

**Manufacturing Analysis
Fourth Shift Release 8.00**

Fourth Shift Help
Release 8.00

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Manufacturing Analysis Module

The Manufacturing Analysis Module extends the functionality of the Inventory Control and Bill of Material modules. The MMAM Module includes a series of screens and reports required by engineering, configuration control and manufacturing personnel to analyze the impact of evolving bills of material. The MMAM Module also includes tools to help reduce product lead times, associated inventory, review engineering changes, track product revisions and minimize phase-out costs.

If the Engineering Module is installed, you can also analyze engineering data, or maintain the workflow and routing of change control information.

Module Prerequisites

The Manufacturing Analysis Module has the following prerequisites:

- SYSM (System Control)
- INVM (Inventory Control)
- BILM (Bill of Material)

Setting Up the Manufacturing Analysis Module

Setting Up the Module provides an overview of how to implement the module. It covers:

- guidelines to consider before you implement the module
- how to prepare your data for loading
- suggested procedures for loading your data
- suggestions for using the module

Although this section provides key information about the Manufacturing Analysis Module, it does not explain such manufacturing concepts as material management.

Before You Implement the Module

The Manufacturing Analysis Module provides a series of screens and reports required by engineering, manufacturing and configuration control personnel to analyze evolving bills of material. To efficiently use this functionality, your bill of material and operations change control procedures should be reviewed to verify that data elements required by the module are available.

Bills of Material Information

- Bills of material information can be maintained from both the Engineering Module (ENGM) and the Bills of Material Module (BILM), but it is recommended that only one of these is used for maintaining bills. We recommend using the ENGM Module if you need to use reference designators or user-defined field capabilities. Procedures should be established for determining where a bill of material information is maintained.
- As changes to your products are made, the bills of material are updated. Procedures should be established for additions, changes and deletions to your bills of material.
- Procedures should be established for tracking revision history within the bills of material.

Change Control

- Define your procedures for handling an engineering change request (ECR), including an information flow diagram and an ECR form for collecting all related information. These procedures should include feedback to originators on the status of the ECR, actions taken on the ECR and ECR tracking from initial request through final disposition.
- Define your procedures for handling an approved Engineering Change Notice (ECN). The procedures should include a process flow diagram and an ECN form for collecting related information, which must include the baseline data required by Fourth Shift. The procedures should identify the reason for the ECN and an appropriate cut-in date for implementing the engineering change.
- Define classes of engineering changes that reflect the reasons for changes. Inclusion of "reason" information allows for subsequent impact analysis of a change class.

Examples of classes include:

Class	Description
Product update	Product cannot be produced efficiently as released
Quality assurance	Product changed to meet functional specs

Class	Description
Marketing requirement	Design update is beyond the original product scope
Material availability	Alternate part must be used
Reliability	Product must pass reliability test
Government requirement	Requirements set by the government must be reviewed
Safety requirement	Product must meet all safety requirements
Material cost reduction	Cost of parts must be reduced
Administrative	Administrative requirements must be met
Engineering release	Product is released into Engineering phase
Production release	Product is released in Production phase

Preparing Your Data for Loading

The guidelines for data preparation are organized around the screens and key fields that are used for loading the data. The following suggestions will help minimize data entry time and effort when you enter the data during startup.

Preparing for Revision History

Revision history functionality allows you to track the history of bill of material revisions by reviewing the sequence of changes to a bill of material, reviewing component assemblies at a revision level and printing the "in effect" revision level on the picklist. Revisions to bills of material are often called an ECR (Engineering Change Request) or ECN (Engineering Change Notice).

Determine how your company will use revision history in the item master and bill of material to:

- identify the revision as an item on the Item Master
- flag all items affected by the revision on the Item Master
- add the revision as a component to the parent's bill of material at the time the content of the bill is modified
- flag each revised component using effectivity date and revision fields on the Bill of Material

Revision Methods

Several methods are available to identify revisions within a bill of material. The approaches differ primarily in whether you use the Item Master to identify individual ECN numbers or to identify ECN change classes. The ECN number or ECN change class is added to the appropriate bills of material and becomes an embedded revision history record.

- **Individual ECN Method.** The ECN number is added to the appropriate bills of material and becomes an embedded revision history record. The ECN impact to items and components can be found using the Where Used and Multi-Level Where Used features. You can analyze the overall impact of the ECN by determining how many times the ECN number appears as a component of different parents. This method allows you to answer these questions: what assemblies were impacted by this change and how effective were our efforts to reduce cost for assemblies in production.

The Individual ECN method results in a greater number of items on the Item Master (one for every ECN number) but minimize the number of text messages (since it is optional).

See [Revision History Method: Individual ECN](#) for more information on this method.

- **ECN Change Class Method.** The ECN change class is added to the appropriate bills of material and becomes an embedded revision history record. The ECN impact to items and components can be found using the TXWU (Text Where Used) screen. The TXWU screen lists all the places a text number is used within Fourth Shift. Every time an ECN text number is found, a revision is occurring for that item.

The ECN Change Class method results in a greater number of text messages (one for every ECN number) but minimize the number of Item Master entries (one for every ECN class).

See [Revision History Method: ECN Change Class](#) for more information on this method.

Revision Records

The five-character **Pt Use** field is used to uniquely define a revision. You use the first three characters as a standard prefix (such as REV) for all revisions and the last two characters as the unique revision level (A, B, 01, 02 and so on). In this way, revisions are grouped together in bills of material and can be isolated for tracking purposes. The prefix is defined in the FS.CFG file by the **EmbeddedRevPrefix** configuration variable. The default is REV.

Revision records may be added to bills of material as resources (**Type = R**) or References (**Type = X**). The **Type**, in addition to the **Component Sort Basis** field on the CNFG screen, determines the position of revision records within a picklist. Review the **Component Sort Basis** options, which include:

Sort Basis	Description
O (operation)	Sort resources first and then the related components based on the Seqn field. Revisions added as resources are listed before the affected components.
P (component type)	Sort components by component type first and then the Pt Use and Seqn fields. Revisions added as resources are listed within the component list.

Suggested Field Values

Use the following suggested field values when entering revision history records on the Item Master and Bill of Material for either the individual ECN number method or the ECN change class method.

Item Master Fields

Field	Suggested Entry: Based on Method
Item	ECN number or Change Classification
Description	ECN number or Change Classification description
UM	EA
MB	B
IT	R
St	A
Ord Pol	5
Insp Reqd	N
Plnr	XXX
Buyr	XXX

Field	Suggested Entry: Based on Method
Pln Pol	N

Bill of Material Fields

Field	Suggested Entry: Based on Method
Pt Use	3-character prefix and rev level
Seqn	ØØØ
Component	ECN Number or Change Classification
CT	D
Quantity	1
QT	O
UM	EA
MB	B
In Effectivity	In Effectivity date of ECN number or change class
Out Effectivity	Out effectivity date of ECN number or change class
LT Offset	Ø
Scr Pct	Ø.Ø

Bill of Material Detail Fields

Field	Suggested Entry: Based on Method
Text	ECN number or Change Classification and, description of the change
Text No	Text number of the associated ECN number or Change Classification previously entered

Specifying Effectivity Dates

Revision history functionality uses effectivity dates and revision levels to determine the following:

- **In** and **Out Effectivity** dates are used to determine the cut-in date of an ECN for the affected components on a bill of material. The dates can also determine when the revision level changes for a bill of material.
- **In Rev** and **Out Rev** fields on the Bill of Material are used to identify the revision level of the parent at the time of the **In** and **Out Effectivity** dates.

Determine how your company will use effectivity dates and revision levels. Review the suggested field entries for the phased-in and phased-out components.

ECN Phased-In Components

Field	Suggested Entry: Based on Method
In Effectivity	In effectivity date of change number or change class
Out Effectivity	Leave as is
In Rev	Revision level of the parent after ECN cut-in
Out Rev	Blank

ECN Phased-Out Components

Field	Suggested Entry: Based on Method
In Effectivity	Leave as is
Out Effectivity	Out effectivity date of change number or change class
In Rev	Revision level of the parent prior to ECN cut-in
Out Rev	Revision level of the parent after ECN cut-in

Loading Your Data

Once your data has been prepared for entry, use this section to load your data into the Manufacturing Analysis module.

A **validation tool** is identified for each screen or task listed in this section. Use the validation tool to double-check the accuracy of the data you have entered. Validation tools include:

- **Screen reports.** Create these reports by choosing **Print** from the **File** menu. For more information, see "Screen Reports" in the Fourth Shift Basics manual.
- **Print screens.** When other report options are not available, you can capture an image of your screen and use it to validate your data entry. For more information, see "Using the Print Screen Key" in the Fourth Shift Basics manual.

Other validation tools, such as batch processes and data extracts, may also be listed.

1. Configure the Module

Screen/Task	Module	Description	Validation Tool
Options from the View menu (from Bill of Material)	MMAM	general options, including record sorting and effectivity date filtering of components	print screen
		lead time options	print screen
		configuration option, including Pt Use value The default is Rev. To change this, edit the EmbeddedRevPrefix configuration variable in the FS.CFG file.	

2. Define Revision Items

Screen/Task	Module	Description	Validation Tool
Item Master	ENGM or INVM	items for each ECN class or ECN number	screen report
Item Master	ENGM or INVM	Rev field changes for each affected item to reflect the new revision	screen report

3. Add Revision Levels to Bills of Material

Screen/Task	Module	Description	Validation Tool
Bill of Material	ENGM or BILM	addition of revision history component for each affected parent revisions	screen report
Production tab from Bill of Material or Bill of Material Detail screen	ENGM or BILM	component text and detail information	print screen

4. Add Component Revision Changes

Screen/Task	Module	Description	Validation Tool
Bill of Material, sorted by In Effectivity Date	ENGM	addition of component In Rev revision changes to match their effectivity dates	screen report
Bill of Material, sorted by Out Effectivity Date	ENGM	addition of component Out Rev revision changes to match their effectivity dates	screen report

Suggestions for Using the Module

The ways in which the Manufacturing Analysis Module is used vary from company to company. The following guidelines may be helpful for using the module in your company.

Access Methods

Several methods are available for accessing the features in the MMAM Module. Access methods allow users to choose how to open the Manufacturing Analysis Module features. See "Access Methods" in the Engineering manual for more information.

Navigation and Selection Options

Several methods are available for navigating and selecting within the Manufacturing Analysis Module. Navigational and selection methods include the following:

- **Menu Options.** Use the mouse to select an option from a menu. Click the menu title to view the options for each menu. Menu options may not always be available. If an option is

unavailable, the text is grayed and the option cannot be selected. Click on the menu option to start the action listed.

- **Toolbar Buttons.** Use the mouse to select a button from the main toolbar. The toolbar provides a quick way to access some of the most frequently used features of the module.
- **Mouse Conventions.** Use the mouse to “drag and drop” components from one category to another. For example, to add a user to a group, simply select the user and then drag and drop the user into the specified group. Click the left or right mouse buttons to select open menus and options.
- **Keyboard Conventions.** You can use the standard keyboard keys to navigate within the system. Keyboard conventions are key or key combinations that allow you to carry out a command or action.

Menu and Toolbar Options

Menu options and toolbar buttons provide several methods for accessing the module features. The menu bar is located at the top of the application window. The toolbar is located below the menu bar at the top of the application window. Options may vary based on available features and for inquiry-only features.

Menu Options

The following menu options are available:

Menu	Option	Description
File	Open	Opens based on specified information.
	Go to Frame	Allows navigation to the module features.
	Print Preview	Displays a report available for the specified parent item.
	Quick Print	Displays record selection options available to print an ad-hoc report.
	Save Settings	Saves all option settings for the application. If you close an application without saving the settings and you have not selected the Save Settings on Exit option on the Options menu, you lose all settings changes you did not save previously.
	Exit	Exits you from the application.
Edit	Find	Opens the Find application that allows you to search for a specific component based on search criteria.
	Find Next	Repeats the search using the criteria defined in the Find feature.
	Select All Records	Selects all records for the current parent item.
	Zoom	Expands the viewing capacity of the selected information.
	Columns	Allows you to specify column layout
View	Refresh	Clears the active field.
	Graphical Bill of Material	Opens the Graphical Bill of Material dialog which allows you to view the bill of material in a graphical hierarchy.
	Shop Calendar	Opens the Shop Calendar, which allows you to calculate shop days based on specified criteria and view embedded revision information.
	Properties	Allows you to define a bill of material filter based on component type related criteria, define available quantity and set cost definitions.

Menu	Option	Description
	Options	Allows you to specify general layout and lead time options and to review configuration settings.
Help	Help Topics	Opens the online help.
	Setting Up the Module	Opens the help at the Setting Up the Module section.
	About MMAM	Displays information about the release level.

Toolbar Buttons

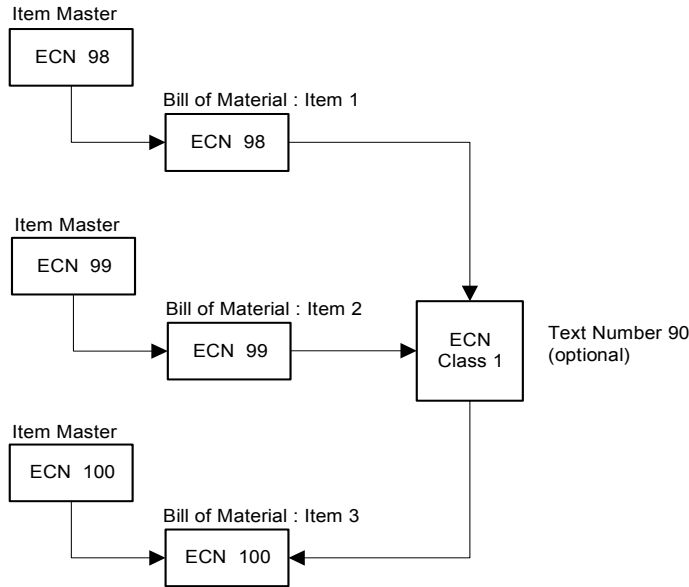
The following toolbar buttons are available:

Toolbar Options	Description
Go to Frame	Allows navigation to the module features.
Open	Opens based on specified information.
Print Preview	Generates a report based on the current column settings and displays report on screen for review. Print the generated reports using your standard Windows printing procedures.
Quick Print	Displays record selection options available to print an ad-hoc report.
Find	Opens the Find application that allows you to search for specific information in the displayed list.
Graphical Bill of Material	Opens the Graphical Bill of Material dialog that allows you to view the bill of material in a graphical hierarchy.
Shop Calendar	Opens the Shop Calendar, which allows you to calculate shop days based on specified criteria and view embedded revision information.
View	Allows you to select a previously specified view using a drop menu.
Save Current View	Saves the current layout of fields into a view.
Properties	Allows you to define a bill of material filter based on component type related criteria, define available quantity and set cost definitions.
Refresh	Clears the active field.
Apply Exclusions	Allows you to filter records based on specified criteria.
Last Message	Displays the previous message that was in the Status Bar, which is located at the bottom of the form.
Help	Displays the help contents.

Revision History Method: Individual ECN

The Individual ECN revision history method involves defining each ECN number as an item on the Item Master. The Individual ECN method results in a greater number of items on the Item Master (one for every ECN number) but minimize the number of text messages (since it is optional).

Revision history using the individual ECN method looks similar to the following:



Method Example

Example ECN items look similar to the following:

Item	Description
ECN 98	Engineering Release
ECN 99	Production Release
ECN 100	Quality Assurance

The following bill of material shows that component U218 changes to U392 on 08/30/1998. Also, the manufacturing revision (ECN 98 and ECN 99) of the parent assembly changes from "A" to "B" on that same date.

