
Oracle Process Manufacturing Production Management Release 11*i*

Student Guide

14539GC10
Production 1.0
July 2000
M012246

ORACLE®

Authors

Laurel Dale

Leanne Vakoc

**Technical Contributors
and Reviewers**

Phil Hubis

Glenn Ruhl

Publisher

John B Dawson

Copyright © Oracle Corporation, 2000. All rights reserved.

This documentation contains proprietary information of Oracle Corporation. It is provided under a license agreement containing restrictions on use and disclosure and is also protected by copyright law. Reverse engineering of the software is prohibited. If this documentation is delivered to a U.S. Government Agency of the Department of Defense, then it is delivered with Restricted Rights and the following legend is applicable:

Restricted Rights Legend

Use, duplication or disclosure by the Government is subject to restrictions for commercial computer software and shall be deemed to be Restricted Rights software under Federal law, as set forth in subparagraph (c)(1)(ii) of DFARS 252.227-7013, Rights in Technical Data and Computer Software (October 1988).

This material or any portion of it may not be copied in any form or by any means without the express prior written permission of Oracle Corporation. Any other copying is a violation of copyright law and may result in civil and/or criminal penalties.

If this documentation is delivered to a U.S. Government Agency not within the Department of Defense, then it is delivered with "Restricted Rights," as defined in FAR 52.227-14, Rights in Data-General, including Alternate III (June 1987).

The information in this document is subject to change without notice. If you find any problems in the documentation, please report them in writing to Education Products, Oracle Corporation, 500 Oracle Parkway, Box SB-6, Redwood Shores, CA 94065. Oracle Corporation does not warrant that this document is error-free.

Oracle is a registered trademark and all references to Oracle and Oracle products are trademarks or registered trademarks of Oracle Corporation.

All other products or company names are used for identification purposes only, and may be trademarks of their respective owners.

Contents

1 Oracle Process Manufacturing Production Management Release 11i

- Objectives 1-2
- Agenda 1-3
- Setup Steps in Other Modules 1-4
- Batches 1-5
- Firm Planned Orders (FPO) 1-6
- Production Batch Processing Steps 1-7
- Pending Batch Status 1-8
- Work in Process Batch Status 1-9
- Certified and Closed Batch Statuses 1-10
- Partial Certification 1-11
- Phantom Batches 1-12
- Production Management Reports 1-13
- Process Operations Control 1-14

2 Setting Up Production Management

- Objectives 2-2
- Overview 2-3
- System Module Setup Steps 2-4
- Inventory Module Setup Steps 2-5
- Allocation Parameters 2-6
- Formula Module Setups 2-7
- MPS Module Setups 2-8
- Plant/Warehouse Relationships 2-9
- Practice 2-1 2-10
- Practice 2-1 Solution 2-11
- Summary 2-12

3 Production Batch Processing

- Objectives 3-2
- Overview 3-3
- Directly Entering a Batch 3-4
- Entering Batch Header and Product Information 3-5
- Entering Batch Ingredients 3-6
- Entering Batch Byproducts 3-7
- Viewing Effectivities 3-8
- Demonstration 3-9
- Releasing a Batch 3-10
- Selecting the Release Type 3-11
- Demonstration 3-12
- Certifying and Closing a Batch 3-13
- Demonstration 3-14

Practice 3-1 3-15
Practice 3-1 Solution 3-16
Allocating Ingredients 3-22
Allocation Timing 3-23
Allocating Ingredients 3-24
Automatic Versus Manual Allocation 3-25
Allocating Products 3-26
Demonstration 3-28
Practice 3-2 3-29
Practice 3-2 Solution 3-31
Demonstration 3-42
Practice 3-3 3-43
Practice 3-3 Solution 3-44
Explaining Allocation Types Versus Release Types 3-49
Editing Batch Input and Output 3-50
Using Batch Input and Output 3-51
Demonstration 3-52
Making a Lot Genealogy Inquiry 3-53
Additional Lot Genealogy Information 3-54
Identifying Circular References 3-55
Using the Where Used Hierarchy 3-56
Using the Lot Source Hierarchy 3-57
Making a Lot Genealogy Inquiry 3-58
Firm Planned Orders 3-59
Creating a Firm Planned Order 3-60
Converting an FPO to a Batch 3-61
Demonstration 3-63
Scaling a Batch 3-64
Demonstration 3-66
True or False Question 3-67
Creating a Phantom Batch 3-71
Demonstration 3-73
Summary 3-74

4 Managing Production

Objectives 4-2
Partial Certification 4-3
Setting the Release Type 4-4
Partially Certifying a Batch 4-5
Demonstration 4-6

Using the Other Action Menu Options 4-7
Accessing the Other Action Menu Options 4-8
Practice 4-1 4-9
Practice 4-1 Solution 4-10
Summary 4-16

5 Using Production Management Reports

Objectives 5-2
Submitting New Requests 5-3
Running OPM Process Execution Reports 5-4
Viewing Reports 5-5
Demonstration 5-6
Summary 5-7

6 Setting Up and Using Process Operations Control

Objectives 6-2
Overview 6-3
Process Operations Control 6-4
Defining Prerequisites for POC 6-5
Setting Up POC 6-6
Defining Routing Step Dependencies 6-7
Associating Routing Steps to Formula Items 6-8
Demonstration 6-9
Entering POC Data 6-10
Viewing and Entering Batch Steps 6-11
Entering Batch Step Details 6-12
Assigning a Batch Step to an Item in a Batch 6-13
Defining Batch Step Dependencies 6-14
Rescheduling Batch Steps 6-15
Entering Batch Resource Transaction Information 6-16
Entering WIP Transaction Information 6-17
Demonstration 6-18
Inquiring on POC Data 6-19
Inquiring on WIP Status 6-20
Viewing Material Variance Data 6-21
Viewing Batch Step Variance Data 6-22
Viewing Resource Variance Details 6-23
Summary 6-24

7 Course Summary

Setting Up Production Management 7-2

Processing Production Batches 7-3

Managing Production 7-4

Using Production Management Reports 7-5

Process Operations Control 7-6

1

Oracle Process Manufacturing Production Management Release 11*i*

Course Introduction

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE®

Objectives

After completing this course, you should be able to do the following:

- **Set up Production Management**
- **Process production batches**
- **Manage production**
- **Use Production Management reports**
- **Use process operations control**

Navigation

N = Navigator

T = Tab

M = Menu

I = Icon

H = Hyperlink

B = Button

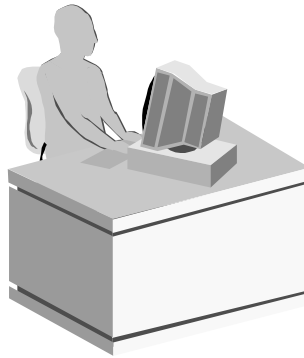
Help = Oracle Applications Help system

Agenda

- **Identify setup steps necessary for Production Management**
- **Demonstrate production batch processing steps**
- **Explain how to partially certify a product and ingredients**
- **Review the production reports available**
- **Create process operations control steps and inquire on Process Operations Control (POC) data**

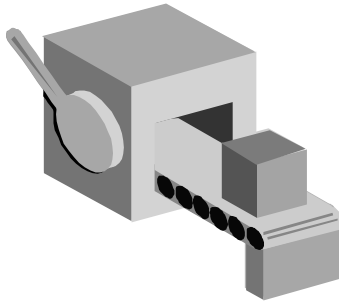
Setup Steps in Other Modules

- **Basics and system setup**
- **Inventory control**
- **Formula management**
- **Master Production Scheduling (MPS)**



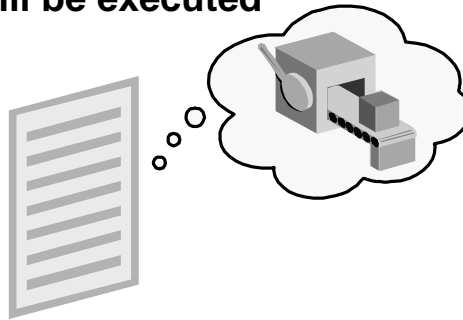
Batches

- **Entered when a planner is confident that the batch will be executed**
- **Establish commitments against on-hand inventory**



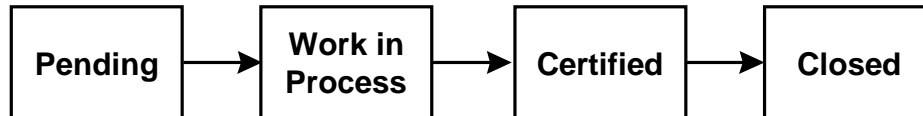
Firm Planned Orders (FPO)

- Represent a plan to manufacture a product
- Represent a supply input of an item
- Do not establish commitments against current on-hand inventory
- Convert to batches when the planner is confident that the batch will be executed

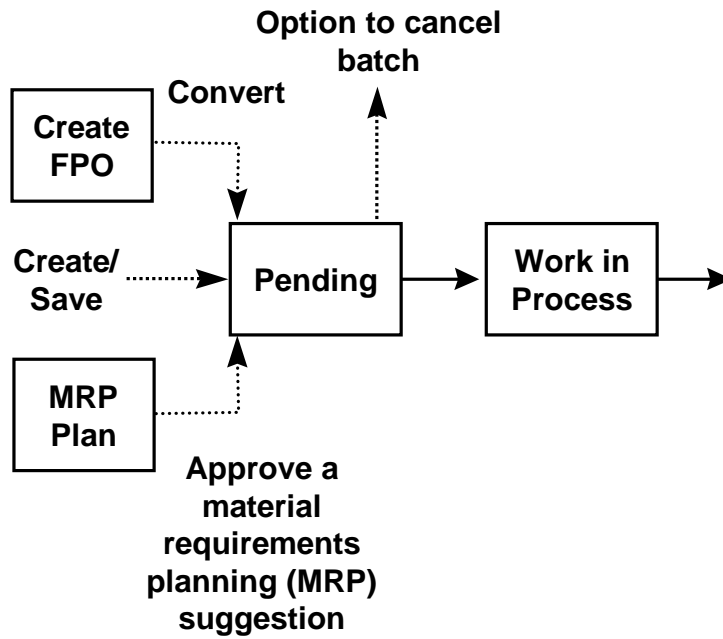


Production Batch Processing Steps

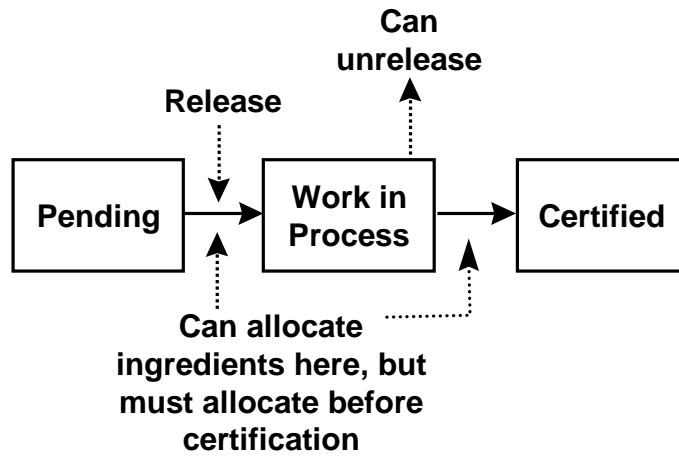
Life cycle of a batch:



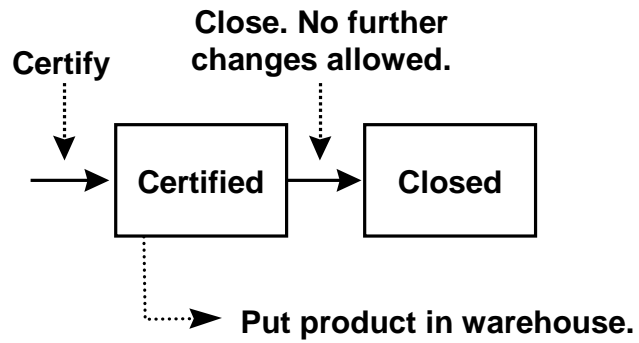
Pending Batch Status



Work in Process Batch Status

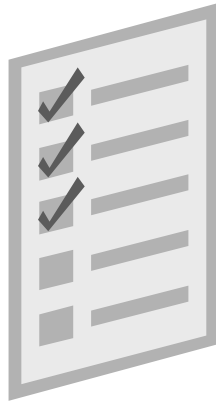


Certified and Closed Batch Statuses



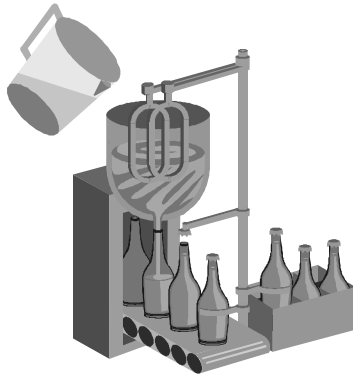
Partial Certification

Certify part of a batch when the batch is long, or when you are continuously processing.



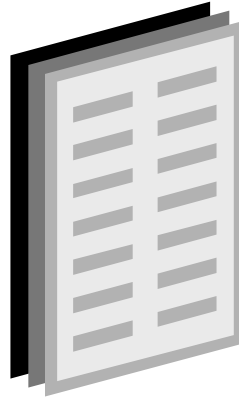
Phantom Batches

A phantom is an intermediate item that usually does not exist by itself and is not generally inventoried.

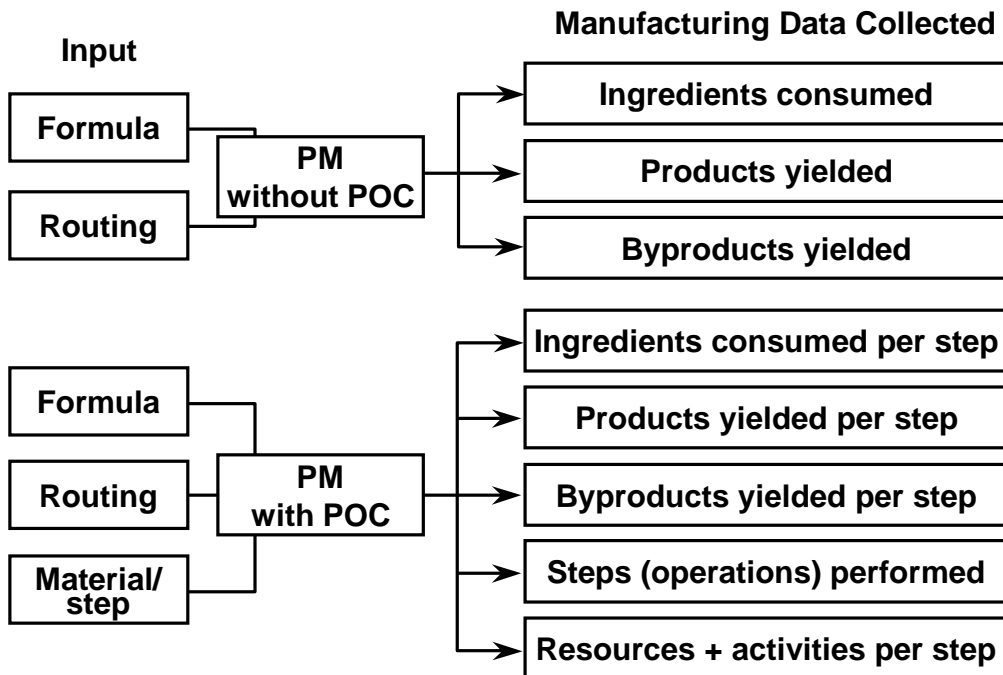


Production Management Reports

- **Batch Pick List**
- **Batch Ticket**
- **Batch Yield Variance**
- **Material Usage and Substitution Variance**
- **Production Activity**



Process Operations Control



2

Setting Up Production Management

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE®

Objectives

After completing this lesson, you should be able to do the following:

- **Identify System module setup steps**
- **Identify Inventory module setup steps**
- **Identify Formula module setup steps**
- **Perform Master Production Schedule setup steps**

Navigation

N = Navigator

T = Tab

M = Menu

I = Icon

H = Hyperlink

B = Button

Help = Oracle Applications Help system

Overview

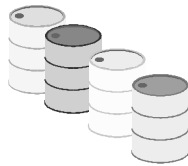
All setup steps for Production Management are defined in other OPM modules.



