Production Planning

Lesson 10
PP_Batch_management

Lesson Objectives

Objectives -On successful completion of this training module, you should have:

- Understood the basics of SAP Batch Management

- Process flow in Batch management

- Batch level features

- Batch search strategy

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Training Agenda

What is Batch Management

What is the use of Batch Management

What are the challenges in Batch management

Process flow in Batch management

Batch level features

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Training Agenda

Batch Number assignment

Batch specifications

Batch master records

Batch Status management

Batch determination

Batch determination Process flow

Training Agenda

Batch search strategy

Batch determination- inventory& Warehouse management

Batch determination – Transfer Order

Batch Specific material units of measure

Material master Setting

Creation of Batch

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Training Agenda

Inventory Management

Warehouse management

Batch determination for goods issue
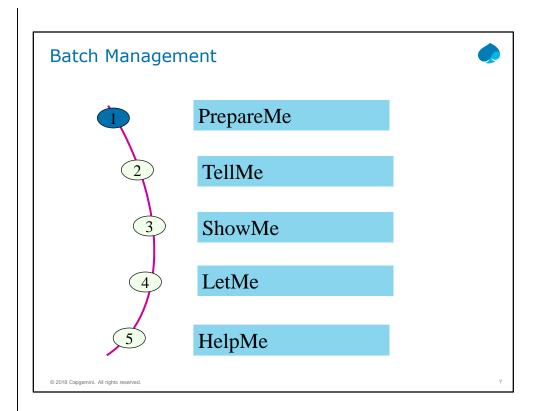
Customizing Data for Batch Management
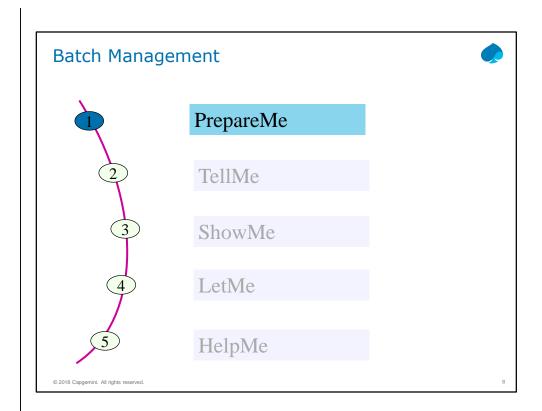
Define Batch Creation for Goods Movements

Define Initial Creation of Data for Batch Master Transactions

Activate Batch-Specific Material Unit of Measure

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Batch Management

1 — PrepareMe

2 — TellMe

3 — ShowMe

4 — LetMe

5 — HelpMe

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Batch Management

1 **PrepareMe**

2 TellMe

3 ShowMe

4 LetMe

5 HelpMe

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Batch Management

Batch is defined as the quantity of a certain material or product which is produced or procured according to the same specifications and this represents one homogenous, non- reproducible unit with unique specifications.

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Use:

Legal requirements (for example, the guidelines set out by GMP (Good Manufacturing Practice) or regulations on hazardous material

Defect tracing, callback activities, and regression requirement

The need for differentiated quantity-and value-based Inventory Management

Differences in usage and the monitoring thereof

in materials planning in SD and Production.

Production or procedural requirements (for example, settlement of material quantities on the basis of different batch specifications
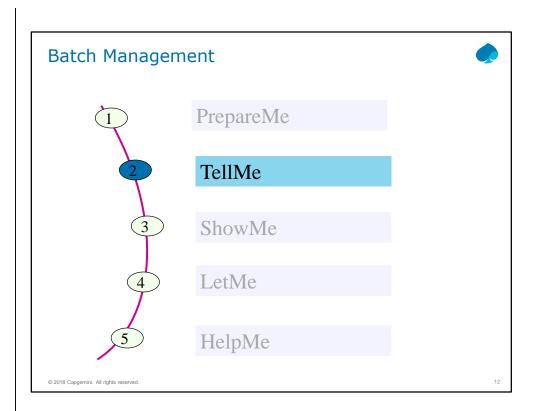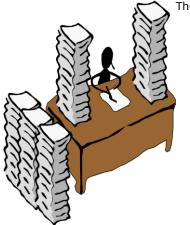
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Challenges

1.For which Process batch Management will be used ?

