan.

1 Select **Control > Collect > Product > Product Inspection Plan Maintenance.**.

2 Open the inspection plan.

3 In the Characteristics table, select the characteristic.

4 Right-click and select **Inspection Plan Info**.

5 Specify this information:

Equipment ID and Equipment Type
Specify the piece of equipment used to make this product characteristic in the Equipment ID field. When you select an equipment ID, the equipment's type is inserted in the Equipment Type field.

Device ID and Device Type
Specify the device used to measure this characteristic. When you select a device ID, the device's type is inserted in the Device Type field.

Measure By
Specify the job code of the individuals responsible for measuring this characteristic.

Chart Type
Specify the chart type to use to analyze the measurement of this characteristic.

Chart By
Specify the job code of the individuals responsible for measuring this characteristic.

Sample Size
Specify the number of samples to be taken for data collection.

Frequency
Specify the frequency code for this characteristic. The frequency code indicates how often this characteristic should be analyzed.

Level
Specify a level inspection code.

Init Sampling Plan
Specify the initial sampling plan to use the first time that you inspect the supplier product characteristic in receiving inspection. You can select any sampling plan defined for the site ID you specified in the Sampling Plan form.

Sampling Plan Ref
Specify a reference number for this sampling plan.

AQL Ref
Specify the Acceptable Quality Level reference for this characteristic.

6 In the Special Instructions section, specify any special instructions to use when inspecting this characteristic.

7 In the Product Characteristic section, this read-only information about the characteristic is displayed:

Characteristic Name
The name of the characteristic is displayed.

Type
The characteristic type code is displayed.

Standard Type
The standard type is displayed. Values are A for attribute, V for variable, and T for text. For variable standards, the standard range and unit of measure are displayed.

Class
The class code for this characteristic is inserted. Class codes can be used to group together characteristics that have the same sampling plan.

Viewing statistics for characteristics in inspection plans

1 Select **Control > Collect > Product > Product Inspection Plan Maintenance**.
2 Open the inspection plan.
3 In the Characteristics table, select the characteristic.
4 Right-click and select **Inspection Plan Info**.
5 Click **Show Statistics**.
6 Statistical charts for the characteristic are displayed. The chart that is displayed depends upon the type of characteristic and the settings specified in Properties.
7 To update the calculation for the charts, click the **Properties** button.

Calculating statistical data for variable characteristics

Use this form to calculate statistical data for variable characteristics.

Control charts are valid only if you use a constant sample size for the inspection plan.

1 Select **Control > Collect > Product > Product Inspection Plan Maintenance**.
2 Open the inspection plan.
3 In the Characteristics table, select a variable characteristic.

4 Right-click and select **Inspection Plan Info**.

5 Click **Show Statistics**.

6 Click the **Chart Properties** button.

7 In the Chart Type field, select one of these options:

Option	Description
Histogram Only	Select this option to view a histogram chart. Use a histogram chart if a large number of samples have been collected and you are determining if a process is in control.
IndMovRng	Select this option to view individual moving range charts. Use this chart if the sample size equals 1.
XBarRange	Select this option to view X-bar and R charts. Use this chart for sample sizes between 2 and 10. The Xbar chart shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each collection, the average measurement is plotted. The R chart displays information about the range of measurements taken. The x-axis shows the date that the samples were measured. the y-axis shows the range of values taken. For each collection, the difference between the largest and smallest measurements is plotted.
XBar Sigma	Select this option to view X-bar and Sigma charts. Use this chart for sample sizes that are greater than 10. The Xbar chart shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each collection, the average measurement is plotted. The sigma chart shows the standard deviation of the samples.

8 To complete the chart format, specify this information:

Viewable Points
Specify the number of data points to include in the charts. Start with 25 viewable points.

Show Specification
To display the chart data statistics for the characteristic, select Yes. To hide chart data statistics, click No.

9 Specify the range of data collection records to include in the calculation of the control limits for the characteristic. To activate the data collection fields, click the **Re-Calculate** button. Specify this information:

Collect ID From
Specify the first data collection record in the range.

Collect ID To
Specify the last data collection in the range.

10 Click **Calculate**. This information is displayed:

Calc From and Calc To Date
The time period during which the data were collected is displayed.

Date of Calculation
The date that the statistics were last calculated is displayed.

Sigma
The estimated standard deviation of the calculated data for control limits is displayed.

Cp
The process capability value is displayed. This index shows how well a system can meet two-sided spec limits, assuming the average is centered on the target value.

Cpk
The process capability index value is displayed. The Cpk for two-sided spec limits measures the process variation with respect to the spec limits and location of process average.

Cpu
Cpu for single-sided spec limits is used to calculate Cpk.

CR
The reciprocal of the Cp value is displayed.

Pp
The process performance value is displayed. Indices are calculated using the actual Sigma (actual individual values) instead of the estimated Sigma.

Ppk
The process performance index value is displayed. Indices are calculated using the actual Sigma (actual individual values) instead of the estimated Sigma.

Pr
The reciprocal of the Pp value is displayed. Indices are calculated using the actual Sigma (actual individual values) instead of the estimated Sigma.

Upper
The upper limit specification for the characteristic is displayed.

Nominal
The nominal specification for the characteristic is displayed.

Lower
The lower limit specification for the characteristic is displayed.

Subgroup Size
The subgroup sample size used in the inspection plan to calculate control limits is displayed.

Mean
The mean of the values is displayed.

Max
The maximum measurement is displayed.

Min
The minimum measurement is displayed.

UCL Xbar
The upper control limit of the Xbar chart is displayed.

LCL Xbar
The lower control limit of the Xbar chart is displayed.

Skewness Test
The skewness value is inserted. The value indicates the concentration of the values at the high end or low end of the scale.

Kurtosis Test
The kurtosis value is inserted. The value indicates the concentration of the values at the middle of the scale.

Wilk-Shapiro
The Wilk-Shapiro value is inserted. This value is used to evaluate whether the measurements are normally distributed.

11 To view the chart, exit the Properties form. The chart you selected is displayed. A histogram is also displayed. To hide the histogram, clear the **Histogram** check box. To change the number of cells on the histogram, specify a new value in the # of Cells field.

To view the upper and lower specification limits, select the **USL/LSL** check box.

If more data points are available, use the forward and back arrows in the chart area to display them.

Use the **Next** and **Previous** toolbar buttons to view additional characteristics in the inspection plan.

Calculating statistical data for attribute characteristics

Use this form to calculate statistical data for attribute characteristics.

Control charts are valid only if you use a constant sample size for the inspection plan.

1 Select **Control > Collect > Product > Product Inspection Plan Maintenance**.
2 Open the inspection plan.
3 In the Characteristics table, select an attribute characteristic.
4 Right-click and select **Inspection Plan Info**.
5 Click **Show Statistics**.
6 Click the **Chart Properties** button.
7 Click the **Calculation Results - Attribute** tab.
8 Specify the range of data collection records to include in the calculation of the control limits for the characteristic. To activate the data collection fields, click the **Re-Calculate** button. Specify this information:

Collect ID From
Specify the first data collection record in the range.

Collect ID To
Specify the last data collection in the range.

9 Click **Calculate**. This information is displayed:

Calc From and Calc To Date
The time period during which the data were collected is displayed.

Date of Calculation
The date that the statistics were last calculated is displayed.

Subgroup Size
The subgroup sample size used in the inspection plan to calculate control limits is displayed.

10 To view the chart, exit the Properties form. A P chart and NP chart is shown. The P chart shows the percentage of nonconformances per group. The NP chart shows the number of nonconforming samples per group.

Canceling characteristics

If you are no longer required to inspect a particular characteristic in a Product Inspection Plan, you can cancel the characteristic. When data is collected in product data collection, canceled characteristics are not displayed.

1 Select **Control > Collect > Product > Product Inspection Plan Maintenance**.
2 Specify the inspection plan.
3 In the Characteristics table, select the **Canceled** check box for the characteristic.
4 Click the **Save** button.

You can choose to view or hide canceled characteristics in the Characteristic table. To show canceled characteristics, select the **Display Canceled Char Nos** check box. To hide canceled characteristics, clear the **Display Canceled Char Nos** check box.

Revising product inspection plans

To formally revise a product inspection plan:

1 Select **Control > Collect > Product > Product Inspection Plan Maintenance**.
2 Select the product inspection plan to revise.
3 Make your revisions
4 In the Revision Level field, specify a new value.
5 In the Issue Date field, specify the date this revision was made.

6 Click the **Save** button.
7 You are prompted enter change history text. To add change history text, click **Yes**.
8 You are informed that the product inspection plan information will be stored when you save the revision. This information is stored in Product Inspection Plan Revision History. Click **Ok**.
9 On the Change History tab, specify a description of the change.
10 Click **Save**.

Viewing product inspection plan change history text

You can view a list of the comments entered when a new product inspection plan revision is saved. All of the comments are displayed on the Change History tab. You can view change history comments in a combined view and a detail view. To view text only, click Combined. To view comments by date or revision level, click Detail. If you click detail, a table with the revision level and issue date is displayed. Select a row in the table to view the associated comments.

You cannot edit product inspection plan change history on this tab.

Editing the change history for a product inspection plan

You can edit the text entered when changes are made to a product inspection plan. An entry is added to Product Inspection Plan Change History if you change either the Issue Date or Revision Level of a product inspection plan.

You can view additional detail about product inspection plan changes in Product Inspection Plan Revision History.

1 Select **Control > Collect > Product > Product Inspection Plan Maintenance**.
2 Open the product inspection plan.
3 Right-click and select **Change History**.
4 In the Revision section, a list of the revisions and dates they were issued is displayed. Select a row to view the change history text.
5 To edit the change history text, specify text in the Change History section. After you exit the field and click the **Save** button, the ID of the currently signed in user, the current date, and the current time are inserted.

Product data collection

Use Product Data Collection to examine product characteristics according to your product inspection plans. If products fail the inspection, you can post the failure to an NCM record.

Adding product data collection records

1 Select **Control > Collect > Product > Product Data Collection**. You can also access Product Data Collection from Receiving Inspection. Select the lot that is ready for inspection, and then right-click and select **Product Data Collection**.

2 Specify this information:

Site ID
Specify the site that is collecting the data. When you select a site, the site's parent entity ID is inserted in the Entity ID field.

Business Unit
Specify the business unit where this data collection takes place.

Order Type
Shows the type of inspection order.

Product Coll ID
Leave this field blank. When you save the record, an ID is generated based on your number generation scheme.

Insp Plan ID
Specify the inspection plan to use to collect characteristic data. When you specify the inspection plan, the Product ID, the Insp Plan Oper, and revision information is inserted.

Date
Specify the date this data collection occurred. By default, the current date is inserted.

Time
Specify the time this data collection occurred. By default, the current time is inserted.

3 In the Made By section, specify who makes the product. Select one of these options:
- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field.

4 In the Checked By section, specify who is responsible for checking the data you collect. Select one of these options:
- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field.

5 In the Revision section, review the current revision levels for the product and the inspection plan. The information in this section is read-only. This information is displayed:

Product
The description of the product is displayed.

Product Revision Level
The current revision level of the product is displayed.

Product Revision Issue Date
The date the current revision level of the product was issued is displayed.

Inspection Plan
The description of the inspection plan is displayed.

Inspection Plan Revision Level
The current revision level of the inspection plan is displayed.

Inspection Plan Revision Issue Date
The date the current revision level of the inspection plan was issued is displayed.

6 Use the Lot Info tab to specify information about the lot you are inspecting. Click the **Lot Info** tab and specify this information:

PO Number
If you received this lot from a supplier, specify your purchase order number. If you are sending this lot to a customer, specify the customer's purchase order number.

If IQM is integrated to an ERP, the purchase order number is retrieved from the ERP.

Release Number
Specify the release number for this lot.

Lot Number
Specify the number for this lot. You can use this field to specify a receiver ID and line number.

If IQM is integrated to an ERP, the purchase receipt line number from the ERP is used.

Lot Size
Specify the size of this lot.

If IQM is integrated to an ERP, the quantity from the purchase order in the ERP is displayed.

Qty Accepted
The quantity of the lot that was accepted is displayed. This number is calculated after data collection input is complete. You can override the value.

Qty Reject
The quantity of this lot that was rejected is displayed. This number is calculated after data collection input is complete. You can override the value.

Result
The result is selected based on the result of the data collection. This table shows the values:

Value	Description
Passed	If the products passed the data analysis, this option is selected.
Failed	If the products did not pass the data analysis, this option is selected

Value	Description
Pending	If data collection has not yet occurred or is not yet complete, this option is selected.

Skip Lot
This field is read-only. If receiving inspection is enabled for the site specified in the Site ID field, then Active is inserted in this field. If receiving inspection is not enabled for the site specified in the Site ID field, then Inactive is inserted in this field.

User Defined 2 and 3
Specify the user-defined information required for your company.

Reference 1, Reference 2, and Reference 3
Specify the reference information required for your company.

Nonconformance
See Posting Failed Data Collection Records to Nonconformance Records.

7 To review the special instructions specified for this product or product inspection plan, click the **Special Instructions** tab. The information specified on the product record is displayed. This information is read-only from the inspection plan.

8 To specify additional information about this data collection record, click the **Comments** tab. Specify any additional information.

9 Use the Assigned To tab to specify who is responsible for collecting data. Click the **Assigned To** tab and specify this information:

Employee ID
Specify the ID of the employee responsible for this data collection record.

A task is added to the employee's My To Do list. The due date of the task is the same as the due date of the product data collection record.

Function
Specify the employee's function.

Job
Specify the employee's job code.

Due Date
Specify the date by which data collection must occur.

Equipment ID
Specify the ID of the equipment used to make the product.

Tooling ID
Specify the ID of the equipment used with this product.

User Defined 1
Specify the user defined information required for your company.

10 The **ERP Info** tab is available when IQM is integrated to an ERP through BODs. Use the tab to select a work order and operation that is related to the product data collection record. Specify this information:

Production Order ID
Use the Find feature to select the work order ID.

Operation ID
Use the Find feature to select the operation ID.

Resource ID
The resource ID is populated based on the operation that you select.

11 Click the **Save** button.

Specifying characteristics to measure with automatic data collection devices

To access this form, you must use the WinStudio client version of IQM. You cannot use this form in the web interface.

You can use an automatic data collection device to measure any variable characteristic. Use this form to select the characteristics that are measured with an automatic data collection device.

1 Select **Control > Collect > Product > Product Data Collection Maintenance**.
2 Open the product data collection record.
3 Right-click and select **Data Collection**. Change the sample size if necessary.
See Changing the sample size on page 408.
4 Exit the data collection form without specifying any collection results.
5 Right-click and select **ADI Results**.
6 For each variable characteristic, click the **Use ADI** check box to collect data using an automatic device. Clear the check box to enter the data manually. To select all variable characteristics, click the **Select** button.
7 In the Device Driver column, specify the driver for the device you use to collect data. To configure the driver, click Configure Driver.
8 Click **Ok**.

Collecting data

After you create the product data collection record master, collect data for the product characteristics. Specify which characteristics to examine in Product Inspection Plan Maintenance.

1 Select **Control > Collect > Product > Product Data Collection Maintenance**.
2 Select the product data collection record.

3 Right-click and select **Data Collection**.

4 If this is the first time you are accessing the data collection form for this data collection record, you are asked to change the sample size. The default sample size is specified in Product Inspection Plan Maintenance. Click **Yes** to override the default and specify a new sample size for the characteristics. You can specify a new sample size if the lot size is smaller than the default sample size.

If you change the sample size, the data record is not considered for charting purposes. Constant sample sizes are required for inclusion in charts.

See Changing the Sample Size on page 408.

5 In the Sort By section, specify how to sort the characteristics in the table.

6 In the Data Collection dialog box, click a characteristic to view information about the characteristic in the header. This information is displayed:

Name
The name of the characteristic is displayed.

Spec
For variable characteristics, the variable standard specified on the product record is displayed. For attribute and text characteristics, this field is blank.

Units
For variable characteristics, the unit of measure for the standard is displayed. For attribute and text characteristics, this field is blank.

Char Class
The Class ID for this characteristic is displayed.

Measure By
The function responsible for measuring this characteristic is displayed.

Device ID
The device used to measure this characteristic is displayed. When you record data, you can select a different device.

Device Type
The type associated with the device ID is displayed.

7 Specify collection data for each characteristic in the table.

- For attribute characteristics, specify this information:

  Serial Number
  Specify the serial number of the product you are examining.

  Device ID
  Specify the device used to measure the characteristic. The device ID specified for the characteristic in the product inspection plan is inserted by default. You can select a different device. To limit your selections to devices with the same device type as the default device, select the Filter check box.

Attribute
Specify whether the attribute passes inspection, fails inspection, or is pending inspection. To pass all attribute characteristics, click Accept All Attributes. A dialog box is displayed that prompts you to either accept all attributes or accept only the attribute characteristics that are blank.

If an attribute fails, NCM is inserted in the Warning column. When you save the data collection information and return to the Product Data Collection form, you are prompted to change the number of products that passed or failed inspection.

- For variable characteristics, specify this information:

  Serial Number
  Specify the serial number or any text information for the product you are examining.

  Device ID
  Specify the device used to measure the characteristic. The device ID specified for the characteristic in the product record is inserted by default. You can select a different device. To limit your selections to devices with the same device type as the default device, select the Filter check box.

  Variable
  Specify the measurement for this instance of the characteristic. If the measurement falls outside of the variable standard, NCM is inserted in the Warning column. When you save the data collection information and return to the Product Data Collection form, you are prompted to change the number of products that passed or failed inspection.

- For text characteristics, specify this information:

  Serial Number
  Specify the serial number of the product you are examining.

  Text
  Specify the information required for this characteristic.

8 Click the **Save** button.

Changing the sample size

When you access the data collection dialog box from Product Data Collection, you are asked if you want to change the sample size. You may want to change the sample size if the lot size is smaller than the default sample size, or if you want to test more samples.

1 Select **Control > Ccollect > Product Data Collection Maintenance**.
2 Open the product data collection record.
3 Right-click and select **Data Collection**.
4 When you are prompted to change the sample size, click **Yes**.

5 Information about the samples is displayed. To specify a new sample size, click in the Sample Size column and specify the size of the sample to test for the characteristic. To apply the same sample size to all rows, specify the value in the New Sample Size field, and then click **Update**.

6 Click **Ok**. Collect the data for the characteristics.

See Collecting data on page 406.

Approving product data collection records

After product data collection is complete, approve or reject the record. Use this form to specify the individuals who approve product data collection records and to record their approvals.

1 Select **Control > Collect > Product > Product Data Collection Maintenance**.

2 Select the data collection record.

3 Right-click and select **Approved By**.

4 Specify the members of the approval team:

- To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
- To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact responsible for the audit in the Contact No column.
- To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact responsible for the audit in the Contact No column.

5 In the decision column, specify the decision made for this data collection record. When you select a decision, the current date and the ID of the currently signed in user are inserted in the **Decision Date** field. Depending on the settings specified in Application Global Maintenance, you may be required to specify your password when you change the decision to Approved or Not Approved.

Option	Description
Pending	Select this option if the data collection record is under review and no final decision has been made.
Approved	Select this option if the data collection record is approved.
Not Approved	Select this option if the data collection record is not approved and data must be recollected.

6 Click the **Save** button.

Posting failed data collection records to Nonconformance Maintenance

You can create nonconformance records directly from the Product Data Collection form. If an attribute or variable characteristic failed data collection, you can choose to include the characteristics in the NCM record.

1 Select **Control > Collect > Product > Product Data Collection Maintenance**.
2 Open the product data collection record.
3 In the Lot Info tab, click **Post NCM**.
4 Specify this information:

Site ID
Specify the site that is reporting the nonconformance.

Post to NCM
Leave this field blank. An NCM ID based on your numbering scheme is generated when you save the record.

NCM Type
Specify a classification for this NCM. Types of NCM could include out of calibration, contamination, or out of spec.

Subject
Specify the subject of this NCM.

Cause
Specify the cause of this NCM.

Assigned To
Specify the employee who is responsible for this NCM.

Due Date
Specify the date by which this NCM must be resolved.

Business Unit
If this NCM relates to a particular business unit, specify the ID of the business unit.

5 In the Reported By section, specify who reported the nonconforming sample:
- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID**field.

6 In the Location section, specify information about the lot and the location were the nonconformance was found:

Lot Size
The lot size specified on the Product Data Collection record is inserted. Adjust this number if necessary.

Quantity Accepted
The quantity accepted specified on the Product Data Collection record is inserted. Adjust this number if necessary.

Quantity Rejected
The quantity rejected specified on the Product Data Collection record is inserted. Adjust this number if necessary.

Location Found
Specify the location where the nonconforming sample was located.

Location Generated
Specify the location where you are generating the nonconformance record.

7 In the Nonconformance Description section, specify a general description of the nonconforming samples.
8 In the Data Collection Characteristics section, the attribute and variable characteristics that failed inspection are inserted. Select the **Post to NCM** check box to include the characteristics in the nonconformance record. Clear the check box to omit the characteristic from the nonconformance record.
9 Perform one of these steps:
- To create the nonconformance record, click **Post to NCM**.
- To create the nonconformance record and e-mail a notification, click **Post to NCM and Email**.
- To create the nonconformance record, select the **Closed** check box and then click **Save**.

Closing product data collection records

After you complete a data collection record, close the record.

1 Select **Control > Collect > Process > Product Data Collection Maintenance**.
2 Select the product data collection record.
3 Select the **Closed** check box.
4 The current date is inserted in the **Closed Date** field. Adjust the date if necessary.
5 Click the **Save** button.
6 A message box is displayed that states that closing and saving the record sets it to read only and that no future edits are allowed. Click **Yes** to close the record.
7 The message box prompt is displayed again. Click **Yes**. The record is saved as a read-only record.

Viewing product inspection plan documents

1 Select **Control > Collect > Product > Product Data Collection**.
2 Specify the date collection record.
3 Click the **Product Inspection Plan Link Embed** button.

4 A list of documents attached to the equipment record is displayed. To view a document, select the row and click **View**.

You cannot add or remove documents from this form. To revise the list of documents attached to the equipment record, use Product Inspection Plan Maintenance.

Copying product data collection records

You can create a new data collection record from an existing record.

1 Select **Control > Collect > Product > Product Data Collection Maintenance**.
2 Select the product data collection record.
3 Right-click and select **Copy Prod Data Col**.
4 Specify the information to copy:

Production Info
Select this check box to copy the information on the Assigned To tab.

Serial Numbers
Select this check box to copy the serial numbers of the data samples. No other information about the data samples is copied.

Quality Costs
Select this check box to copy the quality cost information.

5 Click **Ok**. In addition to the information you specified, the information on the record header, Lot Info, Comments, and Special Instructions tab is copied.

Viewing the revision history of product inspection plans

Use Product Inspection Plan Revision History to review changes made to your product inspection plans over time. Each time you create a new revision for a product inspection plan by changing its revision level or issue date, a copy of key information from the previous revision level is retained.

You can only view information about previous revisions. You cannot edit information in Product Inspection Plan Revision History.

1 Select **Control > Collect > Product > Product Inspection Plan Revision History**.
2 Open a product plan revision.
3 This information is displayed:

Insp Plan ID
The ID for this inspection plan is displayed.

Entity ID
The ID of the entity conducting this inspection is displayed.

Site ID
The ID of the site that is conducting this product inspection is displayed.

Product ID and Description
The ID and description of the product that is the subject of the inspection is displayed.

Operation No
The operation the inspection plan is designed to control is displayed.

Plan Rev Level
The revision level of this inspection plan is displayed.

Plan Issue Date
The date the revision was issued is displayed.

Product Rev Level
The revision level of the product is displayed.

Product Rev Date
The date that the product revision was issued is displayed.

In the Characteristics table, this information is displayed:

Characteristic No
The characteristic number is displayed.

Plan Rev Level
The revision level of the inspection plan is displayed.

Plan Issue Date
The date that the revision was issued is displayed.

Sample Size
The sample size to examine for this characteristic is displayed.

Canceled
This check box is selected if the characteristic is no longer examined as part of the plan.

Product plan revision history data collection

Use Product Plan Revision History Data Collection to collect data against an archived version of a product plan.

Creating a data collection record against an archived product plan

1 Select **Control > Collect > Product > Product Plan Rev History Data Collection**.

2 In the Archived Plans field, specify the archived inspection plan to use for data collection.

3 Specify this information

Entity ID
The entity from the inspection plan is inserted. This information is read-only.

Site ID
Specify the site that is collecting the product data.

Product Collect ID
Leave this field blank. When you save the record, an ID is generated based on your number generation scheme.

Product Name
The name of the product that is the subject of the inspection plan is inserted.

Product Revision
The archived revision level of the product is inserted. This information is read-only.

Operation No
The operation number of the inspection plan is inserted. This information is read-only.

Plan Revision
The revision level of the inspection plan is inserted. This information is read-only.

Date
Specify the date you are collecting data. The current date is inserted. Adjust the date if necessary.

Time
Specify the time you are collecting data. The current time is inserted. Adjust the time if necessary.

Business Unit
If this data collection record relates to a particular business unit, specify the business unit.

4 In the Made By section, specify who makes the product. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

5 In the Checked By section, specify who is responsible for checking the data you collect. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.

- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

6 To review the special instructions specified for this product or product inspection plan, click the **Special Instructions** tab. The information specified on the product record is displayed. This information is read-only.

7 Use the Lot Info tab to specify information about the lot you are inspecting. Click the Lot Info tab and specify this information:

PO Number
If you received this lot from a supplier, specify your purchase order number. If you are sending this lot to a customer, specify the customer's purchase order number.

Lot Number
Specify the number for this lot. You can use this field to specify a receiver ID and line number.

Lot Size
Specify the size of this lot.

Accepted
Specify the quantity of this lot that was accepted.

Rejected
Specify the quantity of this lot that was rejected.

8 To specify additional information about this data collection record, right-click and select **Comments**. Specify any additional information, then click **Ok**. The comments are inserted on the Comments tab.

9 Use the Assigned To tab to specify who is responsible for collecting data. Click the **Assigned To** tab and specify this information:

Employee ID
Specify the ID of the employee responsible for this data collection record.

Function
Specify the employee's function.

Job
Specify the employee's job code.

Due Date
Specify the date by which data collection must occur.

Equipment ID
Specify the ID of the equipment used to make the product.

Tooling ID
Specify the ID of the equipment used with this product.

User Defined 1
Specify the user defined information required for your company.

10 Click the **Save** button.

Collecting data against an archived product plan

After you create the product data collection record master, collect data for the product characteristics. Specify which characteristics to examine in Product Inspection Plan Maintenance.

1 Select **Control > Collect > Product > Product Plan Rev History Data Collection**.

2 Select the product data collection record.

3 Right-click and select **Data Collection**.

4 If this is the first time you are accessing the data collection form for this data collection record, you are asked to change the sample size. The default sample size is specified in Product Inspection Plan Maintenance. Click **Yes** to override the default and specify a new sample size for the characteristics. You can specify a new sample size if the lot size is smaller than the default sample size.

See Changing the Sample Size on page 408.

5 In the Data Collection dialog box, click a characteristic to view information about the characteristic in the header. This information is displayed:

Name
The name of the characteristic is displayed.

Spec
For variable characteristics, the variable standard specified on the product record is displayed. For attribute and text characteristics, this field is blank.

Units
For variable characteristics, the unit of measure for the standard is displayed. For attribute and text characteristics, this field is blank.

Char Class
The Class ID for this characteristic is displayed.

Measure By
The function responsible for measuring this characteristic is displayed.

Device ID
The device used to measure this characteristic is displayed. When you record data, you can select a different device.

Device Type
The type associated with the device ID is displayed.

6 Specify collection data for each characteristic in the table.

- For attribute characteristics, specify this information:

  Serial Number
  Specify the serial number of the product you are examining.

Device ID
Specify the device used to measure the characteristic. The device ID specified for the characteristic in the product inspection plan is inserted by default. You can select a different device.

Attribute
Specify whether the attribute passes inspection, fails inspection, or is pending inspection. To pass all attribute characteristics, click **Accept All Attributes**.

If an attribute fails, NCM is inserted in the Warning column.

- For variable characteristics, specify this information:

  Serial Number
  Specify the serial number of the product you are examining.

  Device ID
  Specify the device used to measure the characteristic. The device ID specified for the characteristic in the product record is inserted by default. You can select a different device.

  Variable
  Specify the measurement for this instance of the characteristic. If the measurement falls outside of the variable standard, NCM is inserted in the Warning column.

- For text characteristics, specify this information:

  Serial Number
  Specify the serial number of the product you are examining.

  Text
  Specify the information required for this characteristic.

7 Click the **Save** button.

Changing the sample size in Product Plan Revision History Data Collection

When you access the data collection dialog box from Product Plan Revision History Data Collection, you are asked if you want to change the sample size. You may want to change the sample size if the lot size is smaller than the default sample size, or if you want to test more samples.

1 Select **Control > Collect > Product > Product Plan Rev History Data Collection**.
2 Open the product data collection record.
3 Right-click and select **Data Collection**.
4 When you are prompted to change the sample size, click **Yes**.
5 Information about the samples is displayed. To specify a new sample size, click in the Sample Size column and specify the size of the sample to test for the characteristic. To apply the same sample size to all rows, specify the value in the New Sample Size field, and then click **Update**.

6 Click **Ok**. Collect the data for the characteristics.
See Collecting or editing data on page 416.

Closing product plan revision history data collection records

After you complete a product plan revision history data collection record, close the record.

To close a record:

1 Select **Control > Collect > Product > Product Plan Rev History Data Collection**.
2 Select the product data collection record.
3 Select the **Closed** check box.
4 The current date is inserted in the Closed Date field. Adjust the date if necessary.
5 Click the **Save** button.

Process inspection plans

Use Process Inspection Plan Maintenance to create thorough instructions for assessing how well a process conforms to its intended design. You can specify the characteristics you would like to examine for each process element, the sample size to be taken, and the date the inspection should occur.

Adding process inspection plans

1 Select **Control > Collect > Process > Process Inspection Plan Maintenance**.
2 Specify this information:

Site ID
Specify the ID of the site that conducts this process inspection. After you specify the site ID, the ID of the site's parent entity is inserted in the entity ID field.

Process ID
Specify the ID of the process that is the subject of this plan. After you specify an ID, you are asked if you want to import all elements for the selected process. Click Yes to import all worksheet elements. Click No to individually specify the worksheet elements to include in the inspection plan. After you specify a process ID, the description and the location specified on the process record is inserted into the Description and Location fields.

Operation No
Specify the operation number for this inspection plan.

Plan Name
Specify the name of this inspection plan.

Plan Rev Level
Specify the current revision level for this plan. If you specify a new level, you are prompted to add change history text when you save the record.

Plan Issue Date
Specify the date that you are issuing this revision. If you specify a new date, you are prompted to add change history text when you save the record.

Business Unit
If this plan pertains to a particular business unit, specify the ID of the unit.

