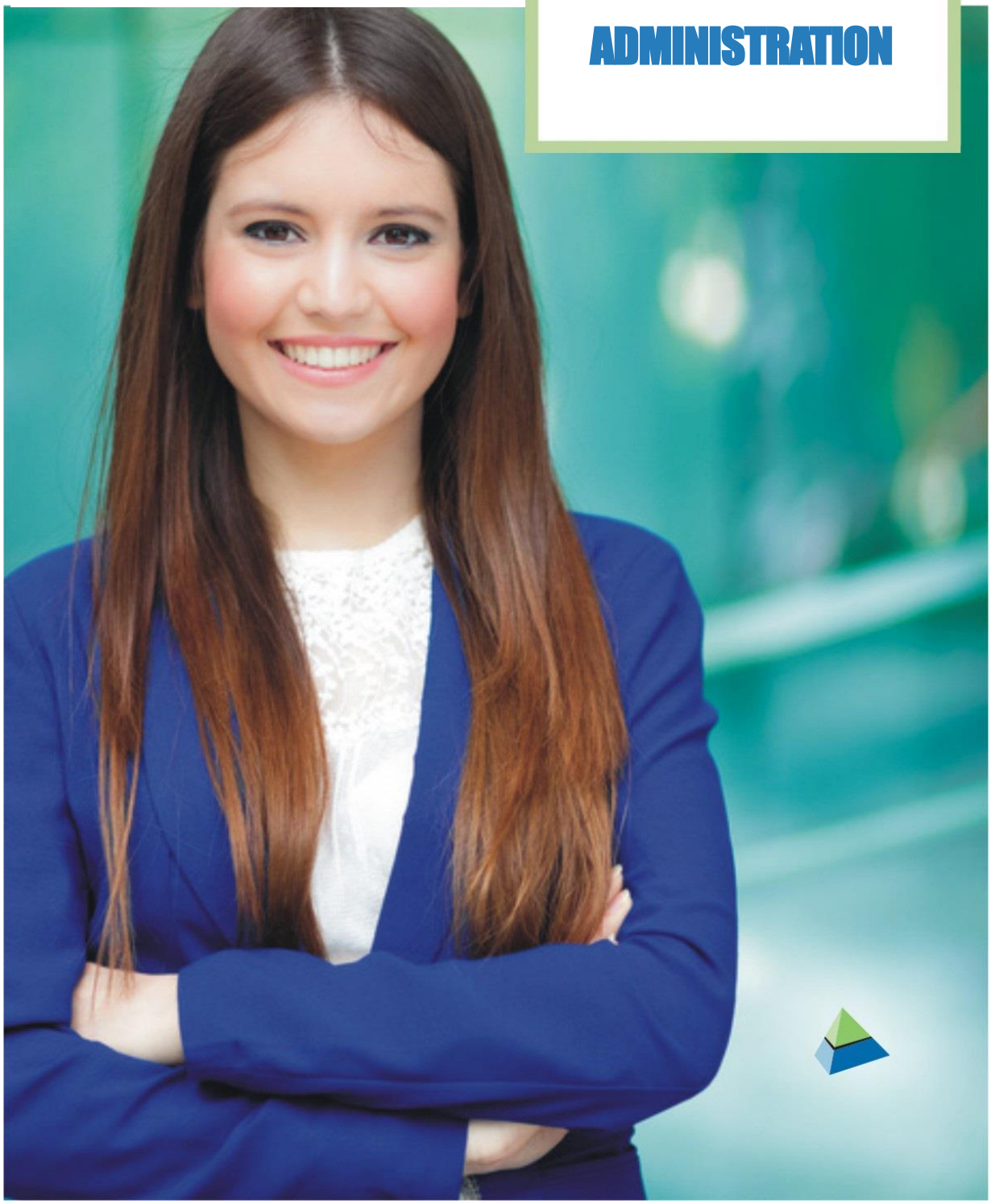
BATCHMASTER® ERP 18.2

User Guide

BatchMaster ERP with SAP Business One
BatchMaster Solutions for
Process Manufacturers

ADMINISTRATION



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About the Manual

Symbols & Conventions

Symbol	Description
	Note
⚠	Mandatory setting
	Tips

Convention	Description
Italicized (*Sales Order Entry*)	Module name, screen name & components
“ ” (“BatchMaster ERP with SAP Business One Hardware and Software Requirements”)	Reference document

Contents

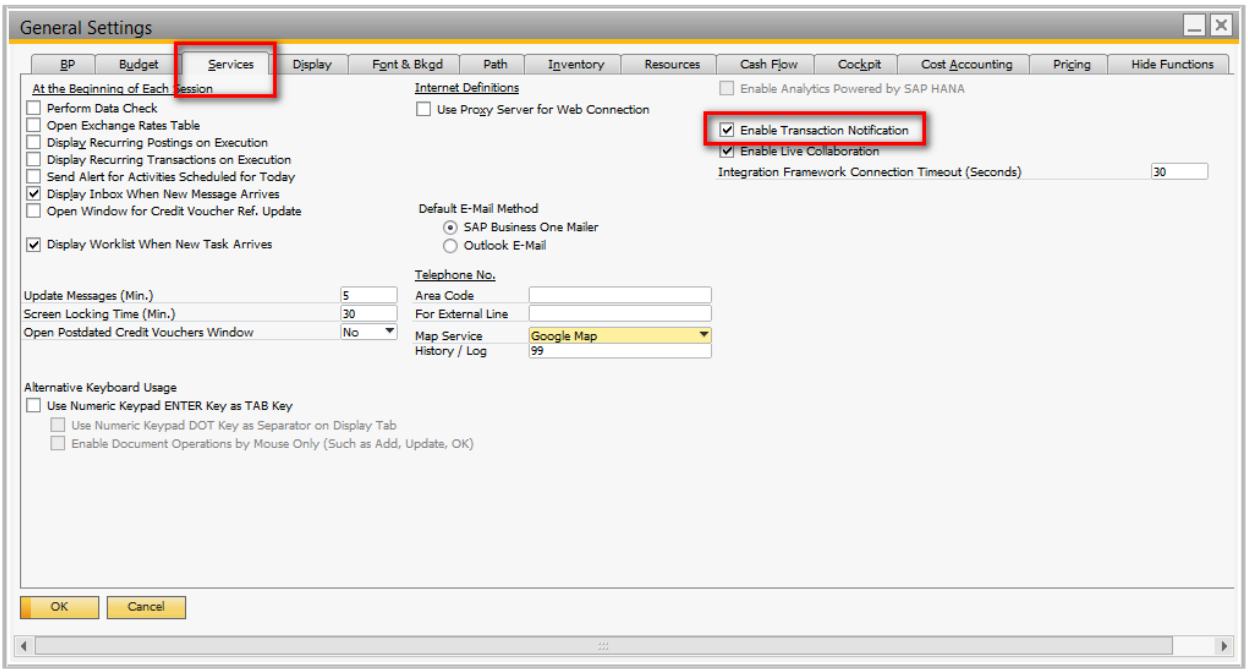
1 DOCUMENT OVERVIEW

This document is designed for use by a customer project lead with help from the BatchMaster implementation consultant. It covers set-up of the process manufacturing functions.

1.1 Enable Transaction Notification

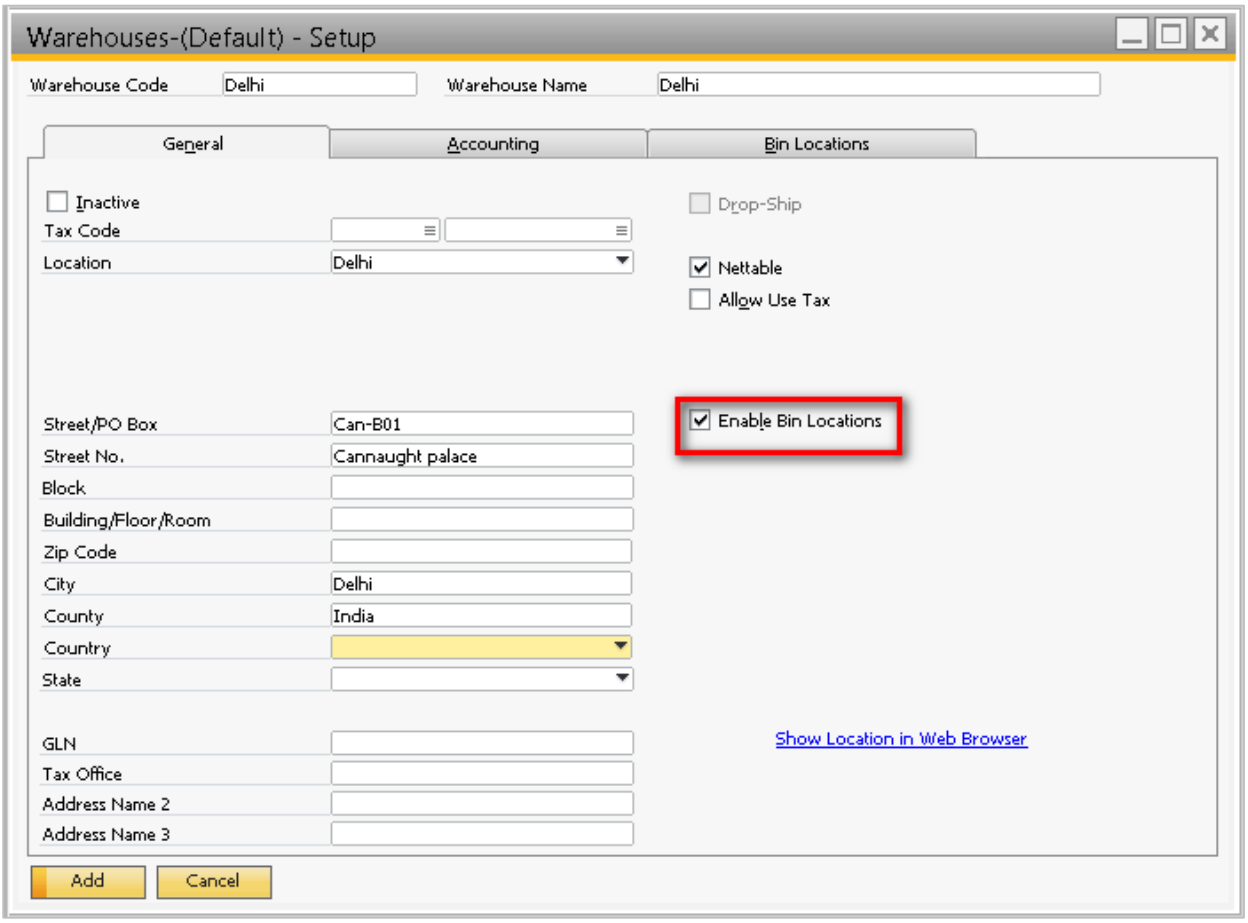
From SAP 9.2 version onwards, check the *Enable Transaction Notification* checkbox available on the G*eneral Settings* screens.

Go To: Administration → System Initialization → General → Unit Master



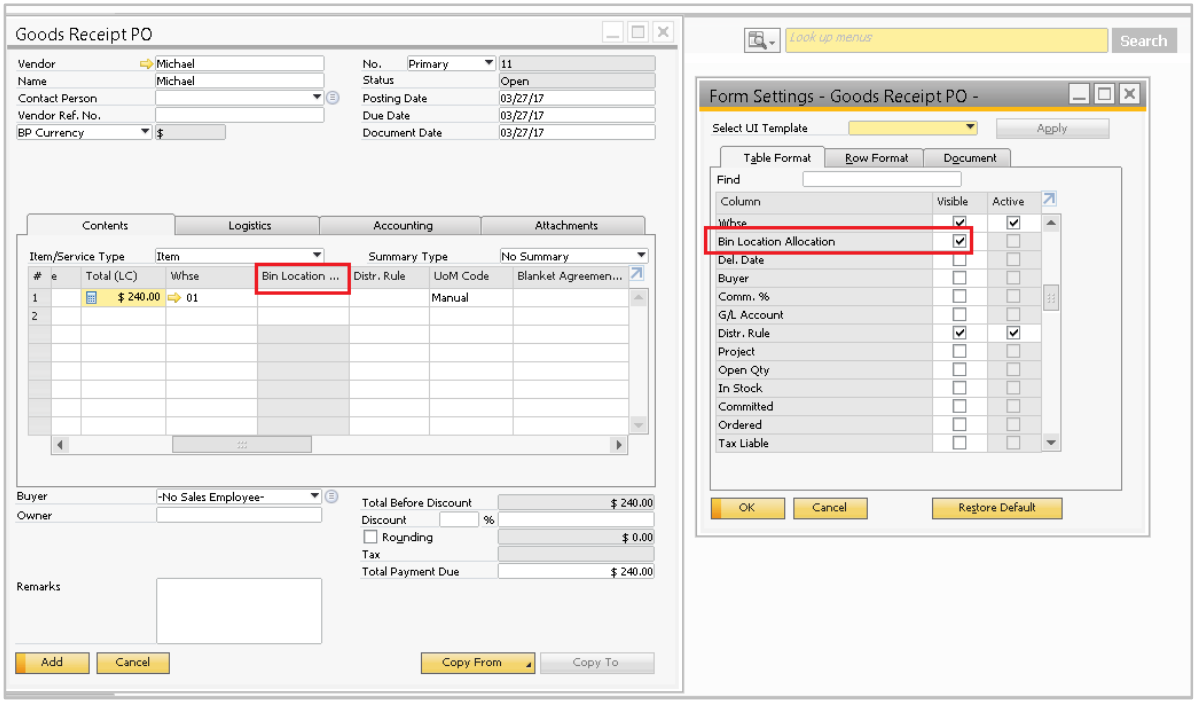
1.2 Enable Bin Location

For every warehouse you create in SAP, ***Enable Bin Location*** *checkbox should be checked.*



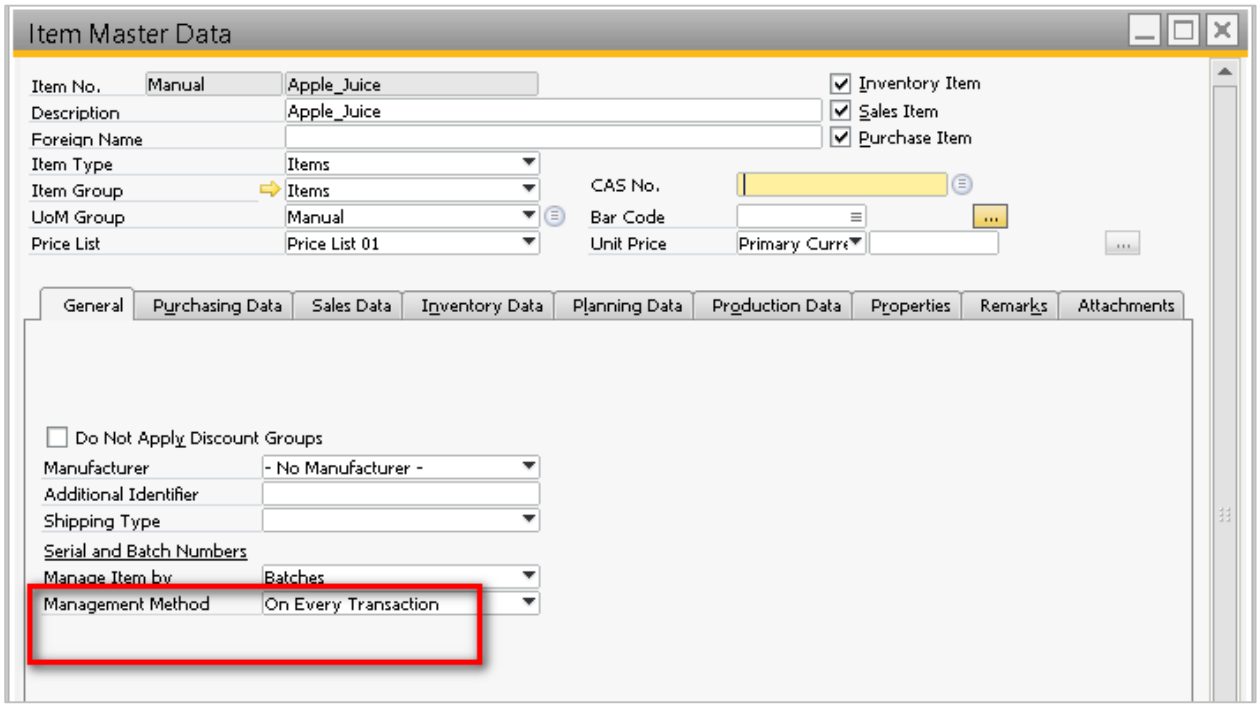
1.3 Default Bin

For every marketing document such as *Goods Receipt PO, Picked & Pack Manager* screen, set the *Bin Location Allocation* field as *Visible* from the *Form settings* screen.



1.4 Management Method

Set the Management method of item as *On Every Transaction*.



2 SETUP

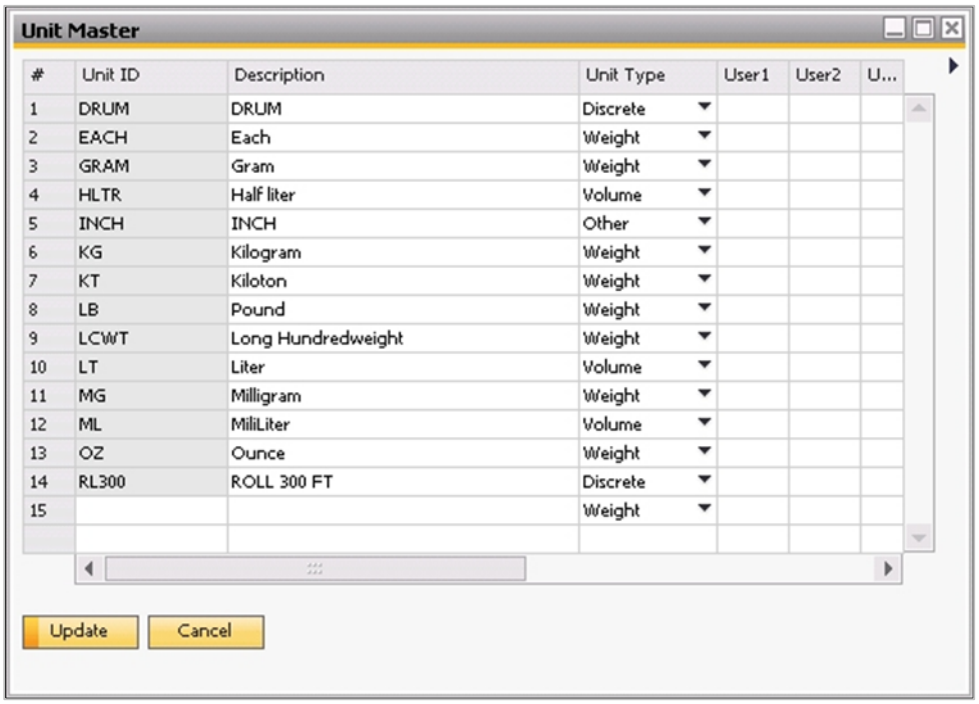
After modifying the setup screens you are required to re-login into BME-B1 before the changes take effect.

2.1 Process Mfg. Units of Measure

2.1.1 Unit Master

The unit master screen is where you define the values used to express item quantities in unit conversions. Unit conversions can be global or item specific.

Go To: Administration → Setup → Process Mfg. Units of Measure → Unit Master



Unit ID: Specify a unique identification key of the unit need to be defined. It can be any like Each, Discrete and so on.

Description: Specify a description of the unit ID, such as Each for EA, kilogram for KG, Litre for LT and so on.

Unit Type: Specify the measuring parameter for the unit defined. The drop-down menu in this field lists the following parameters:

- **Weight:** When you select the type as weight, then the unit used to measure weight can be defined. Example: kilogram, gram
- **Volume**: When you select the type as volume, then the unit used to measure volume can be defined. Example: litre, gallon

- **Discrete**: When you select the type as discrete, then the unit used to measure discrete items can be defined. Example: Dozen, Carat
- **Other**: If you want to define a unit to measure a parameter other than weight, volume, and discrete, then this option can be selected. Example: The unit can be metre, feet and so on.

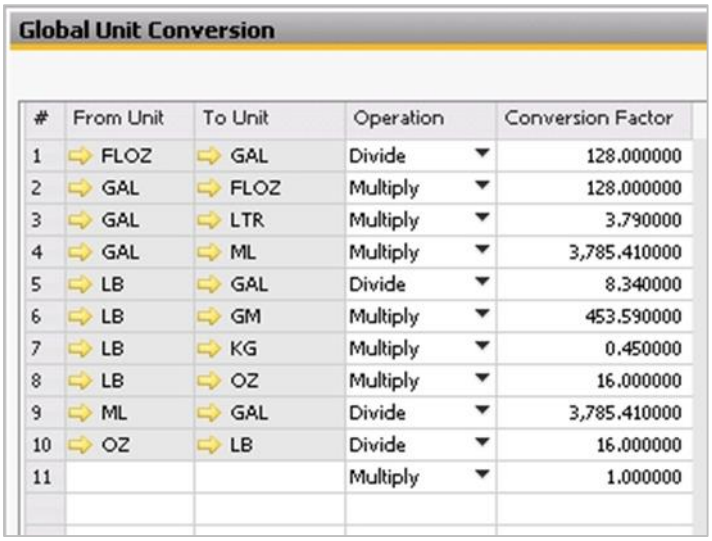
Add or Update (not shown): Click this button to save the record.

Cancel: Click this button to close the screen without saving the record.

2.1.2 Global Unit Conversion

The *Global Unit Conversion* screen enables you to define conversion from one unit of measurement to another for all inventory items. Using this screen, you can specify the units to be converted, the type of the operation necessary to make the conversion, and also the conversion factor.

Go To: Administration → Setup → Process Mfg. Units of Measure → Global Unit Conversion



From Unit: Specify the unit to be converted to some other unit. For example: conversion from KG to LT, then the *From Unit* is *KG*.

To Unit: Specify the unit to which the *From Unit* needs to be converted. For example: conversion from KG to LT, then the *To Unit* should be *LT*.

Operation: Specify the operation that converts the *From Unit* to *To Unit*. The drop-down menu in this field lists the following functions:

1. **Multiply**: When you select this option, the quantity expressed in *From Unit* is multiplied by the conversion factor to obtain the quantity in *To Unit*. For example for converting KG to GRAMS, use a multiplying factor of '1000.'

2. **Divide**: When you select this option, the quantity expressed in *From Unit* is divided by the conversion factor to obtain the quantity in *To Unit*. For example, for converting GRAMS to KG, use a dividing factor of '1000.'

Conversion Factor: View the conversion factor for converting the *From Unit* to the *To Unit*. This field supports maximum six digits after the decimal point.

OK: Click this button to save the record.

Cancel: Click this button to close the screen without saving the record.

2.1.2.1 Recap: Defining Global Unit Conversions

1. Specify the unit which should be converted in the *From Unit* field.
2. Specify the unit to which the From Unit should be converted in the *To Unit* field.
3. Specify the operation that should be performed on the *From Unit* to execute the conversion, in the *Operation* field.
4. Specify the *Conversion Factor*, which when operated on the *From Unit* converts it to the *To Unit*.
5. Click the *Ok* button to save the record.

2.1.2.2 Go To Options

Import Units:

Using this option, you can import standard unit conversions for the *Global Unit Conversion* screen.

To use this option, you need to select a Unit Type (weight versus volume) and Unit Sub Type (Metric, UK, or US.)

Unit Type: Specify the measuring parameter for the unit that you want to import. The drop-down menu in this field lists Weight, Volume, Discrete or Other.

Unit Sub Type: Select the system of units under which the unit type is defined.

#: Displays a sequence number of the line.

Select: Select this checkbox to select the corresponding conversion.

From Unit: Shows the unit which is to be converted to some other unit. For example: To convert from KG to LT, the *From Unit* is *KG*.

From Description: View the description associated with the selected *From Unit*.

To Unit: Shows the unit to which the *From Unit* needs to be converted. For example: conversion from KG to LT, then the *To Unit* should be *LT*

To Description: View the description associated with the selected *To Unit*.

Conversion Factor: View the conversion factor for converting the *From Unit* to the *To Unit*. This field supports maximum six digits after the decimal point.

Operation: Specify the operation that converts the *From Unit* to *To Unit*. The drop-down menu in this field lists the options as *Multiply* and *Divide*.

Select All: Check this checkbox to select all available lines in the grid.

Update: Click this button to update the selected units along with conversion factors and operators and these units will be populated in the *Global Unit Conversion* screen.

Cancel: Click this button to close the screen without saving the modifications.

Importing Unit:

1. Select a *Unit Type* based on which units get auto populated in the grid.
2. Specify a *Unit Sub Type.*
3. Select the row respective to the unit you need to import.
4. Specify the conversion factor that will be used to convert *From Unit* to *To Unit.*
5. Specify the operation that convert *From Unit* to *To Unit*.
6. Click the *Update* button. The selected units along with conversion factors and operators get populated on the *Global Unit Conversion* screen.

2.1.3 System Units

The *System Units* screen is where you define a Unit of Measure for system weight and volume respectively. The units maintained here are used for calculating weights and volumes at the time of creating formulas and batches.

Go To: Administration → Setup → Process Mfg. Units of Measure → System Units

System Weight: Specify the System unit of measure for weight such as kilogram and gram. If the stock unit of an item is different from the system weight unit, then a conversion must be defined from the stock unit to the system weight unit. Only when such a conversion is defined, can the item be used as a formula ingredient or as a by-product on the *Formula Entry* screen.

System Volume: Specify the System unit of measure for volume such as litre and milliliter. If the stock unit of an item is different from the system volume unit, then a conversion must be defined from the stock unit to the system volume unit. Only when such a conversion is defined, can the item be used as a formula ingredient or as a by-product on the *Formula Entry* screen.

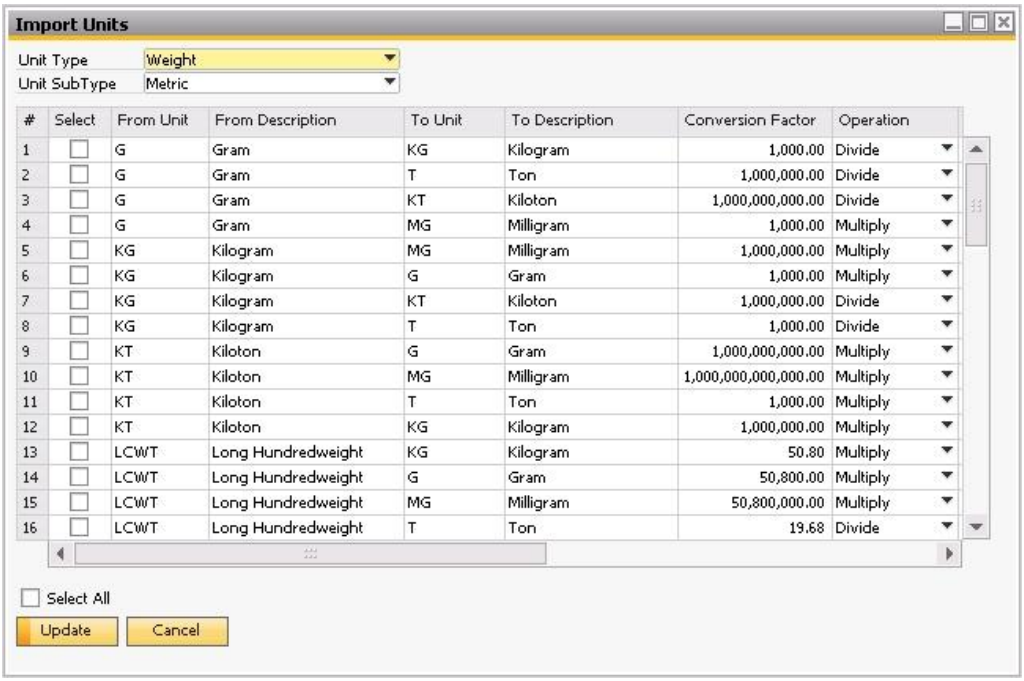
OK: Click this button to save the record.

Cancel: Click this button to close the screen without saving the record.

2.1.4 Go To Option: Import Standard Unit Conversions

You can import pre-defined UOM conversion factors while in the *Global Unit Conversion* screen. You can choose unit types and unit sub-types from the screen. At the Windows toolbar, click on:

Go To: File → Edit → View → Data → GoTo.



Unit Type: Select either the *Weight* or *Volume* option in the *Unit Type* field.

Unit Sub Type: Select either the *Metric* (UK) or the *US Standard* system of measurements in the *Unit Sub Type* field.

Select All: Use the *Select All* checkbox to import all the listed conversions into your table. You can also select or deselect conversions individually.

Update: Click the *Update* button to run the *Import* utility.

Cancel: Click the *Cancel* button to close the screen without saving your changes.

You can run the *Import* utility at any time to update the conversions in your table.

2.1.5 Update Unit Conversion Factors

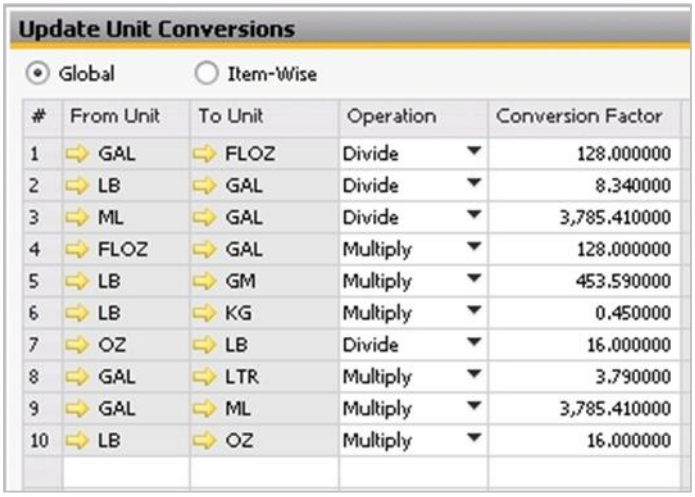
Using this screen you can change the *Operation and Conversion Factor* values for a particular *From Unit/To Unit* relationship. The change can be made for all instances of the *From Unit/To Unit* relationship or on an item-by-item basis.

CAUTION: **Changing these values can have undesired effects on inventory quantities, formulas, and costing.** It is recommended that you make and validate changes in a test environment before doing so in live data.

Go To: Administration → Setup → Process Mfg. Units of Measure → Update Unit Conversions.

There are two choices for this update:

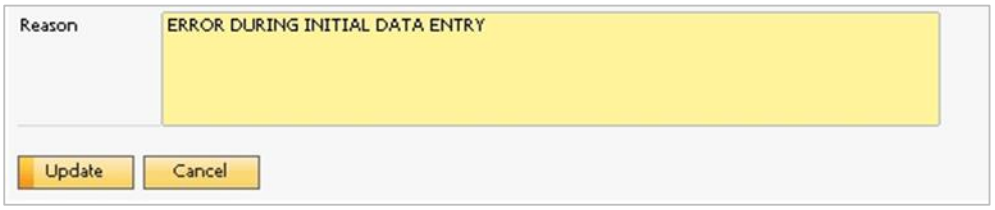
Global – Makes changes for all inventory items.



Operation: The operation that converts the 'From Unit' to the 'To Unit'.

Conversion Factor: The factor for converting the 'From Unit' to the 'To Unit'.

Reason: Enter the business reason for making the change(s).

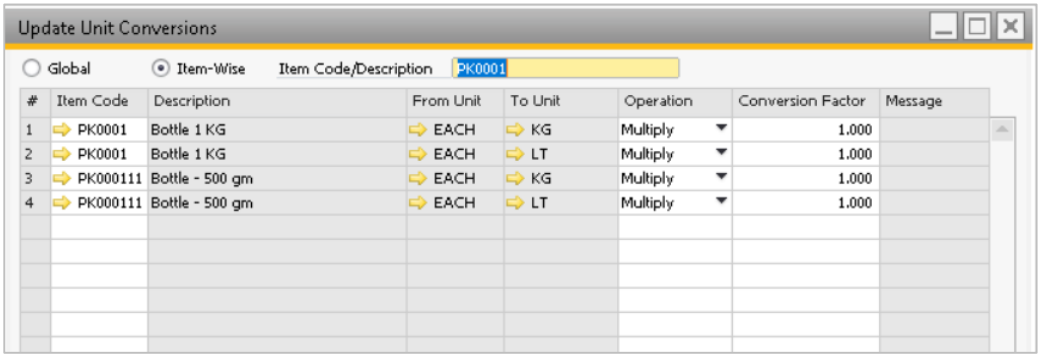


Update: Click the *Update* button to save the record.

Cancel: Click the *Cancel* button to close the screen without saving your changes.

Item-Wise – Makes changes for selected items only. Only items that have a conversion defined at the *Item Master Detail* screen can be modified. You can only change the *Operation* and the *Conversion Factor*.

Selecting this option will activate the *Item Code/Description* search functionality. This allows you to enter either a full or partial item code or description. As you type, the system will filter the results in real-time, displaying only the matching items for efficient searching. Once you enter a complete or partial item code, the displayed data will be immediately filtered to show only the item(s) that match your input.



Item Code: Click on the item whose UOM conversions you want to change.

Operation: The operation that converts the 'From Unit' to the 'To Unit'.

Conversion Factor: The factor for converting the 'From Unit' to the 'To Unit'.

Reason: Enter the business reason for making the change(s).

Update: Click the *Update* button to save the record. Then click *OK* to close the screen.

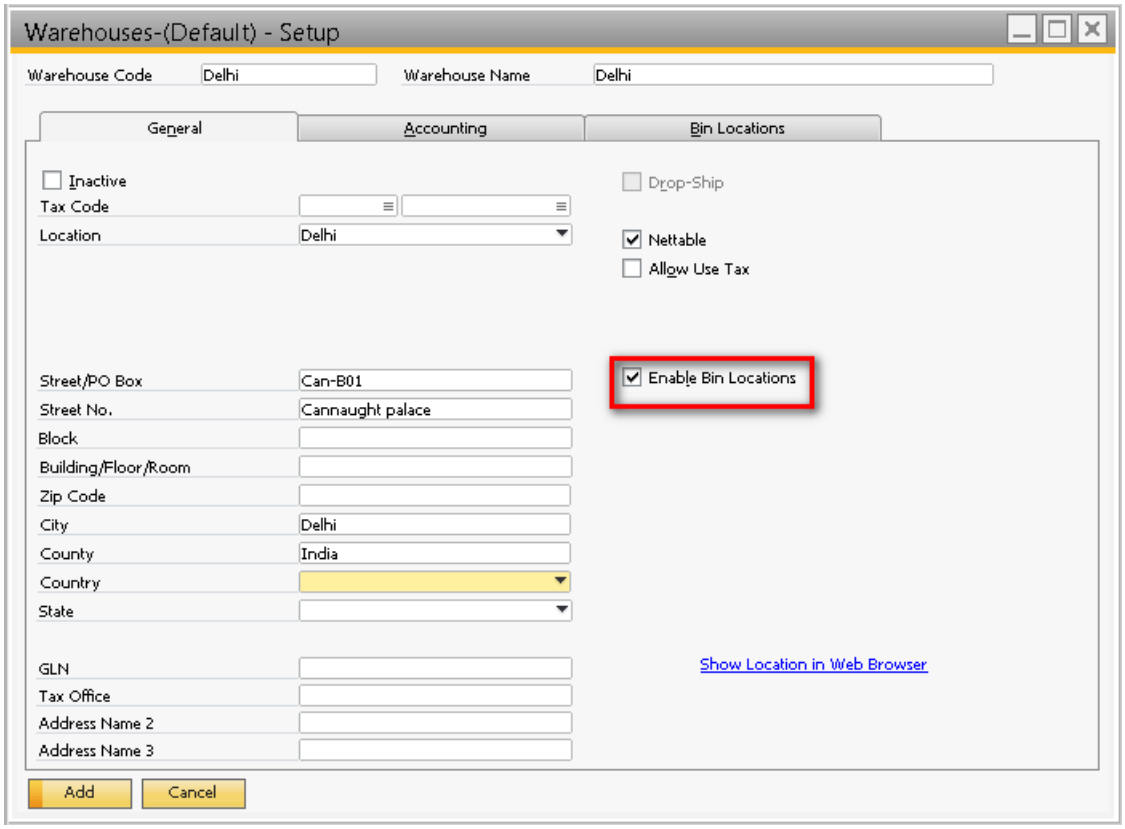
Cancel: Click the *Cancel* button to close the screen without saving your changes.

2.2 Inventory Setup

2.2.1 Enable Bin Location

As a prerequisite, for every warehouse we create in SAP, ***Enable Bin Location*** *must be checked.*

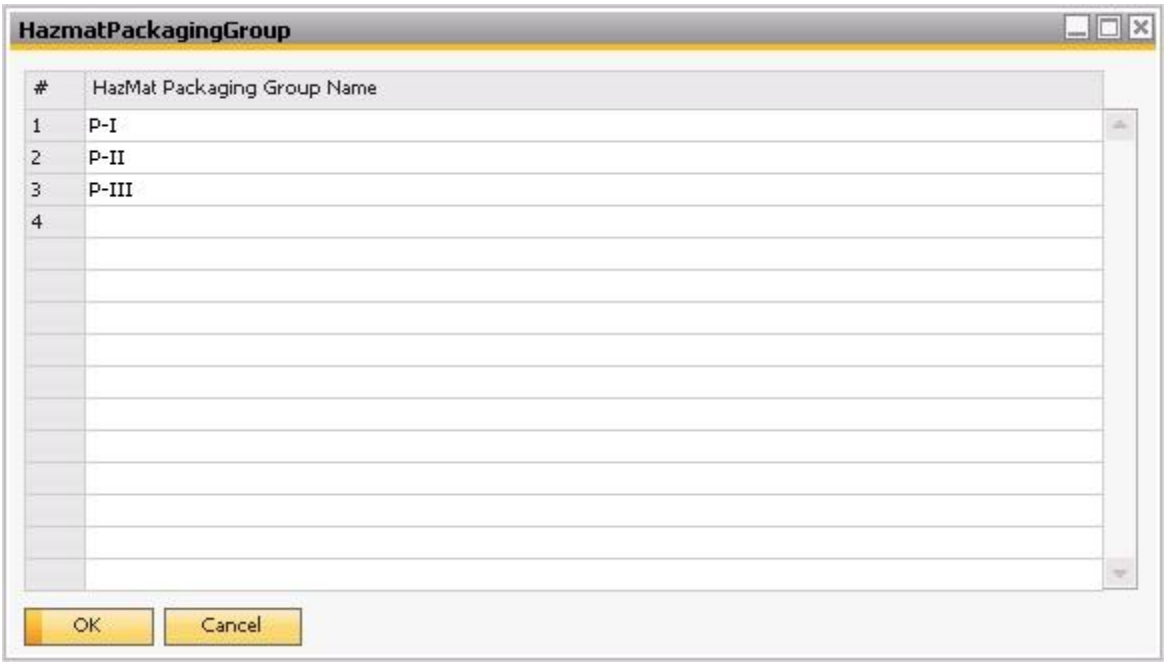
Go To: Main Menu → Administration → Setup → Inventory → Warehouses.



2.2.2 HazMat Packaging Group

Using this screen you can define different packaging groups to indicate the degree of risk a hazardous material may pose in transport.

Go To: Administration → Setup → Inventory → HazMat Package Group.



HazMat Packaging Group: The name of the Hazmat packaging group.

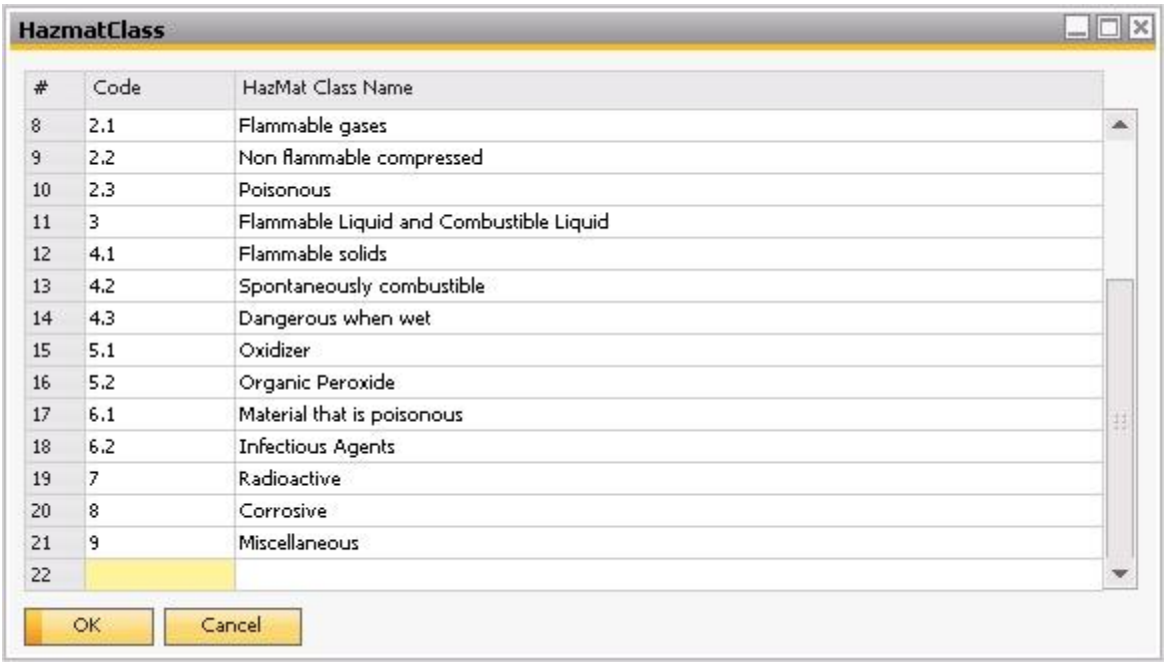
Update: Click the *Update* button to save your edits.

Cancel: Click the *Cancel* button to exit the screen without saving changes.

2.2.3 HazMat Class

Use the *HazMat Class* screen to define various categories of risk posed by your raw materials, intermediates, or finished goods. The system provides the 21 international categories, and you can add more if needed based on your business.

Go To: Administration → Setup → Inventory → HazMat Class.



HazMat Code: The column value is editable so that you can change the class and division of the hazardous material, based on the standards established by the United States Department of Transportation (DOT).

HazMat Class Name: The name in this field should correspond to the code specified in the *HazMat Code* field and be based on the standards established by the DOT.

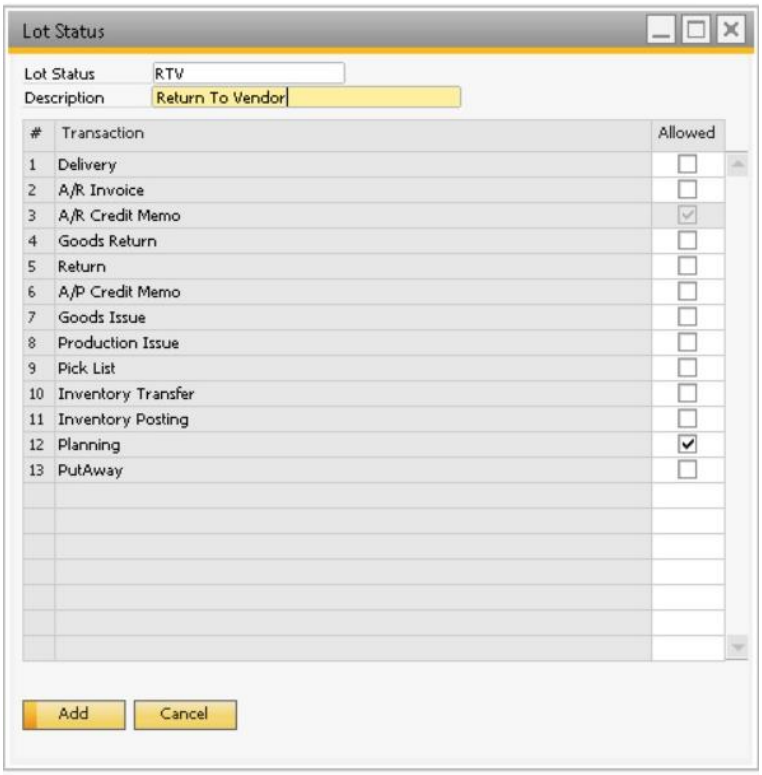
Update: Click the *Update* button to save your edits.

Cancel: Click the *Cancel* button to exit the screen without saving your changes.

2.2.4 Lot Status

Using the *Lot Status* screen you can define different lot statuses that are used to control the movement of inventory in the system.

Go To: Main Menu → Administration → Setup → Inventory → Lot Status



Lot Status: The unique name of the lot status.

Description: A description of the lot status.

Transaction: This column displays a list of transactions.

Allowed: Check the boxes in this column to make the corresponding transactions available for the selected lot status. At least one transaction type must be selected.

Add: Click the *Add* button to save the record.

