



Epicor Kinetic - Classic User Interface Job Management Course

11.1

Disclaimer

This document is for informational purposes only and is subject to change without notice. This document and its contents, including the viewpoints, dates and functional content expressed herein are believed to be accurate as of its date of publication. However, Epicor Software Corporation makes no guarantee, representations or warranties with regard to the enclosed information and specifically disclaims any applicable implied warranties, such as fitness for a particular purpose, merchantability, satisfactory quality or reasonable skill and care. As each user of Epicor software is likely to be unique in their requirements in the use of such software and their business processes, users of this document are always advised to discuss the content of this document with their Epicor account manager. All information contained herein is subject to change without notice and changes to this document since printing and other important information about the software product are made or published in release notes, and you are urged to obtain the current release notes for the software product. We welcome user comments and reserve the right to revise this publication and/or make improvements or changes to the products or programs described in this publication at any time, without notice. The usage of any Epicor software shall be pursuant to an Epicor end user license agreement and the performance of any consulting services by Epicor personnel shall be pursuant to Epicor's standard services terms and conditions. Usage of the solution(s) described in this document with other Epicor software or third party products may require the purchase of licenses for such other products. Where any software is expressed to be compliant with local laws or requirements in this document, such compliance is not a warranty and is based solely on Epicor's current understanding of such laws and requirements. All laws and requirements are subject to varying interpretations as well as to change and accordingly Epicor cannot guarantee that the software will be compliant and up to date with such changes. All statements of platform and product compatibility in this document shall be considered individually in relation to the products referred to in the relevant statement, i.e., where any Epicor software is stated to be compatible with one product and also stated to be compatible with another product, it should not be interpreted that such Epicor software is compatible with both of the products running at the same time on the same platform or environment. Additionally platform or product compatibility may require the application of Epicor or third-party updates, patches and/or service packs and Epicor has no responsibility for compatibility issues which may be caused by updates, patches and/or service packs released by third parties after the date of publication of this document. Epicor® is a registered trademark and/or trademark of Epicor Software Corporation in the United States, certain other countries and/or the EU. All other trademarks mentioned are the property of their respective owners. Copyright © Epicor Software Corporation 2021. All rights reserved. Not for distribution or republication. Information in this document is subject to Epicor license agreement(s).

ED805905

90521-10-9258-583101001

11.1

Revision: March 08, 2021 6:43 p.m.

Total pages: 107

course.ditaval

Contents

Job Management Course.....	8
Before You Begin.....	9
Modules Licensing.....	9
Audience.....	9
Prerequisites.....	9
Environment Setup.....	10
Workshop Constraints.....	11
Overview.....	13
Application Setup.....	15
Company Configuration.....	15
Maintenance Programs.....	16
Job Department Maintenance.....	16
Shift Maintenance.....	16
Shift Detail.....	17
Shift Break Detail.....	17
Employee Maintenance.....	17
Operation Maintenance.....	18
Operation Standard Maintenance.....	19
Operation Text Maintenance.....	19
Resource Group Maintenance.....	19
Detail Sheet.....	20
Resources Detail Sheet.....	20
Reason Code Maintenance.....	20
Daily Job Management Processing.....	22
Job Entry.....	22
Job.....	22
Demand Summary.....	23
Job Types.....	23
Workshop - Create a Job Manually.....	23
Enter a New Sales Order.....	23
Create a Job for the Selected Requirement.....	24
Get Details for the New Job.....	24
Review and Schedule the Job.....	25
Job Processing.....	25
Job Planning Process - Make To Order.....	26
Planning Workbench.....	27
Workshop - Review the Change Queue.....	28
Job Traveler Report.....	29
Workshop - Print the Job Traveler Report.....	29
Order Job Wizard.....	30

Order Job Wizard, Order Lines.....	30
Releases.....	31
Jobs.....	31
Workshop - Create a Job Using the Order Job Wizard.....	31
Duplicate and Update Sales Order Dates.....	31
Review the Order Job Wizard.....	33
Create Job Records (Part 1).....	33
Create Job Records (Part 2).....	33
Job Manager.....	34
Workshop - Create a Job Using the Job Manager.....	34
Duplicate Two Existing Sales Orders.....	35
Select a Part Number.....	36
Create a Job Record.....	36
Add a Demand Requirement to the Job.....	36
Get Details for the New Job.....	36
Engineer, Release, and Schedule the Job.....	37
Job Planning Process - Make To Stock.....	37
Time Phased Material Requirements Report.....	38
Workshop - Use the Time Phased Material Requirements Report.....	39
Workshop - Quick Job Entry.....	39
Workshop - Create a Make To Stock Job.....	40
Create a Job.....	40
Enter Job Details.....	40
Schedule and Release the Job.....	41
Material Requirements Planning.....	41
Adjust Operations and Materials.....	42
Modify Job Requirements.....	42
Workshop - Modify Job Operations and Materials.....	42
Add Material Requirements.....	42
Add a Subcontract Operation.....	43
Schedule the Job.....	43
Work with a Subcontract Operation.....	44
Subcontract Status Report.....	44
Workshop - Work with a Subcontract Operation.....	44
Create a Subcontract Purchase Order.....	44
Add PO Line Details.....	45
Job Transaction Processing.....	45
Issue Material.....	45
Workshop - Issue Material to a Job.....	46
Pick List for Jobs.....	47
Mass Issues to Manufacturing.....	47
Workshop - Mass Issue Job Material.....	48
Time and Expense Entry.....	49
Workshop - Record Labor.....	49
Workshop - Record Additional Labor.....	51

Record Time for Setup.....	51
Record Time and Quantity for Production.....	51
Record Time for Setup.....	52
Record Time for Different Day.....	52
Labor Edit Report.....	53
Workshop - Review the Labor Edit Report.....	53
Complete the Subcontract Operation.....	54
Subcontractor Shipment Entry.....	54
Workshop - Complete the Subcontract Operation.....	54
Generate a Subcontract Status Report.....	54
Enter the Subcontractor Shipment.....	55
View the Subcontract Status Report.....	55
Receipt Entry.....	56
Summary.....	56
Job Subcontract.....	56
Workshop - Receive Subcontracted Parts.....	56
Backflush Materials.....	57
Workshop - Verify Backflushing Activity.....	58
Receiving Job to Inventory.....	59
Receive the Job to Inventory.....	59
Backflush Labor.....	59
Workshop - Backflush Labor.....	61
Create a Job.....	61
Define the Backflush Operation.....	62
Schedule and Release the Job.....	62
Report Labor.....	62
Run Backflush Labor Server Process.....	63
Review and Print Labor Transactions.....	63
Mass Return from Manufacturing.....	64
Complete and Close a Job.....	64
Job Completion/Closing Maintenance.....	65
Workshop - Complete a Job.....	66
Auto Job Completion.....	66
Job Complete/Close Code Parameters Maintenance.....	67
Workshop - Define Job Completion Parameters.....	67
Create a Job Complete/Close Code.....	67
Activate Parameters.....	68
Auto Job Completion Process.....	68
Workshop - Run the Auto Job Completion Process.....	69
Workshop - View the Exception Log.....	69
Job Completion Exception Tracker.....	69
Job Closing Exception Tracker.....	70
Reports.....	70
Specialized Job Management Processing.....	72
Auto Job Firm Process.....	72

Auto Job Release Process.....	73
Return Goods Repair.....	73
Work With Return Goods Repair.....	74
Customer Return.....	75
Enter Rework Job.....	76
Dispose of Items.....	76
Modify Job.....	77
Issue Material.....	78
Report Labor.....	78
Close Job.....	79
Review Job Tracker.....	79
Review Inventory/WIP Reconciliation Report.....	80
Production Planner Workbench.....	80
Make To Job.....	81
Workshop - Create a Job Linked to Another Job.....	81
Duplicate a Sales Order and Create a Parent Job.....	81
Make the Part Direct.....	82
Create a Child Job.....	82
Create Make To Stock Demand.....	83
Schedule the Job.....	84
Job Receipt to Job.....	84
Job Receipt to Inventory.....	84
Workshop - Issue Material and Record Labor.....	85
Issue Materials.....	85
Record Time and Quantity for Operations.....	85
Workshop - Receive Job.....	86
Receive the Make To Job Demand and the Remaining WIP Quantities.....	86
Receive the Make To Stock Demand and the Remaining WIP Quantities.....	86
Job Cost Adjustments.....	87
Co-Parts.....	87
Shop Communication Tools.....	88
Alert Group Maintenance.....	88
Workshop - Create an Alert Group.....	88
Global Alert Maintenance.....	89
Workshop - Set Up Global Alerts.....	90
Assign Global Alerts to an Alert Group.....	90
Activate Global Alerts.....	90
Shop Warning Maintenance.....	91
Workshop - Set Up Shop Warnings.....	91
Assign Shop Warnings to an Alert Group.....	91
Activate Shop Warnings.....	91
Recipients.....	92
Person Maintenance.....	92
Workshop - Set Up a Person Record.....	92
Create a Person Record.....	92

Assign the Person to an Alert Group.....	93
Production Team Maintenance.....	93
Workshop - Associate the Person with a Production Team.....	93
Alerts Activation.....	93
Workshop - Initiate the Alert for the Job.....	94
Job Management Trackers.....	94
Workshop - Use the Job Tracker.....	95
Workshop - Use the Part Tracker.....	95
Workshop - Use the Shop Tracker.....	96
Review Currently Clocked in and Clocked out Employees.....	96
Review Shop Warnings.....	96
Conclusion.....	98
Appendix.....	99
Icons.....	99
Costing Methods.....	100
Recommendations, Considerations, and Approaches.....	101
Approach 1: Resource Group Specific.....	101
Approach 2: Resource Specific.....	102
Approach 3: Multiple Resource Groups or Resources.....	103
Approach 4: Multiple Resource Groups or Resources used with the Advanced Planning and Scheduling Module.....	104

Job Management Course

This course describes the features and functionality of the Job Management module. Job Management provides a comprehensive manufacturing control system designed for routing, scheduling, costing, and tracking custom or repetitive parts produced for inventory or shipped to the customer from the site floor.

Upon successful completion of this course, you will be able to:

- Identify configuration and setup requirements for the Job Management module.
- Use the job planning process for the Make To Order and Make To Stock environments.
- Process jobs through the Epicor application, including engineering, performing initial scheduling, releasing, and printing the job traveler.
- Change specific job requirements.
- Issue materials and adjust job costs.
- Receive finished goods to stock and complete the job.
- Analyze job performance.

Before You Begin

Read this topic for information you should know in order to successfully complete this course.

Modules Licensing

The following modules must be licensed to complete all the workshops in this course:

- Advanced Material Management
- Inventory Management
- Job Management
- MES Data Collection
- Order Management
- Purchase Management
- Shipping Receiving

Audience

Specific audiences will benefit from this course.

- Plant Managers
- Planners and Schedulers
- Production Team Leads
- Controllers and Cost Accountants
- Business Analysts and ERP Support Personnel

Prerequisites

To complete the workshops in this course, the necessary modules must be licensed and operating in your training environment. For more information on the modules available, contact your Epicor Customer Account Manager. It is also important you understand the prerequisite knowledge contained in other valuable courses.

- **System Flow** - This course introduces a basic quote to cash scenario that includes the process from the initial customer quote to final cash receipts and payment of supplier invoices. This course emphasizes the series of processes that make up the quote to cash process by using a simple scenario to highlight various transactions. Your organization may have more complex processing routines than those described in this course.

Environment Setup

The environment setup steps and potential workshop constraints must be reviewed in order to successfully complete the workshops in this course.

Your Epicor training environment, in which the Epicor demonstration database is found, enables you to experience Epicor functionality in action but does not affect data in your live, production environment.

The following steps must be taken to successfully complete the workshops in this course.

1. Verify the following or ask your system administrator to verify for you:

- **Your Epicor training icon (or web address if you are using Epicor Web Access) points to your Epicor training environment with the Epicor demonstration database installed.** Do not complete the course workshops in your live, production environment.



Note It is recommended that multiple Epicor demonstration databases are installed. Contact Support or Systems Consulting for billable assistance.

- **The Epicor demonstration database is at the same version as the Epicor application.** The demonstration database is installed from the Epicor Administration Console using the "Add Demo Database" command under Database Server. See Epicor ERP installation guides for details. If you are an Epicor Cloud ERP customer (and have licensed embedded education), the demonstration database is installed for you.
- **Your system administrator restored (refreshed) the Epicor demonstration database prior to starting this course.** The Epicor demonstration database comes standard with parts, customers, sales orders, and so on, already defined. If the Epicor demonstration database is shared with multiple users (that is, the database is located on a server and users access the same data, much like your live, production environment) and is not periodically refreshed, unexpected results can occur. For example, if a course workshop requires you to ship a sales order that came standard in the Epicor demonstration database, but a different user already completed this workshop and the Epicor demonstration database was not restored (refreshed), then you will not be able to ship the sales order. If you are an Epicor Cloud ERP customer see section below.

2. Log in to the training environment using the credentials **epicor/epicor**.

If you are asked to log into your training environment with another User ID, for example, 'nancy' or 'bhoward', on the initial logon, a message appears to inform you the password has expired. Perform the following steps to set a new password:

1. To the **Password Expired** message, click **Yes**.
2. In the **Current password** field, enter the User ID of the user you are asked to log in as, for example, 'nancy'.
3. In the **New password** field, enter a new password, for example 'Train123'.



Important In **Epicor ERP Cloud** environment, the password must not contain user ID, must be longer than 7 characters and include at least one uppercase letter.

4. In the **Confirm new password** field, re-enter the same password.
5. Click **OK**. The Change Password window closes and you are logged on with the new user ID.



Note Record the new password. This is important as this will be the password everyone uses when they log on with this User ID, until the database is refreshed.

3. From the Main menu, select the company **Epicor Education (EPIC06)**.
4. From the Main menu, select the **Main Site**.

Kinetic Interface Specific Information

All the workshops in this course can be completed using the **Classic** layout. To ensure that the user interfaces used in this course display in the Classic layout, use the steps below:

1. Navigate to **Kinetic Application Maintenance**.

Menu Path: System Setup > Security Maintenance > Kinetic Application Maintenance

2. From the **Menu** list, select the **Epicor Education** company.

The **Company Epic Corporation** pane displays.



Note If you need to work in a multi-company environment you will have to disable the Kinetic layout for all the companies used in the course.

3. Inactivate the **Enable Kinetic UI ON/OFF** button.
4. Exit Kinetic Application Maintenance.
5. On the standard toolbar, select **Options > Preferences**.
6. In the window that displays, in the **Form To Use** field, select **Classic**.
7. Select **OK** to confirm.
8. Relaunch Epicor ERP.

Epicor Cloud ERP Specific Information



Note If you are an Epicor Cloud ERP customer, then note the following about your Epicor-hosted education company. All logins referenced in the course (such as manager, or epicor) should be changed to be the **<site ID>**. For example, if your site ID is 98315, then wherever you are instructed to use the login **manager**, instead use **98315-manager**. The password is 'Train18!'.



Note To refresh your Epicor training data, enter a support ticket in **EpicCare** and include your site ID.

Workshop Constraints

Below is a list of workshops in this course that can be performed only once in each instance of a restored (refreshed) shared database. Where applicable, a detailed explanation of the workshop constraints is documented in the workshop itself.

- Workshop - Record Labor Using Data Collection
- Run Backflush Labor Server Process (workshop task)
- Workshop - Run the Auto Job Completion Process

- Assign Global Alerts to an Alert Group (workshop task)
- Activate Global Alerts (workshop task)
- Activate Shop Warnings (workshop task)

Overview

This topic gives an overview of job management tools, job creation methods, job types, and defines the common terms used in the Job Management module.

Tools

Several tools are available that assist with the creation and management of jobs:

- **Planning Workbench** - Provides a view of job related actions.
- **Job Manager** - Reviews the relationship between jobs and demand.
- **Job Costing** - Compares job estimates to actual costs by job, operation, or material.
- **Order to Job Linking** - Creates one job with one delivery, or creates one job with multiple deliveries.
- **Planned Overproduction of Assemblies** - Produces and auto receives overproduction quantities to inventory on a job.
- **Production Activity** - Provides the functionality to establish lean performance metrics as well as capture production data automatically through shop floor transactions.

Job Creation Methods

Jobs can be created using one of the following methods:

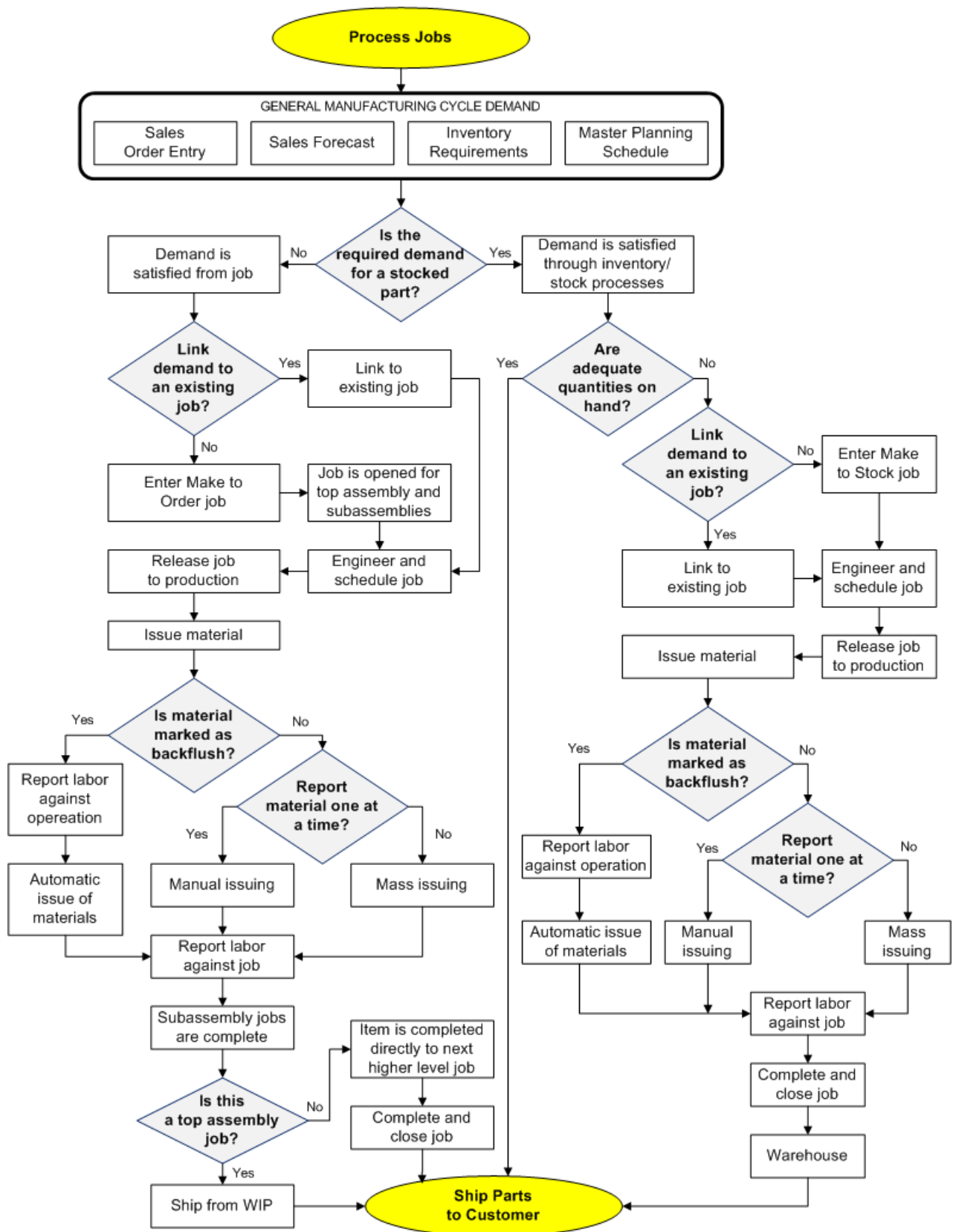
- **Quick Job Entry** - Provides streamlined job creation.
- **Manual Method** - Creates a job for inventory using the Time Phased Material Requirements Report for stocked parts.
- **Material Requirement Planning Module** - Creates planned jobs for stocked and non-stocked items.
- **Planning Workbench** - Notifies you about new sales order requirements and changes for non-stocked parts.
- **Order Job Wizard** - Displays demand, supply, and inventory by part and provides job linking, job creation, and pull from inventory capabilities.
- **Kanban** - Reports the production of parts without a job.

Job Types

Three different types of jobs exist, and each has a different way of relieving the Work in Process (WIP):

- Make To Stock
- Make To Order
- Make To Job

These job types are discussed later in the course.



Application Setup

This section of the course reviews Company Configuration and maintenance programs related to Job Management.

Company Configuration

Company Configuration defines options for companies in the Epicor application. Use these options to customize the application to best fit each company within your organization.

Use Company Configuration to configure the Job Management module. Typically, company configuration is done at implementation. The modules require some maintenance program definition.

Job Management Configuration

To define the default job configuration settings for Job Management, select the **Modules > Production > Job** sheet. This sheet is separated into the following panes:

- Labor
- Time FormatJob Number Generation
- Quick Job ID
- KanBan Prefix
- Change Engineered Job
- Change Impact Price List
- Direct Ship Standard Cost Job Variances
- Load Relieved By
- Issued Manufactured
- Default Standard Format
- User Defined Check Off Labels
- Scheduling
- Change Impact Grace Period

For more information about the fields, refer to the Application help.

Menu Path

Navigate to this program from the Main Menu:

- System Setup > Company/Site Maintenance > Company Configuration

Maintenance Programs

This section of the course reviews the most significant maintenance programs applicable to the Job Management process. In many cases, some fields and sheets in a program are not discussed. If you are interested in learning more about a specific program, refer to the Application Help.

Job Department Maintenance

Use **Job Department Maintenance** to establish job departments, which can be used to group resource groups set up for organizational and reporting purposes. Do not confuse job departments with General Ledger (GL) departments.



Important At least one department is required in the Epicor application.

Job departments do not need to be the same as the departments established in the financial foundation. Job departments are helpful when viewing the shop floor by functional area. They are used in some reports and graphs to view the shop load. Run reports by department, such as the Priority Dispatch Report, to list jobs in the order the work should be done.



Example

- Machining Department
- Shipping Department
- Assembly Department

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > Setup > Department
- Production Management > Quality Assurance > Setup > Department
- Production Management > Scheduling > Setup > Department

Shift Maintenance

Use **Shift Maintenance** to define relevant shift times for labor reporting and time collection purposes.