3 Click the Process Inspection Plan Elements tab. Use this tab to select the elements that are subject to inspection. When you specified a process ID, you had the option of inserting all elements of the process into the table. If you did not insert all elements into the table, you can add them manually. To add elements manually:
   a Click in the Element table.
   b Click the **New** button.
   c Click the **Element No** drop-down button to select the element.
   d Click the **Save** button.

4 To complete the information on the Process Inspection Plan Elements tab, specify this information:

Sample Size
The sample size defined on for the element in Process Maintenance is inserted. You can specify a different sample size.

Special Instructions
Specify any special instructions regarding the inspection of each element. You can specify different instructions for each element. Select the element in the table, before specifying the instructions.

5 In the Inspect By section, specify how to sort the elements in the Process Data Collection window. Click the **Element No** option to sort the elements by element number, then by sample number. Click the **Sample No** option to sort the elements first by sample number, then by element number.

6 To specify inspection plan information for a characteristic, select the characteristic in the table, then right-click and select **Inspection Plan Info**.

7 To specify any special instructions for the entire inspection plan, and not just a specific element, right-click and select **Special Instructions**. After you specify the instructions, click **Ok**. The instructions you specified are inserted in the Special Instruction tab.

8 Click the **Save** button.

Specifying inspection plan information for elements

Use this feature to specify inspection plan information for process elements.

1 Select **Control > Collect > Process > Process Inspection Plan Maintenance**.

2 Open the process inspection plan.

3 In the Elements table, select the element.

4 Right-click and select **Inspection Plan Info**.

5 The inspection information defined for this element in Process Maintenance is displayed. You can override certain information. If you override information in this form, the information in Process Maintenance is not changed. Review or specify this information:

Equipment Type
The type of equipment used to measure this element is displayed.

Device Type
The type of device used to measure this element is displayed.

Measure By
Specify the job code of the individuals responsible for measuring this element.

Form/Form No
Specify the name or number of the hard copy form you use to collect information about this element.

Report By
Specify the job code of the individuals responsible for reporting the measurement results for this element.

Chart Type
Specify the chart type to use to analyze the measurement of this element.

Chart By
Specify the job code of the individuals responsible for creating the chart for this element.

Sample Size
Specify the number of samples to be taken for data collection for this element.

Frequency
Specify the frequency code for this element. The frequency code indicates how often this element should be analyzed.

6 In the Current Element Master Record section, this information about the process worksheet element is displayed:

Element Name
The name of the element is displayed.

Standard Type
The type of standard used to measure the element is displayed. V is displayed if the element uses a variable standard. A is displayed if the element uses an attribute standard. T is displayed if the element uses a text standard.

Viewing statistics for elements in process inspection plans

Use this feature to view information about data collected for this element. To view element statistics:

1 Select **Control > Collect > Process > Process Inspection Plan Maintenance**.

2 In the Inspection Plan ID field, specify the inspection plan.
3 In the elements table, select the element.
4 Right-click and select **Inspection Plan Info**.
5 Click **Show Statistics**. Statistical charts for the element are displayed. The chart that is displayed depends upon the type of element and the settings specified in Properties.
6 To update the calculation for the charts, click the **Chart Properties** button.

Calculating statistics for elements in process inspection plans

Use this form to calculate statistical data for elements.

Control charts are valid only if you use a constant sample size for the inspection plan.

1 Select **Control > Collect > Process > Process Inspection Plan Maintenance**.
2 Open the inspection plan.
3 In the elements table, select a variable element.
4 Right-click and select **Inspection Plan Info**.
5 Click **Show Statistics**.
6 Click **Chart Properties** button.
7 In the Chart Type field, click one of theses options:

Option	Description
Histogram Only	Select this option to view a histogram chart. Use a histogram chart if a large number of samples have been collected and you are determining if a process is in control.
IndMovRng	Select this option to view individual moving range charts. Use this chart if the sample size equals 1.
XBarRange	Select this option to view X-bar and R charts. Select this option to view X-bar and R charts. Use this chart for sample sizes between 2 and 10. The Xbar chart shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each collection, the average measurement is plotted. The R chart displays information about the range of measurements taken. The x-axis shows the date that the samples were measured. the y-axis shows the range of values taken. For each collection, the difference between the largest and smallest measurements is plotted.
XBar Sigma	Select this option to view X-bar and Sigma charts. Use this chart for sample sizes that are greater than 10. The Xbar chart shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each collection, the average measurement is plotted. The sigma chart shows the standard deviation of the samples.

8 To complete the chart format, specify this information:

Viewable Points
Specify the number of data points to include in the charts. Start with 25 viewable points.

Show Specification
To display the chart data statistics for the element, select Yes. To hide chart data statistics, click No.

9 Specify the range of data collection records to include in the calculation of the control limits for the element. To activate the data collection fields, click the **Re-Calculate** button. Specify this information:

Collect ID From
Specify the first data collection record in the range.

Collect ID To
Specify the last data collection in the range.

10 Click **Calculate**. This information is displayed:

Calc From and Calc To Date
The time period during which the data were collected is displayed.

Date of Calculation
The date that the statistics were last calculated is displayed.

Sigma
The estimated standard deviation of the calculated data for control limits is displayed.

Cp
The process capability value is displayed. This index shows how well a system can meet two-sided spec limits, assuming the average is centered on the target value.

Cpk
The process capability index value is displayed. The Cpk for two-sided spec limits measures the process variation with respect to the spec limits and location of process average.

Cpu
Cpu for single-sided spec limits is used to calculate Cpk.

CR
The reciprocal of the Cp value is displayed.

Pp
The process performance value is displayed.

Ppk
The process performance index value is displayed.

Pp
The process performance value is displayed. Indices are calculated using the actual Sigma (actual individual values) instead of the estimated Sigma.

Ppk
The process performance index value is displayed. Indices are calculated using the actual Sigma (actual individual values) instead of the estimated Sigma.

Pr
The reciprocal of the Pp value is displayed. Indices are calculated using the actual Sigma (actual individual values) instead of the estimated Sigma.

Upper
The upper limit specification for the element is displayed.

Nominal
The nominal specification for the element is displayed.

Lower
The lower limit specification for the element is displayed.

Subgroup Size
The subgroup sample size used in the inspection plan to calculate control limits is displayed.

Mean
The mean of the values is displayed.

Max
The maximum measurement is displayed.

Min
The minimum measurement is displayed.

UCL Xbar
The upper control limit of the Xbar chart is displayed.

LCL Xbar
The lower control limit of the Xbar chart is displayed.

Skewness Test
The skewness value is inserted. The value indicates the concentration of the values at the high end or low end of the scale.

Kurtosis Test
The kurtosis value is inserted. The value indicates the concentration of the values at the middle of the scale.

Wilk-Shapiro
The Wilk-Shapiro value is inserted. This value is used to evaluate whether the measurements are normally distributed.

11 To view the chart, exit the Properties form. The chart you selected is displayed. A histogram is also displayed. To hide the histogram, clear the **Histogram** check box. To change the number of cells on the histogram, specify a new value in the # of Cells field.

To view the upper and lower specification limits, select the **USL/LSL** check box.

If more data points are available, use the forward and back arrows in the chart area to display them.

Use the **Next** and **Previous** toolbar buttons to view additional elements in the inspection plan.

Canceling elements

If you are no longer required to inspect a particular element in a Process Inspection Plan, you can cancel the element. When data is collected in process data collection, canceled characteristics are not displayed.

1. Select **Control > Collect > Process > Process Inspection Plan**.
2. In the Inspection Plan ID field, specify the inspection plan.
3. In the Elements table, select the **Canceled** check box for the element.
4. Click the **Save** button.

You can choose to view or hide canceled elements in the Elements table. To show canceled elements , select the **Display Canceled Elements** check box. To hide canceled characteristics, clear the **Display Canceled Elements** check box.

Revising process inspection plan information

To formally revise a product inspection plan:

1. Select **Control > Collect > Process > Process Inspection Plan**.
2. Select the process inspection plan to revise.
3. Make your revisions
4. In the Revision Level field, specify a new value.
5. In the Issue Date field, specify the date this revision was made.
6. Click the **Save** button.
7. You are prompted enter change history text. To add change history text, click **Yes**.
8. You are informed that the process inspection plan information will be stored when you save the revision. This information is stored in Process Inspection Plan Revision History. Click **Ok**.
9. On the **Change History** tab, specify a description of the change.
10. Click **Save**.

Viewing process inspection plan change history text

You can view a list of the comments entered when a new process inspection plan revision is saved. All of the comments are displayed on the Change History tab. You can view change history comments in a combined view and a detail view. To view text only, click Combined. To view comments by date

or revision level, click Detail. If you click detail, a table with the revision level and issue date is displayed. Select a row in the table to view the associated comments.

You cannot edit process inspection plan change history on this tab.

Editing process inspection plan change history

You can edit change history entries. An entry is added to process Inspection Plan Change History if you change either the Issue Date or Revision Level of a process inspection plan.

You can view additional detail about process inspection plan changes in Process Inspection Plan Revision History.

1. Select **Control > Collect > Process > Process Inspection Plan**.
2. Open the process inspection plan.
3. Right-click and select **Change History**.
4. In the Revision section, a list of the revisions and dates they were issued is displayed. Select a row to view the change history text.
5. To edit the change history text, specify text in the Change History section. After you exit the section and click the **Save** button, the ID of the currently signed in user, the current date, and the current time are inserted.

Copying process inspection plans

Use this feature to create a new process inspection plan from an existing process inspection plan.

1. Select **Control > Collect > Process > Process Inspection Plan Maintenance**.
2. Specify the process inspection plan.
3. Right-click and select **Copy Process**.
4. In the Operation No field, specify a new operation number for the inspection plan.
5. Edit the information in the inspection plan as necessary.
6. Click the **Save** button.

Process data collection

Use Process Data Collection to examine process elements according to your process inspection plans. If an element fails the inspection, you can post the failure to an NCM record.

Setting up auto-numbering

For certain records, you can specify unique prefixes or suffixes for system-generate IDs. If you use multiple sites or entities, specifying a unique numbering scheme for each entity or site can make it easier to identify which records belong to a particular entity or site.

It is recommended that system administrators only have access to this form.

You can set up auto-numbering for a certain type of record in its parent form.

1. Access the form where you want to set up auto-numbering.
2. In the Site ID field, specify the site for which you are setting up auto-numbering.
3. Right-click and select **Next System ID**.
4. Specify the prefix or suffix to use. You can specify either a prefix or a suffix, or you can specify both a prefix and suffix. The entity and site for which you are setting up auto-numbering is displayed. Specify this information:

   Prefix
   To use a special prefix for this site's lots, specify the prefix in this field.

   Suffix
   To use a special suffix for this site's lots, specify the suffix in this field.

5. Click **Ok**. When you next create a record for the specified site, the prefix and suffix you specified is attached to the ID.

Adding process data collection records

1. Select **Control > Collect > Process > Process Data Collection Maintenance**.
2. In the header, specify this information:

   Site ID
   Specify the site that is collecting the data. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

   Process ID
   Specify the ID of the process that is the subject of this data collection.

   Operation No
   Specify the operation number of the process inspection plan. Selecting the operation number selects the plan. After you specify an operation number, the Process Name, Location, and Plan Revision information is inserted. The special instructions associated with the plan are inserted in the Special Instructions field.

   Date
   Specify the date you are collecting data for the process. By default, the current date is inserted.

   Time
   Specify the time you are collecting data for the process. By default, the current time is inserted.

Business Unit
If you use business units, specify the ID of the unit conducting the data collection.

3 If this process data collection record is related to the manufacture of a part, use the Made By section to specify information about the creation of the part. Specify this information:

Employee/Customer/Supplier
Specify who made the part.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

Equipment ID
Specify the piece of equipment used to manufacture the part.

Tooling ID
Specify the piece of equipment used in tooling the part.

4 In the Checked By section, specify who is responsible for checking the data you collect. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

5 In the Special Instructions field, the special instructions defined on the inspection plan are displayed. You cannot edit this field.

6 Click the **Lot Info** tab. If this process inspection is conducted in conjunction with the receipt of a particular lot, specify the lot information in this tab. Specify this information:

Product ID
Specify the ID of the product received in the lot.

PO Number
Specify the ID of the purchase order used to acquire the lot.

Lot Number
Specify the ID of the lot. Make sure to specify the lot ID, not the lot system ID.

Lot Size
Specify the quantity of product shipped in the lot.

Accepted
Specify the quantity of product that passed inspection.

Rejected
Specify the quantity of product that did not pass inspection.

7 Click the **Comments** tab. Use the comments tab to specify any additional information about the data collection record. To add comments, right-click and select Comments.

8 Click the **Assigned To** tab. Use the Assigned To tab to specify the employee responsible for collecting data and to specify when the data collection is due. Specify this information:

Employee ID
Specify the ID of the employee who is responsible for collecting data.

Function
Specify the employee's function.

Job
Specify the employee's job code.

Due Date
Specify the date by which data collection must occur.

User Defined 1
Specify the user defined information required for your company.

9 Click the **Save** button.

Collecting data for process inspection plans

After you create the process data collection record master, collect data for the process elements. The process inspection plan determines which elements you examine.

1 Select **Control > Collect > Process > Process Data Collection**.

2 Open the process data collection record.

3 Right-click and select **Data Collection**.

4 If this is the first time you are accessing the data collection form for this particular data collection record, you are asked to change the sample size. The default sample size is specified in Process Inspection Plan Maintenance. Click Yes to override the default and specify a new sample size for the characteristics.

If you change the sample size, the data record is not considered for charting purposes. Constant sample sizes are required for inclusion in charts.

See Changing the Sample Size on page 408.

5 In the Data Collection dialog box, click an element to view information about the element in the header. This information is displayed:

Name
The name of the element is displayed.

Spec
For variable elements, the variable standard specified on the process record is displayed. For attribute and text elements, this field is blank.

Units
For variable elements, the unit of measure for the standard is displayed. For attribute and text elements, this field is blank.

Measure By
The function responsible for measuring this element is displayed.

Equipment Type
The type of equipment used to test this element is displayed.

Device Type
The type of device used to test this element is displayed.

6 The table displays a line item for each element sample. The table is either sorted by characteristic number or sample number. Specify the sort order in Process Inspection Plan Maintenance. The columns available depend on the type of element you are measuring. Perform one of these steps:

- For attribute elements, specify this information:

  Serial Number
  If you are assessing a product for this element, specify the serial number of the product you are examining.

  Device ID
  Specify the device used to measure the element. The device ID specified for the element in the process record is inserted by default. You can select a different device. To limit your selections to devices with the same device type as the default device, select the Filter check box.

  Attribute
  Specify whether the attribute passes inspection, fails inspection, or is pending inspection. To pass all attribute characteristics, click **Accept All Attributes**. A dialog box is displayed that prompts you to either accept all attributes or accept only the attribute characteristics that are blank.

  If an attribute fails, NCM is inserted in the Warning column. When you save the data collection information and return to the Process Data Collection form, you are prompted to change the number of products that passed or failed inspection.

- For variable characteristics, specify this information:

  Serial Number
  If you are measuring a product for this element, specify the serial number of the product you are examining.

  Device ID
  Specify the device used to measure the element. The device ID specified for the element in the process record is inserted by default. You can select a different device. To limit your

selections to devices with the same device type as the default device, select the Filter check box.

Variable
Specify the measurement for this instance of the element. If the measurement falls outside of the variable standard, NCM is inserted in the Warning column. When you save the data collection information and return to the Process Data Collection form, you are prompted to change the number of products that passed or failed inspection.

- For text characteristics, specify this information:

  Serial Number
  If you are examining a product for this element, specify the serial number of the product you are examining.

  Text
  Specify the information required for this element.

7 Click the **Save** button.

Changing the sample size for process inspection data collection

When you access the data collection dialog box from Process Data Collection, you are asked if you want to change the sample size. You may want to change the sample size if the lot size is smaller than the default sample size, or if you want to test more samples.

1 Select **Control > Collect > Process > Process Data Collection Maintenance**.
2 Select the process data collection record.
3 Right-click and select **Data Collection**.
4 When you are prompted to change the sample size, click **Yes**.
5 Information about the elements tested in the plan is displayed. To specify a new sample size, click in the Sample Size column and specify the size of the sample to test for the characteristic. Repeat this step for each characteristic.
6 Click **Ok**. Complete the data collection.
See Collecting data for process inspection plans on page 428.

Specifying elements to measure with automatic data collection devices

To access this form, you must use the WinStudio client version of IQM. You cannot use this form in the web interface.

You can use an automatic data collection device to measure any variable element. You cannot use an automatic data collection device to measure an attribute or text element.

1 Select **Control > Collect > Process > Process Data Collection Maintenance.**.
2 Select the process data collection record.
3 Right-click and select **ADI Results**.
4 For each variable element, click the **Use ADI** check box to collect data using an automatic device. Clear the check box to enter the data manually. To select all variable elements, click the **Select** button.
5 In the Device Driver column, specify the driver for the device you use to collect data. To configure the driver, click Configure Driver.
6 Click **Ok**.

Posting failed process data collection records to Nonconformance Maintenance

You can create nonconformance records directly from the Process Data Collection form. If an attribute or variable element failed data collection, you can choose to include the elements in the NCM record.

1 Select **Control > Collect > Process > Process Data Collection Maintenance**.
2 Open the data collection record.
3 Specify the results of the data collection. If an element did not meet the standard, NCM is inserted in the Warning column.

See Collecting data for process inspection plans on page 428.

4 Click **Save and Close**.
5 In the Post to NCM form, a list of the elements that did not meet the standard is displayed. To post NCM records for these elements, select the Post to NCM? check box. If you do not want to create NCM records for a failed element, clear the Post to NCM? check box.
6 Click **Ok**. The new NCM record is created. Edit the new NCM record in Nonconformance Maintenance.

Closing process data collection records

After you complete a data collection record, close the record.

1 Select **Control > Collect > Product > Product Data Collection Maintenance**.
2 Select the product data collection record.
3 Select the **Closed** check box.
4 The current date is inserted in the **Closed Date** field. Adjust the date if necessary.
5 Click the **Save** button.

Viewing process inspection plan documents

1. Select **Control > Collect > Process > Process Data Collection**.
2. Specify the date collection record.
3. Click the **Process Inspection Plan Link Embed** button.
4. A list of documents attached to the equipment record is displayed. To view a document, select the row and click **View**.

You cannot add or remove documents from this form. To revise the list of documents attached to the equipment record, use Process Inspection Plan Maintenance.

Copying process data collection records

Use this feature to create a new process data collection record from an existing process data collection record.

1. Select **Control > Collect > Process > Process Data Collection Maintenance**.
2. Open the process data collection record.
3. Right-click and select **Copy Process Col ID**.
4. Specify the information to copy:

   Production Info
   Select this check box to copy the information on the Assigned To tab.

   Serial Numbers
   Select this check box to copy the serial numbers of the data samples. No other information about the data samples is copied.

   Quality Costs
   Select this check box to copy the quality cost information.

5. Click **Ok**. In addition to the information you specified, the information on the record header, Lot Info, Comments, and Special Instructions tab is copied.

Viewing process inspection plan revision histories

Use Process Inspection Plan Revision History to review changes made to your process inspection plans over time. Each time you create a new revision for a process inspection plan by changing its revision level or issue date, a copy of key information from the previous revision level is retained.

You can only view information about previous revisions. You cannot edit information in Process Inspection Plan Revision History.

1. Select **Control > Collect > Process > Process Inspection Plan Revision History**.
2. This information is displayed:

Process ID
The ID for the process measured in the plan is displayed.

Entity ID
The ID of the entity conducting this inspection is displayed.

Site ID
The ID of the site that is conducting this inspection is displayed.

Operation No
The operation the inspection plan is designed to control is displayed.

Plan Rev Level
The revision level of this inspection plan is displayed.

Plan Issue Date
The date the revision was issued is displayed.

3 In the Elements table, this information is displayed:

Element No
The element number is displayed.

Plan Rev Level
The revision level of the inspection plan is displayed.

Plan Issue Date
The date that the revision was issued is displayed.

Element Rev Level
The revision level of the element is displayed.

Element Issue Date
The date that the revision was issued is displayed.

Sample Size
The sample size to examine for this characteristic is displayed.

Canceled
This check box is selected if the element is no longer examined as part of the plan.

Process plan revision history data collection

Use Process Plan Revision History Data Collection to collect data against an archived version of a process plan.

Creating a data collection record against an archived process plan

1 Select **Control > Collect > Process > Process Plan Rev History Data Collection**.

2 Specify this information

Site ID
Specify the site that is collecting the data. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Archived Plans
Specify the ID of the archived plan to use to collect data. After you specify a plan ID, the Process Name, Location, Operation Number, and Plan Revision level and date are displayed.

Date
Specify the date you are collecting data for the process. By default, the current date is inserted.

Time
Specify the time you are collecting data for the process. By default, the current time is inserted.

Business Unit
If you use business units, specify the ID of the unit conducting the data collection.

3 If this process data collection record is related to the manufacture of a part, use the Made By section to specify information about the creation of the part. Specify this information:

Employee/Customer/Supplier
Specify who made the part.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

Equipment ID
Specify the piece of equipment used to manufacture the part.

Tooling ID
Specify the piece of equipment used in tooling the part.

4 In the Checked By section, specify who is responsible for checking the data you collect. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

5 In the Special Instructions field, the special instructions defined on the inspection plan are displayed. You cannot edit this field.

6 Click the **Lot Info** tab. If this process inspection is conducted in conjunction with the receipt of a particular lot, specify the lot information in this tab. Specify this information:

Product ID
Specify the ID of the product received in the lot.

PO Number
Specify the ID of the purchase order used to acquire the lot.

Lot Number
Specify the ID of the lot. Make sure to specify the lot ID, not the lot system ID.

Lot Size
Specify the quantity of product shipped in the lot.

Accepted
Specify the quantity of product that passed inspection.

Rejected
Specify the quantity of product that did not pass inspection.

7 Click the **Comments** tab. Use the comments tab to specify any additional information about the data collection record. To add comments, right-click and select Comments.

8 Click the **Assigned To** tab. Use the Assigned To tab to specify the employee responsible for collecting data and to specify when the data collection is due. Specify this information:

Employee ID
Specify the ID of the employee who is responsible for collecting data.

Function
Specify the employee's function.

Job
Specify the employee's job code.

Due Date
Specify the date by which data collection must occur.

User Defined 1
Specify the user defined information required for your company.

9 Click the **Save** button.

Collecting data in Process Plan Revision History

After you create the process plan revision history data collection record master, collect data for the process elements.

1 Select **Control > Collect > Process > Process Plan Rev History Data Collection**.

2 Select the data collection record.

3 Right-click and select **Data Collection**.

4 If this is the first time you are collecting data for this data collection record, you are asked to change the sample size. The default sample size is specified in Process Inspection Plan Maintenance. Click Yes to override the default and specify a new sample size for the elements.

See Changing the Sample Size on page 408.

5 In the Data Collection dialog box, click an element to view information about the element in the header. This information is displayed:

Special Instructions
The special instruction specified for the element is displayed.

Name
The name of the element is displayed.

Std
For variable elements, the variable standard specified on the process record is displayed. For attribute and text elements, this field is blank.

Units
For variable elements, the unit of measure for the standard is displayed. For attribute and text elements, this field is blank.

6 The table displays a line item for each element sample. The table is either sorted by element number or sample number. Specify the sort order in Process Inspection Plan Maintenance. The columns available depend on the type of element you are measuring. Perform one of these steps:

- For attribute elements, specify this information:

  Serial Number
  Specify the serial number of the product you are examining.

  Device ID
  Specify the device used to measure the element. The device ID specified for the element in the process record is inserted by default. You can select a different device.

  Attribute
  Specify whether the attribute passes inspection, fails inspection, or is pending inspection.

  If an attribute fails, NCM is inserted in the Warning column.

- For variable elements, specify this information:

  Serial Number
  Specify the serial number of the product you are examining.

  Device ID
  Specify the device used to measure the element. The device ID specified for the element in the process record is inserted by default. You can select a different device.

Variable
Specify the measurement for this instance of the element. If the measurement falls outside of the variable standard, NCM is inserted in the Warning column.

- For text elements, specify this information:

  Serial Number
  Specify the serial number of the product you are examining.

  Text
  Specify the information required for this element.

7 Click the **Save** button.

Changing the sample size in Process Plan Revision History Data Collection

If this is the first time you are collecting data for this data collection record, you are asked to change the sample size. You may want to change the sample size if the lot size is smaller than the default sample size, or if you want to test more samples.

1 Select **Control > Collect > Process > Process Plan Rev History Data Collection**.
2 In the Archived Plans field, specify the plan revision to use.
3 When you are prompted to change the sample size, click **Yes**.
4 Information about the samples is displayed. To specify a new sample size, click in the Sample Size column and specify the size of the sample to test for the element. Repeat this step for each element.
5 Click **Ok**. Complete the data collection.

See Collecting or editing data in Process Plan Revision History. on page 435.

Closing process plan revision history data collection records

After you complete a process plan revision history data collection record, close the record.

1 Select **Control > Collect > Process > Process Plan Rev History Data Collection**.
2 Select the process data collection record.
3 Select the **Closed** check box.
4 The current date is inserted in the **Closed Date** field. Adjust the date if necessary.
5 Click the **Save** button.

Control plans

Use Control Plans Maintenance to devise a plan to control the quality of a process or product. You can attach inspection plans to the control plans and specify lists of approvers and plan developers.

Adding control plans

1 Select **Control > Collect > Control Plans Maintenance**.

2 In the header, specify this information:

Site ID
Specify the site where the control plan is used. After you select a site, the ID of the site's parent entity is inserted in the Entity ID field.

Business Unit
If a particular business unit uses this control plan, specify the business unit ID.

3 Use the Details section to specify the type of control plan. Specify this information:

Product/Process
To create a product control plan, click the Product option. In the Product ID field, specify the ID of the product that is the subject of this control plan. To create a process control plan, click the Process option. In the Process ID field, specify the ID of the process that is the subject of this control plan.

Category
Specify the stage of the product or process. Specify one of these options:

Option	Description
Prototype	Specify this option if the control plan is for the prototype stage of product or process development. Prototype control plans govern dimensional measurements, materials used, and performance tests that occur during the prototype build.
Pre-launch	Specify this option if the control plan is for the pre-launch stage of product or process development. Pre-launch control plans govern dimensional measurements, materials used, and performance tests that occur after the prototype build and before full production.

Option	Description
Production	Specify this option if the control plan is for the production stage of product or process development. Production control plans apply to documents containing product characteristics or process elements, process controls, tests, and measurement systems used during mass production.

Revision Level
Specify the current revision level for this control plan. When you specify a new revision level, you are prompted to enter change history text when you save the record. You can view a history of the changes made to a control plan in the Change History form.

Issue Date
Specify the date you are issuing the current revision of this control plan. When you specify a new issue date, you are prompted to enter change history text when you save the record. You can view a history of the changes made to a control plan in the Change History form.

Original Date
Specify the date of the first version of the control plan. When you create a new control plan, the current date is inserted by default. You can edit this date.

4 Click the Key Contacts tab. Use the Key Contacts tab to specify the information about where this control plan is conducted and who is responsible for it. Specify this information:

Supplier Code
If your customer uses a particular code to identify your organization, specify the code.

Plant Name
Specify the name of the plant where the control plan is being prepared. A plant can refer to a company, a division of the company, a specific plant, or department that is responsible for the preparation of the control plan.

Employee Contact
Specify the ID of the employee responsible for communicating with parties interested in this control plan.

Phone Number
If the employee's work phone number is defined on the employee record, the phone number is displayed. You can specify a different phone number.

5 Use the Internal Approval tab to specify the employee who must approve the control plan. Click the **Internal Approval** tab, and then specify the ID of the employee in the Approved By field.

6 Use the Eng Approval tab to specify the customer who must approve any engineering elements of control plan. Click the **Eng Approval** tab, and then specify this information:

Customer ID
Specify the ID of the customer.

Contact No
Specify the customer contact.

7 Use the Quality Approval tab to specify the customer who must approve any quality control elements of this plan. Click the **Quality Approval** tab, and then specify this information:

Customer ID
Specify the ID of the customer.

Contact No
Specify the customer contact.

8 Use the **Other Approvals** tab to specify additional personnel who must approve the control plan.
See Approving Control Plans on page 441.

9 Use the Core Teams tab to specify the team responsible for building the control plan. The team can be made up of employees, customers, and suppliers. Click the **Core Teams** tab, and then specify this information:

- To specify an employee, in the **Origin** field select Internal. In the **Employee ID** field, specify the employee's ID.
- To specify a customer, in the Origin field select Customer. In the **Customer ID** field, specify the customer's ID. After you select a customer ID, the customer's name is displayed in the Customer Name field. In the **Contact No** field, specify the customer contact. After you select a contact number, the contact's name is displayed in the **Contact Name** field.
- To specify a supplier, in the Origin field select Supplier. In the **Supplier ID** field, specify the supplier's ID. After you select a supplier ID, the supplier's name is displayed in the **Supplier Name** field. In the **Contact No** field, specify the supplier contact. After you select a contact number, the contact's name is displayed in the **Contact Name** field.
  Note: To see the Supplier fields, scroll the window.

10 Use the **Comments** tab to specify additional information about the control plan. Click the Comments tab and specify the text in the Comments form. Click **Ok** to return to the Control Plan form.

11 Use the Inspection Plans tab to specify the inspection plans to use for this control plan. Click the **Inspection Plans** tab, and then specify this information:

Operation No
Specify the operation number of the inspection plan. After you specify an operation number, the inspection plan ID and plan name are inserted.

Reaction Plan
Use this field to describe the actions to take to avoid nonconformance and corrective actions. You can specify the reaction plan directly in the table. To view a larger input field, right-click in the table column and select Details. Specify the reaction plan, and then click **Ok**.

12 Click the **Save** button.

Reviewing control plans

When a product or process is revised, you may need to revise the control plan.

When you save a revised product or process, the Review Needed check box is selected. Make revisions to the control plan as needed, and then click the **Save** button.

Approving control plans

Control plans must be approved internally and by your customer. Your customer approves both the engineering and quality control aspects of the control plan.

In addition, you can specify addition individuals who have approved the plan.

1. Select **Control > Collect > Control Plans Maintenance**.
2. Specify the control plan.
3. Click the **Internal Approval** tab. Specify the date that the employee approved the control plan.
4. Click the **Eng Approval** tab. Specify the date that the customer approved the engineering aspects of the control plan.
5. Click the **Quality Approval** tab. Specify the date that the customer approved the quality control aspects of the control plan.
6. Use the Other Approvals tab to list any other individual who approved the control plan. Click the **Other Approvals** tab, and then specify this information:
   - To specify an employee, in the **Origin** field select **Internal**. In the **Employee ID** field, specify the employee's ID.
   - To specify a customer, in the **Origin** field select **Customer**. In the **Customer ID** field, specify the customer's ID. After you select a customer ID, the customer's name is displayed in the Customer Name field. In the **Contact No** field, specify the customer contact. After you select a contact number, the contact's name is displayed in the **Contact Name** field.
   - To specify a supplier, in the **Origin** field select **Supplier**. In the **Supplier ID** field, specify the supplier's ID. After you select a supplier ID, the supplier's name is displayed in the Supplier Name field. In the **Contact No** field, specify the supplier contact. After you select a contact number, the contact's name is displayed in the **Contact Name** field.