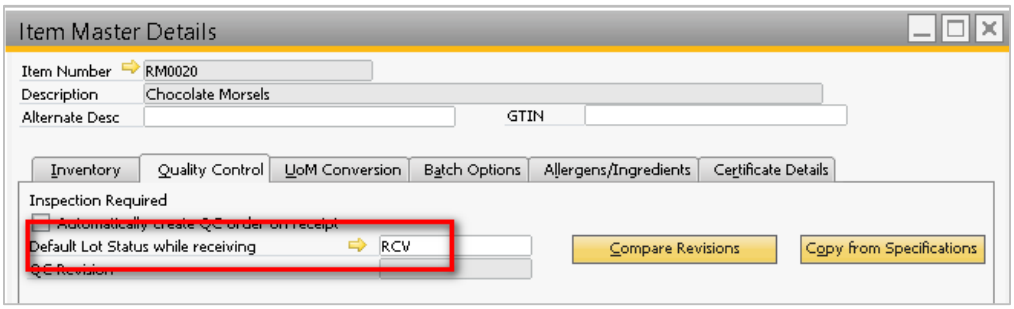
Cancel: Click the *Cancel* button to close the screen without saving your changes.

2.2.4.1 Impact of Lot Status

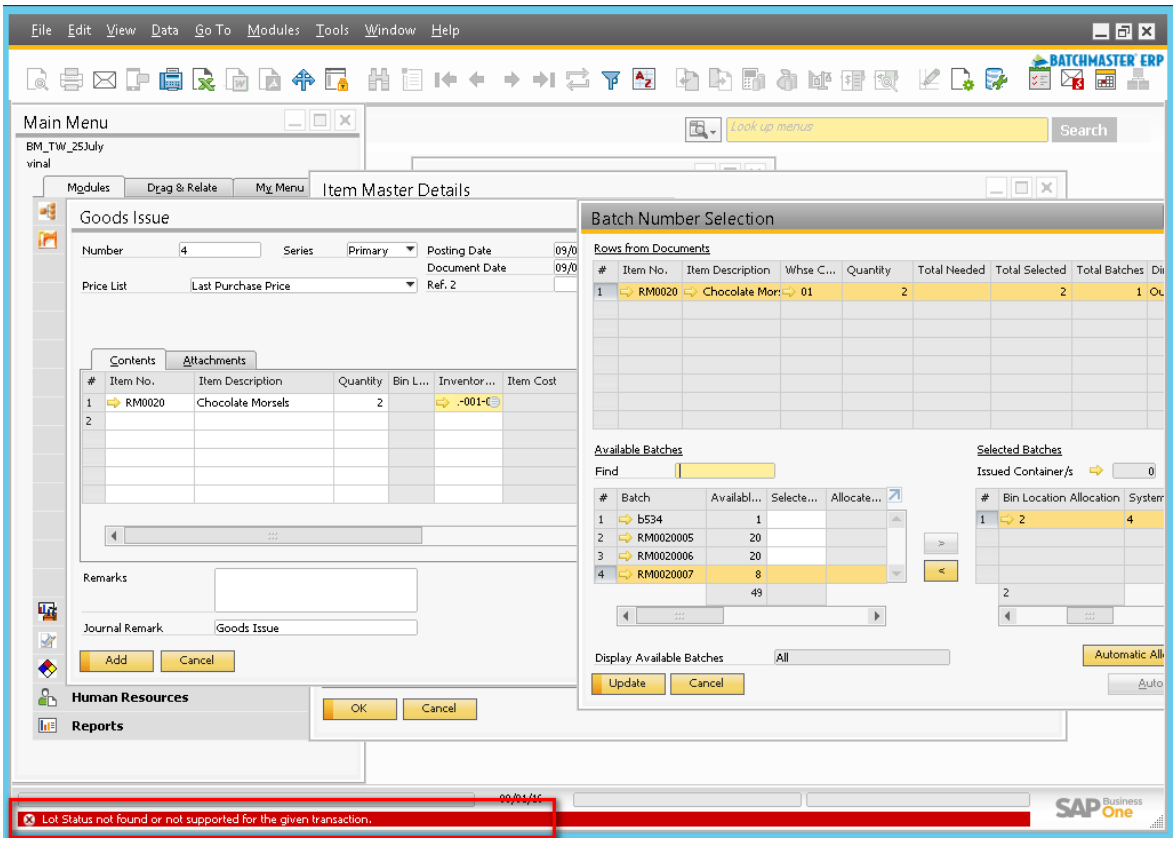
You can assign a lot status to an item lot at the time of receipt. On the *Item Master Details* screen, under the *Quality Control Tab*, the *Default Lot status while Receiving* option is available to set the default lot status of the item. When you keep the field blank it means that the item is open for all transactions and has no restrictions.

For example, you can set RCV (Receiving) as the default lot status for RM0020.

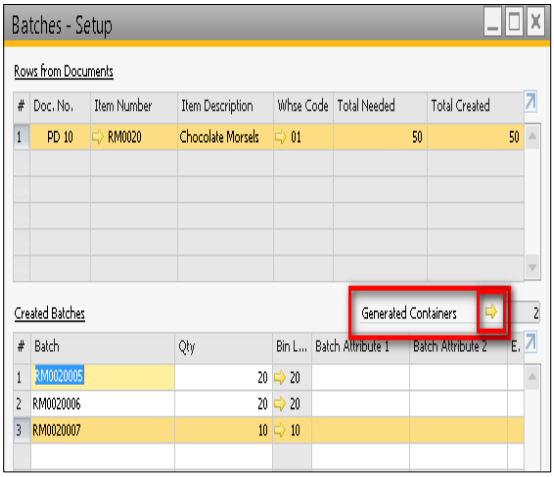
Go To: Main Menu → Inventory → Item Master Details

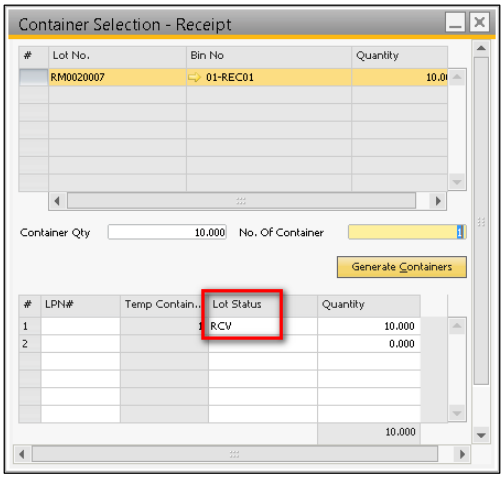


The item lot of RCV status is only allowed for Goods Return, Return and Inventory Transfer. If you attempt any other transactions such as goods issue the system will display an error *Lot Status not found or not supported for the given transaction*, as displayed below:

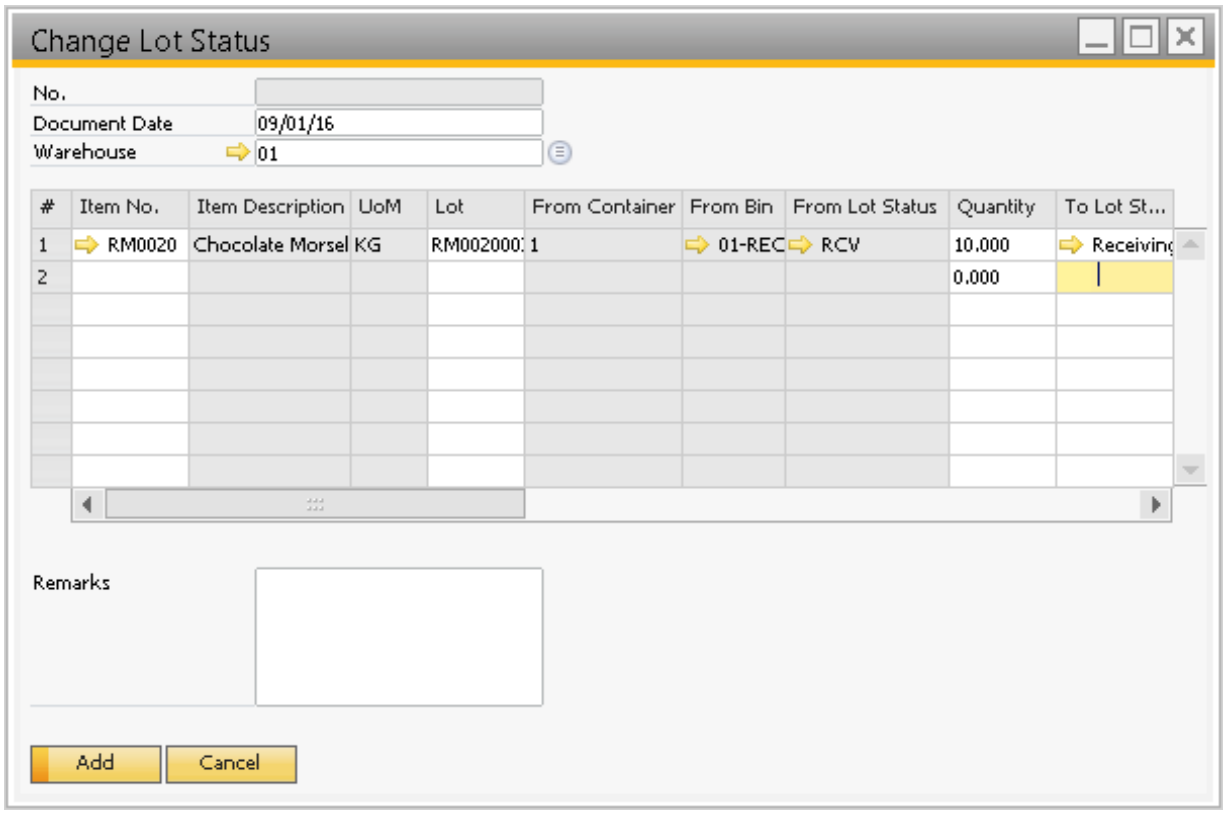


The default lot status you set for the item is defaulted on the *Goods Receipt* screen. During the receipt, if you wish to change this lot status, click the *Generate Containers* hyperlink on the Batches Setup screen. This will open the *Container Selection* screen from where you can change the current lot status.





Later, at any stage, the item lot status can be changed using the *Change Lot Status* screen.

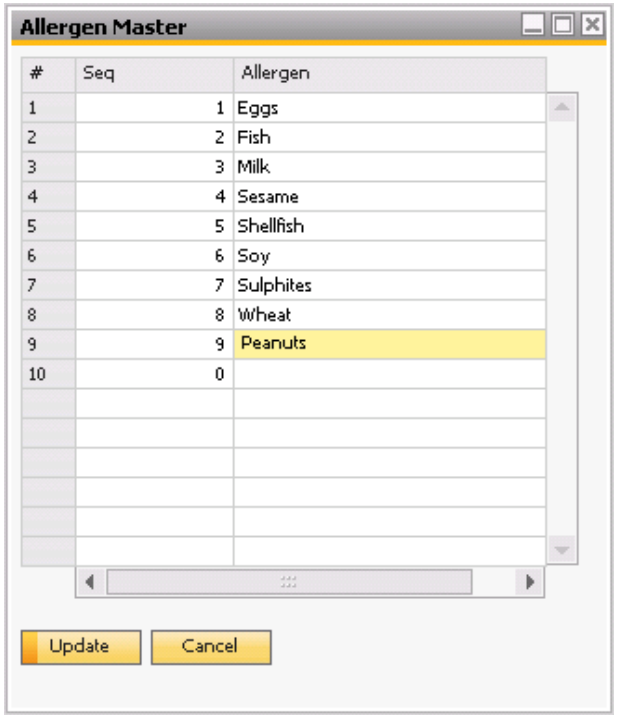


The impact of lot status is also found during quality control. For understanding the impact, please refer to the *QC Defaults* section of the *BME-B1 18.2 QC User Guide.*

2.2.5 Allergens

Use this screen to define potential allergens in your products. The system comes pre-populated with a list of common food allergens. You can edit the list and add your own allergens depending on your business needs. Once this list is created, you can define the allergen(s) that apply to an item on the *Item Master Details* screen.

Go To: Administration → Setup → Inventory → Allergens.



Seq: Define the production sequence for the allergen. This number can be assigned based on when the allergen must be dealt with on the production floor.

Allergen: Specify a name for the allergen.

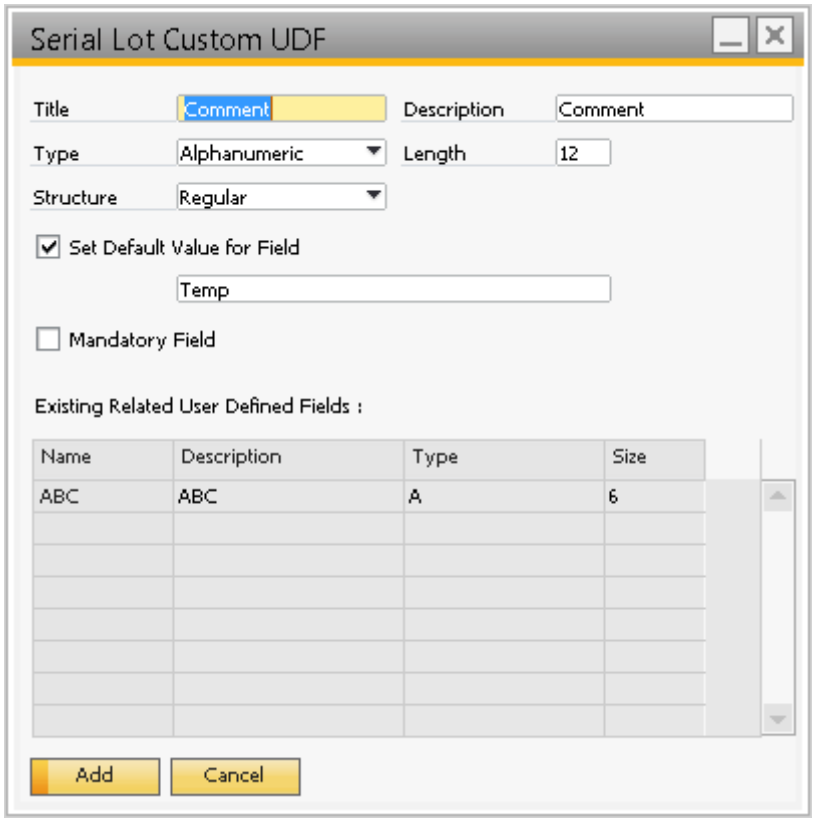
Update: Click the *Update* button to update the record.

Cancel: Click the *Cancel* button to close the screen without saving your changes.

2.2.6 Serial Lot Custom UDF

Use this screen to define User Defined Fields (UDF) in OBTN, PNTRXLOTDTL and QCLOTDETAILS. The custom UDF you define here can be used to save data at the time of assigning a finished good lot.

Go To: Administration → Setup → Inventory → Serial Lot Custom UDF



Title: Enter the name or title of the field.

Description: Enter the field description.

Type: Choose the data type of the field.

Length: Specify the field length.

Structure: Use the field dropdown to choose the field structure.

Set Default Value for field: Enter the field value you require to be defaulted.

Mandatory Field: Use this checkbox to make it compulsory to enter the field value on the *Assign lots* screen.

Existing Related User Defined Fields Grid

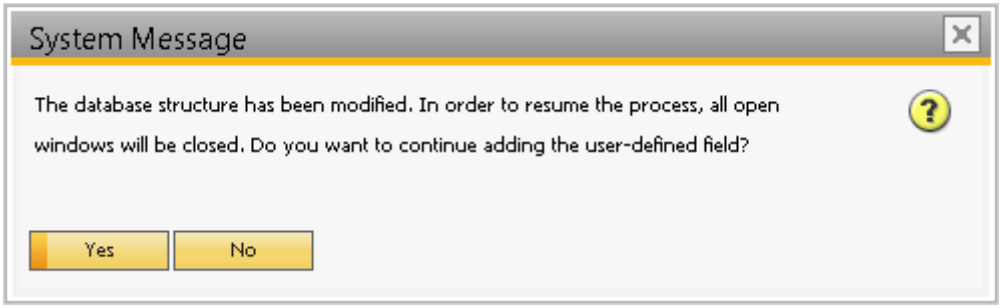
Name: Shows the title or name of the field.

Description: The field description is displayed here.

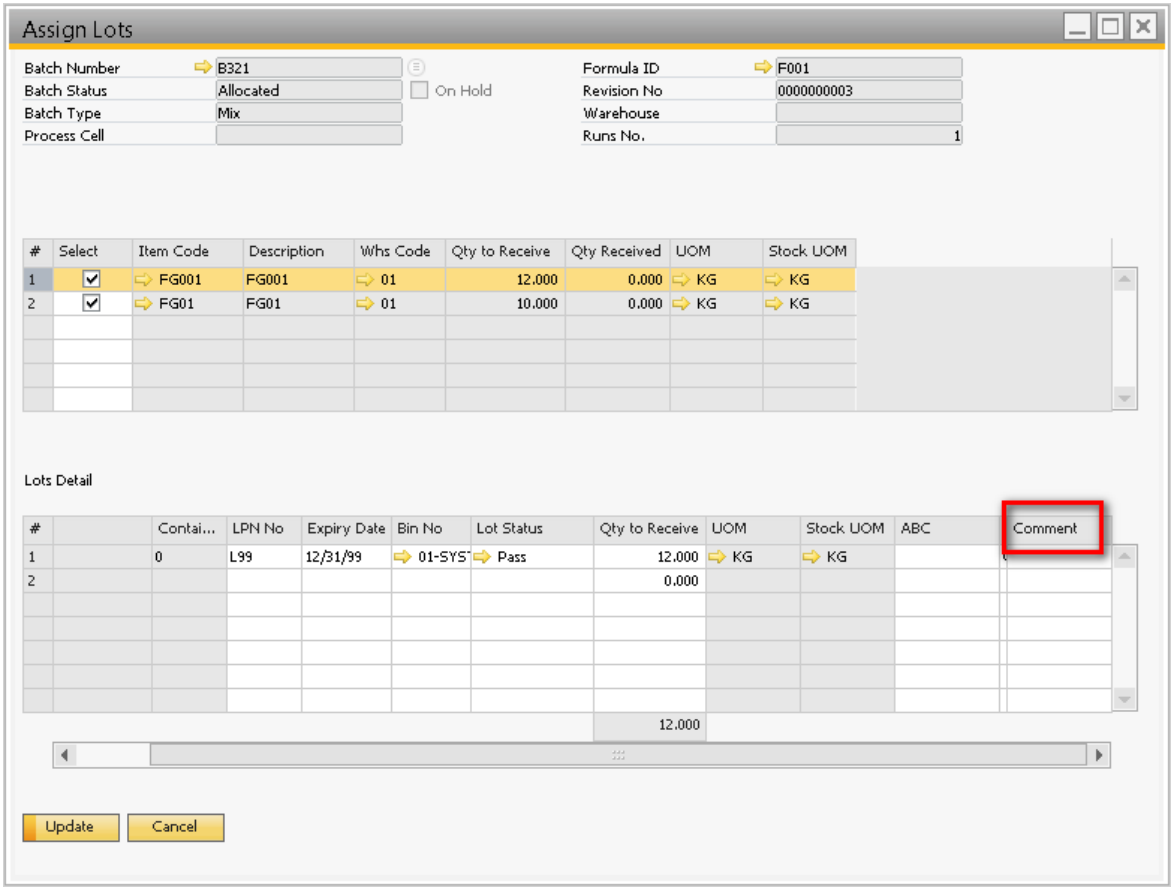
Type: Shows the type of data a user can enter in the field.

Size: Displays the length of the respective field.

As you define the UDF and click the Add button, the system displays the message below:



Click *Yes* and Re-login to the company database to view the changes.



2.3 Formula Setup

This section describes the settings and defaults that must be defined prior to using the system. Some of these settings can be modified later and some are “one time only” choices.

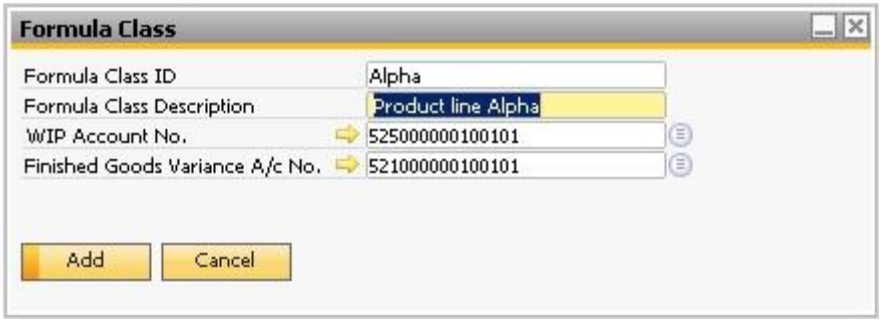
2.3.1 Formula Class

Formula classes are used to group formulas by product family. For example, in the paint industry you might define distempers, emulsions, and oil paints as classes. If you are in the bakery industry, you might define white bread, wheat bread, and dinner rolls as classes. The primary purpose is to segregate the Work in Progress (WIP) and variance accounts used to track manufacturing costs. Reports and inquiries can also be defined and sorted using formula classes.

When a production batch is created, a WIP account for the formula class is used to store all WIP journal entries for each batch.

Pre-requisite: A Chart of Accounts must be set up with WIP and Finished Goods Variance accounts.

Go To: Administration → Setup → Formula → Formula Class.
Press Ctrl+A to switch to ‘Add’ mode.



Formula Class ID: The unique identification key for a formula class.

Formula Class Description: A name or a description for the formula class.

WIP Account No.: The WIP account number for the formula class. Click the lookup button next to the field to open the *Chart of Accounts* window.

Finished Goods Variance A/c No.: The variance account number for the formula class. This account is used to post variances in finished goods costs at the time of batch close.

Add/Update: Click the *Add/Update* button to save the record.

Cancel: Click the *Cancel* button to close the screen without saving your changes.

2.3.1.1 Creating a Formula Class

1. Open the Formula Class screen.
2. Click the *Add* button on the toolbar or press Ctrl + A on the keyboard to open the screen in the *Add* mode.
3. Specify a unique identification key for the formula class in the *Formula Class ID* field.
4. Enter a name or description for the formula class in the *Formula Class Description* field.
5. Select the WIP account number by typing or by using the lookup next to the *WIP Account No.* field.
6. Select the finished good variance account number by typing or by using the lookup next to the *Finished Goods Variance A/c No.* field.
7. Click the *Add* button to save the record.

2.3.2 Formula Policy

The *Formula Policy* screen is used to determine which formulas are displayed during physical property analysis, formula costing, and production. A few commonly used policies are *Active*, *Inactive*, and *Obsolete*.

Go To: Administration → Setup → Formula → Formula Policy.
Press Ctrl+A to enter 'Add' mode.

Formula Policy ID: The unique policy identifier (maximum of 2 alpha-numeric characters).

Formula Policy Description: The name or a description of the formula policy.

Add/Update: Click the *Add/Update* button to save the record.

Cancel: Click the *Cancel* button to close the screen without saving the record.

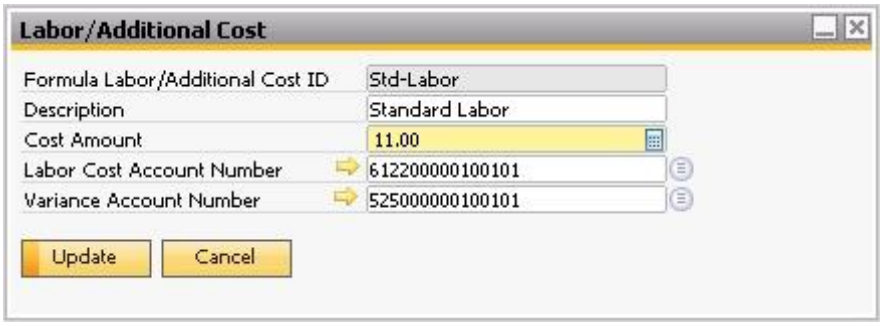
2.3.2.1 Creating a Formula Policy

1. Open the *Formula Policy* screen.
2. Click the *Add* button on the toolbar or press **Ctrl + A** to open the screen in *Add* mode.
3. In the *Formula Policy ID* field, enter a unique identification key for the formula policy.
4. Enter the name or a description of the formula policy in the *Formula Policy Description* field.
5. Click the *Add* button to save the record.

2.3.3 Labor/Additional Cost

Labor/Additional Costs are direct manufacturing costs that you choose to include in the cost of the formula. They could include things such as wages paid to production employees or expenses that are incurred only when the formula is produced (for example, electricity or steam).

Go To: Administration → Setup→ Product Costing→ Labor/Additional Cost.
Press Ctrl+A to switch to 'Add' mode.



Formula Labor/Additional ID: The unique identification code for the labor/additional cost (maximum 20 alpha-numeric characters).

Description (optional)**:** A brief description of the labor/additional cost.

Cost Amount: The cost per unit (hour, kilowatt hour [KWH], etc.).

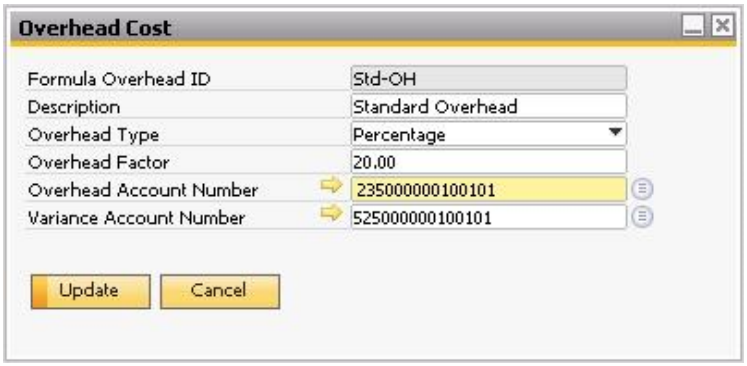
Account Numbers: Select General Ledger accounts to ensure proper accounting for the overhead costs associated with your individual formulas. Click the lookup button to the right of the field to open the *Chart of Accounts* window. (Refer to the *BME-B1 18.2 Production User Guide* for details.)

2.3.4 Overhead Cost

Overhead Costs are indirect or manufacturing support costs that you choose to include in the cost of the formula. They could include such things as facility utilities, maintenance and repair of machines, or wages paid to workers in support functions (for example, the inventory clerk).

Go To: Administration → Setup → Product Costing → Overhead Cost.

Press Ctrl + A to switch to 'Add' mode.



Formula Overhead ID: The unique code for the overhead cost (maximum 20 alpha-numeric characters.)

Description (optional)**:** A brief description of the overhead cost.

Overhead Type: Available options are *Currency Amount* or *Percentage*.

Overhead Factor: A dollar value or a percentage value.

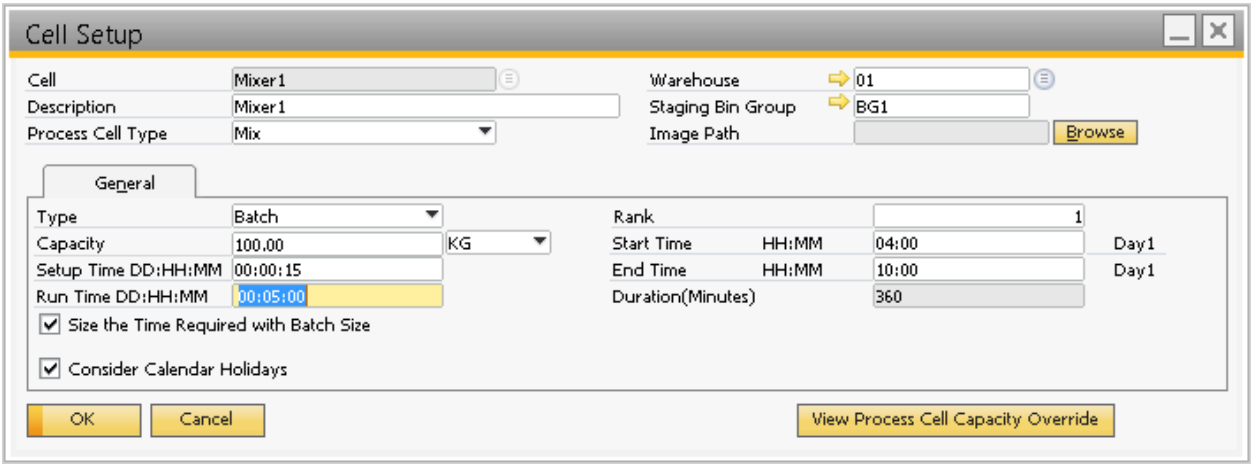
If the Overhead Type is set to *Currency Amount*, the Factor would be a fixed currency value regardless of line-item quantities. If the Overhead Type is set to *Percentage*, the Factor would be a percentage value that will be multiplied by the line value to which it is attached. For example, if the line is a labor line of 3 hours x $10.00, and the *Percentage* is 5%, the value would be calculated as 3 x $10 x 5% = $1.50. Overheads can also be attached to material lines.

Account Numbers: Select General Ledger accounts to ensure proper accounting for the overhead costs associated with your individual formulas. Click the lookup button to the right of the field to open the *Chart of Accounts* window.

2.3.5 Cell Setup

The *Cell Setup* screen allows you to define either a machine or a group of machines as a work center. Within the process cell, goods are manufactured in batches.

Go To: Administration→Setup → Formula → Cell Setup.



Cell: The unique identifier for a process cell.

Description: The name or a description of the process cell.

Process Cell Type: Available options are *Mix, Fill,* and *Assembly*. (This field is informational only.)

Warehouse: Specify the warehouse of the process cell.

Staging Bin Group/Stage Bin: The Staging Bin Group field is displayed if you implemented the Advanced picking system by checking the *Use Enhanced Picking System* checkbox on the *Production Default* Screen. Here you can specify the staging bin group of the warehouse. In a staging bin group, multiple bins can be selected to stage the item. If you left the *Use Enhanced Picking System* checkbox unchecked, then this field is displayed as S*tage Bin* to specify the bin to stage the item.

Image Path: Use the *Browse* button to specify the location of the process cell image.

Type: The operational characteristic of the process cell, explained as:

- ***Batch*:** This type of cell does not run continuously.
- **Continuous Machine:** This type of cell runs continuously.

Capacity: Maximum amount the process cell can contain and the unit of measure. (This field is informational only.)

Setup Time: The length of time needed to set up the process cell. For instance, the machine in the process cell might require cleaning for 30 minutes before it can be operated. The value defined here is added by default when the cell is attached to a formula, bill of material (BOM), or batch. Format = DD: HH: MM. (This field is informational only). For a normal Batch of type Process Cell, the system will consider the Setup up time individually for each batch. For a Super Batch of type Batch with Runs the system will consider the setup up time only once all the batches have been created for the different runs of the Super Batch.

Run Time: The normal run time for one load; in other words, the length of time the process cell would operate. Format = DD: HH: MM. (This field is informational only.)

Rank: When multiple process cells are assigned to an item, the process cell rank decides which cell will be preferred in production activities. This is used while assigning process cells in MPS.

Start Time: (Only for Batch-type cell.) The time at which the process cell will start operating.

End Time: (Only for Batch-type cell.) The end time of the shift when the process cell will stop operating.

The Start Time and End time will work in a 24-hour clock. If you enter 9:00 as the Start time and 17:00 as the end time the system will consider the start time and end time as both being on the same day and display it as "Day1". If you enter 20:00 as the start time and 4:00 as the end time it will consider the start time for "Day 1" and the end time for the next day ("Day 2").

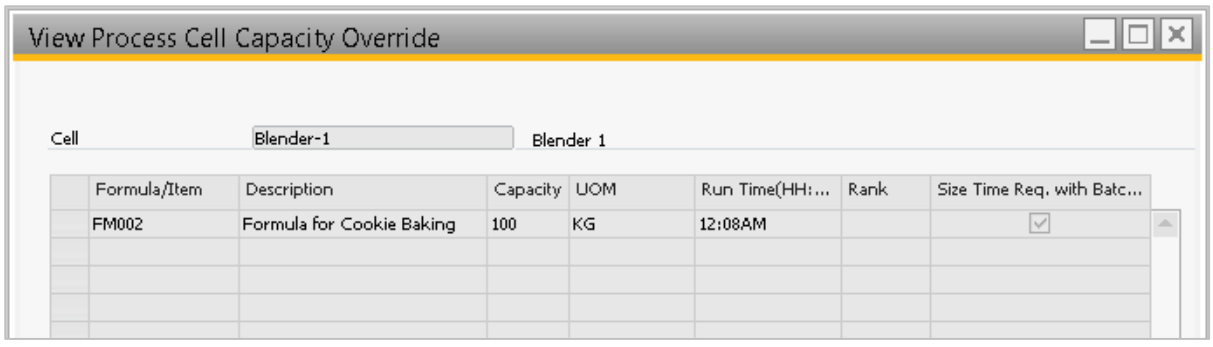
Size the time required with Batch size: Check this option if you wish to size the process cell time according to the size of the production batch. Let's say, for the Process cell *Blender-1, it* requires 2 hrs. to complete 100 Kg of batch, assuming that the process cell capacity is 100 Kg.

For a 150 Kg batch size:

- if you select this option, the batch will be completed in 3 hrs.,
- If you leave this checkbox unchecked, then the time required to finish the batch will be 4 hrs**.**

Consider Calendar Holidays: If you check this option then while suggesting MPS Production Orders, the system will exclude holidays and would plan only for the working days.

View Process Cell Capacity Override: Click this button to display the *Process Cell Capacity Override Entry* screen to identify that the respective process cell is linked to a Formula, Finished Good, or Assembly item.



Add/Update: Click the *Add/Update* button to apply the settings made on the screen.

Cancel: Click the *Cancel* button to close the screen without saving the changes.

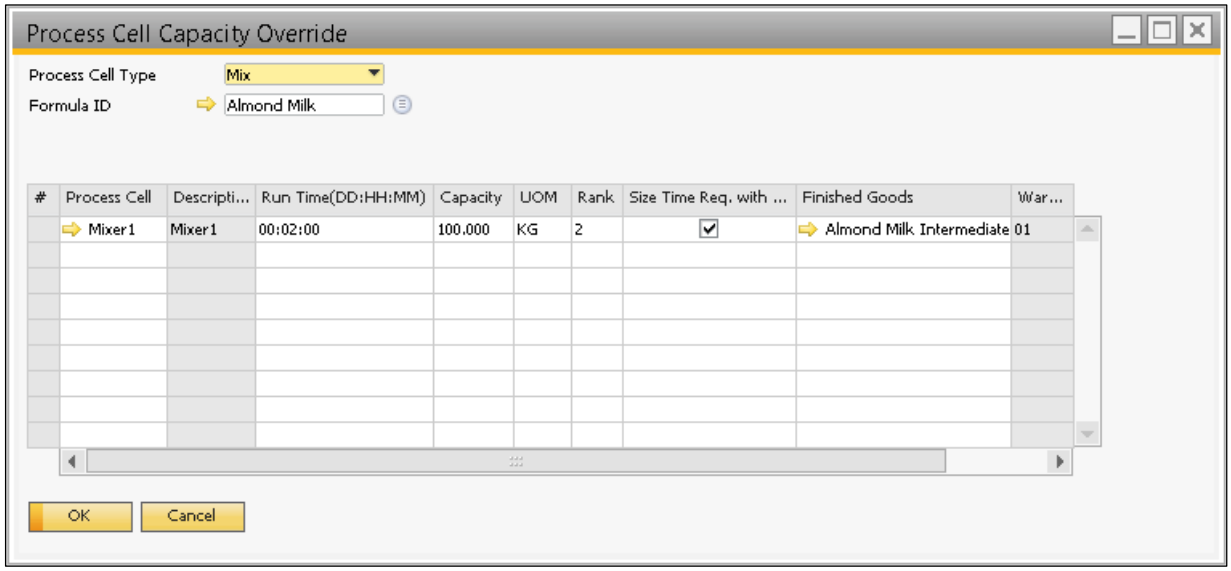
Refer to the ***BME-B1 18.2 Formulation User Guide*** for more details.

2.3.6 Process Cell Capacity Override

Use this screen to link a formula, finished good, or assembly item to one or more process cells.

Go To: Formulation→Process Cell Capacity Override

Process Cell Type: The type of the process cell. The drop-down menu next to the field is used to determine that the process cell will be used for Mix, Fill, or Assembly type batches. According to the type you select here, the lower field captions will be changed. **For a Mix-type process cell,** the *Formula ID* field will be displayed. Select the formula to be linked with one or more process cells.



Process Cell: Unique identifier of the process cell, linked with formula/item.

Description: Displays the name or description of the process cell.

Run Time: Specify the time required to finish one complete load in HH:MM format (i.e., the length of time the process cell would operate for this formula).

Capacity: The maximum amount the process cell can contain. Defaults from the cell master record and can be changed on a formula basis. In our example, the capacity of the second cell was reduced from 500 Liters to 450 Liters.

UOM: The unit in which the cell's capacity is measured.

Rank: Used by MPS/MRP for scheduling purposes.

Size time Req with Batch Size: Check this option to size the process cell time according to the size of the production batch.

Finished Good: For Fill and Mix types of process cell you can define the capcacity of the process cell based on different Finished Goods. Say you have two different finished goods, FG_1_Litre bottle and FG_500_ml bottle. In a grid, you can define the capacity of the process cell seperately for both these Finished goods, such that the Process Cell will take 2 hours to fill 100 liters of FG_1_Liter bottle and the same process cell takes 3 hours to fill 100 liters of FG_500_ml bottle.

Warehouse: Displays the warehouse of the selected Finished Good.

Add/Update: Click the *Add/Update* button to save your changes.

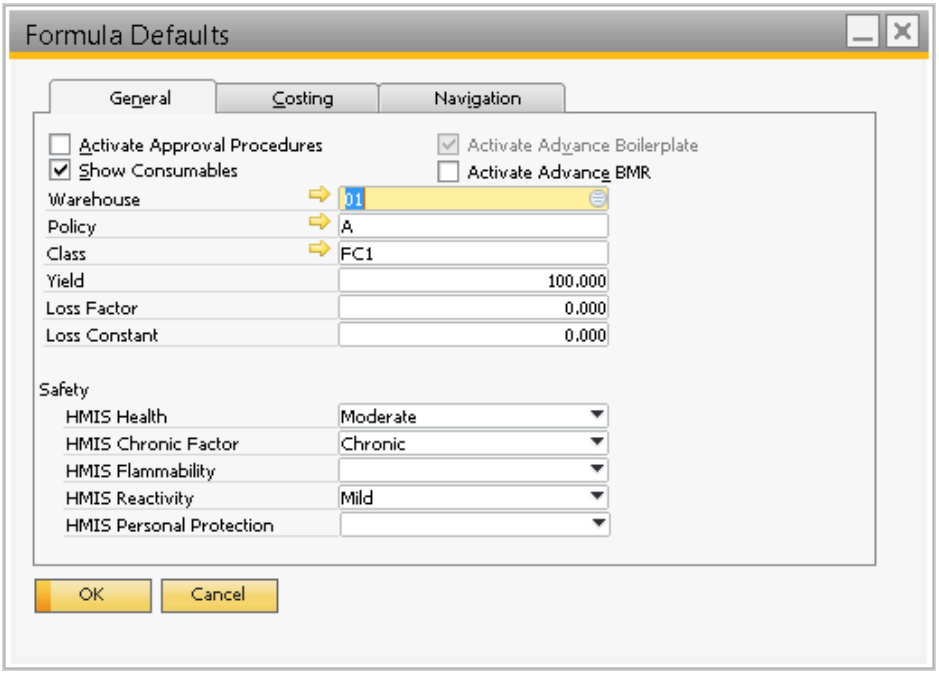
2.3.7 Formula Defaults

Establishing defaults will improve the speed and accuracy of data entry when entering new formulas. The system suggests values for things like warehouse, formula class, yield and loss factors, Hazardous Materials Identification System (HMIS) ratings, and price lists. These values can be over-ridden on specific formulas when required.

The following records must be maintained before *Formula Defaults* can be defined:

- Warehouse.
- Labor/Additional Costs.
- Formula Policies.
- Overhead Costs.
- Formula Classes.

Go To: Administration→Setup→ Formula→Formula Defaults.



2.3.7.1 General Tab

Activate Approval Procedures: Determines whether approval procedures will be used in the system. Approval routings can be set up based on who originates the formula. See the "BatchMaster ERP with SAP Business One 18.2 – Approval Procedures User Guide" for details.

Once approval procedures have been implemented, you cannot remove the selection for this checkbox unless all pending approvals have been processed (either approved or rejected).

Show Consumables: If this box is checked, the *Consumables* tab will display on the *Formula Entry* screen. Consumables are inventory items that are used in formula processing but are not a direct part of the ingredients (for example, an expensive filter that must be changed at the start of each batch or shift). While consumables may be set to scale with the batch size, they do not add to either the input or output weight of the formula.

Activate Advance Boilerplate: Select this checkbox to implement the Advance Boilerplate feature.

Activate Advance BMR: Check it to activate the Advance BMR.

Warehouse: The default warehouse to be used in formulation. This warehouse code gets defaulted when a new formula record is created. You can change the default warehouse in the *Formula Entry* screen, if required. The drop-down menu next to this field lists all warehouses that are not designated as drop ship warehouses.

Policy: The default policy code to be inserted while creating a new formula. Policy codes are used to govern formula usage in production. The drop-down menu next to this field lists all the defined formula policies.

Class: The default formula class to be inserted while creating a new formula record. The drop-down menu next to this field lists all the formula classes.

The formula class provides a WIP account for use in production of items that use the specific formula.

Yield: The usually expected weight of finished goods, which is expressed as a percentage of input weight. The value entered is closest to what you typically expect over the majority of your products. For example, if the input weight of raw materials or ingredients is 100 pounds, and you typically expect 90 pounds of finished goods and a by-product output, then the yield would be 90 percent.

Loss Factor: The default value of the loss factor to be inserted when a new formula is created. The value in this field can range between 0 and 100.

Loss Constant: The default value of the loss constant to be inserted when a new formula is created. Loss constant is measured in the system weight unit.

Loss constant represents the loss that always occurs when a formula is used. For example, five pounds of product may remain in a feeder tube after production.

Safety Grid

HMIS Health: The HMIS rating for the health hazard associated with the formula.

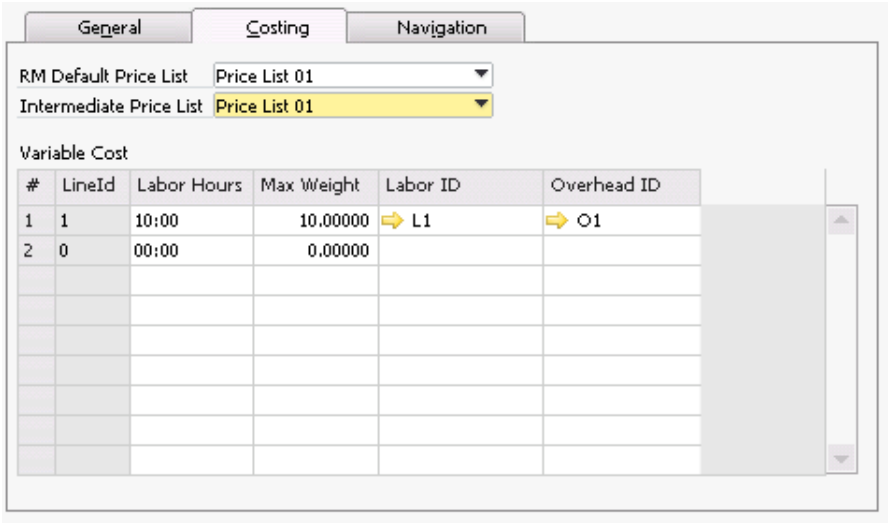
HMIS Chronic Factor: Specify how chronic the product associated with the formula is.

HMIS Flammability: The HMIS rating for flammability associated with the product manufactured using the formula.

HMIS Reactivity: The HMIS rating for reactivity associated with the formula.

HMIS Personal Protection: The personal protection materials or equipment recommended by HMIS while working with the formula.

2.3.7.2 Costing Tab



RM Default Price List: The price list from which raw material prices will be defaulted in the *Formula Entry* screen.

Intermediate Price List: The price list from which intermediate prices will be defaulted in the *Formula Entry*, *Product Costing Analysis*, and *Physical Property Analysis* screens.

Variable Cost Grid

LineId: This system-generated field displays the variable cost line sequence.

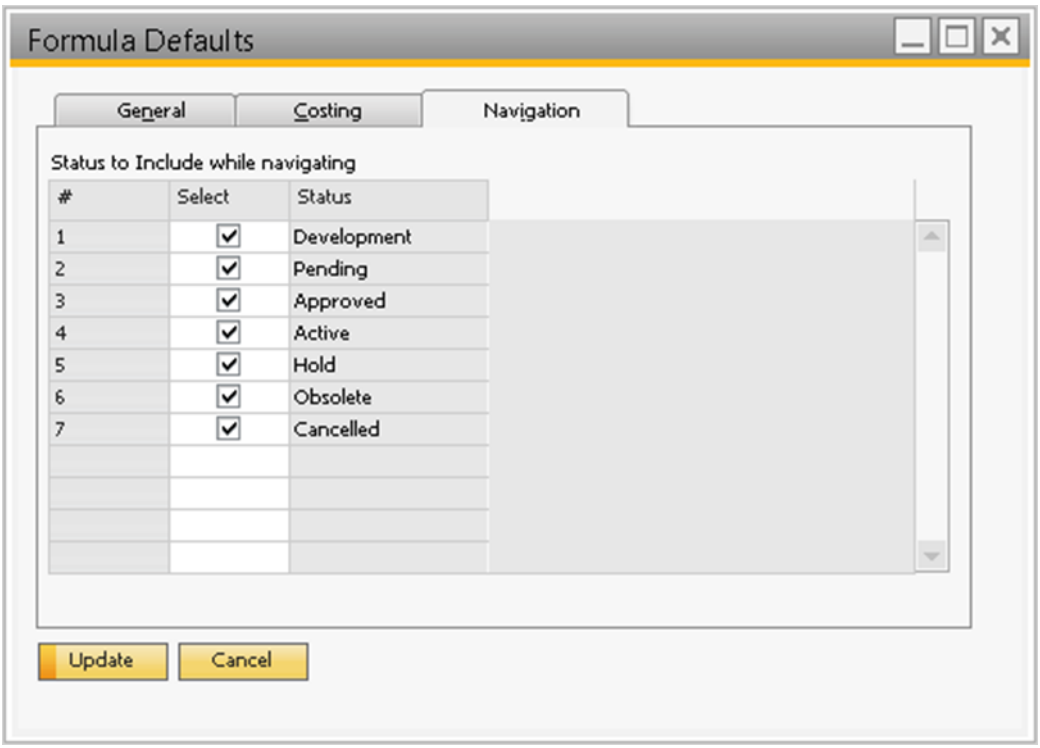
Labor Hours: The number of labor hours required as specified at the *Labor Hours* column.