Each employee defined in **Shop Employee Maintenance** and **Employee Maintenance** belongs to a default shift record entered in **Shift Maintenance**. Data collection and shop warnings use these entries to report warnings such as **Employee Clocked in Early** or **Employee Clocked out Late**.

Menu Path

Navigate to this program from the Main Menu:

- Financial Management > Payroll > Setup > Shift
- Material Management > Data Collection > Setup > Shift
- Material Management > Inventory Management > Setup > Shift
- Production Management > Data Collection > Setup > Shift

- Production Management > Job Management > Setup > Shift
- Service Management > Expense Management > Setup > Shift
- Service Management > Field Service > Setup > Shift
- Service Management > Project Management > Setup > Shift
- Service Management > Time Management > Setup > Shift

Shift Detail

Shift Maintenance > Detail

Use the **Detail** sheet to define general shift information such as the shift description, start and end times, lunch break information (which automatically deducts time from pay hours), and rate differential information.

Rate differentials define additional payment rates employees receive when they work certain shifts. The monetary amount you pay for a shift differential can be hourly or a percentage, depending on the rate qualifier entry you indicate. In addition, you define if the rate differential should always be given to an employee who works the selected shift or if it should only be given if the shift is different than the employee's ordinary shift.



Important You can only use rate differential information if the **Payroll** module is licensed.

Shift Break Detail

Shift Maintenance > Shift Break Detail

Use the **Shift Break Detail** sheet to define breaks (other than lunch) for each shift, and add breaks to both new and existing shift records.



Important Shift break information is only available when the **Data Collection** module is licensed.

Employee Maintenance

Use **Employee Maintenance** to create an employee record. Employees perform work on jobs and enter labor in Time and Expense Entry. If an employee is connected to a User ID, the associated password is required for the employee to log into the Handheld functions or the Manufacturing Execution System (MES).

Employee Maintenance is most valuable if you do not have the Payroll module. The Job Management module uses an employee file separate from the Payroll module.

- If the Payroll module is installed, enter employees. They automatically display in the Employee file, where you can activate other fields. If necessary, update the employee details. When you update employee details in the Payroll module, the employee record updates automatically.
- An employee added to Payroll Employee Maintenance cannot be added again in Employee Maintenance. If you select the **Active Employee** check box in Payroll Employee Maintenance, the employee is automatically part of Employee Maintenance. You can always return to Payroll Employee Maintenance to select this check box.

An employee can start a shift when the payroll administrator is unavailable. In this scenario, the employee is entered in Employee Maintenance to allow them to record time. The payroll administrator can pull the entry into the Payroll module at a later time. Temporary employees who report time must also be entered in Employee Maintenance.

Menu Path

Navigate to this program from the Main Menu:

- Financial Management > External Payroll Integration > Setup > Employee Information
- Material Management > Data Collection > Setup > Employee
- Material Management > Inventory Management > Setup > Employee
- Production Management > Data Collection > Setup > Employee
- Production Management > Job Management > Setup > Employee
- Service Management > Expense Management > Setup > Employee
- Service Management > Field Service > Setup > Employee
- Service Management > Field Service > Setup > Employee
- Service Management > Field Service Integration > Setup > Employee
- Service Management > Project Management > Setup > Employee
- Service Management > Time Management > Setup > Employee

Operation Maintenance

Use **Operation Maintenance** to enter procedures that shop employees must perform when working on a job. Job operations or operation sequences define the sequence of labor steps required to make each part.



Example Drill, Bend, and Cut.

Operations are entered for each part in **Opportunity/Quote Entry** and **Job Entry**. They can also be entered as routing information if you have the Engineering module installed.



Important You must attach specific resources and resource groups to your operations in order to establish labor and burden rates for the operation. Use the **Scheduling Requirements** sheets to do this. If you have the **Advanced Planning and Scheduling (APS)** license installed, you can also attach capabilities to your operations.



Note For more information, refer to the Routing Creation and Job Scheduling advanced topics in the Application Help. For more information on how an operation is costed with respect to the capabilities, resources, or resource groups that might be attached to it, refer to the Costing Workbench topic in the Application Help.

Operations can be **internal** or **subcontract**. Internal operations track the hours and costs for the planned and actual labor. Subcontract operations track the movement of parts and costs associated with outside services.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Engineering > Setup > Operation
- Production Management > Job Management > Setup > Operation
- Production Management > Scheduling > Setup > Operation
- Sales Management > Configurator Management > Setup > Operation
- Service Management > Project Management > Setup > Operation

Operation Standard Maintenance

Use **Operation Standard Maintenance** to define the default setup and production estimates for specific operations. Operation standards are optional, but they can be useful if you have operations that take the same amount of time, regardless of the part produced. You can standardize operation times in the method of manufacturing and in the quoting process.



Example The Shearing operation can take additional setup and operation time, based on the gauge of the material.



Note You can only access this program from **Operation Maintenance**. To launch this program, from the **Actions** menu, select **Standards**.

Operation Text Maintenance

Use **Operation Text Maintenance** to set up standard operation text.

Operation text is printed on the job traveler. Operation text records are standard comments associated with an operation in Operation Maintenance.

For example, you can set up standard instructions or warnings as operation text records, then associate them with specific operations. You can also create an inspection sign-off line as operation text, then associate it with an operation that ordinarily requires inspection.

If you associate a specific operation text record with an operation, that text automatically prints on the job traveler whenever the operation displays. The text displays below specific job operation comments.



Note Operation text should not be confused with the **Operation Description** or **Operation Comments**. These apply to a specific operation on a specific part and can be overridden in Job Entry. Operation text is printed on the job traveler and does not display in Job Entry.

The purpose of operation text is to display generic requirements for an operation, whereas operation comments identify specific requirements for the selected operation. For example, a milling operation may have specific tolerances that must be met. Enter this in the comments at the job level.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > Setup > Operation Text
- Production Management > Scheduling > Setup > Operation Text
- Service Management > Maintenance Management > Setup > Operation Text

Resource Group Maintenance

Use **Resource Group Maintenance** to set up resource groups and resources to be assigned to operations and used during job entry for scheduling purposes. Each resource group must have at least one resource and is inactive until a resource is created for it.

Resource groups and resources carry labor and labor burden cost estimates. They define where and how to perform operations. Resource groups can also be used to build part routings in the Engineering Workbench and in Quote Entry.

Note that within Resource Group Maintenance, you cannot view or maintain resource groups or resources that were created in a site other than where you are logged in.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Engineering > Setup > Resource Group
- Production Management > Job Management > Setup > Resource Group
- Production Management > Scheduling > Setup > Resource Group
- Sales Management > Configurator Management > Setup > Resource Group
- Service Management > Expense Management > Setup > Resource Group
- Service Management > Field Service > Setup > Resource Group
- Service Management > Maintenance Management > Setup > Resource Group
- Service Management > Project Management > Setup > Resource Group
- Service Management > Time Management > Setup > Resource Group



Important This program is not available in Epicor Web Access.

Detail Sheet

Resource Group Maintenance > Detail

Use the **Detail** sheet to set up the default information for the resource group. Each resource group must have at least one resource.

A resource group is an area within a department where work is done or an indication of what is required to do the work. It can be a person, place, or object used during production. Each resource group must contain at least one resource.

Resources Detail Sheet

Resource Group Maintenance > Resources > Detail

Use the **Resources > Detail** sheet to set up individual resources to include in the resource group.

A resource is a subset of a resource group. At least one resource must be set up for each resource group. It can be one of the places or objects used during production.



Example

- A specific machine, such as a CNC machine.
- A specific place in the site, such as Shipping.
- A tool to be used during production, such as a bench.
- A person, such as an inspector.

Note that you cannot view or maintain resource groups or resources that were created in a different site.

Reason Code Maintenance

Use **Reason Code Maintenance** to assign standard explanations for Customer Relationship Management (CRM) events, labor scrap and rework, inventory adjustments, and Return Material Authorization (RMA) entries.

To use reason codes, select the appropriate options in Company Configuration. Next, set up the codes in Reason Code Maintenance and select the reasons in the following programs:

- Count Discrepancy Reason Code Entry

- Time and Expense Entry
- Inventory Adjustment Entry
- RMA Processing
- RMA Dispositions
- Opportunity/Quote Entry

The following reason codes are used in manufacturing:

- **Scrap** - This is used to identify a non-conformance quantity.
- **Quality Assurance** - This is used for inspection and corrective actions.
- **Inventory Adjustments** - This is used to identify items pulled from inventory that are non-conforming.
- **Rework** - This is used for items sent back to be re-worked.

Menu Path

Navigate to this program from the Main Menu:

- Financial Management > Deferred Revenue Accounting > Setup > Reason Code
- Material Management > Inventory Management > Setup > Reason Code
- Production Management > Job Management > Setup > Reason Code
- Production Management > Quality Assurance > Setup > Reason Code
- Sales Management > Customer Relationship Management > Setup > Reason Code
- Service Management > Field Service > Setup > Reason Code

Daily Job Management Processing

This section of the course reviews job management processing that takes place during a typical work day.

Business Scenario

Your company, P&H Auto, is a leading manufacturer of customized parts for race cars and stock cars. You have a strong reputation for manufacturing quality performance aftermarket auto parts. Your company maintains an expansive inventory of parts for chassis, suspension, and steering.

You have been asked to show the newest employee how to use the functionality of Job Management. You decide to show the employee the different ways to create and process jobs as new requests are received.

Job Entry

Use **Job Entry** to create and edit jobs. Job heading information, material, operations, and assembly information is linked to each job through this program. Once you are satisfied with a job's manufacturing process, you can schedule the job so it is placed in the manufacturing queue at once.

Use the tree view to review and edit the aspects of the current job. In the tree view, double-click the icons for the nodes to display sheets with specific information about the job.

From the **Actions** menu, select **Get Details** to quickly add the bill of materials and bill of operations information for a part. You can also enter methods of manufacture (MOM) directly to the job through the **Engineering** sheets. You can then use these methods for other jobs.

Jobs can also be part of a project. A project is a collection of jobs created to complete a larger task. Use the fields on the **Project** sheet to add the current job to a project.



Tip For more information on projects, refer to the Job Management > Job Entry > Project topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Job Entry
- Service Management > Expense Management > General Operations > Job Entry
- Service Management > Project Management > General Operations > Job Entry
- Service Management > Time Management > General Operations > Job Entry

Job

Job Entry > Job

Use the **Job** sheet to enter and edit the main information for each job. This sheet allows you to add a new job or edit an existing job. It also provides an overview of the job and displays part information, quantities, revision, and due dates. This sheet also contains check box options you select to indicate that the jobs planning is complete.

Several sub-sheets are available on the Job Header. These sheets allow you to view the demand for the job and indicate whether the job is made for stock, made to order, or made for a job. You can also select the people associated with the job.

Demand Summary

Job Entry > Job > Demand Summary

The **Job > Demand Summary** sheet displays the demand placed against the current job. It pulls this information from the **Make To Order**, **Make To Stock**, and **Make To Job** demand links created for the part selected in the job header.

The information on this grid is for display only. You cannot edit these fields.



Important You cannot add demand links to jobs marked as Engineered, if the **Prevent Changes** check box, located on the Company Configuration > Modules > Production > Job sheet, is selected. The Job Entry > New Menu > New Demand Link command is inactive on engineered jobs.



Note To add a demand link, clear the **Engineered** check box, add the demand link, and click **Save**. When you save the job change, the **Change** window automatically displays. Use the Change window to enter information about the applied job change.

Job Types

Three different types of job demand are available, each with a different way of relieving Work in Process (WIP). They define where the finished quantity for the job is directed and are indicated as the **Make** options of the **Demand Link** added to a job.

You can select multiple Make options for each job. The three Make options include:

- **Make To Stock** - When selected, this option indicates the quantity for the current job is partly or fully placed in inventory.
- **Make To Order** - When selected, this option indicates the quantity for the current job is partly or fully used to satisfy a sales order.
- **Make To Job** - When selected, this option indicates the quantity for the current job is partly or fully used for another job.

Workshop - Create a Job Manually

You have received a new request from Addison for a machined casting part. As a result of the customer request you enter a sales order for 50 units of the ADD-200-S part. Once you enter the sales order, you create and schedule a new job specific to this customer requirement.

Enter a New Sales Order

Navigate to **Sales Order Entry**.

Menu Path: Sales Management > Order Management > General Operations > Order Entry

1. From the **New** menu, select **New Order**.
2. In **Sales Order Entry**, in the **Customer** field, enter **Addison** and press **Tab**.
3. In the **Need By** field, enter the date two weeks from today.
4. In the **Ship By** field, enter the date two days before the **Need By** date.
5. Click **Save**.

6. Navigate to the **Lines > Detail** sheet.
7. From the **New** menu, select **New Line**.
8. In the **Part/Rev** field, enter **ADD-200-S** and press **Tab**.
9. In the **Order Quantity** field, enter **50**.
10. In the **Unit Price** field, enter **49.25** and press **Tab**.
The **Ext. Price** and **Total Price** fields populate.
11. Click **Save**.
12. Navigate to the **Releases > Detail** sheet.
13. Select the **Make Direct** check box.
14. Click **Save**.
15. Navigate to the **Summary** sheet.
16. Record the sales order number _____.

Create a Job for the Selected Requirement

1. Navigate to the **Releases > Job** sheet and view the **Jobs** grid.
No jobs currently display.
2. Navigate to the **Summary** sheet.
3. Click the **Create Jobs** button.
4. Navigate to the **Releases > Job** sheet.
5. In the **Jobs** grid, view the number of the created job.
6. Record the job number _____.
7. Click **Save**.

Get Details for the New Job

1. In the **Jobs** grid, right-click the job number and select **Open With > Job Entry**.
Job Entry displays.
2. From the **Actions** menu, select **Job > Get Details**.
The **Get Details** window displays.
3. Verify the **Method** sheet displays.

Get Details is used to pull in the method of manufacture for the part to be built on the job. The Epicor application must have a current method of manufacture on file with an approved revision to use the Get Details process.

The application displays manufacturing revisions on file for the part and also allows you to select a method from another job or quote.

4. From the **Revisions** grid, select **Rev A** and click **OK**.

This action pulls in details from the default method for the part.

Review and Schedule the Job

1. In the tree view, expand the **Operations** and **Materials** nodes to review the method details.
2. In the **Req By** field, enter the date two weeks from today.
3. In the **Job > Demand Summary** sheet, review the **Demand Summary** grid.
4. Verify the **Engineered** check box is selected.
5. From the **Actions** menu, select **Schedule > Job Scheduling**.

The **Schedule Job** window displays.



Note The purpose of scheduling the job is to get capacity requirements and raw material requirements into the Epicor application. Use the date entered in the Req By field as the Due Date for the job. You can reschedule the job as needed.

6. Accept the default of **Backward** scheduling.
The Epicor application schedules the job backwards from the due date, which is determined by the Ship By date on the sales order.
7. Click **OK**.
If a message displays informing you that the job will not meet its required date, click **OK**.
8. On the **Job** sheet, select the **Released** check box to release the job.
Once the job is released, you are able to record labor against the job.
9. Click **Save** and exit Job Entry and Sales Order Entry.

Job Processing

This section of the course reviews the job processing details when you enter a job.

Manufacturing Details

Once you enter a job and select the part, manufacturing details are pulled in for the part to be produced. The details are pulled from another job, another part, a quote, or are created directly in the job itself.

A Make To Order job has manufacturing details created directly in the job. You can add assemblies, operations, materials, and subcontract operations using the right-click context menu from the tree view. The details defined

directly in the job remain part of the job itself and can only be re-used if the job is used to pull in details to another part.

A job can be marked as a template by selecting the **Template** check box in Job Entry. This indicates the job can be listed as an option for Get Details. Only jobs or assemblies that have the Template check box selected display in this program.

Preparing the Job for Production

Once you define the details, or bring them into the job, it is then engineered, scheduled, and released. Following is an explanation of each status:

- **Engineered** - The Engineered check box is only available after the method of manufacturing for the job has been approved. Note that each operation on the method must have at least one resource or resource group defined as a location, or at least one capability that has a primary resource group defined as a location. Jobs are only available for scheduling if the Engineered check box is selected. Jobs that are not engineered do not display on some reports and programs and labor transactions cannot post against them. If you clear the Engineered check box after a job has been scheduled, the schedule for that job is removed.

If this is the first time a job is selected as engineered, the Epicor application automatically updates the job quantity in the database. If this is not the first time the job has been selected as engineered, the application displays a message asking if the original quantity value should be reset with the current quantity value.

- **Scheduled** - A job must be selected as engineered before you can schedule it. Scheduling places the job into the shop's workload. At this time, the Scheduling Engine reviews the Bill of Operation (BOO) and the Bill of Materials (BOM) to calculate the time required for each process. The resource groups and specific resource schedules are then evaluated, and a start and due date are generated for the job.

If you use Backward Scheduling, the Epicor application looks at the Required By Date and determines a schedule that can be used to meet that date. Forward Scheduling begins with the date of the job and creates a schedule in response to resource and material requirements. Once the scheduling process is complete, the start and due dates on the job populate.

- **Released** - When selected, this check box indicates this job is ready for manufacturing. Only released jobs can have labor placed against them.

Job Planning Process - Make To Order

The entire manufacturing cycle is influenced by supply and demand. Demand is generated primarily by the entry of a sales order for a specific part, but also from the forecast, master planning schedule, and inventory requirements. The job planning process is controlled by the **Non-Stock Item** check box in Part Maintenance.

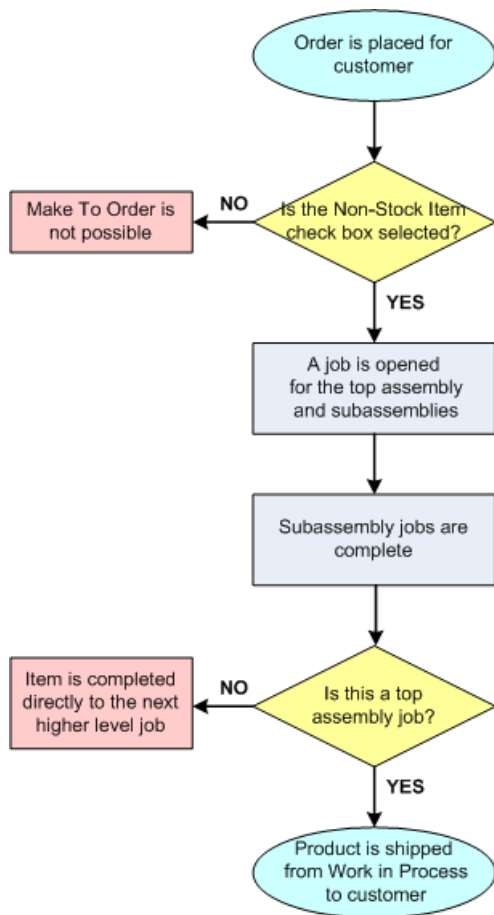
If you select the Non-Stock Item check box on the Part record, the Epicor application expects supply to come from a job. Line items from a sales order flagged as make direct create a suggestion in the Planning Workbench.

Production Control has tools to determine the most efficient way to satisfy demand, including creating a new job or linking to an existing job. In the Make To Order strategy, non-stock materials and subassemblies are produced directly to the job. Purchased, non-stock materials are received directly to the job.

Tools such as the Planning Workbench, Production Control Workbench, Order Job Wizard, and Job Manager are available to manage the supply.

Make To Order Process Flow

The following is the production flow for a Make To Order strategy.



Planning Workbench

Use the **Planning Workbench** to create new jobs, or make changes to the supply/demand links on existing jobs, based on planning suggestions generated by the Epicor application. You first find and select suggestions based on current sales orders. Then, you create jobs and define the demand links by launching programs from the Planning Workbench.

The Epicor application provides suggestions when you create new sales orders or change existing ones. The Planning Workbench allows you to view the following information:

- Sales order line and releases for a non-stock item, and the jobs that need to be performed to satisfy the demand.
- Sales order changes due to a linked sales order change. These changes include:
 1. **Date** - The request date can move forward or backward.
 2. **Revision Level** - The revision on the sales order is different than the revision on the attached job.
 3. **Quantity** - The sales order quantity can be increased, decreased, or canceled.
- If your company uses the **Material Requirements Planning** (MRP) module, the Planning Workbench also creates suggestions that are **not** linked to sales driven demand. This includes **open demand**, whether from transfer orders, sales order releases, or job materials declared as Make Direct. If the MRP module is installed but it cannot create an uniform job for a demand transaction, the Epicor application also displays this type of transaction in the queue.

The **Suggestions** grid displays the part, due date, target job, source, customer name and other information for each planning suggestion. For each order release, it displays a suggested planning action, which include:

- Create job or link to existing job
- Part/Rev conflict
- Increase production quantity
- Decrease production quantity
- Unlink or delete job
- Expedite job
- Postpone job



Note Refer to the field help for a detailed explanation of each suggested action,

The displayed suggestions for new demand in the Planning Workbench create the need for a production control decision, including the following:

- Creation of a new, discrete job from the suggestion record.
- Review the order behind the suggestion record.
- Managing supply and demand for the selected suggestion record.
- Combining of releases.
- Linking demand to an existing job
- Deleting the suggestion.
- Job number decisions - use the next available job number, order release number, or unique number you assign.

The planner selects the action based on the suggestion, or deletes the record from the Planning Workbench if it is unnecessary. This allows access to the job related actions in a single view - direct creation of new jobs, changing job requirements to match changing demand, and allocating and reallocating jobs to satisfy changing customer demand. You can also use the Job Manager to combine requirements into jobs, or use the Order Job Wizard to create and process sales order jobs. This provides you with the ability to plan ahead to manufacture stock or job quantities you may need in the future.



Note Refer to the Job Manager and Order Job Wizard Application Help for more details on these programs.



Important For the **Planning Workbench** command to be active, you must define the **Required By** date on the job in focus.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Planning Workbench

Workshop - Review the Change Queue

This workshop demonstrates how to review the change queue in the Planning Workbench.

Navigate to the **Planning Workbench**.

Menu Path: Production Management > Job Management > General Operations > Planning Workbench

1. Click the **Select** button to initiate a search.

2. In the **Status** field, select **Changes**.
3. Click **Search**.
4. Click **Select All**, and click **OK**.
5. Review the job change types.
The available types include the following:
 - Cancel
 - Date Changes
 - Quantity Increases
 - Reduce Quantity
6. Exit the Planning Workbench.

