Oracle® Process Manufacturing

Process Operation Control User's Guide

Release 11*i*

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Oracle Process Manufacturing Process Operation Control User's Guide, Release 11*i*

Part No. A77376-01

Primary Author: Carole Pink

Contributing Authors: Glenn Ruhl, Tom Muratore

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If you have problems with the software, please contact your local Oracle Support Services.

Preface

Welcome to the *Oracle Process Manufacturing Process Operation Control User's Guide*. This user's guide includes the information you need to work with the Oracle Process Manufacturing (OPM) application effectively.

This preface explains how this user's guide is organized and introduces other sources of information that can help you.

Intended Audience

This guide assumes that you have working knowledge of your business area's processes and tools. It also assumes that you are familiar with OPM Process Execution. If you have never used Process Operation Control, we suggest you attend one or more of the Oracle Process Manufacturing training classes available through Oracle World Wide Education.

This guide also assumes that you are familiar with the Oracle Applications graphical user interface. To learn more about Oracle Applications graphical user interface, read the *Oracle Applications User's Guide*.

About This Guide

This guide contains overviews as well as task and reference information. It includes the following:

Name	Description
POC Overview	Presents an overview of POC and how it is used in conjuction with Production Management and how POC tracks materials at the operations level and resources usage
POC Prerequisites	Discusses the requirements you must meet in other moudles before you can use POC.
POC Setup Screens	Discusses how to set up of routing/step dependencies and formula/item associations.
POC Processing Windows	Discusses the viewing, editing and/or processing of POC data.
POC Inquiries	Discusses the inquiries available when you use POC.
Appendix	Offers a list of default navigation to the POC windows.

Information Sources

You can choose from many sources of information, including documentation, training, and support services to increase your knowledge and understanding.

Online Documentation

Oracle Applications documentation is available on CD-ROM, except for technical reference manuals. User's guides are available in HTML format and on paper. Technical reference manuals are available on paper only. Other documentation is available on paper and sometimes in PDF format.

The content of the documentation remains the same from format to format. Slight formatting differences could occur due to publication standards, but such differences do not affect content. For example, page numbers are included on paper, but are not included in HTML.

The HTML documentation is available from all Oracle Applications windows. Each window is programmed to start your web browser and open a specific, context-sensitive section. Once any section of the HTML documentation is open, you can navigate freely throughout all Oracle Applications documentation.

Related Documents

Oracle Process Manufacturing shares business and setup information with other Oracle products. You may find the following Oracle Applications user's guides useful:

- *Oracle Applications User's Guide Release 11i*
- *Oracle Application's Flexfields Guide Release 11i*
- *Oracle Workflow User Guide*
- *Oracle Applications System Administrator's Guide Release 11i*
- *Oracle General Ledger User's Guide Release 11i*
- *Oracle Payables User's Guide Release 11i*
- *Oracle Receivables User's Guide Release 11i*
- *Oracle Human Resources North American User's Guide Release 11i*
- *Oracle Purchasing User's Guide Release 11i*

Oracle Process Manufacturing Guides

The following is a list of documentation in each product group for OPM Release 11*i*:

Financials

- *Oracle Process Manufacturing Accounting Setup User's Guide*
- *Oracle Process Manufacturing Cost Management User's Guide*
- *Oracle Process Manufacturing Manufacturing Accounting Controller User's Guide*
- *Oracle Process Manufacturing and Oracle Financials Integration User's Guide*

Inventory Control

- *Oracle Process Manufacturing EC Intrastat Reporting User's Guide*
- *Oracle Process Manufacturing Inventory Management User's Guide*
- *Oracle Process Manufacturing Physical Inventory User's Guide*

Logistics

- *Oracle Process Manufacturing Order Fulfillment User's Guide*
- *Oracle Process Manufacturing Purchase Management User's Guide*

Process Execution

- *Oracle Process Manufacturing Process Operation Control User's Guide*
- *Oracle Process Manufacturing Production Management User's Guide*

Process Planning

- *Oracle Process Manufacturing Capacity Planning User's Guide*
- *Oracle Process Manufacturing Capacity Planning with RHYTHM Factory Planner User's Guide*
- *Oracle Process Manufacturing MPS/MRP and Forecasting User's Guide*

Product Development

- *Oracle Process Manufacturing Formula Management User's Guide*
- *Oracle Process Manufacturing Laboratory Management User's Guide*
- *Oracle Process Manufacturing Quality Management User's Guide*

Regulatory

- *Oracle Process Manufacturing Regulatory Management User's Guide*

System Administration and Technical Reference

- *Oracle Process Manufacturing Implementation Guide*
- *Oracle Process Manufacturing System Administration User's Guide*
- Oracle Process Manufacturing Technical Reference Manuals

Training

Oracle offers a complete set of formal training courses to help you master Oracle Process Manufacturing and reach full productivity quickly. We organize these courses into functional learning paths, so you take only those courses appropriate to your area of responsibility.

You have a choice of educational environments. You can attend courses offered by Oracle Education Services at any one of our many Education Centers, or you can arrange for our trainers to teach at your facility. In addition, Oracle Training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization's structure, terminology, and data as examples in a customized training session delivered at your own facility.

Conventions

The following conventions are used in this guide:

Bolded Text

Buttons, fields, keys, menus, and selections are bolded in procedures only. For example: To access the next window, click **OK**. Otherwise, references to these features appear in regular type.

Additional Menu Options

Only nonstandard menu options are discussed. Standard menu bar options (such as Save) are not discussed. These standard options are described in the *Oracle Applications User's Guide Release 11i*. Only menu options unique to the use of the specific window are discussed.

Field References

References to fields within procedures are in bold type. References within the body of this guide appear in regular type.

Required Fields

The word Required appears as the last word in the field description of all required fields. When the field is required contingent on the entry in another field, or only in specific situations, "Required if..." is the last sentence of the field description.

Fields Reserved for Future Use

Fields with no current processing implications are referenced by the statement "This field is not currently used" or "Reserved for future use." Do not use these fields for your own reference data, because there are plans to link future functionality to these fields. Fields intended for informational purposes only are referenced by the statement "This field is for informational purposes only."

Pending/Completed Transactions

Discussions about processing transactions that use the words pending and completed refer to the status of a transaction. Pending and completed do not refer to the database tables that are updated as a result of transactions (for example, some completed transactions are stored in the Pending Transactions table).

Procedures

Most topics contain a procedure with numbered steps. Any actions which are subordinate to a step are assigned letters. You can customize your Oracle Application, therefore, all procedures are suggestive only. Navigate to windows and between responsibilities in a way that works best for your particular setup. Also note that fields may appear in a different order than they are discussed.

Use of the Word Character

The word character means an alphanumeric character. Characters that are numeric or alphabetic only are referenced specifically. Depending on your system security profile, you many not have access to all of the windows and functions described in this guide. If you do not see a menu option described in this guide, and you want access to it, contact your System Administrator.

Do Not Use Database Tools to Modify Oracle Applications Data

Oracle Applications tables are interrelated. As a result, any change you make using Oracle Applications can update many tables at once. If you modify the Oracle Applications data using anything other than Oracle Applications, you could change a row in one table without making corresponding changes in related tables. If your tables are not synchronized with each other, you risk retrieving erroneous information and receiving unpredictable results throughout Oracle Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also track who changes information. If you enter information into database tables using database tools, you could store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

Consequently, we strongly recommend that you never use SQL*Plus or any other tool to modify Oracle Applications data unless otherwise instructed by Oracle Support Services.

About Oracle

Oracle Corporation develops and markets an integrated line of software products for database management, applications development, decision support, and office automation, as well as Oracle Applications, an integrated suite of more than 45 software modules for financial management, supply chain management, manufacturing, project systems, human resources, sales, and service management.

Oracle Products are available for mainframes, minicomputers, personal computers, network computers, and personal digital assistants, allowing organizations to integrate different computers, different operating systems, different networks, and even different database management systems, into a single, unified computing, and information resource.

Oracle is the world's leading supplier of software for information management, and the world's second largest software company. Oracle offers its database, tools, and applications products, along with related consulting, education, and support services in over 140 countries around the world.

Thank You

Thank you for choosing Oracle Process Manufacturing and this user's guide.

We value your comments and feedback. At the beginning of this guide is a Reader's Comment Form that you can use to explain what you like or dislike about this user's guide. Mail your comments to the following address or call us directly at 650-506-7000.

Oracle Applications Documentation Manager
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Or, send an electronic mail message to appsdoc@us.oracle.com

1

POC Overview

Process Operation Control (POC) is an extension to the OPM Production Management application that allows you to record more complete and detailed manufacturing data.

OPM Production Management users are able to record the actual material quantities consumed and yielded during manufacturing. POC provides the ability to record the actual consumption of non-material resources, such as labor, machine time and utilities, associated with a production batch. In addition, as the name implies, with POC, all manufacturing data can now be collected by operation (routing step).

