

JD Edwards EnterpriseOne Applications

Shop Floor Management Implementation Guide

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Describes the Shop Floor Management module, and discusses how to set up and use the module to manage and track manufacturing work orders.

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Contents

Preface	xvii
Audience	xvii
JD Edwards EnterpriseOne Products	xvii
JD Edwards EnterpriseOne Application Fundamentals	xvii
Documentation Accessibility	xviii
Related Documents	xviii
Conventions	xviii
1 Introduction to JD Edwards EnterpriseOne Shop Floor Management	
1.1 JD Edwards EnterpriseOne Shop Floor Management Overview	1-1
1.2 JD Edwards EnterpriseOne Shop Floor Management Business Processes	1-2
1.2.1 Shop Floor Process	1-2
1.3 JD Edwards EnterpriseOne Shop Floor Management Integrations	1-3
1.3.1 JD Edwards EnterpriseOne Product Data Management	1-3
1.3.2 JD Edwards EnterpriseOne Distribution Requirements Planning, Master Production Scheduling, and Material Requirements Planning 1-3	
1.3.3 JD Edwards EnterpriseOne Procurement	1-4
1.3.4 JD Edwards EnterpriseOne Quality Management	1-4
1.3.5 JD Edwards EnterpriseOne Engineer To Order	1-4
1.3.6 JD Edwards EnterpriseOne Warehouse Management	1-4
1.3.7 JD Edwards EnterpriseOne Sales Order Management	1-4
1.3.8 JD Edwards EnterpriseOne Payroll	1-4
1.3.9 JD Edwards EnterpriseOne Inventory Management	1-4
1.3.10 JD Edwards EnterpriseOne Kanban Management	1-4
1.3.11 JD Edwards EnterpriseOne Demand Flow Management	1-5
1.4 Shop Floor Management Implementation	1-5
1.4.1 Global Implementation Steps	1-5
1.4.2 Shop Floor Implementation Steps	1-6
2 Understanding Shop Floor Management	
2.1 Shop Floor Management Features	2-1
2.1.1 Hours and Quantities Tracking	2-1
2.1.2 Reporting	2-1
2.1.3 Material Tracking	2-2
2.1.4 Manufacturing Accounting	2-2

2.1.5	Production Scheduling and Tracking	2-3
2.1.6	Work Order and Rate Schedule Creation.....	2-3
2.1.7	Process or Routing Instructions.....	2-3
2.1.8	Parts List.....	2-3
2.2	Tables for Shop Floor Management	2-4
2.3	Types of Manufacturing.....	2-7
2.3.1	Discrete Manufacturing	2-7
2.3.2	Process Manufacturing	2-7
2.3.3	Repetitive Manufacturing.....	2-8

3 Understanding Lot Processing

3.1	Lot Processing.....	3-1
3.2	Lot Creation	3-3
3.3	Lot Status.....	3-3
3.4	Grade and Potency.....	3-4
3.4.1	Grade and Potency Qualifications.....	3-4
3.4.2	Grade and Potency Control.....	3-5
3.4.3	Lot and Serial Control Items	3-6

4 Setting Up Shop Floor Management

4.1	Understanding Shop Floor Management Setup.....	4-1
4.1.1	Overview of Shop Floor Management Setup	4-1
4.1.2	Prerequisites	4-1
4.1.3	User-Defined Codes for Work Orders	4-2
4.1.4	Work Center Setup	4-5
4.1.5	Resource Unit Setup	4-5
4.2	Setting Up Shop Floor Calendars	4-6
4.2.1	Understanding Shop Floor Calendar Setup.....	4-6
4.2.2	Forms Used to Set Up Shop Floor Calendars	4-7
4.2.3	Setting Processing Options for the Shop Floor Calendar Program (P00071).....	4-7
4.2.3.1	Interop	4-7
4.2.4	Setting Up Shop Floor Calendars	4-7
4.2.5	Revising Shop Floor Calendars.....	4-8
4.3	Setting Up Manufacturing Constants	4-9
4.3.1	Understanding Manufacturing Constants Setup	4-9
4.3.2	Form Used to Set Up Manufacturing Constants	4-10
4.3.3	Setting Up Manufacturing Constants	4-10
4.3.3.1	Manufacturing Constants.....	4-11
4.3.3.2	Shifts	4-12
4.3.3.3	Commitment Control.....	4-12
4.4	Setting Up Employee Labor Rates	4-14
4.4.1	Understanding Employee Labor Rate Setup	4-14
4.4.2	Form Used to Set Up Employee Labor Rates	4-14
4.4.3	Setting Up Employee Labor Rates.....	4-14
4.5	Setting Up Item-to-Line Relationships	4-15
4.5.1	Understanding Item-to-Line Relationship Setup	4-15
4.5.2	Form Used to Set Up Item-to-Line Relationships	4-16

4.5.3	Setting Up Item-to-Line Relationships	4-16
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5 Working with Work Orders and Rate Schedules

5.1	Understanding Work Orders and Rate Schedules	5-1
5.2	Understanding Work Order or Rate Schedule Creation	5-2
5.3	Understanding Attachment of Supplementary Information.....	5-3
5.4	Understanding Start Date Calculation.....	5-3
5.4.1	Fixed Lead Time.....	5-4
5.4.2	Variable Lead Time	5-4
5.5	Understanding Work Order Backscheduling	5-5
5.6	Understanding Shop Paperwork Generation	5-5
5.7	Entering Work Order Headers.....	5-5
5.7.1	Understanding Work Order Header Entry.....	5-5
5.7.2	Prerequisites	5-7
5.7.3	Form Used to Enter Work Order Headers.....	5-7
5.7.4	Setting Processing Options for the Enter/Change Order Program (P48013)	5-7
5.7.4.1	Defaults	5-7
5.7.4.2	Opt Defaults (optional defaults).....	5-8
5.7.4.3	Sales / Configured	5-8
5.7.4.4	Category Codes.....	5-9
5.7.4.5	Validating	5-10
5.7.4.6	Hold Codes.....	5-10
5.7.4.7	Disp Options (display options)	5-10
5.7.4.8	Versions.....	5-11
5.7.4.9	Process Mfg (process manufacturing)	5-12
5.7.4.10	Interop (interoperability).....	5-12
5.7.5	Entering Work Order Headers	5-12
5.7.5.1	Header Area	5-13
5.7.5.2	Dates and Quantities.....	5-13
5.7.5.3	Status & Type	5-14
5.7.5.4	Additional Details 1	5-14
5.8	Entering Rate Schedules.....	5-15
5.8.1	Understanding Rate Schedule Entry.....	5-15
5.8.2	Prerequisites	5-15
5.8.3	Form Used to Enter Rate Schedules.....	5-16
5.8.4	Setting Processing Options for the Enter/Change Rate Schedule Program (P3109).....	5-16
5.8.4.1	Defaults	5-16
5.8.4.2	Display	5-17
5.8.4.3	Categories	5-17
5.8.4.4	Process.....	5-17
5.8.4.5	Edits.....	5-18
5.8.4.6	Versions.....	5-18
5.8.4.7	Interoperability	5-20
5.8.4.8	Hold Codes.....	5-20
5.8.5	Entering Rate Schedules	5-20
5.9	Processing Work Orders and Rate Schedules.....	5-21

5.9.1	Understanding Work Order and Rate Schedule Processing	5-21
5.9.1.1	Order Processing	5-24
5.9.2	Prerequisites	5-25
5.9.3	Running the Order Processing Program	5-25
5.9.4	Setting Processing Options for the Order Processing Program (R31410).....	5-26
5.9.4.1	Edits	5-26
5.9.4.2	Process.....	5-26
5.9.4.3	Defaults	5-27
5.9.4.4	Parts List	5-27
5.9.4.5	Routing.....	5-28
5.9.4.6	Sales/Configurator.....	5-30
5.9.4.7	Printing 1.....	5-30
5.9.4.8	Printing 2.....	5-31
5.9.4.9	Warehouse Management.....	5-32
5.9.4.10	Versions.....	5-33
5.9.4.11	Interoperability	5-34
5.10	Attaching Parts Lists.....	5-35
5.10.1	Understanding Attachment of Part Lists	5-35
5.10.2	Understanding Phantom Items.....	5-37
5.10.3	Understanding Parts List Requirements	5-37
5.10.4	Understanding How to Attach Parts Lists Interactively.....	5-39
5.10.5	Forms Used to Attach Parts Lists Interactively	5-40
5.10.6	Setting Processing Options for the Work Order Parts List Program (P3111)	5-41
5.10.6.1	Edits	5-41
5.10.6.2	Process.....	5-41
5.10.6.3	Warehousing	5-42
5.10.6.4	Versions.....	5-43
5.10.6.5	Export	5-43
5.10.7	Entering Custom Parts Lists.....	5-44
5.10.8	Copying Parts Lists from Bills of Material.....	5-47
5.10.9	Copying Parts Lists from Existing Work Orders	5-47
5.10.10	Selecting Substitute Items.....	5-47
5.10.11	Entering Multiple Locations.....	5-47
5.11	Attaching Routing Instructions.....	5-48
5.11.1	Understanding Attachment of Routing Instructions.....	5-49
5.11.2	Understanding Outside Operations.....	5-49
5.11.3	Understanding How to Attach Routing Instructions Interactively.....	5-50
5.11.4	Understanding Electronic and Device Quality Records	5-50
5.11.5	Prerequisites	5-51
5.11.6	Forms Used to Attach Routing Instructions Interactively	5-52
5.11.7	Setting Processing Options for the Work Order Routing Program (P3112).....	5-53
5.11.7.1	Process.....	5-53
5.11.7.2	Export	5-54
5.11.7.3	Versions.....	5-54
5.11.8	Entering Custom Routings	5-55
5.11.9	Copying Routing Instructions from Standard Routings.....	5-57
5.11.10	Copying Routing Instructions from Existing Work Orders	5-57

5.11.11	Adding Purchase Orders from Outside Operations.....	5-57
5.12	Attaching Co-Products and By-Products	5-57
5.12.1	Understanding the Methods Used to Attach Co-Products and By-Products	5-57
5.12.2	Form Used to Attach Co-Products and By-Products.....	5-58
5.12.3	Attaching Co-Products and By-Products	5-58
5.13	Attaching Intermediate Items	5-59
5.13.1	Understanding Intermediate Items.....	5-59
5.13.2	Form Used to Attach Intermediate Items.....	5-59
5.13.3	Attaching Intermediate Items	5-60
5.14	Assigning Serial Numbers.....	5-60
5.14.1	Understanding Serial Number Assignment	5-60
5.14.2	Prerequisite	5-60
5.14.3	Form Used to Assign Serial Numbers	5-61
5.14.4	Assigning Serial Numbers.....	5-61

6 Working with Commitments

6.1	Understanding Commitments	6-1
6.2	Defining Commitment Rules	6-2
6.2.1	Understanding Commitment Rules.....	6-3
6.2.2	Forms Used to Define Commitment Rules	6-3
6.2.3	Defining the Commitment Method for an Item	6-3
6.2.4	Defining the Commitment Control and Type of Commitment	6-4
6.3	Defining Commitments at a Work Center Location	6-5
6.3.1	Understanding Commitments at a Work Center Location.....	6-5
6.3.2	Forms Used to Define Commitments at a Work Center Location.....	6-6
6.3.3	Defining the Work Center in the Routing Instruction for an Item	6-6
6.3.4	Defining the Location at the Work Center	6-6
6.3.5	Assigning a Component to a Routing Operation.....	6-7
6.4	Managing Commitments for Grade and Potency	6-7
6.4.1	Understanding Commitments for Grade and Potency	6-7
6.4.1.1	Conversion of Units of Measure for Potent Units	6-8
6.4.1.2	Management of Commitments for Grade- and Potency-Controlled Items	6-9
6.4.2	Prerequisite	6-9
6.4.3	Forms Used to Manage Commitments for Grade and Potency	6-9
6.4.4	Converting Units of Measure for Potent Units.....	6-9
6.4.5	Managing Commitments for Grade- and Potency-Controlled Items	6-10
6.5	Reposting Commitments	6-10
6.5.1	Understanding the Repost Open Work Orders Program.....	6-10
6.5.2	Prerequisites	6-11
6.5.3	Running the Repost Open Work Orders Program	6-11
6.5.4	Setting Processing Options for Repost Open Work Orders (R3190).....	6-11
6.5.4.1	Process.....	6-11

7 Working with Availability and Shortages

7.1	Understanding Availability and Shortages.....	7-1
7.2	Defining Availability Calculations for a Branch	7-1

7.2.1	Forms Used to Define Availability Calculations for a Branch	7-2
7.2.2	Defining Availability Calculations for a Branch	7-2
7.3	Reviewing Part Availability Information	7-3
7.3.1	Understanding Part Availability Information.....	7-3
7.3.2	Forms Used to Review Part Availability Information.....	7-3
7.3.3	Setting Processing Options for the Part Availability Program (P30200)	7-4
7.3.3.1	Defaults	7-4
7.3.3.2	Versions.....	7-5
7.3.3.3	Select.....	7-7
7.3.3.4	Process.....	7-7
7.3.4	Reviewing Part Availability	7-9
7.3.5	Setting Processing Options for the Parts List Inquiry Program (P3121).....	7-9
7.3.5.1	Versions.....	7-9
7.3.6	Reviewing Parts List Availability	7-10
7.4	Managing Shortage Information.....	7-11
7.4.1	Understanding Shortage Information	7-11
7.4.2	Forms Used to Manage Shortage Information	7-12
7.4.3	Setting Processing Options for the Shortage Revisions Program (P3118).....	7-12
7.4.3.1	Versions.....	7-12
7.4.3.2	Defaults	7-12
7.4.4	Revising Shortage Information	7-12

8 Working with Issues, Material Movement, and Kanbans

8.1	Understanding Issues, Material Movement, and Kanbans	8-1
8.2	Understanding Inventory Issue	8-2
8.3	Issuing Material by Preflushing.....	8-4
8.3.1	Understanding Preflushing.....	8-4
8.3.2	Prerequisite.....	8-4
8.3.3	Running the Order Processing Program	8-4
8.4	Issuing Material Manually.....	8-4
8.4.1	Understanding the Manual Issue of Material.....	8-5
8.4.2	Forms Used to Issue Material Manually	8-5
8.4.3	Setting Processing Options for the Work Order Inventory Issues Program (P31113).....	8-5
8.4.3.1	Edits.....	8-5
8.4.3.2	Display	8-7
8.4.3.3	Versions.....	8-8
8.4.3.4	Equipment Management.....	8-9
8.4.3.5	Interoperability	8-9
8.4.4	Issuing Material from a Single Location.....	8-10
8.4.5	Issuing Material from Multiple Locations	8-11
8.5	Recording Component Scrap	8-12
8.5.1	Understanding the Recording of Component Scrap	8-13
8.5.1.1	Working with Electronic and Device Quality Records	8-13
8.5.2	Forms Used to Record Component Scrap	8-14
8.5.3	Setting Processing Options for the Component Scrap Program (P31116).....	8-14
8.5.3.1	Process.....	8-14

8.5.3.2	Defaults	8-14
8.5.3.3	SN Processing.....	8-15
8.5.3.4	Versions.....	8-15
8.5.4	Recording Component Scrap	8-15

9 Using Work Order Scheduling and Rate Schedules

9.1	Understanding Work Order Scheduling and Rate Schedules.....	9-1
9.2	Understanding Work Order Mass Updates for Manufacturing Work Orders.....	9-2
9.2.1	Accessing the Work Order Mass Update Programs.....	9-2
9.2.2	Setting Up Your Manufacturing Environment to Use the Work Order Mass Update Process 9-2	
9.2.3	Manufacturing-Specific Work Order Mass Update Functions	9-3
9.3	Revising Work Order Status Information	9-4
9.3.1	Form Used to Revise Work Order Status Information.....	9-5
9.3.2	Setting Processing Options for the Shop Floor Workbench Program (P31225).....	9-5
9.3.2.1	Default 1	9-5
9.3.2.2	Default 2.....	9-6
9.3.2.3	Versions 1.....	9-6
9.3.2.4	Versions 2.....	9-7
9.3.2.5	Interoperability	9-7
9.3.3	Revising Work Order Status Information	9-7
9.4	Scheduling Items on a Production Line.....	9-9
9.4.1	Understanding the Scheduling of Items on a Production Line.....	9-9
9.4.2	Form Used to Schedule Items on a Production Line	9-9
9.4.3	Setting Processing Options for the Line Scheduling Workbench Program (P3153) ..	9-9
9.4.3.1	Defaults	9-10
9.4.3.2	Display	9-10
9.4.3.3	Versions.....	9-10
9.4.4	Scheduling Items on a Production Line	9-11
9.5	Sequencing Rates by Classification Scheme.....	9-12
9.5.1	Understanding the Sequencing of Rates by Classification Scheme.....	9-12
9.5.2	Form Used to Sequence Rates by Classification Scheme	9-12
9.5.3	Setting Processing Options for Line Sequencing Workbench (P3156).....	9-13
9.5.3.1	Process.....	9-13
9.5.3.2	Defaults	9-13
9.5.4	Sequencing Rates by Classification Scheme	9-13

10 Working with Hours and Quantities

10.1	Understanding Hours and Quantities	10-1
10.2	Entering Hours and Quantities.....	10-2
10.2.1	Understanding Hours and Quantities Entry	10-2
10.2.1.1	Working with Electronic and Device Quality Records	10-3
10.2.2	Forms Used to Enter Hours and Quantities	10-4
10.2.3	Setting Processing Options for the Hours and Quantities Program (P311221)	10-4
10.2.3.1	Display	10-4
10.2.3.2	Defaults	10-4

10.2.3.3	Edits	10-4
10.2.3.4	Versions.....	10-5
10.2.3.5	Interoperability	10-6
10.2.4	Entering Hours and Quantities.....	10-6
10.3	Updating Hours and Quantities	10-8
10.3.1	Understanding Hours and Quantities Update.....	10-8
10.3.2	Updating Hours and Quantities.....	10-9
10.3.3	Setting Processing Options for the Hours and Quantities Update Program (R31422).....	10-9
10.3.3.1	Interoperability	10-9
10.3.3.2	S/WM.....	10-9
10.3.3.3	Defaults	10-10
10.4	Reviewing Statuses and Transactions.....	10-10
10.4.1	Understanding the Review of Statuses and Transactions	10-10
10.4.1.1	Reviewing Hours and Quantities Transactions	10-11
10.4.2	Forms Used to Review Hours and Quantities Transactions	10-11
10.4.3	Running the Hours and Quantities Proof Report	10-12
10.4.4	Reviewing the Status of Hours	10-12
10.4.5	Reviewing the Status of Quantities.....	10-12
10.4.6	Setting Processing Options for the Operation Quantity Inquiry Program (P31124)	10-13
10.4.6.1	Defaults	10-13

11 Working with Completions

11.1	Understanding Completions.....	11-1
11.2	Completing Discrete Work Orders.....	11-3
11.2.1	Understanding Discrete Work Order Completion	11-4
11.2.1.1	Releasing Sales Backorders During Completions.....	11-4
11.2.1.2	Managing Completions That Use Receipts Routing	11-5
11.2.1.3	Processing Work Orders through Super Backflush.....	11-5
11.2.1.4	Completing Work Orders with Serialized Components	11-6
11.2.1.5	Working with Electronic and Device Quality Records	11-6
11.2.2	Prerequisites	11-7
11.2.3	Forms Used to Complete Discrete Work Orders	11-7
11.2.4	Setting Processing Options for the Work Order Completions Program (P31114) ..	11-8
11.2.4.1	Defaults	11-8
11.2.4.2	Edits	11-8
11.2.4.3	WO Status	11-10
11.2.4.4	Lot Hold Codes.....	11-11
11.2.4.5	Sales Orders.....	11-11
11.2.4.6	Process Manufacturing	11-12
11.2.4.7	Serial Numbers	11-12
11.2.4.8	Warehouse Management.....	11-13
11.2.4.9	Cross Docking.....	11-13
11.2.4.10	Versions.....	11-14
11.2.4.11	Interoperability	11-15
11.2.5	Completing Work Orders Without Backflushing	11-16

11.2.5.1	Quantity	11-16
11.2.5.2	Lot/Location	11-16
11.2.6	Completing Work Orders Through Backflush.....	11-17
11.2.7	Completing a Work Order for Multiple Locations	11-17
11.2.8	Releasing Sales Backorders During Completions.....	11-18
11.2.9	Managing Completions Using Receipts Routing.....	11-18
11.2.10	Setting Processing Options for the Super Backflush Program (P31123).....	11-19
11.2.10.1	Defaults	11-19
11.2.10.2	Process.....	11-20
11.2.10.3	Edits	11-21
11.2.10.4	Versions.....	11-21
11.2.10.5	Interoperability	11-22
11.2.11	Processing Work Orders Through Super Backflush.....	11-22
11.2.12	Completing Work Orders with Serialized Components.....	11-24
11.3	Completing Process Work Orders.....	11-25
11.3.1	Understanding Process Work Order Completion	11-25
11.3.1.1	Setting the Resource Percent for the Co-Products and By-Products	11-26
11.3.1.2	Releasing Sales Backorders During Completions.....	11-26
11.3.1.3	Processing Process Orders through Super Backflush	11-26
11.3.2	Prerequisites	11-27
11.3.3	Forms Used to Complete Process Work Orders.....	11-27
11.3.4	Completing Process Orders Without Backflushing.....	11-28
11.3.5	Completing Process Orders Through Backflush.....	11-28
11.3.6	Setting the Resource Percent for the Co-Products and By-Products.....	11-29
11.3.7	Releasing Sales Backorders During Completions.....	11-30
11.3.8	Processing Process Orders Through Super Backflush	11-30
11.4	Completing Rate Schedules.....	11-31
11.4.1	Understanding Rate Schedule Completion	11-31
11.4.2	Prerequisite.....	11-31
11.4.3	Forms Used to Complete Rate Schedules	11-32
11.4.4	Setting Processing Options for the Completions Workbench Program (P3119) ...	11-32
11.4.4.1	Defaults	11-32
11.4.4.2	Versions.....	11-32
11.4.4.3	Process.....	11-33
11.4.5	Completing Rate Schedules.....	11-33

12 Processing Transactions for Lean Manufacturing

12.1	Understanding Lean Manufacturing Transactions.....	12-1
12.2	Creating Shop Floor Daily Plans.....	12-2
12.2.1	Understanding Shop Floor Daily Plans.....	12-2
12.2.2	Form Used to Create Shop Floor Daily Plans.....	12-3
12.2.3	Setting Processing Options for Daily Planning (PF31010B)	12-3
12.2.3.1	Defaults	12-3
12.2.4	Creating a Shop Floor Daily Plan	12-3
12.3	Preprocessing Daily Plans	12-4
12.3.1	Understanding Daily Plan Preprocessing.....	12-5
12.3.2	Prerequisites	12-5

12.3.3	Setting Processing Options for BOM and Routing Detail Generation (RF31010A) and Routing Detail Generation - DFM Plan (RF31013) 12-6	
12.3.3.1	Default.....	12-6
12.3.4	Running the BOM and Routing Detail Generation Program.....	12-6
12.3.5	Running the Routing Detail Generation - DFM Plan Program.....	12-6
12.3.6	Setting Processing Options for BOM and Routing Detail Generation - Item/Branch (RF31012) 12-6	
12.3.6.1	Default.....	12-6
12.3.7	Running the BOM and Routing Detail Generation - Item/Branch Program.....	12-7
12.4	Performing Lean Item Completions.....	12-7
12.4.1	Understanding Lean Completions	12-7
12.4.1.1	Shop Floor Daily Plan Completions	12-9
12.4.1.2	Demand Flow Daily Plan Completions.....	12-9
12.4.1.3	Ad Hoc Item Completions	12-10
12.4.1.4	Work Order Completions.....	12-10
12.4.2	Prerequisites	12-10
12.4.3	Forms Used to Perform Lean Completions	12-11
12.4.4	Setting Processing Options for Item Completions (PF31011).....	12-11
12.4.4.1	Default.....	12-11
12.4.5	Setting Processing Options for Multi-Level Item Completions (RF31011B).....	12-12
12.4.5.1	Doc Type	12-12
12.4.5.2	Versions.....	12-12
12.4.6	Setting Processing Options for Shop Floor Plans (PF31012)	12-12
12.4.6.1	Defaults	12-13
12.4.6.2	Versions.....	12-13
12.4.7	Selecting Shop Floor Daily Plans for Completion.....	12-13
12.4.8	Setting Processing Options for Demand Flow Plans (PF31013)	12-14
12.4.8.1	Defaults	12-14
12.4.8.2	Process.....	12-14
12.4.8.3	Versions.....	12-14
12.4.9	Selecting Demand Flow Daily Plans for Completion.....	12-15
12.4.10	Performing Item Completions	12-15
12.4.11	Performing Ad Hoc Item Completions	12-16
12.4.12	Completing Work Orders Against Demand Flow Daily Plans.....	12-16
12.5	Managing Completion Transactions.....	12-16
12.5.1	Understanding Item Completion Reversals	12-17
12.5.2	Forms Used to Manage Transactions.....	12-17
12.5.3	Setting Processing Options for Transaction Management (PF31014)	12-18
12.5.3.1	Default.....	12-18
12.5.4	Reversing Item Completions.....	12-18
12.5.5	Reviewing Transaction Details	12-19

13

Managing Work Order and Rate Schedule Information

13.1	Understanding Work Order and Rate Schedule Information.....	13-1
13.2	Deactivating Work Orders and Rate Schedules	13-1
13.2.1	Understanding Work Order and Rate Schedule Deactivation.....	13-2

13.2.1.1	Work Order and Rate Schedule Deactivation	13-2
13.2.1.2	Rate Schedule and Work Order Status Review	13-3
13.2.1.3	Work Order Closure.....	13-3
13.2.1.4	Rate Schedule Closure	13-4
13.2.1.5	Work Order Purge	13-4
13.2.2	Prerequisite	13-4
13.2.3	Forms Used to Deactivate Work Orders and Rate Schedules	13-5
13.2.4	Reviewing Work Order and Rate Schedule Status	13-5
13.2.5	Setting Processing Options for the Production Status Program (P31226)	13-5
13.2.5.1	Defaults	13-5
13.2.5.2	Process.....	13-6
13.2.6	Changing the Status of Work Orders to Closed	13-6
13.2.7	Changing the Status of Rate Schedules to Closed.....	13-6
13.2.8	Setting Processing Options for the Batch Rate Close Program (R3191).....	13-6
13.2.8.1	Process.....	13-6
13.2.9	Purging Work Orders.....	13-7
13.2.10	Setting Processing Options for the Purge Orders Program (R4801P)	13-7
13.2.10.1	Process.....	13-7
13.3	Reviewing Work Order and Rate Schedule Information.....	13-7
13.3.1	Understanding Work Order and Rate Schedule Review	13-7
13.3.1.1	What You Can Review	13-8
13.3.1.2	Part Usability	13-8
13.3.1.3	Summary Availability	13-8
13.3.1.4	Item Ledger Information	13-8
13.3.1.5	Dispatch List Information	13-8
13.3.1.6	Production History	13-9
13.3.1.7	Production Line Quantities	13-9
13.3.1.8	Production Across Lines.....	13-9
13.3.1.9	Work Center Loads	13-9
13.3.1.10	Process Orders	13-10
13.3.2	Prerequisite	13-10
13.3.3	Forms Used to Review Work Orders and Rate Schedules	13-10
13.3.4	Setting Processing Options for the Part Usability Program (P30212)	13-11
13.3.4.1	Default.....	13-11
13.3.4.2	Versions.....	13-12
13.3.5	Reviewing Summary Availability	13-12
13.3.6	Setting Processing Options for the Summary Availability Program (P41202)	13-13
13.3.6.1	Versions.....	13-13
13.3.6.2	Display	13-14
13.3.6.3	Lot Options	13-15
13.3.7	Reviewing Item Ledger Information	13-16
13.3.8	Reviewing Dispatch List Information.....	13-16
13.3.9	Setting Processing Options for the Dispatch List Program (P31220)	13-16
13.3.9.1	Defaults	13-17
13.3.9.2	Versions.....	13-17
13.3.9.3	Process.....	13-18
13.3.10	Reviewing Production History	13-18

13.3.11	Setting Processing Options for the Production History Program (P31227)	13-18
13.3.11.1	Defaults	13-18
13.3.12	Reviewing Production Line Quantities	13-19
13.3.13	Setting Processing Options for the Line Dispatch List Program (P3159)	13-19
13.3.13.1	Defaults	13-19
13.3.13.2	Process.....	13-20
13.3.14	Reviewing Production Across Lines.....	13-20
13.3.15	Setting Processing Options for the Line Schedule Review Program (P3152)	13-20
13.3.15.1	Defaults	13-20
13.3.15.2	Versions.....	13-20
13.3.16	Reviewing Work Center Loads.....	13-21
13.3.17	Setting Processing Options for the Work Center Schedule Review Program (P31224)	13-21
13.3.17.1	Defaults	13-21
13.3.17.2	Disp Options	13-21
13.3.17.3	WO Processing.....	13-21
13.3.17.4	Versions.....	13-22
13.3.18	Reviewing Process Orders.....	13-22
13.4	Working with Work Center Load Review Calendar (Release 9.1 Update)	13-22
13.4.1	Understanding the Work Center Load Review Calendar	13-22
13.4.1.1	Using the Work Center Load Review Calendar.....	13-24
13.4.1.2	Access to Additional Programs from the Work Center Load Review Calendar	13-27
13.4.2	Prerequisite.....	13-27
13.4.3	Reviewing the Work Center Load.....	13-27
13.4.4	Setting Processing Options for the Work Center Load Review Calendar Program (E313000)	13-30
13.4.4.1	Defaults	13-30
13.4.4.2	Process.....	13-30
13.4.4.3	Versions.....	13-31
13.5	Working with Supply and Demand Information.....	13-31
13.5.1	Understanding Supply and Demand Information	13-31
13.5.2	Form Used to Review Supply and Demand Information.....	13-32
13.5.3	Reviewing Supply and Demand Information	13-32
13.5.4	Setting Processing Options for the Supply/Demand Inquiry Program (P4021)...	13-33
13.5.4.1	Process.....	13-33
13.5.4.2	Display	13-36
13.5.4.3	Versions.....	13-36
13.6	Working with Bills of Material.....	13-39
13.6.1	Understanding Bills of Materials.....	13-39
13.6.2	Forms Used to Work with Bills of Material	13-40
13.6.3	Comparing Two Parts Lists.....	13-40
13.6.4	Comparing a Bill of Material to a Parts List.....	13-40

A JD Edwards EnterpriseOne Shop Floor Management Reports

A.1	JD Edwards EnterpriseOne Shop Floor Management Reports: A to Z.....	A-1
A.2	JD Edwards EnterpriseOne Selected Shop Floor Management Reports	A-2

A.2.1	Processing Options for Shortage Revisions Print (R3118P).....	A-2
A.2.1.1	Print	A-2
A.2.2	R31418 - W. O. Component Shortage List.....	A-2
A.2.3	Processing Options for Component Shortages (R31418)	A-2
A.2.3.1	Edits	A-2
A.2.3.2	Print	A-3
A.2.4	R4051 - Supply and Demand	A-3
A.2.5	Processing Options for Supply and Demand (R4051).....	A-3
A.2.5.1	Process.....	A-3
A.2.5.2	Display	A-5
A.2.6	RF31011P - Lean Transactions - Purge.....	A-6

Index

Preface

Welcome to the JD Edwards EnterpriseOne Applications Shop Floor Management Implementation Guide.

Audience

This guide is intended for implementers and end users of the JD Edwards EnterpriseOne Shop Floor Management system.

JD Edwards EnterpriseOne Products

This implementation guide refers to these JD Edwards EnterpriseOne products from Oracle:

- JD Edwards EnterpriseOne Inventory Management.
- JD Edwards EnterpriseOne Kanban Management.
- JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting.

JD Edwards EnterpriseOne Application Fundamentals

The *JD Edwards EnterpriseOne Shop Floor Management Implementation Guide* provides you with implementation and processing information for JD Edwards EnterpriseOne Shop Floor Management. Additional, essential information describing the setup and design of the system resides in companion documentation. The companion documentation consists of important topics that apply to many or all JD Edwards EnterpriseOne product lines:

- *JD Edwards EnterpriseOne Product Data Management Implementation Guide*
- *JD Edwards EnterpriseOne Inventory Management Implementation Guide*
- *JD Edwards EnterpriseOne Kanban Management Implementation Guide*
- *JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting Implementation Guide*

Customers must conform to the supported platforms for the release as detailed in the JD Edwards EnterpriseOne minimum technical requirements. In addition, JD Edwards EnterpriseOne may integrate, interface, or work in conjunction with other Oracle products. Refer to the cross-reference material in the Program Documentation at <http://oracle.com/contracts/index.html> for Program prerequisites and version cross-reference documents to assure compatibility of various Oracle products.

See Also:

- *JD Edwards EnterpriseOne Applications Product Data Management Implementation Guide.*
- *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.*
- *JD Edwards EnterpriseOne Applications Kanban Management Implementation Guide.*
- *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide.*

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

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Related Documents

You can access related documents from the JD Edwards EnterpriseOne Release Documentation Overview pages on My Oracle Support. Access the main documentation overview page by searching for the document ID, which is 1308615.1, or by using this link:

<https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=1308615.1>

To navigate to this page from the My Oracle Support home page, click the Knowledge tab, and then click the Tools and Training menu, JD Edwards EnterpriseOne, Welcome Center, Release Information Overview.

Conventions

The following text conventions are used in this document:

Convention	Meaning
Bold	Indicates field values.
<i>Italics</i>	Indicates emphasis and JD Edwards EnterpriseOne or other book-length publication titles.
Monospace	Indicates a JD Edwards EnterpriseOne program, other code example, or URL.
> Tutorial	Indicates a link to a recording of the described feature. Ensure that you have an appropriate player installed. Access to these recordings requires a valid Oracle account.

Introduction to JD Edwards EnterpriseOne Shop Floor Management

This chapter contains the following topics:

- Section 1.1, "JD Edwards EnterpriseOne Shop Floor Management Overview"
- Section 1.2, "JD Edwards EnterpriseOne Shop Floor Management Business Processes"
- Section 1.3, "JD Edwards EnterpriseOne Shop Floor Management Integrations"
- Section 1.4, "Shop Floor Management Implementation"

1.1 JD Edwards EnterpriseOne Shop Floor Management Overview

A shop floor management system plays a key role in managing the flow of materials inside the plant. An effectively implemented shop floor management system serves as a mediator between production control and the shop floor. The JD Edwards EnterpriseOne Shop Floor Management system from Oracle provides an effective way to maintain and communicate information that the system requires to complete production requests.

JD Edwards EnterpriseOne Shop Floor Management enables you to manage and track manufacturing work orders. It uses data from the shop floor to maintain and communicate status information regarding materials, work centers, routing instructions, and end operations that are required to complete the production requests. A traditional shop floor uses dispatch lists, capacity requirements, finite scheduling, capacity planning, capacity simulation, and optimization. Some companies might also use bar coding, kanban, and just-in-time manufacturing processes on the shop floor. With JD Edwards EnterpriseOne Shop Floor Management, you can:

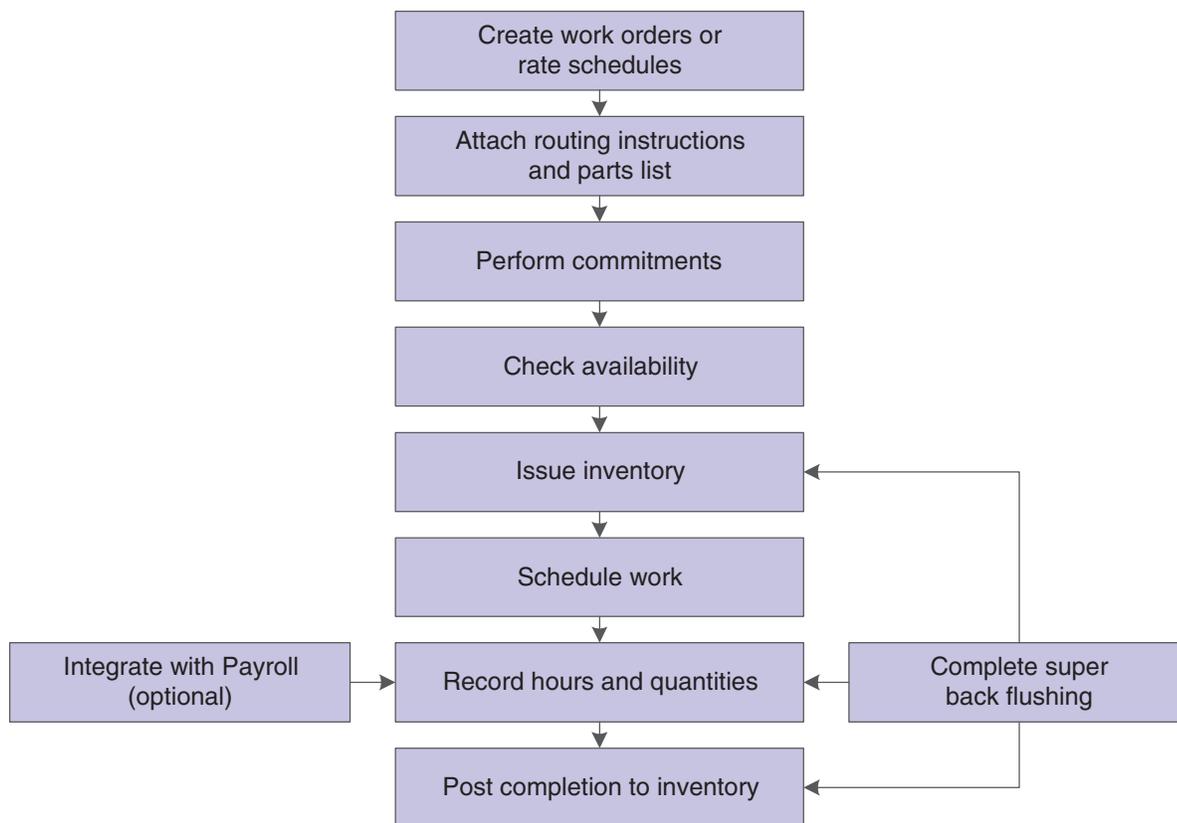
- Create and process work orders, including attaching things like parts lists, routing instructions, co-products and by-products, and intermediate items.
- Process lots, including lots of products in the process industry, such as food, chemical, and pharmaceutical products.
- Work with commitments, including defining commitment rules, defining commitments at a work center location, manage commitments for grade and potency, and reposting commitments.
- Print daily work lists, variance, shortage, and other reports to track and manage shop floor processes.
- Issue and track material, use kanban for material movement, and track scrap.
- Create and maintain work order schedules and rate schedules.

- Track the hours spent on production and the number of end items that are completed on time.
- Transact completed items to update the item quantity records in the inventory management system.
- Set up and use a lean manufacturing solution, which produces end item products at a continuous rate, based on daily customer demand.
- Review, close, or purge work orders and rate schedules.

1.2 JD Edwards EnterpriseOne Shop Floor Management Business Processes

This process flow illustrates the JD Edwards EnterpriseOne Shop Floor Management business processes:

Figure 1–1 Shop Floor Management business process flow



We discuss these business processes in the in the business process chapters in this implementation guide.

1.2.1 Shop Floor Process

The process of scheduling production begins with managing the release of orders to the shop floor. Scheduling production involves setting realistic priorities and adjusting schedules based on required dates and actual dates.

The next step is to manage production by controlling work that is in progress on the shop floor. This means that you must track production on the shop floor to update the

system. Updating the system entails tracking the status of jobs and obtaining the most up-to-date information about production activity. After a company is setup to monitor the shop floor, the system reports information that is required by various departments.

1.3 JD Edwards EnterpriseOne Shop Floor Management Integrations

The JD Edwards EnterpriseOne Shop Floor Management system integrates with these JD Edwards EnterpriseOne systems from Oracle:

- JD Edwards EnterpriseOne Product Data Management
- JD Edwards EnterpriseOne Distribution Requirements Planning
- JD Edwards EnterpriseOne Master Production Schedule
- JD Edwards EnterpriseOne Material Requirements Planning
- JD Edwards EnterpriseOne Procurement
- JD Edwards EnterpriseOne Quality Management
- JD Edwards EnterpriseOne Engineer to Order
- JD Edwards EnterpriseOne Warehouse Management
- JD Edwards EnterpriseOne Sales Order Management
- JD Edwards EnterpriseOne Inventory Management
- JD Edwards EnterpriseOne Payroll
- JD Edwards EnterpriseOne Kanban Management
- JD Edwards EnterpriseOne Demand Flow Manufacturing

JD Edwards EnterpriseOne Shop Floor Management is one of many systems that is used for Supply Chain Management (SCM). SCM enables you to coordinate the inventory, raw material, and labor resources to deliver products according to a managed schedule. It is a manufacturing system that formalizes the activities of company and operations planning, as well as the execution of those plans. We discuss integration considerations in the implementation chapters in this implementation guide. Supplemental information about third-party application integrations is located on the My Oracle Support website.

JD Edwards EnterpriseOne Shop Floor Management integrates with other JD Edwards EnterpriseOne systems to take advantage of single entries, information sharing, and data consistency between systems.

1.3.1 JD Edwards EnterpriseOne Product Data Management

JD Edwards EnterpriseOne Product Data Management (PDM) provides information about bills of material, work centers, routing instructions, and product costs.

1.3.2 JD Edwards EnterpriseOne Distribution Requirements Planning, Master Production Scheduling, and Material Requirements Planning

JD Edwards EnterpriseOne Distribution Requirements Planning (DRP), JD Edwards EnterpriseOne Master Production Schedule (MPS), and JD Edwards EnterpriseOne Material Requirements Planning (MRP) provide suggested purchasing and manufacturing orders that are required to maintain a valid production schedule.

1.3.3 JD Edwards EnterpriseOne Procurement

JD Edwards EnterpriseOne Procurement enables you to automatically generate purchase orders for subcontracted operations on the routing instructions.

1.3.4 JD Edwards EnterpriseOne Quality Management

JD Edwards EnterpriseOne Quality Management enables you to work with test results as you:

- Create, process, manage, and complete work orders and rate schedules.
- Record actual hours and quantities.
- Backflush labor and parts.

1.3.5 JD Edwards EnterpriseOne Engineer To Order

JD Edwards EnterpriseOne Engineer to Order enables you to work with large engineer-to-order projects. You use a number of JD Edwards EnterpriseOne Shop Floor Management programs, such as Order Processing (R31410), Inventory Issues (P31113), and Work Order Completion (P31114), to process the work orders that you create for the project.

1.3.6 JD Edwards EnterpriseOne Warehouse Management

JD Edwards EnterpriseOne Warehouse Management enables you to originate picking requests through manufacturing systems, which further enhances the automated method of tracking inventory movement within a warehouse.

1.3.7 JD Edwards EnterpriseOne Sales Order Management

Sales Order Management enables you to generate work orders when you enter a sales order, and it updates sales information from within Shop Floor Management.

1.3.8 JD Edwards EnterpriseOne Payroll

JD Edwards EnterpriseOne Payroll enables single entry of employees' hours. You can record hours and quantities per work request or per employee to accommodate both piece-rate and hourly-rate employees.

1.3.9 JD Edwards EnterpriseOne Inventory Management

JD Edwards EnterpriseOne Inventory Management enables you to track materials between inventory or storage locations and the shop floor. You can manage inventory issues and commitments, complete orders, and track order quantities throughout the production process.

1.3.10 JD Edwards EnterpriseOne Kanban Management

JD Edwards EnterpriseOne Kanban Management enables you to streamline the day-to-day functions of the shop floor, by using either a physical or electronic card system to track and replenish material at work stations or other locations on the shop floor.

1.3.11 JD Edwards EnterpriseOne Demand Flow Management

JD Edwards EnterpriseOne Demand Flow Management provides you with a means of designing the production line and inventory on the shop floor using the tools of the JD Edwards EnterpriseOne Demand Flow solution. The JD Edwards EnterpriseOne Demand Flow tools include setting up scenarios, defining product synchronizations, setting up mixed model families, creating volume designs, defining process maps, calculating line designs, and calculating operational definitions.

1.4 Shop Floor Management Implementation

This section provides an overview of the steps that are required to implement the JD Edwards EnterpriseOne Shop Floor Management system.

In the planning phase of the implementation, take advantage of all JD Edwards EnterpriseOne sources of information, including the installation guides and troubleshooting information.

When determining which electronic software updates (ESUs) to install for JD Edwards EnterpriseOne Shop Floor Management, use the EnterpriseOne and World Change Assistant. EnterpriseOne and World Change Assistant, a Java-based tool, reduces the time required to search and download ESUs by 75 percent or more and enables you to install multiple ESUs at one time.

See *JD Edwards EnterpriseOne Tools Software Updates Guide*.

For information about the Oracle Business Accelerator solution for implementation of JD Edwards EnterpriseOne Shop Floor Management, review the documentation available.

See http://docs.oracle.com/cd/E24705_01/index.htm.

1.4.1 Global Implementation Steps

Before you can implement JD Edwards EnterpriseOne Shop Floor Management, you must complete several global implementation steps. Global implementation steps are completed by users of many different systems, and are not specific to JD Edwards EnterpriseOne Shop Floor Management. Depending on the features and functionality that the organization uses, you might find that it is not necessary to complete all of these steps. This table lists the suggested global implementation steps for all JD Edwards EnterpriseOne manufacturing products:

- Set up global UDC tables.
See "Working with User Defined Codes" in the *JD Edwards EnterpriseOne Tools System Administration Guide*.
- Set up fiscal date patterns.
See "Setting Up Fiscal Date Patterns" in the *JD Edwards EnterpriseOne Applications Financial Management Fundamentals Implementation Guide*.
- Set up companies.
See "Setting Up Companies" in the *JD Edwards EnterpriseOne Applications Financial Management Fundamentals Implementation Guide*.
- Set up business units.
See "Setting Up Business Units" in the *JD Edwards EnterpriseOne Applications Financial Management Fundamentals Implementation Guide*.

- Set up next numbers.
See "Setting Up Next Numbers" in the *JD Edwards EnterpriseOne Applications Financial Management Fundamentals Implementation Guide*.
- Set up accounts, and the chart of accounts. (Optional)
See "Setting Up Accounts" in the *JD Edwards EnterpriseOne Applications Financial Management Fundamentals Implementation Guide*.
- Set up the General Accounting Constants.
See "Setting Up Constants for General Accounting" in the *JD Edwards EnterpriseOne Applications General Accounting Implementation Guide*.
- Set up multicurrency processing, including currency codes and exchange rates.
See *JD Edwards EnterpriseOne Applications Multicurrency Processing Implementation Guide*.
- Set up ledger type rules. (Optional)
See "Setting Up Ledger Type Rules for General Accounting" in the *JD Edwards EnterpriseOne Applications General Accounting Implementation Guide*.
- Set up address book records.
See "Entering Address Book Records" in the *JD Edwards EnterpriseOne Applications Address Book Implementation Guide*.
- Set up default location and printers.
See "Working with Report Printing Administration" in the *JD Edwards EnterpriseOne Tools Report Printing Administration Technologies Guide*.
- Set up branch/plant constants.
See "Defining Branch, Plant Constants" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.
- Set up Manufacturing/Distribution automatic accounting instructions (AAIs).
See "Setting Up AAIs in Distribution Systems" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.
- Set up document types.
See "Setting Up Document Type Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

1.4.2 Shop Floor Implementation Steps

This table lists the implementation steps for the JD Edwards EnterpriseOne Shop Floor Management system.

- Set up user-defined codes for work orders.
See [User-Defined Codes for Work Orders](#).
- Set up work centers.
See [Work Center Setup](#).
- Set up resource units.
See [Resource Unit Setup](#).
- Set up shop floor calendars.

See [Setting Up Shop Floor Calendars](#).

- Set up employee labor rates.

See [Setting Up Employee Labor Rates](#).

- Set up manufacturing constants.

See [Setting Up Manufacturing Constants](#).

- Set up item-to-line relationships.

See [Setting Up Item-to-Line Relationships](#).

Understanding Shop Floor Management

This chapter contains the following topics:

- [Section 2.1, "Shop Floor Management Features"](#)
- [Section 2.2, "Tables for Shop Floor Management"](#)
- [Section 2.3, "Types of Manufacturing"](#)

2.1 Shop Floor Management Features

This section discusses:

- Hours and quantities tracking.
- Reporting.
- Material tracking.
- Manufacturing accounting.
- Production scheduling and tracking.
- Work order and rate schedule creation.
- Process or routing instructions.
- Parts list.

2.1.1 Hours and Quantities Tracking

You use the hours and quantities tracking features to:

- Enter and track time and quantity completed and quantity scrapped by work order and by employee.
- Allocate and track resource usage by work center per calendar month.
- Review and analyze work order reports with detail information when you use standard versus actual values for:
 - Setup, labor, and machine time.
 - Charging actual hours and quantities to a work order as each manufacturing step is completed.

2.1.2 Reporting

You use the reporting features to:

- Generate reports that compare actual values with planned values and indicate the variance between the two.
- Generate shortage reports by item or work order to identify potential manufacturing constraints due to a lack of required components.
- Print shop floor paperwork, such as work orders, parts lists, and routing instructions for items.
- Review daily work lists to monitor job status, identify queue problems at work centers, and flag other areas, such as engineering changes or lost material.

2.1.3 Material Tracking

You use the material tracking features to:

- Create a parts list automatically when you run the Order Processing program (R31410).
- Attach the parts list and routing instructions to the work order and print shop floor paperwork.
- Check the availability of the components required to manufacture a parent item and generate a shortage list.
- Issue the parts to a work order using a manual, preflush, or backflush method.
- Backflush quantities of components issued to a work order and the labor expended with pay point operations.
- Signal material movement with kanban processing from inventory, work orders, or purchase orders.
- Enter and track completions to inventory when parent items are completed.
- Track where lots are used, and split and trace where lots originate with advanced lot control.
- Maintain and monitor work orders created from the JD Edwards EnterpriseOne Configurator system for configured items.
- Process work orders that produce co-products or by-products.
- Enter issue transactions for inventory items associated with a work order.
- Generate a picking request in the JD Edwards EnterpriseOne Warehouse Management system to select a location and move the inventory. This task occurs after the system creates a parts list without a work center attached, and checks availability. You must have JD Edwards EnterpriseOne Warehouse Management installed to take this step.

2.1.4 Manufacturing Accounting

You use the manufacturing accounting features to:

- Plan and track costs for setup, labor, material, and overhead.
- Compare planned costs to actual costs and calculate a variance amount.
- Create journal entries in the general ledger to charge actual costs and variance costs to a work order or rate schedule.
- Use feature cost percent for co-product and by-product costing.

2.1.5 Production Scheduling and Tracking

You use the production scheduling and tracking features to:

- Schedule work center production for work orders, rate schedules, or both.
- Track and compare planned production schedules with actual schedules.
- Use the online scheduling workbench to review, dispatch, and update production scheduling information in real time.
- Calculate start and completion dates for each work order by operation.
- Maintain the rate schedule after using rate-based Material Requirements Planning (MRP) or Master Production Scheduling (MPS).

2.1.6 Work Order and Rate Schedule Creation

You use the work order and rate schedule creation features to:

- Enter work orders or rate schedules manually.
- Create work orders and rate schedules automatically from MPS or MRP by answering action messages.
- Create work orders from the Sales Order Entry program (P4210), in which you can select kits for assemble-to-order products.
- Generate shop floor paperwork for rate schedules, including standard parts lists and routing instructions.
- Differentiate work orders and rate schedules by type, priority, and status.
- Group work orders by a parent number. For example, you can create job numbers that contain many work order numbers.
- Generate purchase orders for subcontracted operations on the routing instructions for work orders and rate schedules by running the Order Processing program (R31410).

2.1.7 Process or Routing Instructions

You use the process or routing instructions features to:

- Generate routing instructions automatically when you run the Order Processing program (R31410).
- Use master routings or nonstandard routing instructions for items and indicate when to use each item.
- Change the work centers and procedures for each operation on the routing instructions.
- Modify the sequence and status of each operation on the routing instructions.
- Make real-time modifications to routing instructions.
- Review quantity ordered, completed, and scrapped for each operation in the Production Status program (P31226) or the Production History program (P31227).

2.1.8 Parts List

You use the parts list features to:

- Generate a parts list automatically when you run the Order Processing program (R31410)
- Copy an existing bill of material for the items required by a new work order and attach the parts list to the new work order.
- Copy a parts list from an existing work order and attach it to a new work order.
- Specify or change a substitute item or quantities from different locations.
- Select defined substitute items and their quantities on-hand when a component shortage exists.

2.2 Tables for Shop Floor Management

This a list of the tables that are used throughout the JD Edwards EnterpriseOne Shop Floor Management system:

Table	Description
Business Unit Master table (F0006)	Stores branch, plant, warehouse, and business unit information, such as company, description, and category codes that are assigned to that entity.
Generic Message/Rates table (F00191)	Stores codes that correspond to a text message and the employee labor rate. In the JD Edwards EnterpriseOne Shop Floor Management system, these codes are used for the routing instructions text on a work order.
Account Master table (F0901)	Stores account definitions including numbers and descriptions.
Account Ledger table (F0911)	Stores detailed transactions in the general ledger.
Work Center Master File table (F30006)	Stores detailed information, such as efficiency, about all defined work centers.
Bill of Material Master File table (F3002)	Stores information at the business unit level about bills of materials, such as quantities of components, features, options, and levels of detail for each bill.
Lean Multi Level Bill of Material Header table (F300210)	Stores the end item and any related sub-assembly item information for lean manufacturing.
Lean Multi Level Bill of Material table (F300211)	Stores the component information for the end item and related sub-assembly items from the F300210 table. Used only by lean manufacturing.
Item Cost Component Add-Ons table (F30026)	Stores frozen standard costs for the creation of journal entries that are related to work orders.
Routing Master File table (F3003)	Stores information about routing instructions, including operation sequences; work centers; and run, setup, and machine time. The system uses this information to calculate labor, machine, and overhead costs.
Lean Multi Level Routing Detail File table (F300311)	Stores the routing information for the end item and sub-assemblies from the F300210 table. Used by lean manufacturing.

Table	Description
Work Center Resource Units table (F3007)	Stores the capacity information for work centers, such as business unit, month, shift, and efficiency.
Manufacturing Constants table (F3009)	Stores general branch/plant information, such as bill of material and routing instructions validation, commitment control, work hours per day, and costs.
Kanban Master table (F3016)	Stores the set of kanban cards that are associated with an item. Each kanban defines the supplying location, consuming location, quantity, and unit of measure. The system uses next numbers to control the kanban identification number. If the system obtains the item from an external source, the supplier's number is included.
Kanban Card Detail table (F30161)	Stores information related to the kanban, such as status, transaction quantity, and date updated.
Line Master table (F30L912)	Stores production line information used in JD Edwards EnterpriseOne Demand Flow manufacturing.
Production Master table (FF31010)	Stores the daily plans for lean manufacturing. Contains the Production IDs that are used for tracking.
Transaction ID Master table (FF31011)	Stores the completion and scrap information when JD Edwards EnterpriseOne Demand Flow completions are entered.
Production Cost table (F3102)	Stores the work order variance. Variance is the difference between actual costs and the standard costs that were defined at the beginning of the accounting period.
Work Order LSN table (F3105)	Stores the data that identifies work order assemblies with lot serial numbers.
Summarized WO Cross-Reference table (F3108)	Stores the cross-reference information for work orders, such as batch number and date, user, program ID, and workstation.
Line/Item Relationship Master table (F3109)	Stores the relationships between items and production lines. The system uses one of the records as the default rate generation rule.
Schedule Quantity Detail table (F31091)	Stores the daily quantities that make up a work order or a rate schedule. The system uses this table for scheduling and sequencing production lines and work centers.
Work Order Parts List table (F3111)	Stores the components required by a work order.
Work Order Routing table (F3112)	Stores the routing steps that are attached to a work order or rate schedule. It contains one record for each operation sequence number and work center.
Work Order Time Transactions table (F31122)	Stores the labor transactions reported on work orders and rate schedules.
Shortage Maintenance Master File table (F3118)	Stores component shortages for work orders.

Table	Description
Distribution/Manufacturing - AAI Values table (F4095)	Stores the AAIs for the JD Edwards EnterpriseOne Manufacturing systems.
Assembly Inclusion Rules table (F3293)	Stores the inclusion parameters for item numbers and business units.
MPS/MRP/DRP Message File table (F3411)	Stores the supply and demand relationship among the branches.
Forecast File table (F3460)	Stores the forecast data that Resource Requirements Planning (RRP) validates. The data is then used as input to MPS/MRP/DRP.
Inventory Constants table (F41001)	Stores the constants for the day-to-day transactions that occur within the JD Edwards EnterpriseOne Inventory Management system. Inventory constants direct the nature of certain integrated operations between JD Edwards EnterpriseOne Inventory Management and other systems, such as JD Edwards EnterpriseOne Sales Order Management, JD Edwards EnterpriseOne Procurement, and JD Edwards EnterpriseOne General Accounting.
Item Master table (F4101)	Stores basic information about each defined inventory item, such as item number, description, category codes and units of measure.
Item Branch File table (F4102)	Stores the warehouse or plant-level information for an item, such as costs, quantities, category codes, and physical locations.
Item Location File table (F41021)	Stores all inventory locations for an item.
Item Cross Reference File table (F4104)	Stores information that enables you to relate item numbers for a specific purpose.
Lot Master table (F4108)	Stores the potency of a lot.
Item Ledger File table (F4111)	Stores transaction history for all items.
Item History table (F4115)	Stores usage data for items that are optional in some transaction programs in the JD Edwards EnterpriseOne Shop Floor Management system.
Warehouse Requests table (F4600)	Stores putaway, picking, and replenishment requests.
Location Detail Information table (F4602)	Stores the information for locations, such as item, business unit, and lot.
Warehouse Suggestions table (F4611)	Stores putaway, pick, and replenishment suggestions for inventory movement
Work Order Master File table (F4801)	Stores the work order and rate schedule information, such as item numbers, quantities, dates, lots, locations, and shift codes.
Work Order Instructions File table (F4802)	Stores text and instructions for specific work orders that are identified by different record types.

2.3 Types of Manufacturing

Discrete, process, and repetitive manufacturing all use bills of material and routing instructions. The bills of material contain individual parts or components, such as nuts, bolts, wire, plastic, or metal parts of a fixed or variable quantity. Products can be broken down into subassemblies that go into various larger assemblies. The routing instructions include the operations to be performed, their sequence, the various work centers involved, and the standards for setting up and running the operations.

All types of manufacturing use the term *item* for both the raw materials and finished goods. Not all items are planned, scheduled, or produced in their primary unit of measure. To accommodate this fact, full unit of measure capabilities are allowed throughout JD Edwards EnterpriseOne Shop Floor Management. Most entry programs have a Unit of Measure field next to the quantity fields. The unit of measure is stored in the database tables with the quantities. Throughout JD Edwards EnterpriseOne Shop Floor Management, the system uses the values in these three fields in the Item Master table (F4101) as default values in entry forms:

- Component Unit of Measure
- Production Unit of Measure
- Primary Unit of Measure

The value in the Primary Unit of Measure field must be the smallest of the three units of measure.

See "Defining Default Units of Measure for Bulk Items" in the *JD Edwards EnterpriseOne Applications Bulk Stock Inventory Implementation Guide*, if the company uses or manufactures bulk product.

2.3.1 Discrete Manufacturing

Discrete manufacturing is typically characterized by these conditions:

- Work orders produce a specific quantity of a single item for a specific completion date.
- Routing instructions are a series of independent operations.
- Components can be manually issued with the release of the work order, backflushed at the completion of the work order, or both.

Discrete manufacturing is most often used in these manufacturing environments:

- Make-to-stock, using either a highly repetitive or process order-based system.
- Any of the to-order strategies, such as make-to-order, assemble-to-order, or engineer-to-order.
- The one-off or job shop environment

Discrete manufacturing is used to produce items such as:

- Cars
- Furniture
- Electronics
- Airplanes

2.3.2 Process Manufacturing

Process manufacturing is typically characterized by these conditions:

- Work orders produce multiple items, both co-products and by-products, for a specific completion date.
- Routing instructions are a series of dependent operations that work together continuously.
- Products are often produced in batches or with a continuous process.
- Components or ingredients are often stated in terms of a recipe or formula.
- Quantities of components or ingredients can vary according to their grade or potency.
- Components or ingredients can be issued by preflushing with the release of the work order or backflushed at the completion of the work order.

Process manufacturing is most often used to produce:

- Pharmaceuticals.
- Foods and beverages.
- Raw materials such as lumber, metals, and fluids.

The different types of processing in process manufacturing consist of:

Type of processing	Description
Batch processing	In batch processing, a product is usually made in a standard run or lot-size that is determined by vessel size, line rates, or a length of standard run. Items are typically scheduled in short production runs due to the life cycle of the product after its completion. Typical items might be pharmaceuticals, foods, inks, glues, oil or chemical products, and paints. A co-products and by-products list might be generated during batch processing.
Continuous processing	In continuous (or flow) processing, the production period is typically extended, using dedicated equipment that produces one product or product line with slight variations. This method of manufacturing is characterized by the difficulty of planning and controlling variances in quantity and quality yield. Typical items might be petroleum-based products or distilled seawater. Co-products and by-products are generally more prevalent in continuous processing than in batch processing.

Strategies that are similar to discrete manufacturing, including repetitive or any of the to-orders strategies (such as, make-to-order, assemble-to-order, or engineer-to-order) might be used to control the process. Usually, both batch and continuous processing methods require extensive record-keeping. You must track quality and tolerance values during the process, as well as strictly adhere to *lot tracing* and *lot tracking*. You use lot tracing to display the items that are assigned to a lot. You use lot tracking to display the items that are removed from a lot.

2.3.3 Repetitive Manufacturing

Repetitive manufacturing is typically characterized by these conditions:

- Production lines are dedicated to a family of products.
- Product families share similar components and routing instructions.
- Products are often manufactured in a continuous process that requires less inventory movement to and from the production line.
- Work center setup and changeover times between related products are minimized.
- Production is defined in units per hour. The time spent at the operational level might or might not be important. Therefore, you must be able to set up line capacity and define routing instructions in units per hour at the line level. The fundamental basis for backscheduling and capacity planning is hours. To view information in units, the system uses a conversion factor defined at the work center level.
- Visual cues, called kanbans, control material movement. Kanbans represent predetermined quantities of components at specified locations on the production line. They are designed to minimize work-in-process inventories.

Understanding Lot Processing

This chapter contains the following topics:

- [Section 3.1, "Lot Processing"](#)
- [Section 3.2, "Lot Creation"](#)
- [Section 3.3, "Lot Status"](#)
- [Section 3.4, "Grade and Potency"](#)

3.1 Lot Processing

Lot processing enables you to manage information about groups of items. For example, for groups of perishable items, you can have the system assign lot numbers based on receipt dates that identify the items that you must sell first. You can view current information about each lot, such as the quantity of available items and the transactions that have affected the lot.

Lot control is beneficial for identifying groups of items that are components of a final product. For example, if you assign lot numbers to both bicycle tires and bicycles assembled from the tires, you can:

- Identify the lot number for the tires that were used in the manufacture of a specific bicycle.
- Identify all bicycles that used tires from a specific lot.

If you later find that a particular lot of tires is defective, you can immediately identify and recall all bicycles that drew from the lot of defective tires.

A lot usually contains one type of item, but you can set up system constants in the Branch/Plants Constants program (P41001) to allow different types of items in the same lot. When a lot contains different items, the system maintains lot information for each lot number and item. You can also set up system constants to restrict a lot to one type of item and still allow that lot to exist in multiple warehouses.

In manufacturing, you can complete items in multiple lots in inventory from a single work order. When you report multiple lot completions, the system links materials issued to the work order to the completed items by lot number. If you do not have a lot number for the end item by the time that you issue component materials, the system uses only the work order number to link the components to the end item.

The system enables you to define multiple dates that are relevant for lot processing. These dates can be used to determine when lot-controlled items become available. For each lot containing a lot-controlled item, you can define these availability dates based on the information that is set up for the item in the Item Master (P4101) and the Item Branch/Plant (P41026) programs:

- Lot expiration date.
- On-hand date.
- Best-before date.
- Sell-by date.
- Lot effectivity date.
- Based-on date.
- User lot dates 1 through 5.