     Note: To see the Supplier fields, scroll the window.
7. Click the **Save** button

Revising control plans

To formally revise a control plan:

1. Select **Control > Collect > Control Plans Maintenance**.
2. Select the control plan to revise.
3. Make your revisions

4 In the Revision Level field, specify a new value.
5 In the Issue Date field, specify the date this revision was made.
6 Click the **Save** button.
7 You are prompted enter change history text. To add change history text, click **Yes**.
8 In the Change History form, specify a description of the change.
9 Click **Save**.

Viewing and editing control plan history

When you save a new revision of a control plan, you have the opportunity to specify information about the change. Use the Control Plan History form to review or edit the history of changes.

1 Select **Control > Collect > Control Plans Maintenance**.
2 Specify the control plan.
3 Right-click and select **Change History**.
4 In the table, each revision is listed. Select a revision to view the change history text.
5 To edit the change history, click the **Edit** button.
6 Specify new text at the beginning of the field.
7 Click **Ok**. The ID of the user who made the change and the date and time of the change are inserted.

Copying control plans

Use this feature to create a new control plan from an existing control plan.

1 Select **Control > Collect > Control Plans Maintenance**.
2 Open the control plan.
3 Right-click and select **Copy Control Plan**.
4 Specify the information to copy:

Inspection Plans
Select this check box to copy the information in the Inspection Plan tab.

Core Team
Select this check box to copy the core team defined for the plan.

Other Approvals
Select this check box to copy the list of other individuals who approve the plan.

Quality Cost
Select this check box to copy quality cost information.

5 Click **Ok**. In addition to the information you selected, the information in the Details section, Key Contact tab, Eng Approval tab, and Quality Control tab are copied.

Sampling plans

Sampling Plans are used with receiving inspection. Use Sampling Plans Maintenance to set up the criteria for collecting information about the characteristics of supplier products in receiving inspection. You can set up sampling plans by characteristic class code or by lot size.

You can also set up a hierarchy of sampling plans to use when products pass or fail the sampling plan. When you set up characteristics for products, you specify the initial sampling plan to use when collecting information about the characteristic. If the characteristic passes or fails the data collection criteria, then the next sampling plan you specify on the Sampling Plan record are used.

Sampling Plans are a key part of receiving inspection. If you use skip-lot sampling, the sampling plan determines which lots are inspected and which lots are skipped. When you first decide to use skip-lot receiving inspection with a supplier, the first sampling plan can be rigorous. You can set up the sampling plan to test most lots or parts. If the supplier's product passes the first sampling plan, the product can be promoted to a less rigorous sampling plan.

Adding a sampling plan

1 Select **Control > Collect > Sampling Plan Maintenance**.

2 Specify this information:

Site ID
Specify the site conducting this sampling plan. When you select a site, the site's parent entity ID is inserted in the Entity ID field.

Sampling Plan ID
Specify an ID for this sampling plan.

Sampling Plan Name
Specify a name for this sampling plan.

Business Unit
If this sampling plan is used by a particular business unit, specify the business unit in this field.

Change Sampling Plans Automatically
If you specify a pass to sampling plan, select this check box to automatically promote or demote characteristics based on product data collection results. If you clear this check box, then you will be prompted to promote or demote characteristics manually based on product data collection results.

3 In the Sampling Type section, specify the criteria for collecting samples. Specify this information:

- To collect samples based on a characteristic class code, click **Class**. Then, specify this information:

  Class
  Specify the class code to use for this sample. To use this sampling plan with a particular product characteristic, the characteristic must also have the class code that you specify in this field. Specify the class of a product characteristic in Product Maintenance.

Sample Size
Specify the size of the sample.

- To collect samples based on lot size, click **Lot**. Then, specify this information:

  Lot Size From
  Specify the smallest lot size eligible for this sampling plan.

  Lot Size To
  Specify the largest lot size eligible for this sampling plan.

  Sample Size
  Specify the size of the sample.

4 It is highly recommended to complete the pass criteria even if you are using a single sampling plan. To specify the criteria to use to pass a sample, click the **Pass Criteria** tab. Specify this information:

Pass to Samp Plan
Specify the sampling plan to use to assess the characteristic after it passes the current sampling plan. For example, if a lot successfully meets Class Level 1(CL1) criteria, the pass to sampling plan might be Class Level 2 (CL2), or the next less rigorous sampling plan. If you are using a single sampling plan, specify the ID of the current sampling plan.

Req. Pass Number Lots
Select this check box if a certain number of lots must pass the sampling plan before being promoted to the next sampling plan. When you select this check box, the Req. Number of Lots, Num. of Lots to Check, and Num. of Lots to Skip fields become active. Specify this information:

Field	Description
Req. Number of Lots	Specify the number of lots that must pass this sampling plan before the product characteristic is promoted to the next plan. For example, if you specified 10 in this field, after ten lots pass the plan, the next lot would use the sampling plan specified in the **Pass to Samp Plan** field.
Num of Lots to Check and Num of Lots to Skip	Use these fields if you use Skip-lot. Specify the number of lots to check and the number of lots to skip. For example, if you specified 2 in the **Num. of Lots to Check** field and a 1 in the **Num of Lots to Skip** field, two out of every three lots would be inspected with the sampling plan. If you specified 10 in the **Req. Number of Lots** field, then the sampling plan specified in the **Pass to Samp Plan** field would be used after you inspected and passed ten lots.

Req. Pass Number of Parts
Select this check box if a certain number of parts must pass the sampling plan before being promoted to the next sampling plan. When you select this check box, the Req. Number of Parts, Num. of Parts to Check, and Num. of Parts to Skip fields become active. Specify this information:

Field	Description
Req. Number of Parts	Specify the number of parts that must pass this sampling plan before the product characteristic is promoted to the next plan. For example, if you specified 10 in this field, after ten parts pass the plan, the next part would use the sampling plan specified in the **Pass to Samp Plan** field.
Num of Parts to Check and Num of Parts to Skip	Use these fields if you use Skip-lot. Specify the number of parts to check and the number of parts to skip. For example, if you specified 2 in the**Num. of Parts to Check** field and a 1 in the **Num of Parts to Skip** field, two out of every three parts would be inspected with the sampling plan. If you specified 10 in the **Req. Number of Parts** field, then the sampling plan specified in the **Pass to Samp Plan** field would be used after you inspected and passed ten parts.

Req. Pass Number of Days
Use this check box if you are using the Skip-lot inspection feature. If samples must pass inspection for a certain number of days before they can be promoted to another plan, specify the number of days in this field.

5 It is highly recommended to complete the fail criteria even if you are using a single sampling plan. To specify the criteria to use to fail a sample, click the **Fail Criteria** tab. Specify this information:

Fail to Samp Plan
Specify the sampling plan to use to assess the characteristic after it fails the current sampling plan. For example, if a lot does not meet Class Level 2 (CL2) criteria, the fail to sampling plan might be Class Level 1 (CL2), or the next more rigorous sampling plan. If you are using a single sampling plan, specify the ID of the current sampling plan.

Allow Fail Number Lots
If a certain number of lots are allowed to fail this sampling plan, select this check box. Specify the maximum number of lots allowed to fail before demoting the characteristic to another sampling plan.

Allow Fail Number of Parts
If a certain number of parts are allowed to fail this sampling plan, select this check box. Specify the maximum number of parts allowed to fail before demoting the characteristic to another sampling plan.

Provisional Number Days
To specify the number of days a sample is allowed to fail, select this check box. Specify the number of days in the field.

6 To specify user-defined information, click the **User Defined** tab. Specify the user defined information required by your company.

7 To view information about when this sampling plan was created or altered, click the **System Defined** tab. The information on this tab is read-only. This information is displayed:

Created By
The ID of the user who created this plan is displayed.

Create Date
The date and time this sampling plan was created is displayed.

Modified By
The ID of the user who last modified this plan is displayed.

Modified Date
The date and time this sampling plan was last modified is displayed.

8 Click the **Save** button.

Copying a sampling plan

Use this form to create a new sampling plan from an existing sampling plan.

1 Select **Control > Collect > Sampling Plan Maintenance**.
2 Specify the ID of the sampling plan to copy.
3 Right-click and select **Copy Sampling Plan**.
4 Specify the ID of the new sampling plan.
5 Click **Ok**.

Deleting sampling plans

If you no longer use a sampling plan, you can delete it.

1 Select **Control > Collect > Sampling Plan Maintenance**.
2 Specify the ID of the sampling plan to delete.
3 Click the **Delete** button.
4 Click the **Save** button.

Lot Maintenance

Use Lot Maintenance to record information about incoming products. Depending on whether the product requires inspection, the lot record is inserted on either the Lot History Maintenance form or the Inspection Orders.

Before you create a lot, set up unique auto-numbering prefixes or suffixes for each of your sites. When you inspect the lots in Inspection Orders, you can use the prefixes or suffixes to identify the parent site of each lot.

Pre-processing lots

Before a lot arrives, you can specify how the lot should be processed. You can specify that the next lot should be inspected, that the next lot has a higher priority, or that the next lot should not be inspected.

To specify that the next lot should be inspected, use Inspect Next Receipt Maintenance. You can specify that the next receipt of a product should be inspected or that the next receipt of a product made by a particular supplier should be inspected. You can designate that the inspect next receipt record is permanent. When an inspect next receipt record is permanent, then all receipts of a product, or all receipts of a product made by a particular supplier, must be inspected. After you save the Lot Maintenance record, the Lot System ID of the lot is inserted on the inspect next receipt record.

A record of the lot is also displayed in Inspection Orders. Use Inspection Orders to perform the required inspections or move the lot to stock.

By default, incoming lots have a status of Low. You can specify that the next receipt of a product should have a status of Medium or High, or that the next receipt of a product made by a particular supplier should have a status of Medium or High. You can designate that the priority level is permanent. When the priority level is permanent, then all receipts of a product, or all receipts of a product made by a particular supplier, has the priority you specify. To specify that an incoming lot should have a status of Medium or High, use Priority Products Maintenance.

To specify that a lot does not require inspection, use Product No Inspection Maintenance. You can specify that a product does not need inspection only when it is purchased from a particular supplier, or you can specify that the product never needs inspection. After you save a lot that does not require inspection, you can access information about the lot in Lot History Maintenance.

Setting up auto-numbering

For certain records, you can specify unique prefixes or suffixes for system-generate IDs. If you use multiple sites or entities, specifying a unique numbering scheme for each entity or site can make it easier to identify which records belong to a particular entity or site.

It is recommended that system administrators only have access to this form.

You can set up auto-numbering for a certain type of record in its parent form.

1. Access the form where you want to set up auto-numbering.
2. In the Site ID field, specify the site for which you are setting up auto-numbering.
3. Right-click and select **Next System ID**.
4. Specify the prefix or suffix to use. You can specify either a prefix or a suffix, or you can specify both a prefix and suffix. The entity and site for which you are setting up auto-numbering is displayed. Specify this information:

   Prefix
   To use a special prefix for this site's lots, specify the prefix in this field.

   Suffix
   To use a special suffix for this site's lots, specify the suffix in this field.

5. Click **Ok**. When you next create a record for the specified site, the prefix and suffix you specified is attached to the ID.

Creating lots

A lot is a record of a product receipt.

To create a lot:

1. Select **Control > Collect > Lot Maintenance**.
2. In the header, specify this information:

   Site ID
   Specify the ID of the site receiving the lot. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

   Lot Sys ID
   Leave this field blank. This ID is generated when you save the record.

   Lot ID
   Specify the ID for this lot.

   Lot Size Qty
   Specify the quantity of product you are receiving.

   Date Exp.
   Specify the date you expect to receive this lot.

   Time Exp.
   Specify the time of day you expect to receive this lot.

3. In the Details section, specify information about the product you are receiving. Specify this information:

Made By
Specify the supplier who made the incoming product. This field is used in conjunction with the Product ID field to match this lot with priority product, inspect next receipt, or product no inspection records you created.

Product ID
Specify the ID of the product you are receiving. This field is used to match this lot with priority product, inspect next receipt, or product no inspection records you created. If you created one of these records for this product ID, then this lot is processed accordingly. If you also specified a Made By ID on the priority product, inspect next receipt, or product no inspection record, then the Made By ID is also considered to determine how to process this lot.

Insp Plan Oper
If this lot is to be inspected, specify the default inspection plan operation number from site maintenance. This operation number identifies the inspection plan to be used for product inspection.

See Adding sites on page 59.

Product Rev
The current revision level for the product as defined in Product Maintenance is inserted.

Major Location
Specify the ID of the major location where this lot will be stored. For example, specify a warehouse.

Minor Location
Specify the ID of the minor location where this lot will be stored. For example, specify an area within a warehouse.

Lot Status
The current status of the lot is inserted. Generally, it is recommended that you do not edit this field. When you save the lot record, the status is updated based on any pre-processing information you created in Inspect Next Receipt and Product No Inspection. The status is also updated based on previous receipts of the product.

You can use this field to change the status if multiple supplier product records require inspection, and you want to change the inspection order. For example, you have three records for a supplier and product combination. One record has a status of Ready, and two records have a status of Hold. To inspect one of the records with a status of Hold before the record with a status of Ready, change the status of the record you want to inspect from Hold to Ready. Change the status of the record that initially had a status of Ready to Hold.

After you process the lot in Receiving Inspection, the lot status is updated based on the results of the inspection.

This table shows the statuses that are used:

Status	Description
D	This status is used if data collection is complete on this lot. This status indicates that you have conducted and completed the inspection plan for this product but have not closed and saved the data collect record.

Status	Description
FA	The First Article status is used if this is the first shipment of the product that you have received from the specified supplier. Many organizations require special processing for first article receipts. To change the First Article status, you must have certain information for the product set up correctly in IQM. This information is required: • In Product Maintenance, you must specify the supplier who made this product in the Bought From form. You must also specify characteristics to inspect and define class codes for the characteristics. • A product inspection plan must be defined for the product/supplier combination. The product revision specified on the inspection plan must match the current product revision level in Product Maintenance.
H	This lot is on hold. A lot is on hold when it has not yet been inspected.
INR	An inspect next receipt record has been defined for this lot. If you have defined an inspect next receipt record for this lot, INR is inserted in this field after you save the lot record.
MTS	If this lot was moved into your inventory without inspection, MTS (move to stock) is inserted in this field.
NOINSPECT	This lot does not require inspection. If you have defined a product no inspection record for this lot, NOINSPECT is inserted in this field after you save the lot record.
NOPLAN	The product/supplier combination specified for this lot does not have an inspection plan defined for it.
R	This lot is ready for inspection. Data collection can only be performed on lots with this status.
S	This lot was skipped based on historical records in the Skip-lot Manager.
SUBLOT	This lot is a sublot of a parent lot. The parent lot of this sublot is specified in the Target Lot field.

Status	Description
UPROD	This lot contains an invalid product/product revision level combination.
USUPP	This lot contains a supplier that is not defined in Supplier Maintenance. This situation can occur if you are integrated to an ERP system, and the ERP system has sent lot information before it sent supplier information.

Lot Size Unit
Specify the ID of the unit used to measure the quantity of this lot.

Target Lot
If the current lot is a sub-lot of another lot, specify the parent lot in this field. See Creating Sublots.

4 Click the **External/Shipment** tab. Use this tab to specify information that the supplier uses to reference this product and to specify purchase order information. Specify this information:

Ext. Product ID
If the product ID the supplier uses is different from the ID you use, specify the ID in this field.

Ext. Revision Level
If the revision level that the suppler uses is different from the revision level you use, specify the level in this field.

Ext. Lot ID
If the supplier uses a different ID for this lot is different from the ID you use, specify the ID in this field.

Lot Priority
By default, all incoming lots have a priority of low. You can specify a different lot priority.
If you set up a priority product record for this lot, the priority specified on the priority product record is inserted when you save the lot record.

Certification Data Received
If the supplier sent certification data with the lot, select this check box. If the supplier did not send certification data, clear this check box.

PO No
Specify the ID of the purchase order used to purchase this product.

PO Line
Specify the line number on the purchase order used to purchase this product.

Release No
Specify the release number for this product.

Number of Skids
Specify the number of skids that were received.

Complete Shipment Received
If you received the full order of the product, select this check box. If you received a partial shipment, clear this check box.

5 Information on the Special tab is inserted after you save the record. See the end of this procedure.

6 Use the User Defined tab to specify information required by your organization.

7 The System Defined tab displays information about the creation and modifications of this lot. This information is displayed:

Created By
The ID of the user who created the lot is displayed.

Create Date
The date that the lot record was created is displayed.

Modified By
The ID of the user who last modified the lot record is displayed.

Modified Date
The date that the lot record was last modified is displayed.

8 Click the **Save** button.

After you save the record, certain actions occur depending on the pre-processing records you created.

If you created an inspect next receipt record for this lot, then these actions occur:

- The status of the lot is updated to INR.
- On the Special tab, this information is displayed:

  Require Inspection
  This check box is selected.

  Requested By
  The ID of the employee who requested the inspection is inserted. This information is defined on the inspect next receipt record.

  Request Date
  The date the inspection request was made is inserted. This information is defined on the inspect next receipt record.

  Comments
  The comments specified on the inspect next receipt record are inserted.

- On the inspect next receipt record, the lot system ID of the lot is inserted.

If you created a priority product record, then these actions occur:

- The priority specified on the priority product record is inserted in the Lot Priority field.
- On the priority product record, the lot system ID of the lot is inserted.

If you created a product no inspection record, the lot is moved to Lot History Maintenance.

If this lot does not require inspection due to Skip-lot settings, the lot is moved to Lot History Maintenance. A message is displayed informing you that this lot is skipped.

If this lot is a sub-lot, the status of the lot is updated to SUBLOT.

Creating sublots

A lot can have child or sub-lots. A sub-lot is a partial shipment of a product.

Sub-lots can also be inspected. To inspect a sub-lot, you must inspect the parent lot of the sub lot. When you move the parent lot to your inventory, the sub lot is also moved to your inventory.

1. Create a lot using the procedure in Creating Lots.
   See Creating Lots on page 448.
2. In the **Target Lot** field, specify the parent lot of this sub-lot. The parent lot must have the same Made By supplier ID. The parent lot must also have the same site ID as the sub-lot.
3. Click the **Save** button.

Viewing sub-lots

You can view a list of sub-lots attached to a parent lot.

1. Select **Control > Collect > Lot Maintenance**.
2. Open the parent lot.
3. Right-click and select **Show Sublots**. This information is displayed:

   Lot Sys ID
   The system ID of the sub-lot is displayed.

   Lot ID
   The ID of the sub-lot is displayed.

   Product ID
   The ID of the product delivered in the lot is displayed.

   Rev Level
   The revision level of the product is displayed.

   Lot Size
   The quantity of product delivered is displayed.

4. To exit the form, click **Ok**.

Copying lots

Use this feature to create a new lot record from an existing lot record.

1 Select **Control > Collect > Lot Maintenance**.
2 Select the lot to copy.
3 Right-click and select **Copy**.
4 Specify the ID of the new lot.
5 Click **Ok**.

Deleting lots

If a lot maintenance record was entered in error, you can delete the record.

1 Select **Control > Collect > Lot Maintenance**.
2 Select the lot to delete.
3 Click the **Delete** button.
4 Click the **Save** button.

Inspection Orders

Use Inspection Orders to process incoming lots that require inspection and to monitor the inspection status of each lot. Depending on your settings in Application Global Maintenance, the list of incoming lots is updated periodically.

See Specifying Incoming Lots Settings on page 54.

You can access product data collection and lot maintenance directly from the Inspection Orders. This access helps you to process lots quickly. As you inspect the lot, the status of the lot is updated automatically.

If you have proper permissions, you can also override the inspection requirement and move the lot directly into your stock.

The status of each lot determines your next step in processing the lot. For example, if a lot has a status of First Article, you must first ensure that the supplier who made the product is specified in the Bought From form, that the product has characteristics, and that you have an inspection plan for the defined for the product/supplier combination. The product revision specified on the inspection plan must match the current product revision level in Product Maintenance.

Reviewing and monitoring lots

Use the Inspection Orders window to review and monitor lots that require inspection. These types of lots do not require inspection and are not displayed in the window:

- Lots with a status of NONINSPECT

- Lots that were skipped based on the Skip-lot Manager

See Creating Lots on page 448.

1 Select **Control > Collect > Inspection Orders**.

2 Review this information:

Lot Sys ID
The ID for the lot generated by the system is inserted.

Lot ID
The ID specified for the lot is inserted.

Date Exp
The date the lot is expected to arrive is inserted.

Supplier Name
The name of the supplier who made the part is inserted.

Product ID
The ID of the product is inserted.

Revision Level
The current revision level of the product is inserted.

Lot Status
The current status of the lot is displayed. This table shows the statuses:

Status	Description
First Article	The First Article status is used if this is the first shipment of the product that you have received from the specified supplier. Many organizations require special processing for first article receipts. To change the First Article status, you must have certain information for the product set up correctly in IQM. See Processing First Article Lots on page 457.
Hold	A lot is on hold when another lot for a supplier and product has been received and has a status of Ready. See Processing On Hold Lots on page 458.
No Insp Plan Defined	The site/product/supplier combination specified for this lot does not have an inspection plan defined for it. See Processing No Inspection Plan Defined Lots on page 458.

Status	Description
Ready to Inspect	This lot is ready for product data collection. A lot with this designation is the next lot scheduled to be inspected. See Processing Ready to Inspect Lots on page 457.
In Process	This lot is currently being inspected. A product data collection record exists for this lot, but the data collection record is not complete.
Data Collection Complete	The data collection on this lot is complete, but the product data collection record has not yet been closed.
Sublot	This lot is a sub-lot of a parent lot. The parent lot of this sub-lot is specified in the Target Lot field. To process a sub-lot, you must process the parent lot. The ID of the parent lot is inserted in the Target Lot field.
UPROD	This lot contains an invalid product/product revision level combination. To correct this issue, make sure the Lot Maintenance record contains the same revision level as the Product Maintenance record for the product.
USUPP	This lot contains a supplier that is not defined in Supplier Maintenance. This situation can occur if you are integrated to an ERP system, and the ERP system has sent lot information before it sent supplier information. To correct this issue, send supplier information from your ERP to IQM.

Priority
The priority of the lot is displayed.

Priority Order
The priority is translated into a numeric value. These translations are used:
Low - 3
Medium - 2
High - 1

Target Lot
If the lot is a sub-lot, then the parent lot ID is displayed.

Product Inspection Plan
The inspection plan specified for the lot is inserted.

3 You can sort the table by any of the columns. To sort the table, double-click on the appropriate column header. For example, double-click on the Lot Status column header to group lots with the same status together.

Processing lots

Use the processing lots function to update the status of lot based on the most up-to-date information.

1 Select **Control > Collect > Inspection Orders**.
2 Perform one of these steps:
   - To process a single lot, select the lot in the table. Right-click and select **Process Selected Lot**.
   - To process all lots in the table, right-click and select **Process All Lots**.

Processing first article lots

If you are receiving a product from a supplier for the first time, the First Article status is used for the lot. Before you can process this lot, you must set up this information:

- In Product Maintenance, you must specify the supplier who made this product in the Bought From form and specify the characteristics to inspect. .
- In Product Inspection Plan Maintenance, you must have a product inspection plan defined for the site/product/operation number combination.
- The product revision specified on the inspection plan and in lot maintenance must match the current product revision level in Product Maintenance.

To process a first article lot:

1 Select **Control > Collect > Inspection Order**.
2 Select the lot to process.
3 Right-click and select **Process Selected Lot**. If the lot meets the requirements described, the lot status is changed. If this lot is eligible to be inspected, the status is changed to Ready to Inspect. If the lot does not meet the requirements described, then the status cannot be changed from First Article. Make sure that the product meets the criteria described in this topic.
4 Proceed to the next processing step based on the new status of the lot:
   - If the status is Hold, use the procedure for processing hold lots. See Processing Hold Lots.
   - If the status is Ready to Inspect, use the procedure for process lots that are ready to inspect. See Processing Ready to Inspect Lots.

Processing ready to inspect lots

1 Select **Control > Collect > Inspection Orders**.

2 Select the lot.
3 Right-click and select **Product Data Collection**. The status is updated to In Process.
4 Collect the data required by the inspection plan.
5 After data collection is complete, close and save the data collection record. If the product passed inspection, the lot is removed from Receiving Inspection and moved to Lot History Maintenance. If the product failed inspection, the lot is placed on hold.

Processing on hold lots

A lot is placed on hold when another supplier product has a status of Ready. To process the lot, edit the lot maintenance record so that the lot has a status of Ready. Reset the lot that had a status of Ready to Hold.

Processing no inspection plan lots

If a lot has the status of No Inspection Plan, take these steps to correct the issue.

- Create an inspection plan for the lot. Make sure that you create the inspection plan in the same site that received the product and for the same supplier that sold you the product.

  See Adding Product Inspection Plans on page 394.
- Make sure that the inspection plan includes characteristics to inspect.
- Make sure that sampling plans are defined for the characteristics in Product Maintenance.

  See Adding Products on page 171.
- Make sure that the revision level specified for the product in Product Inspection Plan Maintenance and in Lot Maintenance matches the revision level of the product specified in Product Maintenance.

After you correct each of these issues, process the lot again in Receiving Inspection. The status is updated.

Moving lots to stock without inspection

1 Select **Control > Collect > Inspection Orders**.
2 Select the lot to move to stock.
3 Right-click and select **Move to Stock**.
4 Specify this information:

Overridden By
Specify the ID of the individual who authorized the override of the inspection.

Entity ID
Specify the ID of entity where the lot is received.

Override Date
The current date and time are inserted. You cannot edit this field.

Override Comments
Specify the reason for the override.

5 Click **Ok**.

Lot history

Lot History Maintenance is used in conjunction with inspection orders.

Use Lot History Maintenance to review a history of lots created in Lot Maintenance. If a lot requires inspection, then the lot is moved to Lot History after it has been successfully inspected. If a lot does not require inspection, the lot is moved to Lot History after you save the lot in Lot Maintenance.

You can edit the details of the lot in Lot History Maintenance. You should carefully consider which users can edit lot details in Lot History Maintenance. Editing a lot after it has been processed through normal inspection procedures can negatively impact the integrity of your data.

Reviewing details of lots

1 Select **Control > Collect > Lot History Maintenance**.
2 Specify the lot to review.
3 In the header, review this information:

Entity ID
The ID of the parent entity of the site is displayed.

Site ID
The ID of the site receiving the lot is displayed.

Lot Sys ID
The system-generated ID for this lot is displayed.

Lot ID
The ID specified for this lot is displayed.

Lot Size Qty
The quantity received in the lot is displayed.

Date Exp.
The date that the lot was expected to arrive is displayed.

Time Exp.
The time of day the lot was expected to arrive is displayed.

4 The Details section shows information about the product that was received. Review this information:

Made By
The ID of the supplier who made the product is displayed.

Product ID
The ID of the product received in the lot is displayed.

Insp Plan Oper
The operation number of the inspection plan used to inspect this product is displayed.

Product Rev
The current revision level for the product is displayed.

Major Location
The ID of the major location where this lot is stored is displayed.

Minor Location
The ID of the minor location where this lot is stored is displayed.

Lot Status
The current status of the lot is displayed. These statuses are used:

Status	Description
D	This status is used if data collection is complete on this lot. This status indicates that you have conducted and completed the inspection plan for this product.
MTS	If the lot was moved into your stock without inspection, MTS (move to stock) is displayed.
NOINSPECT	If the lot did not require inspection, NOIN-SPECT is displayed.
SUBLOT	This lot is a sublot of a parent lot. The parent lot of this sublot is specified in the Target Lot field.

Lot Size Unit
The ID of the unit used to measure the quantity of this lot is displayed

Target Lot
If the current lot is a sub-lot of another lot, the parent lot ID is displayed.

5 Click the **External/Shipment** tab. This tab shows information that the supplier uses to reference this product and purchase order information. Review this information:

Ext. Product ID
If the product ID the supplier uses is different from the ID you use, the supplier's ID is displayed.

Ext. Revision Level
If the revision level that the suppler uses is different from the revision level you use, the supplier's revision level is displayed.

Ext. Lot ID
If the supplier uses a different ID for this lot is different from the ID you use, the ID is displayed.

Lot Priority
The priority of the lot is displayed.

Certification Data Received
If the supplier sent certification data with the lot, this check box is selected. If the supplier did not send certification data, this check box is cleared.

PO No
The ID of the purchase order used to purchase this product is displayed.

PO Line
The line number on the purchase order used to purchase this product is displayed.

Release No
The release number for this product is displayed.

Number of Skids
The number of skids that were received is displayed.

Complete Shipment Received
If the full order of the product is received, this check box is selected. If a partial shipment is received, this check box is cleared.

6 Click the **Special** tab. If an Inspect Next Receipt record was created for this lot, information about the inspection request is displayed. Review this information:

Require Inspection
If inspection was required, this check box is selected.

Requested By
The ID of the employee who requested the inspection is displayed.

Request Date
The date the inspection request was made is displayed.

Comments
The comments specified on the inspect next receipt record for this lot are displayed.

7 Click the **Move to Stock** tab. If a lot inspection was overridden and the lot was moved to stock without inspection, information about the inspection override is displayed. Review this information:

Overridden and Moved to Stock without Inspection
If the lot inspection was overridden in Receiving Inspection, this check box is selected.

Overridden By
The ID of the employee who moved the lot to stock without inspection is displayed.

Overridden Date
The date the lot was moved to stock is displayed.

Comments
The comments specified on the override request are displayed.

8 Use the Historical tab to report a nonconformance in a lot after it has been received. See Creating an NCM for a Historical Lot on page 462.

9 Click the **User Defined** tab to review information required by your organization.

10 The System Defined tab displays information about the creation and modifications of this lot. This information is displayed:

Created By
The ID of the user who created the lot is displayed.

Create Date
The date that the lot record was created is displayed.

Modified By
The ID of the user who last modified the lot record is displayed.

Modified Date
The date that the lot record was last modified is displayed.

Creating an NCM for a historical lot

If you discover an issue with a product after you have received it into your stock, you can indicate that a nonconformance record exists for the lot history record.

Use this procedure for skipped lots and for move-to-stock lots that were not inspected.

1 Create the NCM in NCM Maintenance. In the Lot Number field, specify the ID of the lot history record. Specify the Lot ID, not the System Lot ID.

2 Select **Control > Collect > Lot History Maintenance**.

3 Select the lot for which you created the NCM.

4 Click the **Historical** tab.

5 Specify this information:

NCM Found in Lot after Receiving Inspection
Select this check box if you found the nonconformance after the product data collection conducted during receiving inspection.