The following topics are discussed:

- POC and the Process ERP Model
- Planned and WIP Manufacturing Analysis
- Post Manufacturing Analysis
- Costing Measurements
- POC in Manufacturing
- Overview of POC Related Forms

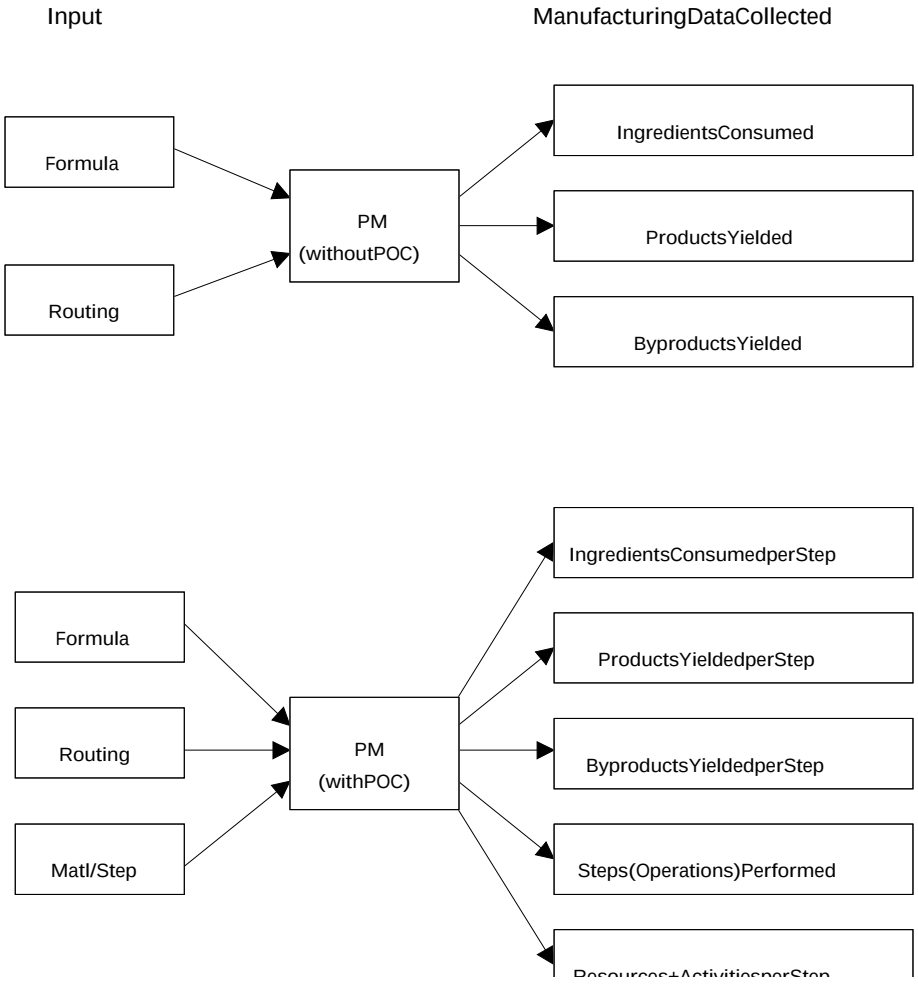


Figure 1–1 Production Management with and without POC

POC and the Process ERP Model

An Enterprise Resource Planning (ERP) system, by definition, must be focused primarily on managing the resources of the enterprise. To serve this purpose, resources (both material and non-material) form the core of the ERP model.

The capabilities of an ERP system are limited only by the ERP model itself. A user must be able to accurately define each resource and its attributes.

Once the resources have been defined, the ERP system must allow the user to associate these resources in a way which closely resembles their manufacturing process. This step is called 'process modeling'.

The process model then serves as the foundation for many other business functions including: cost modeling, planning (MRP & CRP), manufacturing, quality control, laboratory analysis and post-manufacturing resource utilization analysis.

Analysis by comparing the actual process results to the original process plan will permit the user to improve the process model and ultimately, to better manage the resources.

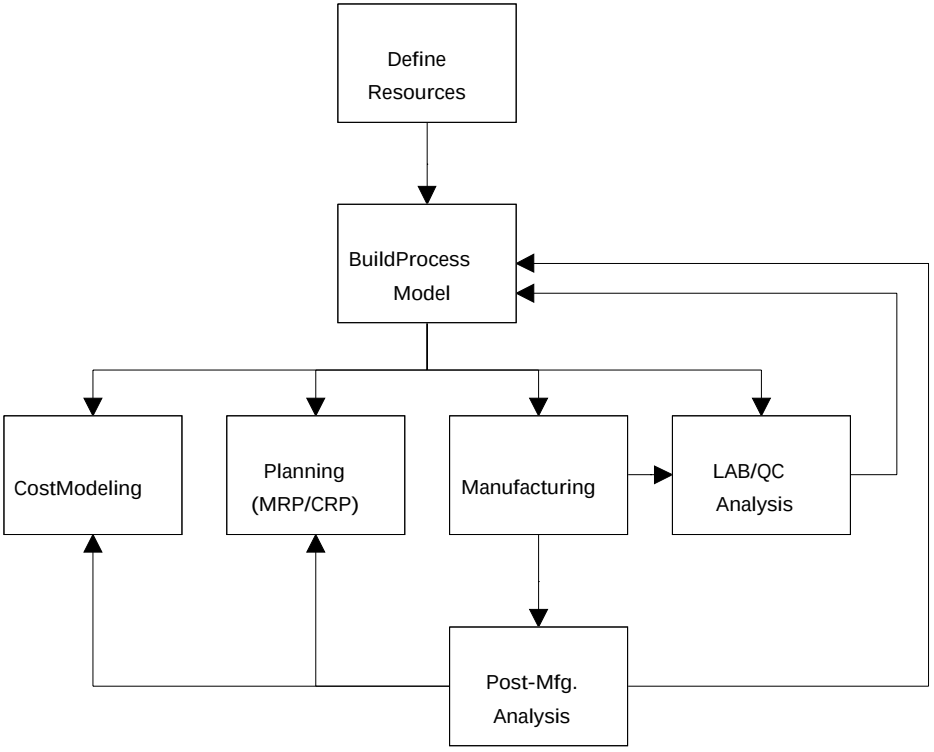


Figure 1–2 POC and the ERP Process Model

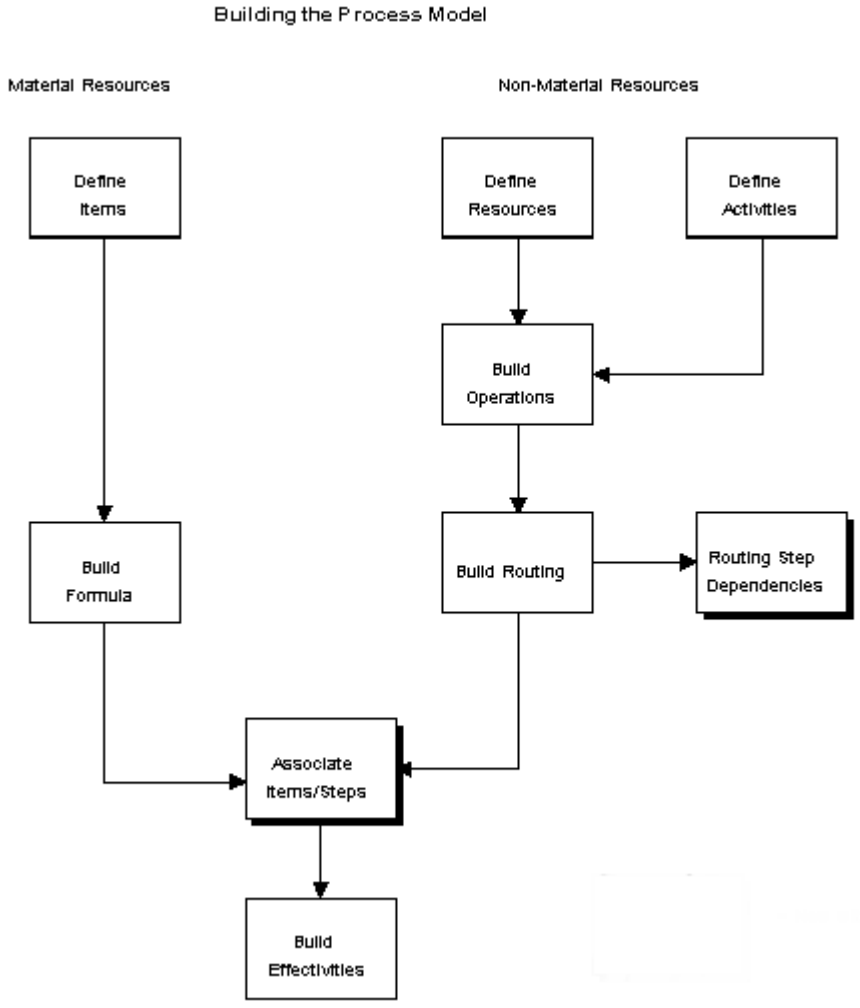


Figure 1–3 Building the Process Model

In OPM, the process model consists of two primary components:

- Formulas - where the relationship of material resources (products, ingredients, and byproducts) is maintained.
- Routings - where the process steps and activities of non-material resources are defined.

For clarity, 'material resources' (raw materials, intermediates, finished goods) will hereafter be referred to as 'materials' and 'non-material resources' (labor, equipment, etc.) will be referred to as 'resources'.

To provide the greatest flexibility to process manufacturers, formulas and routings are built independently of each other, then linked through an effectivity. This way, several different formulas can use the same routing, or one formula can be associated with several different routings.

The effectivity links the formula to the routing for the purpose of defining the circumstances (date, quantity, plant, etc.) under which they are used for manufacturing. Both production batches and FPOs require effectivity links to formulas and routings. POC allows for a more detailed relationship between the formula and routing. This relationship associates the items in a formula to the related routing steps.