You can use the lot expiration date, the sell-by date, and the best-before date, as well as the user-defined lot dates, to define the commitment date method.

Expiration planning considers the expiration dates of lots while calculating the on-hand quantity and consumes the lot quantities in the order of expiration dates. That is, lots with the most current expiration dates are consumed first. This is the first-in, first-out (FIFO) method. Expiration planning is important because whoever in the chain has possession of the product when it expires incurs the loss. Accurate planning, forecasting, and adherence to schedules are important to expiration planning because products must make it through the entire chain from the supplier and, finally, to the customer before the expiration date. If any party in the chain does not adhere to the schedule, at least one party incurs a loss.

By using the lot effectivity date, you can define a lot to become available for use at a future date. You can calculate the effective date for the lot manually or automatically when the lot is created and becomes on-hand. You can use the Manufacturing Effective Days field on the Item Master Revisions form or the Item Branch/Plant Info form to define the number of days before which a lot will be effective.

When you set the appropriate processing options, JD Edwards EnterpriseOne Manufacturing Planning systems perform these actions:

- Deduct expired quantities of items from the on-hand values.
- Send a warning message that is recorded in the MPS/MRP/DRP Message File table (F3411).
- Adjust the time series to reflect the expired product's effect.

You can use several methods to assign lot numbers to items. For example, you can use one of these methods:

- Have the system assign lot numbers.
- Assign user-defined lot numbers.
- Assign supplier lot numbers.

See Also:

- "Defining System Constants" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.
- "Setting Up Dates for Lots" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.
- "Entering Lot Date Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.
- "Defining Effective Dates for Future Availability" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

3.2 Lot Creation

You can create lots automatically or manually. Lots are generated automatically when you perform any of these tasks:

- Create purchase order receipts.
- Complete work orders.
- Adjust inventory.

You can create lots manually, by accessing the Lot Master Revisions program (P4108) either directly from the menu or during work order entry from the Work Order Details form. Each time that you create a lot, the system adds a record to the Lot Master table (F4108).

The actual grade and potency of a lot is defined in the Lot Master table. You also use the Lot Master Revisions program to specify a reason code for a grade or potency change. In addition, you can use processing options to protect a grade or potency from being updated.

Lot master information includes the status and availability dates for the lot. You can also define grade and potency for a lot and specify a reason code for a grade or potency change. In addition, you can use processing options to protect a grade or potency from being updated.

See Also:

- "Entering Lot Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

3.3 Lot Status

The status of a lot determines whether it is available for the system to process. When a lot is on hold for any reason, the system does not process it unless you activate a processing option that enables processing of held lots.

You set up lot status codes to identify reasons that a lot can be put on hold. After you set up the codes, you can assign them to items and lots.

You set up lot status codes in the user-defined code (UDC) table 41/L (Lot Status Codes) by using the User Defined Codes program (P0004A). You assign status codes to different lot locations in the Lot Master Revisions program (P4108). You can assign different status codes to a single lot based on the different locations in which the lot resides. When assigning a lot status, you can use the status code from the lot's record in the Lot Master table (F4108) or the default status from the Item Branch File table (F4102) if no lot status exists.

You can run the Lot Status Update program (R41082) to place expired lots on hold. You can run the program in proof or final mode. If you run the program in proof mode, you can produce a report showing all lots that will be put on hold. If you run the program in final mode, you can produce a report showing all lots that have been put on hold. You assign lot statuses when you:

- Enter a new lot using the Lot Master Revisions form. If you do not enter a status at this time, the system uses the lot status from the item's branch information in the Item Branch File table.
- Set up a new location for an item using the Item Branch/Plant program (P41026).

You can assign lot statuses to different lot locations using the Location Lot Status Update form from the Lot Master Revisions program. When you create a lot through

transfer from another location, the system assigns statuses, using the status code of the From location. You can assign status codes to locations without using lots. Whether the system processes items that reside in locations that are on hold depends on how you set the processing options.

Use these tables to determine the lot status for newly created records in the Lot Master table and the Item Location File table (F4108):

Table	Description
Lot Master (F4108)	<p>If you enter a lot status on the Lot Master Revisions form, the system uses that lot status.</p> <p>If you do not enter a lot status, the system uses the default lot status from the Item Branch File table.</p>
Item Location File (F41021)	<p>If you enter a lot status on the Lot Master Revisions form, the system uses that lot status.</p> <p>If you are moving a lot from another location, the system uses this sequence to assign a lot status:</p> <ul style="list-style-type: none"> ■ The default lot status from the From location. ■ If a lot number exists, the lot status from the Lot Master record. ■ If no lot number exists, the default lot status from the Item Branch File table.

See Also:

- "Assigning Lot Status Codes" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

3.4 Grade and Potency

This section discusses:

- Grade and potency qualifications.
- Grade and potency control.
- Lot and serial control items.

3.4.1 Grade and Potency Qualifications

Manufacturers in the process industry need full control over the quality of products that they make or buy. Examples of process industries include the food, chemical, and pharmaceutical industries. Grade and potency qualifications enable you to categorize products more specifically and trace their movement through the manufacturing and distribution processes.

Grade identifies the particular specification makeup of an item and enables the system to separate one lot from other production lots without changing the item number. Examples of items that have grades are diamonds, lumber, and raw turquoise. Potency refers to the percentage of active ingredient within a solution, such as a 40 percent solution of hydrochloric acid, 3.2 beer versus beer with standard percentages of alcohol, and coffee with varying amounts of caffeine.

In the JD Edwards EnterpriseOne systems, grade and potency are mutually exclusive. You can use only one or the other to categorize an item. All items that are grade- or potency-controlled must also be tracked by lot number. Grades and potencies divide items by their specific makeup or characteristics without changing item numbers. Programs that calculate on-hand and available quantities use the grade or potency for each lot.

For grade- and potency-controlled items, you can enter a standard (preferred) value for each item. You can also enter a range of acceptable values that enable you to continue operations with grades or potencies that are outside of the standard value, but are still acceptable for use. A range helps to establish and maintain quality levels in products, but is flexible enough to keep operations running when the standard level of product is unavailable. The system records grade or potency and lot transfer transactions in the item ledger and the general ledger, so that accounting is incorporated into the tracking.

Only items that meet the grade or potency range requirements stated in the bill of material are issued to the shop floor for production. Components that are outside of the range do not appear as available or on-hand in material inquiries for JD Edwards EnterpriseOne Shop Floor Management. You can order only a certain grade or potency of an item. Sales order and purchase order systems accommodate grade and potency standards and ranges.

3.4.2 Grade and Potency Control

You set up grade- or potency-control fields on the Grade and Potency tab of the Additional System Information form in the Item Master program (P4101). This table describes the control field values that the system uses when you create a branch/plant record for an item:

Control Field	Description
Grade/Potency Pricing	Determines how to price grade- or potency-controlled items in JD Edwards EnterpriseOne Sales Order Management.
Potency Control	Identifies whether the item is potency-controlled.
Grade Control	Identifies whether the item is grade-controlled.
Standard Potency	Identifies the standard percentage of active ingredients that are normally found in an item. The value that you enter provides the default value for several forms in the JD Edwards EnterpriseOne Manufacturing systems. In certain cases, the potency standard is used for the potent unit of measure conversion.
Standard Grade	Identifies the standard grade of the item, such as premium or average. The value that you enter provides the default value for several forms in JD Edwards EnterpriseOne Manufacturing systems.
From and Through Potency	Defines the allowable potency ranges for an item.
From and Through Grade	Defines the allowable grade ranges for an item.

Defining the values for grade, potent units of measure, and conversions for potent units of measure includes:

- Defining the values in UDC 40/LG (Lot Grade) for the grades that you will use.
- Defining the values in UDC 00/UM (Unit of Measure) for the potent units of measure.

For each potent unit of measure that you define, you must type **P** in the second space of the Special Handling Code field on the User Defined Codes form.

- Defining a conversion for each potent unit of measure to a physical unit of measure in the Standard Units of Measure program (P41003).

For example, 100 gallons of a solution at 80 percent potency equals 80 potent gallons, and 80 potent gallons of a solution at 80 percent equals 100 gallons.

See Also:

- "Setting Up Manufacturing Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

3.4.3 Lot and Serial Control Items

Grade- and potency-controlled items must be lot-controlled. Use the Item Branch/Plant program (P41026) to identify an item as a lot- or serial-controlled item by entering one of these values in the Lot Process Type field:

Value	Description
Blank	Lot assignment is optional. Numbers must be manually assigned. Quantity can be greater than one.
1	Lot assignment is used. Numbers are assigned by the system using the system date in YYMMDD format. Quantity can be greater than one.
2	Lot assignment is used. Numbers are assigned in ascending sequence using next numbers. Quantity can be greater than one.
3	Lot assignment is required. Numbers must be manually assigned. Quantity can be greater than one.
4	Serial number assignment is optional except during shipment confirmation. Quantity must not exceed 1.
5	Serial number assignment is required. The system assigns numbers using the system date in YYMMDD format. Quantity must not exceed 1.
6	Serial number assignment is required. The system assigns numbers in ascending order using next numbers. Quantity must not exceed 1.
7	Serial number assignment is required. You must manually assign numbers. Quantity must not exceed 1.

When you attach a parts list to a work order header, the system creates commitments for the components. How these commitments are created depends on the parameters of commitment method, commitment control, and hard- or soft-commit. After you set up these parameters, commitments can be created in the same manner using both the Enter/Change Order (P48013) and Order Processing (R31410) programs.

When an item is defined as lot-controlled, the system moves the grade or potency range to the parts list and allows only those lots within the range to be eligible for commitments. Any remaining quantities are committed to the primary location.

Setting Up Shop Floor Management

This chapter contains the following topics:

- Section 4.1, "Understanding Shop Floor Management Setup"
- Section 4.2, "Setting Up Shop Floor Calendars"
- Section 4.3, "Setting Up Manufacturing Constants"
- Section 4.4, "Setting Up Employee Labor Rates"
- Section 4.5, "Setting Up Item-to-Line Relationships"

4.1 Understanding Shop Floor Management Setup

This section provides an overview of JD Edwards EnterpriseOne Shop Floor Management setup, lists prerequisites, and discusses:

- User-defined codes for work orders.
- Work center setup.
- Resource unit setup.

4.1.1 Overview of Shop Floor Management Setup

JD Edwards EnterpriseOne Shop Floor Management requires some setup before you can use the system. Setup for JD Edwards EnterpriseOne Shop Floor Management includes identifying the codes needed for work orders, such as priority, status, and category codes, and defining the information needed for discrete, process, and repetitive manufacturing, such as shop floor calendars, work centers, and so on.

You must also set up information that is necessary for manufacturing, such as generic messages, shop floor calendars, manufacturing constants, work centers, resource units, and item-to-line relationships.

4.1.2 Prerequisites

Before you set up JD Edwards EnterpriseOne Shop Floor Management, you must:

- Set up records in these tables in the JD Edwards EnterpriseOne Inventory Management system:
 - Item Master table (F4101)
See "Entering Item Master Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.
 - Item Branch File table (F4102)

See "Entering Branch, Plant Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

- Verify that all of the items that you want to control by kanbans are set up and that the kanbans are generated and printed.

See "Setting Up Kanban Management" in the *JD Edwards EnterpriseOne Applications Kanban Management Implementation Guide*.

- Set up the work centers and dispatch groups as valid business units in the Revise Single Business Unit program (P0006).
- Set up processing options for the Work Center Revisions program (P3006).
- Define work days for the branch or plant in the shop floor calendar.

4.1.3 User-Defined Codes for Work Orders

Many fields throughout JD Edwards EnterpriseOne Shop Floor Management accept only user-defined codes (UDCs) for work orders. You need to define these UDCs for manufacturing work orders.

UDCs are stored in tables by system and code type. For example, system 31, type OS represents JD Edwards EnterpriseOne Shop Floor Management and a UDC called *operation status*. To set up operation status codes for work orders, use the User Defined Codes program (P0004A). If you enter an operation status code on another form that you did not identify as an operation status code in the User Defined Codes program, the system displays an error message. For example, in the Operation Status Code field, you can enter only those codes that exist in UDC 31/OS.

You can access all codes through a single user-defined code form. You can access the UDC form by entering UDC in the fast path. After you select a UDC from a menu, you can change the values in the System Code and User Defined Code fields to access another UDC table. The system stores UDCs in the User Defined Codes table (F0005).

This table describes the UDCs for work orders:

User-Defined Code	Description
Work Order/ECO Type (00/TY)	Work Order/Engineering Change Order (ECO) type codes indicate the classification of a work order. For example, rework orders might be type R, and design orders might be type D.
Work Order Priority Code (00/PR)	Work order priority codes indicate the priority of a work order in relation to other work orders. These codes are for reference only and do not affect the scheduling or planning of work. Do not use these codes as the formal priority system.

User-Defined Code	Description
Work Order Status Code (00/SS)	Work order status codes describe the status of an order or the current step in the process of implementing a work order. You can prevent certain transactions from occurring, based on the status of a work order. For instance, the system can hold work orders for which the status indicates that they are pending approval or quality inspection, and release work orders that have status codes indicating that they have been approved or have passed quality inspection. You can also set up the system to automatically update the work order status code when you enter issue and completion transactions.
Phase and Matter Codes (00/W1)	Phase and matter codes indicate the implementation phase of the work order. You can use phase and matter codes to group families of orders for project management, cost accounting, and inquiry purposes. For example, if inspection on the internal parts of a product is not possible beyond a certain point in its production, you can divide the routing into phases. You can then use the phase code to indicate the availability of the product for the next level of inspection.
Work Order Category Codes (00/W2 and 00/W3)	Work order category codes can represent any category or description by which you want to group work orders for project management, cost accounting, or reviews. For example, you can set up one category code to represent types of problems that you might encounter during the work order implementation, such as improper startup or inadequate maintenance, and another code to represent locations in which the work is taking place.
Operation Status (31/OS)	Work order operation status codes indicate the progress or status of an order during the steps that you follow in a particular operation. For example, you can set up codes to indicate whether materials have been received or work has begun at a particular operation. This code enables management to monitor the progress of operations that have longer run times, or shop floor personnel to indicate when items are ready to move to the next operation.

User-Defined Code	Description
Document Type (00/DT)	<p>Document type codes categorize information throughout the JD Edwards EnterpriseOne systems. You can specify up to 12 document types to use for work orders and rates in supply and demand calculations by entering them in the processing options for the Supply/Demand Inclusion Rules program (P34004) in Material Planning. Manufacturing Accounting uses the document type to match the orders to the document types that are defined in the Automatic Accounting Instructions (AAIs) when you post journal entries to the general ledger. You can use the document type codes to categorize work orders by document type. For example, you can define document type codes to indicate rework orders, prototype orders, or repair orders. If you do not specify a document type on a new work order, the system enters a document type of WO (Firm Work Order).</p> <p>In the Codes field, enter the two-character document type code for which you want the system to track lot quantities. For example, enter OP to enable the system to track lot quantities for all purchase orders.</p>
Order Type (48/OT)	<p>Order type codes enable you to distinguish each work order record in the Work Order Master File table (F4801) from other records with different work order types. For example, you do not use the same document type and work order type to represent both an equipment work order and a manufacturing work order. The relationship between the document type and its related order type is defined in the Document Type Maintenance program (P40040).</p>
Unit of Measure (00/UM)	<p>Unit of measure codes must be assigned to each item that you purchase, issue, manufacture, or sell. Each item can have as many as eight units of measure, but one must be identified as the primary unit of measure. You must also set up the conversion tables after you have set up all unit of measure and potent unit of measure codes.</p> <p>Potent units are units of measure for items with potency. The potent units always have a comparable code in UDC 00/UM. For example, if the company uses potency and measures product in gallons, you set up a code such as <i>GA</i> for gallon and a potent unit code such as <i>GP</i> for the potent gallon. When you set up potent units, you must enter P in the Special Handling Code field.</p> <p>When the system creates commitments for an item that is set up with a potent unit of measure, it converts the quantity to the primary unit of measure. For example, if you issue product in <i>GP</i> (potent gallons), the system converts it to the primary unit of measure of <i>GA</i> (gallons).</p>

See Also:

- *JD Edwards EnterpriseOne Tools Foundation Guide.*

4.1.4 Work Center Setup

You can maintain general information about a work center, such as pay points, prime load codes, number of machines and workers, crew size, and backflush locations. You set up work centers by branch/plant, which means that you can associate the same work center with multiple branch/plants. You can also define a unique shop floor calendar for a particular combination of work center and branch/plant.

From the Enter/Change Work Centers program (P3006), you can access business unit information to maintain business units and track costs.

Note: If you use JD Edwards EnterpriseOne Warehouse Management and do not set up valid work center locations, the system interfaces with JD Edwards EnterpriseOne Warehouse Management when you attach a parts list to a work order. If you set up valid work center locations before you attach a parts list, but the work order quantity exceeds the quantity that you have in the work center, the system uses JD Edwards EnterpriseOne Warehouse Management to create a pick request for the remaining quantity to fill the work order request. This process follows the rules that you define in JD Edwards EnterpriseOne Warehouse Management.

Use the Enter/Change Work Centers program to set up production lines for repetitive manufacturing. This setup consists of linking work centers together to establish a specific repetitive line on which a product family will be manufactured.

See Also:

- "Creating Work Centers" in the *JD Edwards EnterpriseOne Applications Product Data Management Implementation Guide.*
- "Setting Up Simulated Rates for Work Centers" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide.*

4.1.5 Resource Unit Setup

Resource unit information indicates the capacity of a work center on a given day. The system uses this information to back-schedule work orders in JD Edwards EnterpriseOne Shop Floor Management and to calculate available hours for capacity planning.

You can manually change the values to account for scheduled or unscheduled downtime, additional shifts, or vacation time. However, each time that you run the Work Center Resource Units Generation program (R3007G), the system recalculates the form values based on information in the Work Center Revisions program (P3006), the Shop Floor Calendar program (P00071), and the Manufacturing Constants table (F3009), and then overwrites the changes that you entered manually, based on the effectivity dates that you specified in the processing options.

The Work Center Resource Units Generation program recalculates the work center hours and updates them on the Work Center Resource Units program (P3007). The system recalculates the resource units for a work center based on information in the

Work Center Revisions program, the Shop Floor Calendar program, and Manufacturing Constants table. You can create versions to recalculate the labor, setup, or machine hours, and set the processing options to update different dates and branches.

The system multiplies the number of machines or employees by the work hours per day from the Work Center Revisions program. If the work hours per day are not available from the Work Center Revisions program, then the system uses the work hours per day from the Manufacturing Constants table that the system defines for each work day on the Shop Floor Calendar.

Resource unit calculations for machine- and labor-related hours are:

- Machine-related hours (prime load code = C or M).
Number of machines multiplied by work hours per day
- Labor-related hours (prime load code = L or B).
Number of employees multiplied by work hours per day

See Also:

- [Setting Up Shop Floor Calendars](#).
- "Setting Up Resource Units" in the *JD Edwards EnterpriseOne Applications Product Data Management Implementation Guide*.
- "Generating Resource Units Automatically" in the *JD Edwards EnterpriseOne Applications Requirements Planning Implementation Guide*.

4.2 Setting Up Shop Floor Calendars

This section provides an overview of shop floor calendar setup and discusses how to:

- Set processing options for the Shop Floor Calendar program (P00071).
- Set up shop floor calendars.
- Revise shop floor calendars.

4.2.1 Understanding Shop Floor Calendar Setup

You can use the Shop Floor Calendar program (P00071) to define the work days by month and year for each branch or all branches in the system. The system uses this calendar to determine manufacturing schedules.

You can also define calendars by shift. The system uses these calendars for line scheduling and sequencing by shift in repetitive manufacturing. Shift calendars are not used for Distribution Requirements Planning (DRP), Master Production Scheduling (MPS), or Material Requirements Planning (MRP).

To increase plant capacity, manufacturers run production lines for more than one shift, as well as run different lines of production on different days of the week. You specify these shifts and lines in the Shop Floor Calendar program.

When you have not yet defined the shop floor calendar for the branch, month, and year, the system preloads default work days (Monday through Friday) and weekends (Saturday and Sunday). Holidays are always user-defined.

4.2.2 Forms Used to Set Up Shop Floor Calendars

Form Name	Form ID	Navigation	Usage
Work With Workday Calendar	W00071B	Shop Floor Management Setup (G3141), Shop Floor Calendar Product Data Management Setup (G3041), Shop Floor Calendar	Set up calendar year, month, type, name, and shift code.
Workday Calendar Revisions	W00071A	Click Add on the Work With Workday Calendar form.	Set up working and nonworking days.

4.2.3 Setting Processing Options for the Shop Floor Calendar Program (P00071)

Processing options enable you to specify the default processing for programs and reports.

4.2.3.1 Interop

Type - Transaction

Specify the transaction type (UDC 00/TT) for the interoperability transaction. If left blank, outbound interoperability processing will not be performed.

Before Image Processing

Specify image processing in interoperability transactions. Values are:

1: Write before images for outbound change transactions.

Blank: Write only after images.

4.2.4 Setting Up Shop Floor Calendars

Access the Work With Workday Calendar form.

Figure 4–1 Work With Workday Calendar form

Branch/Plant	Description	Month	Year	Century	Shift Code	Calendar Type	Calendar Name
M30	Eastern Manufacturing Center	1	12	20			
M30	Eastern Manufacturing Center	1	12	20	1		4x10
M30	Eastern Manufacturing Center	1	12	20	1		
M30	Eastern Manufacturing Center	1	12	20	2		

Branch/Plant

Enter a code that represents a high-level business unit. Use this code to refer to a branch or plant that might have departments or jobs, which represent lower-level business units, subordinate to it. For example:

Branch/Plant (MMCU)

Dept A (MCU)

Dept B (MCU)

Job 123 (MCU)

Business unit security is based on the higher-level business unit.

With the exception of ALL, which is a hard-coded value for the program, the branch/plant that you assign must exist in the Business Unit Master table (F0006).

Calendar Year

Enter a two-digit number that corresponds to a calendar year.

Calendar Month

Enter a number that corresponds to the month in a calendar year.

Calendar Type (optional to specify unique calendars for the same branch/plant)

Enter a value from UDC 42/WD (Work Day Calendar Type) that specifies how the calendar is used. For example, the calendar might be specific to an industry such as banking or it might be used to schedule delivery persons for a route.

Note: If you use the default value of *, the system updates the value to Blank even though Blank is not set up as a value in the UDC table.

Calendar Name (optional to specify unique calendars for the same branch/plant)

Enter a code used to classify values within a calendar type. For example, if the calendar type is ROUTE, you can enter a code that specifies a particular route, such as Daily or Weekend.

Note: The system does not validate the code that you enter.

If you enter a value in the Calendar Name field, you must enter a shift code.

Shift Code (optional to specify unique calendars for the same branch/plant)

Enter a value from UDC 00/SH (Shift Codes) that identifies daily work shifts.

4.2.5 Revising Shop Floor Calendars

Access the Workday Calendar Revisions form.

Figure 4-2 Workday Calendar Revisions form



Day - Type of Day

Enter a code that specifies whether the day of the week is a working day, holiday, vacation day, and so on. With the exception of **W**, which is hard-coded as a working day, all other values specified are nonworking days. The value that you enter must exist in UDC 00/TD (Type of Day). Examples of values include:

- A: Absent
- B: Billable
- E: Weekend
- H: Holiday
- W: Work Day

4.3 Setting Up Manufacturing Constants

This section provides an overview of Manufacturing Constants setup and discusses how to set up Manufacturing constants.

4.3.1 Understanding Manufacturing Constants Setup

You set up manufacturing constants to define branch-specific information that affects processing throughout the JD Edwards EnterpriseOne Manufacturing systems. You can use the Manufacturing Constants program (P3009) to specify the values for constants. This table describes the information that appears on each tab of the Manufacturing Constants program:

Tab	Content
Manufacturing constants	<p>These constants specify:</p> <ul style="list-style-type: none"> ■ Whether the system validates bills of material online as you enter them. ■ Whether an audit trail is created that tracks all changes made to bills of material. ■ Whether the system uses the master routing for an item or the routing instructions that are defined for the parent item.
Shifts	These constants specify the number of work hours that the plant typically operates in a day.
Commitment Control	These constants specify when inventory is committed and backflushed.
Costing options	These constants specify which overhead cost calculations are used and whether the system considers work center efficiency when it calculates direct labor and overhead costs. You can specify whether costs are maintained by cost components and work center or by cost component only. Costing options also include the source for machine and labor rates.

See Also:

- "Setting Up Manufacturing Constants" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.

4.3.2 Form Used to Set Up Manufacturing Constants

Form Name	Form ID	Navigation	Usage
Manufacturing Constants Revision	W3009B	<p>Shop Floor Management Setup (G3141), Manufacturing Constants</p> <p>Locate and select a branch/plant on the Work with Manufacturing Constants form.</p>	Set up manufacturing constants.

4.3.3 Setting Up Manufacturing Constants

Access the Manufacturing Constants Revision form.

Figure 4–3 Manufacturing Constants Revision form

4.3.3.1 Manufacturing Constants

Backflush Options

Enter a code to determine how the system performs commitment and release of inventory. Values are:

- 1: Create a standard parts list based on the value in the Commitment Control field in the Manufacturing Constants table.
- 2: Create a parts list, committing to the location indicated in the Work Center Master File table (F30006). The Operation Sequence field in the Bill of Material Master File table (F3002) determines the work center that is used.

Note: You must create the work order routing before the parts list. If you are running the Work Order Generation program (R31410), you must set the Process tab, Parts List, and Routing Instructions processing option to 3 to generate the parts list and routing instructions at the same time.

If you define a consuming location on the routing instructions, this location overrides the consuming location defined in the F30006 table.

Status for Changes

Specify the status beyond which work orders and rates can not be changed in the Line Scheduling and Line Sequencing Workbench programs.

On-Line BOM Validation (on-line bill of material validation)

Specify whether the system performs an online component or parent validation and low-level code assignment when you revise a bill of material.

It is recommended that you validate items online unless the bills of material are extremely large. If you select not to validate items online, you must validate the items in batch. Run the Integrity Analysis program (R30601) after updates to the bill of material and before you run the Item Cost Component - Frozen Update program (R30835) or perform the DRP/MPS/MRP Generation program (R3482).

To specify that the system validates items online, click the On-Line BOM Validation option under the BOM/Routing Options heading. If you do not click the On-Line BOM Validation option, the system does not validate items online.

Log Bill of Material

Specify whether changes to the bill of material are recorded in the Bill of Material Change File table (F3011). When you log bill of material changes, the system saves the old bill of material and the new, changed bill of material. To record changes to the bill of material, click the Log Bill of Material option under the BOM/Routing Options heading.

Master Routings

Specify whether the system uses the master routing for an item or a routing defined for the parent item. Both routings are retrieved from the Routing Master table (F3003).

If you select to check for master routings, the JD Edwards EnterpriseOne Shop Floor Management system checks the Item Cross Reference table (F4104), cross-reference type MR, for the parent item. If it finds a cross-reference, the program uses the master routing from table F3003. If it does not find a cross-reference, the system uses the routing defined for the parent item. If you do not select to check for master routings, the program uses the parent item's routing from table F3003.

To specify that the system checks for cross-references and uses a master routing for the item, click the Master Routings option under the BOM/Routing Options heading.

4.3.3.2 Shifts

Work Hours

Enter the number of work hours that the manufacturing plant operates per day.

You can enter hours for up to six different shifts. However, the Work Hours Per Day field displays the total of only the first three shift hours.

Shift

Enter a value from UDC 00/SH (Shift Codes) that identifies daily work shifts.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

4.3.3.3 Commitment Control

Select the Commitment Control tab to select an option from the Commitment Control group box and an option from the Hard/Soft Commit group box.

Commitment Control

Select an option under the Commitment Control heading to specify the inventory location to which commitments are made.

Note: The system activates this field only when you create hard commitments.

Further clarification of the three available options are:

- Primary Location.

Make commitments to the primary location in the branch/plant where the work order originates.

- Split-Cross Branch Boundaries.

Split the parts list and commitments to fill any component shortages. The system can cross branch boundaries to fill requirements. In this case, the system uses the next alphabetical branch/plant listed in the table that occurs after the branch/plant on the work order header.

For example, for the branch/plants CAL, CHI, CLE, and HOU:

If the system starts committing inventory at branch/plant CHI, it accesses CLE as the next branch/plant. If inventory is low in all locations, the system makes the remaining commitments to the primary location of the branch/plant on the work order header.

- Split-Don't Cross Branch Boundaries.

This option is similar to Split-Cross Branch Boundaries, but the system cannot cross branch boundaries.

Note: When you set the Commitment Method field in the Item Branch File table (F4102) table to **2** or **3** (lot number or expiration date control), you must use the Split-Don't Cross Branch Boundaries option.

Hard/Soft Commit

Select an option under the Hard/Soft Commit heading to specify how JD Edwards EnterpriseOne Shop Floor Management commits inventory.

The options are:

- Hard commitment at creation of parts list.

The system performs a hard commitment at the creation of the parts list. The hard commitment remains in effect until inventory is relieved.

- Soft commitment, then changed to hard commitment when printing.

The system performs a soft commitment at the creation of the parts list. The system then changes the commitment to a hard commitment during the pick list print process for the work order. The hard commitment remains in effect until inventory is relieved.

- Soft commitment at creation of parts list.

The system performs a soft commitment at creation of the parts list. The soft commitment remains in effect until inventory is relieved.

When you set the Commitment Method field in the Branch/Plant Constants form to **2** or **3**, you must use either Hard commitment at creation of parts list or Soft commitment, then hard commitment when printing because a hard commitment must be performed.

If you want to identify substitute items when a shortage occurs, you must select the hard commitment at creation of parts list option.

When you select either soft, hard when printing, or soft at creation of parts list, any line item in the parts list may be hard-committed before inventory is printed or relieved.

4.4 Setting Up Employee Labor Rates

This section provides an overview of employee labor rate setup and discusses how to set up employee labor rates.

4.4.1 Understanding Employee Labor Rate Setup

You can set up codes that represent the hourly labor rates for employees. The Generic Message/Rate table (F00191) contains employee labor rates that the system uses to calculate actual labor costs. For each code, you can define the name or type of employee that the code represents and the hourly labor rate for the employee or job category.

When you use actual costing, the rate that you define for each employee appears in the Employee Rate field on the Time Entry Revisions form (W311221C) when the employee enters time transactions.

See Also:

- "Setting Up Manufacturing Constants" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.

4.4.2 Form Used to Set Up Employee Labor Rates

Form Name	Form ID	Navigation	Usage
Enter Generic Message/Rates	W00191D	Shop Floor Management Setup (G3141), Employee Labor Rates Select Message/Rates from the Row menu on the Work With Generic Message/Rate Types form.	Set up employee labor rates.

4.4.3 Setting Up Employee Labor Rates

Access the Enter Generic Message/Rates form.

Figure 4–4 Enter Generic Message/Rates form

Code	Description	Rate
00001001	Address Book Common	15.0000
00002006	Walters, Annette	16.5000
00005127	Chester, Ebby	19.0000
00006001	Allen, Ray	18.0000
00006002	Abbott, Dominique	18.5000
00007000	McDougle, Cathy	17.5000

Code

Enter a code that should represent an address book record of an employee who completes work on a work order.

Rate

Enter a code used to define rate information in the Generic Rate/Message table (F00191).

4.5 Setting Up Item-to-Line Relationships

This section provides an overview of item-to-line relationship setup and discusses how to set up item-to-line relationships.

4.5.1 Understanding Item-to-Line Relationship Setup

For repetitive manufacturing, the item-to-line relationships define the lines on which an item is produced and the amount of resources consumed by an item on each line. The Line/Item Relationships program (P31093) enables you to add, change, and delete data that is stored in the Line/Item Relationship Master table (F3109). You can define work center operations within a production line.

Note: The JD Edwards EnterpriseOne Requirements Planning system uses the record that you identify as the default line when the system creates rates. The specifications for shift and period are valid only for the default line.

See Also:

- "Defining Document Type Constants for Work Orders" in the *JD Edwards EnterpriseOne Applications Product Data Management Implementation Guide*.
- "Setting Up Standard Procedures" in the *JD Edwards EnterpriseOne Applications Product Data Management Implementation Guide*.
- [Setting Up Shop Floor Calendars](#).

4.5.2 Form Used to Set Up Item-to-Line Relationships

Form Name	Form ID	Navigation	Usage
Line Item Relationships Revisions	W31093B	Shop Floor Management Setup (G3141), Line/Item Relationships Enter a branch/plant and item number and then click Add on the Work With Line/Item Relationships form.	Set up item-to-line relationships.

4.5.3 Setting Up Item-to-Line Relationships

Access the Line/Item Relationships Revisions form.

Figure 4–5 Line/Item Relationships Revisions form

The screenshot shows the 'Line/Item Relationships Revisions' form. At the top, there are navigation icons and a 'Tools' button. Below that, there are several input fields and dropdown menus:

- Item Number:** 2031
- Line/Cell Identifier:** R-A1
- Capacity consumed:** 2.00
- Use As Default (0/1):** 1
- Default Shift:** 1
- Default Period:** 2

Line/Cell Identifier

Enter a number that defines a production line or cell. Detailed work center operations can be defined inside the line or cell.

Capacity consumed

Enter a number that indicates how many of the line's resource units are needed to produce one item.

Use As Default (0/1)

Enter a code that determines which relationship the system uses as a default value.

Default Shift

Enter a value from UDC 00/SH (Shift Code) that identifies daily work shifts.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an

employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

The system uses this field as the default value when you enter rates.

Default Period

Enter a code that determines the frequency of the schedule. Values are:

1: Monthly

2: Weekly

3: Daily

4: Per Shift (for future use)

The system uses this field as the default value when you enter rates.

Working with Work Orders and Rate Schedules

This chapter contains the following topics:

- Section 5.1, "Understanding Work Orders and Rate Schedules"
- Section 5.2, "Understanding Work Order or Rate Schedule Creation"
- Section 5.3, "Understanding Attachment of Supplementary Information"
- Section 5.4, "Understanding Start Date Calculation"
- Section 5.5, "Understanding Work Order Backscheduling"
- Section 5.6, "Understanding Shop Paperwork Generation"
- Section 5.7, "Entering Work Order Headers"
- Section 5.8, "Entering Rate Schedules"
- Section 5.9, "Processing Work Orders and Rate Schedules"
- Section 5.10, "Attaching Parts Lists"
- Section 5.11, "Attaching Routing Instructions"
- Section 5.12, "Attaching Co-Products and By-Products"
- Section 5.13, "Attaching Intermediate Items"
- Section 5.14, "Assigning Serial Numbers"

5.1 Understanding Work Orders and Rate Schedules

Work orders and rate schedules are requests to complete a given quantity of a specific item. A rate schedule is a request to complete a given quantity of an item over a period of time on a specific production line. Rate schedules are used in repetitive manufacturing, in which you produce items in a continuous process on a dedicated production line. Work orders and rate schedules consist of a header, parts list, and routing instructions.

The work order header specifies the quantity of the item requested and the date on which the quantity is required. The parts list and routing instructions specify the components, operations, and resources that are required to complete the work order. However, the rate schedule header specifies not only the quantity of the item requested and the required date, but also the production line. For process manufacturing, the work order also includes a co-products and by-products list. This list identifies the products produced during the manufacturing process.

The Work Order Completions (P31114), Super Backflush (P31123), Work Order Entry (P48013), Inventory Completion Inbound Processor (R31114Z1I), and Process Work

Order Super Backflush Inbound Transactions (R31123Z11) programs support record reservation for sales order related work orders. (Release 9.1 Update)

When modifying a sales order using the Sales Order Entry programs (P4210 or P42101), the system reserves the sales order. The system issues a record reservation error message if another user attempts to modify the related work orders using the Work Order Completions, Super Backflush, Work Order Entry, Inventory Completion Inbound Processor, and Process Work Order Super Backflush Inbound Transactions programs at the same time that the sales order is being modified. (Release 9.1 Update)

The JD Edwards EnterpriseOne software provides record reservation capability within the Sales Order Entry programs. Record reservation helps to ensure the integrity of the data and prevent data loss. To avoid simultaneous processing of the same records, the system reserves (locks) records for processing by any other program. Thus, the system does not allow you to edit a record that has been locked by a different user or application. (Release 9.1 Update)

When a program that uses record reservation is interrupted, orphaned reservation records might remain in the Business Object Reservation table (F00095). This can occur, for example, when technicians are working with a server, or when a workstation shuts down without warning. If an interruption stops one of the programs in the Sales Order Entry programs before it releases the reservations that it creates, you cannot update the records until the orphaned reservations are removed. (Release 9.1 Update)

You can use the Remove Business Object Reservation program (P00095) to release unwanted record reservations. This program stores reservation information in the Business Object Reservation table (F00095). (Release 9.1 Update)

5.2 Understanding Work Order or Rate Schedule Creation

You can create work orders or rate schedules in several different ways. You can enter a work order header manually. You can also create a work order as a result of master production scheduling or material requirements planning. Finally, when you create a sales order line with line type W, the system automatically creates a work order.

After creating a work order header, you attach the parts list and routing instructions, as well as the co-products and by-products list, if applicable. You can perform these steps manually, interactively, or by using the Order Processing program (R31410). This batch program enables you to process multiple work orders or rate schedules. It performs these actions:

- Updates the status of each work order or rate schedule.
- Supplies the date to use for effectivity checking.
- Issues inventory.
- Prints shop paperwork.
- Calculates standard costs for configured items.
- enables substitute items to be used.
- Generates a purchase order for an outside operation.

Usually, you enter all of the work order or rate schedule headers and then attach the parts lists, routing instructions, and list of co-products and by-products to create the work order or rate schedule, using the Order Processing program. However, you can either attach this information to the work order or rate schedule interactively or revise it manually after you run the batch program. For example, to change a part on the parts list or specify substitutes, you can do so manually after you run the batch

program. When you attach routing instructions to the work order or rate schedule interactively or revise them manually, you can identify the percent of run time that a sequence can overlap the previous operation.

Regardless of the method that you use to attach the parts list, routing instructions, and list of co-products and by-products, you use the processing options for the Work Order Entry (P48013) and Order Processing programs to define information, such as the unit of measure to use for backscheduling the work order or rate schedule.

After you determine the resources that are required to produce the items requested, you can schedule the work order or rate schedule and begin the work. As you complete items on the work order or rate schedule, you report:

- Items completed.
- Materials used.
- Quantities scrapped.
- Hours of machine and personnel time expended.

You can report completions by operation to track work order or rate schedule activity as it is in process. Using the feature cost percent for configured items and the resource percent for process items, you can also calculate costs by operation and track inventory throughout the production process.

Note: If you use the JD Edwards EnterpriseOne Quality Management system, you can test and record test results for manufactured items in these ways: use the Quality Preference Revisions program (P40318) to maintain tests for the parent item; maintain generic text to indicate when to test materials and which test to use; enter test results for the tests that you defined for the parent item.

See Also:

- "Work Order Creation" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.

5.3 Understanding Attachment of Supplementary Information

Instead of using the Order Processing program (R31410) to attach parts lists and routing instructions to work orders and rate schedules, you can also accomplish this task interactively. You can also attach co-products and by-products, as well as intermediate items, to process work orders.

Note: JD Edwards EnterpriseOne Product Data Management provides information to JD Edwards EnterpriseOne Shop Floor Management about bills of material, work centers, and routings.

5.4 Understanding Start Date Calculation

After you enter all required work order information on the Work Order Details form (W48013A), the system calculates the start date for the work order. To calculate the start date of a work order based on the order's due date, the system uses level lead time or lead time per unit for an item that is defined on the Plant Manufacturing tab

on the Additional System Info form (W41026D). The system calculates the start date using either the item's fixed lead time or its variable lead time. For process work orders, you use the effective dates to schedule the rate.

See "Calculating Lead Times" in the *JD Edwards EnterpriseOne Applications Product Data Management Implementation Guide*.

5.4.1 Fixed Lead Time

When an item on a work order has a fixed lead time, the system determines the start date by using the level lead time to backschedule.

For example, assume:

- Work order due date = October 15.
- Level lead time = 3 days.

Note: The shop floor calendar determines which days are considered work days.

The system has a start date of October 12. The system then calculates the start date for the work order by subtracting the level lead time or lead time per unit, depending on the fixed or variable lead time option, from the required date. The system displays an error message if either of these conditions occurs:

- The start date differs from the date of the first operation sequence on the routing instructions for the item.
- The operation sequence dates could not be calculated using back scheduling.

Note: The system schedules work orders to be completed by the end of the day on the day before the work order is due.

5.4.2 Variable Lead Time

If an item on the work order has a variable lead time, the system determines the start date by using the lead time per unit to backschedule. The system uses this calculation:

$$\frac{[(\text{Leadtime per unit} \times \text{order quantity}) / \text{Time basis code unit value}] + \text{Setup} + \text{Total queue}}{\text{Work hours per day}}$$

For example, assume:

- Work order due date = October 15.
- Lead time per unit = 32 hours.
- Work order quantity = 1000.
- Setup = 1 hour.
- Queue (including move time) = 9 hours.
- Time basis code = 10,000 (code 4, which indicates 10,000 units).

This information is from the Item Branch File table (F4102).

- Work hours per day = 8.

$$\frac{[(32 \text{ hours} \times 1000) / 10000] + 1 \text{ hour} + 9 \text{ hours}}{8 \text{ hours}} = 1.65 \text{ days}$$

The system calculates the start date by counting back two working days on the shop floor calendar from the due date. The work order start date is October 13.

5.5 Understanding Work Order Backscheduling

To meet the Material Requirements Plan (MRP) required date for an order, JD Edwards EnterpriseOne Shop Floor Management assigns a completion date for the routing instructions that is one day before the Master Production Schedule (MPS) or MRP required date. Then, the system assigns the start and requested dates to each operation in the routing instructions for the work order or rate schedule. Assigning the start and requested dates for each operation is called backscheduling.

Backscheduling ensures that the material is out of production and available on the required date. For example, a work order completion date of February 15 for routing instructions ensures that the items produced will be out of production and available for shipping or sale on the MRP required date of February 16.

After you have defined the work order routing instructions, the system performs these actions:

- Retrieves the resource units for the work center of each operation.
- Consumes the hours (queue, run, and then move hours) using the calculations for either fixed or variable lead time.
- Scales the work center's remaining units proportionate to the previous operation's remaining units.

For example, if 25 percent of the previous work center's units remain available, the current work center's units available to schedule for the same day will equal 25 percent of its daily total. This calculation assumes that all work centers have consumed 50 percent of available units by the middle of the calendar workday.

5.6 Understanding Shop Paperwork Generation

Shop paperwork consists of these printouts:

- Work orders or rate schedules with or without the parts list or routing instruction information.
- Shop packet summary.
- Parts list shortages.

To generate shop paperwork, you must run the Order Processing program (R31410) with the Shop Packet Summary processing option activated.

5.7 Entering Work Order Headers

This section provides an overview of work order header entry and discusses how to:

- Set processing options for the Enter/Change Order program (P48013).
- Enter work order headers.

5.7.1 Understanding Work Order Header Entry

To enter a work order header, you identify the item, its branch/plant and quantity, and the requested date for the work order. You can also enter other optional information, such as the revision level for the bill of material, or associated sales information. If you

have set up the order item with a secondary unit of measure in the Item Master (P4101) and Item Branch/Plant (P41026) programs, you can enter the order information in both the primary and the secondary unit of measure, but this entry is not required.

The system calculates the start date based on the requested date that you enter. If the requested date is before the current date or is not defined as a work day, an error message appears. The system cannot calculate the start date for the work order when the requested date is in error.

If the order is created for a lot-controlled item, you can define a planned effective date, on which the item will be available for sales or commitments. You can enter this date manually or you can let the system calculate the date based on the Manufacturing Effective Days field in the F4102 table. If the Manufacturing Effective Days field is blank, the work order's requested date provides the default value for the Planned Effective Date field.

If a scheduling problem exists for the work order, the system displays an error message. This message indicates that a difference exists between the work order start date and one or both of these dates:

- The start date of the first routing operation.
- The calculated start date for the work order, which indicates difficulty in back scheduling.

You need to differentiate each type of work order, such as manufacturing work orders, rework orders, repair orders, engineering change orders, orders for prototypes, and so on, by assigning each of them a unique document type and work order type. You use the Document Type Maintenance program (P40040) to set up these document constants.

You might want to determine the availability of the parts that are needed to complete a work order before you create the work order.

While entering a work order header, you can access these additional forms:

Form	Description
Order Address Information (W4006B)	Use this form to locate the address of the customer on the sales order related to the work order. Blank fields appear when no sales order is associated with the work order.
Work Order Details (W48013A)	Use this form to add detailed information to the work order description.
Media Objects	Use this form to create a separate generic text entry for each work order. Notes provide more information and specific instructions for an order. Any modifications that you make to the text do not affect the text that was originally attached to the bill of material. You can also review update dates and information about the user by choosing Properties from the File menu on the Media Objects form. By choosing Templates from the File menu, you can access the Work with Media Object Templates form to retrieve templates that you can use to create notes.

If you use other JD Edwards EnterpriseOne systems, these integration features apply:

System	Feature
JD Edwards EnterpriseOne Requirements Planning integration	JD Edwards EnterpriseOne Distribution Requirements Planning, JD Edwards EnterpriseOne Master Production Schedule, and JD Edwards EnterpriseOne Material Requirements Planning suggest purchase and manufacturing orders that are required to maintain a valid production schedule.
JD Edwards EnterpriseOne Sales Order Management integration	You can generate work orders when you enter a sales order. The integration enables you to update sales information from within JD Edwards EnterpriseOne Shop Floor Management.

5.7.2 Prerequisites

Before you complete the tasks in this section:

- In the processing options, enter the unit of measure that you want the system to use for back-scheduling the routing operations for the process.
- Set up the shop floor calendar for the work days and months, including lead times, that the order activity requires.
- Set up the document types that you use to identify different work order types in the Order Type User Defined Code (UDC) 48/OT.
- If the new document types are to be used in other JD Edwards EnterpriseOne Manufacturing systems, specify which work order types to use in the processing options for the Supply/Demand Inclusion Rules program (P34004).
- Set up valid work center locations.

5.7.3 Form Used to Enter Work Order Headers

Form Name	Form ID	Navigation	Usage
Work Order Details	W48013A	Daily Order Preparation - Discrete (G3111), Enter/Change Order Click Add on the Work With Manufacturing Work Orders form.	Enter work order headers.

5.7.4 Setting Processing Options for the Enter/Change Order Program (P48013)

Use these processing options to set default values, define validating criteria, specify versions, and define how the system processes data.

5.7.4.1 Defaults

These processing options define the default document type and specify back scheduling data for a work order.

1. Document Type

Enter the default document type associated with a work order. Enter a value from UDC 00/DT (Document Type - All Documents) that identifies the origin and purpose of a document.

2. Back Scheduling Unit of Measure

Enter the default unit of measure to use for back scheduling the work order. Enter a value from UDC 00/UM (Unit of Measure) that identifies the unit of measure to use in the document.

3. Back Scheduling Queue and Move Hours

Specify the method that the system uses to back schedule queue hours in the work order routing. Values are:

Blank: Back schedule queue hours as a percentage of the resource units per day.

1: Back schedule queue hours as a percentage of the work hours per day.

5.7.4.2 Opt Defaults (optional defaults)

These processing options specify the default values for the type of work order, priority, beginning status, and the cross-reference codes for the work order, and where the system retrieves the default value for the Charge to Business Unit field.

1. Work Order Type

Specify the default work order type associated with the work order. Enter a value from UDC 00/TY (Work Order/ECO Type) that identifies the type of work order.

2. Work Order Priority

Specify the default priority associated with the work order. Enter a value from UDC 00/PR (Work Order Priority) that identifies the priority of the document.

3. Beginning status

Specify the default beginning status code on the work order header. Enter a value from UDC 00/SS (Work Order Status) that identifies the status of the work order to use when a work order is created.

4. Charge to Business Unit

Specify whether the system uses the Project Number in the Business Unit Master table (F0006) or the branch/plant on the work order as the Charge to Business Unit. Values are:

1: Project number.

Blank: Branch/plant.

5. Cross Reference Code

Specify the default cross-reference code. Enter a value from UDC 41/DT (Cross Reference Type Code) that determines how the system retrieves item replacements for obsolete items.

When you enter an order containing an item that will be obsolete for the work order time frame, the system enables you to specify a replacement item if you set this processing option to **R**.

5.7.4.3 Sales / Configured

These processing options specify the default values for the work orders that are generated through sales orders.

1. Held Status Code

Specify a status code that the system assigns to a sales order generated work order when the related sales order is placed on hold.

The system assigns this status to the work order if the current status of the work order is less than the Cutoff Status. Enter a value from UDC 00/SS (Work Order Status) that identifies the status of the work order.

2. Changed Status Code (Before Cutoff)

Specify the status code that the system assigns to:

- A sales order-generated work order when the related sales order is changed.
- A configured work order when it is modified as a result of a change in its configuration.

The system assigns this status to the work order if the current status of the work order is less than the cutoff status. If you leave this processing option blank, the system will not update the status of the work order. Enter a default status code from UDC 00/SS (Work Order Status) or select it from the Select User Defined Codes form.

3. Changed Status Code (After Cutoff)

Enter the status code that the system assigns to:

- A sales order-generated work order when the related sales order is changed.
- A configured work order when it is modified as a result of a change in its configuration.

The system assigns this status to the work order if the current status of the work order is greater than or equal to the cutoff status. If you leave this processing option blank, the system will not update the status of the work order. Enter a default status code from UDC 00/SS (Work Order Status) or select it from the Select User Defined Codes form.

4. Canceled Status Code

Enter a status code that the system assigns to:

- A sales order-generated work order when the related sales order is canceled.
- A configured work order that has been removed from its configuration.

The system assigns this status to the work order if the current status of the work order is less than the cutoff status. Enter a value from UDC 00/SS (Work Order Status) that identifies the status of the work order.

5. Cutoff Status Code

Enter the cutoff status for these types of work orders:

- A sales order-generated work order.
- A configured work order.

The system uses this status to determine if the work order can be automatically changed. Enter a value from UDC 00/SS (Work Order Status) that identifies the status of the work order.

5.7.4.4 Category Codes

These processing options specify the default category codes for the work order and the item/branch classification codes.

Work order category codes are UDCs (00/W1, W2, W3) that identify the category for the work order. Enter the category code to use as the default value or select it from the Select User Defined Codes form.

Item/branch category codes are UDCs (32/CC) that identify the item/branch classification code on the work order header. Enter the category code to use as the default value or select it from the Select User Defined Codes form.

Category Code 1, Category Code 2, and Category Code 3

Enter the default category codes for the work order. Work order category codes are UDCs (00/W1, W2, W3) that identify the category for the work order. Enter the category codes to use as the default value or select them from the Select User Defined Codes form.

Category Code 1, 2, and 3 on the work order header

Enter the default item/branch category codes for the work order header. Item/branch category codes are UDCs (32/CC) that identify the item/branch classification codes on the work order header.

5.7.4.5 Validating

These processing options specify whether the system recalculates the parts list and routing instructions when quantities change, and whether to validate that the parts list text matches the item/branch record.

1. Quantities and Dates

Specify whether the system automatically recalculates the parts list and routing instructions when the quantities or the dates on the work order change. Values are:

1: Recalculate.

Blank: Do not recalculate.

2. Item Branch/Plant Validation

Specify whether the system validates an existing item/branch record when you add or update a work order. Values are:

1: Validate.

Blank: Do not validate.

5.7.4.6 Hold Codes

These processing options specify the related sales order and purchase order hold codes that the system uses when the work order quantity or date changes.

1. Sales Order

Specify the default sales order hold code to use. Enter a value from UDC 42/HC (Hold Codes) that identifies why the sales order is being held.

2. Purchase Order

Specify the default purchase order hold code to use. Enter a value from UDC 42/HC (Hold Codes) that identifies whether the purchase order is being held.

5.7.4.7 Disp Options (display options)

These processing options specify whether the system displays the Bill of Material Type and Routing Type fields for work orders that are not manufacturing work orders. Work orders are manufacturing work orders when **M** is the value in the Bill of Material Type and Routing Type fields.

1. Bill of Material Field

Specify whether the system displays the Bill of Material Type field on the Work Order Details form. Values are:

1: Display.

Blank: Do not display.

2. Routing Type Field

Specify whether the system displays the Routing Type field on the Work Order Details form. Values are:

1: Display.

Blank: Do not display.

5.7.4.8 Versions

These processing options specify the versions of these programs that the system uses in the work order creation process:

1. Bill Availability (P30200)

Specify the version that the system uses when you select the row exit to the Bill Availability program (P30200) from the Work With Manufacturing Work Orders form or the Work Order Details form. If you leave this processing option blank, the system uses the **ZJDE0001** version of the Bill Availability program.

Versions control how the Bill Availability program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

2. ECO Work Order Entry (P48020)

Specify the version that the system uses when you select the row exit to the ECO Work Order Entry program (P48020) from the Work With Manufacturing Work Orders form or the Work Order Details form. If you leave this processing option blank, the system uses the **ZJDE0001** version of the ECO Work Order Entry program.

Versions control how the ECO Work Order Entry program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

3. Assign Serial Numbers (P3105)

Specify the version that the system uses when you select the row exit to the Assign Serial Numbers program (P3105) from the Work With Manufacturing Work Orders form or the Work Order Details form. If you leave this processing option blank, the system uses the **ZJDE0001** version of the Assign Serial Numbers program.

Versions control how the Assign Serial Numbers program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

4. Routings (P3112)

Specify the version that the system uses when you select the row exit to the Routings program (P3112) from the Work With Manufacturing Work Orders form or the Work Order Details form. If you leave this processing option blank, the system uses the **ZJDE0001** version of the Routing program.

Versions control how the Routings program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

5. Parts List (P3111)

Specify the version that the system uses when you select the row exit to the Parts List program (P3111) from the Work With Manufacturing Work Orders form or the Work Order Details form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Parts List program.

Versions control how the Parts List program displays information. Therefore, you might need to Enter the processing options to specific versions to meet the business need.

6. Material Issues (P31113)

Specify the version that the system uses when you take a row exit to the Work Order Inventory Issues (P31113) from the Work With Manufacturing Work Orders form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Work Order Inventory Issues program.

7. Configured Item Specification (P3210)

Specify the version of the Configured Item Revisions program (P3210) that the system uses when you create a work order for a configured item. If you leave this processing option blank, the system uses version ZJDE0001.

8. Related Configured Orders

Specify the version of the Related Configured Orders program (P3201) that the system uses when you call this program from the Work With Manufacturing Work Orders form. If you leave this processing option blank, the system uses version ZJDE0001.

9. Work Order Mass Update (P48022)

Specify the version of the Search for Work Orders (P48022) program to use. You must access the Search for Work Orders (P48022) program to select records to update in the Work Order Mass Update (P48714) program. If you do not specify a version, the system uses version ZJDE0004.

5.7.4.9 Process Mfg (process manufacturing)

This processing option specifies whether the system automatically creates co-products and by-products.

1. Co- and By-Products

Specify whether the system automatically copies and attaches co-products and by-products from the Bill of Materials. Values are:

1: Copy and attach.

Blank: Do not copy and attach.

5.7.4.10 Interop (interoperability)

This processing option specifies the transaction type that the system uses for export processing.

1. Transaction Type

Specify the transaction type that the system uses for export processing. Enter a value from UDC 00/TT (Transaction Type) that identifies the type of transaction for the work order. If you leave this field blank, the system does not use export processing.

5.7.5 Entering Work Order Headers

Access the Work Order Details form.

Figure 5–1 Work Order Details form

5.7.5.1 Header Area

Complete these fields in the header area of the form:

Item No. (item number)

Enter the item number for the item being produced. It can be in short, long, or third item number format.

For discrete work orders, the item number is the item being produced.

For process work orders, the item number is the process.

5.7.5.2 Dates and Quantities

Select the Dates and Qtys tab to complete these fields:

Requested

Enter the date that an item is scheduled to arrive or that an action is scheduled for completion.

For the JD Edwards EnterpriseOne Shop Floor Management system, when you change the requested date these processes occur:

- The system calculates a new start date based on the new requested date if you delete the date in the Start Date field before you enter the new requested date.
If you do not delete the start date, the system does not recalculate or change it.
- The system recalculates the operation start and complete dates according to the scheduling rules defined.

Order/UOM (order/unit of measure)

Enter the quantity of units affected by this transaction.

For JD Edwards EnterpriseOne Shop Floor Control Discrete Manufacturing, when you change the order quantity, the system recalculates:

- The component-required quantities and commitments.
- The operation start and complete dates, if the lead times are variable.
- In the process industry: the quantity of co-products and by-products produced by the process.

Planned Effective

Enter the date that the work order or engineering change order is planned to be completed.

Start

Enter the start date of the work order.

5.7.5.3 Status & Type

Select the Status & Type tab to complete these fields:

Sts Comm.(status comments)

Enter a brief description to explain the status of the work order.

Type

Enter a value from UDC 00/TY (Work Order/ECO Type) that indicates the classification of a work order or engineering change order.

You can use work order type as a selection criterion for work order approvals.

5.7.5.4 Additional Details 1

Select the Addl Details 1 tab to complete these fields:

Note: If the system created a work order from a sales order line with line type **W**, the fields on the Addl Details 2 tab are updated with information from the work order.

Charge to CC (charge to cost center)

Enter the code that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant.

You can assign a business unit to a document, entity, or person for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business unit to track equipment by responsible department.

Business unit security might prevent you from viewing information about business units for which you have no authority.

Parent WO (parent work order)

Enter a number that identifies the parent work order. You can use this number to:

- Enter default values for new work orders, such as Type, Priority, Status, and Manager.
- Group work orders for project setup and reporting.

For JD Edwards EnterpriseOne Shop Floor Management, you can manually enter this number to:

- Identify multi-level configured items.
- Provide the default value for work orders for the lower configured item (if you enter it for the top-level configured item).
- Group work orders for project setup and reporting.

Lot/Serial

Enter a number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.

See Also:

- [Reviewing Part Availability.](#)

5.8 Entering Rate Schedules

This section provides an overview of rate schedule entry and discusses how to:

- Set processing options for the Enter/Change Rate Schedule program (P3109).
- Enter rate schedules.

5.8.1 Understanding Rate Schedule Entry

Repetitive manufacturing is designed for items that you produce in a continuous process on a dedicated production line. A rate schedule is a request to complete a given quantity of an item over a period of time on a specific production line.

Rate schedules consist of a header, a parts list, and routing instructions. The rate schedule header specifies the quantity of the item requested, the required date, and the production line. The parts list and routing instructions specify the parts, operations, and resources required to complete the rate.

Use the Enter/Change Rate Schedule program (P3109) to add a rate schedule. When you add a rate, the system verifies that:

- The line exists in the Line/Item Relationship Master table (F3109).
- The dates appear in the appropriate shop floor calendar.
- The effective date ranges are within the defined period.

To increase plant capacity, manufacturers run production lines for more than one shift and they run different lines or production on different days of the week. You specify these shifts and lines on the shop floor calendar.

You can identify up to six shifts for the production line using the Manufacturing Constants program (P3009). You can then identify all shifts for the production line by work center, if necessary. After you set up the shifts, use the Line Scheduling Workbench program (P3153) and the Line Sequencing Workbench program (P3156) to schedule production.

See Also:

- [Understanding Attachment of Supplementary Information.](#)
- [Setting Up Shop Floor Calendars.](#)
- [Work Center Setup.](#)
- [Setting Up Item-to-Line Relationships.](#)

5.8.2 Prerequisites

Before you complete the tasks in this section:

- Use the Line/Item Relationships program (P31093) to create a relationship between a line and an item.

- Set the processing options to automatically attach the parts list and routing instructions when you enter a rate schedule.

5.8.3 Form Used to Enter Rate Schedules

Form Name	Form ID	Navigation	Usage
Rate Schedule Revisions	W3109C	Daily Processing - Repetitive (G3115), Enter/Change Rate Schedule Enter a branch/plant, item number, effective from and thru dates on the Work With Rate Schedules form, and then click Add.	Enter rate schedules.

5.8.4 Setting Processing Options for the Enter/Change Rate Schedule Program (P3109)

Use these processing options to set default values, define validating criteria, specify versions, and define how the system processes data.

5.8.4.1 Defaults

These processing options specify default values to be used in the Enter/Change Rate Schedule program.

1. Rate Type

Enter a value from UDC 00/DT (Document Type - All Documents) that identifies the type of work order. If you leave this processing option blank, the system uses rate type SC.

2. Scheduling Unit of Measure

Enter a value from UDC 00/UM (Unit of Measure) that the system uses for scheduling.

3. Number of Days to Add to Today's Date for the Thru Date (Optional)

Specify the effective thru date for a rate. Specify the number of days that the system adds to the current date to calculate the effective thru date. The effective thru date specifies when a rate is no longer active. This date acts as a filter for reviewing rates.

4. From Status

Enter a value from UDC 00/SS (Work Order Status) that the system uses for a work order rate. From Status acts as a filter when you review rates.

5. Thru Status

Enter a value from UDC 00/SS (Work Order Status) that the system uses for a rate. Thru Status is used as a filter for reviewing rates.

6. Beginning Status

Enter a value from UDC 00/SS (Work Order Status) that the system uses on the rate header. The Beginning Status code specifies the status that you use to create new rates.

Note: This processing option is not used if the parts list and routing are created in batch mode. The system uses the beginning status from the Order Processing program (R31410) for batch mode.

7. Closed Rate Status Code

Enter a value from UDC 00/SS (Work Order Status) that the system uses to indicate a closed rate. If you leave this processing option blank, the system uses **99**.

8. Charge to Business Unit

Specify whether the system uses the job number from the Business Unit Master table (F0006) or the branch/plant number from the work order as the Charge to Business Unit number. Values are:

Blank: Branch/plant number.

1: Charge the business unit that is associated with the job number in the Business Unit Master table.

5.8.4.2 Display

This processing option controls whether the system displays all rate schedules or only open rate schedules.

1. Open Schedules

Specify whether the system displays all schedules or open schedules only. Open schedules include schedules that have a status code that is less than the Closed Rate Status code. Values are:

Blank: All schedules.

1: Open schedules only.

5.8.4.3 Categories

These processing options specify default values for the category code fields either by entering them manually or by retrieving them from the corresponding Item Branch class codes.

Rate schedule category codes are UDCs (00/W1, W2, W3) that identify the category for the rate schedule. Enter the category code to use as the default value or select it from the Select User Define Codes form.

Item/branch category codes are UDCs (32/CC) that identify the item/branch classification code on the work order header. Enter the category code to use as the default value or select it from the Select User Defined Codes form.

Category Code 1, Category Code 2, and Category Code 3 (optional)

Specify the default category codes for the rate schedule. These category codes are UDCs (00/W1, W2, W3) that identify the category for the rate schedule. Enter the category codes to use as the default value or select them from the Select User Defined Codes form.

Item Branch Class Codes: Category Code 1, 2, and 3 (optional)

Specify the default item/branch category codes for the rate schedule header. Item/branch category codes are UDCs (32/CC) that identify the item/branch classification codes on the rate schedule header. Enter the category codes to use as the default value or select them from the Select User Defined Codes form.

5.8.4.4 Process

This processing option specifies whether the system automatically attaches the parts list and routing to the rate schedule.

1. Attach Parts List and Routing

Specify the method the system uses to attach parts lists and routings to the rate schedules. Values are:

Blank: Do not attach parts lists and routings.

1: Attach parts lists and routings interactively.

2: Attach parts lists and routings through batch processing.

5.8.4.5 Edits

These processing options specify whether the system automatically updates the parts list and routing when rate quantities and dates change, and validates existing item branch records when you add rate schedules.

1. Update Parts List and Routing

Specify whether the system automatically recalculates parts list quantities, routing quantities, and dates when you change rate schedule quantities or rate schedule dates from the Enter/Change Rate Schedule program (P3109). Values are:

Blank: Do not recalculate parts list quantities, routing quantities, or dates.

1: Update parts list, routing quantities, and dates.

2. Validate Existing Branch/Item Records

Specify whether the system validates an existing item/branch record when you add or update a rate schedule. Values are:

Blank: Do not validate.

1: Validate.