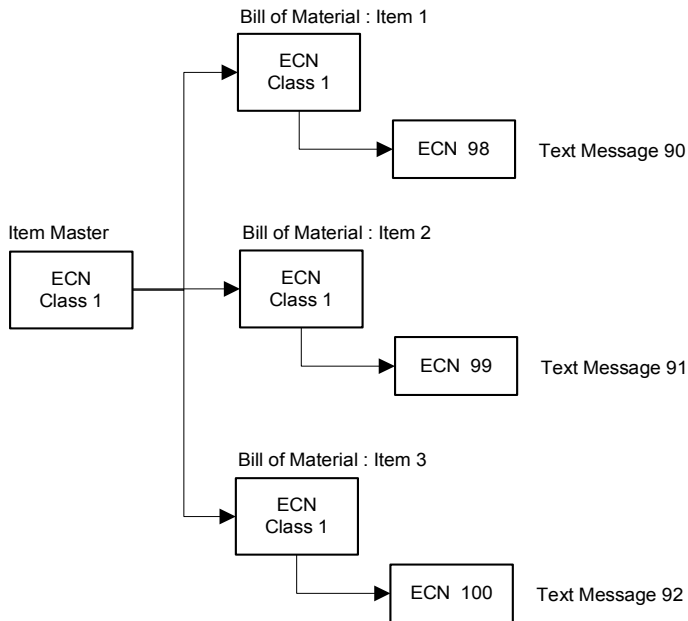
Pt Use	Component	CT	Eff In / Eff Out	In Rev / Out Rev
00001	U218	N	022898 083098	A B
00001	U392	N	083098 123179	B
Rev A	ECN 98	R	022898 083098	A B
Rev B	ECN 99	R	083098 061099	B

The actual ECN change classification and change description can be optionally added as a text message on the bill of material. The **Text No** may be reused on all assemblies impacted by that same ECN.

Revision History Method: ECN Change Class

The ECN Change Class revision history method involves defining an ECN change class as an item on the Item Master. The ECN Change Class method results in a greater number of text messages (one for every ECN number) but minimize the number of Item Master entries (one for every ECN class).

Revision history using the ECN change class method looks similar to the following:



Method Example

Example ECN change classifications look similar to the following:

Item	Description
ECN Class 1	Engineering Release
ECN Class 2	Product Update
ECN Class 3	Quality Assurance
ECN Class 4	Safety Requirement
ECN Class 5	Government Regulation

The following bill of material shows that component U218 changes to U392 on 08/30/1998. Also, the manufacturing revision (ECN Class 1 and ECN Class 5) of the assembly changes from "A" to "B" on that same date.

Pt Use	Component	CT	Eff In / Eff Out	In Rev / Out Rev
00001	U218	N	022898 083098	A B
00001	U392	N	083098 123179	B
Rev A	ECN Class 1	R	022898 083098	A B
Rev B	ECN Class 5	R	083098 061099	B

The actual ECN number and change description are added as a text message on the bill of material. The **Text No** is reused on all assemblies impacted by that same ECN.

Managing Lead Times

The Lead Time Analysis feature is used to reduce lead times by simulating the affect of "what-if" changes to item lead times and component lead time offsets in order to examine the effects of the simulated changes on the end-item's total lead time. Using the Lead Time Analysis feature, you can answer the following business questions:

- Which components do we need to focus on to reduce total product lead time?
- Are the Lead Time Offset values set to correctly reflect the point in time that components are needed to fulfill an order?

The Lead Time Analysis graph displays the aggregate lead time of an assembly. Changing the lead time of a component will change the simulated lead time for all occurrences of that component in the multi-level bill of material.

Critical Path

A methodical approach to lead time analysis and reduction is to work the critical path and simulate changes to the lead times. Starting with the longest lead time components on the critical path, review and update the lead times. After each update, recalculate the critical path and continue the process, starting again with the longest lead time. A component's lead time should stand "the test of reasonableness."

Components on the critical path are flagged with a "*" symbol and highlighted for fast identification.

Managing Inventory Costs

After the lead time analysis is complete and component lead times have been updated, use the Material Exposure button to graphically review the product cost buildup over its lead time. Using the Material Exposure feature, you can answer the following business questions:

- How do we respond more quickly to requests for unplanned "impact builds" from customers?
- What is the worst case investment we have to make to reduce the effective Lead Time of a product 25% or 50%?
- Are there components within a product whose low cost does not justify its negative impact on Lead Time?

You use the Properties dialog to set the cost definitions that are used during the Material Exposure analysis. You may review cost build up information based on different views, such as material cost build ups, overhead absorption profiles or labor application phasing.

Cost Calculations

Cost calculations in Material Exposure analysis use Standard Costs (Cost Type = 0) and include component **Scrap** and **Yield**. Costs calculated include the Cost Per Assembly, Cumulative Cost and % of Cost.

For example, you have a product whose lead time is 65 days, constrained by material availability. Your competition is able to regularly react to impact orders in 50 days. Determine the maximum out-of-pocket investment required to respond to a 20 percent increase to planned product shipments within 40 days of the demand. First, you need to determine what the product's per-unit cost is at 40 days of the current 65-day lead time. To view out-of-pocket costs, set the cost definitions to include only Material costs (exclude Labor and Overhead cost components). The Material Exposure graph and grid present calculated costs similar to the following:

LT Days	LT OS	Component	Cumulative Cost	% of Cost
40	0	U218	72.27	13.5

So, for a maximum investment of \$72.27 (which is 13.5% of the material content of the product) you can reduce your product lead time by 31%, which is $(65-45)/65$. This is the 'worst case' investment required. The \$72.27 per unit cost may be reduced with appropriate focused supplier negotiations. The total investment would be the incremental build quantity multiplied by the post-negotiation costs per unit.

Flattening Bills of Material

Engineering teams usually have change control management in mind, and so the bills of material that they release typically include more levels than the manufacturing team would like to build. For the manufacturing team, more levels mean more cost. The use of phantom assemblies allows manufacturing to eliminate unnecessary assemblies and "flatten the bills" for manufacturing.

You can review the effectiveness of flattening your bills of material by choosing to "explode phantoms," a feature on Bill of Material, Multi Level Bill and Summarized Bill of Material. When phantoms are exploded on the Bill of Material (single level) the bill reflects what would be seen on a manufacturing order picklist.

For example, when a single level bill with phantom subassemblies is exploded, it presents components from subordinate subassemblies. You can create a User Defined View for the Bill of Material (single level), adding the **Level** and **Parent** Fields, which will show the effective levels and phantom Assemblies. A bill of material using this concept would look similar to the following:

Single Level Bill of Material for parent Product-1:

Level	Parent	Component	CT
1	PRODUCT-1	ASSY-1	N
1	PRODUCT-1	ASSY-1	P

Multi-level Bill of Material for parent Product-1:

Level	Parent	Component	CT
1	PRODUCT-1	ASSY-1	N
1	PRODUCT-1	ASSY-1	P
2	ASSY-1	COMP-1	N
2	ASSY-1	COMP-2	N
2	ASSY-1	SUBASSY-1	P
3	ASSY-1	COMP-3	N
3	ASSY-1	COMP-4	N
2	ASSY-1	SUBASSY-2	N
3	ASSY-1	COMP-5	N
3	ASSY-1	COMP-6	N

Single Level Bill of Material for parent Product-1 – Explode Phantoms:

Level	Parent	Component	CT
1	PRODUCT-1	ASSY-1	N
1	PRODUCT-1	ASSY-1	P
2	ASSY-1	COMP-1	N
2	ASSY-1	COMP-2	N
2	ASSY-1	SUBASSY-1	P
3	ASSY-1	COMP-3	N
3	ASSY-1	COMP-4	N
2	ASSY-1	SUBASSY-2	N

The presentation of Level 2 and 3 components within the single level bill of material indicates that the multi-level bill of material has been flattened to one level.

Comparing Bills of Material

Comparison Bills can be used to compare different assemblies within your bills of material. If you maintain revision history within your bills of material, you can display bill of material changes from one revision level to another revision level. Comparison Bills are then used to compare the same assembly at two different revision levels or between two different parent assemblies at different revision levels. With this information you can easily obtain material lists necessary for finished inventory, field or work-in-process update kits linked to the correct revision.

For example, a parent item can have three revision levels: A, B and C with the following **Component Effectivity Dates** for the revision levels:

Rev	Description	In Eff	Out Eff
A	Engineering Release	022898	083098
B	Design Update	083098	061099
C	Functionality Add	061099	123179

You can view the components that are being changed from one revision to the next revision. For example, components for a parent item that have changed between Rev B and Rev C are listed on the Comparison Bill of Material:

Pt Use	Seq	Component	In Eff / Out Eff	In Rev / Out Rev
00001 00001	ASSY ASSY	PCB26 PCB27	022898 061099 061099	A C C
00076	ASSY	J553	061099	C
REV B	001	Design Update	083098 061099	B C
REV C	001	Functionality Add	061099 123102	C

The combination of Pt Use + Seq + Component is the basis of the Comparison Bill. When comparing different assemblies, differences in component properties having the same Pt Use + Seq are highlighted on screens and reports.

Assessing the Potential Impact of Unplanned Orders

The Summarized Bill of Material feature allows you to simulate the production of a quantity of an item. Components are hypothetically consumed and costs are incurred based on the user-defined criteria specified for the Available Quantity and Cost Definitions.

For example, if a customer wants 150 of parent PWA27 inside the product lead time, and material availability is the constraining factor, you need to answer the following questions.

- Is there sufficient Available Inventory (On Hand + Incoming — Allocated) to satisfy the unplanned demand?
- What inventory in addition to that considered "available" is required to satisfy the potential order?
- How much of that "required inventory" must be expedited?
- What are the projected minimum out-of-pocket costs to be incurred?

Specifying Simulation Criteria

You can redefine the Available Inventory definition and specify the Costs for the analysis based on the importance of the impact order being simulated. Simulation criteria is set using the Available Quantity and Cost Definition tabs on the Properties dialog.

For example, to determine the out-of-pocket costs in fulfilling an impact order with inventory from a specific warehouse, set the cost definitions to include only direct material as follows:

- **Available Quantity.** Use the default setting On-Hand + In-Inspection — Allocated. For stock locations, select "Include Only these Locations" and select the desired locations. To select all the bins within Warehouse V1, select Stock=V1 and enter Bin = *.
- **Cost Definition.** To determine out-of-pocket costs, set the cost definitions to include only Material costs (exclude Labor and Overhead costs).

Cost calculations for Summarized Bill analysis include component **Scrap** and **Yield**.

Specify the product quantity and consume type using the **Prod Qty** and **Consume** fields for the analysis:

- **Prod Qty.** Input the size of the Impact Order.
- **Consume.** Select the types of inventory you want the simulation to consume. Consume types include: Buys only, Makes and Buys (no phantoms), All or None.

Simulation Results

Summarized Bill uses the entered simulation criteria to calculate quantities and costs, which include:

- anticipated out-of-pocket (required) costs that could be used in customer price negotiations
- items consumed from available inventory
- item expedite lists sorted by lead time

The following views are available to display simulation results based on different sort options:

- item
- required quantity

- lead time
- required cost
- consumed cost

Each view has a corresponding report that provides inventory and cost centric formats.

Minimize Obsolete Inventory Costs

The Summarized Bill of Material feature may be used to determine optimum build quantities during a product phase-out. The goal in a product phase-out is to build the correct quantity of the item; minimizing new procurement while maximizing consumption of on-hand inventory.

Use the following technique to maximize consumed inventory and minimize inventory required:

- Perform a series of production analyses varying the **Prod Qty** for the item being phased out.
- Review the **Average Cost Required, Average Cost Consumed** and **Average Cost Total**.
- Determine the inflection point where the maximum inventory is being consumed with the minimum inventory required.
- Calculate the **Difference in Cost**.

Constant Product Quantity Increments

If the incremental increase in successive **Prod Qty** values is constant, the calculation of the **Difference in Costs** reflects the approximate optimum build quantity when it is at its maximum.

For example, the following chart represents information that could be calculated on Summarized Bill for an item.

Prod Qty	Average Cost Required	Average Cost Consumed	Average Cost Total	Difference in Cost
100	0	226	226	—
150	26	200	226	26
200	73	153	226	47
250	101	125	226	28
300	120	106	226	19

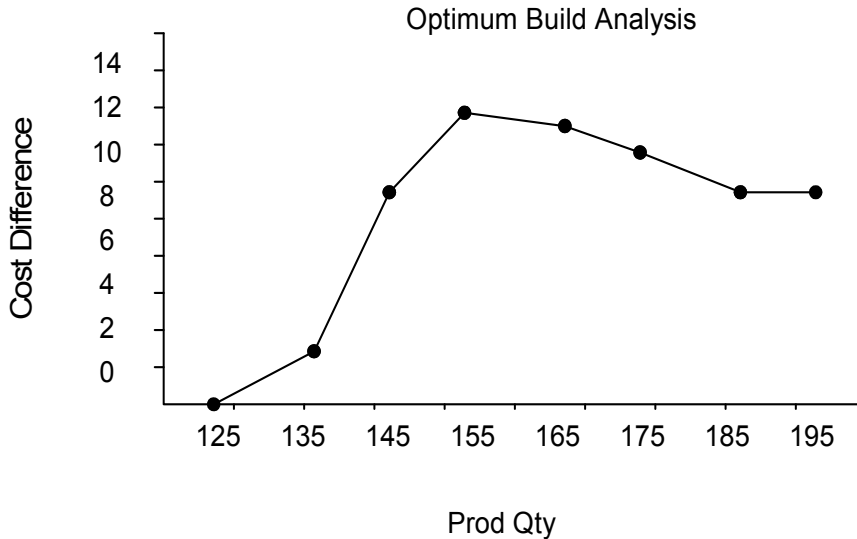
Difference in Cost is calculated by subtracting the previous **Prod Qty's Average Cost** from the current **Prod Qty's Average Cost** for each **Prod Qty**. For example, the **Difference in Cost** for **Prod Qty = 150** is 26 (226-200).

This example shows that the maximum **Difference in Cost** is 47 and therefore you should produce approximately 150-200 units of the item during phase-out.

Random Product Quantity Increments

If the incremental increases in successive **Prod Qty's** are not constant, a graphical depiction of costs can be used to calculate the optimum build quantity. A graph provides a way to visually observe the inflection points.

A closer estimate of the optimum production quantity can be determined by analyzing the **Prod Qty** range of 125-195 using smaller increments. For example, the following chart represents Summarized Bill information using increments of 10:



Details of the product quantity and cost differences include:

Prod Qty	Average Cost Required	Average Cost Consumed	Average Cost Total	Difference in Cost
125	9	217	226	—
135	11	215	226	2
145	20	206	226	9
155	32	194	226	12
165	43	183	226	11
175	53	173	226	10
185	61	165	226	8
195	69	157	226	8

Generating Reports

The screens and tasks in the Manufacturing Analysis (MMAM) Module generate a number of reports.

Sorting Options for Summarized Bill of Material Reports

Several sorting options are available for the Summarized Bill of Material report. Based on the selected standard view and sort option, the following Summarized Bill of Material reports are available:

View	Sort*	Available Reports
Item	Item	All Items with Cost Data All Items with Inventory Required Items with Cost Data Required Items with Inventory
Required Qty	QT, MB, Quantity Required	All Items with Cost Data All Items with Inventory Required Items with Cost Data Required Items with Inventory
Lead Time	MB, Lead Time	All Items with Cost Data All Items with Inventory Required Items with Cost Data Required Items with Inventory
Required Cost	QT, MB, Required Cost	All Items with Cost Data All Items with Inventory
Consumed Cost	QT, MB, Consumed Cost	All Items with Cost Data All Items with Inventory

* = Items, costs and quantities are sorted in descending order. Other sort orders include QT (I,O) and MB (S,M,B).