Comments
Specify additional information about the nonconformance.

6 Click the **Save** button.

Viewing sub-lots in Lot History

You can view a list of sub-lots attached to a parent lot.

1. Select **Control > Collect > Lot History Maintenance**.
2. Open the parent lot.
3. Right-click and select **Show Sublots**. This information is displayed:

   Lot Sys ID
   The system ID of the sub-lot is displayed.

   Lot ID
   The ID of the sub-lot is displayed.

   Product ID
   The ID of the product delivered in the lot is displayed.

   Rev Level
   The revision level of the product is displayed.

   Lot Size
   The quantity of product delivered is displayed.

4. To exit the form, click **Ok**.

Copying lot history records

Use this feature to create a new lot history record from an existing lot history record.

1. Select **Control > Collect > Lot History Maintenance**.
2. Select the lot to copy.
3. Right-click and select **Copy**.
4. Specify the ID of the new lot.
5. Click **Ok**.

Skip-lot management

Skip-lot is a sampling method of quality control designed to save time and money. After you determine that a particular supplier routinely send you products that meet your specifications, you can use Skip-lot functionality to skip inspections for shipments. For example, you can decide to inspect one out of every five shipments that a supplier sends of a particular product.

You can decide whether to use Skip-lot on a site-by-site basis. To use Skip-lot in a site, select the Enable Skip-lot check box in Site Maintenance. Then, specify a default receiving inspection number.

See Adding Sites on page 59.

To determine when to skip the inspection of a lot, use Sampling Plan Maintenance. In the Pass Criteria tab, you can specify how many lots or products should be inspected using the inspection plan, how many lots or products can be skipped, and how many days of successful inspections must elapse before lots can be skipped.

Reviewing Skip-lot products

1 Select **Control > Collect > Skip-lot Manager**.

2 Specify this information:

Site ID
Specify the ID of the site whose receiving records you want to view.

Supplier ID
Specify the ID of the supplier whose receiving records you want to view.

3 Review this information:

Skiplot Sys ID
The ID of the Skip-lot record is displayed.

Product Insp Plan
The inspection plan used for the product when manufactured by the specified supplier is displayed.

Product ID
The ID of the product is displayed.

Revision Level
The product's current revision level is displayed.

Char No
The number of the characteristic is displayed.

Sampling Plan ID
The ID of the sampling plan used to test the characteristic is displayed.

Product Name
The name of the product is displayed.

Reviewing information about skipped lots

Use this feature to review information about the number of lots and quantity of product inspected and the number of lots and quantity of product skipped.

1 Select **Control > Collect > Skip-lot Manager**.

2 Specify this information:

Site ID
Specify the ID of the site whose receiving records you want to view.

Supplier ID
Specify the ID of the supplier whose receiving records you want to view.

3 Select the row to review.

4 Right-click and select **Skip-lot Details**. This information is displayed:

Supplier ID
The ID and name of the supplier is displayed.

Product Insp Plan
The ID and name of the inspection plan is displayed. The ID and name of the product is displayed below the product inspection plan.

Char No
The number of the characteristic that is the subject of the sampling plan is displayed.

Sampling Plan ID
The ID of the current sampling plan is displayed.

5 The Details section shows total counts of quantities and lots inspected and skipped. Review this information:

Num of Passed Lots
The number of lots inspected and passed under the sampling plan is displayed.

Num of Passed Products
The quantity of product inspected and passed under the sampling plan is displayed.

Must Pass Until
The date until which the characteristic must pass the sampling plan is displayed.

Recheck Date
The date when the characteristic must re-pass inspection is displayed.

Num of Failed Lots
The number of lots inspected and failed under the sampling plan is displayed.

Num of Failed Products
The quantity of product inspected and failed under the sampling plan is displayed.

Allow Fail Until
The date until which the characteristic can fail the sampling plan is displayed.

Date of Last Lot Inspected
The date that a lot of this product was last inspected is displayed.

6 The Skiplot Info section show the number of lots and quantity of product skipped and the number of lots and quantity of product inspected. Review this information:

Skip Count Lots
The number of lots skipped under the sampling plan is displayed.

Skip Count Prods
The quantity of product skipped under the sampling plan is displayed.

Num of Current Checked Lots
The number of lots inspected under the sampling plan is displayed.

Num of Current Checked Prods
The quantity of product under the sampling plan is displayed.

Changing the sampling plan in Skip-lot Manager

1 Select **Control > Collect > Skip-lot Manager**.
2 Specify this information:

Site ID
Specify the ID of the site whose receiving records you want to view.

Supplier ID
Specify the ID of the supplier whose receiving records you want to view.

3 Select the characteristic.
4 Right-click and select **Skip-lot Details**.
5 In the Sampling Plan ID field, specify the new sampling plan.
6 Specify this information:

Update All Chars with the Sampling Plan
To update all characteristics of the product with the new sampling plan, select this check box. To update only the characteristic specified in the Skip-lot Details form, clear this check box.

Performed By
Specify the ID of the employee who is updating the sampling plan.

Authorized By
Specify the ID of the employee who authorized the sampling plan change.

Authorized Date
The current date and time is displayed. You cannot edit this information.

Comments
Specify the reason you are changing the sampling plan.

7 Click **Ok**.

Reviewing sampling plan change history

When a sampling plan for a characteristic is changed, a record of the change is displayed in Skip-lot History. A record is inserted in Skip-lot History if a characteristic is demoted or promoted to a different sampling plan or if you manually change the sampling plan.

1 Select **Control > Collect > Skip-lot Manager**.

2 Specify this information:

Site ID
Specify the ID of the site whose receiving records you want to view.

Supplier ID
Specify the ID of the supplier whose receiving records you want to view.

3 Select the characteristic.

4 Right-click and select **Skip-lot History**.

5 Review this information:

Char No
The characteristic number is displayed.

Transaction Date
The date that the sampling plan changed is displayed.

Org Samp Plan
The sampling plan originally used to inspect this characteristic is displayed.

New Samp Plan
The new sampling plan that will be used when this characteristic is next inspected is displayed.

Change Type
The code for the type of change is displayed. These codes are used:

Code	Description
P	The sampling plan was changed because the characteristic was promoted to a new plan.
D	The sampling plan was changed because the characteristic was demoted to a new plan.
U	A user changed the sampling plan.

Performed By
If the sampling plan was changed manually, the ID of the user who made the change is displayed.

Authorized By
If the sampling plan was changed manually, the ID of the user who authorized the change is displayed.

Authorized Date
If the sampling plan was changed manually, the date that the change was made is displayed.

Comments
If the sampling plan was changed manually, the reason specified for the change is displayed.

Inspect next receipt

Use Inspect Next Receipt Maintenance to indicate that the next receipt of a product must be inspected. You can specify that the next receipt from a certain supplier must be inspected, or that all receipts of a particular product should be inspected.

Inspect next receipt records are used in conjunction with receiving inspection plans.

Adding inspect next receipt records

Add an Inspect Next Receipt record to designate that the next receipt of a product must be inspected. When you create a lot for the product in Lot Maintenance, the lot is moved to Receiving Inspection.

1 Select **Control > Collect > Inspect Next Receipt Maintenance**.

2 Specify this information:

Site ID
Specify the site where the product is going to be received. When you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Made By
To indicate that the next receipt of a product made by a particular supplier must be inspected, specify the ID of the supplier. If the next receipt of a product must be inspected regardless of the manufacturer, then leave this field blank.

Product ID
Specify the ID of the product to be inspected. When you specify the product ID, the current revision level of the product is inserted in the Revision Level field.

Requested By
Specify the ID of the employee who is requesting an inspection of the product.

Request Date
Specify the date the request was made.

Authorized By
Specify the ID of the employee who authorized the inspection.

Authorized Date
Specify the date that the inspection was authorized.

Comments
Specify any general information about this inspection request.

Permanent
To require all receipts of this product to be inspected with a status of Inspect Next, select this check box. If you specified a supplier in the Made By field, then all receipts of the product made by the specified supplier must be inspected next.

Lot Sys ID Applied To
When you receive the next shipment of the product, the lot system ID of the shipment is inserted.

3 Click the **Save** button.

Copying inspect next receipt records

Use this feature to create a new inspect next receipt record from an existing inspect next receipt record.

1 Select **Control > Collect > Inspect Next Receipt Maintenance**.
2 Select the record to copy.
3 Right-click and select **Copy**.
4 In the Site ID field, specify the site ID for the new record.
5 Click the **Save** button.

Deleting inspect next receipt records

Delete an inspect next receipt record if you do not require the next receipt of a product to be inspected.

1 Select **Control > Collect > Inspect Next Receipt Maintenance**.
2 Select the record to delete.
3 Click the **Delete** button.
4 Click the **Save** button.

Priority products

Use the Priority Products form to designate that the next lot of a product is of particular importance. You can specify that the next receipt from a certain supplier is a priority product, or that all receipts of a particular product are priorities.

Priority products are used only with receiving inspection plans.

Adding priority products

1 Select **Control > Collect > Priority Products Maintenance**.

2 Specify this information:

Site ID
Specify the site ID where this product is a priority. When you select a site, the site's parent entity ID is inserted in the Entity ID field.

Priority System ID
Leave this field blank. When you save the record, an ID is generated based on the numbering scheme set up for priority products.

Business Unit
If this priority product is used in a particular business unit, specify the business unit.

3 In the Made By section, specify the supplier who makes the product. Specify a supplier if this product is a priority only when made by the supplier you specify. Leave this field blank if the product is always a priority, regardless of who supplied it.

4 In the Product section, specify the priority product. Specify this information:

Product ID
Specify the ID of the product.

Revision Level
The revision level of the product ID is displayed.

5 In the Lot section, specify default information for lots of this product. Specify this information:

Lot Priority
Specify the priority for lots of this product. Specify Medium or High. You cannot specify low. Low is the default for standard lots.

Permanent
To apply this lot priority to all receipts of this product, select this check box. If you specified a supplier in the Made By section, then the lot priority is applied to all receipts of the product from the specified supplier. Clear the check box if only the next receipt of this product is a priority product.

Lot Sys ID Applied To
After you receive the product, the system ID of the lot is inserted.

6 Click the **Save** button.

Deleting priority product records

If a product is no longer a priority product, you can delete the priority product record. Deleting a priority product record does not delete the product from your database.

1 Select **Control > Collect > Priority Products Maintenance**.

2 Select the priority product record.
3 Click the **Delete** button.
4 Click the **Save** button.

Product no inspection

Use this form to specify the products that do not require inspection. You can specify that a product does not need inspection only when it is purchased from a particular supplier, or you can specify that the product never needs inspection.

These products are never displayed in receiving inspection, even if a lot maintenance record is created.

Adding product no inspection records

Use this form to specify which products do not require inspection.

1 Select **Control > Collect > Products No Inspection Maintenance**.
2 Specify this information:

Site ID
Specify the site that does not require the product to be inspected. When you specify a site, the site's parent entity ID is inserted in the Entity ID field.

Product ID
Specify the product that does not require inspection. When you specify a product, the product's name is inserted in the Product Name field.

Made By
Supplier is the only valid choice in this column.

Supplier ID
If this product does not require inspection only if it is purchased from a particular supplier, specify the supplier of the product. When you specify a supplier, the supplier's name is inserted. If the product never requires inspection, leave this field blank.

3 Click the **Save** button.

Deleting product no inspection records

To remove a product from the no inspection list, delete the product from the Product No Inspection table.

To delete a product from the table:

1. Select **Control > Collect > Products No Inspection Maintenance**.
2. Select the line to delete.
3. Click the **Delete** button.
4. Click the **Save** button.

Process inspection orders

If IQM is integrated to an ERP, this form shows purchase receipts that require inspection. Most of the information displayed on this form is derived from the InspectionOrder BOD. If your installation of IQM is not integrated to an ERP, then no information is displayed on this form.

To access this form, select **Control > Collect > ERP Inspection Order Processing**.

To process a receipt, select the Selected check box, and then click Process. To process all receipts, click Process. The processing that occurs depends upon the pre-processing instructions specified for the product.

See Pre-processing Lots.

If the product requires inspection, a Lot Maintenance record is created for the receipt, and the lot is displayed in Receiving Inspection. If the product does not require inspection, a Lot History Maintenance record is created.

While the precise information shown on this form depends on your ERP's InspectionOrder BOD mapping, this information is standard:

Entity ID
The ID of the entity that received the products is displayed.

Site ID
The ID of the site that received the products is displayed.

Receiver ID
The purchase receipt ID is displayed.

Receiver Line No
The purchase receipt line associated with the product is displayed.

P/O ID
The ID of the purchase order used to procure the product is displayed.

P/O Line No
The purchase order line associated with the product is displayed.

Revision Level
The revision level of the product is displayed.

Qty Received
The quantity of product received in the shipment is displayed.

Unit of Measure
The unit of measure for the product is displayed.

Ref One
The information displayed depends upon the mapping. Typically, the ID of the user who generated the BOD is displayed.

Supplier ID
The ID of the supplier who sold this product to you is displayed.

Contact No
The ID number of your contact at the supplier's organization is displayed.

Name
The name of the supplier and the contact are displayed.

Product ID
The ID of the product you received is displayed.

Inspection Order ID
The inspection order ID created for this lot is displayed.

Date Exp.
The date that the inspection is due is displayed.

External Product ID
The product ID that the supplier uses for this product is displayed.

External Revision Level
The revision level that the supplier uses for this product is displayed.

Major Location
The major location associated with the product is displayed.

Minor Location
The minor location associated with the product is displayed.

Warehouse ID
The ID of the warehouse into which the product was received is displayed.

Warehouse Name
The name of the warehouse is displayed.

Address, City, State, Zip, and Country
The address of the warehouse is displayed.

Collect reports

Use these reports to analyze information about data collection and control plans.

AIAG product part approval dimensional results

Use this report to submit information about dimensional measurements to your customers. This report shows the entity and site ID where the measurements were taken, the product collection ID, the ID of the product that was measured, and the name of the product that was measured. The results of each characteristic measurement are displayed in a table. Space is provided for you to specify the supplier ID and the name of the facility where the part was measured. In addition, space is provided for you to sign and date the results.

Generating the AIAG product part approval dimensional results report

1. Select **Control > Collect > My Reports**.
2. Click AIAG Product Part Approval Dimensional Results.
3. Click the sites to use for the report.
4. To generate a report for a particular product data collection record, specify the ID in the Product Collect ID field.
5. Click the **Print Report** button.

Data summary statistics

Use this report to review a summary of the information collected against a product inspection plan. This report displays the accounting entity and site associated with the product inspection plan, the product inspection plan ID, the product inspected with the plan, the product's current revision level, and the operation number for the inspection plan. For each characteristic in the plan, the characteristic number, characteristic name, the standard type, and the total number of data points are displayed. For variable standards, the average measurement, the standard deviation, the process capability calculation, and the process capability index calculation are displayed.

Generating the data summary statistics report

1. Select **Control > Collect > My Reports**.
2. Click Data Summary Statistics.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular inspection plan, specify the ID of the plan in the **Product Inspection Plan ID** field or the operation number for the plan in the **Operation No** field.
   - To view information for a particular product, specify the ID of the product in the **Product ID** field.
   - To view information for inspection plans made by a particular employee, specify the ID of the employee in the **Made By** field.

- To view information collected during a particular time period, specify the starting and ending dates in the **Collection Date From** and **Collection Date To** fields.

5 Click the **Print Report** button.

Data summary statistics with details

Use this report to review a summary of the information collected against a product inspection plan and information about the individual samples taken. This report displays the accounting entity and site associated with the product inspection plan, the product inspection plan ID, the product inspected with the plan, the product's current revision level, and the operation number for the inspection plan. For each characteristic in the plan, the characteristic number and characteristic name are displayed. If the characteristic is a variable, then the specification is displayed; otherwise, the characteristic type is displayed.

This summary information is shown: total number of data points, the average measurement, the standard deviation, the process capability calculation, the process capability index calculation, and the percentage of samples conforming to the standard.

For each sample, this information is displayed: the data collection ID, the collection date, the sample number, and the result.

Generating the data summary statistics report

1 Select **Control > Collect > My Reports**.
2 Click Data Summary Statistics with Details.
3 Click the sites to use for the report.
4 Specify the information to include in the report:
   - To view information for a particular inspection plan, specify the ID of the plan in the **Product Inspection Plan ID** field or the operation number for the plan in the **Operation No** field.
   - To view information for a particular product, specify the ID of the product in the **Product ID** field.
   - To view information for inspection plans made by a particular employee, specify the ID of the employee in the **Made By** field.
   - To view information collected during a particular time period, specify the starting and ending dates in the **Collection Date From** and **Collection Date To** fields.
5 Click the **Print Report** button.

Detailed product inspection plan

Use this report to review details of your product inspection plans. This report displays the entity and site associated with the product inspection plan, the product inspection plan ID, the product inspected with the plan, the product's current revision level, the issue date of the product's current revision level,

the operation number for the inspection plan, the plan name, the plan's revision level, and the issue date for the plan's revision level. For each characteristic evaluated in the plan, characteristic number, standard type, standard specification, characteristic type, the measurement unit, the characteristic class, and the characteristic name are displayed.

Generating the detailed product inspection plan report

1. Select **Control > Collect > My Reports**.
2. Click Detailed Product Inspection Plan.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular inspection plan, specify the ID of the plan in the **Product Inspection Plan ID** field or the operation number for the plan in the **Operation No** field.
   - To view inspection plans for a particular product, specify the ID of the product in the **Product ID** field or the product name in the **Product Name** field.
   - To view inspection plans for a particular product type, specify the type code in the **Product Type** field.
   - To view inspection plans for a particular commodity type, specify the type code in the **Commodity Type** field.
   - To view inspection plans with operations that have a particular name, specify the name of the operation in the **Operation Name** field.
5. Click the **Print Report** button.

Process control plan report

Use this report to review details of process control plans. This report displays the entity and site associated with the control plan, the control plan ID, the ID of the process controlled by the plan, the revision level of the control plan, the control plan category, the plant where the control plan is used, the supplier code, the key employee contact, the contact's phone number, the date the plan was created, the date of the current plan revision, internal approval information, engineering approval information, quality approval information, the inspection plans associated with the control plan, the characteristics from the inspection plan, and the core team for the control plan.

Generating the process control plan report

1. Select **Control > Collect > My Reports**.
2. Click **Process Control Plan**.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular control plan, specify the ID of the plan in the Control Plan ID field.

- To view control plan information for a particular process, specify the ID of the process in the Process ID field.
- To view control plans associated with a particular inspection plan, specify the operation ID of the inspection plan in the Inspection Plan field.

5 Click the **Print Report** button.

Product control plan report

Use this report to review details of product control plans. This report displays the entity and site associated with the control plan, the control plan ID, the ID of the product controlled by the plan, the product revision level, the control plan category, the plant where the control plan is used, the supplier code, the key employee contact, the contact's phone number, the date the plan was created, the date of the current plan revision, internal approval information, engineering approval information, quality approval information, the inspection plans associated with the control plan, the characteristics from the inspection plan, and the core team for the control plan.

Generating the product control plan report

1 Select **Control > Collect > My Reports**.

2 Click Product Control Plan.

3 Click the sites to use for the report.

4 Specify the information to include in the report:

- To view information for a particular control plan, specify the ID of the plan in the **Control Plan ID** field.
- To view control plan information for a particular product, specify the ID of the product in the **Product ID** field.
- To view control plans associated with a particular inspection plan, specify the operation ID of the inspection plan in the **Inspection Plan** field.

5 Click the **Print Report** button.

Chapter 14: Nonconformance

Nonconformance Maintenance (NCM) is a complete control package that helps you collect, compile, and report accurate and timely quality data about the manufacturing process. NCM has powerful product management, data collection, statistical process control, and nonconformance maintenance capabilities. NCM is designed to help you with these tasks:

- Provide full documentation of nonconformance history, dispositions, and verifications
- Quickly and accurately analyze failures
- Provide engineers visibility to problem products
- Provide maintenance engineers visibility to problem machines
- Provide employees information to past history to identify potential problem areas prior to running a job
- Reduce inventory of material waiting for nonconformance disposition
- Manage customer returned material
- Manage supplier-rejected material
- Provide ability to track nonconformance by product, by process, by type, by cause or by subject
- Allow employees to focus on technical matters while letting the computer perform the more routine tasks of managing the nonconformance system
- Record compared audit results with quality assurance standards and regulations such as ISO9001, ISO/TS16949, ISO13485, AS9100, FDA, cGMP and others

You can create a new nonconformance records directly in the Nonconformance Maintenance window. You can also generate nonconformance records when records fail in these forms:

- Audit Manager
- Calibration Maintenance
- Document Audit Maintenance
- Process Data Collection Maintenance
- Product Data Collection Maintenance

Employees can manage tasks related to nonconformance in My To Do list.

See My To Do list on page 34.

After you create a nonconformance record, use the Disposition tab to record how to resolve the nonconformance. After the disposition is approved, you can attach corrective action records that detail the steps you took to correct the nonconformance. You can attach an existing corrective action record or create a new corrective action record specifically for the nonconformance. When all required corrective actions are complete, use the Verification tab to record the steps taken to ensure that failed products were dispositioned.

After you close the disposition and the verification, you can close the NCM.

Creating nonconformance records

To create a nonconformance record:

1 Select **Control > NCM > Nonconformance Maintenance**.

2 In the header, specify this information:

Site ID
Specify the ID of the site where this NCM was reported. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Date
Specify the date that this NCM was reported. The current date is inserted by default.

Time
Specify the time that this NCM was reported. The current time is inserted by default.

Due Date
Specify the date that this NCM is due to be resolved.

Status
The current status of this NCM is displayed. You cannot edit this field until you close the disposition and verification. When you create a new record, the status is Open.

Business Unit
If a particular business unit reported the nonconformance, specify the ID of the business unit.

3 In the Product section, specify information about the product where the nonconformance was found. Specify this information:

Insp Plan ID
Specify the inspection plan used to identify the nonconformance. If you specify an inspection plan, the ID of the product that is the subject of the inspection plan and the inspection plan operation are inserted.

Product ID
If you did not specify an inspection plan, specify the ID of the product that did not meet your standards.

4 To specify a description of the nonconformance, click the Description tab.

5 Right-click and elect **NCM Description Notations**.

6 Specify a description of the nonconformance, and then click **Ok**.

7 Use the Information tab to specify information about the source of the nonconformance. Click the **Information** tab and specify this information:

Made By
Specify who made the nonconforming product. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

Checked By
Specify who checked or measured the nonconforming product. You can specify an employee, a customer, or a supplier.

Reported By
Specify who reported the nonconformance. You can specify an employee, a customer or a supplier.

Assigned To
Specify the ID of the employee responsible for managing this nonconformance record.

A task for the nonconformance is added to the employee's My To Do list. When the nonconformance record is closed, the task is removed from the employee's list.

8 In the General Section, specify information about the product lot. Specify this information:

PO Number
Specify the ID of the purchase order used to purchase the product.

Lot Number
Specify the ID of the lot used to receive the product.

Lot Size
Specify the total quantity of product received in the lot.

Qty Accepted
This field is populated only if the nonconformance was posted from product data collection. The total number of product in the lot that conformed to the standard is displayed. You can edit the quantity.

Qty Rejected
This field is populated only if the nonconformance was posted from product data collection. The total number or product in the lot that did not conform to the standard is displayed.

Data Collection
The source of the failed data collection is displayed.

NCM Type
Specify the type of nonconformance. Use the NCM type to define the general category of nonconformance.

Subject
Specify the subject of the nonconformance. Use the subject code to more specifically categorize the nonconformance.

Cause
Specify the cause of the nonconformance.

Location Found
Specify the location where this nonconformance was found.

Location Generated
Specify the location where this nonconformance was generated.

9 Use the Characteristics tab to add or review product characteristics. If you created this NCM record from a failed data collection record, each failed characteristic sample is listed. You can manually add failed characteristics. To manually add a failed characteristic sample, click the **Characteristics** tab. In the table, specify this information:

Char No
Specify the product characteristic number.

Sample No
Specify the ID of the failed sample.

Variable Standard
If the selected characteristic is a variable, the variable standard is displayed.

Variable Actual
If the selected characteristic is a variable, specify the measurement taken for this characteristic sample.

Variable Variance
If the selected characteristic is a variable, specify the difference between the standard and the measurement taken.

Attribute
If the selected characteristic is an attribute, specify N to indicate that the sample did not conform to the standard.

Text
If the selected characteristic is a text characteristic, specify the measurement taken.

Comments
Specify any additional comments about the sample.

10 To view standard information about a characteristic, click the appropriate row.

11 To specify information about the devices and equipment used to manufacture and measure the product, click the **Trend Info** tab. Specify this information:

UDF One
This is a user-defined field. Specify the information required by your organization.

Equipment ID
Specify the ID of the equipment used to make the product.

Tooling ID
Specify the ID of the equipment used with this product.

Device ID
Specify the device used to measure the product.

Process ID
Specify the ID of the process that generated the nonconforming product.

Process No
Specify the process worksheet that generated the nonconforming product.

Operation No
Specify the inspection plan operation number that generated the nonconforming product.

Serial Numbers
Specify the serial numbers of the nonconforming product.

12 The Disposition tab is used to propose a solution to the nonconformance.
See Adding Disposition Information on page 483.

13 The Verification tab is used to verify that the disposition addresses the nonconformance issue.
See Verifying Dispositions on page 487.

14 The Corrective Action tab is used to list the specific corrective actions used to address the nonconformance.

15 Use the ERP Info tab to record information from your ERP system. Click the **ERP Info** tab and specify this information:

Production Order ID
Specify the ID of the production order used to make the product.

Operation ID
Specify the step within the production order that caused the nonconformance.

Resource ID
If IQM is integrated with an ERP, the ID of the shop resource used during the operation is displayed.

WO Type
Specify the type of work order.

WO Base ID
If your work order ID scheme uses a base ID of the work order.

WO Lot ID
If your work order ID scheme uses a lot ID, specify the ID.

WO Split ID
If your work order ID scheme uses a split ID, specify the ID.

WO Sub ID
If your work order ID scheme uses a sub ID, specify the sub ID.

ERP ID 6 through ERP ID 9
These are user defined fields. Specify the data required by your organization.

16 To specify information required by your organization, click the **User Defined Trend Info** tab.

17 Click the **Save** button.

Viewing and editing nonconformance records generated in data collection

During product data collection, you can use the Nonconformance Wizard to create nonconformance records for failed data collection samples.

This information can be generated directly from the Product Data Collection Nonconformance Wizard:

- Due Date
- Inspection Plan ID
- Product ID
- Inspection Plan Operation
- Description (from the Comments tab in Product Data Collection)
- All information on the Information tab
- All information on the Characteristics tab
- All information on the Trend Info tab, except Device ID and Process Inspection Plan information
- On the ERP tab, Production Order ID, Operation ID, and Resource ID

Specifying dispositions

Use the Disposition tab to specify how to resolve the nonconformance.

1 Select **Control > NCM > Nonconformance Maintenance**.

2 Specify the NCM ID.

3 Click the **Disposition** tab.

4 Specify this information:

Disposition Type
Specify the code that indicates how this NCM will be resolved, such as scrap, repair, or regrade. Define these codes in Disposition Type Maintenance.

Date
Specify the date you created the disposition.

Due Date
Specify the date by which disposition of the nonconforming product must be complete.

Status
For a new disposition, specify Open. After this disposition has been approved and implemented, specify Closed.

See Closing Nonconformance Records on page 488.

Assigned To
Specify the ID of the employee responsible for managing the disposition process.

A task for the disposition is added to the employee's My To Do list. The due date of the task is the same as the due date of the disposition. The task is removed when the disposition is closed.

Disposition By

Specify who suggested the disposition. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

Quantities
Use the reference fields in this section to record numeric values for single or multiple disposition types. Single disposition types could be scrap, rework, repair, and use-as-is. Examples of multiple disposition types could be sort, multiple, define, and disposition-in-process.

Disposition
Describe in detail the steps to take to address the nonconformance. To specify text, right-click and select NCM Disposition. After you enter text, click Ok.

5 Click the **Save** button.

Approving dispositions

After you specify the disposition, specify who must approve the disposition.

1 Select **Control > NCM > Nonconformance Maintenance**.
2 Open the NCM.
3 Click the **Disposition** tab.
4 Right-click and select **Disposition Approved By**.
5 Add the individuals who must approve this disposition. Ensure that the individual that you add are Application User Maintenance and have IQM authorization. Specify this information:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column. Then, specify the employee's function and job codes.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact in the Contact No column.
   - To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact in the Contact No column.

6 In the Decision column, specify the decision made. When you select a decision, the current date and the ID of the currently signed in user are inserted in the Decision Date field. Depending on the settings specified in Application Global Maintenance, you may be required to specify your password when you change the decision to Approved or Not Approved. Select one of these options:

Option	Description
Pending	Select this option if the disposition plan is under review and no final decision has been made.
Approved	Select this option if the disposition plan is approved. An approved request is ready to be implemented. Select this status when the individual has approved this request.
Not Approved	Select this option if the disposition plan is not approved and will not be implemented.

7 Click the **Save** button.

8 If you specified Approved in step 6 and a password is required to approve dispositions, specify the password and then click **Ok**. Specify whether passwords are required in Application Global Maintenance and Application User Maintenance.

See Specifying approval settings on page 53.

See also "Specifying approval settings" in the *Infor Quality Management System Administration Guide*.

Attaching existing corrective actions

After the disposition plan is approved, you can attach related corrective actions to the NCM. Use this procedure to attach an existing corrective action to the NCM record. To create a new corrective action specifically for this NCM, use the procedure for creating and attaching new corrective actions.

1 Select **Control > NCM > Nonconformance Maintenance**.

2 Specify the NCM ID.

3 Click the **Corrective Actions** tab.

4 In the Corrective ID column, select the ID of the corrective action from the drop-down list. Information from the corrective action record is inserted in the table.

5 Click the **Save** button.

Creating and attaching a corrective action to an NCM record

To create and attach a new corrective action to an NCM record, use the Corrective Actions Wizard.

1. Select **Control > NCM > Nonconformance Maintenance**.
2. Open the NCM record.
3. Click the **Corrective Actions** tab.
4. Right-click and select **Corrective Action Insert Wizard**.
5. Information from the NCM record is inserted in the Corrective Action Wizard form. In the header, edit or specify this information:

   Corrective ID
   Leave this field blank. This ID is generated when you post the corrective action record.

   Product ID
   The product ID specified on the nonconformance record is displayed. You can specify a different product ID.

   Due Date
   Specify the date that the corrective action is due to be complete. If you do not know the due date, specify the current date.

   Subject
   The subject code from the nonconformance record is displayed. You can specify a different subject code. Use the subject code to more specifically categorize the nonconformance.

   Cause
   The cause code from the nonconformance record is displayed. You can specify a different cause code. Use the cause code to specify why the nonconformance occurred.