Job Traveler Report

Use the **Job Traveler Report** to print details for a job and use this hard copy to track the manufacturing progress of a job. You can also print details for many jobs in the same report.

Routings from the Job Traveler Report provide production personnel the information necessary to make the product. Each operation required for production displays on the traveler, as well as the resource group used for the operation. In addition, specific user-defined operation text provides an objective, written record of the completion of necessary operations. The Job Traveler also efficiently displays outside processing operations that may be required to complete the job.

The Job Traveler Report explains exactly what is required on a specific job. It divides the operations and materials by the assemblies for the parent job.



Note You can also use Job Entry to access the Job Traveler from the Actions menu.

Use the **Selection** sheet to select the report parameters. Use the **Filter** sheet(s) to select the specific records to include on the report. For more information, refer to the Filters Overview topic in the Application Help.



Important For more information on how to review the status of a report you print, preview, or generate, refer to the System Monitor Overview topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > Reports > Job Traveler
- Production Management > Scheduling > Reports > Job Traveler

Workshop - Print the Job Traveler Report

This workshop demonstrates how to print and use the Job Traveler Report.

Navigate to the **Job Traveler Report**.

Menu Path: Production Management > Job Management > Reports > Job Traveler

1. Navigate to the **Filter > Job** sheet.

2. Click the **Job** button, and search for and select the job you created in the **Workshop - Create a New Job Manually**.
3. Navigate to the **Selection** sheet.
4. Select the **Print Scheduled Resource Descriptions** and **Operation Dates** check boxes.
Job Traveler details are selected using print parameters.
5. Click **Print Preview** to preview the report.
6. Review the Job Traveler Report and the standard text accompanying the operation.
7. Close the report and exit Job Traveler Report.

Order Job Wizard

The **Order Job Wizard** allows you to quickly create jobs for a sales order. This program allows you to create either a job for the order line or a job suggestion that displays in the Planning Workbench.

The Order Job Wizard is only available on sales orders that have at least one line selected to be made direct and for which a Ship By date has been entered for the corresponding order release. When you select the **Make Direct** check box, it indicates the release quantity is manufactured directly instead of being pulled from inventory.



Note The Order Job Wizard is not available for an order line if **No Job** is selected as the job type.



Tip If you select the **Buy To Order** check box for a sold part in the **Releases > Detail** sheet, the sold item does not display in Order Job Wizard and is not included in MRP processing. If a part does not exist in the part master file or the part is a non-stock part, the **Make Direct** check box is automatically selected.

To display Order Job Wizard from Sales Order Entry and the Planning Workbench do the following:

- In Sales Order Entry, from the **Actions** menu, select **Order Job Wizard**. To activate this option for the sales order line, enter the **Need By** and **Ship By** dates on the **Releases > Detail** sheet, select the **Make Direct** check box, and save the sales order.
- In the Planning Workbench, click the **Order Job Wizard** button. To activate this button, select a job suggestion.

The Order Job Wizard initially selects the **Make Direct** check box for each order line. If you clear this check box, you can then manually select the releases and the jobs that satisfy these release quantities.

From the **Actions** menu, select **Create Job** to turn your selections into jobs or job suggestions.

Order Job Wizard, Order Lines

Order Job Wizard > Order Job Wizard, Order Lines

Use the **Order Job Wizard > Order Job Wizard, Order Lines** pane to manually create, schedule, and release jobs for all, or selected, detail lines on the current order. You can then pull the current methods of manufacturing created for the parts into the generated jobs. These jobs can be scheduled and released to the shop floor.



Note

If you clear the **Create Job** check box in the Order Job Wizard, Order Lines pane, you can then select the Create Job check box in the **Release** pane to create a separate job for each release (for example, a series of non-stock part releases).

If you do not clear the **Create Job** check box in the Order Job Wizard, Order Lines pane and run the Create Jobs functionality, the Epicor application generates a single job for the releases on the order line. This causes the entire quantity to be manufactured at the same time.

For more information, refer to the Order Job Wizard - Releases topic in the Application Help.

Releases

Order Job Wizard > Releases

Use the **Order Job Wizard > Releases** pane to link existing jobs to a specific order release. This pane only displays open releases that are created for the order line selected in the **Order Job Wizard, Order Lines** pane. By default, the lines in this pane are display only. To activate this pane, clear the **Create Jobs** check box for the selected order line.



Note

If you clear the **Create Job** check box in the **Order Job Wizard, Order Lines** pane, you can then select the Create Job check box in the **Release** pane to create a separate job for each release (for example, a series of non-stock part releases).

If you do not clear the **Create Job** check box in the Order Job Wizard, Order Lines pane and run the Create Jobs functionality, the Epicor application generates a single job for the releases on the order line. This causes the entire quantity to be manufactured at the same time.

For more information, refer to the Order Job Wizard - Order Job Wizard, Order Lines topic in the Application Help.

To create links to existing jobs, click the **Link** button. In the Jobs pane, indicate which jobs you want to link to this release.

Jobs

Order Job Wizard > Jobs

Use the **Jobs** pane to view the jobs that are currently manufacturing the selected part on the order line.

This pane only displays existing jobs for the part that is on the line selected in the **Order Job Wizard, Order Lines** pane. These jobs manufacture parts that match the parts ordered on the line. The jobs in this pane are display only; you cannot edit this information. You can, however, link these jobs to a selected order release.

Workshop - Create a Job Using the Order Job Wizard

Another customer, Dalton Manufacturing, calls to place an order for two parts. You decide to use the **Order Job Wizard** to quickly create jobs for a sales order. The Order Job Wizard will create the jobs, get details, schedule and release the jobs. The Order Wizard is available from the Planning Workbench or in Sales Order Entry from the Actions menu. The demand created by the sales order can be satisfied by creating one job for the entire order or one job for each line release.

Duplicate and Update Sales Order Dates

In this workshop, duplicate sales order **5050** to create a unique sales order and update the dates on the sales order.

Navigate to **Sales Order Entry**.

Menu Path: Sales Management > Order Management > General Operations > Order Entry

1. In the **Sales Order** field, enter **5050** and press **Tab**.

2. From the **Actions** menu, select **Order > Copy Order**.
The **Copy Order** window displays.
3. Accept the defaults and click **OK**.
This action creates a duplicate sales order of 5050.
4. Record the new sales order number _____.
For the purpose of this course, this new sales order is used in place of 5050.
5. In the **Need By** field, enter the date two weeks from today.
6. In the **Ship By** field, enter the date two days before the **Need By** date.
7. Click **Save**.
8. To the **You have changed the following fields** message, click **Yes**.
9. Navigate to the **Releases > Detail** sheet.
10. In the **Line Number** field, verify **1** displays.
11. In the **Release Number** field, verify **1** displays.
12. In the **Order Quantity** field, enter **50**.
13. Select the **Make Direct** check box.
14. In the **Need By** field, verify the date two weeks from today displays.
15. In the **Ship By** field, enter or verify the date two days before the **Need By** date displays.
16. Click **Save**.
17. To the **You have changed the following fields** message, click **Yes**.
18. In the **Line Number** field, select line **2**.
19. In the **Release Number** field, verify **1** displays.
20. In the **Need By** field, enter the date four weeks from today.
21. In the **Ship By** field, enter the date two days before the **Need By** date.
22. Click **Save**.
23. In the **Release Number** field, select release **2**.
24. In the **Need By** field, enter the date eight weeks from today.
25. In the **Ship By** field, enter the date two days before the **Need By** date.
26. Click **Save**.

Review the Order Job Wizard

1. From the **Actions** menu, select **Order Job Wizard**.
The **Order Job Wizard** window displays.
2. Review the **Order Job Wizard, Order Lines** section.
The Order Lines section allows releases to be combined into a single job. The earliest due date becomes the due date of the job.
3. Review the **Releases** section.
The Releases section focuses on the order line selected and its releases, and allows you to create a new job per release.
4. Review the **Jobs** section.
The Jobs section allows order releases to be linked with other existing jobs for the same part. Active jobs for the part display in the lower right section of the screen.

Create Job Records (Part 1)

1. In the **Order Job Wizard, Order Lines** section, highlight the line for part **DCD-200-ML**.
2. Enter order lines parameters.
In the **Order Lines** grid, select the following check boxes:
 - Create Job
 - Get Details
 - Schedule Job
 - Release Job
3. On the second line for part **DCD-100-SP**, clear or verify the **Create Job** check box is cleared.
A job for part **DCD-100-SP** is created later in this workshop.
4. Click the **Create Jobs** button to create a single job.
5. From the **Releases** section, in the **Job** column, record the job number _____.

Create Job Records (Part 2)

1. In the **Order Lines** grid, select the line with part **DCD-100-SP**.
2. Enter the release options.
In the **Order Lines** grid, select the following check boxes:
 - Create Job
 - Get Details
 - Schedule Job
 - Release Job

3. Click the **Create Jobs** button.
4. In the tree view, under the **Part Number** node, select the **DCD-100-SP** part.
5. In the **Releases** section, in the **Job** column, record the job number_____.
6. Exit the Order Job Wizard.
7. In **Sales Order Entry**, navigate to the **Summary** sheet.
8. Select the **Ready To Process** check box.
9. Click **Save** and exit Sales Order Entry.

Job Manager

Use the **Job Manager** to review, create, and update the supply and demand for a selected part.

The Job Manager allows you to review links that explain the source of a demand or supply for the selected part.

- The **Supply/Demand** grid displays the source for each pending job, including order release, job assembly, or job material.
- The **Demand/Supply** grid displays the quantity requirements for the current part, along with the source for each requirement. The source defines the link within the database for the supply or demand entry.

You can change the supply and demand links, create a job to satisfy demand, or pull the demand quantity from stock. You can also completely remove the supply and demand links.

Job Manager tasks include the following:

- Determine if demand can be met by pulling from stock.
- Determine if demand can be met by linking to an existing job.
- Unlink demand and supply.
- Create a new job to satisfy demand.



Important For the **Job Manager** command to be active, the job in focus must be scheduled.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Job Manager



Note You can refresh the Job Manager by using the **Refresh**  icon located on the **Standard** toolbar. For example, if you search for and select a part in the **Job Manager > Detail > Part** field and then create a job for this part in **Job Entry**, the newly created job will display in the **Job Manager > Supply** section once you click **Refresh**.

Workshop - Create a Job Using the Job Manager

You recall that one of the parts ordered by Dalton Manufacturing was recently ordered by Barriston Engineering. You access Job Manager from the Planning Workbench to view the supply and demand for the specific part, **DCD-100-SP**. For efficiency, you decide to use Job Manager to combine both requirements for the part into one job. The job will be attached to the separate sales orders for the two customers.

Duplicate Two Existing Sales Orders

In this workshop, duplicate sales orders **5121** and **5047**. The unique sales orders you create are used for the workshops that follow.

Navigate to **Sales Order Entry**.

Menu Path: Sales Management > Order Management > General Operations > Order Entry

1. In the **Sales Order** field, enter **5121** and press **Tab**.
This is the first sales order to duplicate.
2. From the **Actions** menu, select **Order > Copy Order**.
The **Copy Order** window displays.
3. Accept defaults and click **OK**.
4. In the **Need By** field, select the date two weeks from today.
5. In the **Ship By** field, select the date two days before the Need by date.
6. Select the **Ready To Process** check box.
7. Click **Save**.
8. To the **You have changed the following fields** message, click **Yes**.
9. Record the new sales order number _____.
10.
From the **Standard** toolbar, click **Clear**  to clear the form.
11. In the **Sales Order** field, enter **5047** and press **Tab**.
This is the second sales order to duplicate.
12. From the **Actions** menu, select **Order > Copy Order**.
The **Copy Order** window displays.
13. Accept defaults and click **OK**.
14. In the **Need By** field, select the date two weeks from today.
15. In the **Ship By** field, select the date two days before the Need by date.
16. Select the **Ready To Process** check box.
17. Click **Save**.
18. To the **You have changed the following fields** message, click **Yes**.
19. Record the new sales order number _____.
20. Exit Sales Order Entry.

Select a Part Number

Navigate the **Planning Workbench**.

Menu Path: Production Management > Job Management > General Operations > Planning Workbench

1. Click the **Select** button.
The **Planning Workbench Search** window displays.
2. In the **Status** field, select **New**.
3. Click **Search**.
4. Click **Select All**, and click **OK**.
5. Highlight the line for the duplicate sales order **5121** with part **DCD-100-SP** you previously created for customer **Dalton**.
6. Click the **Job Manager** button.
The Job Manager opens and displays the demand and supply for the selected part number.
7. Review the demand data.

Create a Job Record

1. In the **Demand** section, highlight the line for the duplicate sales order **5121** you previously created.
2. Click the **Create Job** button.
3. In the **New Job Number** window, click **Next Job**.
4. Record the job number _____.
5. Click **OK**.

Add a Demand Requirement to the Job

1. In the **Supply** section, select the job you created.
To sort job numbers in descending order, click the Job header. The new job should then display at the top of the grid.
2. In the **Demand** section, select the requirement for the duplicate sales order **5047** for customer **Barriston**.
You may need to navigate to the right to see the **Order** and **Customer** columns.
3. In the **Demand** section, click the **Link** button.

Get Details for the New Job

1. In the **Supply** pane, highlight the job you created.
2. Click the **Get Details** button.

The **Get Details** window displays.

3. In the **Revisions** grid, select **Rev A**.

4. Click **OK**.

This pulls in details from the default method for the part. The Epicor application also allows you to select a method from another job or quote.

Engineer, Release, and Schedule the Job

1. In the **Supply** section, verify the job you created is selected and click the **Job Entry** button.

Job Entry displays.

2. Select the **Engineered** check box.

3. From the **Actions** menu, select **Schedule > Job Scheduling**.

The **Schedule Job** window displays.

4. Accept the default of **Backward** scheduling.

5. Click **OK**.

6. Select the **Released** check box.

7. Click **Save** and exit the programs.

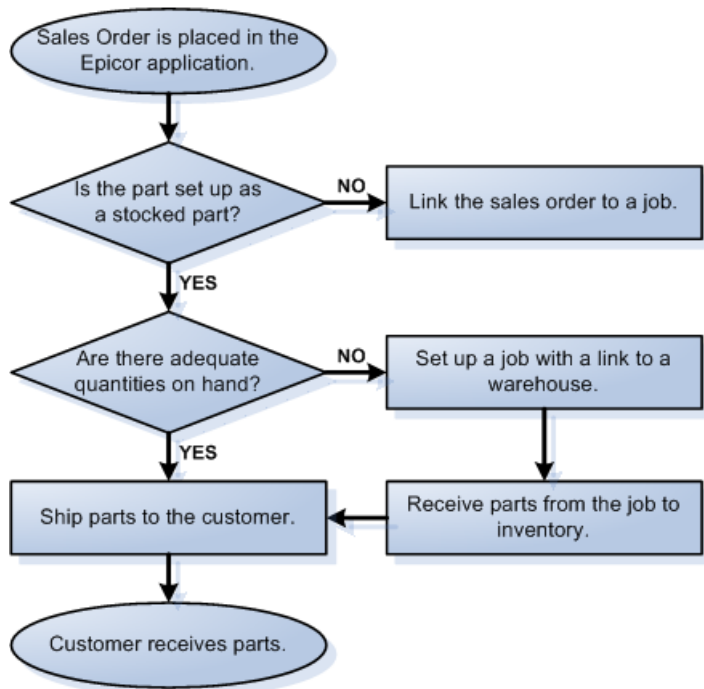
Job Planning Process - Make To Stock

The job planning process for a manufactured part with a Non-Stock Item check box cleared is considered a Make To Stock (MTS) environment. An MTS environment satisfies demand directly from inventory which is monitored by the Time Phased Material process and the optional Material Requirements Planning (MRP) module.

Make To Stock Process

If the Non-Stock Item check box on the part record is clear, the Epicor application expects to satisfy demand through the inventory/stock processes. Stocked materials and subassemblies are expected to be received into and issued from inventory as required. Tools such as MRP or Time Phased Material Requirements help Production Control manage supply.

Following is the production flow for a Make To Stock strategy.



Time Phased Material Requirements Report

Use the **Time Phased Material Requirements Report** to link data in the Purchase Management, Job Management, Order Management, and Inventory Management modules. This report analyzes planned receipts and requirements for each part to project future inventory balances.

Jobs for stocked items are not shown in the Planning Workbench. If the Material Requirement Planning (MRP) module is not licensed, use the Time Phased Material Requirements Report to track supply and demand. It can display both manufactured and purchased parts, as well as stocked or non-stocked parts. The Time Phased Material Requirements Report can be further refined to show only the instances where supply and demand are not in sync with a specific cutoff date in the future.

The Time Phased Material Requirements Report looks at the inventory requirements to evaluate supply and demand, such as minimum and maximum on hand quantities defined at the part level. Once executed, the report displays demand by job, sales order, or both. Use the exception parameters in the Time Phased Material Requirement Report to further refine the demand.

Use the **Selection** sheet to select the report parameters. Use the **Filter** sheet(s) to select the specific records to include on the report. For more information, refer to the Filters Overview topic in the Application Help.



Important For more information on how to review the status of reports you print, preview, or generate, refer to the System Monitor topic in the Application Help.



Note If demand is generated through Epicor FSA by requesting additional items, the Time Phased Material Requirements Report displays the Epicor FSA service order and service order resource numbers that relate to this demand.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Inventory Management > Reports > Time Phased Mtl. Requirements
- Production Management > Material Requirements Planning > Reports > Time Phased Mtl. Requirements

Workshop - Use the Time Phased Material Requirements Report

Later, you need to check the quantities for part **SN1020** in inventory to make sure you have enough on hand to meet future demand. You can execute the Time Phased Material Requirements Report to check inventory levels. Use the information obtained from this report to generate a stock job in the next workshop.

Navigate to the **Time Phased Material Requirements Report**.

Menu Path: Material Management > Inventory Management > Reports > Time Phased Mtl. Requirements

1. In the **Part Types** section, select **Manufactured**.
2. In the **Stock Types** section, verify the **Stocked** option is selected.
3. Select the **Exceptions Only** check box.
If you select this option, it indicates the report should only include parts with projected on-hand quantities below or above certain quantities. If this check box is not selected, the report includes requirements for the parts, even if an adequate quantity of those parts is on-hand.
4. Click **Print Preview** to preview the report.
5. In the report, scroll down to display part **SN1020**.
Note that there are pending requirements for part number SN1020. The report cannot produce a job; therefore, the planner reads the report and uses Quick Job Entry to create a job to replenish inventory.
6. Record details for part SN1020.
Minimum _____
Pending Requirements _____
Safety _____
7. Note the quantity to produce for part SN1020.
The part quantity to produce is determined as:
$$\text{Qty to Produce} = \text{Pending Requirements} + \text{Minimum} + \text{Safety} = \underline{\hspace{2cm}}$$
8. Close the print preview report and exit the Time Phased Material Requirements Report.

Workshop - Quick Job Entry

You use Quick Job Entry to generate a job to replenish inventory of part **SN1020**. You can only use Quick Job Entry if the part exists in Part Maintenance and has a method of manufacture defined in the Epicor application. Quick Job Entry automatically assigns the next job number and allows you to get details, engineer, schedule, and release a job.

Navigate to **Quick Job Entry**.

Menu Path: Production Management > Job Management > General Operations > Quick Job Entry

1. Click the **Next Job** button.
2. Record the job number _____.
3. In the **Part** field, enter **SN1020** and press **Tab**.

4. In the **Quantity** field, enter the quantity to produce from the previous workshop.
5. Select the **Engineered** check box.
6. Select the **Scheduled** check box.
7. Select the **Released** check box.
8. Click **Save**.
9. To the **Job created** message, click **OK**.
10. Exit Quick Job Entry.

Workshop - Create a Make To Stock Job

You also need to replenish a quantity of 100 brackets (**ML-1698-A36**) to inventory. To do so, you will create a Make to Stock job. Use Job Entry to create a job directly and link it to a demand type. Job heading, material, operations, and assembly information is linked to each job through Job Entry. After details are pulled in or created directly in the job, the job is scheduled and released so it is placed on the manufacturing queue at once.

A demand link is added to the job much like a line item is added to a sales order. The demand link you select guides the Epicor application processes for the order.

Create a Job

Navigate to **Job Entry**.

Menu Path: Production Management > Job Management > General Operations > Job Entry

1. From the **New** menu, select **New Job**.
2. In the **New Job Number** window, click the **Next Job** button to assign a job number.
3. Record the job number_____.
This job is used in the transaction sections later in this course.
4. Click **OK**.

Enter Job Details

1. In the **Part** field, enter **ML-1698-A36** and press **Tab**.
2. In the **Req By** field, enter the date two weeks from today.
3. From the **New** menu, select **New Demand Link > Make To Stock**.
4. At the bottom of the **Job** sheet, on the **Make To Stock > Detail** sheet, in the **Quantity** field, enter **100**.
5. From the **Actions** menu, select **Job > Get Details**.
The **Get Details** window displays.
6. In the **Revision** grid, select **Rev D** and click **OK**.

7. Navigate to the **Job** sheet and select the **Engineered** check box.
8. Click **Save**.

Schedule and Release the Job

1. From the **Actions** menu, select **Schedule > Job Scheduling**.
2. Accept the default of **Backward** scheduling and click **OK**.
If a message displays informing you that the job will not meet its required date, click **OK**.
3. Select the **Released** check box.
4. Click **Save** and minimize Job Entry.

Material Requirements Planning

Use the **Material Requirements Planning** (MRP) tools to estimate potential demand and propose the supply that fulfills this demand.

The Material Requirements Planning (MRP) module addresses the following business needs:

- The ability to forecast and plan for demand.
- A fast approach to enter and change jobs.

For an MRP system to be successful, it is necessary to have accurate methods of manufacturing (methods), Engineering Change Order (ECO) control, accurate inventory, accurate lead-time for purchased parts, timely production reporting, and proven capacity estimates for resources and resource groups.

MRP is designed to create jobs and purchasing suggestions based on both independent demand and dependent demand. Independent demand includes sales orders for end items, while dependent demand is for subcomponents and material required for end items. MRP provides the ability to forecast independent demand, visibility for lower level requirements, and the ability to increase or decrease productivity by automatically creating or deleting jobs and purchase order suggestions. MRP also assists in fulfilling Purchase Contract requirements.