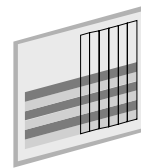
**System
Administration**



Formula

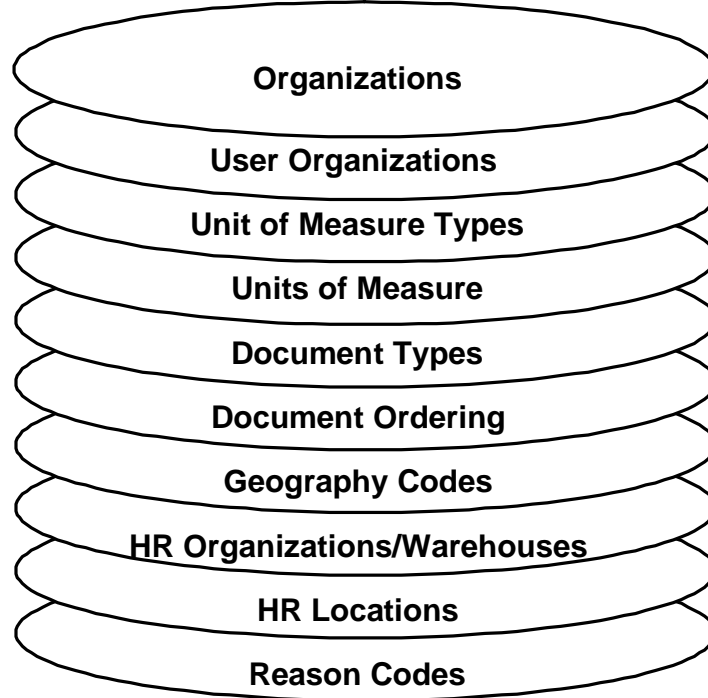


Inventory

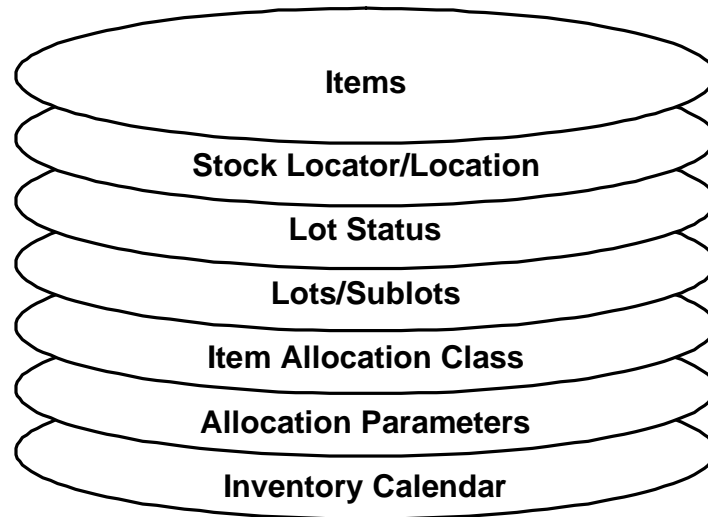


**Master Production
Schedule**

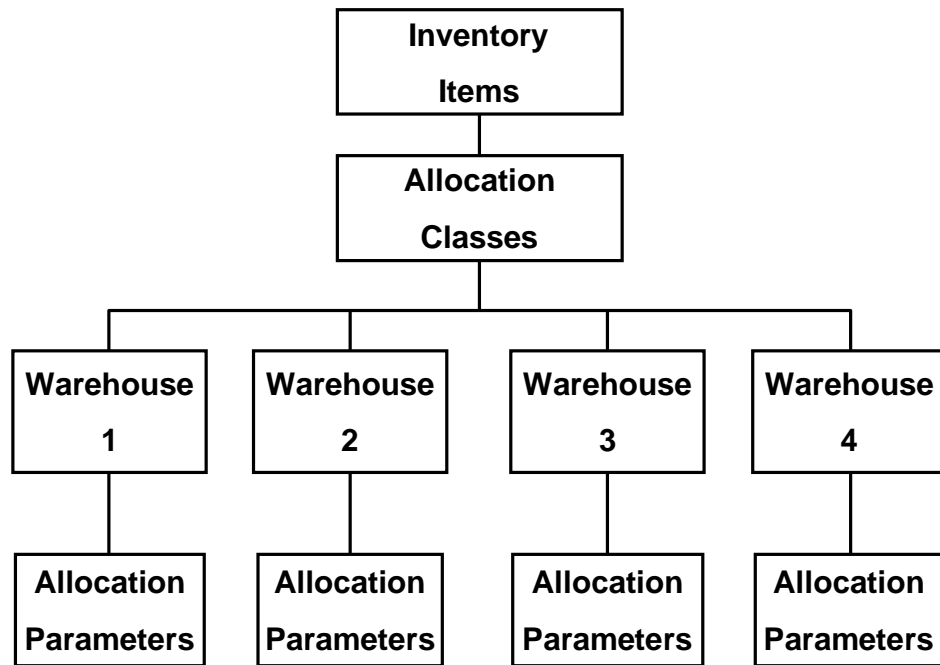
System Module Setup Steps



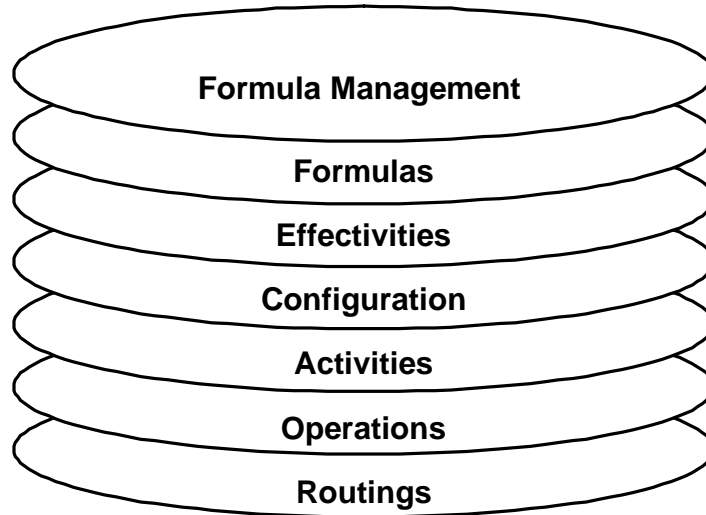
Inventory Module Setup Steps



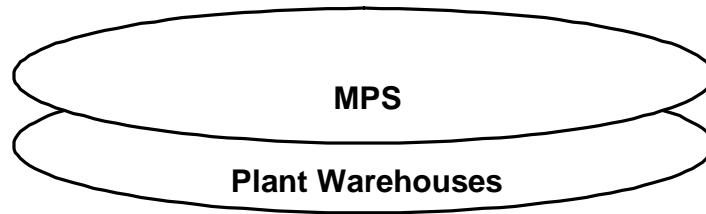
Allocation Parameters



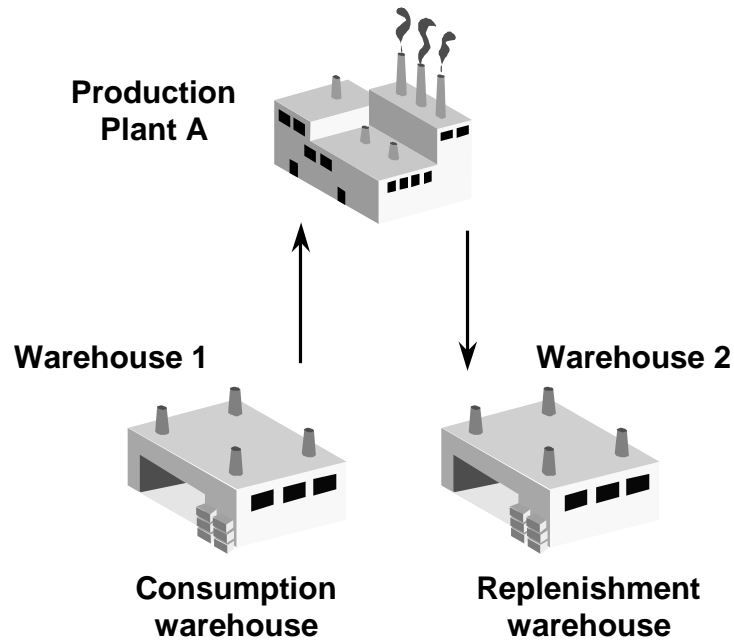
Formula Module Setups



MPS Module Setups



Plant/Warehouse Relationships



2-9

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE®

Plant/Warehouse Relationships

You can consume from and replenish inventory to any warehouse, regardless of what plant warehouse relationships are defined (or not defined). The relationships define the default consumption and replenishment warehouses, and the appropriate relationships must be defined in order to create a batch. You must also define plant warehouse relationships to allocate inventory to a batch automatically.

Practice 2-1

This practice concerns setting up plant warehouse relationships. Enter the following information:

Plant	xxP1	xxP1
Warehouse	xW1	xW2
Consumption	Select	
Replenishment	Select	
Whse Item		

Practice 2-1

Before you use OPM to record the production of finished goods, you need to link the production plant to the warehouse that supplies the raw materials for production, as well as the warehouse to which finished goods are sent. To prepare for the production of finished goods later, set up your plant-warehouse relationship as above.

The plant and warehouses were set up in the Basics and System Setup course, the first day of the Foundation class.

Practice 2-1 Solution

2-11

ORACLE®

- Oracle Process Manufacturing Production Management Release 11i 2-11**

Summary

In this lesson, you should have learned how to:

- **Identify System module setup steps**
- **Identify Inventory module setup steps**
- **Identify Formula module setup steps**
- **Perform Master Production Schedule setup steps**

3

Production Batch Processing

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE®

Objectives

After completing this lesson, you should be able to do the following:

- **Create production batches by direct entry**
- **Release, certify, and close a batch**
- **Allocate ingredients**
- **Allocate a product**
- **Use automatic allocation**
- **Edit batch inputs and outputs**
- **Create Firm Planned Orders (FPOs) and convert them to batches**
- **Scale a batch**
- **Create a phantom batch**

3-2

Copyright © Oracle Corporation, 2000. All rights reserved.



Navigation

N = Navigator

T = Tab

M = Menu

I = Icon

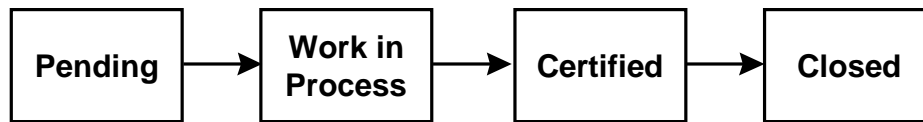
H = Hyperlink

B = Button

Help = Oracle Applications Help system

Overview

Discuss all options and processes involved in taking a batch from pending to closed status.



Directly Entering a Batch

Go to the Create Batch/Firm Planned Order window to enter a batch that will be produced.

**(N) OPM Process Execution—>Production Mgmt—>
Create Btch/FPO**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Creating and Editing Batches—>Creating Batches or FPOs

../—>Creating a Batch or FPO Procedure

../—>Create Batch/Firm Planned Order Field Reference

Entering Batch Header and Product Information

In the Batches window, enter batch header information.

**(N) OPM Process Execution—>Production Mgmt—>
Create Btch/FPO (B)OK**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process
Manufacturing Process Execution—>OPM Production Management User's Guide—>Creating and
Editing Batches—>Editing Batch Header and Products Information

../—>Editing Batch Header and Products Information Procedure

../—>Batches Window Field Reference

Entering Batch Ingredients

In the Batch Ingredients window, enter the quantities of ingredients used in a batch.

**(N) OPM Process Execution—>Production Mgmt—>
Create Btch/FPO (B)Ingredients**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process
Manufacturing Process Execution—>OPM Production Management User's Guide—>Entering and
Editing Batch Ingredients

../—>Batch Ingredients Field References

Entering Batch Byproducts

In the Batch Byproducts window, enter the quantities of byproducts produced by a batch.

**(N) OPM Process Execution—>Production Mgmt—>
Create Btch/FPO (B)Byproducts**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Entering and Editing Batch Byproducts

../—>Batch Byproducts Field References

Viewing Effectivities

View the effectivity upon which a batch or FPO is based.

**(N) OPM Process Execution—>Production Mgmt—>
Batches(M) Actions—>Effectivity**

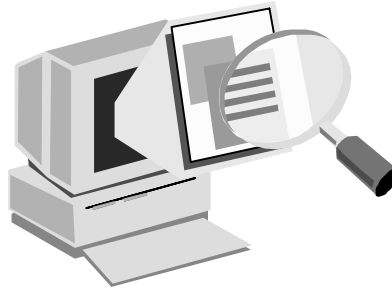
Viewing Effectivities

When you are creating a batch, you must select an effectivity if more than one effectivity can be used.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Creating and Editing Batches—>View Effectivity

Demonstration

This demonstration concerns creating a batch and the resulting transactions.



Releasing a Batch

In the Batches window, release a batch to indicate that the batch has been started.

**(N) OPM Process Execution—>Production Mgmt—>
Batches (M)Actions—>Release**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Production Cycle in OPM—>Production Cycle Steps

../—>Releasing a batch

Selecting the Release Type

RELEASE TYPES:	INGREDIENTS	PRODUCTS
AUTOMATIC	Completed when batch is released	Completed when batch is certified
MANUAL	Complete while batch is WIP	Complete while batch is WIP or certified
INCREMENTAL	Completed with partial certification	Completed with partial certification

Selecting the Release Type

A release type determines when and how transactions are completed and inventory is updated. There are three release types: Automatic, Manual, and Incremental.

Automatic

Transactions for ingredients with a release type of Automatic are completed, and have their actual quantity set and onhand inventory decremented, when the batch is released. Transactions for products with a release type of Automatic are completed, and have their actual quantity set and onhand inventory increased, when the batch is certified.