Max Weight: The upper value of the batch weight range for which labor and overhead key records are to be picked. Thus, the system defaults the labor key and overhead key from this matrix by comparing the batch weight and max weight.

Labor ID: The default labor ID to be applied to the formula.

Overhead ID: The default overhead ID to be applied to the formula.

2.3.7.3 Navigation Tab



Select: Check the boxes in this field to select the corresponding statuses in the *Status* column.

Status: The options selected in this column determine what type of formulas should be included while navigating through formula records. You can select one or more statuses by checking the corresponding options. As a result, when you navigate through formula records in the *Formula Entry* screen, the system will display only those formula records that belong to any of the selected statuses. Available options are displayed in the screen shot above.

At least one status must be selected for navigation. The *Development* option is selected by default.

OK (not shown): Click the *OK* button to apply the setting selections made on the *Formula Defaults* screen to the respective screens.

Cancel (not shown): Click the *Cancel* button to close the *Formula Defaults* screen without saving your changes.

2.4 Product Costing Setup

2.4.1 Costing Defaults

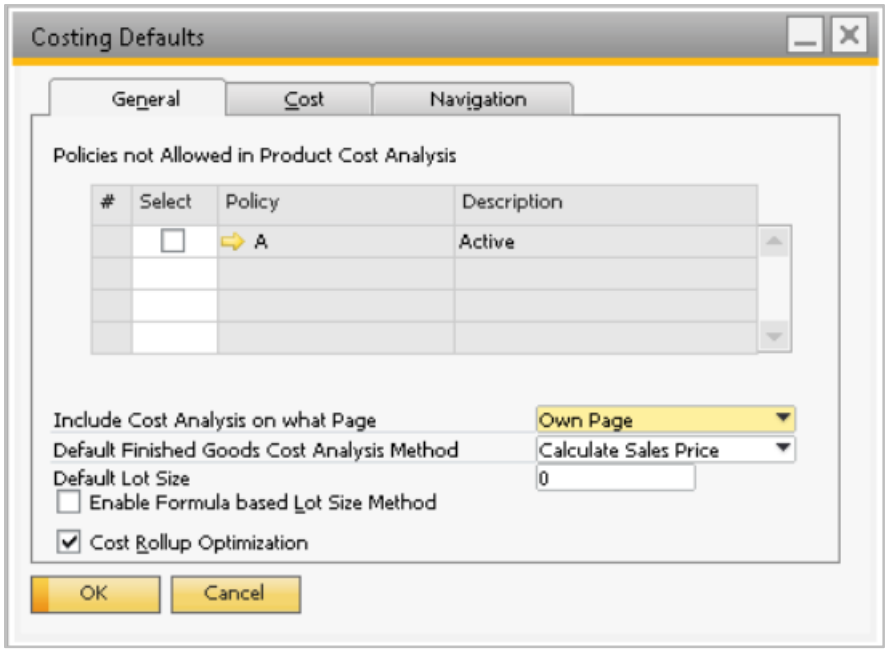
Using the *Formula Policies* function, you can exclude certain formulas from being shown in product cost analysis. For example, you may want to exclude all 'Experimental' formulas from analysis. You will also define page settings for costing reports and decide whether to calculate a markup or margin on your product costs.

Formula Policies must be set up before defining the costing defaults. (Refer to the "*BME-B1 18.2 Formulation User Guide*.")

Go To: Administration → Setup → Product Costing → Costing Defaults.

The data maintained in the *Costing Defaults* screen is used extensively while working with several other screens of the *Costing* module.

The cost rollup optimization is a critical process in standard costing systems where the costs of raw materials, labor, overhead, and sub-assemblies are "rolled up" through the Bill of Materials (BOM) and routing to determine the standard cost of a finished product.



2.4.1.1 General Tab

Policies not Allowed in Product Cost Analysis

The *Policies* grid lists all the defined formula policies.

Select: Check this option to restrict the *Formula* policy from being used in product cost analysis.

Policy: The policy codes previously defined. Policy codes are defined in a table and cannot be edited here.

Description: A description of the selected policy. Policy descriptions are defined in a table and cannot be edited here.

Include Cost Analysis on what Page (of the *Product Cost Analysis Report*)**:** Available options are:

- **Own Page:** Cost analysis information will be printed on a separate page.
- **Same Page:** Cost analysis information will be printed on the same page as the formula.
- **None:** The cost analysis will not print on the report.

Default Finished Good cost Analysis Method: Specify whether to calculate markup or margin when performing cost analysis. This value will be defaulted on the *Product Cost Analysis* screen. Available options are:

- **Calculate Sales Price** (default)**:** Allows you to specify a markup percentage and calculate sales price based on the cost of the product.
- **Calculate Margin:** The system will calculate margin cost based on the calculated per unit cost of the finished good and the price list applicable for the finished good.

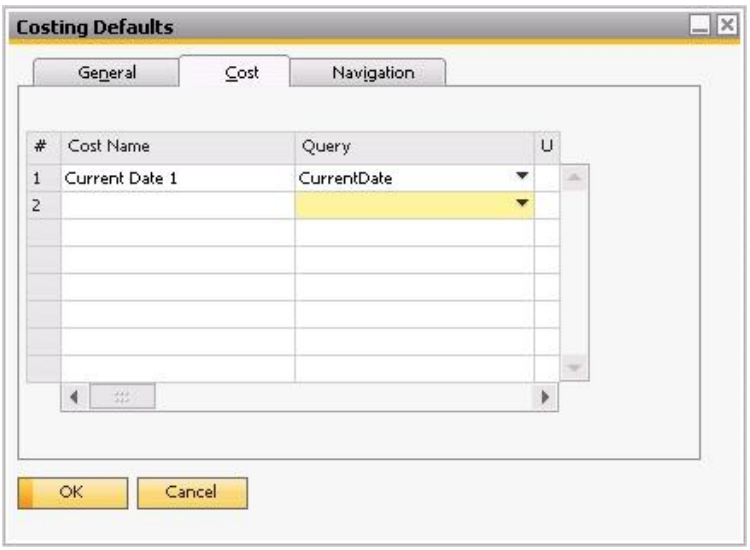
Default Lot Size: Specify the default lot size. The system uses the finished good lot size to calculate the accurate cost per unit of finished good. This lot size is used by default while performing cost rollup.

Enable Formula based Lot Size method: With this checkbox checked you can calculate an accurate rollup cost of the top-level item on the basis of the individual lot size of all its sub level FG/intermediates. Choosing it implements the new logic of cost rollup, in which the top-level item lot size will be picked from the Cost Rollup Criteria screen while its sub level FG/intermediate lot sizes will be obtained from their applicable formulas.

Update: Click the *Update* button to save the defined settings.

Cancel: Click the *Cancel* button to exit the screen without saving your changes.

2.4.1.2 Cost Tab



Cost Name: The unique cost based on which you need to analyze the product cost. The cost you define here will be displayed on the *Product Cost Analysis* screen to perform cost analysis.

Query: The query to be used to get the desired data for the respective cost. The drop-down menu lists all the user queries defined in SAP Business One. A custom query can also be defined using the *Query Generator* option available on the *Tools* menu. BatchMaster recommends the following *Custom Query* format:

SELECT ($[$Cls.1] + $[$Cls.3]) *20/100

In the above query, value **1** denotes CostingAnalysisProperties.FillQty and value **3** denotes CostingAnalysisProperties.FormulaConsumableCost.

Available parameters that can be used to create the queries are listed in the following table:

Parameter (1-23)	Refers to Costing Analysis Property
1	CostingAnalysisProperties.FillQty
2	CostingAnalysisProperties.FormulaMaterialCost
3	CostingAnalysisProperties.FormulaConsumableCost
4	CostingAnalysisProperties.FormulaMaterialOHCost
5	CostingAnalysisProperties.FormulaLaborMachineCost
6	CostingAnalysisProperties.FormulaLaborOHCost
7	CostingAnalysisProperties.FormulaMaterialLossCost
8	CostingAnalysisProperties.FormulaLossConstantCost

Parameter (1-23)	Refers to Costing Analysis Property
9	CostingAnalysisProperties.BOMItemCost
10	CostingAnalysisProperties.BOMConsumableCost
11	CostingAnalysisProperties.BOMItemOHCost
12	CostingAnalysisProperties.BOMLaborMachineCost
13	CostingAnalysisProperties.BOMLaborOHCost
14	CostingAnalysisProperties.FixedLaborCost
15	CostingAnalysisProperties.FixedOHCost
16	CostingAnalysisProperties.SetupLaborCost
17	CostingAnalysisProperties.SetupOHCost
18	CostingAnalysisProperties.FormulaVariableLaborCost
19	CostingAnalysisProperties.FormulaVariableOHCost
20	CostingAnalysisProperties.ByproductCost
21	CostingAnalysisProperties.ByproductOHCost
22	CostingAnalysisProperties.TotalFormulaCost
23	CostingAnalysisProperties.TotalCost

How to Create a Custom Query

Let us say I have to pay 5% brokerage on my raw material costs. Create an FMS that computes 5% of material cost.

Brokerage: SELECT ($[$BMM_CostingAnalysisProperties.FormulaMaterialCost]) *5/100.

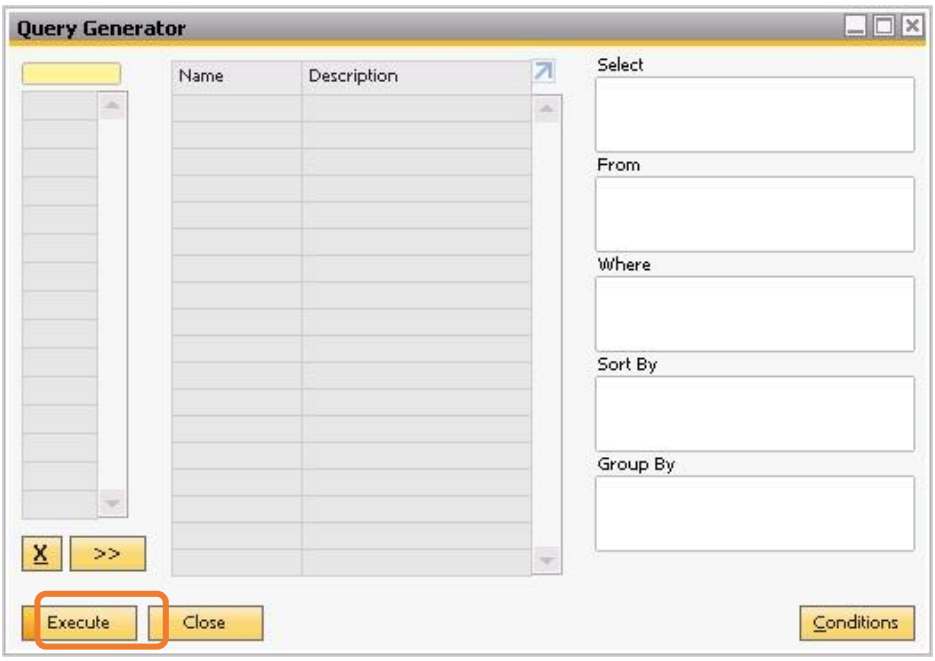
Using the parameters in the table above, we can assemble our query as:

Brokerage: SELECT ($[$Cls.1]) *5/100

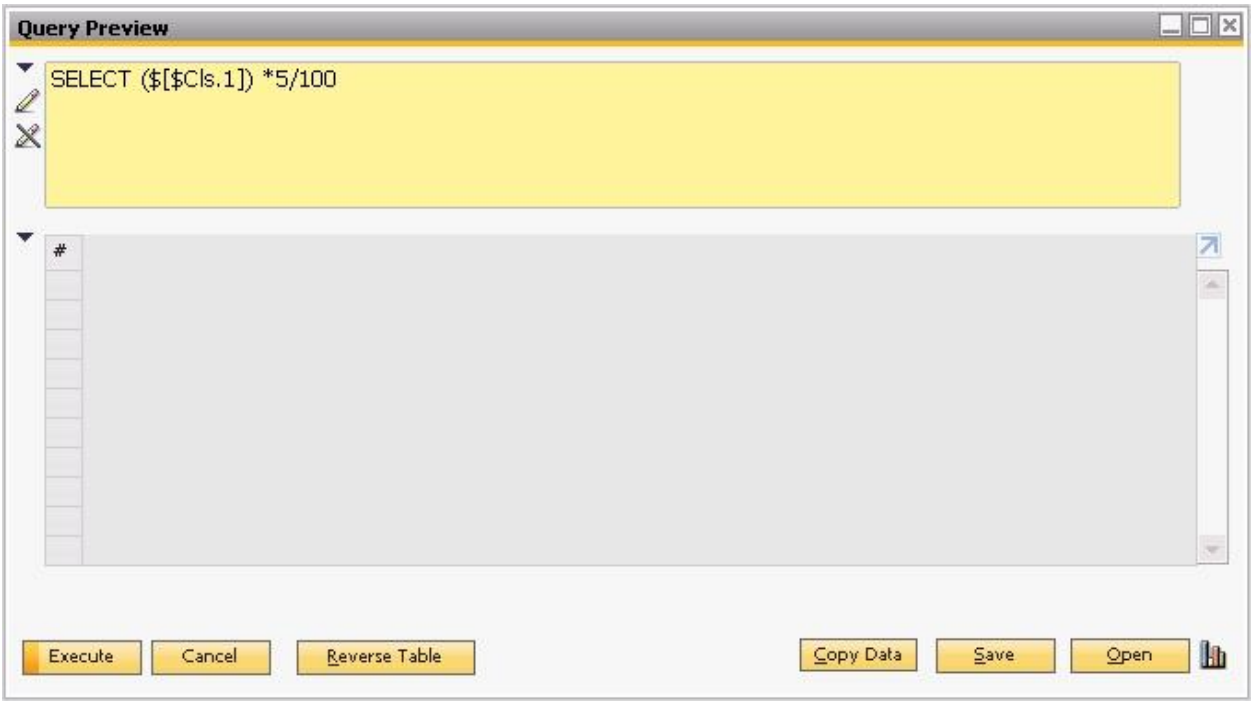
You build this query as shown in a document, and copy it.

Now, from the Toolbar, **Go To: Tools, Queries, Query Generator**.

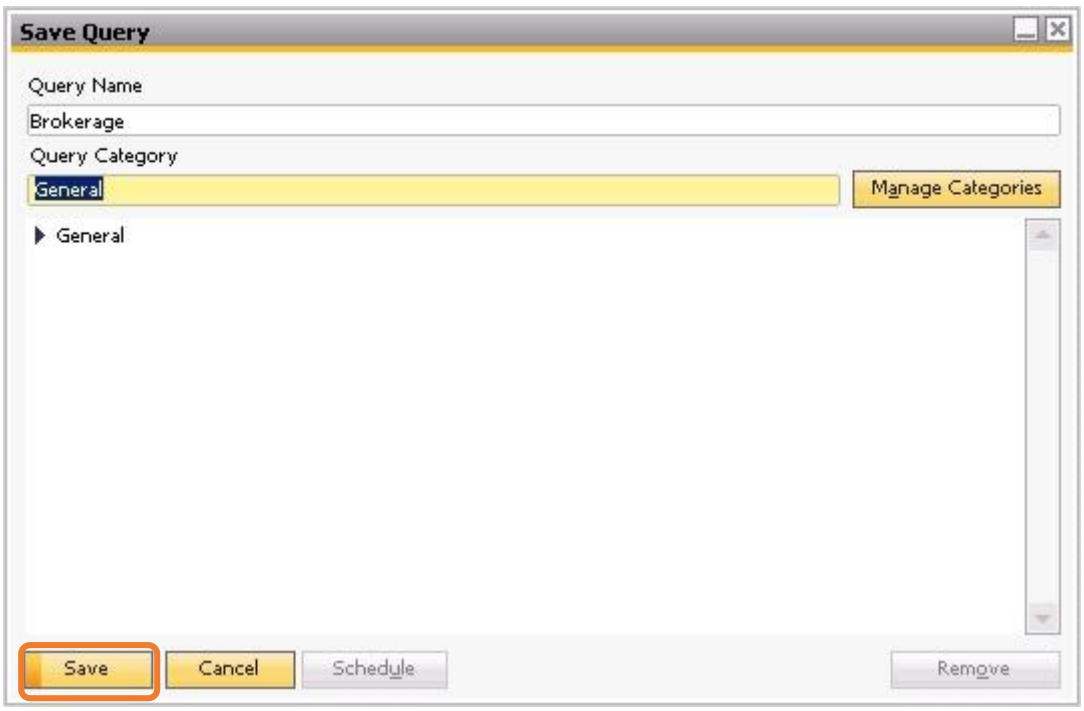
On the screen which opens, click the *Execute* button:



This will open another screen. Paste your copied query into the top box:

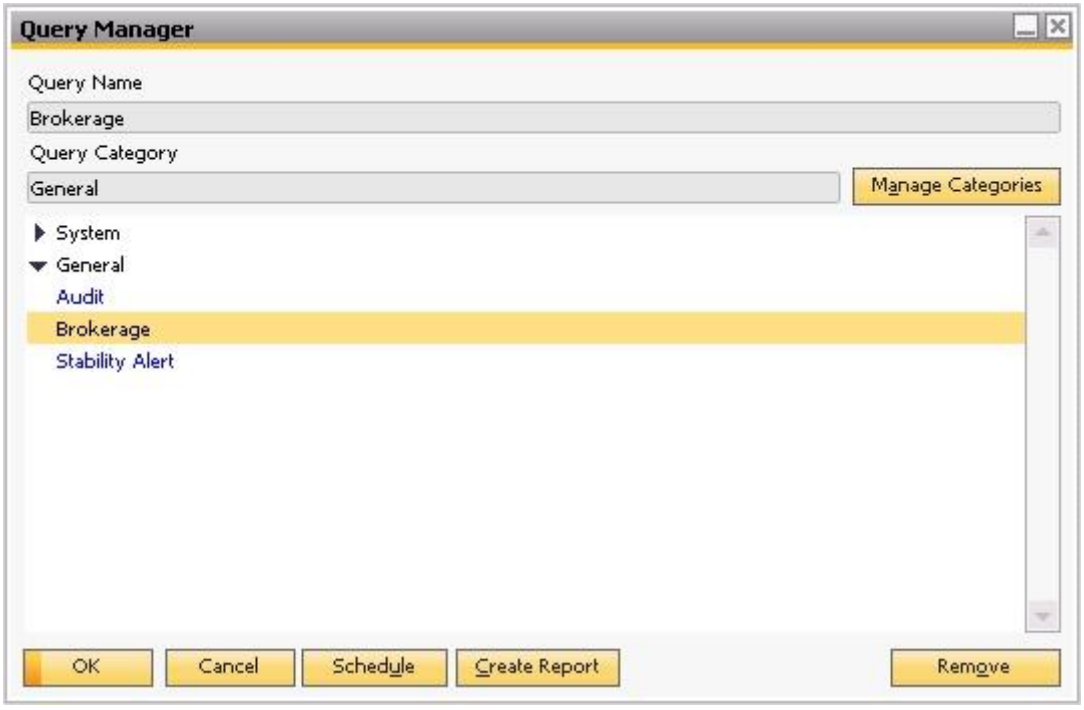


You cannot execute from this screen as we have added a multiplier to the query. You must, however, save your query. Click Save, the following screen opens:

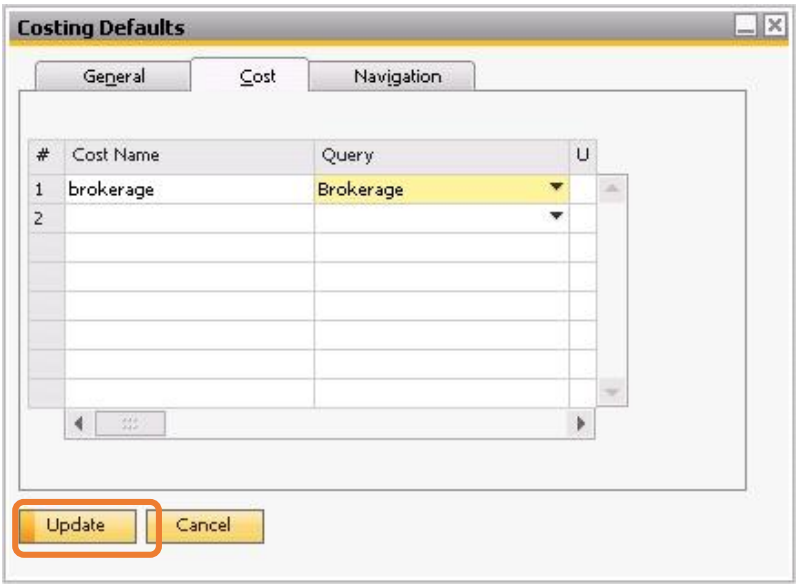


Give the query a name, and select a Category. Here, we have chosen the General category. Click *Save*

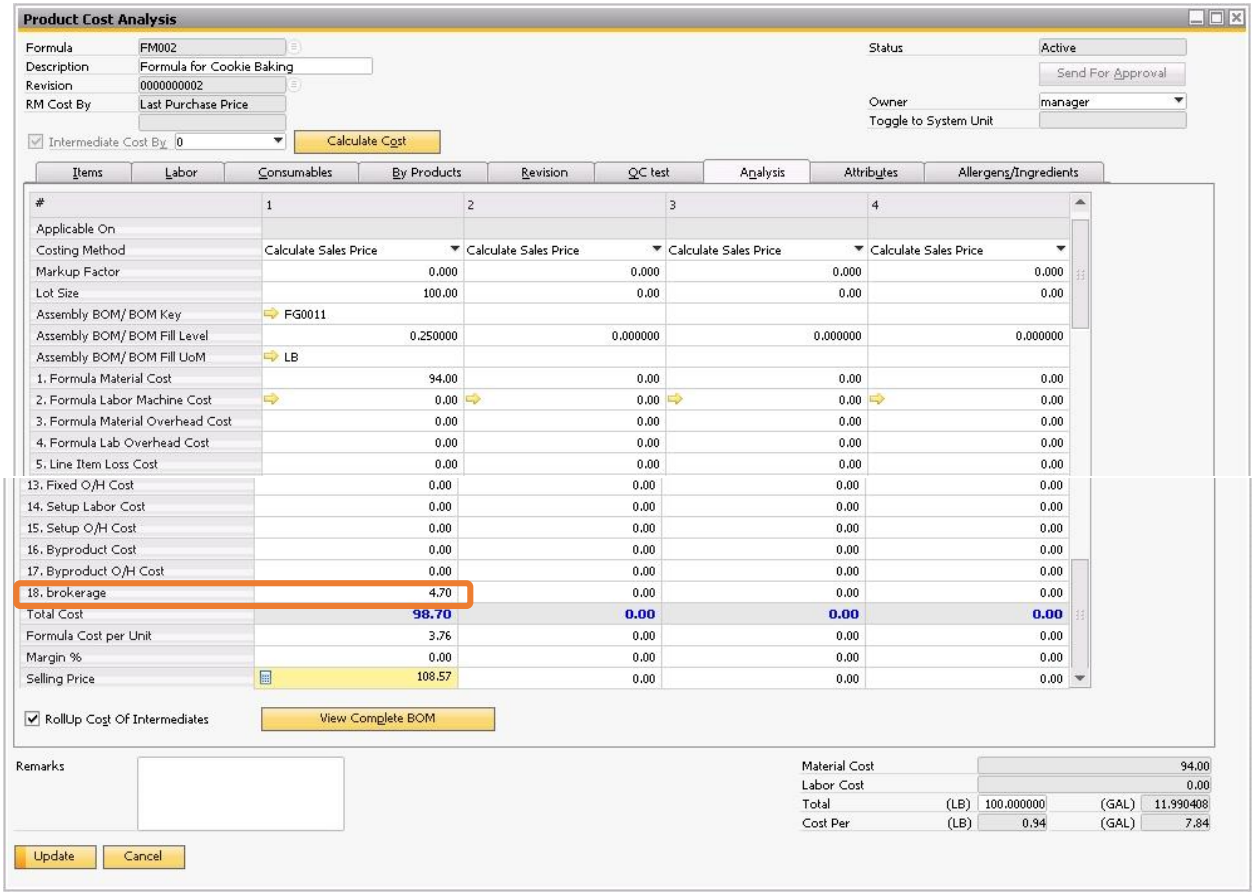
In Tools, Queries, Query Manager, we can see our Query:



Now we associate our *Brokerage* Query created above to a user-defined cost on the *Cost* tab of the *Costing Defaults* screen. Click *Update* to save.

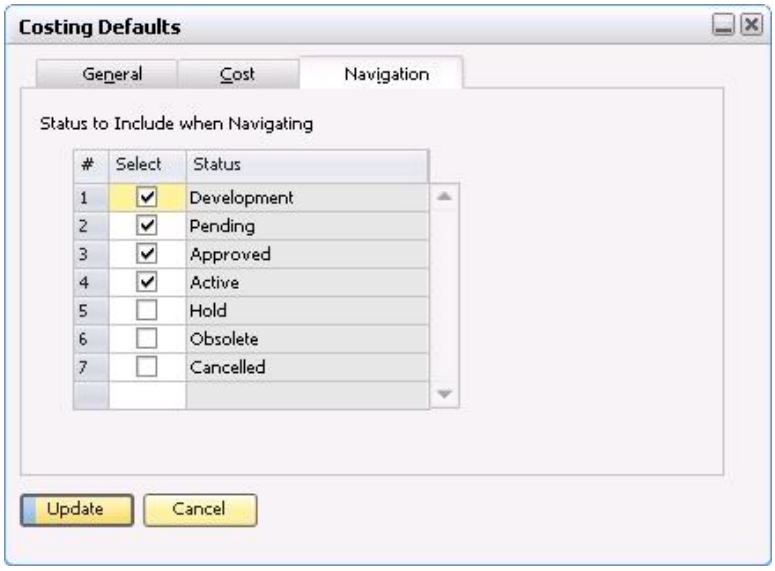


Observe the added custom cost on the *Analysis* tab of the *Product Cost Analysis* screen. You can now analyze the product cost with this additional user-defined cost, too.



2.4.1.3 Navigation Tab

With the *Navigation* tab, you can specify the formula statuses that need to be included in navigation during cost analysis. In other words, only those records that pertain to any of the selected statuses will be displayed while navigating through records.



Status to Include when Navigating

Select: Formula statuses that will be displayed when scrolling through formula records using the 'first record', 'previous record', 'next record', and 'last record' icons.

Status: The type of formulas to be included while navigating through formula records. Available options are *Active*, *Approved*, *Cancelled*, *Development*, *Hold*, *Obsolete*, and *Pending*.

You must select at least one status for navigation. *Development* status is selected by default. Formulas associated with the selected statuses, and not the displayed statuses, will be shown in the *Product Cost Analysis* screen during navigation.

Update: Click the *Update* button to save the changes made to the settings.

OK (shows after *Update* has been clicked)**:** Click the *OK* button to close the screen.

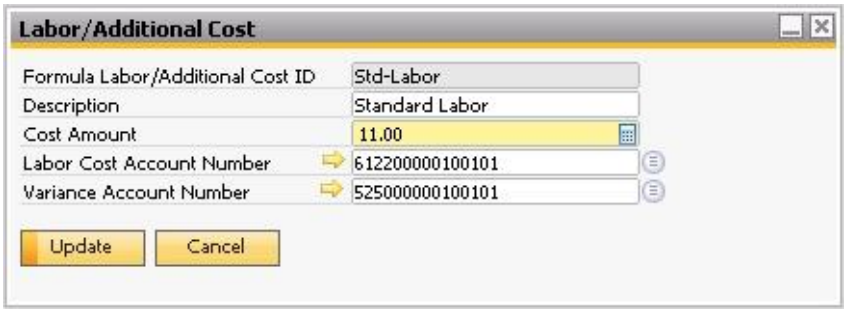
Cancel: Click the *Cancel* button to close the screen without saving your changes.

2.4.2 Labor/Additional Cost

Labor/Additional Costs are direct manufacturing costs that you choose to include in the cost of the formula. They could include things such as wages paid to production employees or expenses that are incurred only when the formula is produced (for example, electricity or steam).

Go To: Administration → Setup → Product Costing → Labor/Additional Cost.

Press Ctrl+A to switch to 'Add' mode.



Formula Labor/Additional ID: The unique identification code for the labor/additional cost (maximum 20 alpha-numeric characters).

Description (optional)**:** A brief description of the labor/additional cost.

Cost Amount: The cost per unit (hour, kilowatt hour [KWH], etc.).

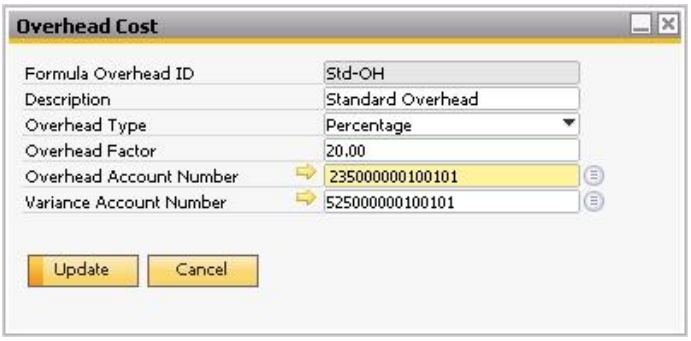
Account Numbers: Select General Ledger accounts to ensure proper accounting for the overhead costs associated with your individual formulas. Click the lookup button to the right of the field to open the *Chart of Accounts* window. (Refer to the "*BME-B1 18.2 Production User Guide*" for details.)

2.4.3 Overhead Cost

Overhead Costs are indirect or manufacturing support costs that you choose to include in the cost of the formula. They could include such things as facility utilities, maintenance and repair of machines, or wages paid to workers in support functions (for example, the inventory clerk).

Go To: Administration → Setup → Product Costing → Overhead Cost.

Press Ctrl + A to switch to 'Add' mode.



Formula Overhead ID: The unique code for the overhead cost (maximum 20 alpha-numeric characters.)

Description (optional)**:** A brief description of the overhead cost.

Overhead Type: Available options are *Currency Amount* or *Percentage*.

Overhead Factor: A dollar value or a percentage value.

If the Overhead Type is set to *Currency Amount*, the Factor would be a fixed currency value regardless of line-item quantities. If the Overhead Type is set to *Percentage*, the Factor would be a percentage value that will be multiplied by the line value to which it is attached. For example, if the line is a labor line of 3 hours x $10.00, and the *Percentage* is 5%, the value would be calculated as 3 x $10 x 5% = $1.50. Overheads can also be attached to material lines.

Account Numbers: Select General Ledger accounts to ensure proper accounting for the overhead costs associated with your individual formulas. Click the lookup button to the right of the field to open the *Chart of Accounts* window.

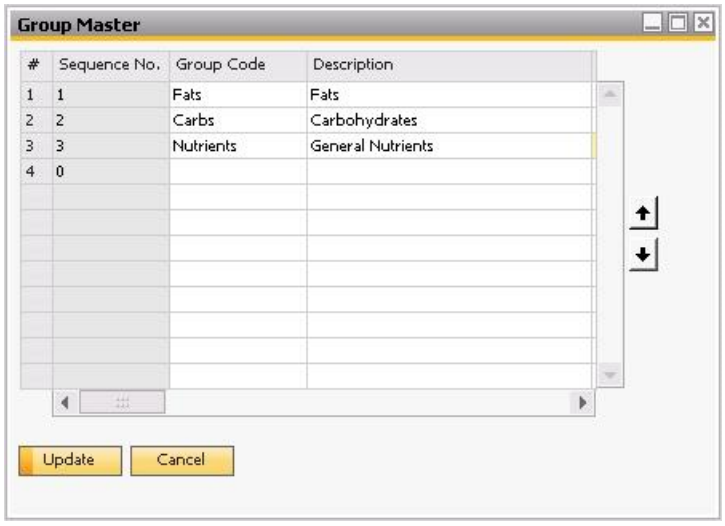
2.5 Laboratory Setup

These settings instruct the system to work according to your business policies.

2.5.1 Group Master

Physical properties are used to perform analysis of formulas. The system allows you to define a maximum of 999 properties. If the properties are displayed in a random sequence during analysis, you may find it difficult to locate the desired property. The *Group Master* function eliminates this problem by letting you define a sequence for property groups. In other words, you can decide which properties should appear on the top, based on their importance in your formulas.

Go To: Administration → Setup → Laboratory → Group Master.



Sequence No.: This is an auto-generated number. The sequence of the line can be rearranged using the re-sequence button on the right side of the screen.

Group Code: Specify a unique identification of the material property group.

Description: Enter a meaningful description of the group.

Re-sequence Button: Click this button to change the order of the lines or rows within the screen. Select a line and then click the up- or down-arrow key to locate that line at the desired location.

Update: Click the *Update* button to save the records.

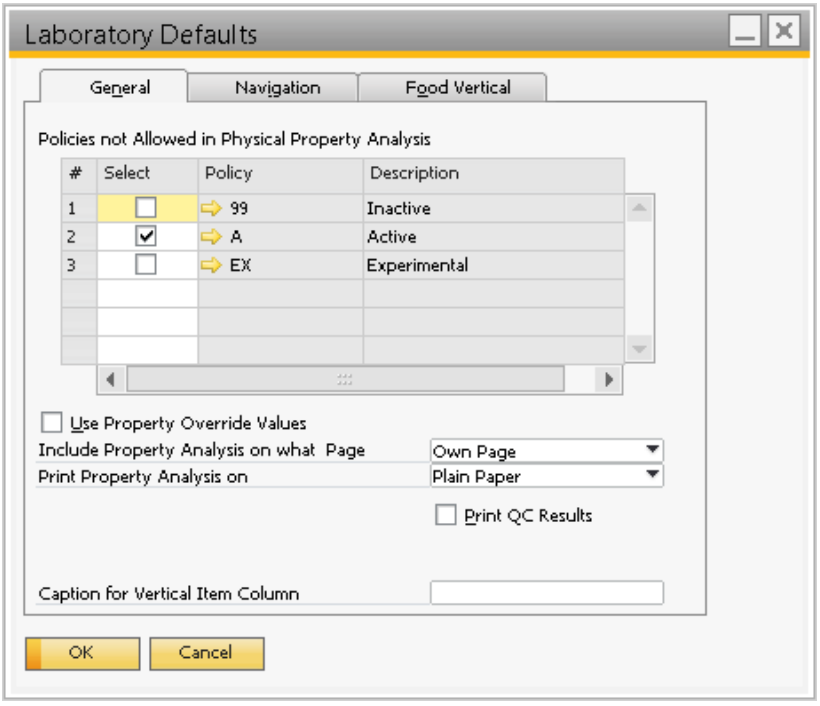
Cancel: Click the *Cancel* button to close the *Group Master* screen without saving your changes.

2.5.2 Laboratory Defaults

The *Laboratory Defaults* screen is used to set the default values that will be used repeatedly in several screens of the *Laboratory* module. You can:

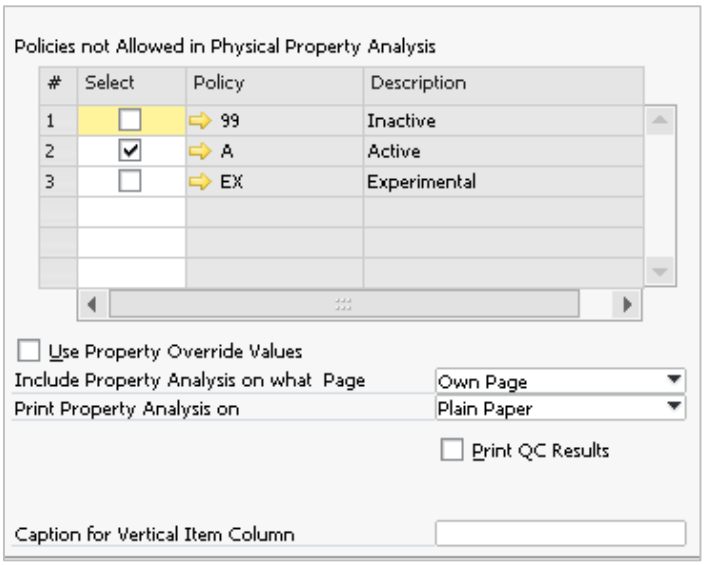
- Define printing options.
- Specify which formula policies are not allowed in physical property analysis.
- Specify the navigation settings while working on the *Physical Property Analysis* screen.

Go To: Administration → Setup → Laboratory → Laboratory Defaults.



Pre-requisite data: Formula Policies must be established.

2.5.2.1 General Tab



Policies not Allowed in Physical Property Analysis: Use filters based on formula policies to restrict certain formulas from being analyzed in the *Laboratory* module. For example, you could exclude *Inactive* and *Experimental* status from analysis.

Use Property Override Values: Specify whether the system uses calculated formula property values or user-entered property values while printing various nutritional labelling reports.

Include Property Analysis on what Page: The page on which the physical properties of formulas should be displayed when printing laboratory reports. Available options displayed in the drop-down menu are:

- **Own Page** (default)**:** Displays physical properties on a new page of the report.
- **Same Page:** Displays physical properties on the same page as the other data in the report.

Do Not Print: Physical properties are not displayed on the report.

Print Property Analysis on: The default printing option for the laboratory reports. Available options are:

- *Plain Paper.*
- *Printed Stationery.*

Print QC Results: Check this box to display the results of QC tests conducted on the formula on the *Physical Property Report*. If this option is not selected, QC information will not be shown on the report.

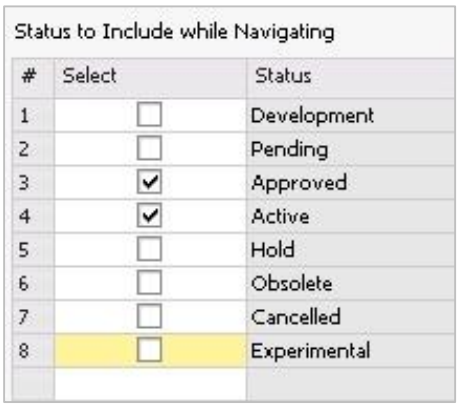
Caption for Vertical Item Column: Specify the appropriate name for the column that will be displayed in the Items tab of the *Physical Property Analysis* screen (food vertical and Nutra databases only.)

Update: Click to save the settings made on the *Laboratory Defaults* screen.

Cancel: Click the *Cancel* button to close the *Laboratory Defaults* screen without saving your changes.

2.5.2.2 Navigation Tab

Here you select one or more **formula statuses** so that the application will display only formula revisions with those statuses while navigating through records in the *Physical Property Analysis* screen. For example, let's say the *Approved* and *Active* statuses are selected on the *Navigation* tab. When you navigate through formula records in the *Physical Property Analysis* screen (using the navigation buttons on the tool bar), the application will display only those formulas whose status matches your selections.



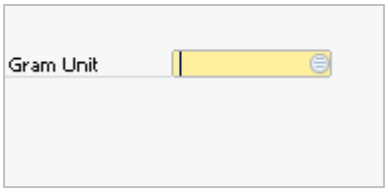
Select: Check the box in this column to select the formula status in the corresponding row.

Status: Formula statuses that can be included while navigating through records in the *Physical Property Analysis* screen.

At least one status must be selected for navigation before saving the data. Development status is selected by default.

2.5.2.3 Food Vertical Tab

This tab is displayed only when the *Enable USDA Integration* checkbox on the *Process Mfg. Setup Wizard* is selected.



Gram Unit: Specify the gram unit of weight.

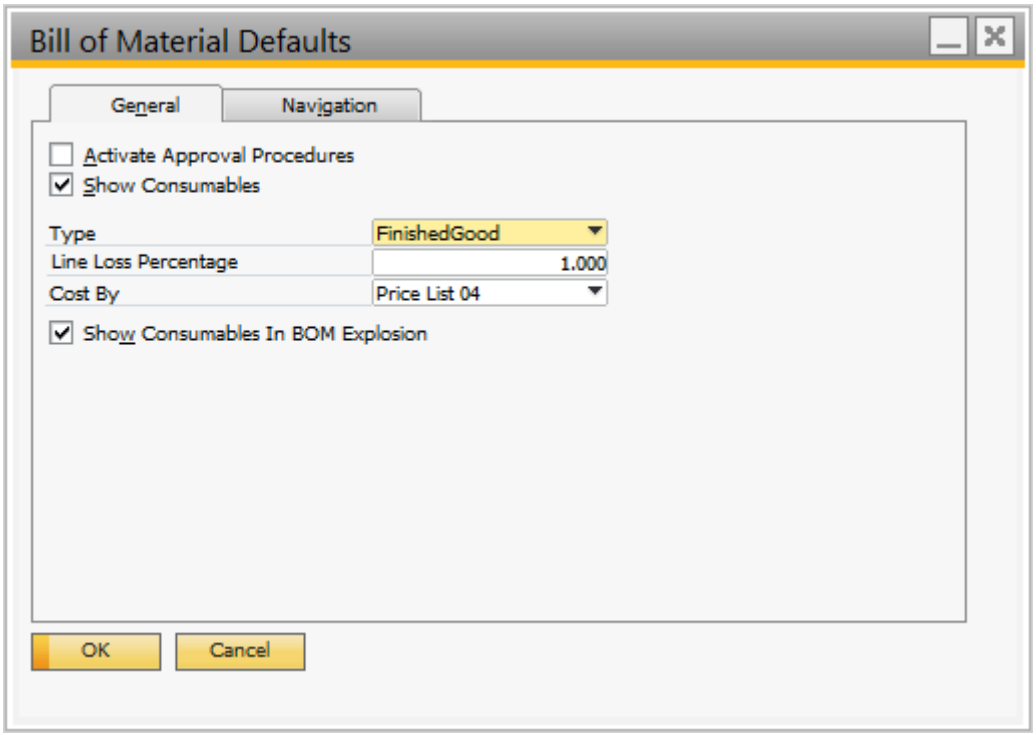
2.6 Bill of Material Defaults

Use the *Bill of Material Defaults* screen to specify whether approvals and consumables are required in BOMs. The system also allows you to define default values when a new BOM is created.

Prerequisites: Item records must first be maintained on the *Item Master Data* screen.

2.6.1 General Tab

Go To: Administration → Setup → Bill of Material → Bill of Material Defaults.



Activate Approval Procedures: Use this field to specify when an approval process is required. If this option is checked, then an approval workflow must be followed when a new BOM version is created.

You cannot uncheck this option until all pending approvals have been processed (either approved or rejected).

Show Consumables: Check this box if you need to list consumable items (other than raw materials) on the BOM. A separate tab appears on the *BOM Entry* screen when this box is checked.

Type: The default BOM type. A value must be entered in this field when you create a new record. Available options are**:**

- ***Intermediate*:** Intermediate-type BOMs are created using formulas and are used to produce items in bulk quantities. This type of BOM does not usually contain any packaging material. For example, you would use this type of BOM to produce vats of grape jelly.

- ***Finished Good*:** A finished good-type BOM is created by calling a formula and adding packaging materials. A single formula can be linked to multiple finished good BOMs, eliminating the need to modify multiple BOMs when the formula changes. For example, if we sell grape jelly in three different size jars, filling each jar would require a unique finished good BOM.
- ***Assembly*:** An assembly-type BOM calls out multiple discrete finished goods; no formula is applicable for this type of BOM. For example, if small jars of grape jelly (a finished good) are packaged with small jars of strawberry jelly (a second finished good) to make an assortment pack, the assortment pack would require an assembly BOM.

Line Loss Percentage: Specify the expected loss percentage of BOM line items. The value you specify here is defaulted as *Line Loss %* on the *BOM Entry* screen.