System Administration

The System Administration manual outlines the tasks involved in maintaining Fourth Shift. The Manufacturing Analysis Module includes special considerations in the area of backups, configuration variables, server processes, and security.

Configuration Variables

The following configuration variable is used in the Manufacturing Analysis Module and can be customized, if desired:

Variable	Description
EmbeddedRevPrefix	Bill of material embedded revision level prefix. Default is "Rev" or value defined in the FS.CFG file.
MMAMDir	Manufacturing Analysis database location

ODBC Server Process

To successfully run the MMAM Module, you need to have the ODBC server process running. The MMAM Module uses the ODBC Server process to access the Fourth Shift database.

Security

Security rules for accessing the Manufacturing Analysis features should be assigned based on the requirements for each user. Use the PASS (Password Maintenance) screen to assign each user identifier a password and access code. Use the FCMT (Function Code Maintenance) screen to associate function codes with access codes.

Screen/Task	Security for
CMND	DOS Command Shell
PROG	Fourth Shift Program Execution
ALT1	Lead Time Analysis from the Lead Time tab in the Multi-Level Bill feature
MEX1	Material Exposure from the Lead Time tab in the Multi-Level Bill feature

Bill of Material

Bills of material are constructed one level at a time by entering a parent item and its first-level components. As you progress through your product structure entering parent-component information, you automatically build the multi-level bill of material for an end-item. While building your bill of material, you can view related item detail, such as packaging, planning and stock status information.

Bill of Material displays parent and component item information in both a graphical hierarchy and in a table (row by column) format. The table format can be customized, for example, to add a second row of column headings, add or remove columns or change the column width.

Features available are based on user job functions:

Access from	Features
ENGM Module	Set up and maintain the single level bills of material, assign reference designators and enter component detail information
MMAM Module	View the single level bills of material

Reports

Bill of Material Reports

To generate the report, choose **Print Preview** from the **File** menu.

Report Title
Bill of Material Lists the bill of material.

Report Description

Lists the bill of material.

Access Method

To generate the report, choose Print Preview from the File menu.

Report Template

For more information on report templates, see "Reporting for SQL Server Systems" in the System Help topics.

Available From

Bill of Material

Fields

Buyr

Buyer code is used to identify the person responsible for handling the purchase of the item. The suggested entry is the buyer's initials. Entry is any alphanumeric combination of up to 3 characters.

Where Used: A/P Receiving Detail; ABCR; APIE; APII; APIR; APPI; APPO; APPV; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Buyer/Planner Code Maintenance; Contract Header Detail; Contract Purchase Orders; Contract Summary; Custom Product Detail; CWIP; Demand Peg Detail; IORD; IPPD; Item Browse Detail; Item Master; Item Master Planning Detail; Item Responsibility Assigned Results; ITHC; Lead Times Assigned Results; Line Item Details + Custom Product; Material Shortages Detail; MBIL; MPSR; MSCF; MSMT; Multi-Level Bill; Multi-Level Where Used; ORST; OVAR; PCST; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCP; POCR; POCT; POMI; POMT; PORI; PORV; Production; Purchase Order Header Detail; Purchase Order Line Item Detail (CPMT); Purchased Component Detail; QUOI; QUOT; SDAB; SSII; Standard Costs Assigned Results; Summarized Bill; VDSC; VPFR; Where Used; WIPR; Workcenter Master

Component

Component is a term that describes the structural relationship between an item and its parent assembly in a bill of material. A **Component** is used in the manufacture of a parent, and it may be a part, raw material or a subassembly. Entry is any alphanumeric combination of up to 30 characters.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; Material Exposure; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; OPSL; OVAR; PCST; PICI; PICK; Picklist Detail; Production; Router/Traveler; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

Component Effectivity Date

Component Effectivity Date is the date used to determine which components on the bill of material to display for the specified parent. If the **Component Effectivity Date** is blank, all components on the bill of material, regardless of their in and out effectivity dates, are displayed for the specified parent. The **Component Effectivity Date** display format is workstation specific, which is defined as the Short Date setting in the Regional Settings within the Control Panel. Default is the current date.

Where Used: Bill of Material; Comparison Bill; Comparison of Summarized Bills; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; Summarized Bill; Where Used

Component Effectivity Date

In Effectivity is the date that the use of a component becomes effective in a bill of material. The default value is today's date or the date you entered when you signed onto the system.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

CT

Component Type distinguishes various types of relationships between a component and its parent assembly in a bill of material. The **Component Type** indicates how a component is used in the manufacture of a parent. The **Component Types** are:

N = Normal.

Component is consumed in the manufacture of its parent.

P = Phantom.

Component is used for structure purposes only (e.g., a transient subassembly consumed in the manufacture of its parent).

R = Resource or Workcenter.

Component is used in the planning process of the manufacture of its parent (e.g., labor hours).

X = Reference.

Component is for information purposes. Reference items are included on the picklist. Reference items are not included in the parent's rolled costs and are typically not required for issue in the manufacturing of the parent.

D = Document.

Component is used for information purposes only. It is not included on the picklist.

B = By-product.

The manufacture of the parent results in the creation of this component.

C = Co-product.

Component is derived from the manufacture of the parent. The manufacture of the co-product, in turn, produces the parent.

T = Tool.

Component is used in the manufacture of the parent.

U = Tool return.

Component is used in, and returned after, the manufacture of the parent.

M = Module.

Component represents a group of components for which requirements are generated for custom product orders. A module component is used for structure purposes only, such as a transient subassembly consumed in the manufacture of its parent. Module components explode requirements for the child components; the module component itself is never required.

V = Purchased material.

Component not defined on the Item Master is required for a custom product customer order.

W = Outside operation or service.

Component, such as heat treating or plating, is required for a custom product customer order.

Y = Phantom parent.

Requirements have been exploded to the next level to meet requirements.

Z = Phantom child.

Component is used in the manufacture of the phantom's parent.

An item's use as a component is limited by its **Item Type**. The Component Types available are based on the information displayed on the screen and not all types are available on all screens.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; OPSL; Order Cost Variance Status; OVAR; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; WIPL; WIPR

Desc

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

Drwg

Drawing number identifies an engineering document that provides design specifications for an item. Entry is any alphanumeric combination of up to 30 characters.

Where Used: AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; Engineering; Item Browse Detail; Item Master; Item Master Detail; MBIL; Multi-Level Bill; Multi-Level Where Used; Production; QUOI; QUOT; Router/Traveler; Shortages by Order; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used

Effective Rev

Effective Revision Level identifies the revision level of a bill of material. Revision level identifiers are embedded in bills of material using items with a predefined **Pt Use** prefix, such as "Rev", and are displayed based on the selected Effectivity Date of the parent item.

Effective Revision Level = Multiple if more than one revision of the bill of material is displayed or if the effective in and out dates overlap.

Where Used: Bill of Material; Comparison Bill; Comparison of Summarized Bills; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; Summarized Bill; Where Used

Fixed LT

Fixed Lead Time is the number of working days required for setup and queue time used in planning an order. It is added to run lead time and inspection lead time to estimate planned lead time for an order. Entry is up to 3 numbers.

Where Used: AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; IPPD; Item Availability; Item Browse Detail; Item Master; Item Master Planning Detail; MBIL; MSMT; Multi-Level Bill; Multi-Level Where Used; Production; QUOI; QUOT; Single-Level Configuration Bill of Material Report; Where Used; Workcenter Master

In Effectivity

In Effectivity is the date that the use of a component becomes effective in a bill of material. The default value is today's date or the date you entered when you signed onto the system.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

LT

Lot Trace indicates whether lot number control is used throughout the manufacturing process to track the use of the item.

Y = Yes.

The item is lot-controlled.

N = No.

The item is not lot-controlled.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master

Planning Detail; ITMB; ITMI; Lot Trace; MPSR; MPSS; Multi-Level Bill; Multi-Level Where Used; Production; SSII; Summarized Bill; Where Used; WUSE

MB

Make-Buy Code indicates if a part is normally purchased or manufactured. **Make-Buy Code** also directs appropriate action messages to the **Buyr** (B or S) or **Plnr** (M). **Make-Buy Codes** are:

M = Make.

Manufactured in-house.

B = Buy.

Purchased; no parts supplied to vendor.

S = Supplied.

Purchased; parts supplied to vendor.

Where Used: ABCR; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; COMP; Costed Bill Detail; CSLB; Demand Peg Detail; Engineering; FCST; IHIR; IORD; IPPD; Item Availability; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMI; Lead Time Analysis; Lead Times Assigned Results; Lot Size Multiple Detail; Lot Trace; LSDA; LVAL; Material Exposure; Material Shortages Detail; MBIL; MPSR; MPSS; MSMT; Multi-Level Bill; PBCI; PBCT; Production; QUOI; QUOT; SDAB; SDAL; Shortages by Order; Single-Level Configuration Bill of Material Report; SSII; Standard Costs Assigned Results; Summarized Bill; Supply Peg Detail

Out Effectivity

Out Effectivity is the first date that a component is not effective in a bill of material. The default value is 12/31/2079.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Where Used; WUSE

Parent

Parent is a term that describes the structural relationship between an item and its components in a bill of material. A **Parent** item is the higher level item in the parent-component relationship. A parent cannot be used in itself. Entry is any alphanumeric combination of up to 30 characters.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; CMLB; Comparison Bill; Comparison of Summarized Bills; Cost Estimate by Lot Size; CSLB; Dispatch List; Engineering; Lead Time; Lead Time Analysis; Location Index; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Summarized Bill; Where Used; WUSE

Pln Pol

Planning Policy is used to determine the type of demand an item generates for its components based on planned orders. The codes are:

N = Normal.

Planned and released orders for this item produce "normal" dependent demand for its components.

P = Production Plan.

Planned orders for this item produce a "production forecast" for its components. Orders cannot be released for this item.

F = Final Assembly.

Planned and released orders for this item create "final assembly" demand for its components. This policy is reserved for future use and is treated like a **Planning Policy = N** by the system.

D = Distribution.

Planned and released orders for this item produce "distribution" demand for its components. This policy is reserved for future use and is treated like a **Planning Policy = N** by the system.

M = Master Scheduled.

Planned and released orders for this item produce "normal" dependent demand for its components. Planned orders must be manually scheduled within the item's **Plng Fnc** (planning fence).

It is recommended that you only use the "N" code until the master planning capability is installed in your system.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; IORD; IPPD; Item Browse Detail; Item Master Planning Detail; MBIL; MSMT; Multi-Level Bill; Multi-Level Where Used; Production; Summarized Bill; Where Used

Plnr

Planner code is used to identify the person responsible for planning the production or usage of an item. The suggested entry is the planner's initials. Entry is any alphanumeric combination of up to 3 characters.

Where Used: ABCR; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; Buyer/Planner Code Maintenance; Custom Product Detail; CWIP; Demand Peg Detail; IORD; IPPD; Item Browse Detail; Item Master; Item Master Planning Detail; Item Responsibility Assigned Results; ITHC; Lead Times Assigned Results; Line Item Details + Custom Product; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Shortages Detail; MBIL; MCST; MOAN; MOMI; MOMT; MORI; MORV; MPSR; MSCF; MSMT; Multi-Level Bill; Multi-Level Where Used; ORST; OVAR; PICI; PICK; Picklist Detail; Production; Purchase Order Line Item Detail; QUOI; QUOT; Router/Traveler; SDAB; Shortages by Order; Single-Level Configuration Bill of Material Report; SSII; Standard Costs Assigned Results; Summarized Bill; Where Used; WIPR; Workcenter Master

Pt Use

Point of Use is a key field that, along with the **Seqn** field, defines the sort sequence of components in a bill of material. The **Point of Use** field accepts any information you choose to enter, but the intended use is to identify the "work center" where the component should be delivered when assembling the parent, the "find number" of the component referenced on the drawing for the parent, or the "component reference designator" of the component on a printed circuit board. If the **Point of Use** field is not applicable in your company, you may enter 0 (zero). Entry is any alphanumeric combination of up to 5 characters.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; Capacity Planning; Comparison Bill; Custom Product Component Detail; Demand Peg Detail; Dispatch List; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; LRRP; Material Shortages Detail; MBIL; Multi-Level Bill; Multi-Level Where Used; MUSE; Order Cost Variance Status; OVAR; PICI; PICK; Picklist Detail; Pricing Maintenance + Test Order; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Router/Traveler; Schedule Board; Single-Level Configuration Bill of Material Report; TRUD; Where Used; WUSE

Pt Use Defines Embedded Revision

Pt Use Defines Embedded Revision specifies the three key characters in the **Pt Use** field that uniquely identify revision history components in a bill of material. The recommended value is REV. If REV has previously been used to define a workcenter, another identification prefix must be used.

Where Used: Bill of Material; Summarized Bill

QT

Quantity Type code defines the nature of the parent- component relationship when placing an order for the parent. It affects how the **Quantity** field is used in calculating component requirements. **Quantity Types** are:

I = Per Item.

Quantity per item is the number of components needed to manufacture one parent item. For a given order, the gross number of components required equals **Quantity** times order size.

O = Per Order.

Quantity per order is the number of components required per order to manufacture one or more parent items. For a given order, the gross number of components required equals **Quantity**.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used; MUSE; OVAR; PCST; Picklist Detail; Production; Purchased Component Detail; Summarized Bill; WUSE

Quantity

Quantity Required specifies how many or how much of a particular component is required to manufacture a parent. Entry is up to 10 numbers. Decimal places are allowed.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Engineering; Job Estimates and Performance Report; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WIPL; WIPR; WUSE

Ref Des Count

Reference Designator Count is the total number of unique reference designator identifiers entered as **Reference Designators** associated with a component. For example, the **Reference Designator Count** = 3 for reference designators entered as a range of D1-D3 for a specified component.

Where Used: Bill of Material; Comparison Bill; Multi-Level Bill; Where Used

Reference Designators

Reference Designators are unique identifiers which allow engineers to assign control information such as device callouts to a component within a Bill of Material. Ranges can be used to organize multiple sequential reference designator identifiers. Entry is up to 10 characters.

Where Used: Bill of Material; Comparison Bill; Engineering; Exceptions; Multi-Level Bill; Where Used

Run LT

Run Lead Time is the average number of shop days required for a manufacturing run or vendor lead time and is used in planning an order. **Run Lead Time** is added to fixed lead time and inspection lead time to estimate planned lead time which serves to time order release. Decimal places for fractional days allowed. MRP Planning uses fractional days as reference and plans using the next whole day increment. For example, if you specify **Run LT** = 2.1, MRP Planning assumes **Run LT** = 3 for calculation purposes. Entry is up to 8 numbers.

Note: Lead times established for an item are considered to be 0 when the item is used as a phantom (**CT** = P) in a bill of material.

Where Used: AVII; AVIT; BILL; BILL; Bill of Material; IPPD; Item Availability; Item Browse Detail; Item Master; Item Master Planning Detail; MBIL; MSMT; Multi-Level Bill; Multi-Level Where Used; Production; QUOI; QUOT; Single-Level Configuration Bill of Material Report; Where Used; Workcenter Master

Rv

Revision Level identifies a level of documentation which specifies the item's design. It should be incremented for each change in the item's design specifications. Entry is any alphanumeric combination of up to 2 characters.