Manual

Transactions for both ingredients and products with a release type of Manual must be manually completed while a batch is in the Work in Process (WIP) status. Manually release ingredients and products by selecting the Completed Indicator in the Line Allocations window. The Line Allocations window is accessible from the Batch Input and Batch Output windows Actions menu.

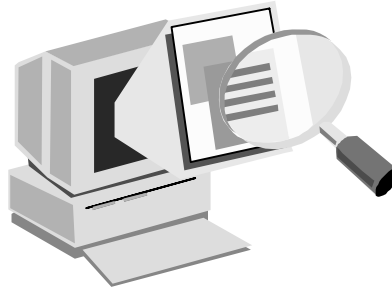
The Manual release type allows you to record consumption and production over a period of time while the batch is in the WIP status.

Incremental

Transactions for ingredients with a release type of Incremental are completed when Partial Certification is performed for the product.

Demonstration

This demonstration concerns releasing a batch and the resulting transactions.



Certifying and Closing a Batch

In the Batches window, certify and close a batch to indicate that the batch has been completed.

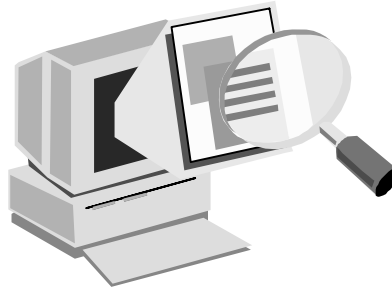
**(N) OPM Process Execution—>Production Mgmt—>Batches (M)
Actions—>Certify**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Production Cycle in OPM—>Production Cycle Steps

../—>Certifying a batch

Demonstration

This demonstration concerns certifying and closing a batch and the resulting transactions.



Practice 3-1

Create, release, certify, and close a batch of xxFGS using the following information:

Plant	xxP1
Effective Qty	100
Planned Dates	use default date

Perform a Transaction Inquiry on xxFGS and xxRM1S after each batch status change to observe the changes in transactions. Perform an Item Inquiry after certifying the batch to see the quantity changes.

Practice 3-1

Create a production batch using the direct entry method.

Step 1: Create a Firm Planned Order

You have a customer order for 100 pounds of xxFGS (your Finished Good, nonlocation or -lot controlled), and you need to create a Firm Planned Order to meet this demand.

Step 2: Convert the Firm Planned Order to a Production Batch

After you have created the Firm Planned Order, you must convert it to a production batch.

Step 3: Release the Batch to Production

After the warehouse supervisor has informed you that all specified raw materials have been delivered to production, you are ready to release this batch to production.

Step 4: Certify the Batch

The production manager has advised you that the first batch is complete. You must now certify the batch to report your output, and change the batch status to Certified. OPM automatically records the amount of products yielded in an inventory transaction.

Step 5: Query Changes in Inventory

You can now check your items (finished goods produced and raw materials consumed) in inventory to see the quantity changes in each case.

Step 6: Close the Batch

This is the final step in the production cycle. Remember, after you close a batch, no additional changes can be made.

Practice 3-1 Solution

The screenshot shows a dialog box titled "Create Batch/Firm Planned Order". It contains the following fields and values:

Field	Value
Document Type	Firm Planned Order
Plant	OSP1 STUDENT 05 ORGANIZATION
Document Number	NEW
Item	05FGS
Effective Quantity	100
Formula	
Routing	
Planned Start	05-JUL-2000 11:52:42
Planned Completion	05-JUL-2000 11:52:42
Required Completion	05-JUL-2000 11:52:42

Additional fields on the right side of the dialog box include:

Field	Value
WIP Warehouse	
Unit of Measure	LB
Version	
Version	

At the bottom right, there are "OK" and "Cancel" buttons.

Practice 3-1 Solution

Step 1: Create a Firm Planned Order

You have a customer order for 100 pounds of xxFGS (Finished Good, nonlocation or -lot controlled), and you need to create a Firm Planned Order to meet this demand.

1. (N) OPM Process Execution—>Production Management—>Create Batch/FPO
2. In the Document Type field, select Firm Planned Order.
3. In the Plant field, the system should default to you plant.
4. In the WIP Warehouse field, enter the code for the warehouse used, or leave the field blank (default to replenishment warehouse).
5. In the Item field, enter the item code.
6. In the Effective Quantity field, specify the quantity that you plan to make in the batch.
7. In the Planned Start field, select the date (or accept default) that you plan to start.
8. In the Planned Completion field, select the planned completion date (or accept default).
9. Accept the default in the Required Completion field and click OK. The View Effectivities window appears.
10. Click OK in the View Effectivities window.
11. Note your new FPO number in the Document Number field.

Practice 3-1 Solution

Seq	Item	Description	Planned Qty	UOM
1	05FGS	Simple Finished Good - Student 05	100	LB

3-17

Copyright © Oracle Corporation, 2000. All rights reserved.



Practice 3-1 Solution (continued)

Step 2: Convert the Firm Planned Order to a Production Batch

After you have created the Firm Planned Order, you must convert it to a production batch.

1. (N) Production Management—>Firm Planned Order
2. Locate FPO Number by (M) View—>Find
3. Review all of the field default values. Edit any fields that need to be changed.
4. (M) Actions—>FPO to Batch
5. The Firm Planned Order to Batch Conversion window appears. If parameters are acceptable, click OK.
6. Make a note of the new batch number that was assigned and click OK.

Practice 3-1 Solution

The screenshot shows the Oracle Batches window with the following details:

- Batch:** 05P1 000002
- Formula:** 05FGS
- Routing:** 1
- WIP Warehouse:** EW1 Warehouse 1E
- Planned Dates:**
 - Start: 05-JUL-2000 12:24:11
 - Completion: 05-JUL-2000 12:24:11
 - Required Completion: 05-JUL-2000 12:24:11
- Actual Dates:**
 - Start: 05-JUL-2000 12:27:13
 - Completion: (empty)
 - Close: (empty)
- Products Table:**

Seq	Item	Description	Planned Qty	Actual Qty	UOM	Allocated
1	05FGS	Simple Finished Good - St	100	0	LB	<input checked="" type="checkbox"/>
- Summary:** Products: 1, By-products: 0, Ingredients: 2
- Buttons:** Byproducts, Ingredients

3-18

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE®

Practice 3-1 Solution (continued)

Step 3: Release the Batch to Production

After the warehouse supervisor has informed you that all specified raw materials have been delivered to production, you are ready to release this batch to production.

1. (N) Production Management—>Batches
2. (M) View—>Find
3. (M) Actions—>Release. A dialog box appears to indicate that the batch has been successfully released.
4. Click OK. Note that the status in the Batch field has changed from Pending to WIP.

Practice 3-1 Solution

Batches

Batch: 05P1 000022 Certified
Formula: 05FGS 1
Routing:
WIP Warehouse: EW1 Warehouse 1E

Planned Dates

Start	05-JUL-2000 12:24:11
Completion	05-JUL-2000 12:24:11
Required Completion	05-JUL-2000 12:24:11

Actual Dates

Start	05-JUL-2000 12:27:13
Completion	05-JUL-2000 12:28:13
Close	

Products

Seq	Item	Description	Planned Qty	Actual Qty	UCM	Allocated
1	05FGS	Simple Finished Good - St	100	100	LB	<input checked="" type="checkbox"/>

Products: 1 By-products: 0 Ingredients: 2

3-19

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Practice 3-1 Solution (continued)

Step 4: Certify the Batch

The production manager has advised you that the first batch is complete. You must now certify the batch to report your output, and change the batch status to certified. OPM automatically records the amount of products yielded in an inventory transaction.

1. (N) Production Management—>Batches
2. (M) View—>Find
3. (M) Actions—>Certify. A dialog box appears to indicate that the batch has been successfully certified.
4. Click OK. Note that the status in the Batch field has changed from WIP to Certified.

Practice 3-1 Solution

Quantity On-hand (Warehouse)

On-hand by: Warehouse

Item: 05FG5

Total On-hand: 100.00000000 LB

Total On-hand2:

Rows Displayed: 1

Warehouse	Status	On-hand
EW1		100.000000

Organization: 95P1

OK

3-20

Copyright © Oracle Corporation, 2000. All rights reserved.



Practice 3-1 Solution (continued)

Step 5: Query Changes in Inventory

You can now check your items (finished goods produced and raw materials consumed) in inventory to see the quantity changes in each case.

1. (N) OPM Inventory Control—>Inquiries>Item Inquiry
2. In the Item field, enter the item code and press [Enter].
3. (M) Actions—>Quantity On-hand
4. Note the total on-hand, and the on-hand quantities, in each warehouse.
5. Click OK.

Practice 3-1 Solution

Batches

Batch: 05P1 000002 Status: Closed

Formula: 05FGS

Routing: 1

WIP Warehouse: EW1 Warehouse 1E

Planned Dates			Actual Dates		
Start	05-JUL-2000 12:24:11		Start	05-JUL-2000 12:27:13	
Completion	05-JUL-2000 12:24:11		Completion	05-JUL-2000 12:28:13	
Required Completion	05-JUL-2000 12:24:11		Close	05-JUL-2000 12:33:12	

Seq	Item	Description	Planned Qty	Actual Qty	UCM	Allocated
1	05FGS	Simple Finished Good - St	100	100	LB	<input checked="" type="checkbox"/>

Products: 1 By-products: 0 Ingredients: 2

Buttons: Byproducts, Ingredients

3-21

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Practice 3-1 Solution (continued)

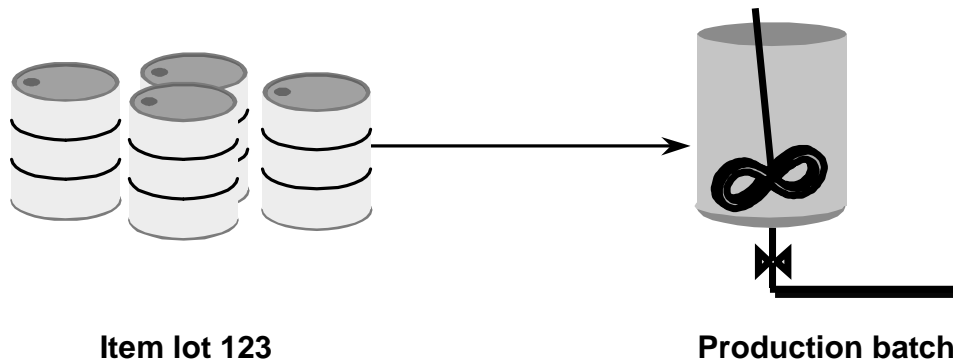
Step 6: Close the Batch

This is the final step in the production cycle. When you close a batch, you cannot make additional changes.

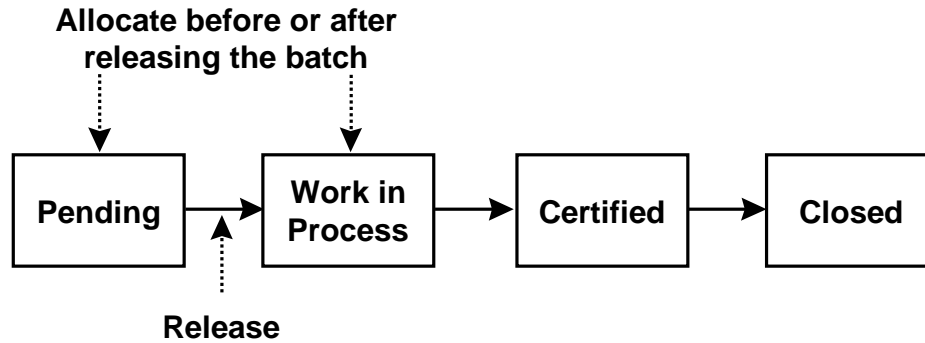
1. (N) Production Management—>Batches
2. (M) View—>Find
3. (M) Actions—>Close
4. Click Yes. A question appears to ask if you are are sure. Click Yes again. A dialog box appears to indicate that the batch has been successfully closed.
5. Click OK. Note that the status in the Batch field has changed to Closed.

Allocating Ingredients

Allocate lot- or location-controlled ingredients to a batch either manually or automatically.



Allocation Timing



3-23

Copyright © Oracle Corporation, 2000. All rights reserved.



Allocation Timing

Allocation Before Releasing

When you allocate ingredients before releasing a batch, you are specifying the material that will be used in the batch.

Allocation After Releasing

When you allocate ingredients after releasing a batch, you are specifying the material that was used in the batch.

Allocating Ingredients

You can allocate ingredients to a batch before or after releasing the batch.

(N) OPM Process Execution—>Production Mgmnt—>Batch Input

Allocating Ingredients

When you have opened the Batch Input window for your batch, select the line to be allocated, then click the drilldown indicator to the left of the Seq field. This will open the Line Allocations window.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>

../ Production Cycle in OPM—>Production Cycle Steps—>Allocating Ingredients

../ Recording Batch Input and Output—>Batch Input - Allocating Ingredients

../ Automatic Allocation

../ User-initiated Auto-allocation

../ Manual Allocation of Ingredients using the Batch Input window

../ Pick Lots/Location

../ Batch Input - Releasing

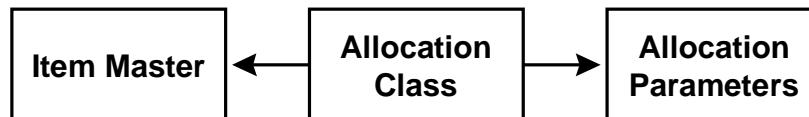
../ Manual or Partial Release

Automatic Versus Manual Allocation

Use automatic allocation when the following circumstances are true for the item:

- **The ingredient is lot-controlled.**
- **The correct material can be chosen using FIFO/FEFO, single/multilot, and lot status rules.**
- **The ingredient is typically available at the time of batch entry, in the consumption warehouse specified on the Plant Warehouses window.**

To set up allocations, define the following:



3-25

Copyright © Oracle Corporation, 2000. All rights reserved.

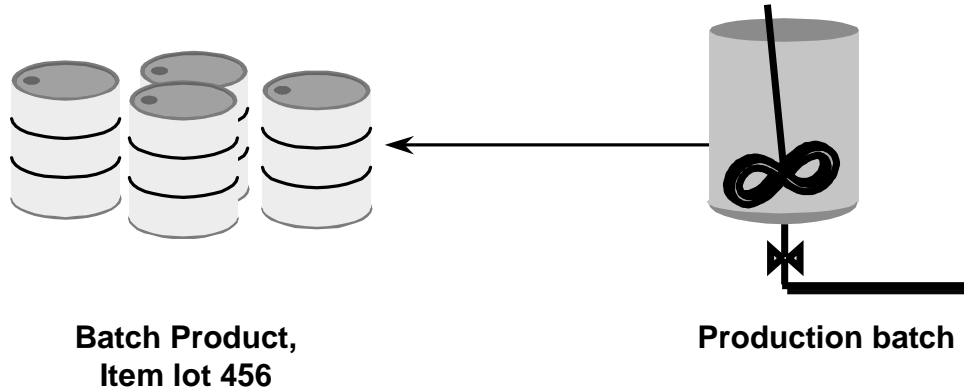
ORACLE

Automatic Versus Manual Allocation

You can enable automatic allocation for an item by specifying an Allocation Class in the Items window, and then creating Allocation Parameters for the Allocation Class/Warehouse combination. You specify whether or not the allocation method is fully automatic or user-initiated in the Allocation Parameters window.