5.8.4.6 Versions

These processing options specify which versions the system uses when it calls these programs from the Enter/Change Rate Schedule program.

1. Completions Workbench (P3119).

Specify the version that the system uses when you select the Completions Workbench program (P3119) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version **ZJDE0001** of the Completions Workbench program. The version controls how the Completions Workbench program displays information.

2. MPS/MRP/DRP Time Series (P3413).

Specify the version that the system uses when you select the MPS Time Series program (P3413) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version **ZJDE0001** of the MPS Time Series program. The version controls how the MPS Time Series program displays information.

3. Bill Availability (P30200).

Specify the version of the Bill of Material Inquiry program (P30200) that you want to use when you select Availability from the row menu of the Work With Rate Schedules form. If you leave this processing option blank, the system uses version **ZJDE0001**.

4. Assign Serial Numbers (P3105).

Specify the version that the system uses when you select the Assign Serial Numbers program (P3105) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version **ZJDE0001** of the Assign

Serial Numbers program. The version controls how the Assign Serial Numbers program displays information.

5. Lot Master Revisions (P4108).

Specify the version that the system uses when you select the Lot Master program (P4108) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version ZJDE0001 of the Lot Master program. The version controls how the Lot Master program displays information.

6. Bill of Materials Revisions (P3002).

Specify the version that the system uses when you select the Bill of Material Revisions program (P3002) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version ZJDE0001 of the Bill of Material Revisions program. The version controls how the Bill of Material Revisions program displays information.

7. Bill of Materials Inquiry (P30200).

Specify the version that the system uses when you select the Bill of Material Inquiry program (P30200) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version ZJDE0001 of the Bill of Material Inquiry program. The version controls how the Bill of Material Inquiry program displays information.

8. Line Scheduling Workbench (P3153).

Specify the version that the system uses when you select the Line Scheduling Workbench program (P3153) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version ZJDE0001 of the Line Scheduling Workbench program. The version controls how the Line Scheduling Workbench program displays information.

9. Supply/Demand Inquiry (P4021).

Specify the version that the system uses when you select the Supply and Demand Inquiry program (P4021) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version ZJDE0001 of the Supply and Demand Inquiry program. The version controls how the Supply and Demand Inquiry program displays information.

10. Order Processing (R31410). If left blank, XJDE0008 will be used.

Specify the version that the system uses when you select the Order Processing program (R31410) from row exit of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version ZJDE0008 of the Order Processing program. The version controls how the Order Processing program updates information.

11. Parts List (P3111).

Specify the version that the system uses when you select the Work Order Parts List program (P3111) from the row menu of the Work with Rate Schedule form. If you leave this processing option blank, the system uses version ZJDE0001 of the Work Order Parts List program. The version controls how the Work Order Parts List program displays information.

12. Routing (P3112).

Specify the version of the Work Order Routing program (P3112) that the system uses when you select it from the row menu of the Enter/Change Rate Schedule program (P3109). If you leave this processing option blank, the system uses version ZJDE0001. The version controls how the Work Order Routing program displays information.

5.8.4.7 Interoperability

This processing option specifies the export transaction type when using interoperability.

1. Export Transaction Type

Specify the transaction type that the system uses for export processing or for supply chain scheduling and planning. Enter a value from UDC 00/TT (Transaction Type).

Note: Blank is a valid value if you do not use export processing.

5.8.4.8 Hold Codes

This processing option specifies the default hold code for related purchase orders.

1. Related Purchase Order

Specify the default hold code for a purchase order. Enter a value from UDC 42/HC (Hold Codes) that identifies whether the purchase order is being held.

5.8.5 Entering Rate Schedules

Access the Rate Schedule Revisions form.

Note: Depending on how you set the Attach Parts List and Routing processing option, the system can attach the parts list and routing instructions to rate schedules automatically by calling the Order Processing program (R31410) when you click OK on this form.

Figure 5–2 Rate Schedule Revisions form

Quantity Ordered	UH	Secondary Qty Ordered	Sec UH	P	S	Line/Cell	Line/Cell Description	Item Number	Item Description	Effective From Date	Effective Thru Date	Order Number	Type	Rate Status
160	EA			2		R-A1 Frame Line 1		2001	Aluminum Frame, Touring	06/13/2005	06/17/2005	452277	SC	30
400	EA			2		R-A1 Frame Line 1		2002	Aluminum Frame, Mountain	06/13/2005	06/17/2005	452285	SC	30
330	EA			2		R-A1 Frame Line 1		2003	Aluminum Frame, Sport	06/13/2005	06/17/2005	452293	SC	30
117	EA			2		R-A1 Frame Line 1		2001	Aluminum Frame, Touring	07/11/2005	07/15/2005	452453	SC	30

Quantity Ordered

Enter the quantity of units affected by this transaction.

P

Enter a code that determines the frequency of the schedule. Values are:

- 1: Monthly
- 2: Weekly
- 3: Daily
- 4: Per Shift (for future use)

S

Enter a value from UDC 00/SH (Shift Codes) that identifies daily work shifts. This value represents the shift for which the rate is originally scheduled.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

Rate Status

Enter a value from UDC 00/SS (Work Order Status) that indicates the status of a work order, rate schedule, or engineering change order. Any status change from 90 through 99 triggers the system to automatically update the completion date.

Category 1

Enter a value from UDC 00/W1 (Phase/System Codes) that indicates the current stage or phase of development for a work order. You can assign a work order to only one phase code at a time.

Note: Certain forms contain a processing option that enables you to enter a default value for this field. If you enter a default value on a form for which you have set this processing option, the system displays the value in the appropriate fields on any work orders that you create. The system also displays the value on the Project Setup form. You can either accept or override the default value.

Category 2 and Category 3

Enter a value from UDC 00/W2 (Work Order Category Code 2) or 00/W3 (Work Order Category Code 3) that indicates the type or category of a work order.

Note: A processing option for some forms lets you enter a default value for these fields. The system enters the default value automatically in the appropriate fields on any work orders that you create on those forms and on the Project Setup form. You can either accept or override the default value.

5.9 Processing Work Orders and Rate Schedules

This section provides an overview of work order and rate schedule processing, lists prerequisites, and discusses how to:

- Run the Order Processing program.
- Set processing options for the Order Processing program (R31410).

5.9.1 Understanding Work Order and Rate Schedule Processing

After you enter a work order header, you can use the Order Processing batch program (R31410) to attach the parts list and routing instructions for each work order or rate schedule header. If you attach the parts list and routing instructions interactively, you

can use the Order Processing batch program to generate and print the shop paperwork.

The processing options for the Order Processing program enable you to perform a wide range of functions, such as:

- Generate a parts list and routing instructions.
- Indicate the date to use for effectivity verification.
- Change the status code of the work orders or rate schedules that are being processed.
- Print information about the work order or rate schedule, such as the routing, parts list, sales order text, and so on.
- Print a shop packet summary that lists processed work orders and rate schedules.
- Enter the unit of measure for backscheduling.
- Issue inventory automatically.
- Generate a shortage report for the work orders and rate schedules.
- Indicate the versions of the associated programs that you want to access.
- Create parts lists based on previous revision levels.

You can organize and separate these functions to accomplish different tasks by setting up several reporting versions, each with different data selections and processing option values. For example, you can set up one version to generate the parts lists and routings for work orders, another version to print shop paperwork, and another version to perform batch inventory issues.

If you use other JD Edwards EnterpriseOne systems, these integration features apply:

System	Features
Configured items integration	<p>You use the Order Processing program to retrieve the parts lists from the Configurator Component table (F3215) and the routings from the Configurator Routings table (F3212) in order to generate the work order parts list and routing instructions. When an item is configured at order entry, the assembly inclusion rules run and the resulting parts list and routing information is stored in the tables.</p> <p>The assembly inclusion rules are defined in the JD Edwards EnterpriseOne Configurator system. The P assembly inclusion rule is used to put component parts on the sales order and work order, while the Q assembly inclusion rule is used to put component parts on the work order only. The R assembly inclusion rule is used to create the routing instructions for the work order.</p> <p>When a sales order is entered for a configured item, the P assembly inclusion rules may print components as separate line items on the sales order based on the setup of the assembly inclusion rules.</p> <p>Running the Order Processing program generates a parts list for a configured item by using data from the Configurator Component table (F3215) to create records in the Work Order Parts List table (F3111). The F3215 records are generated when processing P and Q assembly inclusion rules in the Configured Item Revisions program (P3210) during order entry.</p> <p>The system also generates a routing by using data from the Configurator Routings table (F3212) that is generated from the R assembly inclusion rules run at order entry.</p> <p>The system uses the Issue Type (issue type code) and Operation Seq No. (operation sequence number) fields from the Assembly Inclusions Rules table (F3293).</p>
JD Edwards EnterpriseOne Quality Management integration	<p>When you process work orders, you can use processing options to set values for the status of the work order and operation lot if the components fail tests.</p>
JD Edwards EnterpriseOne Engineer to Order integration	<p>Transactions processing is affected by the JD Edwards EnterpriseOne Engineer to Order (ETO) system. Work orders may be locked by a project that is being processed.</p> <p>When you select the Edit Tasks mode in the Project Workbench, the system places record reservation only on records that you have modified.</p> <p>When you select the Edit And Lock All Tasks mode, all orders in the project are reserved by the project. All records are locked and other applications or programs will not be able to access them until you exit this mode.</p> <p>When working on a project in JD Edwards EnterpriseOne ETO, the system does not let you edit a record that has been locked by a different user or application.</p> <p>See "Understanding Projects" in the <i>JD Edwards EnterpriseOne Applications Engineer to Order Implementation Guide</i>.</p>

System	Features
JD Edwards EnterpriseOne Sales Order Management integration	<p>When you create a work order for a kit during sales order entry, the system can build the parent item and stock it in inventory after you process and complete the work order. When you create the work order, the system subtracts the components from the on-hand quantity in inventory. After you complete the work order, the system adds the parent item to the on-hand quantity in inventory.</p> <p>You must specify line type T (Text) for sales orders in the Order Processing program to avoid writing journal entries for cost of goods sold and inventory for the components when you update the sales order. This line type also ensures that the system does not again subtract components from on-hand quantity in inventory during shipment confirmation or sales update.</p>
JD Edwards EnterpriseOne Warehouse Management integration	<p>If you use JD Edwards EnterpriseOne Warehouse Management, when you process a work order, the system does not search for inventory. Instead, the system generates a pick request. The pick request notifies you of the need for materials from the warehouse.</p> <p>After the system creates the pick request, JD Edwards EnterpriseOne Warehouse Management processes instructions and creates suggestions for you to confirm. Then, the system updates the parts list and increases the on-hand quantity for the To location and decreases the quantity on-hand for the From location.</p> <p>You can specify in the processing options whether you want to print a consolidated pick list for multiple work orders, or individual pick lists for each work order.</p>

5.9.1.1 Order Processing

When you run the Order Processing program (R31410), the system creates the planned variance in the Work Order Variance Tag - Needed for upgrade table (F3102T). The variance determines the difference in costs from when the standards were set at the beginning of the accounting period.

When you run the Order Processing program, the system deletes any previously generated or manually entered parts list that is attached to the work order or rate schedule. You can manually revise the system-generated parts list. If you add parts to the list, the system commits them from the primary location that is defined in the Item Branch program (P41026).

You should not regenerate the parts list if any part on the list has been issued to the work order or rate schedule. If you regenerate the parts list after parts have been issued, you must manually adjust the list to prevent duplication of component quantities.

When you generate a parts list that includes lot-controlled components, the system hard-commits the components from the work center location where lots with quantities exist. If the lot quantity is not sufficient, the parts list line is split.

When you run the Order Processing program, the system deletes any previously generated or manually entered routing instructions. You should not regenerate the routing instructions for the work order or rate schedule if hours and quantities are recorded for any of its operations.

Use a processing option to update the routing instructions if you change the work order or rate schedule. The system recalculates the run labor and run machine hours based on the quantity ordered on the work order or rate schedule.

If the system finds an error in calculating the date for an operation sequence, it enters the work order or rate schedule start and requested dates for that operation.

To automatically issue material to a work order when you run the Order Processing program, you set the Preflush Items processing option to issue only items identified as preflushed items or to preflush all items.

Use a processing option to print a consolidated parts list that provides you with a means to pick inventory needed for a number of work orders or rate schedules. The items are consolidated based on item name, location, lot, unit of measure, and branch/plant. The system prints information for each branch/plant on a separate page and prints on a separate line each occurrence of an item that is in a different location, lot, or unit of measure.

When you run the Order Processing program, the system creates outside operation purchase orders. The Order Processing program enables consolidation of outside operation purchase orders across single or multiple work orders based on supplier and branch/plant. (Release 9.1 Update)

You set the Purchase Order Consolidation processing option on the Order Processing program to consolidate outside operation purchase orders by supplier and branch/plant across single or multiple work orders. (Release 9.1 Update)

When batch processing with the Purchase Order Consolidation processing option set to consolidate, a single multi-line purchase order for each common branch/plant and supplier combination is generated for all work orders in the data selection. Each purchase order line item is tied to the related work order by the Related Order and corresponding Document Type fields. (Release 9.1 Update)

If a purchase order already exists for the supplier and branch/plant combination, then the system uses the existing outside operation purchase order. If no purchase order exists, then the system creates a new outside operation purchase order. (Release 9.1 Update)

When you run the Order Processing program, the system generates an exception report for these conditions:

- The system previously created pick requests but did not regenerate a parts list.
- The system did not create a pick request because the Warehouse Control option for the branch/plant was not set to **Y**.

5.9.2 Prerequisites

Before you complete the tasks in this section:

- Create a version of the Order Processing program (R31410) with the appropriate processing option settings.
- Set up valid work center locations.
See "Creating Work Centers" in the *JD Edwards EnterpriseOne Applications Product Data Management Implementation Guide*.
- Set up a valid routing with appropriate line and item relationship information.
- Use the processing options to initiate JD Edwards EnterpriseOne Warehouse Management system integration, if applicable.

5.9.3 Running the Order Processing Program

From the Daily Order Preparation - Discrete menu (G3111), select Order Processing.

5.9.4 Setting Processing Options for the Order Processing Program (R31410)

Use these processing options to edit lot status groups, set default values, define how the system processes data, and specify versions.

5.9.4.1 Edits

This processing option controls whether the system edits the allowed lot status group.

1. Enter Allowed Lot Status Group to validate

Specify the allowed lot status group to validate. During order processing, the system validates the non-blank lot status codes against the user-defined status code values. If the non-blank lot status codes exist in the Allowed Lot Status table (F41081), then the system treats the user-defined lot status codes as blank and the on-hold item shall continue through the order process.

5.9.4.2 Process

These processing options specify whether the system:

1. Generate Parts List and Routing Instructions

Specify whether the system generates a parts list, routing instructions, or both when you process a work order. Values are:

- 1: Generates a parts list only.
- 2: Generates routing instructions only.
- 3: Generates both a parts list and routing instructions.

Blank: Does not generate a parts list or routing instructions.

This processing option is used in combination with the Update Parts List and Routing Instructions processing option. The system processes the parts list and routing information based on the value of this processing option and the Update Parts List and Routing Instructions processing option:

- If this processing option is set to **1**, **2**, or **3**, and the Update Parts List and Routing Instructions processing option is set to **1**, the system deletes any existing parts list or routing that is attached to the work order and reattaches the parts list or routing to the work order. If there is no parts list or routing attached to the work order, the system attaches the parts list or routing to the work order and performs the commitments based on the settings in the Manufacturing Constants table (F3009).
- If this processing option is set to **1**, **2**, or **3**, and the value of the Update Parts List and Routing Instructions processing option is blank, the system does not take any action if a parts list or routing instructions is already attached to the work order. If there is no parts list or routing attached to the work order, the system attaches the parts list or routing and performs the commitments based on the settings in the Manufacturing Constants table (F3009).
- If the value of this processing option is blank and the Update Parts List and Routing Instructions processing option is set to **1**, the system does not take any action.

Refer to the Parts List and Routing tabs for detailed information about the parts list and routing instructions generation.

2. Update Parts List and Routing Instructions

Specify whether the system updates an existing parts list and routing instructions if the work order quantity or dates have changed. Values are:

1: Update.

Blank: Do not update.

3. Process with No Data Selection

Specify whether Order Processing (R31410) can be run without data selection. Values are:

Blank: Order processing is not allowed to run without data selection. The user must set data selection before running the process.

1: Order processing is allowed to run without data selection. This may impact system performance.

5.9.4.3 Defaults

These processing options specify how the system verifies effectivity and to specify the default header status code to use.

1. Work Order Effectivity Date

Specify the default work order date for effectivity checking. If you leave this field blank, the system uses the work order start date.

2. Header Status Code

Specify the default status code for the work order header. Enter a value from UDC 00/SS (Work Order Status) that identifies the status of the work order. If you leave this field blank, the system does not change the status on the work order header.

5.9.4.4 Parts List

1. Substitutions

Specify whether the system uses bill of material substitute items when there is a shortage. Values are:

1: Use substitutions.

Blank: Do not use substitutions.

2. Prior Revision Level

Specify the revision level that the system uses to build the parts list. Values are:

1: Prior revision level used.

Blank: Prior revision level not used.

If you select **1**, the system uses the current revision level to build the parts list. If you leave this processing option blank, the system uses the revision level that is effective on the start date of the work order.

3. Preflush Items

Specify whether the system issues all items on the work order. Values are:

1: All items.

Blank: Only preflushed items.

If you select to issue all items, the system only issues material if you specify the version of the Inventory Issues program (P31113) in the Inventory Issues processing option for the Versions tab.

4. Commitment Processing Bypass

Specify whether the system bypasses commitment processing when it creates the parts list. Values are:

1: Do not use commitment processing.

Blank: Use commitment control.

You specify commitment processing in the Commitment Control field in the Manufacturing Constants program (P3009).

5. Batch Bill of Material Processing

Specify whether the system uses batch bill processing. In batch bill processing, the system searches for a bill of material that matches the work order quantity. If a matching bill of material is not found, the system uses the zero bill of material to extend the required components. Values are:

Blank: Use.

1: Do not use.

6. Parts List Text

Specify whether the system copies a component's generic text to a parts list.

1: Copy.

Blank: Do not copy.

7. Phantom Operation Sequence Number

Specify how the system displays operation sequence numbers for components of a phantom item. Values are:

Blank: Display the operation sequence number of the component.

1: Display the operation sequence number of the phantom (parent) item.

5.9.4.5 Routing

These processing options specify the default values that the system uses for the unit of measure, document type, line type beginning status, and so on.

1. Unit of Measure

Specify the default unit of measure to use for back scheduling on the routing instructions. Enter a value from UDC 00/UM (Unit of Measure) that identifies the unit of measure to use in the document.

2. Document Type

Specify the default document type associated with the purchase order for a subcontract routing. Enter a value from UDC 00/DT (Document Type) that identifies the origin and purpose of the document.

3. Line Type

Specify the default line type associated with the purchase order for a subcontract routing. Enter the line type to use as the default value or select it from the Line Type Search form.

4. Beginning Status

Enter the default beginning status associated with the purchase order for a subcontract routing. Enter a value from UDC 40/AT (Activity/Status Codes) that identifies the beginning status of the document.

5. Subledger Field

Specify whether the system enters the work order number into the Subledger field of the purchase order. Values are:

1: Enter.

Blank: Do not enter.

6. Batch Routing Processing

Specify whether to use batch routing processing. In batch routing processing, the logic searches for a routing that matches the work order quantity. If no match is found, the system uses the zero routing to extend the required hours. Values are:

1: Do not look for a batch routing.

Blank: Look for a batch routing.

7. Routing Text

Specify whether the system copies an operation's generic text to a routing.

Blank: Do not copy.

1: Copy.

8. Back Scheduling Queue and Move Hours

Specify the method that the system uses to backschedule queue hours in the work order routing. Values are:

Blank: Backschedule queue hours as a percentage of the resource units per day.

1: Backschedule queue hours as a percentage of the work hours per day.

9. Queue and Move Hours

Specify whether the system enters queue hours and move hours in the Work Order Routing program (P3112) from the work center when the queue hours and move hours are blank or zero in the standard routing from the Work With Routing Master program (P3003). Values are:

Blank: If queue hours and move hours are blank or zero in the standard routing, do not enter queue hours and move hours from the work center into the work order routing.

1: If queue hours and move hours are blank or zero in the standard routing enter the queue hours and move hours from the work center into the work order routing.

2: Enter queue hours and move hours from the work center into the work order routing only if a routing step or instruction has been manually added to the detail area of the work order routing.

10. Override Number of Employees/Machines to '1'

Specify whether the system overrides the work center's default number of employees or machines. The system override quantity is 1. Values are:

1: Override the number of employees or machines to 1.

Blank: Use the existing employees or machines from the work center.

11. Purchase Order Consolidation (Release 9.1 Update)

Specify whether the system consolidates purchase order lines when processing single or multiple work orders. Values are:

Blank: Do not consolidate lines.

1: Consolidate lines for a single work order.

2: Consolidate lines for multiple work orders.

For example, if you set the processing option to 1 and run order processing for a single work order that contains two outside operations for the same supplier and branch/plant with a quantity of 10 on each line, then the system creates a single purchase order containing two lines with a quantity of 10 on each line.

If you set the processing option to 2 and run order processing for multiple work orders where each of the multiple work orders contain two outside operations for the same supplier and branch/plant with a quantity of 10 on each line, then the system creates a single purchase order containing two lines with a quantity of 10 on each line.

5.9.4.6 Sales/Configurator

These processing options specify the default values that the system uses for the line type and next status for kit components on sales orders, and whether to calculate the cost in the variance table of the sales order.

1. Line Type

Specify the default line type associated with the sales order for kit components. This processing option applies only to kit items. Enter the line type to use as the default value or select it from the Line Type Search form.

2. Next Status

Specify the default next status associated with the sales order. Enter a value from UDC 40/AT (Activity/Status Codes) that identifies the next status for the kit component lines on the sales order. Enter the next status to use as the default value or select it from the Select User Defined Codes form.

3. Standard Cost Calculation

Specify how the system calculates the cost from the configured routings in the variance table. Values are:

1: Calculate the standard cost.

2: Calculate the standard cost if it has not already been calculated.

Blank: Do not calculate the cost.

5.9.4.7 Printing 1

These processing options specify whether the system prints the work orders, and, if so, whether it prints associated information.

When you select the JD Edwards EnterpriseOne Warehouse Management picking interface, the report displays the value **In Warehouse** in the Location field for all parts with the proper material status code.

1. Work Orders

Specify whether the system prints the work orders. You cannot print associated information described in the remaining processing options on the Printing 1 tab if you do not select to print the work orders using this processing option. Values are:

1: Print.

Blank: Do not print the work orders or any associated information.

You must select to print work orders if you want to print information for the parts lists and routing instructions, the shop packet summary, or sales order text lines.

2. Parts Lists

Specify whether the system prints the associated parts lists if you select the Work Orders processing option to print work orders (Printing 1). Values are:

1: Print.

Blank: Do not print.

3. Parts List Detail

Specify whether the system prints the second line of information on the parts lists if you select the Work Orders processing option to print work orders (Printing 1) and the Parts List processing option to print the parts list (Printing 1). Values are:

1: Print.

Blank: Do not print.

4. Parts List on Separate Pages

Specify whether the system prints each parts list on a new page if you select the Work Orders processing option to print work orders (Printing 1) and the Parts List processing option to print the parts list (Printing 1). Values are:

1: Print.

Blank: Do not print.

5. Consolidated Parts List

Specify whether the system prints a consolidated parts list if you select the Work Orders processing option to print work orders (Printing 1) and the Parts List processing option to print the parts list (Printing 1). The items are consolidated based on item name, location, lot, unit of measure, and branch/plant. The system prints each branch/plant encountered on a separate page and prints each occurrence of an item that is in a different location, lot, or unit of measure on a separate line. Values are:

1: Consolidate.

Blank: Do not consolidate.

6. Parts List Component Text

Specify whether the system prints the component text on the parts lists if you select the Work Orders processing option to print work orders (Printing 1) and the Parts List processing option to print the parts list (Printing 1). Values are:

1: Print.

Blank: Do not print.

5.9.4.8 Printing 2

These processing options specify whether routing information, sales order text lines, and configurator generic text is printed on the work order.

When you select the JD Edwards EnterpriseOne Warehouse Management picking interface, the report displays the value **In Warehouse** in the Location field for all parts with the proper material status code.

1. Routing Instructions

Specify whether the system prints the associated routing instructions if you select the Work Orders processing option to print work orders (Printing 1). Values are:

1: Print.

Blank: Do not print.

2. Routing Instructions on Separate Pages

Specify whether the system prints each routing instruction on a new page if you select the Work Orders processing option to print work orders (Printing 1) and the Routing Instructions processing option to print routing instructions (Printing 2). Values are:

1: Print.

Blank: Do not print.

3. Routing Instructions Text

Specify whether the system prints the text on the routing instructions if you select the Work Orders processing option to print work orders (Printing 1) and the Routing Instructions processing option to print routing instructions (Printing 2). Values are:

1: Print.

Blank: Do not print.

4. Shop Packet Summary

Specify whether the system prints the shop packet summary if you select the Work Orders processing option to print work orders (Printing 1). Values are:

1: Print.

Blank: Do not print.

5. Sales Order Text Lines

Specify whether the system prints the sales order text lines if you select the Work Orders processing option to print work orders (Printing 1). Values are:

1: Print.

Blank: Do not print.

6. Configurator Generic Text

Specify whether the system prints the configurator generic text lines if you select the Work Orders processing option to print work orders (Printing 1). Values are:

1: Print.

Blank: Do not print.

7. Routing Resource Instructions

Specify whether the system prints the associated resource instructions if you select the Print Routing Instructions processing option (Printing 2). Values are:

1: Print.

Blank: Do not print.

5.9.4.9 Warehouse Management

These processing options specify how the system processes putaway requests for JD Edwards EnterpriseOne Warehouse Management integration, assigns a default staging location, and determines whether the system verifies availability.

1. Pick Requests

Specify the directed putaway mode for the system to use. Values are:

1: Process putaway requests only.

2: Process putaway requests by using the subsystem.

Blank: Do not process putaway requests.

If you specify mode 2, enter the version of the subsystem for the system to use in the Location Driver Processing Version processing option.

2. Location Driver Processing Version (R46171)

Specify the version of the Location Driver Processing program (R46171) for the system to use when processing putaway requests if you select directed putaway mode 2 for the Pick Requests processing option. If you leave this processing option blank, the system uses the **XJDE0007** version of the Location Driver Processing program.

Versions control how the Location Driver Processing program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

3. Staging Location

Specify the default staging location for moving goods out of the warehouse. The parts picked from the warehouse are staged at this location before they are used within manufacturing. Enter the staging location to use as the default value or select it from the Item/Branch Locations form.

4. Staging Location Availability

Specify whether the system checks the staging location for availability. If a part is not available at the staging location, the system does not generate a request. This option only applies to parts without work center locations. Values are:

1: Check.

Blank: Do not check.

5.9.4.10 Versions

These processing options specify the versions of these reports and programs that the system uses when processing work orders:

1. Work Order Print (R31415)

Specify the version of the Work Order Print report (R31415) that the system uses. The default sequencing for the parts list is by component item number. The default sequencing for the routing instructions is by operation sequence number. If you leave this processing option blank, the program uses the **ZJDE0001** version of the Work Order Print report.

Versions control how the Work Order Print report displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

2. Shortage Report (R31418)

Specify the version of the Shortage report (R31418) that the system uses. If you leave this processing option blank, the system does not generate this report.

Versions control how the Shortage report displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

3. Bar Coding Report (R31413)

Specify the version of the Bar Coding report (R31413) that the system uses. If you leave this processing option blank, the system uses the **ZJDE0001** version of the Bar Coding report.

Versions control how the Bar Coding report displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

4. Inventory Issues (P31113)

Specify the version of the Inventory Issues program (P31113) that the system uses. If you leave this processing option blank, the system does not issue any material.

Versions control how the Inventory Issues program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

5. Purchase Order Entry (P4310)

Specify the version of the Purchase Order Entry program (P4310) that the system uses when generating purchase orders. The default tax area and automatic blanket order release options are controlled by the Purchase Order Entry version that you specify.

Versions control how the Purchase Order Entry program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

6. Test Results Worksheet (R37470)

Specify which version of the Test Results Worksheet program (R37470) that the system uses. If you leave this processing option blank, the system uses version **ZJDE0001**. The version specifies how the program displays information.

5.9.4.11 Interoperability

These processing options specify the default transaction type that the system uses for processing export transactions, whether the system writes the before images to the Work Order Master File table (F4801) and F3111.

1. Work Order Transaction Type

Specify the default transaction type for the work order header that the system uses when processing export transactions. If you leave this processing option blank, the system does not perform export processing.

2. Parts List Transaction Type

Specify the default transaction type for the parts list that the system uses when processing export transactions. If you leave this processing option blank, the system does not perform export processing.

3. Routing Instructions Transaction Type

Specify the default transaction type for the routing instructions that the system uses when processing export transactions. If you leave this processing option blank, the system does not perform export processing.

4. Work Order Header Before Image

Specify whether the system writes the before image for the work order header. Values are:

1: Include the image.

Blank: Do not include the image.

5. Parts List Before Image

Specify whether the system writes the before image for the parts list. Values are:

1: Include the image.

Blank: Do not include the image.

6. Routing Instructions Before Image

Specify whether the system writes the before image for the routing instructions. Values are:

1: Include the image.

Blank: Do not include the image.

5.10 Attaching Parts Lists

This section provides overviews of parts lists attachment, phantom items, parts list requirements, and how to attach parts lists interactively and discusses how to:

- Set processing options for the Work Order Parts List program (P3111).
- Enter custom parts lists.
- Copy parts lists from bills of material.
- Copy parts lists from existing work orders.
- Select substitute items.
- Enter multiple locations.

5.10.1 Understanding Attachment of Part Lists

You attach the parts list after you enter a work order or rate schedule header. A parts list is a table of the components and their quantities required to complete the work order. You can attach the parts list using any of these methods:

- Manually, by entering the required parts on the Work Order Parts List form (W3111A).
- Interactively, by copying a bill of material or an existing parts list on a work order.
- Batch, using the Order Processing program (R31410).
- Automatically, by setting a processing option for the Work Order Routing Instructions program (P3112) after you attach routing instructions using the work order entry program.

For batch bills and batch routings, the system determines which parts list to use by matching the quantity for the bill type that is specified on the work order header. (Use a batch bill to accommodate physical constraints, such as ovens or vats, in industries in which products are produced in fixed quantities. Use batch routings in industries such as pharmaceuticals, foods, or petroleum, in which products are manufactured in fixed quantities or batches.) If the system does not find a batch size that matches the parts list, it uses this search sequence to locate a matching batch:

- Searches for the specified bill type with a zero batch quantity.
- Searches for a type M bill with the specified quantity.
- Searches for a type M bill with a zero batch quantity.

If the system does not find a match, it does not attach a parts list, and you must attach the parts list manually.

Based on their effective dates, components are included in or excluded from the parts list for a work order. The system increases the quantity of each component by its scrap factor and operation scrap, if applicable.

These terms are used throughout the work order examples that follow:

Shrink

The planned loss of a parent item caused by factors such as breakage, theft, deterioration, and evaporation.

Scrap

Unusable material that results from the production process. Scrap is material outside of specifications and of such characteristics that rework is impractical.

Yield

The ratio of usable output from a process to its input.

These examples illustrate several scenarios pertaining to shrink, scrap, and operational yield for components of parent item A. Each example is based on a quantity of 10 for Parent Item A.

This example illustrates a work order with no shrink, scrap, or yield:

Component	Quantity Per	Operation
B	20	10
C	40	10
D	10	10
E	120	10
F	20	25
G	10	30

This example illustrates a work order with 10 percent shrink on parent item A:

Component	Quantity Per	Operation
B	22	10
C	44	10
D	11	10
E	132	10
F	22	25
G	11	30

This example illustrates a work order with 10 percent scrap on component G:

Component	Quantity Per	Operation
B	20	10
C	40	10
D	10	10
E	120	10
F	20	25
G	11	30

This example illustrates a work order with 95 percent yield at both operations 10 and 25:

Component	Quantity Per	Operation
B	22	10
C	44	10
D	11	10
E	133	10
F	21	25
G	10	30

This example illustrates a work order with 10 percent shrink on parent item A, 10 percent scrap on component G, and 95 percent yield on both operations 10 and 25:

Component	Quantity Per	Operation
B	24	10
C	49	10
D	12	10
E	146	10
F	23	25
G	12	30

5.10.2 Understanding Phantom Items

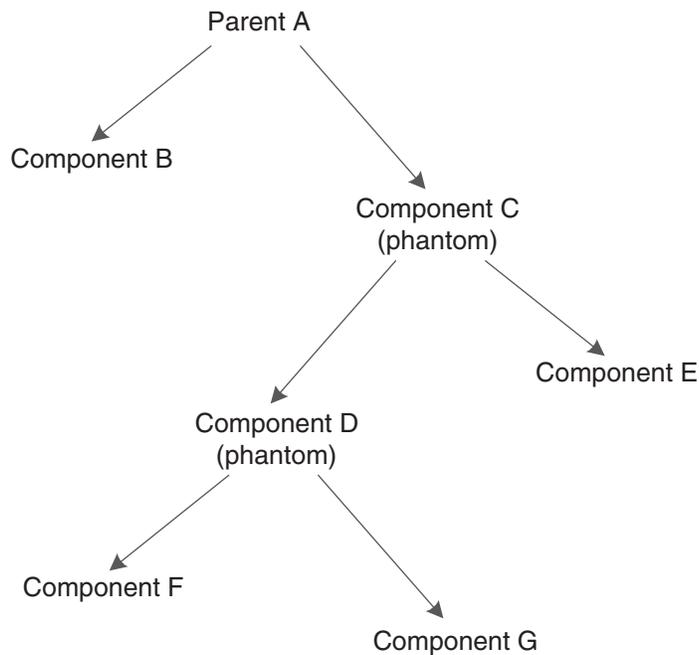
JD Edwards EnterpriseOne Shop Floor Management includes lower-level components of phantom items when you attach a parts list. Phantom items are characterized by:

- They are not planned by material requirements planning (MRP).
- They can be any lower-level component in the bill of material for a parent item.
- They can be used to define a subassembly within a parent item when the subassembly is not stocked in inventory or planned by MRP but is consumed by the parent.

For process manufacturing, these items are intermediates, and can be any lower-level part or intermediate within the process for a co-product (parent item).

5.10.3 Understanding Parts List Requirements

This diagram illustrates a parts list that includes items B, E, F, and G:

Figure 5-3 Parts list requirements

For variable quantity items, the system calculates component quantities according to the order quantity on the work order.

Note: When you activate the rounding feature in the Item Master table (F4101), the system rounds up the extended quantity value to a whole number if it has a decimal value greater than or equal to 0.01.

When the inventory available is insufficient to cover the parts list requirements for the work order, the system highlights the Order Quantity field on the parts list for the item that is in short supply. If you set the Substitutions processing option on the Parts List tab for R31410, the system will automatically include the substitute item if there is insufficient inventory for the original item.

The lead time offset indicates the number of days that a part is needed before or after the start date of a manufacturing work order. The system adds the lead time offset days for the part to the start date of the work order to determine the actual date on which the part is required. To indicate how many days after the work order start date that the part is required, enter a positive number on the Enter Bill of Material Information form (W3002A). To indicate that a part is needed prior to the work order start date, enter the days as a negative number. Examples of items that require negative lead time offset days are items that need processing or inspection before they can be used in an assembly. If the requested date for a component is later than the order completion date, the system enters the order completion date for the item.

When you define a shrink factor for the item on the Additional System Info form of the Item Branch program (P41026), the system compensates for the loss by increasing the component requirements for parent items by the percentage or quantity. The system displays the increased order quantity in the Order + Shrink field on the work order header. You use scrap or yield to inflate the component quantity. The system includes

shrink adjustments, if applicable, when it calculates parts list quantities and routing instructions for the order.

5.10.4 Understanding How to Attach Parts Lists Interactively

After you enter a work order header, you attach a parts list to it. You can either manually enter a custom parts list or copy a parts list from a bill of material or existing work order. You use the manual method to create the parts list, components, and quantities. You use the copy method when existing information exists that you want to copy.

After you attach the parts list to a work order header, you can:

- Specify or change a substitute item or quantities from different locations.
- Add or delete components.
- Change quantities or other information on the parts list or select substitute items and their quantities on-hand when a component shortage is encountered.

To use substitute items or integrate with other JD Edwards EnterpriseOne systems, you should be familiar with the information in this table:

Topic	Description
Substitute items	<p>To use substitute items, you must use a processing option for the Work Order Parts List program (P3111) to specify the substitute processing that you want to use. You can select one of these commitments:</p> <ul style="list-style-type: none"> ■ Commit using the commitment control set in the Manufacturing Constants program (P3009). ■ Commit using the commitment control set in the Manufacturing Constants program, but use substitutes for shortages. ■ Commit using the commitment control set in the Manufacturing Constants program, but use substitutes when the quantity available can compensate for the shortage. <p>The Hard/Soft Commit option on the Manufacturing Constant Revisions form must indicate a Hard at Creation of Parts List setting for you to use substitutions.</p> <p>When the system encounters a component shortage, you can select the available substitutes and quantity. After you enter the information, the system adds the selected items and quantities to the parts list and deducts the equivalent quantity from the component.</p>

Topic	Description
JD Edwards EnterpriseOne Warehouse Management integration	<p>If you use JD Edwards EnterpriseOne Warehouse Management and generate a parts list, the system searches for inventory in the staging or work center location. If you did not define a staging or work center location, or if you did not locate inventory, the system generates a pick request. The pick request notifies you of the need for materials from the warehouse.</p> <p>After the system creates the pick request, the JD Edwards EnterpriseOne Warehouse Management system processes instructions and creates suggestions for you to confirm. Then the system updates the parts list and increases the on-hand quantity for the To location and decreases the quantity on-hand for the From location.</p> <p>When you recreate the parts list, and the items are in the warehouse, these two actions can occur:</p> <ul style="list-style-type: none"> ▪ The Work Order Print program (R31415) prints In Warehouse for all items with the correct material status code. ▪ The Order Processing program (R31410) prints a message indicating that a warehouse pick request already exists. The system does not generate a parts list.

5.10.5 Forms Used to Attach Parts Lists Interactively

Form Name	Form ID	Navigation	Usage
Work Order Parts List	W3111A	<p>Daily Order Preparation - Discrete (G3111), Enter/Change Order</p> <p>Locate and select an order on the Work With Manufacturing Work Orders form, and then select Parts List from the Row menu.</p>	Enter or review a work order parts list.
Copy Screen	W3111E	Select either Copy BOM or Copy from WO from the Form menu on the Work Order Parts List form.	Copy a parts list from a bill of material or from an existing work order.
Substitute Availability Revisions	W3111SB	Select an item on the Work Order Parts List from, then select Substitute Avail from the Row menu.	Select substitute items.
Select Multiple Locations	W42053B	Select an item on the Work Order Parts List from, then select Multi-Location from the Row menu.	Commit items from multiple locations.

5.10.6 Setting Processing Options for the Work Order Parts List Program (P3111)

To access these processing options, use the Interactive Versions program (P983051). Select Interactive Versions from the System Administration Tools menu (GH9011). Enter **P3111** in the Interactive Application field, click Find, select the program version, and then select Processing Options from the Row menu.

5.10.6.1 Edits

These processing options control whether you can attach a parts list to a prior revision level of the bill of material and whether you can select components for the parts list.

1. Parts List at Prior Revision Levels

Specify whether the program uses the current revision level to build the parts list. Values are:

Blank: Do not allow.

1: Allow.

If you select **1**, the system uses the current revision level to build the parts list. If you leave this processing option blank, the system uses the revision level that is effective on the start date of the work order.

2. Select Components for Parts List

Specify whether the system enables you to select components to be included on the parts list when you copy a work order. If you leave this processing option blank, the system disables the Row menu and includes all components on the parts list. Values are:

Blank: Include all components on the parts list.

1: Allow the ability to select specific components to be included on the parts list.

3. Enter Allowed Lot Status Group to validate

Enter a lot group name that the system uses to verify the lot status code against when processing lots. Lot group name is a user-defined list of allowed non-blank lot status codes.

5.10.6.2 Process

These processing options control whether the system generates a routing when you create a parts list and whether the system copies component text. They also control substitute and commitment processing.

1. Routings

Specify whether the system generates routings when a parts list is created for a work order. The system adds routing information to the F3111 table. Values are:

Blank: Do not generate.

1: Generate.

2. Substitute Processing Method

Specify the substitute processing method that the system uses when attaching a parts list to a work order. Values are:

Blank: Do not use substitutes for shortages.

1: Use substitutes for shortages.

2: Display the Substitute Availability form when substitute quantity can cover the shortage.

3. Commitment Processing

Specify whether the system generates component commitments based on commitment control settings stored in the Manufacturing Constants table (F3009) when the parts list is attached to the work order or it bypasses commitment processing. Values are:

Blank: Use commitment control settings in the F3009 table.

1: Bypass commitment processing.

4. Component Generic Text

Specify whether the system copies the text attachment for a component line item to a work order parts list. Values are:

Blank: Do not copy.

1: Copy.

5. Phantom Operation Sequence Number

Specify how the system displays operation sequence numbers for components of a phantom item. Values are:

Blank: Displays the operation sequence number of the component.

1: Displays the operation sequence number of the phantom (parent) item.

5.10.6.3 Warehousing

These processing options control the integration with JD Edwards EnterpriseOne Warehouse Management, if you use this system.

1. Request Process Mode

Specify whether the system generates a warehouse pick request for the items on the parts list.

Note: To use this processing option, all warehouse setup must be complete and warehouse control must be turned on in the Branch/Plant Constants program (P41001).

Values are:

Blank: Do not generate a pick request.

1: Generate a pick request only.

2: Generate a pick request and process using subsystem.

2. Location Selection Version

Specify the version of the Location Selection Driver program (R46171) that the system uses. If the Request Process Mode processing option is set to **2**, you should enter a version here. If you leave this processing option blank, the system uses version **ZJDE0007** of the Location Selection Driver program. The version controls how the Location Selection Driver program displays information.

3. Default Staging Location

Specify the default staging location for releasing warehouse goods. When the Request Process Mode processing option is set to generate pick requests, the pick requests are staged at the location you enter here.

4. Check Default Staging Location for Availability

Specify whether the system verifies part availability in the default staging location. If the part is available at the staging location, the system does not generate a request for the part.

Note: This processing option applies to parts with no work center location assigned.

Values are:

Blank: Do not verify.

1: Verify.

5.10.6.4 Versions

These processing options control the version that the system uses when you call these programs from the Work Order Parts List program (P3111).

1. Work Order Routings - P3112 (ZJDE0001)

Specify the version of the Work Order Routing program (P3112) to use when a routing list is automatically attached to a parts list. The version controls how the Work Order Routing program displays information. If you leave this processing option blank, the system uses version **ZJDE0001** of the Work Order Routing program.

2. Work Order Inventory Issues - P31113 (ZJDE0001)

Specify the version that the system uses when you select the Work Order Inventory Issues program (P31113) from the Row menu of the Work Order Parts List form. If you leave this processing option blank, the system uses version **ZJDE0001** of the Work Order Inventory Issues program. The version controls how the Work Order Inventory Issues program displays information.

3. Purchase Order Entry - P4310 (ZJDE0001)

Specify the version that the system uses when you select the Purchase Orders program (P4310) from the Row menu of the Work Order Parts List form. If you leave this processing option blank, the system uses version **ZJDE0001** of the Purchase Orders program (P4310). The version controls how the Purchase Orders program displays information.

4. Configured Item Specifications - P3210 (ZJDE0001)

Specify the version of the Configured Item Revisions program (P3210) that the system uses when generating a purchase order. If you leave this processing option blank, the system uses version **ZJDE0001**.

5. Supply and Demand Inquiry - P4021 (ZJDE0003)

Specify the version that the system uses when you select the Supply and Demand Inquiry program (P4021) from the Row menu of the Work Order Parts List form. If you leave this processing option blank, the system uses version **ZJDE0003** of the Supply and Demand Inquiry program. The version controls how the Supply and Demand Inquiry program displays information.

5.10.6.5 Export

These processing option control the transaction type that the system uses for export processing and for the Supply Chain Planning and Scheduling integration.

1. Export Transaction Type

Specify the transaction type that the system uses for export processing or for supply chain scheduling and planning. Enter a value from UDC 00/TT (Transaction Type) that the system uses as the default value. Blank is valid if you do not want to use export processing.

5.10.7 Entering Custom Parts Lists

Access the Work Order Parts List form.

Figure 5-4 Work Order Parts List form

Component Item Number	Description	Order Quantity	Issued Quantity	Secondary Qty Ordered	Secondary Qty Issued	Sec UOM	Ln Ty	Act Ingr	Customer	Request Date	Component Branch	Location	Lot Serial Number	Issue B Receipt
2602	Canopy	5	5	EA		EA	S			05/09/2005	M30			0
2603	Seat	5	5	EA		EA	S			05/09/2005	M30			0
2604	Wheel Set	5	5	EA		EA	S			05/09/2005	M30		200506060003	0
2455	Orange Safety Flag	5	5	EA		EA	S			05/09/2005	M30			0
2601	Frame	1	1	EA		EA	S			05/09/2005	M30		20567	0
2601	Frame	1	1	EA		EA	S			05/09/2005	M30		20561	0
2601	Frame	1	1	EA		EA	S			05/09/2005	M30		20563	0
2601	Frame	1	1	EA		EA	S			05/09/2005	M30		20565	0
2601	Frame	1	1	EA		EA	S			05/09/2005	M30		20569	0

Component Branch

Enter a secondary or lower-level business unit. The system uses the value that you enter to indicate that a branch or plant contains several subordinate departments or jobs. For example, assume that the component branch is named MMCU. The structure of MMCU might be:

Branch/Plant - (MMCU)

Dept A - (MCU)

Dept B - (MCU)

Job 123 - (MCU)

Lot Grd (lot grade)

Enter a code that indicates the grade of a lot. The grade is used to indicate the quality of the lot. Examples include:

A1: Premium grade

A2: Secondary grade

The grade for a lot is stored in the Lot Master table (F4108).

Lot Potency

Enter a code that indicates the potency of the lot expressed as a percentage of active or useful material (for example, the percentage of alcohol in a solution). The actual potency of a lot is defined in the F4108 table.

Oper Seq# (operation sequence number)

Enter a number used to indicate an order of succession.

In routing instructions, a number that sequences the fabrication or assembly steps in the manufacture of an item. You can track costs and charge time by operation.

In bills of material, a number that designates the routing step in the fabrication or assembly process that requires a specified component part. You define the operation sequence after you create the routing instructions for the item. The JD Edwards EnterpriseOne Shop Floor Management system uses this number in the backflush/preflush by operation process.

In engineering change orders, a number that sequences the assembly steps for the engineering change.

For repetitive manufacturing, a number that identifies the sequence in which an item is scheduled to be produced.

Skip To fields enable you to enter an operation sequence that you want to begin the display of information.

You can use decimals to add steps between existing steps. For example, use 12.5 to add a step between steps 12 and 13.

From Potency

Enter a number that indicates the minimum potency or percentage of active ingredients acceptable for an item.

The system displays a warning message if you try to purchase or issue items that do not meet the minimum acceptable potency. The system does not allow you to sell items that do not meet the minimum acceptable potency.

Thru Potency

Enter a number that indicates the maximum potency or percentage of active ingredients that is acceptable for an item.

The system displays a warning message if you try to purchase or issue items that have a potency that exceeds the maximum potency acceptable. The system does not allow you to sell items that have a potency that exceeds the maximum potency acceptable.

Frm Grd (from grade)

Enter a value from UDC 40/LG (Lot Grade) that indicates the minimum grade that is acceptable for an item.

The system displays a warning message if you try to purchase or issue items with grades that do not meet the minimum grade acceptable. The system does not allow you to sell items with grades that do not meet the minimum acceptable level.

The From Grade and the Through Grade fields define the allowable grades for an item. The From Grade should be less than the Through Grade. These values are also used to determine the grade requirements of a component in a bill of material or an item in a purchase or sales order.

For example, the value of the From Grade equals A01, and the value of the Through Grade equals A05. In this case, inventory allocations for this item will be made for lots for which the grade is greater than or equal to A01 and less than or equal to A05.

Thr Grd (through grade)

Enter a value from UDC 40/LG (Lot Grade) that indicates the maximum grade that is acceptable for an item.

The system displays a warning message if you try to purchase or issue items with grades that exceed the maximum grade acceptable. The system does not allow you to sell items with grades that exceed the maximum grade acceptable.

The From Grade and the Through Grade define the allowable grades for an item.

The From Grade should be less than the Through Grade. These values are also used to determine the grade requirements of a component in a bill of material or an item in a purchase or sales order.

For example, the value of the From Grade equals A01, and the value of the Through Grade equals A05. In this case, inventory allocations for this item will be made for lots for which the grade is greater than or equal to A01 and less than or equal to A05.

Oper Scrap (operation scrap)

Enter a value that the system uses to increase or decrease the amount of materials to account for loss within the operation. The system updates this value on Enter/Change Bill of Material when you run the Planned Yield Update program.

The system calculates this value by compounding the yield percentages from the last operation to the first operation. Use a processing option in Enter/Change Routing to enable the system to calculate the component scrap percent.

Is Cd (issue code)

Enter a code that indicates how the system issues each component in the bill of material from stock. In JD Edwards EnterpriseOne Shop Floor Management, it indicates how the system issues a part to a work order. Values are:

I: Manual issue.

F: Floor stock (there is no issue).

B: Backflush (when the part is reported as complete).

P: Preflush (when the parts list is generated).

U: Super backflush (at the pay-point operation).

S: Sub-contract item (send to supplier).

Blank: Shippable end item.

You can issue a component in more than one way within a specific branch/plant by using different codes on the bill of material and the work order parts list. The bill of material code overrides the branch/plant value.

Cmp Rev (component revision)

Enter a code that indicates the current revision level of a component on the bill of material. It is usually used with an engineering change notice (ECN) or engineering change order (ECO).

F V (fixed variable)

Enter a code that indicates if the quantity per assembly for an item on the bill of material varies according to the quantity of the parent item produced or is fixed regardless of the parent quantity. This value also determines if the component quantity is a percent of the parent quantity. Values are:

F: Fixed Quantity.

V: Variable Quantity (default).

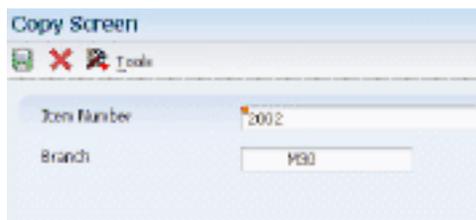
%: Quantities are expressed as a percentage and must total 100 percent.

For fixed-quantity components, Work Order entry and MRP do not extend the component's quantity per assembly value by the order quantity.

5.10.8 Copying Parts Lists from Bills of Material

Access the Copy Screen form.

Figure 5–5 Copy Screen form



Enter the Item Number and Branch that contain the bill of material to copy and click OK.

5.10.9 Copying Parts Lists from Existing Work Orders

Access the Copy Screen form.

Enter the Work Order Number that has the parts list to copy and click OK.

5.10.10 Selecting Substitute Items

Access the Substitute Availability Revisions form.

When the system encounters a component shortage, you can select the available substitutes and quantity. After you enter the information, the system adds the selected items and quantities to the parts list and deducts the equivalent quantity from the component. You cannot access this form unless at least one quantity is available.

The quantity is calculated using the values that you set up for substitute items (fixed or variable, partial, and so on).

5.10.11 Entering Multiple Locations

Access the Select Multiple Locations form.

Note: You can specify more than one commitment location for the item. However, if you select a location that is not the primary location specified on the parts list, the system hard-commits the item.

Figure 5–6 Select Multiple Locations form

The screenshot shows the 'Select Multiple Locations' form. At the top, there are fields for 'Line Number', 'Item Number' (containing '2011'), and 'Branch/Plant' (containing 'M00'). Below these are fields for 'Total Selected', 'Quantity Under', 'Units Ordered' (with a dropdown set to 'EA'), 'Total Secondary Selected', 'Secondary Quantity Over', and 'Secondary Ordered'. There are also fields for 'Location', 'From Lot', and 'To Lot'. At the bottom, a table displays 'Records 1 - 2' with the following columns: Quantity, Secondary Quantity, Location, Lot / Serial, Branch Plant, Available, UN, Secondary Available, Secondary UN, Based On Date, Expiration Date, and Lot Effective Date. The first row of the table has values: Quantity (empty), Secondary Quantity (empty), Location (empty), Lot / Serial (empty), Branch Plant (M0), Available (2), UN (EA), and the rest are empty.

Quantity

Enter the number of units committed for shipment in Sales Order Entry, using either the entered or the primary unit of measure defined for this item.

In the JD Edwards EnterpriseOne Manufacturing system and JD Edwards EnterpriseOne Work Order Time Entry, this field can indicate completed or scrapped quantities. The quantity type is determined by the type code entered.

Location

Enter the area in the warehouse where you receive inventory. The format of the location is user-defined and you enter the location format for each branch/plant.

You can specify more than one commitment location for the item. However, if you select a location other than the primary location that is specified on the parts list, the system hard-commits the item.

Lot / Serial

Enter a number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.

See Also:

- "Reviewing Costed Routings" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.
- [Defining Commitment Rules](#).

5.11 Attaching Routing Instructions

This section provides overviews of attachment of routing instructions, outside operations, and attaching routing instructions interactively, lists prerequisites, and discusses how to:

- Set processing options for the Work Order Routing program (P3112).
- Enter custom routings.

- Copy routing instructions from standard routings.
- Copy routing instructions from existing work orders.
- Add purchase orders for outside operations.

5.11.1 Understanding Attachment of Routing Instructions

You attach the routing instructions after you enter a work order header. Routing instructions provide details about the operations and resources that are required to complete the quantity of items requested from the shop floor. You can attach the routing instructions using any of these methods:

- Manually, by entering each work center on the Work Order Routing form.
- Interactively, by using the Work Order Entry program (P48013).
- Automatically, by setting a processing option for the Work Order Parts List program (P3111) after you attach a parts list using the work order entry program.
- Automatically, using the Order Processing program (R31410).

Regardless of the method that you use to attach routing instructions to work orders, you should attach the instructions at the same time that you attach the parts list. The system uses the routing instructions to verify information about each item on the parts list.

5.11.2 Understanding Outside Operations

You might have steps on the routing instructions that are completed by outside operations. In this case, you need to identify those steps and run order processing in batch mode to create purchase orders for the steps. You can also create purchase orders interactively as you add the routing step that includes the outside operation.

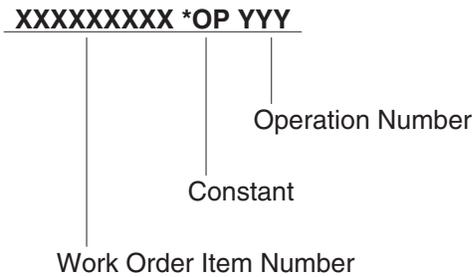
You use the Work Order Routing program (P3112) to interactively create outside operation purchase orders. The Work Order Routing program enables consolidation of outside operation purchase orders across a single work order based on supplier and branch/plant. (Release 9.1 Update)

You set the Purchase Order Consolidation processing option on the Work Order Routing program to consolidate outside operation purchase orders by supplier and branch/plant across the single work order being processed. (Release 9.1 Update)

You can override the processing option value at runtime by selecting the Purchase Order Consolidation checkbox on the Work Order Routing form. (Release 9.1 Update)

If a purchase order already exists for the supplier and branch/plant combination, then the system uses the existing outside operation purchase order. If no purchase order exists, then the system creates a new outside operation purchase order. (Release 9.1 Update)

When you record the receipt through the Purchase Order Receipts program (P4312), the Routing Quantities and Status form automatically appears and enables you to update the routing quantities and status as necessary. You can also track costs for the outside operations. To do so, set up the outside operation as an item in the F4101 table by using this item number structure as the item number before you process the order:

Figure 5–7 Item number structure

You can then assign a unit cost to the item on the Cost Revisions form (W4105A). The unit cost will be added to the item cost of the total parent when you run a cost rollup.

If you do not set up the outside operation as an item in the F4101 table, the system uses the structure mentioned previously to generate an item number for the operation, and enters the item number on the purchase order. System-generated item numbers for outside operations do not have unit costs defined. Therefore, if you do not define outside operations as items, they will carry a zero unit cost when you perform a cost rollup for the parent item and cause errors in the Purchase Order Receipts program.

The quantity of the new item on the purchase order and the supplier instructions are updated with the current information.

If the system cannot create a purchase order, it enters *NO PO in the Related Order field on the routing instructions. The system might be unable to create a purchase order for these reasons:

- The routing instructions for the parent item do not include an item master or item branch record that has an outside operation.
- The purchasing order activity rules were not set up for combination of line type, document type, and status.
- The R31410 program could not create the outside operation, because the operation step was not set up properly in the Routing table (F3003).

5.11.3 Understanding How to Attach Routing Instructions Interactively

In addition to attaching routing instructions to work order headers in batch, you can also enter routing instructions interactively or manually. That is, you can create a custom set of routing instructions or revise them manually after they have already been attached to the work order header. For example, you might have a special routing for a certain engineering release phase in which you want to test a new process step. As with the parts list, you have the option of copying information from an existing routing for an item or from another work order.

When you locate the routing instructions, the system displays the operations that are effective at the start date of the work order and those that are standard instructions or text lines. When no routing instructions are attached to the work order, no values appear in the associated fields.

5.11.4 Understanding Electronic and Device Quality Records

Products such as pharmaceuticals, biotech, and medical devices require an audit trail for each batch, work order, or medical device manufactured.

An audit trail traces the manufacture of an item from design approval through manufacturing. The audit trail includes engineering changes introduced during the manufacture of the product. A quality assurance group must review the product prior to its release for sale or use.

You can review production records for a specific product and track defects. When you review records that are out of conformance, you can open a case for internal personnel to resolve the conformance issue.

On the Work Order Routing form, you select a routing operation and then select the Resource Competency option from the Row menu.

The system calls the version of the Resource Competency Information program (P05100) specified in the Resource Competency Information (P05100) processing option on the Versions tab of the Work Order Routing program.

The system populates the employee number in the Address Number field on the Work With Competencies form from the employee field on the Work Order Routing form. The value 01 in the Resource Type field is a fixed value and cannot be changed. You can review the competencies for the specified employee.

On the Routing Details form, you select the Equipment Search option on Form menu.

The system calls the version of the Work with Equipment Master program (P1701) specified in the Work With Equipment Master (P1701) processing option on the Versions tab of the Work Order Routing program.

The system displays the Work with Equipment Master form. The system populates the equipment number from the Routing Details form. You can also enter an equipment number to search for and review equipment related to a specific step in the manufacturing routing.

5.11.5 Prerequisites

Before you complete the tasks in this section:

- Verify that a record for the parent item exists in the F4101 and Item Branch (F4102) tables.
- Set the Purchase Order Consolidation processing option on the Work Order Routing program to consolidate outside operation purchase orders by supplier and branch/plant (Release 9.1 Update).
- Enter the document type, line type, and status code for the purchase order in the processing options for the Order Processing program (R31410).
- Set the Resource Competency Information (P05100) and Work With Equipment Master (P1701) processing options on the Versions tab to specify a specific version to use when selecting the Resource Competency option from the Row menu on the Work Order Routing form and the Equipment Search option from the Form menu on the Routing Details form.

5.11.6 Forms Used to Attach Routing Instructions Interactively

Form Name	Form ID	Navigation	Usage
Work Order Routing	W3112E	Daily Order Preparation - Discrete (G3111), Enter/Change Order Select a record on the Work With Manufacturing Work Orders form, and then select Routing from the Row menu.	Work with routing instructions.
Routing Details	W3112C	Select a record on the Work Order Routing form, and then select Details from the Row menu.	Review routing details.
Copy by Item	W3112A	Daily Order Preparation - Discrete (G3111), Enter/Change Order Select a record on the Work With Manufacturing Work Orders form, and then select Routing from the Row menu. Select Copy by Item from the Form menu. Click OK on the Copy by Item form to copy the routing instructions for the displayed item and branch/plant to the work order.	Copy a routing instruction from a routing.
Copy by Order Number	W3112B	Select a record on the Work with Manufacturing Work Orders form, and then select Routing from the Row menu. Select Copy by WO from the Form menu. Complete the Work Order Number field on the Copy by Order Number form, and click OK. On the Work Order Routing form, make any final corrections and click OK.	Copy routing instructions from an existing work order.

Form Name	Form ID	Navigation	Usage
Outside Operation Details	W3161A	Select a work order on the Work with Manufacturing Work Orders form, and then select Routing from the Row menu. Select the outside operation routing step for which you want to create a purchase order on the Work Order Routing form, and then select Outside Operations from the Row menu. Complete the Vendor and Cost Type fields on the Outside Operation Detail form, and then select Generate PO from the Form menu and click OK.	Generate a purchase order for an outside operation.
Work With Competencies	W05100A	On the Work Order Routing form, select a routing operation and then select Resource Competency from the Row menu.	Review competencies for the employee in the routing instruction.
Work with Equipment Master	W1701A	On the Routing Details form, select Equipment Search from the Form menu.	Review equipment related to a specific step in the routing.

5.11.7 Setting Processing Options for the Work Order Routing Program (P3112)

To access these processing options, use the Interactive Versions program (P983051). Select Interactive Versions from the System Administration Tools menu (GH9011). Enter P3112 in the Interactive Application field, click Find, select the program version, and then select Processing Options from the Row menu.

5.11.7.1 Process

These processing options control whether the system creates a parts list and copies generic text during the processing.

1. Create Parts List

Specify whether the system creates a parts list when it creates routings for a work order. The system adds the parts list information to the F3111 table. Values are:

Blank: Do not create.

1: Create.

2. Operation's Generic Text

Specify whether the system copies the operation's generic text to a work order routing. Values are:

Blank: Do not copy.

1: Copy.

3. Queue and Move Hours

Specify whether the queue and move hours in the Work Order Routing program (P3112) enter the work center when the system leaves the values blank in the Standard Routing program (P3003). Values are:

Blank: Do not enter the queue and move hours from the work center in the Work Order Routings program when the system leaves the values blank in the Standard Routing program.

1: Enter the queue and move hours from the work center in the Work Order Routings program only when the system leaves the values blank in the Standard Routings program.

2: Enter the queue and move hours from the work center in the Work Order Routings program only when you manually add a routing step or instruction in the detail area for work order routings.

4. Override Number of Employees/Machines to '1'

Specify whether the system overrides the work center's default number of employees or machines. The system override quantity is 1. Values are:

1: Override.

Blank: Use the existing employees or machines from the work center.

5. Purchase Order Consolidation (Release 9.1 Update)

Specify whether the system consolidates purchase order lines when processing a single work order. Values are:

Blank: Do not consolidate lines.

1: Consolidate lines by supplier and branch/plant.

For example, if you set the processing option to 1 and run order processing for a single work order that contains two outside operations for the same supplier and branch/plant with a quantity of 10 on each line, then the system creates a single purchase order containing two lines with a quantity of 10 on each line.

5.11.7.2 Export

These processing option control the transaction type the system uses for export processing and for the Supply Chain Planning and Scheduling integration.

1. Transaction Type

Specify a transaction type that the system uses for export processing or for the Supply Chain Scheduling and Planning. Enter a value from UDC 00/TT (Transaction Type) that the system uses as the default value. Blank is valid if you do not want to use export processing.

5.11.7.3 Versions

These processing options control the version the system uses when you call these programs from the Work Order Routing List program.

1. Capacity Load program (P3313)

Specify the version of the Capacity Load program (P3313). The system uses this program to identify the capacity load in a work center for a specific operation in the work order routing. If you leave this processing option blank, the system uses the default version ZJDE0003.

2. Work With Activity Based Costing Workbench (P1640)

Specify the version of the Activity Based Costing Workbench program (P1640) the system uses.

3. Resource Assignment (P48331)

Specify which version of the Resource Assignment program (P48331) the system uses. If you leave this processing option blank, the system uses version **ZJDE0001**.