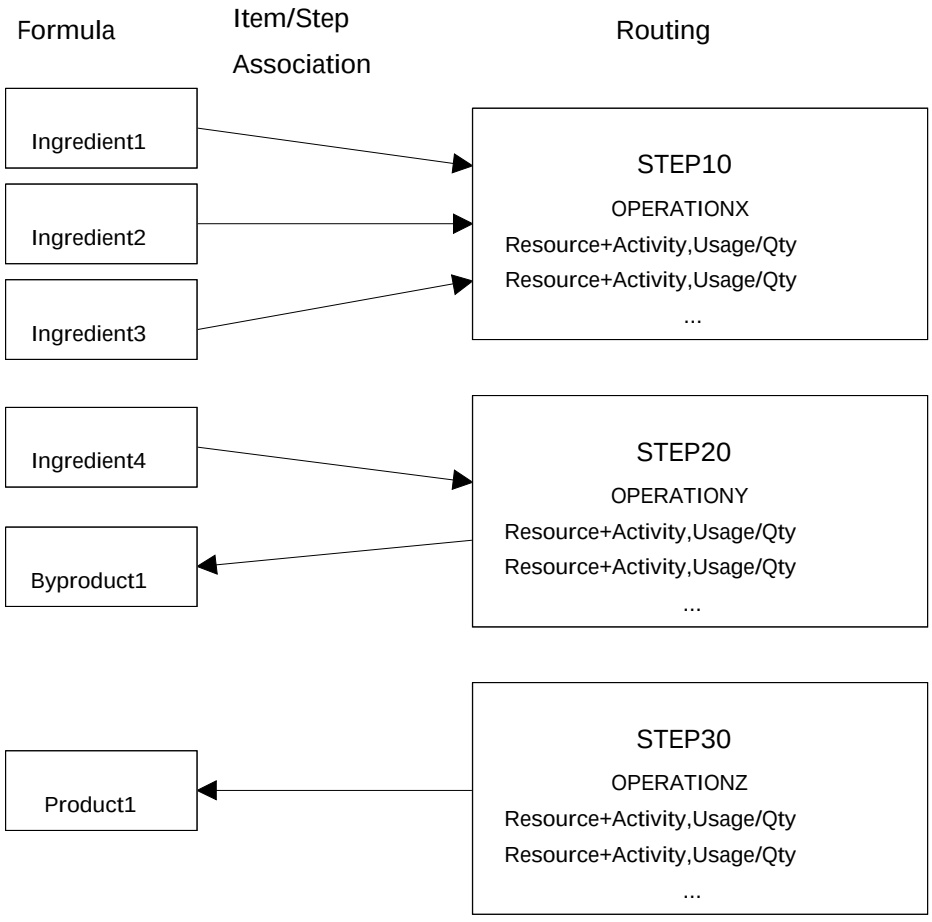


Figure 1–4 Formula and Routing Associations

Planned and WIP Manufacturing Analysis

With POC, the production management orientation can be shifted from Batch / Materials to Operation / Resources. Also, the batch status of WIP can be broken down into significantly greater detail, to step percentage completion.

Operation/Resource Orientation

If you are a given resource, or are responsible for a given resource, you may need to answer the question: "What batches will require my attention today?" or "What ingredients go in at my step?"

If an operation represents your work center, you might ask: "Which batches will be routed through my work center today?"

WIP Status

Steps completed or percent completed can be critical information for downstream operations.

WIP status information can also be used to determine pending resource availability. POC provides inquiries and reports to acquire this information.

Post Manufacturing Analysis

The ultimate goal in collecting all of this data is to improve the manufacturing process and its efficiency. Depending on how standardized an environment is, there could be great value in comparing:

- Actual Data to Planned Data
- Actual Data to Standard Data
- Planned Data to Standard Data

Standard Data provides the standard basis for comparison and is represented by:

- Formula
- Operations
- Routing

Planned and Actual Data are maintained in the Production Batch. The batch planned data defaults from the Standard Data but like all plans, can be changed.

The following variances can be quite useful in analyzing the efficiency of a process.

Bold Italics = Associated with POC

Planned Versus Actual:	Variance:	Compare:
Ingredients used	Substitution	Batch to Formula
Products yielded	Process	Batch to Formula

Planned Versus Actual:	Variance:	Compare:
Byproducts yielded	Process	Batch to Formula
Operations (Routing Steps)	***Methods Change***	***Batch Steps to Routing Steps***
Resources used	***Substitution***	***Batch Step Detail to Operation***
Ingredient Quantities	Planned Consumption Standard Consumption	Batch Actual to Batch Planned Batch Actual to Formula
Product Quantities	Planned Yield Standard Yield	Batch Actual to Batch Planned Batch Actual to Formula
Byproduct Quantities	Planned Yield Standard Yield	Batch Actual to Batch Planned Batch Actual to Formula
Process Quantity	***Planned Process Qty*** ***Standard Process Qty***	***Batch Actual to Batch Planned*** ***Batch Actual to Routing***
Resource Usage	***Planned Usage*** ***Standard Usage***	***Batch Actual to Batch Planned*** ***Batch Actual to Operation***
Resource Usage/Qty Processed	***Planned Rate*** ***Standard***	***Batch Actual to Batch Planned*** ***Batch Actual to Operation***

POC data provides the final elements of manufacturing information required for Actual Cost calculation. With the implementation of Actual Costing, the cost impact of these variances can also be determined.

Costing Measurements

At any point in time, the Resource Transaction Table (pc_tran_pnd) contains all completed resource transactions recorded to date for any given batch/step.

The rule for creating and editing 'completed' resource transactions will be the same as those for material transactions:

- No transactions may be completed until the batch has been released (batch status = WIP)
- Completed transactions may be recorded at any time while the batch status is WIP or Certified.
- If resource usage has not been posted while batch is WIP, then Certification will generate transactions to account for 'Standard' or planned resource usage.
- The resource transactions may be edited until the batch status is 'Closed'.

POC in Manufacturing

POC gives you operation-level status details over a work-in-process production batch. As the following diagram illustrates, POC uses the routing (which sequences operations into routing steps) to allow for the collection of more accurate and detailed manufacturing information.

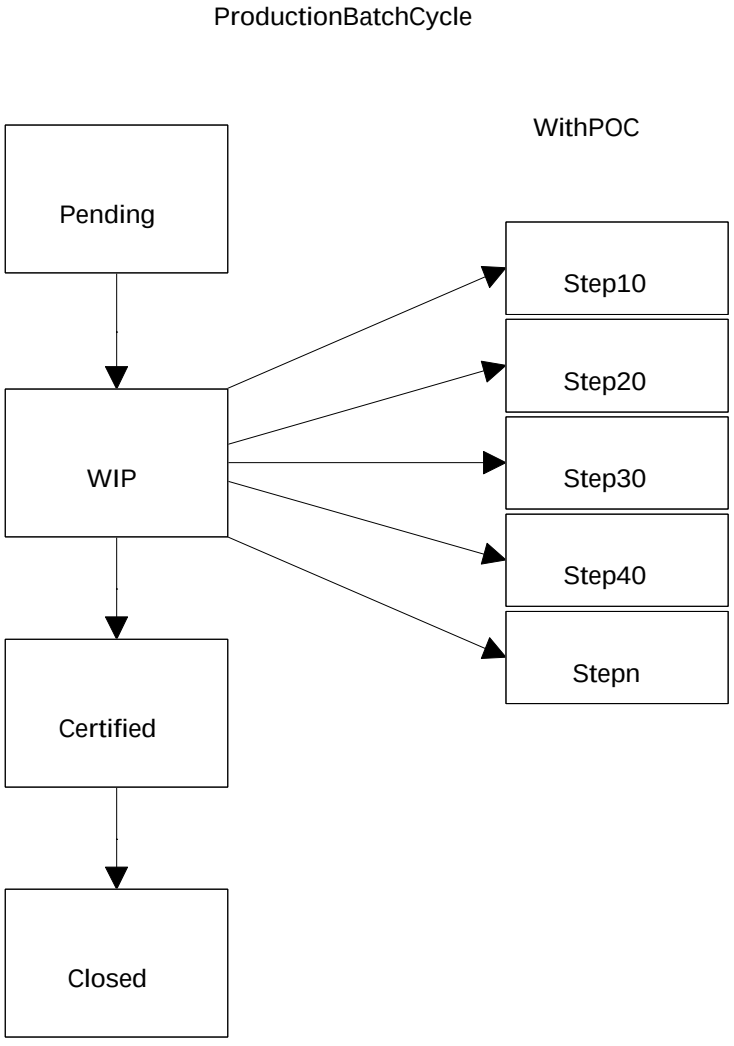
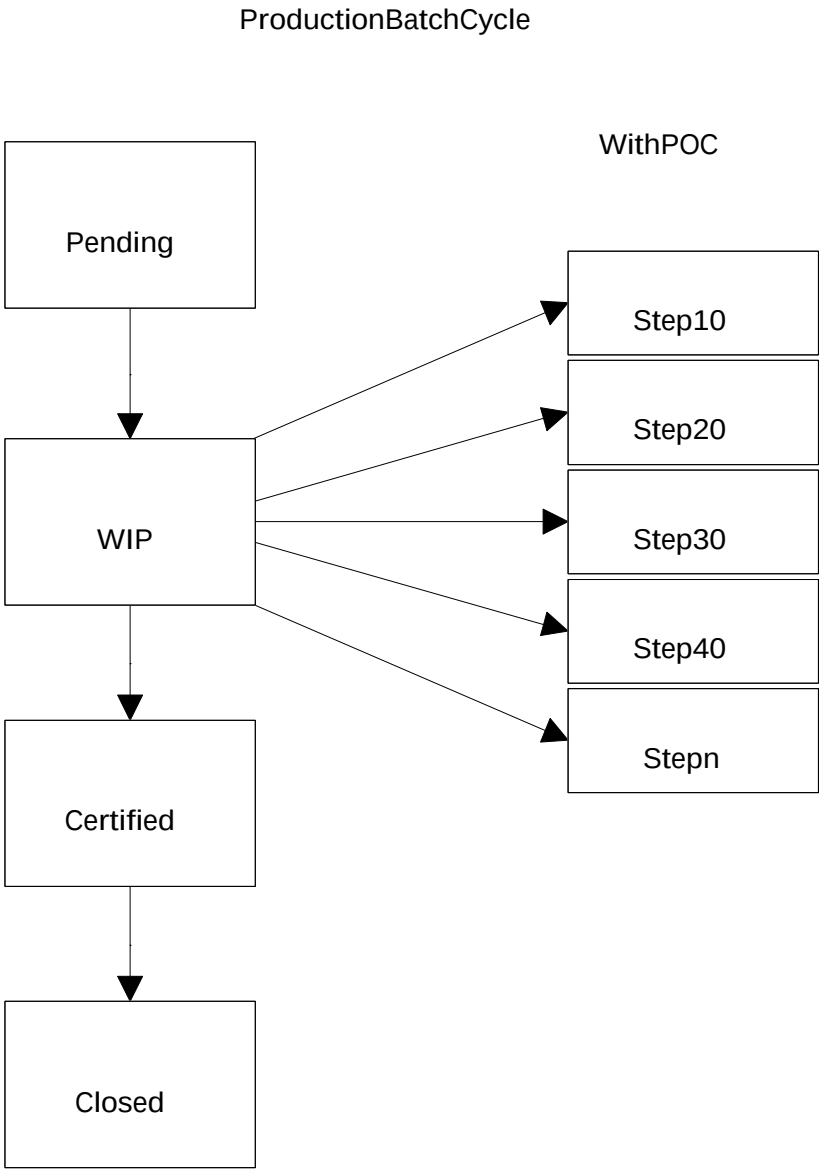


