

Version 5.40

Fitrix_{TM}

Production Order Processing • User Guide

Version 5.40

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Chapter 1

Introduction to Production Order Processing

This chapter contains basic information about Fitrix Production Order Processing. It is meant to give you a general picture of what the module can do and how it is used. The sections that address this are as follows:

- General description of the Fitrix Production Order Processing system
- Features of Fitrix Production Order Processing
- Overview of Production Order Processing

General Description

Production Order processing tracks and controls production activities within an organization. It also manages all material movement relative to production. Production is controlled through the use of production orders. Material movement, such as component material issues and returns, scrap, and production receipts are managed by production orders. Production orders are also used by the planning applications to ensure the appropriate production and purchase activities are performed to support external demand.

This chapter is designed for readers who want to know how Production Order Processing is used to manage the production process. It describes the major functionality of Production Order Processing and provides brief descriptions of the features that are offered in the application.

Features

An effective production order processing application should allow you to quickly and effectively execute a production plan. It should support efficient but flexible material movement methods. It should also allow production to take place in a variety of business scenarios (make-to-stock, make-to-order, engineer-to-order, rework, prototyping). And it should make production information available to management in a timely manner, to assist in decision-making activities.

To address these requirements, the following features are included in Production Order Processing:

Flexible Order Types

Production orders can be processed using a variety of methods to support the changing needs of business.

- Orders can be processed for standard make-to-stock items, using a fixed bill of material.
 These orders can be entered with minimal effort.
- Orders can be set up for items which are a variant of a standard item. A fixed bill of material can be used, but changes are allowed to define a slightly customized product.
- Orders can be established for prototype items, with no bill of material initially. The components can be added as needed to configure the new item.

The variations are managed through the use of order types. Multiple order types can be established, defining which bill of material method and routing method should be used. During order entry these order types construct the appropriate bill of material and routing.

Order Hold Codes

Hold codes are used to control activities which can take place for a production order. If it is determined, for example, that a certain order or group of orders should be held until a defective prototype is reworked, the orders can be assigned to a hold code that prevents material issues. When the rework is complete, the hold codes may be removed to continue production. Hold codes can be used to control:

- Component issues and returns
- Component transfers and scrap reporting
- Production receipts and scrap reporting
- · Production packet print

Order Splits

Order splits allow production for an existing order to be moved ahead of the base order. For example, if a production order is being held up due to a partial component shortage, the portion of the order that can be completed is split into a new order. It carries the correct proportion of component material and labor (for costing purposes). Production is completed on the split order. When the component shortage is replenished, the base order can also be completed. A base order can be split multiple times. For costing purposes, the base order and splits are combined to collect accurate total costs.

Component Issue Methods

Components may be issued to production orders in one of two ways:

Component issue transaction (Issue Method = C) - Components are issued explicitly to orders.

During production receipt (Issue Method = P) - When the production receipt is entered, the components are presented for issue.

Each component can be set up with its own issue type. The issue type is established in the Inventory Information table.

Job Shop Capabilities

Using Sales Order Entry in conjunction with Production work orders, Routing, and Labor Processing you can create "jobs" for MTN items (make to non stock) and roll up costs that will then calculate a fixed or marked up price. An example of this would be the amount you would charge your customer to refurbish a computer system they purchased from you.

Order Notes

Unlimited freeform notes may be included on a production order. The notes may be entered at the order summary level, or for each component, or each routing step. If notes were established for the standard bill of material (in Bill of Material), or standard routing (in Standard Routing), they are automatically included in the production order.

Multiple Component Transactions

A variety of component material movement transactions are available, to provide maximum flexibility and control over work in process inventory:

Component allocation - Allows you to allocate components to a specific location, batch lot, serial number, and FIFO date, if desired. In cases where it is known exactly which material should be used, you can 'reserve' it. When the material is ultimately issued the allocated material is used automatically.

Component issue - This transaction issues material from inventory to work in process for production orders. The issue can be processed for the required quantities automatically, or require entry of the issued quantities explicitly. For components that must be controlled by location, batch lot, serial number, or FIFO date, additional details must be provided.

All of these transactions update inventory and order status immediately when they are entered. Transactions are also logged to the inventory transaction history table, for later review and analysis.

Order History

Completed production orders are flagged to indicate they are ready for close. The closed orders can be removed from the system, or moved to production order history. Inquiries can be used to review orders in history, to determine past production methods and effectiveness.

Material Requirements Planning Integration

Production Order Processing works with Material Requirements Planning in the following areas:

- MRP can create production orders with the Order Review/Release function.
- MRP reviews the status of open production orders when determining if scheduled receipts are sufficient to meet external demand from forecast or sales orders. If open order quantities are not sufficient, planned orders are created.
- MRP Item Requirements Inquiry displays open quantities and due dates for production orders, when analyzing item requirements and projected inventory levels.

Sales Order Management Integration

Production Order Processing works with Sales Order Entry in the following areas:

- Scheduled receipts from production orders can be reviewed for items entered on a sales order. If
 insufficient inventory is available, the production order due dates can be used to commit delivery
 dates to customers.
- When sales orders are entered for items designated as assemble-to-order in the item master, production orders are automatically created after order entry. The production order is linked to the sales order, to facilitate component material picking and shipping.
- Production orders for make-to-stock items can be directly linked to sales orders. This causes the produced item to be discretely allocated to sales orders when it is received to stock.

Purchase Management Integration

Production Order Processing works with Purchase Orders in the following areas:

During purchase receipt transaction entry, production orders can be reviewed to determine if a requirement exists for the item being received.

Item Management Integration

Production Order Processing works with Inventory Control in the following areas:

- Production order entry can allocate components at the item/warehouse level. This is a high level of material reservation, to give management a warehouse level view of material availability.
- Production order entry updates the on-order quantities for items at the item/warehouse level. This gives management a warehouse level view of scheduled receipt quantities by item.
- Component issues and returns update inventory balances at the item/warehouse and item/warehouse/serial or lot levels. They also log the movement to the inventory transaction history table.
- Production receipts update the on-hand inventory balances for finished items at the item/warehouse and item/warehouse/serial or lot levels.

Bill of Material Integration

Production Order Processing works with Bill of Materials in the following areas:

• Standard bills of material can be used as the starting point for a new production order. The bill of material may be changed to support the specific item being produced.

Standard Routing Integration

Production Order Processing works with Standard Routing in the following areas:

• Standard routings can be used as the starting point for a new production order. The routing may be changed to support the specific item being produced.

Labor Processing

You can collect labor costs and assign these costs to a routing step.

Overview

Before You Begin

Before you can use Production Order Processing, you must first complete "setup" of the module. Setup is the process by which you enter all of the information required to begin entering production orders into the system. Setup includes entry of basic "control" information that the programs need to run, and entry of special Order Entry reference information.

Production Order-related activities can be divided into three broad categories: order entry setup, order processing, and report production.

Setup

There are two aspects of setup: Company Setup and Production Order Processing setup. During setup, you enter all of the information the system references as transactions are recorded.

Company setup includes entering basic control information that the programs need to run, such as company information, and administrative information. This basic setup information is covered in the Getting Started with Fitrix User Guide. Because the menu options used for company and administration pertain to the company as a whole, the menu options used to do this initial company setup are located under the General/Administrative menu. You only need to perform this setup procedure once for the system.

Module-specific setup, on the other hand is required for each module you have installed. The following option, accessed from the Production Orders/File Maintenance menu, is used for module setup:

Setup Production Order Processing (5-1-1-e)

In addition, you must use the following options, accessed from the Production Orders/File Maintenance menu, to enter reference information which will be used during Production Order Entry and Transaction Processing:

```
Order Types (5-1-1-a)
Hold Codes (5-1-1-b)
Reason Codes (5-1-1-c)
Responsible Party (5-1-1-d)
```

These options allow you to set up (and update) special codes and definitions, and the order entry defaults, all of which are referenced on a regular basis when entering and processing production orders. These steps are described in detail later in this manual.

Order Processing

After setup is complete, you can begin entering and processing production orders. For all types of production orders, the steps in this process correspond to options located on the Order Processing Menu. In general, regular order processing involves entering and maintaining production orders, printing Production Packets and Pick Lists, issuing components, receiving produced items, and closing out completed orders.

```
Component Issue (5-1-3-a)
Component Issue by Routing (5-1-3-b)
Production Receipt (5-1-3-c)
Production Scrap (5-1-3-d)
Maintain Production Transactions (5-1-3-e)
Edit Production Transactions (5-1-3-f)
Post Production Transactions (5-1-3-g)
```

Transaction Processing

Production Orders are used to manage the component items to be used on an order, and to report production of item being produced on the order. The following transactions are available, on the Transaction Processing Menu:

```
Component Issue (5-1-2-a)
Production Receipt (5-1-2-b)
```

Each transaction can be selected to immediately post to inventory and accounting, or be posted later (for example, at the end of the day). When transactions are selected to post later, options on the Transaction Processing menu are used to edit, maintain an post them:

Maintain Production Transactions (5-1-3-c) Edit Production Transactions (5-1-3-d) Post Production Transactions (5-1-3-e)

Inquiries

Inquiries are used to review the status of orders in a display format. They are accessed on the Inquiries menu:

Production Order Status (5-1-4-a) Production Order History (5-1-4-b) Component Requirements (5-1-4-c)

Reporting

Reports are used to review the status of orders in a printed format. They are accessed on the Reports menu:

Order Shortage (5-1-5-a)
Order Detail (5-1-5-b)
Order Detail – by Job (5-1-5-c)
Order History Detail (5-1-5-d)
Order Component Comparison Detail (5-1-5-e)
Production Order Status Report (5-1-5-f)
Job Cost/Price Detail Report (5-1-5-g)
Work in Process Cost Status Report (5-1-5-h)

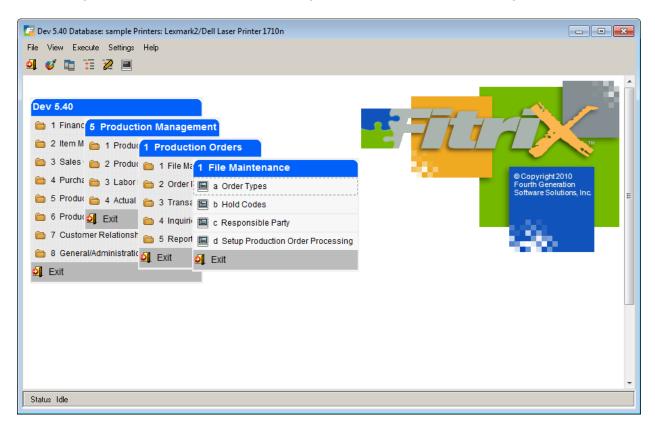
Chapter 2

Setup Production Order Processing

This chapter covers the options, screens, and fields you use to set up the Production Order Processing module. It is assumed that if you are reading this chapter for setup reference, you have already done the basic Company setup that is required before you can set up any Fitrix module. For a more complete discussion of the Company setup, see *Getting Started with Fitrix*. Additional setup is required in the Item Management module for any items and components used on production orders. A brief explanation is included in this chapter, but additional information regarding item setup can be found in the *Item Management User Guide* under Inventory Control - Update Inventory Information.

File Maintenance Menu

The Production Order Processing File Maintenance Menu provides options for updating module defaults, and creating entries in reference tables used during Order and Transaction Processing.

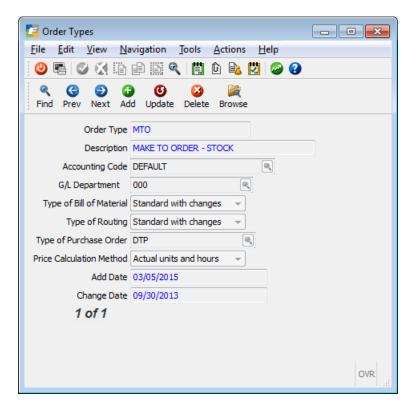


Order Types

This menu option is used to setup and maintain the Order Types information. Order types provide default control information used during entry and maintenance of production orders. You can define multiple order types, then use them when you entering new orders.

Note

At least one order type must be entered before the 'Setup Production Order Processing' option is executed.



The Order Types screen contains the following fields:

Order Type - A unique code (up to 3 characters) to designate order type.

Description – A description (up to 30 characters) for this order type.

Accounting Code – A code relating to the account numbers to be used for the work-in-process related transactions. Use the zoom button to preview a list of available accounting codes.

G/L Department – General Ledger department to be used for production orders using this order type.

Type of Bill of Material –This code controls how an item's bill of material is to be processed when a new production order is entered. The allowed values are:

- **Standard No Changes** The manufactured item's standard bill of material is to be copied into the order's list of components when the order is saved and no changes are allowed.
- Standard with Changes The manufactured item's standard bill of material is to be copied into the order's list of components, and the components will be displayed, to allow for changes, before the order is saved.
- Manual Entry

 No standard bill of material will be copied into the order's list of components, but the component list screen will be displayed, to allow the user to enter a custom list of components, before the order is saved.

Type of Routing –This code controls how an item's routing list is to be processed when a new production order is entered. The allowed values are:

- **S** The manufactured item's standard routing is to be copied into the order's routing list, when the order is saved
- C The manufactured item's standard routing is to be copied into the o order's routing list, and the list will be displayed, to allow for changes, before the order is saved.
- M No standard routing will be copied into the order's routing list, but the routing list screen will be displayed, to allow the user to enter a custom routing list, before the order is saved.

Type of Purchase Order – zoom to select what PO type should be created for purchase orders issued for short components.

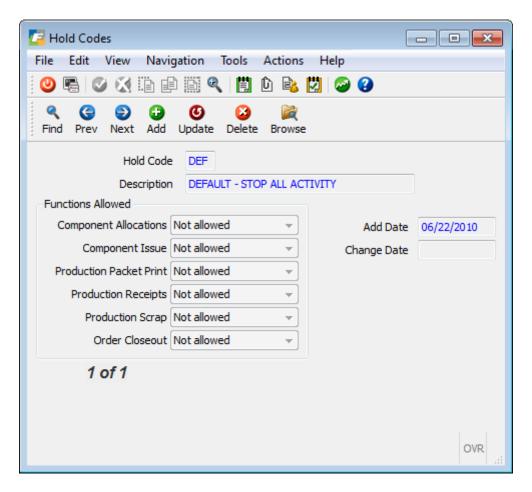
Price Calculation method - when generating the customer invoice if the production order for the line types MTO/MTN has a price calculation method of Actual units and hours then recalculate item price based on actual material and labor posted to the prod order rather than the estimated/expected units and hours.

Add Date – The system will automatically record the date this row was added.

Change Date – The system will automatically record the date this row was last changed.

Hold Codes

Hold codes allow you to suspend order-related activities from taking place after an order has been entered. You can create multiple hold codes to customize how you might wish to suspend specific activities. When an order is to be held, update the order and enter the appropriate hold code on the order summary screen.



Hold Code – Enter a unique identifier (up to 3 characters).

Description – Enter description (up to 30 characters) to describe hold code.

Functions Allowed – each function (menu option) can be controlled separately by entering one of the following values:

Not allowed – this function (menu option) cannot be performed, as long as this hold code is assigned to the order

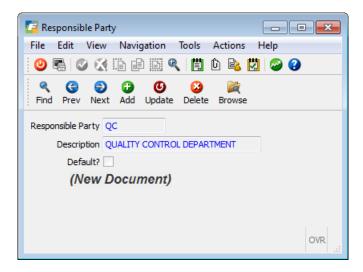
Allowed with warning – this function (menu option) can be performed, but the user will be warned that the order is held

Allowed – this function (menu option) can be performed.

Add Date – The system automatically records date this hold was added.

Change Date – The system automatically records ate this hold was last changed

Responsible Party



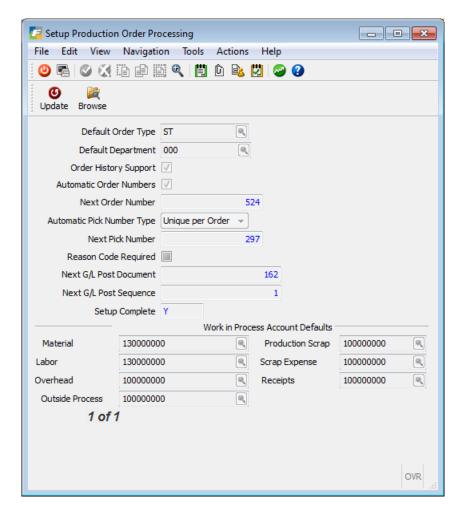
Responsible Party – Abbreviation for party responsible for production order (up to 10 characters).

Description- Description of responsible party (up to 30 characters)

Default- Select to choose default responsible party displayed on production order entry screen.

Setup Production Order Processing

This menu option allows you to setup default values for the module, default values that are used throughout the Order Processing and Transaction Processing options. Some of the default entries on this screen are codes you set up in reference files using the other menu options on the File Maintenance menu, so you want to set up the necessary reference files and information before you set up the defaults file. For example, before you can enter a default order type, it must have been defined via the Order Types option.



When you enter orders and other transactions, the system automatically assigns default values to some of the information fields. The default values may come from a number of different places, depending on the type of data. By automatically filling fields with defaults, the user saves time by not having to enter information for each transaction. You can overwrite most default values by simply entering the desired value.

The data in the Setup Production Order Processing screen is unique to each company's database. Notice that the screen contains only one entry (the screen displays (1 of 1) at the bottom of the screen). Therefore, the commands on the command prompt are disabled, with the exception of Update and Quit. For example, you cannot Use Find because there is only one entry to find and it shows up automatically.

Note

If your system is setup to run more than one company, you must enter defaults for each company.

The screen contains the following fields:

Default Order Type - the order type to be filled in automatically whenever you enter a new Production Order. Click the Zoom button to select from the current list of defined order types.

Default Department- the General Ledger Department to be filled in automatically whenever you enter a new Production Order. Click the Zoom button to select from the current list of defined departments.

Order History Support - select if you want closed orders to be transferred to Order History files when they are purged from the active Production Order tables. Do not select if you want closed orders to be removed completely from the system when they are purged.

Automatic Order Numbers – select if you want the system to automatically assign Production Order numbers. When you enter a new order, the Next Order Number will be assigned to the order. You can override this number during Order Entry if desired. Do not select if you want to manually assign the Order Number each time.

Next Order Number-The next order number to be assigned. Used only if the Automatic Order Numbers option is selected..

Automatic Pick Number Type - This value determines how Production Pick List Numbers are to be assigned.

Unique per order – the first pick list printed for a new order is 1. Subsequent pick lists will be 2, 3, 4, etc

Sequential – each Pick List will have a number that is unique within the module.

Reason Code Required – select if you want production scrap transactions to have a reason code entered with them. Do not select if you do not require a reason code when entering production scrap transactions.

Next G/L Post Document – Transactions posted to G/L from this module are assigned a Journal of 'PD', and a sequential document number. Enter the beginning value for this document here.

Next G/L Post Sequence – Transactions posted to G/L from this module are assigned a Journal of 'PD', a sequential document number, and a sequential posting sequence number. Enter the beginning value for this sequence here.

Setup Complete - Enter Y when setup activities are complete, and you are ready to begin processing production orders.

Work in Process Account Defaults –Accounting codes are typically used to assign account numbers to production transactions for the General Ledger module. These accounts are used as a default in the event that accounting are not used, or were not set up properly.

Material – The account to be debited when component issues are entered. (Note: the account to be credited comes from the components Inventory Information)

Labor – This account is reserved for future use.

Overhead – This account is reserved for future use.

Outside Process – This account is reserved for future use.

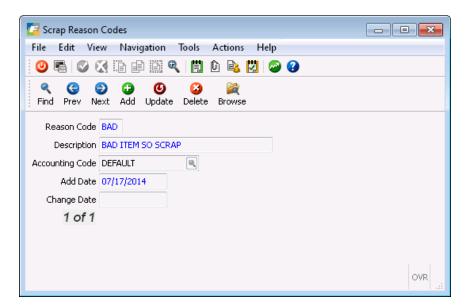
Production Scrap – The account to be credited when a production scrap transaction is entered

Scrap Expense—The account to be debited when a production scrap transaction is entered

Production Receipt – the account to be credited when a production receipt is entered. (Note: the account to be debited comes from the components Inventory Information)

Scrap Reason Codes

Use this screen to set up reason codes that are then assigned to scrap transactions when entered



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Setup for Manufactured Items and Components of a Production Work Order

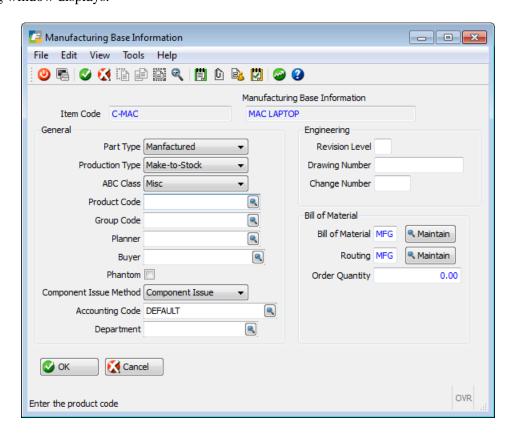
Additional setup must be done for manufactured items and the components of these items in the Item Management Module under Inventory Control, Update item information (2-1-1-a menu option), before a production order can be entered and processed.