2.How to use Batch Management?

3. What is Batch search Strategy ?

4. How to determine Batch for Inventory & Warehouse Management.?

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Batch Management

1 → PrepareMe

2 → **TellMe**

3 → ShowMe

4 → LetMe

5 → HelpMe

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Batch

The batch object contains the following key fields
- Material
- Batch
- Plant

- Batches
- Always assigned to a material
- Can only be used for materials that are to be handled in batches.

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Batch Management – Process Flow

Sales & Distribution

- A sales order for a material subject to handling in batches is posted.
  Run a batch determination, as well as a batch availability and usability check. The system determines that the sales order cannot be met with the present stock.
- A requirement is transferred to production

Production

- A production order is created for the material to be handled in batches due to the posted sales order.
- A batch number can be assigned for the quantity of material to be produced.
- As raw materials with certain specifications are required for the manufacture of this material, batch determination is triggered.
- If a sufficient quantity of raw material is available, the selected batches are reserved for the production or process order

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Batch Management – Process Flow

Quality Management
- The batch produced is subject to a quality inspection for final release.
- The inspection results are recorded.
- A usage decision is made

Inventory management
- The batch produced is posted to the stock in quality inspection.
- An inspection lot is created.
- The batch produced is posted to unrestricted-use stock.
- The goods issue for the batch of raw material required by production is posted.

Warehouse Management
- Using the transport requirement, the batch of raw materials is provided at the correct time and date

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Batch Level - Features

Material level:

The batch number is unique in all plants in connection with the material.
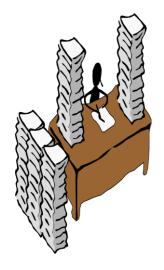
Client level:

The batch number is unique in the whole client.

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Batch Number Assignment

Batch is defined by a Batch Number
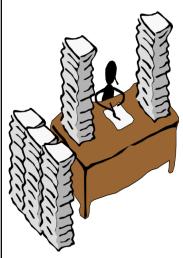
Batch number can be assigned during

- Manual creation of a batch
- When carrying out goods movements, for example, goods receipt or transfer posting
- Creation of a production order
- When a usage decision is made in quality management
- Quality analysis
- Creating a purchase order

Can assign the batch number either:

- Manually or
- Automatically using the Internal Batch Number Assignment function

Batch Specifications

- Batch specifications describe the technical, physical and/or chemical properties of a batch.

- Can store batch specifications, such as batch status or active ingredient potency, as characteristics in the Classification System

- The classification system is used to assign the material specifications to the material of a batch. These material specifications are assigned to the same class as the batches of the materials. Thus one can store the target values of a batch with the respective tolerance range. These target values are, for instance, used in quality inspection or during the goods receipt transaction, if it is necessary to immediately classify a batch. The values are also employed for the usability check.

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Batch Master Record

Can only create batches and batch master records for a material if the material is to be handled in batches.

Set the Batch management indicator in the material master record.

Batch Master Record can be created
- Manually
- In background

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Batch Master Record

The system creates a batch master record in the background in the following procedures:

- The first time goods are received for a batch
- During creation of a production order
- When a usage decision is made in quality management
- During a recurring inspection
- For transfer postings (when you want to split a batch, for example)
- When creating a purchase order

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Batch Status Management

Batch Status is used
- To indicate whether a batch is usable or not
- To prevent goods movements for batches that are not usable, as well as their delivery to customers and their use in Production

Batch Status
- Status unrestricted = the batch can be used
- Status restricted = the batch cannot be used

Stock Types
- Unrestricted stock
- Restricted stock

Stock Update
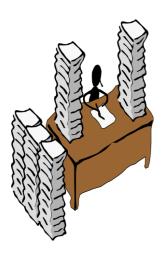
Transfer Postings

Batch Status and Availability Check

Batch Determination

Batch determination is used for all types of goods movements from the warehouse

Batch Determination is carried out in

- Inventory Management
- Production
- Sales & Distribution
- Warehouse Management

Prerequisites

- Assign a search procedure to the business transaction
- Batch search strategy must exists for one of the strategy type
- The selection class must contain at least one of the characteristics with which the batch was classified

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Batch Determination Process Flow