   User Defined 1
   The information in the user defined 1 field in the nonconformance record is displayed. You can specify a different user defined code.

   Assigned To
   Specify the individual responsible for managing the corrective action.
   - To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.

     A task is added to the employee's My To Do list. The due date of the task is the same as the due date of the corrective action. When the corrective action is closed, the task is removed from the list.
   - To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
   - To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

   Request By
   The information from the Reported By section of the nonconformance record is displayed. You can specify a different individual.

6. To specify trend information, click the **NCM Trend** tab. The ID of the nonconformance record is displayed. You can specify additional NCM trend information.
7. To describe and assign immediate actions, click the **Immediate Action** tab. Specify this information:

Action Date
Specify date by which the immediate action must be complete.

Action By
Specify the ID of the employee who is assigned to complete the action.

Immediate Action Description
The ID of the nonconformance record is displayed. Specify the steps required to complete the immediate action.

8 To select nonconformance reference text to include in the corrective action record, click the **Reference** tab. The text you specified for each of the five reference fields on the User Defined Trend Info tab is displayed, along with the programmatic identification of the field. To include reference text in the corrective action record, select the appropriate check box. You can select only one check box. To exclude reference text from the corrective action record, do not select a check box.

9 Complete one of these steps:
- To create the corrective action record, click **Post to CORRECT**. The corrective action ID is generated. To open the corrective action record, right-click the ID and select **Details**.
- To create the corrective action record and e-mail a copy of the record to the individuals in the Assigned To and Request By sections, click **Post to CORRECT and E-mail**. The ID, Name and e-mail addresses of the individuals are displayed. You cannot add or remove individuals from the table. Edit the e-mail addresses if necessary, and then click the **Ok** button to send the corrective action record.

In the Nonconformance Maintenance form, information about the corrective action record you created is inserted on the Corrective Action tab.

Verifying dispositions

You must verify that a nonconforming product was dispositioned using best business practices. Use the Verification tab to record this information.

1 Select **Control > NCM > Nonconformance Maintenance**.
2 Specify the NCM ID.
3 Click the **Verification** tab.
4 Specify this information:

Date
Specify the date you created the steps to use to verify the disposition.

Due Date
Specify the date by which the disposition must be verified.

Status
For a new verification plan, specify Open. After the disposition is closed and you have verified the disposition, specify Closed.

See Closing Nonconformance Records on page 488.

Assigned To
Specify the ID of the employee responsible for managing the verification process.

A task is added to the employee's My To Do list. The due date of the task is the same as the due date of the disposition. When the disposition is closed, the task is removed from the list.

Verification By

Specify who suggested the verification process. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

Depending on settings in Application Global Maintenance and Application User Maintenance, you might be required to specify a password to complete information in the **Verification By** field.

Verification
Describe in detail the steps to take to verify the disposition. To specify text, right-click and select **NCM Verification**. After you enter text, click **Ok**.

5 Click the **Save** button.

Closing nonconformance records

When work on the nonconformance is complete, close the nonconformance record. Before you can close a nonconformance record, you must first close the disposition and verification of the disposition. All disposition and verification approvals must be received and cannot have a status of pending.

1 Select **Control > NCM > Nonconformance Maintenance**.
2 Specify the NCM ID.
3 If you have not closed the disposition, click the **Disposition** tab.
4 Ensure that there are no pending disposition and verification approvals, then specify this information:

Status
Specify Closed.

Closed Date
Specify the date you closed the disposition. The current date is inserted by default.

5 If you have not closed the verification of the disposition, click the **Verification** tab. To close the verification, you must first close the disposition.
6 Specify this information:

Status
Specify Closed.

Closed Date
Specify the date you closed the verification. The current date is inserted by default.

7 In the header, specify this information.

Status
Specify Closed.

Closed Date
Specify the date you closed the nonconformance. The current date is inserted by default.

8 Click the **Save** button. After you close the nonconformance record, you cannot edit the record unless the system administrator has given you override authority in Application User Maintenance.

Copying nonconformance records

You can create a new nonconformance record from an existing record.

1 Select **Control > NCM > Nonconformance Maintenance**.
2 Open the NCM to copy.
3 Right-click and select **Copy NCM**.
4 Specify the information to copy:

Product Characteristics
Select this check box to copy the information on the Characteristics tab.

Disposition Approved By
Select this check box to copy the disposition approval list.

Corrective Actions
Select this check box to copy the information on the Corrective Actions tab.

Quality Costs
Select this check box to copy the quality cost information.

Document Links
Select this check box to copy linked documents.

5 Click **Ok**. In addition to the information you selected in step 4, the information in the header, the Description tab, the Information tab, and the Trend Info tab is also copied.

NCM reports

Use NCM reports to analyze information about nonconformance records.

Comprehensive nonconformance report

Use this report to view detailed information about nonconformance records. This report displays the entity and site where the associated with the nonconformance record, the record ID, the NCM description, the product where the nonconformance was found, the operation number of the inspection plan being conducted when the nonconformance was found, the NCM type, the subject code, the cause code, the ID of the employee assigned to the nonconformance, the due date, the closed status, the closed date, the ID of the party who made the product, and the disposition approval list.

Generating the comprehensive nonconformance report

1. Select **Control > NCM > My Reports**.
2. Click Comprehensive NCM.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular NCM record, specify the ID of the record in the **NCM ID** field.
   - To view NCMs of a particular type, specify the ID of the type in the **NCM Type** field.
   - To view NCMs associated with a particular inspection plan, specify the operation number of the inspection plan.
   - To view NCMs assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID)** field.
   - To view NCMs created during a particular time period, specify the date range in the **NCM From Date**and **NCM To Date** fields.
   - To view NCMs for a particular product, specify the ID of the product in the **Product ID** field.
   - To view NCMs with a particular status, select the appropriate check box. You can select more than one check box.
5. Click the **Print Report** button.

Nonconformance analysis report

Use this report to analyze information about the sources and causes of nonconformances. When you generate this report, you select a criterion to use as the basis of the analysis. For the criterion you select, the report displays the percentage of NCMs for each criterion ID. For example, if you select Equipment ID in the Analysis By field, the report displays the percentage of NCM records associated

with each equipment ID. You can see which pieces of equipment are responsible for the majority of your NCMs.

To be included on the report, a criterion ID must be specified on at least one NCM. For example, if the equipment ID DRILLPRESS was not specified on an NCM, it will not be included on the report.

You can analyze NCMs based on these criteria:

- Assigned To
- Cause
- Checked By
- Device ID
- Disposition Assigned To
- Disposition By
- Disposition Type
- Equipment ID
- Location Found
- Location Generated
- Made By
- NCM Type
- Process ID
- Product ID
- Product Operation No
- Reported By
- Subject
- Tooling ID
- User Defined Field 1
- User Defined Field 5
- User Defined Field 6
- User Defined Field 7
- Verify Assigned To
- Verify By

You can apply a Product ID or an NCM Type filter to the report. When you apply a filter to the report, only NCMs with the product ID and/or NCM Type you specify are considered for the report. For example, if you specify 1/4PLATE in the Product ID field and select Assigned To in the Analysis By field, then the report would show the percentage of NCMs for 1/4PLATE assigned to each employee.

Generating the nonconformance analysis report

1. Select **Control > NCM > My Reports**.
2. Click NCM Analysis.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To analyze NCMs for a particular product, specify the ID of the product in the **Product ID** field.
   - To analyze NCMs of a particular type, specify the ID of the type in the **NCM Type** field.

- To analyze NCMs due during a particular time period, specify the date range in the **Due Date From** and **Due Date To** fields.

5 In the **Analysis Field** field, specify the criterion to use for the analysis.

6 In the **Show Detail** field, specify Yes to view a table of results under the chart. Specify No to view the chart only. If you specify No, you must select a chart type to view data in the report.

7 In the Chart Type section, click the type of chart to view. You can select Pie Chart, Bar Chart, or Column Chart. Click No Chart if you do not want to include the chart in the report. If you select No Chart, you must specify Yes in the Show Detail field to view data in the report.

8 Click the **Print Report** button.

Nonconformance due date list

Use this report to view a list of nonconformance records that are due during a date range that you specify. This report shows the entity and site that are associated with the nonconformance record, the record ID, the date of the nonconformance, the due date of the nonconformance, the product ID, the operation number of the inspection plan, the text specified when the NCM was posted, the type of NCM, the ID of the individual assigned to the disposition, the date that the disposition is due, and the text entered for the disposition.

Generating the nonconformance due date list report

1 Select **Control > NCM > My Reports**.

2 Click Nonconformance Due Date List.

3 Click the sites to include in the report.

4 Specify the information to include in the report:

- To view NCMs for a particular product, specify the ID of the product in the**Product ID** field.
- To view NCMs of a particular type, specify the ID of the type in the **NCM Type** field.
- To view NCMs associated with a particular inspection plan, specify the operation number of the inspection plan.
- To view NCMs assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID)** field.
- To view NCMs created during a particular time period, specify the date range in the **NCM From Date** and **NCM To Date** fields.
- To view NCMs with a particular status, select the appropriate check box. You can select more than one check box.

5 Click **Print Report**.

Nonconformance list report

Use this report to view a list of nonconformance records. This report displays the entity and site that are associated with the nonconformance record, the record ID, the date of the nonconformance, the ID of the party who reported the nonconformance, the ID of the employee assigned to the nonconformance, the due date, and the closed date.

Generating the nonconformance list report

1. Select **Control > NCM > My Reports**.
2. Click **NCM List**.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view NCMs for a particular product, specify the ID of the product in the**Product ID** field.
   - To view NCMs of a particular type, specify the ID of the type in the **NCM Type** field.
   - To view NCMs associated with a particular inspection plan, specify the operation number of the inspection plan.
   - To view NCMs assigned to a particular employee, specify the ID of the employee in the **Assigned To (Employee ID)** field.
   - To view NCMs created during a particular time period, specify the date range in the **NCM From Date** and **NCM To Date** fields.
   - To view NCMs with a particular status, select the appropriate check box. You can select more than one check box.
5. Click the **Print Report** button.

Chapter 15: Corrective actions

When a flaw is discovered in a product or process, use Corrective Actions Maintenance to record the steps taken to resolve an issue. You can create a stand-alone corrective action, or you can link a corrective action to a nonconformance record.

Corrective actions can apply to a single product or to multiple products.

Employees can manage tasks related to corrective actions in My To Do list.

See My To Do list on page 34.

Adding corrective actions

Use this procedure to create a corrective action manually. You can also create a corrective action in Nonconformance Maintenance.

1 Select **Control > Correct > Corrective Actions Maintenance**.

2 In the header, specify this information:

Site ID
Specify the ID of the site where the corrective action occurs. After you specify the site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Date
Specify the date you are creating this corrective action. By default, the current date is inserted.

Due Date
Specify the date by which this corrective action must be complete.

Reference
Specify any reference information.

Subject
Specify the subject code for this corrective action. Use the subject code to describe what portion of a product or process requires correction. Specify subject codes in Subject Codes Maintenance.

Cause
Specify the cause of the corrective action. For example, the cause could be an issue with a device used to make the product. Specify cause codes in Cause Code Maintenance.

User Defined 1
Specify the user defined information required by your organization.

Status
For a new corrective action, specify Open. When the corrective active is complete, specify Closed. See Closing Corrective Actions on page 500.

Assigned To

Specify the individual responsible for managing this corrective action. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.

  A task is added to the employee's My To Do list. The due date of the task is the same as the due date of the corrective action. When the corrective action record is closed, the task is removed from the list.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field.

3 To specify NCM trend information, click the **NCM Trend** tab. Specify any information about patterns or trends revealed by this corrective action.

4 To specify who requested the corrective action, click the **Requested By** tab. Select one of these options:

- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field.

5 If immediate action is required to mitigate the problem, click the **Immediate Action** tab. Specify this information:

Action By
Specify the ID of the employee who will perform the immediate action.

Date
Specify the date that the immediate action is due.

Immediate Action
To describe the immediate action to take, right-click and select **Immediate Action**. Specify a description of the immediate action.

6 To specify the corrective action to take, click the **Corrective Action** tab. Specify this information:

Action By
Specify the ID of the employee who will perform the corrective action.

Date
Specify the date that the corrective action is due.

Corrective Action
To describe the corrective action to take, right-click and select Corrective Action. Specify a description of the corrective action.

Action Type
Specify the action type. Use action types to categorize the corrective action. Add action types in Action Type Maintenance.

Project ID
If you created a project ID to track corrective action activities, specify the ID of the project. Create projects in Project Maintenance.

User Defined 2
Specify the user defined information required by your organization.

7 Click the **Save** button.

Reviewing and editing corrective actions created in Nonconformance Maintenance

If you used the Corrective Action Wizard in Nonconformance Maintenance, this information is inserted in the Corrective Action form:

- All header information. The status of the corrective action is Open.
- Information on the NCM Trend tab. The ID of the NCM is inserted.
- All information on the Request By tab
- All information on the Immediate Action tab
- Information on the Corrective Actions Product form and the associated characteristics
- Information on the Nonconformances form

Specifying products affected by corrective actions

Use this form to specify the products that the corrective action repairs. If you created the corrective action from a nonconformance record, and you specified a product ID on the nonconformance record, then the ID specified on the nonconformance record is displayed in the table.

1 Select **Collect > Correct > Corrective Actions Maintenance**.
2 In the **Corrective ID** field, specify the ID of the corrective action.
3 Right-click and select **Products**.
4 In the Product ID column, specify the ID of the product that is the subject of the corrective action. After you specify the ID, the product name is displayed.

5 Click the **Save** button.

6 To specify the characteristics that the corrective action addresses, select the product ID line and then click **Characteristics**.

7 In the Char No column, specify the characteristic number. After you specify the number, the name of the characteristic is inserted.

8 Click the **Save** button.

Approving immediate actions

1 Select **Control > Collect > Corrective Actions Maintenance**.

2 In the Corrective ID field, specify the ID of the corrective action.

3 Click the **Immediate Action** tab.

4 Right-click and select **Immediate Action Approvals**.

5 Add the individuals who must approve this immediate action. The individuals that you specify must be listed in Application User Maintenance and have IQM Authorization. Specify this information:
   - To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column.
   - To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact in the Contact No column.
   - To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact in the Contact No column.

6 In the Decision column, specify the decision made. When you select a decision, the current date and the ID of the currently signed in user are inserted in the Decision Date field. Depending on the settings specified in Application Global Maintenance, you may be required to specify your password when you change the decision to Approved or Not Approved. Select one of these options:

Option	Description
Pending	Select this option if the immediate action plan is under review and no final decision has been made.
Approved	Select this option if the immediate action plan is approved. An approved request is ready to be implemented. Select this status when the individual has approved this request.
Not Approved	Select this option if the immediate action plan is not approved and will not be implemented.

7 Click the **Save** button.

8 If you specified Approved in step 6 and a password is required to approve immediate actions, specify the password and then click **Ok**. Specify whether passwords are required in Application Global Maintenance and Application User Maintenance.

See Specifying approval settings on page 53.

See also "Specifying approval settings" in the *Infor Quality Management System Administration Guide*.

Approving corrective actions

1 Select **Control > Collect > Corrective Actions Maintenance**.

2 In the Corrective ID field, specify the ID of the corrective action.

3 Click the **Corrective Action** tab.

4 Right-click and select **Corrective Action Approvals**.

5 Add the individuals who must approve the corrective action. Ensure that the individual that you add are Application User Maintenance and have IQM authorization. Specify this information:

- To specify an employee, select the **Employee** option in the Origin Type column. Specify the employee's ID in the Employee ID column.
- To specify a customer, select the **Customer** option in the Origin Type column. Specify the customer's ID in the Customer ID column, then select the contact in the Contact No column.
- To specify a supplier, click the **Supplier** option in the Origin Type column. Specify the supplier's ID in the Supplier ID column, then select the contact in the Contact No column.

6 In the Decision column, specify the decision made. When you select a decision, the current date and the ID of the currently signed in user are inserted in the Decision Date field. Depending on the settings specified in Application Global Maintenance, you may be required to specify your password when you change the decision to Approved or Not Approved. Select one of these options:

Option	Description
Pending	Select this option if the corrective action plan is under review and no final decision has been made.
Approved	Select this option if the corrective action plan is approved. An approved request is ready to be implemented. Select this status when the individual has approved this action.
Not Approved	Select this option if the corrective action plan is not approved and will not be implemented.

7 Click the **Save** button.

8 If you specified Approved in step 6 and a password is required to approve corrective actions, specify the password and then click **Ok**. Specify whether passwords are required in Application Global Maintenance and Application User Maintenance.

See Specifying approval settings on page 53.

See also "Specifying approval settings" in the *Infor Quality Management System Administration Guide*.

Linking nonconformance records to corrective actions

If you created this corrective action using the Nonconformance Maintenance Corrective Action Wizard, then the nonconformance record used to generate the corrective action is displayed in the Nonconformances form. You can link additional nonconformance records to the corrective action.

1 Select **Control > Correct > Corrective Actions Maintenance**.

2 In the Corrective ID field, specify the ID of the corrective action.
3 Right-click and select **Nonconformance**.
4 Click the **New** button.
5 In the NCM ID, select the ID of the nonconformance record from the drop-down list. Information about who reported the nonconformance and to whom the nonconformance is assigned is inserted.
6 Click the **Save** button.

Specifying follow up information

After you implement the corrective action, specify whether the corrective action solved the issue. Use the Follow Up tab to specify this information.

1 Select **Control > Correct > Corrective Actions Maintenance**.
2 In the Corrective ID field, specify the ID of the corrective action.
3 Click the **Follow Up** tab.
4 Specify this information:

Employee ID
Specify the ID of the employee responsible for assessing the effectiveness of the corrective action.

Date
Specify the date you are specifying follow up information.

Follow Up Description
To specify a description, right-click the field and select **Follow Up**. The description can include information about the effectiveness of the corrective action.

5 Specify whether or not the corrective action was effective. Perform one of these steps:
- If the corrective action was effective, specify the date of the decision in the Effective Date field.
- If the corrective action was not effective, Click the **Reissue** button. Specify the information to include in the new corrective action record, and then click **Ok**:

  Products
  Select this check box to copy the products listed in the Corrective Actions Products form.

  Nonconformances
  Select this check box to copy the nonconformance records listed in the Nonconformances form.

  Quality Costs
  Select this check box to copy the quality cost information.

  In addition to the information you selected, the header information, NCM trend information, Request By information, and Immediate Action information are copied. On the original corrective action, the ID of the reissued corrective action is displayed and the Effective check box is cleared. On the reissued corrective action, the ID of the original corrective action is displayed.

6 Click the **Save** button.

Closing corrective actions

After you complete a corrective action, close the record.

Ensure that no approvals are pending before completing this procedure.

1 Select **Control > Correct > Corrective Actions Maintenance**.
2 In the Corrective ID field, specify the ID of the corrective action.
3 In the Status field, specify Closed.
4 In the Closed Date field, specify the date you closed the corrective action. The current date is inserted by default.
5 Click the **Save** button.

After you close the record, you cannot edit it unless the system administrator has given you override authority in Application User Maintenance.

Copying corrective actions

Use this feature to create a new corrective action record from an existing corrective action record.

1 Select **Control > Correct > Corrective Actions Maintenance**.
2 In the Corrective ID field, specify the ID of the corrective action.
3 Right-click and select **Copy Corrective Action**.
4 Specify the information to include in the new corrective action record:

Products
Select this check box to copy the products listed in the Corrective Actions Products form.

Nonconformances
Select this check box to copy the nonconformance records listed in the Nonconformances form.

Quality Costs
Select this check box to copy the quality cost information.

Immediate Action Approvals
Select this check box to copy the approval list for immediate actions.

Corrective Action Approvals
Select this check box to copy the approval list for corrective actions.

5 Click **Ok**. In addition to the information you selected, the header information, NCM trend information, Request By information, and Immediate Action information are copied.

Corrective action reports

Use corrective action reports to print information about corrective actions in the 8D template and to analyze the details of your corrective actions.

Corrective action 8D report

Use this report to view corrective actions in an 8D template. In the header of this report, the entity and site where the corrective action occurred, the corrective action ID, the date of the corrective action, the status, whether the corrective action was effective, the product ID, the product name, customer product ID, the ID of the customer who reported the issue, and reference information are displayed.

The report contains these sections:

Team Approach
This section contains the NCM assigned to information and project name.

Describe the Problem
This section contains the information specified on the NCM Trend tab.

Implement And Verify Immediate / Interim Corrective Action
This section contains the information specified on the Immediate Action tab.

Define And Verify Root Causes - Verify Corrective Actions - Implement Permanent Corrective Actions
This section contains the information specified in the Action By, Action Date, and text fields on the Corrective Action tab.

Prevent Recurrence
This section contains the information specified in the Employee ID, Date, and text fields on the Follow Up tab.

Generating the corrective action 8D report

1. Select **Control > Correct > My Reports**.
2. Click the Corrective Action 8D link.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular corrective action, specify the ID of the corrective action in the **Corrective Action ID** field.
   - To view control plans assigned to a particular employee, specify the ID of the employee in the **Assigned To ID** field.
   - To view open control plans, click the **Open** check box. To view completed control plans, click the **Closed** check box.
5. Click the **Print Report** button.

Corrective action details report

Use this report to view detailed information about corrective actions. This report displays the entity and site where the corrective action occurred, the corrective action ID, the NCM trend description, the date of the corrective action, the ID of the employee assigned to the corrective action, the due date, the reference text, the subject code, the cause code, user-defined information, the status, the closed date, and the ID of the party who requested the corrective action. In addition, all of the information on the Immediate Action, Corrective Action, and Follow Up tabs are displayed. The products attached the Corrective Action and the team members for the corrective action project are also displayed.

Generating the corrective actions details report

1. Select **Control > Correct > My Reports**.
2. Click Corrective Action Detail
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular corrective action, specify the ID of the corrective action in the **Corrective Action ID** field.
   - To view corrective actions assigned to a particular employee, specify the ID of the employee in the **Assigned To ID** field.
   - To view open corrective actions, click the **Open** check box. To view completed corrective actions, click the **Closed** check box.
5. Click the **Print Report** button.

Corrective actions due date list

Use this report to view a list of corrective actions that are due during a date range that you specify. This report shows the entity and site where the corrective action will be made, the corrective action ID, the date of the corrective action, the action type, the subject code, the ID of the employee assigned to the corrective action, the due date, and the product that is the subject of the corrective action.

Generating the corrective actions due date list report

1. Select **Control > Correct > My Reports**.
2. Click Corrective Actions Due Date.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view corrective actions assigned to a particular employee, specify the ID of the employee in the **Assigned To ID** field.
   - To view corrective actions due during a particular time period, specify dates in the **Due Date From** and **Due Date To** fields.

- To view open corrective actions, click the **Open** check box. To view closed corrective actions, click the **Closed** check box.

5 Specify the sort order for the report:

Option	Description
Corrective ID	Select this option to sort the report by corrective ID.
Assigned to + Corrective ID	Select this option to sort the report by assigned to and then corrective ID. This groups together all corrective actions assigned to a particular employee.

6 Click **Print Report**.

Corrective actions list

Use this report to view a list of corrective actions. This report shows the entity and site where the corrective action occurred, the corrective action ID, the date of the corrective action, the action type, the cause, the ID of the employee assigned to the corrective action, the status, the closed date, the due date, the subject code, and the product that is the subject of the corrective action.

Generating the corrective actions list report

1 Select **Control > Correct > My Reports**.
2 Click Corrective Actions List.
3 Click the sites to include in the report.
4 Specify the information to include in the report::
- To view corrective actions assigned to a particular employee, specify the ID of the employee in the **Assigned To ID** field.
- To view corrective actions due during a particular time period, specify dates in the **Due Date From** and **Due Date To** fields.
- To view open corrective actions, click the **Open** check box. To view closed corrective actions, click the **Closed** check box.

5 Specify the sort order for the report:

Option	Description
Corrective ID	Select this option to sort the report by corrective ID.
Assigned To + Corrective ID	Select this option to sort the report by assigned to and then corrective ID. This groups together all corrective actions assigned to a particular employee.

6 Click **Print Report**.

Chapter 16: Statistical Process Control

SPC+ (Statistical Process Control Plus) is designed to collect and analyze data relative to any product, process, or vendor. Its powerful data collection and statistical process control features are designed to help you ensure that your quality control measures are timely and cost-effective and that customers are satisfied.

You can:

- Immediately react to nonconformance conditions.
- View and analyze control charts that signal out-of-control conditions, and notify your personnel to stop and research the reasons for any variation.
- Ensure continuous product and process improvement through dynamic integration with the other modules in IQM.

You can design custom studies and Pareto studies. After you design a custom study and collect data, you can generate these charts:

- Conformance Summaries
- Histograms
- P Charts
- Xbar-R Charts

After you design a Pareto study, you can generate a Pareto chart.

The SPC from this module is not associated with the SPC incorporated in Product Inspection Plans, Product Data Collection, Process Inspection Plans, and Process Data Collection. The SPC studies that you generate in SPC+ are offline SPC studies.

Custom studies

Set up custom studies to analyze characteristics. You can analyze the same characteristics of different products. You can also collect separate sets of characteristic measurements.

After you set up the custom study and collect the data, you can generate custom study charts.

Setting up custom studies

1 Select **Control > SPC > Custom Studies Maintenance**.

2 In the header, specify this information:

Site ID
Specify the ID of the site that is conducting the study.

Custom Study ID
Specify an ID for the custom study.

Study Name
Specify the name of the study

Performed By
Specify the ID of the individual who performed the study.

Date
Specify the date the study was conducted.

Business Unit
Specify the ID of the business unit conducting this study.

3 Use the General tab to specify who requested study. Click the **General** tab and specify this information:

Requested By
Specify who requested the study.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the **Employee ID** field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, then select the contact who requested the study in the **Contact No** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, then select the contact who requested the study in the **Contact No** field.

Comments
Specify any general comments about the custom study, such as the reason for the study.

4 To specify the characteristics to measure in the study, click the **Characteristics** tab. Specify this information:

Char Name
Specify the name of the characteristic.

Standard Type
Specify the standard you use to measure this characteristic. You can select Attribute or Variable. Depending on the standard you select, fields on this form become available.

Sample Size
Specify the number of measurements to take.

5 Click the **Save** button.

Collecting data for custom studies

1. Select **Control > SPC > Custom Studies Maintenance**.
2. Select the custom study.
3. Click the **Characteristics** tab.
4. Select the characteristic to measure.
5. Right-click and select **Data Collection**.
6. In the table at the top of the form, the current date and time is inserted. If you collected this data at a different date and time, adjust these fields.
7. In the table at the bottom of the form, one row is displayed for each sample to be taken. The number of rows equals the sample size specified on the Characteristics tab in the Custom Studies form. Specify this information:
   - For attribute characteristics, specify **Y** if the sample meets the attribute. Specify **N** if the sample does not meet the attribute.
   - For variable characteristics, specify the measurement.
8. To collect data for a second date, insert a row in the top table. Repeat step 7.
9. Click the **Save** button.

Copying SPC studies

Use this feature to create a new SPC study from an existing SPC study.

1. Complete one of these steps:
   - To copy a custom study, select **Control > SPC > Custom Studies Maintenance**.
   - To copy a Pareto study, select **Control > SPC > Pareto Studies Maintenance**
2. Select the study.
3. **Copy Study**. Right-click and select
4. In the **Copy to Study ID** field, specify the ID for the new study.
5. If you are copying a custom study, specify whether to copy characteristics. To copy the characteristics defined on the original study, select the **Characteristics** check box. Clear this check box if you do not want to copy the characteristics.
6. Click **Ok**. The information in the header and the general tab is copied. If you selected the Characteristics check box, then the information on the Characteristics tab is also copied. Data collection information is not copied.

Generating charts

You can generate XBar-R charts, P charts, Histograms, and Conformance Summary charts in the Custom Studies form. You can also generate each of these charts from the menu options in **Control > SPC**.

1. Select **Control > SPC > Custom Studies**.

2 Select the custom study.

3 If you are generating a chart for a variable characteristic, select the characteristic to view in the chart. Click the **Characteristic** tab, then select the row that contains the characteristic.

4 Right-click and select **Charts**.

5 Select the chart to generate:

Option	Description
XBar-R	Select this option to generate a chart that shows the measurement variation between subgroups over time and the measurement variation within subgroups over time. The XBar-R chart shows only variable characteristics.
P Chart	Select this option to generate a chart that shows the proportion of non-conforming items in a group. The P chart shows only attribute characteristics.
Histogram	Select this option to generate a chart that shows the shape and spread of frequency and the central tendency. You should collect at least 50 data points to reveal patterns and to calculate the mean and variation. This chart shows variable characteristics only.
Compliance Chart	Select this option to display the percentage of samples that conform to the standard. This chart shows variable characteristics only. If you select this option, specify the characteristics to display in the chart. Click **All Characteristics** to display all variable study characteristics in the chart. Click **Selected Characteristic** to display only the characteristic in step 3.

6 If you selected Histogram, specify this information:

Cells
Specify the number of cells to use for the x-axis.

Scale By
Specify the scale to use for the x-axis. Select one of these options:

Spec
Select this option to use the specification range as the x-axis.

Sigma
Select this option to use standard deviation values as the x-axis. Specify a value between 3 and 6.

Min Max
Select this option to specify minimum values and maximum values to use on the x-axis.

7 In the Date fields, specify the date range to use for the charts. Samples collected during the range you specify are included in the report.

8 Click **Ok**.

Xbar-R charts

Xbar-R charts show this information:

The upper chart is the Xbar chart. It shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each date, the average measurement is plotted.

The lower chart is the R chart. It displays information about the range of measurements taken. The x-axis shows the date that the samples were measured. The y-axis shows the range of values taken. For each date, the difference between the largest and smallest measurements is plotted.

In addition, the chart shows the upper control limit, the lower control limit, and the center line. To hide any of these lines, click the value in the chart key. For example, to hide the upper control limit line, click UCL in the chart key.

P charts

The P chart displays a data point for the percentage of samples that did not have the attribute specified for the characteristic. The P line shows the trend from percentage to percentage. The CL line shows the average of the data points.

To hide either the P line or the CL line, click the label name in the chart key.

Histograms

Histogram charts shows the number of samples that fall into each cell on the x-axis. Specify the number of cells when you set up the parameters for the chart. The values represented by each cell on the x-axis depend upon your selection in the Scale By section.

The y-axis shows the number of samples.

Conformance summary charts

Conformance Charts show the percentage of samples that met the characteristic standards.

On the y-axis, characteristics are displayed. Then name, characteristic number, and the number of samples taken are displayed.

The x-axis shows percentages.

The bar shows the percentage of samples that met the characteristic standard.

Xbar-R charts

Xbar-R charts show this information:

The upper chart is the Xbar chart. It shows information about the measurement values taken. The x-axis shows the date that the samples were measured. The y-axis shows the measurements. For each date, the average measurement is plotted.