The Production Order module uses the Bills of Material which consists of multiple items and their relationships to each other in a production environment. A bill of material defines the items (components) and their respective quantities required to produce another item (parents).

Items are defined as components or parents in the Inventory Control module, in Inventory Maintenance/Update Inventory Information.

To access the manufacturing-related fields for component and/or parent items, update an item in Invento-

ry Control/Inventory Maintenance/Update Inventory Information, then select the Mfg-Base button. The following window displays:



Field	Description
Item Code:	Inventory Item Code
Description:	Item Description
Part Type	Manufactured or Purchased. This determines how the Planning applications are to plan for either production or purchase of an item. In addition, if a manufactured part is placed on a purchase order to buy, or if a purchased item is entered an an item to be produced, warning messages will be displayed.
Production Type	Assemble to Order or Make to Stock. This determines whether items are configured during sales order entry and allocated to a specific sales order or if item is made to simply add to on hand stock.
ABC Class	An optional classification to be used in reports. It rates an item in comparison to other items as an extension of it's cost times usage.
Product Code	You may optionally assign this item to a pre-defined Product Code. Reports in other modules allow you to select items within specific product codes
Group Code	You may optionally assign this item to a pre-defined Group Code. Reports in other modules allow you to select items within specific group codes
Planner	You may optionally assign this item to pre-defined Planners. Reports in other modules allow you to select items within specific planner codes
Buyer	You may optionally assign this item to pre-defined Buyers. Reports in other modules allow you to select items within specific buyer codes
Phantom:	Phantoms are a convenience for defining a collection of components which are used together in multiple parent items. The components can be defined once under a 'Phantom parent item', then this item is entered as a component in the parent items that use the collection. A phantom is typically never directly produced or stocked in inventory. You may, however, decide to stock phantom items. In this case, whenever a parent item has a phantom in its bill of material, a production order for the parent will test inventory availability for the phantom before 'exploding' its components. Whatever inventory is available is used directly; any shortages will trigger an explosion to the component items in the collection.

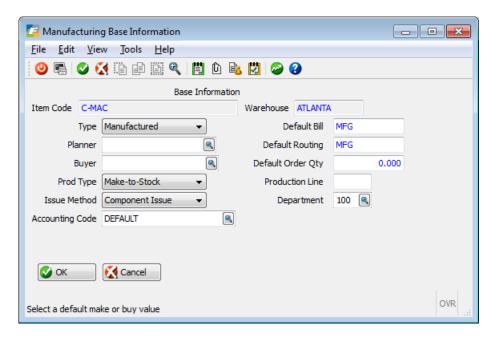
Field	Description
Component Issue Method	For items which are to be used as components in a bill of material, one of the following values:
	Component Issue – Issue this item via the Component Issue transaction in the Production Order Processing module
	Production Receipt – Issue this item via the Production Receipt transaction in the Production Order Processing module. These components will be issued at the same time the parent items is being received to inventory. This is often referred to as 'back-flushing'.
	Operation Complete – Issue this item via the Operation Completion transaction in the Production Order Processing module.
	Not Issued – this item is never issued to a production order. Non-production materials such as drawings, containers, and tooling are used in this way.
Accounting Code	The accounting code entries define the actual account numbers to be used for a variety of production related transactions such as which work in progress account numbers should be debited and credited when components are issued and production receipts for the finished goods are processed.
Department	Enter or zoom to find a department code.
Engineering Revision Level	Enter an optional value to indicate the current revision level for the item. This is useful where items with extensive and/or frequent configuration changes must be managed.
Engineering Drawing Num- ber	Enter an optional drawing number that could be cross-referenced to a physical drawing or electronic document
Engineering Change Number	In cases where Revision Levels are used, this can further reference an engineering department change number that advanced the item to its current revision level.
Bill of Material	Enter the identifier for the default bill of material for the item. Items are allowed to have more than one bill of material (for example: engineering, production, and service), and each bill has its own unique identifier. This value indicates the default bill of material identifier to be used when entering production orders and performing material planning.
Routing	Enter the identifier for the default routing for the item. Items are allowed to have more than one routing (for example: engineering, production, and service), and each routing has its own unique identifier. This value indicates the default routing identifier to be used when entering production orders and performing material planning.
Order Quantity	Enter an option default standard ordering quantity for the item, whenever it is produced or purchased.

Maintaining Item/Warehouse Manufacturing Information

Additional information about the inventory item is stored at the warehouse level as well, and the use of warehouse allows you to have multiple sets of this information for a single item, depending on the warehouse in which it is used.

From the detail section if the Update Inventory Information window, you can access manufacturing information that is specific to an item in an individual warehouse.

To access the manufacturing-related fields, select the button, move the cursor to the ware-house to be maintained for the item, and select the Mfg/Wh-Base button. The following window will display.



Many of the fields in this window are the same as the Mfg-Base window described above. These values at the Item/Warehouse level allow you to override characteristics or behavior of an item depending on the warehouse in which it exists. For example an item might be produced in one facility (warehouse) and consumed in another facility, within the same enterprise. In this case, the item can have a Type of Manufactured in one warehouse, and Purchased in another.

Field	Description
Item Code:	Inventory Item Code
Warehouse	Warehouse Identifier

Field	Description
Туре	Manufactured or Purchased. This determines how the Planning applications are to plan for either production or purchase of an item. In addition, if a manufactured part is placed on a purchase order to buy, or if a purchased item is entered as an item to be produced, warning messages will be displayed.
Planner	You may optionally assign this item to pre-defined Planners. Reports in other modules allow you to select items within specific planner codes
Buyer	You may optionally assign this item to pre-defined Buyers. Reports in other modules allow you to select items within specific buyer codes
Prod Type	Valid values are make to stock or assemble to order.
Issue Method	For items which are to be used as components in a bill of material, one of the following values:
	Component Issue – Issue this item via the Component Issue transaction in the Production Order Processing module
	Production Receipt – Issue this item via the Production Receipt transaction in the Production Order Processing module. These components will be issued at the same time the parent items is being received to inventory. This is often referred to as 'back-flushing'.
	Operation Complete – Issue this item via the Operation Completion transaction in the Production Order Processing module.
	Not Issued – this item is never issued to a production order. Non-production materials such as drawings, containers, and tooling are used in this way.
Accounting	
Code	The accounting code entries define the actual account numbers to be used for a variety of production related transactions such as which work in progress account numbers should be debited and credited when components are issued and production receipts for the finished goods are processed.
Default Bill	Enter the identifier for the default bill of material for the item. Items are allowed to have more than one bill of material (for example: engineering, production, and service), and each bill has its own unique identifier. This value indicates the default bill of material identifier to be used when entering production orders and performing material planning.
Default Routing	Enter the identifier for the default routing for the item. Items are allowed to have more than one routing (for example: engineering, production, and service), and each routing has its own unique identifier. This value indicates the default routing identifier to be used when entering production orders and performing material planning.
Default Order Quantity	Enter an option default standard ordering quantity for the item, whenever it is produced or purchased.
Production Line	This field is reserved for future use

Field	Description
Department	Enter or zoom to find a department code.

The Order Processing Menu

Use the options on this menu to create and modify production orders, print shop paperwork, and closeout orders.



This menu contains the following options:

Order Entry/Maintenance - Use this option to enter new production orders, and to maintain existing orders.

Order Splits - Use this option to split an existing production order into multiple orders with different order quantities and due dates.

Print Production Packet - Use this option to print a packet of information for the order, including required components and routing list. This document is typically placed with the item being produced, to track and record the physical progress of the order in the production facility.

Production Pick List - Use this option to print a component list to be used by personnel responsible for picking the components and making them available to the production processes.

Production Pick List - Reprint - Use this option to re-print a pick list which was already printed. It is used in the event the original was misplaced or lost.

Operation Closeout – Use this option to close routing list steps for an open production order.

Order Closeout – Use this option to access submenu and close out a specific production order, close out a range of orders based on date, run a closed orders report, re-open a closed order, or purge closed orders from the system.

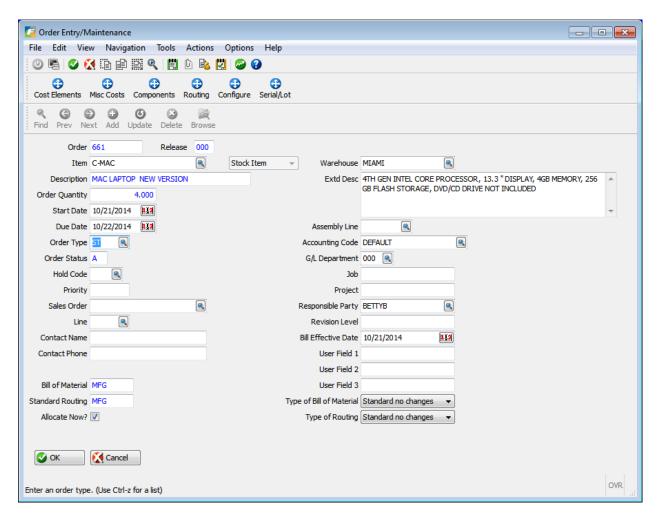
Order Entry/Maintenance

Use this option (2-a) to enter or modify production orders. The option consists of 5 primary screens:

Order Summary Cost Elements Misc Costs List Component List Routing List Configure

Order Entry/Maintenance - Summary screen

When you select Order Entry/Maintenance options, the Order Summary screen displays:



The following fields are displayed:

Order - The identifier for the order being entered. If the Setup Production Order Processing – Automatic Order Number was set to Y (yes), this number will be automatically assigned when you exit this field.

Release – The number of the release for this production order. This column is used when splitting orders. If you do not enter a value, a value of 000 will be used automatically.

Item – The identifier for the item being produced. Zoom for a list of valid items.

Warehouse – The identifier for the warehouse in which the item will be produced. Zoom for a list of valid warehouses.

NOTE:

The item and warehouse entered must have already been set up in the Update Inventory Information option in Inventory Control.

Extd Desc – use this field to enter an extended description for the work order. If the work order is a result of a sales order being entered the extended description on the sale order will display here but it can be revised.

Order Quantity – The number of units of the item being produced.

Start Date – The date this order is to be started. If the date is not a valid working day, a warning message will display. Zoom to display a calendar.

Due Date – The date the order is scheduled to be complete. If the date is not a valid working day, a warning message will display. Zoom to display a calendar.

Order Type – Enter a valid order type, or leave blank to allow the system default to be automatically used.

Order Status – This column can have one of the following values:

- A Active. This is the default value for a new order
- **H** Held. This indicates that the order is to be held from further processing

Hold Code – Enter a valid hold code. A hold code should only be entered if the status is changed to 'H'. Zoom for a list of valid hold codes.

Priority – Enter a user-defined priority, up to 4 characters, A-Z or 1-9.

Sales Order/Line –enter an optional sales order and line item for associated demand for this production order.

Contact Name – if attached to a sales order and a contact name was entered on the order it will display here.

Contact Phone - if attached to a sales order and a contact phone number was entered on the order it will display here.

Bill of Material – The item's default bill of material code (from Update Inventory Information) will be assigned automatically. You may change this code to another valid bill of material for the produced item. Zoom to display a list of valid bill of material codes for the item being produced.

Standard Routing – The item's default routing code (from Update Inventory Information) will be assigned automatically. You may change this code to another valid routing for the produced item. Zoom to display a list of valid standard routing codes for the item being produced.

Allocate Now – Enter Y to allocate material immediately or N to allocate material later.

Assembly Line –reserved for future use.

Accounting Code –assigned automatically from the order type. You may change this to a different accounting code, if needed. Zoom to display a list of valid codes.

G/L Department - this field will be assigned automatically from the order type. You may change this to a different department, if needed. Zoom to display a list of valid departments.

Job –enter an optional job identifier.

Project – enter an optional project identifier.

Responsible Party – enter an optional reference to a party responsible for the order.

Revision Level – enter an option engineering revision level for the item

Bill of Material Effectivity Date – enter an optional date to determine which components are to be used on this order. Components can have an effective start and end date in a bill of material. The date entered here is used to exclude components which have effective dates before or after the entered date. If no date is entered, component effective dates will be compared to the order start date, to determine if they should be used.

User Field 1 – enter optional additional information

User Field 2 – enter optional additional information

User Field 3 – Enter optional additional information

Type of Bill of Material – this field will be assigned automatically from the order type. It controls how an item's component list is to be processed when a new production order is entered. The allowed values are:

- S The manufactured item's standard bill of material is to be copied into the order's list of components, when the order is saved
- C The manufactured item's standard bill of material is to be copied into the order's list of components, and the components will be displayed, to allow for changes, before the order is saved.
- **M** No standard bill of material will be copied into the order's list of components, but the component list screen will be displayed, to allow the user to enter a custom list of components, before the order is saved.

Type of Routing – this field will be assigned automatically from the order type. It controls how an item's routing list is to be processed when a new production order is entered. The allowed values are:

- **S** The manufactured item's standard routing is to be copied into the order's routing list, when the order is saved
- C The manufactured item's standard routing is to be copied into the order's routing list, and the list will be displayed, to allow for changes, before the order is saved.

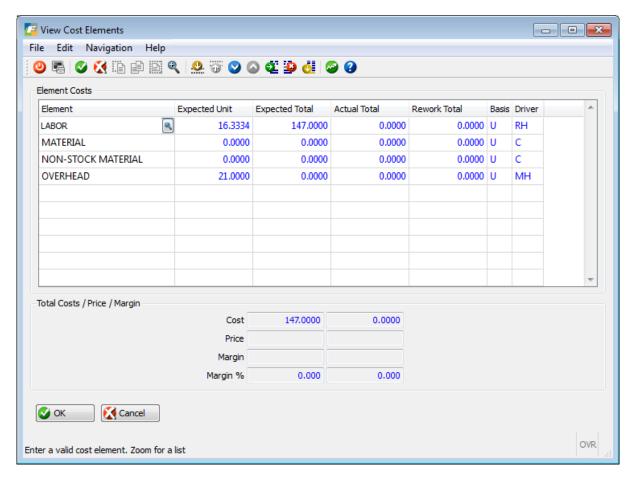
• **M** – No standard routing will be copied into the order's routing list, but the routing list screen will be displayed, to allow the user to enter a custom routing list, before the order is saved.

Cost Elements screen

When you are in update mode and select the



icon the following screen displays:



Element – predefined cost elements associated with this order.

Expected Unit Cost- the expected unit cost for the element associated with this order.

Expected Total Cost- the total standard cost of the element associated with this order.

Actual Cost- the total actual cost of the element associated with this order.

Rework Cost – the total rework cost of the element associated with this order.

Basis- This value defaults to 'Units', and should not be changed. It specifies that costs are calculated based on units of components or labor hours used to produce. The 'Cost' choice is currently not supported.

Driver- This value is one of:

- Component Issue cost is driven by Component Issue to the parent item
- Component Scrap cost is driven by Component Scrap to the parent item
- Run Hours cost is driven by labor reporting of Run Labor hours
- Machine Hours cost is driven by labor reporting of Machine hours
- Setup Hours cost is driven by labor reporting of Setup hours
- Outside Process cost is driven by outside process costs per piece in the labor routing
- Misc cost is driven by miscellaneous costs charged to the parent item. This driver is currently not in use.

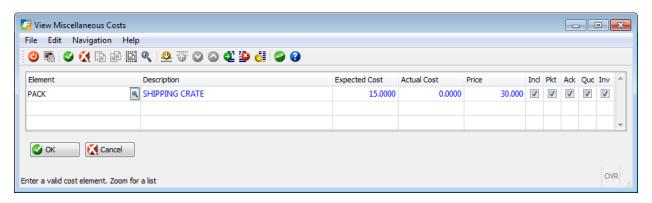
Total Cost/Price/Margin - see the chapter on Job Shop in this user guide.

Miscellaneous Costs screen

When you are in update mode and select the Misc Costs ic



Misc Costs icon the following screen displays:



Element – predefined miscellaneous cost elements associated with this order.

Description- enter a description of the element.

Expected Cost- the expected cost for the element associated with this order.

Actual Cost- the actual cost of the element associated with this order. A display only field that displays actual cost entered through an AP invoice tied to this work order. See the chapter on Job Shop in this user guide for more information.

Price- the price the customer should be charged for this element. If this is a job shop order you will be prompted to "roll up" the price to accommodate this when you save the production work order. See the chapter on Job Shop in this user guide for more information.

Check boxes - check which documents you want the miscellaneous costs to print on. Choices are:

- **Pkt** production packet
- Ack- customer order acknowledgement

- Quo customer quotation
- **Inv** customer invoice

Component List screen

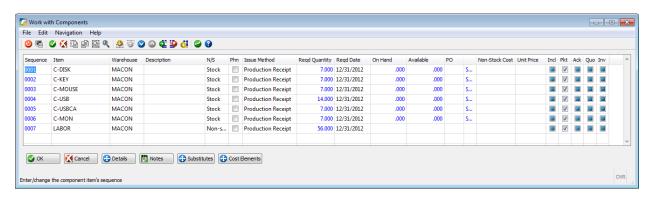
This screen displays when you are in update mode and take one of the following actions:

If a value of C or M is entered in the Type of Bill of Material or

If the Components icon is clicked on the summary screen

The component list displays the standard components from the produced item's bill of material (if Bill of Material Type C or S was selected), or an empty list (if Bill of Material Type M was selected).

The following screen displays:



One or more components may be entered for the production order. For each component:

Seq – Enter a sequential identifier for the component. Components are sorted for display and print based on this sequence.

Item – enter a valid item code for the component to be used. The combination of the 'Seq' and 'Item' must be unique for the line. Zoom to display a list of valid items.

Warehouse – enter a valid warehouse from which this component will be used. Zoom to display a list of valid warehouses.

Description – the description for the component item displays automatically. It cannot be changed.

N/S - defaults to the type of item (stock or non-stock)

Phn (Phantom) – this field is assigned automatically from the item's master information. The possible values are:

• **(Yes)** – this item is a phantom. It is NOT used from inventory, but its components ARE used from inventory. The phantom code is a convenient way to configure multiple items under a

common item code. Then, wherever this common item code is referenced, the phantom value of 1 indicates that the components for the common item code should be used, NOT the common item itself.

• (No) – this item is NOT a phantom. It will be used from inventory directly.

Reqd Quantity (**Required Quantity**) – the total units of the component item required to produce the number of units of the end item. This value is typically computed from the quantity per unit in the standard bill of material, times the number of units of the produced item.

Regularity Date (Required Date) – the date when this component item is expected to be used from inventory.

On Hand – the current on hand balance in inventory for the item. This is displayed as a reference to allow the user to determine if a sufficient quantity exists to be used on this order.

Available – the current on hand balance, minus allocations to sales orders or other production orders. This is displayed as a reference to allow the user to determine if a sufficient quantity exists to be used on this order.

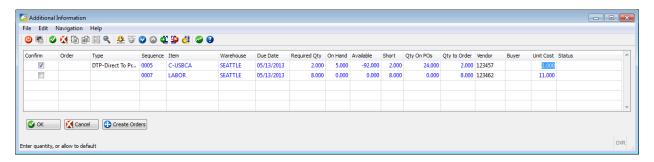
Note

While the quantity on hand may indicate a sufficient balance exists to be used, the available quantity gives more information about additional requirements from other orders for this same component.

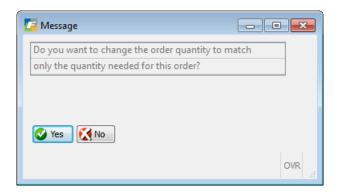
PO – the purchase order created for this component requirement if there was a shortage of availability. If you are short components you will receive this prompt when you save the work order:



If you answer Yes this screen displays and you can select which items you want to create purchase orders for, select the type of purchase order, vendor, and enter the cost.



If the production work order type is ST (for make to stock) this PO release screen recommends an order quantity that will cover all short units on all work orders, not just the production work order being created, and the PO type will be REG. If you want to just order enough components for the one work order you can change the "Type" on the screen shown above to DTP and receive this message:



Answer Yes and the order quantity will automatically be reduced to what the one work order requires.