Where Used: AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; Costed Bill Detail; Demand Peg Detail; Engineering; FCST; ICCR; IORD; IPPD; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; ITMB; ITMI; LMSI; LMST; Lot Detail; Lot Trace; MBIL; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Where Used; PBCI; PBCI; Production; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shortages by Order; Single-Level Configuration Bill of Material Report; Summarized Bill; Supply Peg Detail; Where Used

Seqn

Sequence Number is a key field that, along with the **Pt Use** field, defines the sort sequence of components in a bill of material. The field accepts any information you choose to enter, but the intended purpose is to identify the operation sequence number on the parent's routing that calls out the component. If the **Sequence Number** is not applicable in your company, you may enter 0 (zero). Entry is up to 3 numbers.

Where Used: Backflush Issue Reconciliation Report; BILI; BILL; Bill of Material; Bill of Material Detail; Capacity Planning; CINV; COCP; Comparison Bill; CPMT; Custom Product Component Detail; CWIP; Demand Peg Detail; Dispatch List; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; LRRP; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used; MUSE; OPSL; Order Cost Variance Status; OVAR; PCST; PICI; PICK; Picklist Detail; PORI; PORV; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchased Component Detail; Router/Traveler; Schedule Board; Single-Level Configuration Bill of Material Report; TRUD; Where Used; WIPL; WIPR; WUSE

Total LT

Total Lead Time is the sum of **Run LT**, **Fixed LT** and **Insp LT** as expressed in shop days.

Where Used: Bill of Material; Lead Time; Lead Time Analysis; Multi-Level Bill; Multi-Level Where Used; Summarized Bill; Where Used

UM

Unit of Measure identifies the standard unit for an item used in the manufacturing process. Entry is up to 4 alphanumeric characters.

Where Used: A/P PO/Inv Variance by Invoice; A/P Receiving Detail; APEX; APPI; APPV; APUV; Available for Shipping Allocation Batch; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; CCAT; CINV; CMLB; COBK; COCP; COMI; COMT; Contract Header Detail; Contract Item Detail; Contract Item Detail/Pricing; CORV; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Custom Product Detail; Customer Order; Customer Order Line Price Adjustment; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail;

Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; INVR; IORD; IPPD; ITBI; ITCB; ITCI; Item + Quantity; Item Availability + Quantity; Item Browse Detail; Item History; Item Lot Receipt; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMC; ITMI; ITPB; ITPI; IVPR; IVRR; JEST; Job Estimates and Performance Report; Lead Times Assigned Results; LEXP; LHIS; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPIT; MPSR; MPSS; MSMT; Multi-Currency; Multi-Level Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Packaging Detail; Packing List; Partner Item Detail; PBCI; PBCT; PCST; PICI; PICK; Picklist Detail; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POSR; POVD; Pricing Maintenance + Action Detail; Pricing Maintenance + Action List; Pricing Maintenance + Test Order; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Allocation Batch; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VEIT; Vendor/Item Detail; VETI; VPRF; Where Used; WIPR; Workcenter Master; WUSE

Comparison Bill

Comparison Bill is used to compare bills of material based on parent items or by component effectivity date. For example, you can compare Parent 1 to itself, based on different revisions (component effectivity dates) or you can compare Parent 1 and Parent 2 from different bills of material.

Comparison Bill compares parent, point of use, sequence and component item information in a table (row by column) format based on the information entered in the Parent 1, Parent 2 and Component Effectivity Dates fields. Use the Hide All Matching Records and Hide All Unmatching Records options to easily compare the bills of material information.

The Comparison Bill functionality is the same regardless of how it is accessed.

Reports

Comparison Bill Reports

To generate the report, choose **Print Preview** from the **File** menu.

Report Title
Comparison Bill Lists changes to the product structure, including revision history.

Report Description

Lists changes to the product structure, including revision history.

Access Method

To generate the report, choose Print Preview from the File menu.

Report Template

For more information on report templates, see "Reporting for SQL Server Systems" in the System Help topics.

Available From

Comparison Bill

Fields

Component

Component is a term that describes the structural relationship between an item and its parent assembly in a bill of material. A **Component** is used in the manufacture of a parent, and it may be a part, raw material or a subassembly. Entry is any alphanumeric combination of up to 30 characters.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; Material

Exposure; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; OPSL; OVAR; PCST; PICI; PICK; Picklist Detail; Production; Router/Traveler; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

Component Desc

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

Component Effectivity Date

Component Effectivity Date is the date used to determine which components on the bill of material to display for the specified parent. If the **Component Effectivity Date** is blank, all components on the bill of material, regardless of their in and out effectivity dates, are displayed for the specified parent. The **Component Effectivity Date** display format is workstation specific, which is defined as the Short Date setting in the Regional Settings within the Control Panel. Default is the current date.

Where Used: Bill of Material; Comparison Bill; Comparison of Summarized Bills; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; Summarized Bill; Where Used

Component Effectivity Date

In Effectivity is the date that the use of a component becomes effective in a bill of material. The default value is today's date or the date you entered when you signed onto the system.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

CT

Component Type distinguishes various types of relationships between a component and its parent assembly in a bill of material. The **Component Type** indicates how a component is used in the manufacture of a parent. The **Component Types** are:

N = Normal.

Component is consumed in the manufacture of its parent.

P = Phantom.

Component is used for structure purposes only (e.g., a transient subassembly consumed in the manufacture of its parent).

R = Resource or Workcenter.

Component is used in the planning process of the manufacture of its parent (e.g., labor hours).

X = Reference.

Component is for information purposes. Reference items are included on the picklist. Reference items are not included in the parent's rolled costs and are typically not required for issue in the manufacturing of the parent.

D = Document.

Component is used for information purposes only. It is not included on the picklist.

B = By-product.

The manufacture of the parent results in the creation of this component.

C = Co-product.

Component is derived from the manufacture of the parent. The manufacture of the co-product, in turn, produces the parent.

T = Tool.

Component is used in the manufacture of the parent.

U = Tool return.

Component is used in, and returned after, the manufacture of the parent.

M = Module.

Component represents a group of components for which requirements are generated for custom product orders. A module component is used for structure purposes only, such as a transient subassembly consumed in the manufacture of its parent. Module components explode requirements for the child components; the module component itself is never required.

V = Purchased material.

Component not defined on the Item Master is required for a custom product customer order.

W = Outside operation or service.

Component, such as heat treating or plating, is required for a custom product customer order.

Y = Phantom parent.

Requirements have been exploded to the next level to meet requirements.

Z = Phantom child.

Component is used in the manufacture of the phantoms parent.

An item's use as a component is limited by its **Item Type**. The Component Types available are based on the information displayed on the screen and not all types are available on all screens.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; OPSL; Order Cost Variance Status; OVAR; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; WIPL; WIPR

Desc

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail;

Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

Effective Rev

Effective Revision Level identifies the revision level of a bill of material. Revision level identifiers are embedded in bills of material using items with a predefined **Pt Use** prefix, such as "Rev", and are displayed based on the selected Effectivity Date of the parent item.

Effective Revision Level = Multiple if more than one revision of the bill of material is displayed or if the effective in and out dates overlap.

Where Used: Bill of Material; Comparison Bill; Comparison of Summarized Bills; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; Summarized Bill; Where Used

In Effect

In Effectivity is the first In Effectivity date, which should be considered valid to display for this bill of material. Entry is 6 numbers in the system date format. Default is 010180.

Where Used: BILL; BILL; Comparison Bill

In Effectivity

In Effectivity is the date that the use of a component becomes effective in a bill of material. The default value is today's date or the date you entered when you signed onto the system.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

In Rev

In Revision Level indicates the level of documentation for which the parent-component relationship becomes effective. It is for information purposes only and is not used by the system. Entry is any alphanumeric combination of up to 2 characters.

Where Used: Bill of Material Detail; Comparison Bill; Engineering; Multi-Level Bill; Multi-Level Where Used; Production

Out Effect

Out Effectivity is the last Out Effectivity date which should be considered valid to display for this bill of material. Entry is 6 numbers in the system date format. Default is 123179 when U.S. date format is used.

Where Used: BILL; BILL; Comparison Bill

Out Effectivity

Out Effectivity is the first date that a component is not effective in a bill of material. The default value is 12/31/2079.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Where Used; WUSE

Out Rev

Out Revision Level indicates the level of documentation for which the parent-component relationship is no longer in effect. It is for information purposes only and is not used by the system. Entry is any alphanumeric combination of up to 2 characters.

Where Used: Bill of Material Detail; Comparison Bill; Engineering; Multi-Level Bill; Multi-Level Where Used; Production

Parent

Parent is a term that describes the structural relationship between an item and its components in a bill of material. A **Parent** item is the higher level item in the parent-component relationship. A parent cannot be used in itself. Entry is any alphanumeric combination of up to 30 characters.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; Comparison Bill; Comparison of Summarized Bills; Cost Estimate by Lot Size; CSLB; Dispatch List; Engineering; Lead Time; Lead Time Analysis; Location Index; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Summarized Bill; Where Used; WUSE

Parent Item

Parent is a term that describes the structural relationship between an item and its components in a bill of material. A **Parent** item is the higher level item in the parent-component relationship. A parent cannot be used in itself. Entry is any alphanumeric combination of up to 30 characters.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; Comparison Bill; Comparison of Summarized Bills; Cost Estimate by Lot Size; CSLB; Dispatch List; Engineering; Lead Time; Lead Time Analysis; Location Index; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Summarized Bill; Where Used; WUSE

Production Item

Item is the unique identifier for a part, whether it be a piece part, tool, raw material, an assembly or finished product. All items are set up using the ITMB screen. Within a product

structure, an item can be a component as well as a parent. Entry is any alphanumeric combination of up to 30 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; Allowance/Charge Detail (Detail); APPI; APPV; AUDT; Available for Shipping Allocation Batch; AVII; AVIT; Bill of Material Accuracy Results; Browse Setup (item); Capacity Planning; CBIL; CCAN; CCAT; CIMT; CINV; COAN; COBK; COCD; COMI; COMP; Comparison Bill; Comparison of Summarized Bills; COMT; Contract Item Detail; Contract Item Detail/Pricing; Contract Summary; CORV; CSTU; Cumulative Detail; Customer Item + General; Customer Order; Customer Order Line Price Adjustment; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Engineering; FCST; GASN; ICCR; IHIR; IMTR; INVA; Inventory Adjustment Application; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Receipt; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMC; ITMI; ITPB; ITPJ; Lead Times Assigned Results; LEXP; LHSI; Line Item Details + Item; LMSI; LMST; Lot Detail; Lot Inventory Transaction History Report; Lot Selection; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Shortages Detail; MCST; MOAN; MOFR; MOMI; MOMT; MORI; MORV; MPIT; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; Order Completion Status; Order Cost Variance Status; Order Detail; OVAR; Package Content; Packaging Detail; Packing List; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POCI; POCR; POCT; PORI; PORV; POYE; Pricing Maintenance + Action Detail; Pricing Maintenance + Action List; Pricing Maintenance + Items/Customers; Pricing Maintenance + Test Order; Production; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; Schedule Board; SDAB; SDAL; Selection Setup; Serial Number List; Serial Numbers Shipped; SHIP; Shipment Allocation Detail; Shipment Allocation List; Shipments by Line Item; Shipping Allocation Batch; Shortages by Order; SHPL; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIJ; VDSC; VEIT; Vendor/Item Detail; VETI; VITI; VPFR; WIPL; WIPR; WIPS; WUSE

Pt Use

Point of Use is a key field that, along with the **Seqn** field, defines the sort sequence of components in a bill of material. The **Point of Use** field accepts any information you choose to enter, but the intended use is to identify the "work center" where the component should be delivered when assembling the parent, the "find number" of the component referenced on the drawing for the parent, or the "component reference designator" of the component on a printed circuit board. If the **Point of Use** field is not applicable in your company, you may enter 0 (zero). Entry is any alphanumeric combination of up to 5 characters.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; Capacity Planning; Comparison Bill; Custom Product Component Detail; Demand Peg Detail; Dispatch List; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; LRRP; Material Shortages Detail; MBIL; Multi-Level Bill; Multi-Level Where Used; MUSE; Order Cost Variance Status; OVAR; PICI; PICK; Picklist Detail; Pricing Maintenance + Test Order; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Router/Traveler; Schedule Board; Single-Level Configuration Bill of Material Report; TRUD; Where Used; WUSE

QT

Quantity Type code defines the nature of the parent- component relationship when placing an order for the parent. It affects how the **Quantity** field is used in calculating component requirements. **Quantity Types** are:

I = Per Item.

Quantity per item is the number of components needed to manufacture one parent item. For a given order, the gross number of components required equals **Quantity** times order size.

O = Per Order.

Quantity per order is the number of components required per order to manufacture one or more parent items. For a given order, the gross number of components required equals **Quantity**.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used; MUSE; OVAR; PCST; Picklist Detail; Production; Purchased Component Detail; Summarized Bill; WUSE

Quantity

Quantity Required specifies how many or how much of a particular component is required to manufacture a parent. Entry is up to 10 numbers. Decimal places are allowed.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Engineering; Job Estimates and Performance Report; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WIPL; WIPR; WUSE

Ref Des Count

Reference Designator Count is the total number of unique reference designator identifiers entered as **Reference Designators** associated with a component. For example, the **Reference Designator Count** = 3 for reference designators entered as a range of D1-D3 for a specified component.

Where Used: Bill of Material; Comparison Bill; Multi-Level Bill; Where Used

Reference Designators

Reference Designators are unique identifiers which allow engineers to assign control information such as device callouts to a component within a Bill of Material. Ranges can be used to organize multiple sequential reference designator identifiers. Entry is up to 10 characters.

Where Used: Bill of Material; Comparison Bill; Engineering; Exceptions; Multi-Level Bill; Where Used

Seqn

Sequence Number is a key field that, along with the **Pt Use** field, defines the sort sequence of components in a bill of material. The field accepts any information you choose to enter, but the intended purpose is to identify the operation sequence number on the parent's routing that calls out the component. If the **Sequence Number** is not applicable in your company, you may enter 0 (zero). Entry is up to 3 numbers.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; Capacity Planning; CINV; COCP; Comparison Bill; CPMT; Custom Product Component Detail; CWIP; Demand Peg Detail; Dispatch List; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; LRRP; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used; MUSE; OPSL; Order Cost Variance Status; OVAR; PCST; PICI; PICK; Picklist Detail; PORI; PORV; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchased Component Detail; Router/Traveler; Schedule Board; Single-Level Configuration Bill of Material Report; TRUD; Where Used; WIPL; WIPR; WUSE

Summarized Bill

Summarized Bill allows you to perform "what if" cost and inventory impact analysis by comparing multi-level bills of material where each of the components is listed once with an aggregated quantity.

Summarized Bill is used to:

- plan for optimal material usage during product phase-out
- assess cost/inventory implications of unplanned impact orders
- generate prioritized material expedite lists

Summarized Bill displays component item information in a table (row by column) format based on the information entered in the **Parent** and **Component Effectivity Date** fields.

Features available are based on user job functions:

Access From	Features
ENGM Module	Present a multi-level bill where each of the components is listed once with an aggregated quantity. Quantities are aggregated based on make buy (MB), quantity type (QT) and component type (CT). For example, you may need a purchase requisition for materials still in the engineering phase that means the materials are not in the Fourth Shift inventory. You can use the summarized bill of material with aggregated quantities to show your material requirements in order to get a purchase requisition.
MMAM Module	Present a multi-level bill by specifying a product quantity and an item type to consume. Choose to view data from several pre-defined views, such as Summarized Bill by Lead Time or Required Quantity.

When accessed from the MMAM Module, Summarized Bill analysis calculates summarized, consumed and required quantity and cost information based on a specified **Prod Qty** (production quantity) value. Information calculated includes:

Information calculated	Description
Summarized	total quantity/cost needed to produce the Prod Qty specified, taking scrap and yield into account.
Consumed	quantity/cost taken from Available inventory to fulfill the production of the Prod Qty specified
Required	quantity/cost, in addition to the consumed amount, needed to fulfill the production of the Prod Qty specified

The Summarized Bill of Material reports available can be sorted in a variety of ways. See [Generating Reports](#) in the [Setting Up the Manufacturing Analysis Module](#) section of the *Manufacturing Analysis* manual for more information.