The lower chart is the R chart. It displays information about the range of measurements taken. The x-axis shows the date that the samples were measured. The y-axis shows the range of values taken. For each date, the difference between the largest and smallest measurements is plotted.

In addition, the chart shows the upper control limit, the lower control limit, and the center line. To hide any of these lines, click the value in the chart key. For example, to hide the upper control limit line, click UCL in the chart key.

Generating Xbar-R charts

1 Select **Control > SPC > Xbar-R Chart**.

2 Specify this information:

Site ID
Specify the ID of the site where the custom study was conducted. After you specify a site ID, the ID of the site's parent entity is inserted in the entity ID field.

Study ID
Specify the ID of the custom study to use as the source of characteristic measurements. Create custom studies in Custom Studies Maintenance.
See Setting Up Custom Studies on page 506.

Char No.
Specify the characteristic to use in the chart. Select a variable characteristic.

From Date and To Date
To view measurements for a certain date range, specify the range in the From Date and To Date fields. Leave these fields blank to view all available data.

3 Click **View Chart**.

P charts

The P chart displays a data point for the percentage of samples that did not have the attribute specified for the characteristic. The P line shows the trend from percentage to percentage. The CL line shows the average of the data points.

To hide either the P line or the CL line, click the label name in the chart key.

Generating P charts

1 Select **Control > SPC > P Chart**.

2 Specify this information:

Site ID
Specify the ID of the site where the custom study was conducted. After you specify a site ID, the ID of the site's parent entity is inserted in the entity ID field.

Study ID
Specify the ID of the custom study to use as the source of characteristic measurements. Create custom studies in Custom Studies Maintenance.
See Setting Up Custom Studies on page 506.

Char No.
Specify the characteristic to use in the chart. Select an attribute characteristic.

From Date and To Date
To view data for a certain date range, specify the range in the From Date and To Date fields. Leave these fields blank to view all available data.

3 Click **View Chart**.

Histograms

Histogram charts shows the number of samples that fall into each cell on the x-axis. Specify the number of cells when you set up the parameters for the chart. The values represented by each cell on the x-axis depend upon your selection in the Scale By section.

The y-axis shows the number of samples.

Generating histograms

1 Select **Control > SPC > Histogram**.

2 Specify this information:

Site ID
Specify the ID of the site where the custom study was conducted. After you specify a site ID, the ID of the site's parent entity is inserted in the entity ID field.

Study ID
Specify the ID of the custom study to use as the source of characteristic measurements. Create custom studies in Custom Studies Maintenance.
See Setting Up Custom Studies on page 506.

Char No.
Specify the characteristic to use in the chart. Select a variable characteristic.

From Date and To Date
To view data for a certain date range, specify the range in the From Date and To Date fields. Leave these fields blank to view all available data.

Cells
Specify the number of cells to use for the x-axis.

Scale By
Specify the scale to use for the x-axis. Select one of these options:

Spec
Select this option to use the specification range as the x-axis.

Sigma
Select this option to use standard deviation values as the x-axis. Specify a value between 3 and 6.

Min Max
Select this option to specify minimum values and maximum values to use on the x-axis.

3 Click **View Chart**.

Conformance summary charts

Conformance Charts show the percentage of samples that met the characteristic standards.

On the y-axis, characteristics are displayed. Then name, characteristic number, and the number of samples taken are displayed.

The x-axis shows percentages.

The bar shows the percentage of samples that met the characteristic standard.

Generating conformance summary charts

1 Select **Control > SPC > Conformance Summary Chart**.
2 Specify this information:

Site ID
Specify the ID of the site where the custom study was conducted. After you specify a site ID, the ID of the site's parent entity is inserted in the entity ID field.

Study ID
Specify the ID of the custom study to use as the source of characteristic measurements. Create custom studies in Custom Studies Maintenance.
See Setting Up Custom Studies on page 506.

Char No.
To view a single characteristic in the chart, specify the characteristic number. You can select either an attribute or a variable characteristic. To view all characteristics in the chart, leave this field blank.

From Date and To Date
To view data for a certain date range, specify the range in the From Date and To Date fields. Leave these fields blank to view all available data.

3 Click **View Chart**.

Pareto studies

Pareto Studies measure the frequency of problems with a product or process. After you conduct the study, view the Pareto chart to analyze which problems occur most frequently.

After you set up the study, use the data collection form to specify the categories for which you are tracking problems. For example, you could create categories for different phases of the manufacturing process, such as designing, building, testing, and packaging. After you set up categories, you can specify how frequently issues occur. You can collect up to 50 samples. A sample size could be a day, a shift, a number of packages, or any other equally-sized sampling period.

Setting up Pareto studies

1 Select **Control > SPC > Pareto Studies Maintenance**.
2 Specify this information:

Site ID
Specify the ID of the site that is conducting this study. When you specify a site ID, the ID of the site's parent entity is inserted.

Pareto Study ID
Specify an ID for the study.

Study Name
Specify the name for the study.

Performed By
Specify the ID of the employee who is conducting the study.

Date
Specify the date that the study is conducted. The current date is inserted by default. You can edit the date.

Requested By
Specify who requested this study.

- To specify an employee, click the **Internal** option. Specify the employee's ID in the Employee ID field.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the Customer ID field, then select the contact who requested the study in the Contact No field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the Supplier ID field, then select the contact who requested the study in the Contact No field.

Comments
Specify any general comments about this Pareto study.

3 Click the **Save** button.

Collecting data for Pareto studies

Use the Pareto data collection form to specify the issues you track and the number of occurrences of each issue.

Use the top portion of the form to specify the categories you track. For example, you could create categories for different phases of the manufacturing process, such as designing, building, testing, and packaging.

After you establish categories, use the bottom portion of the form to record the number of events that occur during each sampling period.

1 Select **Control > SPC > Pareto Studies Maintenance**.
2 Select the Pareto study ID.
3 Right-click and select **Data Collection**.
4 In the top portion of the form, specify the categories to track. You can add more than one category. For each category, specify this information:

Category
Specify the category to track.

Cost
Specify the total cost of this category.

5 In the bottom portion of the form, specify the number of events for each category in each sampling period. Select the category in the top portion of the window, then specify the number of events in each sampling period. You can specify events for up to 50 sampling periods.
6 Click the **Save** button.

Generating Pareto charts

1 Perform one of these procedures:
   - Select **Control > SPC > Pareto Studies Maintenance**. Select the Pareto study ID. Right-click and select **Charts**.
   - Select **Control > SPC > Pareto Chart**.

2 Specify this information:

   Site ID
   Specify the ID of the site where the study was conducted. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

   Study ID
   Specify the ID of the study to view. If you access this form from Pareto Studies Maintenance, the ID of the study you selected in the maintenance form is displayed. You can select a different study ID.

   Cost <
   To display only categories with costs equal to or less than a particular amount, specify the amount in this field. Categories with costs higher than the value you specify will not be included in the chart.

3 Click **View Chart**.

Copying SPC studies

Use this feature to create a new SPC study from an existing SPC study.

1 Complete one of these steps:
   - To copy a custom study, select **Control > SPC > Custom Studies Maintenance**.
   - To copy a Pareto study, select **Control > SPC > Pareto Studies Maintenance**

2 Select the study.

3 **Copy Study**. Right-click and select

4 In the **Copy to Study ID** field, specify the ID for the new study.

5 If you are copying a custom study, specify whether to copy characteristics. To copy the characteristics defined on the original study, select the **Characteristics** check box. Clear this check box if you do not want to copy the characteristics.

6 Click **Ok**. The information in the header and the general tab is copied. If you selected the Characteristics check box, then the information on the Characteristics tab is also copied. Data collection information is not copied.

Pareto charts

Pareto charts show the frequency of events in each category and the costliest category as measured by dividing the category cost by the total number of events. The categories are arranged by the total number of events in descending order. The category with the highest cost per number of event is highlighted in black.

Generating Pareto charts

1 Perform one of these procedures:

- Select **Control > SPC > Pareto Studies Maintenance**. Select the Pareto study ID. Right-click and select **Charts**.
- Select **Control > SPC > Pareto Chart**.

2 Specify this information:

Site ID
Specify the ID of the site where the study was conducted. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

Study ID
Specify the ID of the study to view. If you access this form from Pareto Studies Maintenance, the ID of the study you selected in the maintenance form is displayed. You can select a different study ID.

Cost <
To display only categories with costs equal to or less than a particular amount, specify the amount in this field. Categories with costs higher than the value you specify will not be included in the chart.

3 Click **View Chart**.

SPC reports

Use SPC reports to review information about custom studies and Pareto studies.

Custom studies with characteristics

Use this report to view a list of characteristics evaluated during custom studies. This report displays the entity and site where the study occurred, the study ID, the study name, the date, the party who conducted the study, the party who requested the study, and the study date. For each characteristic

in the study, the characteristic number, characteristic name, standard type, variable standard (if applicable), the measurement unit, and the sample size are displayed.

Generating the custom studies with characteristics report

1 Select **Control > SPC > My Reports**.
2 Click Custom Studies with Characteristics.
3 Click the sites to use for the report.
4 Specify the information to include in the report:
   - To view information for a particular study, specify the ID of the study in the **Study ID** field.
   - To view studies with a particular name, specify the name of the study in the **Study Name** field.
   - To view studies performed by a particular employee, specify the ID of the employee in the **Performed By** field.
   - To view studies conducted during a particular time period, specify the date range in the **From Date** and **To Date** fields.
5 Click the **Print Report** button.

Custom studies with data collection

Use this report to view the data collected for each characteristic in your custom studies. This report displays the entity and site where the study occurred, the study ID, the study name, the date, the party who conducted the study, the party who requested the study, and the study date. For each characteristic in the study, the characteristic number, characteristic name, standard type, variable standard (if applicable), the measurement unit, and the sample size are displayed. For each data set collected, the time, date, and results of the data collection are displayed. For variable characteristics, the measurement is displayed. For attribute characteristics, Y or N is displayed.

Generating the custom studies with data collection report

1 Select **Control > SPC > My Reports**.
2 Click Custom Studies with Data Collection.
3 Click the sites to use for the report.
4 Specify the information to include in the report:
   - To view information for a particular study, specify the ID of the study in the **Study ID** field.
   - To view studies with a particular name, specify the name of the study in the **Study Name** field.
   - To view studies performed by a particular employee, specify the ID of the employee in the **Performed By** field.
   - To view studies conducted during a particular time period, specify the date range in the **From Date** and **To Date** fields.
5 Click the **Print Report** button.

Pareto studies with data collection

Use this report to view the data collected for each category in your pareto studies. This report displays the entity and site where the study occurred, the study ID, the study name, the date, the party who conducted the study, the party who requested the study, the study date, and any comments about the study. For each category in the study, the category name and cost are displayed. The value collected for each sample is also displayed.

Generating the Pareto studies with data collection report

1. Select **Control > SPC > My Reports**.
2. Click Pareto Studies with Data Collection.
3. Click the sites to use for the report.
4. Specify the information to include in the report:
   - To view information for a particular study, specify the ID of the study in the **Pareto Study ID** field.
   - To view studies with a particular name, specify the name of the study in the **Study Name** field.
   - To view studies performed by a particular employee, specify the ID of the employee in the **Performed By** field.
   - To view studies conducted during a particular time period, specify the date range in the **From Date** and **To Date** fields.
5. Click the **Print Report** button.

Chapter 17: Advanced Product Quality Planning (APQP)

APQP (Advanced Product Quality Planning) helps you to direct your resources into customer satisfaction. By identifying required changes early in the production cycle, you can continue to provide a quality, cost-effective product on time. APQP was initially designed for the automotive industry, but all types of manufacturing operations can benefit from its program management and product development capabilities. APQP helps you with these tasks:

- Determine your customers' needs and then define your processes to meet those needs
- Manage the entire planning process

After you create an APQP record, you can use the record as the single repository for all the information you gather during the APQP process. When you create APQP tasks, you can attach records you have created in other areas of IQM to show the results of the tasks. For example, in the Voice of the Customer substep, you can attach customer feedback records and customer surveys to show your customers' input into the product design.

Employees can manage tasks related to APQP in My To Do list.

See My To Do list on page 34.

Understanding AIAG five steps

Step 1: Plan and Define Program/Project

Use this information to build your plan or to define the program or project:

- Marketing research
- Historical warranty and quality information
- Team experience
- Business plans
- Marketing strategies
- Product or process benchmark data and assumptions
- Product reliability studies
- Customer input

From these input variables, you can design reliability and quality goals, create a preliminary Bill of Material, create a process flow chart, build preliminary listing of special product and process characteristics, and create a product assurance plan. Use these outputs to earn management support.

Step 2: Product Design and Development

To develop your product design, start with a design goal using the output characteristics from step 1. Then design the Failure Mode Effective Analysis (FMEA), for manufacturability and assembly, verification, reviews, prototype build-control plan, engineering drawings and specifications.

Step 3: Process Design and Development

To develop your process design, start with a design goal using the output characteristics from step 2. Include drawing and specification changes, new equipment, tooling and facilities requirements, special product and process characteristics, gages/testing equipment requirements and team feasibility commitment. From the process and design input characteristics create packaging standards, product, process quality system reviews, process flow charts, floor plan layouts, characteristics matrix, process FMEAs and pre-launch control plans and process instructions.

Step 4: Product and Process Validation

To develop your product and process validation, start with validation using the output characteristics from step 3. Then continue to design the product and process validation developing a measurement systems analysis plan, preliminary process capability study plan, and packaging specifications. From the product and process validation input characteristics, create production trial runs, measurement system evaluations (Device R&Rs), preliminary process capability studies, production part approvals (PPAP), production validation testing, packaging evaluation, production control plan, using quality planning sign-offs.

Step 5: Feedback, Assessment, and Corrective Action

To develop your product and process feedbacks, assessments, and corrective actions use the output characteristics from step 4. From the feedback, assessment, and corrective action input characteristics create customer satisfaction through reduction of variations, quality service and timely delivery.

Concern Resolution

Create a concern resolution using the team€™s product design and/or processing concerns documentation, allocating responsibilities and adherence to the timing schedule.

Specifying default APQP checklists

The Automotive Industry Action Group (AIAG) designed Advanced Product Quality Planning (APQP) to deliver products that meet or exceed customer expectations. APQP checklists are used in portions of this process to record information regarding FMEAs, processes, and production.

Default checklists are provided. You can edit the default questions and add custom questions.

Checklists are provided in these areas:

- 2.1 Design FMEA
- 2.10 New Equipment, Tooling, and Facilities Requirements
- 2.13 Team Feasibility Commitment and Management Support - Design Information
- 2.13 Team Feasibility Commitment and Management Support - Team Feasibility Commitment
- 3.2 Quality System Review
- 3.3 Process Flow Chart
- 3.4 Floor Plan Layout
- 3.6 Process FMEA
- 4.7 Production Control Plan

1. Select **Administration > Application Global Maintenance**.
2. Click the **General** tab.
3. Click **Checklists**.
4. Select the APQP checklist to customize.
5. Customize the questions:
   - To edit a question, place your cursor in the table cell and edit the text.
   - To add a question, click the last row in the table and add your question.
   - To delete question, select the appropriate row and click the **Delete row in current collection** button.
6. Click the **Save** button.

Adding APQP records

To add an APQP record:

1. Select **Documentation > APQP > APQP Maintenance**.
2. Click the **Assignment/Status** tab. Use the Status/Assignment tab to define the name of the project, the resource responsible for managing the APQP project, and the customer or vendor who monitors the APQP project.
3. In the Project Information section, specify this information:

   Site ID
   Specify the ID of the site conducting the APQP. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

   APQP Project ID
   Specify an ID for this APQP project.

   Program
   Specify the full name of this APQP project.

   Part ID
   Specify the product that is the subject of this project.

Project ID
Specify the project to use to track the APQP's progress.

Business Unit
Specify the business unit associated with this record.

4 In the External Tracking section, specify the customer or supplier who is monitoring this APQP project. Perform one of these steps:

- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier.

5 In the Assigned To section, specify the individual responsible for managing the APQP project. Perform one of these steps:

- To specify an employee, click the **Internal** option. In the **Employee ID** field, specify the ID of the employee who is managing this project.

  A task is added to the employee's My To Do list. The due date of the task is the same as the due date of the APQP record. When the APQP record is closed, the task is removed from the list.
- To specify a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, and then select the contact responsible for managing this project in the **Contact No** field.
- To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, and then select the contact responsible for managing this project in the **Contact No** field.

6 Click the **Assignment/Status Cotd.** tab. Use this tab to specify general comments about the project and set up the overall deadline. The ID, program name, and part ID specified on the Assignment/Status tab are displayed. The overall status of the project is also displayed. Specify this information:

Comments
Specify general comments about this project, such as the overall goal or special instructions.

Due Date
Specify the date this project is scheduled to be complete.

Status Warning
Specify the number of days before the due date that the status indicator on individual tasks displays a warning. For example, if you specify a 3 in this field, the status indicator displays a yellow light starting three days before the due date.

Status
Specify the status of the project. You can select Open or Closed.
See Closing an APQP Project on page 597.

7 Click the **Save** button.

Setting up the key contacts list for APQP

Use this form to build a list of suppliers and customers who have a stake in the APQP project. For example, if a manufactured part is the subject of the APQP, you could include the suppliers who provide the raw materials for the part. You could also include all customers who buy the manufactured part.

To add individuals to the key contact list:

1. Select **Documentation > APQP > APQP Maintenance**.
2. Select the APQP ID.
3. Click the **Assignment/Status** tab.
4. Right-click and select **Key Cust/Supp Contacts**.
5. Perform one of these steps:
   - To add a customer, click the **Customer** option. Specify the customer's ID in the **Customer ID** field, and then specify the contact in the **Contact No** field.
   - To specify a supplier, click the **Supplier** option. Specify the supplier's ID in the **Supplier ID** field, and then specify the contact in the **Contact No** field.
6. Click the **Save** button.

Setting up the APQP team

Use Project Maintenance to set up the APQP team. To make the Team Members option available, you must specify a Project ID on the Assignment/Status tab. The team members specified for the project are also the team members for the APQP.

To set up the APQP team:

1. Select **Documentation > APQP > APQP Maintenance**.
2. Click the **Assignment/Status** tab.
3. Verify that a project ID has been specified in the Project ID field.
4. Click the **Assignment/Status Cotd** tab.
5. Right-click and select **Team Members**. The project you specified in the Project ID field is opened.
6. Click the **Team** tab.
7. Specify this information:

   Origin
   Specify whether this team member is an internal resource, a customer, or a supplier. Depending on your selection in this field, other fields become available.

   Employee ID
   If you selected Internal in the Origin field, specify the Employee ID.

   Customer ID and Contact No
   If you selected Customer in the Origin field, specify the Customer ID. Then, specify the contact number of the team member.

Supplier ID and Contact No
If you selected Supplier in the Origin field, specify the Supplier ID. Then, specify the contact number of the team member.

Time
Specify an estimated time commitment required from each team member. This information can help you assess how long the project will take and the cost of the project.

8 Click the **Save** button.

Adding related products

Use this form to list products related to the product ID specified on the main APQP record. Related products can be the raw materials that make up the APQP product, products sold with the APQP product, or products that use the APQP product as a raw material.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Assignment/Status Contd** tab.
4 Right-click and select **Related Products**.
5 In the **Product ID** field, specify the ID of the related product. After you specify an ID, the current revision level and issue date of the product is inserted.
6 Click the **Save** button.

Adding the APQP timing plan

Use this form to set up the timing plan for the APQP. Use the timing plan to determine which tasks should be done first and to estimate how long it will take to complete the APQP. The timing plan is the schedule for the APQP.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Assignment/Status Contd** tab.
4 Right click and select **Project Quality Timing Plan**.
5 Specify this information:

Task Description
Specify the task that must be completed.

Start Date
Specify the date that work on this task begins.

End Date
Specify the date that work on this task ended.

Due Date
Specify the date that work on this task is due to be complete.

Status
Specify the current status of this task. Specify Open or Closed. If you specify Closed, specify the date that this task was completed in the Closed Date field.

Assigned To

Specify the individual responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

6 Click the **Save** button. The task you specified is added to the table. The status indicator shows when a task is due. If the task is due in more than 30 days, the status indicator is Ok. If the task is due in the next 30 days, the status indicator is Warning. If the task is overdue, the status indicator is Due/Past Due.

Using the Five Steps of APQP tab

Use the Five Steps of APQP tab to add tasks and information for each APQP sub-step. To access an individual sub-step, double-click the appropriate row in the table.

If you double-click a top-level step, a form with each sub-step is displayed. You can choose the sub-step from this form. For example, if you double-click 2.0 Product Design and Development, a form is displayed that list all 2.x steps.

After you specify APQP tasks, you can use the Five Steps of APQP tab to track the status of the tasks. For each step, the individual responsible for the step and the due date is displayed. If the step has been closed, then the Closed Date is displayed.

An indication of each task's status is also displayed. If the task is on schedule, then OK is displayed. If the task is in danger of not being complete on time, then Warning is displayed. If the task is overdue, then Due/Past Due is displayed.

This information may not be displayed immediately after you add or edit a task. To display this information, you may need to refresh the form.

Viewing the status Icon

In several places in APQP Maintenance, a traffic light icon is displayed. The icon indicates the status of the item you are viewing. For example, if you are viewing step 3.2, the traffic light icon indicates the current status of step 3.2.

These statuses are used:

Red
This task is overdue.

Yellow
This task is in danger of becoming overdue. To determine if a task is in danger of becoming overdue, the value specified in the Status Warning field on the Assignment/Status Contd. tab is subtracted from the due date for the task to determine the warning range. If the current date falls within the warning range, then the status is yellow.

Green
This task is due to be completed on time, or the task is complete.

Step 1.0: Plan and define the program

Use marketing research, historical warranty and quality information, team experience, business plan and marketing strategies, product or process benchmark data and assumptions, product reliability studies and customer input to plan and define the program or project. From the input variables you can design reliability and quality goals, create a preliminary Bill of Material, process flow chart, preliminary listing of special product and process characteristics, and a product assurance plan.

This table shows the sub-steps included in step 1.0, the purpose of each sub-step, and the forms in IQM that can be used to add information to the sub-step:

Sub-step	Purpose	Supporting forms
1.1 - Voice of the Customer	Use this step to record complaints, recommendations, data, and information obtained from internal/external customers.	Customer Feedback Customer Survey Results Input
1.1.1 - Market Research	Use this step to record market research, conduct customer interviews, and create questionnaires, surveys, competitive product studies, and market tests.	Customer Feedback Customer Survey Results Additional Document
1.1.2 - Historical Warranty and Quality Information	Use this step to record historical customer concerns, warranty and problem resolution reports, and field returns.	Nonconformance Corrective Action Additional Document

Sub-step	Purpose	Supporting forms
1.1.3 - Team Experience	Use this step to record the experience of your team.	Customer Feedback Input Nonconformance Additional Document
1.2 - Business Plan/Marketing Strategy	Use this step to build the business plan and marketing strategy. The business plan and marketing strategy set the framework for the product quality plan.	n/a
1.3 - Product/Process Benchmark Data	Use this step to establish targets for product/process performance.	n/a
1.4 - Product/Process Assumptions	Use this step to record assumptions about the performance of the product/process.	n/a
1.5 - Product Reliability Studies	Use this step to record the results of long-term reliability studies.	Additional Document
1.6 - Customer Inputs	Use this step to develop the metrics to use to analyze customer satisfaction.	Customer Feedback Customer Survey Results Additional Document
1.7 - Design Goals	Use this step to record design goals. Design goals are a translation of the voice of the customer into measurable design objectives.	n/a
1.8 - Reliability and Quality Goals	Use this step to record reliability and quality goals. Reliability goals are based on customer expectations.	n/a
1.9 - Preliminary Bill of Material	Use this step to build the preliminary bill of material. Preliminary BOMs are based on product/process assumptions.	n/a

Sub-step	Purpose	Supporting forms
1.10 - Preliminary Process Flow Chart	Use this step to add the preliminary process flow chart. Manufacturing processes should be described using a process flow chart developed from BOM and product assumptions.	SYSDOC Documents
1.11 - Preliminary Listing of Special Product/Process Characteristics	Use this step to add a list of special product characteristics. This is a list developed as a result of an analysis of inputs pertaining to customer needs and expectations.	n/a
1.12 - Product Assurance Plan	Use this step to record the product assurance plan. The product assurance plan translates design goals into design requirements.	Additional Document
1.13 - Management Support	Use this step to record the meeting you have set up to attain management support.	n/a

Step 1.1: Voice of the customer

Use this step to record complaints, recommendations, data, and information obtained from internal/external customers.

1. Select **Documentation > APQP > APQP Maintenance**.
2. Select the APQP ID.
3. Click the **Five Steps of APQP** tab.
4. Double-click row 2, **1.1. Voice of the Customer**.
5. To assign the task and establish a deadline, click the **Assignment/Status** tab.
6. Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7. Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 Click the **Voice of the Customer** tab.
9 In the Customer Expectations field, enter a summary of the expectations that your customers have communicated to you.
10 To add details, click the **Insert** button.
11 Click one of these options, and then click **Ok**:

Option	Description
CUSTOMER: Feedback	Click this option to add a customer feedback record.
CUSTOMER: Survey	Select this option to add a customer audit result.
INVOLVE: Input	Click this option to add an input record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

12 If you selected CUSTOMER: Feedback, CUSTOMER: Survey, or INVOLVE: Input, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
13 Click the **Save** button under the table.
14 Click the **Save** tool bar button to save all the information in the form.

Step 1.1.1: Market research

Use this step to record market research, conduct customer interviews, and create questionnaires, surveys, competitive product studies, and market tests.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 3, **1.1.1 Market Research**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.

- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact who is assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact who is assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the **Closed Date** field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 Click the **Research** tab.

9 In the Market **Expectations** field, enter a summary of the expectations established in the marketplace.

10 To add details, click the **Insert** button.

11 Click one of these options, and then click **Ok**:

Option	Description
Customer: Feedback	Select this option to add a customer feedback record.
Customer: Survey	Select this option to add a customer audit result.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

12 If you selected Customer: Feedback or Customer: Survey, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

13 Click the **Save** button under the table.

14 Click the **Save** toolbar button to save all the information in the form.

Step 1.1.2 Historical warranty and quality summary information

Use this step to record historical customer concerns, warranty and problem resolution reports, and field returns.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 4, **1.1.2 Historical Warranty and Quality Information**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 Click the **Warranty/Quality Info** tab.

9 In the Historical Warranty and Quality Summary field, enter a summary of past warranty and quality information.

10 To add details, click the **Insert** button.

11 Click one of these options, and then click **Ok**:

Option	Description
NCM: Nonconformance	Click this option to add a nonconformance record.
CORRECT: Corrective Action	Click this option to add a corrective action record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

12 If you selected NCM: Nonconformance or CORRECT: Corrective Action, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

13 Click the **Save** button under the table.

14 Click the **Save** tool bar button to save all the information in the form.

Step 1.1.3: Team experience

Use this step to record the experience of your team.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.
4 Double-click row 5, **1.1.3 Team Experience**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 Click the **Experience** tab.
9 In the Experience field, enter a summary of your team's experience with the product or process.
10 To add details, click the **Insert** button.
11 Click one of these options, and then click **Ok**:

Option	Description
CUSTOMER: Feedback	Click this option to add a customer feedback record.
INVOLVE: Input	Click this option to add an input record.
NCM: Nonconformance	Click this option to add a nonconformance record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

12 If you selected CUSTOMER: Feedback, INVOLVE: Input, or NCM: Nonconformance, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
13 Click the **Save** button under the table.
14 Click the **Save** tool bar button to save all the information in the form.

Step 1.2: Business plan/marketing strategy

Use this step to build the business plan and marketing strategy. The business plan and marketing strategy set the framework for the product quality plan.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 6, **1.2 Team Experience**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 Click the **Strategy** tab.
9 Specify this information:

   Constraints Information
   Specify the factors that might limit the business or marketing plan.

   Marketing Strategy Information
   Specify an overview of the marketing strategy you intend to use.

10 Click the **Save** button.

Step 1.3: Product/process benchmark data

Use this step to establish targets for product or process performance.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.
4 Double-click row 7, **1.3 Product/Process Benchmark Data**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add benchmarks, click the **Benchmark Data** tab.
9 Click the **Insert** button.
10 Specify this information:

Employee ID
Specify the ID of the employee responsible for meeting the benchmark.

Due Date
Specify the date this benchmark is due.

Status
Specify the status of this benchmark task. Select either Open or Closed. If you select Closed, specify the date you closed this benchmark task in the Closed Date field.

Benchmark
Specify a description of the benchmark.

Gap - Current Status vs. Benchmark
Specify a description of the factors preventing you from meeting the benchmark.

Plan Outline to Close Gap
Specify a description of how to address the factors preventing you from meeting the benchmark.

11 Click the **Save** button in the Benchmark Data box to save the information to the table.
12 Click the **Save** tool bar button to save all the information in the form.

Step 1.4: Product/process assumptions

Use this step to record assumptions about the performance of the product or process.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 8, **1.4 Product/Process Assumptions**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To add assumptions about the product or process, click the **Assumptions** tab.
9 To add an assumption about a product, click **Product**. To add an assumption about a process, click **Process**.
10 Click the **Insert** button.
11 Specify this information:

   Assumption
   Specify a description of the assumption.

   Developed By
   Specify the individual who developed the assumption. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact.

Date
Specify the date that the assumption was developed.

12 Click the **Save** button under the Assumptions table to save the information to the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 1:5 Product reliability studies

Use this step to record the results of long-term reliability studies.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 9, **1.5 Product Reliability Studies**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add assumptions about the product or process, click the **Assumptions** tab.
9 Click the **Studies** tab.
10 Click the **Insert** button.
11 Additional Document is the only available option. Click **Ok**.
12 Add the document.
See Adding Additional Documents to APQP Records on page 596.
13 Click the **Save** button under the Studies table.
14 Click the **Save** tool bar button to save all the information in the form.

Step 1:6: Customer inputs

Use this step to develop the metrics to use to analyze customer satisfaction.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 10, **1.6 Customer Input**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To add customer input information, click the **Inputs** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
CUSTOMER: Feedback	Click this option to add a customer feedback record.
CUSTOMER: Survey	Click this option to add a customer audit result record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected CUSTOMER: Feedback or CUSTOMER: Survey an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 1:7: Design goals

Use this step to record design goals. Design goals are a translation of the voice of the customer into measurable design objectives.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 11, **1.7 Design Goals**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To add specific goals, click the **Design Goals** tab.
9 Click the **Insert** button.
10 Specify this information:

   Design Goal
   Specify a description of the goal.

   Priority
   Assign a priority to the goal. Select Low, Medium, and High.

   Developed By
   Specify the individual who developed the goal. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact.

Date
Specify the date that the goal was developed.

11 Click the **Save** button under the table.
12 Click the **Save** tool bar button to save all the information in the form.