If the production work order type is MTO or MTN (created automatically from a sales order and is therefore make to order or make to order nonstock) this PO release screen recommends an order quantity that will cover just the work order being created and the PO type will be DTP (direct to production).

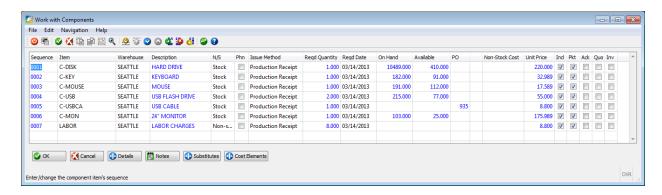
If the AVL Required check box in the Update Purchasing program is checked and you enter a non-catalog vendor you will receive this prompt.



Click on the Create Orders button at the bottom of the screen to create the purchase orders and the order # created will now display as shown here:



The PO number created will then display on the Component Screen. The available and on hand are null to show that the component quantity will be supplied by the purchase order.



If after creating purchase orders you add additional components that you are also short on you can zoom fron the Order field when the screen above displays to add these components to POs already created. If you instead want to issue yet another PO, leave the order field blank.

Non-Stock Cost – enter the cost for non-stock items

Unit Price – for job shop orders enter the price the customer should be charged. See the chapter on Job Shop in this user guide for more information.

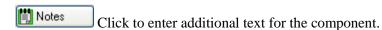
Check boxes - check which documents you want the components to print on. Choices are:

- Pkt production packet
- o Ack- customer order acknowledgement
- Quo customer quotation
- Inv customer invoice

Action Buttons – With the cursor positioned at a specific component, the following buttons support additional functions which can be accessed



Click to display window with additional details for the component item



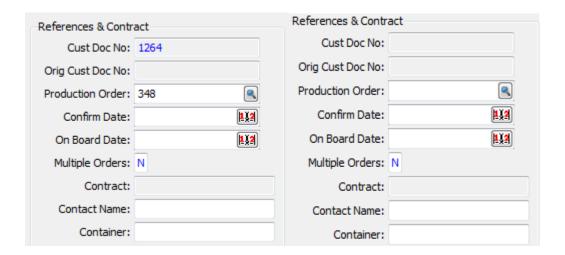
If a component has additional text as part of the standard bill of material, this text is copied into the production order components as well.

Click to see a list of predefined substitute items for the component item. If a component displays an insufficient quantity on hand or available, the screen may offer alternative components to allow the order to proceed.

Click to see a list of predefined cost elements associated with the order. Add appropriate costs that should be included in production order costs.

Un-attaching DTP Purchase Orders from a Work Order

1. Find the DTP PO, go into update mode and set the work order # to null as shown here.

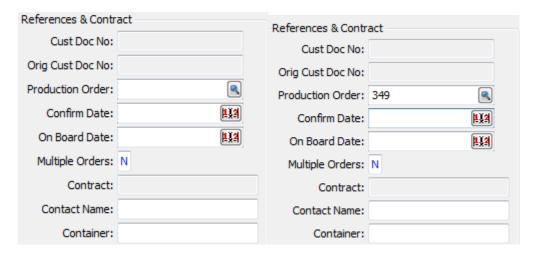


If the PO HAS already been received (and therefore already automatically issued to the Work Order). The steps are:

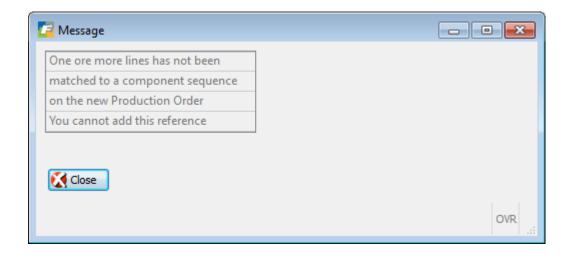
- 1. Enter NEGATIVE Component Issues on the Work Order, for the items on the PO you want to remove this either puts the stock inventory back into stock, or moves the \$ for non-stock material back to the expense account it belongs to. Either way, it removes the \$ from the work order.
- 2. Update the PO in PO Maintenance blank out the Production Order in the PO Header this will take the PO OFF the Job Cost Report for the Work Order.

To attach the removed DTP PO to another work order

1. Find the PO, go into update mode and enter the work order #.

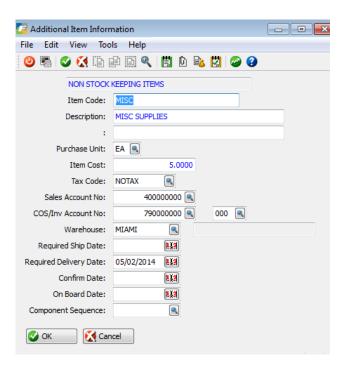


You will get this message when you try to save the transaction because you need to attach the PO line to the WO line.

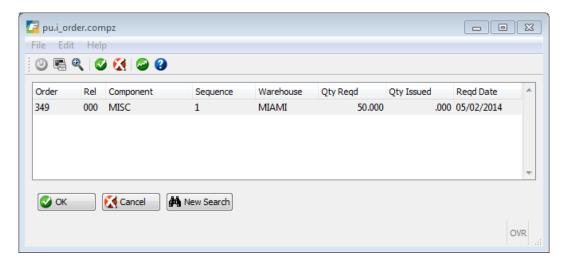


2. Go to the detail line on the PO, click the display:

button on the toolbar and this screen will



Click on the Component Sequence magnifying glass, this screen will display. Confirm the info is correct and click OK to save. This sets the sequence # on the PO line and the PO and WO are now attached.

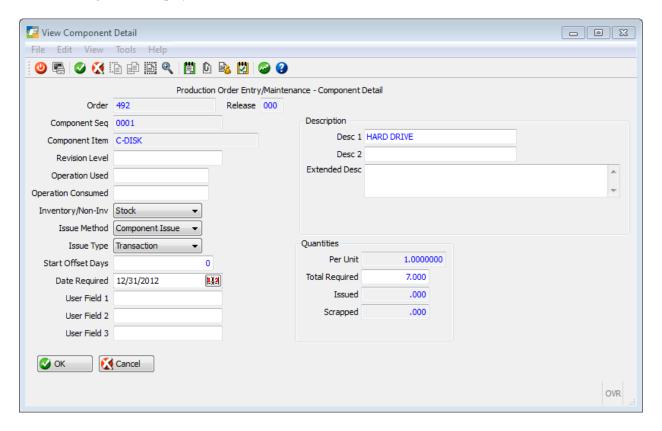


3. If the PO has already been received use the Component Issue option to issue the components to the Work Order. This would normally happen automatically when the Purchase Receipt is entered. But in this case, the items have already been received.

Component Details screen

This screen displays when the cursor is positioned on a specific component on the Component List screen, and you click the button. It lets you review and/or enter additional detail for the selected component. Most of the values are loaded automatically from either the bill of material components table, or the Item Inventory Information table.

The following screen displays:



The following fields are displayed:

Order number- the system assigned number associated with this production order.

Release- the system assigned sequential release number associated with this production order.

Component Item and description - the component item number and its description

Extended Description – optional extended description for this component item.

Revision Level – the current revision level of the item from the Item Inventory Information.

Operation Used – The first step in the routing where this component item is used from inventory.

Operation Consumed – this field is reserved for future use.

Inventory/Non-Inventory – the possible values are:

- **S** (stock) this component is to be issued from stock
- **N** (non-stock) this component will not be issued from stock.

Issue Method – the possible values are:

- **C** the component will be issued from stock with the Component Issue transaction. This is typical when the production process involves a relatively long lead time (such as a week or more).
- **R** the component will be issued when the end item is received into inventory via the Production Receipt transaction. This is typical when the production process involves a short lead time (such as less than one week).
- the component will be issued from stock with the Issue by Operation transaction. Each component which has an 'Operation Used' equal to the Operation being issued will be issued from inventory.
- **N** the component will not be issued. This is typical of items which are sent to work in processs in bulk, or for items which are needed in the production process, but are not stocked items (engineering drawings, tooling, etc).

Issue Type – the possible values are:

- **T** component is issued from inventory, and it's associated cost per unit is used with the quantity to create a transaction for G/L.
- C component is not issued from inventory, but it's cost per unit is used with the quantity to create a transaction for G/L.

Start Offset Days – the number of days after the order starts when this component needed. This offset if used to component the actual required date for the component.

Date Required – the date when this component is to be issued from inventory. The default value is the order date. If the component has a 'Start Offset Days' defined, this will be added to the order start date to computer a required date.

Print on Packet – Y will print the component on the Production Packet. N will not print the component on the Production Packet.

User Field 1 – enter optional additional information

User Field 2 – enter optional additional information

User Field 3 – Enter optional additional information

Quantities -

Per Unit – The number of units of the component to produce one unit of the parent or end item.

Total Required – The total number of units of the component needed to produce the total quantity of the parent or end item.

Issued – The total number of units already issued for the component.

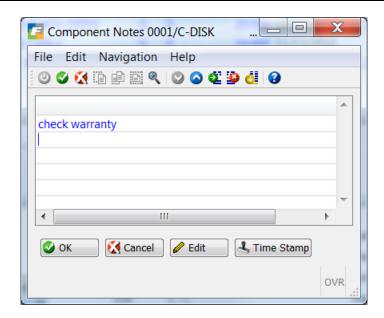
Scrapped – The total number of units of this component already consumed by production scrap transactions.

Notes screen

This screen appears to allow entry of additional text for the component.

Note

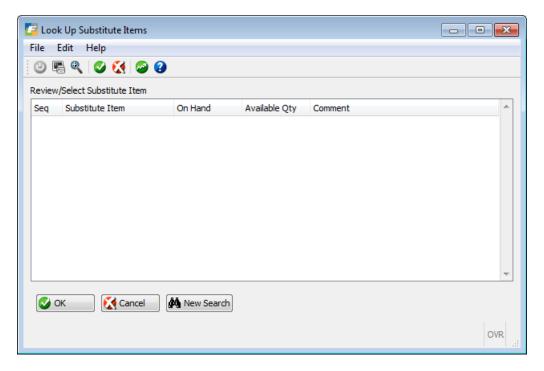
If a component has additional text as part of the standard bill of material, this text is copied into the production order components as well.



Substitutions screen

This screen displays when the cursor is positioned on a specific component on the Component List screen, and you click the Substitutes button. It allows you to review and/or select a substitute item for the current component. This function is typically used when an insufficient quantity of the component is available for the order.

The following screen displays:



Seq – The sequential order for the component. Typically, the substitutes with lower sequence values are preferred over higher sequence values.

Substitute Item – the item code for the substituting item

On Hand Qty (On Hand Quantity) – the on-hand balance

Available Qty (Available Quantity) – the on-hand balance, minus existing allocations, for the substitute.

Comment – a user-defined comment for how the substitute should be used.

User Actions

Click OK to use the selected component

Click Cancel ignore any selected substitute and return to the Component List screen

Click New Search

to enter additional search criteria to shorten the list of substitutes

Routing screen

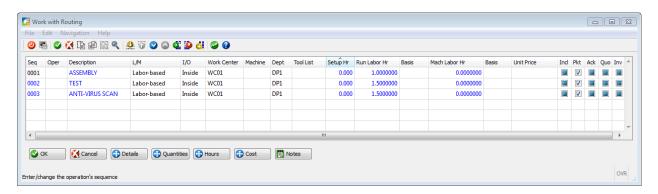
This screen will display when in update mode and the user takes one of the following actions:

If a value of C or M is entered in the Type of Routing

If the Routing icon is clicked on the summary screen

The routing list displays the routing from the produced item's standard routing (if Routing Type C or S was selected), or an empty list (if Routing Type M was selected).

The following screen is displayed:



One or more routing steps may be entered for the production order. For each routing step::

Seq – Enter a sequential identifier for the routing step. Steps are sorted for display and print based on this sequence.

Oper (Operation) – Enter an optional standard operation. Standard Operations can be defined in the Standard Routing module. Selecting an operation here can automatically fill in many of the remaining columns for the step (ie Work Center, Machine, Department, Tool List, Setup Hrs, Labor Hrs)

Description – enter a free-form description of the routing step

L/M – (Labor/Machine Constrained) – Indicate whether this routing step should be scheduled based on labor hours or machine hours

I/O (Inside/Outside Process) – Indicate if this step is performed within the company's production facilities, or if it is performed by an outside entity (ie a service provider).

Work Center – enter an optional work center at which this step will be performed. If a Work Center is selected, it's labor and overhead hourly rates are used to compute labor and overhead costs for the order

Mach (Machine) – enter an optional machine at which this step will be performed

Dept (**Department**) – enter an optional department at which this step will be performed.

Tool List – enter an optional tooling identifier or list of tools required to be used at this step

Setup Hrs (**Setup Hours**) – enter the number of hours required to prepare this step for the production process. If there is no setup time needed, enter 0.

Run Labor Hrs (**Run Labor Hours**) – enter the number of hours associated with completing this step for the produced item. This field is used together with the basis code below.

If the labor time is less than 1 hour, the time must be entered as the decimal equivalent of an hour. For example, a run time of 5 minutes per piece must be entered as 0.0833333, or 5/60 of an hour.

Basis – enter one of the following values:

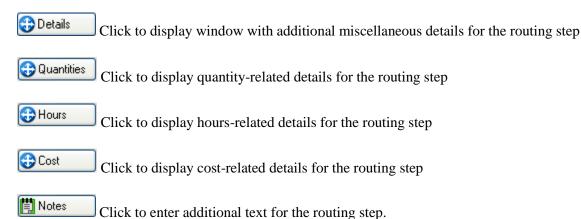
- **H** (**Hours per piece**) the run labor hours above are expressed as the 'hours required to produce one unit of the end item'
- **P** (**Pieces per hour**) the run labor hours above are expressed as the 'pieces completed within one hour

Unit Price – for job shop orders enter the price the customer should be charged. See the Job Shop chapter in this User Guide for more information.

Check boxes - check which documents you want the routing steps to print on. Choices are:

- **Pkt** production packet
- Ack- customer order acknowledgement
- **Quo** customer quotation
- o **Inv** customer invoice

Action Buttons – With the cursor positioned at a specific routing step, the following buttons support additional functions which can be accessed.

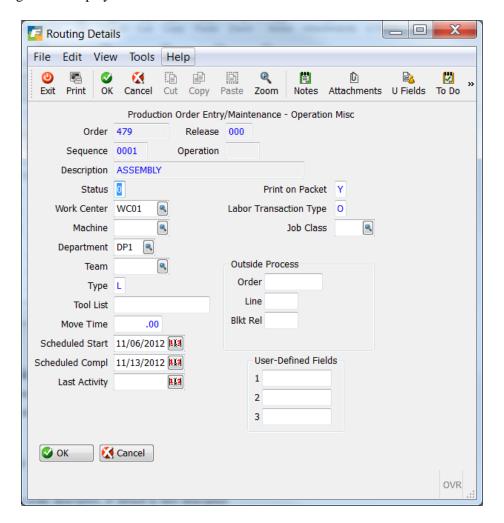


If a routing step has additional text as part of the standard routing, this text is copied into the production order routing steps as well

Routing Detail screen

This screen displays when the cursor is positioned on a specific routing step on the Routing List screen, and you click the button.

The following screen displays:



Status – possible values are:

- **0** the packet has not yet been printed
- 1 no activity on this operation, and no activity on previous operation
- 2 no activity on this operation, and the previous operation has started
- 3 no activity on this operation, and the previous operation has been completed
- 4 some activity has been reported for this operation
- 5 this operation is completed

Work Center – the optional work center at which this operation is being performed. Zoom for a list of valid work centers.

Machine – the optional machine at which this operation is being performed. Zoom for a list of valid machines.

Department – the optional production department in which this operation is being performed.

Team – the optional team performing the work at this operation

Type – possible values are:

- L this operation is to be scheduled based on labor hours remaining
- **M** this operation is to be scheduled base on machine hours remaining

Tool List – the optional tooling list identifier for one more special tools required for this operation.

Move Time – the optional move time in days after this operation is completed. The default value is zero.

Scheduled Start Date – the date this operation is scheduled to be started

Scheduled Compl (Schedule Completion Date) – the date this operation is scheduled to be completed.

Last Activity – the last date any labor activity was reported for this operation

Print on Packet – Y for yes, N for no.

Labor Transaction Type – this field is reserved for future use. The possible values are:

- L labor is reported by the Labor Transaction Entry function
- O labor is reported by the Operation Transaction function
- **P** labor is reported by the Production Receipt function

Job Class – the optional default Job Class for this operation. Job classes can be used to set standard labor rates per hour which may override the Work Center standard labor rate.

Outside Process -

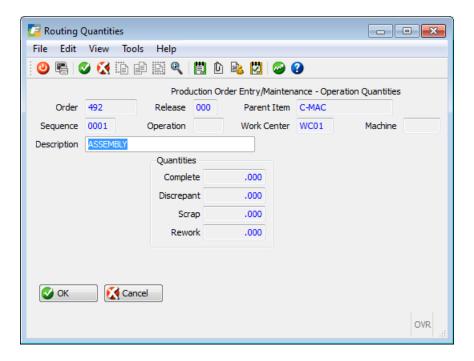
- **Order** The purchase order number associated with this operation, if the Inside/Outside Process type is O.
- **Line** The purchase order line item
- Blkt Rel (Blanket Release) this field is reserved for future use.

User-Defined Fields 1, 2 and 3 – Enter additional user-defined information

Routing Quantities screen

This screen displays when the cursor is positioned on a specific routing step on the Routing List screen, and you click the Quantities button.

The following screen displays:



Quantities - Complete - The number of units completed through this operation

Quantity – Disrecpant – This field is reserved for future use

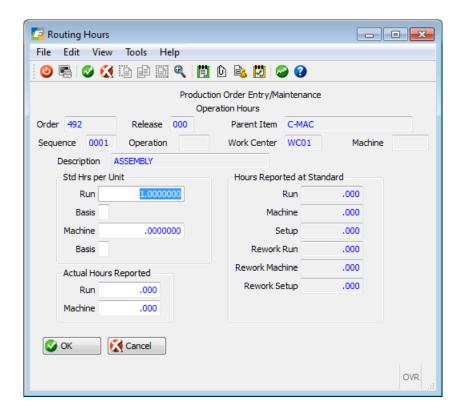
Quantity – **Scrap** – The number of pieces reported scrapped at this operation

Quantity – **Rework** – This field is reserved for future use.

Routing Hours screen

This screen displays when the cursor is positioned on a specific routing step on the Routing List screen, and you click the button.

The following screen displays:



Std Hrs per Unit:

• Run (Standard Hours per Unit – Run) – the number of labor hours required to complete the end item.

Basis – possible values are:

- **H** Run hours are entered as 'Hours required to produce one unit'
- **P** Run hours are entered as 'Number of units completed in one clock hour.
- Machine (Standard Hours per Unit Machine) the number of machine hours required to complete the end item.

Basis – possible values are:

- H Machine hours are entered as 'Hours required to produce one unit'
- P Machine hours are entered as 'Number of units completed in one clock hour.

Actual Hours Reported:

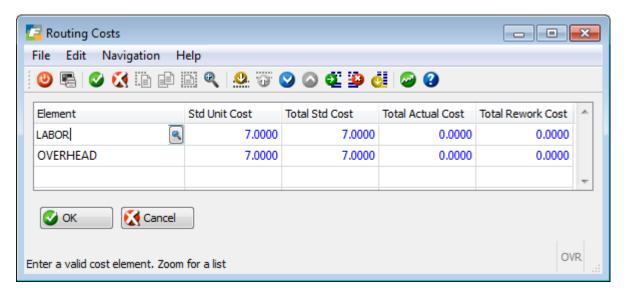
- **Run** the number of labor hours reported to-date for this operation
- **Machine** the number of machine hours reported to-date for this operation.
- Hours Reported at Standard:
- Run the number of units completed at this operated, times the Run Labor hours per unit

- **Machine** the number of units completed at this operated, times the Machine Labor hours per unit
- **Setup** if the operation has started the standard setup hours for this operation displays. If the operation has not started, zero will display here.
- **Rework Run** this field is reserved for future use.
- **Rework Machine** this field is reserved for future use.
- **Rework Setup** this field is reserved for future use.

Routing Cost screen

This screen displays when the cursor is positioned on a specific routing step on the Routing List screen, and you click the button.

The following screen displays:



Element – predefined cost elements associated with this order.

Std Unit Cost- the standard unit cost for the element associated with this order.

Total Std Cost- the total standard cost of the element associated with this order.