Reports

Summarized Bill Reports

To generate the report, choose **Print Preview** from the **File** menu.

Report Title
Summarized Bill Lists inventory and cost data for items.

Report Description

Lists inventory and cost data for items.

Access Method

To generate the report, choose Print Preview from the File menu.

Report Template

For more information on report templates, see "Reporting for SQL Server Systems" in the System Help topics.

Available From

Summarized Bill

Fields

Allocations

Allocated is the number of units committed to released customer orders.

Where Used: Inventory Status; Item + Quantity; Item Availability + Quantity; Summarized Bill

Available

Available is the calculated amount of item inventory that may be applied to satisfy the **Summarized Quantity** of a component necessary to build the **Prod Qty** of a parent assembly. Available inventory types include: On-Hand, On-Hold, In-Inspection, In Shipping.

Where Used: Summarized Bill

Available Qty

Available Quantity is the user-defined formula used to calculate the quantity available for the purpose of fulfilling the simulated **Prod Qty**. **Available Quantity** is increased when the following are selected:

- On-hand (O)**
- In-Inspection (adjusted for yield) (I)**
- On-Hold (H)**
- In WIP (W)**
- In shipping (S)**
- On-Order (R)**

Available Quantity is decreased when the following is selected:

Allocations from other orders (A)

The Available Quantity definition is displayed using the abbreviations in parenthesis. The default calculation is:

$$[\text{On-Hand} + (\text{In-Inspection} * \text{Yield})] - (\text{Allocations from other orders})$$

Where Used: Material Exposure; Summarized Bill

Average Cost Consumed

Average Cost Consumed is the average calculated value of the **Consumed Quantity** in order to fulfill the simulated **Prod Qty**. The calculation is:

$$\text{Extended Cost Consumed} / \text{Prod Qty}$$

Where Used: Summarized Bill

Average Cost Required

Average Cost Required is the average calculated value of components needed in addition to the **Consumed Quantity** in order to fulfill the simulated **Prod Qty**. The calculation is:

$$\text{Extended Cost Required} / \text{Prod Qty}$$

Where Used: Summarized Bill

Average Cost Total

Average Cost Total is the average total calculated value of components needed to fulfill the simulated **Prod Qty**. The calculation is:

$$\text{Average Cost Required} + \text{Average Cost Consumed}$$

Where Used: Summarized Bill

Buyr

Buyer code is used to identify the person responsible for handling the purchase of the item. The suggested entry is the buyer's initials. Entry is any alphanumeric combination of up to 3 characters.

Where Used: A/P Receiving Detail; ABCR; APIE; APII; APIR; APPI; APPO; APPV; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Buyer/Planner Code Maintenance; Contract Header Detail; Contract Purchase Orders; Contract Summary; Custom Product Detail; CWIP; Demand Peg Detail; IORD; IPPD; Item Browse Detail; Item Master; Item Master Planning Detail; Item Responsibility Assigned Results; ITHC; Lead Times Assigned Results; Line Item Details + Custom Product; Material Shortages Detail; MBIL; MPSR; MSCF; MSMT;

Multi-Level Bill; Multi-Level Where Used; ORST; OVAR; PCST; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCP; POCR; POCT; POMI; POMT; PORI; PORV; Production; Purchase Order Header Detail; Purchase Order Line Item Detail (CPMT); Purchased Component Detail; QUOI; QUOT; SDAB; SSII; Standard Costs Assigned Results; Summarized Bill; VDSC; VPRF; Where Used; WIPR; Workcenter Master

Component

Component is a term that describes the structural relationship between an item and its parent assembly in a bill of material. A **Component** is used in the manufacture of a parent, and it may be a part, raw material or a subassembly. Entry is any alphanumeric combination of up to 30 characters.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; Material Exposure; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; OPSL; OVAR; PCST; PICI; PICK; Picklist Detail; Production; Router/Traveler; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

Component Desc

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail;

Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

Component Effectivity Date

Component Effectivity Date is the date used to determine which components on the bill of material to display for the specified parent. If the **Component Effectivity Date** is blank, all components on the bill of material, regardless of their in and out effectivity dates, are displayed for the specified parent. The **Component Effectivity Date** display format is workstation specific, which is defined as the Short Date setting in the Regional Settings within the Control Panel. Default is the current date.

Where Used: Bill of Material; Comparison Bill; Comparison of Summarized Bills; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; Summarized Bill; Where Used

Component Effectivity Date

In Effectivity is the date that the use of a component becomes effective in a bill of material. The default value is today's date or the date you entered when you signed onto the system.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

Consume Avail

Consume Avail defines what types of items are obtained from the **Available Quantity** to fulfill the simulated **Prod Qty**.

- 0 = Buy items only**
- 1 = Make/Buy items (no phantoms)**
- 2 = All items**
- 3 = No items**

Where Used: Summarized Bill

Consumed Item Cost

Consumed Item Cost is the per unit total rolled cost of an item as displayed on the ITMC (Item/Work Center Cost Data) screen at the time it is displayed. The consumed item cost answers the "what if" question of how much did it cost to produce an item currently available to be consumed.

Where Used: Summarized Bill

Consumed Quantity

Consumed Quantity is the number of components taken from **Available Quantity** to fulfill the simulated **Prod Qty**.

Where Used: Summarized Bill

CT

Component Type distinguishes various types of relationships between a component and its parent assembly in a bill of material. The **Component Type** indicates how a component is used in the manufacture of a parent. The **Component Types** are:

N = Normal.

Component is consumed in the manufacture of its parent.

P = Phantom.

Component is used for structure purposes only (e.g., a transient subassembly consumed in the manufacture of its parent).

R = Resource or Workcenter.

Component is used in the planning process of the manufacture of its parent (e.g., labor hours).

X = Reference.

Component is for information purposes. Reference items are included on the picklist. Reference items are not included in the parent's rolled costs and are typically not required for issue in the manufacturing of the parent.

D = Document.

Component is used for information purposes only. It is not included on the picklist.

B = By-product.

The manufacture of the parent results in the creation of this component.

C = Co-product.

Component is derived from the manufacture of the parent. The manufacture of the co-product, in turn, produces the parent.

T = Tool.

Component is used in the manufacture of the parent.

U = Tool return.

Component is used in, and returned after, the manufacture of the parent.

M = Module.

Component represents a group of components for which requirements are generated for custom product orders. A module component is used for structure purposes only, such as a transient subassembly consumed in the manufacture of its parent. Module components explode requirements for the child components; the module component itself is never required.

V = Purchased material.

Component not defined on the Item Master is required for a custom product customer order.

W = Outside operation or service.

Component, such as heat treating or plating, is required for a custom product customer order.

Y = Phantom parent.

Requirements have been exploded to the next level to meet requirements.

Z = Phantom child.

Component is used in the manufacture of the phantoms parent.

An item's use as a component is limited by its **Item Type**. The Component Types available are based on the information displayed on the screen and not all types are available on all screens.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; OPSL; Order Cost Variance Status; OVAR; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; WIPL; WIPR

Desc

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL;

Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

Drwg

Drawing number identifies an engineering document that provides design specifications for an item. Entry is any alphanumeric combination of up to 30 characters.

Where Used: AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; Engineering; Item Browse Detail; Item Master; Item Master Detail; MBIL; Multi-Level Bill; Multi-Level Where Used; Production; QUOI; QUOT; Router/Traveler; Shortages by Order; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used

Effective Rev

Effective Revision Level identifies the revision level of a bill of material. Revision level identifiers are embedded in bills of material using items with a predefined **Pt Use** prefix, such as "Rev", and are displayed based on the selected Effectivity Date of the parent item.

Effective Revision Level = Multiple if more than one revision of the bill of material is displayed or if the effective in and out dates overlap.

Where Used: Bill of Material; Comparison Bill; Comparison of Summarized Bills; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; Summarized Bill; Where Used

Effectivity Date

Effectivity Date is the effectivity date specified the last time the CROL task was run.

Where Used: CMLB; CSLB; Summarized Bill

Extended Cost Consumed

Extended Cost Consumed is the calculated value of all components taken from **Available Quantity** in order to fulfill the simulated **Prod Qty**. The calculation is:

Consumed Quantity * Cost Definition of Standard Cost

Where Used: Summarized Bill

Extended Cost Required

Extended Cost Required is the calculated value of all components needed in addition to those taken from **Available Quantity** to fulfill the simulated **Prod Qty**. The calculation is:

Required Quantity * Cost Definition of At This Level Cost

Where Used: Summarized Bill

Extended Cost Total

Extended Cost Total is the total calculated value of the items needed to fulfill the simulated **Prod Qty**. The calculation is:

Extended Cost Consumed + Extended Cost Required

Where Used: Summarized Bill

Inventory

Inventory identifies the quantity of inventory stored in a stock and bin location. Inventory types includes allocated, in-inspection, in shipping, internal WIP, external WIP, on hand, on hold and on order.

Where Used: Summarized Bill

Item

Item is the unique identifier for a part, whether it be a piece part, tool, raw material, an assembly or finished product. All items are set up using the ITMB screen. Within a product structure, an item can be a component as well as a parent. Entry is any alphanumeric combination of up to 30 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; Allowance/Charge Detail (Detail); APPI; APPV; AUDT; Available for Shipping Allocation Batch; AVII; AVIT; Bill of Material Accuracy Results; Browse Setup (item); Capacity Planning; CBIL; CCAN; CCAT; CIMT; CINV; COAN; COBK; COCD; COMI; COMP; Comparison Bill; Comparison of Summarized Bills; COMT; Contract Item Detail; Contract Item Detail/Pricing; Contract Summary; CORV; CSTU; Cumulative Detail; Customer Item + General; Customer Order; Customer Order Line Price Adjustment; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Engineering; FCST; GASN; ICCR; IHIR; IMTR; INVA; Inventory Adjustment Application; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Receipt; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMC; ITMI; ITPB; ITPJ; Lead Times Assigned Results; LEXP; LHIS; Line Item Details + Item; LMSI; LMST; Lot Detail; Lot Inventory Transaction History Report; Lot Selection; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Shortages Detail; MCST; MOAN; MOFR; MOMI; MOMT; MORI; MORV; MPIT; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; Order Completion Status; Order Cost Variance Status; Order Detail; OVAR; Package Content; Packaging Detail; Packing List; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POCI; POCR; POCT; PORI; PORV; POYE; Pricing Maintenance + Action Detail; Pricing Maintenance + Action List; Pricing Maintenance + Items/Customers; Pricing Maintenance + Test Order; Production; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; Schedule Board; SDAB; SDAL; Selection Setup; Serial Number List; Serial Numbers Shipped; SHIP; Shipment Allocation Detail; Shipment Allocation List; Shipments by Line Item; Shipping Allocation Batch; Shortages by Order; SHPL; SSII; SSIL; Standard Costs Assigned Results;

Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VEIT; Vendor/Item Detail; VETI; VITI; VPFR; WIPL; WIPR; WIPS; WUSE

LT

Lot Trace indicates whether lot number control is used throughout the manufacturing process to track the use of the item.

Y = Yes.

The item is lot-controlled.

N = No.

The item is not lot-controlled.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; ITMB; ITMI; Lot Trace; MPSR; MPSS; Multi-Level Bill; Multi-Level Where Used; Production; SSII; Summarized Bill; Where Used; WUSE

Make / Buy Cost

Make / Buy Cost is the user-defined formula used to calculate the **Total Cost** for make and buy items. Cost definitions for make and buy items can include the following costs:

Material (M)

Labor (L)

Variable overhead (V)

Fixed overhead (F)

The **Make / Buy Cost** definition is displayed using the abbreviations in parenthesis.

Where Used: Material Exposure; Summarized Bill

Matl Cost

Material Cost is the cost of an item, and normally applies to purchased items only. **Material Cost** can be specified for each Cost Type established for an item. Entry is up to 16 numbers.

Where Used: ITCI; Item Master; ITHC; ITMC; Multi-Level Costed Bill; QUOI; QUOT; Summarized Bill

MB

Make-Buy Code indicates if a part is normally purchased or manufactured. **Make-Buy Code** also directs appropriate action messages to the **Buyr** (B or S) or **Plnr** (M). **Make-Buy Codes** are:

M = Make.

Manufactured in-house.

B = Buy.

Purchased; no parts supplied to vendor.

S = Supplied.

Purchased; parts supplied to vendor.

Where Used: ABCR; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; COMP; Costed Bill Detail; CSLB; Demand Peg Detail; Engineering; FCST; IHIR; IORD; IPPD; Item Availability; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMI; Lead Time Analysis; Lead Times Assigned Results; Lot Size Multiple Detail; Lot Trace; LSDA; LVAL; Material Exposure; Material Shortages Detail; MBIL; MPSR; MPSS; MSMT; Multi-Level Bill; PBCI; PBCT; Production; QUOI; QUOT; SDAB; SDAL; Shortages by Order; Single-Level Configuration Bill of Material Report; SSII; Standard Costs Assigned Results; Summarized Bill; Supply Peg Detail

On Order

On Order Quantity is the total number of items on open or released manufacturing and purchase orders (**Ln# Sta** = 3 or 4).

Where Used: Inventory Status; Item + Quantity; Item Availability; Item Availability + Quantity; Item Shortages; Location Index; Material Shortages Detail; Production; Shortages by Order; SSII; Summarized Bill

Order Related Total

Order Related Total is the total cost of all components (**Quantity Type** = O) and their subordinates. The **Order Related Total** cost is included in the **Extended Cost** and in the **Average Cost** and is amortized over the parent **Prod Qty**.

Where Used: Summarized Bill

Parent

Parent is a term that describes the structural relationship between an item and its components in a bill of material. A **Parent** item is the higher level item in the parent-component relationship. A parent cannot be used in itself. Entry is any alphanumeric combination of up to 30 characters.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; CMLB; Comparison Bill; Comparison of Summarized Bills; Cost Estimate by Lot Size; CSLB; Dispatch List; Engineering; Lead Time; Lead Time Analysis; Location Index; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Summarized Bill; Where Used; WUSE

Pln Pol

Planning Policy is used to determine the type of demand an item generates for its components based on planned orders. The codes are:

N = Normal.

Planned and released orders for this item produce "normal" dependent demand for its components.

P = Production Plan.

Planned orders for this item produce a "production forecast" for its components. Orders cannot be released for this item.

F = Final Assembly.

Planned and released orders for this item create "final assembly" demand for its components. This policy is reserved for future use and is treated like a **Planning Policy** = N by the system.

D = Distribution.

Planned and released orders for this item produce "distribution" demand for its components. This policy is reserved for future use and is treated like a **Planning Policy** = N by the system.

M = Master Scheduled.

Planned and released orders for this item produce "normal" dependent demand for its components. Planned orders must be manually scheduled within the item's **Plng Fnc** (planning fence).

It is recommended that you only use the "N" code until the master planning capability is installed in your system.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; IORD; IPPD; Item Browse Detail; Item Master Planning Detail; MBIL; MSMT; Multi-Level Bill; Multi-Level Where Used; Production; Summarized Bill; Where Used

Plnr

Planner code is used to identify the person responsible for planning the production or usage of an item. The suggested entry is the planner's initials. Entry is any alphanumeric combination of up to 3 characters.