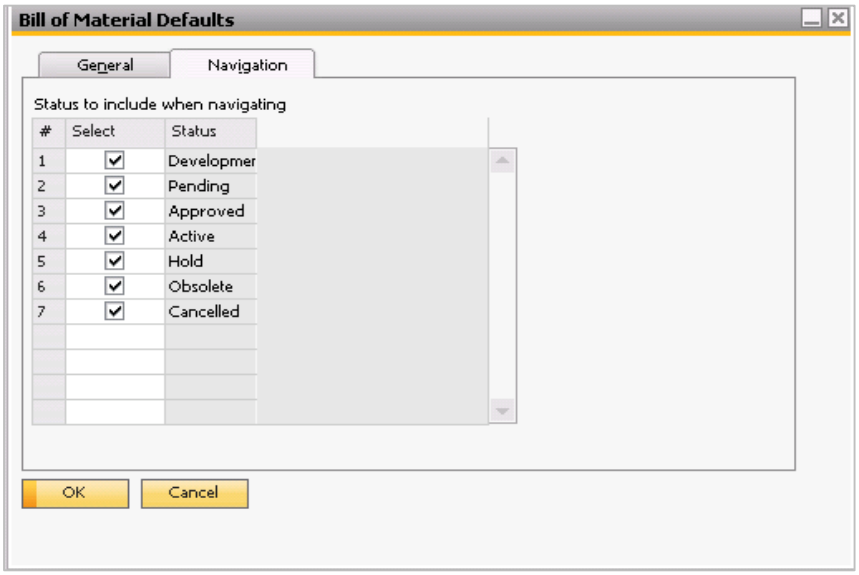
Show Consumables in BOM Explosion: Select this checkbox to display Formula/BOM consumables in BOM Explosion.

Cost By: A default price list to be used during BOM creation.

OK/Update: Click the *Update* button to save changes made on the screen.

Cancel: Click the *Cancel* button to close the screen without saving the data.

2.6.2 Navigation Tab



Status to include when navigating: Check the box beside each status you want accessible when viewing bills of material. Available options are:

- **Development:** Denotes that the BOM is in the creation process. BatchMaster ERP tracks BOMs by revision, so there can be multiple versions of the same BOM in Development status at a particular time. These can be updated or deleted, but cannot be used in production.
- **Pending:** This status is set by the software when a BOM revision has been submitted for approval. No changes can be made to a BOM with Pending status. If the approval process is not activated, this status would not apply.
- **Approved:** Indicates that the BOM revision has been approved by all appropriate reviewers and it is waiting to be set to Active status. If an 'effective from' date was entered during BOM creation, the revision will be set to Active status when the system date matches the 'effective from' date. If the approval process is not activated, this status does not apply.

  When the *Effective From* field is left blank, the software will make the BOM revision Active immediately after approval. One or more BOM revisions can be approved at a given time, with different effective dates, but only one BOM revision can be Active at any point in time.

- **Active:** The BOM revision is available for use in production activities. There can only be one Active BOM revision at a time. When a revision is made Active, the previous revision is marked as Obsolete. BatchMaster ERP with SAP Business One provides a status update service that will poll periodically to determine if a BOM revision should be Active based on its 'effective from' and 'valid until' dates.
- **Hold:** The BOM revision is temporarily not available for production. No changes can be made to the BOM, but the status can be toggled back to Active when appropriate.
- **Obsolete:** The BOM is no longer available for production. If the system date crosses the 'valid until' date, the application would automatically change the BOM status to Obsolete.
- **Canceled:** The BOM is not available for production. The proposed BOM revision has been rejected by the approval body. No changes are allowed to a cancelled BOM.

Add/Update: Click this button to update any previously saved settings.

Cancel: Click the *Cancel* button to close the screen without saving the data.

2.6.3 Setting up BOM Defaults

Open the *Bill of Material Defaults* screen.

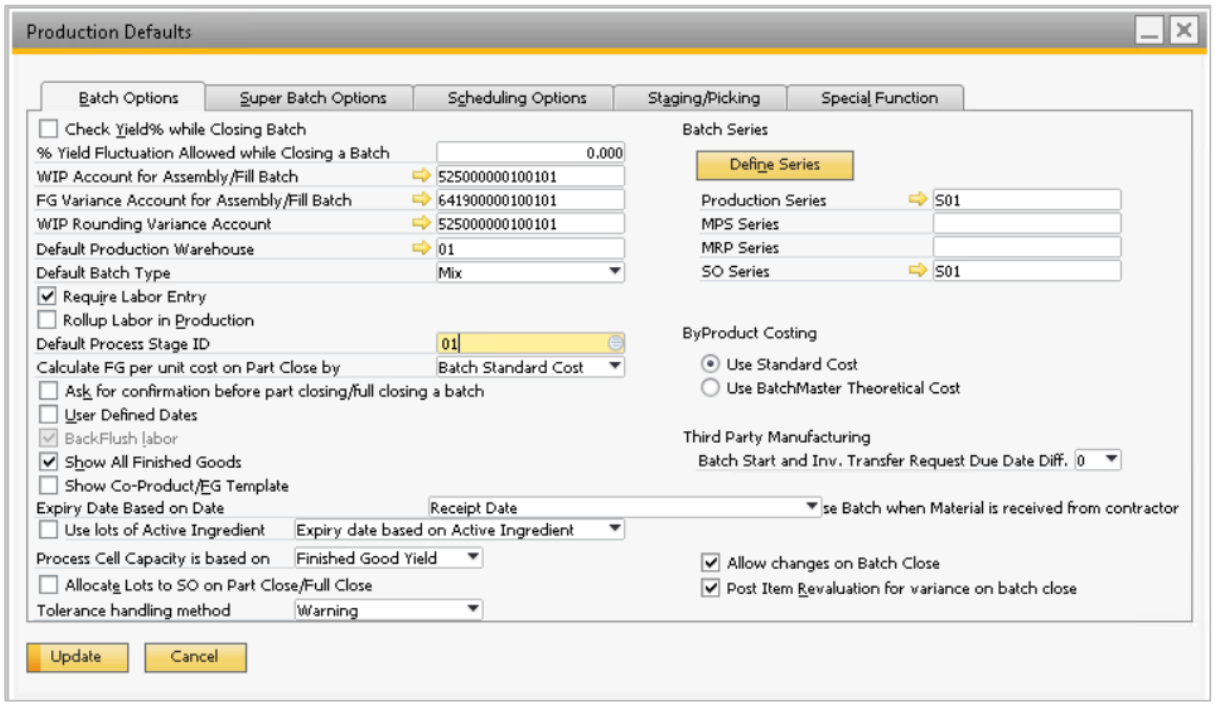
1. Check the *Activate Approval Procedure* option to activate the approval process for the BOM.
2. Check the *Show Consumables* option to associate consumable items (other than raw materials) with a BOM.
3. Select the BOM type using the drop-down menu next to the *Type* field. Available options are *Intermediate*, *Finished Good*, and *Assembly*.
4. In the *Scrap Percentage* field, enter the percentage of material scrapped at the end of the production process. (For informational purposes only.)
5. Select the required cost method in the *Cost By* field.
6. Check the *Show Consumables in BOM Explosion* checkbox if you want to display the consumables items of a Formula/BOM in BOM Explosion.
7. Switch to the *Navigation* tab. Select the statuses you want to see during navigation.
8. Click the *Update* button to save the record.

2.7 Production Defaults

Go To: Administration → Setup → Production → Production Defaults.

The values on the *Production Defaults* screen are used to define the data needed when a batch is created, edited, or closed. Some of the data can be over-ridden during batch processing.

2.7.1 Batch Options Tab



Check Yield % while Closing Batch: Check this box to make the system verify that a batch has met production yield requirements before it can be closed. The allowable fluctuation is defined in the following field.

% Yield Fluctuation: This is the amount by which actual production can vary from planned production. At the time of batch closure, the system will compare actual production to planned production. If the difference exceeds plus or minus 'x' percent, a warning message will be shown.

WIP Account for Assembly/Fill Batch: This is the work-in-progress (WIP) account for assembly-type batches.

FG Variance Account for Assembly/Fill Batches: The account to which finished good (FG) variances will be posted when the batch is closed.

WIP Rounding Variance Account: The account to which any rounding variances will be posted.

Default Production Warehouse: The warehouse for which the batch will be opened. (Can be over-ridden at *Batch Entry*.)

Default Batch Type: The type of batch that will be created during *Batch Entry*. (Can be over-ridden.) The options displayed in the drop-down menu are:

- ***Mix*:** Requires a formula; a bill of material (BOM) for additional items or packaging is optional. Both intermediates and FGs can be made using this batch type.
- ***Fill*:** Requires an intermediate available in stock and a BOM for packaging. Makes FGs only.
- ***Assembly*:** Requires an assembly BOM. Used to take two or more FGs and package them together in another container as a new finished item.
- **Rework:** Used to rework an FG or intermediate. The item plus any materials needed for the rework is the only inputs. No formula or BOM is allowed.

Require Labor Entry: Check to require that actual labor hours are entered against each production batch. If left unchecked, the *Labor Entry* screen cannot be accessed.

Rollup Labor in Production (available only if *Require Labor Entry* checkbox is checked)**:** If you select this check box, labor costs will be included in batch costing. If the box is left unchecked, labor entries will be excluded from batch costing and used for reports only.

Default Process Stage ID: The process stage ID entered here will be defaulted at time of *Batch Entry* unless a process ID has been defined for the formula being used on the batch.

Calculate FG per unit cost on Part Close by (all costs taken from *Item Master* records)**:** Available options are:

- ***Batch Standard Cost*:** The costs of all raw materials, intermediates, consumables, and packaging that have been issued to the job at the time of partial close will be rolled up to define the cost of the batch.
- **Item Cost:** The cost per unit of the item produced will be used to define the cost of the batch, regardless of what materials have been issued at the time of partial close.

Ask for Confirmation…: When this box is checked, the system will ask for confirmation when a batch is partially or fully closed. User must answer *Yes* at the prompt to continue the close process.

User-defined Dates: When this option is checked, the application will not calculate the scheduled start date or scheduled end date based on process cell capacity. When this option is not checked, the application will calculate the start and end dates based on the scheduling option specified on the *Scheduling* tab.

Backflush Labor: This option is defined at system setup and cannot be changed here.

Show All Finished Goods: Check this box to display the *Show All Finished Goods* option on the *Batch Entry* and *SuperBatch Entry* screens. If the user then selects that option, all BOM items will be displayed for selection. Otherwise, only BOM items that use the formula tied to the batch will be displayed.

Show Co-Product/FG Template: Check this box to enable the use of *Co-Product/FG Templates* during *Batch Entry*. (See the "BatchMaster ERP with SAP Business One 18.2 – Bill of Material User Guide" for details.)

Expiry Date based on Batch Actual Start Date: If you choose this option the system will calculate an Expiry date for the Finished Good lot on the basis of the *Actual start date* (specified on the Batch Ticket Screen) of the batch.

Use Lots of Active Ingredient: Select this checkbox if you want to continue the same lot number of the active ingredient throughout production.

Expiry date based on Active Ingredient: Select this option if you want the product expiry date the same as the expiry date of an active ingredient.

You can specify the Active Ingredient on the *Formula Entry* or *BOM Entry* screens.

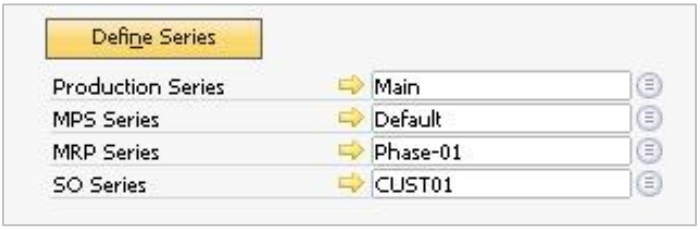
Expiry date based on Item Master Detail: Select this option if you want the product expiry date to be picked from the Item Master.

Process Cell Capacity is Based on: Choose from "Material Usage" or "Finished Good Yield."

Allocate Lots to SO on Part Close/ Full Close: Check this box to allocate production lots to the sales order associated with the batch.

Tolerance handling method: Using this dropdown you can specify that the system will warn/stop you from issuing a quantity beyond the lower and upper tolerance %. With the *Warning* option selected, if you attempt to issue a quantity more or less than the specified tolerance percentage, the system displays a warning message. If needed, you can continue issuing the required quantity. If you choose the *Block* option, the system won't allow you to issue a quantity falling beyond the tolerance permission.

Batch Series: The Batch Series screen defines what your batch numbers will look like.



You can define a different batch number structure (sometimes called a mask) for batches created via the following methods:

- Manual batch entry (Production Series).
- Suggestions from Master Production Scheduling (MPS Series).
- Suggestions from Material Requirements Planning (MRP Series).
- Automatic creation from a Sales Order (SO Series).

MPS and MRP are discussed in the ***BatchMaster ERP with SAP Business One 18.2 – Planning User Guide***.

By-Product Costing: Check a radio button to define how by-products will be valued. The system deducts the cost of a byproduct from the batch cost to determine the cost of producing the primary product. Available options are:

- **Use Standard Cost:** If your byproducts are valued at Standard, use this option.
- **Use BatchMaster Theoretical Cost:** If your byproducts are valued using Moving Average or First In, First Out (FIFO), you can use this option to stabilize the cost. The theoretical cost is stored in the Item Master Record.

Allow Changes on Batch Close: When this option is checked, you can modify item level details on the Batch Close screen. If left unchecked, you cannot make changes at the time of Batch Close.

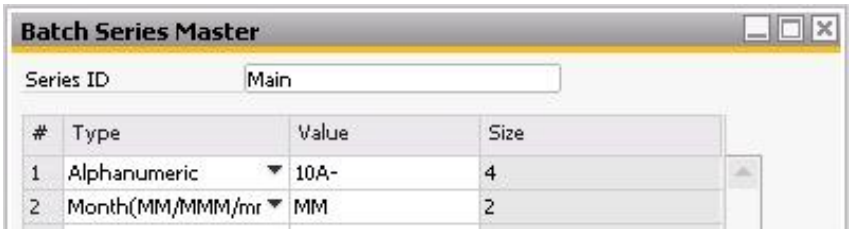
Post Item Revaluation for variance on batch close: If you check this checkbox then on *Batch Close* system will recalculate the batch standard cost and compare with actual per unit cost posted during part close. If any difference is obtained in comparison then the *Finished Good* cost will get revaluated with the difference amount for the quantity and accordingly post the part close transaction and revaluation document.

2.7.1.1 Batch Series Master

Using the *Batch Series Master* screen, you can create and edit the prefix that is added to the batch number at the time of batch creation. This prefix can be alphanumeric, a customer number, a date (a combination of month/day/year), or a numeric serial value. BatchMaster ERP will assign batch numbers sequentially after the prefix.

Go To: Administration → Setup → Production → Batch Series Master.
Press Ctrl + A to enter 'Add' mode.

At this screen, specify the unique series identifier at the *Series Id* field. Next, specify the series mask using the *Type* field available in the grid. Available options are *Alphanumeric*, *Customer*, *Month (MM/MMM)*, *Series*, *Year (yy/yyy)*, or *Day (dd/ddd/JD)*.



Type: Choose one of the following options for each line of the grid. Based on the segment *Type* chosen on each line of the grid, enter the *Value* for the series mask. If you have selected:

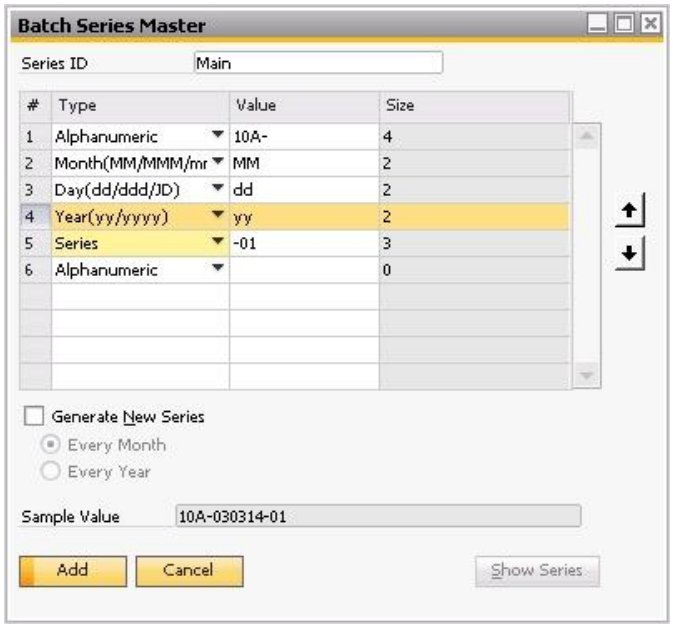
- ***Alphanumeric***, you must enter alphanumeric characters in the grid cell (maximum 19 characters).
- ***Customer***, you will be prompted to enter the customer name at the time of batch close (maximum 15 characters).
- ***Month (MM/MMM)***, select the month format from the drop-down box in the grid cell.
- ***Year (yy/yyyy)***, chose the year format from the drop-down box in the grid cell.
- ***Day (dd/ddd/JD)***, select the year format from the drop-down box in the grid cell. (Note: JD = Julian date.)
- **Series**, you must enter a starting numeric serial value in the grid cell. (Note: This entry must be the last row.)

Value: Enter the characters that make up the alphanumeric or the series. Month, day, and year formats are listed in parenthesis and are case-sensitive (i.e., the use of capital letters versus lowercase letters must be followed).

Size: Displays based on the entries made in the *Value* column. The cumulative size of all the grid rows cannot be more than 35 characters.

Add: Click the *Add* button to save your work.

EXAMPLE # 1:



This set of choices results in all batch numbers starting with "10A-", followed by the MM/dd/yy the batch was created, followed by the series. The series is the portion of the batch number that is auto-generated by the system.

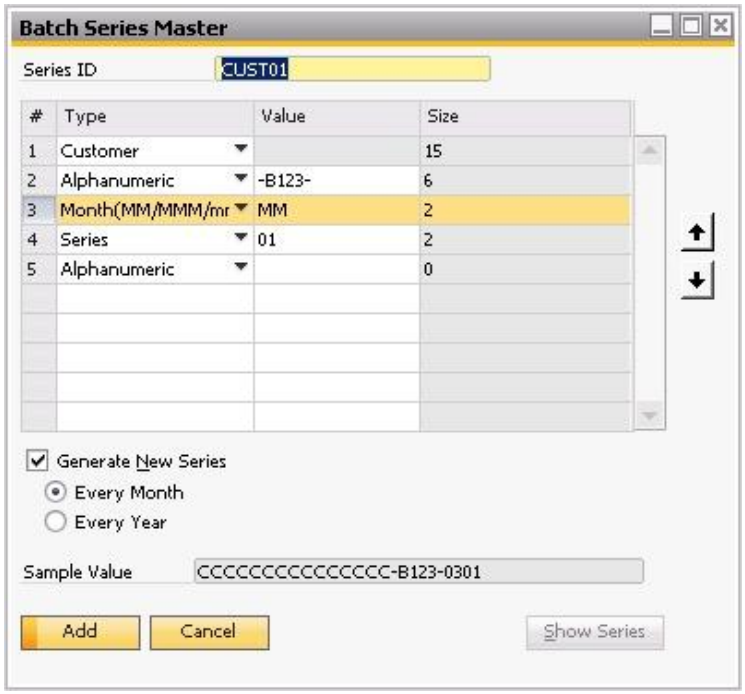
For example, if we created two batches on March 7, 2014, they would be numbered as follows:

10A-030714-01

10A-030714-02

Note: The "-" must be defined by the user.

EXAMPLE # 2:



This set of choices results in all batch numbers starting with the customer name (up to 15 characters), followed by the string "-B123-", and ending with the two-digit month followed by the series.

For example, if we created two batches for customer "AJAX" on March 7, 2014, they would be numbered as follows:

AJAX-B123-0301

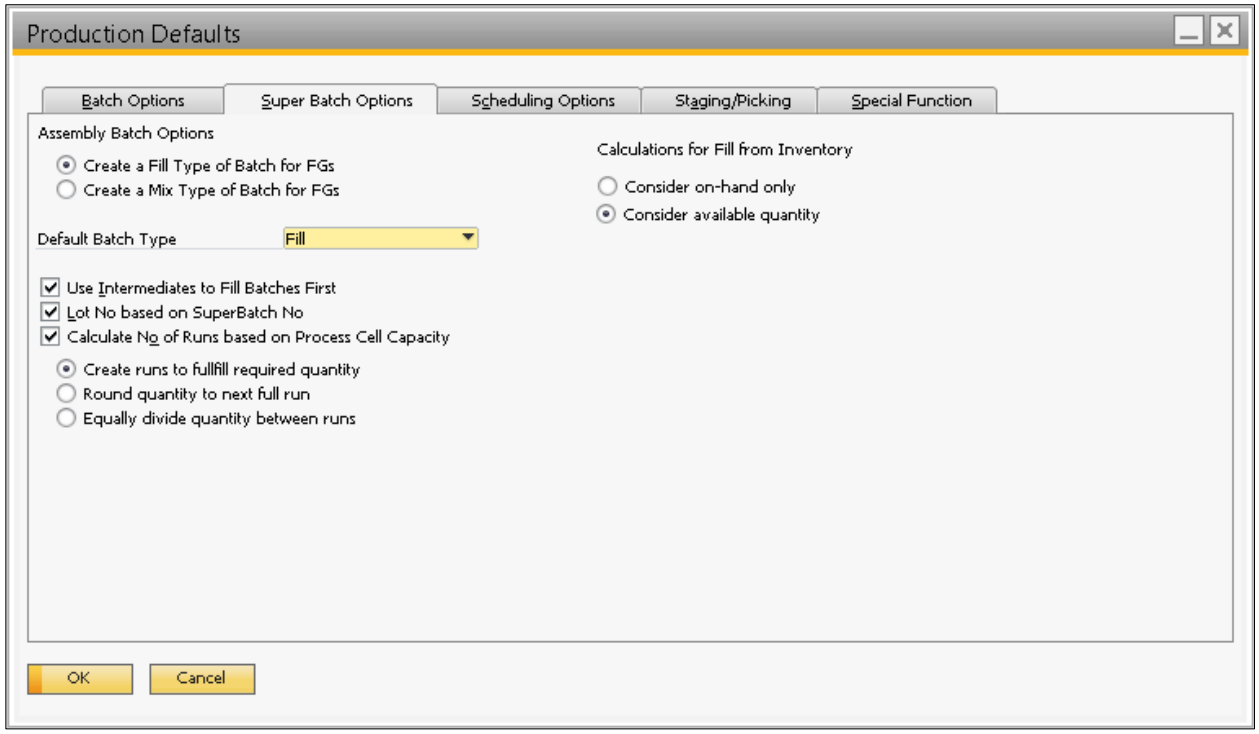
AJAX-B123-0302

Note: The "-" must be defined by the user.

Generate New Series: Check this box to have the system change the month or the year automatically. Then pick *Month* or *Year* by clicking the appropriate radio button.

If you select *Generate New Series Every Month*, you must have *Month* as one of the numbering segments. *Generate New Series Every Year* requires *Year* as one of the numbering segments.

2.7.2 SuperBatch Options Tab



Assembly Batch Options: Sets the batch type for assembly-type SuperBatches only.

- ***Create a Fill Type of Batch for FGs*:** The system will use intermediates that are available in stock before suggesting new intermediate batches.
- **Create a Mix Type of Batch for FGs:** The system will ignore any available intermediate inventory and always create new batches for the production of intermediates.

Default Batch Type: Sets the batch type for the (top level) SuperBatch. Available options are:

- ***Mix*:** Best used when a SuperBatch will be used to produce an FG in its packaging. (Uses a formula and a packaging BOM.) There can be intermediates below this level which will be produced using their own linked batches.
- **Fill:** Uses a BOM for FG and separates it into two batches: a SuperBatch for the packaging and a batch one level down for making the intermediate from the formula. Intermediates below this level will be produced using their own linked batches.

Use Intermediates to Fill Batches First: Selecting this option tells the system to use available inventory of intermediates before suggesting new production batches. This option functions regardless of the *Default Batch Type*. It is useful when you have intermediates as components of other intermediates.

Intermediates already allocated for production are not considered in the calculation.

Lot No based on SuperBatch No: Allows creation of an intermediate lot number based on the SuperBatch lot number rather than requiring an independent entry.

Applicable only when lot number generation is set at *Automatic,* and the batch/serial masking is defined as *DocNo+Series* at the *Item Defaults* screen. Choose this option when you want to identify all intermediates and FGs with the same lot number.

Calculate No of Runs Based on Process Cell Capacity: Required batch runs are calculated by dividing the total production quantity by the process cell capacity. For example, if the process cell has a capacity of 50 pounds and the batch size is 150 pounds, the cell must operate three times to make the full production quantity. When opening a SuperBatch, you can elect to calculate the number of runs or you can ignore this function and open a single batch for the full production quantity.

The number of runs is calculated based on batch weight, not volume.

If this option is selected, then the following options are enabled. You can choose any one to calculate the number of runs.

- **Create runs to fulfill required quantity**: If you mark this checkbox, the number of runs will be calculated based on the quantity needed to be produced. If you need 250 kg of the item to be produced and the associated process cell capacity is 100 kg, the system will calculate 3 runs to fulfill the required quantity and results in creating 3 sub-batches of quantity 100 kg, 100 kg and 50 kg.

- **Round quantity to next full run**: If you choose this option the system will calculate the number of runs on the basis of the quantity required to be produced but round off the last run quantity to the quantity of a full run. If you are required to produce a batch of 250 kg and your process cell capacity is 100 kg, the system will calculate 3 runs and create sub-batches of quantity 100 kg, 100 kg and again of 100 kg. Although the last run quantity required is 50 kg, the system will round-off this 50kg quantity to the quantity required for a full run and thus creates the last sub-batch of 100 kg.

- **Equally divide quantity between runs**: If you choose this option, the system will calculate the number of runs based on the quantity required to be produced but here the quantity produced will be equally distributed among the number of runs calculated. For example, to

produce 250 kg of quantity using a 100 kg process cell capacity, the system calculates the number of runs as 3 but all 3 sub-batches will be created with a quantity of 83.33 kg each.

Calculations for Fill From Inventory: The options available here will help you to determine the logic used to fulfill the child batch requirement of the super batch.

Consider on-hand only: If you choose this option then the child item on-hand quantity will be considered first to fulfill the requirement and accordingly system will create sub-batches for the remaining quantity.

Consider available quantity: If you choose this option then the child item available quantity (i.e. On-hand – Allocations) will be considered to fulfill the requirement and accordingly sub-batches will be created for the remaining quantity.

Update (not shown)**:** Click the *Update* button to save your work.

2.7.3 Scheduling Options Tab

This setting only applies to batches created using the *Batch Entry* and *Transfer SO to Batch* applications. Batches suggested via the *MPS* and *MRP Modules* always use backward scheduling.

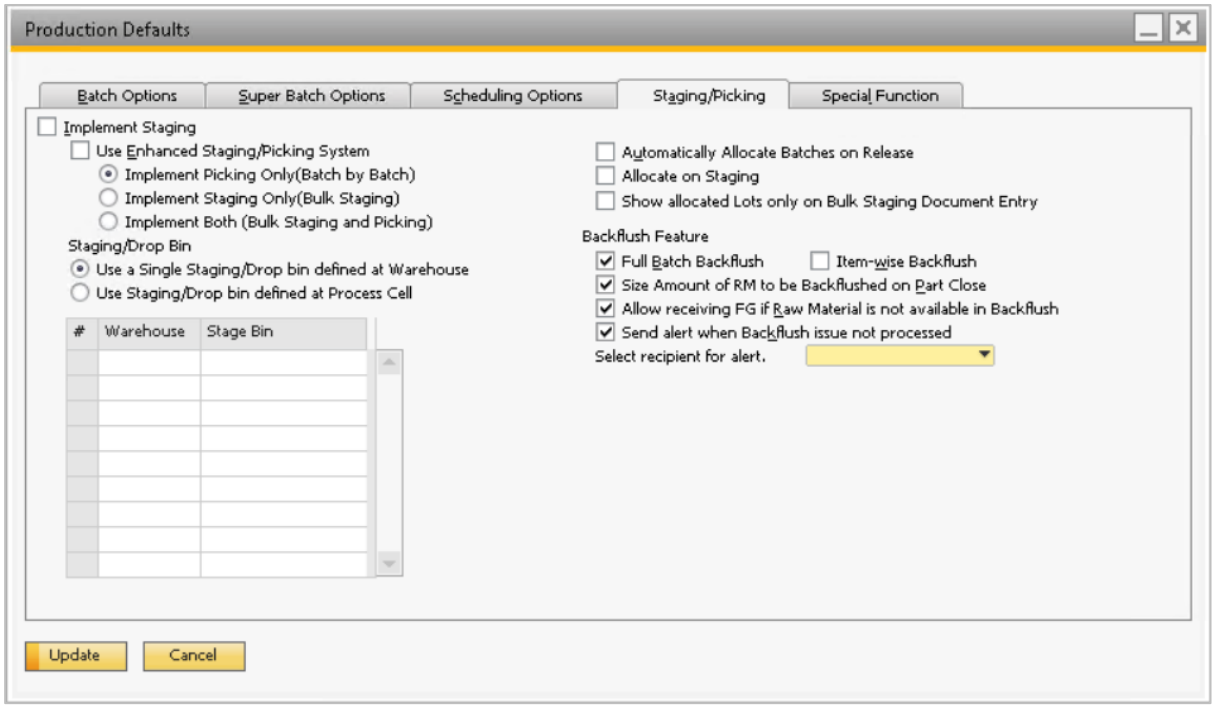
Scheduling Method: Choose the *Forward* or *Backward* option from the drop-down box.

- When you choose ***Forward***, the system will start with the current date and calculate when the batch will be finished.
- When you select **Backward**, the system will start with the due date and calculate when the batch must start.

Update (not shown)**:** Click the *Update* button to save your work.

2.7.4 Staging/Picking Tab

The staging area is a location where you can temporarily keep materials used for production.



To implement staging, the *Enable Bin Location* option must be checked on the Warehouse screen.

Descriptions of the fields in the *Staging* tab are as follows:

Implement Staging: Select this checkbox to implement staging during production activities. If staging is implemented, then the production system picks material from the stage bin during allocation.

Use Enhanced Staging/Picking System: Check this checkbox to implement the modified, advanced picking system. With this option checked you have the following options to choose for picking:

> ***Implement picking only (Batch by Batch Picking):*** Use this option if you wish to perform picking batch by batch. A separate Pick document will be generated for each selected batch to accomplish batch-wise individual picking.
>
> ***Implement Bulk Staging Only***: With this option selected you can generate a bulk picking document for the items required for a range of batches. It generates a single bulk staging document for all the selected batches to collect and stage material from the storage bin to the Stage bin of the attached Bin Group.
>
> ***Implement Both (Bulk Staging and Picking):*** If this option is chosen, first you need to generate a Bulk staging document using the *Bulk Staging Document Generation Screen* and then processing it from the *Bulk Staging Document Entry Screen*. Secondly, you would generate a pick document

for the range of batches using the *Pick Order Generation screen* and then perform picking batch by batch on the *Pick Order Entry screen*.

Staging/Drop Bin

Use a Single Staging/Drop Bin Defined at Warehouse: Select this option to use the staging/drop bin defined at the warehouse. Selecting this checkbox lets you to define warehouse-wise staging/drop bins in the grid below.

Use Staging/Drop Bin Defined at Process Cell: Select this option to use the staging/drop bin defined at the process cell. The *Default Process Cell ID* is entered on the *Revision* tab of the *Formula Entry* Screen and can be modified during Batch Entry.

Automatically Allocate Batches on Release: Choose this option to automatically allocate raw materials to the batch when the batch is released.

- When staging is not implemented, the system will allocate lots based on the lot picking method (FIFO/FEFO/LIFO) in the designated warehouse.
- If staging is implemented, the system will allocate lots from the staging area. When all the materials from the staging area have been used, the system will allocate materials from the warehouse.

Allocate on Staging: If you select this checkbox the system will allocate the batch when performing Bulk staging.

Lot Allocation will be based on Schedule Start Date of the batch.

Show Allocated Lots only on Bulk Staging Document Entry: If selected, when you perform Bulk Staging then, at the time of lot selection, the system will display only the lots already allocated to choose from.

Backflush Feature

Full Batch Backflush: This checkbox enables automatic issuance of all raw materials linked to a batch during production. When selected, the system follows the traditional backflush behavior, issuing every item listed in the BOM without distinction. It is best suited for environments where material consumption is consistent and predictable, minimizing the need for manual intervention.

Selecting this option will instruct the system to backflush raw materials according to the following rules:

- If the materials are allocated to the batch, backflush will be from the staging area or warehouse defined during the allocation process.
- If there is no allocation to the batch, the material will be backflushed from the applicable staging area (or from the warehouse, if no staging bins are established or the bins have been emptied).

Selecting this option would auto select the *Size Amount of RM to be Backflushed on Part Close option.*

Item-wise Backflush: This checkbox activates item-level control over backflushing. When enabled, the system refers to the Backflush Item checkbox configured in the Item Master Details screen to determine whether each item should be auto issued or manually issued. This provides flexibility for users to selectively automate issuance, reducing over-issuance and improving inventory accuracy. Only one of the two options—Full Batch Backflush or Item-Wise Backflush—can be selected at a time.

Size Amount of RM to be Backflushed on Part Close: Select this checkbox to resize the quantity of raw material based on the quantity of finished goods produced during part close of the batch. This option will automatically get selected, when the *Backflush Raw Material* option is selected.

Example: You create a batch to manufacture 10 liters of orange juice and partially close this batch with 5 liters. BatchMaster will automatically update the quantities of raw materials used, leaving the remaining raw materials in inventory until you produce the rest of the batch.

Allow Receiving FG if Raw Material is Not Available in Backflush: This option allows users to receive FG even when raw materials are unavailable at the time of backflush. If selected, the system will permit FG receipt and display a warning message detailing the reason for the backflush failure, such as stock shortage or configuration issues. This feature supports flexible production workflows and ensures continuity even when RM constraints exist.

Send Alert When Backflush Issue Not Processed: When enabled, this checkbox triggers an alert notification if backflush fails during FG receipt. The alert includes error details and is sent to the user selected in the dropdown field below. This ensures that responsible personnel are informed promptly and can take corrective action to resolve inventory discrepancies.

Select Recipient for Alert: This dropdown field allows users to designate a recipient for backflush failure alerts. It becomes active only when the alert checkbox is checked. Selecting a recipient ensures accountability and timely follow-up on unresolved backflush issues.

Grid Level

The grid is enabled only when the *Implement Staging* checkbox is selected.

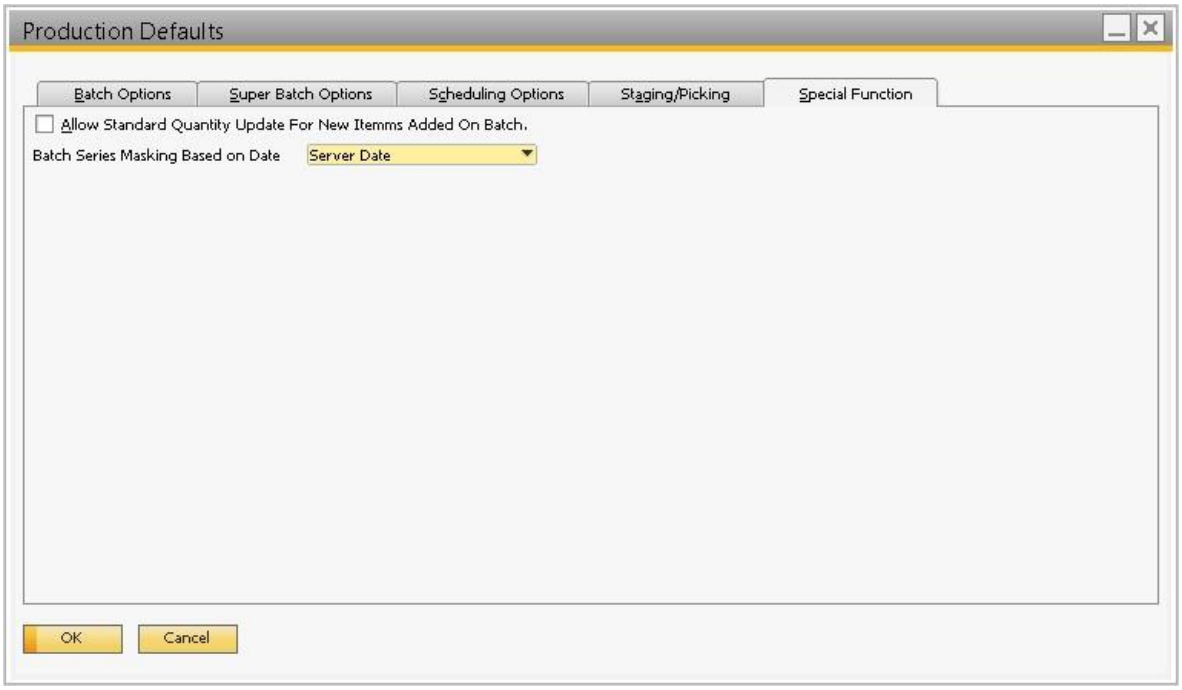
Warehouse: Specify the warehouse code.

Staging Bin Group: Specify the staging bin group. A bin associated with this staging bin group can only be used as a staging bin.

Update: Click the *Update* button to save your work.

Cancel: Click *Cancel* to exit the *Production Defaults* screen without saving your work.

2.7.5 Special Function



Allow Standard Quantity Update for New Items Added on Batch: Selecting this option, on the *Batch Ticket Screen* you can modify the *Quantity Required* of any newly add formula items.

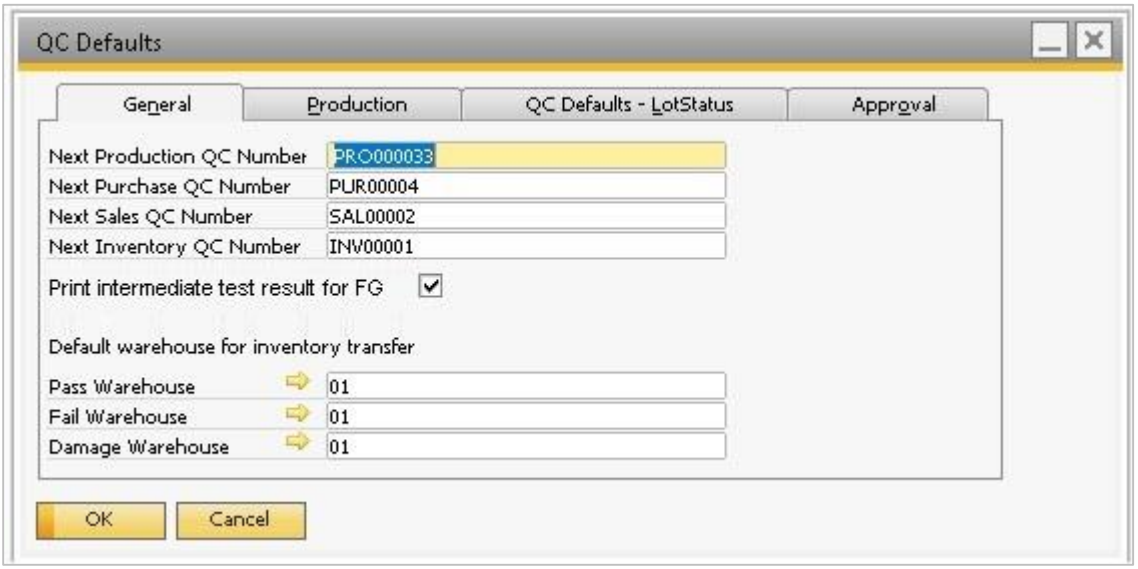
Batch Series Masking Based on Date: Use this dropdown to specify that the Batch Series masking will consider the date as the *Server Date* or *Schedule Start Date*.

2.8 Quality Control Setup

2.8.1 QC Defaults

The *QC Default* screen is used to define setup options and QC document numbering.

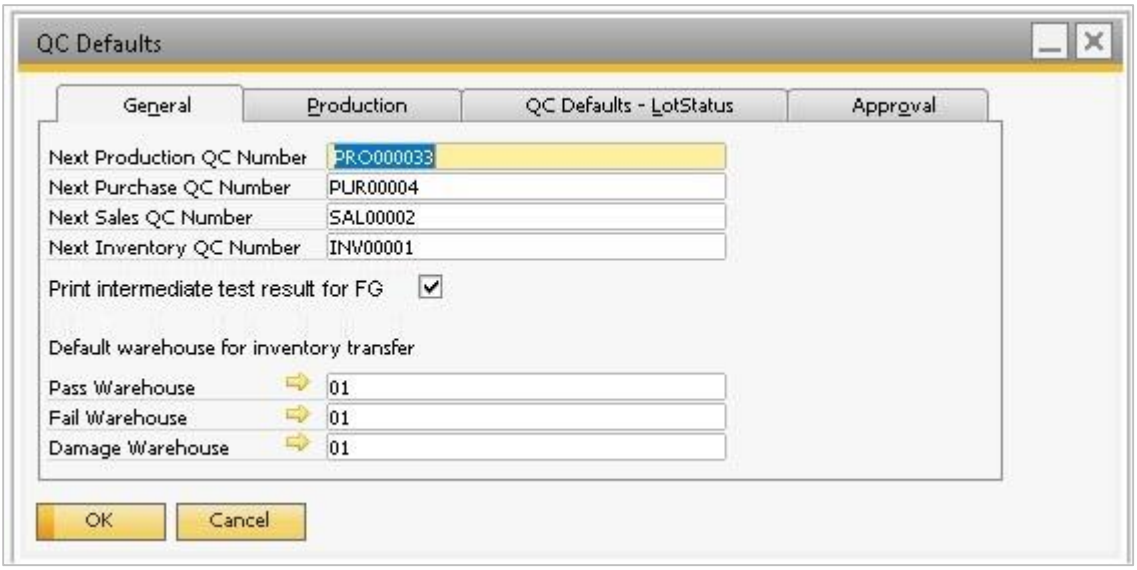
Go To: Administration → Setup → Quality Control → QC Defaults.



2.8.1.1 General Tab

Using the options in the *General* tab, you can do the following:

- Establish the default warehouses (one for each of these cases) where passed, failed, and damaged inventory items should be sent.
- Specify the next production, purchase, sales, and inventory default QC numbers.



Next Production QC Number: The QC Order Number to be assigned to the next production QC order. You can use an alphanumeric series.

Next Purchase QC Number: The QC Order Number to be assigned to the next purchase QC order.

Next Sales QC Number: The QC Order Number to be assigned to the next sales QC order.

Next Inventory QC Number: The QC Order Number to be assigned to the next inventory QC order. Such QC orders can be defined at any point in the receiving, production, or shipping process.

Print intermediate test result for FG: Use this field to include/exclude the QC Test result of the intermediate item(s) in the generated report.

- On marking this checkbox, if you print *COA Sales* Reports for a finished goods item, the QC Test result of the intermediate item used for producing the finished goods also gets printed on the report. The generated report includes the intermediate items that are linked to the QC test.
- On unmarking this checkbox, the *COA Sales* report displays all the quality control tests performed on finished goods items only. The generated report also displays data for the Finished Goods QC Test.

If you have multilevel intermediate hierarchy, the generated COA Sales report fetch top-level intermediate item's QC test. If you don't want to print FG QC tests on the report, then you need to unmark *Print CoA* option from the Item Master Details - QC tab. So, the system only print Intermediate QC test result with the default check box option is enabled. For Intermediate Item QC, the report only print those QCs where *Print CoA* option on the *Item Master Detail* screen - QC tab is selected.

If you print CoA Sales for a multilevel hierarchy, the system fetch QC of the Finished Goods and Intermediate item, which is top-level item.

Scenarios for Sales CoA report with Finished Goods and Intermediate Item's combination

- When only Production QC Order performed for Finished Goods which has Default Intermediate in BOM entry or will take top level intermediate for *Super Batch Entry*.
    - The *Sales COA Report* displays all the tests of Finished Goods and its intermediate tests from Production QC Order where the *Print CoA* option is selected at the *Item Master Details* screen.
- When only Sales QC order is performed for Finished Goods.
    - The *Sales COA Report* displays all the QC tests of the Finished Goods which are performed on Sales QC Order of the lot which is received from Production.
- When both the Production QC Order and Sales QC Order are created with *Print COA* option available at the *Item Master Details* screen as per *Production QC*, and *Sales QC* options.
    - The *Sales COA Report* displays all the tests of Production Finished Goods, and its intermediate tests with the Sales QC test as well.

For Intermediates, Item QC only print those QCs where *Print CoA* option on the *Item Master Detail* - QC tab is selected.

Default Warehouse for Inventory Transfer: Use this field to specify default warehouses for passed, failed, and damaged goods.

Pass Whse: The default 'pass' warehouse where accepted goods will be posted.

Fail Whse: The default 'fail' warehouse where rejected goods will be posted.

Damage Whse: The default 'damage' warehouse to which the items scrapped in QC will be posted.

Update: Click the *Update* button to save the settings.

Cancel: Click the *Cancel* button to close the screen without saving the settings.

2.8.1.1.1 Specifying General Settings

1. Open the *QC Defaults* screen.
2. Specify the subsequent production QC order number in the *Next Production QC Number* field.

3. Specify the appropriate values in the *Next Purchase QC Number*, *Next Sales QC Number*, and *Next Default QC Number* fields.

4. Mark/Unmark the *Print intermediate test result for FG* checkbox to include/exclude the QC Test result of the intermediate item(s) in the generated report.