Total Actual Cost- the total actual cost of the element associated with this order.

Total Rework Cost – the total rework cost of the element associated with this order.

Configure Screen

See the Product Configurator User Guide for information on configured items.



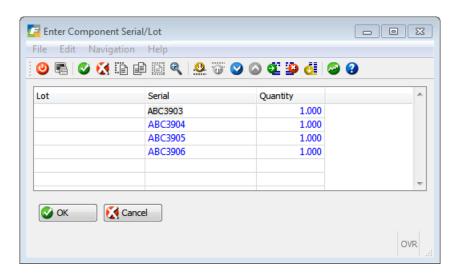
Serial/Lot Screen

If you are producing more than one of and item and the item being produced is serial and/or lot # controlled and has one or more components that are serial/lot # controlled use this screen to assign parent serial/lot #s to end items. Then when either Component Issue or Production Receipt is run you can assign the component serial/lot #s to the parent serial/lots# thereby having full traceability as to which parts went into each end item.

If auto serialization is turned on in the IC defaults table you will receive this prompt when you click on the Serial/Lot screen button



If you answer Y this screen displays with the serial numbers populated:



If auto serialization is not turned on this screen will still display but you will need o manually assign serial and/or lots numbers.

Multiple Inventory Items on the Same Work Order

Example:

You want a single work order that consumes one or more components and produces (to stock):

1 unit of an item A 2 units of an item B 2 units of an item C

To accomplish this:

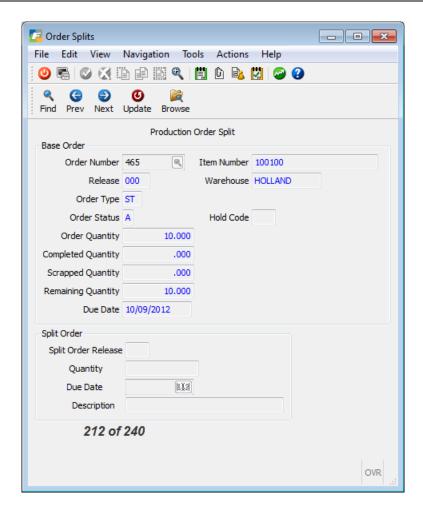
- 1. Set up a production order for 1 unit of item A.
- 2. Add components for all the material needed to produce items A, B and C.
- 3. Add item B as a component with a total qty required of -2, and an issue method of P(production receipt).
- 4. Add item C as a component with a total qty required of -2, and an issue method of P(production receipt).
- 5. Issue the components from step 2.
- 6. Enter a Production Receipt for item A. Items B and C will pop up at the bottom of the screen, with negative quantities displayed in the 'This Issue' column.
- 7. When you click OK to save, it will put:

I unit of item A into inventory 2 units of item B into inventory 2 units of item C into inventory

Order Split

Use this menu option (option 2-b) to split a production order into multiple orders. This option is useful when the total number of units cannot be completed, due to material shortages or insufficient capacity of resources. Splitting an order into smaller quantities may allow you to complete a lesser quantity and then complete remaining quantities when the shortages/capacity issues have been resolved.

You must first click the Find button, then enter the Order Number and Release for the base order you wish to split, and click OK. The following screen displays:



Split Order Release – enter a new release number for the split order. The split order will retain the Order Number, but must have a unique release number

Quantity – enter the quantity to be split into the new release

Due Date – enter the due date for the new release

Description – enter text describing the reason for the split.

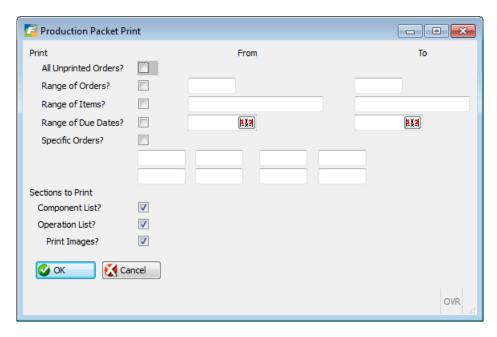
After entering the split order information, click OK to create the split order. The base order will remain as an active order, with the same due date, and a quantity which is the difference between the base order quantity and the split order quantity.

Print Production Packet

You use this menu option (2-c) to print or reprint production packets for orders entered through the Order Entry/Maintenance option. The Production Packet prints summary information about the order, such a item produced and warehouse, quantity and due date, and reference information and notes. In addition:

- Component List the component items and descriptions, along with their required quantities and dates
- **Routing List** the routing steps required to product the end item. Each step prints with description, setup and labor hour, and department, work center, machine and teams used to produce.

After selecting output destination, the following screen will then display:



All Unprinted Orders? - Double click to select $(\sqrt{})$ and print packets for all production orders which have not yet been printed.

Range of Orders? - Double click to select $(\sqrt{})$ and print packets for a range of orders. You must also enter a beginning order number and ending order number.

Range of Items?— Double click to select($\sqrt{}$) and print packets for a range of item numbers. You must also enter a beginning item number and ending item number.

Range of Due Dates? - Double click to select $(\sqrt{})$ and print packets for a range of due dates. You must also enter a beginning date and ending date.

Specific Orders? – Double click to select $(\sqrt{})$ individual order numbers (up to eight orders).

Sections to Print-

- Component List–Select if you want the component list to print on the packet. The default is $\sqrt{.}$
- Routing List–Select if you want the routing list to print on the packet. The default is $\sqrt{.}$

NOTE:

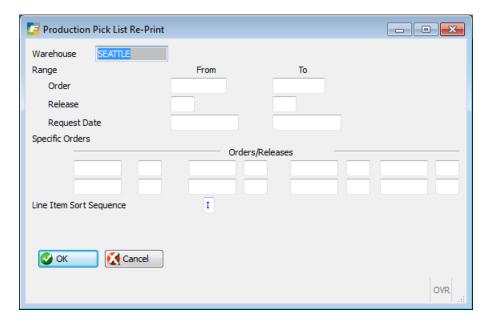
You can only select $(\sqrt{})$ for one of the 5 five choices in the 'Print' section above.

After entering the selection information, click OK to process the report.

Production Pick List / Production Pick List - Reprint

You use these menu options (2-d and 2-e) to print or reprint component material pick lists for orders entered through the Order Entry/Maintenance option. The Production Pick List prints the inventoried components which are to be picked to begin the production process. For each component, the item and description are printed, along with the quantity required and required date. In addition, if the component(s) are either serialized or lot controlled (see the *Inventory Control User Guide*), the serial or lot information is printed below the description.

After selecting output destination, the following screen will displays:



Warehouse – Enter the warehouse for the order(s) to be printed. If a production order requires components from multiple warehouses, a separate pick list must be printed from each warehouse.

All Unprinted Orders? (**Y or N**) – Enter **Y** to print all orders which do not yet have a pick list. Otherwise, select N.

NOTE

If you select Y here, you cannot also select a Range, or Specific items.

Range – you can enter ranges of Orders, Releases, and Request Dates

Specific Orders – You can enter specific order and release numbers.

NOTE:

You may enter a range, AND specific order numbers.

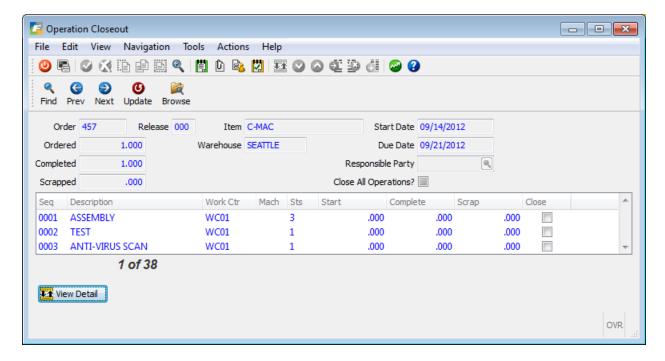
Line Item Sort Sequence – possible values are:

- **I** Sort by item number
- L sort by component sequence number
- **D** sort by default stock location

After entering the selection information, click OK to process the report.

Operation Closeout

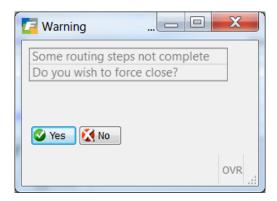
Use this menu option (2-f) to set the status of open operations on a production order to completed. Closing open operations removes them from the order scheduling functions in the *Production Scheduling* module.



Enter Responsible Party if necessary (optional).

Close All Operations? – check this box to close all operations.

When you press tab, you may see the following popup window:



Click Yes to continue (all operations will display as checked), or No to return to the screen. If you select Yes, the cursor will move to the checkbox for the first operation.

Order Closeout

Use these menu options (2-g) to move completed production orders to the history inquiry tables, re-open as needed, and also purge from the database.

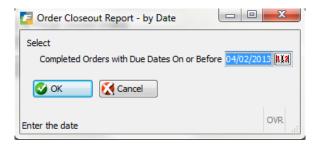
Closeout by Order

Use this option to close a specific Production Order. The following window displays:

Use the Find option to enter the order to be closed. Then select Update, and the 'Close Order' checkbox will automatically be checked. Click OK with the checkbox checked, and the order status will be changed to Closed.

Order Closeout by Date

Use this option to close orders based on their due dates. The following selection window displays:



An order is eligible to be closed, if its due date is on or before the selected due, and:

- All components have been completely issued
- All labor has been reported in the Labor Processing module
- All variances have been posted from the Actual Costing module.

The selected Active orders will have their status changed to Closed. A report lists the Production Orders which were Closed.

Closed Orders Report

Use this option to print a list of Production Orders that are closed. No selection window is displayed. The report lists one line per closed order, with due date, closed date and quantities.

Re-Open Closed Orders

Use this option to re-open previously closed orders. It is common to re-open closed orders when:

- Additional, or previously missed, component materials are to be issued
- Additional labor is to be issued.

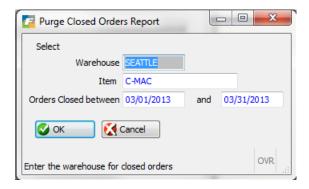
The following windows displays:



Use the Find option to enter the order to be re-opened. Then click Update, and the 'Re-Open Order' checkbox will be automatically checked. Click OK to re-open.

Purge Closed Orders

Use this option to remove closed orders from the Production Order tables, and optionally archive them in the Production Order History tables. The following window displays:



Warehouse – enter the warehouse for orders to be purged. If you do not enter a warehouse, orders for all warehouses will be considered.

Item – enter the end item for orders to be purged. If you do not enter an item, orders for all items will be considered.

Orders Closed between MM/DD/YYYY and MM/DD/YYYY – Enter a range of closed dates. If you do not enter a range, order with all close dates will be considered.

NOTE 1: If you do not enter ANY selection criteria, ALL closed orders will be removed and optionally archived to Production Order History.

NOTE 2: If you want purged orders to be archived, you must select 'Yes' to the 'Order History Support' option in Setup Production Order Processing.

A report will list the orders removed.



Chapter 3

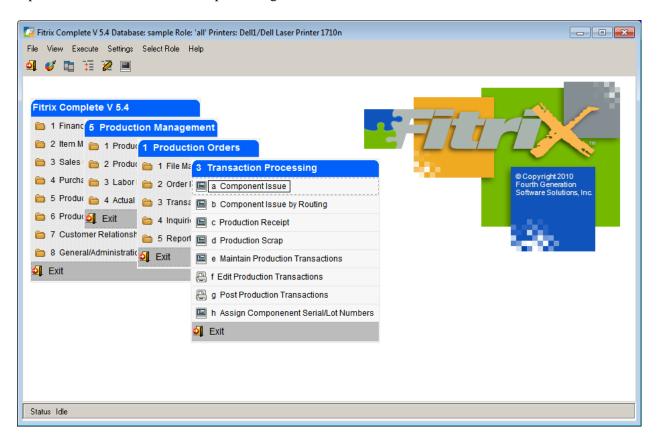
Transaction Processing

This chapter contains reference information about the different menu options on the Transaction Processing menu (option 3), and the screens and fields associated with these options. The information is organized by menu option.

For each menu option we briefly describe what the menu option does, show an example of the screen or report associated with the option, and describe each field on the data-entry screens.

The Transaction Processing Menu

Use the options on this menu to enter inventory transactions related to production orders, and work with reports and screens to control the processing of the transactions.



This menu contains the following options:

Component Issue - Use this option to move component items from inventory to work in process via production orders

Component Issue by Routing - Use this option to move component items from inventory to work in process via production orders, for components used at a specific labor routing step.

Production Receipt - Use this option to move component items from inventory to work in process and to move completed items from work in process to finished inventory.

Production Scrap - Use this option to move component items from inventory to work in process and to report units of end item scrapped from production to a scrap expense account.

Maintain Production Transactions - Use this option to process inventory movement transactions in the General Ledger module. You can make changes to the Transaction Date, and Account Numbers/Departments, before posting them to Inventory Control and General Ledger.

Edit Production Transactions - Use this option to print a validation report for transactions to be posted to General Ledger if the posting was not done real time.

Post Production Transactions - Use this option to print a posting report for transactions being posted to General Ledger if the posting was not done real time.

Component Issue

Use this menu option (option 3-a) to issue component inventory from stock, and add it to a production order's component material usage. This option is useful when a production order has a lead time that is long enough to require tracking of the value of work in process on a periodic basis. For example, of a production order requires a 2-week lead-time to complete, and if the material is needed at the start of the order, it is possible that the order might still be in progress at the end of an accounting period. If accounting practices specify that the value of any work-in-process be quantifiable at month-end, Component Issue supports this requirement.

Component Issue screen

When you select the menu option, the Component Issue screen displays. To enter an issue transaction, click the Add button. The first time you select Add, the Session Default screen displays.

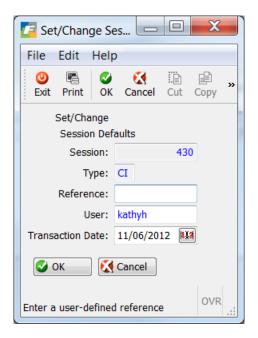
This screen displays:

• The first time you click the Add button or



• When you click the Session button

You typically review or change these session defaults one time, then begin entering transactions.

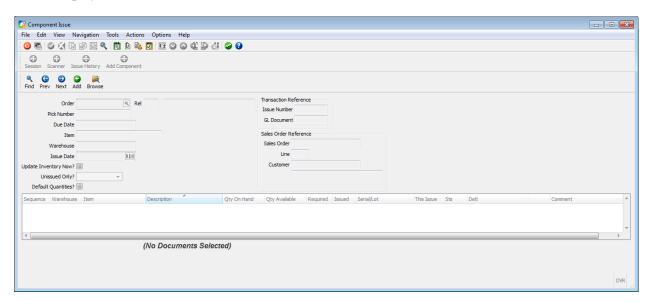


Reference – Enter a user-defined general reference to be saved with the transactions

User – Enter the user associated with this transaction

Transaction Date – Enter the date of the transactions (default is system date)

After you review/change the session defaults, and adding any information, select OK and the following screen displays:



Enter the following fields:

Order – Enter the production order number for this transaction. Zoom for a list of valid production orders

Release – Enter the production order release number for this transaction.

NOTE

When you press tab after entering the Release, other fields related to the order are automatically displayed.

Pick Number – If you want to issue from a specific pick list number, enter it here. If you leave this field blank, all components which are eligible to be issued will be included.

Due Date - date product should be completed by.

Item – finished good item code.

Warehouse – warehouse finished good will be put into.

Issue Date – enter the date to be recorded with the issue. The default is the Session Default Transaction Date.

Update Inventory Now? – check if you wish to update the inventory immediately, or uncheck if to update later, via the Post Production Transactions menu option.

Unissued Only – you can issue components over multiple sessions. Each time you start a session this flag determines what components display in the detail section of the screen. The options are Unissued only, Active Only, All Components.

Default Quantities? – check to automatically fill in the issue quantities with the expected issue quantities (you can still make changes if needed). Uncheck to fill in the quantities manually.

Issue Number - issue number for this work order.

GL Document – document number assigned by the program when the issue is posted.

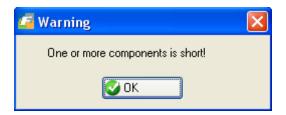
Sales Order Reference – if there is a sales order tied to the work order, its information displays here.

NOTES

NOTE 1: When you press tab after selecting the Default Quantities choice, the list of components which can be issued display automatically.

NOTE 2: Only components with an Issue Method of 'C' will be displayed.

NOTE 3: If one or more components has insufficient inventory for the issue, a warning window will display:



This Issue – Enter or verify the quantity issued for each component. To reverse a previous component receipt set the Unissued Only flag to All Components and enter a negative quantity.

NOTES

NOTE 1: If you press tab while the cursor is in the 'This Issue' column, AND the 'Detail' column is highlighted as 'Needed', the Serial and Lot Selection screen will display automatically (See 'Detail' description below)

NOTE 2: If you press tab while the cursor is in the 'This Issue' column, and the on-hand balance is less than the issue quantity, the following error displays:

Sts (**Status**) – the possible choices are:

Close – Change the issue status of this component to Closed. No further issues can be entered.

Leave Open – The issue status will remain Open. Further issues can be entered later.

Re-Open – For a component which was previously closed, change the issue status back to open.

NOTE:

The Status will be automatically set to Close, if the total quantity issued is equal to or greater than the quantity required, OR to Leave Open, if the total quantity issued is less than the quantity required

Detl– The possible values are:

- Needed If the component is serialized OR lot-controlled, this button will be turned on. This indicates that an additional window will display for you to select the serial numbers or lots to be selected.
- **Supplied** If the component is serialized OR lot-controlled, and the serial or lots have been successfully selected, this button will be turned on.
- **NONE** If the component is NOT serialized and NOT lot controlled, neither button will be turned on, and the serial or lot selection window will not display.

'Short' – This label will display automatically for any component with an on-hand balance less than the required quantity.

Comment – Enter an optional comment for the component being issued.

Serial and Lot Selection screen

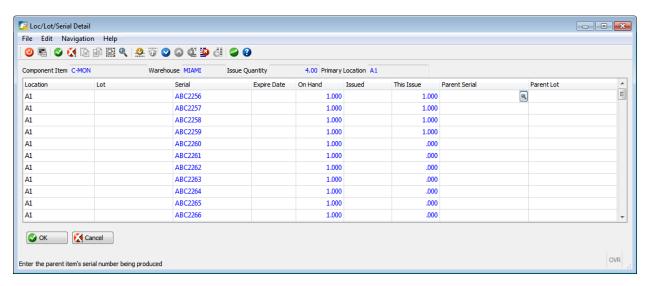
0

This screen displays when:

- You tab past 'This Issue', for a component where the Detail column was highlighted as 'Needed'.
- You click the Lot/Serial button when the cursor is positioned on a component where the 'Detail' column is highlighted as 'Needed' or 'Supplied'

You must select serial numbers or lots with a total quantity that matches the issue quantity.

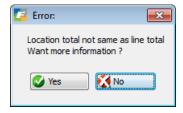
The following screen displays:



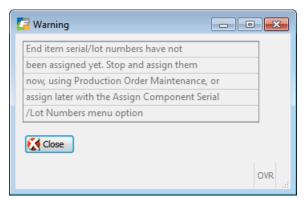
This Issue – Enter a quantity of the serial number or lot issued

NOTE:

The issue quantity for each selected serial or lot is summed and compared to the issue quantity for the component. If the sum does not match, an error is displayed:



If you assigned serial/lot #s to the end item being produced you can zoom from the Parent Serial or Parent Lot # fields to associate component serial/lots #s with the parent item they will be a part of. If you have not you will received this error.

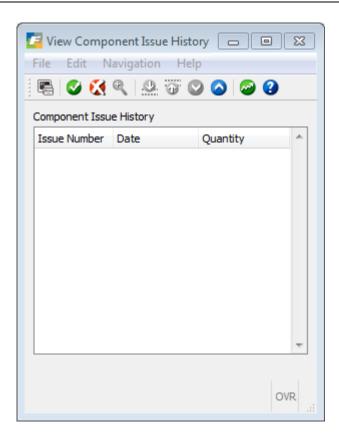


The same will hold true in the Production Receipt screen if that is the issue method used.

Issue History screen

This screen displays when you click the History button. It displays any previous issue transactions for the current component item.

The following screen displays:



Component Issue by Routing (Operation)

Use this menu option (option 3-b) to issue component inventory from stock, and add it to a production order's component material usage, for components used at a specific labor routing. This option is very similar to the Component Issue transaction, but in cases where material usage is closely aligned to labor routing steps and associated reporting, it more accurately reflects exactly WHEN components are issued. As with Component Issue, if accounting practices specify that the value of any work-in-process be quantifiable at month-end, Component Issue supports this requirement.