Where Used: ABCR; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Buyer/Planner Code Maintenance; Custom Product Detail; CWIP; Demand Peg Detail; IORD; IPPD; Item Browse Detail; Item Master; Item Master Planning Detail; Item Responsibility Assigned Results; ITHC; Lead Times Assigned Results; Line Item Details + Custom Product; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Shortages Detail; MBIL; MCST; MOAN; MOMI; MOMT; MORI; MORV; MPSR; MSCF; MSMT; Multi-Level Bill; Multi-Level Where Used; ORST; OVAR; PICI; PICK; Picklist Detail; Production; Purchase Order Line Item Detail; QUOI; QUOT; Router/Traveler; SDAB; Shortages by Order; Single-Level Configuration Bill of Material Report; SSII; Standard Costs Assigned Results; Summarized Bill; Where Used; WIPR; Workcenter Master

Prod Qty

Production Quantity is the number of parent items for which you want to analyze component impact. Entry is 1 - 9999999999.

Where Used: Summarized Bill

Pt Use Defines Embedded Revision

Pt Use Defines Embedded Revision specifies the three key characters in the **Pt Use** field that uniquely identify revision history components in a bill of material. The recommended value is REV. If REV has previously been used to define a workcenter, another identification prefix must be used.

Where Used: Bill of Material; Summarized Bill

QT

Quantity Type code defines the nature of the parent- component relationship when placing an order for the parent. It affects how the **Quantity** field is used in calculating component requirements. **Quantity Types** are:

I = Per Item.

Quantity per item is the number of components needed to manufacture one parent item. For a given order, the gross number of components required equals **Quantity** times order size.

O = Per Order.

Quantity per order is the number of components required per order to manufacture one or more parent items. For a given order, the gross number of components required equals **Quantity**.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used; MUSE; OVAR; PCST; Picklist Detail; Production; Purchased Component Detail; Summarized Bill; WUSE

Quantity

Quantity Required specifies how many or how much of a particular component is required to manufacture a parent. Entry is up to 10 numbers. Decimal places are allowed.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Engineering; Job Estimates and Performance Report; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WIPL; WIPR; WUSE

Required Item Cost

Required Item Cost is the per unit cost calculated at the time it is displayed based on the multi-level bill content and the At This Level Costs defined at the time of the simulated cost roll. The required item cost answers the "what if" question of how much will it cost if the required item had to be built.

Where Used: Summarized Bill

Required Quantity

Required Quantity is the number of components needed in addition to the **Consumed Quantity** to fulfill the simulated **Prod Qty**.

Where Used: Summarized Bill

Rev

Revision Level identifies a level of documentation which specifies the item's design. It should be incremented for each change in the item's design specifications. Entry is any alphanumeric combination of up to 2 characters.

Where Used: AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; Costed Bill Detail; Demand Peg Detail; Engineering; FCST; ICCR; IORD; IPPD; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; ITMB; ITMI; LMSI; LMST; Lot Detail; Lot Trace; MBIL; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Where Used; PBCI; PBCT; Production; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shortages by Order; Single-Level Configuration Bill of Material Report; Summarized Bill; Supply Peg Detail; Where Used

Stock/Bin Locations

Available Stock/Bin Locations is the user-defined formula to specify which stock and bin locations are calculated in **Available Quantity**. You can specify to include the following:

- all stock / bin locations**
- include only specific stock / bin locations**
- exclude specific stock / bin locations**

Default is to include all stock / bin locations in the available quantity.

Where Used: Summarized Bill

Summarized Quantity

Summarized Quantity is the total number of components needed to fulfill the simulated **Prod Qty**.

Where Used: Summarized Bill

Total LT

Total Lead Time is the sum of **Run LT**, **Fixed LT** and **Insp LT** as expressed in shop days.

Where Used: Bill of Material; Lead Time; Lead Time Analysis; Multi-Level Bill; Multi-Level Where Used; Summarized Bill; Where Used

UM

Unit of Measure identifies the standard unit for an item used in the manufacturing process. Entry is up to 4 alphanumeric characters.

Where Used: A/P PO/Inv Variance by Invoice; A/P Receiving Detail; APEX; APPI; APPV; APUV; Available for Shipping Allocation Batch; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; CCAT; CINV; CMLB; COBK; COCP; COMI; COMT; Contract Header Detail; Contract Item Detail; Contract Item Detail/Pricing; CORV; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Custom Product Detail; Customer Order; Customer Order Line Price Adjustment; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; INVR; IORD; IPPD; ITBI; ITCB; ITCI; Item + Quantity; Item Availability + Quantity; Item Browse Detail; Item History; Item Lot Receipt; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMC; ITMI; ITPB; ITPI; IVPR; IVRR; JEST; Job Estimates and Performance Report; Lead Times Assigned Results; LEXP; LHis; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPIT; MPSR; MPSS; MSMT; Multi-Currency; Multi-Level Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Packaging Detail; Packing List; Partner Item Detail; PBCI; PBCT; PCST; PICI; PICK; Picklist Detail; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POSR; POVD; Pricing Maintenance + Action Detail; Pricing Maintenance + Action List; Pricing Maintenance + Test Order; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Allocation Batch; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VEIT; Vendor/Item Detail; VETI; VPFR; Where Used; WIPR; Workcenter Master; WUSE

Multi-Level Bill

Multi-Level Bill is used to view a parent items' multi-level product structure as of a user-specified effectivity date. You can view a flattened bill format by exploding phantom components. Multi-Level Bill also allows you to view the complete item change history as of a specific revision level or effectivity date.

Multi-Level Bill displays component item information in a table (row by column) format based on the information entered in the Parent and Component Effectivity Date fields.

The Multi-Level Bill functionality is the same regardless of how it is accessed.

Reports

Multi-Level Bill Reports

To generate the report, choose **Print Preview** from the **File** menu.

Report Title
Multi-Level Bill of Material Lists all bill of material information for your parent item.

Report Description

Lists all bill of material information for your parent item.

Access Method

To generate the report, choose Print Preview from the File menu.

Report Template

For more information on report templates, see "Reporting for SQL Server Systems" in the System Help topics.

Available From

Multi-Level Bill

Fields

Buyr

Buyer code is used to identify the person responsible for handling the purchase of the item. The suggested entry is the buyer's initials. Entry is any alphanumeric combination of up to 3 characters.

Where Used: A/P Receiving Detail; ABCR; APIE; APII; APIR; APPI; APPO; APPV; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; Buyer/Planner Code Maintenance; Contract Header Detail; Contract Purchase Orders; Contract Summary; Custom Product Detail; CWIP; Demand Peg Detail; IORD; IPPD; Item Browse Detail; Item Master; Item Master Planning Detail; Item Responsibility Assigned Results; ITHC; Lead Times Assigned Results; Line Item Details + Custom Product; Material Shortages Detail; MBIL; MPSR; MSCF; MSMT; Multi-Level Bill; Multi-Level Where Used; ORST; OVAR; PCST; PICI; PICK; Picklist Detail;

POAN; POAS; POCI; POCP; POCR; POCT; POMI; POMT; PORI; PORV; Production; Purchase Order Header Detail; Purchase Order Line Item Detail (CPMT); Purchased Component Detail; QUOI; QUOT; SDAB; SSII; Standard Costs Assigned Results; Summarized Bill; VDSC; VPFR; Where Used; WIPR; Workcenter Master

Component

Component is a term that describes the structural relationship between an item and its parent assembly in a bill of material. A **Component** is used in the manufacture of a parent, and it may be a part, raw material or a subassembly. Entry is any alphanumeric combination of up to 30 characters.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; Material Exposure; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; OPSL; OVAR; PCST; PICI; PICK; Picklist Detail; Production; Router/Traveler; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

Component Desc

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL;

Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

Component Effectivity Date

Component Effectivity Date is the date used to determine which components on the bill of material to display for the specified parent. If the **Component Effectivity Date** is blank, all components on the bill of material, regardless of their in and out effectivity dates, are displayed for the specified parent. The **Component Effectivity Date** display format is workstation specific, which is defined as the Short Date setting in the Regional Settings within the Control Panel. Default is the current date.

Where Used: Bill of Material; Comparison Bill; Comparison of Summarized Bills; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; Summarized Bill; Where Used

Component Effectivity Date

In Effectivity is the date that the use of a component becomes effective in a bill of material. The default value is today's date or the date you entered when you signed onto the system.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

CT

Component Type distinguishes various types of relationships between a component and its parent assembly in a bill of material. The **Component Type** indicates how a component is used in the manufacture of a parent. The **Component Types** are:

N = Normal.

Component is consumed in the manufacture of its parent.

P = Phantom.

Component is used for structure purposes only (e.g., a transient subassembly consumed in the manufacture of its parent).

R = Resource or Workcenter.

Component is used in the planning process of the manufacture of its parent (e.g., labor hours).

X = Reference.

Component is for information purposes. Reference items are included on the picklist. Reference items are not included in the parent's rolled costs and are typically not required for issue in the manufacturing of the parent.

D = Document.

Component is used for information purposes only. It is not included on the picklist.

B = By-product.

The manufacture of the parent results in the creation of this component.

C = Co-product.

Component is derived from the manufacture of the parent. The manufacture of the co-product, in turn, produces the parent.

T = Tool.

Component is used in the manufacture of the parent.

U = Tool return.

Component is used in, and returned after, the manufacture of the parent.

M = Module.

Component represents a group of components for which requirements are generated for custom product orders. A module component is used for structure purposes only, such as a transient subassembly consumed in the manufacture of its parent. Module components explode requirements for the child components; the module component itself is never required.

V = Purchased material.

Component not defined on the Item Master is required for a custom product customer order.

W = Outside operation or service.

Component, such as heat treating or plating, is required for a custom product customer order.

Y = Phantom parent.

Requirements have been exploded to the next level to meet requirements.

Z = Phantom child.

Component is used in the manufacture of the phantoms parent.

An item's use as a component is limited by its **Item Type**. The Component Types available are based on the information displayed on the screen and not all types are available on all screens.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; OPSL; Order Cost Variance Status; OVAR; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; WIPL; WIPR

Cum LT

Cumulative Lead Time is the number of shop days to manufacture an item from start to finish—from initially placing a purchase order for raw material through each level in the product structure to completion of the item. **Cumulative Lead Time** is based on the critical path of components in the item's multi-level bills of material and the component lead times.

Where Used: Multi-Level Bill

Desc

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

Drwg

Drawing number identifies an engineering document that provides design specifications for an item. Entry is any alphanumeric combination of up to 30 characters.

Where Used: AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Engineering; Item Browse Detail; Item Master; Item Master Detail; MBIL; Multi-Level Bill; Multi-Level Where Used; Production; QUOI; QUOT; Router/Traveler; Shortages by Order; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used

Effective Rev

Effective Revision Level identifies the revision level of a bill of material. Revision level identifiers are embedded in bills of material using items with a predefined **Pt Use** prefix, such as "Rev", and are displayed based on the selected Effectivity Date of the parent item.

Effective Revision Level = Multiple if more than one revision of the bill of material is displayed or if the effective in and out dates overlap.

Where Used: Bill of Material; Comparison Bill; Comparison of Summarized Bills; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; Summarized Bill; Where Used

Fixed LT

Fixed Lead Time is the number of working days required for setup and queue time used in planning an order. It is added to run lead time and inspection lead time to estimate planned lead time for an order. Entry is up to 3 numbers.

Where Used: AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; IPPD; Item Availability; Item Browse Detail; Item Master; Item Master Planning Detail; MBIL; MSMT; Multi-Level Bill; Multi-Level Where Used; Production; QUOI; QUOT; Single-Level Configuration Bill of Material Report; Where Used; Workcenter Master

In Effectivity

In Effectivity is the date that the use of a component becomes effective in a bill of material. The default value is today's date or the date you entered when you signed onto the system.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

In Rev

In Revision Level indicates the level of documentation for which the parent-component relationship becomes effective. It is for information purposes only and is not used by the system. Entry is any alphanumeric combination of up to 2 characters.

Where Used: Bill of Material Detail; Comparison Bill; Engineering; Multi-Level Bill; Multi-Level Where Used; Production

Item

Item is the unique identifier for a part, whether it be a piece part, tool, raw material, an assembly or finished product. All items are set up using the ITMB screen. Within a product structure, an item can be a component as well as a parent. Entry is any alphanumeric combination of up to 30 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; Allowance/Charge Detail (Detail); APPI; APPV; AUDT; Available for Shipping Allocation Batch; AVII; AVIT; Bill of Material Accuracy Results; Browse Setup (item); Capacity Planning; CBIL; CCAN; CCAT; CIMT; CINV; COAN; COBK; COCD; COMI; COMP; Comparison Bill; Comparison of Summarized Bills; COMT; Contract Item Detail; Contract Item Detail/Pricing; Contract Summary; CORV; CSTU; Cumulative Detail; Customer Item + General; Customer Order; Customer Order Line Price Adjustment; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Engineering; FCST; GASN; ICCR; IHIR; IMTR; INVA; Inventory Adjustment Application; Inventory Allocation; Inventory History List; Inventory Transaction History Report;

INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Receipt; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMC; ITMI; ITPB; ITPI; Lead Times Assigned Results; LEXP; LHS; Line Item Details + Item; LMSI; LMST; Lot Detail; Lot Inventory Transaction History Report; Lot Selection; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Shortages Detail; MCST; MOAN; MOFR; MOMI; MOMT; MORI; MORV; MPIT; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; Order Completion Status; Order Cost Variance Status; Order Detail; OVAR; Package Content; Packaging Detail; Packing List; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POCI; POCR; POCT; PORI; PORV; POYE; Pricing Maintenance + Action Detail; Pricing Maintenance + Action List; Pricing Maintenance + Items/Customers; Pricing Maintenance + Test Order; Production; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; Schedule Board; SDAB; SDAL; Selection Setup; Serial Number List; Serial Numbers Shipped; SHIP; Shipment Allocation Detail; Shipment Allocation List; Shipments by Line Item; Shipping Allocation Batch; Shortages by Order; SHPL; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDI; VDSC; VEIT; Vendor/Item Detail; VETI; VITI; VPFR; WIPL; WIPR; WIPS; WUSE

Level

Item Level indicates the position of an item within a product structure. **Level** is used to show the relative position of an item in relationship to its higher-level parent or lower-level components. Entry is any alphanumeric combination.

Where Used: CMLB; Location Index; LOTR; MBIL; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE

LT

Lot Trace indicates whether lot number control is used throughout the manufacturing process to track the use of the item.

Y = Yes.

The item is lot-controlled.

N = No.

The item is not lot-controlled.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; ITMB; ITMI; Lot Trace; MPSR; MPSS; Multi-Level Bill; Multi-Level Where Used; Production; SSII; Summarized Bill; Where Used; WUSE

LT Offset

Lead Time Offset is the number of days after the order start date that a component is needed in the manufacturing process. Entry is up to 3 numbers. Default value is 0.

Where Used: BILL; Bill of Material Detail; Demand Peg Detail; Lead Time; Lead Time Analysis; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Where Used; Production; Single-Level Configuration Bill of Material Report

MB

Make-Buy Code indicates if a part is normally purchased or manufactured. **Make-Buy Code** also directs appropriate action messages to the **Buyr** (B or S) or **Plnr** (M). **Make-Buy Codes** are:

M = Make.

Manufactured in-house.

B = Buy.

Purchased; no parts supplied to vendor.

S = Supplied.

Purchased; parts supplied to vendor.

Where Used: ABCR; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; COMP; Costed Bill Detail; CSLB; Demand Peg Detail; Engineering; FCST; IHIR; IORD; IPPD; Item Availability; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMI; Lead Time Analysis; Lead Times Assigned Results; Lot Size Multiple Detail; Lot Trace; LSDA; LVAL; Material Exposure; Material Shortages Detail; MBIL; MPSR; MPSS; MSMT; Multi-Level Bill; PBCI; PBCT; Production; QUOI; QUOT; SDAB; SDAL; Shortages by Order; Single-Level Configuration Bill of Material Report; SSII; Standard Costs Assigned Results; Summarized Bill; Supply Peg Detail

Out Effectivity

Out Effectivity is the first date that a component is not effective in a bill of material. The default value is 12/31/2079.