Allocating Products

Allocate products and byproducts anytime before batch certification from the Batch Output window.



Allocating Products

You can allocate products to a batch anytime before certifying the batch.

(N) OPM Process Execution—>Production Mgmt—>Batch Output

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide

../ Production Cycle in OPM—>Production Cycle Steps—>Allocating Products

../ Recording Batch Input and Output—>Batch Output - Allocating Lines in a Batch—>

../ Allocating Lines for Batch Output Procedure

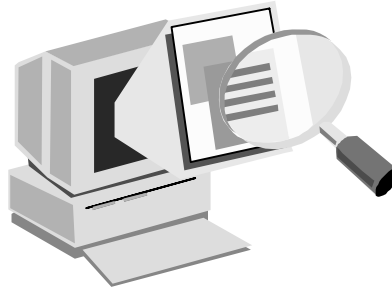
../ Line Allocations Box Field References

../ Line Allocations Box - Buttons

../ Batch Output - Actions Menu

Demonstration

This demonstration concerns creating and releasing a batch, manually allocating ingredients, manually allocating the product, and then certifying the batch.



Practice 3-2

Create a batch of *xxINTC* while manually allocating the ingredients and the product.

Practice 3-2

You will repeat the process used in Practice 3-1 for creating a production batch for a lot-or location-controlled finished good. However, the finished good requires that an intermediate product be made first.

Step 1: Create a Firm Planned Order

You have a customer order for 100 pounds of *xxFGC* (Complex Finished Good), and you need to create a Firm Planned Order to meet this demand.

Step 2: Create a Batch for the Intermediate Complex (*xxINTC*) Product

Create a batch for 100 pounds of the *xxINTC*.

1. Why would the system notify you of an inventory shortage for *xxRM2C* if you have *xxRM2C* on hand in the warehouse?
2. How would you enable the issue of this raw material lot to the *xxINTC* batch?

Step 3: Change the Lot Status for *xxRM2C* Lots

Change the lot status of the *xxRM2C* lots before it can be issued for the batch.

Step 4: Release the *xxINTC* Batch

Release the *xxINTC* batch into production.

Practice 3-2 (continued)

Step 5: Allocating Items

When you attempt to certify the batch, you receive a message that there are unallocated items (xxINTC, xxRM1C, and xxRM2C). Allocate xxRM1C and xxRM2C using the Batch Input window. Allocate xxINTC using the Batch Output window.

Step 6: Certify the xxINTC Batch

After you have allocated all items, return to the Batches window and certify the batch.

Step 7: Query Inventory Changes

Check inventory levels of both the intermediate good and the raw materials.

Step 8: Close the xxINTC Batch

This is the final step for the intermediate complex product.

Step 9: Convert the xxFGC Firm Planned Order to a Batch

OPM notifies you that xxINTC is not allocated. Using the Batch Input window, specify the lot of xxINTC to allocate before converting FPO to a batch.

Step 10: Release the xxFGC Batch

OPM notifies you that the xxFGC is not allocated. Use the Batch Output window for allocating this batch. Certify and close the batch.

Practice 3-2 Solution

Create Batch/Firm Planned Order

Document Type: Firm Planned Order

Plant: 05P1 STUDENT 05 ORGANIZATION

Document Number: 000005

Item: 05FGC

Effective Quantity: 100

Unit of Measure: LB

Formula:

Routing:

Planned Start: 05-JUL-2000 13:47:58

Planned Completion: 05-JUL-2000 13:47:58

Required Completion: 05-JUL-2000 13:47:58

Note: APP-GME-62151: A new FPO number has been assigned, please make a note of it.

OK

Practice 3-2 Solution

Step 1: Create a Firm Planned Order

You have a customer order for 100 pounds of xxFGC (Complex Finished Good), and you need to create a Firm Planned Order to meet this demand.

1. (N) OPM Process Execution—>Production Management—>Create Batch/FPO
2. In the Document Type field, select Firm Planned Order.
3. Ensure that the Plant field contains the correct plant.
4. In the WIP Warehouse field, enter the code for the warehouse used, or leave the field blank (default to Replenishment warehouse).
5. In the Item field, enter the item code.
6. In the Effective Quantity field, specify the quantity that you plan to make in the batch.
7. In the Planned Start field, select the date that you plan to start (or accept default).
8. In the Planned Completion field, select the planned completion date (or accept default).
9. Accept the default in the Required Completion field.
10. Click OK. The View Effectivities window appears.
11. Click OK in the View Effectivities window.
12. Note your new FPO number is the Document Number field and click OK.

Practice 3-2 Solution

Document Type: Batch

Plant: 05P1 STUDENT 05 ORGANIZATION

Document Number: 000003

Item: 05INTC

Effective Quantity: 100

Unit of Measure: LB

Planned Start: 05-JUL-2000 13:53:05

Planned Completion: 05-JUL-2000 13:53:05

Required Completion: 05-JUL-2000 13:53:05

Note: APP-GME-82100: A new Batch has been created, please make a note of it.

Practice 3-2 Solution (continued)

Step 2: Create a Batch for the Intermediate Complex (xxINTC) Product

Create a batch for 100 pounds of the xxINTC.

1. (N) Production Management—>Create Batch/FPO
2. In the Document Type field, select Batch.
3. In the Plant field, the system should default to your plant.
4. In the WIP Warehouse field, enter the code for the warehouse used, or leave the field blank (default to Replenishment warehouse).
5. In the Item field, enter the item code.
6. In the Effective Quantity field, specify the quantity you plan to make in the batch.
7. In the Planned Start field, select the date that you plan to start (or accept default).
8. In the Planned Completion field, select the planned completion date (or accept default).
9. You can accept the default in the Required Completion field.
10. Click OK.

Practice 3-2 Solution (continued)

Step 2: Create a Batch for the Intermediate Complex (xxINTC) Product (continued)

11. After the Inventory Shortage window appears, click OK.

Why would the system notify you of an inventory shortage for xxRM2C if you have xxRM2C on hand in the warehouse?

This raw material is both status- and grade-controlled. The lots of xxRM2C still have the default Lot Status of QCCK (on hold for quality check).

How would you enable the issue of this raw material lot to the xxINTC batch?

You would have to change the lot status to OK.

12. Note your new batch number in the Document Number field.

Practice 3-2 Solution

Inventory Quantities

Status Immediate

Organization 05P1

Journal 000002

Date 05-JUL-2000 14:02:38

Reason Code NONE Default

Item 05RM2C

Complex Raw Material 2

Lot 100

Sublot

Lot Status OK QC Check Passed

Warehouse EW1 Warehouse 1E

QC Grade

Location RM Raw Materials Location

On Hand Qty 1000 LB

0

To Status OK

Description QC Check Passed

3-34

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Practice 3-2 Solution (continued)

Step 3: Change the Lot Status for xxRM2C Lots

Change the lot status of the xxRM2C lots before it can be issued for the batch.

1. (N) OPM Inventory—>OPM Inventory Control—>Quantities—>Status Immediate
2. In the Date field, accept the default date.
3. In the Reason Code field, select the appropriate code.
4. In the Item Number field, enter the item code.
5. In the Lot field, enter the lot number.
6. In the Warehouse field, enter the warehouse where the items are located.
7. In the Location field, enter the location.
8. In the To Status field, select OK.
9. Save your work.

Practice 3-2 Solution

The screenshot shows the Oracle Batches window with the following details:

- Batch: 05P1 050303
- Formula: 05INTC
- Routing: 1
- WIP Warehouse: EW1 Warehouse 1E
- Planned Dates:
 - Start: 05-JUL-2000 13:53:05
 - Completion: 05-JUL-2000 13:53:05
 - Required Completion: 05-JUL-2000 13:53:05
- Actual Dates:
 - Start: 05-JUL-2000 14:07:08
 - Completion: (empty)
 - Close: (empty)
- Products table:

Seq	Item	Description	Planned Qty	Actual Qty	UOM	Allocated
1	05INTC	Complex Intermediate	100	0	LB	<input type="checkbox"/>
- Summary: Products: 1, By-products: 0, Ingredients: 2
- Buttons: Byproducts, Ingredients

3-35

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Practice 3-2 Solution (continued)

Step 4: Release the xxINTC Batch

Release the xxINTC batch into production.

1. (N) Production Management—>Batches
2. (M) View—>Find
3. (M) Actions—>Release
4. You should receive a dialog box that lets you know the batch has been successfully released. Click OK.

Practice 3-2 Solution

Lot	Sub Lot	Warehouse	Location	Allocated Qty	Completed	Reason
DEFAULT LOT		EW1	NONE	0	<input checked="" type="checkbox"/>	
500		EW1	RM	60	<input checked="" type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	

Completed: 60 Pending: 0 Allocated: 60

Previous Line Next Line OK Cancel

Practice 3-2 Solution (continued)

Step 5: Allocating Items

When you attempt to certify the batch, you receive a message that there are unallocated items (xxINTC, xxRM1C, and xxRM2C). Allocate xxRM1C and xxRM2C using the Batch Input window. Allocate xxINTC using the Batch Output window.

1. (N) Production Management—>Batch Input
2. (M) View—>Find
3. Select line (xxRM1C) to be allocated, and click the drilldown indicator to the left of the Seq field (this should bring up the Line Allocations window).
4. In the Lot field, enter the lot from which the ingredients are allocated.
5. In the Warehouse field, enter the warehouse code.
6. In the Location field, enter the location code.
7. When you tab to the Allocated Qty field, the quantity number appears.
8. Click OK.
9. Repeat steps 3–8 for xxRM2C.
10. (N) Production Management—>Batch Output
11. (M) View—>Find
12. Repeat steps 3–8 for xxINTC.

Practice 3-2 Solution

The screenshot shows the Oracle Batches window with the following details:

- Batch: 05P1 000033
- Formula: 05INTC
- Routing: 1
- WIP Warehouse: EW1 Warehouse 1E
- Planned Dates: Start 05-JUL-2000 13:53:05, Completion 05-JUL-2000 13:53:05, Required Completion 05-JUL-2000 13:53:05
- Actual Dates: Start 05-JUL-2000 14:07:08, Completion 05-JUL-2000 14:26:13, Close
- Products table:

Seq	Item	Description	Planned Qty	Actual Qty	UCM	Allocated
1	05INTC	Complex Intermediate	100	100	LB	<input checked="" type="checkbox"/>
- Summary: Products 1, By-products 0, Ingredients 2
- Buttons: ,

3-37

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Practice 3-2 Solution (continued)

Step 6: Certify the xxINTC Batch

After you have allocated all items, return to the Batches window and certify the batch.

1. (N) Production Management—>Batches
2. (M) View—>Find
3. (M) Actions—>Certify
4. Click Yes.
5. Click OK.

Practice 3-2 Solution

Quantity On hand (Warehouse and Location)

On-hand by: Warehouse and Location

Item: 05RM1C

Total On-hand: 9340.00000000 LB

Total On-hand2:

Rows Displayed: 1

Quantities

Warehouse	Status	Location	On-hand
EW1		RM	9340.00000000

Organization: 05P1

OK

3-38

Copyright © Oracle Corporation, 2000. All rights reserved.



Practice 3-2 Solution (continued)

Step 7: Query Inventory Changes

Check inventory levels of both the intermediate good and the raw materials.

1. (N) OPM Inventory Control—>Inquiries—>Item Inquiry
2. In the Item field, enter the item code and press [Enter].
3. Select Warehouse and Location.
4. Note the total on-hand and the on-hand quantities in each warehouse.
5. Click OK.
6. Repeat steps 2–5 for the other raw material item and intermediate finished good.

Practice 3-2 Solution

The screenshot shows the Oracle Batches window with the following details:

- Batch: 05P1 000023
- Status: Closed
- Formula: 05INTC
- Routing: 1
- WIP Warehouse: EW1 Warehouse 1E

Planned Dates			Actual Dates		
Start	05-JUL-2000 13:53:05		Start	05-JUL-2000 14:07:00	
Completion	05-JUL-2000 13:53:05		Completion	05-JUL-2000 14:26:13	
Required Completion	05-JUL-2000 13:53:05		Close	05-JUL-2000 14:33:25	

Seq	Item	Description	Planned Qty	Actual Qty	UOM	Allocated
1	05INTC	Complex Intermediate	100	100	LB	<input checked="" type="checkbox"/>

Products: 1 By-products: 0 Ingredients: 2

Buttons: Byproducts, Ingredients

3-39

Copyright © Oracle Corporation, 2000. All rights reserved.



Practice 3-2 Solution (continued)

Step 8: Close the xxINTC Batch

This is the final step for the intermediate complex product.

1. (N) Production Management—>Batches
2. (M) View—>Find
3. (M) Actions—>Close
4. Click Yes.
5. You should receive a dialog box informing you that the batch has been successfully closed.
6. Click OK.

Practice 3-2 Solution

Firm Planned Order

Firm Planned Order: 05P1 000005

Status: Converted FPO

Formula: 05FGC 1

Routing:

WIP Warehouse: EW1 Warehouse 1E

Planned Start: 05-JUL-2000 13:47:58

Planned Completion: 05-JUL-2000 13:47:58

Required Completion: 05-JUL-2000 13:47:58

Seq	Item	Description	Planned Qty	UOM
1	05FGC	Complex Finished Good	100	LB

Products: 1 By-products: 0 Ingredients: 1

Byproducts Ingredients

3-40

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Practice 3-2 Solution (continued)

Step 9: Convert the xxFGC Firm Planned Order to a Batch

OPM notifies you of unallocated items. Using the Batch Input window, specify the lot of xxINTC to allocate before converting FPO to a batch.

1. (N) Production Management—>Firm Planned Order
2. Locate FPO Number by (M) View—>Find
3. (M) Actions—>FPO to Batch
4. Click OK to convert FPO to Production Batch.
5. Edit parameters such as dates (if needed).
6. Make a note of the new batch number that was assigned and click OK.

Practice 3-2 Solution

The screenshot shows the Oracle Batches window with the following details:

- Batch:** 05P1 000085
- Status:** Closed
- Formula:** 05FGC
- Routing:** 1
- WIP Warehouse:** EW1 Warehouse 1E

Planned Dates			Actual Dates		
Start	05-JUL-2000 13:47:58		Start	05-JUL-2000 14:43:11	
Completion	05-JUL-2000 13:47:58		Completion	05-JUL-2000 14:45:57	
Required Completion	05-JUL-2000 13:47:58		Close	05-JUL-2000 14:49:25	

Seq	Item	Description	Planned Qty	Actual Qty	UOM	Allocated
1	05FGC	Complex Finished Good	100	100	LB	<input checked="" type="checkbox"/>

Products: 1 By-products: 0 Ingredients: 1

Buttons: Byproducts, Ingredients

3-41

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Practice 3-2 Solution (continued)

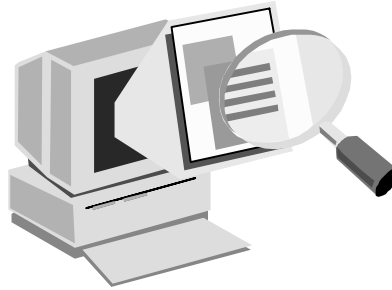
Step 10: Release the xxFGC Batch

OPM notifies you that the xxFGC is not allocated. Use the Batch Output window for allocating this batch. Certify and close the batch.