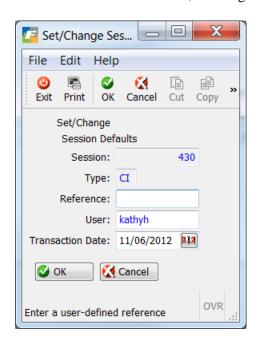
Component Issue by Operation screen

When you select the menu option, the Component Issue by Operation screen displays. To enter an issue transaction, click the Add button. The first time you select Add, the Session Default screen displays.

This screen displays:

- The first time you click the Add button or
- When you click the Session button

You typically review or change these session defaults one time, then begin entering transactions.

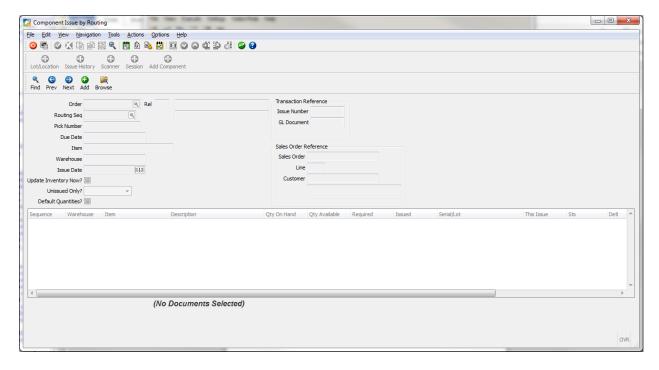


Reference – Enter a user-defined general reference to be saved with the transactions

User – Enter the user associated with this transaction

Transaction Date – Enter the date of the transactions (default is system date)

After you review/change the session defaults, and adding any information, select OK and the following screen displays:



Enter the following fields:

Order – Enter the production order number for this transaction. Zoom for a list of valid production orders

Release – Enter the production order release number for this transaction.

Routing Seq – Enter the labor routing step for the components to be issued for this transaction.

NOTE

When you press tab after entering the Release, other fields related to the order are automatically displayed.

Pick Number – If you want to issue from a specific pick list number, enter it here. If you leave this field blank, all components which are eligible to be issued will be included.

Issue Date – enter the date to be recorded with the issue. The default is the Session Default Transaction Date.

Update Inventory Now? – check if you wish to update the inventory immediately, or uncheck if to update later, via the Post Production Transactions menu option.

Unissued Only? - Select one of the following choices

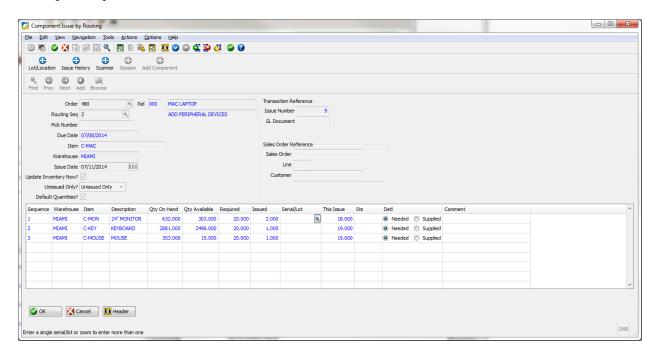
Unissued Only – skip any components that have been fully issued

Active Only – display only components that have an 'Active' Status

All Components – display all components, regardless of status or previous issue quantity. This choice is typically used when a negative issue quantity (ie a return to stock) is to be entered.

Default Quantities? – check to automatically fill in the issue quantities with the expected issue quantities (you can still make changes if needed). Uncheck to fill in the quantities manually.

A sample component issue screen is shown below:



NOTES

NOTE 1: When you press tab after selecting the Default Quantities choice, the list of components which can be issued display automatically.

NOTE 2: Only components with a bill of material Issue Method of 'O'(Issue by Routing), AND an Operation Where-Used that matches the entered routing sequence, will be displayed.

NOTE 3: If one or more components has insufficient inventory for the issue, a warning window will display:



This Issue – Enter or verify the quantity issued for each component.

NOTES

NOTE 1: If you press tab while the cursor is in the 'This Issue' column, AND the 'Detail' column is highlighted as 'Needed', the Serial and Lot Selection screen will display automatically (See 'Detail' description below)

NOTE 2: If you press tab while the cursor is in the 'This Issue' column, and the on-hand balance is less than the issue quantity, an error message will display.

Sts (Status) – the possible choices are:

Close – Change the issue status of this component to Closed. No further issues can be entered.

Leave Open – The issue status will remain Open. Further issues can be entered later.

Re-Open – For a component which was previously closed, change the issue status back to open.

NOTE:

The Status will be automatically set to Close, if the total quantity issued is equal to or greater than the quantity required, OR to Leave Open, if the total quantity issued is less than the quantity required

Detl– The possible values are:

- Needed If the component is serialized OR lot-controlled, this button will be turned on. This indicates that an additional window will display for you to select the serial numbers or lots to be selected.
- **Supplied** If the component is serialized OR lot-controlled, and the serial or lots have been successfully selected, this button will be turned on.
- **NONE** If the component is NOT serialized and NOT lot controlled, neither button will be turned on and the serial or lot selection window will not display.

'Short' – This label will display automatically for any component with an on-hand balance less than the required quantity.

Comment – Enter an optional comment for the component being issued.

Serial and Lot Selection screen

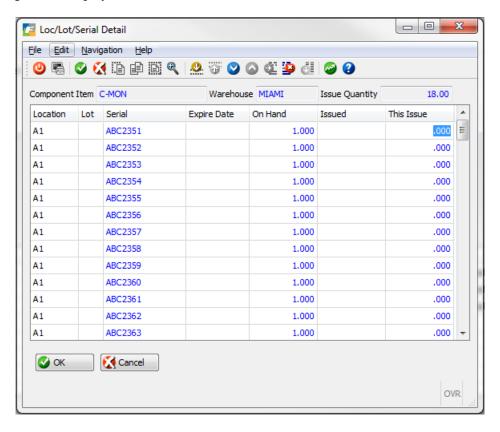
This screen displays when:

• You tab past 'This Issue', for a component where the Detail column was highlighted as 'Needed'.

• You click the Lot/Serial button when the cursor is positioned on a component where the 'Detail' column is highlighted as 'Needed' or 'Supplied'

You must select serial numbers or lots with a total quantity that matches the issue quantity.

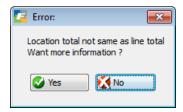
The following screen displays:



This Issue – Enter a quantity of the serial number or lot issued

NOTE:

The issue quantity for each selected serial or lot is summed and compared to the issue quantity for the component. If the sum does not match, an error is displayed:



Issue History screen

This screen displays when you click the History button. It displays any previous issue transactions for the current component item.

The following screen displays:



Production Receipt

Use this menu option (option 3-b) to:

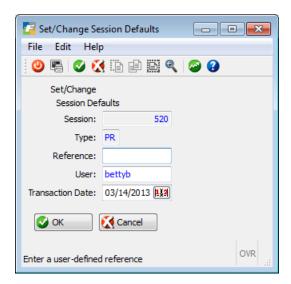
- Receive a completed item from a production order into inventory.
- Optionally, issue component inventory from stock, and add it to a production order's component
 material usage. Please note that if you try to run the production receipt for a work order that has
 an issues method of component issue and not all components have been issued you will receive
 this error and not be allowed to continue.



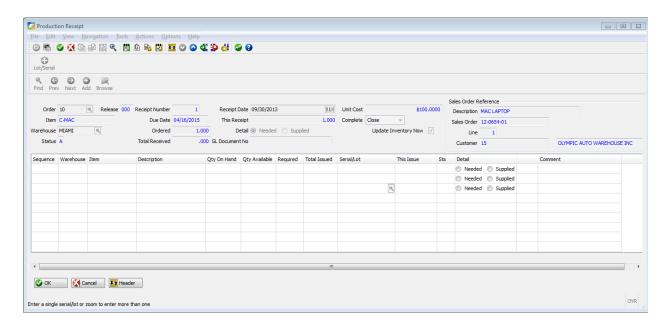
This option is used to complete the production order cycle. The end item defined on a production order is received into finished inventory. Optionally, for components defined with a Component Issue Method of 'P', quantities are issued from inventory and added to the usage quantities. It is useful to define components with this issue method when there is a relatively short lead time. In these cases, this function can save keystrokes, and offer a higher level of accuracy, as both component issue and production receipt happen simultaneously.

Production Receipt screen

When you select this menu option, the Production Receipt screen displays. To enter a receipt transaction, click the Add button. The first time you select Add, the Session Default screen displays



After you review/change the session defaults, enter the transaction information into the following screen:



The following fields are available:

Order – Enter the production order number for this transaction. Zoom for a list of valid production orders

Release – Enter the production order release number for this transaction.

NOTE:

When you press tab after entering the Release, other fields related to the order are automatically displayed

Receipt Number – This number is automatically generated, to indicate the number of receipt transactions entered for the current production order.

Receipt Date – enter the date to be recorded with the receipt. The default is the Session Default Transaction Date.

This Receipt – enter the quantity to receive. To reverse a previous production receipt enter a negative quantity.

NOTES

NOTE 1: If the end item is either serial or lot controlled, the Enter Serial/Lot Numbers screen will display when you click tab from the Receipt Quantity (see below)

NOTE 2: When you click tab, if any associated components have an on-hand balance which is less than the required quantity, the following window displays:



NOTE3: When you click tab after entering the receipt quantity, the list of components which can be issued displays automatically. Only components with a Component Issue Method of 'P' will display.

Unit Cost – The unit cost for the end item will be automatically calculated, from the costs associated with the components issued. You can change this value.

WARNING:

If you change the calculated unit cost, you may cause the work in process balance for this order to be incorrect.

Complete –The possible values are:

- Leave Open Do not set the order status to Closed
- Close Set the order status to close. Further receipts will not be allowed.

 This value will be automatically computed based on the Receipt Quantity entered. If the total received quantity equals or exceeds the order quantity, it will be set to Close. If less, it will be set to 'Leave Open'.

If you do enter a short quantity received but you want the receipt quantity to be costed as if all the components had been used, manually change the Complete value to Closed. This is handy when you did use all components but some of the end items produced had to be scrapped. You want what was produced to be the cost of all components used and the work order to be closed.

Update Inventory Now? – check if you wish to update the inventory immediately, or uncheck if to update later, via the Post Production Transactions menu option.

NOTE:

When you click tab after selecting the Update Inventory Now choice, the cursor will move to the first component. If no components display, click OK to complete the receipt.

The following component fields are available:

This Issue – Enter or verify the quantity issued for each component.

NOTES

NOTE 1: If you press tab while the cursor is in the 'This Issue' column, AND the 'Detail' column is highlighted as 'Needed', the Serial and Lot Selection screen will display automatically (See 'Detail' description below)

NOTE 2: If you press tab while the cursor is in the 'This Issue' column, and the on-hand balance is less than the issue quantity, the following error displays:

Sts (**Status**) – the possible choices are:

- Close Change the issue status of this component to Closed. No further issues can be entered.
- Leave Open The issue status will remain Open. Further issues can be entered later.
- **Re-Open** For a component which was previously closed, change the issue status back to open.

NOTF:

The Status will be automatically set to Close, if the total quantity issued is equal to or greater than the quantity required, OR to Leave Open, if the total quantity issued is less than the quantity required

Total Received- total received to date.

GL Document No – the document number assigned to the work order by the posting routine.

Sales Order Reference – if the production work order is tied to a sales order the sales order information will display in these fields

Detail– The possible values are:

- Needed If the component is serialized OR lot-controlled, this button will be turned on. This indicates that an additional window will display for you to select the serial numbers or lots to be selected.
- **Supplied** If the component is serialized OR lot-controlled, and the serial or lots have been successfully selected, this button will be turned on.
- **NONE** If the component is NOT serialized and NOT lot controlled, neither button will be turned on, and the serial or lot selection window will not display.

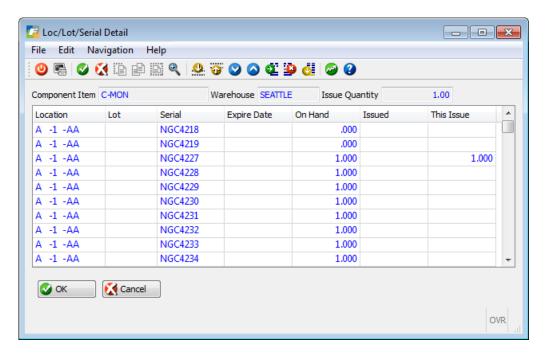
'Short' – This label will display automatically for any component with an on-hand balance less than the required quantity.

Comment – Enter an optional comment for the component being issued.

Enter Serial/Lot Numbers screen

This screen displays when the end item is either serialized or lot controlled (See the Inventory Control User Guide). You must enter the required information to place the item into inventory.

The following screen is displayed:



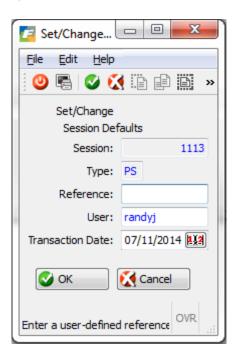
The following fields are displayed:

Lot Number – you can only enter into this field if the item is Lot Controlled

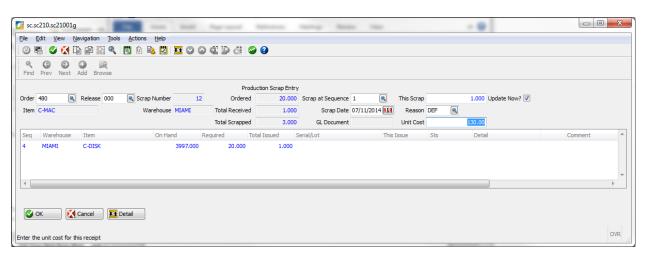
Quantity – enter the total quantity to be used.

Production Scrap

When you select this menu option, the Production Scrap screen displays. To enter a scrap transaction, click the Add button. The first time you select Add, the Session Default screen displays



After you review/change the session defaults, enter the transaction information into the following screen:



The following fields are available:

Order – Enter the production order number for this transaction. Zoom for a list of valid production orders

Release – Enter the production order release number for this transaction.

NOTE:

when you press tab after entering the Release, other fields related to the order are automatically displayed

Scrap Number – This number is automatically generated, to indicate the number of scrap transactions entered for the current production order.

Scrap Date – enter the date to be recorded with the scrap. The default is the Session Default Transaction Date.

Scrap Quantity – enter the quantity to be scrapped.

NOTE1: When you click tab, if any associated components have an on-hand balance which is less than the required quantity, the following window displays:



NOTE2: When you click tab after entering the receipt quantity, the list of components which can be issued displays automatically. Only components with a Component Issue Method of 'P' will display.

Unit Cost – The unit cost for the scrapped item(s) will be automatically calculated, as noted above. You can change this value.

WARNING:

If you change the calculated unit cost, you may cause the work in process balance for this order to be incorrect.

Complete –The possible values are:

- Leave Open Do not set the order status to Closed
- Close Set the order status to close. Further receipts will not be allowed.

 This value will be automatically computed based on the Receipt Quantity entered. If the total received quantity equals or exceeds the order quantity, it will be set to Close. If less, it will be set to 'Leave Open'.

Update Inventory Now? – check if you wish to update the inventory immediately, or uncheck if to update later, via the Post Production Transactions menu option.

NOTE:

When you click tab after selecting the Update Inventory Now choice, the cursor will move to the first component. If no components display, click OK to complete the receipt.

The following component fields are available:

This Issue – Enter or verify the quantity issued for each component.

NOTES

NOTE 1: If you press tab while the cursor is in the 'This Issue' column, AND the 'Detail' column is highlighted as 'Needed', the Serial and Lot Selection screen will display automatically (See 'Detail' description below)

NOTE 2: If you press tab while the cursor is in the 'This Issue' column, and the on-hand balance is less than the issue quantity, the following error displays:

Resulting Balance cannot be negative. You will not be allowed to continue unless you change the quantity to less than or equal to the on hand

Sts (**Status**) – the possible choices are:

- Close Change the issue status of this component to Closed. No further issues can be entered.
- Leave Open The issue status will remain Open. Further issues can be entered later.
- **Re-Open** For a component which was previously closed, change the issue status back to open.

NOTE:

The Status will be automatically set to Close, if the total quantity issued is equal to or greater than the quantity required, OR to Leave Open, if the total quantity issued is less than the quantity required

Detail– The possible values are:

- Needed If the component is serialized OR lot-controlled, this button will be turned on. This indicates that an additional window will display for you to select the serial numbers or lots to be selected.
- **Supplied** If the component is serialized OR lot-controlled, and the serial or lots have been successfully selected, this button will be turned on.
- **NONE** If the component is NOT serialized and NOT lot controlled, neither button will be turned on, and the serial or lot selection window will not display.

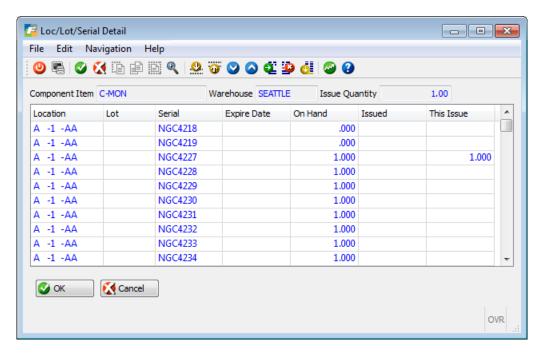
'Short' – This label will display automatically for any component with an on-hand balance less than the required quantity.

Comment – Enter an optional comment for the component being issued.

Enter Serial/Lot Numbers screen

This screen displays when the end item is either serialized or lot controlled (See the Inventory Control User Guide). You must enter the required information to place the item into inventory.

The following screen is displayed:



The window displays a list of components, with their bin locations, lot numbers, serial numbers (if applicable) and On Hand balances. You can enter into the following columns::

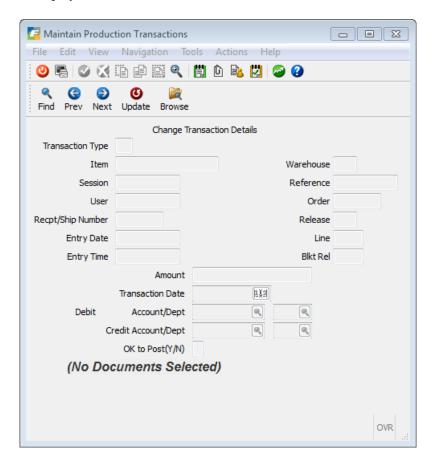
This Issue – enter the total quantity to be issued.

NOTE: If the component is serialized, you should only enter a quantity of 1, for each unit to be used.

Maintain Production Transactions

Use this menu option (option 3-c) to work with production inventory transactions which were NOT processed with the 'Update Inventory Now' choice. You can make changes to the Transaction Date, and Account Numbers/Departments, before posting them to Inventory Control and General Ledger.

The following screen displays:



The following fields are available:

Transaction Date – the date to be recorded in the General Ledger

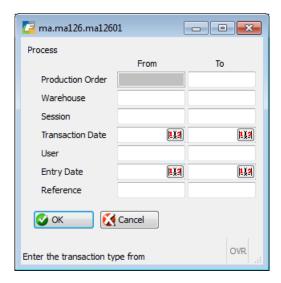
Debit Account/Dept – Zoom to display valid accounts and departments

Credit Account/Dept – Zoom to display valid accounts and departments

OK to Post (Y/N) – Enter Y to allow posting to Inventory Control and General Ledger or N to prevent posting.

Edit Production Transactions

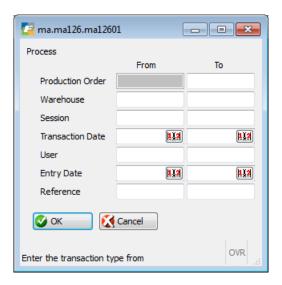
Use this menu option (option 3-d) to print an edit listing of production inventory transactions which were NOT processed with the 'Update Inventory Now' choice.



Enter From- and To- ranges for any of the available fields, then Click OK to process the edit listing.

Post Production Transactions

Use this menu option (option 3-e) to print a posting list of production inventory transactions which were NOT processed with the 'Update Inventory Now' choice. The posting updates inventory on hand balances, and posts accounting entries to the General Ledger transaction tables.