5. Choose the default warehouse for QC approved inventory using the lookup next to the *Pass Whse* field.

6. Specify the default warehouse for rejected inventory using the lookup next to the *Fail Whse* field.

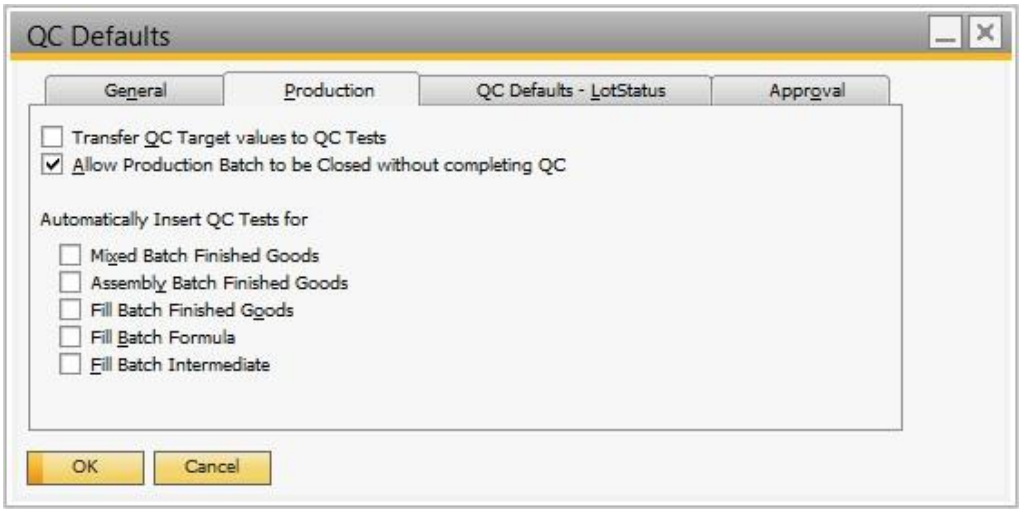
7. Select the default warehouse for the damaged inventory using the lookup next to the *Damage Whse* field.

8. Click the *Update* button to save the settings.

2.8.1.2 Production Tab

From the *Production* tab you can define how a production QC record is created when a production batch is released.

Go To: Administration → Setup → Quality Control → QC Defaults.



Transfer QC Target Values to QC Tests: Check this option when you want the QC technician to see target values while conducting tests. This is a business decision: not displaying the target values forces the technician to test and record the results, whereas if the target values are displayed a technician could enter a passing value without actually performing the test. However, having the target values

visible gives the technician a benchmark to ensure that test results are not entered erroneously (e.g., placing a decimal point in the wrong place).

Allow Production Batch to Be Closed without Completing QC: Checking this option allows you to close a production batch while waiting for test results that take a significant amount of time to acquire or review. The intermediate or finished good produced by the batch will go to a QC Hold bin location. It cannot be processed further or sold until the QC technician records the test results and releases the inventory.

Automatically Insert QC Tests for: Check each box to automatically create a QC Test Document for the respective batch type, Fill type Batch for Finished Goods, Formula and Intermediate. Once the document is created, it must be processed by the QC technician before the batch output can be processed further or sold.

 It is always possible to create a QC Test Document manually if the default is not checked.

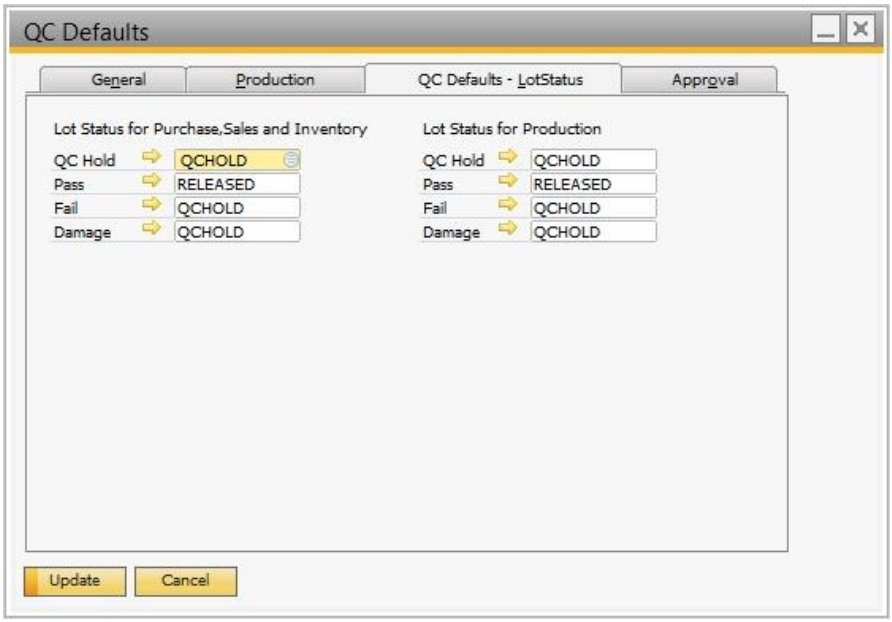
For information on the different batch types, please refer to the "***BME-B1 18.2 Production User Guide***"

2.8.1.2.1 Specifying Production Settings

1. Switch to the Production tab on the *QC Defaults* screen.
2. Check the Transfer QC Target values to *QC Tests* option, if need be.
3. Check the *Allow Production Batch to be Closed without completing QC* option to close production batches without performing QC.
4. Select one or more of the checkboxes under the *Automatically Insert QC Tests for* header, if desired. Available options are *Mix Batch Finished Goods*, *Assembly Batch Finished Goods*, *Fill Batch Finished Goods*, *Fill Batch Formula*, and *Fill Batch Intermediates*.

2.8.1.3 QC Defaults-Lot Status Tab

This screen is where you specify the default lot status to be applied to an item during QC testing as well as when test results are entered.



Lot Status records are maintained at: **Administration → Setup → Inventory → Lot Status**
During transactions, the lot status of an item is assigned according to the following hierarchy:

- If the item has QC applicable at the Item Master Details screen, the QC HOLD status from the QC defaults screen is applied.
- If the item does not have QC applicable, the "Default lot status when receiving" at the Item Master Details screen is applied. This status applies to GRPO receipts and production receipts (batch close or partial close.) If this field is blank for an item and no QC is applicable:
- The system assigns a lot status "ALL".

The status of a lot can be changed by an authorized user at the *Change Lot Status* screen found under the Quality Control menus.

The status of a lot can be viewed on the Inventory Detail report (for purchased items) or the Production Goods Transaction Report (for make items.)

2.8.1.3.1 Specifying QC-Default lot Status

1. Switch to the *QC Defaults Lot Status* tab.
2. Use the lookup next to *QC Hold* to assign the default lot status for the lot which is kept on hold.

3. Use the lookup next to *Pass* to assign default lot status for the lot accepted during the Purchase, Sales and Inventory QC process.

4. Use the lookup next to *Fail* to assign default lot status for the lot rejected during the Purchase, Sales and Inventory QC process.

5. Use the lookup next to *Damage* to assign default lot status for the lot found damage during the Purchase, Sales and Inventory QC process.

6. Similarly, specify the default *Lot status* for Production QC process as well.

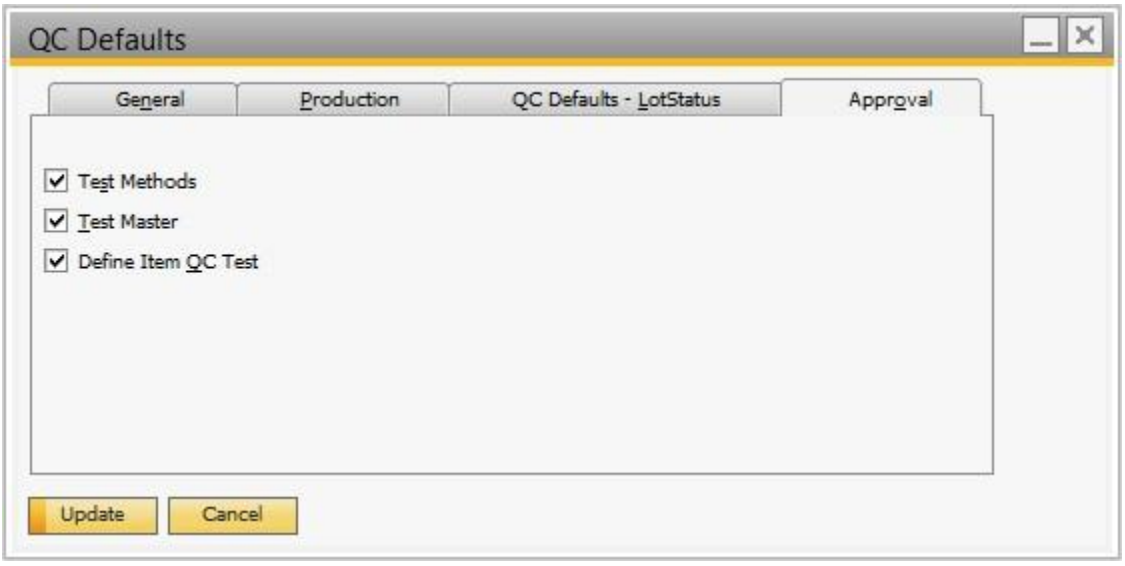
7. Click the *Update* button to save the modifications.

2.8.1.4 Approval Tab

Using this tab you can apply approval procedure on following QC documents:

- Test methods.
- Test Master.
- Define Item QC Test.

Go To: Administration → Setup → Quality Control → QC Defaults.



Test Methods: Mark this checkbox to apply approval workflow on a QC test method defined on the *Test Method* Screen. If you choose it, the Test Method screen layout changes to *Test Method Draft* Screen.

Test Master: Mark this checkbox to apply approval workflow on the *Test Master* Screen. If you opt it the Test Master Screen layout changes to the *Test Master Draft* screen.

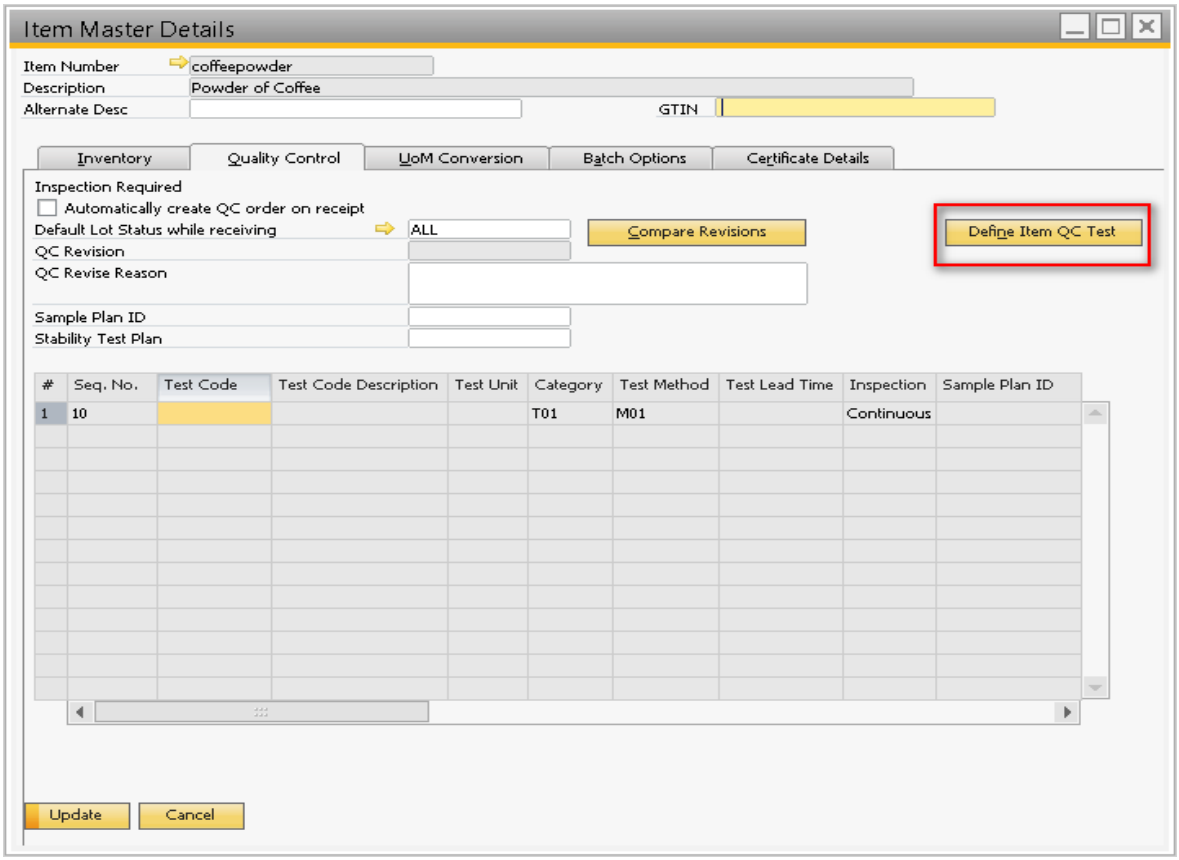
Define Item QC Test: Mark this checkbox if you wish to apply approval workflow on Item QC tests. Opting it, *Define Item QC test* button gets displayed on the *Item Master Details* screen, from where you define item-wise QC test and send them for approval.

2.8.1.4.1 Specifying Approval on QC Documents

1. Switch to the *QC Defaults Approval tab*.
2. Check the QC documents on which approval procedure needs to be applied.
3. Click on the *Update* button to save changes.

2.8.1.5 Define Item QC with Approval Procedure

If approval is implemented, *Test grid* on *Item Master Details QC Tab* becomes non-editable. You must use the *Define Item QC Test* button to open *Define Item QC Test Draft* Screen.



Automatically Create QC order on receipt: Mark this checkbox to create Purchase QC order automatically, when an item is received.

Default lot status while receiving: This lookup shows the lot status to be assigned at time of receipt. It displays the statuses you have maintained at Lot status screen.

QC Revision: This field shows QC revision number. This is a read-only field.

QC Revise Reason: Enter comments/notes for specific reason for QC revision.

Compare Revisions: Click this button to compare different QC revisions of the same item.

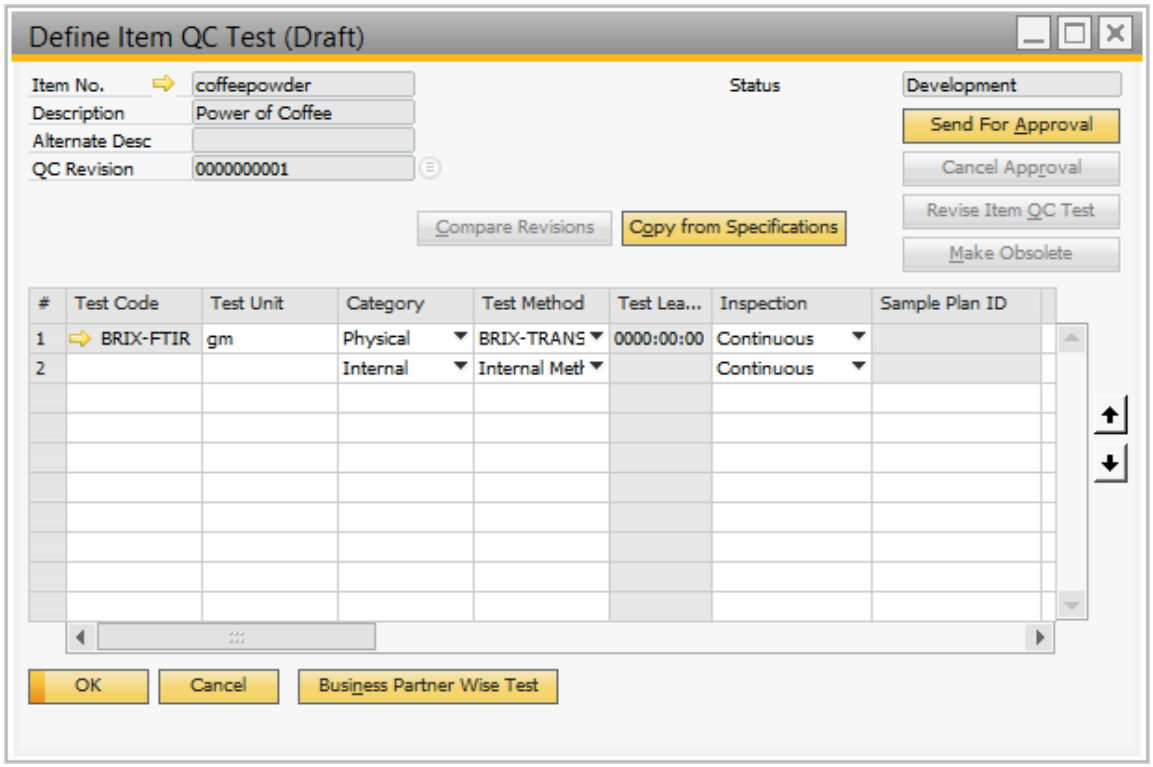
Define Item QC Test: Click this button to open Define Item QC Test Draft Screen. Here you can maintain Item QC tests and send it for approval.

Update: Click this button to update the changes.

Cancel: Click this button to discard changes.

2.8.1.5.1 Define Item QC Test Draft

This screen is used to define QC test for an item with available test category and methods. When the user adds a new test record, its status is "development."



Item No: This lookup allows you to select an item defined in the *Item Master* screen.

Description: This field shows the description of the Item.

Alternate Description (Optional): Allows definition of a customer-friendly description to print on ingredient statements.

QC Revision: This field shows auto generated revision number. Each changes have unique revision number.

Test Code: This lookup allows you to select from defined Test IDs.

Test Unit: This field shows the test unit such as kg, liter. This is for reference only and should not be confused with inventory unit of measure.

Category: Select the test category as defined on the *Test Category* screen.

Test Method: Select test method as defined on the *Test Method* screen.

Test Lead Time (Optional): Specify the time needed to complete the test.

Inspection: This lookup allows you to select predefined inspection type: continuous or sampling.

Sample Plan ID: If you choose sampling as inspection method then select a sample plan ID.

Measuring: Specify how test results are measured. The possible values are *Pass/Fail, Numeric,* and *Alphanumeric.* For example, the results of pH test are measured in numeric value.

Target Value: Specify the ideal numeric value expected in the test results. This field is valid only if the *Measuring* type is *Numeric*.

Control Lower Limit 1: Specify the lowest acceptable value of the test result. For example, you have a specification that pH of milk should be between 8 and 10. In such a case, the *Control Lower Limit* is 8.

Control Upper Limit 1: Specify the highest acceptable value of the test result. Consider the same example, pH test for milk, the *Control Upper Limit* is 10.

Maximum Allowable % defective 1: Specify the acceptable percentage of defective samples. A value greater than the specified value will result in rejection of the lot.

Target Alpha: For an alphanumeric test, specify the ideal alphanumeric value expected in the test results.

Print COA: Select this checkbox to print the test results on the Certificate of Analysis (COA) report.

Remarks: Specify any instruction or notes about the test. For example, you could specify the ambient temperature at which this test should be conducted.

Purchase QC: Select this checkbox to implement QC inspection tests on the item during its receipt.

Production QC: Select this checkbox to implement QC inspection tests on the item after it is produced.

Sales QC: Select this checkbox to implement QC inspection tests on the item prior to shipment. This is an opportunity to establish a QC test based on customer requirements.

Inventory QC: Select this checkbox to implement QC inspection tests on inventoried items. The most common use is to make sure the item and lot can be used in production or shipped to a customer.

Status: This field shows valid QC test statuses such as Development, Pending, Cancelled, Approved and Obsolete.

Send for Approval: Clicking this button sends an alert to the first authorizer defined by the applicable approval process.

Cancel Approval: Click this button to cancel Approval Request.

Revise Item QC Test: Click this button to perform modifications on Item QC test.

Make Obsolete: Click this button to change the status of QC test to "obsolete."

Business Partner wise List: Click this button to define QC tests at the business-partner level. These tests will override QC tests defined at item level.

Up Down Re-Sequence Button: Up and Down re-sequence button will re-sequence Test Code details.

Copy from Specification: Click this button to access the *Copy Item QC Tests from Item Specifications* screen, which lets you copy specifications to the *QC Item Test* grid. Select the *Show for All Items* option to show the selected QC Specifications for all items. Selected test values will be copied to the Item QC Test grid. While copying the specifications, the *Spec ID Code* will be copied to the *Test Code ID* field. If the Test Code does not exist with the same *Spec ID* name in the test master, then BatchMaster ERP will create a Test Code with the same Spec ID and Description. If the Spec ID already exists in the Item QC Test grid, then the system will display a warning message that some of the Item QC Tests already exist with the same Specification ID, do you want to override?

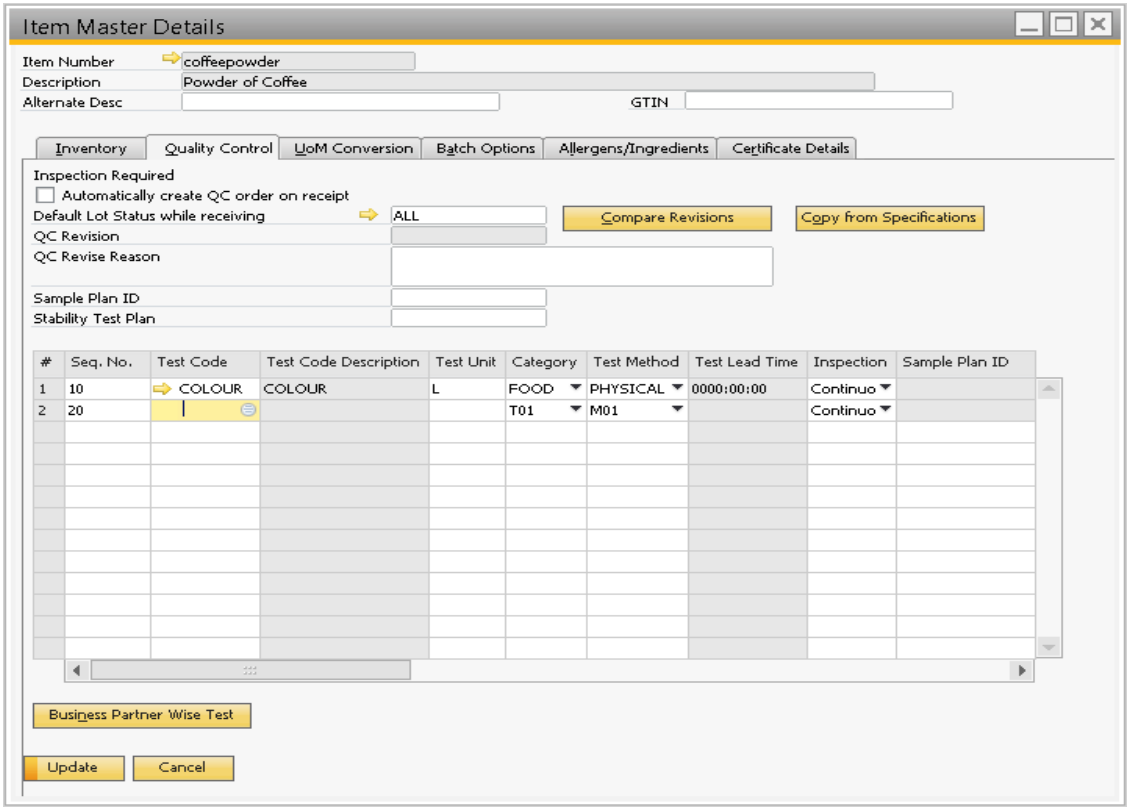
Compare Revisions: Click this button to compare different QC revisions for the same item.

Ok: Click this button to save changes on screen.

Cancel: Click this button to discard changes and close the screen.

2.8.1.6 Define Item QC without Approval Procedures

Here you will define the specific QC tests needed for the item, the target test values, and the business process points at which the QC tests must occur.

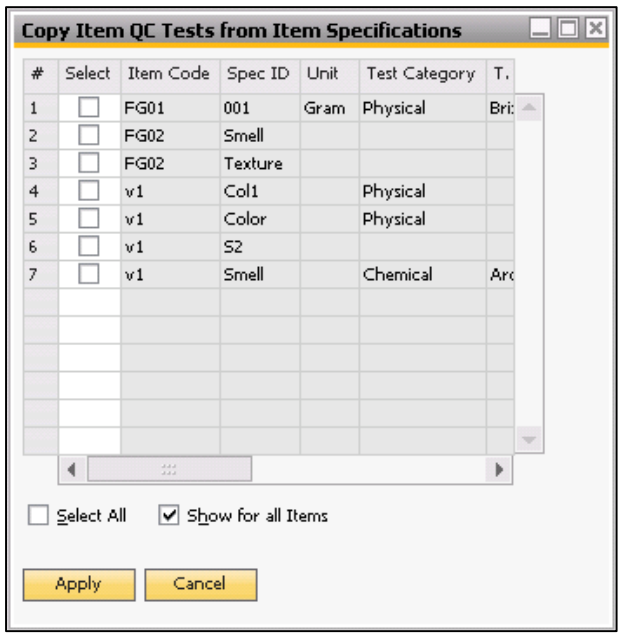


QC Revision: View the QC revision number. This is a read-only field.

QC Revise Reason: Specify the reason for the QC revision.

Compare Revisions: Click this button to compare different QC test revisions of the same item.

Copy from Specifications: Click this button to access the *Copy Item QC Tests from Item Specifications* screen, which lets you copy specifications to the *QC Item Test* grid. Select the *Show for All Items* option to show the selected QC Specifications for all items. Selected test values will be copied to the Item QC Test grid. While copying the specifications, the *Spec ID Code* will be copied to the *Test Code ID* field. If the Test Code does not exist with the same *Spec ID* name in the test master, then BatchMaster ERP will create a Test Code with the same Spec ID and Description. If the Spec ID already exists in the Item QC Test grid, then the system will display a warning message that some of the Item QC Tests already exist with the same Specification ID, do you want to override?



Test Grid Details:

#: Field displays the sequence number of the row.

Seq No: When you add a new test row in the grid, the system auto generates the sequence number of the attached test row in multiple of tens, say 10, 20, 30 and so on. To reorder the test row sequence you can simply modify its sequence number. For example, you have added three test rows in the grid of sequence number 10, 20 and 30. Now, to change the sequence of third row to second you can simply modify the third row sequence number from 30 to any number that lies between 10 and 20, say 11. This will change the third row to second and second to third row. Note that, for every new row entered, the generated sequence number will be the nearest multiple of ten on the higher side.

Test Code: Select a code from the *Test Master*. The system defaults inspection, measuring, test unit, category and test methods.

Test Unit: Specify the test unit, this is a free screen field and should not be confused with inventory units of measure.

Category: Specify a test category such as microbiological and organoleptic.

Test Method: Specify test methods employed for the test such as Brix-FTIR, PH-Glass Electrode, and HPLC.

Test Lead Time: Specify the time needed to complete this test.

Inspection: Specify inspection plan for the test. Typically you choose sampling as inspection plan.

Sample Plan ID: If you choose sampling as inspection method then select a sample plan ID.

Measuring: Specify how test results are measured. The possible values are *Pass/Fail, Numeric,* and *Alphanumeric.* For example, the results of pH test is measured in numeric value, whereas the result of odor test is alphanumeric.

Target Value: Specify the ideal numeric value expected in the test results. This field is valid only if the *Measuring* type is *Numeric*.

Control Lower Limit 1: Specify the lowest acceptable value of the test result. For example, you have a specification that pH of milk should be between 8 and 10. In such a case, the *Control Lower Limit* is 8.

Control Upper Limit 1: Specify the highest acceptable value of the test result. Consider the same example, pH test for milk, the *Control Upper Limit* is 10.

Max Allowable % Defective 1: Specify the acceptable percentage of defective samples. A value greater than the specified value will result in rejection of the lot.

Target Alpha: For an alphanumeric test, specify the ideal alphanumeric value expected in the test results.

Print On COA: Select this checkbox to print the test results on the Certificate of Analysis (COA) report.

Remarks: Specify any instruction or notes about the test. For example, you may specify the temperature at which this test should be conducted.

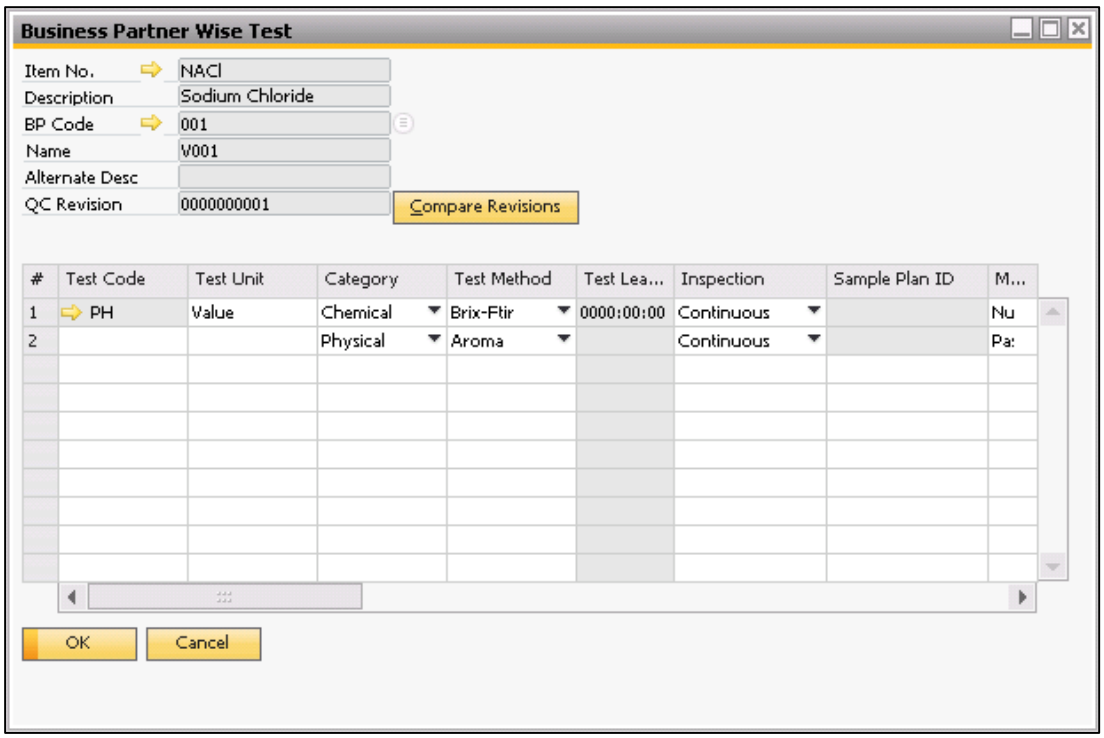
Purchase QC: Select this checkbox to implement QC inspection tests on the item during its receipt.

Production QC: Select this checkbox to implement QC inspection tests on the item after it is produced.

Sales QC: Select this checkbox to implement QC inspection tests on the item during its sales.

Inventory QC: Select this checkbox to implement QC inspection tests on inventoried items. The most common use is to make sure the item and lot are able to be used in production or shipped to a customer (meaning no expiry or damage.)

Business Partner Wise Test: Click this button to define QC tests at business-partner level. These tests will override QC tests defined at item level.



Header

Item No: View the unique identification code of the item for which the tests are being defined. The item code is drawn from the *Item Master Data* screen.

Description: View the description of the item from the *Item Master Data* screen.

BP Code: Specify the unique identification code of the business partner (usually a customer.)

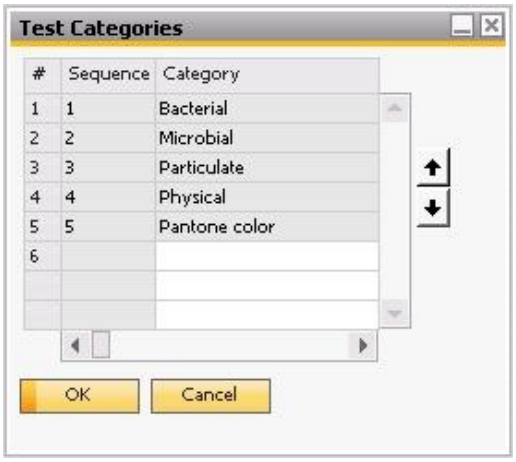
Name: View the name of the business partner corresponding to the *BP Code* selected.

Remaining field descriptions and use are the same as discussed earlier.

2.8.2 Test Categories

Use the *Test Category* screen to define groups or classifications for the test methods used in your business. You can always define new test categories as your business needs change.

Go To: Administration → Setup → Quality Control → Test Categories.



#: This column shows the serial number of the test.

Sequence: Use this system-generated field to view the sequence of test categories.

Category: Specify a unique name for the test category. For reporting purposes, the practical limit is 20 to 25 alpha-numeric characters.

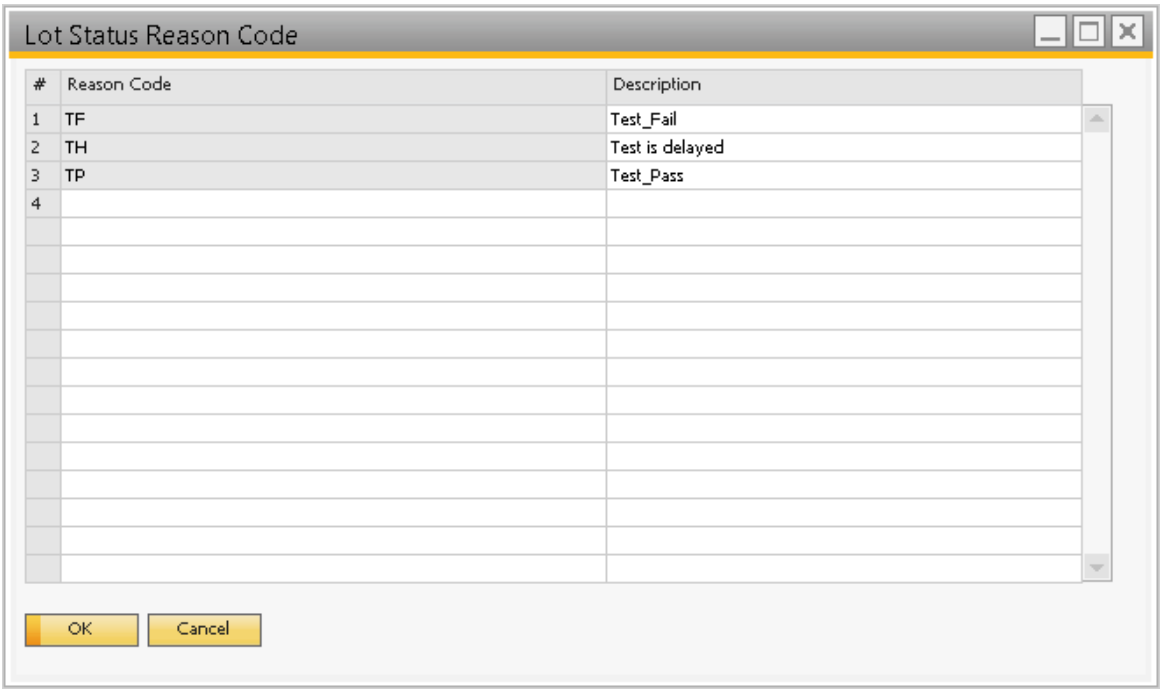
Update: Click the *Update* button to save the record.

Cancel: Click the *Cancel* button to close the screen without saving the record.

Re-Sequence Button: Use this button to change the order of the lines or rows within the screen. To change the sequence, select a line and then click the up or down arrow to move it to the desired location.

2.8.3 Lot Status Reason Code

On this screen you can maintain Reason Codes signifying the reason for changing the lot status of an item. The *Reason code* you maintain here can be selected on the *Change Lot Status* screen.



Reason Code: A unique identifier for the reason being added. The code can be alpha, numeric, or alpha-numeric, depending on your business needs.

Description: A description of, or explanation for, the reason code.

Update: Click the *Update* button to update the newly added reasons in the master.

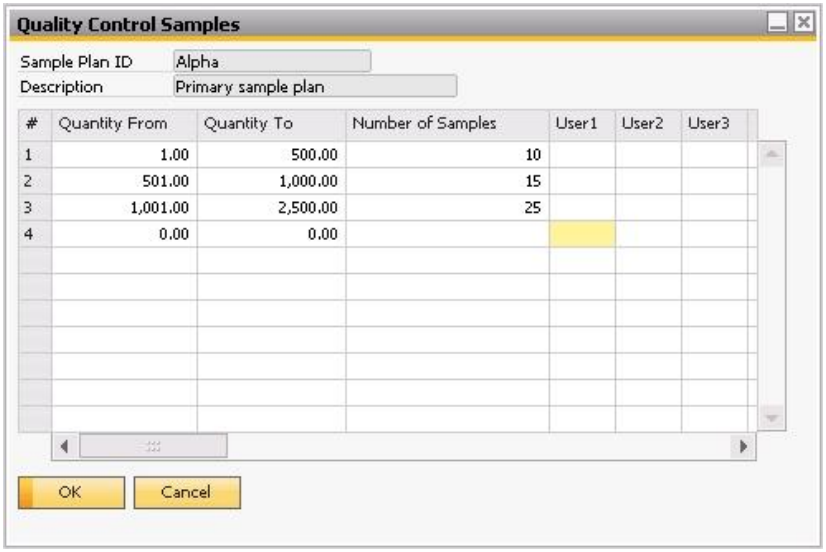
2.8.3.1 Adding Reasons for QC Pass or Failure

1. Specify a unique code for each reason in the *Reason Code* column.
2. Enter an appropriate reason in the *Description* column.
3. Click the *Update* button to add the reasons.

2.8.4 Quality Control Samples

The *Quality Control Samples* screen lets you define a sample plan to inspect a partial quantity of an item rather than the entire batch. You can define the number of samples that need to be drawn based on either receipt or production quantity. These values can be updated at any time as your business needs change.

Go To: Administration → Setup → Quality Control → Quality Control Samples.



Sample Plan ID: A unique ID for the sampling plan.

Description: A description of the sampling plan.

Quantity From and Quantity To: The range of quantities for which samples need to be taken.

Number of Samples: Specify how many samples need to be taken for a given quantity range.

OK: Click the *OK* button to save the record.

Cancel: Click the *Cancel* button to close the screen without saving the record.

2.8.4.1 Creating a QC Sampling Plan

1. Enter a unique sampling plan ID in the *Sample Plan ID* field.
2. Enter a description of the sampling plan in the *Sample Plan Description* field.
3. Define the sampling plan by specifying quantity intervals for drawing samples. (Each row pertains to an interval.)

4. Specify the quantity range from which sample(s) need to be drawn in the *Quantity From* and *Quantity To* fields.

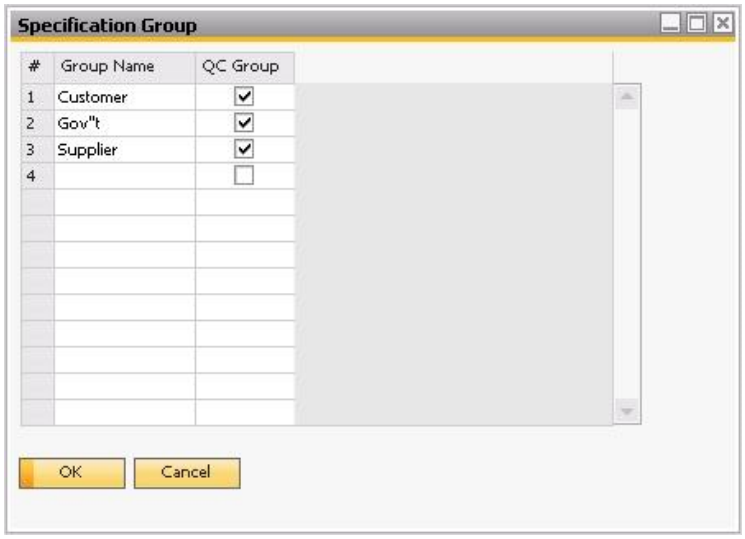
5. Specify the number of samples to be drawn in the *Number of Samples 1* field.

6. Click the *Add or Update* button to save the *QC Sample* record.

2.8.5 Specification Group

In the *Specification Group* screen you can define categories that help you classify the characteristics of the products, processes, or services required by your customers. The groups defined here would be listed in the *Group Name* drop-down on the *Specifications* screen.

Go To: Administration → Setup → Quality Control → Specification Group.



Group Name: The name of the specification group you need to create.

QC Group: Check this option if the respective group can be related to a QC test.

Update: Click the *Update* button to save the record.

Cancel: Click the *Cancel* button to close the screen without saving the data.

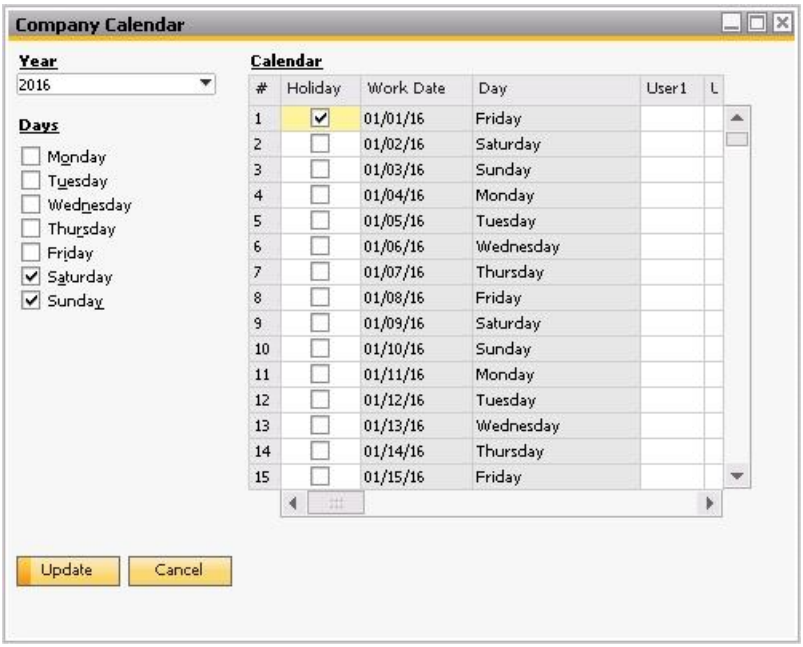
2.9 Planning Setup

The *Planning Setup* utility helps you configure your planning options. Use these screens to define your planning buckets and options for the planning engine, and to group multiple warehouse demand to a single production warehouse.

2.9.1 Company Calendar

Go To: Administration → Setup→ Planning → Company Calendar.

The *Company Calendar* screen allows you to define the non-working days and holidays within a calendar year. The calendar for a given year should be set up in advance of that year. The calendar serves as the base calendar for running MPS/MRP.



Year: Select the required value from the drop-down menu. Note that you must set up each year's calendar separately. A calendar can be modified once it is set up, if need be.

Days: Select (check) the non-working days in the week. The system will apply non-working days to your calendar when you save the record by clicking the *Update* button.

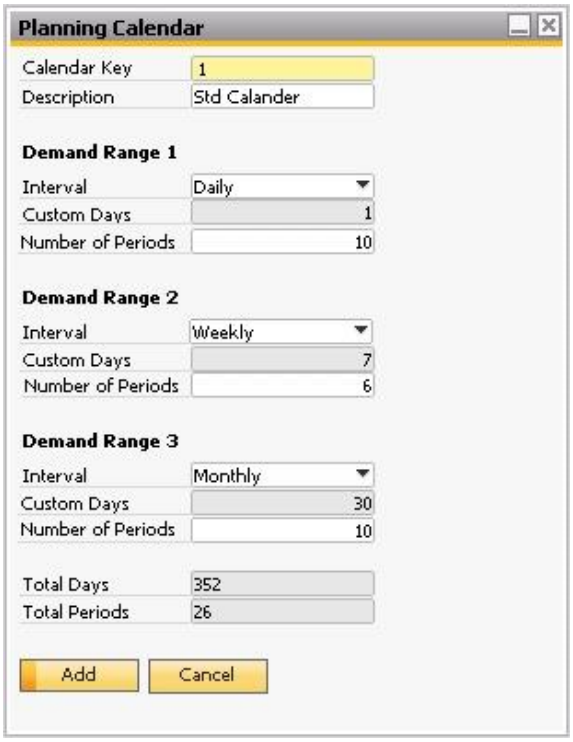
Holiday: Select (check) any other non-workdays for the year.

Update: Click *Update* to save your edits or click *Cancel* to exit without saving changes.

2.9.2 Planning Calendar

Go To: Administration → Setup→ Planning → Planning Calendar.

Use the *Planning Calendar* to define the way planning data is collected and displayed. The system supports three levels of planning buckets. For example, you can choose to see the first two weeks in daily buckets, the next six weeks in weekly buckets, and future data in a monthly time bucket.



Calendar Key: Enter a unique identifier for the *Planning Calendar*. Maximum of 10 alpha-numeric characters.

Description: Provide a description for the *Planning Calendar* in this field.

Interval: Four interval types are supported:

- **Daily:** Lets you define a daily time bucket.
- **Weekly:** Lets you define a time bucket for a calendar week (from Monday to Sunday).
- **Monthly:** Lets you define a time bucket for a calendar month.
- **Custom:** Lets you define a custom bucket. You can enter any number of days you want.

Demand Range1 to Demand Range 3

Interval: Select an interval from the drop-down menu.

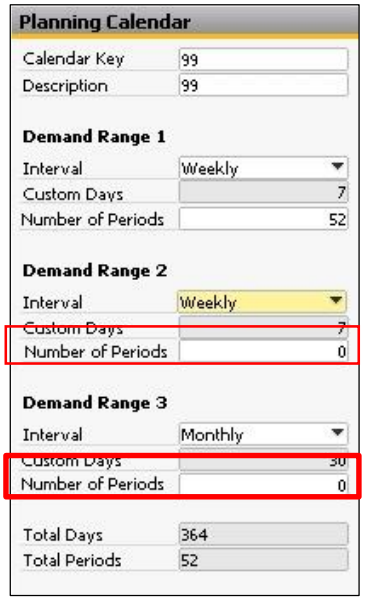
Customs Days: If you have selected *Custom* as an interval, enter the desired number of days. Otherwise this field will default to the number of days representing the interval you have chosen (1 for *Daily*, 7 for *Weekly*, or 30 for *Monthly*).