1. (N) Production Management—>Batches
2. (M) View—>Find
3. (N) Batch Input
4. Allocate ingredients
5. (M) Actions—>Release
6. (N) Production Management—>Batch Output
7. Allocate product.
8. Click OK.
9. (M) Actions—>Certify
10. You should receive a dialog box informing you that the batch has been successfully certified. Click OK.
11. (M) Actions—>Close
12. Click Yes.

Demonstration

This demonstration concerns automatically allocating ingredients to a batch.



Practice 3-3

Define an allocation class, assign the allocation class to a raw material, and process a batch using automatic allocations with the following information:

Allocation Class	xxALLOC1
Effective Qty	100
Planned Dates	use default date

Practice 3-3

Using automatic allocation, OPM automatically allocates the ingredients in a batch when the batch is saved for the first time. This is based on the allocation class you assign the items on the Items form, and the rules you set up on the Allocation Parameters form.

In this practice, you will create another batch of xxINTC.

Step 1: Define an Allocation Class

Return to OPM Inventory setup, and define Studentxx Allocation Class 1 (xxALLOC1).

Step 2: Define Allocation Parameters

In OPM Inventory setup, specify automatic allocation and the method First Expired First Out.

Step 3: Assign Allocation Parameters to the Items

Returning to the Item Master window, assign xxALLOC1 to both of your complex ingredients (xxRM1C and xxRM2C).

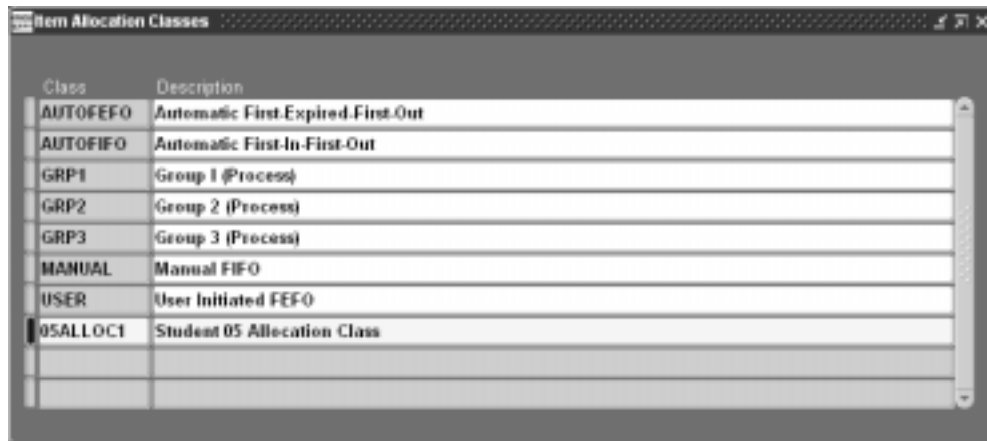
Step 4: Create a Batch for the Intermediate (xxINTC) Product

Create a batch of 100 pounds of the xxINTC product.

Step 5: Verify Allocated Items

Verify that the ingredients have been allocated by navigating to the Batch Ingredients window, and ensuring that the Allocated check box has been selected for both ingredient lines.

Practice 3-3 Solution



Class	Description
AUTOFEFO	Automatic First Expired-First Out
AUTOFIFO	Automatic First-In-First-Out
GRP1	Group 1 (Process)
GRP2	Group 2 (Process)
GRP3	Group 3 (Process)
MANUAL	Manual FIFO
USER	User Initiated FEFO
05ALLOC1	Student 05 Allocation Class

Practice 3-3 Solution

Step 1: Define an Allocation Class

Return to OPM Inventory setup and define Studentxx Allocation Class 1 (xxALLOC1).

1. (N) OPM Inventory Control—>Setup—>Allocation Setup—>Class
2. (M) File—>New
3. In the Class field, enter xxALLOC1.
4. In the Description field, enter a description of your allocation class.
5. Save your work.

Practice 3-3 Solution

The screenshot shows the 'Allocation Parameters' window. At the top, there are two fields: 'Allocation Class' with the value '05ALLOC1' and a description 'Student 05 Allocation Class', and 'Warehouse' with the value 'EW1' and a description 'Warehouse 1E'. Below these, there is a section titled 'Allocation Parameters' containing five fields: 'Method' set to 'First Expired First Out', 'Type' set to 'Automatic', 'Shelf Days' set to '0', 'Horizon' set to '0', and 'Lot Quantity' set to 'Multiple Lot'.

Practice 3-3 Solution (continued)

Step 2: Define Allocation Parameters

In OPM Inventory setup, specify automatic allocation and the method First Expired First Out.

1. (N) OPM Inventory Control—>Setup—>Allocation Setup—>Parameters
2. In the Allocation Class field, select your allocation class from the list of values.
3. In the Warehouse field, select your warehouse from the list of values.
4. In the Method field, select the method of allocation.
5. In the Type field, select the type of allocation.
6. Save your work.

Practice 3-3 Solution

The screenshot shows the Oracle Item Master window for item 05RM1C. The window is titled "Items" and contains the following fields and sections:

- Item:** 05RM1C
- Description:** Complex Raw Material 1
- Comment:** (empty)
- Alternate Item A:** (empty)
- Alternate Item B:** (empty)
- Warehouse Item:** 05RM1C
- Unit of Measure:**
 - Dual Control:** Non Dual
 - UCM:** LB
 - Dual:** (empty)
 - Deviation Factor+:** (empty)
 - Deviation Factor-:** (empty)
- Codes:**
 - Type:** (empty)
 - ABC Rank:** (empty)
 - Commodity:** NONE
- Controls:**
 - Sales:** (empty)
 - GL:** (empty)
 - Ship:** (empty)
 - Freight:** (empty)
 - Price:** (empty)
- Classes:**
 - Cost:** (empty)
 - Storage:** (empty)
 - Inventory:** (empty)
 - Purchase:** (empty)
 - Allocation:** 05ALLOC1
- Customs:**
 - Planning:** (empty)
 - Sequence:** (empty)
 - Cost Ref:** (empty)
- Inactive:** ☐
- Experimental:** ☐

3-46

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Practice 3-3 Solution (continued)

Step 3: Assign Allocation Parameters to the Items

Returning to the Item Master window, assign xxALLOC1 to both of your complex ingredients (xxRM1C and xxRM2C).

1. (N) OPM Inventory Control—>Setup—>Item Master
2. (M) View—>Find
3. Select the Classes tab. In the Allocation field, select the appropriate allocation class.
4. Repeat step 2 for xxRM2C.
5. Save your work.

Practice 3-3 Solution

Create Batch/Firm Planned Order

Document Type	Batch	
Plant	05P1	STUDENT 05 ORGANIZATION
Document Number	000006	WIP Warehouse
Item	05INTC	
Effective Quantity	100	Unit of Measure LB
Formula		Version
Routing		Version
Planned Start	05-JUL-2000 15:06:37	
Planned Completion	05-JUL-2000 15:06:37	
Required Completion	05-JUL-2000 15:06:37	

Note
APP-GME-82100: A new Batch has been created, please make a note of it.
OK

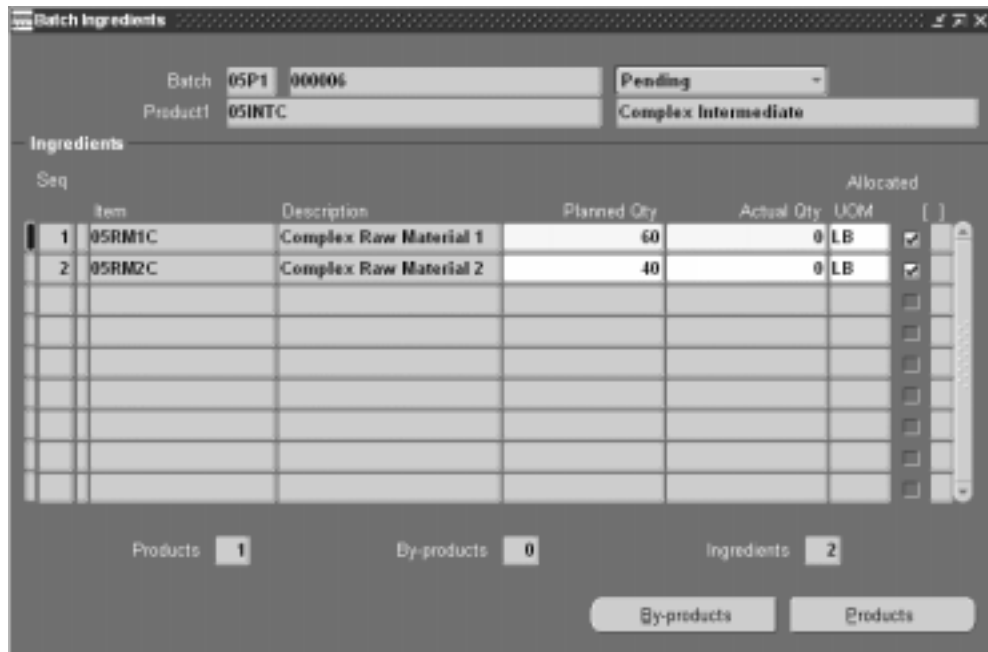
Practice 3-3 Solution (continued)

Step 4: Create a Batch for the Intermediate (xxINTC) Product

Create a batch of 100 pounds of the xxINTC product.

1. (N) Production Management—>Create Batch/FPO
2. In the Document Type field, select Batch.
3. In the Plant field, the system should default to your plant.
4. In the WIP Warehouse field, enter the code for the warehouse used, or leave the field blank (default to Replenishment warehouse).
5. In the Item field, enter the item code.
6. In the Effective Quantity field, specify the quantity you plan to make in the batch.
7. In the Planned Start field, select the date that you plan to start (or accept default).
8. In the Planned Completion field, select the planned completion date (or accept default).
9. You can accept the default in the Required Completion field.
10. Click OK and note your new batch number in the Document Number field.

Practice 3-3 Solution



The screenshot displays the 'Batch Ingredients' window. At the top, the batch is identified as '05P1 000006' with a status of 'Pending'. The product is '05INTC', which is a 'Complex Intermediate'. Below this, the 'Ingredients' section lists two items:

Seq	Item	Description	Planned Qty	Actual Qty	UOM	Allocated
1	05RM1C	Complex Raw Material 1	60	0	LB	<input checked="" type="checkbox"/>
2	05RM2C	Complex Raw Material 2	40	0	LB	<input checked="" type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

At the bottom of the window, summary counts are shown: Products: 1, By-products: 0, and Ingredients: 2. There are also buttons for 'By-products' and 'Products'.

Copyright © Oracle Corporation, 2000. All rights reserved.



Step 5: Verify Allocated Items

1. (N) Production Management—>Batches
2. (M) View—>Find
3. (B) Ingredients

Explaining Allocation Types Versus Release Types

ALLOCATION TYPES	RELEASE TYPES
Manual	Manual
Automatic	Automatic
	Incremental

Explaining Allocation Types Versus Release Types

Many people confuse release types with automatic allocation and manual allocation. Actually, however, release types and allocation types are separate concepts and have different functions. Allocation types specify the selection of lots and locations. Release types determine when and how transactions are completed and inventory is updated.

Items in a batch can be: auto-allocated but manually released; manually allocated but automatically released; both auto; both manual; auto-allocated and incrementally released; or manually allocated and incrementally released.

Release type is independent of the way allocation is performed.

Editing Batch Input and Output

You can accomplish the following in either the Batch Input or Batch Output window:

- **Allocate ingredients, products, and byproducts**
- **View unallocated items**
- **View the materials consumed by a batch**
- **Pick lots and locations from which to allocate ingredients**
- **Certify a batch**

Using Batch Input and Output

Use the Batch Input and Output windows to allocate materials and edit batch information.

**(N) OPM Process Execution—>Production Mgmnt—>
Batch Input or Batch Output**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Recording Batch Input and Output

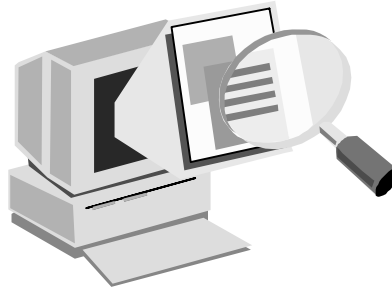
More help information for the Batch Input and Output windows is available online at:

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Recording Batch Input and Output—>

- ../ Batch Input - Allocating Ingredients
- ../ Viewing Unallocated Items
- ../ Recording Batch Consumption
- ../ Allocating Lines in a Batch - Batch Input
- ../ Picking Lots/Locations
- ../ Recording Batch Output
- ../ Recording Batch Production
- ../ Batch Output - Allocating Lines in a Batch

Demonstration

This demonstration concerns editing batch input and batch output.



Making a Lot Genealogy Inquiry

Lot Genealogy contains a valuable tool that can identify defective materials quickly and efficiently, allowing management to take appropriate action.