Where Used: BILL; Bill of Material; Bill of Material Detail; Comparison Bill; Costed Bill Detail; Demand Peg Detail; Engineering; Exceptions; Location Index; Multi-Level Bill; Multi-Level Where Used; MUSE; Production; Single-Level Configuration Bill of Material Report; Where Used; WUSE

Out Rev

Out Revision Level indicates the level of documentation for which the parent-component relationship is no longer in effect. It is for information purposes only and is not used by the system. Entry is any alphanumeric combination of up to 2 characters.

Where Used: Bill of Material Detail; Comparison Bill; Engineering; Multi-Level Bill; Multi-Level Where Used; Production

Parent

Parent is a term that describes the structural relationship between an item and its components in a bill of material. A **Parent** item is the higher level item in the parent-component relationship. A parent cannot be used in itself. Entry is any alphanumeric combination of up to 30 characters.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; CMLB; Comparison Bill; Comparison of Summarized Bills; Cost Estimate by Lot Size; CSLB; Dispatch List; Engineering; Lead Time; Lead Time Analysis; Location Index; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Summarized Bill; Where Used; WUSE

Pln Pol

Planning Policy is used to determine the type of demand an item generates for its components based on planned orders. The codes are:

N = Normal.

Planned and released orders for this item produce "normal" dependent demand for its components.

P = Production Plan.

Planned orders for this item produce a "production forecast" for its components. Orders cannot be released for this item.

F = Final Assembly.

Planned and released orders for this item create "final assembly" demand for its components. This policy is reserved for future use and is treated like a **Planning Policy = N** by the system.

D = Distribution.

Planned and released orders for this item produce "distribution" demand for its components. This policy is reserved for future use and is treated like a **Planning Policy = N** by the system.

M = Master Scheduled.

Planned and released orders for this item produce "normal" dependent demand for its components. Planned orders must be manually scheduled within the item's **Plng Fnc** (planning fence).

It is recommended that you only use the "N" code until the master planning capability is installed in your system.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; IORD; IPPD; Item Browse Detail; Item Master Planning Detail; MBIL; MSMT; Multi-Level Bill; Multi-Level Where Used; Production; Summarized Bill; Where Used

Plnr

Planner code is used to identify the person responsible for planning the production or usage of an item. The suggested entry is the planner's initials. Entry is any alphanumeric combination of up to 3 characters.

Where Used: ABCR; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; Buyer/Planner Code Maintenance; Custom Product Detail; CWIP; Demand Peg Detail; IORD; IPPD; Item Browse Detail; Item Master; Item Master Planning Detail; Item Responsibility Assigned Results; ITHC; Lead Times Assigned Results; Line Item Details + Custom Product; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Shortages Detail; MBIL; MCST; MOAN; MOMI; MOMT; MORI; MORV; MPSR; MSCF; MSMT; Multi-Level Bill; Multi-Level Where Used; ORST; OVAR; PICI; PICK; Picklist Detail; Production; Purchase Order Line Item Detail; QUOI; QUOT; Router/Traveler; SDAB; Shortages by Order; Single-Level Configuration Bill of Material Report; SSII; Standard Costs Assigned Results; Summarized Bill; Where Used; WIPR; Workcenter Master

Pt Use

Point of Use is a key field that, along with the **Seqn** field, defines the sort sequence of components in a bill of material. The **Point of Use** field accepts any information you choose to enter, but the intended use is to identify the "work center" where the component should be delivered when assembling the parent, the "find number" of the component referenced on the drawing for the parent, or the "component reference designator" of the component on a printed circuit board. If the **Point of Use** field is not applicable in your company, you may enter 0 (zero). Entry is any alphanumeric combination of up to 5 characters.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; Capacity Planning; Comparison Bill; Custom Product Component Detail; Demand Peg Detail; Dispatch List; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; LRRP; Material Shortages Detail; MBIL; Multi-Level Bill; Multi-Level Where Used; MUSE; Order Cost Variance Status; OVAR; PICI; PICK; Picklist Detail; Pricing Maintenance + Test Order; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Router/Traveler; Schedule Board; Single-Level Configuration Bill of Material Report; TRUD; Where Used; WUSE

QT

Quantity Type code defines the nature of the parent- component relationship when placing an order for the parent. It affects how the **Quantity** field is used in calculating component requirements. **Quantity Types** are:

I = Per Item.

Quantity per item is the number of components needed to manufacture one parent item. For a given order, the gross number of components required equals **Quantity** times order size.

O = Per Order.

Quantity per order is the number of components required per order to manufacture one or more parent items. For a given order, the gross number of components required equals **Quantity**.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used;

MUSE; OVAR; PCST; Picklist Detail; Production; Purchased Component Detail; Summarized Bill; WUSE

Quantity

Quantity Required specifies how many or how much of a particular component is required to manufacture a parent. Entry is up to 10 numbers. Decimal places are allowed.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Engineering; Job Estimates and Performance Report; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WIPL; WIPR; WUSE

Ref Des Count

Reference Designator Count is the total number of unique reference designator identifiers entered as **Reference Designators** associated with a component. For example, the **Reference Designator Count** = 3 for reference designators entered as a range of D1-D3 for a specified component.

Where Used: Bill of Material; Comparison Bill; Multi-Level Bill; Where Used

Reference Designators

Reference Designators are unique identifiers which allow engineers to assign control information such as device callouts to a component within a Bill of Material. Ranges can be used to organize multiple sequential reference designator identifiers. Entry is up to 10 characters.

Where Used: Bill of Material; Comparison Bill; Engineering; Exceptions; Multi-Level Bill; Where Used

Rev

Revision Level identifies a level of documentation which specifies the item's design. It should be incremented for each change in the item's design specifications. Entry is any alphanumeric combination of up to 2 characters.

Where Used: AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Costed Bill Detail; Demand Peg Detail; Engineering; FCST; ICCR; IORD; IPPD; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; ITMB; ITMI; LMSI; LMST; Lot Detail; Lot Trace; MBIL; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Where Used; PBCI; PBCI; Production; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shortages by Order; Single-Level Configuration Bill of Material Report; Summarized Bill; Supply Peg Detail; Where Used

Run LT

Run Lead Time is the average number of shop days required for a manufacturing run or vendor lead time and is used in planning an order. **Run Lead Time** is added to fixed lead time and inspection lead time to estimate planned lead time which serves to time order release. Decimal places for fractional days allowed. MRP Planning uses fractional days as reference and plans using the next whole day increment. For example, if you specify **Run LT** = 2.1, MRP Planning assumes **Run LT** = 3 for calculation purposes. Entry is up to 8 numbers.

Note: Lead times established for an item are considered to be 0 when the item is used as a phantom (**CT** = P) in a bill of material.

Where Used: AVII; AVIT; BILL; BILL; Bill of Material; IPPD; Item Availability; Item Browse Detail; Item Master; Item Master Planning Detail; MBIL; MSMT; Multi-Level Bill; Multi-Level Where Used; Production; QUOI; QUOT; Single-Level Configuration Bill of Material Report; Where Used; Workcenter Master

Seqn

Sequence Number is a key field that, along with the **Pt Use** field, defines the sort sequence of components in a bill of material. The field accepts any information you choose to enter, but the intended purpose is to identify the operation sequence number on the parent's routing that calls out the component. If the **Sequence Number** is not applicable in your company, you may enter 0 (zero). Entry is up to 3 numbers.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; Capacity Planning; CINV; COCP; Comparison Bill; CPMT; Custom Product Component Detail; CWIP; Demand Peg Detail; Dispatch List; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; LRRP; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used; MUSE; OPSL; Order Cost Variance Status; OVAR; PCST; PICI; PICK; Picklist Detail; PORI; PORV; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchased Component Detail; Router/Traveler; Schedule Board; Single-Level Configuration Bill of Material Report; TRUD; Where Used; WIPL; WIPR; WUSE

Total LT

Total Lead Time is the sum of **Run LT**, **Fixed LT** and **Insp LT** as expressed in shop days.

Where Used: Bill of Material; Lead Time; Lead Time Analysis; Multi-Level Bill; Multi-Level Where Used; Summarized Bill; Where Used

UM

Unit of Measure identifies the standard unit for an item used in the manufacturing process. Entry is up to 4 alphanumeric characters.

Where Used: A/P PO/Inv Variance by Invoice; A/P Receiving Detail; APEX; APPI; APPV; APUV; Available for Shipping Allocation Batch; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; CCAT; CINV; CMLB; COBK; COCP; COMI; COMT; Contract Header Detail;

Contract Item Detail; Contract Item Detail/Pricing; CORV; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Custom Product Detail; Customer Order; Customer Order Line Price Adjustment; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; INVR; IORD; IPPD; ITBI; ITCB; ITCI; Item + Quantity; Item Availability + Quantity; Item Browse Detail; Item History; Item Lot Receipt; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMC; ITMI; ITPB; ITPI; IVPR; IVRR; JEST; Job Estimates and Performance Report; Lead Times Assigned Results; LEXP; LHis; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPIT; MPSR; MPSS; MSMT; Multi-Currency; Multi-Level Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Packaging Detail; Packing List; Partner Item Detail; PBCI; PBCT; PCST; PICI; PICK; Picklist Detail; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POSR; POVD; Pricing Maintenance + Action Detail; Pricing Maintenance + Action List; Pricing Maintenance + Test Order; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Allocation Batch; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VEIT; Vendor/Item Detail; VETI; VPRF; Where Used; WIPR; Workcenter Master; WUSE

Lead Time

The Lead Time tab allows you to view cumulative and individual lead times for an item's multi-level product structure in effect as of a user-specified date. You can also simulate lead time changes, including changes to the start times as specified by a component's lead time offset.

The Lead Time tab also allows critical path analysis. You can interactively walk the critical path adjusting lead times and lead time offsets while monitoring the impact of simulated changes on the cumulative lead time of the parent.

The Lead Time tab displays parent and component item information in a graphical hierarchy on the left side and the related lead time information in a Gantt chart on the right side.

The Lead Time tab is only available from the Multi-Level Bill of Material and its functionality is the same regardless of how it is accessed. See also [Access Methods](#) for more information on accessing this feature.

The **Gantt Chart** has several display features:

- Daily time increments are displayed by the horizontal axis. Chart scaling is displayed along the top of the chart.
- Each component is displayed by one line:

Line Type	Description
Solid single	buy item
Solid double	make item with a normal component type (CT = N)
Dashed double	a make item with a phantom component type (CT = P)
Line length	Component's lead time

- The starting point of a line, represented by the right vertical line, indicates when the component is needed. This date is based on lead times of higher-level items to determine when a component's parent item should be started.
- The critical path of components to manufacture the parent item is displayed with red lines by default. When more than one critical path exists, only the last one (nearest the bottom of the Gantt chart) is displayed in red. Critical paths are marked with an asterisk (*) in the graphical hierarchy.
- The normal, highlighted and critical path line colors can be customized by selecting Options from the View menu.
- The cumulative lead time for the parent item, based on the critical path of components, is displayed in the **Cum LT** field.

Reports

Lead Time Reports

To generate the report, choose **Print Preview** from the **File** menu.

Report Title
<p>Lead Time Analysis Changes Lists items which have modified lead times or lead time offsets. Several report formats are available: Full Gantt, Critical Path Gantt, and Lead Time/Lead Time Offset Changes Only.</p>

Quick Print Reports

To generate the report, choose **Quick Print** from the **File** menu.

Report Title
<p>Lead Time Analysis - Full Gantt Chart Graphical representation of the lead time analysis detail plus gantt chart.</p>

Lead Time Analysis - Full Gantt Chart

Report Description

Graphical representation of the lead time analysis detail plus gantt chart.

Access Method

To generate the report, choose Quick Print from the File menu.

Report Template

This report is not a template-based report.

Available From

Lead Time

Lead Time Analysis Changes

Report Description

Lists items which have modified lead times or lead time offsets. Several report formats are available: Full Gantt, Critical Path Gantt, and Lead Time/Lead Time Offset Changes Only.

Access Method

To generate the report, choose Print Preview from the File menu.

Report Template

For more information on report templates, see "Reporting for SQL Server Systems" in the System Help topics.

Available From

Lead Time

Fields

Component

Component is a term that describes the structural relationship between an item and its parent assembly in a bill of material. A **Component** is used in the manufacture of a parent, and it may

be a part, raw material or a subassembly. Entry is any alphanumeric combination of up to 30 characters.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; Material Exposure; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; OPSL; OVAR; PCST; PICI; PICK; Picklist Detail; Production; Router/Traveler; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

Description

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

LT Offset

Lead Time Offset is the number of days after the order start date that a component is needed in the manufacturing process. Entry is up to 3 numbers. Default value is 0.

Where Used: BILL; Bill of Material Detail; Demand Peg Detail; Lead Time; Lead Time Analysis; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Where Used; Production; Single-Level Configuration Bill of Material Report

Parent

Parent is a term that describes the structural relationship between an item and its components in a bill of material. A **Parent** item is the higher level item in the parent-component relationship. A parent cannot be used in itself. Entry is any alphanumeric combination of up to 30 characters.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; Comparison Bill; Comparison of Summarized Bills; Cost Estimate by Lot Size; CSLB; Dispatch List; Engineering; Lead Time; Lead Time Analysis; Location Index; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Summarized Bill; Where Used; WUSE

Pt Use

Point of Use is a key field that, along with the **Seqn** field, defines the sort sequence of components in a bill of material. The **Point of Use** field accepts any information you choose to enter, but the intended use is to identify the "work center" where the component should be delivered when assembling the parent, the "find number" of the component referenced on the drawing for the parent, or the "component reference designator" of the component on a printed circuit board. If the **Point of Use** field is not applicable in your company, you may enter 0 (zero). Entry is any alphanumeric combination of up to 5 characters.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; Capacity Planning; Comparison Bill; Custom Product Component Detail; Demand Peg Detail; Dispatch List; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; LRRP; Material Shortages Detail; MBIL; Multi-Level Bill; Multi-Level Where Used; MUSE; Order Cost Variance Status; OVAR; PIC1; PICK; Picklist Detail; Pricing Maintenance + Test Order; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Router/Traveler; Schedule Board; Single-Level Configuration Bill of Material Report; TRUD; Where Used; WUSE

Seqn

Sequence Number is a key field that, along with the **Pt Use** field, defines the sort sequence of components in a bill of material. The field accepts any information you choose to enter, but the intended purpose is to identify the operation sequence number on the parent's routing that calls out the component. If the **Sequence Number** is not applicable in your company, you may enter 0 (zero). Entry is up to 3 numbers.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; Capacity Planning; CINV; COCP; Comparison Bill; CPMT; Custom Product Component Detail; CWIP; Demand Peg Detail; Dispatch List; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; LRRP; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used; MUSE; OPSL; Order Cost Variance Status; OVAR; PCST; PIC1; PICK; Picklist Detail; PORI; PORV; Production;

Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchased Component Detail; Router/Traveler; Schedule Board; Single-Level Configuration Bill of Material Report; TRUD; Where Used; WIPL; WIPR; WUSE

Total Lead Time

Total Lead Time is the sum of **Run LT**, **Fixed LT** and **Insp LT** as expressed in shop days.

Where Used: Bill of Material; Lead Time; Lead Time Analysis; Multi-Level Bill; Multi-Level Where Used; Summarized Bill; Where Used

Material Exposure

The Material Exposure button allows you to view lead time information with material exposure detail. Material Exposure is the buildup of product cost over the lead time of a selected parent item. By analyzing material exposure, you can determine the source of excessive early costs and therefore reduce on-hand inventory. You can also quantify the maximum investment required to shorten a product's lead time by a fixed number of days.