Step 1:8: Reliability and quality goals

Use this step to record reliability and quality goals. Reliability goals are based on customer expectations.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 12, **1.8 Reliability and Quality Goals**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add goals, click the **Reliability and Quality Goals** tab.
9 Click the **Insert** button.
10 Specify this information:

Reliability/Quality Goal
Specify a description of the goal.

Priority
Assign a priority to the goal. Select Low, Medium, and High.

Developed By
Specify the individual who developed the goal. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact.

Date
Specify the date that the goal was developed.

11 Click the **Save** button under the table.
12 Click the **Save** tool bar button to save all the information in the form.

Step 1:9: Preliminary bill of material

Use this step to build the preliminary bill of material. Preliminary BOMs are based on product and process assumptions.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 13, **1.9 Preliminary Bill of Material**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To build the bill of material, click the **Preliminary Bill of Material** tab.

9 In the **Preliminary Bill of Material** field, specify how the raw materials in the bill of material are assembled to make the finished product.

10 To add a list of raw materials, specify this information:

Supplier ID
Specify the ID of the supplier who makes the material.

Contact No
Specify the ID of your contact at the supplier's company.

Product ID
Specify the ID of the product that the supplier provides.

11 Click the **Save** button under the table.

12 Click the **Save** tool bar button to save all the information in the form.

Step 1:10: Preliminary process flow chart

Use this step to add the preliminary process flow chart. Manufacturing processes should be described using a process flow chart developed from BOM and product assumptions.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 14, **1.10 Preliminary Process Flow Chart**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To attach flow chart documents, click the **Preliminary Process Flow Chart** tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
SYSDOC: Documents	Click this option to add a document maintenance record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected SYSDOC: Documents, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 1:11: Preliminary special characteristics

Use this step to add a list of special product characteristics. This is a list developed as a result of an analysis of inputs pertaining to customer needs and expectations.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 15, **1.11 Preliminary Special Characteristics**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To specify characteristics, click the **Characteristics** tab.

9 In the **Comments** field, specify comments about the product comments related to the special characteristics. The comments you specify apply to all characteristics you add to the table.

10 To add a characteristic to the table, specify this information:

Product ID
Specify the ID of the product.

Char No
Specify the number of the characteristic to add to the list.

11 Click the **Save** button under the table.

12 Click the **Save** tool bar button to save all the information in the form.

Step 1.12: Product assurance plan

Use this step to record the product assurance plan. The product assurance plan translates design goals into design requirements.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 16, **1.12 Product Assurance Plan**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To attach the product assurance plan, click the **Product Assurance Plan** tab.

9 Click the **Insert** button.

10 Additional Document is the only available option. Click **Ok**.

11 Add the document.

See Adding Additional Documents to APQP Records on page 596.

12 Click the **Save** button under the Studies table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 1.13: Management support

Use this step to record the meeting you have set up to attain management support.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 17, **1.13 Management Support**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add information about the management meeting, click the **Management Support** tab.

9 Specify this information:

Comments
Specify information regarding specific management support projects.

Project ID
Specify the ID of the project you are using to gain management support.

Meeting ID
Specify the ID of the project meeting set up to gain management support.

10 Click the **Save** tool bar button to save all the information in the form.

Step 2.0: Product design and development

To develop your product design, start with a design goal using the output characteristics from step 1. Then design the Failure Mode Effective Analysis (FMEA), for manufacturability and assembly, verification, reviews, prototype build-control plan, engineering drawings, and specifications.

This table shows the sub-steps included in step 2.0, the purpose of each sub-step, and the forms in IQM that can be used to add information to the sub-step:

Sub-step	Purpose	Supporting forms
2.1 - Design Failure Mode and Effects Analysis	Use this step to specify the FMEA that is related to the product. An FMEA assesses the probability of failure and the effect of such a failure.	n/a
2.2 - Design for Manufacturability and Assembly	Use this step to design your manufacturing process to optimize the relationship between design function, manufacturability, and ease of assembly.	Additional Document
2.3 - Design Verification	Use this step to verify that the product design meets customer requirements.	Additional Document
2.4 - Design Reviews	Use this step to list the regular meetings that the supplier's design engineers conduct.	Involve Project Meeting Additional Document
2.5 - Prototype Build - Control Plan	Use this step to describe the dimensional measurements, materials, and functional tests that occur during prototype build.	n/a
2.6 - Engineering Drawings	Use this step to record the review of engineering drawings. Drawings should be reviewed to determine if there is sufficient information for a dimensional layout of the individual parts.	Involve Project Meeting Product Additional Document
2.7 - Engineering Specifications	Use this step to determine which characteristics affect or control the results that fulfill meeting functional, durability, and appearance requirements.	Involve Project Meeting Product Additional Document

Sub-step	Purpose	Supporting forms
2.8 - Material Specifications	Use this step to record the review of material specifications. Specifications should be reviewed for special characteristics relating to physical properties and performance requirements.	Involve Project Meeting Product Additional Document
2.9 - Drawing and Specification Changes	Use this step to record any change requests for the product.	Product Change Request Additional Document
2.10 - New Equipment, Tooling and Facilities Requirements	Use this step to ensure that equipment, tooling, and facilities will be ready to manufacture the product.	Prevent Equipment Calibrate Device Additional Document
2.11 - Special Product and Process Characteristics	Use this step to identify the single special characteristic.	n/a
2.12 - Gage/Testing Equipment Requirements	Use this step to identify any requirements for devices.	Calibrate Device Additional Document
2.13 - Team Feasibility Commitment and Management Support	Use this step to assess the feasibility of the proposed design.	Involve Project Meeting Additional Document

Step 2.1: Design failure mode and effects

Before specifying information for this task, set up the checklist.

See Specifying default APQP checklists on page 52.

Use this step to specify the FMEA related to the product. An FMEA assesses the probability of failure as well as the effect of such a failure.

1. Select **Documentation > APQP > APQP Maintenance**.
2. Select the APQP ID.
3. Click the **Five Steps of APQP** tab.
4. Double-click **2.1 Design FMEA**.
5. To assign the task and establish a deadline, click the **Assignment/Status** tab.
6. Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.

- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer checklist questions related to failure modes and mitigation, click the **Design FMEA Checklist** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 Click the **Save** button.

Step 2.2: Design for manufacturability and assembly

Use this step to design your manufacturing process to optimize the relationship between design function, manufacturability, and ease of assembly.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 20, **2.2 Design for Manufacturability and Assembly.**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To attach design documents, click the **Design for Manufacturability and Assembly** tab.
9 Click the **Insert** button.
10 Additional Document is the only available option. Click **Ok**.
11 Add the document.
   See Adding Additional Documents to APQP Records on page 596.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 2.3: Design verification

Use this step to verify that the product design meets customer requirements.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 20, **2.2 Design for Manufacturability and Assembly.**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.

- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To attach design documents, click the **Design Verification Maintenance** tab.
9 Click the **Insert** button.
10 Additional Document is the only available option. Click **Ok**.
11 Add the document.
See Adding Additional Documents to APQP Records on page 596.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 2.4: Design reviews

Use this step to list the meetings that were held to review product design.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 22, **2.4 Design Reviews**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To attach meeting information, click the **Design Reviews Maintenance** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
INVOLVE: Project Meeting	Click this option to add a project meeting.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected INVOLVE: Project Meeting, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 2.5: Prototype build - control plan

Before specifying information for this task, set up the checklist.

See Specifying default APQP checklists on page 52.

Use this step to describe the dimensional measurements, materials, and functional tests that occur during prototype build.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 23, **2.5 Prototype Build - Control Plan**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.

- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer checklist questions about the control plan, click the **Control Plan Checklist** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 To add control plan information, click the **Control Plan** tab.

11 Click the **Insert** button.

12 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Control Plan	Click this option to add a control plan.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

13 If you selected COLLECT: Control Plan, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
14 Click the **Save** button under the table.
15 Click the **Save** tool bar button to save all the information in the form.

Step 2.6: Engineering drawings

Use this step to record the review of engineering drawings. Drawings should be reviewed to determine if there is sufficient information for a dimensional layout of the individual parts.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 24, **2.6 Engineering Drawings**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To list information about engineering drawings, click the **Engineering Drawings** tab. The product ID specified for the APQP is displayed at the top of the tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
INVOLVE: Project Meeting	Click this option to add a project meeting.
PRODUCT: Product	Click this option to add a product record.

Option	Description
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected INVOLVE: Project Meeting or PRODUCT: Product, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 2.7: Engineering specifications

Use this step to determine which characteristics affect or control the results that fulfill meeting functional, durability, and appearance requirements.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 25, **2.7 Engineering Specifications**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To list information about engineering specifications, click the **Engineering Specifications** tab. The product ID specified for the APQP is displayed at the top of the tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
INVOLVE: Project Meeting	Click this option to add a project meeting.
PRODUCT: Product	Click this option to add a product record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected INVOLVE: Project Meeting or PRODUCT: Product, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 2.8: Material specifications

Use this step to record the review of material specifications. Specifications should be reviewed for special characteristics relating to physical properties and performance requirements.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 26, **2.8 Material Specifications**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To list material specifications, click the **Material Specifications** tab. The product ID specified for the APQP is displayed at the top of the tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
INVOLVE: Project Meeting	Click this option to add a project meeting.
PRODUCT: Product	Click this option to add a product record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected INVOLVE: Project Meeting or PRODUCT: Product, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 2.9: Drawing and specification changes

Use this step to record any change requests for the product.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 27, **2.9 Drawing and Specification Changes**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add change requests, click the **Product and Specifications** tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
PRODUCT: Product Change Request	Click this option to add a product change request.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected PRODUCT: Product Change Request, an ID field is displayed above the table. Specify the ID of the record to insert in the table. The text specified on the Change Request tab on the product change request record is inserted into the Request Text field.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 2.10: New equipment, tooling and facilities requirements

Before specifying information for this task, set up the checklist.

See Specifying default APQP checklists on page 52.

Use this step to ensure that equipment, tooling, and facilities will be ready to manufacture the product.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 28, **2.10 New Equipment, Tooling, and Facilities Requirements**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.

See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer checklist questions about equipment, tooling, or facilities, click the **New Eqpmnt, Tool'g, - Test Eqpmnt Checklist** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 To add information about equipment, tooling, or facilities, click the **New Eqpmnt, Tool'g and Facilities Reqmnts** tab.

11 Click the **Insert** button.

12 Click one of these options, and then click **Ok**:

Option	Description
PREVENT: Equipment	Click this option to add an equipment record.
CALIBRATE: Device	Click this option to add a device record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

13 If you selected PREVENT: Equipment or CALIBRATE: Device, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

14 Click the **Save** button under the table.

15 Click the **Save** tool bar button to save all the information in the form.

Step 2.11: Special characteristics

Use this step to identify the single special characteristic.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 20, **2.2 Design for Manufacturability and Assembly.**.
5 **Assignment/Status** tab. To assign the task and establish a deadline, click the
6 To assign the task and establish a deadline, click the Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To specify the special characteristic, click the **Special Product & Process Characteristics** tab.
9 Click the **Save** button. The Product ID you specified in the APQP Maintenance is inserted in the Product ID field.
10 In the Characteristics ID field, specify the key characteristic.
11 Click **Save**.

Step 2.12: Gages/testing equipment requirements

Use this step to identify any requirements for devices.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 27, **2.12 Gages/Testing Equipment Requirements**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To list devices, click the **Gages/Testing Equipment Requirements** tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
CALIBRATE: Device	Click this option to add a device record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected CALIBRATE: Device, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 2.13: Team feasibility commitment

Before specifying information for this task, set up the checklist.

See Specifying default APQP checklists on page 52.

Use this step to assess the feasibility of the proposed design.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 31, **2.13 Team Feasibility Commitment**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer checklist questions about design feasibility, click the **Design Information Checklist** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 To answer checklist questions about team commitment, click the **Team Feasibility Commitment** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

11 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

12 To specify the result of your feasibility analysis, click the Conclusion arrow. Select one of these options:

Option	Description
Feasible	Select this option if the product can be manufactured as specified.
Feasible with changes	Select this option if the product can be manufactured after changes are made to the specifications or processes.
Not Feasible	Select this option if the product cannot be produced as specified.

13 To specify the meetings scheduled to build management support, click the **Management Support** tab.

14 Click the **Insert** button.

15 Click one of these options, and then click **Ok**:

Option	Description
INVOLVE: Project Meeting	Click this option to add a project meeting record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

16 If you selected INVOLVE: Project Meeting, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

17 Click the **Save** button under the table.

18 Click the **Save** tool bar button to save all the information in the form.

Step 3.0: Process design and development

To develop your process design, start with a design goal using the output characteristics from step 2. Include drawing and specification changes, new equipment, tooling and facilities requirements, special product and process characteristics, gages/testing equipment requirements and team feasibility commitment and management support. From the process and design input characteristics create packaging standards, product, process quality system reviews, process flow charts, floor plan layouts, characteristics matrix, process FMEAs and pre-launch control plans and process instructions.

This table shows the sub-steps included in step 3.0, the purpose of each sub-step, and the forms in IQM that can be used to add information to the sub-step:

Sub-step	Purpose	Supporting forms
3.1 - Packaging Standards	Use this step to develop packaging standards. Packaging design should ensure product integrity at point of use.	Sysdoc Document Additional Document
3.2 - Quality System Review	Use this step to update the Quality system manual for any additional controls or procedural changes required to produce the product.	Audit Manager Audit Sysdoc Audit Product Audit Process Audit Additional Document
3.3 - Process Flow Chart	Use this step to add a schematic representation of the process flow and used to analyze sources of variation in the process.	Control Plan Sysdoc Document Additional Document
3.4 - Floor Plan Layout	Use this step to determine inspection points, control chart location, and storage area for defective materials.	Sysdoc Document Additional Document
3.5 - Characteristics Matrix	Use this step to outline the relationship between process parameters and manufacturing stations.	Control Plan Additional Document
3.6 - Process Failure Mode and Effects Analysis	Use this step to conduct a PFMEA before production. The Process FMEA checklist helps to guide the analysis.	n/a
3.7 - Pre-Launch Control Plan	Use this step to describe the dimensional measurements, materials and functional tests that will occur after prototype and before production.	Control Plan Additional Document

Sub-step	Purpose	Supporting forms
3.8 - Process Instructions	Use this step to provide instructions for all personnel who have direct responsibility for the operation of the processes.	Sysdoc Document Process Activity Instruction Process Worksheet Additional Document
3.9 - Measurement Systems Analysis	Use this step to develop the plan to accomplish the measurement systems analysis.	Calibrate RR ANOVA Calibrate RR Range Calibrate RR Attribute Calibrate Bias Calibrate Stability Calibrate Linearity Additional Document
3.10 - Preliminary Process Capability Study Plan	Use this step to identify the characteristics in the control plan that will serve as the basis for the preliminary capability study.	Collect Control Plan Collect Product Inspection Plan Collect Product Data Collection Collect Process Inspection Plan Collect Process Data Collection Additional Document
3.11 - Packaging Specifications	Use this step to assure that the product performance and characteristics will remain unchanged during packing and transit.	Product Additional Document
3.12 - Management Support	Use this step to plan a formal review designed to reinforce management commitment.	Involve Project Meeting Additional Document

Step 3.1: Packaging standards

Use this step to develop packaging standards. Packaging design should ensure product integrity at point of use.

1. Select **Documentation > APQP > APQP Maintenance**.
2. Select the APQP ID.
3. Click the **Five Steps of APQP** tab.
4. Double-click row **3.1 Packaging Standards**.
5. To assign the task and establish a deadline, click the **Assignment/Status** tab.
6. Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add packaging specifications, click the **Packaging Standards** tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
SYSDOC: Document	Click this option to add a SYSDOC document maintenance record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected SYSDOC: Document, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 3.2: Product/process quality system review

Before specifying information for this task, set up the checklist.

See Specifying default APQP checklists on page 52. .

Use this step to update the Quality system manual for any additional controls or procedural changes required to produce the product.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click **3.2 Quality System Review.**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer questions related to the quality system review, click the **Product/Process Quality Checklist** tab. The ID of the product specified in APQP maintenance is displayed. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 To add audit information, click the **Product/Process Quality System Review** tab.

11 Click the **Insert** button.

12 Click one of these options, and then click **Ok**:

Option	Description
AUDMGR: Audit	Click this option to add an audit manager record.
PROCESS: Audit	Click this option to add a process audit.
SYSDOC: Audit	Click this option to add a document audit.
PRODUCT: Audit	Click this option to add a product audit.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

13 If you selected AUDMGR: Audit, PROCESS: Audit, SYSDOC: Audit, or PRODUCT: Audit, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

14 Click the **Save** button under the table.

15 Click the **Save** tool bar button to save all the information in the form.

Step 3.3: Process flow chart

Before specifying information for this task, set up the checklist.

See Specifying default APQP checklists on page 52.

Use this step to add a schematic representation of the process flow and to analyze sources of variation in the process.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 35, **3.3 Process Flow Chart**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the Employee ID field.
- To specify a customer, click the **Customer** option. In the Customer ID field, specify the ID of the customer. In the Contact No field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the Supplier ID field, specify the ID of the supplier. In the Contact No field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer process flow chart questions, click the **Process Flow Chart Checklist** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 To add flow chart documents, click the **Process Flow Chart** tab.

11 Click the **Insert** button.

12 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Control Plan	Click this option to add a control plan.
SYSDOC: Document	Click this option to add a document maintenance record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

13 If you selected COLLECT: Control Plan or SYSDOC: Document, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

14 Click the **Save** button under the table.

15 Click the **Save** tool bar button to save all the information in the form.

Step 3.4: Floor plan layout

Before specifying information for this task, set up the checklist.

See Specifying default APQP checklists on page 52.

Use this step to determine inspection points, control chart location, and storage area for defective materials.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 36, **3.4 Floor Plan Layout**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To answer floor plan checklist questions, click the **Floor Plan Layout Checklist** tab. The product ID specified in APQP Maintenance is displayed. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.
9 For each question, specify this information:

   Yes/No
   If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

   Responsible ID
   Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

   Due Date
   Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 To add floor plan documents, click the **Floor Plan Layout** tab.
11 Click the **Insert** button.
12 Click one of these options, and then click **Ok**:

Option	Description
SYSDOC: Document	Click this option to add a document maintenance record.
Additional Document	Select this option to create a document. See Adding additional documents to APQP records on page 596.

13 If you selected SYSDOC: Document, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
14 Click the **Save** button under the table.
15 Click the **Save** tool bar button to save all the information in the form.

Step 3.5: Characteristics matrix

Use this step to outline the relationship between process parameters and manufacturing stations.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 37, **3.5 Characteristics Matrix**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add characteristics records, click the **Characteristics Matrix** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Control Plan	Click this option to add a control plan.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected COLLECT: Control Plan, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 3.6: Process failure mode and effects

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **3.6 Process FMEA.**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer checklist questions related to failure modes and mitigation, click the **Process FMEA Checklist** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 In the FMEA ID field, specify the ID of the FMEA you are using for this APQP.

10 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

11 Click**Save**.

Step 3.7: Pre-Launch control plan

Before specifying information for this task, set up the checklist.

See Specifying default APQP checklists on page 52.

Use this step to describe the dimensional measurements, materials and functional tests that will occur after prototype and before production.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 39, **3.7 Pre-Launch Control Plan**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer control plan checklist questions, click the **Pre-Launch Control Plan Checklist** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 To add control plan documents, click the **Pre-Launch Control Plan** tab.

11 Click the **Insert** button.

12 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Control Plan	Click this option to add a control plan.

Option	Description
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

13 If you selected COLLECT: Control Plan, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

14 Click the **Save** button under the table.

15 Click the **Save** tool bar button to save all the information in the form.

Step 3.8: Process instructions

Use this step to provide instructions for all personnel who have direct responsibility for the operation of the processes.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click row 40, **3.8 Process Instructions**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add process instruction documents, click the **Process Instructions** tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
PROCESS: Activity Instruction	Click this option to add a portion of a process model.
PROCESS: Worksheet	Click this option to add a process model element and its worksheet.
SYSDOC: Document	Click this option to add a document maintenance document.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected PROCESS: Activity Instruction, PROCESS: Worksheet, or SYSDOC: Document, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 3.9: Measurement systems analysis plan

Use this step to develop the plan to accomplish the measurement systems analysis.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **3.9 Measurement System Analysis**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add plan information, click the **Measurement Systems Analysis Plan** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
CALIBRATE: RR ANOVA	Click this option to add an RR ANOVA study.
CALIBRATE: RR Attribute	Click this option to add an RR attribute study.
CALIBRATE: Stability	Click this option to add a stability study.
CALIBRATE: RR Range	Click this option to add an RR range study.
CALIBRATE: Bias	Click this option to add a bias study.
CALIBRATE: Linearity	Click this option to add a linearity study.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected CALIBRATE: RR ANOVA, CALIBRATE: RR Attribute, CALIBRATE: Stability, CALIBRATE: RR Range, or CALIBRATE: Bias, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 3.10: Preliminary process capability study plan

Use this step to identify the characteristics in the control plan that will serve as the basis for the preliminary capability study.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 42, **3.10 Preliminary Process Capability Study Plan**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add study plan information, click the **Preliminary Process Capability Study Plan** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Control Plan	Click this option to add a control plan.
COLLECT: Product Inspection Plan	Click this option to add a product inspection plan.
COLLECT: Product Data Collection	Click this option to add a product data collection record.
COLLECT: Process Inspection Plan	Click this option to add a process inspection plan.
COLLECT: Process Data Collection	Click this option to add a process data collection record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected COLLECT: Control Plan, COLLECT: Product Inspection Plan, COLLECT: Product Data Collection, COLLECT: Process Inspection Plan, or COLLECT: Process Data Collection, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 3.11: Packaging specifications

Use this step to assure that the product performance and characteristics will remain unchanged during packing and transit.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click row 43, **3.11 Packaging Specifications**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.

- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To attach packaging information, click the **Packaging Specifications** tab. The product ID specified in APQP Maintenance is displayed.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
PRODUCT: Product	Click this option to add a product record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected PRODUCT: Product, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 3.12: Management support

Use this step to plan a formal review designed to reinforce management commitment.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click **3.12 Management Support**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.

- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add information about management meetings, click the **Management Support** tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
INVOLVE: Project Meeting	Click this option to add a project meeting record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected INVOLVE: Project Meeting, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 4.0: Product and process validation

After you develop the product and process design, conduct a trial production run. Use the test run to evaluate the preliminary product and process design.

This table shows the sub-steps included in step 4.0, the purpose of each sub-step, and the forms in IQM that can be used to add information to the sub-step:

Sub-step	Purpose	Supporting forms
4.1 - Significant Production Trial Run	Use this step to record information about the trial run. Conduct trial runs using production tooling and equipment.	Collect Product Data Collection Additional Document

Sub-step	Purpose	Supporting forms
4.2 - Measurement Systems Evaluation	Use this step to evaluate the performance of your measurement systems.	Calibrate RR ANOVA Calibrate RR Range Calibrate RR Attribute Calibrate Bias Calibrate Stability Calibrate Linearity Additional Document
4.3 - Preliminary Process Capability Study	Use this step to conduct the preliminary process capability study. This study is performed on characteristics identified in the control plan.	Control Plan Collect Product Inspection Plan Collect Product Data Collection Collect Process Inspection Plan Collect Process Data Collection Additional Document
4.4 - PPAP - Production Part Approval	Use this step validate that products made from production tools your customer's requirements.	PPAP Manager: PPAP Additional Document
4.5 - Production Validation Testing	Use this step to record the engineering tests that validate that products made from production tools meet engineering requirements.	Collect Product Inspection Plan Collect Product Data Collection Collect Process Inspection Plan Collect Process Data Collection Additional Document
4.6 - Packaging Evaluation	Use this step to assess the protection of the product from normal transportation damage and adverse environmental factors.	Collect Product Inspection Plan Collect Product Data Collection Collect Process Inspection Plan Collect Process Data Collection Additional Document
4.7 - Production Control Plan	Use this step to develop systems for controlling parts and processes.	Collect Control Plan Additional Document
4.8 - Quality Planning Sign-Off and Management Support	Use this step to record management's approval of the product and process to manufacture the product.	Involve Project Meeting Additional Document

Step 4.1: Production trial run

Use this step to record information about the trial run. Conduct trial runs using production tooling and equipment.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **4.1: Significant Production Trial Run**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To attach information about the trial run, click the **Significant Production Run** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Product Data Collection	Click this option to add a product data collection record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected COLLECT: Product Data Collection, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 4.2: Measurement systems evaluation

Use this step to evaluate the performance of your measurement systems.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **4.2 Measurement Systems Analysis**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact who is assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact who is assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the **Closed Date** field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To attach analyses of your measurement systems, click the **Measurement Systems Analysis** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
CALIBRATE: RR ANOVA	Click this option to add an RR ANOVA study.
CALIBRATE: RR Attribute	Click this option to add an RR attribute study.
CALIBRATE: Stability	Click this option to add a stability study.
CALIBRATE: RR Range	Click this option to add an RR range study.
CALIBRATE: Bias	Click this option to add a bias study.
CALIBRATE: Linearity	Click this option to add a linearity study.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected CALIBRATE: RR ANOVA, CALIBRATE: RR Attribute, CALIBRATE: Stability, CALIBRATE: RR Range, or CALIBRATE: Bias, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** toolbar button to save all the information in the form.

Step 4.3: Preliminary process capability study

Use this step to conduct the preliminary process capability study. You developed this study in step 3.10. This study is performed on characteristics identified in the control plan.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click **4.3 Preliminary Process Capability Study**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To add study plan information, click the **Preliminary Process Capability Study** tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Control Plan	Click this option to add a control plan.
COLLECT: Product Inspection Plan	Click this option to add a product inspection plan.
COLLECT: Product Data Collection	Click this option to add a product data collection record.

Option	Description
COLLECT: Process Inspection Plan	Click this option to add a process inspection plan.
COLLECT: Process Data Collection	Click this option to add a process data collection record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected COLLECT: Control Plan, COLLECT: Product Inspection Plan, COLLECT: Product Data Collection, COLLECT: Process Inspection Plan, or COLLECT: Process Data Collection, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 4.4: PPAP - Production Part Approval Maintenance

Use this step validate that products made from production tools meet your customer's requirements. Use the product part approval process to formally submit the product to your customer.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click **4.4 PPAP - Production Part Approval**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To attach the PPAP record and any additional information, click the **Production Part Approval** tab.

9 Click the **Insert** button.

10 Click one of these options, and then click **Ok**:

Option	Description
PPAPMGR: PPAP	Click this option to add a PPAP record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected PPAPMGR: PPAP, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

12 Click the **Save** button under the table.

13 Click the **Save** tool bar button to save all the information in the form.

Step 4.5: Production validation testing

Use this step to record information about the trial run. Conduct trial runs using production tooling and equipment.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click **4.5 Production Validation Testing**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To attach test results, click the **Production Validation** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Product Inspection Plan	Click this option to add a product inspection plan.
COLLECT: Product Data Collection	Click this option to add a product data collection record.
COLLECT: Process Inspection Plan	Click this option to add a process inspection plan.
COLLECT: Process Data Collection	Click this option to add a process data collection record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected COLLECT: Product Inspection Plan, COLLECT: Product Data Collection, COLLECT: Process Inspection Plan, or COLLECT: Process Data Collection, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 4.6: Packaging evaluation

Use this step to assess the protection of the product from normal transportation damage and adverse environmental factors.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **4.6 Packaging Evaluation**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To attach evaluation information, click the **Packaging Evaluation** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Product Inspection Plan	Click this option to add a product inspection plan.
COLLECT: Product Data Collection	Click this option to add a product data collection record.
COLLECT: Process Inspection Plan	Click this option to add a process inspection plan.
COLLECT: Process Data Collection	Click this option to add a process data collection record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected COLLECT: Product Inspection Plan, COLLECT: Product Data Collection, COLLECT: Process Inspection Plan, or COLLECT: Process Data Collection, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 Click the **Save** tool bar button to save all the information in the form.

Step 4.7: Production control plan

Use this step to develop systems for controlling parts and processes.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **4.7 Production Control Plan**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To answer checklist questions about the production control plan, click the **Prototype Build - Control Plan Checklist** tab. If the checklist questions are not displayed in the table, click the **Save** button. Then, click the **Refresh** button.

9 For each question, specify this information:

Yes/No
If the answer to the question is Yes, select the check box. If the answer to the question is No, clear the check box.

Responsible ID
Specify the ID of the employee responsible for addressing the checklist question. After you specify the ID, the employee's name is inserted in the Responsible - Name field.

Due Date
Specify the date by which the question must be answered.

Status
Specify the current status of the question. Specify Open or Closed. If you specify Closed, specify the date that the question was answered in the Closed Date field.

Comments/Action Required
Specify any additional information about the question and the actions required to resolve any issues.

10 To attach control plan information, click the **Production Control Plan** tab.

11 Click the **Insert** button.

12 Click one of these options, and then click **Ok**:

Option	Description
COLLECT: Control Plan	Click this option to add a control plan.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

13 If you selected COLLECT: Control Plan, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

14 Click the **Save** button under the table.

15 Click the **Save** tool bar button to save all the information in the form.

Step 4.8: Quality planning sign off

Use this step to record management's approval of the product and process to manufacture the product.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **4.8: Quality Planning Sign-off and Management Support**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
   - To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
   - To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
   - To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.
7 Specify this information:

   Due Date
   Specify the deadline for this task.

   Status
   Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
   See Closing APQP Tasks on page 597.

   Comments
   Specify any additional information regarding the task assignment.

8 To list the management meetings that you held, click the **Project Team Meeting** tab.
9 Click the **Insert** button.
10 Click one of these options, and then click **Ok**:

Option	Description
INVOLVE: Project Meeting	Click this option to add a project meeting record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

11 If you selected INVOLVE: Project Meeting, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
12 Click the **Save** button under the table.
13 To specify the individuals who signed off on this new product and process, click the **Sign-off** tab.

14 Specify the individuals who must sign off on the product and process. To specify these individuals, perform one or both of these procedures:
   - To insert the members of the APQP team, click the **Add All Project Team Members** button.
   - To insert additional individuals, click the **Insert** button and then select the type of team member to add.

15 In the Due Date field, specify the date by which this individual must make a decision.

16 In the Approval Status column, specify the individual's decision. Select one of these options:

Option	Description
Pending	If the individual has not yet made a decision, specify this option. When you specify this option, the Status Indicator column is updated to Yellow.
Approved	If the individual has signed off on the APQP, specify this option. When you specify this option, the Status Indicator column is updated to Green. In the Approval Date column, specify the date that the individual approved the APQP.
Not Approved	If the individual has rejected this APQP, specify this option. When you specify this option, the Status Indicator column is updated to Red.

17 Click the **Save** button under the table.

18 Click the **Save** tool bar button to save all of the information on the form.

Step 5.0: Feedback, assessment, and corrective action

Use step 5 to record the lessons learned through the APQP process. You can apply these lessons to future product and process development.