Using the Lot Genealogy inquiry, you can:

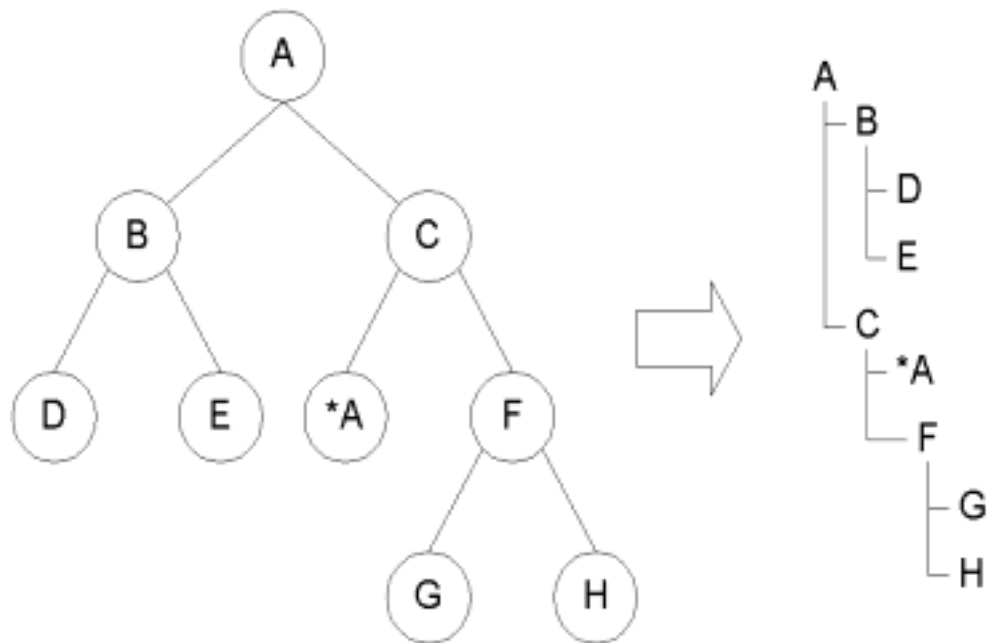
- **Perform a Lot Source inquiry to determine which ingredients went into a lot**
- **Perform a Where Used inquiry to identify the products in which a lot was used**

Additional Lot Genealogy Information

Additional lot information that is available on the Lot Genealogy Navigator includes the following:

- **Lot attributes**
- **Lot ingredients**
- **Lot products**
- **Lot events**
- **Current on-hand inventory**
- **Quality control**

Identifying Circular References

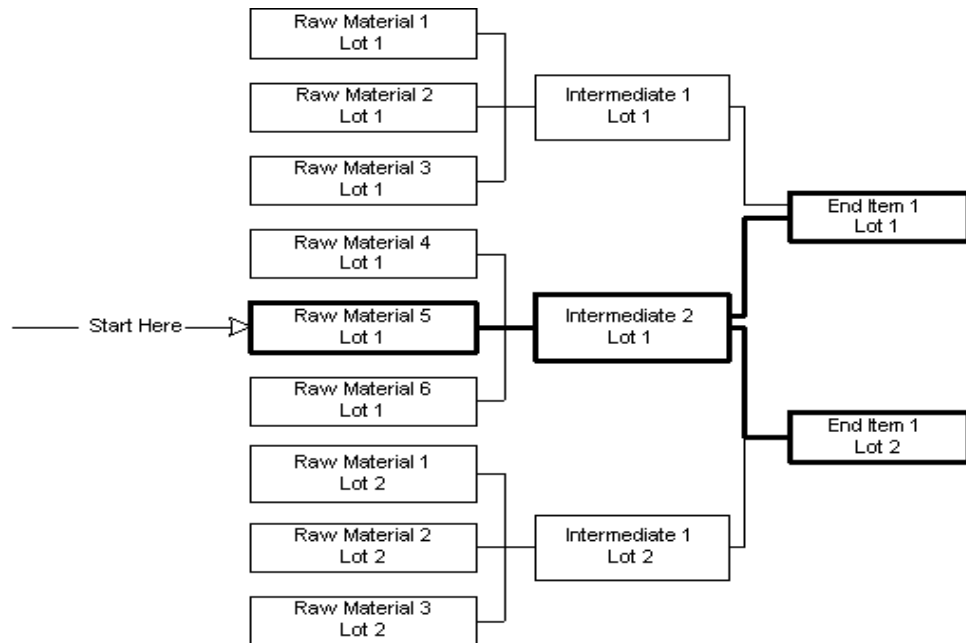


3-55

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Using the Where Used Hierarchy

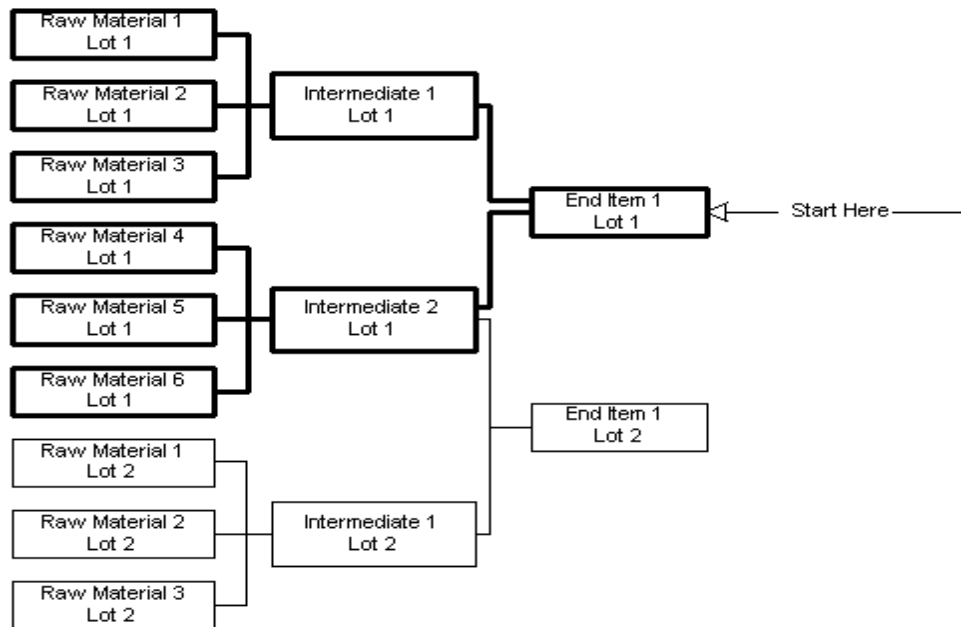


3-56

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Using the Lot Source Hierarchy



Making a Lot Genealogy Inquiry

Go to the Lot Genealogy Navigator to display the hierarchical structures of lot composition.

(N) OPM Inventory Control—>Inquiries—>Lot Genealogy

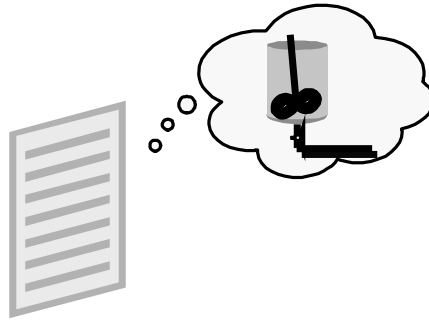
(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Inventory—>OPM Inventory Management User's Guide—>Inventory Inquiries—>Making a Lot Genealogy Inquiry

- ../ Using the Lot Bill of Materials Navigator
- ../ Identifying Circular References
- ../ Lot Genealogy Process Flow

Firm Planned Orders

Firm planned orders:

- Represent a plan to manufacture a product
- Represent a supply input of an item
- Do not establish commitments against current on-hand inventory



Creating a Firm Planned Order

Create a firm planned order when you plan to manufacture a product.

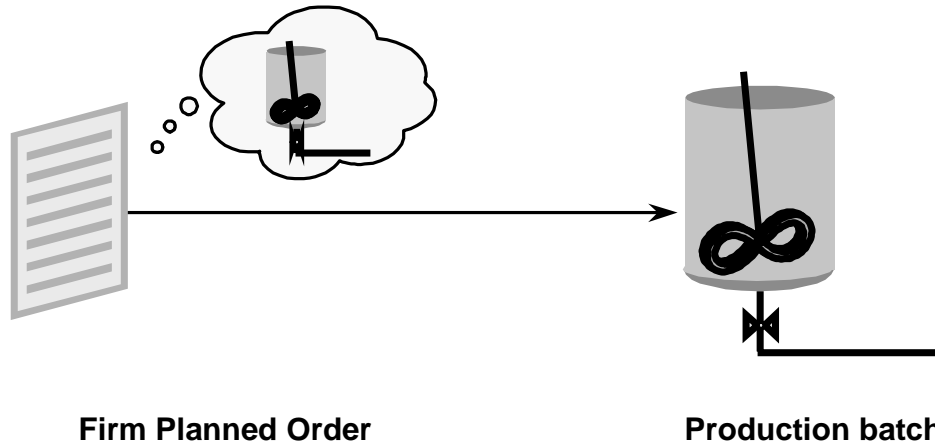
**(N) OPM Process Execution—>Production Mgmt—>
Create Batch/FPO**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Firm Planned Order—>Defining FPO Header and Product Information

- ../ Defining FPO Header and Product Information Procedure
- ../ Firm Planned Order Field Reference
- ../ Firm Planned Order Window - Buttons
- ../ FPO Header and Products - Actions Menu

Converting an FPO to a Batch

Create one or more batches based on an FPO.



Converting an FPO to a Batch

Convert an FPO to one or more batches from the Firm Planned Order window.

**(N) OPM Process Execution—>Production Mgmt—>
Firm Planned Order**

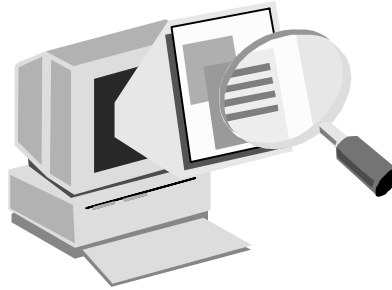
(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Firm Planned Orders

../ Converting an FPO to a Batch

../ Firm Planned Order to a Batch Conversion Field Reference

Demonstration

This demonstration concerns creating an FPO and converting an FPO to a batch.

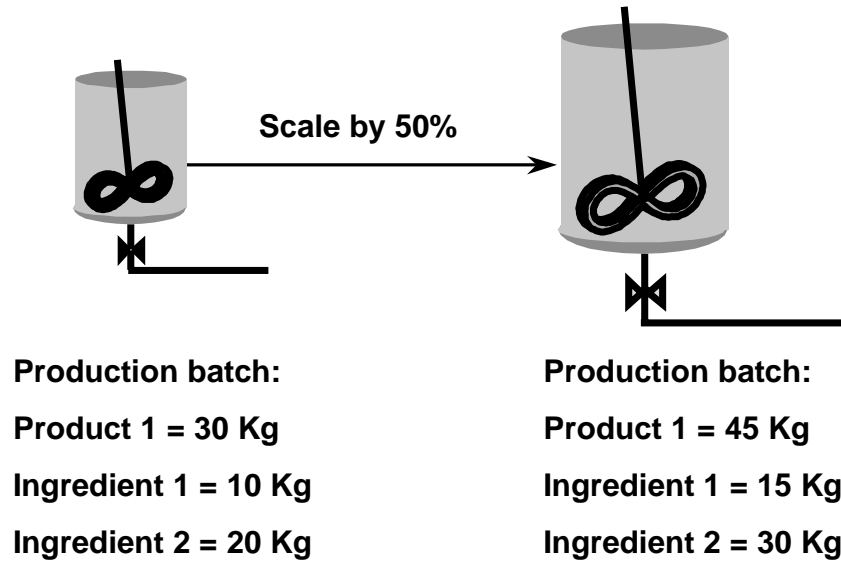


3-63

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE®

Scaling a Batch



Scaling a Batch

Scaling allows the proportional increase or decrease of ingredients, products, and byproducts in an FPO or batch.

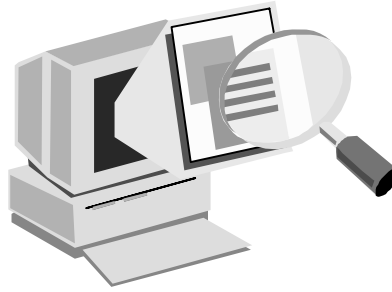
**(N) OPM Process Execution—>Production Mgmt—>
Firm Planned Order or Batches**

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Scaling and Theoretical Yield

- ../ Scaling Production Batches
- ../ Scaling Batches - Example 1
- ../ Scaling Batches - Example 2
- ../ Scaling - Example 3

Demonstration

This demonstration concerns scaling a batch.



3-66

Copyright © Oracle Corporation, 2000. All rights reserved.



True or False Question

A formula can be scaled only if the scale type is set to scalable in the Formulas window.

True or false?

3-67

Copyright © Oracle Corporation, 2000. All rights reserved.



True or False Question

A formula can be scaled only if the scale type is set to scalable in the Formulas window. True or false?

The answer is true.

In a formula, the only items that are scaled are those for which the scale type is set to linear scaling in the Additional Information window. The quantity of items for which scale type is set to fixed quantity remains fixed.

True or False Question

Formulas can be scaled by both percentage and/or quantity.

True or false?

3-69

Copyright © Oracle Corporation, 2000. All rights reserved.



True or False Question

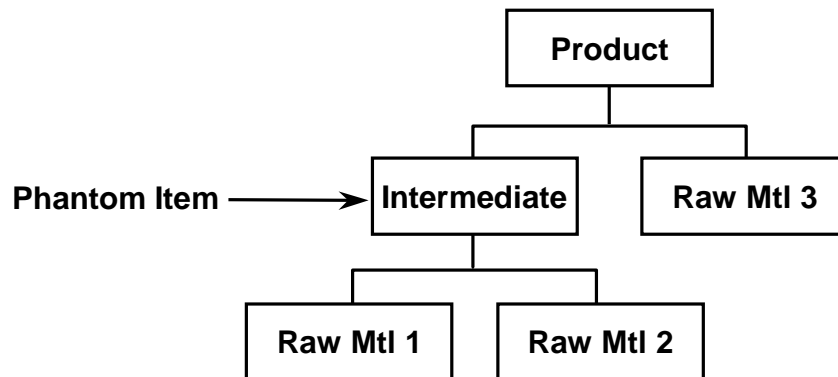
Formulas can be scaled by both percentage and/or quantity. True or false?

The answer is true.

Formulas can be scaled using two methods: Percentage and Quantity. Formulas can also be switched from percent scaling to quantity scaling.

Creating a Phantom Batch

A phantom is an intermediate item and is only made during the production of another product.



Creating a Phantom Batch

Phantom items are not usually sold, manufactured separately, or stored in inventory.

**(N) OPM Product Development—>Formula Mgmt—>Formulas (B)
Ingredients (M) Actions—>Additional Information**

Creating a Phantom Batch

Use the Additional Information box to select a Phantom Type. At the Phantom Type field, select one of the following: Not a Phantom, Auto Generate, or Manually Generated.

When you select the Auto-Generate Phantom Batches function with automatic document numbering, the system automatically creates a phantom batch when you first save the parent batch.

When you use the Manually Generated Phantom Batches function, you will have to select Actions—>Create Phantom from the Ingredients window to create a phantom batch after you have saved the parent batch.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Creating and Editing Batches—>Phantom Batches

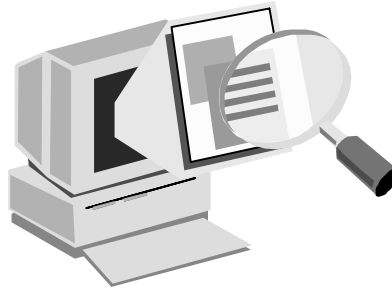
../ Example

../ Creating and Generating Phantoms

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Product Development—>OPM Formula Management User's Guide—>Formula Setup—>Understanding Formula Phantoms

Demonstration

This demonstration concerns the behavior of a batch when intermediates are defined as phantoms.



Summary

In this lesson, you should have learned how to:

- **Create production batches by direct entry**
- **Release, certify, and close a batch**
- **Allocate ingredients**
- **Allocate a product**
- **Use automatic allocation**
- **Edit batch inputs and outputs**
- **Create FPOs and convert them to batches**
- **Scale a batch**
- **Create a phantom batch**

4

Managing Production

Copyright © Oracle Corporation, 2000. All rights reserved.



Objectives

After completing this lesson, you should be able to do the following:

- **Set the batch release type for partial certification**
- **Partially certify a batch**
- **Use additional batch Action menu options**

Navigation

N = Navigator

T = Tab

M = Menu

I = Icon

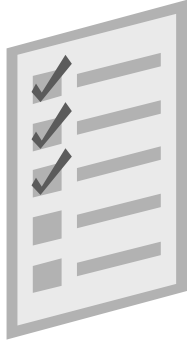
H = Hyperlink

B = Button

Help = Oracle Applications Help system

Partial Certification

Certify part of a batch when the batch is long, or when you are continuously processing.