The MRP module creates unfirm jobs and suggestions to satisfy:

- Sales order requirements
- Minimum stock levels, safety stock levels, or a combination of both (the Epicor application re-order point)
- Forecasted independent demand or master production schedule demand
- Dependent demand (subassemblies)
- Job material requirements
- Purchase Contract requirements

MRP considers a job firm unless the job is locked on the job Header sheet. Once firmed, it stays with the date and method it acquired when it was created, and changes have to be performed manually. If a job is unfirm and the revision level on the method changes, MRP brings in the new revision the next time it runs, providing that the **Use Current Rev** option is selected in Part Maintenance.

Adjust Operations and Materials

After you release jobs to the floor, it is often necessary to change a raw material requirement or operation. For example, the raw material supplier may be unable to supply the specific material but has an equally good alternative. You must adjust the job to reflect cost changes that may result.

Modify Job Requirements

Materials and operations can be changed to meet the requirements of a specific job.

Materials on the Bill of Materials (BOM) are based on default material requirements for the part; however, those materials can change to meet the requirements of the specific job.

At the time the Get Details process is done on the job, an engineer or planner may determine if material changes are required.

For example, stock availability may require a substitution part. When the part is changed on the job, the cost of the new part replaces the cost of the old part in the job.

Operations may also be changed to meet a job's schedule. For example, perhaps an inside operation needs to be sent to a subcontractor because the resource is overloaded. This change must be made to the job to reflect cost changes and to notify the Purchasing Department of the need for a subcontract purchase order.



Important Be cautious of cost issues. Review the planned costs in the Job Tracker before making changes to operations or material, and review again after they have been made to view the changes.

Workshop - Modify Job Operations and Materials

You need to fortify the bracket ML-1698-A36 using additional bolts. In this workshop, add part 516x100B to the Assembly operation.

Add Material Requirements

Maximize **Job Entry**.

Menu Path: Production Management > Job Management > General Operations > Job Entry

1. Clear the **Released** check box.
2. In the tree view, expand the **Operations** node.
3. Navigate to the **Engineering > Parts** sheet.
4. Click the **Part** button and search for and select part **516x100B**.
5. In the **Parts** grid, select part **516x100B** and drag and drop it in the tree view onto **XXXX > ASM:0 ML-1698-A36 > Operations > Opr: 10 OP: SHEAR** (where XXXX is the job number).
6. In the tree view, click **XXXX > ASM:0 ML-1698-A36 > Materials > Mtl: XX 516x100B** (where XX is the correct material sequence).
7. Navigate to the **Job Details > Materials > Detail** sheet.
8. In the **Qty/Parent** field, enter **3**.

9. Click **Save**.

Add a Subcontract Operation

A subcontract operation is an outside supplier process. This portion of the workshop demonstrates how to change an internal operation to a subcontract operation. You make a change because the Paint Line operation for the job is too busy, and therefore, the decision was made to turn it into an outside operation.

1. In the tree view, right-click **XXXX > ASM:0 ML-1698-A36 > Operations** (where XXXX is the job number) and select **Add Subcontract Operation**.

The next sequence number is assigned and can be changed if required.

The **Job Details > Operations > Subcontract** sheet displays.

2. In the **Opr** field, verify **70** displays.
3. In the **Operation** field, select **Outside Vendor Painting**.
4. In the **Supplier ID** field, search for or verify **Rainforest Painting Inc.** displays.
5. Click **Save**.
6. In the tree view, right-click **XXXX > ASM:0 ML-1698-A36 > Operations > Opr: 50 OP: PTP** (where XXXX is the job number) and select **Delete**.



Note Operation 50 is replaced with an outside subcontract operation which is now placed as Operation 70.

7. To the **Delete this record?** message, click **Yes**.
8. Click **Save**.

Schedule the Job

The subcontract operation may add additional time to the job schedule and requires you to reschedule the job again to reflect the change.

1. From the **Actions** menu, select **Schedule > Job Scheduling**.
2. Accept the default of **Backward** scheduling and click **OK**.



Note There may be numerous other details that need to be attended to at this point, depending on your company's procedures. For example, after the job is changed, the site scheduler may need to reschedule the job, the Purchasing Department may need to create a purchase order, and the job traveler may need to be reprinted and redistributed.

3. Navigate to the **Job** sheet.
4. Select the **Released** check box.
5. Click **Save** and exit Job Entry.

Work with a Subcontract Operation

You must enter the purchase order for a created subcontract operation to process it.

A subcontract operation is a job step completed outside your site by another supplier. A typical subcontract operation includes a period of time, referred to as Days Out, which is the time required by the supplier to perform the operation.

Subcontract Status Report

Use the **Subcontract Status Report** to produce a list of shipments to subcontractors that have outstanding quantities to receive or subcontract operations that need to be shipped out.

When a material is sent to a subcontractor, the transaction code **MFG-VEN** (Shipment of Mfg job to supplier) displays on reports and trackers. When the item is received back from the supplier, the transaction code **PUR-SUB** (Purchase receipt to Subcontract) displays.

Use the **Selection** sheet to select the report parameters. Use the **Filter** sheet(s) to select the specific records to include on the report. For more information, refer to the Filters Overview topic in the Application Help.



Important For more information on how to review the status of a report you print, preview, or generate, refer to the System Monitor Overview topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > Reports > Subcontract Status

Workshop - Work with a Subcontract Operation

A subcontract operation is an outside supplier operation and requires the parts to be shipped from the site to the supplier. This process is initiated by the job requirement and is arranged by the Purchasing Department. In this workshop, you generate the purchase order for a subcontract operation to the supplier, Rainforest Painting Inc. A later workshop completes the process.

Create a Subcontract Purchase Order

Navigate to **Purchase Order Entry**.

Menu Path: Material Management > Purchase Management > General Operations > Purchase Order Entry

1. From the **New** menu, select **New PO**.
2. Navigate to the **Header > Detail** sheet.
3. In the **Supplier** field, search for and select **Rainforest Painting Inc.**
4. In the **Ship Via** field, select **Local Truck**.
5. In the **FOB** field, select **Factory**.
6. In the **Buyer** field, select **House Account**.
7. Click **Save**.

Add PO Line Details

1. From the **New** menu, select **New Line**.
The **Lines > Detail** sheet displays.
2. In the **Buy For** section, select **Subcontract Operation**.
3. In the **Job** field, enter the job number for part **ML-1698-A36** and press **Tab**.
This job was created during the **Workshop - Create a Make To Stock Job**.
4. In the **Asm** field, verify **0** displays.
5. In the **Operation** field, select **70 OSVPA**.
6. In the **Unit Price** field, enter **1**.
7. Click **Save**.
8. Navigate to the **Summary** sheet.
9. Select the **Unapproved** check box.
The **Approved** status displays.
10. Record the purchase order number_____.
11. Click **Save** and exit Purchase Order Entry.

Job Transaction Processing

This section of the course introduces a variety of common job processing transactions and the tools available in the Epicor application to process a job. Each organization requires different processes for their unique business requirements.

Issue Material

Use **Issue Material** to issue material from inventory to a job. This program issues material to a job one part at a time. To issue the required parts to a job at once, use **Mass Issues to Manufacturing**.

When you issue material to a job, several events occur:

- The **IssuedQty** and **TotalCost** values on the job material or assembly record update with the quantity issued and the extended cost. **Extended Cost** is calculated as the issue quantity multiplied by the current inventory Average, Standard, or Last unit cost (depending on the inventory costing method).
- The **On Hand** quantity and the **Allocated** quantity for the part in the part master file are reduced by the quantity issued.
- A transaction history record is created for the part. The transaction type is **STK-MTL** (job material issue).



Important To use the Manufacturing Execution System (MES) to issue job material, the Advanced Material Management (AMM) license must be installed in the Epicor application. Once you install this license, you

can define shop employees as Material Handlers in Shop Employee Maintenance; these users can then issue or move material on the manufacturing center.

An AMM license must also be installed for proper access to the **To Warehouse** and **To Bin** fields in Issue Material. If it is not, warehouse and warehouse bin numbers display in each respective field, but the fields themselves are disabled and cannot be accessed. When this occurs, an Issue Material error displays when you attempt to save the transaction. To save the transaction and get rid of the error message, you can use the following workaround procedure:

1. Navigate to **Resource Group Maintenance** located in the **Production Management > Job Management > Setup** folder.

2. Search for and select a resource group.

3. Verify the **Detail** sheet is active.



Note The Detail sheet contains three warehouse fields, labeled **Input Warehouse**, **Output Warehouse** and **Backflush Warehouse**.

4. Click into each warehouse field once; even if the field is empty and displays as disabled.

5. Change another control or field in the group (for example, by populating a field or selecting a check box).

6. Click **Save**.

7. Navigate to the **Resources** sheet and repeat steps 2 - 5 for each resource that displays in the sheet. Remember to click **Save** after changing a resource, and moving on to the next one. Do this for each listed resource, and resource group.



Note If you complete this workaround properly, the error message should no longer display in Issue Material and the To Warehouse field still displays as disabled, but also as empty (no value).

8. Click **Save** to complete the transaction and Exit Resource Group Maintenance.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Inventory Management > General Operations > Issue Material
- Service Management > Maintenance Management > General Operations > Issue Material

Workshop - Issue Material to a Job

You can issue job material manually (one material at a time), or use the mass issue function to automatically issue the materials to a job. This workshop demonstrates how to issue the material requirement for the job generated for part number **DCD-100-SP** (Frame Rail).



Note You must have the **Advanced Material Management** module licensed to complete the following workshop.

Navigate to **Issue Material**.

Menu Path: Material Management > Inventory Management > General Operations > Issue Material

1. In the **Job** field, enter the job created for **DCD-100-SP** in the **Workshop - Create a New Job Using the Order Job Wizard**.
2. In the **Assembly** field, select **0**.
3. In the **Mtl** field, select **10**.
4. In the **Quantity** field, enter the value that displays in the **Required Quantity** field.
5. Click **OK**.
The Issue Material screen is now clear of the job details.
6. Exit Issue Material.

Pick List for Jobs

Use the **Pick List for Jobs** to list material requirements for the jobs selected. You can include both inventory and purchased materials. Inventory materials are listed in a format useful for entering issue quantities directly on the report.

If your company uses PCIDs, under each warehouse and part, the report displays a list of PCIDs that include the part.

The Pick List for Jobs is a shopping list of the materials that need to be issued to the job. The pick list assists warehouse personnel in locating and physically pulling the parts job assemblies require. The efficient use of pick lists can maximize the speed with which parts are selected to complete a job or job assembly.

Use the **Selection** sheet to select the report parameters. Use the **Filter** sheet(s) to select the specific records to include on the report. For more information, refer to the Filters Overview topic in the Application Help.



Important For more information on how to review the status of a report you print, preview, or generate, refer to the System Monitor Overview topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Inventory Management > Reports > Job Pick List
- Material Management > Shipping / Receiving > Reports > Job Pick List
- Production Management > Job Management > Reports > Job Pick List

Mass Issues to Manufacturing

Use **Mass Issues to Manufacturing** to quickly issue the planned materials to a job, rather than enter each transaction individually.

The main advantage of Mass Issue to Manufacturing is that it issues material to the subassemblies at the same time. Part transactions generated through this program reduce inventory quantities and post material costs to jobs. This program is useful if your material estimates are accurate.

After you select the parts listed in the **Pick List for Jobs** report, they can be issued from inventory to the job or assembly that requires the material. You can do this line by line or with the mass issue function.

When jobs have several raw material requirements, you can use the mass issue function to expedite the issuing process. The mass issue function works well with job materials not controlled by serial numbers. If the job calls

for lot-tracked or dimension-tracked material, select the appropriate lot number or dimension code when you process the mass issue. You will receive prompt messages when you save the transaction.



Important The system allows you to mass issue materials based on the **Negative Qty Action** setting located in Part Class Maintenance (None, Warn, Stop). If you:

- Select **None** then the system allows you to issue more material that you currently hold in stock (go negative).
- Select **Warn** then the system will warn you that you are overstepping the current on hand quantity. However, you can still mass issue and go negative.
- Select **Stop** then the system will prevent you from going negative.

You link a part class to a material in Part Maintenance.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Inventory Management > General Operations > Mass Issue to Mfg
- Service Management > Field Service > General Operations > Mass Issue to Mfg.

Workshop - Mass Issue Job Material

You would like to mass issue materials used to make bracket **ML-1698-A36** to the job at once. This workshop demonstrates how to use the mass issue function to issue material requirements to a job.



Note Jobs created up to this point have single assembly parts. Primarily, the Mass Issue functionality is used for multiple assembly parts. However, it also works with single assemblies as demonstrated in this workshop.

Navigate to **Mass Issue to Manufacturing**.

Menu Path: Material Management > Inventory Management > General Operations > Mass Issue to Mfg

1. In the **Job** field, enter the job number created for part **ML-1698-A36**.
2. Click the **Issue** button to display a list of job materials.
The **Issue > List** sheet displays.
3. In the **Qty Issued** column field, enter **1**.
4. Click the **Issue All** button.
Materials are issued from the primary bin and the primary warehouse.
5. Click **OK**.



Note Do not click **Save**.

In the tree view, expand the nodes and a clipboard icon with a check mark displays.

6. Exit Mass Issue to Manufacturing.

Time and Expense Entry

Use **Time and Expense Entry** to enter labor into the Epicor application from the Job Management module.

You can also enter labor directly from the site floor using the Data Collection module and the Manufacturing Execution System (MES).



Important Use Time and Expense Entry, to change labor entered through Office Data Collection and the MES. However, multiple breaks are deducted from pay time only if the time is entered through Office Data Collection.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Time and Expense Entry
- Service Management > Expense Management > General Operations > Time and Expense Entry
- Service Management > Field Service > General Operations > Time and Expense Entry
- Service Management > Field Service Integration > General Operations > Time and Expense Entry
- Service Management > Maintenance Management > General Operations > Time and Expense Entry
- Service Management > Project Management > General Operations > Time and Expense Entry
- Service Management > Time Management > General Operations > Time and Expense Entry
- Time and Expense > Expense Management > General Operations > Time and Expense Entry
- Time and Expense > Time Management > General Operations > Time and Expense Entry

Workshop - Record Labor

Your employee, James B Carville, is ready to report his labor activity for the first operation (SHEAR) of the job created earlier in the Workshop - Create a Make To Stock Job for part **ML-1698-A36**.

This workshop uses Time and Expense Entry to report labor. However, if you were a shop floor employee you would most likely use the Manufacturing Execution System (MES) interface for labor reporting. MES allows you to enter labor and inventory transactions while work is performed on the shop floor. Let's say you start working on a job using MES so you simply execute Start Production Activity. Your production time starts and when you are done with the job operation you just end activity. This provides management with a current view of what is occurring on the shop floor by employee and by job. Using MES you can also report **Downtime** against a job if necessary. You would use Downtime when the resource is in production and something interrupts that production and the resource is down requiring immediate attention. Or for example there is electricity outage or you are waiting for materials. This is different from indirect codes which are used to track non-production time for a variety of reasons. When you report Downtime you must select the Downtime code that outlines the nature of the issue. You set up these codes in Indirect Labor Code Maintenance and mark them as Downtime. Review the following example to see how the Downtime feature works.



Example You start production activity on job '1111' but the machine runs out of material and you are waiting for material to continue. Instead of clocking out of the job, you report downtime by selecting an appropriate indirect code. When you select the Downtime button is selected, it suspends time to any job(s) you are currently clocked into and starts accruing time to the selected downtime code. When whatever condition that caused the downtime is resolved, you end downtime, and time again starts to accrue to the job(s).



Note You can also report Downtime through Time and Expense Entry, but any job time adjustments for downtime must be done manually.



Note To see Downtime in action, review the MES course.



Important This workshop can only be performed by one person on a shared database. The MES application does not allow multiple users to enter labor using the same employee record simultaneously.

Navigate to **Time and Expense Entry**.

Menu Path: Production Management > Job Management > General Operations > Time and Expense Entry

1. In the **Employee ID** field, search for and select **James B Carville (100)**.
2. From the **New** menu, select **New Time Detail**.
The **Time > Daily Time > Detail > Detail** sheet displays.
3. In the **Labor Type** field, select **Setup**.
4. In the **Job** field, enter the job number created for the part **ML-1698-A36** and press **Tab**.
5. In the **Operation** field, select **10**.
6. In the **Setup % Complete** field, enter **100**.
7. In the **Clock In** field, accept the default time value of **6:00 AM**.
8. In the **Clock Out** field, enter **07:00 AM** and press **Tab**.
9. Click **Submit**.
10. From the **New** menu, select **New Time Detail**.
11. In the **Labor Type** field, verify **Production** defaults.
12. In the **Job** field, enter the job number created for the part **ML-1698-A36** and press **Tab**.
13. In the **Operation** field, select **10**.
14. In the **Labor Qty** field, enter **100**.
15. In the **Clock In** field, accept the default time value of **7:00 AM**.
16. In the **Clock Out** field, enter **09:00 AM** and press **Tab**.
17. Click **Submit**.
18. Repeat the steps **10-17** to record both setup and production for the other operations.

Operation	Setup Clock-In Time	Setup Clock-Out Time	Production Clock-In Time	Production Clock-Out Time	Quantity Produced
20	9:00 AM	10:00AM	10:00AM	11:00AM	100
30	11:00AM	12:00PM	12:00PM	01:00PM	100
40	01:00PM	02:00PM	02:00PM	03:00PM	100
60	03:00PM	04:00PM	04:00PM	05:00PM	100



Note Operation 70 is a subcontract operation and is handled later in the course.

19. Remain in Time and Expense Entry.

Workshop - Record Additional Labor

Meanwhile, another employee, Linda K. Carter reports her time against the job operations for part **ADD-200-S**.

Record Time for Setup

1. In Time and Expense Entry, navigate to the **Employee** sheet.
2. In the **Employee ID** field, search for and select **Linda K. Carter (106)**.
3. In the **Calendar** pane, select the date two days before today.
4. From the **New** menu, select **New Time Detail** to enter labor detail (setup) for operation 10 for the selected employee.
The **Time > Daily Time > Detail > Detail** sheet displays.
5. In the **Labor Type** field, select **Setup**.
6. In the **Job** field, enter the job number created in the **Workshop - Create a New Job Manually** for part **ADD-200-S**.
7. Enter the following information:

Field	Data
Operation	10 (MILL)
Setup % Complete	100
Clock In	08:00 AM
Clock Out	08:15 AM

When the clock out time is changed, labor hours and burden hours calculate the appropriate number of hours from the time clock. If employees report they spent 1.00 hour on setup, enter 1.00 hour in the Labor Hrs and Burden Hrs fields rather than using the Clock In and Clock Out time fields.

8. Click **Save**.
9. Click **Submit**.
Since Linda Carter is an employee with auto approve selected, her approval status changes to **Approved**.

Record Time and Quantity for Production

1. From the **New** menu, select **New Time Detail** to enter labor detail (production) for operation 10 for this employee.
2. In the **Labor Type** field, verify **Production** displays.

3. In the **Job** field, search for and select the job created in the **Workshop - Create a New Job Manually** for part **ADD-200-S**.
4. Enter the following information:

Field	Data
Operation	10 (MILL)
Labor Qty (pieces produced)	50
Clock In	08:16 AM
Clock Out	02:00 PM

5. Click **Save**.
6. Click **Submit**.

Record Time for Setup

1. From the **New** menu, select **New Time Detail** to enter labor detail (setup) for operation 20 for the selected employee.
2. In the **Labor Type** field, select **Setup**.
3. In the **Job** field, enter the job number created in the **Workshop - Create a New Job Manually** for part **ADD-200-S**.
4. Enter the following information:

Field	Data
Operation	20 (DRILL)
Setup % Complete	100
Clock In	02:01 PM
Clock Out	04:30 PM

5. Click **Save**.
6. Click **Submit**.

Record Time for Different Day

In this example, labor spans across two days and the job goes untouched for the night shift. Labor Entry is one day behind and therefore, needs to start over.

1. In the **Calendar** pane, select the day one day before today.
2. From the **New** menu, select **New Time Detail** to enter labor detail (production) for operation 20 for this employee.

- Repeat the steps listed in the previous tasks of this workshop to enter setup, production, and quantities against the job.

Enter the following information:

	Operation	Setup Clock-In Time	Setup Clock-Out Time	Production Clock-In Time	Production Clock-Out Time	Quantity Produced
20	DRILL	Done	Done	08:00 AM	12:00 PM	50
30	DEBUR	12:01 PM	12:50 PM	12:51 PM	03:00 PM	50
40	SHIP	None	None	03:01 PM	06:00 PM	50

- Make sure operation 40 is still selected and select the **Completed** checkbox.
- Click **Submit** and exit Time and Expense Entry.

Labor Edit Report

Use the **Labor Edit Report** to produce a list of the labor details reported through Time and Expense Entry in the Job Management module or through the Data Collection module.

The Labor Edit Report provides current data about employee labor that is in process or is completed and entered into the Epicor application.

The report details labor times and the production completed, as well as efficiency percentages and warnings regarding the efficiency of the labor compared to the related operation. You can always generate this report during the production process and provides a helpful snapshot of the labor activity within a given date range by specific employees.

Use the **Selection** sheet to select the report parameters. Use the **Filter** sheet(s) to select the specific records to include on the report. For more information, refer to the Filters Overview topic in the Application Help.

For technical information related to this report, review the Technical Notes section in the Application Help.



Important For more information on how to review the status of a report you print, preview, or generate, refer to the System Monitor Overview topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > Reports > Labor Edit

Workshop - Review the Labor Edit Report

Use the Labor Edit Report to review time entered through Time and Expense Entry or the Data Collection modules. It displays labor entries by employee.

Navigate to the **Labor Edit Report**.

Menu Path: Production Management > Job Management > Reports > Labor Edit

- Navigate to the **Filter > Employee** sheet.
- Click the **Employee** button, search for and select **Linda K. Carter** and **James Carville**.

Use the **Ctrl** key to select both employees.

3. Navigate to the **Selection** sheet.
4. In the **Begin Date** field, enter the date two days before today.
5. In the **End Date** field, enter today's date.
6. Click **Print Preview** to review the report.

The report is sorted by employee ID. The date displays under the employee, indicating the clock in and clock out times. The job information, including the specific operation IDs, displays along with the labor and burden rates. Additionally, the report displays whether the reported labor was for setup or production (S/P), whether the operation was completed (Cmp), and quantities reported. Finally, pertinent warning messages regarding the labor efficiency display directly beneath each labor entry.

7. Close the report and exit the Labor Edit Report.

Complete the Subcontract Operation

Once the Purchasing Department generates the purchase order, the part or assembly must be shipped to the supplier for the work to be done. After the subcontractor parts are made, they must be received back.