Number of Periods: Enter the number of buckets you need to define for this range.

Total Days: This read-only field displays the total number of days across all the demand ranges.

Total Periods: This read-only field displays the total number of periods entered across all three demand ranges.

You do not need to define data for all three demand ranges. Below is an example of a single range in weekly buckets covering a period of one year:

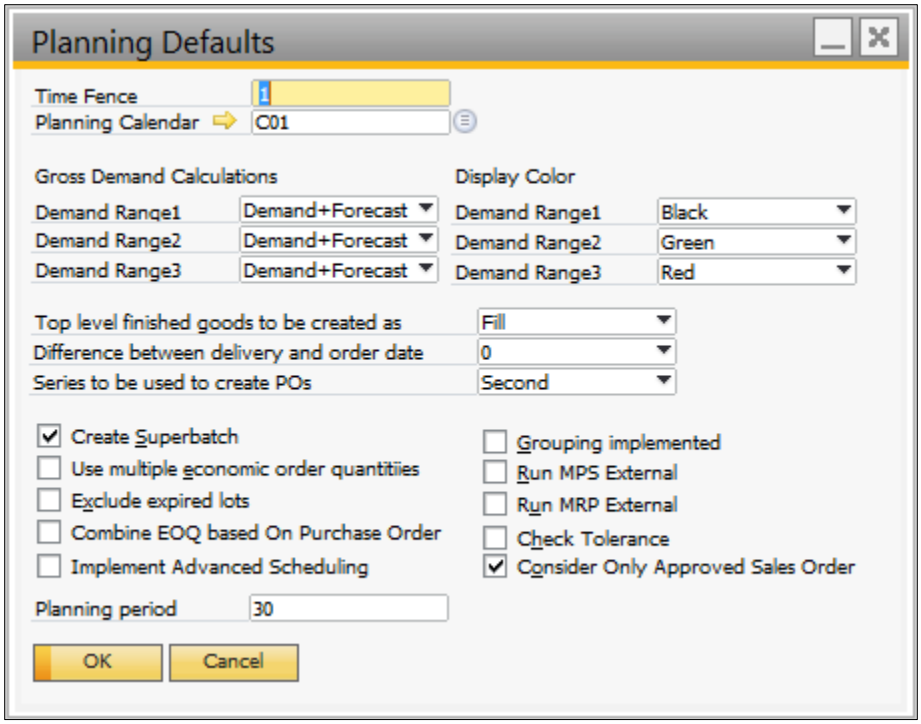


2.9.3 Planning Defaults

Go To: Administration → Setup → Planning → Planning Defaults.

The settings made here impact how the system suggests and displays planning data.

⚠ At least one *Planning Calendar* must be entered before you begin working on the *Planning Defaults* screen.



Time Fence: Define a 'no changes' period in days. The planning system will flag any recommendation falling within this period as an exception. In the example above, we have set a 3-day 'no changes' period. Any order recommendations that fall within the next 3 days must be evaluated on a case-by-case basis.

Planning Calendar: Select a *Planning Calendar*.

Gross Demand Calculations

Demand Range1: The value in this field decides how gross demand for a range will be calculated. The value can be one of the following:

- **Demand:** This option is generally used for the shortest (near) range planning. If this option is selected, the gross demand would be calculated by adding up the following four types of demand:
  - Sales Orders.
  - Warehouse Transfers (the 'transfer out' from this warehouse).
  - MPS type raw materials remaining to be issued to production batches that are not on Hold.
  - The quantity by which On Hand Quantity is less than the Safety Stock as defined at the *Item Master Data* screen.
- **Forecast:** This option is generally used for longer range planning. If this option is selected, the gross demand will be equal to the demand generated only from forecast entries with Active status.
- **Demand and Forecast:** If this option is selected, the gross demand would be calculated by adding up the following:
  - Sales Orders.
  - Warehouse Transfers (the 'transfer out' from this warehouse).
  - MPS type raw materials remaining to be issued to production batches that are not on Hold.
  - The quantity by which On Hand Quantity is less than the Safety Stock as defined at the *Item Master Data* screen.
  - Forecast entries with an Active status.
- **Greater of Demand or Forecast:** If this option is selected, the gross demand will be equal to the greater of either demand or forecast. This option is generally used for intermediate range planning.

Demand Range2: The value in this field decides how the gross demand for this range will be calculated (see Demand Range1, above).

Demand Range3: The value in this field decides how the gross demand for this range will be calculated (see Demand Range1, above).

Display Color

Demand Range1: The value in this field decides the color to be used for values on the *MPS Planning Worksheet*. The default color setting for this range is Blue.

BatchMaster recommends using different colors for different demand ranges, to make differentiation of values in the worksheet easier to identify.

Demand Range2: The value in this field decides the color to be used to display values in the *MPS Planning Worksheet* for Demand Range2. The default color setting for this range is Black.

Demand Range3: The value in this field decides the color to be used to display values in the *MPS Planning Worksheet* for Demand Range3. The default color setting for this range is Cyan.

Top level finished goods to be created as: Available options are *Mix* and *Fill*.

- **Mix:** Choose this option if your company produces finished goods directly, that is in a single production run.
- **Fill:** If your company produces bulk first and then fills it into finished goods using fill tickets then choose this option. Using this option will instruct the system to consume existing on-hand inventory of bulk.

Difference between delivery and order date (in days): The value in this field will decide whether order delivery is possible on the same day as order completion. When the value is set as 0 (zero), BatchMaster ERP understands that the completed orders can be delivered on the same day as they are produced. When the value is 1 (one), BatchMaster ERP understands that a gap of one day is required between completion of production and delivery.

Series to be used to create POs: Select the numbering series the system should use when transferring purchase recommendations to POs.

Create SuperBatch: Use this option to generate SuperBatch recommendations instead of normal production batches. When a SuperBatch is created, the system automatically creates low-level batches (intermediates) along with the top-level batch.

If you select this option, the system will not allow you to convert low-level intermediates to production batches because a SuperBatch will create them automatically.

Use multiple economic order quantities: Select this option when you want the system to use a table to compute economic order quantities. See the *Planning User Guide* for more information.

Grouping Implemented: Use this option when you want to consolidate demand from multiple warehouses to a single production warehouse. When you choose this option, the system will

consolidate all requirements from various warehouses and generate production orders at a single warehouse.

Example: If production warehouse 01 is grouped with warehouses 02 and 03, when there is a demand for an item (make-type) in warehouse 02 or 03, MPS orders will be generated for the item in warehouse 01 to fulfill the demand. A similar scenario occurs with MRP orders for buy-type items.

Run MPS External: Select this option if you want to run MPS in console mode. It lets you continue working in the system while MPS is running. When you click "run MPS" he system populates a temporary table with the required data and uses that table to perform calculations. When the MPS run is complete, the table is emptied and ready for the next run. The same process is used for "Run MRP External."

Exclude expired lots: If this check box is selected, BatchMaster ERP would exclude any expired lots from on-hand calculations while running planning engines.

Combine EOQ based on Purchase Order: If this check box is selected, for a 'Buy' type of item which has multiple demands the system will generate a single planned order for the total suggested order quantity and for the Economic Order Quantity.

Implement Advanced Scheduling: Selecting it, the system considers that the process cell has a finite capacity so it will always check the availability of the process cell, based on its *Ranking*, and accordingly schedule the batch.

On the *MPS dashboard*, in the *Planned Production Orders* tab, the *Schedule Start Time*, *Schedule End Time*, *Confirm Start Time* and *Confirm End Time* fields will be available to view the system-computed Schedule Start and End Time of the batches. If needed, you can modify the *Confirm Start Time* and *Confirm End Time* and *Save* it to schedule the batches at your required time.

Check Tolerance: If this check box is selected, the system will check the *Minimum Tolerance Quantity* defined for the item on the *Maintain MPS item/ Maintain MRP items* screen, before creating the MPS/MRP order.

Consider only Approved Sales Order: If you select this checkbox then, at the time of planning, the planning engine will only include approved Sales orders. Sales orders/Draft documents whose approval is pending will be excluded from planning.

Planning Period: Specify the number of days for which MPS/MRP needs to be run. The value you specify here will be added to the *Demand Start date* of the item on the *Run MPS/MRP* screen and accordingly calculates and shows an item *Demand End Date*.

2.9.4 Warehouse Groups

Go To: Administration → Setup → Planning → Warehouse Groups.

Use this screen to group multiple warehouses to a single production/purchase warehouse. You can define several such warehouse groups to perform generalized planning of materials during MPS/MRP. It broadens the scope of scheduling required materials considering their availability at any of the group locations, so an accurate forecast can be predicted by taking into account exact Demand/Supply generated within a particular warehouse group.

Production warehouse: Select the production warehouse that will fulfill demand from all warehouses selected in the table.

Purchase warehouse: Select the warehouse where all POs will be created.

The production warehouse caters to: Select warehouses whose demands will be consolidated to the Production and Purchasing warehouses specified above.

⚠ You can associate a demand warehouse with only one Production Warehouse.

Add/Update: Click *Add/Update* to save your edits.

Cancel: Click *Cancel* to exit the screen without saving changes.

2.10 System Initialization

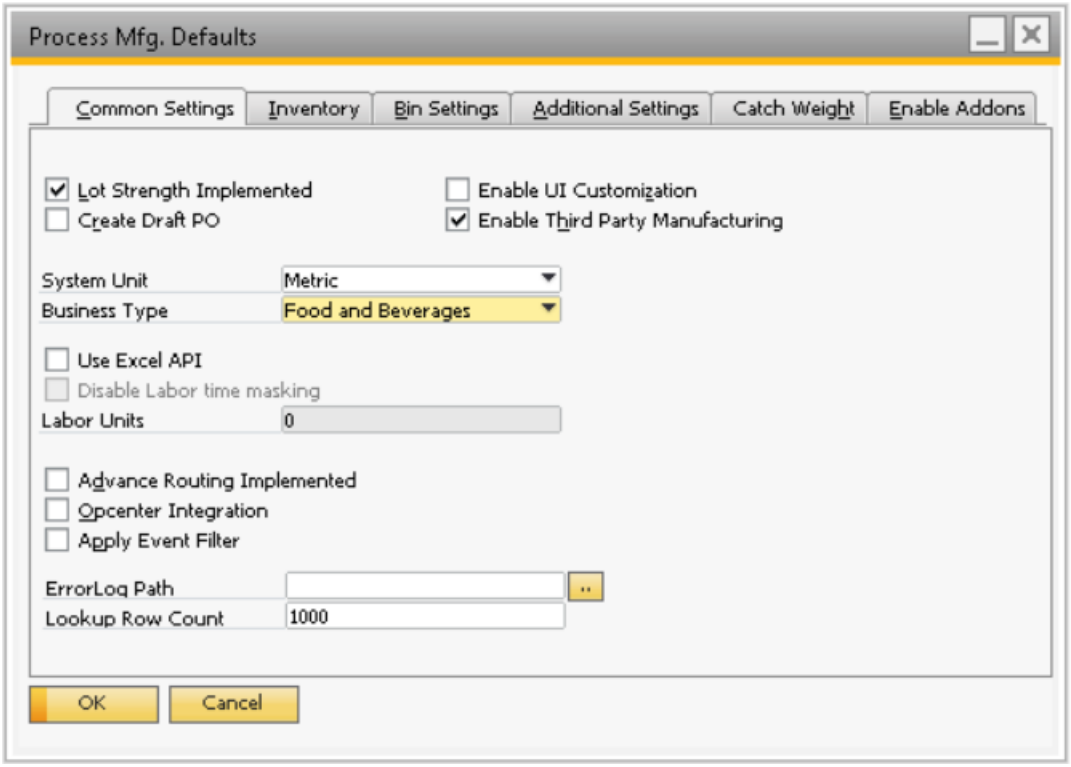
2.10.1 Process Mfg Defaults

Using the *Process Mfg. Defaults* screen , you can specify certain default parameteres and use them system-wide. On this screen, some basic settings such as bin settings and vertical-related settings can be defined.

Go To: Administration → Setup → System Initialization → Process Mfg Defaults.

2.10.1.1 Tab Details

Common Settings Tab



The settings in this tab are reflected in the *Name of Business* tab under the *Process Mfg. Setup Wizard*.

Lot Strength Implemented: Check this option, if required, to implement the lot strength feature in BatchMaster ERP.

Create Draft PO: Not currently supported.

Enable UI Customization: Select this option to use the screens listed under *Customization* menu and customize BatchMaster ERP, based on needs. Customization includes adding customized fields in the desired screen and customized menu in the desired module.

Enable Third Party Manufacturing (Available with Nutra Vertical)**:** Select this option to enable third-party manufacturing for the production module. On marking this checkbox and updating settings, the system enables third-party manufacturing options on the *Production Defaults* screen - *Batch Options* tab.

The *Enable Third Party Manufacturing* option is available with the nutra vertical. Refer *BME-B1 18.2 Nutra Adv Features User Guide* for more details.

System Unit: Specify the system of units, depending on the country in which the customer resides. The unit systems available are: *US, British* and *Metric. Consultants* can make the choice based on the customer's country or based on the manufacturer's preference.

Business Type: Specify the nature of customer's business using the drop-down menu.

Use Excel API: BatchMaster DTW, Forecast Entry now support the Excel API to import/export data. Selecting this checkbox, they work independently from the Microsoft Excel and Access Database Engine for data transfer.

Following are the software requirements to use this feature

1.) .NET Framework Version 4.6.1(Mandatory)

2.) LibreOffice (Version: 6.0.7.3) (Recommended)

Disable Labor Time Masking: You can select this checkbox to deactivate the labor time masking. Selecting it, you can define the labor as a numeric unit. Using the *Labor Units* dropdown you can select the Labor units as Hours, Minutes or Seconds. The Unit you select here will be used as the unit to calculate the Labor time on the basis of the Start and End times you specify on the *Labor Entry* screen.

- Leaving this checkbox unchecked will consider the default labor masking as *DD:HH:MM*
- It is a one-time setting and cannot be modified if a Labor transaction is performed in the company database (Formula, BOM, Labor Entry/Production).

Advance Routing Implemented: Select this checkbox to activate Advance Routing in the database.

Opcenter Integration: Check this option to hide the option of Demand pegging, Production Scheduling Defaults and Production Scheduling Board Menu on the lower grid of the MPS Dashboard and MRP Dashboard. In order to view the changes user need to relogin in SAP.

Apply Event Filter: Check this option to Apply Event Filter feature that can help you to increase efficiency and improve accuracy of the screen while retereving data from the system. Applying event filters can help you manage your system more effectively, with improved security of your system.

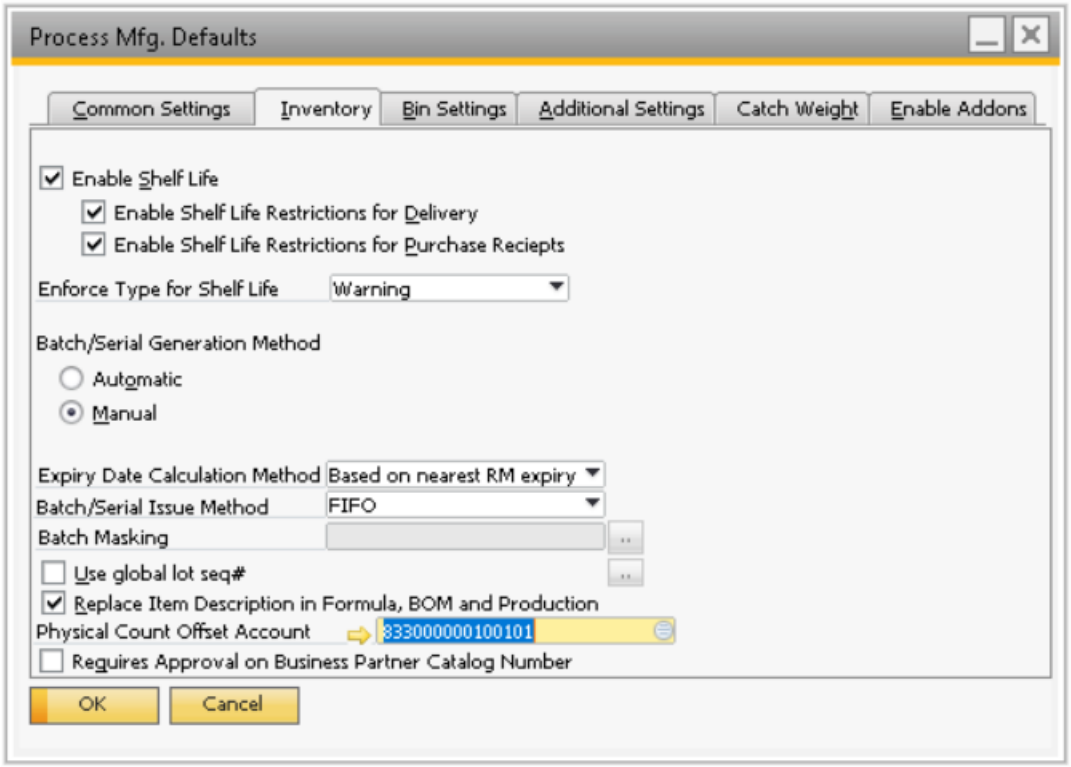
Error Log Path: Specify the path where you want to keep the error log file generated in BME B1. Here note that you must have full access priviledge on the specified folder, else system will keep the log in the Public folder. Also, you are required to restart the addon after entering/modifying the path.

Lookup Row Count: Specify a numeric value that determines the maximum number of records displayed in BMM lookup screens. The default value of this field is 1000 but you can specify any positive numeric value in the range of 0 to 10000.

OK: Click this button to save the record.

Cancel: Click this button to close the screen without saving the settings made.

Inventory Tab



Enable Shelf Life: Check this option to implement the shelf life feature. Only if the *Enable Shelf Life* checkbox is selected, in *Inventory* tab of *Process Mfg. Defaults* screen, will the shelf life feature will be active, and the details will be visible in the *Item Master Details* screen. Also, the dependent checkboxes will be inactive, if this checkbox is not selected.

Enable Shelf Life Restriction for Delivery: Check this option to apply shelf life restrictions on product shipment and delivery. A product whose shelf life expires prior to the delivery date will trigger a warning message or a blocked transaction message at time of shipment.

Enable Shelf Life Restriction for Purchase receipts: Check this option to apply shelf life restrictions on purchases. At the time of receipt, the user must enter the lot expiry date. The system will then start will then calculate:

[Receipt date] + [Number of shelf life days from the item master details screen] = "X".

If the item's shelf life expires prior to "X", the system will display a warning message or a blocked transaction message during the receiving transaction.

Enforce Type for Shelf Life: Select the desired type of restriction that you want to apply for shelf life. The drop-down menu of this option includes two alternatives: Warning and Block. Warning will continue the process, but with a warning. If blocked, the process will terminate with a message.

Batch/Serial Generation Method: Specify the default batch/serial generation method: *Manual* or *Automatic for a new item*. When a new item definition is created in item master the values are defaulted there. The option *Manual,* if selected, enables you to manually enter a serial or lot number at the time of maintaining Batch/lots. While the option *Automatic* signifies that serial/lot number will be generated automatically, as per the masking defined.

Expiry Date Calculation Method: Specify the default method to calculate the expiry date of finished goods. The options available are *Expiry days* and *Based on nearest Raw material expiry*.

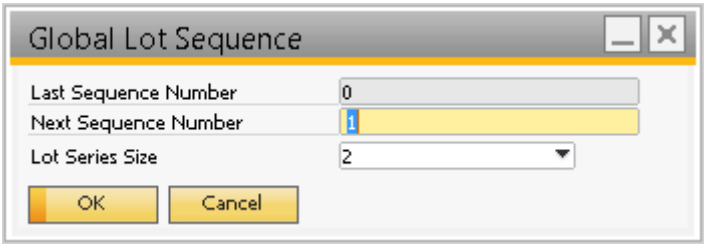
- **Expiry**: The expiry date of the finished good will be computed based on the expiry days mentioned for the item on the *Item Master Detail* screen .
- **Based on Nearest RM Expiry**: The expiry date of the finished good is taken as that of the raw material that has the nearest expiry date.

Batch/Serial Issue Method: Specify the default method for issuing batches/items. The options available are *FEFO, FIFO* and *LIFO*.

- **FEFO**: *FEFO* stands for First Expiry First Out. In this method, the warehouse manager allocates the items/batches with the nearest expiry date, in order to keep the stock fresh which in turn also reduces inventory wastage.
- **FIFO**: *FIFO* denotes First In First Out. The inventory lots are issued based on the admission date on which they are received. In other words, the lot that was received first, will be issued first.
- **LIFO**: *LIFO* denotes Last In First Out. In this method, the lot that was received last is issued first and the earlier receipts are issued subsequently.

Batch Masking: Define a number format in which the batch/serial numbers for the item will be generated. This field gets enabled, if you define the *Default batch/serial generation method* as *Automatic*. A look-up of defined batch masks is available.

Use Global Lot Seq #: If you check this option the system will use the global lot sequence for all items instead of an item specific sequence. On clicking the ellipses button next to the field, the Global Lot Sequence screen appears to specify the Last sequence number being used, next sequence number to be used and the lot series size.



Replace Item Description in Formula, BOM and Production: If you select this checkbox, if a user changes the description of an item on the *Item Master Data* screen, the modified description of the item will be displayed on screens wherever the item has been used in Formula, BOM, and Production (including closed batches but excluding archived batches). This feature is irreversible. Therefore, if the selection is removed after updating the item description, it will not be reversed to the initial value.

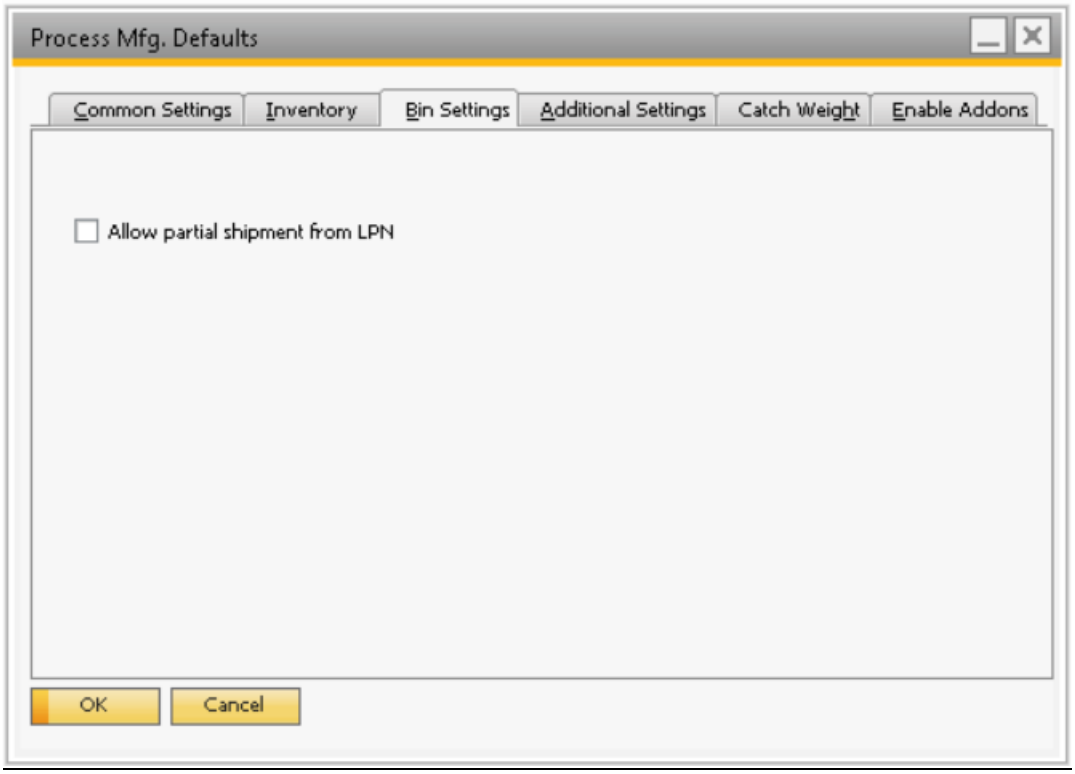
The name is not changed in the existing records of formula, BOM, and production. The new name is defaulted when you create a new record.

Physical Count Offset Account: This field is used to specify the Physical Count Offset Account number that will be used as the Offset Account for Physical Counting module of BMM. If this account is not specified, then the system will pick the offset account according to the usual GL determination policy Item/Item Group/Warehouse, as the case may be.

Requires Approval on Business Partner Catalog Number: Use this option to apply the approval procedure on the *Business Partner Catalog Number* screen. Implementing the approval procedure further opens the *Business Partner Catalog Numbers-Draft* screen to configure a Business Partner to your item number.

Add/Update: Click this button to save the record, or click **Cancel** to abort.

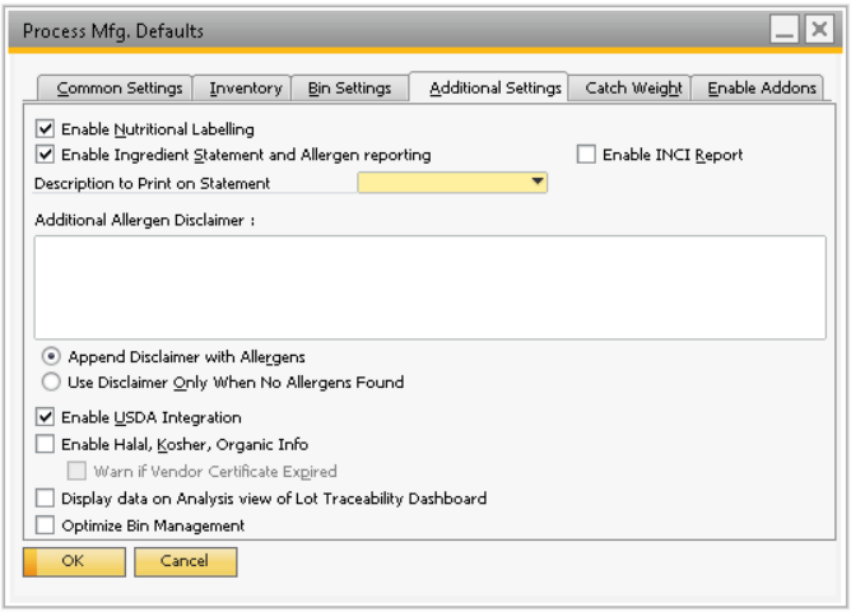
Bin Settings Tab



Allow partial shipment from LPN: Select this option for allowing LPNs to split.

Additional Settings Tab

For example, if you choose your business as one related to Nutrition, then Nutritional Labeling can be installed. As a result, the modules, screens, and features specific to food vertical, such as Nutritional Labelling, get added in BatchMaster ERP. The settings in this tab reflect in the *Name of Business* tab under the *Process Mfg. Setup Wizard*.



Enable Nutritional Labeling: Select this option to enable Nutritional Labeling.

Enable Ingredient Statement and Allergen Reporting: Select this option to enable Ingredient Statement and Allergen Reporting. Select this button to enable creating reports that contain information pertaining to allergens along with the statement of ingredients.

Description to Print on Statement: Select the type of description, which will be printed on the statement detailing the information about the product. The options available are: Description, Foreign Name, and Alternate Description.

Enable INCI Report: Select this option to print the INCI report for any Finished Goods or Formula. The system will enable the INCI Report under the Formulation Module.

Additional Allergen Description: Enter allergen description based on your business requirements. Select one of the options available: *Append disclaimer with allergen*, and *Use disclaimer only when no Allergens found.*

Enable USDA Integration: Select this checkbox to enable integration of data based on USDA compliances.

Enable Halal, Kosher, Organic Info: Click this button to enable the *Certificate Details* tab on the *Item Master Details* screen.

Warn if Vendor Certificate expired: Select this checkbox to help the application warn you of expiration of certificate. This helps in better management.

Display data on Analysis view of Lot Traceability Dashboard: Check this option to display lot explosion details in an Analysis view as well as the Grid view. If you leave it unchecked, the system will hide the Analysis view and displays details only in the Grid view.

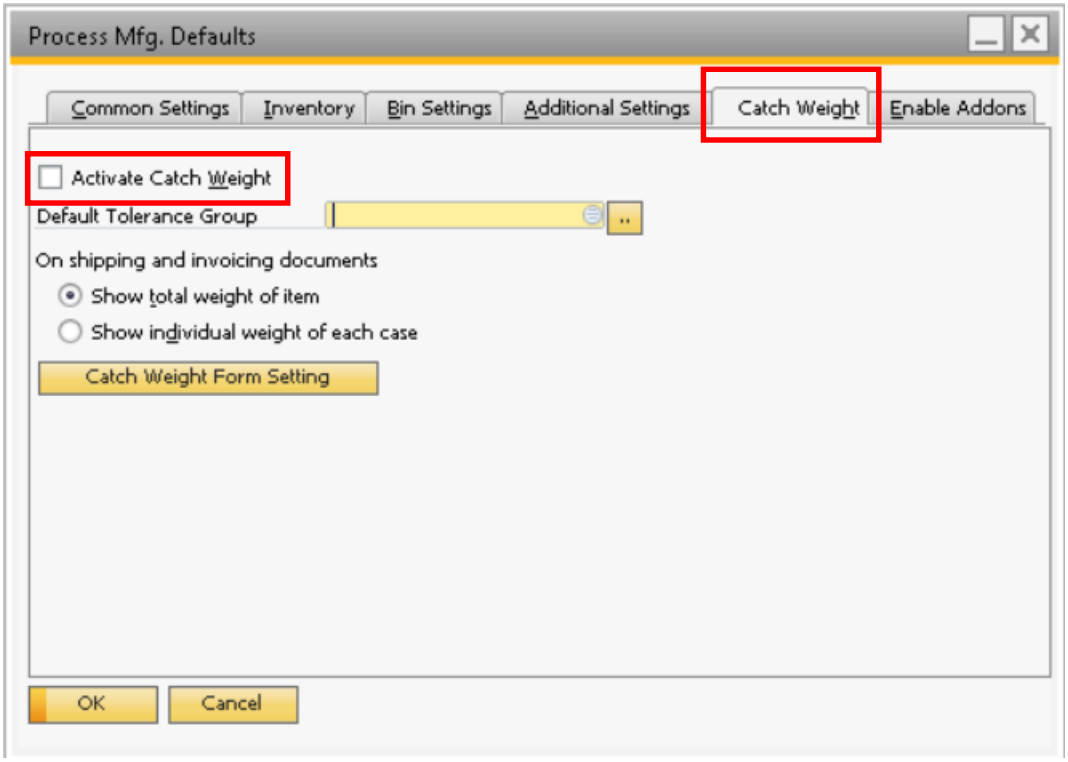
Optimize Bin Management: Check this option if you experience delays while executing transactions such as Goods Receipt or Raw Material Issue, etc. Activating this setting helps the system to reduce the transaction time and improves the overall transaction performance.

OK: Click this button to save the record.

Cancel: Click this button to close the screen without importing data.

Catch Weight Tab

On the *Process Mfg Defaults* screen, a new tab *Catch Weigh* is provided. From here you can *Activate Catch weight* on the database.



Activate Catch Weight*:* Select this checkbox to set the item as catch weight item.

Default Tolerance Group: Set the Tolerance Group required to get defaulted for the Catch Weight item, at the *Item Master Details* screen.

Show Total Weight of Item: If this option is chosen then total weight along with number of cases will be printed on *Bill of Lading* documents

Show Individual Weight of each Case: Select this option if you wish to print the weight of individual case on *Bill of Lading* documents.

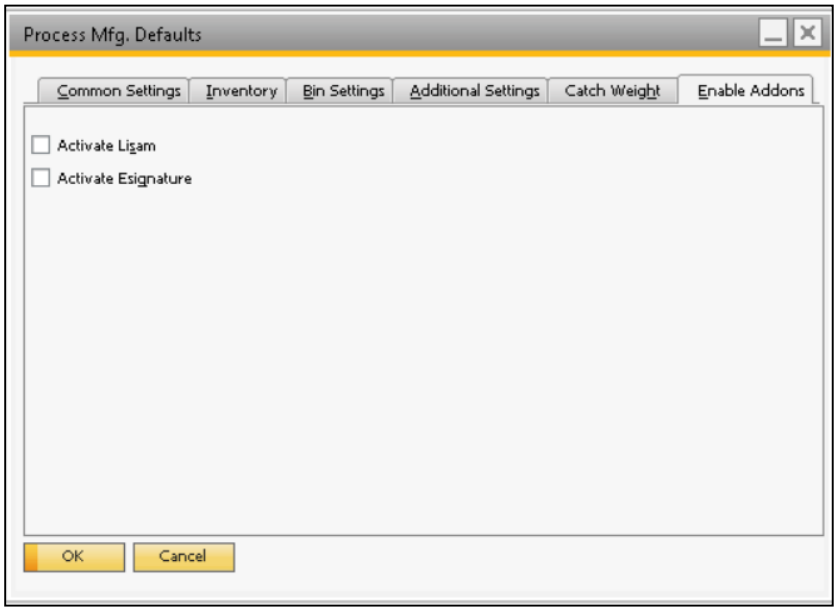
Catch Weight Form Setting: Choose this button to enable Catch Weight Fields on marketing documents.

If the setting does not work then you will have to reset form setting on Sales and Purchase documents and then choose this button again. You need to Re-login in BME B1 to see the effects of the setting.

Enable Addons Tab

Use this tab to configure *Lisam or E-Signature* add-ons. Enabling any of the add-ons eliminates the need for both add-ons' separate installations. Upon enabling the add-on settings, the system directly facilitates access to license assignment and database upgrade settings. This process streamlines enabling add-ons and simplifies the setup process for users/system administrators. Select one of the options, either *Activate Lisam* or *Activate E-signature*, i.e., one at a time.

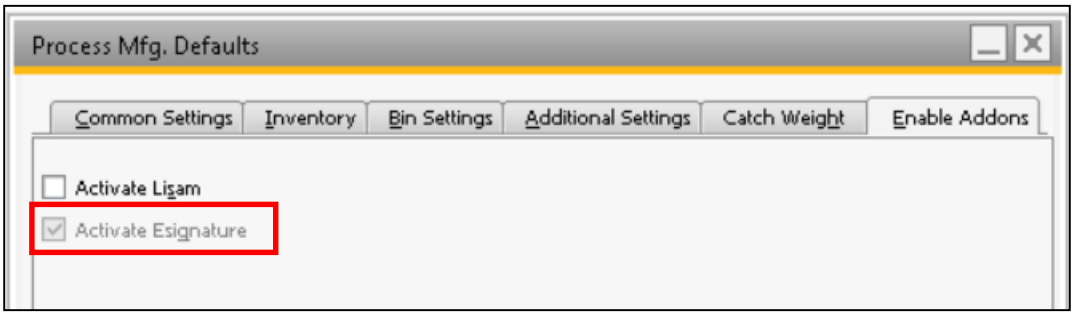
- Add-on activation is a one-time configuration, i.e., irreversible.
- Once Activate *Lisam* or *Activate Esignature* is checked and updated, the system eventually proceeds with license import and database upgrade steps accordingly.



Activate Lisam: Mark this checkbox to enable the Lisam add-on within the SAP application.

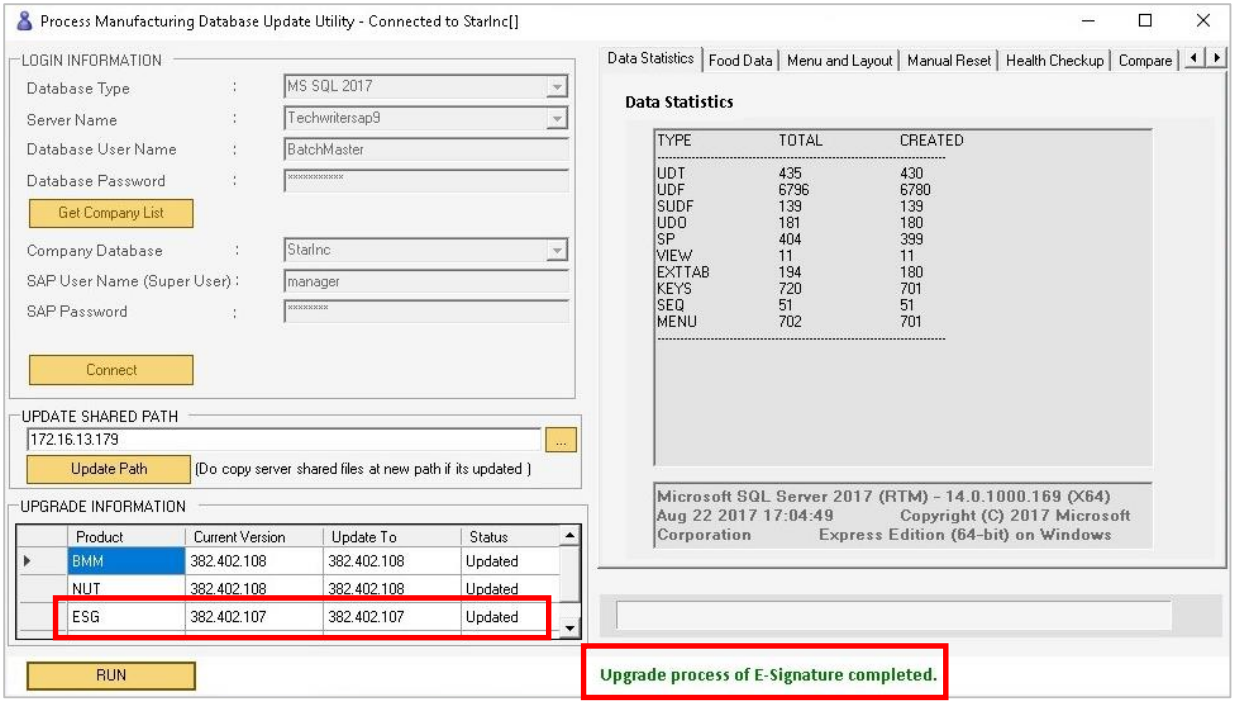
Activate Esignature: Mark this checkbox to enable the E-Signature add-on within the SAP application. Once selected and updated successfully, this setting becomes irreversible. Say, for example, if you

enable the *E-signature* add-on, the system disables the *Activate E-signature* option after updation as shown below:



Similarly, if you enable the *Lisam* add-on, the system disables the *Activate Lisam* option after the updation process.

Once *E-Signature* or *Lisam* is activated, it becomes a non-editable setting. This ensures compliance and consistency in regulatory or safety-critical environments. After successful license server installation, re-login to SAP. Upon re-login, the system automatically launches the *Process Manufacturing Database Upgrade Utility* to complete the database upgrade process for the selected E-Signature/Lisam activation. Upon upgrading database successfully, the system displays a success message as shown below:



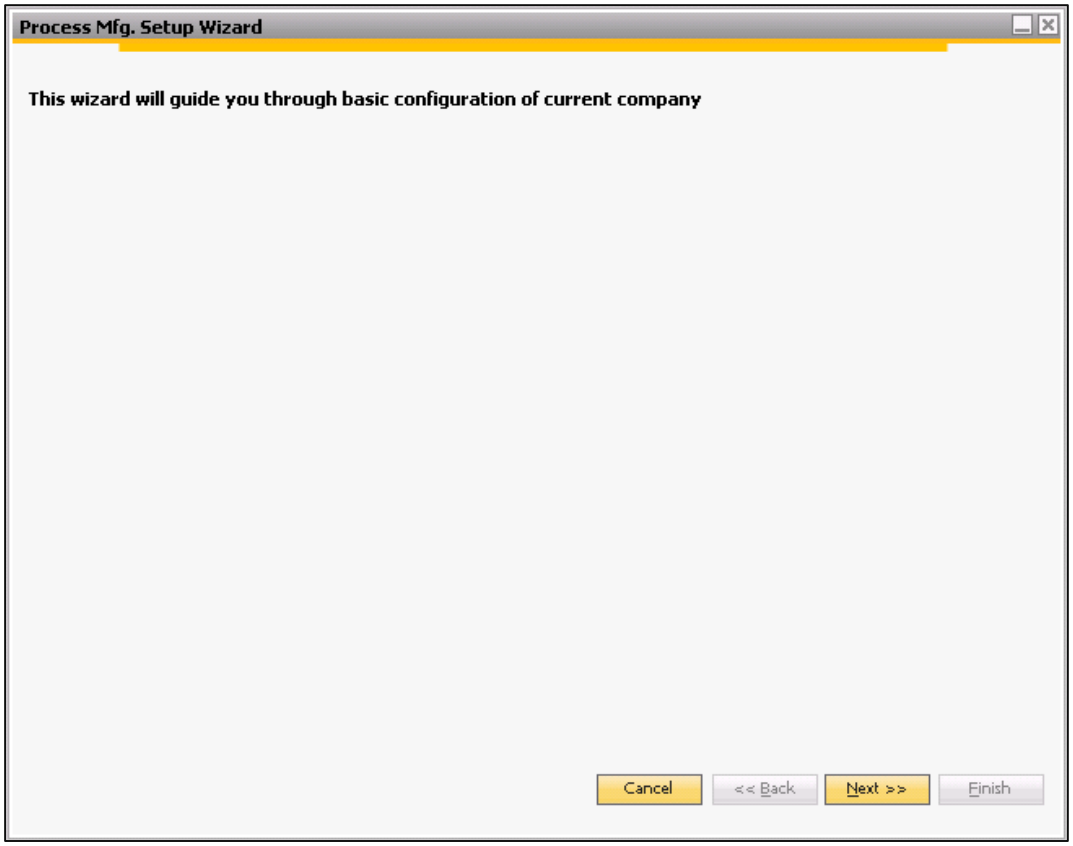
Manual intervention is restricted during the configuration process. The system automatically displays the License Import screen upon activation and subsequently triggers the *Process*

Manufacturing Database Upgrade Utility post-login. This ensures a smooth and guided setup process. For the existing users where either add-on has already been configured previously, the respective checkboxes appear auto-enabled on the *Enable Addons* tab of the *Process Mfg. Defaults* screen.

2.10.2 Process Mfg. Setup Wizard

The Process Mfg. Setup Wizard allows you to configure all BatchMaster ERP related settings.

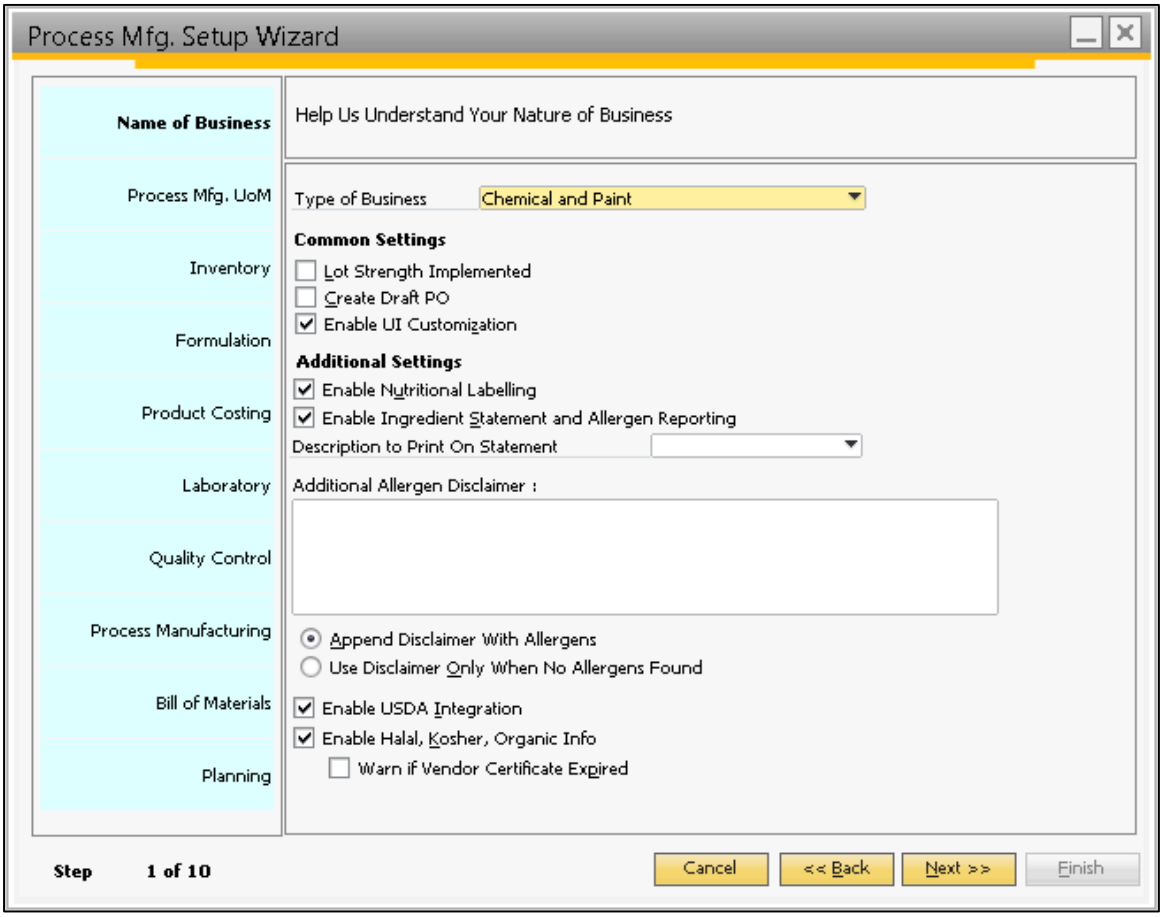
Go To: Process Mfg. Setup Wizard, click Administration→ Setup → System Initialization → Process Mfg. Setup Wizard. The Setup Wizard appears:



Click the *Next* button to begin the process. The wizard opens with the *Name of Business* window.