This table shows the sub-steps included in step 5.0, the purpose of each sub-step, and the forms in IQM that can be used to add information to the sub-step:

Sub-step	Purpose	Supporting forms
5.1 - Reduced Variation	Use this step to record information about how process variation was reduced.	Customer Feedback Customer Survey Result Corrective Action Additional Document
5.2 - Improved Customer Satisfaction	Use this step to record the steps taken to improve customer satisfaction.	Customer Feedback Customer Survey Result Additional Document

Sub-step	Purpose	Supporting forms
5.3 - Improved Delivery and Service	Use this step to record how delivery and service was improved. The step continues the Supplier/Customer partnership in solving problems and aiding in improvements.	Customer Feedback Customer Survey Result Nonconformance Additional Document
5.4 - Lessons Learned/Best Practices	Use this step to identify the lessons learned in the APQP process and to develop best practices to use in the future.	Customer Feedback Customer Survey Result Corrective Action Additional Document

Step 5.1: Reduced variation

Use this step to record information about how process variation was reduced.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **5.1: Reduced Variation**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To specify information about how variation was reduced, click the **Reduced Variation** tab.
9 In the **Reduced Variation** field, enter a description of how variation was reduced.

10 In the table, attach records that support your variation findings. Click the **Insert** button.

11 Click one of these options, and then click **Ok**:

Option	Description
CUSTOMER: Feedback	Click this option to add a customer feedback record.
CUSTOMER: Survey Result	Click this option to add a customer audit result record.
CORRECT: Corrective Action	Click this option to add a corrective action record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

12 If you selected CUSTOMER: Feedback, CUSTOMER: Survey Result, or CORRECT: Corrective action, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

13 Click the **Save** button under the table.

14 Click the **Save** tool bar button to save all the information in the form.

Step 5.2: Improved customer satisfaction

Use this step to record the steps taken to improve customer satisfaction.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click **5.2: Improved Customer Satisfaction**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To specify information about how customer satisfaction was improved, click the **Improved Customer Satisfaction** tab.

9 In the Improved Customer Satisfaction field, enter a description of how customer satisfaction was improved.

10 In the table, attach records that support your variation findings. Click the **Insert** button.

11 Click one of these options, and then click **Ok**:

Option	Description
CUSTOMER: Feedback	Click this option to add a customer feedback record.
CUSTOMER: Survey Result	Click this option to add a customer audit result record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

12 If you selected CUSTOMER: Feedback or CUSTOMER: Survey Result, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

13 Click the **Save** button under the table.

14 Click the **Save** tool bar button to save all the information in the form.

Step 5.3: Improved delivery and service

Use this step to record how delivery and service was improved. The step helps to improve the relationship between the supplier and the customer. Customers and suppliers collaborate to solve problems and make improvements.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click **5.3: Improved Delivery and Service**.

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To specify information about how delivery and service were improved, click the **Improved Delivery and Service** tab.
9 In the **Improved Delivery and Service** field, enter a description of how delivery and service were improved.
10 In the table, attach records that support your findings. Click the **Insert** button.
11 Click one of these options, and then click **Ok**:

Option	Description
CUSTOMER: Feedback	Click this option to add a customer feedback record.
CUSTOMER: Survey Result	Click this option to add a customer audit result record.
NCM: Nonconformance	Click this option to add a nonconformance record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

12 If you selected CUSTOMER: Feedback, CUSTOMER: Survey Result, or NCM: Nonconformance, an ID field is displayed above the table. Specify the ID of the record to insert in the table.
13 Click the **Save** button under the table.
14 Click the **Save** tool bar button to save all the information in the form.

Step 5.4: Lessons learned/best practices

Use this step to identify the lessons learned in the APQP process and to develop best practices to use in the future.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Double-click **5.4: Lessons Learned/Best Practices**.
5 To assign the task and establish a deadline, click the **Assignment/Status** tab.
6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.

- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To specify information about how variation was reduced, click the **Lessons Learned/Best Practices** tab.

9 In the Lessons Learned/Best Practices field, enter a description of each lesson learned and best practice developed.

10 In the table, attach records that support your findings. Click the **Insert** button.

11 Click one of these options, and then click **Ok**:

Option	Description
CUSTOMER: Feedback	Click this option to add a customer feedback record.
CUSTOMER: Survey Result	Click this option to add a customer audit result record.
CORRECT: Corrective Action	Click this option to add a corrective action record.
Additional Document	Select this option to create a document. See Adding Additional Documents to APQP Records on page 596.

12 If you selected CUSTOMER: Feedback, CUSTOMER: Survey Result, or CORRECT: Corrective action, an ID field is displayed above the table. Specify the ID of the record to insert in the table.

13 Click the **Save** button under the table.

14 Click the **Save** tool bar button to save all the information in the form.

Resolving concerns

During the APQP process, specific concerns may be raised. Use Concern Resolution to record concerns and develop solutions.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.

3 Click the **Five Steps of APQP** tab.

4 Double-click **Concern Resolution.**

5 To assign the task and establish a deadline, click the **Assignment/Status** tab.

6 Specify who is responsible for this task. Perform one of these steps:
- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

7 Specify this information:

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Comments
Specify any additional information regarding the task assignment.

8 To specify information about a concern and its resolution, click the **Concerns** tab.

9 Click the **Insert** button.

10 Specify this information:

Assigned To
Specify the employee responsible for this concern and its resolution.

Due Date
Specify the deadline for this task.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Concern
Describe the concern found during the APQP process.

Resolution
Specify the resolution found for the concern.

11 Click the **Save** button under the table.

12 Click the **Save** tool bar button to save all of the information in the form.

Adding additional documents to APQP records

You can attach an additional document to most tasks in the APQP process. If the APQP task includes a table of records, then you can attach an additional document.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.
4 Open the task to which you are attaching the document.
5 Click the tab that contains the record table.
6 Click **Additional Document**.
7 Specify this information:

Assigned To

Specify the individual responsible for this document. Perform one of these steps:

- To specify an employee, click the **Internal** option. Then, specify the ID of the employee in the **Employee ID** field.
- To specify a customer, click the **Customer** option. In the **Customer ID** field, specify the ID of the customer. In the **Contact No** field, specify the ID of the customer contact assigned to this task.
- To specify a supplier, click the **Supplier** option. In the **Supplier ID** field, specify the ID of the supplier. In the **Contact No** field, specify the ID of the supplier contact assigned to this task.

Due Date
Specify the deadline for this document.

Status
Specify the current status of this task. Select Open or Closed. If you select Closed, specify the date the task was complete in the Closed Date field.
See Closing APQP Tasks on page 597.

Reference
Specify any additional information regarding this additional document.

8 Click the **Save** button.

Calculating APQP project status

Use this feature to calculate the overall status of your APQP project. When you calculate the project status, the total number of assignments in each status level is displayed. The total number of attached records in each status level is also displayed.

To calculate APQP project status:

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Click the **Five Steps of APQP** tab.

4 Right-click and select **Calculate Summary**.

The total number of assignments in each status level is displayed. Attached records are labeled 1 - n Tasks. The total number of attached records in each status level is also displayed.

Closing APQP tasks

To close an APQP task:

1 In APQP Maintenance, click the **Five Steps of APQP** tab.
2 Open the step to close.
3 Specify this information:

Status
Specify Closed.

Closed Date
Specify the date you closed the record.

4 Click the **Save** button.

Closing an APQP project

After all steps of an APQP project are complete, close the project.

1 Select **Documentation > APQP > APQP Maintenance**.
2 Select the APQP ID.
3 Specify this information:

Status
Specify Closed.

Closed Date
Specify the date that you closed the project.

4 Click the **Save** button.

Copying APQP records

You can create a new APQP record from an existing APQP record.

1 Select **Documentation > APQP > APQP Maintenance**.

2 Select the APQP ID.
3 Right-click and select **Copy**.
4 Specify a new APQP Project ID.
5 Click the **Save** button. When you copy an APQP record, all of the information on the Assignment/Status tab and Assignment/Status Contd. tab is copied. No other information is copied.

APQP reports

Use these reports to review information about the APQP process.

APQP business plan / marketing strategy report

This report shows information about the business plans and marketing strategies that you developed during step 1.2 of the APQP process.

Generating the APQP business plan / marketing strategy report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Business Plan / Marketing Strategy.
3 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the APQP ID field.
   - To view information related to a particular APQP project, specify the APQP project ID in the APQP Project ID field.
   - To view information related to a particular part, specify the ID in the Part ID field.
4 In the Sites field, select the sites to include in the report.
5 Click the **Print Report** button.

APQP characteristics matrix report

Use this report to review information about the characteristics matrix. This report shows information specified in step 3.5 of the APQP process.

Generating the APQP characteristics matrix report

1 Select **Documentation > APQP > My Reports**.

2 Click APQP Characteristics Matrix.
3 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
4 In the Sites field, select the sites to include in the report.
5 Click the **Print Report** button.

APQP concern resolution

Use this report to review the concerns that were raised and resolved during the APQP process.

Generating the APQP concern resolution report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Concern Resolution.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP customer inputs

Use this report to review information about customer inputs. This report shows information specified in step 1.6 of the APQP process.

Generating the APQP customer inputs report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Customer Inputs.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.

- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click **Print Report**.

APQP design for manufacturability and assembly

Use this report to review information about your manufacturing and assembly process. This report shows the information specified in step 2.2 of APQP.

APQP design for manufacturability and assembly report

1 Select **Documentation > APQP > My Reports**.
2 Click AQPQ Design for Manufacturability and Assembly.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
- To view information for a particular APQP record, specify the ID in the **APQP ID** field.
- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP design goals

Use this report to review information about the design goals that were identified during APQP. This report shows information specified in step 1.7 of the APQP process.

Generating the APQP design goals report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP design goals.
3 Click the sites to include in the report.
4 Specify the information to view in the report:
- To view information for a particular APQP record, specify the ID in the **APQP ID** field.
- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click **Print Report**.

APQP design reviews

Use this report to review information about the design review process. This report shows information specified during step 2.4 of APQP.

Generating the APQP design reviews report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Design Reviews.
3. Click the sites to include in the report.
4. Specify the information to include in the report.
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP design verification

Use this report to review information used to verify that your design meets your customers' requirements. This report shows information that was specified during step 2.3 of APQP.

Generating the APQP design verification report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Design Verification.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP drawing and specification changes

Use this report to view the change requests made for the product in the APQP process. This report shows information that was specified in step 2.9 of APQP.

Generating the APQP drawing and specification changes report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Drawing and Specification Changes.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP engineering drawings

Use this report to view information about the review of engineering drawings. This report shows the information that was specified during step 2.6 of APQP.

Generating the APQP engineering drawings report

1 Select **Documentation > APQP > My Reports**.
2 Click Engineering Drawings.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP engineering specifications

Use this report to view information about the product characteristics that affect functional, durability, and appearance requirements. This report shows information that was specified during step 2.7 of APQP.

Generating the APQP engineering specifications report

1 Select **Documentation > APQP > My Reports**.

2 Click APQP engineering specifications.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP floor plan layout

Use this report to review information about the floor plan. This report shows information that was specified during step 3.4 of APQP.

Generating the APQP floor plan layout report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Floor Plan Layout.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP gages / test equipment requirements

Use this report to review information about the requirements that have been identified for gages and test equipment. This report shows information that was specified during step 2.12 of APQP.

Generating the APQP gages / test equipment requirements report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Gages / Test Equipment Requirements.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.

- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP historical warranty and quality information

Use this report to review past customer concerns, warranty claims, problem resolution reports, and field returns. This report shows the information that was specified during step 1.1.2 of APQP.

Generating the APQP historical warranty and quality information report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Historical Warranty and Quality Information.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
- To view information for a particular APQP record, specify the ID in the **APQP ID** field.
- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP improved customer satisfaction

Use this report to review steps that were taken to improve customer satisfaction. This report shows the information that was specified during step 5.2 of APQP.

Generating the APQP improved customer satisfaction report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Improved Customer Satisfaction.
3 Click the sites to include in the report.
4 Specify the information to include in the report.
- To view information for a particular APQP record, specify the ID in the **APQP ID** field.
- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP improved delivery and service

Use this report to review how delivery and service was improved as a result of APQP. This report shows information that was specified during step 5.3 of APQP.

Generating the APQP improved delivery and service report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Improved Delivery and Service.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP management support

Use this report to review information about the meetings that were held to reinforce management commitment to improvements. This report shows information that was specified during step 1.13 of APQP.

Generating the APQP management support report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Management Support.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP management support design

Use this report to review information about the meetings that were held to reinforce management commitment to changes in design. This report shows information that was specified during step 3.12 of APQP.

Generating the APQP management support design report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Management Support Design.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP market research

Use this report to review the market research that you conducted during the APQP process. This report shows the information that was specified in step 1.1.1 of APQP.

Generating the APQP market research report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Market Research.
3. Click the sites to include in the report.
4. Select the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP material specifications

Use this report to view information about the reviews of material specifications. This report shows the information that was specified during step 2.8 of APQP.

Generating the APQP material specifications report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Material Specifications.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP measurement systems analysis

Use this report to view information about the measurement systems analysis. This report shows the information that was specified during step 3.9 of the APQP process.

Generating the APQP measurement systems analysis report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Measurement Systems Analysis.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP measurement systems analysis validation

Use this report to review information about the steps that you took to validate measurement systems. This report shows the information that was specified during step 4.2 of APQP.

Generating the APQP measurement systems analysis validation report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Measurement Systems Analysis Validation.
3. Click the sites to include in the report.
4. Select the information for the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP new equipment, tooling, facilities requirements

Use this report to review information about the steps that you took to ensure that equipment, tooling, and facilities met your requirements. This report shows the information that was specified during step 2.10 of APQP.

Generating the new equipment, tooling, facilities requirements report

1. Select **Documentation > APQP > My Reports**.
2. Click New Equipment, Tooling, Facilities Requirements.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP packaging evaluation

Use this report to review information about the results of your packaging evaluation. This report shows the information that was specified during step 4.6 of APQP.

Generating the APQP packaging evaluation report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Packaging Evaluation.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP packaging specifications

Use this report to review information about the packaging specifications that you identified during the APQP process. This report shows the information that was specified in step 3.11 of APQP.

Generating the APQP packaging specifications report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Packaging Specifications.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP packaging standards

Use this report to review the standards that you established for packaging. This report shows the information that was specified during step 3.1 of APQP.

Generating the APQP packaging standards report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Packaging Standards.

3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP PPAP - production part approval

Use this report to review information about the PPAPs that you submitted to the customer. This report shows the information that was specified in step 4.4 of APQP.

Generating the APQP PPAP - production part approval report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP PPAP - Production Part Approval.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP pre-launch control plan

Use this report to review information about your pre-launch control plan. This report shows the information that was specified in step 3.7 of APQP.

Generating the APQP pre-launch control plan report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Pre-launch Control Plan.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.

- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP preliminary bill of material

Use this report to review information about the preliminary bill of material. This report shows the information that was specified in step 1.9 of APQP.

Generating the preliminary bill of material report

1 Select **Documentation > APQP > My Reports**.
2 Click Preliminary Bill of Material.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
- To view information for a particular APQP record, specify the ID in the **APQP ID** field.
- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP preliminary process capability study

Use this report to review information about the preliminary process capability study that you performed. This report shows the information that was specified in step 4.3 of APQP.

Generating the preliminary process capability study report

1 Select **Documentation > APQP > My Reports**.
2 Click Preliminary Process Capability Study.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
- To view information for a particular APQP record, specify the ID in the **APQP ID** field.
- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP preliminary process capability study plan

Use this report to review information about the plans that you made for the preliminary capability study. This report shows the information that was specified in step 3.10 of APQP.

Generating the APQP preliminary process capability study plan report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Preliminary Process Capability Study Plan.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP preliminary process flow chart

Use this report to view information about the preliminary process flow chart. This reports shows the information that was specified during step 1.10 of APQP.

Generating the preliminary process flow chart report

1. Select **Documentation > APQP > My Reports**.
2. Click Preliminary Process Flow Chart.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP preliminary special characteristic report

Use this report to view information about the special characteristic. This report shows information that was specified during step 1.11 of APQP.

Generating the APQP preliminary special characteristic report

1. Select **Documentation > APQP > My Reports**.
2. Click Preliminary Special Characteristic.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click **Print Report**.

APQP process flow chart

Use this report to review information about the analysis done on the process flow chart. This report shows the information that was specified in step 3.3 of APQP.

Generating the APQP process flow chart report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Process Flow Chart Report.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP product / process assumptions

Use this report to review information about product and process assumptions. This report shows the information that was specified during step 1.4 of APQP.

Generating the APQP product / process assumptions report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Product / Process Assumptions.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP product / process benchmark data

Use this report to review information about the benchmark data that you established for the product or process in APQP. This report shows the information that was specified during step 1.3 of APQP.

Generating the APQP product / process benchmark data report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Product / Process Benchmark Data.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP product / process quality system review

Use this report to review information about the updates that you made to quality processes. This report shows the information that was specified during step 3.2 of APQP.

Generating the APQP product / process quality system review report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Product / Process Quality System Review.

3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP product assurance plan

Use this report to review information about the product assurance plan. This report shows the information that was specified in step 1.12 of APQP.

Generating the APQP product assurance plan report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Product Assurance Plan
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP product reliability studies

Use this report to review information about the reliability studies conducted for the product. This report shows the information that was specified in step 1.5 of APQP.

Generating the APQP product reliability studies report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Product Reliability Studies.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.

- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP production control plan

Use this report to review information about the control plan used during production. This report shows the information that was specified in step 4.7 of APQP.

Generating the APQP production control plan report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Production Control Plan.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
- To view information for a particular APQP record, specify the ID in the **APQP ID** field.
- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP production validation testing

Use this report to review information about the trial run. This report shows the information that was specified in step 4.5 of APQP.

Generating the APQP production validation testing report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Production Validation Testing.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
- To view information for a particular APQP record, specify the ID in the **APQP ID** field.
- To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
- To view information related to a particular part, specify the ID in the **Part ID** field.

5 Click the **Print Report** button.

APQP prototype build control plan

Use this report to review information about the control plan used for the prototype. This report shows the information that was specified in step 2.5 of APQP.

Generating the APQP prototype build control plan report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Prototype Build Control Plan.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP quality planning sign-off and management support

Use this report to review information about management's sign off on the improved process. This report shows the information that was specified in step 4.8 of APQP.

Generating the APQP quality planning sign-off and management report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Quality Planning Sign-off and Management.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP reduced variation

Use this report to review information about how variation was reduced as a result of the APQP process. This report shows the information that was specified in step 5.1 of APQP.

Generating the APQP reduced variation report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Reduced Variation.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP reliability and quality goals

Use this report to review information about the reliability and quality goals established during the APQP process. This report shows the information that was specified in step 1.8 of APQP.

Generating the APQP reliability and quality goals report

1. Select **Documentation > APQP > My Reports**.
2. Click APQP Reliability and Quality Goals.
3. Click the sites to include in the report.
4. Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5. Click the **Print Report** button.

APQP significant production run

Use this report to review information about the production run. This report shows the information that was specified in step 4.1 of APQP.

Generating the APQP significant production run report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Significant Production Run.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP team experience

Use this report to review information about the APQP team's experience. This report shows the information that was specified in step 1.1.3 of APQP.

Generating the APQP team experience report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Team Experience.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP team feasibility commitment and management support

Use this report to review information about the feasibility of the design identified in the APQP process. This report shows the information that was specified in step 2.13 of APQP.

Generating the APQP team feasibility commitment and management report

1 Select **Documentation > APQP > My Reports**.

2 Click APQP Team Feasibility Commitment and Management.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

APQP voice of the customer

Use this report to review customer input. This report shows the information that was specified in step 1.1 of APQP.

Generating the APQP voice of the customer report

1 Select **Documentation > APQP > My Reports**.
2 Click APQP Voice of the Customer.
3 Click the sites to include in the report.
4 Specify the information to include in the report:
   - To view information for a particular APQP record, specify the ID in the **APQP ID** field.
   - To view information related to a particular APQP project, specify the APQP project ID in the **APQP Project ID** field.
   - To view information related to a particular part, specify the ID in the **Part ID** field.
5 Click the **Print Report** button.

Chapter 18: Quality cost

Use the Quality Cost forms to record the costs associated with quality functions. You can automatically post quality cost information for selected types activities or for all quality control activities. Comprehensive reporting and charting capabilities then assist you in assessing the overall cost effectiveness of your quality controls.

You can:

- Define quality and cost objectives, then establish programs to meet your overall needs.
- Store an unlimited number of cost categories that are assigned as one of the four quality cost types.
- Create a Quality Cost Ledger using information collected in other modules, and post the entries manually or automatically.
- Identify problem areas and set action priorities.

To set up the quality cost system, first establish cost categories to use. Each of these cost categories is linked to a general ledger account. When you post quality costs, the cost categories are used to determine how the costs flow through your general ledger.

If you intend to record labor costs, you can also set up the hourly quality cost rates for each of your employees in Employee Maintenance. These rates are not necessarily the same as the employee's salary. You can set up a single rate for each employee to apply to all sites, or you can set up rates on a site-by-site basis.

See Adding Employee Records on page 69.

After you set up cost categories, you can record the cost of quality. You can record costs in every Communication, Documentation, Control, and Equipment form within IQM. When you record costs for a record in a particular form, you can specify labor costs, material costs, or both.

After you record costs, post them to the general ledger. The costs are applied to the accounts you specified in Cost Category Maintenance.

To review posted costs, use the Quality Cost Ledger.

After you record costs, you can analyze the cost of quality using Measurement Base Maintenance and Quality Cost Ledger Charts. Use measurement bases to compare the total cost of quality to the total cost of a particular measurement base type, such as labor or sales. Use Quality Cost Ledger Charts to review bar, trend, and pareto charts of your costs over a time frame you specify.

Cost categories

Use Cost Category Maintenance to set up the categories to use to classify costs and the accounts to use to record quality costs.

Adding cost categories

1. Select **Control > Qcost > Cost Category Maintenance**.
2. Click the **New** button.
3. Specify this information:

   Cost Category
   Specify the name of the cost category.

   Cost Type
   Specify the type of cost this category measures. Select one of these options:

   Appraisals
   Specify this option to use this category to record costs associated with the direct appraisal of quality, both in the plant and in the field.

   External Failure
   Specify this option to use this category to record costs associated with the failure of a product or service in the field.

   Internal Failure
   Specify this option to use this category to record costs associated with defective production on-site.

   Preventive
   Specify this option to sue this category to record costs associated with planning and controlling quality assurance systems and programs using FMEAs.

   Description
   Specify a description of this cost category.

   GL Account ID
   Specify the ID of the posting general ledger account for these costs.

4. Click the **Save** button.

Deleting cost categories

To delete a cost category:

1. Select **Control > Qcost > Cost Category Maintenance**.
2. Select the category to delete.

3 Click the **Delete** button.
4 Click the **Save** button.

Quality costs

Use the Quality Costs form to record the costs incurred while performing a quality-related function or procedure. For example, you can record the labor costs incurred during product data collection. The Quality Costs form is available in each Communication, Documentation, Control, and Equipment form.

Before you can record quality costs, you must first set up quality cost categories. See Adding Cost Categories on page 622.

Adding quality cost records

You can add a quality cost to a record only if the record is not closed.

To add a quality cost record:

1 From the record to which you are adding costs, right-click and select Quality Costs. For example, to add quality cost information to a product data collection record, open the record in Product Data Collection Maintenance. Right-click and select **Quality Costs**.
2 The entity ID and site ID from the record are inserted. Specify this information:

Date
Specify the date the costs were incurred.

Cost Category
Specify the category for this cost. Select a category that is associated with the cost type to use for this cost. After you select a category, the type of cost is displayed in the Cost Type cell.

3 Specify the cost. Perform one of these steps:
- To enter a labor cost, specify this information:

Time
Specify the amount of time in hours it took to complete the task for which you are entering quality costs.

Employee ID
Specify the ID of the employee who performed the task.

Labor Cost
The employee's hourly rate is multiplied by the number of hours you specified in the Time field. If you specified a rate for the employee in the selected site, then the site rate is used. If you did not specify a rate for the employee in the selected site, then the employee's default rate is used. You can also override the calculation and specify a custom labor cost amount.

- To enter a material cost, specify the amount in the Material Cost cell.

4 In the Reference field, specify additional information about the cost incurred.

5 Click the **Save** button.

Viewing posted transactions

To post transactions, use the Posting form. You can view posted transactions attached to a particular record.

To view posted transactions:

From the record to which you are adding costs, right-click and select Quality Costs. For example, to add quality cost information to a product data collection record, open the record in Product Data Collection Maintenance. Right-click and select **Quality Costs**.

If a transaction has been posted, the Posted check box is selected. In the Posted Date column, the date the transaction was posted is displayed.

Deleting quality cost records

You can delete a quality cost record only if it has not been posted. After a quality cost record has been posted, it cannot be deleted.

1 From the record to which you are adding costs, right-click and select Quality Costs. For example, to add quality cost information to a product data collection record, open the record in Product Data Collection Maintenance. Right-click and select **Quality Costs**.

2 Select the record to delete.

3 Click the **Delete** button.

4 Click the **Save** button.

Posting quality costs to the general ledger

Use Posting Maintenance to post quality cost records to the general ledger. You can use the filters in Posting Maintenance to post only certain quality cost records, such as for a particular site or for a particular module.

1 Select **Control > Qcost > Posting Maintenance**.

2 Specify the transactions to post:

Location
To post records for a particular entity, specify the entity in the Entity ID field. To post records for a particular site, specify the site in the Site ID field. To post records for all entities and sites, leave these fields blank.

Date
Specify the date range to use. Quality cost records with dates that fall within the range you specify are posted.

Modules
To post quality cost records created in a certain module, select the check box for that module. For example, to post quality cost records created in the Collect modules only, select the Collect check box and clear the other check boxes. To post quality records for all modules, select all of the check boxes.

3 Click **Run**. In the Output field, the total number of transactions processed for each selected module is displayed.

Quality cost ledger

Use the Quality Cost Ledger to review all posted quality cost transactions. You can add comments to transactions and edit the reference text. You can also change the cost type.

Editing posted quality cost transactions

You can add comments, edit reference text, and edit the cost type of posted transactions.

To review and edit posted quality cost transactions:

1 Select **Control > QCost > Quality Cost Ledger**.
2 Select the costs to view. Specify this information:

Entity ID
Specify the entity costs to view.

Site ID
Specify the site costs to view. After you specify an entity and a site, the currency you use for the site is inserted and costs for the site are displayed. The costs are displayed in the specified currency.

View By
Specify the order in which to display the transactions. Select one of these options:

Month/Year, Type, Category
Select this option to sort the transactions first by the month and year they were posted, then by cost type, and then by cost category.

Type, Category, Month/Year
Select this option to sort the transactions first by cost type, then by cost category, and then by the month and year the transactions were posted.

Module, Month/Year
Select this option to sort the transactions first by the module in which they were posted, and then by the month and year the transactions were posted.

Cost
Select this option to sort the transactions by cost in ascending order.
To sort by a particular column header, double-click the column header. Double-click the column header again to toggle between ascending and descending order.

3 For each transaction, review or edit this information:

Entity ID
The entity where the cost was recorded.

Site ID
The site where the cost was recorded.

Month/Year
The month and year that the cost was posted to the general ledger is displayed.

Cost Category
The category specified for the quality cost is displayed.

Cost Type
The cost type associated with the cost category is displayed. You can select a different cost type.

Module
The module where the cost was recorded is displayed.

Cost
The total cost posted is displayed.

Reference
Any reference text specified on the cost transaction is displayed. If no reference text was specified, "Automatically posted" is inserted. This indicates that the record was posted by using Posting Maintenance. You can edit the reference text. To edit the text,click in the cell and specify the new text.

Comments
Specify any additional information for this transaction. To specify a comment, select the row for the transaction. In the Comments field, specify the text.

4 Click the **Save** button.

Deleting transactions from the quality cost ledger

To delete a transaction from the quality cost ledger:

1. Select **Control > QCost > Quality Cost Ledger**.
2. Select the row to delete.
3. Click the **Delete** button.
4. Click the **Save** button.

Measurement bases

A measurement base is a category of cost against which you compare quality costs. Examples of measurement bases include Sales and Labor.

Use the Measurement Base Maintenance to set up these costs. Before you can set up measurement bases, you must first set up measurement base types and unit codes.

Adding measurement bases

1. Select **Control > QCost > Measurement Base Maintenance**.
2. Click the **New** button.
3. Specify this information:

   Site ID
   Specify the ID of the site where you are setting up the measurement base. After you specify a site ID, the ID of the site's parent entity is inserted in the Entity ID field.

   Month/Year
   Specify the month and year this measurement base began to be used.

   Measurement Base
   Specify the measurement base code that identifies this measurement base. After you select a code, the description of the code is displayed in the Description column. Set up measurement base codes in Measurement Base Code Maintenance.

   Value
   Specify the value of this measurement base. The value is expressed in the units you select.

   Units
   Specify the unit of measure for the value. After you select a code, the description of the code is displayed in the Description column. Set up unit codes in Unit Code Maintenance.

4. Click the **Save** button.

5 To change the sort order of the measurement base table, use the View By field. Select one of these options:

Month/Year, Measurement Base
Select this option to sort the table first by the Month/Year column, and then by the measurement base code.

Measurement Base, Month/Year
Select this option to sort the table first by measurement base code, and then by the Month/Year column.

Value
Select this option to sort the table by value in ascending order.

Deleting measurement bases

1 Select **Control > QCost > Measurement Base Maintenance**.
2 Select the row to delete.
3 Click the **Delete** button.
4 Click the **Save** button.

Quality cost ledger charts

Use Quality Cost Ledger Charts to track changes and trends to quality costs over time. You can create these charts:

Bar
The bar chart shows the total percentage of each cost type by month.

Trend
The trend chart shows the changes to each cost type by month.

Pareto
The pareto chart shows the most commonly occurring quality cost over the time period you specify.

Generating quality cost charts

1 Select **Control > QCost > Quality Cost Ledger Charts**.
2 Specify the information to include in the chart. Specify these options:

Entity ID
Specify the ID of the entity to include in the chart. To include all entities, leave this field blank.

Site ID
Specify the ID of the site to include in the chart. To include all sites within the selected entity, leave this field blank.

Currency ID
Specify the currency for the chart. You can select any currency used by the selected entity.

Month/Year
Specify the date range for the chart.

Category
To view information for a single cost category, specify the ID. After you specify the ID the cost type is inserted. To view all cost categories, leave this field blank.

Cost Type
To view information for a single cost type, specify the cost type. To view all cost types, leave this field blank.

Cost
To view costs that fall into a particular range, specify the cost range in the Cost and To fields. To view all costs, specify 0 in both fields.

3 In the Chart Type section, specify the type of chart to generate.
4 Click **View**. The chart you specified is opened populated with the data you selected.