Figure 1–5 Production Batch Cycle

With POC, the following information can be collected at each step:

- Material Consumed
- Non-material Resources Consumed including:
  - Number of Resources used
  - Duration of Resource usage
  - Quantity Processed by Resource / Activity
- Step Completion
- Material Yielded

Overview of POC Related Forms



When a new Batch is created, the Standard Data (where applicable) is scaled to the batch quantity and becomes the Batch Planned Data. The batch plan can then be modified or executed, recording actuals and transactions.

2

POC Prerequisites

Certain data must be set up in other OPM modules before you can use the POC application. All of the required set ups for the PM application apply to POC. For example, units of measure must be set up in the OPM System application, items in the Inventory Management application, and formulas in the Formula Management application. All of the prerequisites for PM and POC are summarized in this chapter.

The following topics are discussed:

- Setting Up OPM System Prerequisites
- Formula Management Application Setup
- Capacity Planning Setup

Setting Up OPM System Prerequisites

You must set up the following data in the OPM System application:

- System Profile Option SY$UOM_HOURS System Profile as HR.

  This profile specifies the default unit of measure that is expressed as gradation of time. Whenever time is allotted for resources, the unit of time must be converted to this unit of measure.

- Unit of Measure Types
- In addition to setting up units of measure types such as mass or volume, you must define a type for Time, if you have not already done so.
- Units of Measure
- In addition to the other UOMs you define, you must create a default UOM for the UOM type of Time (for example, HR)
- Organizations
- On the Organizations window, set the Plant indicator field to Manufacturing Plant and the Process Operator Control field to Collect POC Data.
- Document Ordering
- You must define document ordering for the following document types before they can be used in PM:
  - PROD - Production batches
  - FPO - Firm planned orders

Refer to the Oracle Process Manufacturing Implementation Guide for more information on the OPM System Administration application.

Formula Management Setup

The following data must be set up in the Formula Management application before you can use POC. For more information about the Formula Management application, see the *Guide to OPM Formula Management* and the on-line help for the appropriate forms.

- Activities

  Define activities on the Activities window. Activities are actions performed during production, for example, mixing or cooling. They should be divided by logical breakpoints in the manufacturing process.

  You assign cost analysis codes to activities. Cost analysis codes determine how the costs associated with an activity are calculated and processed by the Costing application. See the *Oracle Process Manufacturing Costing Management User's Guide* for the Cost Analysis Codes window for more information about cost analysis codes.

- Operations

  Define operations on the Operations window. An operation is a combination of one or more activities performed in production batch and the resources used to perform those activities. A resource can be any noninventory item used in production, such as a blender or oven. For example, the operation of mixing is composed of the activity of mixing and the mixer (resource) used to perform the mixing.

- Routings

  A routing represents the sequence of operations or steps used during the manufacturing process. Define routings on the Routings window. On this window, you specify each operation in sequential order, the operation quantity, and the total routing quantity.

Capacity Planning Setup

The following data must be set up in the Capacity Planning application.

- Resources

  Set up resources on the resources window. Resources are the assets you use to produce batches, including production equipment and employee labor. You can define each resource very generally (for example, "OVENS") or specifically ("OVEN 1, OVEN 2," and so on). For each resource you must assign a classification code for costing purposes; see the *Oracle Process Manufacturing Cost Management User's Guide* for details on the Cost Component Class window. You can (optionally) group resources into resource classifications (for example, "Ovens" and "Stoves" may be grouped into "Cooking Units".

3

POC Setup Screens

How you set up POC is dependent on the amount of detailed information you need for analysis. The more complex and detailed the informational needs, the more detailed and complex the setup requirements. After turning POC on for your plant (on the OPM System Administration's Organization window), the minimum requirements for POC setup are:

- a formula
- a routing
- an effectivity

Each of these are set up in OPM Formula Management application. You will need to decide the level of information detail that is most appropriate for your production analysis. This could range from ignoring POC altogether to posting individual resource transactions.

The two POC screens described in this section are not required to run POC; however, if you want detailed data, you need to define routing step dependencies and establish a detailed relationship between formulas and routings.

The following topics are discussed:

- Setting Up Routing Step Dependencies
- Setting Up Routing Step / Formula Items Associations

Setting Up Routing Step Dependencies

This dialog box is used to modify routing step dependencies for new or substitute routing steps.

The Routing Step Dependencies window allows you to create and modify routing step dependencies. You may define new dependencies or delete dependencies. Step dependencies are relationships between routing steps such that a certain step can not start until another step is completed. For example, if step 10 is baking and step 20 is cooling, then step 10 must be completed before step 20 can begin, that is, step 20 is dependent on the completion of step 10.

The dependencies are used to calculate planned start times, but may be overwritten.

The previous step must validate against the routing currently being edited, and must not be the same as the current step. However, be careful about defining circular references, for example 10<20<10.

Setting Up Routing Step Dependencies - Procedure

- Proceed as follows:
- Navigate to the to the **Routing Step Dependencies** window.
- Complete the fields as described.
- Save the window.

Routing Step Dependencies Window Field References

The sections that follow describe the fields located on the Routing Step Dependencies window.

Routing

Enter the name of the routing for which you want to set up step dependencies. Required.

Version

Enter the version number of the routing for which you want to define step dependencies. Required.

Routing Step

Enter the name or number of the routing step for which you wish to set up a dependency relationship. Required.

Operation

This field displays the operation ID code associated with the routing step.

Dependencies

Previous Step

Enter the routing step that the step you entered previously is dependent on. The dependent routing step must immediately succeed the routing step entered in this field.

Type

Select the type of dependency occurring.

- Normal
- Rework (rework is not supported at this time)

Rework Reason

This field is reserved for future use.

Standard Delay

Enter the standard number of hours from the end of the preceding routing step to the start of this routing step. This field is used to calculate POC operation start times. If you enter this time as zero (0), the next step starts immediately after the preceding step ends (back to back).

Minimum Delay

Enter the least / minimum number of hours from the end of the preceding routing step to the start of this routing step.

Maximum Delay

Enter the maximum number of hours from the end of the preceding routing step to the start of this routing step.

Transfer Quantity

This field is reserved for future use.

UOM

This field is reserved for future use.

Setting Up Routing Step/Formula Items Associations

This window is used to associate the routing steps with the lines (items) in a formula. The POC application allows for a more detailed relationship between formulas and routings than Production Management.

Upon entry of Routing and Formula, both arrays are displayed. You should scroll through the Routing Step array to move to the desired step. Click the current record indicator on the Routing Step line to select that step.

If you need to use the same item in many different steps, it must be defined in separate lines in your formula**.**

Setting Up Routing Step/Formula Items Associations - Procedure

- Proceed as follows:
- Navigate to the **Routing Step/Formula Item Association** window.
- Complete the fields as described.
- Save the window.

Routing Step/Formula Items Associations Window Field References

The sections that follow describe the fields located on the Routing Step / Formula Item Associations window.

Routing

Enter the name of the routing that has steps you want to associate to a formula item.

Version

Enter the version number of the routing

Formula

Enter the formula for which you want to associate items to routing steps.

Version

Enter the version number of the formula.

The fields below are populated with data when you complete the previous fields. The only field you can edit is the Formula Details Step field.

Routing Details

Step
This field displays the step numbers of the routings.

Operation
This field displays the name of operation that the step performs.

Description
This field displays the description of the operation step.

Step Qty
This field displays the quantity processed by the step.

UOM
This field displays the unit of measure of the step quantity.

Formula Details

Step
Enter the step number to which you want to associate this formula item.

Type
This field displays the item type (product, ingredient, byproduct)

Line
This field displays the formula line number for the formula item.

Item
This field displays the code or name of the formula item.

Description
This field displays the text of the description of the item.

Quantity
This field displays the quantity of the formula item.

UOM

This field displays the unit of measure of the formula item.

4

POC Processing Windows

POC processing windows enable you to enter and edit batch steps, reschedule and associate steps with items. Each window requires increasing levels of detail about the batch steps that comprise the production run.

The following topics are discussed:

- Viewing and Editing Batch Steps
- Rescheduling Batch Steps
- Defining Batch Step Details
- Associating Batch Steps with Items
- Defining Batch Step Dependencies
- Editing Batch Resource Transactions
- Reporting Batch Operation WIP

Viewing and Editing Batch Steps

Use this window to view and edit batch steps in a given production run. This window maintains both the planned and the actual batch step data for a POC controlled batch.

At this window, you may release, certify, close and cancel a batch step. In addition, you may view planned operations, planned start dates, planned completion dates and the status of each batch step.

The following windows can be accessed from the Batch Steps **Actions** menu:

- Batch Step Dependencies
- Batch Step / Batch Item Association
- Batch Step Details
- Resource Transactions
- Reschedule Step

Viewing and Editing Batch Steps - Procedure

- To edit and view batch steps, proceed as follows:
- Navigate to the **Batch Steps** window.
- Using a Query option, enter the batch number.
- You may do one of the following at this window:
  - Edit the date fields as .
  - Select the **Actions** menu options to display other windows, or to take an action on a step. (reschedule, release, certify, cancel or close).
- Save the window.