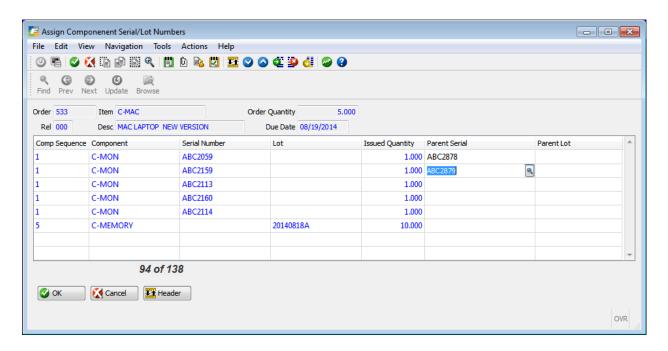


Enter From- and To- ranges for any of the available fields, then Click OK to process the posting list.

Assign Component Serial/Lot Numbers

Use this program to assign component serial/lot #s to parent items if you have not already done so during either Component Issue or Production Receipt.

Find the production work. Components that have not been assigned to a parent will display in the detail. Go into update mode and then zoom to find the serial/lot # the component went into.



Chapter 4

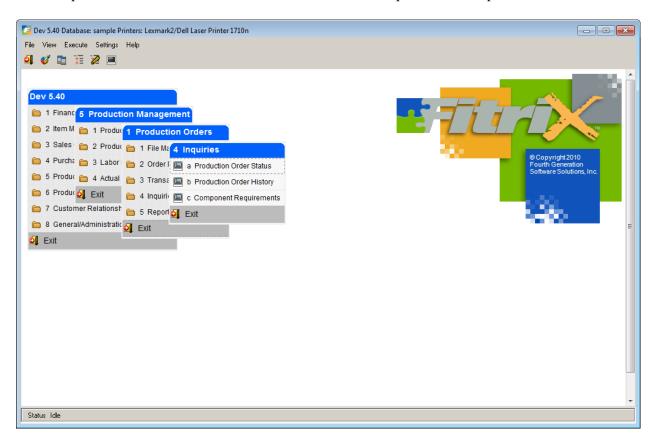
Inquiries

This chapter contains reference information about the different menu options on the Inquiries menu (option 4), and the screens and fields associated with these options. The information is organized by menu option.

For each menu option we briefly describe what the menu option does, show an example of the screen or report associated with the option, and describe each field on the data-entry screens.

Inquiries Menu

Use the options on this menu to review on screens the status of open and closed production orders



This menu contains the following options:

Production Order Status - Use this option to review the current summary status of an order, as well as details related to components and routing steps.

Production Order History - Use this option to review the summary status of an order which has been closed and purged to history, as well as details related to component usage and routing step completion.

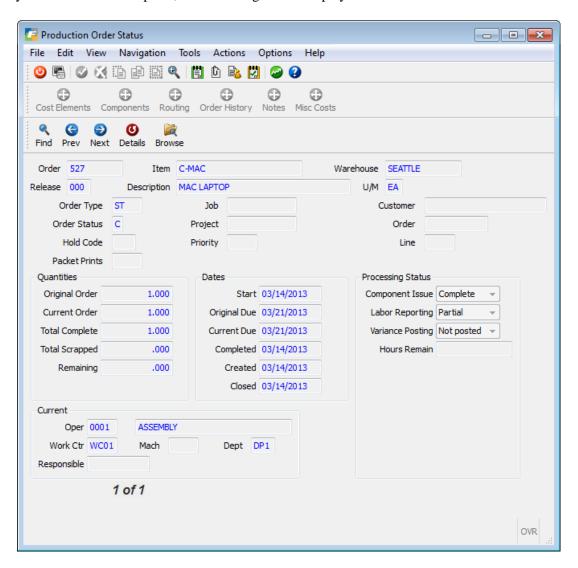
Component Requirements - Use this option to review all open orders using a common component item.

Production Order Status

Use this menu option (option 4-a) to display the current status of an open production order. Information is presented as an at-a-glance summary, showing status relative to quantities produced, due dates, and current operation statistics. You can also review component and routing step details.

Production Order Status screen

When you select the menu option, the following screen displays:

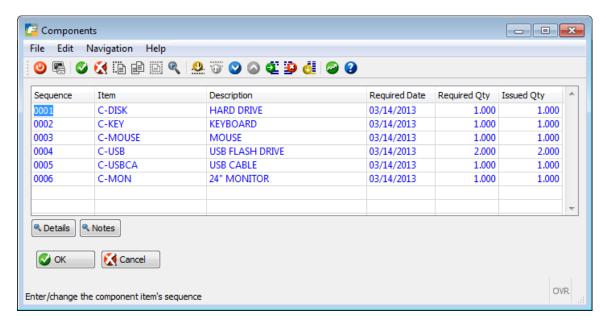


Click the Find button to search for the order. You can then click the Details button to access more options

Component List screen

Components

This screen displays when you click the Components button from the Status screen:



The following additional information is available, by clicking the appropriate button:



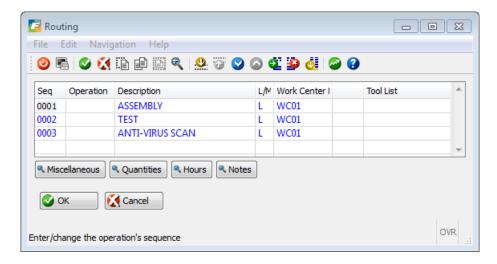
View additional details for the current component



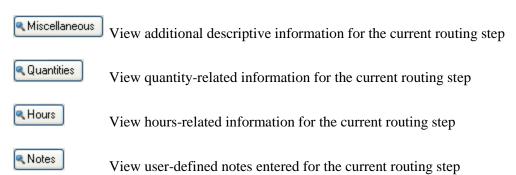
View user-defined notes for the current component

Routing List screen

This screen displays when you click the Routing button from the Status screen:



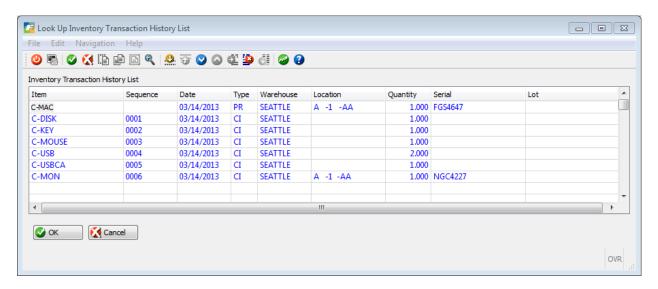
The following additional information is available, by clicking the appropriate button:



Order History screen

This screen displays when you click the Order History button from the Status screen. It displays the Production Receipts which have been processed for the current order.

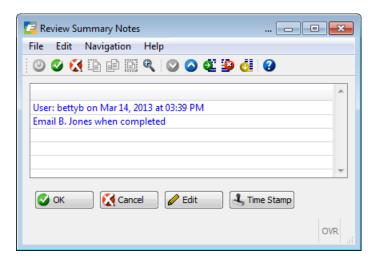
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Order Notes screen

This screen displays when you click the Notes button from the Status screen. It displays any user-defined notes entered for the current order.

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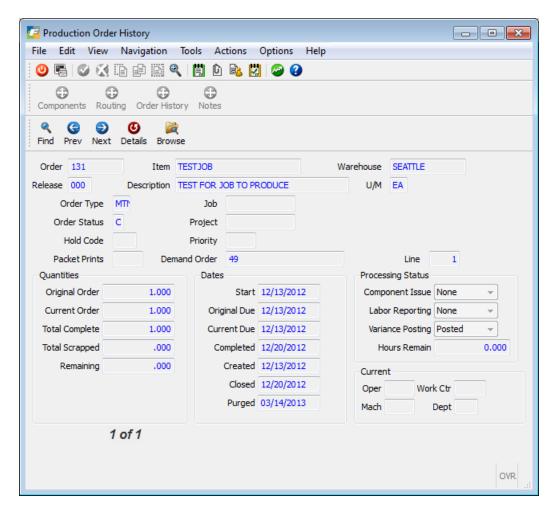


Production Order History

Use this menu option (option 4-b) to display the summary and details for orders which have been purged to history using the purge program on the Order Processing submenu. Information is presented as an ataglance summary, showing status relative to quantities produced, due dates, and last operation statistics. You can also review component and routing step details.

Production Order History screen

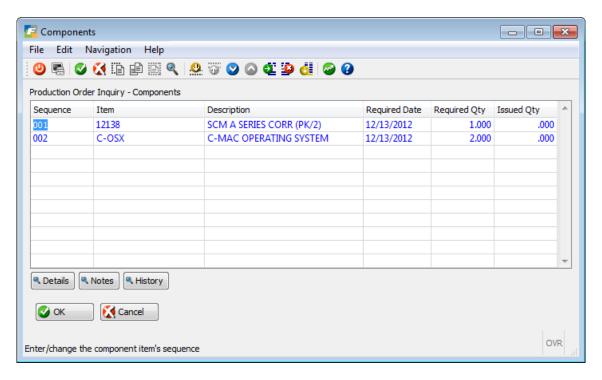
When you select the menu option, the following screen displays:



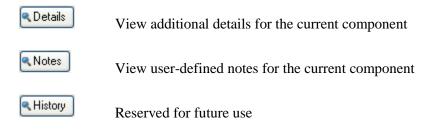
Click the Find button to search for the order. You can then click the Details button to access more options

Component List screen

This screen displays when you click the Components button from the Status screen:

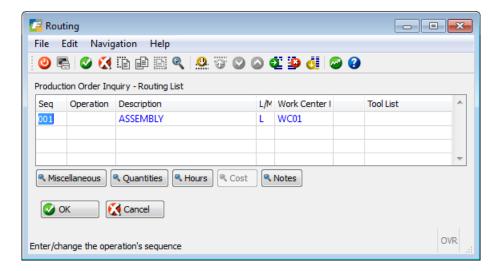


The following additional information is available, by clicking the appropriate button:

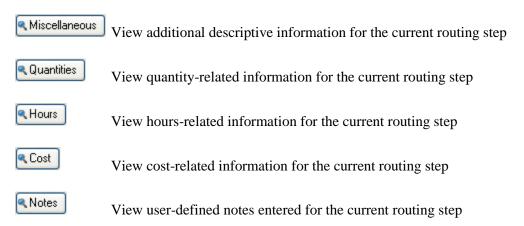


Routing List screen

This screen displays when you click the Routing button from the Status screen:

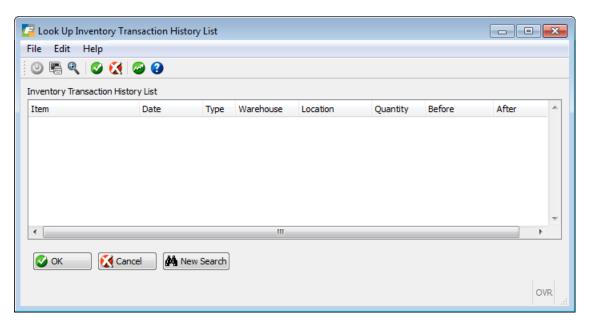


The following additional information is available, by clicking the appropriate button:



Order History screen

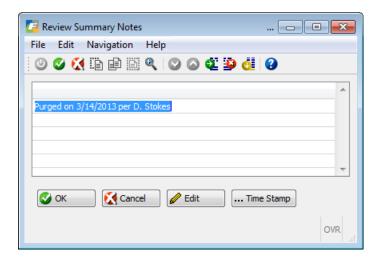
This screen displays when you click the Order History button from the Status screen. It displays the Production Receipts which have been processed for the current order.



Order Notes screen

This screen displays when you click the Notes button from the Status screen. It displays any user-defined notes entered for the current order.

a

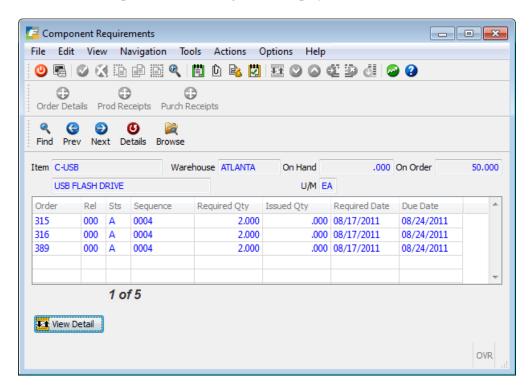


Component Requirements

Use this menu option (option 4-c) to display the production orders which require a common component. This is useful in determining where a component item might be needed when it is in stock, or when arriving on a purchase order.

Component Requirements screen

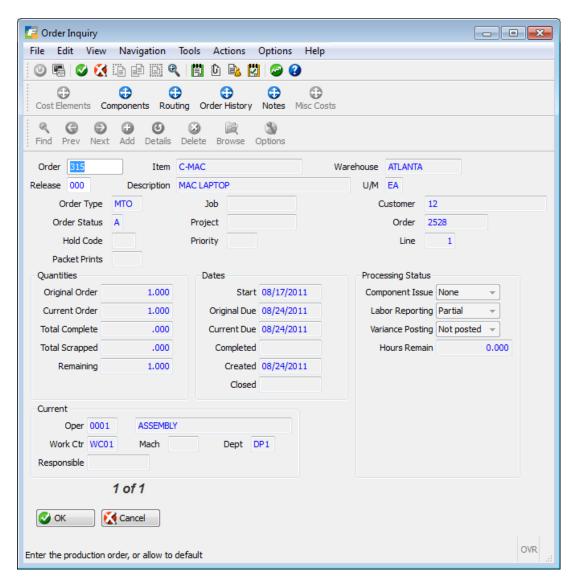
When you select the menu option, the following screen displays:



First click the Find button, and enter the component item and warehouse to be reviewed. After the item and its requirements are displayed, click the Detail button to access more options.

Order Details screen

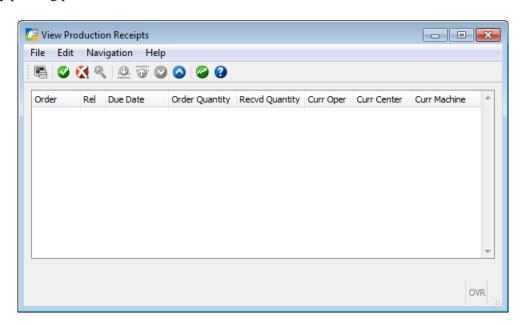
This screen displays when you click the Order Details button from the Status screen:



From this screen, you can access the same additional data as in the Production Order Status Inquiry (menu option 4-a).

Production Receipts screen

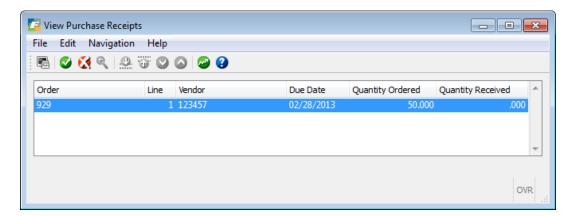
This screen displays when you click the Prod Receipts button from the Status screen. It shows scheduled receipts from open production orders. If the component item is a manufactured item, this screen would show any pending production for the item.



Purchase Receipts screen

This screen displays when you click the Purch Receipts button from the Status screen. It shows scheduled receipts from open purchase orders. If the component item is a purchased item, this screen would show any pending purchase receipts for the item.

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Chapter 5

Job Shop

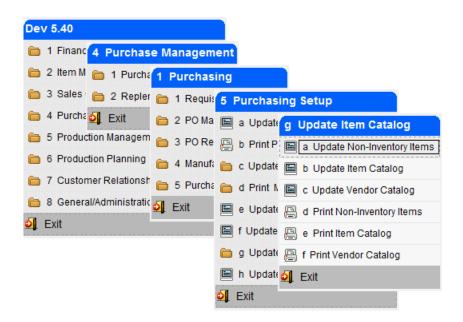
Job Shop is a type of production process that handles custom and/or makes to order products. Jobs are an accumulation of stock and non-stock items, labor, overhead, miscellaneous charges, and outside process steps, each of which may have associated internal costs and charges to be billed to the customer. These elements are then consolidated in the job, for both the cost and price. Reporting is available that compares price to both actual and estimated costs and calculates the gross margin achieved.

In this chapter we will cover the options, screens, and reports used to process and analyze jobs. As a prerequisite for job shop processing you should have already become familiar with the following Fitrix modules:

- Sales Order Entry
- Production Work Order Processing
- Standard Routing
- Labor Processing
- Accounts Payable

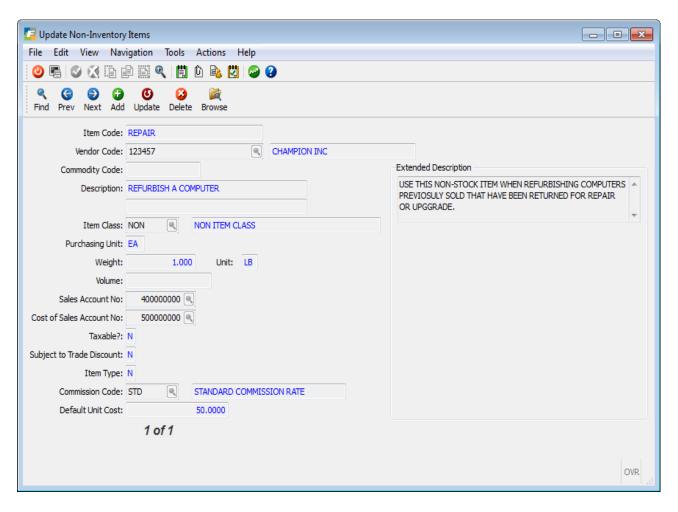
Setting Up Non-Stock Items to Be Used In Sales Order Entry

The end item being produced by a job can be either a make to stock item (an item you typically stock) or a non-stock item. For make to stock items that exist in the item master table you simply use the line type MTO when entering the sales order and a production work will be created when the sales order is saved. For non-stock items you must first create the item using the Update Non Stock Items program found on this Purchasing submenu. You then use the line type MTN (make to order for non-stock) on the sales order.



A good example of a non-stock item used in a job would be an item for REPAIR as shown here.

The job for this item could then consist of stock and non-stock items needed to refurbish an item previously purchased plus labor and miscellaneous costs like the packaging needed to ship the repaired item to your customer.



Item Code

This code uniquely identifies each approved non-inventory item to the system.

• Up to 20 characters

Vendor Code

This field holds the vendor code from which this item is usually purchased.

• Up to 20 characters

Commodity Code

This field holds the unique commodity code for this item. Certain industries use standard commodity codes to identify items they buy and sell. Entry in this field is optional.

Description

There are two description lines available for each item entered.

Extended Description

Enter up to 256 characters of extended description.

Purchasing Unit

This two character field is required and specifies the default unit of purchase for this item.

Weight

The weight of each unit can optionally be entered in this field.

Unit

This field contains the unit of measure for the weight entered in the previous field.

Volume

This field contains the volume of the item.

Sales Account Number

Enter the sales account number that should be credited when this item is sold. Initially defaults to the sales account number in the Update Order Entry Defaults program but can be changed.

Cost of Sales Account No

Enter the cost of sales account number that should be debited when the production work order is posted. Initially defaults to the Non-stock Account number set up in the Update Purchasing Defaults program but can be changed.

Taxable

Enter Y if taxed should be charged on this item when it is sold to a customer that you collect sales tax from.

Subject to Trade Discount

Enter Y if this item should be included in trade discounts offered to your customers.

Item Type

This is a non-entry field. It will contain an N for a non-stock item.

Commission Code:

Enter a commission code if commission is paid on this item when it is sold.

Default Unit Cost:

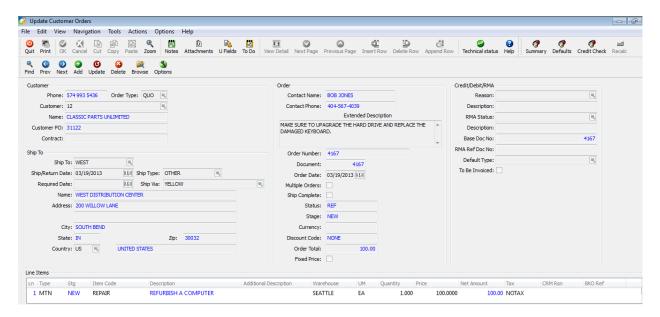
Cost used when non stock item is included in a bill of material. For job shop items this cost is not used. The cost will be the accumulation of all components, labor, and miscellaneous costs on the work order.

Entering A Sales Order For A Job

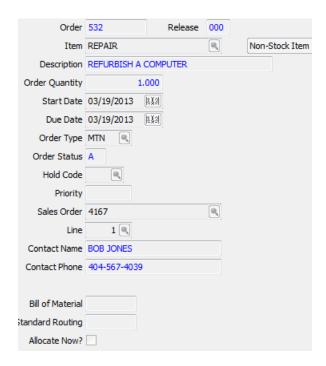
You should already be very familiar with how to process a sales order using the Fitrix Order Entry module. If you are not, you should read the Fitrix Order Entry User Guide What will be discussed in this section are items that need to be made or reworked in some way via a production work order.