Use the **Subcontract Status Report** to view the parts or assemblies awaiting shipment to a supplier. Use **Subcontractor Shipment Entry** to ship the product.

Subcontractor Shipment Entry

Use **Subcontractor Shipment Entry** to enter shipments to subcontractor suppliers for Work in Process (WIP) parts that require outside processing. By entering the shipment, you can process the part movement when they are outside your site and track the material shipped to subcontractors.

You can use the **Attachments** selection, located on the **Actions** menu, to associate documents (and files created by other applications) to specific shipment transactions.



Example You can attach a picture graphic file (.jpg, .bmp) of the actual load shipment as a proof of shipment. This could function as a legal document, which affects payment of supplier invoices, billing for customer invoices, liability of product and transfer of title.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Shipping / Receiving > General Operations > Subcontractor Shipment Entry

Workshop - Complete the Subcontract Operation

You are ready to ship the bracket (**ML-1698-A36**) to the subcontractor, Rainforest Paints, for painting. This workshop demonstrates how to ship a part or assembly to a supplier for the work to be done.

Generate a Subcontract Status Report

Navigate to the **Subcontract Status Report**.

Menu Path: Production Management > Job Management > Reports > Subcontract Status

1. In the **Due on or Before** field, enter the date one month from today.
2. Verify the **Planned Shipments** option is selected.
3. Select the **Print Transaction Details** and **Print Related Purchase Orders** check boxes.
4. Click **Print Preview** to review the report.
5. Close the report and minimize the Subcontract Status Report.

Enter the Subcontractor Shipment

Navigate to **Subcontractor Shipment Entry**.

Menu Path: Material Management > Shipping / Receiving > General Operations > Subcontractor Shipment Entry

1. From the **New** menu, select **New Pack**.
2. In the **Supplier ID** field, search for and select **Rainforest Painting Inc.**
3. In the **Ship Via** field, select **Company Truck**.
4. From the **New** menu, select **New Line**.
5. Navigate to the **Lines > Detail** sheet.
6. In the **Job** field, enter the job number for part **ML-1698-A36**.
7. In the **Asm/Opr** field, enter **0** and **70**.
8. In the **PO/Line/Rel** field, verify the purchase order created earlier displays.
9. Click **Save** and exit Subcontractor Shipment Entry.

View the Subcontract Status Report

Maximize the **Subcontract Status Report**.

Menu Path: Production Management > Job Management > Reports > Subcontract Status

1. In the **Due on or Before** field, enter the date one month from today.
2. Select the **Planned Receipts** option.
3. Select the **Print Transaction Details** and **Print Related Purchase Orders** check boxes.
4. Click **Print Preview** to review the report.

Note the transaction code MFG-VEN (shipment of manufacturing job to supplier) which indicates the part was sent to the supplier. Once you enter the receipt, the transaction code PUR-SUB (purchase receipt to subcontract) displays with the return date.

5. Close the preview window and exit the Subcontract Status Report.

Receipt Entry

Use **Receipt Entry** to record the physical receipt of purchased materials to stock inventory, directly to a job, to a job subcontract operation, or to manually enter the receipt of non-inventory parts such as office supplies.

Receipt line items are either **Purchase Order** receipts (material received that are recorded against a purchase order), or **Miscellaneous** receipts (material received that is not associated with a purchase order). Receipt information updates the purchase order and creates transactions to update inventory or job quantities and costs. If you have the Document Management module installed, you can add Certificate of Compliance documents to the receipt line.

Receipt entries can be saved to generate accounts payable invoice entries. Use the **Modules > Finance > Accounts Payable** sheet within **Company Configuration** to indicate whether you want to save receipt entries for accounts payable. If the Quality Assurance module is enabled in your environment, you can also receive parts to inspection using Receipt Entry. To complete this process, use **Inspection Processing** in the Quality Assurance module after inspecting the parts you received.



Note You cannot use Receipt Entry to receive purchased items tied to a sales order release and designated for drop shipment to the customer. An error message displays if you attempt to receive a drop ship release in the Stock Detail sheet. You must use **Drop Shipment Entry** to mark a drop shipped release as "received". This marks the sales order release as shipped and also marks the PO release as received.



Important Use **RMA Processing** to receive parts returned by the customer.

Summary

Use the **Summary** sheet to enter the receipt header information, including the purchase order number, packing slip number, arrival date and (optionally) transaction document type and import number/country. Once you enter receipt summary information, enter the accompanying receipt line detail into the **Lines > Detail** sheet.

Job Subcontract

Use the **Job Subcontract** sheets to enter the receipt of a subcontract operation to a job.

Use the **Detail** sheet to enter purchase order line receipts or miscellaneous receipts that are not associated with a purchase order.

Use the **Import** sheet to enter the import details for the parts receipt.

Workshop - Receive Subcontracted Parts

The subcontractor, Rainforest Paints, has completed their work on the bracket (**ML-1698-A36**). This workshop demonstrates how to receive subcontract parts back to inventory.

Navigate to **Receipt Entry**.

Menu Path: Material Management > Shipping / Receiving > General Operations > Receipt Entry

1. From the **New** menu, select **New Receipt**.
2. In the **PO** field, search for and select the purchase order (PO) number for the subcontract operation.
3. In the **Packing Slip** field, enter the PO number.
4. From the **New** menu, select **New Receipt Line**.

5. In the **Line** field, enter **1** and press **Tab**.
6. In the **Transaction Type** field, verify **Job Subcontract** type displays.
7. Select the **Received** check box.
8. Click **Save** and exit Receipt Entry.

Backflush Materials

Backflushing materials refers to the automatic issue of materials.

The backflushing materials can occur at two different points:

- When a quantity is reported against an operation and the prerequisites are met.
- At job completion, when unissued material needs to be backflushed.

Backflushing at Quantity Reporting

Backflushing is a process where the Epicor application actually issues materials on your behalf. Backflushing is dependent on labor reporting. When a labor quantity is reported against a related operation, material is issued to the job at that quantity, to the parent operation.

Prerequisites

- The part must be coded as backflush.
- The part must have a primary warehouse and primary bin.
- The material requirement must be attached to a job operation or have a related operation.
- The operation must have a labor quantity reported against it.
- Labor entry must be accurate and timely.
- Serial number controlled, lot controlled, or dimensionally controlled inventory cannot be backflushed.

Advantages

- Backflushing eliminates the need to manually issue material to each job operation where the material is needed.
- Backflushing takes the scrap factor into account when calculating the quantity used. The quantity required, plus the scrap factor is backflushed, eliminating manual efforts to calculate scrap.

Common Mistakes

Situation	Result
The Backflush flag changes on a material while transactions are in process.	This causes errors when you remove material from inventory.
Material is issued and the Backflush flag is enabled on a part.	This causes material to be issued twice.
The Backflush flag is changed on a part without running a Where Used Report to determine the impact on other assemblies.	This causes a lot of manual effort when you issue these parts to jobs.
Substitute materials are used without informing the Epicor application about the substitution.	This causes the material called for on the job to decrease while the substitute part does not decrease. Inventory is incorrect for both parts.

Situation	Result
Rework is not reported as rework.	This causes inventory to be reduced by the amount of pieces reported even though no parts were consumed.
Labor reporting is not timely.	This causes parts to display in inventory even though they have been consumed.

Backflushing at Job Completion or Job Closing

Backflushing at job completion or job closing is an unconditional backflush. Material does not need to be attached to an operation and does not need to have the **Backflush** check box selected on the **Part > Site > Detail** sheet in Part Maintenance for these parts to backflush.

Job completion is a task performed when the parts on a job are produced and the operations are completed. Job completion should not be confused with job closing. Job completion removes a job from manufacturing and places it in a queue for the Accounting Department as a candidate for closing. The Accounting Department closes a job once costs are received and recorded.

Job completion performs two important tasks:

- Remaining load capacity on the job is removed. The job clears from the job scheduling board.
- Unused material is removed. Inventory or purchasing requirements clear.



Note When using this procedure, consider the following questions:

- Were these parts actually used on this job? Perhaps they were not needed.
- Has a cycle count been performed and the inventory corrected since they were pulled from stock?

Assumptions

There is an unstated assumption regarding backflushing that the amount of material used equals the standard quantity called for on the job. This assumption is a result of the process the backflush follows. The Epicor application relieves inventory for the “quantity per” called for on the material line.

Warning messages display before the backflush process begins. The Epicor application asks if you want to run the backflush process. It also warns you if the complete quantity value is less than the planned production quantity. Material issue quantity calculations are based on the complete quantity if the backflush process continues. Once backflushing occurs, material records are considered issued complete. You cannot reverse the process, so verify you are ready to run this process on the current job.



Note If you run a backflush error, use Quantity Adjustment to adjust inventory, job quantities, and costs.

Workshop - Verify Backflushing Activity

Backflush materials were added to the job created for part number **ML-1698-A36**. Labor was recorded against the linked operation which triggers the Epicor application to backflush the parts. This activity is verified using the Production Detail Report.

Navigate to the **Production Detail Report**.

Menu Path: Production Management > Job Management > Reports > Production Detail



Tip The Production Detail report is also available from the **Actions** menu of **Job Entry**. It is also one of the final reports that should be run at Job Completion.

1. In the **Selection** sheet, select the following check boxes:

- Print Material Transactions

- Print Material Cost Breakdown
- Print Operation Transactions
- Print Profitability Information
- Consolidated Totals
- Subtotal by Product Group

The Production Detail Report displays data based on the combination of print parameters and the filter selected using the print screen.

2. Navigate to the **Filter > Jobs** sheet.
3. Click the **Job** button, search for and select the job created for part **ML-1698-A36**.
This job was created earlier in the **Workshop - Create a Make To Stock Job**.
4. Click **Print Preview** to review the report.
5. Close the preview window and exit the Production Detail Report.

Receiving Job to Inventory

Before completing the job you need to receive it to inventory.

Menu Path: Material Management > Inventory Management > General Operations > Job Receipt to Inventory

Receive the Job to Inventory

Navigate to **Job Receipt to Inventory**.

Menu Path: Material Management > Inventory Management > General Operations > Job Receipt to Inventory

1. In the **From Job** field, enter the job number for the job created in **Workshop - Create a Make To Stock Job** for part **ML-1698-A36** and press **Tab**.

The default inventory details populate based on the part number on the job.

2. In the **Quantity** field, enter **100**.
3. Click **OK**.
4. Exit Job Receipt to Inventory.

Backflush Labor

The backflush labor feature addresses the needs of manufacturing where labor reporting is difficult to capture or does not add value to the manufacturing process. This feature backflushes a predetermined amount of time and quantity and the related costs, based on a quantity reported elsewhere.

A resource group has a designated Backflush Default Employee used in the labor detail. If this field is blank, the employee that entered the manually entered transaction is included in the labor detail. In Data Collection, the process is triggered at the end of the job activity. In the Advanced Material Management module, it is triggered during the Report Quantity function.

Case Studies

Dalton has three jobs (Cases 1, 2, and 3 below), each with a different sequence of operations with different labor types. The labor type setup determines what information you can manually enter.



Note Backflush operations need to be triggered by operations where at least quantity is manually entered. For that reason, a backflush operation cannot be the last operation on a job, nor can it be the last operation before a subcontract job. Unless a subsequent job operation has time or quantity manually entered, previous backflush entries do not have time or quantity information.

Case 1

The operations are marked for backflush, except the last one. This is a cell, or production line, environment where the team lead reports the quantity based on the final entry, and you determine the other entries from it.

The team member may, or may not, be clocked into the job.

Operation Sequence	Labor Entry	Manually Entered	System Determined
10	Backflush	No	Time and Qty, upon entry of Op 40
20	Backflush	No	Time and Qty, upon entry of Op 40
30	Backflush	No	Time and Qty, upon entry of Op 40
40	Qty Only	Quantity	Time, based on estimates

Case 2

Quantity is entered at each operation and time is accrued based on the estimate from the Job Operation record. This is not a cell environment because material is moved between resource groups and a quantity is entered at each step.

Operation Sequence	Labor Entry	Manually Entered	System Determined
10	Qty Only	Quantity	Time, based on estimates
20	Qty Only	Quantity	Time, based on estimates
30	Qty Only	Quantity	Time, based on estimates
40	Qty Only	Quantity	Time, based on estimates

Case 3

Combination of the three labor types:

Operation sequence 10 is a prerequisite for 20. Preparation, movement, or cutting sequence 20 is targeted as an operation where actual time reporting is important.

Operation sequence 30 is a prerequisite for 40, such as cleaning or painting. Operation sequence 40 is done by indirect labor, so only a quantity is required.

Operation Sequence	Labor Entry	Manually Entered	System Determined
10 (ex. Mtl movement)	Backflush	No	Time and Quantity, upon entry of Op 20
20 (milestone opr; previous step must be completed)	Time and Qty	Time and Quantity	Accepts manual entry
30 (other non-milestone operation)	Backflush	No	Time and Quantity, upon entry of Op 40

Operation Sequence	Labor Entry	Manually Entered	System Determined
40 (Assembly)	Qty Only	Quantity	Time, based on standard

Note that labor detail records cannot be modified if the operation is a backflush. The backflush operations above are blocked from Data Collection.

Limitations

An operation cannot be backflushed if it is the last operation in an assembly or if it is followed by a subcontract operation. Under either condition, no subsequent operation can trigger the quantities needed.

- Neither indirect labor nor subcontract labor can be backflushed.
- No machine data is recorded on backflush transactions.
- Backflushing does not flow in parent-child relationships to subassemblies. To obtain this functionality, use the phantom bill to design the bill of material (BOM).
- Rework does not trigger backflush.
- Material not marked as backflush is not backflushed, regardless of a link to an operation marked for backflush. As a result, you can issue actual materials to a job.
- Auto-receive is available for the **Qty Only** and **Time and Quantity** operations.

Efficiencies in Backflushing

Backflush and Quantity Only operations always have efficiencies of 100%.

Traditional shop efficiency is determined by estimated hours, divided by actual hours, based on the production quantity. If a job operation is Quantity Only or Backflush, traditional shop efficiency does not apply.

To determine the efficiency of such operations, compare the actual hours spent in the resource group or department to the number of hours backflushed. You need to create a report to perform this comparison. This comparison yields a reliable efficiency if the operations for the job are of this labor type and if the entire job was processed in the resource group or department.

Workshop - Backflush Labor

In this workshop, backflush labor against an existing employee record.

Create a Job

Navigate to **Job Entry**.

Menu Path: Production Management > Job Management > General Operations > Job Entry

1. From the **New** menu, select **New Job**.
The **New Job Number** window displays.
2. Click **Next Job** to assign a job number.
3. Record the job number _____.
4. Click **OK**.
5. In the **Part** field, enter **DSS-1000** and press **Tab**.

6. In the **Req By** field, enter the date two weeks from today.
7. From the **New** menu, select **New Demand Link > Make To Stock**.
The **Job > Make to Stock > Detail** sheet displays.
8. In the **Quantity** field, enter **10**.
9. Click **Save**.
10. From the **Actions** menu, select **Job > Get Details**.
The **Get Details** window displays.
11. In the **Revisions** grid, select **Rev A** and click **OK**.

Define the Backflush Operation

1. From the tree view, expand the **Operations** node.
2. From the tree view, select **Opr 10** (Assemble per print).
The **Job Details > Operations > Detail** sheet displays.
3. In the **Labor Entry** field, select **Backflush**.
4. Click **Save**.

Schedule and Release the Job

1. Navigate to the **Job** sheet.
2. Select the **Engineered** check box.
3. From the **Actions** menu, select **Schedule > Job Scheduling**.
4. Accept the default of **Backward** scheduling and click **OK**.
5. Select the **Released** check box.
6. Click **Save**.
7. Record the job number_____.
8. Exit Job Entry.

Report Labor

Navigate to **Time and Expense Entry**.

Menu Path: Production Management > Job Management > General Operations > Time and Expense Entry

1. In the **Employee ID** field, verify **Charles L. Johnson (105)** displays.

2. From the **New** menu, select **New Time Detail**.

The **Time > Daily Time > Detail > Detail** sheet displays.

3. In the **Job** field, enter the job number recorded in the **Schedule and Release the Job** task and press **Tab**.
4. Enter the following information:

Field	Data
Operation	20
Labor Qty	10
Clock In	06:00 AM
Clock Out	09:00 AM

5. Click **Save**.
6. Click **Submit**.
The status changes to **Approved**.
7. Exit Time and Expense Entry.

Run Backflush Labor Server Process

In this task, execute the Run Backflush Labor Server Process.



Important It is recommended that this workshop is performed by one person on a shared database.

Navigate to the **Backflush Labor Server Process**.

Menu Path: Production Management > Job Management > General Operations > Backflush Labor Server Process

1. Clear the **Continuous Processing** check box.
2. In the **Schedule** field, verify **Now** displays.
3. On the **Standard** toolbar, click **Submit** .
The process may take up to one minute to complete.
4. Exit the Backflush Labor Server Process.

Review and Print Labor Transactions

Navigate to the **Job Tracker**.

Menu Path: Production Management > Job Management > General Operations > Job Tracker

1. In the **Job** field, enter the job number you just created and press **Tab**.
2. In the tree view, expand the **Operations** node and select operation **10**.

3. Navigate to the **Job Details > Operations > Labor Transactions** sheet.
4. Click the **Retrieve** button and review the information that displays.
5. Repeat step 2 for the next operation.
6. From the **Actions** menu, select **Print > Production Detail**.
The **Production Detail Report** window displays.
7. Select the following check boxes:
 - Print Material Transactions
 - Print Material Cost Breakdown
 - Print Operation Transactions
8. Click **Print Preview** and review the costs for each operation.
9. Close the windows and exit the Job Tracker.

Mass Return from Manufacturing

Use **Mass Return from Manufacturing** to return the already issued job material from the job (Production Floor) back to stock.

When jobs have several raw materials requirements, you can use the Mass Return functionality to expedite the return process. The mass return function works well with job materials not controlled by serial numbers. If the job calls for lot-tracked material, select the appropriate lot number when you process the mass return.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Inventory Management > General Operations > Mass Return from Mfg

Complete and Close a Job

After the parts are produced on a job, the task of the Manufacturing Department is to complete the jobs and, typically, the task of the Finance Department is to close the jobs. This is done with **Job Completion/Closing Maintenance**. Once you close a job in this program, it is ready to be closed through the financial modules.

Job Completion

Manufacturing prints the Production Detail report to evaluate and make corrections necessary to labor or material issues. The job is evaluated to determine if it was a winner or a loser and then, it can be completed. Forward permanently changed process steps or material requirements to the Engineering Department so the method can be updated. The Production Detail report is forwarded to the Finance Department with notation on issues discovered.

Jobs available for completion display as **Candidates** in the Job Search/Job Filter when:

- The last operation is complete.
- A packer is created (non-stock part).

- The top level part is moved to inventory.

The Epicor Application Response to Job Completion

When a job is marked as **Complete**, the following occurs:

- Load is removed (scheduling).
- Material requirements are removed (Material Requirements Planning and purchasing suggestions).
- The cost is calculated based on the pieces completed.
- The option to backflush unissued materials becomes available.

Job Closing

You can close a job in Job Completion/Closing Maintenance, but it is recommended that you complete and close a job using separate processes. In general, Production personnel should complete jobs, and Accounting personnel should close jobs. Estimates to actual are reviewed again, and required adjustments are made by Accounting or Production Control.

Jobs should be closed only at month-end prior to executing the Capture COS/WIP Activity and only after:

- Discrepancies are resolved.
- Directly purchased materials have been invoiced. The following can be used to ensure this:
 - Received but not Invoiced Report
 - Work In Process Report
 - Part Tracker

Job Completion/Closing Maintenance

Use **Job Completion/Closing Maintenance** to both complete and close jobs. Once you close a job through this program, it is then ready to be closed through the financial modules.

- A **complete** job is one that has finished production but is still waiting for approval or additional costs. It can still receive labor, material, shipping, invoices, and other transactions. If you complete a job, it removes outstanding load for operations that are not complete and material allocations for materials that are not issued complete. You can also make adjustments to the labor and material quantity and costs for the job. To backflush the materials for the job, select the **Backflush** check box.
- A **closed** job is completely finished and costed. You cannot post costs against it, but you can keep the job record as long as you need to review it. Typically, the Accounting Department closes a job after its financial transactions are audited. Closed jobs no longer display on various sheets and reports. They cannot be used in transactions or adjustments either.
- You can close jobs that contain materials with a zero quantity per parent, whether the materials were issued or not.



Example A job requires 15 steps. The 15th step was just completed, so the job is updated as completed. However, an approval and testing process still must take place. This job is marked as complete but not closed. The job is not closed until you select this status.

Another job requires no further action after assembly. Its last step is complete, so you update the job as closed. It is automatically considered finished.

If for some reason the job is no longer considered complete or closed, you can clear the **Complete** and **Closed** check boxes in this program to remove either status.

You can review, add, edit, or delete memos for the current job. To do this, select **Memo** from the **Actions** menu, or click the **Memo** button on the **Standard** toolbar.



Important If a miscellaneous shipment Pack ID has been changed to a status different than Open (Closed, Freight, Staged, Shipped) you cannot reopen a closed job. If you reopen the closed job that carries the Open status, the linked miscellaneous shipment Pack ID is automatically deleted. If the part carries serial numbers, the serial numbers acquire the original status.

The job closing logic only applies if a miscellaneous shipment Pack ID is automatically created as a result of selecting the Job or Return Shipment options in the RMA Dispositions > Disposition > Detail > Dispose To field or via DMR Processing using the Return To Customer functionality, given that you select the Misc Shipment from WIP check box located on the Job Entry > Job > Make To Stock > Detail sheet.

For more information about the Misc Shipment from WIP check box logic, refer to the Job Management > Operation Programs > Job Entry > Job > Make To Stock > Detail > Fields topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Job Closing

Workshop - Complete a Job

You are ready to complete the job for part **ML-1698-A36**.

Navigate to **Job Completion/Closing Maintenance**.

Menu Path: Production Management > Job Management > General Operations > Job Closing

1. Click the **Job** button to initiate a search for jobs.
2. In the **Job Search** window, in the **Job Filter** field, select **Candidate** and click **Search**.
3. Select the job for part **ML-1698-A36** and click **OK**.
This job was created earlier in the Workshop - Create a Make-to-Stock Job.
4. Select the **Complete** check box.
To generate a final Production Detail report at the same time, select the **Print Production Detail** check box.
5. Click **Save**.
The **Production Detail Report** window displays.
6. Click **Print Preview** to preview the report.
7. Close the preview window and close the Production Detail Report window.
8. Exit Job Completion/Closing Maintenance.