Batch Steps Window Field References

Batch

Using Query Find or Query Find All, Enter the number of the batch you wish to view or edit. POC must be on when the batch was made. The batch status displays in the unlabeled field. Batches may be pending, WIP, Certified or Canceled.

Routing
This field displays the routing that is used by this batch to produce the product.

Routing Qty
This field displays the quantity that is being produced by this batch routing.

Batch Steps

Drill Down Indicator (Unlabeled)
Click this box to display the Batch Step Details window.

Step
This field displays number of the step.

Operation
This field displays the name of the operation to be performed at this routing step.

Planned Dates Region

Start
Edit/view the planned operation start date. This field can be edited while in pending status.

Completion
Edit/view the planned operation completion date. This field can be edited while in pending, or WIP status.

Actual Dates Region

Start
This field references the actual time and date the batch step started. It can be edited until the step is closed.

Completion
This field references the actual time and date the batch step was completed. It can be edited until the step is closed.

Step Quantities Region

Planned

Enter the planned quantity to be processed at this batch step. This field defaults to the scaled routing quantity.

Actual

Enter the actual quantity which was processed at this batch step. If no value is entered the system will default to the planned quantity.

Other Dates Region

Due Date

Displays the required completion date. This field is for information purposes only.

Step Close

This field records the actual date and time that the batch step was closed.

Batch Step Window - Buttons

Products

Displays the Batches window of the associated batch which includes the products manufactured by the batch. See the *Oracle Process Manufacturing Production Management User's Guide* for more information.

Output

Displays the Batch Output window of the associated batch. See the *Oracle Process Manufacturing Production Management User's Guide* for more information.

Input

Displays the Batch Input window of the associated batch. See the *Oracle Process Manufacturing Production Management User's Guide* for more information.

Batch Steps Window - Actions Menu

Byproducts

Select this option to display the Productions Management By-products window. For more information, refer to the *Oracle Process Manufacturing Production Management User's Guide.*

Batch Step Details

Select this option to display the Batch Step Details window. You must select the indicator of one of the batch steps to use this option.

Item/Step Association

Select this option to display the Item / Step Association window.

Batch Step Dependencies

Select this option to display the Batch Step Dependencies window.

Release Step

Select this option to release a step. The batch must be in WIP status.

Certify Step

Select this option to certify a step. The batch must be in WIP status.

Close Step

Select this option to close a step. The batch must be in WIP status.

Reschedule Step

Select this option to Reschedule a step. This displays the Reschedule Batch Step window. For more information refer to the *Rescheduling Batch Steps* section.

Ingredients

Select this option to display the Batch Ingredients window. This window is described in the *Oracle Process Manufacturing Production Management User's Guide.*

Rescheduling Batch Steps

This dialog box is accessed from the Batch Steps form's **Actions** menu. Use the Reschedule Step dialog box to reschedule a pending batch step. 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.

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

Rescheduling Batch Steps - Procedure

- To reschedule batch steps, proceed as follows:
- Navigate to the **Batch Steps** window and populate the fields as described.
- From the **Actions** menu, select **Reschedule Step**. This displays the **Reschedule Step** dialog box.
- Complete the fields as described.
- Click **OK**. The dates you changed will be reflected in the appropriate fields on the **Batch Steps** window.
- Save the window.

Reschedule Step Dialog Box Field References

Planned Start Date

Enter the new planned start date for the batch step. You can only edit this field if the batch has a status of Pending.

Planned Completion Date

Enter the new planned completion date for the batch step. You can only edit this field if the batch has a status of Pending.

Reschedule Batch Steps - Actions Menu

Byproducts

Select this option to display the Productions Management By-products window. For more information, refer to the *Oracle Process Manufacturing Production Management User's Guide.*

Batch Step Details

Select this option to display the Batch Step Details window which is described in the *Viewing Batch Step Details* topic. You must select one of the batch steps to use this option.

Item/Step Association

Select this option to display the Item / Step Association window.

Batch Step Dependencies

Select this option to display the Batch Step Dependencies window. You must select one of the batch steps to use this option.

Release Step

Select this option to release a step. The batch must be in WIP status. You must select one of the batch steps to use this option.

Certify Step

Select this option to certify a step. The batch must be in WIP status. You must select one of the batch steps to use this option.

Close Step

Select this option to close a step. The batch must be in WIP status. You must select one of the batch steps to use this option.

Reschedule Step

Select this option to Reschedule a step. This displays the Reschedule Batch Step window. You must select one of the pending batch steps to use this option. For more information refer to the *Rescheduling Batch Steps* section.

Ingredients

Select this option to display the Batch Ingredients window. This window is described in the *Oracle Process Manufacturing Production Management User's Guide*.

Defining Batch Step Details

The Batch Step Detail window enables you to define in detail the resources and activities associated with each routing step. This window displays the same operation/step dates as the Batch step window. You may also edit the planned values, delete resource rows and insert new rows for additional details.

Similar to the Operations window when defining resource usage, this window adds the notion of dates and times and planned and actual quantities to permit recording of step detail data in production.

Defining Batch Step Details - Procedure

- At the **Batch Steps** window, click the drill down indicator box next the batch step whose details you want to see. This displays the **Batch Step Details** window.
- Complete the fields as described.
- Save the window.

Batch Step Details Window Field References

Batch

This field displays the batch ID number and its associated organization code.

Batch Step

This field displays the batch step number. To select a new step to modify you must return to the Batch Step window.

Operation

This field displays the operation number associated with this batch step and its corresponding description.

Planned Start

This field displays the planned start date associated with this batch step. This field can be edited on the batch steps window.

Planned Completion

This field displays the planned completion date associated with this batch step. You can edit this information on the Batch Steps window.

Operation Details

Resource

Enter the name or number of the resource used in this manufacturing operation. Resources can be such things as blenders, ovens, or any other non-inventory item used in production. You set up resources on the Resources window in the Capacity Requirement Planning application.

Activity

Enter the code reflecting the activity for which this resource is involved. Activities are set up on the Activities window.

Planned Throughput Region

Count

Enter the planned number of resources needed for this activity (01-99). For example, if two identical blenders are needed, enter 2.

Process Qty

Enter the planned process quantity for the resource. This quantity, combined with the Usage, define the usage rate. For example, if the resource can mix 200 gallons per hour, enter 200 in this field and 1 in the Usage field.

UOM

Enter the unit of measure in which the planned process quantity is expressed. UOMs are defined on the Unit of Measure window.

Usage

Enter the planned resource usage required for the process quantity. This is normally measured in time, but may be measured in other units for resources such as electricity.

For example, if the resource can mix 200 gallons per hour, enter 200 in the Process Qty field and 1 in this field.

UOM

Enter the unit of measure in which the planned usage is expressed (usually HR). UOMs are defined on the Unit of Measure window.

Actual Throughput Region

Count

Enter the actual number of resources needed for this activity (01-99). For example, if two identical blenders are needed, enter 2.

Process Qty

Enter the actual process quantity for the resource. This quantity, combined with the Usage, defines the usage rate. For example, if the resource can mix 200 gallons per hour, enter 200 in this field and 1 in the Usage field.

UOM

Enter the actual process quantity unit of measure.

Usage

Enter the actual resource usage required for the process quantity. This is normally measured in time, but may be measured in other units for resources such as electricity.

For example, if the resource can mix 200 gallons per hour, enter 200 in the Process Qty field and 1 in this field.

UOM

Enter the unit of measure in which the actual usage is expressed (usually HR). UOM are defined on the Unit of Measure window on the System Administration menu.

Planned Dates Region

Start

Enter / view planned resource start date. This field can be edited while in pending status.

Completion

Enter the planned resource completion date. This field can be edited while in pending or WIP status.

Actual Dates Region

Start

Enter the actual time and date that this activity began.

Completion

Enter the actual time and date that this activity was completed.

Scheduling Information Region

Resource Type

Designate this resource as either primary or secondary.

A primary resource limits or determines cost or time at a specific routing step.

For example, when producing white paint, the paint is mixed in 1,000 gallon tanks. There are two resources, the labor needed to operate the mixing equipment and the tank to hold the paint.

The tank is the primary resource because even if there is an increase in labor, the time required to mix the paint will not change because the tank capacity is constant.

Offset

Enter the number of hours from the batch step start to the start time of this activity.

Scale Type

Select to designate the scale type as fixed or linear.

Resource Desc

This field displays the description associated to the Resource code. Resources are set up on the Resources window.

Activity Desc

This field displays the description associated to the Resource Activity code. Activities are set up. Activities are set up on the Activity window.

Component Class Desc

This field displays the description associated with the Component Class code. Component Class codes are set up on the Component Class window.

Analysis Desc

This field displays the description associated with the Analysis code. Analysis codes are set up on the Cost Analysis Codes window.

Associating Batch Steps with Items

This window is used to modify the batch steps at which given items are introduced into or yielded from the production process. It is currently an optional window used to record information for user defined reports.

The POC application sets up a more detailed relationship between batches and batch steps. POC provides a record of ingredients or items that go into a given batch step.

If the production planner needs to alter the steps at which given items are introduced into or yielded from the process, use this window.

The only editable fields on this window are the batch item Step fields.

If you do not assign a routing step to all Batch Items the following error message will appear: All items do not have a Routing step associated, continue(y or n)?

Associating Batch Steps with Formula Items - Procedure

To associate routing steps with formula items, proceed as follows:

- Navigate to the **Batch Step/Formula Item Association** window.
- Enter the routing number and version whose steps you want to associate to formula items.
- Enter the formula number and version whose items you want to associate with the routing information entered in step 2.
- In the **Formula Details** panel click the **Step** field of the item you want to associate. Enter the routing step you want to associate to the formula item.
- Continue until you have associated all the steps.
- Save the window.