2.10.2.1 Name of Business

This window is used to determine the nature of your business.



Type of Business: Specify the nature of your business. The drop-down menu in this field displays the options: *Chemical and Paints, Food and Beverages, Life Sciences, Bakery, Cosmetics,* and *Other*.

Common Settings

Lot Strength Implemented: Check this option, if required, to implement lot strength feature in BatchMaster ERP.

Create Draft PO: (Not currently supported.) Check this option to create draft orders for the purchase orders created from the MPS/MRP module. The draft orders can then be added to purchase orders.

Enable UI Customization: Check this option to use the screens listed under *Customization* menu and customize BatchMaster ERP, based on the needs. The options include adding customized fields in the desired screen and customized menus in the desired module.

Additional Settings

Enable Nutritional Labeling: Select this checkbox to enable Nutritional Labeling. Under the default settings, this checkbox is deselected.

Enable Ingredient Statement and Allergen Reporting: Select this checkbox to enable Ingredient Statement and Allergen Reporting.

Description to Print on Statement: Select the type of description that will be printed on the statement detailing the information about the product. The options available are: Description, Foreign Name, and Alternate Description.

Additional Allergen Disclaimer: Enter an allergen disclaimer based on your business requirements. Select one of the options available: *Append disclaimer with allergen*, and *Use disclaimer only when no Allergens found.*

Enable USDA Integration: Select this checkbox to enable integration of data based on USDA compliances.

Enable Halal, Kosher, Organic Info: Click this button to enable the *Certificate Details* tab on the *Item Master Details* screen.

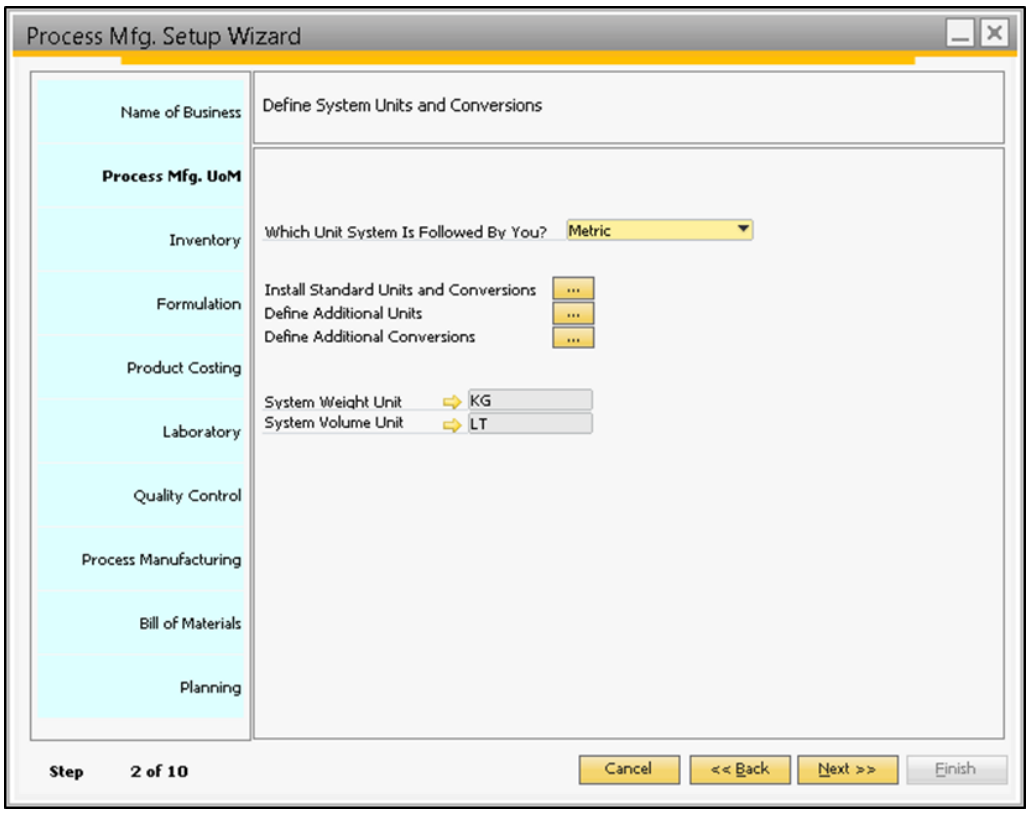
Warn if Vendor Certificate expired: Select this checkbox to have the application warn you when the vendor certificate expires.

Cancel: Click this button to close the wizard without saving the changes made on the screen.

Back: Click this button to navigate to the previous screen.

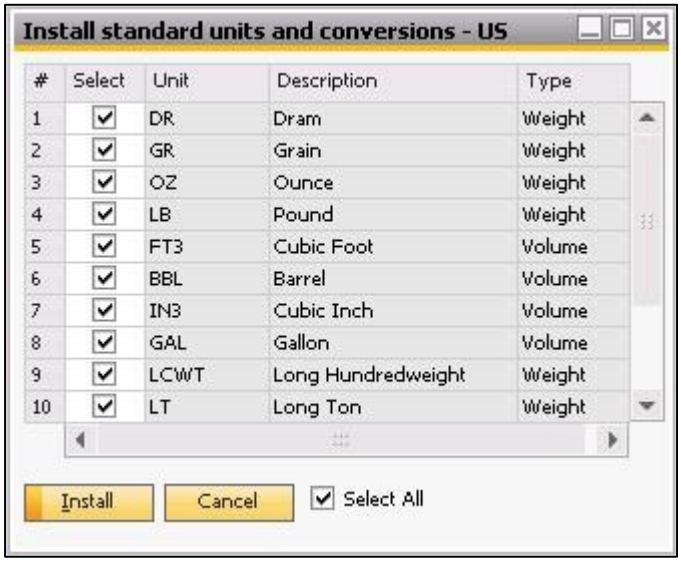
Next: Click this button to navigate to the next step of the wizard.

2.10.2.2 Process Mfg. UOM



Which unit system is followed by You?: Specify the system of units that you want to follow.

Install Standard Unit and Conversions: Based upon the unit system selected above, you can import standard units and their conversions from the BatchMaster ERP library to the database by clicking the *Browse* button available next to this field.



Define Additional Units: Click the *Browse* button available next to this field to display the *Unit Master* screen. Using this screen, you can add units of measure required for the business.

Define Additional Conversions: Click the *Browse* button available next to this field to access the *Global Unit Conversion* screen in which you can define conversions between additional units and system units of measure.

System Weight Unit: Click this button to select the *System Weight* of measure. If the stock unit of an item is different from the system weight unit, a conversion must be defined.

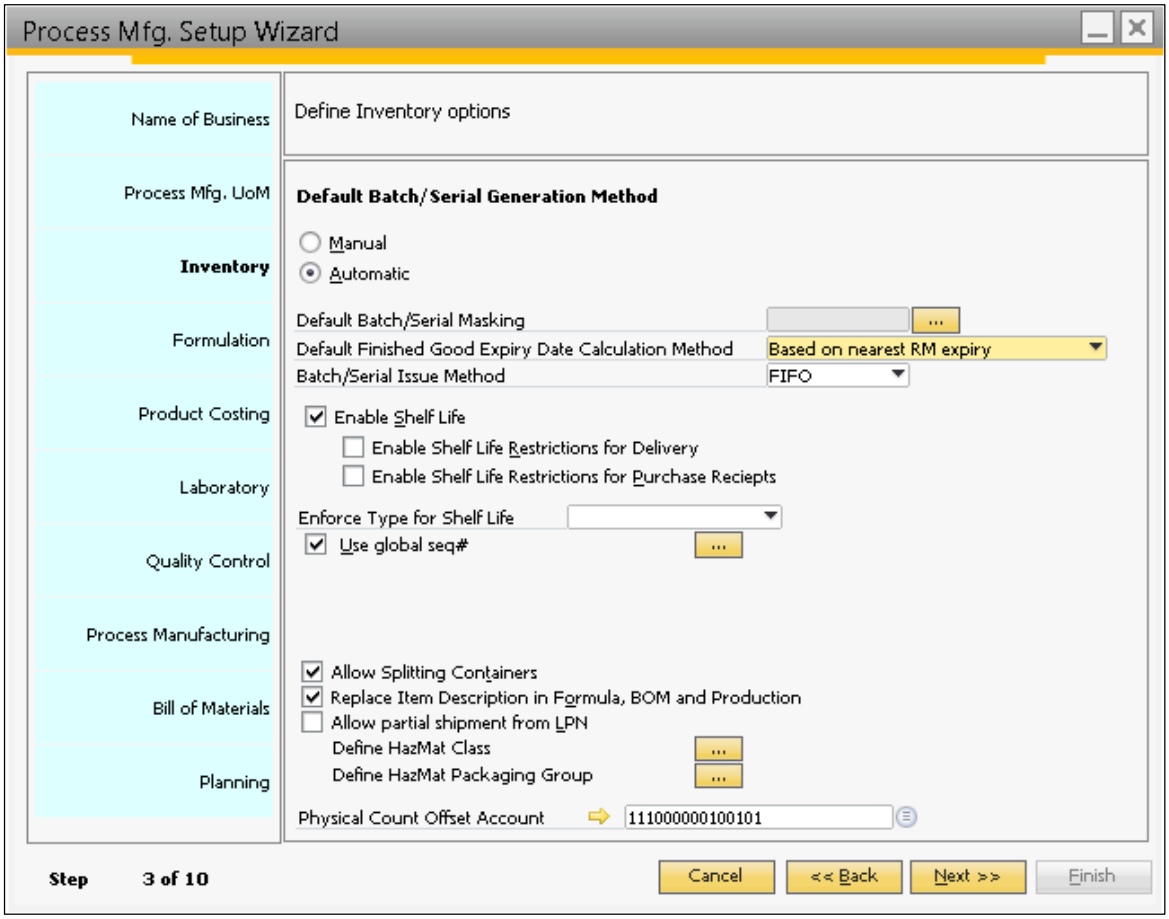
System Volume Unit: Click this button to select the *System Volume* of measure. If the stock unit of an item is different from the system volume unit, then a conversion must be defined.

Cancel: Click this button to close the screen without saving the changes.

Back: Click this button to get back to the previous screen of the wizard.

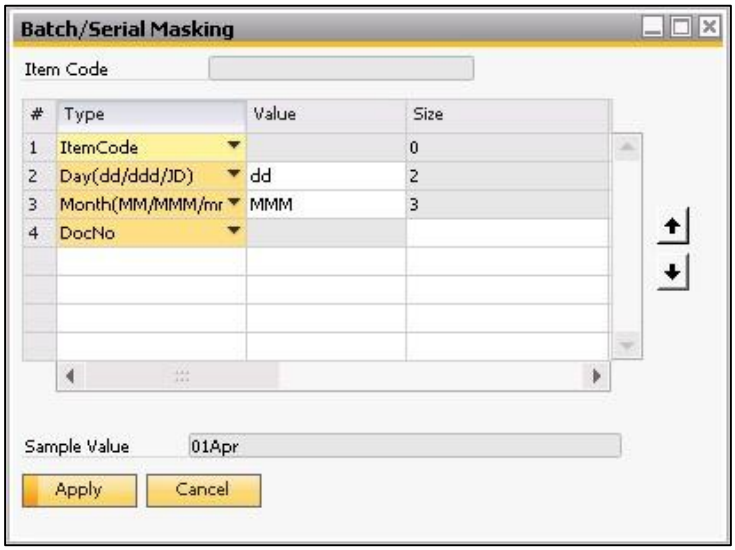
Next: Click this button to go to the next step of the wizard.

2.10.2.3 Inventory



Default Batch/Serial Generation Method: Specify the *Default Batch/Serial Generation Method: Manual* or *Automatic*. This option will be used by default while creating a new item master definition. The *Manual* option means you must manually enter a serial or lot number at the time of maintaining batch/lots. The *Automatic* option means that serial/lot numbers will be generated as per the masking defined.

Default Batch/Serial Mask: Define a number format in which the batch/serial numbers for the item will be generated. For example, the format may be like *Item code- Date-Month-Docno* or any other desired combination. This field is only enabled if you define the *Default batch/serial generation method* as *Automatic*.



Default Finished Good Expiry Date Calculation Method: Specify the default method to calculate the expiry date of the finished goods. The options available are *Expiry days* or *Based on nearest Raw material expiry*. If you opt for *Expiry days*, then the expiry date of the finished good will be computed based on Expiry days defined on the *Item Master Detail* screen. If you select the *Based on nearest raw material expiry* option, then the expiry date of the finished good is taken as that of the raw material that has the nearest expiry date.

Batch/Serial Issue Method: Specify the default method for issuing batches/items. The options available are *FEFO, FIFO* and *LIFO*.

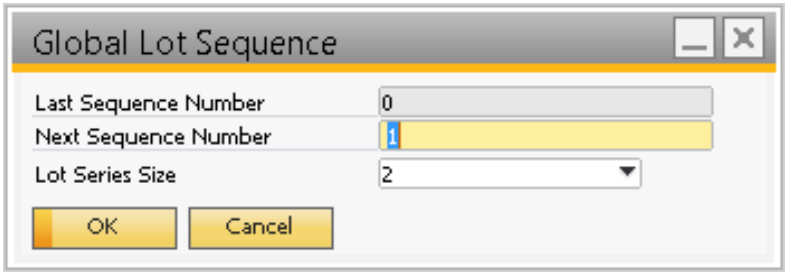
- **FEFO**: *FEFO* stands for First Expiry First Out. Under this method, the system issues the items/batches with the earliest expiry date.
- **FIFO**: *FIFO* denotes First In First Out. The inventory lots are issued based on the date on which they were received.
- **LIFO**: *LIFO* denotes Last In First Out. In this method, the lot which was received last is issued first and the earlier receipts are issued subsequently.

Enable Shelf Life: Check this option to implement shelf life feature. If enabled, shelf life details for an item are to be entered in the Item Master Details screen.

- **Enable Shelf Life Restriction for Delivery**: Check this option to apply shelf life restrictions on product shipment and delivery. Products whose shelf life expires before the delivery date will be subject to a warning message during delivery or will be ineligible for shipment.
- **Enable Shelf Life Restriction for Purchase receipts**: Check this option to apply shelf life restrictions on purchases. Products whose shelf life expires before the current date will be subject to a warning message during receipt or will be ineligible for receipt.

Enforce Type of Shelf Life: Select the action you want to enforce on products beyond their shelf life during shipments or receipts. The available options are *Warning* and *Block*. The option "warning" will continue the process but if "blocked", the process will terminate with a message.

Use Global Seq #: If you check this option the system will use the global lot sequence for all items instead of an item specific sequence. On clicking the ellipses button next to the field, the Global Lot Sequence screen appears to specify the Last sequence number being used, next sequence number to be used and the lot series size.



Replace Item Description in Formula, BOM and Production: If you select this checkbox, when a user changes the description of an item on the *Item Master Data* screen, the modified description of the item will be displayed on the *Formula Entry*, *BOM Entry* and *Batch Entry* screens (including closed batches but excluding archived batches). This feature is irreversible.

Define Hazmat Class: Use the *Browse* button available here to define a new hazmat category.

Define Hazmat Packaging Group: Using this button you can define a new hazmat packaging group to indicate the degree of risk a hazardous material may pose in transport in relation to other materials in that hazard class.

Physical Count Offset Account: This field is used to specify the Physical Count Offset Account number that will be used as the Offset Account for Physical Counting module of BMM. If this account is not

specified then the system will pick the offset account according to the usual GL determination policy Item / Item Group / Warehouse, as the case may be.

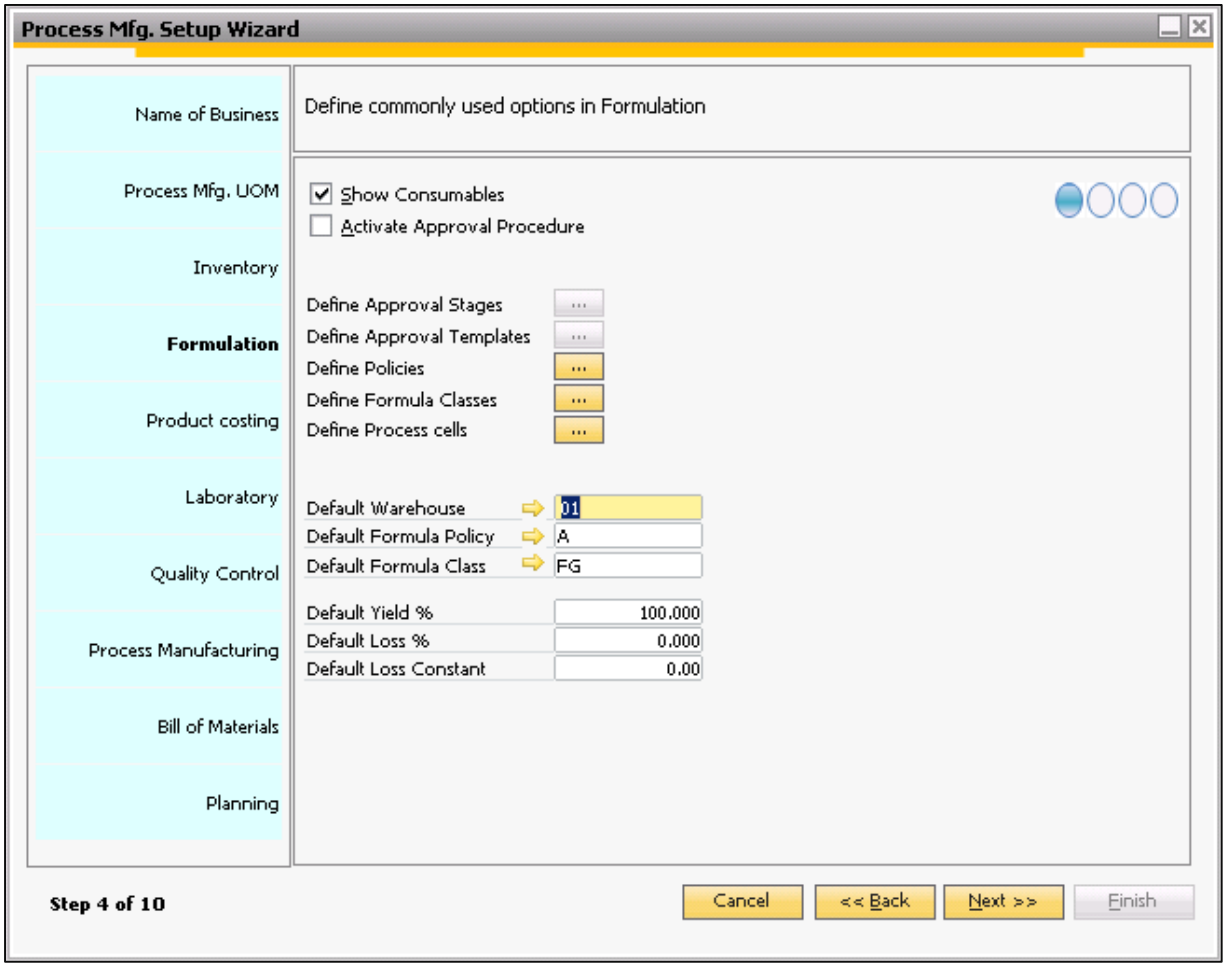
Cancel: Click this button to close the screen without saving the changes.

Back: Click this button to get back to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.4 Formulation – 1

Here you define the defaults parameters for the Formulation module.

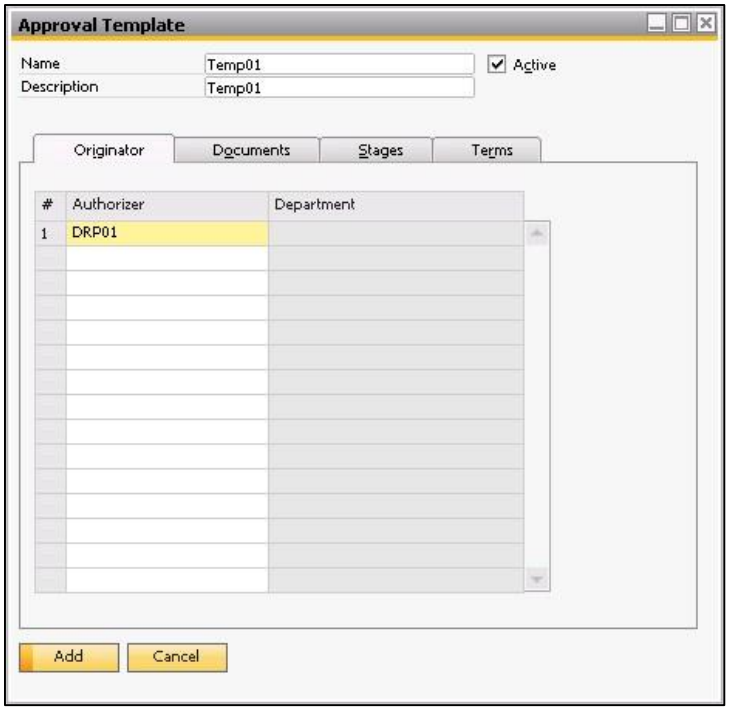


Show Consumables: Check this option to display the *Consumables* tab on the *Formula Entry* screen. Consumables are inventory items that are not part of the formula but are required in the process.

Activate Approval Procedure: Specify whether to apply formula approvals. Checking this option means that formulas need approval before being used in production.

Define Approval Stages: Click the browse button available next to this field to define approval stages in the *Approval stages* screen. While defining the approval stages, you can specify the number of approvals required in each stage.

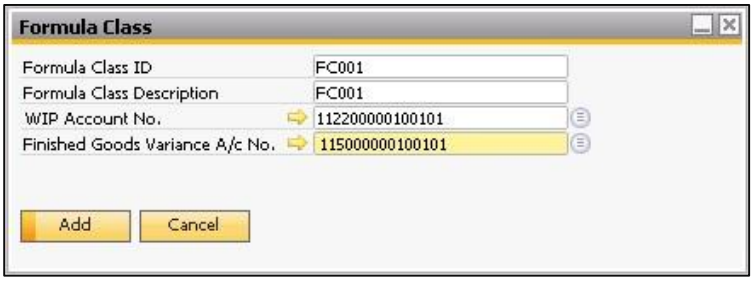
Define Approval Templates: Click the browse button available next to this field to access the *Approval Template* screen. On this screen, you can design the structure or a template, using which various groups of formulas/recipes or individual ones can be subjected to approval. The template once defined can be used to setup the approval structure for any formula.



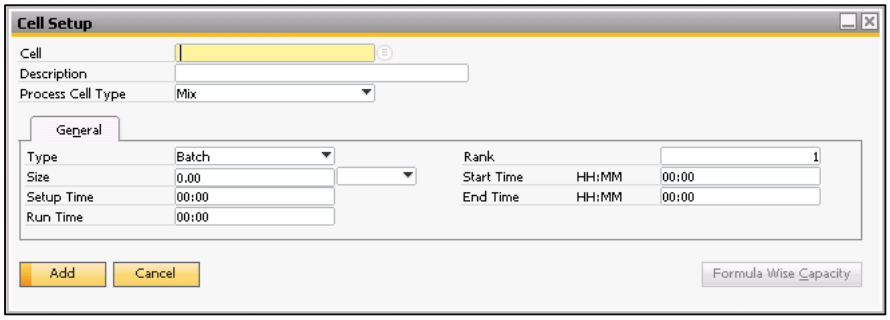
Refer to the *Approval Procedures* for more details.

Define Policies: Formula policies are used to determine whether a formula should be used in production/costing/laboratory modules. Click the *Browse* to view and define policies.

Define Formula Classes: A formula class is used to group formulas based on their WIP (Work in Progress) account and Finished Goods Variance account. Click the *Browse* to view and define classes.



Define Process Cells: Click this field to navigate to the *Cell Setup* screen. On the *Cell Setup* screen, provide the description, type, and details of the cell, and save the record.



Refer to the BME-B1 18.2 *Formulation User Guide* for details on formula policies, classes and cell setup.

Default Warehouse: Specify the default warehouse for picking ingredients during formula creation. This warehouse is added by default to the *Line Items* tab on the *Formula Entry* screen. Click the *Browse* button available next to this field to open the *Default warehouse* screen where you can specify the default warehouse.

Default Formula Policy: Specify the policy to be applied to a formula during its creation.

Default Formula Class: Specify the class to be applied to a formula during its creation.

Default Yield %: Enter the percentage of the formula input weight that is expected to be produced after considering all variable loss factors.

Default Loss%: System will calculate this as 100 percent minus the default yield percentage.

Default Loss Constant: Enter any fixed quantity of loss that always occurs while processing a formula. The possible reasons for such losses can be pre-mix left in the container or material lost while filling. This loss constant is always expressed in terms of weight.

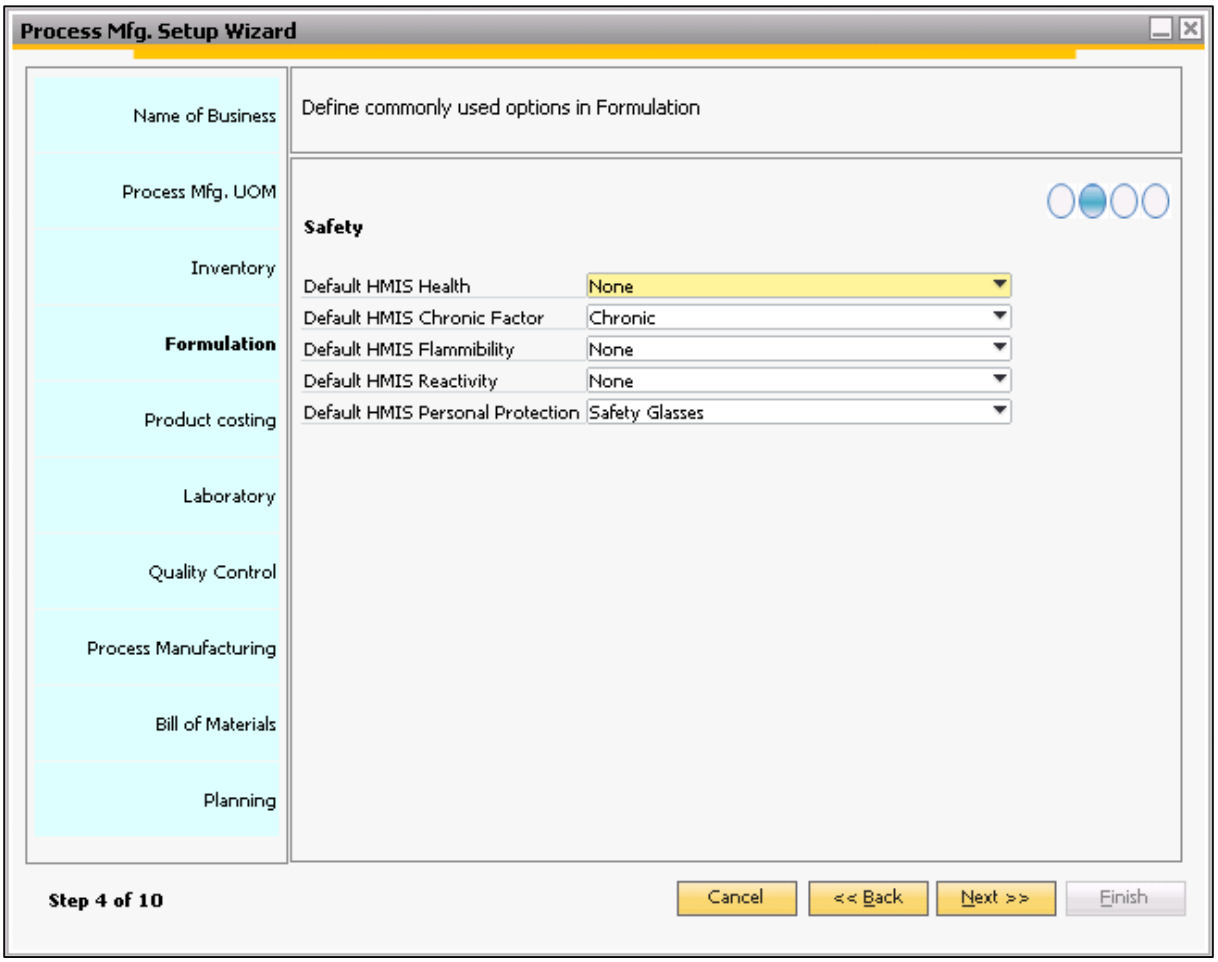
Refer to the BME-B1 18.2 *Formulation User Guide* for details.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.5 Formulation – 2



Safety:

Default HMIS Health: Specify the default value of the HMIS health rating to be inserted while creating a formula. The options available in this field are *None, Mild, Moderate, Serious*, and *Extreme*.

Default HMIS Chronic Factor: Specify the default value of the *HMIS Chronic Factor* to be inserted while creating a formula. The options available in this field are *Chronic* and *None*.

Default HMIS Flammability: Define the default value of the *HMIS Flammability* rating to be inserted, while creating a formula. The options available in this field are: *None, Mild, Moderate,* and *Serious*.

Default HMIS Reactivity: Specify the default value of the *HMIS Reactivity* rating to be inserted, when a new formula is created. The options are: *None*, *Mild*, *Moderate*, and *Serious*.

Default HMIS Personal Protection: Specify the default value of the *HMIS Personal Protection* equipment to be inserted, when a new formula is created. The options are:

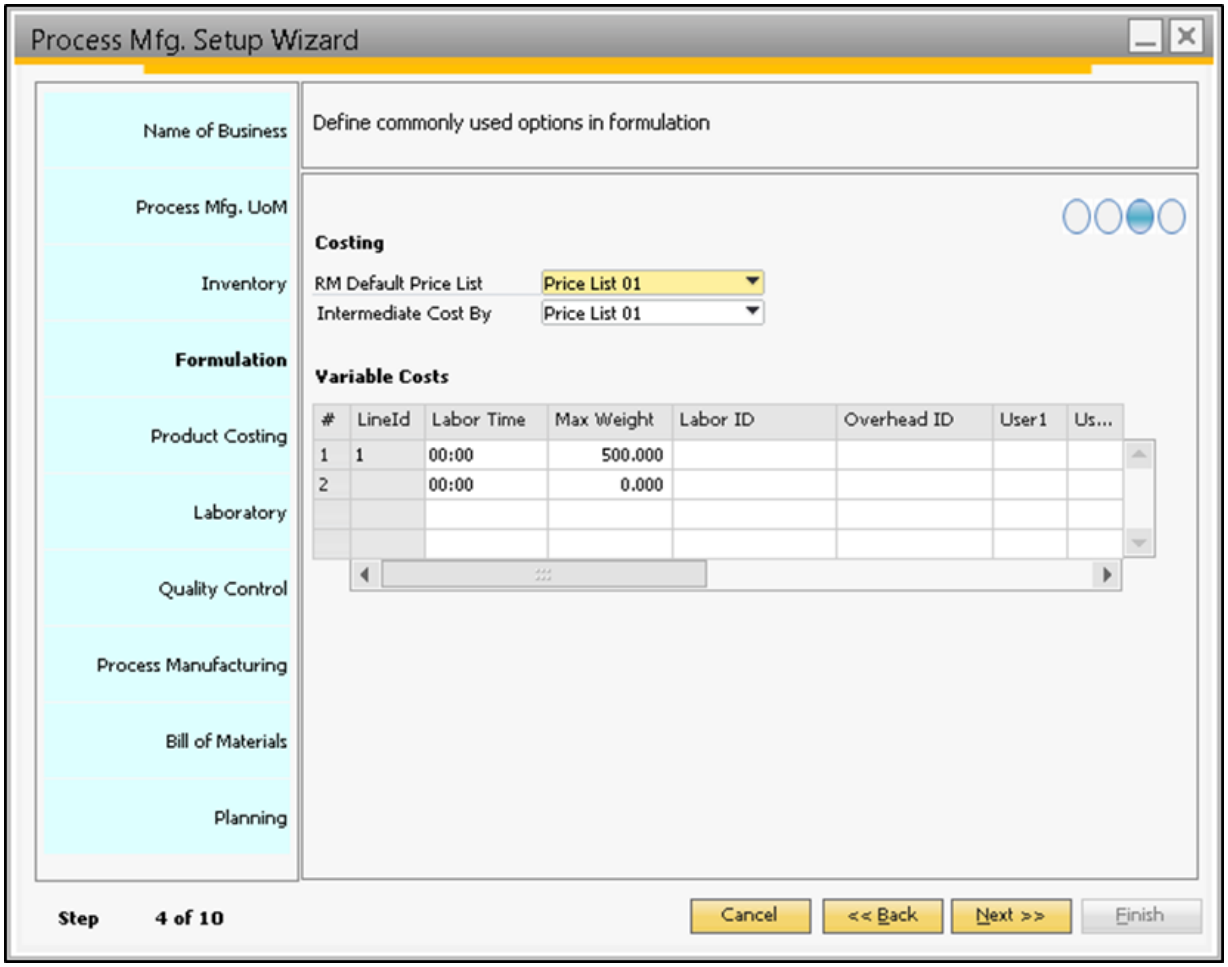
- Safety Glasses
- Safety Glasses, Gloves
- Safety Glasses, Gloves, Synthetic Apron
- Face Shield, Gloves, Synthetic Apron
- Safety Glasses, Gloves, Dust Respirator
- Safety Glasses, Gloves, Synthetic Apron and Dust Respirator

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.6 Formulation – 3



Costing

RM Default Price List: The price list for the cost of raw materials used in formulation.

Intermediate Cost By: The price list for the cost of the intermediate item used in formulation.

Variable Costs:

Line ID: This is a system-generated field that displays the sequence of variable costs.

Labor Time: Specify number of hours required for labor activities.

Max Weight: The maximum batch weight for which the specified labor and overhead keys will be applied. Note that any batches with a weight over the last entry in the grid will be treated as if their weight is within the last range.

Labor ID: Specify the default labor ID to be used.

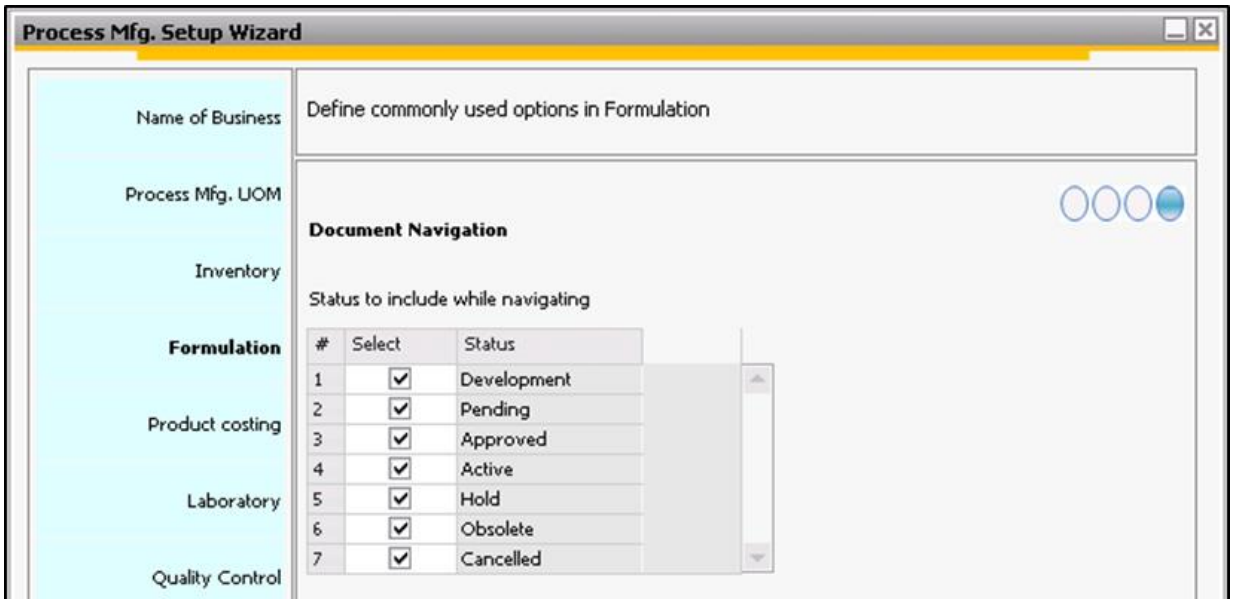
Overhead ID: Specify the default overhead ID to be used.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.7 Formulation – 4



Status to Include while navigating: Select one or more statuses that should be included while navigating through records in the *Formula Entry* screen. The available statuses are *Development, Pending, Approved, Active, Hold, Obsolete* and *Cancelled*.

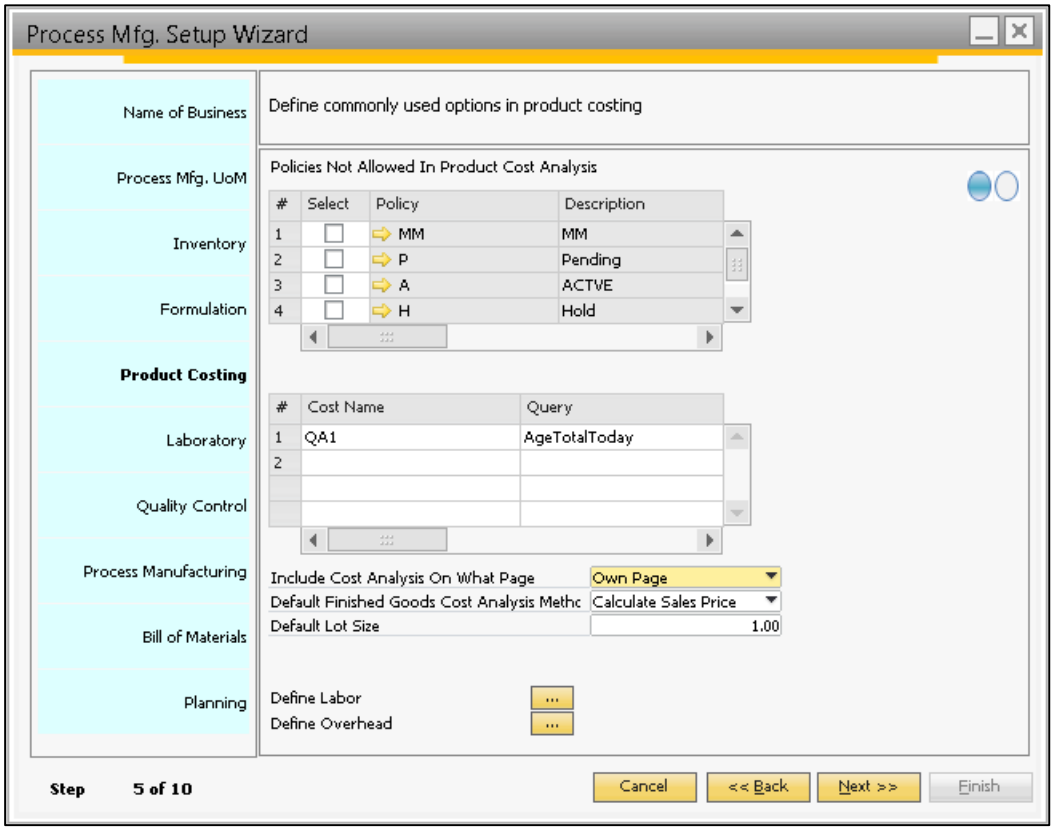
Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.8 Product Costing -1

Here you define the default settings for proper functioning of the costing module.



Policies not Allowed in Product Cost Analysis

The *Policies* grid will list all defined Formula Policies

Select: Check / uncheck the option corresponding to this field to specify which formula policies are not allowed in *Product Cost Analysis*. This way, you can exclude the formula records that are not useful for costing purpose.

Costing Grid

Cost Name: Use this field to specify the unique cost on the basis of which you need to analyze the product cost. The cost you define here will be displayed on the *Product Cost Analysis* screen to perform cost analysis.

Query: Select the query to be used to get the desired data for the respective cost. The drop down here enlists all the user queries defined in SAP Business One.

For more details, please refer to the *Costing Defaults* section of the *Product Costing* manual.

Include Cost Analysis on what page: Specify the page on which the cost analysis should be printed. The available options are *Own page, Same Page* and *None*.

Default Finished Good Cost Analysis Method: Specify the default costing method to be used to calculate the finished goods cost in the *Product Cost Analysis* screen. The options available are:

- **Calculate Sales Price:** If this option is selected, the sales price will be calculated after adding markup factor defined on the *Product Cost Analysis* screen.
- **Calculate Margin:** If this option is selected, the application will calculate Margin based upon cost (per unit) of finished goods and the price list applicable for the finished good.

Default Lot Size: Specify the default lot size to calculate the accurate cost per unit of FG. This lot size is used by default in the:

- Product Cost Analysis (Analysis Tab)
- Cost Rollup Utility
- Product Cost Analysis Report
- Product Cost Summary Report
- Detailed Product Cost Report

Define Labor: Click the *Browse* button in this field to access the *Labor/Additional Cost* screen, where you can view or define costs pertaining to labor.

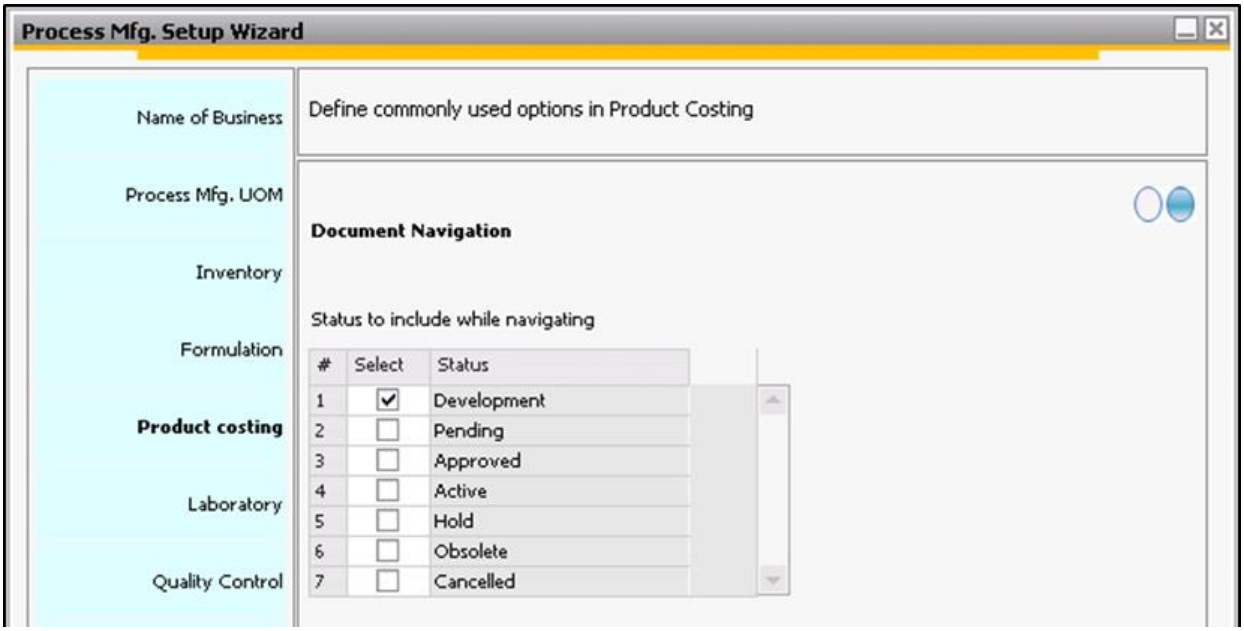
Define Overhead: Click the search button in this field to go to the *Overhead Cost* screen where you can view or define overhead costs.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.9 Product Costing -2



Status to Include while navigating: Select one or more statuses so that formulas pertaining to any of the selected statuses will be displayed, while navigating through records in the *Product Cost Analysis* screen. The available statuses are *Development, Pending, Approved, Active, Hold, Obsolete,* and *Cancelled*.