Auto Job Completion

The Epicor application allows you to automatically complete and close jobs based on specific parameters you configure. You then set up both the Auto Job Completion Process and the Auto Job Closing Process to run regularly on a schedule you select. Jobs that match the threshold criteria defined on the code are automatically completed or closed through these processes. Jobs that are not complete or closed display in a log file located

on the server. The Job Completion Exception Tracker and the Job Closing Exception Tracker provide you with a dashboard to identify and manage the exceptions.

Job Complete/Close Code Parameters Maintenance

Use **Job Complete/Close Code Parameters Maintenance** to create closing and completion codes for jobs.

These codes direct the Epicor application to automatically complete or close several jobs at once without further review. This allows you to complete or close jobs by exception, as only jobs that do not fall within the threshold of a specific code need to be reviewed.

Each threshold of a specific code is defined by **material**, **operation**, and **subcontract** criteria. You further define these criteria through **quantity** and **cost** variance percentages.

Alternately, the code threshold can be set using a monetary threshold by entering a variance amount in the Job Cost Under or Over field(s). Once closing codes are established, they can optionally be assigned to specific product group(s). A code can also be set as the default, regardless of the product group.

Implement Your Codes

When you create closing codes, you must select them on product groups. These product groups are assigned to specific part records. Jobs that manufacture these parts can then be automatically completed or closed.

To do this, set up both the Auto Job Closing Process and the Auto Job Completion Process to run regularly on a schedule you select. Jobs that match the threshold criteria defined on the code automatically complete or close through these processes.

Jobs not completed display on the Job Completion Exception Tracker. Likewise, jobs that were not closed display on the Job Closing Exception Tracker. Use these trackers to determine why the job did not complete or close properly. You can then open the job in Job Entry, or another related program, to correct the exception.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > Setup > Job Complete/Close Parameters

Workshop - Define Job Completion Parameters

This workshop demonstrates how to set up the job complete/close parameters.

Create a Job Complete/Close Code

Create the job complete/close code for auto job completion.

Navigate to **Job Complete/Close Parameters Maintenance**.

Menu Path: Production Management > Job Management > Setup > Job Complete/Close Parameters

1. Click **New**.
2. In the **Code** field, enter **XXX10** (where XXX are your initials).
3. In the **Description** field, enter **XXX Class Closing Parameters** (where XXX are your initials).
4. Select the **Job Completion** and **Job Closing** check boxes.
5. For both **Job Completion** and **Job Closing** select the **Default** check boxes.

6. In the **Qty Over** and **Under** threshold fields for **Material %**, **Operation %**, and **Subcontract %**, enter **20**.
7. Click **Save** and exit Job Complete/Close Parameters Maintenance.

Activate Parameters

After you define the parameters, you must activate them by attaching the parameters to one or more product groups. A job for a manufactured part that carries a product group with the Job Complete/Close Parameter becomes a candidate for automatic completion or closing.

The part number on the job to be completed is automatically **ADD-200-S**, which is a member of the Machined Parts product group.

Navigate to **Product Group Maintenance**.

Menu Path: Production Management > Job Management > Setup > Product Group

1. In the **Group** field, search for and select the **Machine Building Parts** product group.
2. In the **Job Completion** field, select **XXX Class Closing Parameters** (where XXX are your initials).
3. In the **Job Closing** field, select **XXX Class Closing Parameters** (where XXX are your initials).
4. Click **Save** and exit Product Group Maintenance.

Auto Job Completion Process

Use the **Auto Job Completion Process** to automatically complete jobs. A job that falls within the thresholds defined on completion codes is automatically completed. A job that falls outside these thresholds fails to complete.

Jobs that were not completed display on the Job Completion Exception Tracker. Use this tracker to determine why the job did not complete properly. You can then open the job in Job Entry, or another related program, to correct the exception.

Note that you can close jobs that contain materials with a zero quantity per parent, whether the materials were issued or not.



Note You create completion codes within Job Complete/Close Code Parameters Maintenance. You select the completion codes to use on product groups.

To run this process:

- Use this **Selection** sheet to select the parameters for the process.
- Use the **Filter** sheet to select the sites to include on the process.



Important For more information on how to review the status of processes that you have run, refer to the System Monitor topic in the Interface Navigation section of the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Auto Job Completion Process

Workshop - Run the Auto Job Completion Process

Auto Job Completion Process is executed once the Auto Complete/Close Parameters have been defined and attached to the product group. The process identifies candidates for completion or closing by looking at the parameter definitions. If the candidates meet the threshold requirements, the jobs are automatically completed or closed; if they do not, the jobs are listed as exceptions and do not complete or close. The results of the process are viewed using the Job Complete/Close Exception Tracker, the Change Log, or both.



Important It is recommended that this workshop is performed by one person on a shared database.

Navigate to **Auto Job Completion Process**.

Menu Path: Production Management > Job Management > General Operations > Auto Job Completion Process

1. In the **Log** field, enter your initials.

This is used as the name of the log file generated from the process. The text file is written to the reports folder for your user login on the server.

2. From the **Standard** toolbar, select **Process** .

3. Exit Auto Job Completion Process.

Workshop - View the Exception Log

The Epicor application generates a log file and places it out on the server as a .txt file.

Navigate to the exception log.

Menu Path: C:\EpicorData\Reports\Manager (or check with your administrator for the correct path for your installation).

1. Double-click your log file.
The log file name is <your initials>.txt.
2. Review the log file to see both the exceptions and the completed jobs as a result of the Auto Job Completion Process execution.
3. Close the log file.

Job Completion Exception Tracker

The **Job Completion Exception Tracker** displays information about job records that did not complete through the Auto Job Completion Process. This enables you to review why the job did not complete and figure out how to resolve this job completion exception.

Use the Job Completion Exception Tracker to review job exceptions in a dashboard format. This includes information such as exception jobs, operations, subcontract operations, and materials. You cannot add or edit records in this tracker.

Before you use a tracker, you should review the Tracker Overview topic in the Application Help to learn about its general program functionality. The overview topic explains the tracker interface, as well as how to best search for specific records. The topic also contains definitions of concepts and terms.

Job Closing Exception Tracker

The **Job Closing Exception Tracker** displays information about job records that did not close through the Auto Job Closing Process. This enables you to review why the job did not close and figure out how to resolve this job close exception.

Use the Job Closing Exception Tracker to review these job exceptions in a dashboard format. This includes information such as exception jobs, operations, subcontract operations, and materials. You cannot add or edit records in this tracker.

Before you use a tracker, you should review the Tracker Overview topic in the Application Help to learn about its general program functionality. The overview topic explains the tracker interface, as well as how to best search for specific records. The topic also contains definitions of concepts and terms.

Reports

The following section reviews some of the Epicor application reports available in the Job Management module that were not mentioned in other topics.

Employee Efficiency Report

The **Employee Efficiency Report** summarizes labor details. You can filter this report by departments, employees, or both. This report only displays labor data for the dates you select.

Menu Path: Production Management > Job Management > Reports > Employee Efficiency

Job Status Report

Use the **Job Status Report** to review open jobs within the selection parameters you specify. Use this report to identify potential problem jobs, and as a summary of current job activity.

Menu Path: Production Management > Job Management > Reports > Job Status Report

Priority Dispatch Report

Use the **Priority Dispatch Report** to communicate the work schedule to the shop floor employees. The report displays the jobs on which shop employees are to work during the day. Typically, you print this report to display one page for each resource group. Each page is either provided to the shop supervisor for that group or posted within the work area. Filtering options for this report include by: department, resource group, region (Current Work, Available Work, and Expected Work), start, date, time, and operation sequence.

Menu Path: Production Management > Job Management > Reports > Priority Dispatch

Cut Lists Report

Use the **Cut Lists Report** to list the materials that are related to operations within a particular date range.

This report displays the default warehouse on the job material record, the on-hand quantity in the bin, and whether the material is directly purchased to the job or issued from the warehouse.

You can display job material and job operation comments as well as insert a page break by part.

Menu Path: Production Management > Job Management > Reports > Cut List

Part/Lot Where Used Report

Use the **Part/Lot Where Used Report** to produce a list of job bills of material (BOX) that use the specified part and lot.

When you research a lot-controlled part sold to customers, this report shows to which customers a lot-controlled part may have been shipped.

Menu Path: Production Management > Job Management > Reports > Part/Lot Where Used

Shop Load Report

The **Shop Load Report** prints the load hours for each operation that is scheduled in each **Resource Group**. Load hours are calculated by adding the Setup Load and the Production Load for each operation.

Load Hours = Setup Load + Production Load

This report provides a tool to monitor overload conditions. It can be run by week or day, in summary or in detail.

Menu Path: Production Management > Job Management > Reports > Shop Load

Resource Group Efficiency Report

Use the **Resource Group Efficiency Report** to produce a report that summarizes labor efficiency by resource group for the specified time period.

Menu Path: Production Management > Job Management > Reports > Resource Group Efficiency

Specialized Job Management Processing

This section of the course discusses special job management capabilities of the Epicor application.

- **Auto Job Firm Process** - Run this process to change unfirm jobs generated through MRP to firm jobs.
- **Auto Job Release Process** - Run this process to indicate which firm jobs are within the process parameters to be released.
- **Production Planner Workbench** - Displays information about material shortages of selected jobs in a dashboard format.
- **Make To Job** - Use this demand link to increase or enter a manufactured quantity required for another job.
- **Job Receipt to Job** - Use to enter the receipt of manufactured parts to another job.
- **Job Receipt to Inventory** - Use to enter the receipt of manufactured parts into inventory.

Auto Job Firm Process

Run the **Auto Job Firm** process to automatically change unfirm jobs generated through Material Requirements Planning (MRP) to firm jobs. These firm jobs are available for review by your production planners.

The **Auto Firm Process** established the criteria for the job status to be set to firm. This process performs two main tasks:

- The process enables jobs to be firmed on a schedule that runs during off peak times.
- The process saves you from manually having to firm jobs and wait for the system to complete the request.

Use the **Scheduled Job Start Dates** parameters to identify the time period for which you want to firm jobs. Jobs that have scheduled start dates within the defined time period are defined as firm. You can then indicate whether these jobs are included in a mass print.

Through the same process the firming logic allows you to break off plan as assembly and sub assemblies into **their** own jobs when the primary job is set as firm.



Note Only subassemblies selected as **stocked** parts can be auto firmed without the parent.

The Auto Job Release process criteria can be further limited by sites, product groups, planners, and parts.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Auto Job Firm Process

Auto Job Release Process

Run the **Auto Job Release** process to automatically indicate which firm jobs are within the process parameters to be released. These jobs are then available for your manufacturing center and production can begin.

Use the **Schedule Job Start Date** parameters to identify the time period for which you want to release jobs. Jobs with scheduled start dates within this time period are defined as released. You can indicate whether these released jobs are included in a mass print.

You can further limit the Auto Job Release process criteria by sites, product groups, planners, and parts.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Auto Job Release

Return Goods Repair

Job Entry includes the **Return Goods Repair** pane used to specify that a job needs to be shipped directly from WIP through **Miscellaneous Shipment Entry** when you close the job. The Return Goods Repair pane is located on the **Job Entry > Job > Make To Stock > Detail** sheet.

The pane includes the **RMA Line, RMA Number, DMR Number, DMR Action Number** fields used to review if a job is tied to an RMA or DMR records via the **RMA Disposition Entry** and **DMR Processing** programs. The fields are for display only.

The pane also includes the **Misc Shipment from WIP** check box. Depending on whether you select the check box, you can synchronize a job with an RMA Disposition or DMR Number.

The following rules apply if you select the Misc Shipment from WIP check box:

- The Epicor ERP application automatically creates a Miscellaneous Shipment Pack ID with RMA Disposition information upon job closing or DMR information upon using the Return To Customer functionality.



Note The Ship To, Part Number, and Quantity are retrieved from the linked RMA Disposition or DMR records.

- If the miscellaneous shipment has been changed to a status different than Open (Closed, Freight, Staged, Shipped) you cannot reopen a closed job. If you reopen the closed job that carries the Open status, the linked miscellaneous shipment Pack ID is automatically deleted. If the part carries serial numbers, the serial numbers acquire the original status.
- If you don't link an RMA Disposition or DMR records, information is retrieved from job's demand link (Make to Stock) upon job closing.



Note The Ship To is the job number and Part Number with the required quantity is retrieved from job's demand link.

- You won't be able to receive completed items to inventory or job. The Miscellaneous Shipment is automatically created upon job closing.
- You can add a Make to Stock demand link for parts on the fly and select the Misc Shipment from WIP check box.

- In RMA Disposition Entry, if you attempt to dispose of items using the Job option, the RMA/Line fields located on the Job Entry > Job > Make To Stock > Detail sheet automatically update.
- In DMR Processing, if you add Return To Customer on a DMR record, the DMR/Action fields located on the Job Entry > Job > Make To Stock > Detail sheet automatically update.
- If a job with Misc Shipment from WIP already exists and is linked to a different DMR Action or RMA Disposition, the **Job already has WIP to Misc Shipment demand linked to another DMR Action or RMA Disposition** message displays.
- If you delete RMA Disposition the value in the RMA Line and RMA Number fields clear.



Important You cannot delete RMA Disposition that is linked to a closed job.

- You won't be able to receive job to inventory or report quantity via MES.



Important Jobs that include multiple Make To Stock lines can be received to inventory or quantity reported via MES only if one of those lines is not marked as Misc Shipment from WIP. If all the Make To Stock lines are marked as Misc Shipment from WIP jobs cannot be received or quantity reported.

- You cannot link multiple RMAs/DMRs to the same job. If you do so, the **RMA will not be fully linked to Job demand link. Sync Job anyway?** message displays.
- You cannot select this check box if you add a co-part. If you attempt to add a co-part while this check box is selected, an error message displays.

The following rules apply if you clear the Misc Shipment from WIP check box:

- If you Save after clearing the check box, the RMA and DMR related fields automatically clear.

Menu Path: Production Management > Job Management > General Operations > Job Entry

Work With Return Goods Repair

When a customer returns a defective item, you can rework/repair it. Once you complete the rework, you can choose to return it to the customer. In the past you needed to perform **Job Receipt to Inventory** and move out the items from a designated warehouse.

With the 10.2.300 release, you can deliver directly from a job once you close it, using an automatically generated Miscellaneous Shipment Pack ID.



Note If you select the **Misc Shipment WIP** check box, Job Receipt to Inventory is not allowed.



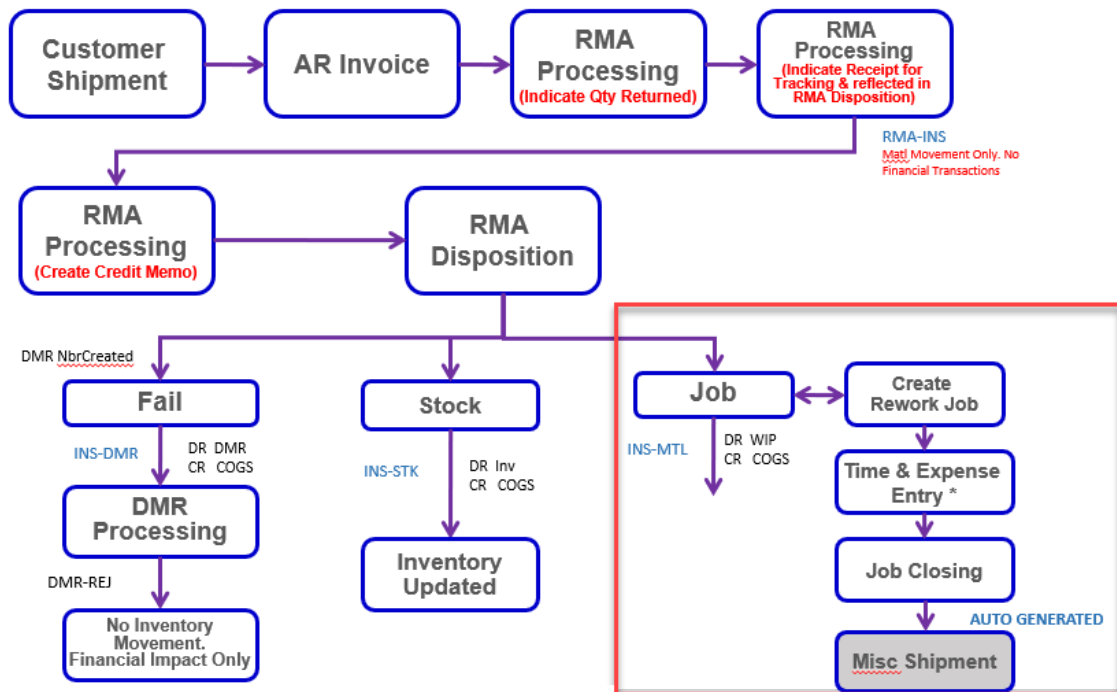
Note The set of workshops will use the following database entries:

Accounts Receivable Invoice	10061
Sales Order	5013 (Line 1)
Packing Slip	128
Part	DCD-300-OR
Quantity Shipped	2



Note Review the red box in the flow. This is the functional area you will work with.

RMA Processing



Customer Return

Addison Engineering has returned two items complaining that they are defective. You received two pieces of part DCD-300-OR so you create a new RMA record using Return Material Authorization. Use this program to control and track customer returns.

1. Navigate to **Return Material Authorization**.

Menu Path: Sales Management > Order Management > General Operations > RMA Processing

2. From the **New** menu, select **New RMA**.
3. In the **Customer** field, enter **Addison** and press **Tab**.
4. In the **Legal Number** field, enter **10061** and press **Tab**.
5. From the **New** menu, select **New Line**.
6. On the **Summary > Details** sheet, in the **RMA Details** grid, in the **Line** field, enter **1** and press **Tab**.
7. Click **Save**.
8. Navigate to the **Details > Detail** sheet.
9. In the **Quantity** field, enter **2**.
10. In the **Reason** field, select **Defective Assembly**.
11. Click **Save**.

12. Navigate to the **Receipts > Details** sheet.
13. From the **New** menu, select **New Receipt**.
14. Click **Save**.
15. Record the RMA number _____.
16. Exit Return Material Authorization.

Enter Rework Job

Once you receive the defective units, and after the quality assurance inspection, there are three possible outcomes. You either reject the items, put them back to stock or rework them. In this case you enter a rework job. The rework job is similar to any stock job. The only difference is the job material itself. Let's now create a rework job.

1. Navigate to **Job Entry**.
Menu Path: Production Management > Job Management > General Operations > Job Entry
2. From the **New** menu, select **New Job**.
The **New Job Number** window displays.
3. In the **New Job** field, enter **RWK1** and click **OK**.
4. In the **Part** field, enter part **DCD-300-OR** and press **Tab**.
5. In the **Req By** field, select the date two days from today.
6. Click **Save**.
7. From the **New** menu, select **New Demand Link > Make To Stock**.
The **Job > Make To Stock > Detail** sheet displays.
8. In the **Quantity** field, enter **2**.
9. Select the **Misc Shipment WIP** check box.
10. Click **Save** and minimize Job Entry.

Dispose of Items

So far you have entered a new RMA for the received parts and decided to rework them. The next step in the process is to tie the previously created RMA to the rework job. As previously mentioned, you can dispose to a job, back to stock, or reject the items altogether.

1. Navigate to **RMA Disposition Entry**.
Menu Path: Sales Management > Order Management > General Operations > RMA Dispositions
2. On the standard toolbar, click the search (binoculars) icon to display the **RMA Disposition Search** window.
3. In the **Starting At** field, enter the previously recorded RMA number and click the **Search** button.

4. Navigate to the **Disposition > Detail** sheet.
5. Click **New**.
6. In the **Dispose To** field, select **Job**.
7. Click the **Job Number** button and search for and select the **RWK1** job.
8. In the **Quantity** field, enter **2**.
9. In the **Inspected By** field, select **Advanced Quality**.
10. Click **Save**.
11. Exit RMA Disposition Entry.

Modify Job

In a rework job, you can add additional operation(s) or even material(s) used during the rework.

In this case you add operation **Arc Weld** and material **Titanium448**.

1. Maximize **Job Entry**.
2. On the standard toolbar, click **Refresh**.
3. In the tree view, right-click **ASM: 0 DCD-300-OR** and select **Tree > Expand Tree**.
Notice the **Materials** node displays material **DCD-300-OR**.
4. In the tree view, right-click **Operations** and select **Add Operation**.
The **Job Details > Operations > Detail** sheet displays.
5. In the **Operation** field, select **Arc Weld**.
6. In the **Prod Std** field, enter **10** and accept the **Pieces/Hour** default.
7. Click **Save**.
8. In the tree view, right-click **Materials** and select **Add Material**.
The **Job Details > Materials > Detail** sheet displays.
9. In the **Part/Rev** field, enter **Titanium448** and press **Tab**.
10. In the **Qty/Parent** field, enter **1**.
11. Click **Save**.
12. Navigate to the **Job > Make To Stock > Detail** sheet.
Notice the RMA/Line field includes the RMA and Line numbers. The **Misc Shipment from WIP** check box is selected but inactive.
13. Select the **Engineered** check box.

The total production quantity is below the Part's minimum lot size of 250. Do you want to continue?
message displays.

14. To the message, click **Yes**.
15. Select the **Released** check box.
The **Schedule Job RWK1** window displays.
16. Accept the default of **Backward** scheduling and click **OK**.
17. Click **Save**.
18. Exit Job Entry.

Issue Material

The job is releases to production so let's now issue material.

1. Navigate to **Issue Material**.
Menu Path: Material Management > Inventory Management > General Operations > Issue Material
2. In the **Job** field, enter **RWK1** and press **Tab**.
3. In the **Mtl** field, select **20**.
4. In the **Quantity** field, enter **2**.
5. Click **OK**.
6. Right-click in the job field and select **Open With > Job Tracker**.
The **Job Tracker** displays.
7. In the tree view, right-click **ASM: 0 DCD-300-OR** and select **Tree > Expand Tree**.
Notice a green check mark on both materials.
8. Exit the Job Tracker.
9. Exit Issue Material.

Report Labor

Charles L. Johnson has completed the rework job so he needs to enter time.

1. Navigate to **Time and Expense Entry**.
Menu Path: Production Management > Job Management > General Operations > Time and Expense Entry
2. In the **Employee ID** field, enter **105** and press **Tab**.
This is the ID for the Charles L. Johnson employee.
3. In the calendar, accept today's default.