Setting the Release Type

Partial certification requires a release type of Incremental for ingredients, and Manual or Incremental for products.

**(N) OPM Product Development—>Formula Mgmnt—>Formulas
(M) Actions—>Additional Information**

or

**(N) OPM Process Execution—>Production Mgmnt—>Batches
(M) Actions—>Additional Edit**

Setting the Release Type

You are required to complete only one setup step before using partial certification: you must set the ingredients' release types to Incremental and the product release type to Manual.

In addition to the menu paths shown above, you can also set the release type in the Additional Edit box of the Batch Ingredients, Batch Byproducts, Batch Input, or Batch Output windows.

If you want all formula lines to default to release type Incremental, you can set the profile option GMD:Default Release Type Profile to 2. When this profile option is set, all new formula lines are automatically entered with an Incremental release type.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Partial Certification with Backflushing—>Partial Certification with Backflushing Overview

../—>Partial Certification with Backflushing - Example

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Partial Certification with Backflushing—>Release Type Setup for Partial Certification

Partially Certifying a Batch

Partially certify the batch product as it is produced.

**(N) OPM Process Execution—>Production Mgmnt—>Partial Cert
or**

**(N) OPM Process Execution—>Production Mgmnt—>Batch Output
(M) Actions—>Partial Certify**

Partially Certifying a Batch

There are many different ways you can choose to partially certify a batch:

Partially certify the product, and allow the system to backflush the ingredients and byproducts.

Partially certify an ingredient, and allow the system to backflush the remaining ingredients, the product, and byproducts.

Allocate ingredients before partially certifying a batch.

Change the actual quantity that you originally partially certified and allow the system to backflush again.

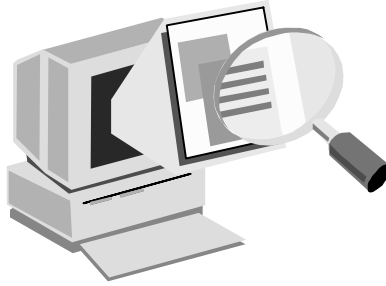
Backflush quantities through phantom batches.

Take scrap factors into account when partially certifying items.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Partial Certification with Backflushing

Demonstration

This demonstration concerns partially certifying a batch.



Using the Other Action Menu Options

Some additional options available from the Batches window Actions menu include:

- **Edit Parent**
- **Unrelease**
- **Reschedule**
- **Reroute**
- **Results**
- **Samples**
- **Specifications**
- **Theoretical Yield**

Options Available from the Batches Window Header Section

You can access the following additional options from the Actions menu when your cursor is positioned in the Header section of the Batches window:

- Edit Parent
- Unrelease
- Reschedule
- Reroute

The following additional options from the Actions menu can be accessed when your cursor is positioned in the Products section of the Batches window:

- Results
- Samples
- Specifications
- Theoretical Yield

Accessing the Other Action Menu Options

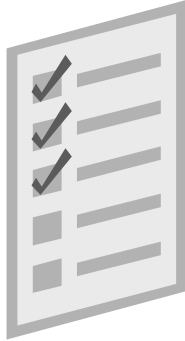
Many other options enable you to manage production batches from the Batches window.

(N) OPM Process Execution—>Production Mgmt—>Batches

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Production Management User's Guide—>Creating and Editing Batches—>Batches - Actions Menu

Practice 4-1

In this practice you will use partial certification for a simple finished good.



Practice 4-1

OPM allows you to use partial certification to record quantities as they are yielded. For example, you have a lengthy batch run that yields the product incrementally, a few at a time. In this practice you will use partial certification for a simple finished good. Your first task is to set up a formula that is a prerequisite for using partial certification functionality.

Step 1: Formula Setup

Set up your formula with the release type of the product set to manual release. The first ingredient is set for an incremental release. You may choose to leave the second ingredient set for full automatic release, or set it for incremental release.

Step 2: Create a Batch

Create a batch of xxFGS with a quantity of 100 pounds.

Step 3: Release the Batch

After you release the batch, review the Ingredients window and the changes to the first and second ingredients.

Step 4: Partial Certify the Batch

In the Incremental Quantity field, enter 25. Notice the New Actual and % Planned fields are updated. Review the Ingredients window and you should now see the actual quantity for ingredient 1 is 25% of the Planned Quantity.

Practice 4-1 Solution

Additional Information

Item	05FGS
Description	Simple Finished Good - Student 95
Quantity	100.00000000 LB
Scrap Factor	.00000000 %
Required Quantity	.00000000
Scale Type	Linear Scaling
Release Type	Manual
Phantom Type	Not a Phantom
Rework Type	Not Rework
Cost Allocation	1.00000000

OK Cancel

Practice 4-1 Solution

Step 1: Formula Setup

Set up your formula with the release type of the product set to manual release. The first ingredient is set for an incremental release. You may choose to leave the second ingredient set for full automatic release, or set it for incremental release.

1. (N) OPM Product Development—>Formula Management—>Formulas
2. (M) View—>Find
3. In the Formula field, enter xxFGS.
4. (M) Actions—> Additional Information
5. In the Release Type field, select the Manual release type and click OK.
6. At the Formulas window, navigate to (B) Ingredients.
7. (M) Actions—>Additional Information
8. In the Release Type field, select Incremental and click OK.
9. Repeat steps 6–8 for the other ingredient. If you choose not to repeat the process, the first ingredient performs with the Partial Certification. The second ingredient continues to perform as before with automatic release taking place.
10. Save your work. Your setup is complete.

Practice 4-1 Solution

The screenshot shows a dialog box titled "Create Batch/Firm Planned Order". The fields are as follows:

Field	Value
Document Type	Batch
Plant	05P1 STUDENT 05 ORGANIZATION
Document Number	000007
Item	05FGS
Effective Quantity	100
Formula	
Routing	
Planned Start	05-JUL-2000 15:29:41
Planned Completion	05-JUL-2000 15:29:41
Required Completion	05-JUL-2000 15:29:41

Additional fields on the right side:

Field	Value
WIP Warehouse	
Unit of Measure	LB
Version	
Version	

Buttons: OK, Cancel

Practice 4-1 Solution (continued)

Step 2: Create a Batch

Create a batch of xxFGS with a quantity of 100 pounds.

1. (N) Production Management—>Create Batch/FPO
2. In the Document Type field, use the default.
3. In the Item field, select xxFGS.
4. In the Effective Quantity field, enter 100.
5. Accept defaults in the other fields.
6. Click OK and note the number in the Document Number field.

Practice 4-1 Solution

The screenshot shows the Oracle Batches window with the following details:

- Batch:** 05P1 000007
- Formula:** 05FGS
- Routing:** 1
- WIP Warehouse:** EW1
- Warehouse 1E:** Warehouse 1E
- Planned Dates:**
 - Start: 05-JUL-2000 15:29:41
 - Completion: 05-JUL-2000 15:29:41
 - Required Completion: 05-JUL-2000 15:29:41
- Actual Dates:**
 - Start: 05-JUL-2000 15:38:14
 - Completion: (empty)
 - Close: (empty)
- Products Table:**

Seq	Item	Description	Planned Qty	Actual Qty	UOM	Allocated
1	05FGS	Simple Finished Good - St	100	0	LB	<input checked="" type="checkbox"/>
- Summary:**
 - Products: 1
 - By-products: 0
 - Ingredients: 2
- Buttons:** Byproducts, Ingredients

4-12

Copyright © Oracle Corporation, 2000. All rights reserved.



Practice 4-1 Solution (continued)

Step 3: Release the Batch

After you release the batch, review the Ingredients window and the changes to the first and second ingredients.

1. (N) Production Management—>Batches
2. (M) View—>Find.
3. Enter batch number and click Find.
4. (M) Actions —>Release
5. The product of the batch xxFGS is still the same, with 100 pounds in the Planned Qty field and zero in the Actual Qty field.

Practice 4-1 Solution

The screenshot displays the 'Batch Ingredients' window in Oracle. The window title is 'Batch Ingredients'. The 'Batch' field is '05P1', the 'Product1' field is '05FGS', and the 'WIP' field is 'Simple Finished Good - Student 05'. The 'Ingredients' section shows a table with columns: Seq, Item, Description, Planned Qty, Actual Qty, UOM, and a checkbox. The table contains two rows of ingredients:

Seq	Item	Description	Planned Qty	Actual Qty	UOM	
1	05RM1S	Simple Raw Material 1 - Si	100	0	LB	<input checked="" type="checkbox"/>
2	05RM2S	Simple Raw Material 2 - Si	100	0	LB	<input checked="" type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

At the bottom of the window, the 'Products' field is '1', the 'By-products' field is '0', and the 'Ingredients' field is '2'. There are buttons for 'By-products' and 'Products' at the bottom right.

Copyright © Oracle Corporation, 2000. All rights reserved.



Step 3: Release the Batch (continued)

6. Navigate to (B) Ingredients. The first ingredient that was changed still has the original planned quantity and an actual quantity of zero.
7. If you left the second ingredient set to Automatic Release, its actual quantity will have been set equal to the planned quantity. If you set it to incremental release, the actual quantity will be zero.

6. Navigate to (B) Ingredients. The first ingredient that was changed still has the original planned quantity and an actual quantity of zero.
7. If you left the second ingredient set to Automatic Release, its actual quantity will have been set equal to the planned quantity. If you set it to incremental release, the actual quantity will be zero.

Practice 4-1 Solution

Partial Certification

Batch: 05P1 000007 Status: Work In Process

Product: 05FGS

Formula: 05FGS

Routing:

Batch Line

Item: 05FGS Description: Simple Finished Good - Student 05

Type: Product Seq: 1

Quantities

Incremental: 25 LB Planned: 100

New Actual: 25 Old Actual: 0

Percent Of Plan: 25 %

OK Cancel

Practice 4-1 Solution (continued)

Step 4: Partially Certify the Batch

In the Incremental Quantity field, enter 25. Notice how the New Actual and % Planned fields are updated. Review the Ingredients window and you should now see the actual quantity for ingredient 1 is 25% of the Planned Quantity.

1. (N) Production Management—>Partial Cert
2. Select your batch number from the list of values.
3. Select the product item code from the list of values.
4. In the Incremental field, enter 25. Notice that the values have been updated in both the New Actual and Percent of Plan fields.
5. Click OK.

Practice 4-1 Solution

The screenshot shows the 'Batch Ingredients' window in Oracle. The 'Batch' field contains '05P1' and '000007'. The 'Product1' field contains '05FGS'. The 'WIP' dropdown is set to 'Simple Finished Good - Student #5'. Below the 'Ingredients' section, there is a table with columns: Seq, Item, Description, Planned Qty, Actual Qty, UOM, and a checkbox column. The table has two rows of data:

Seq	Item	Description	Planned Qty	Actual Qty	UOM	
1	05RM1S	Simple Raw Material 1 - S	100	25	LB	<input checked="" type="checkbox"/>
2	05RM2S	Simple Raw Material 2 - S	100	25	LB	<input checked="" type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

At the bottom of the window, the summary fields show: Products: 1, By-products: 0, and Ingredients: 2. There are also buttons for 'By-products' and 'Products'.

4-15

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE®

Copyright © Oracle Corporation, 2000. All rights reserved.



Step 4: Partially Certify the Batch (continued)

6. (N) Production Management—>Batches
7. (M) View—>Find
8. (B) Ingredients
9. Note that the value in the Actual Qty field is 25% of the Planned Quantity.

6. (N) Production Management—>Batches
7. (M) View—>Find
8. (B) Ingredients
9. Note that the value in the Actual Qty field is 25% of the Planned Quantity.

Summary

In this lesson, you should have learned how to:

- **Set the batch release type for partial certification**
- **Partially certify a batch**
- **Use additional batch Action menu options**

5

Using Production Management Reports

Copyright © Oracle Corporation, 2000. All rights reserved.



Objectives

After completing this lesson, you should be able to do the following:

- **Submit new report requests**
- **Run OPM process execution reports**
- **View reports**



5-2

Copyright © Oracle Corporation, 2000. All rights reserved.



Using Production Management Reports

This topic discusses various standard reports, already formatted and ready to run, that you can select from the View and Report menus in many windows. Many of these selections produce windows in which you can specify parameters to restrict your inquiry to the desired information.

Navigation

N = Navigator

T = Tab

M = Menu

I = Icon

H = Hyperlink

B = Button

Help = Oracle Applications Help system

Submitting New Requests

Specify the parameters by which to run your inquiry or report.

(N) OPM Process Execution—>Production Mgmnt—>Reports—>Run—>Submit a New Request (B) OK

(Help) Oracle Applications User's Guide—>Running Reports and Programs—>Using Standard Request Submission—>Submitting a Request

Running OPM Process Execution Reports

You can run a request for the following reports:

- **Batch Pick List Report**
- **Batch Ticket Report**
- **Batch Yield Variance Report**
- **Material Usage and Substitution Variance Report**
- **Production Activity Report**

Batch Pick List Report

This report identifies the material that must be picked for production batches. If you allocate ingredients before releasing the batches, the report identifies the lots that must be picked and the warehouse locations from which to pick the ingredients.

Batch Ticket Report

This report includes information about the formula used, starting and completion dates, and items and item quantities.

Batch Yield Variance Report

It reports the yield (output) variances. For example, if 100 lbs. of a product is expected, but after running a batch, only 96 lbs. results, the yield variance report is 4 lbs.

Material Usage and Substitution Variance Report

This report shows how much of an item in a batch was actually used. It also accounts for any materials that were substituted during the process.

Production Activity Report

This report shows the production activity scheduled during a specific period for batches both with pending status, and for firm planned orders.

Viewing Reports

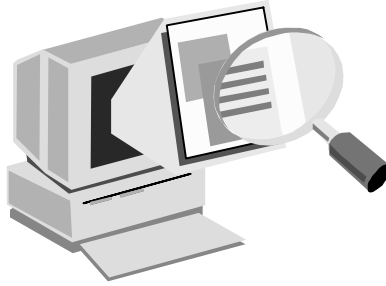
View your report after running a report request.

**(N) OPM Process Execution—>Production Mgmnt—>Reports—>
View—>Find Requests (B) Find**

(Help) Oracle Applications User's Guide—>Viewing Reports—>Viewing Requests—>
../Using the Requests window

Demonstration

This demonstration concerns viewing a batch pick list report.



Summary

In this lesson, you should have learned how to:

- **Submit new report requests**
- **Run OPM process execution reports**
- **View reports**



6

Setting Up and Using Process Operations Control

Copyright © Oracle Corporation, 2000. All rights reserved.



Objectives

After completing this lesson, you should be able to do the following:

- **Set up Process Operations Control (POC)**
- **Enter POC data**
- **View and edit batch steps**
- **Assign a batch step to an item in a batch**
- **Define batch step dependencies**
- **Reschedule batch steps**
- **Enter batch resource transaction information**
- **Enter WIP transaction information**
- **Inquire on POC data**

6-2

Copyright © Oracle Corporation, 2000. All rights reserved.