Quotation for a Job

The sales order entry screen:



If the order type entered is QUO for quotation any components added to the production work order after the sales order is saved will not be committed because the Allocate Now flag on the production work order created is unchecked as shown here.



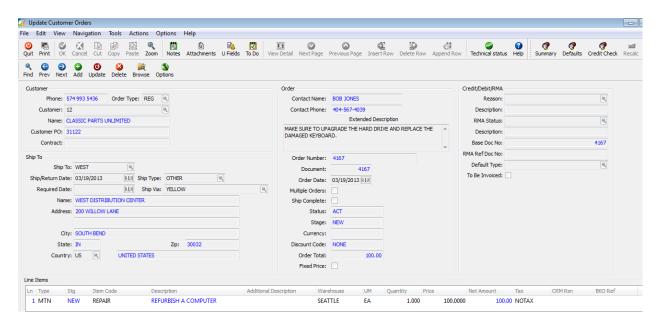
If you need to send a quotation to your customer for approval, click on the Options button on the toolbar and select Quotation from the drop down list that displays. You can also print the quotation using the Print Quotes/Order Acknowledgements option on the Order Maintenance Menu (option b).



If the quote is not accepted and the sale order is cancelled, this in turn will cancel the production work order linked to it.

Sales Order for a Job

You can enter a regular order (order type REG) or if a quotation was entered you can change the order type from QUO to REG. This will commit the component inventory on the production work order and change the Order Status from REF for reference to ACT for active on the sales order.



If you need to send an Acknowledgement to your customer for approval, click on the Options button on the toolbar and select Acknowledgement from the drop down list that displays. You can also print the acknowledgement using the Print Quotes/Order Acknowledgements option on the Order Maintenance Menu (option b).



 22501 72ND
 200 WILLOW LANE

 CLEARING POINT BUSINESS CENTER
 SOUTH BEND IN 46601

 SOUTH BEND IN 46601
 SOUTH BEND IN 30032

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Below is a list of differences between processing a sales order for a stock item versus an MTO or MTN item that will be made or reworked in some way.

Sales Order Header Screen:

Contact Name

Enter a contact name if there is a specific contact for this sales order. This contact name will transfer to the production work order that is created when the sales order is saved and it will also display on the Labor Entry screen.

Contact Phone

Enter a telephone number for the contact entered. This contact phone will transfer to the production work order that is created when the sales order is saved and it will also display on the Labor Entry screen.

Description

Use this field to enter an optional description about the order. The description can be up to 256 characters long. This description will transfer to the production work order that is created when the sales order is saved.

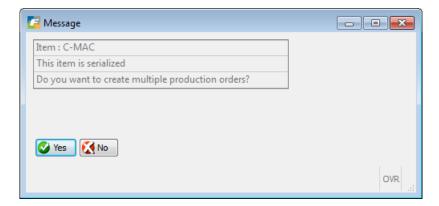
Fixed Price

Check this box if you do not want to update the unit price based on a roll up of prices calculated and/or entered on the work order.

Sales Order Detail Screen

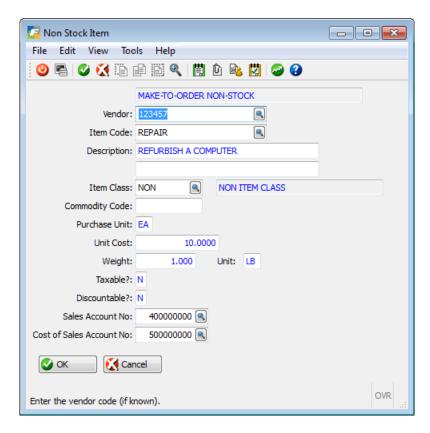
Line Type – there are two line types that create production work orders.

• MTO – make to order. Using this line type will create a production work order. The line stage will initially be set to NEW and when the item is made and the production order is processed, the line stage will be reset to ORD so that the item can be picked and shipped. If the order quantity is greater than 1 you will receive this prompt:



Answer yes if you want to create multiple production work orders or no if you want to create one production work order for the total quantity ordered.

• MTN – make to order non stock item. Using this line type will create a production work order. The line stage will initially be set to NEW and when the item is made and production order is processed, the line stage will be reset to ORD so that the item can be shipped. When you enter a MTN item the standard Non-stock item screen shown here will display.

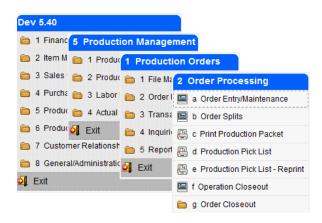


The cost that displays on this screen will not be used as the cost of the MTN item. The cost instead will be the accumulated cost of all components, labor, and miscellaneous costs on the corresponding production work order.

Price – you have the option of updating the price entered on the sales order by rolling it up based on the pricing of components, labor, and costs on the production work order unless you have checked the Fixed Price check box in the order header. See the section on Production Work Orders for more information on price roll up.

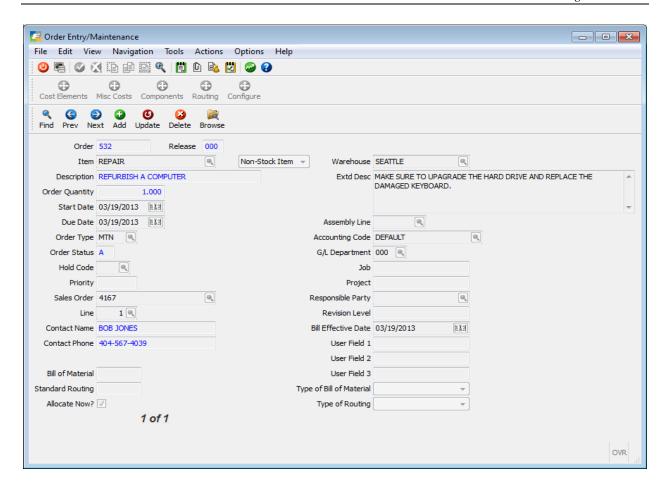
Production Order Maintenance

When the sales order for an MTO or MTN item is saved the production work order is automatically created. This production work can be accessed by going to Order Entry/Maintenance option (a) on the Order Processing submenu shown here:



It can also be accessed from within Sales Order Entry by clicking on the Make To Order button on the toolbar while on the line item in the detail section of the Sales Order Entry screen.

Sales order #4167 (screen shot on previous page) created this production work order when it was saved.

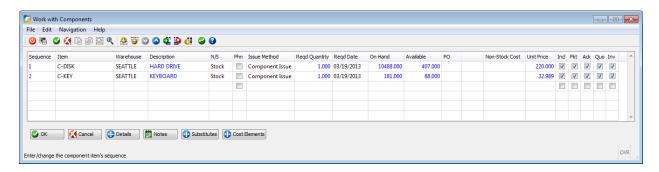


Adding Components

Components

button on

To add components to the work order, go into update mode and then click on the the toolbar. This screen displays:



Enter the component items needed for the job. The price will default to the list price or whatever pricing structure is set up for the customer (i.e.- cost plus 30%) in the Special Pricing Defaults defined in the Order Entry module (see Chapter 2 of the Order Entry User Guide, Update Special Price Defaults, for more information on customer pricing).

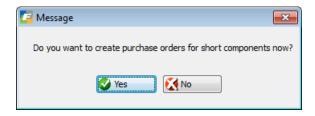
If any component is a non stock item you must also enter the cost for the item.

If the price of the component should be included in the price roll up, check the Incl check box. Also check which documents you want the component detail to print on. The choices include:

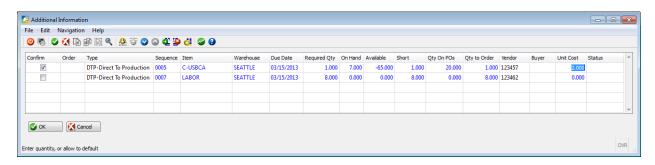
- Production Packet
- Order Acknowledgement
- Customer Quotation
- Customer Invoice

Short Components

If you are short components you will receive this prompt when you save the work order:



If you answer yes this screen displays and you can select which items you want to create purchase orders for, select the vendor the PO should be issued to, and the cost that should be used.



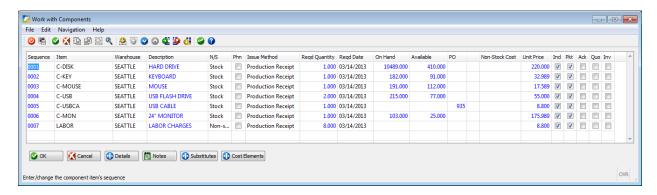
If the production work order type is ST (for to stock) this PO release screen recommends an order quantity that will cover all short units, not just the production work order being created, and the PO type will be REG. If the production work order type is MTO or MTN (for to make to order) this PO release screen recommends an order quantity that will cover just the production work order being created and the PO type will be DTP (direct to production).

If you have already created a PO and then add an additional component to the work order that should be included on the PO, enter the PO number in the order column before you click on Create Order. If you don't do this a new PO will be created.

If the AVL Required check box in the Update Purchasing program is checked and you enter a non-catalog vendor you will receive this prompt.



The PO number created will then display on the Component Screen. The available and on hand are null to show that the component quantity will be supplied by the purchase order.



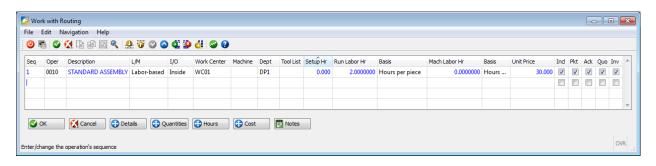
The purchase order is created with an order type of DTP which stands for Direct to Production. When the purchase order is received the production orders the parts should be allocated to will print on the receipt posting report.

Adding Routing



To add routing steps to the job click on the Routing

button on the toolbar and this screen displays:



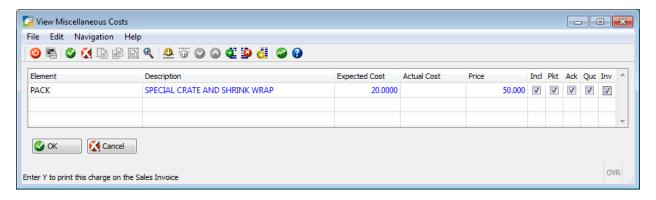
Just like with the components, enter the price to be charged to the customer and select which documents the routing steps should print on.

Adding Miscellaneous Costs

To add miscellaneous costs to the job click on the



button and this screen will display:



Element – must have been previously set up using the Cost Elements program (option (b) on the Standard Routing File Maintenance submenu).

Expected Cost- enter what the expected cost is and this cost will be included in the total expected cost calculation on the Job Cost/Price Detail report discussed later in this chapter.

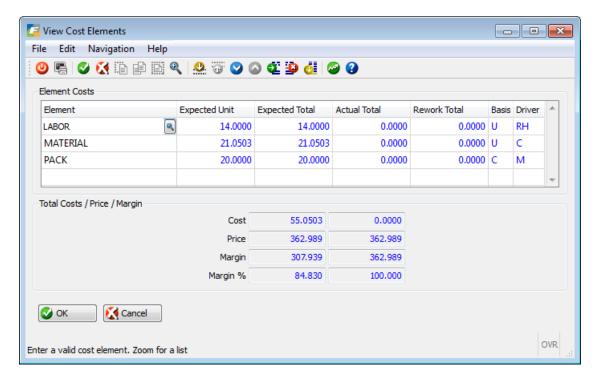
Actual Cost – this cost will come from the AP invoice received from your vendor. See the section below "AP Invoices for Miscellaneous Costs".

Price – enter the price the customer should be charged for this cost element.

Just like with the components and routing steps select which documents the routing steps should print on by checking the appropriate check boxes.

Cost Elements Screen

To view all of the cost elements that make up the job, click on the Cost Elements button



The actual costs will not display until components have been issued, labor processed and posted, and miscellaneous cost are posted through AP. All of these steps are discussed later in this chapter.

Adding Freight to a Job

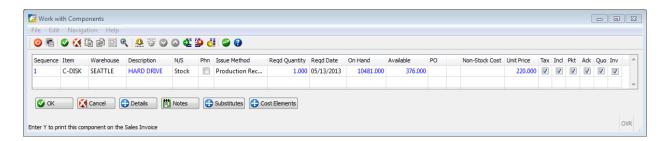
If the vendor charges freight on the merchandise purchased as part of a job and you want this freight cost included in the job here is the best way to handle this.

- 1. Create a nonstock item FREIGHT.
- 2. Enter FREIGHT as a non-stock component on the Production Order, with an estimate of the cost
- 3. When the PO is created for the Production Order components that are short, FREIGHT will be added to the PO as a line item.
- 4. When the PO lines are received, the FREIGHT line will be flagged as received along with the other lines
 - a. If the AP Invoice is available at the time, the actual freight amount must be updated on the PO, BEFORE it is received (just like the price on all other items on the PO should be verified). If the freight cost is NOT updated, then the freight cost added to the job will not be the actual cost.
- 5. When the AP Invoice is entered in Purchasing, the freight line cost can be changed to the actual freight charged if this was not done in step 4a.

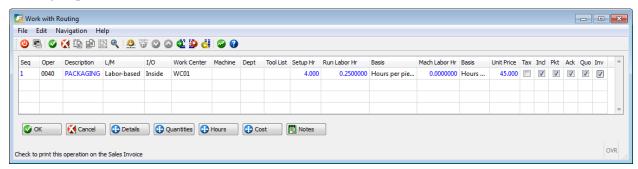
Charging Sales Tax on Jobs

On the Component screen, Routing screen, and Miscellaneous Costs screen there is a box labeled Tax. If you want to charge sales tax, check this box. The default values are as follows:

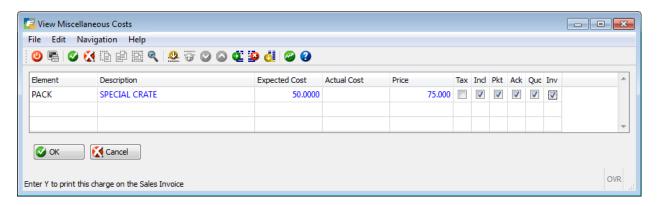
Stock and Nonstock items – will default to taxable if taxable flag at item level is Yes.



Routing steps - defaults to not taxable.



Miscellaneous Costs – defaults to not taxable.

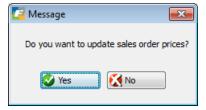


The rule for charging tax on fixed priced jobs is as follows:

- 1. If material and labor is not broken out on the invoice always charge tax on the fixed price \$ amount.
- 2. If material and labor is broken out on the invoice and labor is not taxable, charge tax on the lesser of actual material or fixed price.

Price Rollup

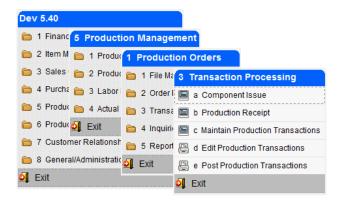
Unless you have checked the Fixed Price box on the Sales Order header screen, every time you are in update mode and save the production work order this prompt will display:



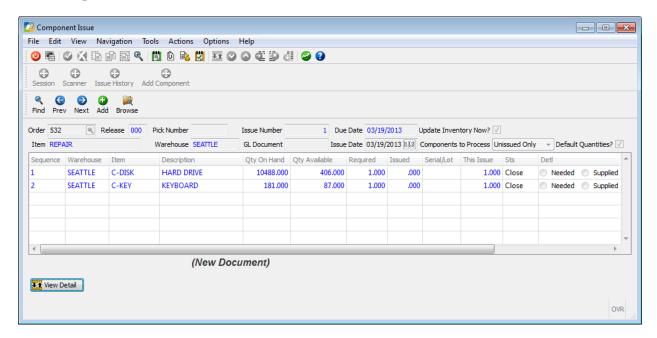
Select yes if the unit price on the sales order should be a cumulative total of pricing on all components, routing steps, and miscellaneous costs.

Component Issue

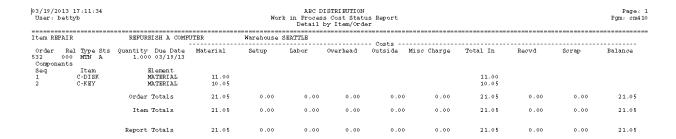
To remove components from inventory run the Component Issue program (option (a) on this submenu):



The Component Issue screen:



Processing a component issue will book the work in process to your General Ledger. To view what makes up the Work in Process total run the Work in Process Cost Status Report on the Production Management Reports submenu.

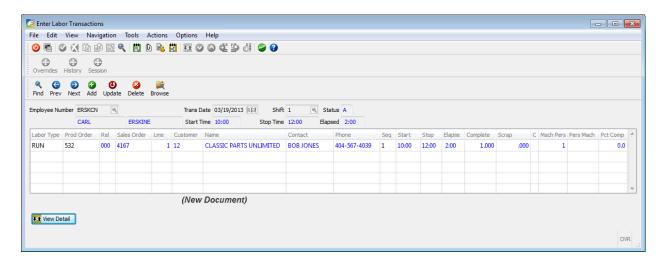


Post Labor Costs to the Job

To post labor costs to the job, run the three programs found on this submenu.



The Enter Labor Transactions screen:

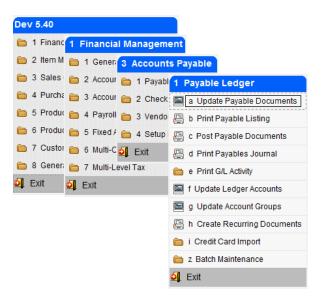


For more information on this screen program please refer to the Labor Processing User Guide.

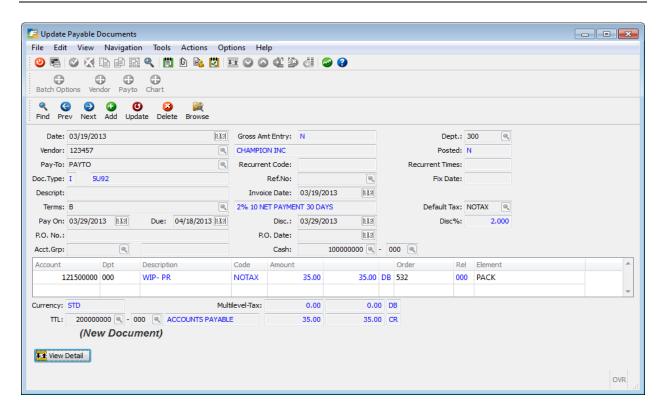
Once the labor has been entered run the edit and post program to update both the actual labor costs associated with the job and the general ledger balances.

Post Miscellaneous Costs to the Job

These costs are processed through Accounts Payable. Use the Update Payable Documents program found on this submenu.



When entering the detail lines for the invoice simply enter the work order that the cost should be added to. Zoom is available to find the work order number, release number, and cost element.

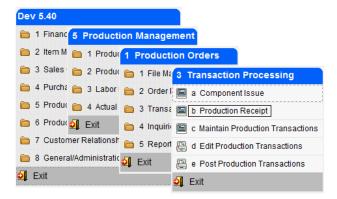


The GL account number that should be used should be the same GL account number that is debited when the production receipt is posted. See the section in this chapter "GL Accounting for Jobs".

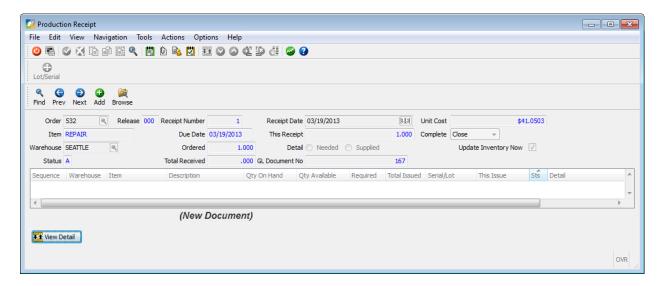
Once the AP invoice has been entered, run the edit and post to post the item to the vendor's account to be paid and to update the GL balances.

Production Receipt

The Production Receipt program is found on this submenu:



This program will change the line stage on the sales order from NEW to ORD so that it can be processed and shipped and also posts entries to the General Ledger. See the section in this chapter "GL Accounting for Jobs".