Material Exposure displays cost totals on the left side and a graphical cost buildup representation on the right side. The related component information is also listed in a table format.

The Material Exposure button is only available from the Lead Time tab on Multi-Level Bill of Material. See also "Access Methods" in the Engineering manual for more information on accessing this feature.

Reports

Material Exposure Reports

To generate the report, choose **Print Preview** from the **File** menu.

Report Title
Material Exposure Lists a graph of the time-phased cost buildup as well as the detail for components within the specified lead time.

Quick Print Reports

To generate the report, choose **Quick Print** from the **File** menu.

Report Title
Material Exposure Profile Graphical representation of the material exposure detail.

Report Description

Lists a graph of the time-phased cost buildup as well as the detail for components within the specified lead time.

Access Method

To generate the report, choose Print Preview from the File menu.

Report Template

For more information on report templates, see "Reporting for SQL Server Systems" in the System Help topics.

Available From

Material Exposure

Material Exposure Profile

Report Description

Graphical representation of the material exposure detail.

Access Method

To generate the report, choose Quick Print from the File menu.

Report Template

This report is not a template-based report.

Available From

Material Exposure

Fields**Available Qty**

Available Quantity is the user-defined formula used to calculate the quantity available for the purpose of fulfilling the simulated **Prod Qty**. **Available Quantity** is increased when the following are selected:

- On-hand (O)**
- In-Inspection (adjusted for yield) (I)**
- On-Hold (H)**
- In WIP (W)**
- In shipping (S)**
- On-Order (R)**

Available Quantity is decreased when the following is selected:

Allocations from other orders (A)

The Available Quantity definition is displayed using the abbreviations in parenthesis. The default calculation is:

$$[\text{On-Hand} + (\text{In-Inspection} * \text{Yield})] - (\text{Allocations from other orders})$$

Where Used: Material Exposure; Summarized Bill

Component

Component is a term that describes the structural relationship between an item and its parent assembly in a bill of material. A **Component** is used in the manufacture of a parent, and it may be a part, raw material or a subassembly. Entry is any alphanumeric combination of up to 30 characters.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; Material Exposure; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; OPSL; OVAR; PCST; PICI; PICK; Picklist Detail; Production; Router/Traveler; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

Costs Per Assembly

Cost Per Assembly is the total cost of the item used to produce the parent.

Where Used: Material Exposure

CT

Component Type distinguishes various types of relationships between a component and its parent assembly in a bill of material. The **Component Type** indicates how a component is used in the manufacture of a parent. The **Component Types** are:

N = Normal.

Component is consumed in the manufacture of its parent.

P = Phantom.

Component is used for structure purposes only (e.g., a transient subassembly consumed in the manufacture of its parent).

R = Resource or Workcenter.

Component is used in the planning process of the manufacture of its parent (e.g., labor hours).

X = Reference.

Component is for information purposes. Reference items are included on the picklist. Reference items are not included in the parent's rolled costs and are typically not required for issue in the manufacturing of the parent.

D = Document.

Component is used for information purposes only. It is not included on the picklist.

B = By-product.

The manufacture of the parent results in the creation of this component.

C = Co-product.

Component is derived from the manufacture of the parent. The manufacture of the co-product, in turn, produces the parent.

T = Tool.

Component is used in the manufacture of the parent.

U = Tool return.

Component is used in, and returned after, the manufacture of the parent.

M = Module.

Component represents a group of components for which requirements are generated for custom product orders. A module component is used for structure purposes only, such as a transient subassembly consumed in the manufacture of its parent. Module components explode requirements for the child components; the module component itself is never required.

V = Purchased material.

Component not defined on the Item Master is required for a custom product customer order.

W = Outside operation or service.

Component, such as heat treating or plating, is required for a custom product customer order.

Y = Phantom parent.

Requirements have been exploded to the next level to meet requirements.

Z = Phantom child.

Component is used in the manufacture of the phantoms parent.

An item's use as a component is limited by its **Item Type**. The Component Types available are based on the information displayed on the screen and not all types are available on all screens.

Where Used: Backflush Issue Reconciliation Report; BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Exceptions; Job Estimates and Performance Report; Lead Time; Location Index; Material Exposure; Material Shortages Detail; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; OPSL; OVAR; PCST; PICI; PICK; Picklist Detail; Production; Router/Traveler; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WUSE

Cumulative Cost

Cumulative Cost is the calculated costs incurred to build the parent item through the lead time day specified.

Where Used: Material Exposure

Description

Item Description identifies the item in terms of its characteristics. When space is limited, a partial description is displayed. Entry is any alphanumeric combination of up to 70 characters.

Where Used: A/P Received Item List; ABCR; Advance Ship Notice Line; APPI; APPV; Available Pricing; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; Browse Setup (item); Capacity Planning; CCAN; CCAT; CMLB; COBK; COCP; COMP; Comparison Bill; Comparison of Summarized Bills; Contract Item Detail; Contract Item Detail/Pricing; CORV; Cost Estimate by Lot Size; Costed Bill Detail; CSLB; Custom Product Component Detail; Customer Item + General; Customer Order; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Dispatch List; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; Inventory History List; Inventory Transaction History Report; INVR; IORD; IPPD; ISVI; ITBI; ITCB; ITCI; Item + Alternates; Item + Quantity; Item Availability; Item Availability + Quantity; Item Browse; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; ITMB; ITMC; ITMI; ITPB; ITPI; Job Estimates and Performance Report; Lead Time; Lead Time Analysis; Lead Times Assigned Results; LEXP; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Inventory Transaction History Report; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPSR; MPSS; MSMT; Multi-Level Bill; Multi-Level Costed Bill;

Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Package Content; Packaging Detail; Partner Item Detail; PBCI; PBCT; PBII; PICI; PICK; Picklist Detail; POAN; POAS; POCI; POGR; POCT; POMI; POMT; PORI; PORR; PORV; POYE; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QSRC; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VITI; Where Used; WIPR; WUSE

LT Days

Lead Time Days is the number of days into the production of the parent item.

Where Used: Lead Time Analysis; Material Exposure

LT Os

Lead Time Offset is the number of days after the order start date that a component is needed in the manufacturing process. Entry is up to 3 numbers. Default value is 0.

Where Used: BILL; Bill of Material Detail; Demand Peg Detail; Lead Time; Lead Time Analysis; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Where Used; Production; Single-Level Configuration Bill of Material Report

Make / Buy Cost

Make / Buy Cost is the user-defined formula used to calculate the **Total Cost** for make and buy items. Cost definitions for make and buy items can include the following costs:

Material (M)

Labor (L)

Variable overhead (V)

Fixed overhead (F)

The **Make / Buy Cost** definition is displayed using the abbreviations in parenthesis.

Where Used: Material Exposure; Summarized Bill

MB

Make-Buy Code indicates if a part is normally purchased or manufactured. **Make-Buy Code** also directs appropriate action messages to the **Buyr** (B or S) or **Plnr** (M). **Make-Buy Codes** are:

M = Make.

Manufactured in-house.

B = Buy.

Purchased; no parts supplied to vendor.

S = Supplied.

Purchased; parts supplied to vendor.

Where Used: ABCR; AVII; AVIT; BILI; BILL; Bill of Material; Bill of Material Detail; COMP; Costed Bill Detail; CSLB; Demand Peg Detail; Engineering; FCST; IHIR; IORD; IPPD; Item Availability; Item Browse Detail; Item History; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMI; Lead Time Analysis; Lead Times Assigned Results; Lot Size Multiple Detail; Lot Trace; LSDA; LVAL; Material Exposure; Material Shortages Detail; MBIL; MPSR; MPSS; MSMT; Multi-Level Bill; PBCI; PBCT; Production; QUOI; QUOT; SDAB; SDAL; Shortages by Order; Single-Level Configuration Bill of Material Report; SSII; Standard Costs Assigned Results; Summarized Bill; Supply Peg Detail

Parent

Parent is a term that describes the structural relationship between an item and its components in a bill of material. A **Parent** item is the higher level item in the parent-component relationship. A parent cannot be used in itself. Entry is any alphanumeric combination of up to 30 characters.

Where Used: BILI; BILL; Bill of Material; Bill of Material Detail; CMLB; Comparison Bill; Comparison of Summarized Bills; Cost Estimate by Lot Size; CSLB; Dispatch List; Engineering; Lead Time; Lead Time Analysis; Location Index; Material Exposure; MBIL; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; Production; Summarized Bill; Where Used; WUSE

% of Cost

Percent of Cost is the calculated percentage of the costs incurred to produce the parent item at a specified lead time day in relation to the total cost to produce the parent item. The **Percent of Cost** calculation is **Cumulative Cost/Total Cost**.

Where Used: Material Exposure

QT

Quantity Type code defines the nature of the parent- component relationship when placing an order for the parent. It affects how the **Quantity** field is used in calculating component requirements. **Quantity Types** are:

I = Per Item.

Quantity per item is the number of components needed to manufacture one parent item. For a given order, the gross number of components required equals **Quantity** times order size.

O = Per Order.

Quantity per order is the number of components required per order to manufacture one or more parent items. For a given order, the gross number of components required equals **Quantity**.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Demand Peg Detail; Engineering; Job Estimates and Performance Report; Location Index; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Where Used; MUSE; OVAR; PCST; Picklist Detail; Production; Purchased Component Detail; Summarized Bill; WUSE

Quantity

Quantity Required specifies how many or how much of a particular component is required to manufacture a parent. Entry is up to 10 numbers. Decimal places are allowed.

Where Used: BILL; BILL; Bill of Material; Bill of Material Detail; CMLB; COCP; Comparison Bill; Comparison of Summarized Bills; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; CWIP; Engineering; Job Estimates and Performance Report; Material Exposure; MBIL; MCST; Multi-Level Bill; Multi-Level Costed Bill; Multi-Level Where Used; MUSE; PCST; Production; Purchased Component Detail; Single-Level Configuration Bill of Material Report; Summarized Bill; Where Used; WIPL; WIPR; WUSE

Scr Pcnt

Scrap Percent is the amount of scrap (specified as a percent of component quantity required) that is normally generated for the component item during the manufacture of its parent. Entries must be less than 100 percent and a decimal point must be entered for tenths or hundredths of one percent. For example, enter 3.5 for 3.5%. A decimal point displays for whole numbers even though the decimal point does not have to be entered. For example, enter 2 for 2%, which actually displays as 2.0. Default value is 0.

Where Used: BILL; Bill of Material Detail; Costed Bill Detail; Demand Peg Detail; Material Exposure; MBIL; OVAR; Production; Single-Level Configuration Bill of Material Report

UM

Unit of Measure identifies the standard unit for an item used in the manufacturing process. Entry is up to 4 alphanumeric characters.

Where Used: A/P PO/Inv Variance by Invoice; A/P Receiving Detail; APEX; APPI; APPV; APUV; Available for Shipping Allocation Batch; AVII; AVIT; BILL; BILL; Bill of Material; Bill of Material Detail; CCAT; CINV; CMLB; COBK; COCP; COMI; COMT; Contract Header Detail; Contract Item Detail; Contract Item Detail/Pricing; CORV; Costed Bill Detail; CPMT; CSLB; Custom Product Component Detail; Custom Product Detail; Customer Order; Customer Order Line Price Adjustment; Customer Order Receipt/Reverse; CWIP; Demand Peg Detail; Engineering; FCST; ICCR; IHIR; INVA; Inventory Allocation; INVR; IORD; IPPD; ITBI; ITCB; ITCI; Item + Quantity; Item Availability + Quantity; Item Browse Detail; Item History; Item Lot Receipt; Item Lot Trace and Serialization Detail; Item Master; Item Master Detail; Item Master Planning Detail; Item Responsibility Assigned Results; Item Shortages; ITHC; ITHR; ITMB; ITMC; ITMI; ITPB; ITPI; IVPR; IVRR; JEST; Job Estimates and Performance Report; Lead Times Assigned Results; LEXP; LHIS; Line Item Details + Item; LMSI; LMST; Location Index; Lot Detail; Lot Trace; Lot Trace Issue Detail; Lot Trace Receipt Detail; LOTR; LVAL; Manufacturing Order Line Item Detail; Manufacturing Order Receipt/Reverse; Material

Exposure; MBIL; MCST; MOMI; MOMT; MORI; MORV; MPIT; MPSR; MPSS; MSMT; Multi-Currency; Multi-Level Bill; Multi-Level Where Used; MUSE; Open Order Detail; OPSL; Order Completion Status; Order Cost Variance Status; Order Detail; Order Line Items; OVAR; Packaging Detail; Packing List; Partner Item Detail; PBCI; PBCT; PCST; PICI; PICK; Picklist Detail; POCI; POCR; POCT; POMI; POMT; PORI; PORR; PORV; POSR; POVD; Pricing Maintenance + Action Detail; Pricing Maintenance + Action List; Pricing Maintenance + Test Order; Production; Purchase Order Line Item Detail; Purchase Order Line Item Detail (CPMT); Purchase Order Line Items; Purchase Order Receipt History; Purchased Component Detail; QUOI; QUOT; Router/Traveler; SDAB; SDAL; Shipment Allocation Detail; Shipments by Line Item; Shipping Allocation Batch; Shipping Detail; Shortages by Order; SHPL; Single-Level Configuration Bill of Material Report; SSII; SSIL; Standard Costs Assigned Results; Standard Product Detail; Summarized Bill; Supply Peg Detail; Transaction Detail; VDII; VDIT; VDSC; VEIT; Vendor/Item Detail; VETI; VPFPR; Where Used; WIPR; Workcenter Master; WUSE

Product Structure Detail

From the bill of material features, you can review product structure detail. Product structure detail includes production item detail, item history and lot trace detail. The following tabs are available:

- **Production.** Includes component detail, references, planning detail, planning fence and stock status.
- **Item History.** Includes an item's inventory history and activity information.
- **Lot Trace.** Includes an item's lot trace and serialization details.

Production

The Production tab allows you to enter component detail, references, planning detail, planning fence and view stock status.

The Production tab is divided into sections that include:

Tab Title	Description
Comp Detail	Allows you to enter engineering or production component detail such as in and out revision dates. Component specific notes may also be entered. Available only from the Production Bill of Material or Production Where Used features.
References	Allows you to view classification information, such as item class codes and family grouping, to further define the item. All entries are optional and should be used if your company requires a detailed record for the item
Packaging	Allows you to view specific shipping and packaging information, such as shipping weight or package type, to further define the item. All entries are optional and should be used if your company requires a detailed record for the item.
Planning Detail	Allows you to view planning information, such as preferred location and lead time. Used as key references by the system to make planning calculations.
Planning Fence	Allows you to view planning information, such as forecast codes and lot size quantities. Used as key references by the system to make planning calculations.
Stock Status	Allows you to view an item's current inventory status. Provides information on the quantity for each inventory classification (on hand, in-inspection, shipping, on-hold and internal and external WIP) and inventory value based upon ITMC Cost Type Ø.

Item History

The Item History tab allows you to view an item's inventory history and activity information.

The Item History tab displays beginning, receipt, issue, shipping and adjustment quantities.

Lot Trace

The Lot Trace tab allows you to view an item's lot trace and serialization detail information.

The Lot Trace tab is divided into sections that include:

Tab Title	Description
Detail	Allows you to view an item's lot trace and serialization detail information. Provides information such as policies, calendar days and text messages.

Tab Title	Description
Lot / SN	Allows you to view an item's lot trace and serialization number detail. Provides information such as lot and serial mask, default and last number used.