Batch Step/Batch Item Association Window Field References

The sections that follow describe the fields located on the Batch Step / Batch Item Association Window.

Routing

Enter the ID number of the routing you want to associate to the steps.

Version
Enter the routing version number.

Formula
Enter the name of the formula whose items you want to associate to the routing.

Version
Enter the formula version number.

Step Details

Step
This field displays the routing step number.

Operation
This field displays the operation name or ID code.

Description
This field displays the description associated to the operation name.

Step Qty
This field displays the quantity processed by the step.

UOM
This field displays the unit of measure in which the step quantity is expressed.

Item Details

Step
Enter the number of the batch step you wish to associate with a given item.

Type
This field displays the item's formula type. Items can be products, byproducts or ingredients.

Line
This formula displays item's line in the formula.

Item
This field displays the item's ID code.

Description
This field displays the description associated with the item ID code.

Quantity
This field displays the quantity of the item that is produced by the batch.

UOM
This field displays the unit of measure in which the formula quantity is expressed.

Defining Batch Step Dependencies

The Batch Step Dependencies window allows you to modify batch steps and their dependencies. You may define new batch step dependencies or delete old batch step dependencies. If you insert a new step, you must establish its immediate dependencies here. If you delete a routing step the associated dependencies will automatically be deleted.

The previous step number column has a lookup restricted to those steps in the routing being edited excluding the current step. When a 'previous step' is entered, the following field displays the operation (which can not be edited). The only dependency type supported initially is Normal. When Normal is selected, the cursor skips the Rework Reason Code field.

Previous step must validate against the batch steps currently being edited, and must not be the same as the current step.

Defining Batch Step Dependencies - Procedure

- At the **Batch Steps** window, select **Batch Step Dependencies** from the **Actions** menu. This displays **the Batch Step Dependencies** window.
- Complete the fields as described.
- Save the window.

Batch Step Dependencies Window Field References

The sections that follow describe the fields located in the header and Batch Step Dependencies panels.

Batch

Displays the batch ID code for which you want to create step dependencies.

Batch Step

Enter the name or number of the batch step you wish to view or modify.

Batch Step Dependencies

Previous Step

Enter the name or number of the previous batch step associated with this dependency.

Type

Enter the type of dependency: Normal or Rework. Currently only Normal is functional in OPM.

Std Delay

Enter the standard time elapsed between the end of the preceding batch step and the start current batch step.

Min Delay

Enter the minimum time elapsed between the end of the preceding batch step and the start current batch step.

Max Delay

Enter the maximum time elapsed between the end of the preceding batch step and the start current batch step.

Transfer Qty

Enter the quantity of material being transfer from the previous batch step.

UOM

Enter the unit of measure in which the quantity is expressed.

Editing Batch Resource Transactions

This window is used to edit transactions to post incremental resource usage. The transaction usage is a required field. When entering a quantity, the actual usage field is automatically updated by the system. The resource start and stop dates are for posting 'clock on' and 'clock off' data for the resources, and are not required.

This window is accessed from the Batch Step Detail window. The step has to be WIP or certified. With the cursor positioned on a given step detail indicator, you can then select **Actions** >Transactions to post incremental resource usage.

Batch Resource Transactions - Procedure

- At the **Batch Steps Details** window, place the cursor on the line.
- Select **Transactions** from the **Actions** menu. This displays the **Batch Resource Transactions** window.
- Complete the fields as described.
- Save the window..

Batch Resource Transactions Window Field References

The sections that follow describe the fields located in the header and Transaction Details panels.

Batch

This field displays the number of the batch you wish to edit.

Batch Step

This field displays the number of the batch step you wish to edit.

Resource

This displays the resource used on this operation line.

Activity

This field displays the activity to be performed on this operation line.

Actual Resource Usage

This field displays the actual amount of this resource used to perform the activity on this operation line. If no value is entered the system defaults to the planned data.

Transaction Details

Date

Enter the date of the resource transaction. This defaults to the current date. This date is used by the costing.

Usage

Enter the incremental usage in this field. This is how much time the resource has used for the transaction.

Start

Enter the start date and time of the resource transactions. The data entered here is used for user defined reporting.

Stop

Enter the end date and time of the resource transaction. The data entered here is used for user defined reporting.

Reason

Enter the reason code associated with this resource transaction. Reason codes are entered in the OPM System Administration application.

Reporting Batch Operation WIP

This window is used for reporting inter-operation WIP transactions. It is for information purposes only.

Step description may not be edited on this window.

Reporting Batch Operation WIP - Procedure

Proceed as follows:

- Navigate to the **Batch Operation WIP** window.
- Complete the fields as described.
- Save the window.

Batch Operation WIP WindowField References

Batch

Using a Query option, enter the number of the batch for which you would like to edit WIP transfers.

Batch Step

Enter the batch step number for which you would like to edit WIP transfers.

WIP Received

Quantity

Enter the material quantity that was transferred from the previous batch step.

UOM

Enter the unit of measure for the material quantity transferred from the previous batch step.

Step

Enter the step number of the previous batch step from which you transferred material.

Transaction Date

Enter the date and time when the material transfer took place.

WIP Sent

Quantity

Enter the quantity of the material that was transferred from this batch step.

UOM

Enter the unit of measure for the material that was transferred from this batch step.

Step

Enter the number of the batch step where material should be transferred.

Transaction Date

Enter the date and time when the material transfer took place.

5

POC Inquiries

The following topics are discussed:

- Viewing WIP Batch Information Overview
- Viewing Material Variance Information
- Viewing Batch Step Variances
- Viewing Resource Variances

Viewing WIP Batch Information Overview

Use the POC WIP (work in process) Inquiry to view detailed information about batches that are in process. When you first select WIP Inquiry from the POC menu, the POC WIP Inquiry Selection Box appears. The entries you make in this box determine the batch data shown. At the second screen displayed, you select a batch on which you want to view more detailed information.

Viewing WIP Batch Information - Procedure

- To view WIP batch status information, proceed as follows:
- Navigate to the **POC Wip Inquiry - Selection Box**.
- Complete the fields as described.
- Click **OK**. This displays the first **POC WIP Inquiry**. This inquiry lists batches that meet the criteria you entered along with general information. For a description of the fields in the **POC WIP Inquiry**, see the *WIP Inquiry (first) Field References* topic.
- At the first **POC WIP Inquiry** window, click the drill down indicator next to the batch on which you want to see more details. This displays the second **POC WIP Inquiry** window. This inquiry displays detailed information on the batch you selected. For a description of the fields in the second **POC WIP Inquiry**, see *WIP Status Inquiry (second) - Fields* topic.
- When you are done viewing the data, click **Close**.

POC WIP Inquiry Selection Box

At this box you enter criteria to select WIP batches on which you want to view more information.

POC WIP Inquiry Selection Box Field References

Organization

Enter one or a range of organizations. Leaving the From and To fields blank indicates you want to do an inquiry on All organizations.

Batch

Enter one batch number or a range of batch numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All batches.

Start Date

Enter a single start date or a range of start dates.

Formula

Enter one formula or a range of formulas. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Version

Enter a single version number or a range of version numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Routing

Enter one routing or a range or routings. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Version

Enter a single version number or a range of version numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

POC WIP Inquiry (first)

After you enter the selection criteria, the first POC WIP Inquiry appears. This inquiry displays batches that meet the criteria you entered on the POC WIP Inquiry Selection Criteria dialog box. At this dialog box, you select the batch for which you want to see details.

The purpose of the inquiry is to provide you with more information about batches in-process. For example, you can view the number of steps in a batch, the number of steps completed in a batch and the number of steps still in process. This entire window is display only.

POC WIP Inquiry Window - Procedure

Click the box next to the batch on which you want to view detailed information.

POC WIP Inquiry (first) Field References

Drill Down Indicator (Unlabeled)

Click this drill down indicator to view the more detailed information on the second POC WIP Inquiry window.

Plant

This field displays the plant organization code.

Batch

This field displays the batch ID number.

Planned Completion Date

This field displays the batch steps planned start date and time.

Routing

This field displays the routing ID number.

Version

This field displays the routing version ID number.

Total Steps

This field displays the total number of steps in the routing.

Certified Steps

This field displays the number of steps that have been certified.

Active Steps

This field displays the number of steps that are still active.

POC WIP Inquiry (first) - Actions Menu Options

Work in Progress Details

This displays the second POC WIP Inquiry which lists more detailed WIP batch information.

POC WIP Inquiry (second)

After you click the drill down indicator or select Work In Progress from the Actions menu, the second POC WIP Inquiry displays. At this window, you view line details of a WIP batch.

POC WIP Inquiry (second) Field References

Batch

This field displays the batch ID number.

Product

This field displays the code of the primary product that is produced by the batch.

Routing

This field displays the routing ID number.

Version

This field displays the routing version number.

Qty

This field displays the quantity of the product that is produced by this batch / routing / version combination.

Description

This field displays a description of the routing.

Step

This field displays the operation step number.

Planned Dates

Operation

This field displays the name of the operation performed by the step.

Start

This field displays the planned start date and time for the batch step.

Completion
This field displays the planned completion date and time for the batch step.

Status
This field displays the status of the step. Steps may be pending, WIP, canceled, certified, or closed.

Description
This field displays a description of the operation step which has its box highlighted.

Actual Dates

Start
This field displays the operation's actual start date time.

Completion
This field displays the operation's actual completion date and time.

Dates

Step Closed
This field displays the date and time the batch step was closed.

Required Completion
This field displays the required completion date and time.

Planned
This field displays the planned step quantity

Step Quantities

Actual
This field displays the actual step quantity.

Priority

Code
This field is reserved for future use.

Value
This field is reserved for future use.