4. From the **New** menu, select **New Time Detail**.
The **Time > Daily Time > Detail > Detail** sheet displays.
5. In the **Job** field, enter **RWK1** and press **Tab**.
6. In the **Operation** field, select **10**.
7. In the **Labor Qty** field, enter **2** and press **Tab**.
8. Accept the default for **Labor** and **Burden** hours.
9. Click **Submit**.
10. Click **Save** and exit Time and Expense Entry.

Close Job

The last step in the process is to close the job. Let's do it then.

1. Navigate to **Job Completion/Closing Maintenance**.
Menu Path: Production Management > Job Management > General Operations > Job Closing
2. In the **Job** field, enter **RWK1** and press **Tab**.
3. Select the **Complete** check box.
4. Select the **Closed** check box.
5. Click **Save**.
6. Exit Job Completion/Closing Maintenance.

Review Job Tracker

Once you close the job the application should automatically create a Miscellaneous Shipment Pack ID. This is because you selected the Misc Shipment WIP check box when previously entering the rework job.

1. Navigate to the **Job Tracker**.
Menu Path: Production Management > Job Management > General Operations > Job Tracker
2. In the **Job** field, enter **RWK1** and press **Tab**.
The job displays the **Closed** status.
3. Navigate to the Miscellaneous Shipment sheet.
4. Click the **Retrieve** button.
5. In the **Miscellaneous Shipping Headers** grid, right-click inside the **Pack ID** field and select **Open With > Miscellaneous Shipment Tracker**.
The **Miscellaneous Shipment Tracker** displays.

6. Navigate to the **Header > Detail** sheet and review the information.
7. Exit the Miscellaneous Shipment Tracker.
8. Exit the Job Tracker.

Review Inventory/WIP Reconciliation Report

Of course, financially, when Miscellaneous Shipment Pack ID generates, there should be transactions created. This is from Inv/WIP Reconciliation.

- **MFG-CUS** - This transaction is created when Miscellaneous Shipment is generated. In this case it means the items are returned to Addison Engineering after repair.
- **MFG-SRV** - This is the additional repair cost. Remember you have added one operation and one material.

1. Navigate to the **Inventory/WIP Reconciliation Report**.

Menu Path: Production Management > Job Management > Reports > Inventory/WIP Reconciliation

2. Navigate to the **Filter > Job** sheet.
3. Click the **Job** button and search for and select the **RWK1** job.
4. On the standard toolbar, click **Print Preview**.
The **Inventory/WIP Reconciliation Report** displays.
5. Review and close the report.
6. Exit the Inventory/WIP Reconciliation Report.

Production Planner Workbench

The **Production Planner Workbench** displays information about material shortages of selected jobs in a dashboard format. This dashboard is valuable for viewing information about multiple jobs at once. You cannot add or edit records in this tracker.

Although this information is already available in each job, this overview provides the job planner with a tool to quickly gather information for multiple jobs at once.

In the Production Planner Workbench, select one or more jobs, parts, or product groups for material shortage review. For each job material from each selected job, the Epicor application compares the required quantity with the available quantity. If the available quantity is less than the required quantity, the application expects and displays a shortage of material. This information is useful for determining which jobs to reschedule and allows you to request materials to resolve the shortage. Note that the **Consumed** quantity field that displays the consumed quantity per component is the sum of the required quantities of the other job materials with the same part number.



Note For more information on trackers, review the Tracker Overview topic in the Application Help. The overview topic explains the tracker interface, as well as how to best search for specific records. The topic also contains definitions of concepts and terms.



Note For more information on dashboards and dashboard capabilities, review the Dashboard overview topic in the Application Help. This topic contains links to other dashboard topics that explain how to personalize and customize dashboards.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Production Planning Process

Make To Job

Use the Make To Job demand link to increase or enter a manufactured quantity required for another job.



Example A job exists to make a parent assembly with a requirement for a stocked manufactured part pulled as a material. Inventory records indicate the manufactured part is below its minimum on-hand. The planner adds a Make To Job demand link to the parent job that matches the quantity of the manufactured part to meet both the original demand and inventory requirements.

Workshop - Create a Job Linked to Another Job

In this workshop, create a job to manufacture items received to a parent job.

Duplicate a Sales Order and Create a Parent Job

In this workshop, duplicate sales order **5067** and create a job similar to **2066**.

Navigate to **Sales Order Entry**.

Menu Path: Sales Management > Order Management > General Operations > Order Entry

1. In the **Sales Order** field, enter **5067** and press **Tab**.
2. From the **Actions** menu, select **Order > Copy Order**.
The **Copy Order** window displays.
3. Accept the defaults and click **OK**.
4. Record the sales order number _____.
5. In the **Need By** field, select the date two weeks from today.
6. In the **Ship By** field, select the date two days before the **Need By** date.
7. Click **Save**.
8. To the **You have changed the following fields**, click **Yes**.
9. From the **Actions** menu, select **Order Job Wizard**.
The **Order Job Wizard** displays.

10. In the **Order Lines** pane, for part **DSS-1000**, select the following check boxes:

- Create Job
- Get Details
- Schedule Job
- Release Job

11. Click the **Create Jobs** button.

This action creates a job for the second line of the sales order for part DSS-1000.

12. In the **Releases** pane, in the **Job** column, record the job number _____.

You may need to use the scroll bar to find the Job column in the pane.

13. Click **Save**.

14. Exit the Order job Wizard.

15. In **Sales Order Entry**, select the **Ready To Process** check box.

16. Click **Save** and exit Sales Order Entry.

Make the Part Direct

Navigate to **Job Entry**.

Menu Path: Production Management > Job Management > General Operations > Job Entry

1. In the **Job** field, enter the job you created in the previous task **Duplicate a Sales Order and Create a Parent Job**.
2. In the tree view, expand the **Materials** node to review material requirements for the job.
3. In the tree view, select part **DSS-1020**.
The **Job Details > Materials > Detail** sheet displays.
4. In the **From Location** pane, select the **Make Direct** check box.
5. Navigate to the **Job** sheet.
6. In the **Req By** field, verify or enter the date two weeks from today.
7. From the **Actions** menu, select **Schedule > Job Scheduling**.
8. Verify the **Start Date** and **Due Date** fields are correct and click **OK**.
9. Click **Save** and exit Job Entry.

Create a Child Job

In this workshop, create the child job for part **DSS-1020**.

Navigate to the **Planning Workbench**.

Menu Path: Production Management > Job Management > General Operations > Planning Workbench

1. Click the **Select** button to search for job suggestions.
The **Planning Workbench Search** window displays.
2. In the **Status** field, select **New** and click **Search**.
3. Select the new requirement for part **DSS-1020** and click **OK**.
4. Click the **Create Job** button.
5. Click **Next Job** to assign a job number.
6. Record the job number_____.
7. Select the following check boxes:
 - Get Details
 - Schedule
 - Release
8. Click the **Create Job** button.
The Epicor application opens Job Entry with the new job details for part DSS-1020.
9. Minimize Job Entry.
10. Exit the Planning Workbench.

Create Make To Stock Demand

Navigate to **Job Entry**.

Menu Path: Production Management > Job Management > General Operations > Job Entry

1. Maximize **Job Entry**.
2. Navigate to the **Job > Make to Job > Detail** sheet.
3. Review the following information for this job.
 - Quantity
 - Demand Link



Note On the **Make to Job** sheet, the parent job number displays in the **Job Number** field. This is the Demand Link number.

The new job, created by the Planning Workbench, has a Make To Job demand link pointing to the parent job for the demand quantity. The schedule created when the job was created matches the due date for the parent job.

4. From the **New** menu, select **New Demand Link > Make to Stock**.
5. In the **Quantity** field, enter **300**.
6. Click **Save**.

Schedule the Job

1. From the **Actions** menu, select **Schedule > Job Scheduling**.
2. Accept the defaults, and click **OK**.
3. Click **Save** and exit Job Entry.

Job Receipt to Job

Use **Job Receipt to Job** to enter the receipt of manufactured parts to another job.

After the receipt is completed, the Job Tracker view of the parent job displays a transaction code of **MFG-WIP** manufacturing receipt to job.



Important When receiving labor parts for concurrent jobs, it is important to receive the main part last. This is to ensure that all received labor parts will have the correct prorated job costs.

If you use the **Advanced Production** module, you can receive multiple part quantities from the same job. The **Part** field is active, so you can select the part you want to receive. The parts manufactured on the current batch or multi-part job are available; the primary part defaults. For more information, refer to the Advanced Production Module topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Inventory Management > General Operations > Job Receipt to Job

Job Receipt to Inventory

Use **Job Receipt to Inventory** to enter the receipt of manufactured parts into inventory.

After the receipt is completed, the Job Tracker view of the parent job displays a transaction code of **MFG-STK** manufacturing receipt to stock.

When you receive manufactured parts to inventory, several events occur. The on-hand quantity for the part in the part master file is updated, and the costs are updated. Also, a transaction history record with the job reference is created for the part.

You do not have to receive parts to inventory before you ship them; you can ship directly out of Work in Process (WIP). Only receive items to inventory if you are building standard products, or if you have overruns or spares that you are not able to ship right away.



Important When receiving labor parts for concurrent jobs, it is important to receive the main part last. This is to ensure that all received labor parts will have the correct prorated job costs.



Tip If you use the **Advanced Production** module, you can receive multiple part quantities from the same job. The **Part** field is active, so you can select the part you want to receive. The parts manufactured on the current batch or multi-part job are available; the primary part defaults. For more information, refer to the Advanced Production Module topic in the Application Help.

If you use the **Advanced Material Management** module, at least one operation on the job assembly is required to determine the WIP warehouse and bin for the receipt. For information about multi-site logic as it pertains to this program, refer to the Job Receipt to Inventory - Multi-site Logic topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Data Collection > Handheld > Material Handling > Job Receipt to Inventory Handheld
- Production Management > Data Collection > Handheld > Material Handling > Job Receipt to Inventory Handheld



Important This program is not available in Epicor Web Access.

Workshop - Issue Material and Record Labor

You must complete a job before parts can be received and issue materials to the job before production can begin.

Issue Materials

Navigate to **Mass Issues to Manufacturing**.

Menu Path: Material Management > Inventory Management > General Operations > Mass Issue to Mfg

1. In the **Job** field, enter the child job number you created for part **DSS-1020** and press **Tab**.
2. Select the **Include Subassemblies** check box.
3. Click the **Issue** button.
4. From the **Issue > List** sheet click the **Issue All** button.
5. Click **OK**.
6. Exit Mass Issues to Manufacturing.

Now that materials are issued to the job, you can complete the operations by reporting labor.

Record Time and Quantity for Operations

Navigate to **Time and Expense Entry**.

Menu Path: Production Management > Job Management > General Operations > Time and Expense Entry

1. In the **Employee** field, enter **197** (John J. Lewis) and press **Tab**.
2. From the **New** menu, select **New Time Detail**.
3. In the **Labor Type** field, verify **Production** displays.
4. In the **Job** field, search for and select the child job number created earlier.

5. Enter the following information:

Field	Data
Operation	10 (SAW)
Labor Qty (pieces produced)	600
Clock In	08:00 AM
Clock Out	11:00 AM

6. Click **Save**.

7. Click **Submit**.

8. Repeat steps 2-7 above to enter production and quantities against the job.

Operation	Description	Production Clock-In Time	Production Clock-Out Time	Labor Qty
20	DRILL	11:01 AM	06:00 PM	600
30	PREP	06:01 PM	08:00 PM	600
40	PTP	08:01 PM	11:30 PM	600

9. Exit Time and Expense Entry.

Workshop - Receive Job

The parent job holds the quantity and costs for the Make To Job or Make To Stock demand link. Receiving transactions move the quantity and the costs to the appropriate location(s). This workshop reviews the mass issue process and demonstrates the receipt process for both the Make To Job and the Make To Stock demand links.

Receive the Make To Job Demand and the Remaining WIP Quantities

Navigate to **Job Receipt To Job**.

Menu Path: Material Management > Inventory Management > General Operations > Job Receipt to Job

1. In the **From Job** field, enter the job number for the child job created earlier and press **Tab**.

The linked parent job defaults in the **To Job** field.

2. In the **Quantity** field, enter **45**.

3. Click **OK**.

4. Exit Job Receipt to Job.

Receive the Make To Stock Demand and the Remaining WIP Quantities

Navigate to **Job Receipt to Inventory**.

Menu Path: Material Management > Inventory Management > General Operations > Job Receipt to Inventory

1. In the **From Job** field, enter the job number for the child job created earlier and press **Tab**.

The default inventory details populate based on the part number on the job.

2. In the **Quantity** field, enter **555**.

3. Click **OK**.

4. Exit Job Receipt to Inventory.

Job Cost Adjustments

Use **Job Cost Adjustments** to make specific changes to a job's labor, material, or subcontract records. For most fields in this program, enter values that are then added to the current values on the job. Both positive and negative adjustments can be entered.



Tip This program is useful when you first install the Jobs module. It lets you enter the costs to date on the current jobs you have in progress.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Job Adjustment

Co-Parts

If you have the **Advanced Production** module installed, you can set up a single job to manufacture multiple end part quantities. Job Entry provides the functionality to add additional co-parts, which you can then define on the **Job > Co-Parts** sheet. Use this sheet to determine how many additional parts are created when a primary part is manufactured.



Example A manufacturer makes upholstered office chairs. They manufacture several different sized chair backs which use the same fabric. In this scenario, you can enter a single job that creates two different parts on one job operation (stamping the material into two different sizes).

When you create a multi-part job in Job Entry, you first must select a primary part. This part defines the product group, production standard, and other key information for the job.

After you select a primary part, the **New** menu has an additional active option on its menu, **New Co-Part**. When you select this option, the fields on the Co-Parts sheet become available. You can then define additional part quantities manufactured within this multi-part job.

Use the **Co-Parts** sheet to enter multiple parts manufactured through the current job. On this sheet you can establish the yield per quantity of the co-parts and their costing ratios. You can also select the **Prevent Suggestions** check box to prevent Material Requirements Planning (MRP) from creating job suggestions for the specified co-part.



Note Refer to the **MRP Technical Reference Guide** for more information on the **Prevent Suggestions** modifier.

The **Time and Expense Entry** interface and the **Manufacturing Execution System (MES)** interface each have a **Co-Parts** sheet. This enables shop floor employees to indicate the part quantities produced on the multi-part or batch job. This additional sheet allows the Epicor application to calculate the labor cost of producing each part quantity manufactured on the job.



Note For more information on Co-Parts functionality, refer to the **Advanced Production Management** course.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > General Operations > Job Entry
- Service Management > Expense Management > General Operations > Job Entry
- Service Management > Project Management > General Operations > Job Entry
- Service Management > Time Management > General Operations > Job Entry

Shop Communication Tools

The Epicor application includes several options for shop floor communication including shop warnings and global alerts. These tools are created, activated, and assigned to a person or a group. Certain events in the application trigger the execution process.

Alert groups and production teams use shop warnings, global alerts, and person records. They link a group of people to a specific job, which allows these selected people to receive email alerts when certain events occur on that job.

Alert Group Maintenance

Use **Alert Group Maintenance** to set up groups of users who receive a notification from the Epicor application when an event takes place. The events are predefined as global alerts or shop warnings, and occurrence of one of these events notifies everyone in the group in which this alert is assigned.



Note When you set up users, you can assign users to alert groups.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > Setup > Alert Group

Workshop - Create an Alert Group

In this workshop, create a new alert group record.

Navigate to **Alert Group Maintenance**.

Menu Path: Production Management > Job Management > Setup > Alert Group

1. Click **New**.
2. In the **Group** field, enter **XXX** (where XXX are your initials).

3. In the **Description** field, enter **XXX Scheduling** (where XXX are your initials).

4. Remain in Alert Group Maintenance for the next workshop.



Note Do not click **Save** at this point. To save an alert group, you must add at least one alert; otherwise, you receive an error message. Alerts are added in the next workshop.

Global Alert Maintenance

Use **Global Alert Maintenance** to both activate and adjust the standard global alerts that ship with the application. Global alerts are messages that can be automatically sent out to pre-defined recipients when certain events occur within the database. Global alerts are an excellent communication tool that help individuals within your organization keep up-to-date on current business activity.

Standard global alerts are pre-defined in your Epicor application. As shipped, none of the alerts are activated. You must activate each global alert you want to use. An active standard global alert writes alerts to the AlertQue table in the application database. To enable email alert messages, you must set up and activate a supporting Business Process Management (BPM) data directive that monitors the AlertQue table and sends alert email messages whenever a row is added to the table. Since all standard global alerts write to AlertQue, this BPM data directive, once set up and activated, will send email messages for all active standard global alerts that have the send alert option enabled in Global Alert Maintenance.



Example An employee decides to place a sales order on hold. You enable a standard global alert that tracks changes in order hold status and configure it to create an application memo and to send an email to the members of the sales staff that are associated with the sales order.

When the standard global alerts that ship with the application do not match your monitoring requirements, you can create custom global alerts through Business Process Management. Custom global alerts are BPM data directives that define which table/column to monitor, the table condition that will trigger an alert, who receives alert email messages, and the template for the alert email. Custom global alerts are independent of the Global Alert Maintenance program.

Email alert messages for both standard and custom global alerts can be configured to include a shortcut.sysconfig file that the message recipient can use to launch the Epicor application and display the record that triggered the alert.

Menu Path

Navigate to this program from the Main Menu:

- Financial Management > Accounts Payable > Setup > Global Alert
- Financial Management > Accounts Receivable > Setup > Global Alert
- Production Management > Job Management > Setup > Global Alert
- Production Management > Quality Assurance > Setup > Global Alert
- Sales Management > Customer Relationship Management > Setup > Global Alert
- Sales Management > Order Management > Setup > Global Alert
- Sales Management > Quote Management > Setup > Global Alert

Workshop - Set Up Global Alerts

This workshop demonstrates how to assign and activate global alerts.

Assign Global Alerts to an Alert Group



Important The data input in this workshop cannot be entered by more than one person in a shared database.

Verify you are in **Alert Group Maintenance**.

Menu Path: Production Management > Job Management > Setup > Alert Group

1. In the **Available Global Alerts** pane, select the **Job released status has changed** alert and click the right arrow button to move this alert to the **Selected Global Alerts** pane.
2. In the **Available Global Alerts** pane, select the **Material has been received complete** alert and click the right arrow button to move this alert to the **Selected Global Alerts** pane.
3. Click **Save** and exit Alert Group Maintenance.

Activate Global Alerts



Important The data input in this workshop cannot be entered by more than one person in a shared database.

You must activate the selected global alerts before they can be sent.

Navigate to **Global Alert Maintenance**.

Menu Path: Production Management > Job Management > Setup > Global Alert



Important If an alert(s) is marked as active in the Epicor application, use this workshop as a review or verification of the activation.

1. In the **ID** field, search for and select global alert **1170 - Job released status has changed**.
2. In the **Options** section, verify or select the following check boxes:
 - Active
 - Create Memo
 - Send Alert
3. Click **Save**.
4. Repeat the steps above to activate the **1140 - Material has been received complete** alert.
5. Click **Save** and exit Global Alert Maintenance.

Shop Warning Maintenance

Shop Warning Maintenance displays in various locations throughout the Epicor application. These warnings display when certain conditions exist or certain events occur. They are intended to keep supervisors informed of a job status or the performance of an employee.

You cannot add or delete your own shop warning messages. Instead, a number of predefined warnings are included in the application to inform you of a variety of critical events. Use **Shop Warning Maintenance** to activate and configure the predefined warnings.



Note These warnings only display if you have indicated that you want to use labor warnings in the company configuration for the **Data Collection** module.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Data Collection > Setup > Shop Warning
- Production Management > Data Collection > Setup > Shop Warning
- Production Management > Job Management > Setup > Shop Warning

Workshop - Set Up Shop Warnings

This workshop demonstrates how to assign and activate shop warnings.

Assign Shop Warnings to an Alert Group

Navigate to **Alert Group Maintenance**.

Menu Path: Production Management > Job Management > Setup > Alert Group

1. In the **Group** field, enter **XXX** (where XXX are your initials) and press **Tab**.
2. In the **Available Shop Warnings** pane, select **Operation is behind schedule** and click the right arrow button to move this warning to the **Selected Shop Warnings** pane.
3. In the **Available Shop Warnings** pane, select **Operation is over estimate** and click the right arrow button to move this warning to the **Selected Shop Warnings** pane.
4. In the **Available Shop Warnings** pane, select **Operation efficiency % is under limit** and click the right arrow button to move this warning to the **Selected Shop Warnings** pane.
5. Click **Save** and exit Alert Group Maintenance.

Activate Shop Warnings



Important The data input in this workshop cannot be entered by more than one person in a shared database.

Navigate to **Shop Warning Maintenance**.

Menu Path: Production Management > Job Management > Setup > Shop Warning



Tip If a shop warning(s) is marked as active in the Epicor application, use this workshop as a review or verification of the activation process.

1. In the **Code** field, search for and select shop warning **50 – Operation is behind schedule**.
2. In the **Variance Alert** section, select or verify the **Send Alert** check box is selected.
3. Click **Save**.
4. Repeat the steps above to activate the following shop warnings:
 - 90 - Operation is over estimate
 - 160 - Operation efficiency % is under limit
5. Click **Save** and exit Shop Warning Maintenance.

Recipients

Use **Person Maintenance** to set up person records and use **Production Team Maintenance** to assign people to production teams. You can then associate these production teams with specific jobs, and the people on those teams receive email alerts whenever events occur on those jobs.

Person Maintenance

Use **Person Maintenance** to link individuals with specific production-related global alerts and shop warnings. Each person record can be linked to alert groups, allowing these individuals to automatically receive email alerts whenever certain events occur on jobs.



Note To assign people to production teams, use Production Team Maintenance. For more information on production teams usage, refer to the Production Team Maintenance topic in the Application Help.

Menu Path

Navigate to this program from the Main Menu:

- Material Management > Supplier Relationship Management > Setup > Person
- Production Management > Job Management > Setup > Person
- Sales Management > Order Management > Setup > Person

Workshop - Set Up a Person Record

Now that the alerts are active, you can create a person record using Person Maintenance. This person becomes the designated alert recipient of active global alerts and shop warnings.

Create a Person Record

Navigate to **Person Maintenance**.

Menu Path: Production Management > Job Management > Setup > Person

1. Click **New**.
2. In the **Person** field, enter your initials.
3. In the **Name** field, enter your full name.
4. In the **Email** field, enter your email address.

Assign the Person to an Alert Group

1. From the **Available** list, select the **XXX Scheduling** (where XXX are your initials) alert group.
2. Click the right arrow button to move the selected alert group to the **Selected** list.
3. Click **Save** and exit Person Maintenance.