4. Outside Operation Revisions (P3161)

Specify which version of the Outside Operation Revisions program (P3161) the Work Order Routing program (P3112) calls. The system uses this program to generate and maintain purchase orders for outside operations. If you leave this processing option blank, the system uses version **ZJDE0001**.

5. Resource Competency Information (P05100)

Specify which version of the Resource Competency Information program (P05100) the Work Order Routing program (P3112) calls. The system uses this program to enable viewing of the competencies for the user specified in the grid row. The Row menu option does not function without a user specified in the row. If you leave this processing option blank, the system uses version **ZJDE0001**.

6. Work With Equipment Master (P1701)

Specify which version of the Equipment Master program (P1701) the Work Order Routing program (P3112) calls. This option is available on the Form menu of the Routing Details form. If you leave this processing option blank, the system uses version **ZJDE0001**.

5.11.8 Entering Custom Routings

Access the Work Order Routing form.

Figure 5–8 Work Order Routing form (Release 9.1 Update)

Work Center	Operation Sequence	R A	Operation Status	Operation Status Desc	Operation Description	Machine Run Hours	Labor Run Hours
200-901	10.00	0		Waiting for Assignment	Assemble, Inspect, Package		2.50

Purchase Order Consolidation (Release 9.1 Update)

Specify whether the system overrides the processing option value at runtime for consolidation of purchase order lines when processing a single work order. Values are:

Cleared: Do not consolidate lines.

Selected: Consolidate lines by supplier and branch/plant.

For example, if you set the processing option to 1 and run order processing for a single work order that contains two outside operations for the same supplier and branch/plant with a quantity of 10 on each line, then the system creates a single purchase order containing two lines with a quantity of 10 on each line.

Skip to Order Number

Enter a number identifying the original document. This can be an invoice number, work order number, sales order number, journal entry number, and so on.

Machine Run Hours

Enter the standard machine hours that you expect to incur in the normal production of this item.

Labor Run Hours

Enter the standard hours of labor that you expect to incur in the normal production of this item.

The run labor hours in the Routing Master table (F3003) are the total hours that it takes the specified crew size to complete the operation. The hours are multiplied by the crew size during shop floor release and product costing.

Start Date

Enter the start date of either the work order or the routing instructions.

Operation Type

Enter a value from UDC 30/OT (Type Operation) that indicates the type of operation. Values include:

A: Alternate routing

TT: Travel time

IT: Idle time

T: Text

Pay Point

Enter a code that indicates whether a work center has labor, material, or both, backflushed through it when quantities are reported against operations occurring in the work center. If you do not override the routing record, the system uses the work center value as the default. Codes are:

0: Not a backflush work center.

B: Backflush material and labor.

M: Backflush material only.

L: Backflush labor only.

P: Preflush material only.

If you leave this field blank, the system retrieves the value from the Work Order Routing table (F3112).

Crew Size

Enter the number of people who work in the specified work center or routing operation.

The system multiplies the Run Labor value in the F3003 table by crew size during costing to generate total labor amounts.

If the Prime Load Code is L or B, the system uses the total labor hours for backcheduling. If the Prime Load Code is C or M, the system uses the total machine hours for backcheduling without modification by crew size.

Setup Hours

Enter the standard setup hours that you expect to incur in the normal completion of this item. This value is not affected by crew size.

5.11.9 Copying Routing Instructions from Standard Routings

Access the Copy by Item form.

Enter the Item Number and Branch that contain the routing instructions to copy and click OK.

5.11.10 Copying Routing Instructions from Existing Work Orders

Access the Copy by Order Number form.

Enter the Work Order Number that has the routing instructions to copy and click OK

5.11.11 Adding Purchase Orders from Outside Operations

Access the Outside Operation Details form.

Create a purchase order for any step in the routing instructions that involves a subcontractor. You use the Enter/Change Routing program (P3003) to add an outside operations step. To define a routing step as an outside operation, you must enter a supplier and cost type and enter **Y** in the PO (Y/N) field. When you run the Order Processing batch program (R31410), the system generates a purchase order. You can also enter the purchase order interactively by calling the Outside Operation Revisions program (P3161) from the Work Order Routing form (W3112E).

Important: When you create purchase orders for outside operations, consider these processes:

- When you change the status of a routing instruction, the system can create duplicate purchase orders for that operation when you run the Order Processing program for that work order again.
- When you enter a purchase order interactively and then run the Order Processing program, the system creates duplicate purchase orders as well.
- When you delete an outside operation with an associated purchase order, the system deletes the purchase order when the original status of the operation remains unchanged. When the system deletes the purchase order, it updates the supplier instructions with the quantity of the value of the purchase order for the primary location and the open amount.
- If you set up a work center as a valid location, the system verifies that the work center is available before you use JD Edwards EnterpriseOne Warehouse Management.

5.12 Attaching Co-Products and By-Products

This section provides an overview of the methods used to attach co-products and by-products and discusses how to attach co-products and by-products.

5.12.1 Understanding the Methods Used to Attach Co-Products and By-Products

For process manufacturing, you attach co-products and by-products after you enter a work order header. Co-products are usually manufactured together or sequentially because of product or process similarities. By-products are materials for which production is incidental to the process, but that may have value. Co-products and

by-products identify the items that result from the process, whether they are planned or unplanned.

You can use these methods to attach co-products and by-products:

- Manually, by making changes after running the Order Processing program (R31410).
- Interactively, by using the Work Order Entry program (P48013).
- Automatically, by attaching them after the header is entered by setting a processing option in the Work Order Entry program (P48013).
- Automatically, by setting a processing option to attach them from the JD Edwards EnterpriseOne Requirements Planning system.

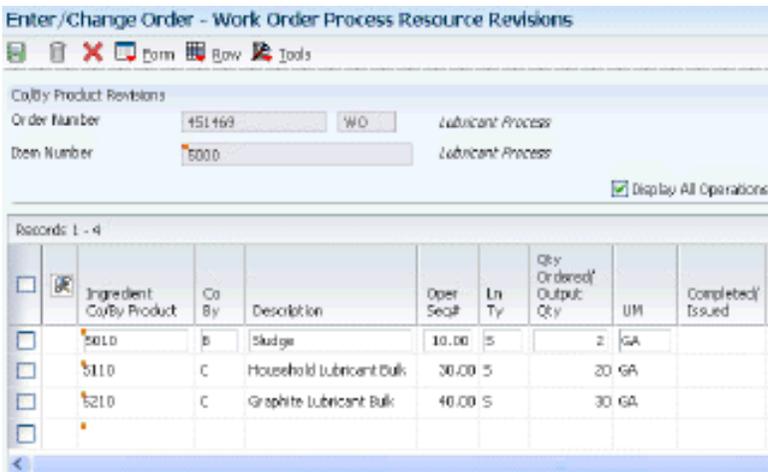
5.12.2 Form Used to Attach Co-Products and By-Products

Form Name	Form ID	Navigation	Usage
Work Order Process Resource Revisions	W3111PE	Daily Order Preparation - Process (G3113), Enter/Change Order Locate and select an order on the Work With Manufacturing Work Orders form, and then select Co/By Products from the Row menu.	Attach co-products and by-products.

5.12.3 Attaching Co-Products and By-Products

Access the Work Order Process Resource Revisions form.

Figure 5–9 Work Order Process Resource Revisions form



Co By (co-products by-products)

Enter a code that identifies standard components or ingredients as co-products, by-products, and intermediates. Co-products are (concurrent) end items as the result of a process. By-products are items that can be produced at any step of a process, but

were not planned. Intermediate products are items defined as a result of a step but are automatically consumed in this step.

Generally, intermediates are nonstock items and are only defined steps with a pay-point for reporting purposes. Standard components (Discrete Manufacturing) or ingredients (Process Manufacturing) are consumed during the production process. Values are:

C: Co-products.

B: By-products.

I: Intermediate products.

Blank: Standard components or ingredients.

Qty Ordered/Output Qty (quantity ordered/output quantity)

Enter the quantity of units affected by this transaction.

5.13 Attaching Intermediate Items

This section provides an overview of intermediate items and discusses how to attach intermediate items.

5.13.1 Understanding Intermediate Items

For process manufacturing, use intermediates to track the quantity of output of any operation in a work center at a specific time. You can define intermediates in different units of measure, by item, or by quantity. You set up one intermediate per operation. However, you cannot define an intermediate for the last operation. You can manually attach intermediates.

Fermented liquid is an example of an intermediate. The liquid ferments for an extended period of time before being distilled. The resulting liquid is not a finished product, but it proceeds to the next operation. You can use intermediates to verify quality as the process is running to ensure that the end product is produced according to specifications.

5.13.2 Form Used to Attach Intermediate Items

Form Name	Form ID	Navigation	Usage
Intermediate Product Revisions	W3111IA	Daily Order Preparation - Process (G3113), Enter/Change Order Locate and select an order on the Work With Manufacturing Work Orders form, and then select Routing from the Row menu. Select an item on the Work Order Routing form, and then select Intermediates from the Row menu.	Attach intermediate items.

5.13.3 Attaching Intermediate Items

Access the Intermediate Product Revisions form.

Figure 5–10 Intermediate Product Revisions form

Item Number	Description	Quantity Ordered	UOM	Oper Seq#	Remark	Stocking Type	Component Branch	Co By	Order Number
50011	Refined Oil	45	OZ	10.00		0	M30	1	451469

Quantity Ordered

Enter the quantity of units affected by this transaction.

5.14 Assigning Serial Numbers

This section provides an overview of serial number assignment and discusses how to assign serial numbers.

5.14.1 Understanding Serial Number Assignment

You assign serial numbers to work orders to track serialized items within lots. You can assign serial numbers to work orders at any time. When you enter serial numbers, the system creates serial number master records, as well as work order lot or serial numbers. The system does not validate any serial number that you enter until you complete the work order. If you do not assign a serial number to a serialized assembly, the system requires a number before you can complete the work order. After you complete a work order, you cannot modify any serial numbers that are assigned to the assemblies.

You can assign serial numbers to specific assemblies at any time before the work order is completed. You can also assign serial numbers to specific assemblies at the time of work order completions by selecting Lot SN Generation from the Form menu on the Serial Number Revisions form (W3105B). You can associate serialized components to a specific assembly either at inventory issues or at work order completions. You must issue serialized components in their respective primary unit of measure to associate them to a specific assembly.

The Assign Serial Numbers program (P3105) assumes a quantity of one in the unit of measure on the work order. For serialized assemblies, this is the primary unit of measure. You cannot enter more serial numbers than the quantity on the work order.

Note: You can delete a serial number only when the system detects no activity for the number.

5.14.2 Prerequisite

Set the Lot Process Type and Serial Number Required fields on the Item Master Information form for serial number processing.

See "Entering Item Master Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

5.14.3 Form Used to Assign Serial Numbers

Form Name	Form ID	Navigation	Usage
Serial Number Revisions	W3105B	Daily Order Preparation - Discrete (G3111), Enter/Change Order Locate and select a work order on the Work With Manufacturing Work Orders form, and then select Serial Numbers from the Row menu. Select Revisions from the Form menu on the Work With Work Order Serial Numbers form. Select Lot/SN Generation from the Form menu on the Serial Number Revisions form.	Assign serial numbers.

5.14.4 Assigning Serial Numbers

Access the Serial Number Revisions form.

Note: You can also access the Assign Serial Numbers program (P3105) from the menu (G3111). In this case, however, you can use it only to locate existing serial numbers, but not to update or add serial numbers.

Working with Commitments

This chapter contains the following topics:

- [Section 6.1, "Understanding Commitments"](#)
- [Section 6.2, "Defining Commitment Rules"](#)
- [Section 6.3, "Defining Commitments at a Work Center Location"](#)
- [Section 6.4, "Managing Commitments for Grade and Potency"](#)
- [Section 6.5, "Reposting Commitments"](#)

6.1 Understanding Commitments

A commitment is a reservation for the parts that are needed on a work order. You can define commitments by branch or work center. You can change commitments manually or through a batch program.

When you attach a parts list to a work order header, the system creates commitments for the required quantity of each component. The commitment reserves the material for a particular work order. The type of commitment that the program creates (hard or soft) depends on which commitment option that you specified in the Manufacturing Constants program (P3009).

A hard commitment reserves designated inventory in a specific location for a particular work order. A soft commitment enables you to commit the inventory at the primary location to a work order without designated inventory from a specific location. This inventory can be used for another work order. Soft commitments also enable you to compare the material that is needed for current work orders to available inventory.

The system enables you to use hard commitments or soft commitments in a work order, or you can let the system change the commitment from soft to hard when you process the work order. You can also set up the system to place a soft commitment at the creation of the work order and change it to a hard commitment when you run the Order Processing program (R31410).

If, at any time, the location that appears on the parts list is not the primary location, the system hard-commits that line item. Inventory remains committed until the system records the issues. Then, the system reduces the on-hand quantity and the committed quantities.

The Inventory Issues program (P31113) relieves commitments. When you issue or reverse material that you committed to a secondary location when you entered the parts list line, the system performs a hard commitment for this material. When you partially issue or reverse inventory to a different location, the system relieves the

commitment from the old location and commits the remaining material to the new location.

If you use lot processing, the system creates commitments based on the commitment date method, the lot expiration date method, and the lot effectivity date, if applicable, as well as grade or potency ranges for the lot numbers. The parts list for the work order might specify a range of grade or potency values that can be used on the order. The system commits the lot of the grade or potency within the range that you defined for the item. The system can also search for inventory that you need for the order in a certain sequence. For example, you might want to search for inventory with a specific lot number, grade, or potency.

When you commit lot-controlled component quantities at the work center location, the system searches for available quantities in the lots that are available at the work center location and commits quantities from those lots based on the commitment method. When you use more than one lot, the parts list line is split. If more components are needed than are available, the system commits the remaining quantity from the primary location. This process applies only when you do not use the JD Edwards EnterpriseOne Warehouse Management system.

Use this table to identify the processing options available for both the Enter/Change Order (P48013) and Order Processing programs:

Program	Function
Enter/Change Order	Using the Enter/Change Order program, you can automatically generate: <ul style="list-style-type: none"> ■ Routing instructions, when you create the parts list online ■ Parts list, when you create the routing instructions online
Order Processing	Using the Order Processing program, you can specify either the work order effective date or the start date for effectivity checking. You can set up the system to perform these tasks automatically: <ul style="list-style-type: none"> ■ Use substitutes for items that are out of stock and for blanket order release processing ■ Generate the parts list, routing instructions, or both

See Also:

- "Setting Processing Options for Segmented Item Availability (P41206)" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

6.2 Defining Commitment Rules

This section provides an overview of commitment rules and discusses how to:

- Define the commitment method for an item.
- Define the commitment control and type of commitment.

6.2.1 Understanding Commitment Rules

When a parts list is attached to a work order header, either manually or by using the batch program, the system automatically creates commitments for the components unless you set the processing option to bypass inventory commitments.

When you define commitments, you set up the parameters that determine how the commitment is created. If you are using lot control, you can also manage commitments by commitment date method, as well as grade or potency. You repost commitments when you need to clear commitments and reassign quantities to other work orders.

When creating commitments, you can activate a processing option to verify whether substitutes exist for an item. To use substitutes, you must use a hard commitment at the creation of a work order or at pick time.

You define the method that the system uses when creating a commitment. Using the Item Branch/Plant program (P41026), you can define the commitment method by location, lot number, or date. If you define commitments by date, you specify the commitment date method, as well as the lot expiration date method, if applicable, on the Lot Processing tab. The system calculates these dates based on the default days information that you define in the Item Master (P4101) and Item Branch/Plant programs and stores them in the Lot Master table (F4108).

You use the Manufacturing Constants program (P3009) to define the commitment control method and type of commitment for the work order. Commitment control determines how the system commits inventory to a work order. For example, commitment control determines whether the system can cross branch boundaries to fill requirements. In addition, you can specify whether the commitment is soft or hard. Soft commitments can become hard commitments in certain circumstances, such as when inventory is relieved.

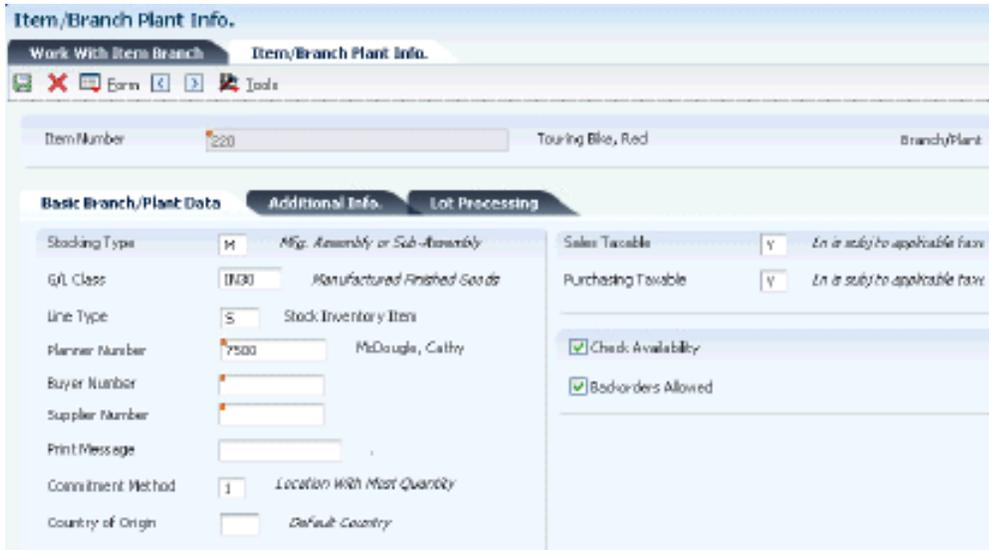
6.2.2 Forms Used to Define Commitment Rules

Form Name	Form ID	Navigation	Usage
Item/Branch Plant Info.	W41026A	Inventory Master/Transactions (G4111), Item Branch/Plant Locate and select an item on the Work With Item Branch form.	Define the commitment method for an item.
Manufacturing Constants Revision	W3009B	Shop Floor Management Setup (G3141), Manufacturing Constants Locate and select a branch/plant on the Work With Manufacturing Constants form.	Define the commitment control and type of commitment.

6.2.3 Defining the Commitment Method for an Item

Access the Item/Branch Plant Info form.

Figure 6–1 Item/Branch Plant Info form



To define the commitment method for the item:

1. On the Item/Branch Plant Info. form, complete the Commitment Method field on the Basic Branch/Plant Data tab.
2. If you define the commitment method by date, select the Lot Processing tab and complete the Commitment Date Method field.
3. If you specify the lot expiration date as the commitment date method, complete the Lot Expiration Date Method field on the Lot Processing tab and click OK.

■ **Commitment Method**

Enter a code that indicates the method that the system uses to commit lot items from inventory. Codes are:

1: The normal commitment method for inventory. The system commits inventory from the primary location and then from secondary locations.

The system commits inventory from the locations with the most inventory before committing inventory from locations with the least. The system commits backorders to the primary location.

2: The inventory commitment method by lot number. The system commits inventory by lot number, starting with the lowest lot number and committing orders to available lots.

3: The inventory commitment method by lot expiration date. The system commits inventory from the locations with the earliest expiration date first. The system considers only locations with expiration dates greater than or equal to the sales order or parts list requested date.

6.2.4 Defining the Commitment Control and Type of Commitment

Access the Manufacturing Constants Revision form.

Figure 6–2 Manufacturing Constants Revision form, Commitment Control tab

The screenshot shows the 'Manufacturing Constants - Manufacturing Constants Revision' form. At the top, there are icons for 'Tools' and a 'Branch/Plant' dropdown menu set to 'M00' with 'Eastern Manufacturing Center' selected. Below this are four tabs: 'Manufacturing Constants', 'Shifts', 'Commitment Control', and 'Costing Options'. The 'Commitment Control' tab is active, showing two groups of radio buttons. The 'Commitment Control' group has three options: 'Primary Location', 'Split-Cross Branch boundaries', and 'Split-Don't cross Branch boundaries'. The 'Hard/Soft Commit' group has three options: 'Hard at creation of Parts List', 'Soft, Hard when printing', and 'Soft at creation of Parts List'.

To define the commitment control and type of commitment:

1. On the Manufacturing Constants Revision form, select the Commitment Control tab and then select an option from the Commitment Control group box

If you select the Primary Location option, the program does not select lots.

If you want to split locations, you have two options. You can either specify commitments throughout different locations within one branch/plant, or specify commitments throughout different locations from different branch/plants.

2. Select an option from the Hard/Soft Commit group box, and then click OK:

If you use substitutes, you must specify a hard commitment.

The first option will make hard commitments when parts list is attached. The second option will make soft commitments when the parts list is attached. These commitments will become hard when the parts list is printed using Work Order Generation (R31410). The last option will create soft commitments when the parts list is attached and will remain soft, until a lot is specified.

6.3 Defining Commitments at a Work Center Location

This section provides an overview of commitments at a work center location and discusses how to:

- Define the work center in the routing instructions for an item.
- Define the location at the work center.
- Assign a component to a routing operation.

6.3.1 Understanding Commitments at a Work Center Location

In order to commit inventory to be issued to a particular work order, you need to define the values that allow you to make the material available where and when it is needed. For this purpose, you need to specify the work center for the routing instructions, as well as the issue location for the work center. You also specify the operation sequence at which each component is needed. If you work in a process manufacturing environment, you do not have a bill of material. Finally, you need to specify in the Manufacturing Constants program (P3009) which backflush option to use for the branch/plant.

6.3.2 Forms Used to Define Commitments at a Work Center Location

Form Name	Form ID	Navigation	Usage
Enter Routing Information	W3003B	Daily PDM Discrete (G3011), Enter/Change Routing Locate and select an item on the Work With Routing Operations form.	Define the work center in the routing instructions for an item.
Work Center Master Revisions	W3006A	Daily PDM Discrete (G3011), Enter/Change Work Center Locate and select a work center on the Work With Work Centers form.	Define the location at the work center.
Enter Bill of Material Information	W3002A	Daily PDM Discrete (G3011), Enter/Change Bill Locate and select an item on the Work with Bill of Material form.	Assign a component to a routing operation.

6.3.3 Defining the Work Center in the Routing Instruction for an Item

Access the Enter Routing Information form.

Figure 6–3 Enter Routing Information form

Work Center	Oper Seq#	Description	Run Labor	Run Machine	Setup Labor	Cons Prod	Queue Hours	Move Hours	Line/Cell	Effective From	Effective Thru
200-201	10.00	Filter	.50	.00	.00	Cons	.00			04/04/1997	12/31/2041
200-901	20.00	Assembly	.25	.00	.00	Cons	.00			04/04/1997	12/31/2041
200-901	30.00	Assembly	1.00	.00	.00	Cons	.00			04/04/1997	12/31/2041
200-901	40.00	Assembly	1.00	.00	.00	Cons	.00			04/04/1997	12/31/2041
200-911	50.00	Test / Inspect	.25	.00	.00	Cons	.00			04/04/1997	12/31/2041
200-920	60.00	Package	.25	.00	.00	Cons	.00			04/04/1997	12/31/2041

6.3.4 Defining the Location at the Work Center

Access the Work Center Master Revisions form.

Figure 6–4 Work Center Master Revisions form

6.3.5 Assigning a Component to a Routing Operation

Access the Enter Bill of Material Information form.

Figure 6–5 Enter Bill of Material Information form

Item Number	Description	Quantity	UM	Active Engr. Reg	P	V	Is Cd	Skg Typ	Ln Ty	Oper Seq#	Line No.	Effective From	Effective Thru
2001	Cro-Moly frame, Red	1	EA		Y	U	M	S		10.00	10.00	04/04/1997	12/31/2041
2006	Touring Fork	1	EA		Y	U	P	S		20.00	20.00	04/04/1997	12/31/2041
2007	Bottom Bracket	1	EA		Y	U	P	S		30.00	30.00	04/04/1997	12/31/2041
2008	Head Set	1	EA		Y	U	P	S		40.00	40.00	04/04/1997	12/31/2041
2009	Crank	2	EA		Y	U	P	S		50.00	50.00	04/04/1997	12/31/2041
2010	Chain Rings	1	EA		Y	U	P	S		60.00	60.00	04/04/1997	12/31/2041
2011	Chain, Std	1	EA		Y	U	P	S		60.00	70.00	04/04/1997	12/31/2041
2013	Shift Kit	1	EA		Y	U	P	S		30.00	80.00	04/04/1997	12/31/2041
2014	Brake Kit	1	EA		Y	U	P	S		40.00	90.00	04/04/1997	12/31/2041
2015	Wheel Set, Front	1	EA		Y	U	P	S		60.00	100.00	04/04/1997	12/31/2041

6.4 Managing Commitments for Grade and Potency

This section provides an overview of commitments for grade and potency and discusses how to:

- Convert units of measure for potent units.
- Manage commitments for grade- and potency-controlled items.

6.4.1 Understanding Commitments for Grade and Potency

When the system creates commitments for grade- and potency-controlled items, it moves the grade and potency range to the parts list. The range is defined on the Bill of

Materials. Only lots that are within the range are eligible for commitments. The system creates the commitments in date sequence.

In this example, the work order quantity required is 800, and the grade range is A01 through A03:

Level	Location	Expiration Date	Grade	On Hand	Commit
Primary	..	N/A	N/A	0	50
Secondary	9406220000	08/31	A01	50	50
Secondary	9406230000	08/15	A02	300	300
Secondary	9406240000	12/12	A03	400	400
Secondary	9406250000	09/01	A04	5	0
Secondary	9406260000	09/01	A05	5000	0

The system commits the quantities using the primary unit of measure. When the specified lots in the range have insufficient quantity to meet all of the commitments, the system commits the remainder to the primary location at standard grade or potency.

6.4.1.1 Conversion of Units of Measure for Potent Units

When you define a unit of measure as a potent unit of measure, and the system creates commitments, the system converts the quantity to the primary unit of measure. For example, assume that the component unit of measure is GP (potent gallons), and the standard potency is 70 percent. Also assume that the parts list requires 500 GP. However, only the equivalent of 470 potent gallons is available. The demand for the remaining 30 potent gallons is committed from the primary location in the primary unit of measure ($30 \text{ GP} / .7 = 43 \text{ GA}$).

This table illustrates the example:

Level	Location	Potency	On Hand	Potent Units	Commit at 70 percent potency
Primary	..	N/A	0	0	43
Secondary	9406220000	80 percent	50	40	50
Secondary	9406230000	90 percent	300	270	300
Secondary	9406240000	40 percent	400	160	400

The potency associated with the item in the Lot Master table (F4108) is for conversion purposes only.

A lot that consists of 100 potent units with a potency of 75 percent is the equivalent of 133.3333... physical gallons ($100 / .75$). Companies that store inventory in potent units must know the physical size of the inventory.

Important: The system displays a warning message when it changes the standard value for grade or potency on the branch/plant record. Commitments can be brought out of balance if the primary unit of measure for an item is not potent and commitments in a potent unit of measure exist from a sales order or work order. Conversion errors work in both directions. That is, commitments can be out-of-balance by either the potent or the primary unit of measure. You can correct this imbalance by running a repost for the sales order and work order. You should run sales order reports and repost the sales order after you repost the work order.

To create commitments for potent units, you must set up the correct unit of measure conversions. You set up a unit of measure conversion for potent units so that the system can:

- Convert potent units of measure to physical units of measure
- Convert physical units of measure to potent units of measure

The conversion for potent units is always 1 potent unit = 1 physical unit. For example, 1 LP = 1 LT and 1 GP = 1 GA.

6.4.1.2 Management of Commitments for Grade- and Potency-Controlled Items

Use the Work Order Parts List form to specify the location and grade or potency for each applicable component on a work order.

6.4.2 Prerequisite

Set up potent units in UDC 00/UM (Units of Measure).

6.4.3 Forms Used to Manage Commitments for Grade and Potency

Form Name	Form ID	Navigation	Usage
Standard Units of Measure Revisions	W41003B	Inventory Setup (G4141), Standard Units of Measure Click Add on the Work With Standard Units of Measure form.	Convert units of measure for potent units.
Work Order Parts List	W3111A	Daily Order Preparation - Discrete (G3111), Enter/Change Order Locate an order on the Work With Manufacturing Work Orders form, and select Parts List from the Row menu.	Manage commitments for grade- and potency-controlled items.

6.4.4 Converting Units of Measure for Potent Units

Access the Standard Units of Measure Revisions form.

Figure 6–6 Standard Units of Measure Revisions form

Standard Units of Measure - Standard Units of Measure Revisions

From Unit of Measure: DZ Conversion Factor: 12.0000000 To Unit of Measure: EA

6.4.5 Managing Commitments for Grade- and Potency-Controlled Items

Access the Work Order Parts List form.

Figure 6–7 Work Order Parts List form

Work Order Parts List

Order Number: 451012 W/O Branch/Plant: M30
 Cra-Moly Frame, Red Requested: 06/23/2005

Item Number: 3001 Cra-Moly Frame, Red
 Production Number:

Records 1 - 6

Component Item Number	Description	Order Quantity	Issued Quantity	UN	Secondary Qty Ordered	Secondary Qty Issued	Sec UM	Ln Ty	Act Engr	Customer	Request Date	Component Branch	Location	Lot Serial Number
3004	Cra-Moly Frame	10		EA			EA	S			06/13/2005	M30	.	
3005	Chain Stay	20		EA			EA	S			06/13/2005	M30	.	
9005	Acid	3		LP			LT	S			06/13/2005	M30	.	200505010001
9011	Paint, Red	2250		ML			ML	S			06/13/2005	M30	.	
9031	Primer	2250		ML			ML	S			06/13/2005	M30	.	

6.5 Reposting Commitments

This section provides an overview of the Repost Open Work Orders program, lists prerequisites, and discusses how to:

- Run the Repost Open Work Orders program.
- Set processing options for the Repost Work Orders program.

6.5.1 Understanding the Repost Open Work Orders Program

After you set up commitments, run the Repost Open Quantities program (R3190) to perform these tasks:

- Perform a net change on all values for the quantity in the Item Location File table (F41021) and recalculate the commitments.
- Repost the quantity value in the Item Location File table (F41021) for the parent item. The system uses the information from the Work Order Master File table (F4801) and this calculation:
 quantity ordered - (quantity completed + quantity scrapped)
- Repost the quantity-committed value for components in the Item Location File table (F41021) for the location specified on the work order parts list for the item. The system uses the information from the Work Order Parts List table (F3111) and this calculation:
 quantity required - quantity issued

Processing options enable you to repost only those work orders that are below a certain status.

The system does not repost bulk items and lines that do not have an inventory interface.

6.5.2 Prerequisites

Before you complete the tasks in this section:

- Verify that the Item Location File table (F41021) is not in use.
- Indicate whether you want inventory hard- or soft-committed at each branch.

6.5.3 Running the Repost Open Work Orders Program

From the Shop Floor Management Advanced menu (G3131), select Repost Open Quantities.

6.5.4 Setting Processing Options for Repost Open Work Orders (R3190)

Processing options enable you to specify the default processing for programs and reports.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

6.5.4.1 Process

Work Order Status Code

Specify the work order status code. Values are:

1: Enter the work order status for the update.

The system will repost any order with a status less than the input status, and clear commitments for any order with a status equal to or greater than the input status.

Blank: The system uses status **99** as the default value.

Working with Availability and Shortages

This chapter contains the following topics:

- [Section 7.1, "Understanding Availability and Shortages"](#)
- [Section 7.2, "Defining Availability Calculations for a Branch"](#)
- [Section 7.3, "Reviewing Part Availability Information"](#)
- [Section 7.4, "Managing Shortage Information"](#)

7.1 Understanding Availability and Shortages

To ensure that jobs are completed in the most cost-effective manner, JD Edwards EnterpriseOne Shop Floor Management coordinates material handling, material availability, setup and tooling availability, and operator skills. You can use availability and shortage tracking programs to determine what inventory you have and what inventory you need.

You verify the availability of the parts that you need to complete a work order, either before you create the work order or when the work order has been processed and is ready for release to the shop floor. You can use the bill of material, as well as the parts list, to review the materials that are available for completing the work order or rate schedule. You can select to print shortages for specified components or print all shortages.

When material shortages exist, you can enter and review them using the Shortage Workbench program (P3118). You can also create shortage reports.

7.2 Defining Availability Calculations for a Branch

The system uses the quantities that are defined for each branch to calculate availability. Therefore, you indicate the quantities that you want the system to add or subtract from the on-hand balance when the system calculates availability at the branch. If you leave any field blank, the system excludes the quantity in that field from the calculation.

This section discusses how to define availability calculations for a branch.

7.2.1 Forms Used to Define Availability Calculations for a Branch

Form Name	Form ID	Navigation	Usage
Item Availability Definition	W41001G	Inventory Setup (G4141), Branch/Plant Constants Locate a branch/plant on the Work With Branch/Plant Constants form, and select Availability from the Row menu.	Define availability calculations for a branch.

7.2.2 Defining Availability Calculations for a Branch

Access the Item Availability Definition form.

Figure 7-1 Item Availability Definition form

To define availability calculations for a branch:

1. Select any of these options to subtract the appropriate quantities:
 - Quantity Soft Committed to SO & WO
 - Quantity Hard Committed to SO
 - Quantity Future Committed to SO
 - Quantity Hard Committed to WO
 - Other Quantity 1 SO
 - Other Quantity 2 SO
 - Quantity on Hold
 - Safety Stock
2. To add a quantity, click any of the these options, and then click OK:
 - Quantity on Purchase Order Receipts
 - Quantity on PO - Other 1
 - Quantity on Work Order Receipts

- Quantity in Transit
- Quantity in Inspection
- Quantity in Operation 1
- Quantity in Operation 2

7.3 Reviewing Part Availability Information

This section provides an overview of part availability information and discusses how to:

- Set processing options for the Part Availability program (P30200).
- Review part availability.
- Set processing options for the Parts List Inquiry program (P3121).
- Review parts list availability.

7.3.1 Understanding Part Availability Information

You can determine the availability of the parts that are required to make a certain quantity of a parent item before you create a work order or rate schedule. Use the Part Availability program (P30200) to determine the availability of the parts.

Before you release a work order or rate schedule to the shop floor, you can review the parts list for the work order to determine the availability of the parts that are required to make a certain quantity of a parent item. Use the Parts List Inquiry program (P3121) to determine the availability of a part.

When you specify a soft commitment for the part, the quantities that appear indicate the item's availability at all locations. When you specify a hard-commitment for the part, only quantities from the hard-committed locations appear. You can also display the quantities of each part that have hard and soft commitments to work orders and sales orders.

7.3.2 Forms Used to Review Part Availability Information

Form Name	Form ID	Navigation	Usage
Parts Availability - Multi Level Indented	W30200C	Daily Order Preparation - Discrete (G3111), Part Availability Select the Parts Availability tab and locate an item for a branch on the Parts Availability - Multi Level Indented form.	Review part availability.

Form Name	Form ID	Navigation	Usage
Parts List Detail Inquiry	W3121B	Daily Order Preparation - Discrete (G3111), Parts List Inquiry Locate a work order on the Work With Work Order Parts List form, select an item and click Select.	Review parts list availability.

7.3.3 Setting Processing Options for the Part Availability Program (P30200)

Processing options enable you to specify the default processing for programs and reports.

7.3.3.1 Defaults

These processing options control default settings for running this program. For example, you can use a processing option to specify the processing mode that the system uses and the bill of material type that appears.

1. Processing Mode

Specify how the system displays the information on which you inquiry. select from these processing modes: simple inquiry, parts availability, or lead time inquiry.

The simple inquiry mode displays the components of a bill of material.

The parts availability mode displays the components of a bill of material and the available quantities for those components. If you use this mode, specify whether you want the system to subtract safety stock from the quantity on hand and whether to display negative quantities using the Safety Stock and Negative Items processing options under the Select tab.

The lead time inquiry mode displays actual and calculated lead times for an item. Actual lead times are derived from the lead times as updated in the Item Branch table by the Leadtime Rollup program. Calculated lead times are the number of days that you must start to manufacture a part prior to the date that the parent needs it. You can use this mode of processing to define lead times for an item at each routing instruction step or to compare the actual and calculated lead times. If you use this mode, specify whether you want the system to display the actual or calculated lead times in the Leadtime Values processing option under the Select tab. Values are:

- 1: Displays the simple inquiry mode.
- 2: Displays the parts availability mode.
- 3: Displays the lead time inquiry mode.

If you leave this processing option blank, the system displays the simple inquiry mode.

2. Inquiry Mode

Specify the level of detail that you want the system to display. The single level mode displays the parent item and its components. The multilevel mode displays the parent item, its components, and the subassemblies of the components. The multilevel indented mode displays the parent item, its components, and the subassemblies of the components. In addition, it indents the subassemblies. Values are:

- 1: Displays the single level mode.

2: Displays the multilevel mode.

3: Displays the multilevel indented mode.

If you leave this processing option blank, the system displays the multilevel indented mode.

3. Bill of Material Type

Specify the type of bill of material that the system uses as the default value in the Type of Bill field on the Work With Bill of Material form. Enter a value from user-defined code (UDC) table 40/TB (Bill Type) that designates the type of bill of material. If you leave this processing option blank, the system uses M for manufacturing bill of material.

4. Display Sequence

Specify how you want the system to sort information on the Work With Bill of Material form. You can select to sequence the data by component line number or by operation sequence number. The component line number indicates the sequence of the components on a bill of material. The operation sequence number indicates the sequence of the fabrication or assembly steps in the manufacture of an item. Values are:

1: Sorts by component line number.

2: Sorts by operation sequence number.

Blank: Sorts the data by component line number.

7.3.3.2 Versions

These processing options control which version the system uses when these programs are called from the Part Availability program.

1. Bill Of Material Print (R30460)

Specify the version of the Bill of Material Print report that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Bill of Material Print report displays information.

Therefore, you might need to set the processing option to a specific version to meet the business need.

2. ECO Workbench (P30225)

Specify the version that the system uses when you select the Row exit to the ECO Workbench program from the Work With Bill of Material form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the ECO Workbench program displays information.

Therefore, you might need to set the processing option to a specific version to meet the business need.

3. ECO Header (P48020)

Specify the version of the ECO Header program that the system uses when you select the Form exit to the Bill of Material Revisions program from the Work With Bill of Material. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the ECO Header program displays information. Therefore, you might need to set the processing option to a specific version to meet the business need.

4. Bill of Material Revisions (P3002)

Specify the version that the system uses when you select the Form exit to the Bill of Material Revisions program from the Work With Bill of Material form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Bill of Material Revisions program displays information. Therefore, you might need to set the processing option to a specific version to meet the business need.

5. Item Master (P4101B)

Specify the version that the system uses when you select the Form exit to the Item Master program from the Work With Bill of material form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Master program displays information. Therefore, you might need to set the processing option to a specific version to meet the business need.

6. Process Inquiry (P30240)

Specify the version that the system uses when you select the Form exit to the Process Inquiry program from the Work With Bill of Material form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Process Inquiry program displays information.

Therefore, you might need to set the processing option to a specific version to meet the business need.

7. Work With Routing Master (P3003)

Specify the version of the Work With Routing Master program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Work With Routing Master program displays information. Therefore, you might need to set the processing option to a specific version to meet the business need.

8. Item Availability (P41202)

Specify the version of the Item Availability program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Availability program displays information.

Therefore, you might need to set the processing option to a specific version to meet the business need.

9. Item Cross Reference (P4104)

Specify the version of the Item Cross Reference program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Cross Reference program displays information.

Therefore, you might need to set the processing option to a specific version to meet the business need.

10. Item Search (P41200)

Specify the version of the Item Search program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Search program displays information. Therefore, you might need to set the processing option to a specific version to meet the business need.

7.3.3.3 Select

These processing options control how certain values appear, based on the default selection for the Processing Mode processing option.

1. Safety Stock

Specify whether the system subtracts the safety stock from the quantity on hand. Use this processing option in conjunction with the Parts Availability mode in the Processing Mode processing option under the Defaults tab. Values are:

Blank: Does not subtract safety stock.

1: Subtracts safety stock.

2. Negative Quantities

Specify whether the system displays negative amounts for the component quantities. Use this processing option in conjunction with the Parts Availability mode in the Processing Mode processing option under the Defaults tab. Values are:

Blank: Displays all amounts.

1: Displays only negative amounts.

3. Leadtime Values

Specify whether the system displays the actual or calculated lead time values. Use this processing option in conjunction with the Leadtime Inquiry mode in the Processing Mode processing option under the Defaults tab. Values are:

Blank: Displays the actual lead time values from the Item Branch table (F4102).

1: Displays the calculated lead time values.

7.3.3.4 Process

These processing options control how the system uses certain data in the program. For example, you can use a processing option to specify whether phantom or process item are included in the inquiry.

1. Phantom Items

Specify whether the system explodes the phantoms to the next level and omits the display of the phantom. A phantom is normally defined for engineering or manufacturing purposes. Phantoms enable common parts, that may or may not be assembled, to be grouped in a bill of material structure. When viewing the bill of material, you may want to display only the subassemblies and raw material. Values are:

Blank: Omits the phantom items from the inquiry and displays only the subassemblies and raw material.

1: Includes phantom items in the inquiry.

2. Process Items

Specify whether the system displays the process items. Process items include the process, co-products, by-products, and ingredients. A discrete bill may contain a component that is produced from a process. You use this processing option when you combine discrete and process manufacturing to display a complete structure of the requirements. Values are:

Blank: Excludes process items from the inquiry.

1: Includes process items in the inquiry.

3. Text Lines

Specify whether the system displays the text lines. Values are:

Blank: Excludes text lines from the inquiry.

1: Includes text lines in the inquiry.

4. Consolidate Component Items

Specify whether the system consolidates duplicate components. The same component may be listed in the bill of material several times, either on different subassemblies or on the same subassembly at different operations. When you use this processing option with the Subassemblies processing option, the system consolidates components at the subassembly level or for all levels of the bill of material. When viewing the consolidated components, the quantity required is accumulated for duplicate components. Values are:

Blank: Displays individual occurrences of duplicate components in the inquiry.

1: Consolidates duplicate components in the inquiry.

5. Subassemblies

Specify whether the system displays the subassemblies. A subassembly is an assembly that is used at a higher level to make up another assembly. Values are:

Blank: Excludes subassemblies from the inquiry.

1: Includes subassemblies in the inquiry.

6. Shrink

Specify whether the system adjusts the requested quantity for shrinkage. Shrinkage is the planned loss of a parent item caused by factors such as breakage, theft, deterioration, and evaporation. Values are:

Blank: Does not adjust the requested quantity.

1: Adjusts the requested quantity for shrinkage.

7. Scrap

Specify whether the system adjusts the extended quantity for scrap. Scrap is unusable material that results from the production process. It is material outside of specifications and of such characteristics that rework is impractical. Values are:

Blank: Does not adjust the extended quantity.

1: Adjusts the extended quantity.

8. Yield

Specify whether the system adjusts the extended quantity for yield. Yield is the ratio of usable output from a process to its input. Values are:

Blank: Does not adjust the extended quantity.

1: Adjusts the extended quantity.

9. Purchased Items

Specify whether the system explodes to the next level of purchased items in the bill of material report. Values are:

Blank: Excludes lower-level purchased items from the report.

1: Includes lower-level purchased items in the report.

10. Phantom Operation Sequence Number

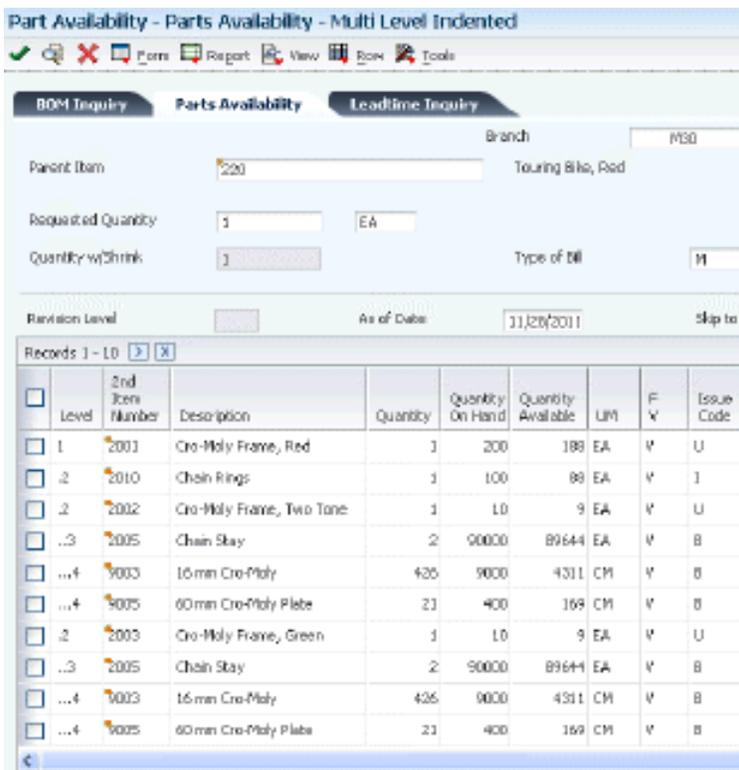
Specify how the system displays operation sequence numbers for components of a phantom item. Values are:

- Blank: Displays the operation sequence number of the component.
- 1: Displays the operation sequence number of the phantom item.

7.3.4 Reviewing Part Availability

Access the Parts Availability - Multi Level Indented form.

Figure 7–2 Parts Availability - Multi Level Indented form



Quantity Available

Enter the available quantity. The available quantity may be on-hand balance minus commitments, reservations, and backorders. Availability is user-defined and can be set up through the branch/plant constants.

7.3.5 Setting Processing Options for the Parts List Inquiry Program (P3121)

Processing options enable you to specify the default processing for programs and reports.

7.3.5.1 Versions

These processing options control which version the system uses when these programs are called from the Parts List Inquiry program.

1. Purchase Order Inquiry Version (P4310)

Specify the version of the Purchase Orders program (P4310). If you leave this processing option blank, the system uses ZJDE0001.

2. Supply/Demand Version (P4021)

Specify the version for the Supply and Demand Inquiry program (P4021). If you leave this processing option blank, the system uses ZJDE0003.

3. Manufacturing WO Parts List (P3111)

Specify the version that the system uses when you select the row exit to the Parts List program (P3111) from the Work With Manufacturing Work Orders form or the Work Order Details form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Parts List program.

Versions control how the Parts List program displays information. Therefore, you might need to specify the processing options to specific versions to meet the business need.

4. Equipment/Service Order Parts List (P17730)

Specify the version of the Work Order Parts Detail program (P17730) that the system uses. If you leave this processing option blank, the system uses ZJDE0001.

7.3.6 Reviewing Parts List Availability

Access the Parts List Detail Inquiry form.

Figure 7-3 Parts List Detail Inquiry form

The screenshot shows the 'Parts List Inquiry - Parts List Detail Inquiry' form. At the top, there is a title bar with a close button and a 'Tools' icon. Below the title bar, there are several input fields: 'Item Number' with the value '2010', 'Branch/Plant' with 'P00', 'Date Requested' with '06/24/2005', and 'Chain Rings'. There are also fields for 'Location' and 'Lot/Serial'. Below these are fields for 'Lot Grade', 'Grade From', 'Grade Thru', 'Lot Potency', 'Potency From', and 'Potency Thru'. A tabbed interface is visible with 'Transaction Qty' and 'Secondary Qty' tabs. Under the 'Transaction Qty' tab, there are several rows of data: 'Qty Required' (empty), 'Qty on Hand' (100), 'Qty Available' (89), 'Ordered' (empty), and 'Issued' (empty). To the right of these are fields for 'WO Hard Commit' (11), 'SO Hard Commit' (empty), 'WO/SO Soft Commit' (empty), and 'Qty on Order' (empty).

Qty Required (quantity required)

Enter a number that indicates the quantity that is available.

For example, the available quantity might consist of the on-hand quantity minus commitments, reservations, and backorders.

Availability is user-defined. You can set up availability in the Branch/Plant Constants program (P41001).

WO Hard Commit (work order hard commit)

Enter the number of units hard committed to work orders in the primary unit of measure.

SO Hard Commit (sales order hard commit)

Enter the number of units hard committed to a specific location and lot.

WO/SO Soft Commit (work order/sales order soft commit)

Enter the number of units soft committed to sales orders or work orders in the primary units of measure.

Qty on Order (quantity on order)

Enter the number of units specified on the purchase order in primary units of measure.

7.4 Managing Shortage Information

This section provides an overview of shortage information and discusses how to:

- Set processing options for the Shortage Revisions program (P3118).
- Revise shortage information.

7.4.1 Understanding Shortage Information

Shortages occur when you do not have enough of the required materials to complete the quantity of the parent item requested on a work order. When you review the availability of items and compare it to a bill of material or a work order, the system indicates items that are short by displaying a negative available quantity.

You track shortage information for parts with these characteristics:

- Purchased parts that you obtain from a single source
- Purchased parts that are difficult to obtain
- Parts that have a long lead time
- Parts that, if absent, stop the production line
- Parts that are expensive to purchase or manufacture
- Parts that must be closely monitored
- Parts that are produced at critical work centers

You can change component shortage information by item, work order, branch/plant, work order type, or any combination of these by using the Shortage Workbench program (P3118). You can also review and revise information that indicates how the system fills shortages.

You can locate and review shortage information for an item that is associated with one or more work orders. Use this program to determine the amount of a shortage and how the shortage will be filled. You can locate item shortages by using these criteria:

- Branch/plant and item number
- Branch/plant, item number, order number, and order type
- Order number and order type
- Order type

You can print a report that lists all shortages or only the component shortages for a specific work order. The system retrieves the shortage information for these reports from the Shortage Maintenance Master File table (F3118).

7.4.2 Forms Used to Manage Shortage Information

Form Name	Form ID	Navigation	Usage
Shortage Maintenance Revisions	W3118D	Daily Order Preparation - Discrete (G3111), Shortage Workbench Locate an order on the Work With Shortage Workbench form, and click Select.	Revise shortage information.

7.4.3 Setting Processing Options for the Shortage Revisions Program (P3118)

Processing options enable you to specify the default processing for programs and reports.

7.4.3.1 Versions

Enter the reporting feature version. If left blank, default version ZJDE0001 will be used.

1. For Order Inventory Issues:

Specify the reporting feature version for Order Inventory Issues.

2. For Open Work Orders:

Specify the reporting feature version for Open Work Orders.

3. For Open Purchase Orders:

Specify the reporting feature version for Open Purchase Orders.

7.4.3.2 Defaults

1. Enter the default work order type. If left blank, 'WO' will be used.

Specify a value from UDC 00/DT (Document Type - All Documents) that identifies the type of document. This code also indicates the origin of the transaction.

7.4.4 Revising Shortage Information

Access the Shortage Maintenance Revisions form.

Due Date

Specify the date that an item is scheduled to arrive or that an action is scheduled for completion.

Short Quantity

Specify the quantity of units affected by this transaction.

Deliver To W/C

Specify an alphanumeric code that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant.

You can assign a business unit to a document, entity, or person for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business unit to track equipment by responsible department.

Business unit security might prevent you from viewing information about business units for which you have no authority.

Rel Ord Type (related order type)

Specify a value from UDC 00/DT (Document Type - All Documents) that indicates the document type of the secondary or related order. For example, a purchase order might be document type OP and might have been created to fill a related work order with document type WO.

Working with Issues, Material Movement, and Kanbans

This chapter contains the following topics:

- [Section 8.1, "Understanding Issues, Material Movement, and Kanbans"](#)
- [Section 8.2, "Understanding Inventory Issue"](#)
- [Section 8.3, "Issuing Material by Preflushing"](#)
- [Section 8.4, "Issuing Material Manually"](#)
- [Section 8.5, "Recording Component Scrap"](#)

8.1 Understanding Issues, Material Movement, and Kanbans

Regardless of whether you use work orders or rate schedules for an item that you produce, you must send the required materials to the shop floor for production. You must also deduct the quantities that are issued to the shop floor from inventory through an issue transaction. Along with issue transactions, you can use a visual system such as: kanban processing to alleviate paperwork.

The JD Edwards EnterpriseOne Shop Floor Management and JD Edwards EnterpriseOne Manufacturing Accounting systems use issue transactions to determine the actual quantities of materials that are used in the production process according to the parts list for the work order or rate schedule.

This table identifies integration features with other JD Edwards EnterpriseOne systems:

System	Integration features
JD Edwards EnterpriseOne Inventory Management	The JD Edwards EnterpriseOne Inventory Management system enables you to track materials between inventory or storage locations and the shop floor. You can manage inventory issues and commitments, complete orders, and track order quantities throughout the production process. The system enables you to issue material in two different units of measure, if dual units of measure are defined for the item in the Item Master program (P4101). When the item that you are issuing is a lot-controlled item, and the effective date of the lot is greater than the current date, the system issues a warning.

System	Integration features
JD Edwards EnterpriseOne Warehouse Management	The JD Edwards EnterpriseOne Warehouse Management system enables you to originate picking requests through the JD Edwards EnterpriseOne Manufacturing systems, which further enhances the automated method of tracking inventory movement within a warehouse.

See Also:

- "Processing Kanban Transactions by Item" in the *JD Edwards EnterpriseOne Applications Kanban Management Implementation Guide*.

8.2 Understanding Inventory Issue

You do not have to generate an issue transaction at the same time that inventory is physically moved. The JD Edwards EnterpriseOne Shop Floor Management system enables you to select the point in the production process during which you generate issue transactions. In other words, you can select when you want the inventory records to reflect the issue of materials to the work order or rate schedule.

For example, for a short production cycle, you might want to simultaneously deduct the issued inventory and receive the completed product into inventory when you report full completions for the work order or rate schedule. For longer production cycles, you might need to generate issue transactions at various operations within the routing instructions to minimize the discrepancies between materials that are actually on the shop floor and materials that the JD Edwards EnterpriseOne Inventory Management system lists as being on the shop floor.

You can select any of these methods to issue inventory:

Method	Description
Manual issues	The system deducts materials from inventory when you enter the issue transactions on the Inventory Issue Revisions form.
Preflush	The system automatically deducts materials from inventory when you run the Order Processing program (R31410).
Backflush	The system deducts materials from inventory when you report items on the work order or rate schedule as complete. Backflush can occur when you report partial completions throughout the production process or when you report full completions at the last operation of the routing instructions. When the parts list includes lot-controlled items, the system first issues the parts list lines with lot numbers because those quantities are already hard-committed. When these quantities are not sufficient, the system searches for additional lots at the work center location and issues material from those lots based on the commitment method.

Method	Description
Super Backflush	The system automatically deducts materials from inventory during operations that are defined as pay points throughout the routing instructions. Super backflush enables you to simultaneously backflush materials and labor hours and to report items as complete.

Some issue methods enable you to issue materials without displaying the Inventory Issue Revisions form. Other methods display the issue transaction for review before the system records it.

You can perform partial issues by setting up the work order or rate schedule and issuing a backflush daily. For example, if the rate for the week is 10,000, and the daily backflush is 2,000, you can perform a partial issue of 2,000 for five days. On the fifth day, the rate schedule is completed.

The default transaction date for issue transactions is the current system date. You can enter a different date. If you issue too much of one item, the system displays a warning message. You can either adjust the issue quantity or accept the issue.

Inventory is issued from the location at which it is committed. You can change the commitment location for an item. The Inventory Issues program (P31113) correctly relieves these commitments. If you are issuing a grade- or potency-controlled item from a lot, and the lot grade or potency rating is not within the desired range, the system displays a warning message.

When you issue inventory, the system performs these updates:

- Relieves inventory
- Updates the Item Location File table (F41021)
- Writes records to the Item Ledger File table (F4111)
- Updates the Production Cost table (F3102)
- Updates unaccounted units in the Work Order Parts List table (F3111)
- Writes general ledger transaction in the Account Ledger table (F0911)

You can issue materials without recording a completion to a work order. You can also record component quantities that are scrapped and the reason for the scrap.

Note: If you have repeated items in the bill of material, verify that the operation sequence numbers for those lines are unique for the bill of material.

If you are using the JD Edwards EnterpriseOne Warehouse Management system and issuing materials to a work order, the system does not issue any part that has a status of **In Warehouse**. Before the system can issue the part, you need to update its status to **Out of Warehouse** by pick confirmation through a pick list. A pick list is a document that specifies to warehouse personnel what inventory to pick up per work order and where the inventory is located. The system generates the pick list when you run the Order Processing program.

See Also:

- "Inventory Issue Transactions" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.
- "Confirming Pick Suggestions Interactively" in the *JD Edwards EnterpriseOne Applications Warehouse Management Implementation Guide*.

8.3 Issuing Material by Preflushing

This section provides an overview of preflushing and discusses how to run the Order Processing program.

8.3.1 Understanding Preflushing

Preflushing is the act of using the Order Processing program (R31410) to enter issue transactions for all material that is required for a work order when you process the work order. Materials include those that are not required until the last operation in the routing instructions, which could occur weeks or months in the future. These items are issued at the start date of the work order when you use the Order Processing program.

Important: You should not use the preflushing method unless the manufacturing cycle time is short enough to ensure that materials are physically moved to the shop floor within the same day that the issue transaction is recorded. If the cycle time is longer than a day, a discrepancy appears in the inventory records because the materials have been deducted from inventory records, but not physically removed from inventory stock.

You can set a processing option to issue only preflush items. If you leave this processing option blank, the system preflushes any item that is associated with the work order, regardless of the issue code of the item.

8.3.2 Prerequisite

Set the issue type code on the parts list.

8.3.3 Running the Order Processing Program

From the Daily Order Preparation - Discrete menu (G3111), select Order Processing.

8.4 Issuing Material Manually

This section provides an overview of the manual issue of material and discusses how to:

- Set processing options for the Work Order Inventory Issues program (P31113).
- Issue material from a single location.
- Issue material from multiple locations.

8.4.1 Understanding the Manual Issue of Material

You can use the Inventory Issues program (P31113) to manually issue material that is associated with a work order. When you issue material, you can select to have the system automatically adjust the issue quantity by the parent item's shrink or yield factor. You can also use this program to change the commitments that the system recorded. When you change commitments, the system displays an error message if the quantities do not add up to the total quantity that is required. It also adjusts the available balance for any location in which you changed the quantity committed.

If you are working with a large parts list and do not need to issue all component quantities at the same time, the system provides you with filter fields to display only those component records for which you want to perform issues. You can filter the parts list by operation sequence, requested dates, component item numbers, and component line numbers. If you issue items that have a secondary unit of measure, the issue line must state the issue quantity in both the primary and secondary unit of measure.

If you did not assign serial numbers to any of the assemblies on the work order at order entry, you can assign them during the inventory issue process.

You can access the Select Multiple Locations program (P42053) from the Inventory Issue Revision form if you need to issue material from locations that are different from the locations that appear on the Inventory Issue Revisions form.

8.4.2 Forms Used to Issue Material Manually

Form Name	Form ID	Navigation	Usage
Inventory Issue Revisions	W31113A	Daily Order Preparation - Discrete (G3111), Inventory Issues. Locate a branch/plant and work order on the Work With Work Order Inventory Issue form, select the work order and click Select.	Issue material from a single location.
Select Multiple Locations	W42053B	Locate and select an item on the Inventory Issue Revisions form, and then select Multi-Location from the Row menu.	Issue material from multiple locations.

8.4.3 Setting Processing Options for the Work Order Inventory Issues Program (P31113)

Processing options enable you to specify the default processing for programs and reports.

8.4.3.1 Edits

These processing options control default values for the Inventory Issues program-- for example, the default document type for inventory issues-- as well as the status beyond which the system cannot issue inventory and the lot hold codes that still enable you to

issue inventory to a lot. You can also determine whether an error message is displayed when an issue causes the on-hand quantity to become negative.

1. Document Type

Specify the default document type that the system enters when issuing inventory. Enter a value from user-defined code (UDC) table 00/DT (Document Type) that identifies the origin and purpose of the document.

2. Work Order Status Code

Specify the default status code for the issued material on the work order header. Enter a value from UDC 00/SS (Work Order Status) that identifies the status of the work order that the system uses when a material issue has been performed. If you leave this field blank, the system does not update the work order header status code.

3. Material Status Code

Specify the default material status code that the system uses on the work order header. Enter a value from UDC 31/MS (Material Status) that identifies the status of the material to use when the system issues material. If you leave this field blank, the system does not enter a material status code.

4. Enter the Status Code from which Shop Floor Activity cannot be entered. (Release 9.1 Update)

Specify the work order status code (00/SS) at or beyond which the system cannot issue material. For example, if this processing option is set to status 95 and a work order has reached this status, the system generates an error message if you attempt to run Issues for that work order. If you leave this processing option blank, the system processes work orders at any status. (Release 9.1 Update)

5. Negative Quantity on Hand

Specify whether the system displays an error message when the material issued sets the on-hand quantity to a negative amount. Values are:

1: Displays an error message for negative on-hand quantities.

Blank: Does not display an error message for negative on-hand quantities.

6. Item Sales History

Specify whether the system updates the Item Sales History table (F4115) when you issue material. Values are:

1: Updates.

Blank: Does not update.

7. Unplanned Issues

Specify whether the system processes unplanned issues. Values are:

1: Processes.

Blank: Does not process.

8. Purchase Order Document Type

Specify the default document type of the purchase order associated with the simultaneous issue and receipt of material. Enter a value from UDC 00/DT (Document Type) that identifies the document type that the system uses when searching for an open purchase order. If you leave this processing option blank, the system uses OP as the document type.

9. Enter Allowed Lot Status Group to validate

Specify the lot group. The lot group is the name of a user-defined list of allowed non-blank lot status codes. Entering a lot group name enables this application to process lots whose lot status code is defined within the specified lot group name.

10. Production Number On Hand Consumption

Specify how the Work Order Inventory Issues program selects production number on hand quantity from the Item Location Tag File table (F41021T).

Production number on hand is consumed whenever on hand quantity is not available to continue the transaction.

If you process inventory selection blindly, then the system consumes production number on hand quantity in the following order:

1. Generic inventory.
2. Inactive production numbers.
3. Orphaned production numbers.
4. Production number with the farthest end item demand date.

If you process inventory selection interactively, then you can select the production number from the options available on the Select Inventory for Consumption form (W42054A). Values are:

Blank: The program performs blind selection of inventory.

1: The program enables interactive selection of inventory.

11. Debit Entry Company (Release 9.1 Update)

Specify the company that will be used for debit entry upon issuing material for a Service and Warranty Management (SWM) or Capital Asset Management work order. Values are:

Blank: Company from Work Order Header

1: Company from Parts Details

8.4.3.2 Display

These processing options control the display of values in the Inventory Issue program. For example, you can specify that the system only display components with valid issue type codes, and that the issue quantity is displayed with shrink or yield already applied.

1. Issue Type Code

Specify whether the system displays all components or only components with a valid issue type code. Values are:

1: Displays only components with valid issue type codes.

Blank: Displays components of all issue type codes.

2. Lot Number

Specify whether the system protects the Lot Number field from entry. Values are:

1: Does not allow you to enter a value in the Lot Number field.

Blank: Allows you to enter a value in the Lot Number field.

3. Issue Material For

Specify whether the system enters the recommended issued quantity for all components with a valid issue type code.

The system uses the value from the Issue Material For field on the Work With Work Order Inventory Issue form. The system issues only items with an issue quantity. Values are:

1: Automatically enters the quantity.

Blank: Does not enter the quantity.

4. Apply Shrink to Issue Quantity

Specify a code that controls whether the system applies a parent item's shrink factor to the recommended issue quantity of a component item. Values are:

1: Applies the shrink factor.

Blank: Does not apply the shrink factor.

5. Apply Yield to Issue Quantity

Specify whether the system applies operation scrap percentage to the recommended issue quantity of a component item. Values are:

1: Applies the operation scrap percent.

Blank: Does not apply the operation scrap percent.

6. Select All Lines for Issue on Entry

Specify whether the system processes unviewed records after you click OK. The detail area displays components one page at a time. Click OK before scrolling down to view and process all records. Values are:

Blank: Process unviewed records.

1: Do not process unviewed records.

7. Display Only Open Lines

Specify whether the system displays only open lines or all lines in the detail area. A line is considered open if it has not been closed by choosing Close Line from the row menu. A line is also considered open if the order quantity is greater than the issued quantity. Values are:

Blank: All lines.

1: Open lines.