Start batch determination manually, or the system starts automatic batch determination.
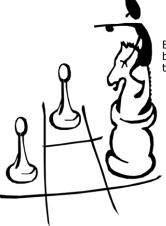
The system then carries out the following steps in succession:

- it looks for a search procedure for the business transaction
- it searches through the strategy types listed in the search procedure for a search strategy. The first valid search strategy is adopted and all other search strategies are ignored.
- it then uses the characteristics from the selection class of the search strategy to look for batches with suitable specifications
- it checks whether the batches are available
- it sorts the batches that were found and are available according to the sort rule from the search strategy
- the system selects a proposed quantity in accordance with the proposed quantity from the search strategy.
- the system proposes that batch determination is to run online, providing that the search strategy contains the information

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Batch Search Strategy

Batch search Strategy is used to define rules for batch determination in particular business transactions. Specify:

- The conditions under which batch determination is to be triggered
- The search criteria that are to be used

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Batch Determination-Inventory & Ware house Management

Inventory Management
- Used only for goods issues
  - Withdrawal for production
  - Internal material provision
  - Return delivery to supplier
  - Scrapping/sampling
  - Transfer posting

Warehouse Management :
- If optimum stock removal strategy takes precedence over other factors such as customer specifications

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Batch Determination- Transfer Order

Batch determination is always carried out
- automatically
- background

Batch Determination Without Reference Documents

Batch Determination with Reference Documents
- Deliver
- Production Order

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Batch-Specific Material Units of Measure
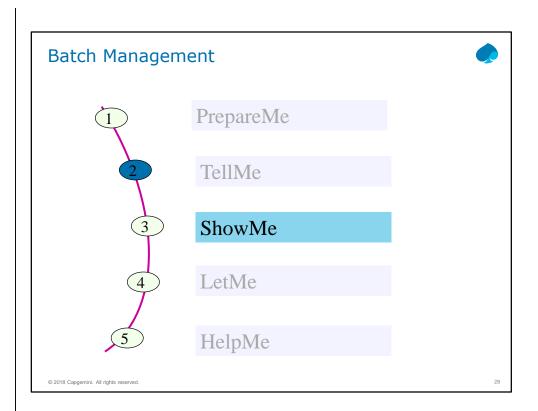
Alternative units of a material for which the conversion ratio to the base unit of measure can be defined on a batch-specific basis.

Batch-specific material units of measure are:
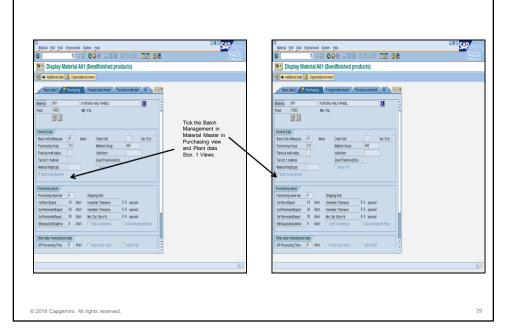
- Proportion units
  - Units of measure in which you can enter proportions of the base unit of a material. The total quantity or physical quantity may be made up of several proportions

- Product units
  - Unit of measure that describes the total quantity of a material as an alternative to the base unit of measure

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Batch Management

1 — PrepareMe

2 — TellMe

3 — **ShowMe**

4 — LetMe

5 — HelpMe

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Material Master Setting-MM01

Tick the Batch Management in Material Master in Purchasing view and Plant data Stor. 1 Views
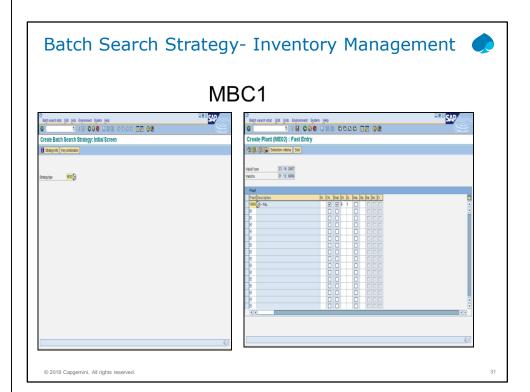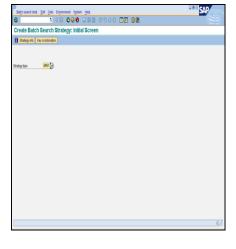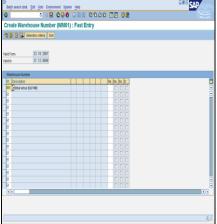
Creation of Batch-MSC1N