POC WIP Inquiry (second) - Actions Menu

Work In Progress
Select this option to return to the first POC WIP Inquiry window.

Viewing Material Variance Information

Use the Material Variance Inquiry to view detailed information about batch material production and consumption. When you first select the Material Variance option from the POC menu, the Material Variance Selection Box appears. The entries made in the Selection Box determines the batch data shown.

Viewing Material Variance Information - Procedure

To view material variance information, proceed as follows:

- Navigate to the **Material Variance Selection Box**.
- Complete the fields as described in the *POC WIP Inquiry Selection Criteria Box - Fields* topic.
- Click **OK**. This displays the first **Material Variance Inquiry**. This box lists batches that meet the criteria you entered along with general information. For a description of the fields in the **Material Variance Inquiry**, see the *Material Variance Inquiry - Fields* topic.
- At the **Material Variance Inquiry**, click the drill down indicator next to the batch on which you want to see ingredient details. This displays the second **Material Variance - Ingredients Inquiry**. This dialog box displays detailed ingredient information on the batch you selected. For a description of the fields in this inquiry, seethe *Material Variance Ingredients Inquiry - Fields* topic.
- To view step details, click the indicator box next to the line item. This displays the **Material Variance - Step Details** box.

Material Variance Selection Box

This dialog box appears when you select Material Variance from the POC menu. The data entered here determines the batches selected for viewing in the inquiry window. After OK is selected, the Material Variance Inquiry window appears.

Material Variance Selection Box Field References

Organization

Enter one or a range of organizations. Leaving the From and To fields blank indicates you want to do an inquiry on All organizations.

Batch

Enter one batch number or a range of batch numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All batches.

Start Date

Enter a single start date or a range of start dates.

Formula

Enter one formula or a range of formulas. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Version

Enter a single version number or a range of version numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Routing

Enter one routing or a range or routings. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Version

Enter a single version number or a range of version numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Item

Enter a single item number or a range of item numbers. Leaving the From and To fields blank indicates you want to do on inquiry on All items. This is the item (product) on which you want to see material variances.

Material Variance Inquiry

The Material Variance Inquiry provides information about where and when materials are produced and consumed within a production run. This entire window is display only. From this inquiry you can proceed to the Material Variance - Ingredient Inquiry. To do this, click the drill down indicator on the same line as the batch on which you want to view ingredient information.

Material Variance Inquiry Field References

Indicator (Unlabeled)

Click this field to display the Material Variance - Ingredient Inquiry.

Organization

This field displays the organization code.

Batch

This field display the Batch ID code.

Actual Start Date

This field displays the actual start date of the batch.

Item

This field displays the item code.

Planned Qty

This field displays the planned quantity to be produced by the batch.

Actual Qty

This field displays the actual quantity produced by the batch.

Variance

In percentages, this field displays the variance between the planned quantity and the actual quantity produced by the batch.

Material Variance Inquiry - Actions menu

Ingredients

Select this option to display the Material Variance - Ingredient Inquiry.

Material Variance - Ingredient Inquiry

The Material Variance - Ingredient Inquiry displays when you click the box next to the line item on the Material Variance Inquiry or when you select Ingredients from the Material Variance Inquiry Actions menu. This inquiry lists ingredient consumption detail information.

Material Variance - Ingredient Inquiry Field References

Batch
This field displays the plant code and the batch ID number.

Product

Routing
This field displays the routing ID number.

Version
This field displays the routing version number.

Formula
This field displays the formula ID.

Version
This field displays the formula version number.

Planned

Quantity
This field displays the routing planned quantity of the product produced by the batch.

Start Date
This field displays the planned start date and time.

Completion Date
This field displays the planned completion date and time.

Actual

Quantity
This field displays the actual quantity of the product produced by the batch..

Start Date
This field displays the actual start date and time.

Completion
This field displays the actual completion date and time.

Ingredient Details

Item
This field displays the item ID number for the ingredient used.

Planned Qty
This field displays the planned ingredient consumption quantity.

Actual Qty
This field displays the actual ingredient consumption quantity.

UOM
This field displays the unit of measure in which the ingredient quantities are expressed.

Variance
Displays the variance (in percent) between the planned and actual quantities of the ingredient consumption.

Planned Qty2
This field displays the planned quantity if the ingredient is dual unit of measure enabled.

Actual Qty2

This field displays the actual quantity used for the second UOM if the ingredient has dual unit of measure enabled.

Material Variance Ingredient Inquiry - Actions Menu

Material Variance

Select this option to return to the Material Variance Inquiry window.

Step Details

Select this option to display the Material Variance - Step Details Inquiry.

Material Variance - Step Details Inquiry

This inquiry lists step information for an ingredient in a production batch. You access this window from the Material Variance - Ingredient Inquiry.

Material Variance - Step Details Field References

Batch

This field displays the plant code and batch ID code to which the step is associated.

Ingredient

This field displays the ingredient in the formula which is associated to the step.

Routing

This field displays the routing used to produce the batch.

Version

This field displays the routing version number.

Product

This field displays the ID code of the product produced by the batch which consumes the ingredient.

Planned Quantity

This field displays the planned quantity of the ingredient.

Actual Quantity

This field displays the actual quantity of the ingredient that was used by the batch.

UOM

This field displays the unit of measure in which the ingredient quantity is expressed.

Step Details

Step
This field displays the number of the batch step.

Operation
This field displays the ID code of the operation that the step is performing on the ingredient.

Status
This field displays the status of the step (WIP, Certified, etc.)

Standard Quantity
This field displays the formula quantity of the ingredient associated with the step.

Planned Quantity
This field displays the planned quantity of the ingredient associated with the step.

Actual Quantity
This field displays the actual quantity of the ingredient associated with the step.

UOM
This field displays the unit of measure in which the quantities are expressed.

Variance
This field displays the difference between the planned quantity and actual quantity consumed. Variance = actual / planned.

Material Variance Step Details - Actions Menu

Ingredients
Select this option to return to the Material Variance - Ingredient Inquiry

Viewing Batch Step Variances

Use the Batch Step Variance Inquiry window to view detailed information about batch steps in a production run. The entries made in the Batch Step Variance Dialog Box determines the data shown.

Viewing Batch Step Variances - Procedure

To view material variance information, proceed as follows:

- Navigate to the **Batch Step Variance - Dialog Box**.
- Complete the fields as described in the *Batch Step Variance Dialog Box - Fields* topic.
- Click **OK**. This displays the **Batch Variance Inquiry**. This box lists batches that meet the criteria you entered along with general information. For a description of the fields in the **Batch Variance Inquiry**, see the *Batch Step Variance Variance Inquiry - Fields* topic.
- At the **Batch Variance Inquiry**, click the drill down indicator next to the batch on which you want to see ingredient details. This displays the **Batch Step Variance Inquiry**. This inquiry displays detailed ingredient information on the batch you selected. For a description of the fields in this inquiry, see *Batch Step Variance Inquiry - Fields.*
- To view operation step details, click the drill down next to the line item. This displays the **Batch Variance Inquiry - Operation Details** window. For a description of the fields on this inquiry, see the *Batch Variance Inquiry - Operation Details - Fields* topic.

Batch Step Variance - Dialog Box

This dialog box appears when you select the Batch Step Variance Inquiry. The data entered here determines the batches selected for viewing in the inquiry window.

Batch Step Variance Dialog Box Field References

Organization

Enter one or a range of organizations. Leaving the From and To fields blank indicates you want to do an inquiry on All organizations.

Batch

Enter one batch number or a range of batch numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All batches.

Start Date

Enter a single start date or a range of start dates.

Formula

Enter one formula or a range of formulas. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Version

Enter a single version number or a range of version numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Routing

Enter one routing or a range or routings. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Version

Enter a single version number or a range of version numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Item

Enter a single item number or a range of item numbers. Leaving the From and To fields blank indicates you want to do on inquiry on All items. This is the item (product) on which you want to see material variances.

Operation

Enter a single operation code or a range of operation codes. Leaving the From and To fields blank indicates you want to do an inquiry on All operations.

Batch Variance Inquiry Window

Use this inquiry to view batch level information about batch steps in a production run at the batch level. The entries made in the Batch Step Variance Dialog Box determines the data shown.

To get more detailed information about any specific batch, you must select it on this window by clicking the indicator box on the same line as the batch on which you want to view variance information. This displays the Batch Step Variance Inquiry window which provides a more detailed view of a specific batch's steps.

Batch Variance Inquirey Window Field References

Indicator (Unlabeled)

Click this box to proceed to the Batch Step Variance Inquiry.

Org

This field displays the organization code for the plant.

Batch

This field displays the plant code and batch ID number.

Actual Completion Date

This field displays the actual Compton date for the batch.

Routing

This field displays the routing ID number.

Version

This field displays the routing's version number.

Num of Routing Steps

This field displays the number of routing steps.

Num of Batch Steps

This field displays the number of batch steps.

Planned Hours

This field displays the planned number of hours to complete the batch step.

Actual Hours

This field displays the actual number of hour used to complete the batch step.

Variance

This field displays the variance between the planned and actual time to complete the batch step.

Batch Variance Inquiry - Actions Menu

Batch Step Variance

This option displays the Batch Step Variance Inquiry which is discussed in the next section.

Batch Step Variance Inquiry

Use this inquiry to view detailed information about batch steps in a production run. This window displays the data related to the batch you selected on the previous window. From this screen you can navigate to the Batch Step Inquiry - Operation Details window.

Batch Step Variance Inquiry Field References

Drill Down Indicator (Unlabeled)

Click this indicator box to proceed to the Batch Variance Inquiry - Operation Details window.

Batch

This field displays the batch ID number.

Product

This field displays the product's item ID number.

Routing

This field displays the routing ID number.

Version

This field displays the routing's version number.

Planned Dates

Start

This field displays the planned start date and time for the batch.