8.4.3.3 Versions

These processing options control which version the system uses when you call these programs from the Inventory Issues program:

1. Shortage Maintenance (P3118)

Specify the version that the system uses when you select the row exit to the Shortage Maintenance program (P3118) from the Inventory Issue Revisions form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Shortage Maintenance program. Versions control how the Shortage Maintenance program displays information. Therefore, you might need to set the processing option to a specific version to meet the business need.

2. Open Purchase Orders (P3160W)

Specify the version that the system uses when you select the row exit to the Purchase Order Inquiry program (P4310) from the Inventory Issue Revisions form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Purchase Order Inquiry program. Versions control how the Purchase Order Inquiry program displays information.

Therefore, you might need to set the processing option to a specific version to meet the business need.

3. PO Receipts (P4312)

Specify the version that the system uses when you select the row exit to the Purchase Order Receipts program (P4312) from the Inventory Issue Revisions form. If you leave this processing option blank, the program uses the ZJDE0008 version of the Purchase Order Receipts program. Versions control how the Purchase Order Receipts program displays information. Therefore, you might need to set the processing option to a specific version to meet the business need.

4. Movement and Disposition (P43250)

Specify the version that the system uses when you select the row exit to the Receipt Routing Movement and Disposition program (P43250) from the Inventory Issue Revisions form. If you leave this processing option blank, the program uses the ZJDE0002 version of the Receipt Routing Movement and Disposition program. Versions control how the Receipt Routing Movement and Disposition program displays information. Therefore, you might need to set the processing option to a specific version to meet the business need.

8.4.3.4 Equipment Management

This processing option controls whether the system automatically enters the work order number into the subledger field of the journal entry when processing maintenance orders.

1. Work Order Number

Specify whether the system enters the work order number in the subledger field of the journal entry when the system processes a maintenance work order. Values are:

1: Automatically enters the work order number in the subledger field.

Blank: Does not enter the work order number in the subledger field.

8.4.3.5 Interoperability

These processing options control the default transaction type for inventory issue and work order transactions, as well as whether the system writes a before image for the work order header.

1. Inventory Issue Transaction Type

Specify the transaction type that the system uses for export processing. Enter a value from UDC 00/TT (Transaction Type) that identifies the type of transaction for the work order. If you leave this processing option blank, the system does not use export processing.

2. Work Order Transaction Type

Specify the default transaction type for the work order header that the system uses when processing export transactions. If you leave this processing option blank, the system does not perform export processing.

3. Work Order Header Before Image

Specify whether the system writes the before image for the work order header. Values are:

Blank: Does not include the image.

1: Includes the image.

2: Does not include the image.

8.4.4 Issuing Material from a Single Location

Access the Inventory Issue Revisions form.

Figure 8–1 Inventory Issue Revisions form

Issue L/O	Item Number	Description	Oper Seq#	Issues	Secondary Issues	Request Date	Mt St	Quantity Ordered
1	9003	10 mm Cro-Moly	10,00			05/07/2007		4203
1	9005	60 mm Cro-Moly Plate	20,00			06/07/2007		210
1								

To issue material from a single location:

- If you do not want to issue material for all component quantities at once, select the Filters tab, complete any of the these fields and options, and click Find:
 - Requested Date - From
 - Requested Date - Through
 - From Op Seq
 - Through Op Seq
 - Component Item No
 - Skip To Component Line Number
 - Display All Lines
 - Display Only Open Lines
- Review the these fields:
 - Mt St
 - Quantity Ordered
 - Component Branch
 - Secondary Qty Ordered

- Location
 - Lot Serial Number
 - Expired Date
 - Lot Effective Date
3. Select the Basic Information tab and complete the Issue Material For/UOM field:
Use this field to enter the quantity of the parent item that indicates how many sets of parts are needed. If you are issuing a partial parent item quantity, enter this quantity and click Find. The detail area displays the partial quantity to be issued. The Qty (Quantity) Ordered field in the detail area indicates the quantity of each component that the system deducts from inventory.
 4. To override the processing option settings for applying the shrink or yield factor of the parent quantity, select the Additional Details tab and select one or both of these options:
 - Inflate Shrink
 - Inflate Yield
 5. To complete the issue process, click OK.

Note: To reverse an issue transaction, change the item quantity that you want to reverse to a negative number. The system decreases the amount in the Quantity Ordered field for the item by the amount of the reversal.

To close items that you no longer need, select the items and then select Close Line from the Row menu. The system closes the item and changes the information in the Description field to ****Line Item is Closed****.

You can associate components with a specific serialized assembly during inventory issues. If you do not know the assembly number, use the Assign Serial Numbers program (P3105) to review numbers that the system previously assigned to work order assemblies.

8.4.5 Issuing Material from Multiple Locations

Access the Select Multiple Locations form.

Figure 8–2 Select Multiple Locations form

The screenshot shows the 'Select Multiple Locations' form. At the top, there are navigation icons and a 'Tools' button. Below that, the form is divided into several sections:

- Line Information:** Line Number (empty), Item Number (9009), and Branch Plant (M30).
- Selection Summary:** Total Selected (5), Total Secondary Selected (empty), Quantity Under (empty), Secondary Quantity Over (empty), Units Ordered (5), and Secondary Ordered (empty).
- Location and Lot Fields:** Location (empty), Home Lot 1 (empty), Home Lot 2 (empty), From Lot (empty), and To Lot (empty).
- Records Table:** A table with 11 columns: Quantity, Secondary Quantity, Location, Lot / Serial, Branch Plant, Available, LM, Secondary Available, Secondary LM, and Based On Date. The first row shows: Quantity 5, Secondary Quantity (empty), Location . . ., Lot / Serial (empty), Branch Plant M30, Available 4737, LM (empty), Secondary Available (empty), Secondary LM (empty), and Based On Date (empty).

Quantity

Enter the number of units committed for shipment in the Sales Order Entry program, using either the entered or the primary unit of measure defined for this item.

In the JD Edwards EnterpriseOne Manufacturing system and the Work Order Time Entry program, this field can indicate completed or scrapped quantities. The quantity type is determined by the type code entered.

Location

Enter the storage location from which goods will be moved.

Lot / Serial

Enter a number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.

Lot Effective Date

Enter the date on which a lot becomes available. The system uses this date for availability and commitment processing to indicate that the lot is available on or after the date that you specify. You must complete this field when inventory first becomes an on-hand quantity for the lot. If you leave this field blank, the system calculates the effective date of the lot by using the value for Effective Days in the Item Branch File table (F4102) or the current date if the value for Effective Days is zero.

8.5 Recording Component Scrap

This section provides an overview of the recording of component scrap and discusses how to:

- Set processing options for the Component Scrap program (P31116).
- Record component scrap.

8.5.1 Understanding the Recording of Component Scrap

You can use the Component Scrap program (P31116) to add scrapped quantities of component items to the Item Ledger File table (F4111) and the Work Order Parts List table (F3111). The Item Ledger File table provides an audit trail of the quantity scrapped and the reason for the scrap transaction.

When you use the Component Scrap program, consider this important information:

- You cannot scrap components unless they have been issued to a work order.
- The total quantity that is scrapped for a component cannot exceed the total quantity that is issued to the work order.
- Negative transactions are enabled unless the transaction quantity causes a negative issue.
- You can enter scrap transactions in any unit of measure. The scrapped quantity is converted to the unit of measure of the parts list and rounded to one whole unit of measure when the system updates the F3111 table.

The system uses the order number information from the Work Order Master File table (F4801) and the component information from the F3111 table.

See Also:

- "Understanding Work Orders, Component Scrap" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.

8.5.1.1 Working with Electronic and Device Quality Records

Products such as pharmaceuticals, biotech, and medical devices require an audit trail for each batch, work order, or medical device manufactured.

An audit trail traces the manufacture of an item from design approval through manufacturing. The audit trail includes engineering changes introduced during the manufacture of the product. A quality assurance group must review the product prior to its release for sale or use.

You can review production records for a specific product and track defects. When you review records that are out of conformance, you can open a case for internal personnel to resolve the conformance issue.

On the Component Scrap Revisions form, you enter a quantity for scrap and select the Case Management option from the Row menu.

The system enables the Case Management option only when a value resides in the Quantity To Scrap field.

The system calls the version of the Case Entry program (P90CG504) in add mode based on the version specified in the Case Entry Add Mode (P90CG504) processing option on the Versions tab of the Component Scrap program. The system populates the Customer Number and Caller Number fields on the Add Case form from the audit field of the line, which is not visible on the line. The system also populates the item number, branch/plant, and lot number from the item and lot number fields on the Component Scrap Revisions form.

8.5.2 Forms Used to Record Component Scrap

Form Name	Form ID	Navigation	Usage
Component Scrap Revisions	W31116I	Daily Order Preparation - Discrete (G3111), Component Scrap Locate and select a work order for an item on the Work With Component Scrap form, and click Select.	Record component scrap.
Add Case	W90CG504A	On the Component Scrap Revisions form, enter a quantity for scrap and select the Case Management option from the Row menu.	Enter a case for component scrap.

8.5.3 Setting Processing Options for the Component Scrap Program (P31116)

Processing options enable you to specify the default processing for programs and reports.

8.5.3.1 Process

1. Processing Mode

Specify whether the system processes by item number or work order number. Values are:

1: Item number.

Blank: Work order number.

2. Component Scrap Status

Specify the Status Code beyond which Component Scrap cannot be made. Blank means no restriction for Component Scrap.

8.5.3.2 Defaults

2. Transaction Date

Specify the date that an order was entered into the system. This date determines which effective level the system uses for inventory pricing. Leave the processing option blank for the default value of today's date.

3. Reason Code

Specify a value from UDC 31/RC (Reason Code) that indicates the reason for the quantity that was scrapped at this operation.

4. Document Type

Specify a value from UDC 00/DT (Document Type) that identifies the origin and purpose of the transaction. Enter the document type associated with the Component Scrap Transaction.

8.5.3.3 SN Processing

1. Document Type

Specify the Document Type (UDC table 00/DT) used for Serial Number Issues. Leave blank for the default value of IM (Material Charged to Work Orders).

8.5.3.4 Versions

1. Case Entry Add Mode (P90CG504)

Specify the version of the Case Entry program (P90CA504) you want to use in Add mode. You use this program to create a case if there is component scrap. If you leave this processing option blank, the system uses version ZJDE0001.

8.5.4 Recording Component Scrap

Access the Component Scrap Revisions form.

Figure 8–3 Component Scrap Revisions form

Component 2nd Number	Order Number	Issued	Scrapped	Quantity To Scrap	UPI	Reason Code	Explanation	Date	Description
9000	481079							11/20/2011	160 mm Cro-Moly

Reason Code

Enter a value from UDC 31/RC (Reason Code) that indicates the reason for the quantity that was scrapped at this operation.

Explanation

Enter text that identifies the reason that a transaction occurred.

Using Work Order Scheduling and Rate Schedules

This chapter contains the following topics:

- [Section 9.1, "Understanding Work Order Scheduling and Rate Schedules"](#)
- [Section 9.2, "Understanding Work Order Mass Updates for Manufacturing Work Orders"](#)
- [Section 9.3, "Revising Work Order Status Information"](#)
- [Section 9.4, "Scheduling Items on a Production Line"](#)
- [Section 9.5, "Sequencing Rates by Classification Scheme"](#)

9.1 Understanding Work Order Scheduling and Rate Schedules

As part of scheduling activities, you can monitor work order progress, manage work order releases, and update the status of any order to ensure the validity of the material requirements planning (MRP) and master production scheduling (MPS) schedules. When you work with schedules, you can display manufacturing work orders by item, planner, customer, parent work order, status, type, priority, or a combination of these. You can display work orders by start date or requested date. You can also access related information, such as associated work orders, sales orders, purchase orders, parts lists, and routing instructions.

Note: If you use the JD Edwards EnterpriseOne Capacity Requirements Planning system, it reads the routing instructions for work orders and rate schedules and monitors the load on the involved work centers. This process enables you to manage the loads on the work centers to maximize production and meet scheduled demand.

After you have established the production schedule, you print scheduling information and run the production in a work center.

Repetitive manufacturing involves consistent demand for a family of products that can be built on dedicated production lines. To use the capacity of the production lines efficiently, you schedule and sequence items using the Line Scheduling Workbench (P3153) and the Line Sequencing Workbench (P3156) programs.

9.2 Understanding Work Order Mass Updates for Manufacturing Work Orders

The work order mass update process enables you to select and modify multiple work orders at one time. You can use the mass update process for manufacturing work orders that have a work order type of 02 (manufacturing) or 03 (manufacturing rework) from the Order Type (48/OT) UDC table.

You use the Search for Work Orders program (P48022) to search for and select the work orders that you want to modify, and then use the Work Order Mass Update program (P48714) to enter the new values that you want to apply to the selected work orders. Alternatively, you can set up templates in the Work Order Mass Update Template program (P48710) to specify default values for the fields that you want to update. After you enter the new values, you run the Work Order Mass Update batch program (R48714) in draft mode, verify the changes that you want to make, and then run the R48714 program in final mode to commit the changes to the database.

See "Using the Work Order Mass Update Process" in the *JD Edwards EnterpriseOne Applications Work Orders Implementation Guide*.

9.2.1 Accessing the Work Order Mass Update Programs

Links to the Work Order Mass Update Template program and the Search for Work Orders program appear on the Periodic Functions - Discrete menu (G3121). You access the Work Order Mass Update interactive program from the Search for Work Orders program, and access the Work Order Mass Update batch program from the Work Order Mass Update interactive program.

You can also access the Search for Work Orders program using these access points:

- An option on the Form menu in the Manufacturing Work Order Processing program (P48013).
The system launches the version of the Search for Work Orders program that you specify in the Work Order Mass Update (P48022) Version processing option in the Manufacturing Work Order Processing program.
- An option on the Form menu in the Manufacturing Scheduling Workbench program (P31225).
The system launches the version of the Search for Work Orders program that you specify in the Work Order Mass Update (P48022) Version processing option in the Manufacturing Scheduling Workbench program.

9.2.2 Setting Up Your Manufacturing Environment to Use the Work Order Mass Update Process

Before you use the work order mass update process, you should set up versions and processing options for the programs used by the process. In addition to the processing options for the Search for Work Orders and Work Order Mass Update programs, the system uses some of the processing options from the versions of manufacturing work order programs that you specify.

See [Setting Processing Options for the Enter/Change Order Program \(P48013\)](#)

This table lists the programs for which you should set up processing options.

Note: This table lists only the programs that have processing options that affect how work orders are processed in the work order mass update process. You will set up and specify versions of other applications if you do not want to use default versions. You specify the versions to use in the processing options of the Search for Work Orders program.

Program	Processing Options
Search for Work Orders (P48022)	<p>You specify the version of this program to use in processing options in the Work With Work Orders (P48201), Manufacturing Work Order Processing (P48013), and Manufacturing Scheduling Workbench (P31225) programs.</p> <p>The Search for Work Orders program includes processing options in which you specify the versions of the programs to use when you use Form and Row menu options. You will need to set up versions of those programs if you choose to use a version other than the default version noted in the processing option description.</p> <p>See "Setting Processing Options for Search for Work Orders (P48022)" in the <i>JD Edwards EnterpriseOne Applications Work Orders Implementation Guide</i>.</p>
Work Order Mass Update (P48714)	<p>You specify the version of this program to use in the Search for Work Orders program.</p> <p>See "Setting Processing Options for Work Order Mass Updates (P48714)" in the <i>JD Edwards EnterpriseOne Applications Work Orders Implementation Guide</i>.</p>
Manufacturing Work Order Processing (P48013)	<p>To specify the version of the Manufacturing Work Order Processing program to use, in the Search for Work Orders program:</p> <ul style="list-style-type: none"> ■ Enter 5 in the Work Order Revisions Application processing option. ■ Enter 3 in the Work Order Type processing option. ■ Specify the version name of the Manufacturing Work Order Processing program to use in the Work Order Revisions Version processing option.
Manufacturing Scheduling Workbench (P31225)	<p>You can access the work order mass update programs from an option on the Form menu in the Manufacturing Scheduling Workbench program.</p> <p>Set the Work Order Mass Update (P48022) Version processing option in the Manufacturing Scheduling Workbench program to use the appropriate version.</p>

9.2.3 Manufacturing-Specific Work Order Mass Update Functions

You can use the work order mass update process to update manufacturing, tenant, service, and equipment work orders. When working with work orders for manufacturing, you should note that:

- Some of the options available in the work order mass update process are available for only specific work order types.
- Some actions that you can perform when working with individual manufacturing work orders are not supported when you work with multiple manufacturing work orders.

- Some of the processing options that you set up in the version of the Manufacturing Work Order Processing program (P48013) that you use when working with work order mass updates affect the processing of the work order mass updates.

This table lists the functions that are specific to working with manufacturing work orders, the functions that are not supported when you work with multiple manufacturing work orders, and the processing logic in the Manufacturing Work Order Processing program that affects work order mass updates for manufacturing work orders.

Function	Description
Apparel Management module	When you work with manufacturing work order mass updates, you can determine whether to include style items in your search for work orders to update. You set processing options in the Search for Work Orders program to set a default value for a check box to exclude style items, and to lock that filtering check box. You cannot work with work orders for style items unless the Apparel Management module is installed and active in your JD Edwards EnterpriseOne system.
Configured items	Mass updates to work orders with configured items is not supported when you work with mass updates for manufacturing work orders.
Field updates	Some fields that appear in manufacturing work orders are not editable when you work with multiple work orders. See "Unsupported Fields by Work Order Type" in the <i>JD Edwards EnterpriseOne Applications Work Orders Implementation Guide</i> .
Item Branch/Plant Validation processing option	If this processing option is set to validate the branch/plant record for work orders with attached items and the validation fails, the system issues an error message and does not process the work order update.
Bill of Material Field processing option	If you leave this processing option blank, the Type Bill of Material field is disabled on the Manufacturing Work Order Mass Update form.
Routing Type Field processing option	If you leave this processing option blank, the Type of Routing field is disabled on the Manufacturing Work Order Mass Update form.

9.3 Revising Work Order Status Information

After a work order is on the shop floor, you can review the order and the capacity of each work center through which the order is scheduled. When you review a work order, you can change the status, type, priority rating, freeze code designation, and type of flash message.

This section discusses how to:

- Set processing options for the Shop Floor Workbench program (P31225).
- Revise work order status information.

9.3.1 Form Used to Revise Work Order Status Information

Form Name	Form ID	Navigation	Usage
Work Order Status Update	W31225C	Daily Order Preparation - Discrete (G3111), Shop Floor Workbench Locate a work order on the Work With Order Scheduling form, and click Select.	Revise work order status information.

9.3.2 Setting Processing Options for the Shop Floor Workbench Program (P31225)

Processing options enable you to specify the default processing for programs and reports.

9.3.2.1 Default 1

1. Select Status Range or Item

From W.O. Status

Specify a value from user-defined code (UDC) table 00/SS (Work Order Status) that indicates the status of a work order, rate schedule, or engineering change order. Any status change from 90 through 99 triggers the system to automatically update the completion date.

Thru W.O. Status

Specify the next status for a work order, according to the work order activity rules, as the work order moves through the approval route. You must define a status code as a work order status in the Work Order Activity Rules table before you can use it as a next status.

Item Number

Specify a number that the system assigns to an item. It can be in short, long, or third item number format.

Item Cross Reference

Specify an alphanumeric value used as a cross-reference or secondary reference number. Typically, this is the customer number, supplier number, or job number.

2. Select Planner and/or Customer

Address Number-Planner

Specify the address book number of the crew that is responsible for completing the work. A crew is a group of employees, covering a number of primary crafts, that is responsible for carrying out the work in an area or for a particular craft across multiple areas.

Address Number-Customer

Specify a number that identifies an entry in the JD Edwards EnterpriseOne Address Book system, such as employee, applicant, participant, customer, supplier, tenant, or location.

9.3.2.2 Default 2

3. Select WO Categories (select work order categories)

W.O. Type

Specify the default work order type that is associated with the work order. Enter a value from UDC 00/TY (Work Order Type) that identifies the type of work order.

W.O. Priority

Specify the default priority that is associated with the work order. Enter a value from UDC 00/PR Work Order Priority) that identifies the priority of the document.

Phase (Category 1)

Specify the default category code for the work order. Enter a value from UDC 00/W1 (Work Order Category Code 1) that identifies the category for the work order.

Category 2

Specify the default category code for the work order. Enter a value from UDC 00/W2 (Work Order Category Code 2) that identifies the category for the work order.

Category 3

Specify the default category code for the work order. Enter a value from UDC 00/W3 (Work Order Category Code 3) that identifies the category for the work order.

4. Select WO Document Type (select work order document type)

W.O. Document Type

Specify the default document type that is associated with a work order. Enter a value from UDC 00/DT (Document Type) that identifies the origin and purpose of a document.

9.3.2.3 Versions 1

If you leave these fields blank, the system uses default version ZJDE0001.

1. Work Order Completions Version

Specify which version of the Work Order Completions program (P31114) that the system uses to complete manufacturing items from a work order to inventory.

2. Super Backflush Version

Specify the version of the selected Super Backflush program.

3. Inventory Issues Version

Specify the version of the Work Order Inventory Issues program (P31113) that the system uses.

4. Work Order Entry Version

Specify the version of the selected work order program.

5. Work Order Parts List Version

Specify the version that the system uses when you select the Work Order Parts List program (P3111) from the Row menu of the Work With Operation Dispatch form.

6. Work Order Routing Version

Specify the version of Routings (P3112) that the system uses.

7. Rate Schedule Version

Specify the version of the Enter/Change Rate Schedule program (P3109) that the system uses when called from Row and Form exits from the Work With Supply and Demand form.

Versions control how the Enter/Change Rate Schedule program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

8. Production Status Version

Specify the version of the selected production status program.

9.3.2.4 Versions 2

If you leave these processing options blank, the system uses default version ZJDE0001.

9. Sales Order Inquiry Version and 10. Sales Order Entry Version

Specify the version of the Sales Order Entry program (P4210) that the system uses to create and inquire on sales orders.

11. Purchase Order Inquiry Version and 12. Purchase Order Entry Version

Specify the version of the Purchase Order Entry program (P4310) that the system uses to create and inquire on purchase orders. When you enter a version, review its processing options to ensure that it meets the business need.

Work Order Mass Update (P48022)

Specify the version of the Search for Work Orders (P48022) program to use. You must access the Search for Work Orders (P48022) program to select records to update in the Work Order Mass Update (P48714) program. If you do not specify a version, the system uses version ZJDE0004.

9.3.2.5 Interoperability**1. Work Order Transaction Type**

Specify the default transaction type for the work order header that the system uses when processing export transactions. If you leave this processing option blank, the system does not perform export processing.

2. Work Order Header Before Image

Specify whether the system writes the before image for the work order header. Values are:

1: Includes the image.

Blank: Does not include the image.

9.3.3 Revising Work Order Status Information

Access the Work Order Status Update form.

Figure 9–1 Work Order Status Update form

The screenshot shows the 'Shop Floor Workbench - Work Order Status Update' form. The 'WD Status' section has a 'Additional W/O Detail' tab. The form contains the following fields:

Field	Value	Field	Value	Field	Value
Or No/Ty/Co	451004 W/O 00300	Branch/Plant	M30	Transaction	EA
Item Number	220	Ordered	EO	Secondary	
Lot/Serial		Quantity Open	EO		
Search Cross-Ref.		Completed			
Requested Date	06/29/2005	Scrapped			
Start Date	06/24/2005				

The 'Status Updates' section contains the following fields:

Field	Value	Field	Value	Field	Value
Status	45	Flash Msg	1	W/O Scheduling	
Type	5	Freeze Y/N	N	Do not freeze the order.	
Priority	1	Sequence			

Type

Enter a value from UDC 00/TY (Work Order/ECO Type) that indicates the classification of a work order or engineering change order.

You can use work order type as a selection criterion for work order approvals.

Priority

Enter a value from UDC 00/PR (Work Order Priority) that indicates the relative priority of a work order or engineering change order in relation to other orders.

A processing option for some forms enables you to enter a default value for this field. The value then displays automatically in the appropriate fields on any work order that you create on those forms and on the Project Setup form. You can either accept or override the default value.

Flash Msg (flag message)

Enter a value from UDC 00/WM (Work Order Flash Message) that indicates a change in the status of a work order. The system indicates a changed work order with an asterisk in the appropriate report or inquiry form field. The system highlights the flash message in the Description field of the work order.

Freeze Y/N (freeze yes/no)

Enter a code that indicates if the line on the order is frozen. MPS/MRP does not suggest changes to frozen orders. Values are:

Y: Yes, freeze the order.

N: No, do not freeze the order. This is the default value.

Sequence

Use the resequence code to rearrange work items within a cost code.

If you are using a GANTT chart for planning, the chart is sequenced by:

1. Cost code
2. Resequence code
3. Work order number

9.4 Scheduling Items on a Production Line

This section provides an overview of the scheduling of items on a production line and discusses how to:

- Set processing options for the Line Scheduling Workbench program (P3153).
- Schedule items on a production line.

9.4.1 Understanding the Scheduling of Items on a Production Line

Use the Line Scheduling Workbench (P3153) to schedule rates and work orders for the family of items that is produced on a production line. This program displays information in daily areas about both firmed and planned rates and work orders. After you manually revise the scheduled quantities, you can firm the schedule. Use start and through dates to display the workdays for the production line within the date range. When you create a rate or work order, or the system creates a rate through planning, the system spreads the quantities evenly throughout the workdays, within the date range specified in the line and item relationship for the item. From the workbench, you can access these forms:

- Alternate Line Selection (W3155WC).
- Split Lines Window (W3154WA).
- Parts Availability Multi Level Indented (W30200C).
- Work with Detail Messages (W3411D).

You use the Split Lines form to move scheduled quantities from one line or shift to another. You can use any of these methods:

- Splitting production between two lines, which might create a schedule on the new line.
- Consolidating production from two lines to one line.
- Transferring production from one line to another.
- Splitting production among shifts on the same or different lines.

Use Alternate Line Selection to review all lines for which line and item relationships exist with the item.

Note: The system highlights over-capacity values.

9.4.2 Form Used to Schedule Items on a Production Line

Form Name	Form ID	Navigation	Usage
Line Scheduling Workbench	W3153A	Daily Processing - Repetitive (G3115), Line Scheduling Workbench Locate a line or cell for a branch/plant.	Schedule items on a production line.

9.4.3 Setting Processing Options for the Line Scheduling Workbench Program (P3153)

Processing options enable you to specify the default processing for programs and reports.

9.4.3.1 Defaults

1. Enter the Status Code to use when Firming rates and/or work orders.

Specify a value from UDC 00/SS (Work Order Status) that indicates the status of a work order, rate schedule, or engineering change order. Any status change from 90 through 99 triggers the system to automatically update the completion date.

2. Enter the Order Type to use for data selection. (Optional)

Specify a value from UDC 00/DT (Document Type) that identifies the type of document. This code also indicates the origin of the transaction.

3. Enter the Shift Code to use for data selection. (Optional)

Specify a value from UDC 00/SH (Shift Code) that identifies daily work shifts.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

4. Enter the number of days to add to today's date when defaulting the Thru Date. (Optional)

Specify the number of days that the system adds to or subtracts from (if you specify negative days) the date in the Based on Date field (DABS) to calculate the discount due date or net due date on the invoice or voucher.

9.4.3.2 Display

1. Status Code used to exclude closed rates from the workbench. (Default '99')

Specify a value from UDC 00/SS (Work Order Status) that indicates the status of a work order, rate schedule, or engineering change order. Any status change from 90 through 99 triggers the system to automatically update the completion date.

2. Enter a '1' to display PLANNED rates and work orders.

Specify whether the system displays planned rates and work orders. Values are:

1: Display planned rates and work orders.

Blank: Do not display planned rates and work orders.

9.4.3.3 Versions

Enter the version to be used for each program. If you leave the processing option blank, the system uses ZJDE0001.

1. Production Status (P31226)

Specify the version of the Production Status program (P31226).

2. Line Sequencing Workbench (P3156)

Specify the version of the Line Sequencing Workbench program (P3156).

3. Split Lines Window (P3156W)

Specify the version of the Split Lines Window program (P3156W).

4. Enter/Change Rate Schedule (P3109)

Specify the version of the Enter/Change Rate Schedule program (P3109).

5. Supply/Demand Inquiry (P4021)

Specify the version of the Supply/Demand Inquiry program (P4021).

6. Message File Revisions (P3411)

Specify the version of the Message File Revisions program (P3411).

7. Sales Order Entry (P4210)

Specify the version of the Sales Order Entry program (P4210).

8. Rates/Manufacturing Work Orders (P48013)

Specify the version of the Rates/Manufacturing Work Orders program (P48013).

9. Part Availability (P30200)

Specify the version of the Part Availability program (P30200).

9.4.4 Scheduling Items on a Production Line

Access the Line Scheduling Workbench form, and locate a line or cell for a branch/plant.

To schedule items on a production line:

1. On Line Scheduling Workbench, after locating a line or cell for a branch/plant, change any scheduled quantity as needed.

If you change the total quantity and update the schedule, the system displays a warning before it spreads the new quantity evenly across the date range. You must update the schedule before the system changes the record.

2. To specify an alternate line, select a record, and then select Alternate Line from the Row menu.
3. On Alternate Line Selection, select the alternate line, select Select/Split from the Row menu, and click OK.
4. On Split Lines Window, complete the Quantity field to move scheduled quantities from one line to another.

If you access the Split Lines Window directly from the Line Scheduling Workbench form, you also need to complete the Line field.

5. To specify shift and date information, enter a start date, request date, and shift code.
6. To complete the split, click OK.

- **Line**

Enter a number that defines a production line or cell. Detailed work center operations can be defined inside the line or cell.

- **Start Date**

Enter a date that identifies the start date of either the work order or the routing instructions.

- **Sh (shift)**

Enter a value from UDC 00/SH (Shift Code) that identifies daily work shifts.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

9.5 Sequencing Rates by Classification Scheme

This section provides an overview of the sequencing of rates by classification scheme and discusses how to:

- Set processing options for the Line Sequencing Workbench program (P3156).
- Sequence rates by classification scheme.

9.5.1 Understanding the Sequencing of Rates by Classification Scheme

Use the Line Sequencing Workbench program (P3156) to sequence the rates after you schedule production. This workbench displays information about actual rates only, and it displays the information in daily amounts. You must update the schedule before the system changes the record. You can use these criteria to sequence the rates:

- Category code
- Sequence number

The category code values are determined by the processing options for the Enter/Change Rate Schedule program (P3109). Beginning with the first shift and day, the program forward-schedules the quantities, thus consuming the available capacity. You use the processing options to control whether these quantities are pulled forward or pushed back in time across shifts only, or both shifts and days. This process places the scheduled quantities that exceed the capacity available, within the date range selected, in the last shift of the last day.

If you sequence by sequence number, beginning with the first shift and day, the program forward-schedules the quantities, thus consuming the available capacity. When created, a new rate has an initial sequence number of 999999, which causes the rate to be sequenced last for the shift, placing it after any previously-sequenced rates. To manually override the default sequence, change the sequence number value of either the new rate, an existing rate, or both. Keep in mind that the status of the new rate cannot be greater than the rate status value on the Manufacturing Constants Revision form (W3009B). After revising the sequence, you can update the schedule as it is, or forward-schedule it again.

9.5.2 Form Used to Sequence Rates by Classification Scheme

Form Name	Form ID	Navigation	Usage
Sequencing Workbench	W3156A	Daily Processing - Repetitive (G3115), Line Sequencing Workbench Locate a line or cell for a branch/plant.	Sequence rates by classification scheme.

9.5.3 Setting Processing Options for Line Sequencing Workbench (P3156)

Processing options enable you to specify the default processing for programs and reports.

9.5.3.1 Process

1. Enter a '1' to allow scheduling across shifts.

Specify whether to allow scheduling across shifts. Values are:

Blank: Do not allow.

1: Allow.

2. Enter a '1' to allow scheduling across days.

Specify whether to allow scheduling across days. Values are:

Blank: If you have enabled scheduled across shifts, the remaining hours for a day will be applied to the last shift of the day.

1: Allow scheduling across days.

Note: To schedule across days, scheduling across shifts must be allowed.

9.5.3.2 Defaults

1. Add Days to Effective Thru Date (Optional)

Specify the number of days to add to today's date for the Effective Thru Date.

2. Status Code to Exclude Closed Rates (Default is '99')

Specify the Status Code (00/SS) used to exclude closed rates from the Workbench.

9.5.4 Sequencing Rates by Classification Scheme

Access the Sequencing Workbench form and locate a line or cell for a branch/plant.

Working with Hours and Quantities

This chapter contains the following topics:

- [Section 10.1, "Understanding Hours and Quantities"](#)
- [Section 10.2, "Entering Hours and Quantities"](#)
- [Section 10.3, "Updating Hours and Quantities"](#)
- [Section 10.4, "Reviewing Statuses and Transactions"](#)

10.1 Understanding Hours and Quantities

As you produce the items on a work request, you need to record the hours spent on production and the number of items (or co-products and by-products, for process manufacturing) that are completed in that time. This enables you to monitor progress and actual costs and compare them to the standard hours and quantities that you estimated for the job.

If the estimates are reasonably accurate, you can use the Super Backflush program (P31123) to have the system automatically enter the standard values at the pay point operations in the routing instructions. Otherwise, you can have all employees individually enter their time and the quantities that they completed.

The JD Edwards EnterpriseOne Shop Floor Management system interfaces with the time entry feature of the JD Edwards EnterpriseOne Time Accounting system so that employee hours and quantities produced have to be entered only once. The single entry saves time, reduces the risk of data entry error, and ensures that data throughout the enterprise is consistent.

The system can record hours and quantities in the work order record and in the JD Edwards EnterpriseOne Time and Labor system. Hours and quantities can be applied to a specific work order so that you can maintain accurate manufacturing accounting and costing data. To accommodate both piecework and hourly-rate employees, you can record hours and quantities either per work order or per employee.

The JD Edwards EnterpriseOne Shop Floor Management system manages hour and quantity information in the same manner whether you enter it in the Hours and Quantities program (P311221) or in the Speed Time Entry program (P051121) in the JD Edwards EnterpriseOne Time and Labor system. If you use the JD Edwards EnterpriseOne Time and Labor system in conjunction with the JD Edwards EnterpriseOne Shop Floor Management system, you should use the Speed Time Entry program to enter hours and quantities information.

After you enter hours and quantities on either time entry form, you can review and revise them before you post them to the JD Edwards EnterpriseOne Manufacturing

system for further tracking and cost accounting. You can review the hours and quantities either online or by printing a report.

Note: When you change the status of a routing operation, the change does not take effect until you run the Hours and Quantities Update program (R31422) to update the Work Order Routing table (F3112).

The system stores header information from the Work With Work Order Time Entry form (W311221B) in the Work Order Master File table (F4801). Detail information is stored in the Work Order Time Transactions table (F31122).

If you use the JD Edwards EnterpriseOne Quality Management system, as you record actual hours and quantities for a work order, you can access the Enter Test Results program (P3711) for completed items that require testing.

10.2 Entering Hours and Quantities

This section provides an overview hours and quantities entry and discusses how to:

- Set processing options for the Hours and Quantities program (P311221).
- Enter hours and quantities.

10.2.1 Understanding Hours and Quantities Entry

Use the Hours and Quantities program (P311221) to charge actual hours and quantities to a work order. You can use the processing options to specify either of these formats for work order time entry:

Format	Description
Order number format	This format records time and quantities for employees by work order
Employee number format	This format records time and quantities for the routing instruction steps on a work order by employee.

Consider this important information about entering hours and quantities:

- Enter the quantity completed only once per operation sequence number. Entering it for each type of hours causes a variance amount.
- Enter hours using beginning and ending times for each entry or the actual hours, up to two decimal places.
- To reverse completed or scrapped quantities that you have entered, enter the quantity as a negative quantity.
- If you activate the Apply Yield to Completed Quantity processing option, the system applies the operation yield percentage to the completed quantity. When you enter the completed quantity, the system automatically adds a scrap quantity line that is calculated based on the yield percentage.
- The system verifies that the completed and scrapped quantities that you enter do not exceed the quantity at operation.

Note: If you use the Speed Time Entry program (P051121), you can set the Manufacturing Time Entry processing option to update the information in the Hours and Quantities program.

After you enter hours and quantities, you can review the entries on the Work With Work Order Time Entry form.

If you entered a quantity that you want to be posted as complete, the system adds a separate detail line for the completed quantity (Type of Hours 4). If scrap exists, the system adds a scrap quantity line (Type of Hours 5).

See Also:

- "Understanding Work Orders, Hours and Quantities" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.
- "Processing Test Results" in the *JD Edwards EnterpriseOne Applications Quality Management Implementation Guide*.
- "Entering Timecards for Employees" in the *JD Edwards EnterpriseOne Applications Time and Labor Implementation Guide*.

10.2.1.1 Working with Electronic and Device Quality Records

Products such as pharmaceuticals, biotech, and medical devices require an audit trail for each batch, work order, or medical device manufactured.

An audit trail traces the manufacture of an item from design approval through manufacturing. The audit trail includes engineering changes introduced during the manufacture of the product. A quality assurance group must review the product prior to its release for sale or use.

You can review production records for a specific product and track defects. When you review records that are out of conformance, you can open a case for internal personnel to resolve the conformance issue.

On the Time Entry Revisions form, you select a row and select the Case Management option from the Row menu.

The system calls the version of the Case Entry program (P90CG504) in add mode based on the version specified in the Case Entry Add Mode (P90CG504) processing option on the Versions tab of the Work Order Time Entry program. The system populates the Customer Number and Caller Number fields on the Add Case form from the assigned to on the Time Entry Revisions form. The system also populates the Inventory Item Number and Branch Plant fields. The processing options for the version of the Case Entry program determine the assigned to for the case.

10.2.2 Forms Used to Enter Hours and Quantities

Form Name	Form ID	Navigation	Usage
Time Entry Revisions	W311221C	Daily Order Reporting - Discrete (G3112), Hours and Quantities Locate an order on the Work With Work Order Time Entry form and click Add.	Enter hours and quantities.
Add Case	W90CG504A	On the Time Entry Revisions form, select a routing step and select the Case Management option from the Row menu.	Enter a case for scrapped quantities.

10.2.3 Setting Processing Options for the Hours and Quantities Program (P311221)

Processing options enable you to specify the default processing for programs and reports.

10.2.3.1 Display

This processing option controls whether the system displays the Time Entry Revisions form (W051131A) in order number or employee number format.

1. Display

Specify whether the system displays forms by employee number or order number. Values are:

Blank: Employee number

1: Order number

10.2.3.2 Defaults

These processing options control the default values for the document type and work order status code that are used in the Hours and Quantities program.

1. Enter the Document Type associated with Shop Floor Activity.

Specify a value from user-defined code (UDC) table 00/DT (Document Type) that is associated with shop floor activity. You define document type codes in the Document Type Maintenance program (P40040).

2. Work Order Status Code

Specify the default work order status code (UDC 00/SS) that the system assigns to the work order when hours and quantities are posted to the work order routing. If you leave this processing option blank, the system does not update the work order status code.

10.2.3.3 Edits

These processing options control processing in the Hours and Quantities program, such as whether the system performs quantity verification or applies a yield percentage to the completed quantity.

1. Enter the Status Code beyond which Shop Floor Activity cannot be entered.

Specify the status (UDC 00/SS) of a work order from which shop floor activity cannot be entered. The system does not process work orders at a status equal or greater than the processing option value. For example, if the processing option is set to 95, then any work order with a status of 95 or higher cannot be changed by the application. If the processing option is blank, the system allows processing of work orders at any status. (Release 9.1 Update)

2. Quantity Verification

Specify whether the system verifies if the quantity complete and the quantity scrapped exceeds the quantity at operation.

Blank: Disable quantity verification.

1: Enable quantity verification.

3. Employee Rate

Specify whether the system displays the employee rate. Values are:

Blank: Display.

1: Do not display.

4. Apply Yield to Completed Quantity

Specify whether the system applies the operation yield percentage to the quantity that the user completes at an operation. The yield percentage determines the scrap quantity. Values are:

Blank: Does not apply the operation yield percentage.

1: Applies the operation yield percentage.

5. Apply Shrink to Completed Quantity

Specify whether the system applies the parent item's shrink factor to the recommended issue quantity of a component item. Values are:

0: The system does not apply the shrink factor to the quantity of a component item.

1: The system applies the shrink factor to the quantity of a component item.

10.2.3.4 Versions

These processing options control which version the system uses when these programs are called from the Hours and Quantities program.

1. Test Results Revisions (P3711)

Specify the version of the Test Results Revisions program (P3711) you want the system to use.

2. Manufacturing Scheduling Workbench (P31225)

Specify the version of the Manufacturing Scheduling Workbench program (P31225) you want the system to use.

3. Production Status (P31226)

Specify the version of the Production Status program (P31226) you want the system to use.

4. Hours and Quantities Update (R31422)

Specify the version of the Hours and Quantities Update program (R31422) you want the system to use.

5. Case Entry Add Mode (P90CG504)

Specify the version that you want to use when calling the Case Entry program (P90CG504) in Add mode. The system uses this version when entering a case for scrapped quantity. If you leave this processing option blank, the system uses version ZJDE0001.

10.2.3.5 Interoperability

These processing options control which transaction type the system uses for outbound hours and quantities transactions and whether the system writes a before image for the work order header.

1. Work Order Transaction Type

Specify the default transaction type for the work order header that the system uses when processing export transactions. If you leave this processing option blank, the system does not perform export processing.

2. Work Order Header Before Image

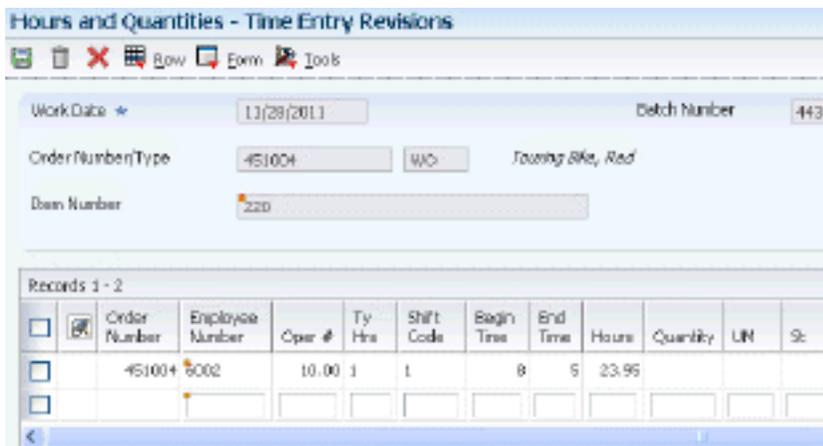
Specify whether the system writes the before image for the work order header. Values are:

- 1: Writes the before image.
- Blank: Does not write the before image.

10.2.4 Entering Hours and Quantities

Access the Time Entry Revisions form.

Figure 10–1 Time Entry Revisions form



Oper # (operation number)

Enter a number used to indicate an order of succession.

In routing instructions, a number that sequences the fabrication or assembly steps in the manufacture of an item. You can track costs and charge time by operation.

In bills of material, a number that designates the routing step in the fabrication or assembly process that requires a specified component part. You define the operation sequence after you create the routing instructions for the item. The JD Edwards EnterpriseOne Shop Floor Management system uses this number in the backflush/preflush by operation process.

In engineering change orders, a number that sequences the assembly steps for the engineering change.

For repetitive manufacturing, a number that identifies the sequence in which an item is scheduled to be produced.

Skip To fields enable you to enter an operation sequence that you want to begin the display of information.

You can use decimals to add steps between existing steps. For example, use 12.5 to add a step between steps 12 and 13.

This is the sequence number of the routing step on the work order. You must enter this number.

Ty Hrs

Enter a code that indicates the type of time entered. Values are:

- 1: Run Labor Hours
- 2: Setup Labor Hours
- 3: Machine Hours
- 4: Quantities Completed
- 5: Quantities Scrapped
- 9: Miscellaneous (such as piece rate bonus)

Hours

Enter the number of hours associated with each transaction.

Quantity

Enter the number of units committed for shipment in Sales Order Entry, using either the entered or the primary unit of measure defined for this item.

In the JD Edwards EnterpriseOne Manufacturing system and the Work Order Time Entry program, this field can indicate completed or scrapped quantities. The quantity type is determined by the type code entered.

Equipment Number

Enter an identification code that represents an asset. You enter the identification code in one of these formats:

- 1: Asset number (a computer-assigned, eight-digit, numeric control number)
- 2: Unit number (a 12-character alphanumeric field)
- 3: Serial number (a 25-character alphanumeric field)

Every asset has an asset number. You can use unit number and serial number to further identify assets. If this is a data entry field, the first character you enter indicates whether you are entering the primary (default) format that is defined for the system, or one of the other two formats. A special character (such as / or *) in the first position of this field indicates which asset number format you are using. You assign special characters to asset number formats in the fixed assets constants.

St (status)

Enter a value from UDC 31/OS (Operation Status) that identifies the current status of a work order or engineering change order as the operation steps in the routing are completed.

Employee Rate

Enter the employee's hourly rate as retrieved, entered or calculated during time entry. (See also GRT, PWRT, BRT.)

In the Employee Master file, this is the employee's base hourly rate. In the Union Rates file, this is the straight time rate.

Note: If you change the value of the DATA DISPLAY DECIMALS for this field, you must also change the field GRT to have exactly the same data display decimals

Equipment Rate

Enter a code that represents the amount that you want to charge the job. Each piece of equipment can have numerous billing rates based on the rate code. The equipment billing rate can be composed of up to ten different rates. For example:

Billing Rate = 200

100 Rate 1 (Ownership Component)

25 Rate 2 (Operating Component)

50 Rate 3 (Maintenance Component)

25 Rate 4 (Other Costs Component)

When you post time entries to the general ledger, the system recognizes credits in revenue accounts for each of the rate components. This enables you to separate portions of the equipment billing by type of cost.

Note: You are not required to use rate components.

Reason Code

Enter a value from UDC 42/RC (Reason Code) that explains the purpose for a transaction. For example, you can indicate the reason that you are returning items.

10.3 Updating Hours and Quantities

This section provides an overview of hours and quantities update and discusses how to:

- Update hours and quantities.
- Set processing options for the Hours and Quantities Update program (R31422).

10.3.1 Understanding Hours and Quantities Update

To post hours and quantities to the JD Edwards EnterpriseOne Manufacturing system, you must run the Hours and Quantities Update program (R31422). This program updates the Work Order Routing table (F3112) with unaccounted labor units and amounts for each work order operation. This table then supplies the manufacturing accounting programs with the current data. Before the data is updated, you can locate and change it as necessary. After you run this program, you cannot locate the data on the Time Entry Revisions form (W051131A).

If you use the Super Backflush program (P31123) to enter hours and quantities, the quantity transactions are posted in real time. The program enters the transactions at

the points in the routing instructions that you specify. To post hours, you still have to run the Hours and Quantities Update program. The system posts only the records that are in the current entry session. Therefore, if you exit the Super Backflush form after you enter the transaction data, you must locate the data on the Time Entry Revisions form and change the records to make them current with the system.

When you run this batch program from the menu, you use data selection to update those records that have not yet been posted. The system retrieves the hours and quantities information from the Work Order Time Transactions table (F31122). The system enters a **P** in the Processed Code field for each entry that it updates so that the record cannot be updated again. If you access the update program from Time Entry Revisions form, the system updates the time entry lines that appear on the form for the selected work order or employee. After the update, the system clears the form, and the records that were processed no longer appear.

10.3.2 Updating Hours and Quantities

From the Daily Order Reporting - Discrete menu (G3112), select Hours and Quantities Update.

10.3.3 Setting Processing Options for the Hours and Quantities Update Program (R31422)

Processing options enable you to specify the default processing for programs and reports.

10.3.3.1 Interoperability

These processing options control the transaction type for outbound hours and quantities transactions and the call to the batch program for the outbound subsystem.

1. Transaction Type

Specify the transaction type for the hours and quantities the system uses when processing outbound transactions. If you leave this processing option blank, the system does not perform outbound processing.

2. Outbound Subsystem UBE

Specify whether the system calls the subsystem after the Hours and Quantities Update program (P31422) successfully processes the outbound transactions. Values are:

1: Calls the subsystem.

Blank: Does not call the subsystem.

10.3.3.2 S/WM

These processing options control processing for JD Edwards EnterpriseOne Service Management. For example, the processing options control whether the system creates journal entries, whether flex accounting is used, and whether the order number should be used as a default value for the subledger field.

1. S/WM Journal Entries

Specify whether the system creates journal entries for SWM Work Orders. Values are:

1: Creates.

Blank: Does not create.

2. Flex Accounting

Specify whether this program searches for flex accounting rules to populate cost objects in the Account Ledger table (F0911). The system requires flex accounting to attach cost objects to the journal entries. Values are:

1: Uses flex accounting.

Blank: Does not use flex accounting.

3. General Ledger Date

Specify the date that appears on journal entries. If you leave this processing option blank, the program uses the system date.

4. Subledger

Specify whether the system uses the work order number as the default value in the Subledger field. Values are:

1: Uses the work order number as the default value.

Blank: Does not supply a default value.

5. Document Type

Specify the default document type that the system enters for journal entries on extra cost components if you do not use routings. Enter a value from UDC 00/DT (Document Type) that identifies the origin and purpose of the document. If you use routings, the system automatically assigns a document type of IH. If you leave this field blank, the system uses document type IH.

10.3.3.3 Defaults

This processing option controls the status that the system assigns to the work order when hours and quantities are posted to the work order routing.

1. Work Order Status Code

Specify the work order status code (UDC 00/SS) that the system uses to update the work order when hours and quantities are posted to the work order routing. If you leave this processing option blank, the system does not update the work order status code.

10.4 Reviewing Statuses and Transactions

This section provides overviews of the review of statuses and transactions and discusses how to:

- Run the Hours and Quantities Proof report.
- Review the status of hours.
- Review the status of quantities.
- Set processing options for the Operation Quantity Inquiry program (P31124).

10.4.1 Understanding the Review of Statuses and Transactions

After you enter hours and quantities, you can review the information either online or by printing a report. To review hours and quantity entries before you post them, you can use the Hours and Quantities Proof program (R31322). Then, you run the Hours and Quantities Update program (R31422) to post the entries.

You can use the Order Hours Status program (P31121) to display the actual hours for machine, labor, and setup hours entered for each operation that is associated with a

work order. You can also access the Work Order Status - Hours Revisions form, on which you can review the actual, standard, and variance values for the hours.

You can use the Order Quantities Status program (P31122) to display the quantities entered for the operations that are scheduled for a work order, including the actual quantity ordered, completed, and scrapped for each operation. You can also access the Quantities Revision form, on which you can review the actual, standard, and variance values for the quantities.

You can use the Operation Quantity Inquiry program (P31124) to display the routing instructions, operation quantity, quantity completed, and quantity scrapped for a work order, including the projected quantity complete and projected yield, for each operation and for the entire order. Processing options enable you to define the default from and through statuses.

To review hours and quantities entries before you post them, you can use the Hours and Quantities Proof program (R31322)

10.4.1.1 Reviewing Hours and Quantities Transactions

The Hours and Quantities Proof program (R31322) enables you to print a report that lists all labor hours and completed quantities that are recorded for a work order. You can print the hours and quantities transactions that have been entered and review them before you post them to the JD Edwards EnterpriseOne General Ledger system. Before you post the transactions, you can change or update them. After you post them, you cannot change them. The system retrieves the hours and quantities information from the Work Order Time Transactions table (F31122).

10.4.2 Forms Used to Review Hours and Quantities Transactions

Form Name	Form ID	Navigation	Usage
Work Order Status - Hours Revisions	W31121B	Daily Order Reporting - Discrete (G3112), Order Hours Status Locate and select an operation on the Work With Work Order Status - Hours form, and click Select.	Review the status of hours.
Work Order Status - Quantities Revisions	W31122A	Daily Order Reporting - Discrete (G3112), Order Quantities Status Locate and select an operation on the Work with Work Order Status - Quantities form, and click Select.	Review the status of quantities.
Operation Quantities Inquiry	W31124B	Daily Order Reporting - Discrete (G3112), Operation Quantity Inquiry Locate and select an order on the Work With Operation Quantities form, and click Select.	Review the status of operation quantities.

10.4.3 Running the Hours and Quantities Proof Report

From the Daily Order Reporting - Discrete menu (G3112), select Hours and Quantities Proof.

10.4.4 Reviewing the Status of Hours

Access the Work Order Status - Hours Revisions form.

Order Number/Type

Enter a number identifying the original document. This can be an invoice number, work order number, sales order number, journal entry number, and so on.

Op Seq # (operation sequence number)

Enter a number used to indicate an order of succession.

In routing instructions, a number that sequences the fabrication or assembly steps in the manufacture of an item. You can track costs and charge time by operation.

In bills of material, a number that designates the routing step in the fabrication or assembly process that requires a specified component part. You define the operation sequence after you create the routing instructions for the item. The JD Edwards EnterpriseOne Shop Floor Management system uses this number in the backflush/preflush by operation process.

In engineering change orders, a number that sequences the assembly steps for the engineering change.

For repetitive manufacturing, a number that identifies the sequence in which an item is scheduled to be produced.

Skip To fields enable you to enter an operation sequence that you want to begin the display of information.

You can use decimals to add steps between existing steps. For example, use 12.5 to add a step between steps 12 and 13.

Op Status (operation status)

Enter a value from UDC 31/OS (Operation Status) that identifies the current status of a work order or engineering change order as the operation steps in the routing are completed.

Actual Machine Hours

Enter the actual machine time in hours recorded against the work order.

Variance

Enter the variance amount, hours or quantity associated with an operation.

10.4.5 Reviewing the Status of Quantities

Access the Work Order Status - Quantities Revisions form.

Percent Yield

Enter the percentage to be allocated to the various payroll elements. Based upon the program being called, this may represent various types of percentages such as Percentage of Tip Wages versus Total Wages.

Completed

Enter the number of units committed for shipment in Sales Order Entry, using either the entered or the primary unit of measure defined for this item.

In the JD Edwards EnterpriseOne Manufacturing system and the Work Order Time Entry program, this field can indicate completed or scrapped quantities. The quantity type is determined by the type code entered.

Standard

Enter the quantity of units affected by this transaction.

Variance

Enter the variance amount, hours or quantity associated with an operation.

At Operation

Enter the quantity that is physically at the step at the work center.

Scrapped

Enter the number of units canceled in Sales Order or Work Order Processing, using either the entered or the primary unit of measure defined for this item.

In manufacturing, this can also be the number of units scrapped to date.

Variance Scrap

Enter the variance amount, hours or quantity associated with an operation.

Percent Yield

Enter the percentage to be allocated to the various payroll elements. Based upon the program being called, this may represent various types of percentages such as Percentage of Tip Wages versus Total Wages.

10.4.6 Setting Processing Options for the Operation Quantity Inquiry Program (P31124)

Processing options enable you to specify the default processing for programs and reports.

10.4.6.1 Defaults

Status Info

1. From Status

Enter a value from UDC 31/OS (Operation Status) that indicates the status of an operation. The from operation status is used as a beginning point to select work order information to display.

2. Thru Status (through status)

Enter a value from UDC 31/OS (Operation Status) that indicates the status of an operation. The thru operation status is used as an ending point to select work order information to display.

Working with Completions

This chapter contains the following topics:

- [Section 11.1, "Understanding Completions"](#)
- [Section 11.2, "Completing Discrete Work Orders"](#)
- [Section 11.3, "Completing Process Work Orders"](#)
- [Section 11.4, "Completing Rate Schedules"](#)

11.1 Understanding Completions

When you finish producing items on the shop floor, you need to record the completions to inventory. The completion transactions that you enter in the JD Edwards EnterpriseOne Shop Floor Management system update the item quantity records in the JD Edwards EnterpriseOne Inventory Management system. The system provides you with programs and processes that enable you to record completions for discrete and process work orders, as well as rate schedules.

You use the Super Backflush (P31123) and Work Order Completions (P31114) programs to enter completions for work orders, and the Completions Workbench program (P3119) to enter completions to rate schedules.

If you use lot control, you can complete the item to an existing lot or you can create a new lot for the completed item and set its expiration date. The system can calculate different lot dates, such as expiration date and effectivity date, based on the lot date calculation information that you defined in the Item Master (P4101) or the Item Branch/Plant (P41026) program.

When you use JD Edwards EnterpriseOne Shop Floor Management with other JD Edwards EnterpriseOne systems, these integration features apply:

System	Feature
JD Edwards EnterpriseOne Inventory Management	The JD Edwards EnterpriseOne Inventory Management system enables you to track materials between inventory or storage locations and the shop floor. You can manage inventory issues and commitments, complete orders, and track order quantities throughout the production process. If you set dual unit of measure information in the item master record for an item, you need to enter completed quantities both in the primary and in the secondary unit of measure.

System	Feature
<p>JD Edwards EnterpriseOne Warehouse Management</p>	<p>If you process transactions for a branch/plant that uses warehouse control, the Location Detail Maintenance program (P4602) appears when you enter backflush transactions, and the system creates a second record with the location detail information. In this case, you select location detail information records for processing. To ensure that the quantities in the Location Detail Information table (F4602) are consistent, you should make a selection from the form. The original quantity being processed through this transaction program, using the Location Detail Maintenance program, appears in the header section of the Super Backflush form.</p> <p>If the item being processed has a unit of measure structure or storage containers, the system enters them in the detail area of the Location Detail Maintenance form. Although you can override these values, the system verifies that this information is true:</p> <ul style="list-style-type: none"> ■ The primary unit of measure in the structure and the last level specified are valid, based upon unit of measure conversions in the Item Master program (P4101). ■ The units of measure appear in order from the largest to the smallest. ■ The structure must result in whole number conversions between units of measure. <p>The system enables unit of measure values in these conditions:</p> <ul style="list-style-type: none"> ■ Each unit of measure can contain only one partial quantity for that unit of measure. ■ You can overfill pallet-type units of measure only as defined on the Unit of Measure Group Revisions form (W46096B). <p>The system always displays the Location Detail Maintenance form when you add inventory to the branch/plant, except when inventory is removed and only one location detail record is in the location. In this case, the quantity is automatically removed from the single location detail.</p> <p>For completed items for which cross-docking is activated in the record in the Item Branch File table (F4102), you can determine whether the system performs cross-docking to fill back orders. You can also specify whether the system creates pick requests for cross-docked items.</p>

System	Feature
JD Edwards EnterpriseOne Quality Management	<p>As you enter work order completions, including quantity completed and quantity scrapped, you can:</p> <ul style="list-style-type: none"> ■ Access the Enter Test Results program (P3711) for any items that require testing upon completion ■ Review generic text for the work order ■ Set processing options for default lot, work order, and operation statuses <p>As you backflush labor and material for a work order, you can:</p> <ul style="list-style-type: none"> ■ Access the Enter Test Results program for any items that require testing ■ Review generic text for the parent item and its operation
JD Edwards EnterpriseOne Sales Order Management	<p>If you partially complete a work order that was generated from a sales order, the system can split the sales order into multiple sales order lines to reflect the partial commitment. If the sales order contains no hard commitment, you can set the Sales Order Lot and Location processing options to update the sales order with location information following a partial completion. You can also set a processing option to update the sales order status, regardless of whether the completed quantity is hard-committed. You can also reverse a partial completion. In this case, the system splits the sales order again and creates a negative line.</p>

When you complete work orders or rate schedules, the system performs these actions:

- Updates the Item Location File table (F41021).
- Writes a record in the Item Ledger File table (F4111).
- Updates the Production Cost table (F3102).
- Updates unaccounted units in the Work Order Master File table (F4801).

See Also:

- "Understanding Work Orders, Completions" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.

11.2 Completing Discrete Work Orders

This section provides an overview of discrete work order completion and discusses how to:

- Set processing options for the Work Order Completions program (P31114).
- Complete work orders without backflushing.
- Complete work orders through backflush.
- Complete a work order for multiple locations.

- Release sales backorders during completions.
- Manage completions using receipts routing.
- Set processing options for the Super Backflush program (P31123).
- Process work orders through super backflush.
- Complete work orders with serialized components.

11.2.1 Understanding Discrete Work Order Completion

When you finish producing discrete items on the shop floor, you need to record the completions to inventory. The completion transactions that you enter in the JD Edwards EnterpriseOne Shop Floor Management system update the item quantity records in the JD Edwards EnterpriseOne Inventory Management system. For items that are defined in a primary and a secondary unit of measure, you must enter the completed quantity in both units of measure.

You use the Work Order Completion (P31114) program to record completions. If you have already manually issued material for a work order, you perform a completion without backflush. You can either report all items as complete when the entire work order is finished, or report partial completions as they occur throughout the production process. The point at which you select to report completions depends on factors related to the production cycle time. Depending on the nature of the manufactured item, you can report partial completions or report total completions in one transaction.

When you report partial completions, you can also indicate the stage or progress that is being made on an order in production and identify any delays in the production process. The Work With Work Order Completions form displays completed and scrapped quantities and percent complete information for a work order.

When you use the Work Order Completion program to complete more than the quantity ordered, the system highlights the Completed Quantity field and warns you that completing the quantity that you designated will generate an over-completion. You can complete a work order to multiple locations. In this case, you enter the total quantity to be completed and then divide it among multiple locations.

When a previous completion exists for a work order, the system displays information in the lot, grade or potency, and status fields. Also, when you enter a quantity, the system adds inventory to the lot at the grade or potency and the current status.

You can perform full or partial order completions either with or without backflushing the parts. If you use backflushing, you report the issue transactions at completion or at operations that are defined as pay point operations for super backflush. For backflush to occur, the ingredient must be set up with an issue code that enables the item to be backflushed.

When you set a completions threshold in the processing option, the system updates the Update Status field on the Work Order Completion Detail form according to the threshold rules. If you use lot control, you can also specify a default value for the completion lot number, such as the work order number or the associated sales order number. You can override the default value on the form.

11.2.1.1 Releasing Sales Backorders During Completions

You can create a sales order in the JD Edwards EnterpriseOne Sales Order Management system that automatically generates a work order to supply the ordered item (a sales order with line type W). If the requested date of this sales order does not allow sufficient time for the item to be manufactured, given the item's level lead time,

the order quantity can be identified as backordered. In this case, you can launch the Release Backorders - Online program (P42117) during work order completion to release the backorder for the item.

11.2.1.2 Managing Completions That Use Receipts Routing

You set up a receipt routing in the JD Edwards EnterpriseOne Procurement system by specifying a unique code name for routing receipts in the UDC table 43/RC (Route Codes) and an operation name in UDC 43/OC (Operation Codes). You enter a Y in any of the update fields in the Receipt Routing Definition program (P43091) to cause the system to update the appropriate field in the Item Location File table (F41021) when an item arrives at the specified operation.

The system considers items to be on-hand only at the end of a receipt routing. You must enter a Y (Yes) in the Update O/H field for the system to assign the last operation to a routing. The system assigns a Y in the Pay field on the operation to which a Y is assigned in the On-Hand field.

To specify whether the system directs items through a receipt routing, you must assign a routing to each item. You assign receipt routings to items based on item or supplier relationships or both.

For manufactured items, the supplier must be -99999999. However, the system generates the supplier when you set the processing options for Work Order Completion in the Supplier/Item Relationships program (P43090). The processing options automatically sets the manufactured items to supplier -99999999 and prevents the system from displaying a supplier field in the program.

To locate the status of the receipt's routing, use the Status Inquiry program (P43250). To view the details of a step, access the Receipt Routing Movement form. When you use receipt routing in completions, you will not see the completed quantity updated to the F4801 table until the receipt routing has completed.

11.2.1.3 Processing Work Orders through Super Backflush

You can use the Super Backflush program (P31123) to enter completed and scrapped quantities by operation and employee. If the quantities you enter exceed the quantity at operation, the system issues an error message. The pay point code that you define for each operation in the routing instructions determines what information is backflushed at each pay point. Pay point code B, for example, means that you issue materials and report labor at the operation. You can also select to backflush material or labor only at a given pay point. The last operation in the routing instructions must be set up with pay point code B to ensure that all remaining materials and labor are reported before the work order is completed. The backflush procedure can perform these transactions by operation:

- Issue parts to the work order
- Enter hours and quantities for the work order
- Enter inventory completions

In the processing options, you can set up the super backflush process to be performed either automatically or interactively. If the process is set up to run interactively, the system displays these programs after you enter the completion information on the Super Backflush form:

- Inventory Issues (P31113)
- Hours and Quantities (P311221)
- Work Order Inventory Completions (P31114)

You can accept the information that appears in these programs, or you can revise it. For example, when the Time Entry Revisions form appears after you enter information on the Super Backflush form, you can view the labor recorded for the operation, as well as the quantity completed. The records created through Super Backflush are stored in the Work Order Time Transactions table (F31122) with a Processed Code of S. The system automatically updates the Work Order Routing table (F3112). If you add information on the Time Entry Revisions form, you must run the Hours and Quantities Update program (R31422) to update the Work Order Routing table. These records will have a Processed Code of P in the Work Order Time Transactions table.