Batch Search Strategy- Inventory Management

MBC1

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Batch Search Strategy - Warehouse Management LS51
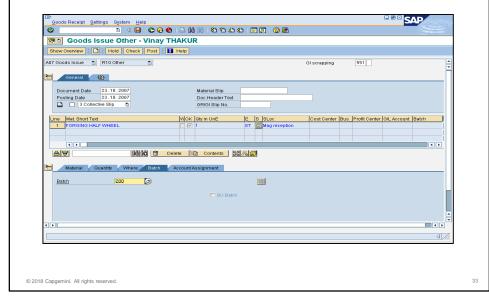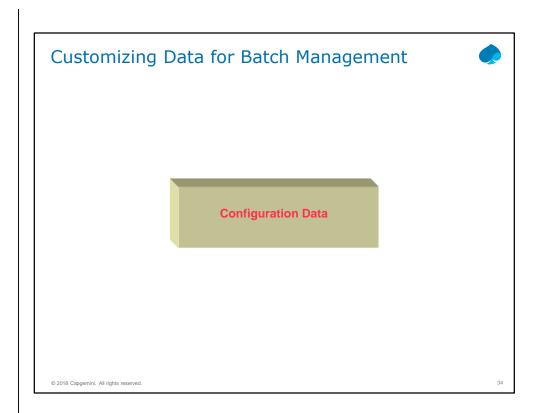
Batch Determination for Goods Issues -MIGO

Customizing Data for Batch Management

Configuration Data

Batch Level

Define Batch Creation for Goods Movements

Define Initial Creation of Data for Batch Master Transactions
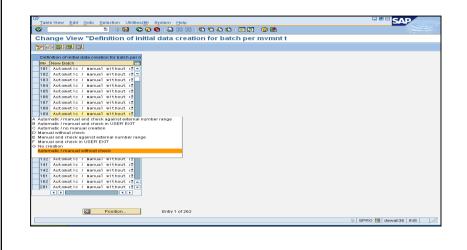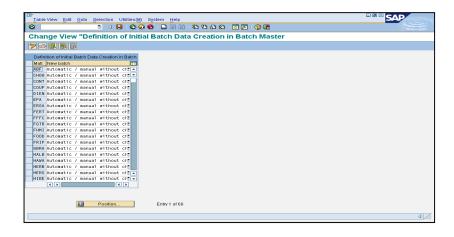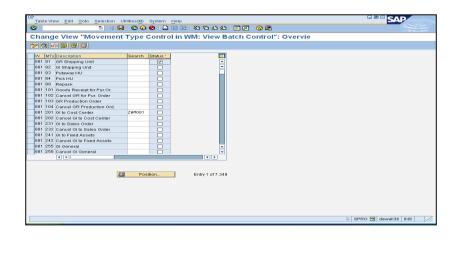
Activate Batch Status Checking in Warehouse Management
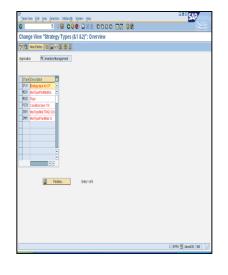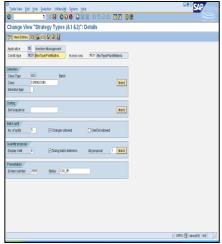
Batch Strategy Types- Inventory Management
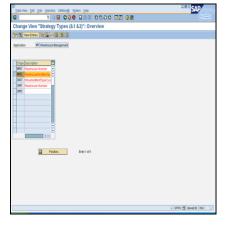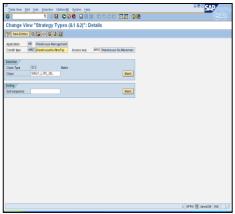
Batch Strategy Types -Warehouse Management
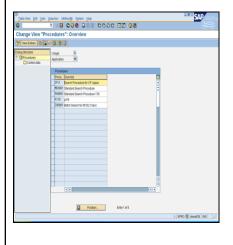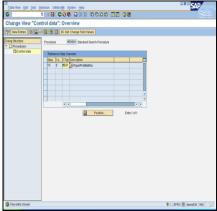
Batch Strategy Search Procedure- Inventory Management
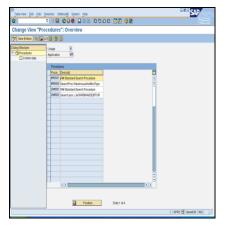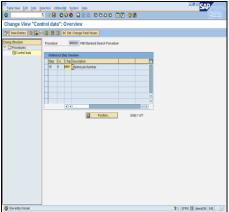
Batch Strategy Search Procedure- Warehouse Management