Production Team Maintenance

Use **Production Team Maintenance** to direct global alerts to specific teams. Production teams are used in conjunction with global alerts, alert groups, and people. If you associate a production team with a job in Job Entry, members of that team can automatically receive emails when certain events occur on that job.

Menu Path

Navigate to this program from the Main Menu:

- Production Management > Job Management > Setup > Production Team

Workshop - Associate the Person with a Production Team

Now that the person record is set up, you can associate that person with an appropriate production team.

Navigate to **Production Team Maintenance**.

Menu Path: Production Management > Job Management > Setup > Production Team

1. In the **Team** field, search for and select **Team A**.
2. From the **Available (Active)** person list, select your name.
3. Click the right arrow button to move this person to the **Selected** person list pane.
4. Click **Save**.
5. Repeat the steps above to add yourself to Team B.
6. Click **Save** and exit Production Team Maintenance.

Alerts Activation

Use **Job Entry** to activate alerts for a job.

Select a production team on a job header. The production team associated with a job creates the default person list for that job. You can modify this list for a specific job on the **People** sheet and add or remove people.

When an event occurs on a job that triggers a shop warning or a global alert, the Epicor application automatically sends an email to everyone on the People list who are assigned to alert groups that use that shop warning or global alert.

Workshop - Initiate the Alert for the Job

This workshop demonstrates how to activate and execute shop communication tools.

Navigate to **Job Entry**.

Menu Path: Production Management > Job Management > General Operations > Job Entry

1. In the **Job** field, enter the job number created in the **Workshop - Quick Job Entry** (for part SN-1020) and press **Tab**.
2. In the **Prod Team** field, select **Team A**.
3. Click **Save**.
4. Clear the **Release** checkbox and click **Save**.
5. Select the **Release** checkbox and click **Save**.
6. In the **Standard** toolbar, click **Memo** to view the alert message created.



Note Your training PC may not be set up with email so an email alert cannot be sent.

7. Exit Job Entry.

Job Management Trackers

A tracker is a read-only view of programs in the application. This section focuses on the trackers useful to Job Management that were not mentioned in other topics.

Job Tracker

Use the **Job Tracker** to review current information about a selected job record such as demand links, operations, and materials.

Menu Path: Production Management > Job Management > General Operations > Job Tracker

Part Tracker

Use the **Part Tracker** to access current information on parts in the database. This includes information such as revisions, on-hand quantities, costs, locations, inspections, and planning data.

You can use the Part Search feature to pull multiple part records into the Part Tracker. The tracker displays only one part at a time. You cannot add or edit records in this tracker.

Menu Path: Production Management > Job Management > General Operations > Part Tracker

Purchase Order Tracker

Use the **Purchase Order Tracker** to research details regarding a purchase order.

Menu Path: Material Management > Purchase Management > General Operations > Purchase Order Tracker

Lot Tracker

Use the **Lot Tracker** to review information regarding lot-tracked part records.

Menu Path: Production Management > Job Management > General Operations > Lot Tracker

Serial Number Tracker

Use the **Serial Number Tracker** to review information regarding serial-tracked part records including the serial number status, location, and serial-tracked transactions.

Menu Path: Production Management > Job Management > General Operations > Serial Number Tracker

Shop Tracker

Use the **Shop Tracker** to review current information about shop activity. This includes information on resources, labor, activity, and shop warnings.

Production Activity Tracker

Use the **Production Activity Tracker** to review current (real-time) information regarding production activity on the site floor. Information provided in this tracker includes the production activity estimates verses actuals, resource group, activity plan, approval status, period details, and labor details.

Production Activity Summary Tracker

Use the **Production Activity Summary Tracker** to review the production activity detail by resource group to department, and site by day or period.

Workshop - Use the Job Tracker

This workshop demonstrates how to use the Job Tracker.

Navigate to the **Job Tracker**.

Menu Path: Production Management > Job Management > General Operations > Job Tracker

1. In the **Job** field, enter the job number you created for part **ML-1698-A36**.
2. In the tree view, expand the **Materials** node to review the materials for the job.
3. In the tree view, expand the **Operations** node to review the operations for the job.
4. In the tree view, select the first operation, and review the **Job Details > Operations > Detail** sheet.
5. Select the **Job Details > Operations > Labor Transactions** sheet and click the **Retrieve** button to display the labor transactions entered against the job.
6. In the tree view, select the first material, and review the **Job Details > Materials > Detail** sheet.
7. Select the **Job Details > Materials > Material Transactions** sheet and click the **Retrieve** button to review the list of transactions for this material on the job.
8. Exit the Job Tracker.

Workshop - Use the Part Tracker

This workshop demonstrates how to use the Part Tracker.

Navigate to the **Part Tracker**.

Menu Path: Production Management > Job Management > General Operations > Part Tracker

1. Click the **Part** button.
The **Part Search** window displays.

2. In the **Starting At** field, enter **1032** and click **Search**.
3. In the **Search Results** grid, select part **1032KNUT** and click **OK**.
4. Navigate to the **On Hand > Warehouses** sheet.
5. In the **Warehouses** grid, review the on-hand quantities.
6. Navigate to the **On Hand > Bins** sheet and click the **Retrieve** button to display information by warehouse and by bin.
7. Navigate to the **General > Part** sheet.
8. Right-click the **Part** field, and select **Open With > Time Phase** to retrieve the detail information. The **Time Phase Inquiry** displays.
9. Review the information and close the Time Phase Inquiry.
10. Right-click the **Part** field and select **Open With** to review additional available programs accessible from the Part Tracker.
11. Exit the Part Tracker.

Workshop - Use the Shop Tracker

This workshop demonstrates how to use the Shop Tracker.

Review Currently Clocked in and Clocked out Employees

Navigate to the **Shop Tracker**.

Menu Path: Production Management > Job Management > General Operations > Shop Tracker

1. Navigate to the **Who is Here** sheet.
This sheet lists employees whose shift occurs during this time and who are currently clocked in.
2. Click the **Who is Here** button and click **Search**.
3. Click **Select All** and click **OK** to retrieve the list of employees who are currently clocked in.
4. Navigate to the **Who is Not Here** sheet.
This sheet lists employees who are not clocked in during this time.
5. Click the **Who is Not Here** button and click **Search**.
6. Click **Select All** and click **OK** to retrieve the list of employees who are currently not clocked in.

Review Shop Warnings

1. Navigate to the **Shop Warnings** sheet.
Shop warnings is a communication tool that must be set up and activated. The Shop Tracker displays information about shop warnings that have been issued.

2. Click the **Retrieve** button and review the shop warnings.
3. Click the **Move All to History** button.
This moves the shop warnings that display to history.
4. Click the **Retrieve** button again.
No shop warnings display because they have been moved to history.
5. Exit the Shop Tracker.

Conclusion

Congratulations! You have completed the Job Management course.

Appendix

This section of the course contains additional reference information.

Icons

This section describes the icons used in the job tree view.

Icon	Description
	Indicates that this item is a project.
	Indicates that this item is a standard job.
	Indicates that this is an assembly linked to the job.
	Indicates that the assembly is on the critical path. Any delay to an item on the critical path will delay the job's completion.
	Indicates that this assembly has a problem with the availability of its material needs.
	Indicates an operation that has not been run yet. This icon may also be coupled with the "tag with a red dot" icon to indicate that there are material constraints for the operation.
	Indicates that this operation is complete.
	Indicates that this operation has a problem with its capacity. This icon may also be coupled with the "tag with a red dot" icon to indicate that there are material constraints as well as capacity constraints.
	Indicates that this is a subcontract operation. This icon may also display with a red dot to indicate that the subcontract operation has a capacity constraint.
	Indicates that this subcontract operation is complete.
	Indicates that this item is a material. This is the default icon for material.
	This icon can appear for one of several reasons: This icon can appear for one of several reasons: These materials have been issued to the job.

Icon	Description
	- The job material does not have a required date. This is either because the job was not scheduled, or the material was added after the job was scheduled. - The job material is from stock, and it is Make Direct. - The job material is from stock, and is coming from a different site, from which the material has already been shipped. - The job material PO release (if purchased) has a received quantity, or will be here before the Material Required Date.
	Indicates that the backflush location does not have enough on-hand quantity to satisfy the requirement, but the job material record's warehouse - plus the backflush warehouse - does have enough on-hand quantity.
	This icon can appear for one of several reasons: - Not enough stock is available to satisfy this material's requirement. - The Job Material is now overdue. - The job material is from stock, and is coming from a different site, from which the material cannot arrive by the Job Material Required Date - The job materials PO release (if purchased) does not have a received quantity, or will not be here before the Material Required Date. - The job material is backflushed, but the backflush location did not have enough on-hand quantity to cover the requirement, and neither does the job material's warehouse plus the backflush warehouse. - The job Start Date is in the past. In this case, there may be enough material quantity available, but because the Start Date is in the past, the material is considered late.
	Indicates a material with a zero quantity per parent for which nothing has been issued. The icon will display even after the job is completed and closed, so long as the material is not issued.
	Indicates a material with a zero quantity per parent for which material has been issued on this job. The icon will display even after the job is completed and closed.
	Indicates that the part revision has changed.

Costing Methods

Different costing methods for inventory valuation are used when an item unit cost is required in a transaction, such as an issue to manufacturing.

The cost type is initially set in Company Configuration and typically, should not be changed without consulting the Financial Department. The cost type for each item may be different; for instance, finished goods may be at a standard cost while raw materials may be at an average cost.

The cost type for a part can be changed only when the balance falls below zero. The actual cost of the item can always be changed using the Cost Adjustment menu option.

The available costing methods include the following:

- **Average Cost** - This method calculates the weighted average of the receipt costs for this part.
- **FIFO** - This is an abbreviation for **First In First Out**. This method assumes that the next quantity that is issued or shipped from stock is the oldest quantity stored in the warehouse. As long as quantity remains from the original received quantity, the Epicor application uses this cost value until the entire quantity from the original receipt is consumed.
- **Last Cost** - This method calculates the most recent receipt cost for this part.
- **Lot Average Cost** - This method calculates the average cost of the parts in a lot. This is the total cost, divided by the total quantity, for the parts in a lot.
- **Lot FIFO** - This method determines the cost of the parts in a lot by using the FIFO costing method described above.
- **Standard Cost** - This method calculates a set cost you establish and enter for this part. Define and update the standard cost for each part in the **Costing Workbench**.

If a part shipped using Customer Shipment Entry is standard costed, the shipment from the WIP (MFG-CUS) transaction uses the standard unit cost for that part rather than actual costs from the job. If there are variances between the standard cost for the part and the actual costs of the job, the Epicor application creates a MFG-VAR transaction for the remaining Work in Process (WIP) balances.

Recommendations, Considerations, and Approaches

Multiple approaches to resource groups, resources, operations, and methods exist. Each of these approaches impacts scheduling, costing, engineering, and job management. This section details some of the possibilities available when you use the Epicor application.

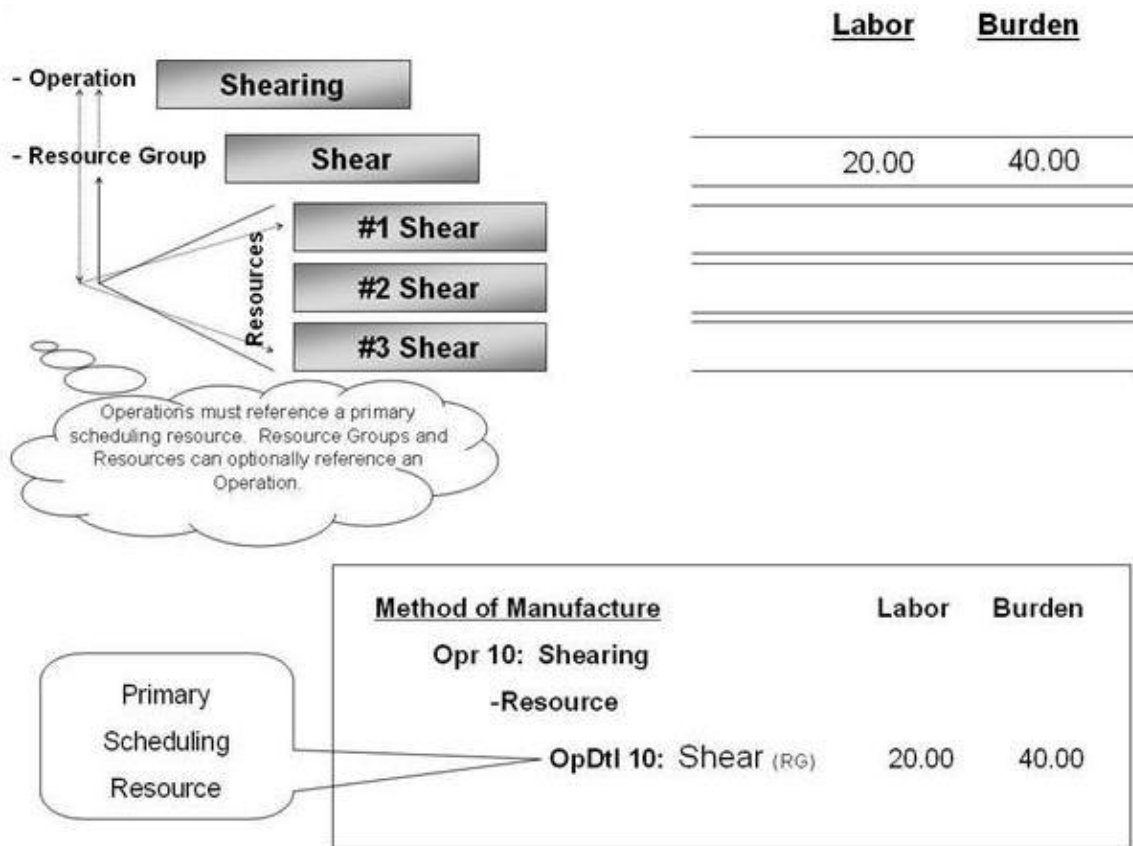
From a scheduling perspective, attaching operations to resource groups, as opposed to resources, provides the most flexibility. Use the **Mass Resource Group Replace** process in the General Operations folder of the Engineering module to change a resource group. This process goes through the methods and swaps out one resource group for another. There is no mass replace process for resources alone, so method maintenance is manual.

If your company typically does not use scheduling or it uses scheduling but everything is scheduled infinitely, Epicor recommends you review the expanded functionality to not lock your company down with an inflexible setup.

Resource groups that only have one resource are a great place to start. This setup allows for growth and future functionality. If the operations are attached to the resource group, you can easily add additional resources as necessary and automatically increase capacity at the group level, making the resources available without changing the methods of manufacturing.

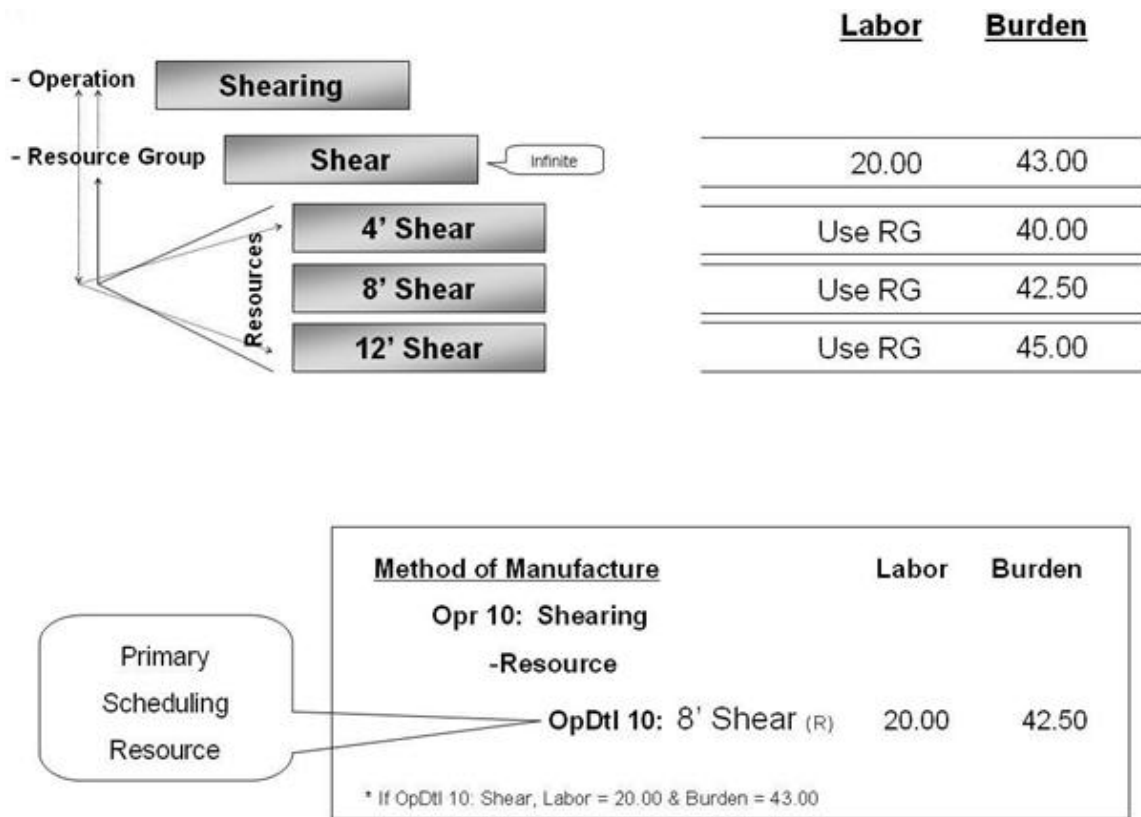
Approach 1: Resource Group Specific

In this example, there are three interchangeable, or generic, shearing machines in the Shear resource group. Each shearing machine was added as a resource to the Shear resource group. Since you can use one of the shearing machines when you perform the operation for this job, you only need the resource group on the method of manufacturing for that job. Labor and burden costs are defined only on the resource group and represent an average of the costs related to each.



Approach 2: Resource Specific

In this example, resources are not interchangeable. The setup depicted here shows an operation that calls for a specific resource in the resource group. This approach works as long as your company has no expected expansion, does not use the Scheduling module, or schedules the resources infinitely. If your company expects expansion in the future and does not schedule the resources infinitely, review the considerations below.



Note If the resource group is selected on the method instead of the 8' shear, the labor and overhead values defined on the resource group are used for the job cost estimate. The values defined on the resource group should be an average of the values defined on the resources in case only the resource group is pulled into the method.

Considerations

In the example described above, it is difficult to add resources that become available. For instance, your company purchases an additional 8' shear you can also use for this operation, or one like it. The new shear is not referred to on the methods of manufacture without manually changing one or more methods to include this new resource. To avoid manually changing methods, create a 4' Shear group, an 8' Shear group, and a 12' Shear group, each containing one shear. Next, attach the appropriate Shear group to the operation. If, and when, you purchase another 8' shear, you can add it to the 8' group, which in turn, doubles the capacity of that group. In addition, both resources in the 8' group are automatically available without changing the MOM.

Approach 3: Multiple Resource Groups or Resources

In this example for a Milling operation, a specific machine and specific skill set are required. Instead of defining a single resource group with machine and skill set resources related to it, two resource groups are defined - Milling Machine, with resources for specific machines, and Mill Work Force, with resources for specific skill sets. Machine resources can be available 24 hours a day, seven days a week; therefore, you can schedule them infinitely. The workforce may work a single shift and be scheduled finitely. Labor and burden costs are both defined on the workforce resource group, and burden only is defined on the machine resource group. Values for each accumulate to arrive at a job cost estimate total. Like the last approach, this approach works as long as your company has no expected expansion, does not use the Scheduling module, or schedules the resources infinitely. If your company expects expansion in the future and does not schedule the resources infinitely, review the considerations below.

		<u>Labor</u>	<u>Burden</u>
- Operation	Milling		
- Resource Group	Milling Machine	0.00	3.00
	CNC Auto	Use RG	5.00
	Semi Auto	Use RG	2.50
- Resource Group	Mill Work Force	15.00	30.00
	Apprentice	10.00	20.00
	Skilled	20.00	40.00

Method of Manufacture	Labor	Burden
Opr 10: Milling		
-Resource		
OpDtl 10: Semi Auto (R)	0.00	2.50
OpDtl 20: Skilled (R)	20.00	40.00
Total Cost	20.00	42.50
* If OpDtl 10: Milling Machine (RG) and OpDtl 20: Mill Work Force, Labor = 15 & Burden = 33.00		

Considerations

Since both the Milling Machine group and the Mill Work Force group contain resources that are not interchangeable, the method of manufacturing must point to the resource, which makes adding additional resources later a time-consuming task. To use added resources on a method of manufacturing, you must manually update the method of manufacturing to use the new resource.

An alternate approach is to have, for example, a CNC Auto group and a CNC Semi-Auto group in addition to an Apprentice Mill Work Force group and a Skilled Mill Work Force group. Even if you start with a single resource in each of these groups, you are still setting up the environment for less complicated updates when you add resources.

Approach 4: Multiple Resource Groups or Resources used with the Advanced Planning and Scheduling Module

In this example, not only are the machines and skill sets defined in their own resource groups, but resource groups for Fixtures are defined as well. The Fixtures resource group contains resources for tools you may also need to schedule. The method of manufacture defines three operation details; more than two operation details are allowed only if the Advanced Planning and Scheduling (APS) module is licensed and enabled.

		<u>Labor</u>	<u>Burden</u>
- Operation	Milling		
- Resource Group	Milling Machine	0.00	3.00
	CNC Auto	Use RG	5.00
	Semi Auto	Use RG	2.50
- Resource Group	Mill Work Force	15.00	30.00
	Apprentice	10.00	20.00
	Skilled	20.00	40.00
- Resource Group	Fixtures	0.00	0.00
	Jig	Use RG	1.00
	Saw	Use RG	Use RG

Only two OpDtl's may be defined unless the APS module is enabled.

Method of Manufacture

Opr 10: Milling

-Resource

	<u>Labor</u>	<u>Burden</u>
OpDtl 10: Semi Auto (R)	0.00	2.50
OpDtl 20: Skilled (R)	20.00	40.00
OpDtl 30: Saw (R)	<u>0.00</u>	<u>1.00</u>
Total Cost	20.00	43.50

Index

I

issue material 45



Additional information is available at the Education and Documentation areas of the EPICweb Customer Portal. To access this site, you need a Site ID and an EPICweb account. To create an account, go to <http://support.epicor.com>.