11.2.1.4 Completing Work Orders with Serialized Components

When you enter a completion for serialized components, you can generate a serial number for each completed item by accessing the Assign Serial Numbers program (P3105). Another program, Serial Number Associations (P3107), is accessible only when you are associating serial number-controlled components to serial number assemblies. The system displays the preassigned serial numbers and any memo lot information on the Serial Number Associations form.

After you generate serial numbers for a work order, you associate the serialized components with a serialized assembly. To associate a serialized component with a serialized assembly, you enter the associating quantity.

In addition, the completion program enables you to enter a memo lot number to use when both lot and serial numbers are required for tracking assemblies. You can set the Serial No. Required field on the Item Branch/Plant Info. form (W41026A) to specify that the system verify the memo lot number and serial number.

When you complete work orders with components that are not serialized, you cannot assign serial numbers to the assemblies at completion.

When you set the appropriate processing options in the completion program, the system enables you to complete multiple items using the same serial number.

11.2.1.5 Working with Electronic and Device Quality Records

Products such as pharmaceuticals, biotech, and medical devices require an audit trail for each batch, work order, or medical device manufactured.

An audit trail traces the manufacture of an item from design approval through manufacturing. The audit trail includes engineering changes introduced during the manufacture of the product. A quality assurance group must review the product prior to its release for sale or use.

You can review production records for a specific product and track defects. When you review records that are out of conformance, you can open a case for internal personnel to resolve the conformance issue.

On the Work Order Completion Detail form, you enter a quantity for scrap and select the Case Management option from the Form menu.

The system enables the Case Management option only when a value resides in the Qty Scrapped To Date field or the value in the Qty Scrapped field is greater than 0.

The system calls the version of the Case Entry program (P90CG504) in add mode based on the version specified in the Case Entry Add Mode (P90CG504) processing option on the Versions tab of the Work Order Completions program. The system populates the branch/plant, lot number, item number, and customer caller number on the Add Case form from the user ID.

11.2.2 Prerequisites

Before you complete the tasks in this section:

- If you want to perform a completion with backflush, set the appropriate processing options to access the Inventory Issues program (P31113) and to identify the version of the program to use.
- Before you release sales backorders during completion, set processing options to call the Backorder Release program (P42117) and identify the version of the program to use.
- Before managing completions using receipts routing, set the processing option to initiate the receipt routing process.
- Set the Case Entry Add Mode (P90CG504) processing option on the Versions tab to specify a specific version to use when selecting the Case Management option on the Row menu.

11.2.3 Forms Used to Complete Discrete Work Orders

Form Name	Form ID	Navigation	Usage
Work Order Completion Detail	W31114B	Daily Order Reporting - Discrete (G3112), Partial Completion or Full Completion Locate and select an order on the Work With Work Order Completions form, and then click Select.	Complete work orders without backflushing.
Work Order Completion Detail	W31114B	Daily Order Reporting - Discrete (G3112), Completion with Backflush Locate and select an order on the Work With Work Order Completions form, and then click Select.	Complete work orders through backflush.
Work Order Completion Detail	W31114B	Daily Order Reporting - Discrete (G3112), Partial Completion Locate and select an order on the Work With Work Order Completions form, and then click Select.	Complete a work order for multiple locations.
Work Order Completion Detail	W31114B	Daily Order Reporting - Discrete (G3112), Full Completion Locate and select an order on the Work With Work Order Completions form, and then click Select.	Release sales backorders during completions.

Form Name	Form ID	Navigation	Usage
Supplier/Item Relationships	W43090B	Receipt Routing (G43A14), Routing/Analysis Revisions Locate and select a branch/plant on the Work With Supplier/Item Relationships form, and click Select.	Manage completions using receipts routing.
Super Backflush	W31123A	Daily Order Reporting - Discrete (G3112), Super Backflush Locate and select an order on the Work With Order Numbers form, and then click Select.	Process work orders through super backflush.
Work Order Completion Detail	W31114B	Locate and select an order on the Work With Work Order Completions form.	Completing work orders with serialized components.
Add Case	W90CG504A	On the Work Order Completion Detail form, enter a quantity for scrap and select the Case Management option from the Form menu.	Enter a case for scrapped materials.

11.2.4 Setting Processing Options for the Work Order Completions Program (P31114)

Processing options enable you to specify the default processing for programs and reports.

11.2.4.1 Defaults

These processing options control the default document types that the system uses when you complete inventory.

1. Inventory Completion Document Type

Enter the default document type for inventory completions. Select the document type from UDC 00/DT (Document Type - All Documents).

2. Inventory Scrap Document Type

Enter the default document type for inventory scrap transactions. Select the document type from UDC 00/DT (Document Type - All Documents).

11.2.4.2 Edits

These processing options control how the system invokes processes, such as issues and receipt routing, during the completions process.

1. Backflush

Specify whether the system issues material to the Parts List based on the quantity that is completed. You can also specify whether the system issues material in interactive mode or blind mode. If the processing option is set to 1 or 2, you need to specify the

version of the Work Order Inventory Issues program (P31113) on the Versions tab.
Values are:

Blank: The system does not issue material to the Parts List.

1: Displays the Work Order Issues form.

2: Performs a blind execution of Work Order Issues.

2. Receipt Routing

Specify whether the system initiates the receipt routing process. This action enables the inventory completion to enter an inspection mode before the quantity is moved to stock.

To activate receipt routing for an item, the item must have a route assigned to it through the Supplier/Item Relationships program (P43090). The supplier for the manufactured end-item must be listed as -99999999. Values are:

Blank: Does not initiate receipt routing.

1: Initiates receipt routing.

3. Override Lot Numbers

Specify whether the system allows you to override the lot number. If you leave this processing option blank and you have performed no other completions for the work order, the lot number field is unprotected. If you have performed any completions for the work order, the system protects the lot number field. It uses the lot number for the first completion of that work order and for all other partial completions. However, if you set this processing option to 1, you can override the lot number even if you have already performed a partial completion for the work order. Values are:

Blank: Does not allow.

1: Allows.

4. Negative Quantity on Hand

Specify whether the system displays an error message when the completed material sets the on-hand quantity to a negative amount. Values are:

Blank: Does not display an error message.

1: Displays an error message.

5. Enter a '1' to initiate WIP Revaluation (R30837)

Specify whether the system calls the WIP Revaluation program (R30837) to adjust work-in-progress amounts to reflect cost changes. Values are:

Blank: Do not initiate WIP Revaluation.

1: Initiate WIP Revaluation.

6. Enter Hold Code Requirement

Specify whether a lot status code is required for the finished good lot based on the lot status of the component items. The system will notify the user if any of the component items used to produce the finished good have a non-blank lot status. Values are:

Blank: You are not required to enter a lot status code for the finished good lot.

1: You have the option of entering a lot status code for the finished good lot.

2: You must enter a lot status code for the finished good lot.

7. Production Number On Hand Consumption

Specify how the Work Order Completions program selects production number on hand quantity from the Item Location Tag File table (F41021T).

Production number on hand is consumed whenever on hand quantity is not available to continue the transaction.

If you process inventory selection blindly, then the system consumes production number on hand quantity in the following order:

1. Generic inventory.
2. Inactive production numbers.
3. Orphaned production numbers.
4. Production number with the farthest end item demand date.

If you process inventory selection interactively, then you can select the production number from the options available on the Select Inventory for Consumption form (W42054A). Values are:

Blank: The program performs blind selection of inventory.

1: The program enables interactive selection of inventory.

11.2.4.3 WO Status

These processing options controls the status that you can assign to partially and fully completed work orders. You can also define a status as a threshold beyond which the system does not perform completion processing.

1. Partial Work Order Status Code

Specify the status code that you want the system to assign to a partially completed order. The system considers an order partially complete as long as the completed quantity is less than the percentage that is specified in the completion threshold processing option. If you leave this processing option blank, the system does not automatically update the status.

2. Completed Status Code

Specify the status code that the system assigns to a completed order. If you leave this processing option blank, the system does not automatically change the status. The system considers an order complete if the completed quantity is greater than or equal to the percentage that is specified in the Completion Threshold processing option.

3. Completion Threshold

Specify the threshold percentage at which the system considers the order to be complete. For example, if you enter 95, the system sets the work order status to complete when 95 percent of the order quantity is complete. If you specify a threshold value of zero, the system sets the work order status to complete when 100 percent of the order quantity is complete. If the completed quantity does not reach the threshold, the system sets the work order status to partially complete. If a related sales order is attached or the work order is cross-docked, any threshold less than 100 percent is ignored.

4. Enter the Status Code from which Shop Floor Activity cannot be entered (Release 9.1 Update)

Specify the work order status code (00/SS) at or beyond which the system cannot run the Work Order Completions program (P3114). For example, if this processing option is set to status 95 and a work order has reached this status, the system generates an

error message if you attempt to run Completions for that work order. If you leave this processing option blank, the system processes work orders at any status.

11.2.4.4 Lot Hold Codes

These processing options control the lot hold codes to which the system processes a completion. You can enter up to five lot hold codes.

If you enter an asterisk in any of these fields, the system processes completions to all held lots. Additionally, if you leave these fields blank, the system does not process completions to any held lots.

1. Lot Hold Code #1 through 5. Lot Hold Code #5

Specify one of five lot hold codes to which the system processes completions. Enter a hold code, an asterisk, or leave these processing options blank. If you enter a hold code, the system processes completions to that hold code. If you enter an asterisk, the system processes completions to all held lots. If you leave these processing options blank, the system does not process completions to any held lots.

11.2.4.5 Sales Orders

These processing options control the information that the system needs to process completions that are associated with sales orders.

1. Work Order Lot and Location Defaults

Specify which number the system uses for the completion lot number and the completion location. Values are:

- 1: Sales order number as the completion lot number.
- 2: Sales order number as the completion location and the sales order line number as the completion lot number.
- 3: Work order number as the completion lot number.
- 4: Production number as the completion lot number.

2. Sales Order Lot and Location

Specify whether the system updates the related sales order by committing the inventory to the related sales order, splitting the sales order detail line when a partial completion occurs, and updating the lot number and location number fields from the work order. Values are:

Blank: Do not update.

- 1: Update.

3. Update Sales Order Next Status

Specify the default next status code for the sales order. The system uses this processing option only if the Update Sales Order Next Status processing option is set to update.

Enter a status code from UDC 40/AT (Activity/Status Codes). If you leave this processing option blank, the system uses the sales order next status from the order activity rules.

4. Override Next Status

Specify whether the system updates the Next Status for the sales order. Values are:

Blank: The system does not update the Next Status.

- 1: The system updates the Next Status.

5. Display Back Order Release Form

Specify whether the system calls the Backorder Release program (P42117) for completed backordered items. By using this program, you can view the items that are on backorder and select to ship them immediately. You can also prioritize existing backorders. If you enter 1 for this processing option, use the Back Order Release Version processing option on the Versions tab to specify which version of the Backorder Release program to use. Values are:

Blank: Do not call the Backorder Release program.

1: Call the Backorder Release program.

6. Memo Lot Field Defaults (Release 9.1 Update)

Specify whether the production number displays in the Memo Lot 1 field on the work order. Values are:

Blank: Do not display the production number in the Memo Lot 1 field.

1: Display the production number in the Memo Lot 1 field.

11.2.4.6 Process Manufacturing

These processing options control whether the system enables unplanned co-products and by-products and whether the system issues them separately or together.

1. Allow Unplanned Co/By Products

Specify whether the system processes completions of unplanned co-products and by-products. Values are:

Blank: Does not process.

1: Processes.

2. Issues Ingredients to Co/By Products

Specify if ingredients are issued to the process item or to each co-product or by-product that the system completes. This processing option is used only if the Backflush option is set to call the Work Order Inventory Issues program (P31113). Values are:

Blank: Process item.

1: Co- and by-products.

Note: If you select 1, you can track lots to the final end product.

11.2.4.7 Serial Numbers

These processing options control how the system processes inventory completions when you have serial numbers attached to the work orders.

1. Allow Duplicate Lot Serial Number

Specify whether the system duplicates lot numbers, serial numbers, or both, that exist in the system. Values are:

Blank: Does not duplicate lot numbers or serial numbers.

1: Duplicates lot numbers and serial numbers.

2. Document Type

Specify the default document type that the system uses for serial number issues. Document types are listed in UDC 00/DT (Document Type - All Documents). If you

leave this processing option blank, the system uses IM (Material Charged to WOs) as the default value.

11.2.4.8 Warehouse Management

These processing options control information that is relevant to integration with the JD Edwards EnterpriseOne Warehouse Management system.

1. Putaway Requests

Specify whether putaway requests will be processed. For mode 2, you need to specify the version of the subsystem program that the system uses in the Location Selection Driver processing option (R46171) on the Versions tab. Values are:

Blank: The system does not process putaway requests.

1: The system processes putaway requests only.

2: The system processes putaway requests when it accesses the subsystem.

2. License Plate Number Generation Method

Specify what license plate number generation method should be used. Values are:

00: Use license plate constants.

01: Enter manually.

02: Create user-defined formula.

03: Create Electronic Product Code (EPC) number.

3. Build default UOM structure (build default unit of measure structure)

Specify the UOM Structure to be used to create license plate number automatically.

License plates are only created for item UOM that have the license plate flag turned on in the Item Unit of Measure Definition (P46011) application. Values are:

1: The default item UOM Structure, excluding levels higher than the transaction UOM is used.

Blank: The default item UOM structure is used.

4. Assign Items to License Plate Window (P46L30)

Specify whether the system automatically displays the Assign/Remove Items to License Plate (W46L30B) form. This processing option applies only if you are using license plate functionality in the warehouse management system and license plate numbers are not created automatically by the system. Values are:

Blank: Does not automatically display.

1: Automatically displays.

11.2.4.9 Cross Docking

These processing options control processing for cross-docking.

1. Cross Docking

Specify whether the system performs opportunistic cross-docking, planned cross-docking, or both. The system performs planned cross-docking only for items for which the cross-docking code is activated in the item branch/plant record. Values are:

Blank: Do not use cross-docking.

1: Use opportunistic cross-docking (only for warehouse items).

2: Use planned cross-docking.

3: Use both opportunistic and planned cross-docking.

2. Pick Request for Planned Cross Docking

Specify whether the system creates a pick request when it performs planned cross-docking. Values are:

Blank: Do not create a pick request.

1: Create a pick request.

2: Create a pick request and process it through the subsystem.

3. Override Next Status for Sales Orders

Specify the default next status code for the sales order. The system uses this processing option only if planned cross-docking is performed.

Enter a status code from UDC 40/AT (Activity/Status Codes). If you leave this processing option blank, the system uses the sales order next status from the order activity rules.

4. From Sales Order Status

Specify the from status code of the sales order for cross-docking during work order completions. The system uses this processing option only if planned cross-docking is performed.

5. Thru Sales Order Status

Specify the thru status code of the sales order for cross-docking during work order completions. The system uses this processing option only if planned cross-docking is performed.

11.2.4.10 Versions

These processing options control which versions of these programs the system uses in the completion process:

1. Work Order Entry (P48013)

Specify the version you want to use when calling the Work Order Entry program (P48013) from the Work Order Completion Detail form. The version controls how the program displays information. If you leave this processing option blank, the system uses version ZJDE0001.

2. Work Order Issues Version (P31113)

Specify the version of the Work Order Issues program that the system uses. The system only requires this processing option when Work Order Issues is set to execute.

If you leave this field blank, the system uses the ZJDE0001 version of the program. This version controls how the Work Order Issues program displays information.

3. Test Results Revisions (P3711)

Specify the version that you want to use when calling the Test Results Revisions program (P3711) from the Work Order Completion Detail form. The version controls how the program displays information. If you leave this processing option blank, the system uses version ZJDE0001.

4. WIP Revaluation (R30837)

Specify which version of the WIP Revaluation program (R30837) the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

5. Pick Request Version (R46171)

Specify the version of the Location Selection Driver program (R46171) that the system uses to create pick requests during planned cross-docking. If you leave this processing option blank, the system uses version ZJDE0001.

6. Location Selection Driver Version (R46171)

Specify the version of the Location Selection Driver program (P46171) to use. If you leave this processing option blank, the system uses version ZJDE0001. The version controls how the program displays information.

7. Back Order Release Version (P42117)

Specify the version of the Backorder Release program (P42117) that the system uses to complete inventory with backordered items. The version controls how the Back Order Release program displays information. Enter a version if the Display Back Order Release Form processing option on the Sales Orders tab is set to 1. If you leave this processing option blank, the system uses version ZJDE0001.

8. Shortage Workbench (P3118)

Specify the version that you want to use when calling the Shortage Revisions program (P3118) from the Work Order Completion Detail form. The version controls how the program displays information. If you leave this processing option blank, the system uses version ZJDE0001.

9. Case Entry Add Mode (P90CG504)

Specify the version that you want to use when calling the Case Entry program (P90CG504) in Add mode from the Work Order Completion Detail form. The version is used when entering a case for scrapped quantity. If you leave this processing option blank, the system uses version ZJDE0001.

11.2.4.11 Interoperability

These processing options control the default transaction type that the system uses to process export transactions and to identify the outbound subsystem.

1. Transaction Type

Enter the transaction type that the system uses for outbound interoperability processing. Transaction types are listed in UDC 00/TT (Transaction Type). The system assigns a transaction type to a transaction when it completes a work order. If you leave this processing option blank, the system does not perform outbound interoperability processing.

2. Call Outbound Subsystem

Specify whether the system activates the subsystem after the Work Order Completions program (P31114) has successfully processed an outbound transaction. Values are:

Blank: Does not activate.

1: Activates.

3. Work Order Header Before Image

Specify whether the system writes the before image for the work order header. Values are:

1: Includes the image.

Blank: Does not include the image.

11.2.5 Completing Work Orders Without Backflushing

Access the Work Order Completion Detail form.

Figure 11–1 Work Order Completion Detail form

11.2.5.1 Quantity

Select Quantity to complete these fields:

Secondary Qty Completed (secondary quantity completed)

Enter the number of units that have been completed, expressed in the secondary unit of measure.

You must complete the Secondary Quantity Completed field if the item you are completing is set up with dual units of measure in the item master record.

11.2.5.2 Lot/Location

Select the Lot/Location tab to complete these fields:

Location

Enter the area in the warehouse where you receive inventory. The format of the location is user-defined and you enter the location format for each branch/plant.

Caution: If you have activated the Location Control option in the Branch/Plant Constants program (P41001), you can only complete work orders to locations you have defined in the Location Master program (P4100).

Lot/Serial

Enter a number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.

You can also set the appropriate processing option to use the sales order or work order number as the default value for the lot number on this form.

If you complete an item to an existing lot, the lot expiration and effectivity dates are populated from the lot master record. You can also use the Lot Date Override form exit on Work Order Completion Detail to enter the appropriate lot dates.

11.2.6 Completing Work Orders Through Backflush

Access the Work Order Completion Detail form.

To complete work orders through backflush:

1. On Work Order Completion Detail, select the Quantity tab and complete these fields:

- Quantity Completed
- Secondary Qty Completed

You must complete the Secondary Quantity Completed field if the item you are completing is set up with dual units of measure in the item master record.

2. Complete these optional fields:

- Quantity Scrapped
- Date Completed

You can enter scrap manually for a parent item. You can also set up the system to calculate scrap automatically by using the scrap or yield percentage values defined in the bill of material and routing.

3. To complete a work order at a location other than the primary location, select the Lot/Location tab, complete the Location field and click OK:
4. If you are creating a new lot for a lot-controlled item, complete the Lot/Serial field:
5. Click OK.
6. On Inventory Issue Revisions, review the issue quantities and click OK to issue the material.

11.2.7 Completing a Work Order for Multiple Locations

Access the Work Order Completion Detail form.

To complete a work order for multiple locations:

1. On Work Order Completion Detail, select the Quantity tab and complete these fields:

- Quantity Completed
- Secondary Qty Completed

You must complete the Secondary Quantity Completed field if the item you are completing is set up with dual units of measure in the item master record.

2. Complete these optional fields:

- Quantity Scrapped
- Date Completed

You can enter scrap manually for a process item. You can also set up the system to calculate scrap automatically by using the scrap or yield percentage values defined in the bill of material and routing.

3. To complete the quantity for multiple locations, select Multi-location from the Form menu.
4. On Select Multiple Locations, complete these fields for all locations for which you want to complete parent items:
 - Quantity
 - Location
5. Complete the optional Lot/Serial field:
6. Click OK.
7. On Work Order Completion Detail, click OK.

11.2.8 Releasing Sales Backorders During Completions

Access the Work Order Completion Detail form.

To release sales backorders during completions:

1. On Work Order Completion Detail, select the Quantity tab and complete these fields:

You must complete the Secondary Quantity Completed field if the item you are completing is set up with dual units of measure in the item master record.
2. Complete this optional Quantity Scrapped field:

You can enter scrap manually for a parent item. You can also set up the system to calculate scrap automatically by using the scrap or yield percentage values defined in the bill of material and routing.
3. To complete a work order at a location other than the primary location, select the Lot/Location tab, complete the Location field and click OK:
4. On Work With Backorders, review the information.

If the available quantity plus the amount being received is enough to fill any or all of the backorders, the system enters the amount for that order in the Quantity to Ship field on Release Backorders.

 - **Quantity on Backorder**

Enter the number of units backordered in JD Edwards EnterpriseOne Sales Order Management or in Work Order Processing, using either the entered or the primary unit of measure defined for this item.

11.2.9 Managing Completions Using Receipts Routing

Access the Supplier/Item Relationships form.

Figure 11–2 Supplier/Item Relationships form

The screenshot shows the 'Supplier/Item Relationships' form. It is divided into several sections:

- Header:** Routing/Analysis Revisions - Supplier/Item Relationships
- Form Fields:**
 - Branch/Plant: M30
 - Supplier: 99999999
 - Item Number: 4200
 - Certification Status: []
 - Effective Date: 08/02/2000
 - Expiration Date: 12/31/2041
- Routing Information:**
 - Normal Route Code: MINS
 - Alt. Route Code: []
 - Route Type Code: []
- Analysis Information:**
 - Average Unit Cost: []
 - Leadtime Quantity %: 90.00
 - Frequency Days: []
 - Frequency Number: []
 - Average Leadtime: .00
 - Days Allowed Early: []
 - Days Allowed Late: []

Normal Route Code

Enter a value from user-defined code (UDC) table 43/RC (Route Codes) that identifies a receipt route. Each receipt route consists of a series of operations through which the system directs items upon receipt.

See Also:

- "Entering Receipts" in the *JD Edwards EnterpriseOne Applications Procurement Management Implementation Guide*.

11.2.10 Setting Processing Options for the Super Backflush Program (P31123)

Processing options enable you to specify the default processing for programs and reports.

11.2.10.1 Defaults

These processing options enable you to identify the operation status for partial and full completions, as well as default values for the work order status, employee number, and shift code.

1. Operation Status for Partial Completions.

Specify the default operation status for a line when the quantity is partially completed at this operation step in the routing.

2. Operation Status Code for Full Completions.

Specify the default operation status at the point when the quantity is fully complete.

3. Work Order Status Code

Specify the default status code for the work order header that the system updates after a super backflush transaction. This value always supersedes any status set by Work Order Inventory Issues (P31113), Work Order Time Entry (P311221), or Work Order Completions (P31114) programs.

4. Employee Number

Specify an employee number (AN8) that the system uses as the default value for the detail area on the Super Backflush form. If you leave this processing option blank, the Employee Number field in the detail area remains blank.

5. Shift Code

Specify a shift code that the system uses as the default value in the header area on the Super Backflush form. If you leave this processing option blank, the Shift Code field in the header area remains blank.

11.2.10.2 Process

These processing options control whether the system displays forms for interactive processing when you run the Super Backflush program. You can also specify whether the system applies the operation yield percentage to the completed quantity.

1. Work Order Completions

Specify how the Super Backflush program (P31123) processes work order completions. If completions are processed blindly, the Super Backflush program completes the quantity that is specified on the Super Backflush grid. If you plan to complete quantities to different locations, lot or serial numbers, then process the Work Order Completions program (P31114) in interactive mode. Values are:

Blank: The program calls the Work Order Completions program for interactive processing.

1: The program blindly processes work order completions.

2. Work Order Issues

Specify how Super Backflush (P31123) processes inventory issues for work orders. If the Work Order Inventory Issues program (P31113) is executed blindly, the Super Backflush program issues the quantity that is specified on the Super Backflush grid, according to the issue type code. If you plan to issue quantities other than the standard calculated quantity, then process the Work Order Inventory Issues program (P31113) in interactive mode. Values are:

Blank: The program calls the Work Order Inventory Issues program for interactive processing.

1: The program blindly processes inventory issues to work orders.

3. Hours and Quantities Form

Specify how the Super Backflush program (P31123) processes hours and quantities transactions. If the hours and quantities transactions are processed blindly, the Super Backflush program creates standard transactions in the Work Order Time Transactions table (F31122). If you plan to enter additional hours and quantities other than the standard amount, then process the Work Order Time Entry program (P311221) in interactive mode. Values are:

Blank: The program calls the Hours and Quantities program for interactive processing.

1: The program blindly processes hours and quantities transactions.

4. Apply Yield to Completed Quantity

Specify whether the system applies the operation yield percentage to the quantity that the user completes at an operation. The yield percentage determines the scrap quantity. Values are:

Blank: Does not apply the operation yield percent.

1: Applies the operation yield percent.

11.2.10.3 Edits

These processing options control whether the system compares the quantity at operation with the completed and scrapped quantity, and they define the work order status beyond which the Super Backflush program cannot be run for a work order.

1. Validate Quantity at Operation

Specify that the quantity completed plus the quantity scrapped does not exceed the quantity at operation. Values are:

Blank: Does not validate quantities at operation.

1: Validates quantities at operation.

2. Enter the Status Code from which Shop Floor Activity cannot be entered. (Release 9.1 Update)

Specify the work order status code (00/SS) at or beyond which the system cannot run the Super Backflush program. For example, if this processing option is set to 95 and a work order has reached a status of 95, then the system generates an error message if you attempt to run Super Backflush on that work order.

11.2.10.4 Versions

These processing options control which version the system uses when these programs are called from the Super Backflush program:

1. Hours and Quantities (P311221)

Specify the version of the Work Order Time Entry program (P311221) that the system uses to report labor hours, machine hours, and quantities for a routing step of a particular work order. If you leave this processing option blank, the system uses version ZJDE0001.

2. Work Order Issues (P31113)

Specify which version of the Work Order Inventory Issues program (P31113) that the system uses to report material which is issued from inventory to a work order. If you leave this processing option blank, the system uses version ZJDE0001.

3. Work Order Completions (P31114)

Specify which version of the Work Order Completions program (P31114) that the system uses to complete manufacturing items from a work order to inventory. If you leave this processing option blank, the system uses version ZJDE0001.

4. Test Results Revisions (P3711)

Specify which version of the Test Results Revisions program (P3711) that the system uses when you call this program from the Super Backflush form. If you leave this processing option blank, the system uses version ZJDE0001.

5. Scheduling Workbench (P31225)

Specify which version of the Manufacturing Scheduling Workbench program (P31225) that the system uses when you call the program from the Super Backflush form. If you leave this processing option blank, the system uses version ZJDE0001.

6. Work Order Entry (P48013)

Specify which version of the Work Order Entry program (P48013) that the system uses when you call this program from the Super Backflush form. If you leave this processing option blank, the system uses version ZJDE0001.

11.2.10.5 Interoperability

These processing options control the work order transaction type that the system uses for outbound processing and whether it includes a before image of the work order header.

1. Work Order Transaction Type

Specify the default transaction type for the work order header that the system uses when processing export transactions. If you leave this processing option blank, the system does not perform export processing.

2. Work Order Header Before Image

Specify whether the system writes the before image for the work order header. Values are:

1: Writes the before image.

Blank: Does not write the before image.

11.2.11 Processing Work Orders Through Super Backflush

Access the Super Backflush form.

Figure 11-3 Super Backflush form

The screenshot shows the 'Super Backflush' form with the following data:

- Order Number/Type: 451004
- Branch/Plant: M30
- Item Number: 220
- Date Requested: 09/29/2005
- Transaction Date: (blank)
- Shift Code: 1
- Production Number: (blank)
- Quantities: Ordered: 80, Completed: (blank), Scrapped: (blank), U/M: EA

Work Center	Workcenter Branch	Oper Seq#	Employee Number	Equipment Number	Quantity Completed	Quantity Scrapped	U/M	Op St	Pay Point Status	Pay Point Code	Description
210-901	M30	10.00	6001				EA		O		Assembly
230-901	M30	20.00	6001				EA		B		Assembly
250-901	M30	30.00	6001				EA		O		Assembly
210-901	M30	40.00	6001				EA		O		Assembly
200-911	M30	50.00	6001				EA		O		Test / Drope d.
200-920	M30	60.00	6001				EA		B		Package

On the Super Backflush form, operations defined as pay points appear in reverse image.

To process work orders through super backflush:

- On Super Backflush, complete these fields:
 - Transaction Date
 - Shift Code
- Complete these fields in the grid area for a pay point operation:
 - Employee Number

- Quantity Completed
- Op St

If you have defined default values for the shift code, employee number and operation status in the processing options, you do not have to enter values into these fields.

3. Complete the optional Pay Point Status field and click OK:

If the pay point code for the operation indicates that material should be backflushed, the Inventory Issue Revisions form appears.

4. On Inventory Issue Revisions, accept or revise the issue quantities and click OK.

If the pay point code for the operation indicates that labor should be backflushed, the Time Entry Revisions form appears.

5. On Time Entry Revisions, review any of these fields and click OK:

- Employee Number
- Oper #
- Ty Hrs
- Hours
- Quantity
- UM
- St

The Time Entry Revision form displays the records created in the Super Backflush program. The system updates the Work Order Routing table (F3112) with this information. On Time Entry Revision, you can add hours and quantity information.

6. On the last pay point, complete steps 1 through 5.

The Work Order Completion Detail form appears.

7. Review the completion information and click OK.

- **Transaction Date**

Enter the date that an order was entered into the system. This date determines which effective level the system uses for inventory pricing.

- **Shift Code**

Enter a value from UDC 00/SH (Shift Code) that identifies daily work shifts.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

- **Op St (operation status)**

Enter a value from UDC 31/OS (Operation Status) that identifies the current status of a work order or engineering change order as the operation steps in the routing are completed.

- **Pay Point Status**

Enter a code that indicates whether the operation should be taken to a status of complete or partially complete. Values are:

Blank: Not reported

P: Partially complete

C: Completed

11.2.12 Completing Work Orders with Serialized Components

Access the Work Order Completion Detail form.

To complete work orders with serialized components:

1. On Work Order Completion Detail, select the Quantity tab and complete these fields:
 - Quantity Completed
 - Secondary Qty Completed

You must complete the Secondary Quantity Completed field if the item you are completing is set up with dual units of measure in the item master record.
2. Complete these optional fields:
 - Quantity Scrapped
 - Date Completed

For serialized items you can complete only one item at a time.
3. If you know the serial number, select the Lot/Location tab and complete the Lot/Serial field:
4. If you do not know the serial number, select Serial Numbers from the Form menu.
5. On Work With Order Serial Number, select a number, click Select, and then go to step 9.

If a list of serial numbers does not appear, you must generate them by choosing Revisions from the Form menu.
6. On Serial Number Revisions, select Lot/SN Generation from the Form menu.

The system generates enough serial numbers for all the items on the work order.
7. Click OK to return the list to Work With Order Serial Numbers.
8. On Work With Order Serial Numbers, select the serial number that you want and click Select.
9. To complete a work order at a known location other than the primary location, complete the Location field and click OK:
10. Select Lot/SN Association from the Form menu.
11. On Serial Number Associations, select Issued Items from the Form menu.
12. On Work With Serialized Issued Items, select the components that you want to associate with the serialized assembly and click Select.

13. On Serial Number Associations, click OK.
14. On Work With Work Order Completion Detail, click OK.

11.3 Completing Process Work Orders

This section provides an overview of process work order completion, lists prerequisites, and discusses how to:

- Complete process orders without backflushing.
- Complete process orders through backflush.
- Set the resource percent for the co-products and by-products.
- Release sales backorders during completions.
- Process process orders through super backflush.

11.3.1 Understanding Process Work Order Completion

When you finish producing a process item on the shop floor, you need to record the completions to inventory. The completion transactions that you enter in the JD Edwards EnterpriseOne Shop Floor Management system update the ingredient quantity records in the JD Edwards EnterpriseOne Inventory Management system.

You use the Super Backflush (P31123) or Work Order Completions (P31114) programs to report completions. Use these programs to perform one of these two functions:

- Report all co-products and by-products as complete after the entire work order is complete
- Report partial completions as they occur throughout the production process

The point at which you select to report completions depends on the process, the co-products and by-products that it produces, and the production cycle time. Depending on the nature of the manufactured item, you can report partial completions or report total completions in one transaction. When you report partial completions, you can also indicate the stage or progress that is being made on an order in production and identify any delays in the production process.

When you use the Work Order Completions program to complete more than the quantity ordered, the system highlights the Completed Quantity field and warns you that completing the quantity that you designated will generate an over-completion.

When a previous completion exists for a work order, the system displays information in the lot, grade or potency, and status fields. Also, when you enter a quantity, the system adds inventory to the lot at the grade or potency and the current status. The Work With Work Order Completions form displays completed and scrapped quantities and percent complete information for a work order.

You can perform full or partial process order completions without or without backflushing the ingredients. When you use backflushing, you report the issue transactions for ingredients that you use in a process after the co-products and by-products of the process are produced. For backflush to occur, the ingredient must be set up with an issue code that enables backflushing.

When you set a completions threshold in the processing option, the system updates the Update Status field on the Work Order Completion Detail form according to the threshold rules. When you use lot control, you can also specify a default value for the completion lot number, such as the work order number or the associated sales order number. You can override the default value on the form.

11.3.1.1 Setting the Resource Percent for the Co-Products and By-Products

Use the Co/By Product Revision form to indicate what percent of the ingredients should be issued separately to co-products and by-products.

11.3.1.2 Releasing Sales Backorders During Completions

You can create a sales order in the JD Edwards EnterpriseOne Sales Order Management system that automatically generates a work order to supply the ordered item (sales order with line type W). If the requested date of this sales order does not allow sufficient time for the item to be manufactured, given the item's lead time, the order quantity can be identified as backordered. In this case, you can select to run the Release Backorders - Online program (P42117) during work order completion to release the backorder for the item.

11.3.1.3 Processing Process Orders through Super Backflush

You can use the Super Backflush program (P31123) to enter completed and scrapped quantities by operation and employee. If the quantities that you enter exceed the quantity at operation, the system issues an error message. The pay point code that you define for each operation in the routing instructions determines what information is backflushed at each pay point. Pay point code B, for example, means that you issue material and report labor at the operation. You can also select to backflush material or labor only at a given pay point. The last operation in the routing instructions must be set up with pay point code B to ensure that all remaining materials and labor are reported before the process order is completed. The backflush procedure can perform these transactions by operation:

- Issue parts to the process order
- Record hours and quantities against the process order
- Record inventory completions

In the processing options, you can set up the super backflush process to be performed either automatically or interactively. When you set up the process to run interactively, the system displays these programs after you enter the completion information on the Super Backflush form:

- Inventory Issues (P31113)
- Hours and Quantities (P311221)
- Work Order Completions (P31114)

You can accept the information that appears on the forms, or you can revise it. For example, when the Time Entry Revisions form appears after you enter information on the Super Backflush form, you can review the labor recorded for the operation, as well as the quantity completed. The records created through Super Backflush are stored in the Work Order Time Transactions table (F31122) with a Processed Code of S. The system automatically updates the Work Order Routing table (F3112). If you add information on the Time Entry Revisions form, you must run the Hours and Quantities Update program (R31422) to update the Work Order Routing table. These records will have a Processed Code of P in the Work Order Time Transactions table.

When the system has an intermediate for the operation, all form quantities appear in the unit of measure for the intermediate. When the system completes the quantity, it deducts the quantity from the operation and adds it to the next operation.

11.3.2 Prerequisites

Before you complete the tasks in this section:

- Before completing process work orders:
- Set the appropriate processing options to access the Inventory Issues program (P4112) and to identify the version of the program to use.
- Set the appropriate processing options to issue ingredients for each co-product and by-product separately, and to enable completion of unplanned co-products and by-products.
- Before releasing sales backorders during completions, set processing options to call the Backorder Release program (P42117) and identify the version to use.

11.3.3 Forms Used to Complete Process Work Orders

Form Name	Form ID	Navigation	Usage
Work Order Completion Detail	W31114B	Daily Order Reporting - Process (G3114), Partial Completion, Full Completion, or Completion with Backflush. Locate and select an order on the Work With Work Order Completions form, and then click Select.	Specify a process item.
Co/By Completion Revision	W31115F	Specify a process item on the Work Order Completion Detail form, and click OK.	Complete a process work order.
Inventory Issue Revisions	W31113A	Click OK on the Co/By Completion Revision form, after completing a process order through backflush.	Review issue quantities after completing a process order through backflush.
Co/By Product Revision	W3002PA	Daily PDM Process (G3012), Enter/Change Process Locate an item for a branch/plant on the Work with Routing Operations form, select an operation, and then click Select. Select Co/By Revision from the Form menu on the Enter Process Information form.	Set the resource percent for the co-products and by-products.
Work With Backorders	W42117M	Click OK on the Co/By Completion Revisions form, after completing the fields for completing a process work order.	Review default information for releasing sales backorders during completions.

Form Name	Form ID	Navigation	Usage
Super Backflush	W31123A	Daily Order Reporting - Process (G3114), Super Backflush. Locate and select an order on the Work With Order Numbers, and then click Select.	Process process orders through super backflush.

11.3.4 Completing Process Orders Without Backflushing

Access the Co/By Completion Revisions form. (Use the Partial Completion or Full Completion selection from the Daily Order Reporting - Process menu.)

Secondary Qty Completed (secondary quantity completed)

Enter the number of units, expressed in the secondary unit of measure, that the system has recorded as completed or issued. This value can represent either the quantity completed for co-products and by-products or the quantity that was issued for a component.

Note: You must complete the Secondary Quantity Completed field if the item you are completing is set up with dual units of measure in the item master record.

Quantity Canceled

Enter the number of units canceled in Sales Order or Work Order Processing, using either the entered or the primary unit of measure defined for this item.

In manufacturing, this can also be the number of units scrapped to date.

Date Completed

Enter the date that the work order or engineering change order is completed or canceled.

Note: You can enter scrap manually for a process item. You can also set up the system to calculate scrap automatically by using the scrap or yield percentage values defined in the bill of material and routing.

Location

Enter the storage location from which goods will be moved.

Lot Serial Number

Enter a number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.

11.3.5 Completing Process Orders Through Backflush

Access the Co/By Completion Revisions form. (Use the Completion with Backflush selection from the Daily Order Reporting - Process menu.)

After you complete the information on the Co/By Completion Revisions form and click OK, the system updates the on-hand inventory for the co-products and by-products. The Inventory Issues form appears for each co-product and by-product,

enabling you to issue the ingredients separately for each co-product and by-product. To issue the material, click OK.

11.3.6 Setting the Resource Percent for the Co-Products and By-Products

Access the Co/By Product Revision form.

Figure 11–4 Co/By Product Revision form

Co By	Co/By Product	Description	Output Quantity	UoM	Staging Type	Co/By Branch	Feat Cost%	Resource %	Oper Seq#	Remark	Co/By Line#
B	5010	Sludge	2	SA	M	M	.01	.03	10.00		1.00
							100.00	100.00	10.00		2.00

Co By (co-products by-products)

Enter a code that distinguishes standard components or ingredients from co-products, by-products, and intermediates. Co-products are (concurrent) end items as the result of a process. By-products are items that can be produced at any step of a process, but were not planned. Intermediate products are items defined as a result of a step but are automatically consumed in this step.

Generally, intermediates are nonstock items and are only defined steps with a pay-point for reporting purposes. Standard components (Discrete Manufacturing) or ingredients (Process Manufacturing) are consumed during the production process. Values are:

C: Co-products

B: By-products

I: Intermediate products

Blank: Standard components or ingredients

Output Quantity

Enter the quantity of finished units that you expect this bill of material or routing to produce. This field enables you to specify varying quantities of components based on the amount of finished goods produced. For example, 1 ounce of solvent is required per unit up to 100 units of finished product.

However, if 200 units of finished product is produced, 2 ounces of solvent are required per finished unit. In this example, you would set up batch quantities for 100 and 200 units of finished product specifying the proper amount of solvent per unit.

Feat Cost % (feature cost percentage)

Enter a percentage that the Simulate Cost Rollup program uses to calculate the cost of a feature or option item as a percentage of the total cost of the parent.

Enter the percentage as a whole number, for example, enter 5 percent as 5.0.

This value is used in Cost Rollup to calculate what percentage of the cost, up to and including the operation, that the co-product and by-product comes out of, is apportioned to the co-products and by-products at that step.

The total of all percentages at an operation cannot exceed 100 percent. All percentages at the last operation must total 100 percent.

Resource % (resource percentage)

Enter a number that indicates what percent of the ingredients should be issued separately to co-products and by-products.

This is used to issue ingredients separately to co-products and by-products at work order completion, rather than a total issue for each ingredient.

For co-products and by-products at the final operation, their resource percent must total 100 percent to issue all ingredients.

11.3.7 Releasing Sales Backorders During Completions

Access the Work With Backorders form.

If the available quantity plus the amount being received is enough to fill any or all of the backorders, the system enters the amount for that order in the Quantity to Ship field on Work with Backorders.

11.3.8 Processing Process Orders Through Super Backflush

Access the Super Backflush form.

On the Super Backflush form, operations defined as pay points appear in reverse image.

1. On Super Backflush, complete these fields:
 - Transaction Date
 - Shift Code
2. Complete these grid fields for a pay point operation:
 - Employee Number
 - Quantity Completed
 - Op St

If you have defined default values for the shift code, employee number and operation status in the processing options, you do not have to enter values into these fields.
3. Complete the optional Pay Point Status field and click OK:

If the pay point code for the operation indicates that material should be backflushed, the Inventory Issue Revisions form appears
4. On Inventory Issue Revisions, accept or revise the issue quantities and click OK.

If the pay point code for the operation indicates that labor should be backflushed, the Time Entry Revisions form appears.
5. On Time Entry Revisions, review any of these fields and click OK:
 - Employee Number
 - Oper #
 - Ty Hrs
 - Hours

- Quantity
- UM
- St

The Time Entry Revision form displays the records created in the Super Backflush program. The system has already updated the Work Order Routing table with this information. You can add hours and quantity information here.

6. On the last pay point, complete steps 3 through 7.
The Work Order Completion Detail form appears.
7. Review the completion information and click OK.
8. On the Co/By Completion Revisions form, review these fields:
 - Quantity Completed
 - Quantity Canceled
 - Date Completed
 - Secondary Qty Completed
 - Location
 - Lot Serial Number
9. Click OK.

11.4 Completing Rate Schedules

This section provides an overview of rate schedule completion, lists prerequisites, and discusses how to:

- Set processing options for the Completions Workbench program (P3119).
- Complete rate schedules:

11.4.1 Understanding Rate Schedule Completion

Use the Completions Workbench program (P3119) to enter rate schedule completions, issue parts, and enter hours and quantities for the rate. Depending on how you set the processing options, the Inventory Issue Revisions and Time Entry Revisions forms appear as you complete rate schedules.

When you perform a completion, the system enters the inventory records as they are received and updates all of the required tables for the JD Edwards EnterpriseOne Inventory Management system. The system adds the quantity that is completed to the quantity on hand for the location that you indicate.

Note: If you use the JD Edwards EnterpriseOne Quality Management system when you manage rate-based information and complete quantities to inventory, you can access the Test Results Revisions form for items that require testing.

11.4.2 Prerequisite

Set the processing options to access the Inventory Issues (P31113) and Hours and Quantities programs (P311221).

11.4.3 Forms Used to Complete Rate Schedules

Form Name	Form ID	Navigation	Usage
Completions Workbench	W3119C	Daily Processing - Repetitive (G3115), Completions Workbench	Complete rate schedules.
Time Entry Revisions	W311221C	Find and select a record on the Completions Workbench form, then select Hours Quantities from the Row menu	Review information after completing rate schedules

11.4.4 Setting Processing Options for the Completions Workbench Program (P3119)

Processing options enable you to specify the default processing for programs and reports.

11.4.4.1 Defaults

1. Schedule Type

Specify the Schedule Type. The default value is **SC**.

2. Employee Number (Optional)

Specify the Employee's address book number.

3. Production Line (Optional)

Specify the production line identification number.

4. Days to Add for the Thru Date (Optional)

Specify the number of days to add to the From Date for the Thru Date.

5. Status From (Optional) and 6. Status Thru (Optional)

Specify a value from UDC 00/SS (Work Order Status) that indicates the status of a work order. Any status change from 90 thru 99 automatically updates the date completed.

7. Closing Rates Status Code

Specify the status code to use when closing rates. Default value is **99**.

11.4.4.2 Versions

Enter the version for each program. If left blank, ZJDE0001 will be used.

1. Super Backflush (P31123)

Specify the version of the Super Backflush program (P31123) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

2. Hours and Quantities (P311221)

Specify the version of the Hours and Quantities program (P311221) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

3. Material Issues (P31113)

Specify the version of the Material Issues program (P31113) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

4. Enter/Change Rate Schedule (P3109)

Specify the version of the Enter/Change Rate Schedule program (P3109) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

5. Item Ledger Inquiry (P4111)

Specify the version of the Item Ledger Inquiry program (P4111) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

6. Line Schedule Review (P3152)

Specify the version of the Line Schedule Review program (P3152) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

7. Schedule History Inquiry (P31226)

Specify the version of the Schedule History Inquiry program (P31226) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

8. Work Order Completions (P31114)

Specify the version of the Work Order Completions program (P31114) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

9. Lot Master Revisions (P4108)

Specify the version of the Lot Master Revisions program (P4108) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

10. Hours and Quantities Update (R31422)

Specify the version of the Hours and Quantities Update program (R31422) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

11. Name Search (P01012)

Specify the version of the Name Search program (P01012) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

12. Test Results Revisions (P3711)

Specify the version of the Test Results Revisions program (P3711) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

11.4.4.3 Process**1. Process Hours and Quantities**

Specify whether you want the system to process the Hours and Quantities Update program (R31422) automatically, or whether you want to submit it manually. Values are:

1: Automatically process hours and quantities using the version you specified on the Versions tab for R31422.

Blank: Submit R31422 manually.

11.4.5 Completing Rate Schedules

Access the Completions Workbench form.

Figure 11-5 Completions Workbench form

Completions Workbench - Completions Workbench

Form Edit Tools

Item Number Branch/Plant

Line/Col Frame Line Order Type

Effective Date From Effective Date Thru

From Status Thru Status

Records 1 - 5

Item Number	Item Description	Quantity Completed	Quantity Scraped	Unit Of Measure	Secondary Qty Completed	Sec UOM	Date Complete	Shift	Quantity	Unit of Measure
2031	Aluminum Frame, Touring			EA			11/28/2011		160	EA
2032	Aluminum Frame, Mountain			EA			11/28/2011		400	EA
2033	Aluminum Frame, Sport			EA			11/28/2011		300	EA
2031	Aluminum Frame, Touring			EA			11/28/2011		117	EA

Processing Transactions for Lean Manufacturing

This chapter contains the following topics:

- [Section 12.1, "Understanding Lean Manufacturing Transactions"](#)
- [Section 12.2, "Creating Shop Floor Daily Plans"](#)
- [Section 12.3, "Preprocessing Daily Plans"](#)
- [Section 12.4, "Performing Lean Item Completions"](#)
- [Section 12.5, "Managing Completion Transactions"](#)

12.1 Understanding Lean Manufacturing Transactions

Lean manufacturing is characterized as a product flow line driven by customer demand. You typically set up a flow line for a product family with the end item product being delivered at a continuous rate. As a consequence of this production method, the transactions that support lean manufacturing differ from traditional work order driven manufacturing.

In preparation for production on a flow line, you can create a daily plan in JD Edwards EnterpriseOne or import one from Demand Flow Manufacturing (DFM). A daily plan defines the end items and quantities that are to be produced on a flow line in a given time period.

After creating the daily plan, you have the option of preprocessing the data you need for completions. Preprocessing involves exploding the bill of material, routing, and labor records for a daily plan or item into a multilevel structure. Preprocessing an item or daily plan improves the performance of item completions. Although preprocessing is an optional activity, it is strongly recommended for customers who have large bills of material and routings or who complete at a high rate of speed.

You use the Item Completions program (PF31011) to complete the items defined in a daily plan. The Item Completions program supports item completions without the dependency of a corresponding work order. This feature enables you to significantly reduce the number of transactions required to complete items coming off of a flow line.

Note: The Item Completions program does not support JD Edwards EnterpriseOne lean solutions, such as repetitive manufacturing.

You may also perform ad hoc item completions. Ad hoc items are items for which you did not create a daily plan.

You can enter a lot number on item completions or on the daily plan. Lot numbers entered on a daily plan appear by default in item completions. Lot numbers must be entered manually and are validated by the system.

Once you have completed an item, you can review, track, and reverse lean transactions. You can track the completion on a daily plan based on the production ID used in the daily plan or the transaction ID created with each completion. The completion process associates parts list, routing, hours, and quantity information with the transaction ID. Transaction records can include both open and closed daily plans.

The system enables you to reverse an item completion. When you reverse an item completion, the system reverses all associated transactions. However, if you meet the component demand through a purchase order and receipt, the system does not automatically reverse the receipt. You have to adjust inventory manually to account for the reversal.

Because the Item Completions program does not support interactive completions, the following functionality is not available:

- Percent Bills of Material.
- Advanced lot processing.
- Component lot processing.
- Substitute item processing.
- Outside operations.
- Configured item completions.
- Process completions.
- Multi location completions.

Because lean manufacturing supports multiple independent completion transactions, it is assumed that these are separate transactions.

- Duplication of bill of material media objects.
- Component scrap.
- Integration with JD Edwards EnterpriseOne Quality Management.
- Integration with JD Edwards EnterpriseOne Warehouse Management.

12.2 Creating Shop Floor Daily Plans

This section provides an overview of shop floor daily plans and discusses how to:

- Set processing options for Daily Planning (PF31010B).
- Create a shop floor daily plan.

12.2.1 Understanding Shop Floor Daily Plans

You can create a daily plan in JD Edwards EnterpriseOne or use a daily plan created in DFM. If you use daily plans created in DFM you do not have to export them from DFM, but can view them directly in the Demand Flow Plans program (PF31013). You must complete DFM daily plans using the Item Completions program (PF31011).

When performing daily planning for a flow line, use either DFM Daily Planning or Shop Floor Daily Planning for the line. You can use the daily planning programs for two separate flow lines.

Important: You cannot use both daily plans on a single production line.

You use the Daily Planning program (PF31010B) to create daily plans in JD Edwards EnterpriseOne. The Daily Planning program is a scaled down, simplified version of DFM daily planning that mimics doing daily planning manually on a spreadsheet. The system generates a unique production plan ID for every plan that you define.

The Shop Floor Daily Planning program does not recognize the consumption of sales order demand. You can find a sales order line to bring back into the daily plan. Although the sales order field is not required in a daily plan, it is a verified field.

12.2.2 Form Used to Create Shop Floor Daily Plans

Form Name	Form ID	Navigation	Usage
Daily Plan - Search for Plan	WF31010BA	Daily Orderless Preparation - Discrete (GF3111), Shop Floor Daily Plan Definition	Search for existing daily plans to edit, copy, or delete, and add daily plans.

12.2.3 Setting Processing Options for Daily Planning (PF31010B)

These processing options control default processing for the Daily Planning program.

12.2.3.1 Defaults

These processing options control default values for the Daily Planning program.

Branch

Enter the default branch/plant that the system uses in the daily plan.

Line/Cell

Enter the default line/cell that the system uses in the daily plan.

The line/cell must have work center type 2.

Shift Code

Enter the default shift code that the system uses in the daily plan. Enter a value from user-defined code (UDC) table 00/SH (Shift Code) that identifies all working shifts.

12.2.4 Creating a Shop Floor Daily Plan

Access the Daily Plan - Search for Plan form.

Figure 12–1 Daily Plan - Search for Plan form (1 of 2)

Daily Plan - Search for Plan

Line/Cell: Branch/Plant:

Shift Code:

Planned Completion From Date: Through:

Records: 1 - 1

Item Number	Item Description	Planned Completion Date	Planned Qty	Accumulated Completed Qty	Accumulated Scrap Qty	Unit Of Measure	Last Completion	Location
222	Touring Bike, Green...	11/29/2012 00:00:00...	120.0000	.0000	.0000	EA	11/29/2011 00:00:00...	.

Figure 12–2 Daily Plan - Search for Plan form (2 of 2)

Daily Shop Floor Plan - Item Add

Line/Cell: Branch/Plant:

Shift Code:

Item Number:

Planned Qty: UM:

Planned Completion Date:

Optional

Sales Order No: Order Type:

SO Line No:

Location:

Lot/Serial Number:

Planned Qty (planned quantity)

Enter the planned quantity that you want to complete. If you are working with a DFM plan, this field displays the DFM plan quantity.

Planned Completion Date

Enter the completion date for the item in a daily plan.

Production Plan ID

When you save the plan information, the system generates this identifier for the shop floor daily plan.

12.3 Preprocessing Daily Plans

This section provides an overview of preprocessing daily plans and discusses how to:

- Set processing options for BOM and Routing Detail Generation (RF31010A) and BOM and Routing Detail Generation - DFM Plan (RF31013).
- Run the BOM and Routing Detail Generation program.
- Run the BOM and Routing Detail Generation - DFM Plan program.
- Set processing options for BOM and Routing Detail Generation - Item/Branch (RF31012).
- Run the BOM and Routing Detail Generation - Item/Branch program.

12.3.1 Understanding Daily Plan Preprocessing

To facilitate lean completions you can preprocess daily plan items before performing the completion transaction. During preprocessing, the system prepares the parts list, routing, and labor records for item completion.

Depending on which preprocessing program you use, you select data from the appropriate tables. This table lists the three preprocessing programs and the corresponding tables for data selection:

Preprocessing	Data Selection
BOM and Routing Detail Generation (RF31010A)	Production Master (FF31010)
BOM and Routing Detail Generation - DFM Plan (RF31013)	Daily Plan (FF34S002)
BOM and Routing Detail Generation - Item/Branch (RF31012)	Item Branch (F4102)

Important: You do not use batch bills of material and routings to generate parts lists and routings for lean transactions.

When you preprocess items to explode the bill of material, the system populates these tables with bill of material and routing information if that information is available:

- Lean Multi Level Bill of Material Header (F300210).
- Lean Multi Level Bill of Material Detail (F300211).
- Lean Multi Level Routing Detail (F300311).

The system uses this information for item completion.

Note: Preprocessing is recommended for companies that have large stable bills and routings or quick manufacturing times. Companies that change their bill of material and routing frequently might prefer to determine the multilevel bill of material and routing at the time of completion.

12.3.2 Prerequisites

To preprocess items for lean completions, you must complete either of these tasks:

- Create shop floor daily plans in JD Edwards EnterpriseOne.
- Create Demand Flow daily plans, if you use DFM.

12.3.3 Setting Processing Options for BOM and Routing Detail Generation (RF31010A) and Routing Detail Generation - DFM Plan (RF31013)

These processing options control default processing for the BOM and Routing Detail Generation program and the BOM and Routing Detail Generation - DFM Plan program.

12.3.3.1 Default

These processing options control how the system prepares items for lean completions

Lean BOM Regeneration Flag (lean bill of material regeneration flag)

Specify the type of Lean BOM leveling that the system performs. The system enables you to refresh the lean BOM and routing records, create new records, or delete all records related to the end item. Values are:

Blank: Preserve all existing records for the end item. This is the default value.

1: Refresh all records. The system refreshes records in these tables:

- Lean Multi Level Bill of Material Header (F300210).
- Lean Multi Level Bill of Material Detail (F300211).
- Lean Multi Level Routing Detail (F300311).

Production Schedule - Effective From

Specify the start date that the system uses when processing the daily plan.

Production Schedule - Effective Thru

Specify the end date that the system uses when processing the daily plan.

12.3.4 Running the BOM and Routing Detail Generation Program

Select Daily Orderless Preparation - Discrete (GF3111), BOM & Routing Detail.

12.3.5 Running the Routing Detail Generation - DFM Plan Program

Select Daily Orderless Preparation - Discrete (GF3111), Daily Plan BOM & Routing Detail.

12.3.6 Setting Processing Options for BOM and Routing Detail Generation - Item/Branch (RF31012)

These processing options control default processing for the BOM and Routing Detail Generation - Item/Branch program.

12.3.6.1 Default

These processing options control how the program preprocesses items for lean completions.

Lean BOM Regeneration Flag (lean bill of material regeneration flag)

Specify the type of lean bill of material leveling that the system performs. The system enables you to refresh the lean bill of material and routing records, create new records, or delete all records related to the end item. Values are:

Blank: Preserve all existing records for the end item. This is the default value.

1: Refresh all records. The system refreshes records in these tables:

- Lean Multi Level Bill of Material Header (F300210).
- Lean Multi Level Bill of Material Detail (F300211).
- Lean Multi Level Routing Detail File (F300311).

12.3.7 Running the BOM and Routing Detail Generation - Item/Branch Program

Select Daily Orderless Preparation - Discrete (GF3111), Item/Branch BOM & Routing Detail.

12.4 Performing Lean Item Completions

This section provides an overview of lean item completions, lists prerequisites, and discusses how to:

- Set processing options for Item Completions (PF31011).
- Set processing options for Multi-Level Item Completions (RF31011B).
- Set processing options for Shop Floor Plans (PF31012).
- Select shop floor daily plans for completion.
- Set processing options for Demand Flow Plans (PF31013).
- Select Demand Flow daily plans for completion.
- Perform item completions.
- Perform ad hoc item completions.
- Complete work orders against Demand Flow daily plans.

12.4.1 Understanding Lean Completions

You use the Item Completions program (PF31011) to complete an item on a shop floor daily plan or Demand Flow daily plan, or complete an ad hoc (unplanned) item. You perform a completion based on an item number instead of a work order. There is only one Item Completions program, but there are three ways to complete an item based on the setup.

If you have set up the line using the Demand Flow line design process, you use the Daily Planning and Sequencing program (PF34S002) to plan the demand based on sales orders or finished goods orders. You select a Demand Flow daily plan against which to complete items using the Demand Flow Plans program (PF31013).

If you do not use the DFM system, you create a daily plan in the JD Edwards EnterpriseOne Shop Floor Management system and then use the Shop Floor Plans program (PF31012) to select a plan for completion.

An ad hoc completion completes transactions for any item that you did not plan through either daily plan program. You complete ad hoc items directly through the Item Completions program.

Once items on a daily plan are displayed, you specify this information for each item that you want to complete:

- Actual completed quantity
- Actual scrapped quantity
- Location

- Lot or serial number

Note: You can enter a lot or serial number manually only for end items.

After entering item completion information, you process the completion transaction by running the Multi-Level Item Completions program (RF31011B). This batch program creates the transactions related to completions, such as component issues and labor reporting.

You can set a processing option to use the preprocessed item data or have the system ignore it and perform preprocessing through Item Completions. You have the flexibility to define how the backflush transaction occurs during item completion:

- Backflush the material and labor for the single-level item (including all phantoms).
- Backflush the material and labor through any user-specified level in the BOM.
- Backflush the material and labor for all levels in the BOM structure.

The Item Completions program backflushes all material and labor based on standard values from the bill of material and routing within the effectivity dates and user-specified level in the bill of material. Demand Flow principles require a flattened bill of material and routing for backflushing, but the system creates the flattened (multilevel) bill of material and routing automatically. This enables you to maintain the existing bills and routings in an easy-to-read format.

You can create the multilevel bill and routing before using Item Completions (preprocessing) or let Item Completions create the multilevel bill and routing. Creating the multilevel bill and routing before Item Completions improves processing time for Item Completions. Preprocessing is recommended for companies that have large stable bills and routings or quick manufacturing times. Companies that change their BOM and routing frequently may want to determine the multilevel BOM and routing at the time of completion. The system performs a backflush from a single raw-in-process (RIP) location that is defined in the Line Master program (PF30L912) and stored in the Work Center Master table (F30006).

When you run completions, the system:

- Records the end items completed and creates a transaction ID in the Transaction ID Master table (FF31011).
- Records routing detail in the Routing Transaction table (FF31112).
The routing does not contain rework or outside operations for Item Completions.
- Records labor detail in the Lean Transaction Labor Detail table (FF31113).
- Records part detail in the Lean Transactions Parts List table (FF31111).
- Receives purchased items into inventory.
- Issues components to the manufactured end item.
- Updates the daily plan with actual completed quantities.
- Updates the daily plan with actual scrapped quantities.
- Updates end item inventory.
- Updates the Item Ledger table (F4111).
- Updates manufacturing accounting.

Note: Subassemblies scheduled by material requirements planning (MRP) and those produced on separate lines are issued to the end item and must be completed separately.

For consignment stock issues, you can set up purchased component items to be received into the system at the same time as they are issued to lean transactions. To enable this functionality, perform these three steps:

- Set the Issue and Receipt field on the Additional System Info form in the Item Branch/Plant program (P41026) to **1**. (The system receives an item when an inventory issue occurs).
- Enter purchase orders.
- Create a version of the Purchase Order Receipts program (P4312) that the system calls to receive components when creating issue transactions for lean completions.

When the system creates the lean parts list record in the Lean Transactions Parts List table (FF31111), it retrieves the value from the Issue and Receipt in the Item Branch table (F4102). If this value is **1**, the system looks for open purchase orders for the item and matching branch. If open purchase orders exist, the system selects the purchase order with the lowest order number. You cannot manually select a different purchase order for the receipt. The receipt quantity is automatically the issue quantity. If the issue quantity is greater than the open quantity on the purchase order, the system still creates a receipt for the issue quantity. You can review the details of the receipt transaction in the Transaction Management program (PF31014).

If the receipt transaction fails or if there are no open purchase orders, the system sends a message to the work center, but continues issuing the material, thus driving inventory negative. You have to reconcile inventory manually. Reversing a completion transaction does not reverse the purchase order receipt. You have to perform a manual inventory adjustment after reversing the completion transaction.

Because the transactions are processed blindly, you cannot use lot or serial numbers.

You can track the completion on a daily plan based on the production ID used in the daily plan or the transaction ID created with each completion. The transaction ID records have associated parts, routing, hours, and quantity information that you can review. The records can include both open and closed daily plans.

Once accounting is completed through variances and the processing option in variances has been set to close the transaction to further processing, the transaction status is set to Closed so that no further processing is enabled.

12.4.1.1 Shop Floor Daily Plan Completions

You use the Shop Floor Plans program (PF31012) to complete items on a shop floor daily plan. You set a processing option to specify the version of the Item Completions program (PF31011) that the system uses to complete the item on the shop floor daily plan.

12.4.1.2 Demand Flow Daily Plan Completions

You use the Demand Flow Plans program (PF31013) to complete items on a Demand Flow daily plan. You set a processing option to specify the version of the Item Completions program (PF31011) that the system uses to complete the item on the Demand Flow daily plan. Item Completions uses the Daily Plan table (FF34S002) when performing completions.

For DFM items, the line on a daily plan is closed if the completed quantity is greater than or equal to the planned quantity. The system updates the Completed Quantity and the Scrapped Quantity field in the FF34S002 table when you complete an item quantity against the Demand Flow plan.

See "Defining Daily Plans" in the *JD Edwards EnterpriseOne Applications Demand Flow Manufacturing Implementation Guide*.