Batch Where-Used List

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Activate Batch-Specific Material Unit of Measure

Batch Management

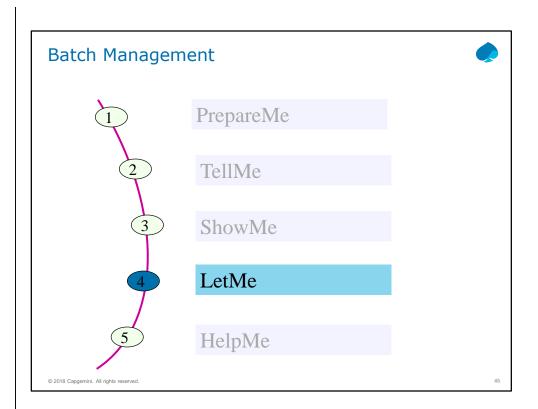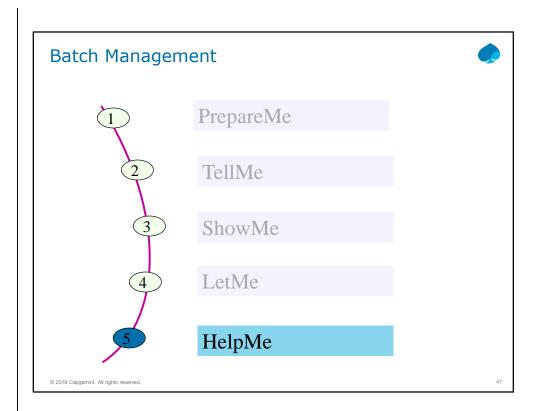|	
①	PrepareMe
②	TellMe
③	ShowMe
④	**LetMe**
⑤	HelpMe

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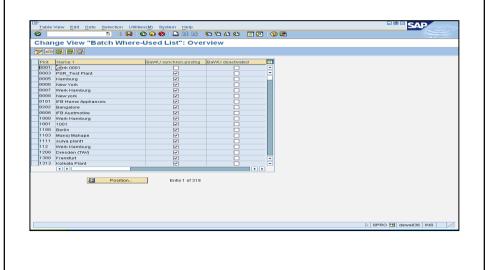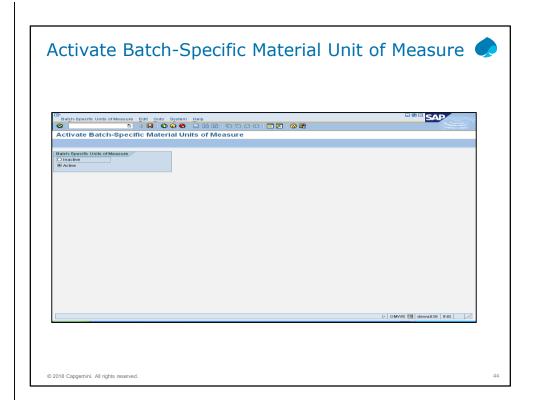
Let Me- Batch Management

MNC Corporation has 2 Plants in USA. Each Plants have 2 Storage Locations. Carryout Batch Management Procedure

1)   Tick the Batch Management in Material Master

2)   Create Batch (MSC1N)

3)   Create Batch Determination Strategy for Inventory Management (MBC1)

4)   Create Batch Determination Strategy for Warehouse Management (LS51)

5)   Create Pick up List (MB5C)

6)   Maintain Batch-specific Units of Measure (MM02)

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Batch Management

1 PrepareMe

2 TellMe

3 ShowMe

4 LetMe

5 **HelpMe**

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Help Me

Some Useful Batch Management Transaction

The report RM07MMHD provides an overview of the remaining shelf life o
batches.

Availability Overview –CO09

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