Invoicing the Customer

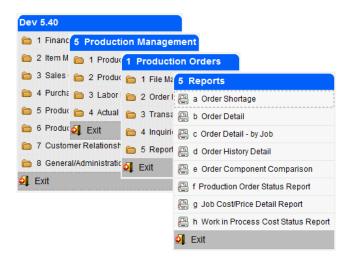
Once the Production receipt program is run here are the steps needed to invoice the customer:

Program	Menu Option	
Print Picking Ticket	3-2-1-с	
Update Invoices/Memos	3-2-1-i-b	
Print Invoices and Memos	3-2-1-i-f	
Print Order Entry Edit List	3-2-1-k	(end of day process for all invoices)
Post Order Entry Documents	3-2-1-1	(end of day process for all invoices)

Please note that when the invoice is created if the production order type has the Price Calculation Method set to Actual units and hours and the sales order is not fixed priced, the item pricing will be based on the actual material and labor pricing on the production order not the estimated.

Job Profitability Reporting

To determine the profitability of the job run the Job Cost/Price Detail Report found on this submenu:



03/19/2013 18:20:17 User: bettyb		Job C	ABC DISTRIBU ost/Price Det	ail Report				Page: 2 Pgm: sc430
Item: REPAIR	REFURBISH A COM	MPUTER						=======
Order 532	Sales Order 4167 Line 1 Customer 12 CLASSIC PARTS		Dat Started (Due (es 03/19/2013 03/19/2013	Quantiti Ordered Completed	1.000 1.000	Price/Cost Price Expected Cost Expected Margin Actual Cost Actual Margin	362.99 55.05 84.839 41.05
					Cos			
Seq	Component / Description							
1	C-DISK HARD DRIVE	s	1,000	1,000	11.00	11.0	0 220,00	
2	C-KEY KEYBOARD	S	1,000	1,000	10.05	10.0	5 32.99	
		Work	Hours		Cost -			
Seq I/O	Description			otual :	Expected	Actual	Price	
1 I ST	ANDARD ASSEMBLY	WC01	2.00	2.00	14.00	20.00	60.00	
			C H A R G	E S	Co			
Elem	ent Desci	ription			Expected	Actual	Price	
PACK	SPECIAL CRATE I					0.	00 50.00	
		Price					Actual Margin%	
Item Sub-T		362,99		5.05		41.0		

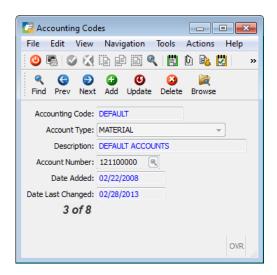
GL Accounting for Jobs

The item being produced is a MTN (made to order non-stock item)

Component Issue

Debit – for stock items the work in process account that is debited is the account number for material as defined for the accounting code used on the production work order (See Accounting Codes on the Bill of Material File Maintenance menu). For example, if the accounting code DEFAULT was used on the production work order this account will be debited.

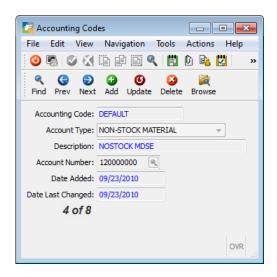
There is no component issue for nonstock components. See DTP PO posting below.



Credit –for stock items the item's inventory account number as defined in the item master. For non-stock components there is no component issue. See DTP PO posting below.

PO Post for Nonstock Components

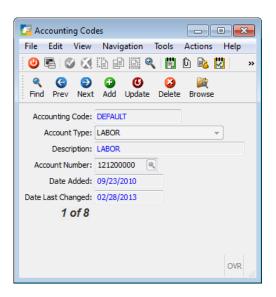
For nonstock components a DTP purchase order (direct to production) can be created to order the items when the production work order is saved. When the PO is received there is no GL entry made. When the PO is posted to AP the entry is a debit to WIP for the account number defined for the accounting code for nonstock items shown here and a credit to the AP liability account.



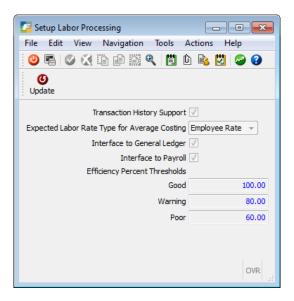
The cost of the nonstock components is recorded when the production receipt is posted. See Production Receipt below.

Labor Posting

Debit – the work in process account that is debited is the account number for labor as defined for the accounting code used on the production work order (See Accounting Codes on the Bill of Material File Maintenance menu). For example, if the accounting code DEFAULT was used on the production work order this account will debited:



The amount of the transaction is the number of hours worked multiplied by the employee rate in the employee payroll table if the Labor control program uses Employee Rate for costing as shown here (versus using a work center or job class rate). See Setup Labor Processing program on the Labor Processing File Maintenance submenu.

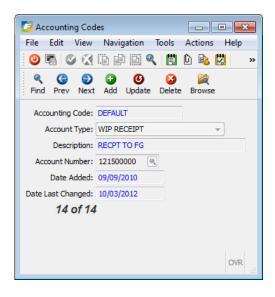


Credit – the work in process account that is credited the account number for labor control as defined for the accounting code used on the production work order (See Accounting Codes on the Bill of Material File Maintenance menu). For example, if the accounting code DEFAULT was used on the production work order this account will credited:



Miscellaneous Charges Posted via AP

Debit - the account debited is whatever account is used when entering the vendor invoice. It is recommended that you use the WIP- Production Receipts account since this is what will be credited when the production receipt is posted. See Accounting Codes on the Bill of Material File Maintenance menu. For example, if the accounting code DEFAULT was used on the production work order this account will credited when the receipt is posted:

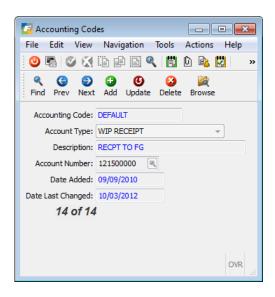


Credit – Accounts payable liability account as defined in the Vendor Master record.

Production Receipt

Debit- (MTN item) the item's cost of goods account number as defined in the Update Non Inventory Items catalog program.

Credit – Production Receipts WIP account as defined for the Accounting code assigned to the work order.



Order Entry Invoice Posting Stock or MTO Items

Debit – Accounts Receivable

Debit- Cost of sales as defined in the item master

Credit – Inventory as defined in the item master

Credit – Sales as defined in the item master

Order Entry Invoice Posting Non-stock or MTN Items

Debit – Accounts Receivable

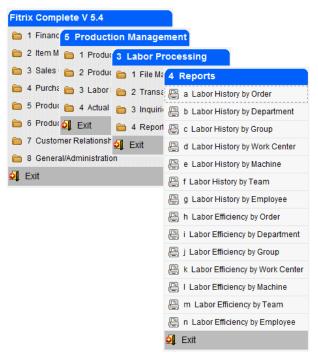
Credit – Sales as defined in the Non Invetory Items catalog

The cost of goods is debited when the production recepit was posted. See above.

Month End Journal Entries

1. All the work in process (WIP accounts) will net each other out but if you use different WIP account numbers for material, labor, overhead, you will need to do a journal entry to offset the various balances to 0.

There will be a balance in the Labor Control account that was credited when the Labor was
posted. Run the Labor History by Empolyee report for the month to see how many hours were
recorded for labor. Then do a journal entry to debit the labor contol account and credit salary
expense.



Chapter 6

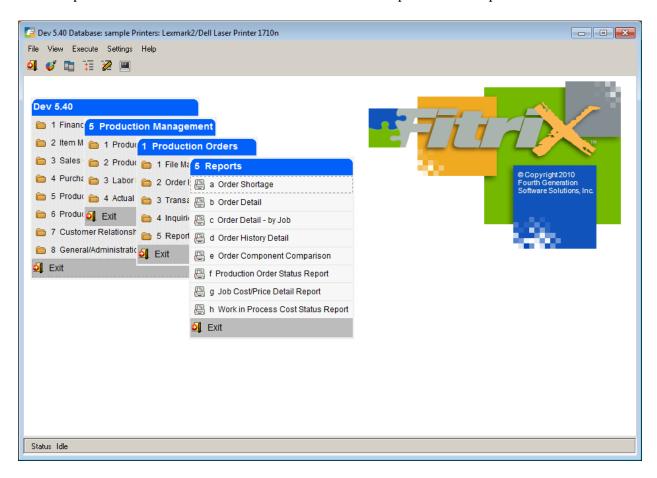
Sample Reports and WIP Reconciliation Steps

This chapter contains reference information about the different menu options on the Reports menu (option 5), and the screens and fields associated with these options. The information is organized by menu option.

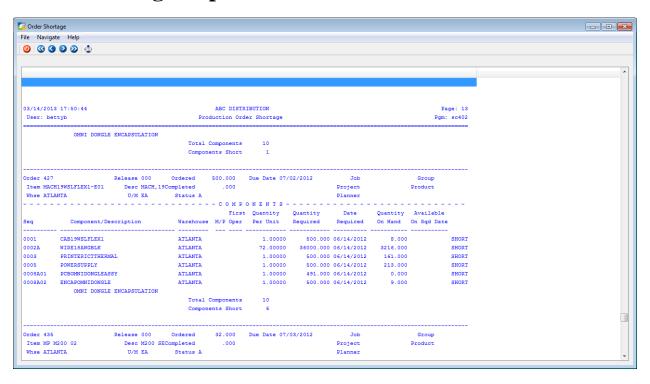
For each menu option we briefly describe what the menu option does, show an example of the screen or report associated with the option, and describe each field on the data-entry screens.

Reports Menu

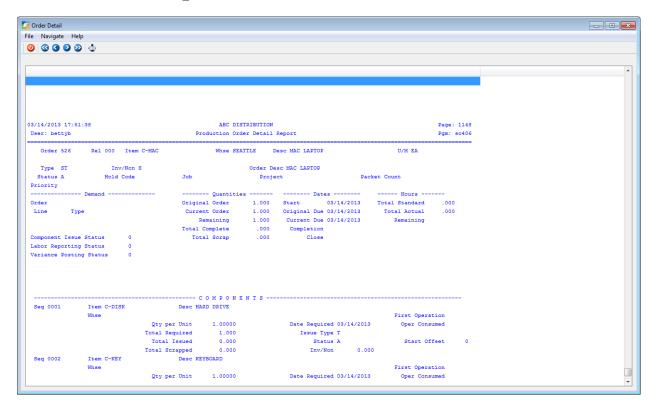
Use the options on this menu to review on screens the status of open and closed production orders



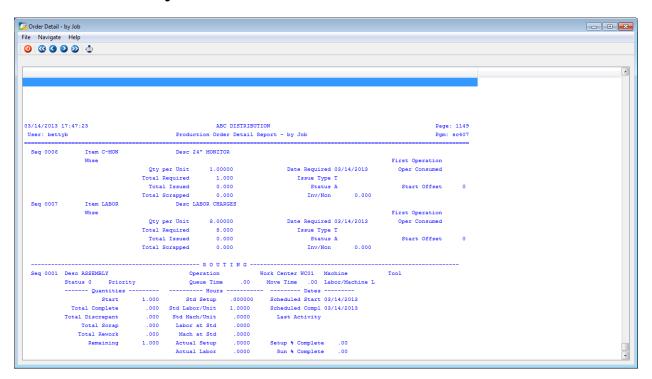
Order Shortage Report



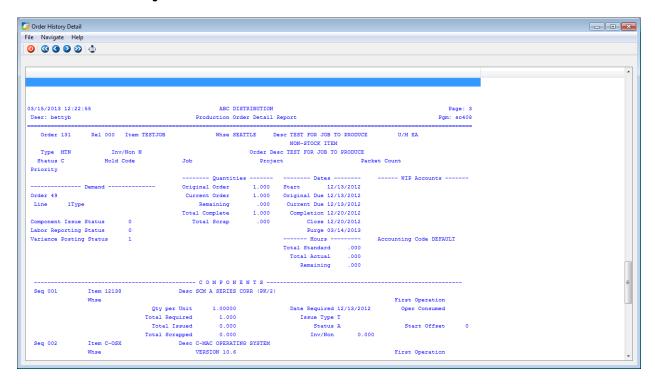
Order Detail Report



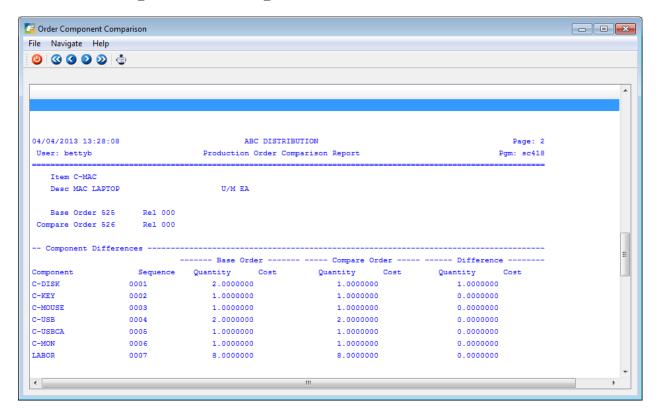
Order Detail by Job



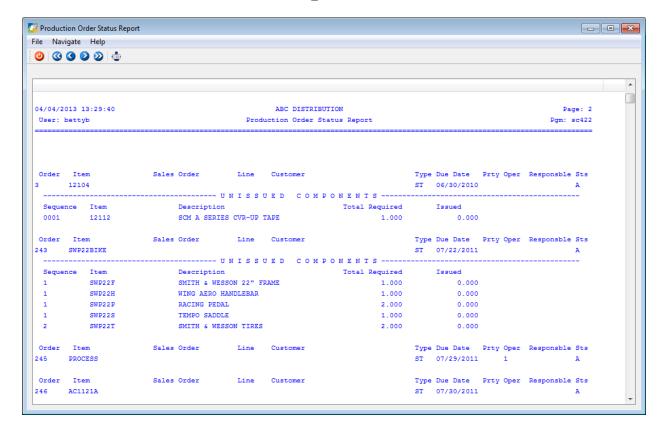
Order History Detail



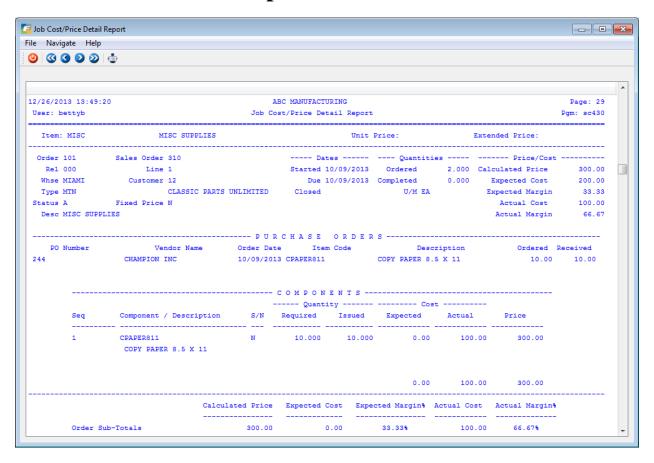
Order Component Comparison



Production Order Status Report



Job Cost/Price Detail Report



Work in Process Cost Status Report – Open Orders



Additional information about the numbers on this report:

- Component issues add dollars to the material column
- Labor postings add dollars to the overhead column
- Production receipts adds dollars to the rcvd (receipts) column
- The balance on the work order is Material + Overhead Rcvd

At the bottom of the reprot after the total you will see this:

DTP	Purchase	Order	Recap:	Receipts	184.97
				Invoices	0.00
				Not Invoiced	184.97

- Receipts on Direct to Production purchase orders
- Invoices on Direct to Production purchase orders
- Not Invoiced = Receipt Amount Invoice Amount . Since the DTP purchase orders do not affect the GL WIP balance until they are posted to AP (debit WIP and credit AP) this number needs to be added to the GL WIP balance to get it to match the WIP report total. See the section in this guide on reconciling work in progress.

Work in Process Cost Status Report – Closed Orders

04/24/2014 12:34:09 User: bettyb				ABC MANUFACTURING Work in Process Cost - Closed Orders Detail by Item/Order										Page: 8 Pgm: cm411	
Item C-MAC			MAC LAPTOP		Warehouse MIAMI										
Order	Rel	Тур	e Sts	Quantity			Setup	Labor	Overhead		Misc Charge	Total In	Recvd	Scrap	Balance
				Order 1	Totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	000	ST	С	5.000	09/28/13	Closed Date:									
				Order 1	Totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	000	ST	C	5.000	09/25/13	Closed Date:									
				Order 1	Totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	000	ST	c	5.000	09/25/13	Closed Date:									
				Order 1	Totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	000	мто	c	1.000	04/16/15	Closed Date:									
				Order 1	Totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	000	ST	С	10.000	10/01/13	Closed Date:									
				Order 1	Totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Ttem 1	Cotals	330.19	0.00	0.00	0.00	0.00	0.00	330.19	200.00	0.00	130.19

Work in Process Reconciliation Steps

Balance Sheet Balance: \$1,000,000

Add:

WIP Open Orders Report: DTP Not Invoiced total 25,000 (1)

WIP Closed Orders Report: DTP Not Invoiced total 15,000 (1)

Subtract:

WIP Closed Orders Report Total fiscal YTD (120,000) (2)

Revised WIP Balance (should match WIP Open Orders report total): \$920,000

- (1) DTP purchase orders and purchase orders for non-stock items (line type NON) do not post to GL WIP until the vendor invoice is received and posted to AP. However these items are included on the WIP Cost Status report. Because of this the balance sheet and WIP report will never balance due to these transactions so this total must be added to the balance sheet balance when reconciling the two reports.
- (2) In order to maintain a proper balance between the Work in Process Cost Status report and the General Ledger work in process account, it is necessary to review the cost details for orders which are closed out during an accounting period and confirm that all costs have been properly recorded in the General Ledger.

When using the Average Costing option for inventory valuation, the cost of end items manufactured on production orders is the sum of all material, labor, overhead and outside process costs. If the production receipt is the last transaction for an order, the sum of the costs is transferred from work in process to the end item's inventory account. This leaves a balance of zero for the production order. In addition, the order is automatically closed. These types of orders reflect a proper balance with General Ledger.

In some cases, it is necessary to re-open an order to add more material, labor, overhead, or outside process costs. This results in additional costs being added to the order that may not be transferred to inventory and therefore a non-zero balance for the order. The 'Work in Process Report – Closed Orders' prints the cost value of any orders where this additional activity occurs. Any cost balances on closed orders must be either:

- Resolved with additional transactions to properly close the order (see Approach I)
- Used to create a General Journal that transfers the cost balances to another account, typically Cost of Goods Sold (see Approach II)

Approach 1 – Resolve Remaining balances

The recommended steps to resolve remaining balances on Production Orders are:

- a. Run the WIP Cost Status Report Closed Order to get the list of orders to be addressed
- Use the Production Orders/Order Processing/Order Closeout/Re-Open Closed Orders
 to reactivate a closed order
- c. Enter NEGATIVE Production Receipt transactions for the total received
- d. Enter adjusting transactions for Component Issue if applicable
- e. Enter adjusting Labor Transactions and post them
- f. Enter POSITIVE Production Receipt transactions
- g. Run the WIP Cost Status Report Closed Orders to confirm the order has a zero balance

By executing these steps, you can be assured that all costs transferred into WIP, and from WIP to inventory, are properly recorded in the General Ledger. If you run the Closed Order report and see balances for a given accounting period, but do not resolve them, recognize that they represent costs that were automatically removed from Work In Process, but did NOT have a corresponding transfer of costs in the General Ledger.

Approach 2 – Record General Journal

1. If you choose not to take the above steps, you can use the total cost from the Closed Order report to record a General Journal that credits the GL WIP account for the total value of the orders for the date range specified. For the debit if a shop is mostly make-to-stock, it will be a production variance (i.e. a contra asset account). If make-to-order, it will be a COGS account.

Production Order Log

This report prints all production orders entered for the year specified by the user. Due to the amount of information it contains this report should always be exported to Excel since it will not fit on a 8.5x11 form.

Production Order

Sales Order

Description and Extended Description

End Item

Order Quantity

Start Date

Due Date

Responsible Party

Customer PO#

Customer Code

Customer Name

Job Price by Salesperson/Customer

User:	013 13:36:48				Job Price b	Page: 1 Pgm: sc434					
Account	;	Prod Order	Sales	Order Line	Invoiced	Material	Labor	Hours	Rate	Description	
BJ	BILL JOHNSON	·									
12			RTS UNLIMIT								
			361	000	189.98	189.98	0.00	0.00	0.00		
		129	362	000	189.98	189.98	0.00	0.00	0.00		
			Acc	ount Totals	379.96	379.96	0.00	0.00	0.00		
			Sales Pe	rson Totals	379.96	379.96	0.00		0.00		

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