12.4.1.3 Ad Hoc Item Completions

You can preprocess and complete an item that is not on the daily plan by performing ad hoc completions. Ad hoc item completions use the Item Completions program (PF31011) to complete the item. Because an ad hoc item is not on a daily plan, you do not search for a daily plan, but access the Item Completions program directly from the menu.

12.4.1.4 Work Order Completions

Some sales orders that you plan using the Daily Planning and Sequencing program (PF34S002), may have related work orders. A sales order has a related work order, if the sales order line has the line type **W** (Work Order), for example configured work orders. Work orders that are associated with a daily plan, are identified in the Work Order Master Tag table (F4801T).

You cannot complete work orders using the Item Completions program; instead, the system calls the Work Order Completions program (P31114) when you click the Complete Item button on the Search for Demand Flow Plan form. You enter completion and scrap quantities using the normal completion process. Once you have completed a quantity, the system updates the daily plan. You can review the updated daily plan in the Daily Planning and Sequencing program.

To complete a work order against a daily plan, you must access the Work Order Completions program from the Demand Flow Plans program. If you try to access the Work Order Completions program directly to complete the work order quantity, the system issue a error.

You can also complete related work orders using the Super Backflush program (P31123). To use the Super Backflush program, set the appropriate processing options for the Demand Flow Plans program.

See [Completing Discrete Work Orders](#).

If you need to reverse a completion, you access the Work Order Completions program from the Demand Flow Plans program and enter a negative completion quantity. As a result, the system reverses the completion quantities on the work order and on the daily plan.

12.4.2 Prerequisites

Before you complete the tasks in this section:

- Set up product data in base manufacturing, for example item master and item branch records, bills of material, and routings.
- Export DFM data from the DFM system to base manufacturing.
- Perform kanban transactions necessary to provide inventory within the RIP area.
- Create sales orders in JD Edwards EnterpriseOne for association with ad hoc item completions.

12.4.3 Forms Used to Perform Lean Completions

Form Name	Form ID	Navigation	Usage
Search for Shop Floor Plan	WF31012C	Daily Orderless Reporting - Discrete (GF3112), Complete Shop Floor Daily Plans	Select shop floor daily plans for completion.
Search for Demand Flow Plan	WF31013A	Daily Orderless Reporting - Discrete (GF3112), Complete Demand Flow Daily Plans	Select Demand Flow daily plans for completion.
Daily Plan - Complete Item	WF31011A	Select the Complete Item button on the Search for Shop Floor Plan or the Search for Demand Flow Plan form.	Select items on a daily plan for item completions.
Item Completions - Complete Item	WF31011A	Daily Orderless Reporting - Discrete (GF3112), Adhoc Item Completions	Perform item completions for ad hoc items.

12.4.4 Setting Processing Options for Item Completions (PF31011)

These processing options control default processing for the Item Completions program.

12.4.4.1 Default

These processing options control default values for the Item Completions program.

Line/Cell

Specify the line or cell where the item is completed.

The line or cell must be a work center type 2.

Shift

Specify the default shift code that the system uses when completing items. Enter a value from Shift Code (UDC 00/SH) that identifies all working shifts.

Refresh Production Records

Specify whether the system uses the records created by preprocessing or performs preprocessing during item completions. Values are:

Blank: Use existing records if BOM and routing leveling records are available.

1: Create new BOM and routing leveling records.

The BOM and routing leveling records reside in the Lean Multi Level Bill of Material Header table (F300210), Lean Multi Level Bill of Material Detail table (F300211), and Lean Multi Level Routing Detail File table (F300311).

Completion Report (RF31011B)

Specify the version of the Multi-Level Item Completions program (RF31011B) that the system uses when you complete items from the Item Completions - Complete Item form. If you leave this processing option blank, the system uses the default version XJDE0001.

12.4.5 Setting Processing Options for Multi-Level Item Completions (RF31011B)

These processing options control default processing for the Multi-Level Item Completions program.

12.4.5.1 Doc Type

These processing options define the document types that the system uses during item completions.

Issues Document Type

Specify the default document type for lean issues by selecting the appropriate document type from the Document Type UDC (00/DT). If you leave this processing option blank, the system uses the LM document type (material charged to lean transactions) as the default value.

Labor Document Type

Specify the default document type for lean labor detail by selecting the appropriate document type from the Document Type UDC (00/DT). If you leave this processing option blank, the system uses the LL document type (labor charged to lean transactions) as the default value.

Completions Document Type

Specify the default document type for lean completion transactions by selecting the appropriate document type from the Document Type UDC (00/DT). If you leave this processing option blank, the system uses the LC document type (completed lean transaction to inventory) as the default value.

Scrap Document Type

Specify the default document type for scrap transactions during lean completions by selecting the appropriate document type from the Document Type UDC (00/DT). If you leave this processing option blank, the system uses the LP document type (scrapped lean transaction to inventory) as the default value.

Purchase Order Document Type

Specify the default document type of the purchase order associated with the simultaneous issue and receipt of material during lean completions. Select the appropriate document type from the Document Type UDC (00/DT). If you leave this processing option blank, the system uses the OP document type (purchase order) as the default value.

12.4.5.2 Versions

This processing option controls the version the system uses when calling additional programs from the Multi-Level Item Completions program.

Purchase Order Receipts (P4312)

Specify the version that the system uses when receiving purchase orders that the system issues processing simultaneous issue and receipt of material during completions. If you leave this processing option blank, the system uses the default version ZJDE0008.

12.4.6 Setting Processing Options for Shop Floor Plans (PF31012)

These processing options control default processing for the Shop Floor Plans program.

12.4.6.1 Defaults

These processing options control default values for the Shop Floor Plans program.

Line/Cell or Line Name

Specify the line or cell where the item is completed. You must select a line that is defined as a work center type 2.

Shift Code

Specify the default shift code that the system uses when completing items. Enter a value from UDC 00/SH (Shift Code) that identifies all working shifts.

12.4.6.2 Versions

These processing options control which version the system uses when calling additional programs from the Shop Floor Plans program.

Item Completions (PF31011)

Specify the version that the system uses when you complete an item on a daily plan by clicking the Complete Item button. If you leave this processing option blank, the system uses the default version ZJDE0001.

12.4.7 Selecting Shop Floor Daily Plans for Completion

Access the Search for Shop Floor Plan form.

Figure 12–3 Search for Shop Floor Plan form

Item Number	Item Description	Planned Completion Date	Planned Qty	Accumulated Completed Qty	Accumulated Scrap Qty	Unit of Measure	Last Completion
222	Touring Bike, Green	11/29/2012 00:00:00	100.0000	.0000	.0000	EA	11/29/2011 00:00:00
DPMP	DPMP	01/31/2012 00:00:00	100.0000	.0000	.0000	EA	12/15/2011 00:00:00

Select the daily plan that you want to complete by item number, line/cell, shift code, branch/plant, sales order information, and planned completion date range. Once you have performed the completion, the system updates the grid with completion information.

Accumulated Completion Qty (accumulated completion quantity) and Accumulated Scrap Qty (accumulated scrap quantity)

The system updates these fields on the daily plan every time that you perform a completion against a plan

The system validates if the completed quantity is less than or equal to the total item production quantity in the daily plan.

Last Completion

The system updates this field on the daily plan with the date of the most recent completion.

Complete Item

Click to run the Item Completions program (PF31011) to complete the selected item on a shop floor daily plan.

Review Transactions

Click to open the Review or Reverse Transaction form in the Transaction Management program (PF31014).

12.4.8 Setting Processing Options for Demand Flow Plans (PF31013)

These processing options control default processing for the Demand Flow Plans program.

12.4.8.1 Defaults

These processing options control default values for the Demand Flow Plans program.

Line/Cell or Line Name

Specify the line or cell where the item is completed. You must select a line that is defined as a work center type 2.

Shift Code

Specify the default shift code that the system uses when completing items. Enter a value from UDC 00/SH (Shift Code) that identifies all working shifts.

12.4.8.2 Process

This processing option controls which program the system uses to complete related work orders.

1. Complete Work Orders through Work Order Completions (P31114) or Super Backflush (P31123)

When you complete work orders that are related to a Demand Flow daily plan, you can specify which completions program to use:

Blank: Work Order Completions (P31114)

1: Super Backflush (P31123)

12.4.8.3 Versions

These processing options control which version the system uses when calling additional programs from the Demand Flow Plans program.

Item Completions (PF31011)

Specify the version that the system uses when you complete an item on a daily plan by clicking the Complete Item button. If you leave this processing option blank, the system uses the default version ZJDE0001.

2. Work Order Completions (P31114)

Specify the version that the system uses when you complete related work orders. If you leave this processing option blank, the system uses the default version ZJDE0001.

3. Super Backflush (P31123)

Specify the version that the system uses when you complete related work orders. If you leave this processing option blank, the system uses the default version ZJDE0001.

12.4.9 Selecting Demand Flow Daily Plans for Completion

Access the Search for Demand Flow Plan form.

Select the daily plan that you want to complete by product number, line name, shift code, branch/plant, sales order information, and planned completion date range. Once you have performed the completion, the system updates the grid with completion information.

Product Number

Specify the number of the Demand Flow product for which you want to retrieve daily plans.

Line Name

Enter the name that identifies the Demand Flow line where the product is going to be manufactured.

Complete Item

Click to run the Item Completions program (PF31011) to complete the selected item on the Demand Flow daily plan.

Review Transactions

Click to open the Review or Reverse Transaction form in the Transaction Management program (PF31014).

12.4.10 Performing Item Completions

Access the Daily Plan - Complete Item form.

Figure 12–4 *Daily Plan - Complete Item form*

The screenshot shows a software form titled "Items Completions - Complete Item". At the top, there are input fields for "Item Number" (containing "DPFP"), "Branch/Plant" (containing "ME0"), and "DRP". Below this is a section titled "Completion Information" with several fields: "Line/Cell" (R-4), "Shift" (3), "Completion Date" (01/03/2012), "Quantity Completed" (with "UM" and "EA" units), "Quantity Scraped", "Location", "Lot/Serial Number", and "Country of Origin" (US, United States). At the bottom of the form are three buttons: "Submit and Close", "Submit and Continue", and "Cancel".

Completion Date

Enter the date of the completion. The default value is the current date.

Location

Specify the location for the completed quantity.

Lot/Serial Number

If the item is a lot- or serial-controlled item, enter the lot or serial number for the completed item or items.

Submit and Close

Click to run the Multi-Level Item Completions program (RF31011B). This batch program generates the related parts list, routing, and labor detail transactions.

12.4.11 Performing Ad Hoc Item Completions

Access the Item Completions - Complete Item form.

Figure 12–5 Item Completions - Complete Item form

Enter completion information and click the Submit and Close button to generate the completion and related transactions.

Note: On this version of the form, the daily plan reference information does not appear because the ad hoc completion is not based on a daily plan.

12.4.12 Completing Work Orders Against Demand Flow Daily Plans

Access the Search for Demand Flow Plan form.

To complete work orders against Demand Flow Daily Plans:

1. Select the daily plan against which you want to complete work orders on the Demand Flow Plan form.
2. Click the Complete Item button.
3. Enter completion and scrap quantities as needed on the Work Order Completion Detail form.

Note: If you are reversing a completion, enter negative quantities.

4. Click OK.

12.5 Managing Completion Transactions

This section provides an overview of item completion reversals and discusses how to:

- Set processing options for Transaction Management (PF31014)

- Reverse item completions.
- Review transaction details.

12.5.1 Understanding Item Completion Reversals

You use the Transaction Management program (PF31014) to review transactions and reverse a completion transaction for an end item. You perform an item completion reversal by selecting the transaction ID of the end item. The item completion reversal uses the completed quantity associated with the transaction ID of the end item selected for reversal.

The reversal of an end item includes its subassemblies. You cannot reverse subassembly transactions separately as they are related to the parent transaction ID of the end item.

The system enables reversals based on the accounting transactions performed on the transaction ID. You reverse accounting transactions partially or completely, based on user options. When an item completion is reversed, the system:

- Deletes the associated component part inventory transactions.
- Deletes the associated production record for routings.
- Deletes the associated production record for hours and quantities.
- Restores end item inventory to its original state.
- Reverses the Item Ledger table (F4111) (Cardex) transactions for inventory issues and hours.

The Cardex entries credit the IM and IH accounts and debit the IC accounts.

The journal entries are reversed at the standard cost. After the accounting transactions associated with the item completion are reversed, the accounting tables are restored to their original state.

Once you have completed accounting through variances and set the processing option for the Lean Variance Journal Entries program (RF31210) to disable further processing, the system sets the transaction status to closed so that no further processing is enabled. You can also manually set the transaction status to prevent the reversal process.

See "Working with Lean Accounting" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.

12.5.2 Forms Used to Manage Transactions

Form Name	Form ID	Navigation	Usage
Review or Reverse Transaction	WF31014A	Daily Orderless Reporting - Discrete (GF3112), Transaction Management	Locate a parent item and review transaction details, review production cost inquiry, or reverse a transaction.
Transaction Details	WF31014B	Locate and select an item on the Review or Reverse Transaction form, and then click the Transaction Detail button.	Review transaction details such as parts records, routing records, and labor details by transaction ID for an item.

12.5.3 Setting Processing Options for Transaction Management (PF31014)

These processing options control default processing for the Transaction Management program.

12.5.3.1 Default

These processing options control default values that the system uses on the Review or Reverse Transaction form.

Branch/Plant

Specify the branch/plant for retrieving transactions.

Line/Cell

Specify the production line for which you want to retrieve transactions.

Shift Code

Specify the shift code for retrieving transactions.

Transactions Mode

Specify the type of completion transaction that you want to retrieve. Values are:

- 1: Adhoc Completions
- 2: Shop Floor Plans
- 3: DFM Daily Plans

Display for Transaction Cost Inquiry

Modify the button display on the Review or Reverse Transaction form. Enter 1 to hide the Transaction Details and the Reverse Transaction button.

12.5.4 Reversing Item Completions

Access the Review or Reverse Transaction form.

Figure 12–6 Review or Reverse Transaction form

Item Number	Quantity Completed	Quantity Scrapped	UH	Transaction Date	Location	Lot Serial Number	Line ID	Branch Plant	Production ID	Transaction ID	Master Transaction ID
202	3	1	EA	11/29/2011 00:00:00	.	.	R-AL	M30	2	1	1
2005	4		EA	11/29/2011 00:00:00	.	.	R-AL	M30	2	2	1
DFMP	1	1	EA	12/15/2011 00:00:00	.	.	ADHOC	M30	4	3	3

Parent Item Number

Enter the item number that corresponds to the parent item.

Transaction Date From and Transaction Date Through

Enter the start or end date for the transaction.

Transaction Mode

Enter a value from the Transaction Mode UDC (F31/TM) that identifies the mode in which the completion transaction is recorded. Values are:

- 1: Adhoc Completions
- 2: Shop Floor Plans
- 3: DFM Daily Plans

Transaction Status

Enter a value from the Transaction Status UDC (F31/TS) that identifies the status of the transaction ID based on active or canceled transactions. Values are:

- AT: Active Transactions
- CT: Canceled Transactions

Transaction Date

Enter the date when the transaction is processed.

Line ID

Displays a code that identifies the Demand Flow line. You set up the line as a work center.

Transaction ID

Displays the unique number generated by the system that defines a transaction record in lean manufacturing.

Master Transaction ID

Stores the parent transaction ID in the subassembly transaction records.

Transaction Details

Click to review parts records, routing records, and labor details for a transaction ID.

Reverse Transaction

Click to cancel the selected item completion transaction and reverse all related transactions.

Note: If you have created a purchase order receipt for any of the component items, the system does not reverse the receipt when you reverse the completion transaction. You must adjust inventory manually to reflect the reversal.

Production Cost Inquiry

Click to call the Lean Accounting - Production Cost Inquiry program (PF31200) to view transaction information.

12.5.5 Reviewing Transaction Details

Access the Transaction Details form.

Figure 12-7 Transaction Details form (1 of 2)

Transaction Management - Transaction Details

Transaction ID: 1

Parts Records

Records 1 - 5

2nd Item Number	Transaction Quantity	Issues Quantity	UM	Ln Ty	Requested Date	Component Branch
2005	2	2	EA	5	11/29/2011 00:00:00 UTC	M30
2005	4	4	EA	5	11/29/2011 00:00:00 UTC	M30
2006	2	2	EA	5	11/29/2011 00:00:00 UTC	M30
2007	2	2	EA	5	11/29/2011 00:00:00 UTC	M30
2008	2	2	EA	5	11/29/2011 00:00:00 UTC	M30

Close

Figure 12-8 Transaction Details form (2 of 2)

Routing Records

Records 1 - 1

Work Center	Description	Oper Seq#	Production Line	Run Labor	Run Machine	Setup Labor	Queue Hours	Move Hours	Setup Crew
200-101	Weld	40.00	R-A1	.00000000	.00000000	50.00			1.00

Close

Labor Details

Records 1 - 2

Work Center	Oper Seq#	Type Hours	Hours	Hourly Rate	Gross Pay	Production Line	2nd Item Number	S h	Transaction ID	Master ID
200-101	40.00	1	.00000000	2.00	.00000000	R-A1	2005	1	19293	
200-101	40.00	2	.00000000	2.00	.00000000	R-A1	2005	1	19293	

Close

Managing Work Order and Rate Schedule Information

This chapter contains the following topics:

- [Section 13.1, "Understanding Work Order and Rate Schedule Information"](#)
- [Section 13.2, "Deactivating Work Orders and Rate Schedules"](#)
- [Section 13.3, "Reviewing Work Order and Rate Schedule Information"](#)
- [Section 13.4, "Working with Work Center Load Review Calendar \(Release 9.1 Update\)"](#)
- [Section 13.5, "Working with Supply and Demand Information"](#)
- [Section 13.6, "Working with Bills of Material"](#)

13.1 Understanding Work Order and Rate Schedule Information

After you have processed work orders or rate schedules, you can close, delete, or purge work orders and rate schedules from the system, review component information, such as usability, availability, supply, and demand, and print reports that you need to effectively manage work order or rate schedule information. You can also compare bills of material or parts lists by using the Bill of Material Comparison program (P30204).

13.2 Deactivating Work Orders and Rate Schedules

This section provides an overview of work order and rate schedule deactivation, lists prerequisites, and discusses how to:

- Review work order and rate schedule status.
- Set processing options for the Production Status program (P31226).
- Change the status of work orders to closed.
- Change the status of rate schedules to closed.
- Set processing options for the Batch Rate Close program (R3191).
- Purge work orders.
- Set processing options for the Purge Orders program (R4801P).

13.2.1 Understanding Work Order and Rate Schedule Deactivation

This section discusses:

- Work order and rate schedule deactivation.
- Rate schedule and work order status review.
- Work order closure.
- Rate schedule closure.
- Work order purge.

13.2.1.1 Work Order and Rate Schedule Deactivation

You might want to deactivate any work orders or rate schedules that are no longer active or that have been completed. To maintain a record of the work order or rate schedule and its progress, you should close the work order or schedule before you deactivate it. This ensures that quantity information in the JD Edwards EnterpriseOne Inventory Management system and manufacturing accounting information is traceable after you deactivate the work order or rate schedule.

You can use one of these methods to deactivate work orders or rate schedules that you no longer use:

Method	Description
Change its status to closed	When you change the status of a work order or rate schedule to closed, the system identifies the work order or schedule as inactive, but does not delete it. This is the recommended way to deactivate a work order or rate schedule. This method enables you to keep complete historical records of the work order or rate schedule and its associated costing and accounting transactions.

Method	Description
Delete it	<p>When you delete a work order or rate schedule, it is removed from the system entirely. You should complete the work order or rate schedule before deleting it to ensure that manufacturing accounting and inventory information is updated. If you delete a work order or rate schedule before completing it, these records might not be in place. If the quantity completed on the work order or rate schedule is less than the quantity ordered, the system removes the remaining quantity from the Quantity on Work Order field in the Item Location File table (F41021) when you delete the order or schedule.</p> <p>Before you delete or purge a work order or rate schedule from the system, you must first complete the work order and then delete the parts list and routing instructions that are attached to the order.</p> <p>Additionally, you cannot delete a work order or rate schedule if any of these conditions is true:</p> <ul style="list-style-type: none"> ■ The order number is used as a subledger number in the Account Ledger table (F0911) ■ The work order is a parent order to other work orders ■ Parts have been issued to the work order or rate schedule ■ Labor has been entered for the work order or rate schedule <p>When a work order is in process, you should report completed and scrapped quantities for it before you delete it.</p>
Purge it	<p>When you purge work orders and rate schedules, the system deletes them based on their status code. You can save the purged records in a separate purge table.</p>

13.2.1.2 Rate Schedule and Work Order Status Review

Use the Production Status program (P31226) to review the status of all rate schedules and work orders by work center or line, work order number, rate schedule number, or item number, as qualified by the status and date ranges. You might want to review all of the work orders or rate schedules that are at a particular status or for a particular date range to determine which ones you want to deactivate. The program displays historical information, as well as open rates and work orders.

From the Production Status program, you can access the Production History program (P31227) where you can review the transactions for each entry of completions and scrap at an operation. The history program displays all transactions that make up the scrapped quantities and the details of these transactions.

13.2.1.3 Work Order Closure

When you change the status of a work order to closed, the system identifies the order as inactive, but does not delete it. This is the recommended way to deactivate a work

order. This method enables you to keep complete historical records of the work order and its associated costing and accounting transactions.

13.2.1.4 Rate Schedule Closure

For repetitive manufacturing, use the Batch Rate Close program (R3191) to close rate schedules when either of these conditions apply:

- The status is less than or equal to the value specified in the processing options
- The effective through date is less than or equal to the date specified in the processing options

When you close rates, the system performs these steps:

- Purges the rate schedule data from the Line/Item Relationship Master table (F3109)
- Release the commitment of any quantities for the applicable rates

13.2.1.5 Work Order Purge

The Purge Orders program (R4801P) deletes selected work orders or rate schedules from the system. The system purges the work orders and rate schedules and their associated information from these tables:

- Work Order Master File (F4801)
- Work Order Instructions File (F4802)
- Work Order Parts List (F3111)
- Work Order Routing (F3112)
- Work Order Time Transactions (F31122)

When you purge work orders or rate schedules, the system deletes them based on their status codes. When you need to purge work orders or rates schedules that contain information that you might want to retain, you can save the purged records in a separate table.

You use the processing option for the Purge Orders program to specify whether you want to save the records that you purge in a special purge library. The system names this library JDE, followed by the current system date (without separators). For example, if you purge the records on January 1, 2005, the purge library is named JDE010105. The system creates a physical table with the same name within that library. If you purge the same table multiple times on the same day, the system adds the purged records to the records that are already in the purge table for that day.

13.2.2 Prerequisite

Before you purge work orders, you must complete the accounting for the work orders or rate schedules before you purge them from the system.

See "Working with the Manufacturing Accounting System" in the *JD Edwards EnterpriseOne Applications Product Costing and Manufacturing Accounting Implementation Guide*.

13.2.3 Forms Used to Deactivate Work Orders and Rate Schedules

Form Name	Form ID	Navigation	Usage
Production Status	W31226F	Daily Processing - Repetitive (G3115), Production Status	Review work order and rate schedule status.
Work Order Details	W48013A	Daily Order Preparation - Discrete (G3111), Enter/Change Order Select an order number on the Work With Manufacturing Work Orders form, and click Select.	Change that status of an order (which closes the work order without deleting it from the system).

13.2.4 Reviewing Work Order and Rate Schedule Status

Access the Production Status form.

Figure 13–1 Production Status form

Production Status - Production Status

Work Center (Line) 200-101 Weld Branch/Plant P00

Job Number

Order Number/Type

Effective Date From Effective Date Thru

Operation Status From Operation Status Thru

Records: 1 - 3

Item Number	Description	Order Number	Type	Op St	Operation Status	Start Date	Request Date	Oper Seq	Quantity Remaining	UM
2005	Chain Sley	451039	WO		Waiting for Assignment	06/07/2005	06/07/2005	40.00	20	EA
200H	Cr-Moly Frame	451021	WO		Waiting for Assignment	06/08/2005	06/12/2005	40.00	10	EA

Quantities/Hours Production History Line Dispatch

13.2.5 Setting Processing Options for the Production Status Program (P31226)

Processing options enable you to specify the default processing for programs and reports.

13.2.5.1 Defaults

1. Enter the From Status. (Optional) and 2. Enter the Thru Status. (Optional)

Specify a value from user-defined code (UDC) table 31/OS (Operation Status) that identifies the current status of a work order or engineering change order as the operation steps in the routing are completed.

3. Calculate the default Thru Date. (Optional)

(Optional) Specify the number of days to add to today's date to calculate the default Thru Date.

13.2.5.2 Process

1. Remaining Quantity

Specify how the remaining quantity on a work order is calculated. The remaining quantity at a particular operation consists of the number of units to be completed at that operation in order to complete the order quantity. Values are:

Blank: Include Canceled/Scrapped quantity

1: Exclude Canceled/Scrapped quantity

13.2.6 Changing the Status of Work Orders to Closed

Access the Work Order Details form.

Figure 13–2 Work Order Details form

The screenshot displays the 'Work Order Details' form. At the top, there are fields for 'Order No/Type' (451004), 'Branch/Plant' (R30), 'WO Desc' (Touring Bike, Red), and 'Item Number' (220). Below these fields is a navigation bar with tabs: 'Dates & Qty's', 'Status & Type', 'Cat Codes', 'People', 'Addl Details 1', 'Addl Details 2', and 'Attachment'. The 'Status & Type' tab is selected, showing a 'Status' field with the value '99' and a 'TA' button. Other fields in this tab include 'Order/UOM' (00), 'Secondary/UOM', 'Shipped', and 'Canceled'.

Select the Status & Type tab, enter 99 in the Status field, and click OK.

13.2.7 Changing the Status of Rate Schedules to Closed

Access the Batch Rate Close form.

13.2.8 Setting Processing Options for the Batch Rate Close Program (R3191)

Processing options enable you to specify the default processing for programs and reports.

13.2.8.1 Process

1. Enter the date to compare to the Rate Effective Thru Date. All rates for which the Thru Date is less than this date will be closed. If left blank, no rates will be closed. Specify a date with or without slashes (/) or dashes (-) as separators. If you leave a date entry field blank, the system supplies the current date.

2. Enter the status for closed rates. If left blank, '99' will be used.

Specify a value from UDC 00/SS (Work Order Status) that indicates the status of a work order, rate schedule, or engineering change order. Any status change from 90 through 99 triggers the system to automatically update the completion date.

13.2.9 Purging Work Orders

Access the Purge Orders form.

13.2.10 Setting Processing Options for the Purge Orders Program (R4801P)

Processing options enable you to specify the default processing for programs and reports.

13.2.10.1 Process

Select the Process tab.

This processing option controls whether the records that you select to purge are saved to the appropriate purge tables.

Save Purged Records

Specify whether the records you want to purge will be saved in these purge-related tables: F1307P, F3102S, F3105S, F3111S, F3112S, F31122S, F31171S, F31172S, F4801S, F4801ST, F4802S, and F48311S. Values are:

1: Save the records.

Blank: Do not save the records.

13.3 Reviewing Work Order and Rate Schedule Information

This section provides an overview of work order and rate schedule review and discusses how to:

- Review part usability.
- Set processing options for the Part Usability program (P30212).
- Review summary availability.
- Set processing options for the Summary Availability program (P41202).
- Review item ledger information
- Review dispatch list Information.
- Set processing options for the Dispatch List program (P31220).
- Review production history.
- Set processing options for the Production History program (P31227).
- Review production line quantities.
- Set processing options for the Line Dispatch List program (P3159).
- Review production across lines.
- Set processing options for the Line Schedule Review program (P3152).
- Review work center loads.
- Set processing options for the Work Center Schedule Review program (P31224).
- Review process orders.

13.3.1 Understanding Work Order and Rate Schedule Review

This section discusses:

- What you can review.
- Part usability.
- Summary availability.
- Item ledger information dispatch list information.
- Production history.
- Production line quantities.
- Production across lines.
- Work center loads.
- Process orders.

13.3.1.1 What You Can Review

Throughout the manufacturing process, many different positions and business areas need access to product and manufacturing information. You might need information to solve problems, make decisions, or answer questions. You can review information for components, such as usability, availability, supply, and demand. You can review all item transactions in the system. Additionally, you can review all work orders that make up the load at a particular work center.

13.3.1.2 Part Usability

Use the Part Usability program (P30212) to display the quantity of a parent item that can be produced based on the component quantity. The system adjusts the production quantity in relation to the component quantity. You can use this program to determine how much of a parent item can be produced, based on component material on-hand. You can limit the information that appears to a specific lot, grade, or potency of the item.

13.3.1.3 Summary Availability

Use the Summary Availability program (P41202) to verify the availability of an item in the branches or plants. You can display the data in detail or summary mode, and for one branch or for all of the branches.

13.3.1.4 Item Ledger Information

Use the Item Ledger (The CARDEX) program (P4111) to display a detailed history of the transactions that have occurred for an item. The transactions include this information:

- Inventory issues, adjustments, and transfers
- Sales posted after sales update
- Purchase receipts
- Manufacturing issues and completions
- Physical inventory updates

13.3.1.5 Dispatch List Information

A dispatch list is a sequential listing of manufacturing work orders or rate schedules that contains detailed information about location, quantity, and capacity requirements. You should generate dispatch lists daily by work center or line.

Use the Dispatch List program (P31220) to list the work orders that have remaining operations for a given work center. The work order might not be physically present at the work center. You can display sequenced orders by start date or requested date. You can also schedule and release work orders to the work center. Additionally, you can access associated information, such as routing instructions, parts lists, status hours, and quantities for work orders.

Processing options enable you to define default from and through status and date values for the review. You can also specify the versions that the system uses when you access other programs, such as the Parts List Inquiry program (P3121).

The system calculates the remaining machine, labor, and setup run hours and the remaining quantities of the item to be produced, as this table indicates:

What to Calculate	Calculation Method
Remaining run machine hours	Standard run machine hours x (quantity remaining / standard quantity)
Remaining run labor hours	Standard run labor hours x (quantity remaining / standard quantity)
Remaining setup time	Standard setup time - hours recorded
Remaining quantity	Total quantity ordered - completed quantity

13.3.1.6 Production History

To solve problems, make decisions, and answer questions, you might need to review the historical information about the work orders or rate schedules. When you review the production history in the Production History program (P31227), you can review information such as date updated and the quantities ordered, shipped, and canceled for a particular work center.

Important: For repetitive manufacturing, to have correct data appear on the Production History form, you must not simultaneously process records with the same hour type and operation sequence number.

13.3.1.7 Production Line Quantities

For repetitive manufacturing, use the Line Dispatch List program (P3159) to view the planned and remaining quantities for all items that are scheduled for a particular production line.

13.3.1.8 Production Across Lines

Use the Line Schedule Review program (P3152) to review the schedule of the production lines for the family of items produced. If items are produced on multiple production lines, use this program to review production across lines while staying within the capacity of each line. You can also review the information graphically.

13.3.1.9 Work Center Loads

Use the Work Center Schedule Review program (P31224) to review the rate schedule load and the work order load for a work center. You can review a work center load for a day, a week, or a month. You can also enter a specific date range to review the load for the work center. If you need to adjust the scheduled load at the work center, you can access several different forms to make adjustments. Use a processing option to

specify whether to include loads that are generated by a work order before or after loads that are generated by a rate schedule.

13.3.1.10 Process Orders

For process manufacturing, use the Process Order Inquiry program (P31240) to display this information for a process work order:

- Each operation of the process
- The ingredients lists
- A list of the co-products and by-products
- The existing intermediates of a work order, by operation

From this program, you can perform these tasks:

- Access the Enter/Change Order program (P48013) and make changes, as necessary
- Display the intermediate for a specific operation, using the unit of measure defined for the intermediate instead of the primary unit of measure
- Display intermediates for all operations

13.3.2 Prerequisite

Before you review dispatch list information, you must display the actual quantities by entering actual quantities on the Time Entry Revisions form and running the Hours and Quantities Update program (R31422).

13.3.3 Forms Used to Review Work Orders and Rate Schedules

Form Name	Form ID	Navigation	Usage
Work With Usability	W30212A	Daily Order Preparation - Discrete (G3111), Part Usability	Review part usability.
Detail Availability	W41202C	Daily Order Preparation - Discrete (G3111), Summary Availability Select a record on the Work With Item Availability form, and select Detail Avail from the Row menu.	Review detailed information about item availability at a particular branch.
Item Ledger Detail	W4111B	Periodic Functions - Discrete (G3121), Item Ledger (The CARDEX) Select a document number on the Work With Item Ledger form, and click Select.	Review item ledger information.

Form Name	Form ID	Navigation	Usage
Operation Dispatch Detail Revisions	W31220A	Daily Order Preparation - Discrete (G3111), Dispatch List Select an order number on the Work With Operation Dispatch form, and click Select.	Review dispatch list information.
Work With Production History	W31227B	Daily Processing - Repetitive (G3115), Production History	Review production history.
Work With Line Dispatch List	W3159A	Daily Processing - Repetitive (G3115), Line Dispatch List	Review production line quantities.
Line Schedule Review	W3152A	Daily Processing - Repetitive (G3115), Line Schedule Review	Review production across lines.
Work Center Schedule Review	W31224B	Daily Order Preparation - Discrete (G3111), Work Center Schedule Review	Review work center loads.
Work with Ingredients and Co/By-Products	W31240M	Daily Order Preparation - Process (G3113), Process Order Inquiry Select a record on the Work with Process Orders form, and select Ingreds/Co/By-Prod from the Row menu.	Review process orders.

13.3.4 Setting Processing Options for the Part Usability Program (P30212)

Processing options enable you to specify the default processing for programs and reports.

13.3.4.1 Default

Type Bill of Material

Specify a value from UDC 40/TB (Bill Type) that designates the type of bill of material. You can define different types of bills of material for different uses. For example:

M: Standard manufacturing bill

RWK: Rework bill

SPR: Spare parts bill

The system enters bill type M in the work order header when you create a work order, unless you specify another bill type. The system reads the bill type code on the work order header to know which bill of material to use to create the work order parts list. MRP uses the bill type code to identify the bill of material to use when it attaches MRP messages. Batch bills of material must be type M for shop floor management, product costing, and MRP processing.

13.3.4.2 Versions

Enter the version to be used for each program. If left blank, version ZJDE0001 is used.

Item Search (P41200)

Specify the version of the Item Search program (P41200) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

Work Order Entry (P48013)

Specify the version of the Work Order Entry program (P48013) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

Item Master (P4101)

Specify the version of the Item Master program (P4101) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

Item Availability (P41202)

Specify the version of the Item Availability program (P41202) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

BOM Inquiry (P30200)

Specify the version of the BOM Inquiry program (P30200) that the system uses. If you leave this processing option blank, the system uses version ZJDE0002.

Parts Availability (P30200)

Specify the version of the Parts Availability program (P30200) that the system uses. If you leave this processing option blank, the system uses version ZJDE0004.

13.3.5 Reviewing Summary Availability

Access the Detail Availability form.

Figure 13–3 Detail Availability form

The screenshot displays the 'Detail Availability' form. At the top, it shows 'Work With Item Availability' and 'Detail Availability' tabs. Below the tabs are fields for 'Item Number' (220), 'Branch/Plant' (N30), and 'Location'. The main area is divided into 'Primary' and 'Secondary' sections. The 'Primary' section contains two columns: 'Quantity to Subtract' and 'Quantity to Add'. The 'Quantity to Subtract' column has several rows with checkboxes and input fields. The 'Quantity to Add' column has similar rows. At the bottom, the 'Total Quantity' section shows 'On Receipt' as 175 and 'Available' as 992.

P S (primary or secondary)

Enter a code that indicates whether this is the primary or secondary location for this item within this stocking location. Values are:

P: Primary storage location

S: Secondary storage location

Note: You can only have one storage area marked as primary within each branch or warehouse. In some cases, the system uses the primary storage area as the default location.

Location

Enter the area in the warehouse where you receive inventory. The format of the location is user-defined and you enter the location format for each branch/plant.

Committed

Enter the total quantity that is committed to a specific location. The total quantity is the sum of all quantities that have been sold or committed from:

Soft Committed to Sales Orders

Hard Committed to Sales Orders

Soft Committed to Work Orders

Hard Committed to Work Orders

On Hand

Enter the number of units that are physically in stock. The system displays the quantity on-hand in the primary unit of measure.

Available

Enter a number that indicates the quantity that is available.

For example, the available quantity might consist of the on-hand quantity minus commitments, reservations, and backorders.

Availability is user-defined. You can set up availability in the Branch/Plant Constants program (P41001).

On Receipt

Enter the total number of items that are on receipt for a specific location. The total is the sum of all quantities of an item that are on order and in route for a location.

13.3.6 Setting Processing Options for the Summary Availability Program (P41202)

Processing options enable you to specify the default processing for programs and reports.

13.3.6.1 Versions

Enter the version for each program. If left blank, ZJDE0001 will be used.

1. Item Master

Specify the version the system uses when you access the Item Master program (P4101). If you leave this processing option blank, the system uses version ZJDE0001.

2. Item Notes

Specify the version the system uses when you access the Item Notes program (P40163). If you leave this processing option blank, the system uses version ZJDE0001.

3. Item Search

Specify the version the system uses when you access the Item Search program (P41200). If you leave this processing option blank, the system uses version ZJDE0001.

4. Purchase Order Inquiry

Specify the version the system uses when you access the Purchase Order Inquiry program (P430301). If you leave this processing option blank, the system uses version ZJDE0001.

5. Customer Service Inquiry

Specify the version the system uses when you access the Customer Service Inquiry (Misc. Windows) program (P42045). If you leave this processing option blank, the system uses version ZJDE0001.

6. Open Work Orders

Specify the version the system uses when you access the Open Work Orders program (R31400). If you leave this processing option blank, the system uses version ZJDE0001.

7. Supply and Demand

Specify the version the system uses when you access the Supply and Demand Inquiry program (P4021). If you leave this processing option blank, the system uses version ZJDE0001.

8. Bill of Material

Specify the version the system uses when you access the Bill of Material Inquiry program (P30200). If you leave this processing option blank, the system uses version ZJDE0001.

9. Lot Availability

Specify the version the system uses when you access the Lot Master Availability program (P41280). If you leave this processing option blank, the system uses version ZJDE0001.

10. Item Ledger

Specify the version the system uses when you access the Item Ledger Inquiry (CARDEX) program (P4111). If you leave this processing option blank, the system uses version ZJDE0001.

11. Branch/Plant Item Information

Specify the version the system uses when you access the Branch/Plant Constants program (P41001). If you leave this processing option blank, the system uses version ZJDE0001.

12. Location Master

Specify the version the system uses when you access the Location Master program (P4100). If you leave this processing option blank, the system uses version ZJDE0001.

13. Item Location Information

Specify the version the system uses when you access the Item Location Type program (P41023). If you leave this processing option blank, the system uses version ZJDE0001.

13.3.6.2 Display

1. Grade Information

Specify whether the system displays grade information. Values are:

Blank: Do not display.

1: Display.

2. Potency Information

Specify whether the system displays potency information. Values are:

Blank: Do not display.

1: Display.

3. Quality Management

Specify whether the system displays information from the JD Edwards EnterpriseOne Quality Management system. Values are:

Blank: Do not display quantities in primary units of measure.

1: Display quantities in primary units of measure.

4. Quantity - Primary Units of Measure

Specify whether the system displays quantity information in primary units of measure. Values are:

Blank: Do not display.

1: Display.

5. Truncate/Round

Specify the manner in which the system truncates or rounds the information in the detail area. Values are:

Blank: Round the information in the detail area. The system uses normal mathematical rounding. For example, with no display decimals specified, 2.3 remains 2 and 2.6 is rounded up to 3.

1: Truncate the information in the grid. The system always removes additional positions. For example, with no display decimals specified, 2.3 and 2.6 are both truncated to 2.

2: Round up the information in the grid. The system always rounds to the next higher number. For example, with no display decimals specified, 2.3 and 2.6 are both rounded up to 3.

6. Customer Self-Service

Specify whether the system uses the standard mode or customer self-service functionality. Values are:

Blank: Bypass customer self-service functionality and use the standard mode.

1: Activate customer self-service functionality.

13.3.6.3 Lot Options

1. Display Percent of Life Remaining

Specify whether the system displays the Percent of Life Remaining field. If you do not select this option, the system does not display the Percent of Life Remaining field.

2. Display Number of Days Remaining

Specify a code that determines whether the system displays the Number of Days Remaining field. If you do not select this option, the system does not display the Number of Days Remaining field.

3. Calculation Date

Specify a date that the system uses to calculate the remaining number of days until a lot expires. If you leave this processing option blank, the system uses today's date.

13.3.7 Reviewing Item Ledger Information

Access the Item Ledger Detail form.

Figure 13–4 Item Ledger Detail form

The screenshot shows the 'Item Ledger (The CARDEX) - Item Ledger Detail' form. It includes a toolbar with 'Form' and 'Tools' buttons. The main area contains several input fields and labels:

- Branch/Plant: M30
- Item Number: 220 (Touring Bike, Rad)
- Location: 1, A, 2
- Quantity: 134
- Secondary Quantity: (empty)
- Unit Cost: 520.0324
- Extended Cost: 69664.34
- Lot Status Code: (empty)
- Add Lot Status Codes here: (empty)
- Lot Potency: .000
- Lot Grade: (empty)
- Document: 3600
- IJE Line No.: 3.0
- G/L Date: 06/01/2005
- Batch Number: 3069
- Document Number: 0
- Line Number: 2,000

13.3.8 Reviewing Dispatch List Information

Access the Operation Dispatch Detail Revisions form.

Figure 13–5 Operation Dispatch Detail Revisions form

The screenshot shows the 'Dispatch List - Operation Dispatch Detail Revisions' form. It includes a toolbar with 'Tools' button. The main area contains several input fields and labels:

- Order Number/Type: 451030
- Op Status: (empty)
- WO Status: 40
- Ring Run Mch: (empty)
- Ring Run Lab: 10.00
- Ring Setup Hrs: (empty)
- Item Number: 2005
- Supplier: (empty)
- PO Number: (empty)
- PO Type: (empty)
- Op Seq: 40.00
- WO Type: 5
- Ring Qty: 20
- Std Mch Hrs: (empty)
- Std Labor Hrs: 10.00
- Std Setup Hrs: .25
- Chain Stay: (empty)
- SO Num: (empty)
- SO Type: (empty)
- Tool ID: (empty)
- Crew Size: 1.0

13.3.9 Setting Processing Options for the Dispatch List Program (P31220)

Processing options enable you to specify the default processing for programs and reports.

13.3.9.1 Defaults

These processing options control the default settings for status and days for the inquiry.

From Status

Specify the from status (UDC 31/OS) on the Work with Operation Dispatch form. The from status specifies the beginning date for the selection of work order information.

Thru Status

Specify the thru status (UDC 31/OS) on the Work with Operation Dispatch form. The thru status specifies the end date for the selection of work order information.

Prior to today's date for the From Date

Specify the from date on the Work with Operation Dispatch form. You can specify a from date prior to the current date by entering the number of days that the system must subtract from the current date. For example, if the current date is June 15 and you want the system to use June 10 as the from date, you enter 5. The system subtracts five days and sets the from date to June 10. If you leave this processing option blank, the system uses the current date as the from date.

Note: The From Date/Period specifies that the system displays transactions beginning with this date or period. Totals are calculated for the transactions that are displayed.

After today's date for the Thru Date

Specify the thru date on the Work with Operation Dispatch form. You can specify a thru date later than the current date by entering the number of days that the system adds to the current date. For example, if the current date is June 15 and you want the system to use June 20 as the thru date, you enter 5. The system adds five days and sets the thru date to June 20. If you leave this processing option blank, the system uses the current date as the thru date.

Note: The Thru Date/Period specifies that the system displays transactions ending with this date or period. Totals are calculated for the transactions that are displayed.

13.3.9.2 Versions

These processing options control the versions that the system uses when these programs are called from the Dispatch List program.

1. Work Order Processing (P48013)

Specify the version that the system uses when you select the Work Order Entry program (P48013) from the Row menu on the Work With Operation Dispatch form. If you leave this processing option blank, the system uses version ZJDE0001.

2. Work Order Routing (P3112)

Specify the version that the system uses when you select the Work Order Routing program (P3112) from the Row menu on the Work With Operation Dispatch form. If you leave this processing option blank, the system uses version ZDJE0001.

3. Work Order Parts List (P3111)

Specify the version that the system uses when you select the Work Order Parts List program (P3111) from the Row menu of the Work With Operation Dispatch form. If you leave this processing option blank, the system uses version ZDJE0001.

4. Work Order Parts Inquiry (P3121)

Specify the version that the system uses when you select the Work Order Parts List Inquiry program (P3121) from the Row menu on the Work With Operation Dispatch form. If you leave this processing option blank, the system uses version ZJDE0001.

5. Operation Dispatch Inquiry (P31220)

Specify the version that the system uses when you select the Operation Dispatch Inquiry program (P31220) from the Row menu on the Work With Operation Dispatch form. If you leave this processing option blank, the system uses version ZJDE0001.

6. Work Order Quantity (P31121)

Specify the version of the Work Order Quantity program (P31121) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

7. Work Order Hours (P31122)

Specify the version of the Work Order Hours program (P31122) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

13.3.9.3 Process

This processing option controls whether the remaining quantity includes the scrapped or canceled quantity.

1. Quantity Calculation

Specify whether the system subtracts the quantity scrapped or canceled from the remaining quantity. Values are:

Blank: Include the quantity scrapped or canceled in the remaining quantity.

1: Subtract the quantity scrapped or canceled from the remaining quantity.

13.3.10 Reviewing Production History

Access the Work With Production History form.

13.3.11 Setting Processing Options for the Production History Program (P31227)

Processing options enable you to specify the default processing for programs and reports.

13.3.11.1 Defaults

Sequence Numbers - Operations

Specify a number used to indicate an order of succession.

In routing instructions, a number that sequences the fabrication or assembly steps in the manufacture of an item.

You can track costs and charge time by operation. In bills of material, a number that designates the routing step in the fabrication or assembly process that requires a specified component part. You define the operation sequence after you create the routing instructions for the item. The JD Edwards EnterpriseOne Shop Floor Management system uses this number in the backflush/preflush by operation process.

In engineering change orders, a number that sequences the assembly steps for the engineering change.

For repetitive manufacturing, a number that identifies the sequence in which an item is scheduled to be produced.

Skip To fields enable you to enter an operation sequence that you want to begin the display of information.

You can use decimals to add steps between existing steps. For example, use 12.5 to add a step between steps 12 and 13.

Add Days for Thru Date

Specify the number of days to add to today's date for the Thru date.

Shift Code

Specify a value from UDC 00/SH (Shift Code) that identifies daily work shifts.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

13.3.12 Reviewing Production Line Quantities

For repetitive manufacturing, use the Line Dispatch List program (P3159) to view the planned and remaining quantities for all items that are scheduled for a particular production line. Access Work With Line Dispatch List form.

13.3.13 Setting Processing Options for the Line Dispatch List Program (P3159)

Processing options enable you to specify the default processing for programs and reports.

13.3.13.1 Defaults

Add Days for Thru Date

Specify the number of days to add to today's date for the Thru date.

Enter the Shift Code. (Optional)

Specify a value from UDC 00/SH (Shift Code) that identifies daily work shifts.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

Enter the From Status. (Optional)

Specify a value from UDC 00/SS (Work Order Status) that indicates the status of a work order, rate schedule, or engineering change order. Any status change from 90 through 99 triggers the system to automatically update the completion date.

Enter the Thru Status. (Optional)

Specify a value from UDC 00/SS (Work Order Status) that indicates the status of a work order, rate schedule, or engineering change order. Any status change from 90 through 99 triggers the system to automatically update the completion date.

13.3.13.2 Process

Quantity Canceled/Scrapped

Specify whether the system includes canceled or scrapped amounts from the Remaining Quantity. Values are:

1: Subtract Quantity Canceled/Scrapped from the Remaining Quantity.

Blank: Remaining Quantity value includes Quantity Canceled/Scrapped.

13.3.14 Reviewing Production Across Lines

Access the Line Schedule Review form.

13.3.15 Setting Processing Options for the Line Schedule Review Program (P3152)

Processing options enable you to specify the default processing for programs and reports.

13.3.15.1 Defaults

These processing options specify default values for the Document Type and Shift fields.

1. Document Type (Default is 'SC')

Specify the default document type associated with the schedule quantity detail. Enter a value from UDC 00/DT (Document Type - All Documents) that identifies the origin and purpose of the document. Enter the document type to use as the default value or select it from the Select User Define Code form. If you leave this field blank, the system uses SC.

2. Shift (Optional)

Specify the default shift code associated with the schedule quantity detail. Enter a value from UDC 00/SH (Shift Code) that identifies daily work shifts. Enter the shift code to use as the default value or select it from the Select User Define Code form.

13.3.15.2 Versions

This processing option specifies the version of the Rate Revisions program (P3109) that the Line Schedule Review program uses.

1. Rate Revisions (P3109)

Specify which version the system uses when you select the row exit to the Enter/Change Rate Schedule program (P3109) from the Line Schedule Review form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Enter/Change Rate Schedule program.

Versions control how the Enter/Change Rate Schedule program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

13.3.16 Reviewing Work Center Loads

Access the Work Center Schedule Review form.

13.3.17 Setting Processing Options for the Work Center Schedule Review Program (P31224)

Processing options enable you to specify the default processing for programs and reports.

13.3.17.1 Defaults

This processing option controls the default document type for the records that appear on the form.

1. Document Type

Specify the default document type associated with the work order or rate schedule. Enter a value from UDC 00/DT (Document Type - All Documents) that identifies the origin and purpose of the document.

13.3.17.2 Disp Options

This processing option controls the time frames for which work center load information appears on the form.

1. Subfile Dates

Specify how the system calculates and displays the loads. Values are:

- 1: Calculates and displays monthly loads.
- 2: Calculates and displays weekly loads.
- Blank or 3: Calculates and displays daily loads.

13.3.17.3 WO Processing

These processing options control the work center information that appears on the form.

1. Include Work Order Generated Loads

Specify whether the system includes work order loads before rate schedules, after rate schedules, or not at all. Values are:

- 1: Generates work order loads before rate schedules.
- 2: Generates work order loads after rate schedules.
- Blank: Does not recognize work order loads.

2. From Operation Status

Specify the status the system uses for the work orders or rate schedules as the routing steps are completed. Enter a value from UDC 31/OS (Operation Status) that indicates the status of a work order or rate schedule. Enter the operation status to use as the default value or select it from the Select User Define Code form.

3. To Operation Status

Specify the operation status the system uses for the work orders or rate schedules as the routing steps are completed. Enter a value from UDC 31/OS (Operation Status) that indicates the status of a work order or rate schedule. Enter the operation status to use as the default value or select it from the Select User Define Code form.

13.3.17.4 Versions

This processing option controls the version that the system uses when you call this program:

1. Rate Revisions (P3109)

Specify the version the system uses when you select the row exit to the Enter/Change Rate Schedule program (P3109) from the Work Center Schedule Review program (P31224). If you leave this processing option blank, the system uses the ZJDE0001 version of the Enter/Change Rate Schedule program.

Versions control how the Enter/Change Rate Schedule program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

13.3.18 Reviewing Process Orders

Access the Work with Ingredients and Co/By-Products form.

Review these fields:

- Qty Ordered/Output
- Qty Issued/Completed
- Co By

13.4 Working with Work Center Load Review Calendar (Release 9.1 Update)

This section provides an overview of the Work Center Load Review Calendar, lists a prerequisite, and discusses how to:

- Review the work center load on the Work Center Load Review Calendar.
- Set processing options for the Work Center Load Review Calendar program (E313000).

13.4.1 Understanding the Work Center Load Review Calendar

To create a viable production schedule, it is important for production schedulers to have visibility to the scheduled work order load and the available capacity at a work center at any time. This enables a production scheduler to determine whether the work center load is over the capacity or under the capacity, and then plan the production schedule accordingly.

The Work Center Load Review Calendar program (E313000) is built on the Oracle Application Development Framework (Oracle ADF) and enables you to view a visual representation of the daily, weekly, and monthly calendar views of the scheduled work center load and the available capacity in real time.

See Also: "Building and Installing EnterpriseOne ADF Application" in the *JD Edwards EnterpriseOne Application Interface Services Server for Application Developer Framework (ADF) Applications Configuration Guide*.

Use the Work Center Load Review Calendar program to:

- View scheduled work order load for a work center.
- View work center capacity.
- View work center availability (capacity - load).
- Access related programs.

When you access the Work Center Load Review Calendar program (E313000), the system invokes the Work Center Load Data Retrieval program (P313001) and the Resource Units Data Retrieval program (P313002). The system retrieves load and capacity information from the Work Center Load Data Retrieval program and Resource Units Data Retrieval program respectively, and uses that information to generate the work center load review calendar.

The system retrieves load information for the Work Center Load Data Retrieval program from the following tables:

- Work Order Routing (F3112)
- Work Order Master File (F4801)
- Work Order Master Tag (F4801T)

The following table describes how the system calculates the remaining run machine hours, remaining run labor hours, remaining setup hours, and remaining quantity for the Work Center Load Data Retrieval program:

What to Calculate	Calculation Method
Remaining run machine hours	Standard run machine hours - actual run machine hours Note: If the calculated value is less than 0, the system displays it as 0.
Remaining run labor hours	Standard run labor hours - actual run labor hours Note: If the calculated value is less than 0, the system displays it as 0.
Remaining setup hours	Standard setup hours - actual setup hours Note: If the calculated value is less than 0, the system displays it as 0.
Remaining quantity	Total quantity ordered - completed quantity

The system uses capacity information from the Resource Units Data Retrieval program (P313002) to generate the Work Center Load Review Calendar. The Resource Units Data Retrieval program uses data from the Work Center Resource Units table (F3007).

You can use the processing options for the Work Center Load Review Calendar program (E313000) to define the load and capacity information that are retrieved from the Work Center Load Data Retrieval program (P313001) and Resource Units Data Retrieval program (P313002). For example, to view load and capacity information for work center abc and branch/plant xyz, you can set the Work Center processing option as abc, and Branch/Plant processing option as xyz. However, if you leave either or

both of the Work Center and Branch/Plant processing options blank, the system displays a blank calendar when you access the work center load review calendar.

Additionally, as part of the processing options, you can specify the versions that the system uses when you access other related programs from the Work Center Load Review Calendar program, such as the Work Order Processing program (P48013).

> **Tutorial:** [Click here to view a recording of this tutorial.](#)

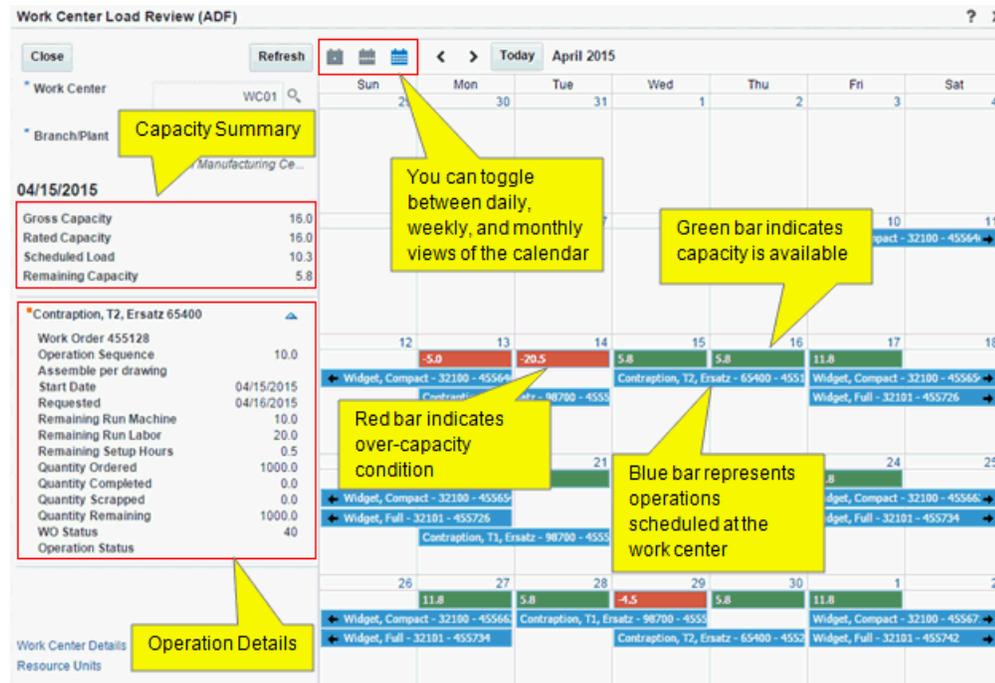
13.4.1.1 Using the Work Center Load Review Calendar

You can use the Work Center Load Review Calendar program (E313000) to view the operations scheduled for a work center associated with a branch/plant. You can view the scheduled operations by day, week, or month.

Note: The work center load review calendar reflects scheduled operations and capacity requirements for actual, released work orders with routings attached. The calendar does not display capacity requirements for planned work orders.

The following image illustrates the features of the Work Center Load Review Calendar program:

Figure 13–6 Work Center Load Review Calendar (Monthly View)



When you access the Work Center Load Review Calendar program, the system calculates the load for each individual work order operation and displays the aggregated load for the day. The aggregated or scheduled load is the accumulated daily load for all operations that are active on a given date.

The system calculates the rated capacity after factoring in efficiency and utilization, and then subtracts the scheduled or aggregated load from the rated capacity to

calculate the remaining capacity for the day. The system displays the remaining capacity for each day in a color-coded bar: a red bar indicates an over-capacity condition (when the work center load is greater than the net capacity) and a green bar indicates available capacity.

The system calculates the daily load, depending on whether the remaining setup hours are included or not, based on the prime load code:

B: Run labor hours + setup hours

L: Run labor only

C: Machine hours + setup hours

M: Machine hours only

The system calculates the daily load after dividing the remaining hours by the number of days with rated capacity greater than 0 for the duration of the operation, from the Start Date through the Request Date. For example:

- If the Start Date and Request Date of the operation are prior to the current date (today's date) and if there are remaining hours or remaining quantity for that operation, the daily load is a negative value. The system places that daily load on the Request Date on the work center load review calendar and displays the remaining capacity as a negative value (in a red bar).

Note: For days that are prior to the current date, the system displays only negative remaining capacity on the work center load review calendar.

- If the Start Date is prior to the current date and the Request Date is after the current date, and if there are remaining hours or remaining quantity for the operation, the daily load is spread across the days from the current date through the Request Date.

The Work Center Load Review Calendar program enables you to view the capacity summary for the selected day on the calendar. You can view the following details:

- Gross Capacity
- Rated Capacity
- Scheduled Load
- Remaining Capacity

The following table describes the fields that you can view in the capacity summary area:

Field	Description
Gross capacity and rated capacity	<p>Gross capacity is the total resource units that are available at a work center. Rated capacity is the available resource units, factored by efficiency and utilization.</p> <p>The system retrieves resource unit information from the Work Center Resource Units program (P3007), starting with the year prior to the current year and moving forward. If the date being processed is prior to the current date, the system saves both the gross capacity and rated capacity values as 0 (zero).</p> <p>Note: The system does not display zero values on the work center load review calendar for dates prior to the current date and these values are not counted in the number of days for the daily load calculation.</p>
Scheduled/aggregated load	The accumulated daily load for all operations that are active on a given date.
Remaining capacity	The rated capacity minus the scheduled or aggregated load.

The Work Center Load Review Calendar program provides a panel on the left of the calendar that displays the list of operations associated with the selected day on the calendar. By default, the system displays the operations for the current day in the weekly and monthly view.

You can expand or collapse the operation details displayed on the left panel. When you expand an operation, the system displays the following details:

- Work Order Number
- Operation Sequence
- Operation Description
- Start Date
- Requested Date
- Remaining Run Machine
- Remaining Run Labor
- Remaining Setup Hours
- Quantity Ordered
- Quantity Completed
- Quantity Scrapped
- Quantity Remaining
- Work Order Status
- Operation Status
- Related Sales Order (if not blank)
- Production Number (if not blank)

13.4.1.2 Access to Additional Programs from the Work Center Load Review Calendar

You can access related programs from within the Work Center Load Review Calendar program. For example, if the work center load is over the capacity, you might need to add more machines to the work center. In such a scenario, you can access the Work Center Resource Units program (P3007), make the required revisions, and then refresh the work center load review calendar to view the updated load and capacity information.

You can access the following programs from the Work Center Load Review Calendar program:

- Work Center Resource Units program (P3007): To access this program, click the Resource Units link.
- Work Center Revisions program (P3006): To access this program, click the Work Center Details link.
- Work Order Processing (P48013): To access this program, right-click an operation on the calendar and then select WO Details from the menu. Alternatively, right-click the orange square in the operation details panel, and then select WO Details from the menu.
- Work Order Routing (P3112): To access this program, right-click an operation on the calendar and then select WO Routing from the menu. Alternatively, right-click the orange square in the operation details panel, and then select WO Routing from the menu.
- Work Order Parts List (P3111): To access this program, right-click an operation on the calendar and then select WO Parts List from the menu. Alternatively, right-click the orange square in the operation details panel, and then select WO Parts List from the menu.
- Parts List Inquiry (P3121): To access this program, right-click an operation on the calendar and then select Parts List Inquiry from the menu. Alternatively, right-click the orange square in the operation details panel, and then select Parts List Inquiry from the menu.
- Work Order Time Entry (P311221): To access this program, right-click an operation on the calendar and then select WO Time Entry from the menu. Alternatively, right-click the orange square in the operation details panel, and then select WO Time Entry from the menu.

13.4.2 Prerequisite

Before you complete the tasks in this section, you must create a task for the Work Center Load Review Calendar program (E313000) in the Work with Tasks application (P9000), and set the version of the E313000 application that you want to access from the JD Edwards EnterpriseOne system.

See "Creating a Task" in the *JD Edwards EnterpriseOne Tools Solution Explorer Guide*.

13.4.3 Reviewing the Work Center Load

To review the work center load:

1. Access the work center load review calendar by selecting WC Load Review Calendar from one of the following menus:
 - Daily Order Preparation - Discrete (G3111)

- Daily Order Preparation - Process (G3113)
 - Daily Rough Cut Capacity Planning (G3312)
 - Daily Capacity Requirements Planning (G3313)
2. Enter or review the following fields:

Work Center

Enter or review the work center for which you want to review the load information. This field is mandatory.

Branch/Plant

Enter or review the branch/plant associated with the work center for which you want to review the load information. This field is mandatory.

3. (Optional) Click the day, week, or month calendar icon to view the load information on the calendar for a day, a week, or a month.
4. Review the load and capacity information.
- Remaining Capacity: The system displays the remaining capacity for each day in a color-coded bar on the work center load review calendar: a red bar indicates an over-capacity condition (when the aggregated load is greater than the net capacity), and a green bar indicates that capacity is available. The system displays the work order operations scheduled for each day in a blue bar.

Note: The system does not display an operation if the remaining quantity = 0.

- Capacity Summary: The system displays the summary of the work center capacity for the selected day on the top-left corner in the Work Center Load Review Calendar program. Alternatively, you can view the capacity summary by clicking the capacity bar on the calendar. Review the following fields:

Gross Capacity

Displays the gross capacity at the work center.

Rated Capacity

Displays the rated capacity at the work center. The system calculates the rated capacity after factoring in efficiency and utilization.

Scheduled Load

Displays the scheduled load at the work center.

Remaining Capacity

Displays the remaining capacity at the work center. The system calculates the remaining capacity by subtracting the aggregated load from the rated capacity (remaining capacity = rated capacity - aggregated load).

- Operation Details: The system displays the details of the operation scheduled for the selected day in a panel on the left of the work center load review calendar. Alternatively, you can view the operation details by clicking an operation on the calendar. Review the following fields:

Work Order Number

Displays the work order number associated with the operation.

Operation Sequence

Displays the operation sequence number for the item.

<Operation Description>

Displays the description of the operation.

Start Date

Displays the start date of the operation.

Requested

Displays the date by which the operation is scheduled to be completed.

Remaining Run Machine

Displays the remaining run machine hours for the work center.

Remaining Run Labor

Displays the remaining run labor hours for the work center.

Remaining Setup Hours

Displays the remaining setup hours for the work center.