Navigation

N = Navigator

T = Tab

M = Menu

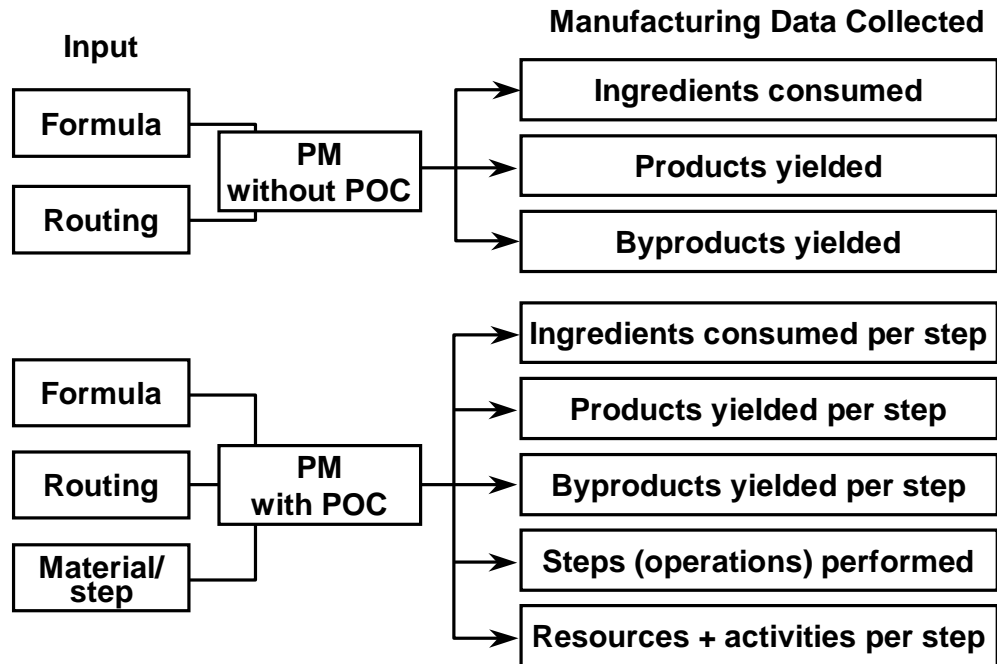
I = Icon

H = Hyperlink

B = Button

Help = Oracle Applications Help system

Overview



Process Operations Control

Process Operations Control (POC) collects the following information at each step:

- **Material consumed**
- **Nonmaterial resources consumed, including:**
 - **Number of resources used**
 - **Duration of resource usage**
 - **Quantity processed by resource and activity**
- **Step completion**
- **Material yielded**

POC in Manufacturing

POC gives you operation-level status details over a work-in-process production batch. POC uses the routing (which sequences operations into routing steps) to enable the collection of accurate and detailed manufacturing information.

Defining Prerequisites for POC

The following lists the prerequisites for setting up POC:

- Turn on POC for a plant
- Create a default unit of measure for the time UOM type (such as HR)
- Define document ordering for document types PROD and FPO
- Define activities, resources, operations, and routings

POC Prerequisites

The above data is required before POC can be set up for your operations.

Setting Up POC

The following setup steps are not required to run POC, unless you want to collect detailed data:

- **Routing step dependencies**
- **Formula/routing association**

Setting Up POC

You can decide the level of detail that you want to collect for your production analysis. The level of detail collected could range from ignoring POC altogether to posting individual resource transactions.

Defining Routing Step Dependencies

Routing step dependencies define the relationship between routing steps.

(N) OPM Process Execution—>POC—>Routing Step Depend

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Setup Screens—>Setting Up Routing Step Dependencies

../—>Setting Up Routing Step Dependencies - Procedure

../—>Routing Step Dependencies Window Field Reference

Associating Routing Steps to Formula Items

**This window explains where in the routing each
formula item is used.**

(N) OPM Process Execution—>POC—>Form/Route Assoc

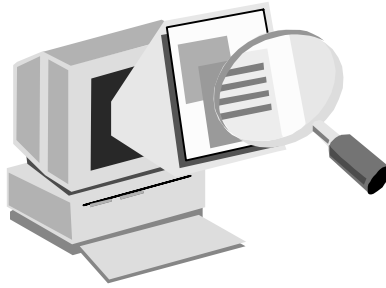
(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process
Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Setup
Screens—>Setting Up Routing Step/Formula Items Associations

../—>Setting Up Routing Step/Formula Items Associations - Process

../—>Routing Step/Formula Items Assoc./Window Field Ref

Demonstration

This demonstration covers POC setup.



Entering POC Data

You can enter POC data in the following windows:

- **Batch Steps**
- **Batch Step Details**
- **Batch Step/Batch Item Association**
- **Batch Step Dependencies**
- **Resource Transactions**
- **Batch Operation WIP**

Entering POC Data

Each window requires increasing levels of detail about the batch steps that comprise the production run.

Viewing and Entering Batch Steps

You can maintain both the planned and the actual batch step data in the Batch Steps window.

(N) OPM Process Execution—>POC—>Batch Steps

Viewing and Entering Batch Steps

In this window, you can release, certify, and close a batch step, in addition to viewing the status of each batch step.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Processing Windows—>Viewing and Editing Batch Steps

../—>Viewing and Editing Batch Steps - Procedure

../—>Batch Steps Window Field References

../—>Batch Steps Window - Buttons

../—>Batch Steps Window - Actions Menu

Entering Batch Step Details

Define in detail the resources and activities that are associated with each routing step.

(N) OPM Process Execution—>POC—>Batch Steps

Click the drilldown indicator box next to the batch step whose details you want to see.

Entering Batch Step Details

Although the Batch Step Details window is similar to the Operations window in terms of defining resource usage, this window adds the concepts of dates, times, and planned and actual quantities to permit recording of step detail data in production.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Processing Windows—>Defining Batch Step Details

../—>Defining Batch Step Details - Procedure

../—>Batch Step Details Window Field Reference

Assigning a Batch Step to an Item in a Batch

Modify the batch steps at which items are introduced into, or yielded from, the production process.

(N) OPM Process Execution—>POC—>Batch Steps
(M) Actions—>Item/Step Association

Assigning a Batch Step to an Item in a Batch

Modify the batch steps at which items are introduced into, or yielded from, the production process. Specify the number of the batch step that you want to associate with an item.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Processing Windows—>Associating Batch Steps with Items

../—>Associating Batch Steps with Formula Items - Procedure

../—>Batch Step/Batch Item Association Window Field Ref

Defining Batch Step Dependencies

You can modify step dependencies or add dependencies for new or substitute steps.

(N) OPM Process Execution—>POC—>Batch Steps
(M) Actions—>Batch Step Dependencies

Defining Batch Step Dependencies

If you insert a new step, you can establish its immediate dependencies in this window. Dependencies are optional. If you delete a batch step, the associated dependencies are automatically deleted.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Processing Windows—>Defining Batch Step Dependencies

../—>Defining Batch Step Dependencies - Procedure

../—>Batch Step Dependencies Window Field References

Rescheduling Batch Steps

You can change the planned start date and time, and the planned complete date and time, on a batch step that has a status of Pending.

(N) OPM Process Execution—> POC—>Batch Steps
(M) Actions—>Reschedule Step

Rescheduling Batch Steps

Changing the planned start date and time changes the date and time of the pending ingredient transactions. Changing the planned completion date and time changes the date and time of the pending product and byproduct transactions.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Processing Windows—>Rescheduling Batch Steps

../—>Rescheduling Batch Steps - Procedure

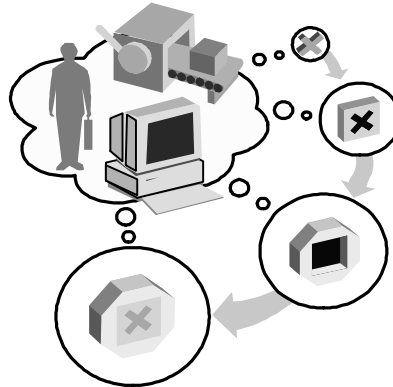
../—>Rescheduling Steps Dialog Box Field References

../—>Reschedule Batch Steps - Actions Menu

Entering Batch Resource Transaction Information

Edit transactions to post incremental resource usage.

(N) OPM Process Execution—>POC—>Batch Step Details
(M) Actions—>Transactions



6-16

Copyright © Oracle Corporation, 2000. All rights reserved.

ORACLE

Entering Batch Resource Transaction Information

You must release a step before you can insert resource transactions.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Processing Windows—>Editing Batch Resource Transactions

../—>Batch Resource Transactions - Procedure

../—>Rescheduling Steps Dialog Box Field References

../—>Reschedule Batch Steps - Actions Menu

Entering WIP Transaction Information

Report interoperation WIP transactions in this window for data storage purposes only.

(N) OPM Process Execution—>POC—>Batch Operation WIP

Entering WIP Transaction Information

POC does not use the data that you enter into the Batch Operation WIP window. This window is only used as a place to store data relating to WIP batch details.

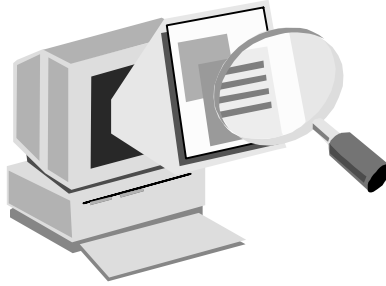
(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Processing Windows—>Reporting Batch Operation WIP

../—>Reporting Batch Operation WIP - Procedure

../—>Reporting Batch Operation WIP Window Field References

Demonstration

This demonstration concerns creating a batch and releasing it to WIP using POC.



Inquiring on POC Data

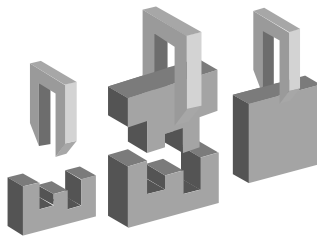
You can inquire on the following types of POC data:

- **WIP status**
- **Material variance**
- **Batch step variance**
- **Resource variance**

Inquiring on WIP Status

You can view detailed information about batches that are in process.

(N) OPM Process Execution—>POC—>WIP Inquiry



6-20

Copyright © Oracle Corporation, 2000. All rights reserved.



Inquiring on WIP Status

Specify the inquiry criteria and click on the drilldown indicator box next to the batch step whose details you want to see to get to the more detailed (second) POC WIP Inquiry window.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Inquiries

../—>Viewing WIP Batch Information Overview

../—>POC WIP Inquiry Selection Box

../—>POC WIP Inquiry (first)

../—>POC WIP Inquiry (second)

Viewing Material Variance Data

You can view detailed information about batch material consumption, such as where and when materials are consumed in a production run.

(N) OPM Process Execution—>POC—>Material Variance

Viewing Material Variance Data

For detailed information about a specific batch, highlight the batch and select Ingredients from the Actions menu to open the Material Variance - Ingredient Inquiry window. This window displays the planned and actual quantities for a batch by ingredient.

Access the Material Variance - Step Details Inquiry window from the Material Variance - Ingredient Inquiry window Actions menu.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Inquiries

- ../—>Viewing Material Variance Information
- ../—>Material Variance Selection Box
- ../—>Material Variance Inquiry
- ../—>Material Variance - Ingredient Inquiry
- ../—>Material Variance - Step Details Inquiry

Viewing Batch Step Variance Data

You can view detailed information about batch steps in a production run, such as the operation performed at a particular step.

(N) OPM Process Execution—>POC—>Batch Step Var Inq

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Inquiries

- ../—>Viewing Batch Step Variances
- ../—>Batch Step Variances - Dialog Box
- ../—>Batch Step Variance Inquiry Window
- ../—>Batch Step Variance Inquiry
- ../—>Batch Variance Inquiry - Operation Step Details

Viewing Resource Variance Details

View information about resource consumption during production, such as nonmaterial resources used, the date and time specific resources are to be used, and the variance between the planned and actual use.

(N) OPM Process Execution—>POC—>Resource Variance

Viewing Resource Variance Details

For detailed information about a specific resource, highlight the resource in the Resource Variance Details window, then select Resource Usage from the Actions menu. This window displays a more detailed view of the routings and batches consuming a specific nonmaterial resource.

More details on resource usage are displayed in the Resource Usage Details window. Highlight the resource in the Resource Usage window, and then select Resource Usage Details from the Actions menu.

(Help) Oracle Manufacturing Applications—>Oracle Process Applications—>Oracle Process Manufacturing Process Execution—>OPM Process Operation Control User's Guide—>POC Inquiries

- ../—>Viewing Resource Variances
- ../—>Resource Variance Selection Box
- ../—>Resource Variance Details Window
- ../—>Resource Usage Window
- ../—>Resource Usage Details Window

Summary

In this lesson, you should have learned how to:

- **Set up Process Operations Control (POC)**
- **Enter POC data**
- **View and edit batch steps**
- **Assign a batch step to an item in a batch**
- **Define batch step dependencies**
- **Reschedule batch steps**
- **Enter batch resource transaction information**
- **Enter WIP transaction information**
- **Inquire on POC data**



Course Summary

Copyright © Oracle Corporation, 2000. All rights reserved.



Setting Up Production Management

- **Systems**
- **Inventory Control**
- **Formula Management**
- **Master Production Scheduling (MPS)**

7-2

Copyright © Oracle Corporation, 2000. All rights reserved.



Navigation

N = Navigator

T = Tab

M = Menu

I = Icon

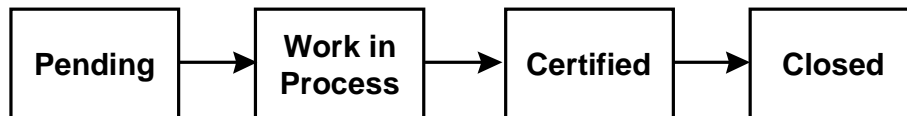
H = Hyperlink

B = Button

Help = Oracle Applications Help system

Processing Production Batches

- **Batch process**
 - Create
 - Release
 - Certify
 - Close
- **Batch statuses**
- **Allocation**
- **Batch input and output**
- **Firm planned orders**
- **Batch scaling**
- **Phantom batches**



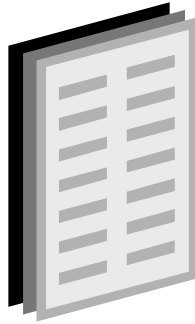
Managing Production

Certify part of a batch when the batch is long, or when you are continuously processing.



Using Production Management Reports

- **Batch Pick List Report**
- **Batch Ticket Report**
- **Batch Yield Variance Report**
- **Material Usage and Substitution Variance Report**
- **Production Activity Report**



7-5

Copyright © Oracle Corporation, 2000. All rights reserved.



Process Operations Control

POC collects the following information at each step:

- **Material consumed**
- **Nonmaterial resources consumed, including:**
 - **Number of resources used**
 - **Duration of resource usage**
 - **Quantity processed by resource and activity**
- **Step completion**
- **Material yielded**