Completion

This field displays the planned completion date and time for the batch.

Actual Dates

Start

This field displays the actual start date and time for the batch.

Completion
This field displays the actual completion date and time for the batch.

Step Details

Step
This field displays the step number.

Operation
This field displays the name of the operation performed by the step.

Planned Dates Region

Start Date
This field displays the planned start date and time of the operation performed by the batch step.

Completion
This field displays planned completion and time date of the operation performed by the batch step.

Start
This field displays the actual date and time the operation performed by the batch step was started.

Actual Dates Reion

Completion
This field displays the actual date and time the operation performed by the batch step was completed.

Planned Hours
This field displays the planned time in hours it took to complete the operation step.

Actual Hours
This field displays the actual time in hours it took to perform the operation step.

Variance

This field displays the difference (in percentage) between the planned and the actual time it took to complete to operation step.

Batch Step Variance Inquiry - Actions Menu

Batch Variance

Select this option to return to the previous window, the Batch Variance Inquiry.

Operation Details

Select this option to display the Operation Details window.

Batch Variance Inquiry - Operation Step Details

The Operation Details window displays detail information on an operation step. You navigate to this window by clicking the drill down indicator next to the operation step you want to view more details on or by selecting Operation Details from the Batch Step Variance Inquiry's Actions menu.

Batch Variance Inquiry Operation Details Window Field References

Batch

This field displays the batch ID code.

Product

This field displays the product’s item ID code.

Qty Per Batch

This field displays the quantity of the product manufactured by the batch.

Batch Step

This field displays the number of the step you selected.

Operation

This field displays the name of the operation performed by the step.

Process Qty UOM

The unit of measure in which the process quantity is expressed.

Planned Dates

Start

This field displays the planned start date and time for the batch.

Completion

This field displays the planned completion date and time for the batch.

Actual Dates

Start

This field displays the actual start date and time for the batch.

Completion

This field displays the actual completion date and time for the batch.

Usages

Resource

This field displays the name or ID code of the resource used to perform the operation step. Resources are the assets you use to produce batches, including production equipment and employee labor. Resources are set up in the OPM Capacity Requirement Planning application.

Count

This field displays the number of resources normally used to complete the operation step. This information is set up on the Routings window. This is for informational purposes only.

Activity Code

This field displays the code for the activity performed by the resource. For example, BLEND for blending. Activities are set up in the Formula Management application.

Planned

This field displays the planned usage of the resource (time).

Actual

This field displays the actual usage of the resource (time).

UOM

This field displays the usage unit of measure (time UOM). For example HR, for hour.

Variance

This field displays (in percentage) the difference between the planned and actual usage of the resource.

Planned Dates

Start

This field displays the planned start date and time for the resource / step combination.

Completion

This field displays the planned completion date and time for the resource / step combination.

Actual Dates

Start

This field displays the actual start date and time for the resource / step combination.

Completion

This field displays the actual completion date and time for the resource / step combination.

The field described below is located at the bottom of the window.

Actual Count

This field is located at the bottom of the window. This is the actual number of resources used. This is for informational purposes only.

Batch Step Variance Operation Details Window - Actions menu

Batch Step Variance

Select this option to display the Batch Step Variance Inquiry window.

Viewing Resource Variances

Use the Resource Variance Details window to view information about resource consumption during production. Resources are the assets you use to produce your products such as machinery and labor. Resources are set up on the Resources window in the OPM Capacity Planning application.

Resource Variance Selection Box

This dialog box appears when you select the Resource Variance Inquiry. The data entered here determines the batches selected for viewing in the inquiry window.

Resource Variance Selection Box - Procedure

- Navigate to the **Resource Variance Selection Box.**
- Complete the fields as described in the *Resource Variance Selection Box - Fields* topic.
- Click **OK**. This displays the Resource Variance Details window. For information on this window, see the section *Viewing Resource Variance Details.*

Resource Variance Selection Box Field References

Resource

Enter one or a range of resource codes. Leaving the From and To fields blanks indicates you want to do an inquiry on All resources.

Organization

Enter one or a range of organizations. Leaving the From and To fields blank indicates you want to do an inquiry on All organizations.

Batch

Enter one batch number or a range of batch numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All batches.

Start Date

Enter a single start date or a range of start dates.

Formula

Enter one formula or a range of formulas. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Version

Enter a single version number or a range of version numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Routing

Enter one routing or a range or routings. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Version

Enter a single version number or a range of version numbers. Leaving the From and To fields blank indicates you want to do an inquiry on All formulas.

Operation

Enter a single operation code or a range of operation codes. Leaving the From and To fields blank indicates you want to do an inquiry on All operations.

Resource Variance Details Window

Use the Resource Variance Details window to view information about variances in resource consumption. The entries made in the Resource Variance Selection Box determines the batch data shown.

The purpose of this inquiry is to provide information about resource usage. For example, you can view details about the non-material resources used, the date and time specific resources are used, the planned and actual time they are used and the variance between the planned and actual use.

Resource Variance Details Window - Procedure

- Navigate to the **Resource Variance Selection** dialog box.
- Complete the fields as described and click **OK**. This displays the Resource Variance Details window.
- To see to more detailed Resource Usage information, click the drill down indicator next to the resource on which you want to view more detailed information. This displays the **Resource Usage** window.

Resource Variance Details Window Field References

Drill Down Indicator (Unlabeled)

Click this box to see Resource Usage details.

Resource

This field displays the code or name of the resource that meets the criteria you entered on the Resource Variance Selection Criteria Box.

Usage Date

This field displays the date on which the resource was used.

Total Batches

This field displays the number of batches on which the resource was used.

Planned Hours

This field displays the planned number of usage hours for the resource.

Actual Hours

This field displays the actual number of usage hours for the resource.

Variance

This field displays the variance (percentage) between the planned hours and the actual hours.

Resource Variance Details Window - Actions Menu

Resource Usage

Select this option to view the Resource Usage window.

Resource Usage Window

Use this window to view information on resource usage.

Resource Usage Window Field References

Resource

This field displays the name of the non-material resource.

Routing

This field displays routing ID number.

Version

This field displays the version number of the routing.

Org

This field displays the plant organization ID number.

Actual Start Date

This field displays the actual start date and time

Status

This field displays the batch status.

Planned Hours

This field displays the amount of planned use of the non-material resource.

Actual Hours

This field displays the actual amount of time the non-material resource is in use.

Variance

This field displays the variance, in percentage, between the planned and actual use of non-material resource.

Resource Usage Window - Actions Menu

Resource Variance Details

Select this option to view the Resource Variance Details window.

Resource Usage Details

Select this option to view the Resource Usage Details window.

Resource Usage Details Window

Use this window to view further details on resource usage.

Resource Usage Details Window Field References

Organization

This field displays the plant organization code.

Resource

This field displays the resource's ID code.

Routing

This field displays the routing ID code.

Batch

This field displays the batch ID code.

Usage Details

The fields in this section display resource usage detail information.

Operation

This field displays the code for the operation that the resource performed. Operations are steps in the routing. Operation codes are set up on the Operations window.

Activity

This field displays the activity which the operation performed.

Planned Count

This field displays the planned number of resources used to perform the operation.

Actual Count

This field displays the actual number of resources used to perform the operation.

Planned Usages

This field displays the planned number of usage hours for the resource.

Actual Usages

This field displays the actual number of usage hours for the resource.

UOM

This field displays the unit of measure in which the usage is expressed. This is usually a unit of measure of time such as HR.

Variance

This field displays the difference in percentage between the planned usage and the actual usage of the resource during the operation step.

A

Appendix

The following topics are discussed:

- Process Operation Controls Navigator Paths

Process Operation Control Navigator Paths

Although your system administrator may have customized your navigator, default navigation paths are described in the following tables. In some cases, there is more than one way to navigate to a window. These tables provide the most typical default path.

Window	Path
Batch Operation WIP	OPM Production Execution:POC:Batch Operation WIP
Batch Steps	OPM Production Execution:POC:Batch Steps
Batch Step Variance - Dialog Box	OPM Production Execution:POC:Batch Step Var Inq
Batch Step Variance Inquiry (1st)	OPM Production Execution:POC:Batch Step Var Inq:OK
Batch Step Variance Inquiry (2nd)	OPM Production Execution:POC:Batch Step Var Inq:OK:Actions:Batch Step Variance
Batch Variance Inquiry - Operation Details	OPM Production Execution:POC:Batch Step Var Inq:OK:Actions:Batch Step Variance:Actions:Operation Details

Window	Path
Routing Step / Formula Item Association	OPM Production Execution:POC:Formula / Route Assoc
Material Variance Selection Box	OPM Production Execution:POC:Material Variance
Material Variance Inquiry	OPM Production Execution:POC:Material Variance:OK
Material Variance - Ingredient Inquiry	OPM Production Execution:POC:Material Variance:OK:Actions:Ingredients
Material Variance - Step Details	OPM Production Execution:POC:Material Variance:OK:Actions:Ingredients:Actions:Step Details
Resource Variance Selection Box	OPM Production Execution:POC:Resource Variance
Resource Variance Details	OPM Production Execution:POC:Resource Variance:OK
Resource Usage	OPM Production Execution:POC:Resource Variance:OK:Actions:Resource Usage
Resource Usage Details	OPM Production Execution:POC:Resource Variance:OK:Actions:Resource Usage:Actions:Resource Usage
Routing Step Dependencies	OPM Production Execution:POC:Routing Step Depend
POC WIP Inquiry - Selection Box	OPM Production Execution:POC:WIP Inquiry
POC WIP Inquiry (1st)	OPM Production Execution:POC:WIP Inquiry:OK
POC WIP Inquiry (2nd)	OPM Production Execution:POC:WIP Inquiry:OK:Actions:Work In Progress
Submit Requests	OPM Production Execution:POC:Reports:Submit a New Request

You navigate to the Submit Requests dialog box to print reports.

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