Quantity Ordered

Displays the quantity ordered at the work center.

Quantity Completed

Displays the quantity completed for the work center.

Quantity Scrapped

Displays the quantity scrapped or canceled for the work center.

Quantity Remaining

Displays the remaining quantity at the work center. The system calculates the remaining quantity by subtracting the quantity completed from the quantity ordered (remaining quantity = quantity ordered - quantity completed).

Note: If the Quantity Calculation processing option is set to include scrapped or canceled quantity, the remaining quantity is the accumulation of the quantity at operation from the Work Order Routing table (F3112) for a work order and for all operation sequence numbers less than or equal to the selected record.

WO Status (Work Order Status)

Displays the status of the work order.

Operation Status

Displays the status of the operation.

Related Sales Order

Displays the related sales order number associated with the work order.

Note: The system displays this field only if a related sales order exists for the work order.

Production Number

Displays the production number associated with the work order.

Note: The system displays this field only if a production number exists for the work order.

5. (Optional) Click the Resource Units link to navigate to the Work Center Resource Units program (P3007) and review resource unit information.
6. (Optional) Click the Work Center Details link to navigate to the Work Center Revisions program (P3006) and review work center-related information.
7. Click the Refresh button to refresh the load and capacity information with any updates that you made in the Work Center Resource Units program, the Work Center Revisions program, or any of the related programs that are accessible from the Work Center Load Review Calendar program.
8. Click the Close button to close the work center load review calendar.

13.4.4 Setting Processing Options for the Work Center Load Review Calendar Program (E313000)

Processing options enable you to specify the default processing for programs and reports.

13.4.4.1 Defaults

1. Work Center

Specify the default work center from the Work Center Load Review Calendar program (E313000).

2. Branch/Plant

Specify the default branch/plant from the Work Center Load Review Calendar program (E313000).

13.4.4.2 Process

1. From Operation Status

Specify a default from operation status from the Work Center Load Review Calendar program (E313000).

2. Through Operation Status

Specify a default through operation status from the Work Center Load Review Calendar program (E313000).

3. Version of Supply/Demand Inclusion Rules

Specify a default version of the supply/demand inclusion rules from the Work Center Load Review Calendar program (E313000).

4. Quantity Calculation

Specify whether the system includes the scrapped or canceled quantity in the calculation of the remaining quantity. Values are:

Blank: Include the scrapped or canceled quantity in the remaining quantity.

1: Do not include the scrapped or canceled quantity in the remaining quantity.

13.4.4.3 Versions

1. Work Order Processing (P48013)

Specify the version of the Work Order Processing program (P48013) that the system uses. If you leave this processing option blank, then the system uses version ZJDE0001.

2. Work Order Routing (P3112)

Specify the version of the Work Order Routing program (P3112) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

3. Work Order Parts List (P3111)

Specify the version of the Work Order Parts List program (P3111) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

4. Work Order Parts List Inquiry (P3121)

Specify the version of the Work Order Parts List Inquiry program (P3121) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

5. Work Center Resource Units (P3007)

Specify the version of the Work Center Resource Units program (P3007) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

6. Work Center Revision (P3006)

Specify the version of the Work Center Revision program (P3006) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

13.5 Working with Supply and Demand Information

This section provides an overview of supply and demand information and discusses how to:

- Review supply and demand information.
- Set processing options for the Supply/Demand Inquiry program (P4021).

13.5.1 Understanding Supply and Demand Information

Information about the supply and demand for an item helps you accurately plan for future needs. You can monitor information about how many items are on demand, available in supply, and available to promise (ATP). These are some examples of what members of the organization can do:

- Personnel in sales order entry can provide customers with an expected order ship date.
- Purchase agents can evaluate future orders and stocking needs.
- Warehouse personnel can plan warehouse resource around receipts and order picking.

You can access supply and demand information from the JD Edwards EnterpriseOne Shop Floor Management, JD Edwards EnterpriseOne Inventory Management, and JD Edwards EnterpriseOne Sales Order Management systems. If you are using Supply Chain Management in conjunction with the JD Edwards EnterpriseOne Inventory Management system, you should set up the supply and demand inclusion rules.

Use the Supply/Demand Inquiry program (P4021) to review demand, supply, and available quantities for a specific item. You can also access these programs to confirm detail information:

- Manufacturing Scheduling Workbench (P31225)
- Parts Availability (P30200)
- MRP/MPS Detail Message Revisions (P3411)
- Time Series (P3413)
- Pegging Inquiry (P3412)
- Item Availability (P41202)
- Customer Service Inquiry (P4210)
- Item Branch/Plant (P41026)

The demand quantities are displayed by date and can include safety stock, quantities on sales orders, work order parts lists, planned order demand for lower levels, and interplant and forecasted demand.

The supply quantities are displayed by date and can include on-hand inventory and quantities on purchase orders, manufacturing work orders, planned orders, and rate schedules. Supply quantities without dates or order information represent current availability by branch/plant location or lot.

13.5.2 Form Used to Review Supply and Demand Information

Form Name	Form ID	Navigation	Usage
Work With Supply and Demand	W4021B	Daily Order Preparation - Discrete (G3111), Supply/Demand Inquiry	Review supply and demand information.

13.5.3 Reviewing Supply and Demand Information

Access the Work With Supply and Demand form.

Figure 13–7 Work With Supply and Demand form

Work With Supply and Demand

Item Number: 2001 Cro-Moly Frame, Red

Branch/Plant: * MB3

Thru Date: * UOM: EA

Leadtime Level: 0 Fixed

Records: 1 - 30

	Promise Date	Demand	Supply	Quantity Available	Order No	Type	Branch/Plant	Location	Customer/Supplier Name	Lot/Serial	Record Type
<input checked="" type="radio"/>	01/03/21		200	200			MB3		On Hand Balances		On Hand Balances
<input type="radio"/>			197	397		WO	MB3				Planned Order
<input type="radio"/>			198	595		WO	MB3				Planned Order
<input type="radio"/>			216	773		WO	MB3				Planned Order
<input type="radio"/>			96	869		WO	MB3				Planned Order
<input type="radio"/>			197	1066		WO	MB3				Planned Order
<input type="radio"/>			242	1308		WO	MB3				Planned Order
<input type="radio"/>			54	1362		WO	MB3				Planned Order
<input type="radio"/>			51	1413		WO	MB3				Planned Order
<input type="radio"/>			131	1544		WO	MB3				Planned Order
<input type="radio"/>			136	1679		WO	MB3				Planned Order
<input type="radio"/>			172	1851		WO	MB3				Planned Order
<input type="radio"/>			246	2097		WO	MB3				Planned Order
<input type="radio"/>	10/26/19	1		2096	451426	WO	MB3				Cro-Moly Frame, Red
<input type="radio"/>	04/27/20		167	2096	451119	WO	MB3				Cro-Moly Frame, Red

13.5.4 Setting Processing Options for the Supply/Demand Inquiry Program (P4021)

Processing options enable you to specify the default processing for programs and reports.

13.5.4.1 Process

These processing options control processing for the Supply/Demand Inquiry program, such as which quantities and document types, as well as forecast and planning data, are included in the inquiry.

1. Deduct Safety Stock From Available Quantity

Specify whether the system displays the safety stock line and decreases the safety stock from the available quantity. Values are:

Blank: Does not deduct safety stock.

1: Deducts safety stock.

2. Receipt Routing Quantities Considered As On Hand

Quantity In Transit

Specify whether the system considers the Quantity in Transit part of the on-hand quantity. In a manufacturing environment, sometimes it is necessary to establish where stock is, in order to determine whether it is available for immediate use. Values are:

Blank: The system displays the Quantity in Transit for the appropriate date.

1: The system includes the Quantity in Transit in the on-hand inventory.

Quantity In Inspection

Specify whether the system considers the Quantity in Inspection part of the on-hand quantity. In a manufacturing environment, sometimes it is necessary to establish

where stock is, in order to determine whether it is available for immediate use. Values are:

Blank: The system displays the Quantity in Inspection for the appropriate date.

1: The system includes the Quantity in Inspection in the on-hand inventory.

User Defined Quantity 1

Specify whether the system considers the User Defined Quantity 1 part of the on-hand quantity. This quantity is defined in the Update Operation 1 field on the Receipt Routing Definition form. In a manufacturing environment, sometimes it is necessary to establish where stock is, in order to determine whether it is available for immediate use. Values are:

Blank: The system displays the User Defined Quantity 1 for the appropriate date.

1: The system includes the User Defined Quantity 1 in the on-hand inventory.

User Defined Quantity 2

Specify whether the system considers the User Defined Quantity 2 part of the on-hand quantity. This quantity is defined in the Update Operation 2 field on the Receipt Routing Definition form. In a manufacturing environment, sometimes it is necessary to establish where stock is, in order to determine whether it is available for immediate use. Values are:

Blank: The system displays the User Defined Quantity 2 for the appropriate date.

1: The system includes the User Defined Quantity 2 in the on-hand inventory.

3. Supply/Demand Inclusion Rules

Specify the supply and demand inclusion rules version for the system to use. These rules define the order type, line type and line status. Enter a value from UDC 40/RV (Inclusion Version) that identifies the version to use for processing. Enter an inclusion rule to use as the default value or select it from the Select User Define Code form.

4. Subtract Expired Lot Quantities

Specify whether the system deducts the expired lot quantities from the available quantity. Values are:

Blank: Does not reduce the available quantity.

1: Reduces the available quantity.

This processing option does not work with available to promise lines. If you select value 1 in this processing option, you must set the Available to Promise Line Flag processing option, under the Process 1 tab, to either blank or 2.

5. Enable Engineer to Order (ETO)

Specify whether the system enables Engineer-to-Order (ETO) functionality. Values are:

Blank: Do not enable.

1: Enable.

6. Include Past Due Supply In Quantity Available

Specify if past due quantities are included while calculating available quantity. Values are:

Blank: Do not include.

1: Include.

7. Rate Based Schedule Type

Specify the rate-based schedule type for the system to display. Enter a value from UDC 31/ST (Schedule Type) that identifies the schedule type. If you leave this processing option blank, the system does not display any rate-based schedules.

8. Include MPS/MRP/DRP Planned Orders

Specify whether the system displays planned orders from MPS/MRP/DRP generations. Values are:

Blank: Does not display.

1: Displays.

9. Forecast Types (5 Types Maximum)

Specify which forecast types, up to five, that the system includes in the inquiry. If you leave this field blank, the system does not include any forecast records. Enter multiple forecasts: to enter 01, 02, and BF, type 0102BF.

10. Days From Today To Include Forecast

Specify the number of days (+ or -) from the system date that you want the system to include forecast records. If you leave this processing option blank, the system uses the system date.

11. Exclude Bulk Items

Specify whether the system displays bulk stocking type records. Values are:

Blank: Displays.

1: Does not display.

12. Include Past Due Rates as a supply

Specify whether the system considers open quantities from past due rate schedules as supply. When you enter 1, the system includes past due rate orders in the display. Values are:

Blank: Do not use open quantities.

1: Use open quantities.

13. Forecast Start Date

Specify the Start Date. Values are:

Blank: Use the System Date.

1: Use the Start Date of the current forecast period.

Note: If you enter a 1, the Enable Engineer to Order processing option must be blank.

14. Lot Hold Codes (up to 5)

Specify the lots to be included in the calculation of on-hand inventory. You can enter a maximum of 5 lot hold codes from UDC 41/L (Lot Status Codes).

Blank: Include no held lots in calculation of on-hand inventory.

*: Include all held lots in calculation of on-hand inventory.

13.5.4.2 Display

These processing options control how certain information appears on the Work With Supply and Demand form. For example, a processing option controls whether quantities appear after they are converted to standard potency.

1. Convert Quantities To Standard Potency

Specify whether the system converts quantities to the standard potency. Values are:

Blank: Does not convert the quantities.

1: Converts the quantities.

2. Display ATP Line

Specify whether the system displays an available to promise line, a cumulative available to promise line, or neither. Values are:

Blank: Does not display either line.

1: Displays the available to promise line.

2: Displays the cumulative available to promise line.

If you select to display the available to promise line (value 1) in this processing option, you cannot use the Display 3 tab, Reduce Expired Lot Quantities processing option.

3. Summarize All In Receipt Routing Steps

Specify whether the system summarizes all quantities for the In Receipt routing steps into one line. Values are:

Blank: Does not summarize.

1: Summarizes.

4. Summarize Item Balance Quantity Records

Specify whether the system summarizes all the quantities in the item location records into one line. Values are:

Blank: Does not summarize.

1: Summarizes.

5. Display Data In Window Mode

Specify whether the system displays the Supply & Demand Inquiry program (P4021) in the window format if called from another program. Values are:

Blank: Displays the program in the full form format.

1: Displays the program in the window format.

6. Summarize Pegging And Parts List Demand

Specify whether the system summarized the pegging and the parts list demand. Values are:

Blank: Do not summarize.

1: Summarize

13.5.4.3 Versions

These processing options control the versions that the system uses when you call these programs:

1. Purchase Order Entry (P4310)

Specify the version of the Purchase Order Entry program (P4311) that the system uses when call from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Purchase Order Entry program.

Versions control how the Purchase Order Entry program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

2. Purchase Order Inquiry (P4310)

Specify the version of the Purchase Order Inquiry program (P430301) that the system uses when call from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Purchase Order Inquiry program.

Versions control how the Purchase Order Inquiry program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

3. Sales Order Entry (P4210)

Specify the version of the Sales Order Entry program (P4211) that the system uses when call from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Sales Order Entry program.

Versions control how the Sales Order Entry program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

4. Sales Order Inquiry (P4210)

Specify the version of the Sales Order Inquiry program (P42045) that the system uses when call from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Sales Order Inquiry program.

Versions control how the Sales Order Inquiry program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

5. Scheduling Work Bench (P31225)

Specify the version of the Scheduling Workbench program (P31225) that the system uses when call from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Scheduling Workbench program.

Versions control how the Scheduling Workbench program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

6. MPS/MRP/DRP Pegging Inquiry (P3412)

Specify the version of the MPS/MRP/DRP Pegging Inquiry program (P3412) that the system uses when call from row and form exits from the Work With Supply and Demand form. If you leave this field blank, the system uses the ZJDE0001 version of the Pegging Inquiry program.

Versions control how the Pegging Inquiry program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

7. MPS/MRP/DRP Time Series (P3413)

Specify the version of the MPS Time Series program (P3413) that the system uses when call from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the MPS Time Series program.

Versions control how the MPS Time Series program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

8. MPS/MRP/DRP Msg Detail (P3411)

Specify the version of the MPS/MRP Detail Message Revisions program (P3411) that the system uses when call from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the MPS/MRP Detail Message Revisions program.

Versions control how the MPS/MRP Detail Message Revisions program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

9. Bill of Material Inquiry (P30200)

Specify the version of the Bill of Material Inquiry program (P30200) program that the system uses when called from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Bill of Material Inquiry program.

Versions control how the Bill of Material Inquiry program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

10. Item Branch (P41026)

Specify the version of the Item Branch program (P41026) that the system uses when you access the program from row and form exits on the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Item Branch program. Versions control how the Item Branch program displays information.

11. Mfg WO Processing (P48013)

Specify the version of the Manufacturing Work Order Processing program (P48013) program that the system uses when called from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Manufacturing Work Order Processing program.

Versions control how the Manufacturing Work Order Processing program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

12. Enter/Change Rate Schedule (P3109)

Specify the version of the Enter/Change Rate Schedule program (P3109) program that the system uses when called from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Enter/Change Rate Schedule program.

Versions control how the Enter/Change Rate Schedule program displays information. Therefore, you might need to set the processing options to specific versions to meet the business need.

13. Item Availability (P41202)

Specify the version of the Item Availability program (P41202) that the system uses when called from row and form exits from the Work With Supply and Demand form. If you leave this processing option blank, the system uses the ZJDE0001 version of the Item Availability program.

Versions control how the Item Availability program displays information.

Therefore, you might need to set the processing options to specific versions to meet the business need.

13.6 Working with Bills of Material

This section provides an overview of bills of material and discusses how to:

- Compare two parts lists.
- Compare a bill of material to a parts list.

13.6.1 Understanding Bills of Materials

After you process work orders or rate schedules, you can compare bills of material or parts lists either online by using different versions of the Bill of Material Comparison program (P30204), or by reviewing reports that provide different views of the components that are listed on the bill of material (BOM). Use the comparisons to determine the differences that exist between the parts lists or bill of material for two different orders or items.

Use the Bill of Material Comparison program (P30204) to compare bills of material or parts lists. The system displays all the components of both items or only those components that are different between the two, depending on the processing option selections. You can change the display from the View menu on the Work With Comparisons form. You use the processing options to define whether the program enables you to compare bills of material or parts lists. You can access different versions of this program that are defined by these processing option settings.

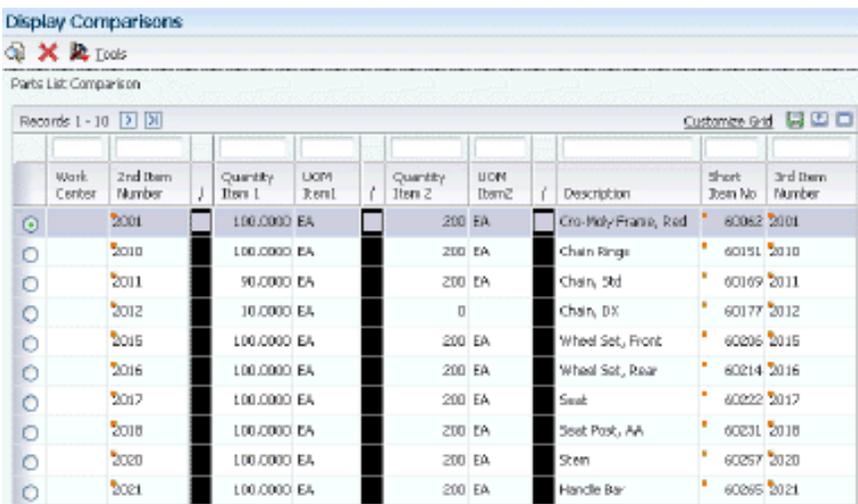
13.6.2 Forms Used to Work with Bills of Material

Form Name	Form ID	Navigation	Usage
Display Comparisons	W30204D	Daily Order Preparation - Discrete (G3111), Parts List Comparison Select the PL to PL tab on the Work With Comparisons form, and then complete the Order Number field for the first parts list. Complete the Work Center and Dispatch Group fields, if necessary, and then complete the Order Number field, and click Find.	Compare two parts lists.
Display Comparisons	W30204D	Daily Order Preparation - Discrete (G3111), Parts List BOM Comparison Select the PL to BOM tab on the Work With Comparisons form, and complete the Order Number field for the parts list.	Compare a bill of material to a parts list.

13.6.3 Comparing Two Parts Lists

Access the Display Comparisons form.

Figure 13–8 Display Comparisons form



13.6.4 Comparing a Bill of Material to a Parts List

Access the Display Comparisons form.

Figure 13–9 Display Comparisons form

Display Comparisons

Tools

Parts to BOM Comparison

Records 1 - 10 Customize Grid

	Work Center	Std Item Number	Quantity Item 1	UOM Item1	Quantity Item 2	UOM Item2	Short Item No	Std Item Number
<input checked="" type="radio"/>		2001	100.0000	EA	0		60052	2001
<input type="radio"/>		2021	100.0000	EA	0		60055	2021
<input type="radio"/>	200-20	2001	.0000		100	EA	60052	2001
<input type="radio"/>	200-20	2021	.0000		100	EA	60055	2021
<input type="radio"/>	200-90	2006	100.0000	EA	100	EA	60118	2006
<input type="radio"/>	200-90	2007	100.0000	EA	100	EA	60126	2007
<input type="radio"/>	200-90	2008	100.0000	EA	100	EA	60134	2008
<input type="radio"/>	200-90	2013	100.0000	EA	100	EA	60185	2013
<input type="radio"/>	200-90	2014	100.0000	EA	100	EA	60193	2014
<input type="radio"/>	200-91	2009	200.0000	EA	200	EA	60142	2009

See Also:

- "Setting Up Bills of Material" in the *JD Edwards EnterpriseOne Applications Product Data Management Implementation Guide*.
- *JD Edwards EnterpriseOne Applications Interoperability Fundamentals Implementation Guide*.

A

JD Edwards EnterpriseOne Shop Floor Management Reports

This appendix contains the following topics:

- [Section A.1, "JD Edwards EnterpriseOne Shop Floor Management Reports: A to Z"](#)
- [Section A.2, "JD Edwards EnterpriseOne Selected Shop Floor Management Reports"](#)

This appendix provides an overview of shop floor reports and enables you to:

- View a summary table of all reports.
- View details for selected reports.

A.1 JD Edwards EnterpriseOne Shop Floor Management Reports: A to Z

This table lists the JD Edwards EnterpriseOne Shop Floor Management reports, sorted alphanumerically by report ID.

Report ID and Report Name	Description	Navigation
R3118P Shortage Revisions Print	Lists shortage details for each short item.	Periodic Functions - Discrete (G3121), All Shortages
R31400 Open Work Orders	Lists work orders in the system. The report displays the planner ID, item number, order quantity, completed quantity, and start and due dates.	Periodic Functions - Discrete (G3121), Work Order Summary
R31418 W. O. Component Shortage List	Lists the component parts required to complete a work order and indicates their current availability.	Periodic Functions - Discrete (G3121), Component Shortages
R31435 Scheduling Workbench by Work Center	Displays scheduling information for a work center. Use this program to plan and run the production in a work center. You can review and change this information in the Dispatch List program (P31220).	Periodic Functions - Discrete menu (G3121), Dispatch List
R4051 Supply and Demand	Displays the supply, demand, and available quantities for an item.	Periodic Functions - Discrete (G3121), Supply/Demand

Report ID and Report Name	Description	Navigation
RF31011P Lean Completions - Purge	Archive lean transactions records based on the master transaction ID.	Daily Orderless Reporting - Discrete (GF3112), Lean Completions - Purge

A.2 JD Edwards EnterpriseOne Selected Shop Floor Management Reports

This section provides detailed information, including processing options, for individual reports. The reports are listed alphanumerically by report ID.

A.2.1 Processing Options for Shortage Revisions Print (R3118P)

This processing option specifies whether you want one or two detail lines for each short item.

A.2.1.1 Print

Detail Lines

Specify the number of detail lines you want to appear. Values are:

- 1: Print one line of detail.
- 2: Print two lines of detail.

A.2.2 R31418 - W. O. Component Shortage List

The W. O. Component Shortage List report (R31418) includes this information:

- Quantities available
- Quantities on order
- Quantities required
- Quantities short

Note: If you use JD Edwards EnterpriseOne Warehouse Management, the Component Shortages report does not include parts that have a status of In Warehouse.

A.2.3 Processing Options for Component Shortages (R31418)

Use the processing option to specify whether the system prints only parts with shortages. A part with a shortage is included on more than one order only when the sum of the on-hand quantity and the on-order quantity, minus the required quantity, is negative. You can also generate this report as part of the shop paperwork when you run the Order Processing program (R31410).

A.2.3.1 Edits

Enter Allowed Lot Status Group to validate

Specify a Lot Group name. A Lot Group is the name of a user-defined list of allowed non-blank lot status codes. Entry of a Lot Group name in the Processing Option will allow this Application to process lots whose lot status code is defined within the specified Lot Group Name.

A.2.3.2 Print**Print All Parts or Just Shortages**

Specify whether the report contains all parts, or just parts with a shortage. Values are:

Blank: Print all parts (whether or not there are shortages)

1: Print only parts with a shortage (print shortages only)

A.2.4 R4051 - Supply and Demand

The Supply and Demand report (R4051) can include quantities of materials in these categories:

- On-hand inventory
- Safety stock
- Sales orders
- Purchase orders
- Work orders
- MPS/MRP planned orders
- Forecasts
- Rate schedules

A.2.5 Processing Options for Supply and Demand (R4051)

You can set the processing options to customize the report in various ways; for example, you can decide which quantities to include and what date range to consider for the report.

A.2.5.1 Process**1. Deduct Safety Stock From Available Quantity**

Specify whether the system displays the safety stock line and decreases the safety stock from the available quantity. Values are:

Blank: Do Not Deduct

1: Deduct Safety Stock

2. Receipt Routing Quantities Considered On Hand

Specify whether you want quantities in routing steps to be considered as on hand. Values are:

Blank: Do Not Consider

1: Consider As On Hand

Routing quantities fields that appear on the processing option form:

Quantity in Transit

Quantity in Inspection

User Defined Quantity 1

User Defined Quantity 2

3. Supply/Demand Inclusion Rules

Specify the supply and demand inclusion rules version for the system to use. These rules define the order type, line type and line status. Enter a value from UDC 40/RV (Inclusion Version) that identifies the version to use for processing. Enter an inclusion rule to use as the default value or select it from the Select User Define Code form.

4. Subtract Expired Lot Quantities

Specify whether the system deducts the expired lot quantities from the available quantity. Values are:

Blank: Do Not Subtract

1: Subtract Expired Lots

This processing option does not work with available to promise lines. If you select value 1 in this processing option, you must set the Available to Promise Line Flag processing option, under the Display tab, to either blank or 2.

5. Enable Engineering Project Management (EPM)

Specify whether the system enables Engineer-to-Order (ETO) functionality. Values are:

Blank: Do not enable.

1: Enable.

6. Include Past Due Supply In Quantity Available

Specify if past due quantities are included while calculating available quantity. Values are:

Blank: Do not include.

1: Include.

7. Rate Based Schedule Type (Future)

Specify a value from user-defined code (UDC) table 31/ST (Schedule Type) that identifies the type of schedule, for example, AC for actual schedule and PL for planned schedule. If you leave this processing option blank, the system does not display any rate based items.

8. Include MPS/MRP/DRP Planned Orders

Specify whether the system displays planned orders from MPS/MRP/DRP generations. Values are:

Blank: Do Not Include

1: Include Planned Orders

9. Forecast Types (5 Types Maximum)

Specify which forecast types, up to five, that the system includes in the inquiry. If you leave this field blank, the system does not include any forecast records. Enter multiple forecasts: to enter 01, 02, and BF, type 0102BF.

10. Days From Today To Include Forecast

Enter the number of days (+ or -) from the system date that you want the system to include forecast records. If you leave this field blank, the system uses the system date.

11. Exclude Bulk Items

Specify whether the system displays bulk stocking type records. Values are:

Blank: Do Not Exclude

1: Exclude Bulk Items

12. Lot Hold Codes (up to 5)

Enter the lots to be included in the calculation of on-hand inventory. You can enter a maximum of 5 lot hold codes from UDC 41/L (Lot Status Codes). Values are:

Blank: Include no held lots in calculation of on-hand inventory.

*: Include all held lots in calculation of on-hand inventory.

A.2.5.2 Display**1. Display Unit Of Measure**

Enter a value from UDC 00/UM (Unit of Measure) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box). If you leave the field blank, the system uses the primary unit of measure.

2. Convert Quantities To Standard Potency

Specify whether the system converts quantities to the standard potency. Values are:

Blank: Do Not Convert

1: Convert To Standard Potency

3. Effective Thru Date

Enter a date that indicates one of these conditions:

- When a component part is no longer in effect on a bill of material.
- When a routing step is no longer in effect as a sequence on the routing for an item.
- When a rate schedule is no longer active.

The default date is December 31 of the default year defined in the Data Dictionary for Century Change Year. You can enter future effective dates so that the system plans for upcoming changes. Items that are no longer effective in the future can still be recorded and recognized in JD Edwards EnterpriseOne Product Costing, JD Edwards EnterpriseOne Shop Floor Management, and JD Edwards EnterpriseOne Capacity Requirements Planning. The JD Edwards EnterpriseOne Material Requirements Planning system determines valid components by effectivity dates, not by the bill of material revision level. Some forms display data based on the effectivity dates you enter.

4. Display ATP Line

Specify whether the system displays an available to promise line, a cumulative available to promise line, or neither. Values are:

Blank: Do Not Display

1: Display ATP Line

2: Display CATP Line

If you select to display the available to promise line (value 1) in this processing option, you cannot use the Reduce Expired Lot Quantities processing option on the Process tab.

5. Summarize All In Receipt Routing Steps

Specify whether the system summarizes all in receipt routing steps. Values are:

Blank: Do Not Summarize

1: Summarize

6. Summarize Item Balance Quantity Records

Specify whether the system summarizes item balance quantity records. Values are:

Blank: Do Not Summarize

1: Summarize

A.2.6 RF31011P - Lean Transactions - Purge

The volume of records create by lean transactions can be significant. To forestall performance problems, use this program to purge lean transaction records from the primary tables and move them to corresponding archive tables.

Based on the master transaction ID, you can purge and archive both active and canceled transactions. A transaction is active if you have performed a completion against a daily plan from Demand Flow Manufacturing or a JD Edwards EnterpriseOne Shop Floor plan, or if you have performed an ad hoc completion. If you have reversed a completion, the transaction has a status of canceled.

If you select a master transaction ID for archiving, the system archives all related transaction records and deletes the transaction records from their respective tables. If you select to archive a subassembly transaction, you can archive all transactions related to the corresponding master transaction ID, or you can archive only the selected transaction.

Note: If the purge process does not clear existing data from the primary tables or fails to copy all selected data to the archive table, the system issues an error message.

The archiving process moves transaction records from these primary tables to the corresponding archive tables:

Primary Table	Archive Table
Transaction ID Master File (FF31011)	Purge - Transaction ID Master File (FF31011S)
Lean Transaction Parts List (FF31111)	Purge - Lean Transaction Parts List (FF31111S)
Routing Transaction Table (FF31112)	Purge - Routing Transaction Table (FF31112S)
Lean Transaction Labor Detail (FF31113)	Purge - Lean Transaction Labor Detail (FF31113S)

Glossary

Bill Type

Enter a value from user-defined code (UDC) table 40/TB (Bill Type) that designates the type of bill of material. You can define different types of bills of material for different uses. For example:

M for a standard manufacturing bill.

RWK for a rework bill.

SPR for a spare parts bill.

The system enters bill type M in the work order header when you create a work order, unless you specify another bill type. The system reads the bill type code on the work order header to know which bill of material to use to create the work order parts list. Material Requirements Planning (MRP) uses the bill type code to identify the bill of material to use when it attaches MRP messages. Batch bills of material must be type M for shop floor management, product costing, and MRP processing.

Branch/Plant

Enter an alphanumeric code that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant.

You can assign a business unit to a document, entity, or person for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business unit to track equipment by responsible department.

Business unit security might prevent you from viewing information about business units for which you have no authority.

Document Type

Enter a value from UDC 00/DT (Document Type - All Documents) that identifies the origin and purpose of the document. Enter the document type to use as the default value or select it from the Select User Define Codes form. For example, you can specify the default document type associated with the purchase order for a subcontract routing.

Due Date

Enter the date that an item is scheduled to arrive or that an action is scheduled for completion.

Employee Number

Enter a number that identifies an entry in the JD Edwards EnterpriseOne Address Book system, such as employee, applicant, participant, customer, supplier, tenant, or location.

Freeze Code

Enter a code that indicates if the line on the order is frozen. Master Production Scheduling (MPS) and MRP do not suggest changes to frozen orders. Values are:

Y: Yes, freeze the order.

N: No, do not freeze the order. This is the default value.

Item Number

Enter a number that the system assigns to an item. It can be in short, long, or third item number format.

Line/Cell

Enter a number that defines a production line or cell. Detailed work center operations can be defined inside the line or cell.

Line Type

Enter the default line type associated with the sales order for kit components. This processing option applies only to kit items. Enter the line type to use as the default value or select it from the Line Type Search form.

Order Number

Enter a number that identifies the original document. This can be an invoice number, work order number, sales order number, journal entry number, and so on.

If you use the employee number format for time entry, the system displays the Employee Number field instead of the Order Number field.

Quantity Completed

Enter the number of units committed for shipment in Sales Order Entry, using either the entered or the primary unit of measure defined for this item. In the JD Edwards EnterpriseOne Manufacturing and Work Order Time Entry systems, this field can indicate completed or scrapped quantities. The quantity type is determined by the type code entered.

Quantity Scrapped

Enter the number of units canceled in Sales Order or Work Order Processing, using either the entered or the primary unit of measure defined for this item. In manufacturing, this can also be the number of units scrapped to date.

Request Date

Enter the date that an item is scheduled to arrive or that an action is scheduled for completion.

Routing Type

Enter a value from UDC 40/TR (Routing Type) that indicates the type of routing. You can define different types of routing instructions for different uses. For example:

M: Standard Manufacturing Routing

RWK: Rework Routing

RSH: Rush Routing

You define the routing type on the work order header. The system then uses the specific type of routing that you define in the work order routing.

JD Edwards EnterpriseOne Product Costing and JD Edwards EnterpriseOne Capacity Planning systems use only the **M** type of routing.

Shift Code

Enter a value from UDC 00/SH (Shift Codes) that identifies daily work shifts.

In JD Edwards EnterpriseOne Payroll systems, you can use a shift code to add a percentage or amount to the hourly rate on a timecard.

For JD Edwards EnterpriseOne Payroll and Time Entry: If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time. If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default value.

Status

Enter a value from UDC 00/SS (Work Order Status) that indicates the status of a work order, rate schedule, or engineering change order.

Unit of Measure

Enter a value from UDC 00/UM (Unit of Measure) that identifies the unit of measurement for an amount or quantity. For example, it can represent a barrel, box, cubic meter, liter, hour, and so on.

Variance

Enter the variance amount, hours or quantity associated with an operation.

Index

A

Account Ledger table (F0911), 2-4
Account Master table (F0901), 2-4
accounting, 2-2
actual costing, 4-14
ad hoc items
 completing, 12-10, 12-16
 completing for items not planned, 12-7
Assembly Inclusion Rules table (F3293), 2-6
Assign Serial Numbers program (P3105), 5-61, 11-6
audit trail, 8-12
audit trails, 5-50, 8-13, 10-3, 11-6
availability
 reviewing, 7-1
 reviewing summary, 13-12
 verifying, 13-8

B

backflush
 description of issue method, 8-2
 item completion transactions, 12-8
Backorder Release program (P42117)
 usage, 11-7
backorders
 releasing during completions, 11-5
 releasing sales, 11-18, 11-26, 11-30
backschedule
 overview, 5-5
 work orders, 5-5
Batch Rate Close form, 13-6
Batch Rate Close program (R3191)
 closing rate schedules, 13-4
 processing options, 13-6
Bill of Material Comparison program (P30204)
 usage, 13-39
 work order and rate schedule information, 13-1
Bill of Material Master File table (F3002), 2-4
bills of material
 comparing to parts list, 13-40
 overview, 13-39
BOM and Routing Detail Generation - DFM Plan
 program (RF31013)
 preparing for item completions, 12-5, 12-6
 processing options, 12-6

BOM and Routing Detail Generation - Item/Branch
 program (RF31012)
 preparing for item completions, 12-5, 12-7
 processing options, 12-6
BOM and Routing Detail Generation program
 (RF31010A)
 preparing for item completions, 12-5, 12-6
 processing options, 12-6
BOM bills of material, 13-39
Branch/Plant Constants program (P41001), 7-2
business processes, 1-2
Business Unit Master table (F0006), 2-4
by-products, 5-58

C

calendarshop floor calendar, 4-6
Capacity Requirements Planning, 9-1
Co/By Product Revision form, 11-29
commitments
 defining branch and parent item, 6-5
 defining control and type, 6-3
 defining item routing, 6-5
 defining method, 6-3
 defining rules, 6-3
 grade-controlled, 6-9
 hard, 6-1
 inventory interfaces, 6-10
 managing for grade and potency, 6-8
 overview, 6-1
 potency-controlled, 6-9
 reposting quantities, 6-10
 soft, 6-1
completions
 Demand Flow daily plan, 12-9
 discrete work order, 11-4
 integration, 11-1, 11-2
 managing transactions, 12-16
 overview, 11-1
 process orders, 11-26
 process work orders through backflushing, 11-28
 process work orders without backflushing, 11-28
 rate schedules, 11-31
 releasing backorders, 11-5
 releasing sales backorders, 11-18
 releasing work orders, 11-30

Sales Order integration, 11-3
shop floor daily plan, 12-9
Completions Workbench form, 11-33
Completions Workbench program (P3119)
processing options, 11-32
usage, 11-31
component scrap, 8-12
Component Scrap program (P31116)
processing options, 8-13
usage, 8-12
Component Scrap Revisions form, 8-14
Component Shortages program (R31418)
processing options, A-2
usage, A-2
configured item integrations, 5-23
constantssee manufacturing constants, 4-9
conversions for potent units, 6-8
co-products, 5-58
Copy Screen form, 5-47
cost information, 13-8

D

Daily Plan - Complete Item form, 12-11, 12-15
Daily Plan - Search for Plan form, 12-3
Daily Plan table (FF34S002), 12-5, 12-9
Daily Planning program (PF31010B)
creating daily plans, 12-3
processing options, 12-3
daily plans
creating shop floor, 12-2
Demand Flow Manufacturing, 12-2
preprocessing, 12-4
preprocessing overview, 12-5
understanding, 12-2
Demand Flow daily plan
completing, 12-9, 12-15
setting up, 12-2
Demand Flow Management, 1-5
Demand Flow Plans program (PF31013)
completing items, 12-7, 12-9
processing options, 12-12, 12-14
Detail Availability form, 13-12
device history records, 5-50, 8-13, 10-3, 11-6
device quality records, 5-50, 8-13, 10-3, 11-6
DFMDemand Flow Management, 12-2
discrete manufacturing, 2-7
discrete work orders, 11-4
dispatch list calculations, 13-9
Dispatch List program (P31220)
processing options, 13-16
usage, 13-8
Display Comparisons form, 13-40
Distribution Requirements Planning, 1-3
Distribution/Manufacturing - AAI Values table
(F4095), 2-6
Document Type - All Documents UDC (00/DT), 4-4
DRPDistributionRequirements Planning, 1-3

E

electronic batch records, 5-50, 8-13, 10-3, 11-6
electronic quality records, 5-50, 8-13, 10-3, 11-6
employee labor rates
actual costing, 4-14
setting up, 4-14
Engineer to Order, 1-4, 5-23
Enter Bill of Material Information form, 6-7
Enter Generic Message/Rates form, 4-14
Enter Routing Information form, 6-6
Enter/Change Bill program (P3002), 6-7
Enter/Change Order program (P48013)
processing options, 5-7
usage, 5-6
Enter/Change Rate Schedule program (P3109)
processing options, 5-16
usage, 5-15
Enter/Change Routing program (P3003), 6-6
Enter/Change Work Centers program (P3006), 6-6

F

F0005 table, 4-2
F0006 table, 2-4
F00191 table, 2-4
F0901 table, 2-4
F0911 table, 2-4
F30006 table, 2-4, 12-8
F3002 table, 2-4
F300210 table, 2-4
F300211 table, 2-4
F30026 table, 2-4
F3003 table, 2-4
F300311 table, 2-4
F3007 table, 2-5
F3009 table, 2-5
F3016 table, 2-5
F30161 table, 2-5
F30L912 table, 2-5
F3102 table, 2-5
F3105 table, 2-5
F3108 table, 2-5
F3109 table, 2-5, 4-15
F31091 table, 2-5
F3111 table, 2-5
F3112 table, 2-5
F31122 table, 2-5
F3118 table, 2-5
F3293 table, 2-6
F3411 table, 2-6
F3460 table, 2-6
F4095 table, 2-6
F41001 table, 2-6
F4101 table, 2-6
F4102 table, 2-6, 12-5
F41021 table, 2-6, 3-4
F4104 table, 2-6
F4108 table, 2-6, 3-4
F4111 table, 2-6, 12-17
F4115 table, 2-6

F4600 table, 2-6
 F4602 table, 2-6
 F4611 table, 2-6
 F4801 table, 2-6
 F4802 table, 2-6
 features
 hours and quantities tracking, 2-1
 manufacturing accounting, 2-2
 material tracking, 2-2
 parts list, 2-4
 process instructions, 2-3
 production scheduling, 2-3
 production tracking, 2-3
 rate schedule creation, 2-3
 reporting, 2-2
 routing instructions, 2-3
 work order creation, 2-3
 FF31010 table, 2-5, 12-5
 FF31011 table, 2-5, 12-8, A-6
 FF31011S table, A-6
 FF31111 table, 12-8, A-6
 FF31111S table, A-6
 FF31112 table, 12-8, A-6
 FF31112S table, A-6
 FF31113 table, 12-8, A-6
 FF31113S table, A-6
 FF34S002 table, 12-5, 12-9
 fixed lead time, 5-4
 Forecast File table (F3460), 2-6

G

Generic Message/Rates table (F00191), 2-4
 generic text, 5-6
 grade and potency
 managing commitments, 6-8
 overview, 3-4
 setting up, 3-5

H

hard commitments, 6-1
 hours and quantities
 entering, 10-2
 integration with Payroll, 10-1
 integration with Quality Management, 10-2
 overview, 10-1
 reviewing transactions, 10-11
 tracking, 2-1
 updating, 10-8
 Hours and Quantities program (P311221)
 processing options, 10-4
 usage, 10-2
 Hours and Quantities Update program (R31422)
 processing options, 10-9
 usage, 10-8
 Hours and Quantity Proof program (R31322)
 report, 10-12
 usage, 10-11

I

implementation steps
 global, 1-5
 overview, 1-5
 shop floor, 1-6
 ingredients list consolidation, 5-25
 integrations
 Capacity Requirements Planning, 9-1
 configured items, 5-23
 Demand Flow Management, 1-5
 Distribution Requirements Planning, 1-3
 Engineer to Order, 1-4, 5-23
 Inventory Management, 1-4, 8-1, 11-1
 Kanban Management, 1-4
 Master Production Scheduling, 1-3
 Material Requirements Planning, 1-3
 Payroll, 1-4, 10-1
 Procurement, 1-4
 Product Data Management, 1-3, 5-3
 Quality Management, 1-4, 5-3, 5-23, 10-2, 11-31
 Requirements Planning, 5-7
 Sales Order Management, 1-4, 5-24, 11-3
 Supply Chain Management, 1-3
 Warehouse Management, 1-4, 5-24, 5-40, 5-57,
 8-2, 8-3, 11-2
 intermediate items, 5-59
 Intermediate Product Revisions form, 5-60
 Intermediate Product Revisions program
 (P31111), 5-59
 intermediates
 attaching to work orders, 5-59
 quantity at operation, 11-26
 inventory commitments/commitments, 6-1
 Inventory Completion Inbound Processor program
 (R31114Z1I), 5-1
 Inventory Constants table (F41001), 2-6
 Inventory Issue Revisions form, 8-9
 inventory issues
 assigning, 8-5
 associating components, 8-11
 automatic, 5-25
 backflushing, 8-2
 closing out materials, 8-11
 Inventory Management integration, 8-1
 location, 8-3
 manual, 8-2, 8-5
 overview, 8-1
 parent quantity, 8-11
 preflushing, 8-2, 8-4
 reversing a transaction, 8-11
 super backflushing, 8-3
 Warehouse Management integration, 8-2
 without recording completion, 8-3
 Inventory Issues program (P31113)
 processing options, 8-5
 usage, 8-5, 11-7
 Inventory Management, 1-4, 11-1
 issues
 materials automatically, 5-25
 transaction overview, 8-1

- item availability
 - defining calculations, 7-1
 - reviewing, 7-1
- Item Availability Definition form, 7-2
- Item Branch File table (F4102), 2-6, 12-5
- item completions
 - ad hoc items, 12-7, 12-16
 - backflushing, 12-8
 - overview, 12-7
 - reversing, 12-16, 12-18
 - understanding ad hoc items, 12-10
- Item Completions - Complete Item form, 12-11, 12-16
- Item Completions program (PF31011)
 - completing ad hoc items, 12-10
 - completing items, 12-9
 - completing items defined in daily plan, 12-1
 - Demand Flow daily plan items, 12-9
 - processing options, 12-11
 - usage, 12-7
- Item Cost Component Add-Ons table (F30026), 2-4
- Item Cross Reference File table (F4104), 2-6
- Item History table (F4115), 2-6
- item ledger, 13-8
- Item Ledger (The CARDEX) program (P4111), 13-8
- Item Ledger Detail form, 13-16
- Item Ledger File table (F4111), 2-6, 12-17
- Item Location File table (F41021), 2-6, 3-4
- Item Master table (F4101), 2-6
- item shortages, 7-1
- item transactions, 13-8
- Item/Branch Plant Info. form, 6-3

K

- Kanban Card Detail table (F30161), 2-5
- Kanban Management, 1-4
- Kanban Master table (F3016), 2-5
- kanbans, 8-1

L

- lead time
 - fixed, 5-4
 - variable, 5-4
- lean completions, 12-7
- Lean Completions - Purge program (RF31011P), A-2
- lean manufacturing
 - overview of transactions, 12-1
- Lean Multi Level Bill of Material Header table (F300210), 2-4
- Lean Multi Level Bill of Material table (F300211), 2-4
- Lean Multi Level Routing Detail File table (F300311), 2-4
- Lean Transaction Labor Detail table (FF31113), 12-8, A-6
- Lean Transactions Parts List table (FF31111), 12-8, A-6
- line and item relationships setup, 4-15
- Line Dispatch List program (P3159)

- processing options, 13-19
- usage, 13-9
- Line Master program (PF30L912), 12-8
- Line Master table (F30L912), 2-5
- Line Schedule Review program (P3152)
 - processing options, 13-20
 - usage, 13-9
- Line Scheduling Workbench program (P3153)
 - processing options, 9-9
 - usage, 9-9
- Line Sequencing Workbench program (P3156)
 - processing options, 9-13
 - usage, 9-12
- Line/Item Relationship Master table (F3109), 2-5, 4-15
- Line/Item Relationships Revisions form, 4-16
- Location Detail Information table (F4602), 2-6
- locations, defining at work center, 6-5
- lot control, defining items, 3-6
- Lot Master table (F4108), 2-6, 3-4
- lot processing
 - grade and potency, 3-4
 - overview, 3-1
- lots
 - creating, 3-3
 - status, 3-3

M

- manual issues, 8-2
- manufacturing accounting, 2-2
- manufacturing constants, 4-9
- Manufacturing Constants program (P3009), 6-4
- Manufacturing Constants Revision form, 4-10, 6-4
- Manufacturing Constants table (F3009), 2-5
- Master Production Scheduling, 1-3
- material issues/inventory issues, 8-1
- material movements, 8-1
- Material Requirements Planning, 1-3
- material tracking, 2-2
- MPS Master Production Scheduling, 1-3
- MPS/MRP/DRP Message File table (F3411), 2-6
- MRP Material Requirements Planning, 1-3
- Multi-Level Item Completions program (RF31011B)
 - processing options, 12-12
 - usage, 12-8

O

- Open Work Order report (R31400), A-1
- Operation Dispatch Detail Revisions form, 13-16
- operation dispatch inquiry, 13-8
- operation numbers, 11-22
- Operation Quantity Inquiry program (P31124)
 - processing options, 10-13
 - usage, 10-11
- Operation Status UDC (31/OS), 4-3
- Order Hours Status program (P31121), 10-11
- order processing, 5-24
- Order Processing program (R31410)

- processing options, 5-26
- usage, 5-24
- Order Quantities Status program (P31122), 10-11
- Order Type UDC (48/OT), 4-4
- outside operations, 5-49

P

- P0004A program, 4-2
- P00071 program
 - processing options, 4-7
 - usage, 4-6
- P3002 program, 6-7
- P3003 program, 6-6
- P3006 program, 6-6
- P3009 program, 6-4
- P30200 program
 - processing options, 7-4
 - usage, 7-3
- P30204 program
 - usage, 13-39
 - work order and rate schedule information, 13-1
- P30212 program
 - displaying parent items, 13-8
 - processing options, 13-11
- P3105 program, 5-61, 11-6
- P3107 program, 11-6, 11-24
- P3109 program
 - processing options, 5-16
 - usage, 5-15
- P3111 program
 - processing options, 5-41
 - usage, 5-39
- P31113 program
 - processing options, 8-5
 - usage, 8-5, 11-7
- P31114 program
 - daily plan demand, 12-10
 - processing options, 11-8
 - usage, 11-4
- P31116 program
 - processing options, 8-13
 - usage, 8-12
- P3111I program, 5-59
- P3111S program, 5-47
- P3112 program
 - processing options, 5-53
 - system processes, 5-5
- P31121 program, 10-11
- P31122 program, 10-11
- P311221 program
 - processing options, 10-4
 - usage, 10-2
- P31123 program
 - completing work orders, 11-5
 - process work orders, 11-30
 - processing options, 11-19
- P31124 program
 - processing options, 10-13
 - usage, 10-11
- P3118 program
 - processing options, 7-12
 - usage, 7-11
- P3119 program
 - processing options, 11-32
 - usage, 11-31
- P3121 program
 - processing options, 7-9
 - usage, 7-10, 13-8
- P31220 program
 - processing options, 13-16
 - usage, 13-8
- P31224 program
 - processing options, 13-21
 - usage, 13-10
- P31225 program
 - processing options, 9-5
 - usage, 9-4
- P31226 program
 - processing options, 13-5
 - reviewing rate schedule and work order statuses, 13-3
- P31227 program
 - processing options, 13-18
 - reviewing operation transactions, 13-3
 - usage, 13-9
- P31240 program, 13-10
- P3124W program, 9-11
- P3152 program
 - processing options, 13-20
 - usage, 13-9
- P3153 program
 - processing options, 9-9
 - usage, 9-9
- P3156 program
 - processing options, 9-13
 - usage, 9-12
- P3159 program
 - processing options, 13-19
 - usage, 13-9
- P4021 program
 - processing options, 13-30, 13-33
 - usage, 13-31
- P41001 program, 7-2
- P41003 program, 6-9
- P4111 program, 13-8
- P41202 program
 - processing options, 13-13
 - verifying availability, 13-8
- P42053 Program, 8-5
- P42117 program, 11-5
 - usage, 11-7
- P43090 program, 11-5
- P43091 program, 11-5
- P4312 program, 5-49
- P43250 program, 11-5
- P48013 program
 - processing options, 5-7
 - usage, 5-6
- part availability, 7-3

- Part Availability program (P30200)
 - processing options, 7-4
 - usage, 7-3
- Part Usability program (P30212)
 - displaying parent items, 13-8
 - processing options, 13-11
- Parts Availability - Multi Level Indented form, 7-9
- parts list
 - attaching, 5-35
 - attaching interactively, 5-39
 - attaching manually, 5-39
 - comparing, 13-40
 - comparing to bill of material, 13-40
 - overview, 2-4
 - phantom items, 5-37
 - regenerating, 5-24
 - requirements, 5-37
 - reviewing, 13-8
- Parts List Detail Inquiry form, 7-10
- Parts List Inquiry program (P3121)
 - processing options, 7-9
 - usage, 7-10, 13-8
- Payroll, 1-4, 10-1
- PF30L912 program, 12-8
- PF31010B program
 - creating daily plans, 12-3
 - processing options, 12-3
 - usage, 12-7
- PF31011 program
 - completing ad hoc items, 12-10
 - completing items, 12-9
 - completing items defined in daily plan, 12-1
 - Demand Flow daily plan items, 12-9
 - processing options, 12-11
 - usage, 12-7
- PF31012 program
 - completing items, 12-7, 12-9
 - processing options, 12-12, 12-14
- PF31013 program
 - completing items, 12-7, 12-9
 - processing options, 12-12, 12-14
- PF31014 program
 - processing options, 12-18
 - reviewing and reversing transactions, 12-17
- phantom items, 5-37
- Phase and Matter Codes UDC (00/W1), 4-3
- potent units conversion, 6-8
- preflush
 - description of issue method, 8-2
 - issuing materials, 8-4
- process instructions, 2-3
- process manufacturing, 2-7
- Process Order Inquiry program (P31240), 13-10
- Process Work Order Super Backflush Inbound Transactions program (R31123Z11), 5-1
- process work orders
 - completing, 11-25, 11-26
 - completing through backflushing, 11-28
 - completing without backflushing, 11-28
 - reviewing, 13-10
 - super backflush, 11-26, 11-30
- Procurement, 1-4
- product audit trails, 5-50, 8-13, 10-3, 11-6
- Product Data Management, 1-3
- product overview, 1-1
- product summary, 1-1
- production
 - scheduling, 2-3
 - tracking, 2-3
- Production Cost table (F3102), 2-5
- Production History program (P31227)
 - processing options, 13-18
 - reviewing operation transactions, 13-3
 - usage, 13-9
- production lines
 - reviewing multiple lines, 13-9
 - reviewing quantities, 13-9
 - scheduling item rates, 9-9
- Production Master table (FF31010), 2-5, 12-5
- production status, 13-3
- Production Status form, 13-5
- Production Status program (P31226)
 - processing options, 13-5
 - reviewing statuses, 13-3
- Purchase Order Receipts program (P4312), 5-49
- purge
 - saving work order records, 13-4
 - work orders, 13-3, 13-4
- Purge - Lean Transaction Labor Detail table (FF31113S), A-6
- Purge - Lean Transaction Parts List table (FF31111S), A-6
- Purge - Routing Transaction table (FF31112S), A-6
- Purge - Transaction ID Master table (FF31011S), A-6

Q

- Quality Management, 1-4, 5-23, 10-2
- quantities
 - reviewing planned and remaining, 13-9
 - tracking, 2-1
- quantities and hourshoursand quantities, 10-1
- Quantities Update program (R31422), 10-11

R

- R31114Z1I program, 5-1
- R31123Z1I program, 5-1
- R3118P report
 - description and navigation, A-1
 - processing options, A-2
- R31322 program
 - report, 10-12
 - usage, 10-11
- R31400 report, A-1
- R31410 program
 - processing options, 5-26
 - usage, 5-24
- R31418 program
 - description and navigation, A-1

- processing options, A-2
- usage, A-2
- R31422 program, 10-11
 - processing options, 10-9
 - usage, 10-8
- R31435 report, A-1
- R3190 program
 - processing options, 6-11
 - usage, 6-10
- R3191 program
 - closing rate schedules, 13-4
 - processing options, 13-6
- R4051 report
 - description and navigation, A-1
 - processing options, A-3
 - usage, A-3
- R4801P program
 - processing options, 13-7
 - usage, 13-4
- Rate Schedule Revisions form, 5-20
- rate schedules
 - classification scheme, 9-12
 - closing, 13-4
 - completing, 11-31
 - creating, 2-3, 5-2
 - deactivating, 13-2
 - entering, 5-15
 - overview, 5-1
 - processing, 5-22
 - production line items, 9-9
 - Quality Management integration, 11-31
 - reviewing production across lines, 13-9
 - reviewing production status, 13-3
 - scheduling, 9-1
 - sequencing, 9-12
- Receipt Routing Definition program (P43091), 11-5
- receipts routing
 - completing, 11-18
 - managing completions, 11-5
- record reservation, 5-1
- Release Backorders - Online program (P42117), 11-5
- repetitive manufacturing, 2-7, 2-8
- reporting, 2-2
- Repost Open Work Orders program (R3190)
 - processing options, 6-11
 - usage, 6-10
- repost work order commitments, 6-10
- resource percent, 11-26
- resource units
 - generating, 4-5
 - refreshing, 4-6
 - setting up, 4-5
- Review or Reverse Transaction form, 12-17, 12-18
- RF31010A program
 - preparing for item completions, 12-5, 12-6
 - processing options, 12-6
- RF31011B program
 - processing options, 12-12
 - usage, 12-8
- RF31011P program, A-2

- RF31012 program
 - preparing for item completions, 12-5, 12-7
 - processing options, 12-6
- RF31013 program
 - preparing for item completions, 12-5, 12-6
 - processing options, 12-6
- routing instructions, 2-3
 - attaching manually, 5-50
 - attaching to work orders, 5-49
 - changing status, 5-50, 5-57
 - changing status of operation, 5-57
 - creating purchase orders, 5-57
 - deleting outside operations, 5-57
 - locating, 5-50
 - outside operations, 5-49
 - regenerating, 5-25
- Routing Master File table (F3003), 2-4
- Routing Transaction table (FF31112), 12-8, A-6

S

- sales backorders
 - releasing, 11-26
 - releasing during completions, 11-5, 11-30
- Sales Order Management, 1-4, 5-24, 11-3
- schedule
 - rates, 9-1
 - work orders, 9-1
- Schedule Quantity Detail table (F31091), 2-5
- Scheduling Workbench by Work Center report (R31435), A-1
- scrapped quantity, 8-12
- Search for Demand Flow Plan form, 12-11
- Search for Shop Floor Plan form, 12-11, 12-13
- Select Multiple Locations form, 5-47, 8-11
- Select Multiple Locations program (P42053), 8-5
- serial control items, 3-6
- serial numbers
 - assigning, 5-60
 - completing work orders, 11-6
 - deleting, 5-60
- Serial Numbers Associations program (P3107), 11-6, 11-24
- serialized components, 11-24
- shop floor calendar, 4-6
- Shop Floor Calendar program (P00071)
 - processing options, 4-7
 - usage, 4-6
- Shop Floor Daily Planning program (PF31010B)
 - usage, 12-7
- shop floor daily plans
 - completing, 12-9
 - creating, 12-2
- shop floor management
 - features, 2-1
 - system setup, 4-1
 - system tables, 2-4
- Shop Floor Plans program (PF31012)
 - completing items, 12-7, 12-9
 - processing options, 12-12, 12-14

- Shop Floor Workbench program (P31225)
 - processing options, 9-5
 - usage, 9-4
- shop paperwork
 - generating, 5-5
 - overview, 5-5
- Shortage Maintenance Master File table (F3118), 2-5
- Shortage Revisions Print report (R3118P)
 - description and navigation, A-1
 - processing options, A-2
- Shortage Revisions program (P3118)
 - processing options, 7-12
 - usage, 7-11
- shortages
 - changing information, 7-11
 - locating, 7-11
 - managing material, 7-11
- soft commitments, 6-1
- Split Lines Window program (P3124W), 9-11
- Standard Units of Measure (P41003), 6-9
- Standard Units of Measure Revisions form, 6-9
- start date calculation, 5-4
- Status Inquiry program (P43250), 11-5
- statuses and transactions, 10-10
- substitute items
 - choosing, 5-47
 - usage, 5-39
- Summarized WO Cross-Reference table (F3108), 2-5
- Summary Availability program (P41202)
 - processing options, 13-13
 - verifying availability, 13-8
- super backflush
 - completing work orders, 11-5
 - description of issue method, 8-3
 - operation numbers, 11-22
 - process orders, 11-26
 - process work orders, 11-30
- Super Backflush form, 11-22
- Super Backflush program (P31123)
 - completing work orders, 11-5
 - process work orders, 11-30
 - processing options, 11-19
- supplementary data, 5-3
- Supplier/Item Relationships form, 11-18
- Supplier/Item Relationships program (P43090), 11-5
- supply and demand
 - overview, 13-31
 - quantities, 13-32
- Supply and Demand report (R4051)
 - description and navigation, A-1
 - processing options, A-3
 - usage, A-3
- Supply Chain Management, 1-3
- Supply/Demand Inquiry program (P4021)
 - processing options, 13-30, 13-33
 - usage, 13-31
- system setup
 - employee labor rates, 4-14
 - line and item relationships, 4-15
 - manufacturing constants, 4-9

- resource units, 4-5
- shop floor calendar, 4-6
- work centers, 4-5

T

- Time Entry Revisions form, 10-6
- Transaction Details form, 12-17, 12-19
- transaction ID, 12-17
- Transaction ID Master table (FF31011), 2-5, 12-8, A-6
- Transaction Management program (PF31014)
 - processing options, 12-18
 - reviewing and reversing transactions, 12-17
- types of manufacturing, 2-7

U

- UDCuser-defined codes, 4-2
- UMunitsof measure, 6-8
- Unit of Measure UDC (00/UM), 4-4
- units of measure
 - potent units conversion, 6-8
 - types of, 2-7
- User Defined Codes program (P0004A), 4-2
- User Defined Codes table (F0005), 4-2
- user-defined codes
 - Document Type - All Documents (00/DT), 4-4
 - Operation Status (31/OS), 4-3
 - Order Type (48/OT), 4-4
 - Phase and Matter Codes (00/W1), 4-3
 - Unit of Measure (00/UM), 4-4
 - Work Order Category Codes (00/W2 and 00/W3), 4-3
 - Work Order Priority Code (00/PR), 4-2
 - Work Order Status Code (00/SS), 4-3
 - Work Order/ECO Type (00/TY), 4-2
 - work orders, 4-2

V

- variable lead time, 5-4

W

- W. O. Component Shortage List program (R31418)
 - description and navigation, A-1
- Warehouse Management, 1-4, 5-24, 5-40, 5-57, 8-3, 11-2
- Warehouse Requests table (F4600), 2-6
- Warehouse Suggestions table (F4611), 2-6
- Work Center Master File table (F30006), 2-4
- Work Center Master Revisions form, 6-6
- Work Center Master table (F30006), 12-8
- Work Center Resource Units table (F3007), 2-5
- Work Center Schedule Review program (P31224)
 - processing options, 13-21
 - usage, 13-10
- work centers
 - defining item routing, 6-5
 - reviewing loads, 13-10
 - setting up, 4-5

- Warehouse Management integration, 4-5
- Work Order Category Codes UDC (00/W2 and 00/W3), 4-3
- Work Order Completion Detail form, 11-16
- Work Order Completions program (P31114)
 - daily plan demand, 12-10
 - processing options, 11-8
 - usage, 11-4
- Work Order Details form, 5-12, 13-6
- Work Order Instructions File table (F4802), 2-6
- Work Order LSN table (F3105), 2-5
- Work Order Master File table (F4801), 2-6
- Work Order Parts List form, 5-44, 6-10
- Work Order Parts List program (P3111)
 - processing options, 5-41
 - usage, 5-39
- Work Order Parts List table (F3111), 2-5
- Work Order Priority Code UDC (00/PR), 4-2
- Work Order Process Resource Revisions form, 5-58
- Work Order Purge program (R4801P)
 - processing options, 13-7
 - usage, 13-4
- work order resource percent, 5-58
- Work Order Routing form, 5-55
- Work Order Routing program (P3112)
 - processing options, 5-53
 - system processes, 5-5
- Work Order Routing table (F3112), 2-5
- Work Order Status Code UDC (00/SS), 4-3
- Work Order Status Update form, 9-7
- Work Order Time Transactions table (F31122), 2-5
- Work Order/ECO Type UDC (00/TY), 4-2
- work orders
 - assigning, 8-5
 - assigning serial numbers, 5-60
 - associating components, 8-11
 - attaching co-products and by-products, 5-58
 - attaching intermediate items, 5-59
 - attaching parts list, 5-35
 - attaching parts list interactively, 5-39
 - attaching parts list manually, 5-39
 - attaching routing instructions, 5-49
 - backcheduling, 5-5
 - calculating start date, 5-4
 - choosing substitute items, 5-47
 - closing, 13-2, 13-4
 - commitment method, 6-3
 - committing, 6-1
 - completing process, 11-25
 - completing serialized components, 11-24
 - completing with serialized components, 11-6
 - completing with super backflush, 11-5
 - consolidating ingredients list, 5-25
 - creating, 2-3, 5-2
 - deactivating, 13-2
 - defining commitment control and type, 6-3
 - deleting, 13-3
 - discrete completions, 11-4
 - entering headers, 5-6
 - entering purchase orders for outside
 - operations, 5-57
 - expiration date method, 6-3
 - generating parts list, 6-2
 - generating routing instructions, 6-2
 - issuing material automatically, 5-25
 - locating routing instructions, 5-50
 - overview, 5-1
 - processing, 5-22, 5-24
 - processing commitments, 6-2
 - Product Data Management integration, 5-3
 - purging, 13-3, 13-4, 13-7
 - Quality Management integration, 5-3
 - quantities, 13-32
 - quantity at operation, 11-26
 - regenerating parts list, 5-24
 - regenerating routing instructions, 5-25
 - reporting quantities, 13-3
 - Requirements Planning integration, 5-7
 - reviewing status, 13-3
 - revising status, 13-2
 - saving purged records, 13-4
 - scheduling, 9-1
 - setting resource percent, 5-58
 - shop paperwork, 5-5
 - text files, 5-6
- Work With Supply and Demand form, 13-32
- Work With Workday Calendar form, 4-7
- Workday Calendar Revisions form, 4-8