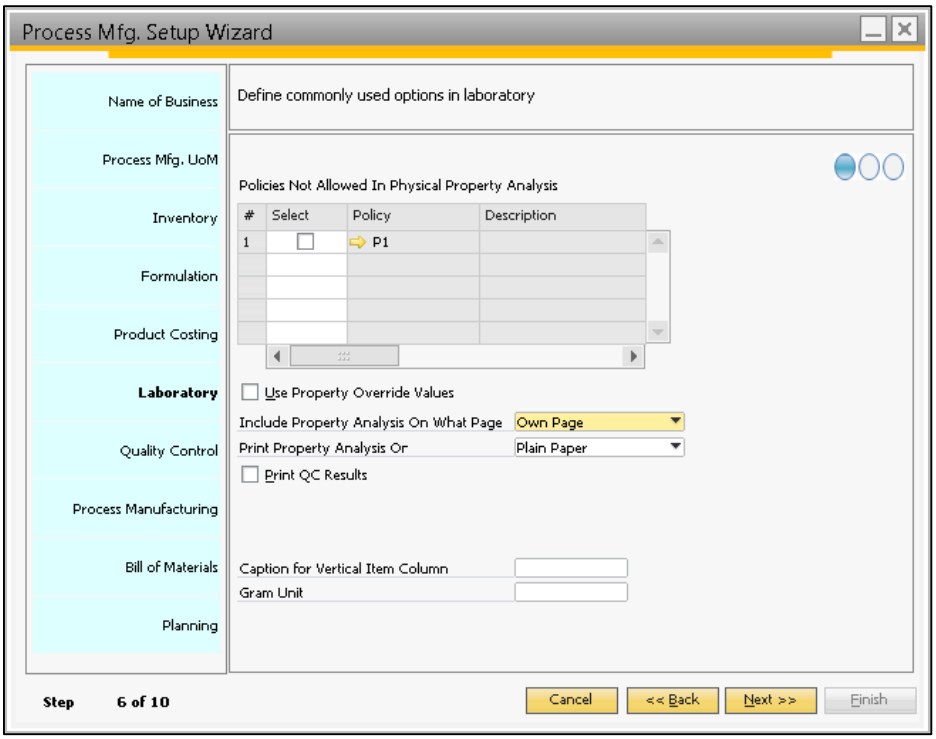
Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.10 Laboratory – 1

Using this screen, you can store the default values that will be used in the Laboratory module.



Policies not Allowed in Physical Property Analysis: Select the policies that you do not want to include while navigating through records on the *Physical Property Analysis* screen.

Use Property Override Values: Check this option to override property values calculated by the application, while printing formula physical properties on various nutritional labeling reports.

Include Property Analysis on what Page: Specify the location to print the formula physical properties while printing the laboratory reports. By default, the value of this field is *Own Page*. The drop-down menu in this field displays the following options: *Own page, Same Page* and *None*. The option *Own page,* if selected, would print the property analysis on a separate page. The option *Same page,* if selected, would print the property analysis of distinct finished goods on the same page. The option *None,* if selected, doesn't print the property analysis.

Print Property Analysis on: Specify the default printing option for the laboratory reports depending upon the business needs. The options available are

- Plain Paper
- Printed Stationary

Print QC Results: Check this option to print QC results on the *Physical Property Report*. If unchecked, the QC results will not be shown on the *Physical Property Report*.

Caption for Vertical Item Column: Specify the caption that you want to use for information obtained from a third party database. For example, BatchMaster ERP is integrated with US Department of Agriculture food database, so you may want to choose USDA Code as column caption. This field is valid only for Food and Nutraceutical manufacturers. If you do not mention any name in the field, then by default the column name will be displayed as *Vertical Item.*

 This field is visible only when the *Enable USDA Integration* checkbox in the *Additional Settings* tab of the *Process Mfg. Defaults* screen.

Gram Unit: Specify which unit in your system accurately defines gram unit so that it can correctly calculate values or import items and properties from USDA database. BatchMaster ERP is integrated with USDA database. USDA database stores nutritional values per 100 grams of the item.

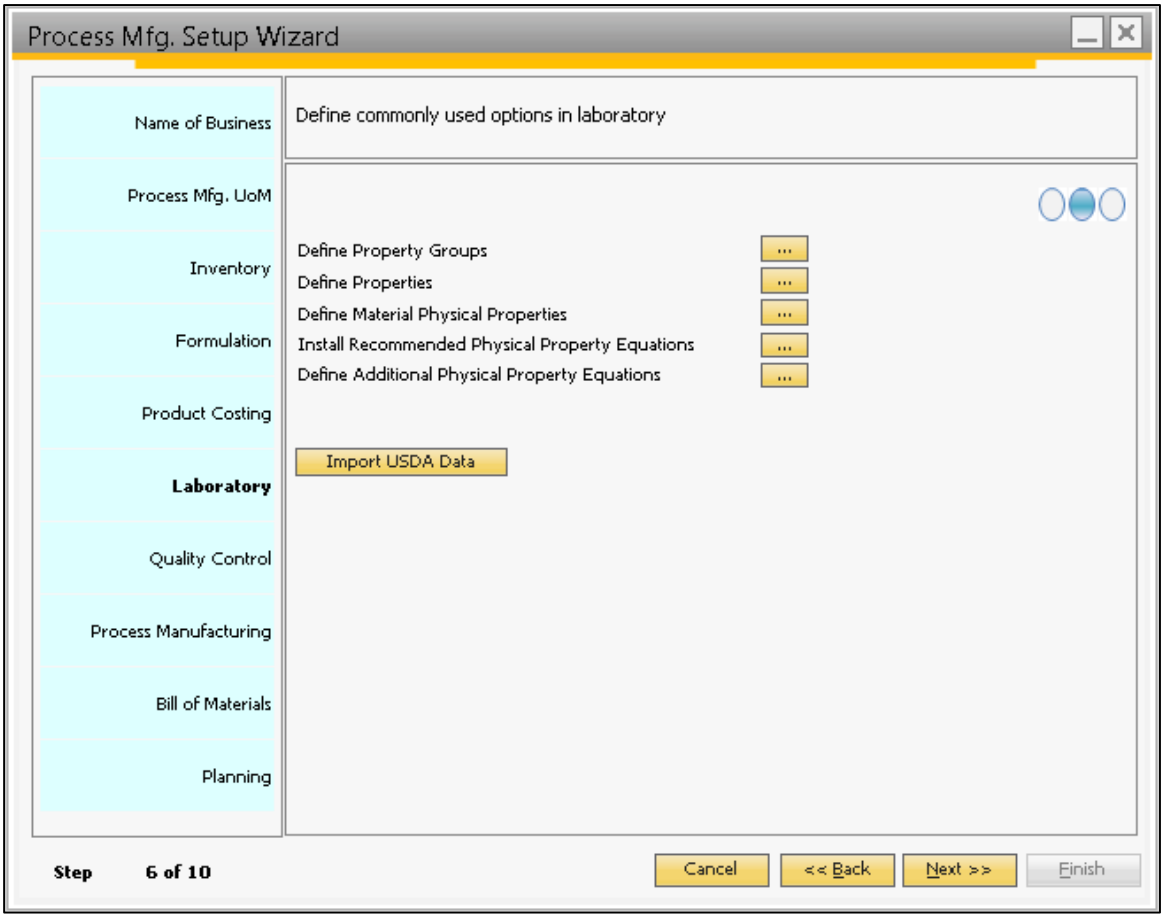
 This field is visible only when the *Enable USDA Integration* checkbox in the *Additional Settings* tab of the *Process Mfg. Defaults* screen.

Cancel: Click this button to close the screen without saving the record.

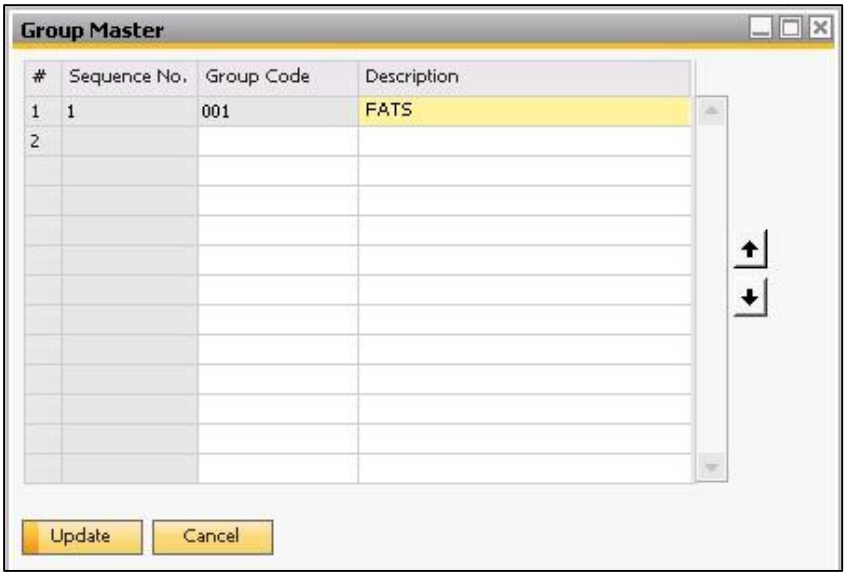
Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

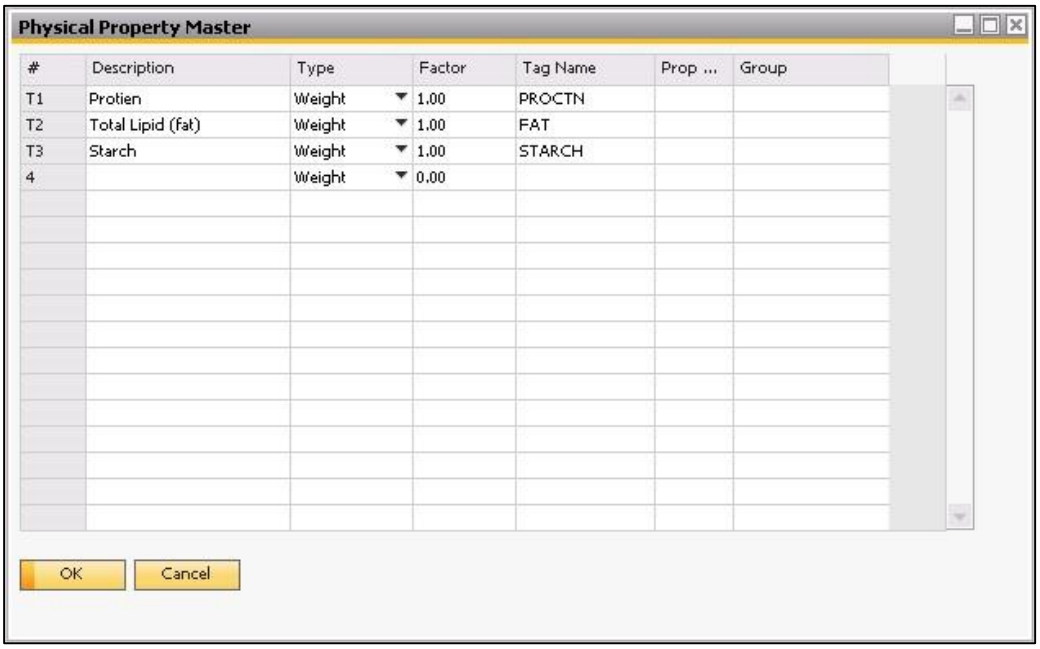
2.10.2.11 Laboratory – 2



Define Property Groups: Click the browse button available next to this field to define the material property groups that can be used to classify the physical properties based on their types.

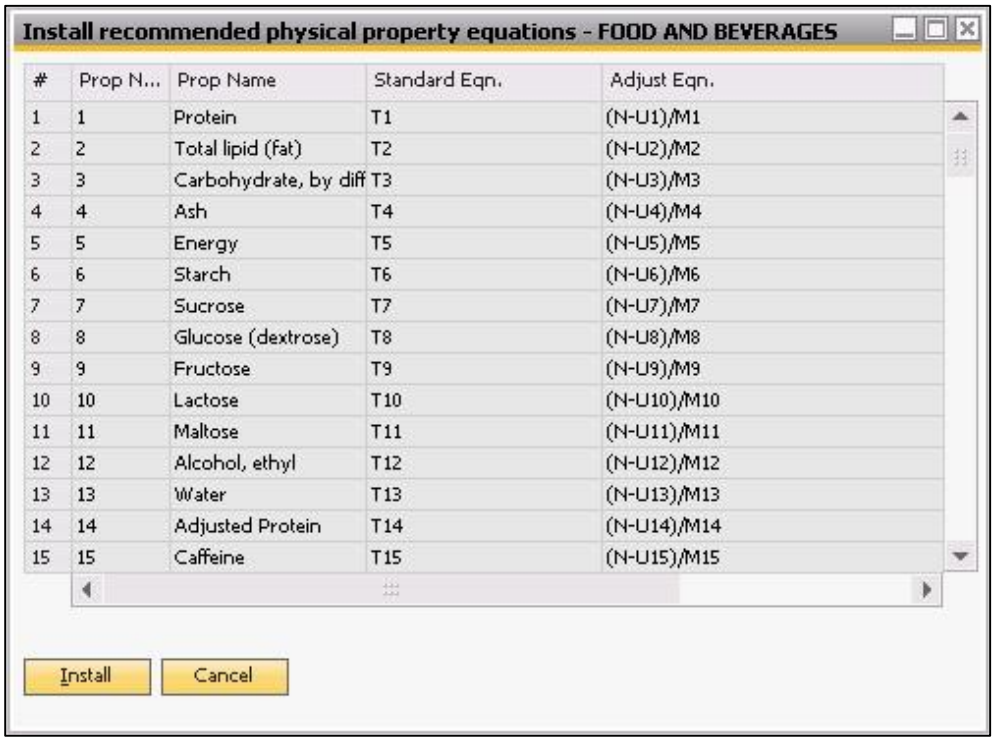


Define Properties: Click the Browser button available next to this field to define the material physical properties that can be associated with items. In addition, you can also define the material attributes.

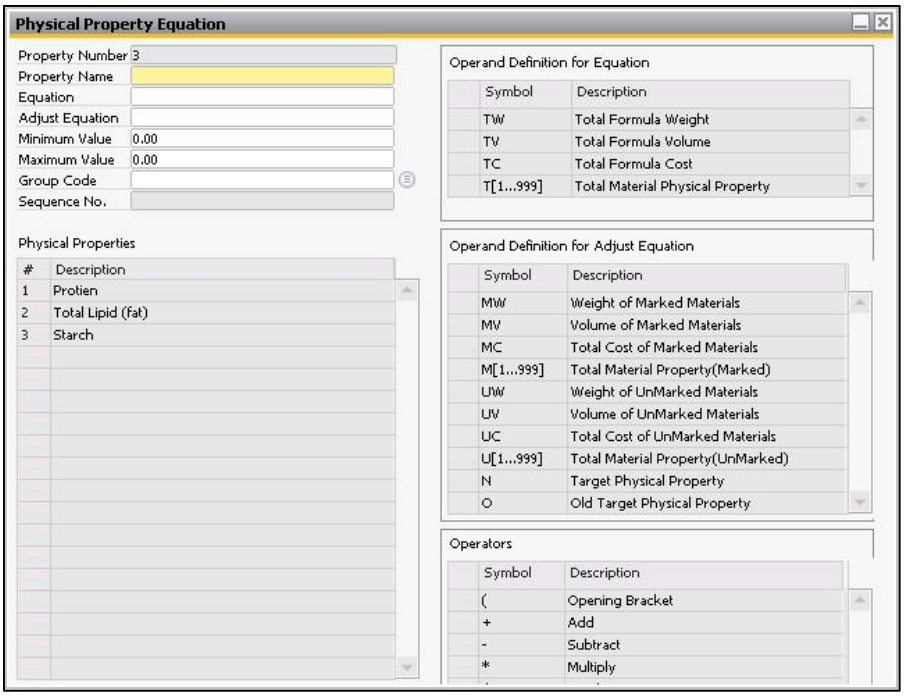


Define Material Physical Properties: Click the browse button available next to this field to define physical properties for a specific item using the *Item Physical Property Master* screen.

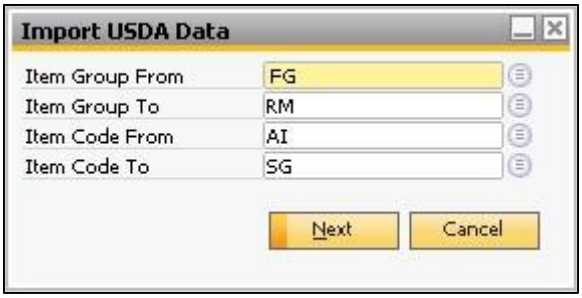
Install Recommended Physical Property Equations: Click the browse button available next to this field to install few standard physical property equations that are readily available.



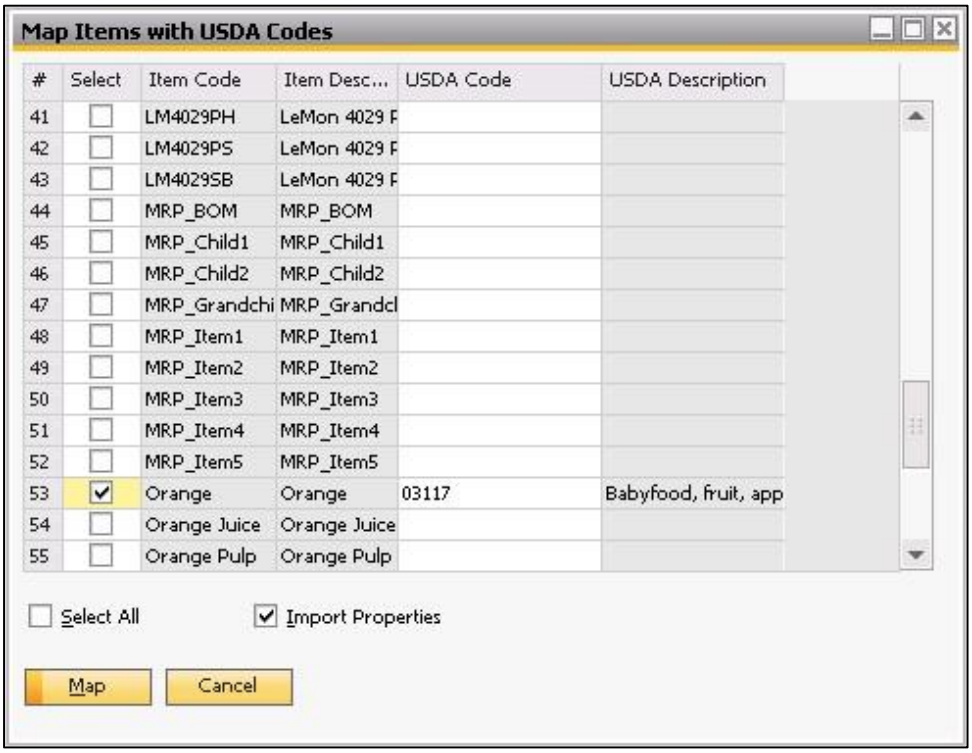
Define Additional Physical Property Equations: Click the browse button in this field to define equations that help you calculate the value of a physical property.



Import USDA Data: Click this button to map the USDA item key for all the items for which the nutrition labeling is required. The *Import USDA Data* screen offers a range of item groups and items to be selected. Further it allows mapping BatchMaster ERP's Item key with USDA item key. You can select the required item on the screen to be mapped, or you can select all the items at once.



Map the Items with the USDA codes for which Supplement Fact Sheet needs to be generated.

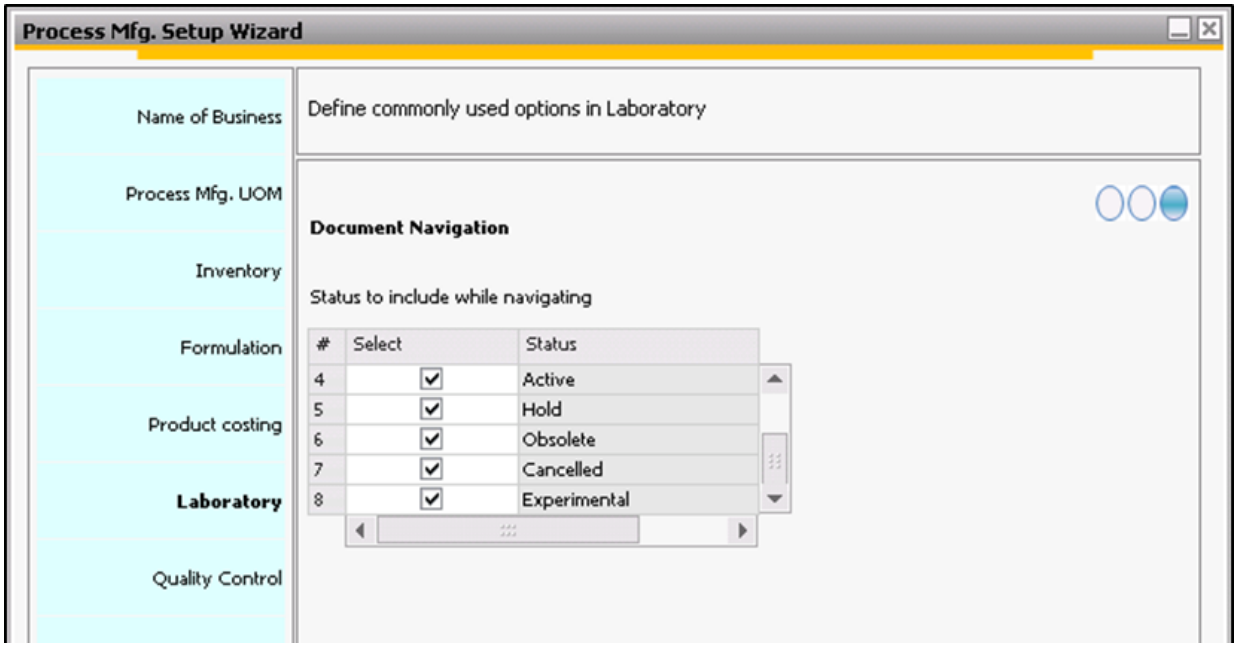


Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.12 Laboratory – 3



Status to Include while navigating: Select one or more statuses so that only those formulas pertaining to any of the selected statuses will be displayed while navigating through formula records on the *Physical Property Analysis* screen. The available statuses are *Development, Pending, Approved, Active, Hold, Obsolete*, *Cancelled*, and *Experimental*.

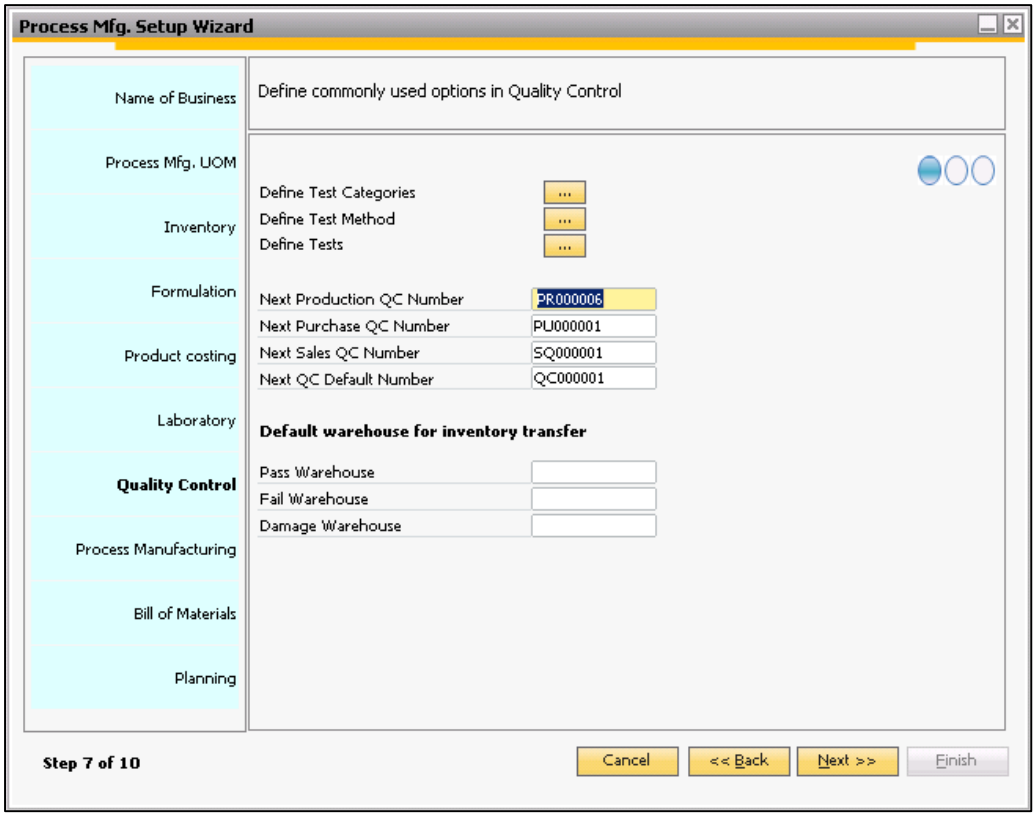
Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

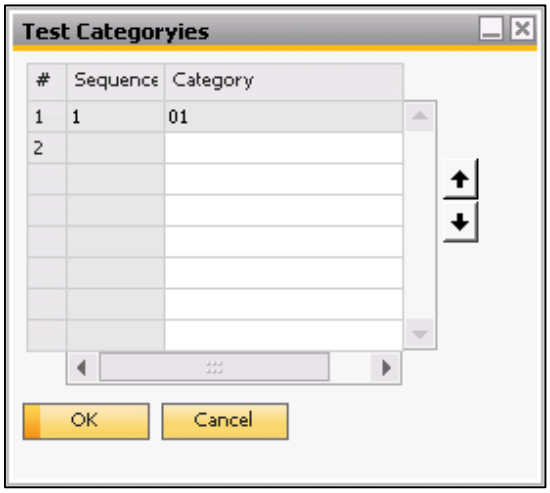
Next: Click this button to navigate to the next screen of the wizard.

2.10.2.13 Quality Control – 1

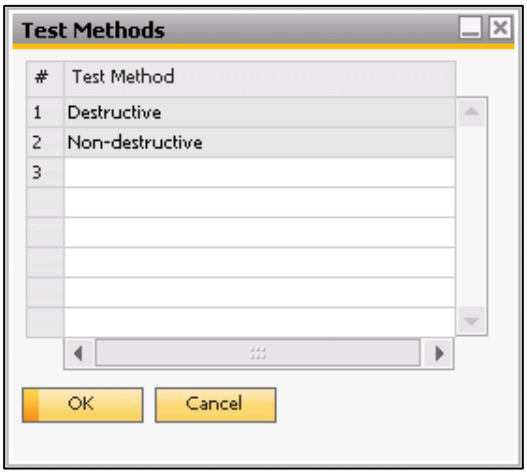
Quality control checks can be implemented on purchase, sales, or production orders. Each of these implementations is referred to as QC orders. Using the *Quality Control* options, you can maintain the default settings pertaining to the QC orders.



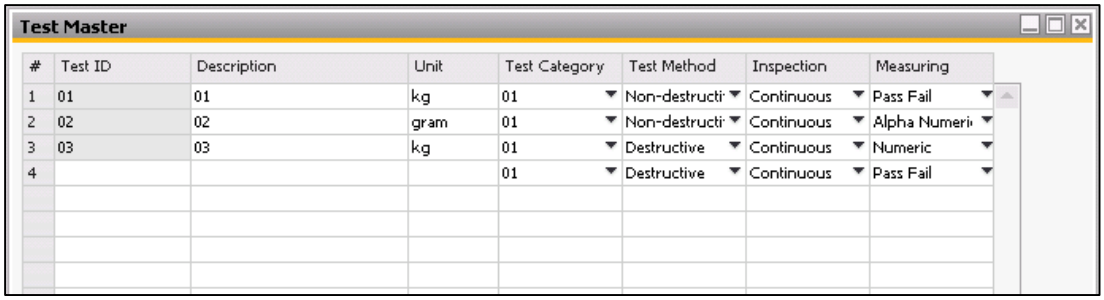
Define Test Categories: Click the *Browse* button in this field to access the *Test Categories* screen. Here you can create or search for test categories.



Define Test Method: Click the *Browse* button in this field to access the *Test Methods* screen. Here you can create or search for test methods.



Define Tests: Click the *Browse* button in this field to access the *Test Categories* screen. Here you can create or search for test categories.



Next Production QC Number: The QC Order Number to be assigned to the next production QC Order.

Next Purchase QC Number: The QC Order Number to be assigned to the next Purchase QC Order.

Next Sales QC Number: The QC Order Number to be assigned to the next Sales QC Order.

Next QC Default Number: The QC Order Number to be assigned to the next inventory QC Order created via the *Order/Post Inventory QC* screen.

Default warehouse for inventory transfer:

Pass Warehouse: Specify the location to which items accepted through the *Order/post Inventory QC* screen are posted.

Fail Warehouse: Specify the location to which items rejected in QC are posted.

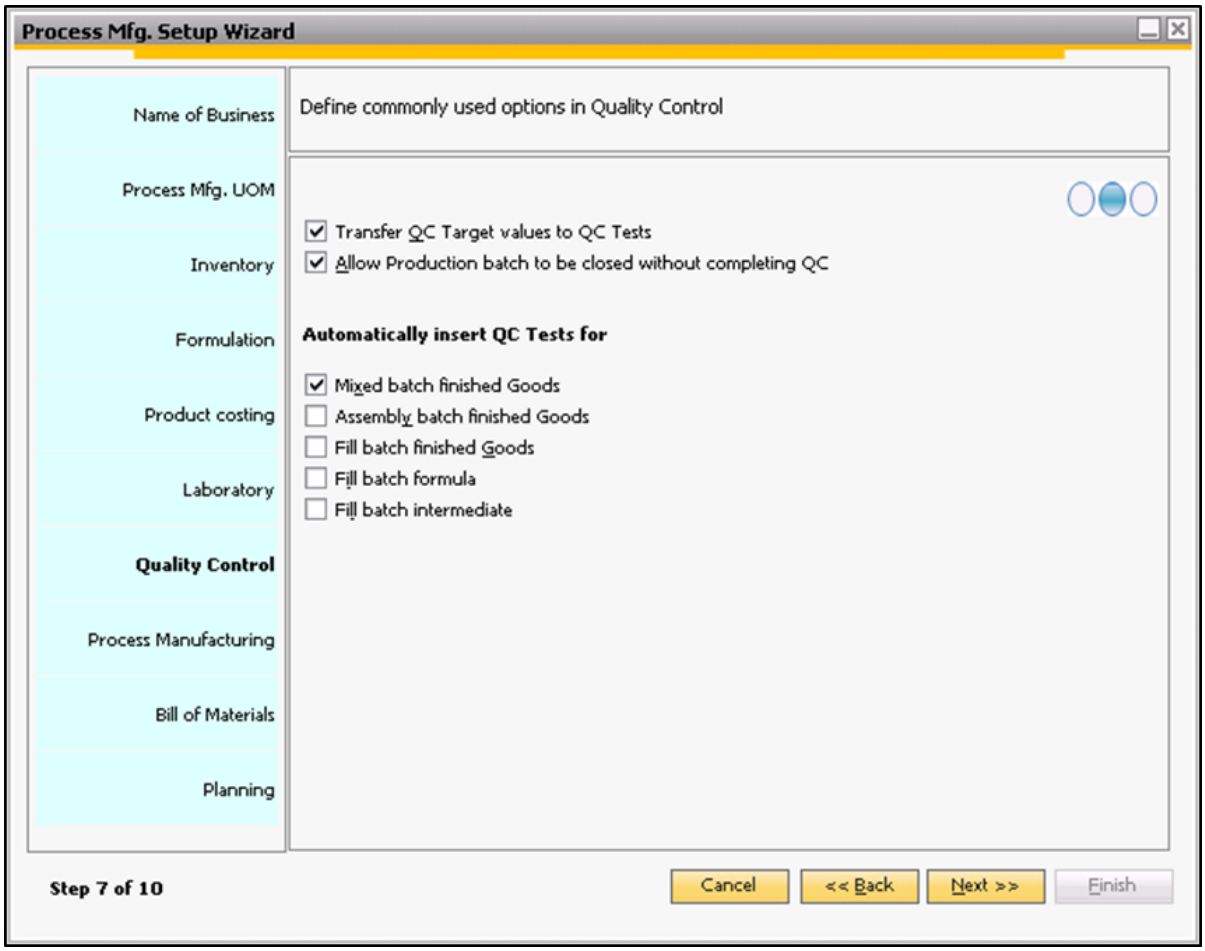
Damage Warehouse: Specify the location to which items scrapped in QC are posted.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.14 Quality Control – 2



Transfer QC Target Values to QC Tests: Check this option to copy QC target values to QC tests.

Allow Production Batch to be closed without completing QC: Check this option to close the production batch, even if QC is incomplete.

Automatically Insert QC Tests For

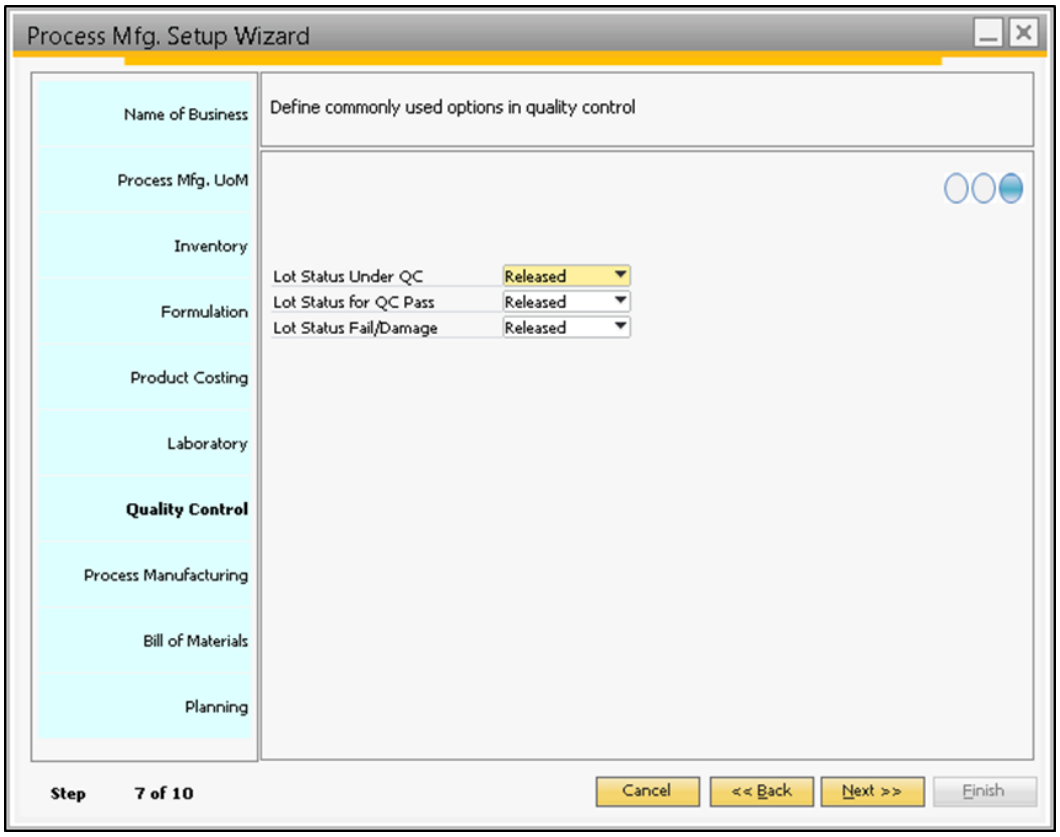
Check those options for which QC tests need to be inserted automatically. The options available are shown in the screen shot.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.15 Quality Control – 3



Lot Status under QC: Specify default status of the lot which is under QC process.

Lot status for QC Pass: Specify the default status of the lot that was accepted during QC process.

Lot status Fail/Damage: Specify the default status of the lot that was declared failed or damaged during QC process.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

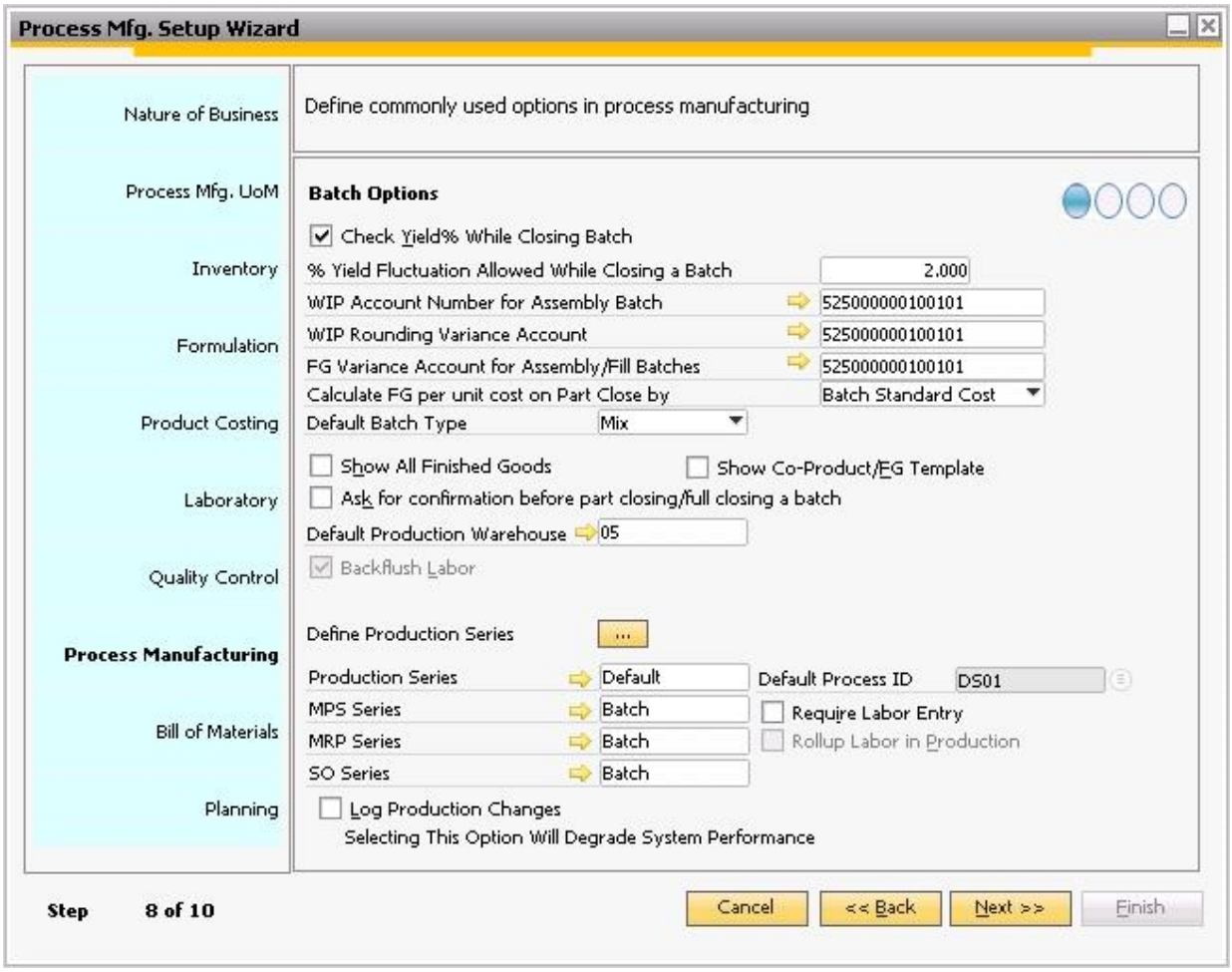
Next: Click this button to navigate to the next screen of the wizard.

Lot statuses are defined at: **Administration → Setup → Inventory → Lot Status**

Refer to the *BME-B1 18.2 Inventory User Guide* for details.

2.10.2.16 Process Mfg – 1

Process Manufacturing options store default information as well as some setup information required for recording production activities.



Check Yield % while Closing Batch: Check this box to make the system verify that a batch has met production yield requirements before it can be closed. The allowable fluctuation is defined in the following field.

% Yield Fluctuation Allowed while Closing a Batch: This is the amount by which actual production can vary from planned production. At the time of batch closure, the system will compare actual production to planned production. If the difference exceeds plus or minus 'x' percent, a warning message will be shown.

WIP Account for Assembly/Fill Batch: Specify the *WIP account* to be used while creating an assembly- or fill-type batch.

WIP Rounding Variance Account: Specify the WIP Rounding Variance account, which is used to clear off any rounding variances while closing a production batch. This account is used to offset any value left in WIP (due to rounding differences) at the time of batch close.

FG Variance Account for Assembly/Fill Batch: The actual cost of finished goods manufactured can vary from the planned or standard cost of these goods. The difference between these costs is accounted in the *FG Variance account*. The *FG variance cost* associated with *assembly*- or *fill*-type batches is posted to this account.

Calculate FG per unit cost on part close by: Use this field to select the finished goods unit price determination factor when part closing a batch. You can select the *Batch Standard Cost* option to part close a batch based on the standard cost for a batch. Alternatively, select the *Item Cost* option to part close a batch based on the standard cost of the finished goods.

Default Batch Type: Specify the type of batch to be defaulted on the *Batch Entry* screen while creating a batch. The default value of this field is *Mix,* which can be changed if need be. The available options for this field are:

- ***Mix*:** Requires a formula; a bill of material (BOM) for additional items or packaging is optional. Both intermediates and FGs can be made using this batch type.
- ***Fill*:** Requires an intermediate available in stock and a BOM for packaging. Makes FGs only.
- ***Assembly*:** Requires an assembly BOM. Used to take two or more FGs and package them together in another container as a new finished item.
- ***Rework*:** Used to rework an FG or intermediate. The item plus any materials needed for the rework are the only inputs. No formula or BOM is allowed.

Show All Finished Goods: Check this option to display the *Show all finished goods* checkbox on the *Batch Entry* and *Super Batch Entry* forms. This checkbox on the *Batch Entry* and *Super Batch Entry* screens allows any finished good to be picked, irrespective of its formula. Thus it allows you to specify whether all FGs should be displayed while creating a *mix-type* batch (irrespective of formula). If this option is not checked, then the application does not show the checkbox at the *Batch Entry* screen and as a result, only those finished goods that are associated with the formula entered are displayed.

Show Co-Product/FG Template: Select this checkbox to display the co-product or finished goods template. This field displays the *FG Template ID* and *Template Qty* fields on the *Batch Entry* and *Super Batch Entry* screens.

Ask for confirmation before part closing/full closing a batch: If this checkbox is selected, then the system prompts a confirmation message before part-closing or closing a batch. This feature is also applicable for super batch.

Default Production Warehouse: Specify the production warehouse that would be added by default in the *Batch Entry* screen. This reduces the need to specify warehouse information while entering finished goods.

Backflush Labor: This is a read-only field, because labor in BatchMaster ERP is always backflushed.

Define Production Series: Click this button to access the *Batch Series* screen. This setup screen allows you to create and edit batch series.

Production Series: Specify the numbering series to be defaulted on the *Batch Entry* screen.

MPS Series: The default series when a batch is created from an *MPS order*.

MRP Series: The default series when a batch is created from an *MRP order*.

SO Series: The default series when a batch is created from a sales order.

Require Labor Entry: Check this option to perform labor entry through *Labor Entry* screen. Leaving this box unchecked will not allow you to open the *Labor Entry* screen using which you can admit labor hours for the batch.

Rollup Labor in Production: Select this checkbox if you need to post the labor hour entered at *Labor Entry* screen to a production batch. Leaving this checkbox unchecked will not affect the batch labor entry and is only used for recording or analysis purpose. If you have marked *Require Labor Entry* checkbox on the screen then this checkbox gets activated.

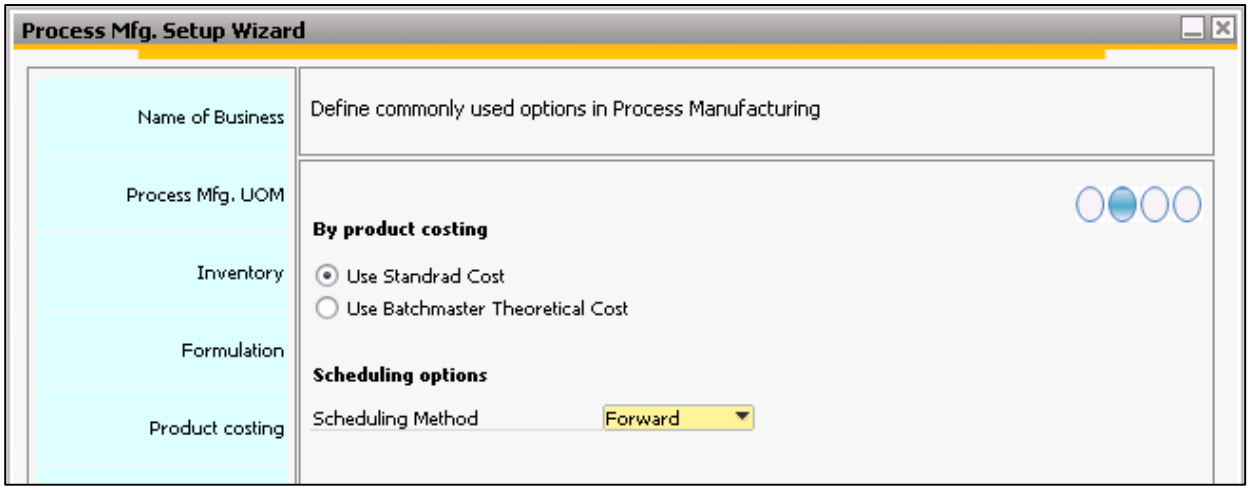
Log Production Changes: Select this checkbox to create a log of changes in the production processes.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.17 Process Mfg – 2



By-Product Costing: Check a radio button to define how byproducts will be valued. The system deducts the cost of a byproduct from the batch cost to determine the cost of producing the primary product. Available options are:

- **Use Standard Cost:** If your byproducts are valued at Standard, use this option.
- **Use BatchMaster Theoretical Cost:** If your byproducts are valued using Moving Average or First In, First Out (FIFO), you can use this option to stabilize the cost. The theoretical cost is stored in the Item Master record.

Scheduling options: Specify how manually-entered batches and batches created from SOs are scheduled. MPS/MRP engines always do backward planning.

The available options for this field are:

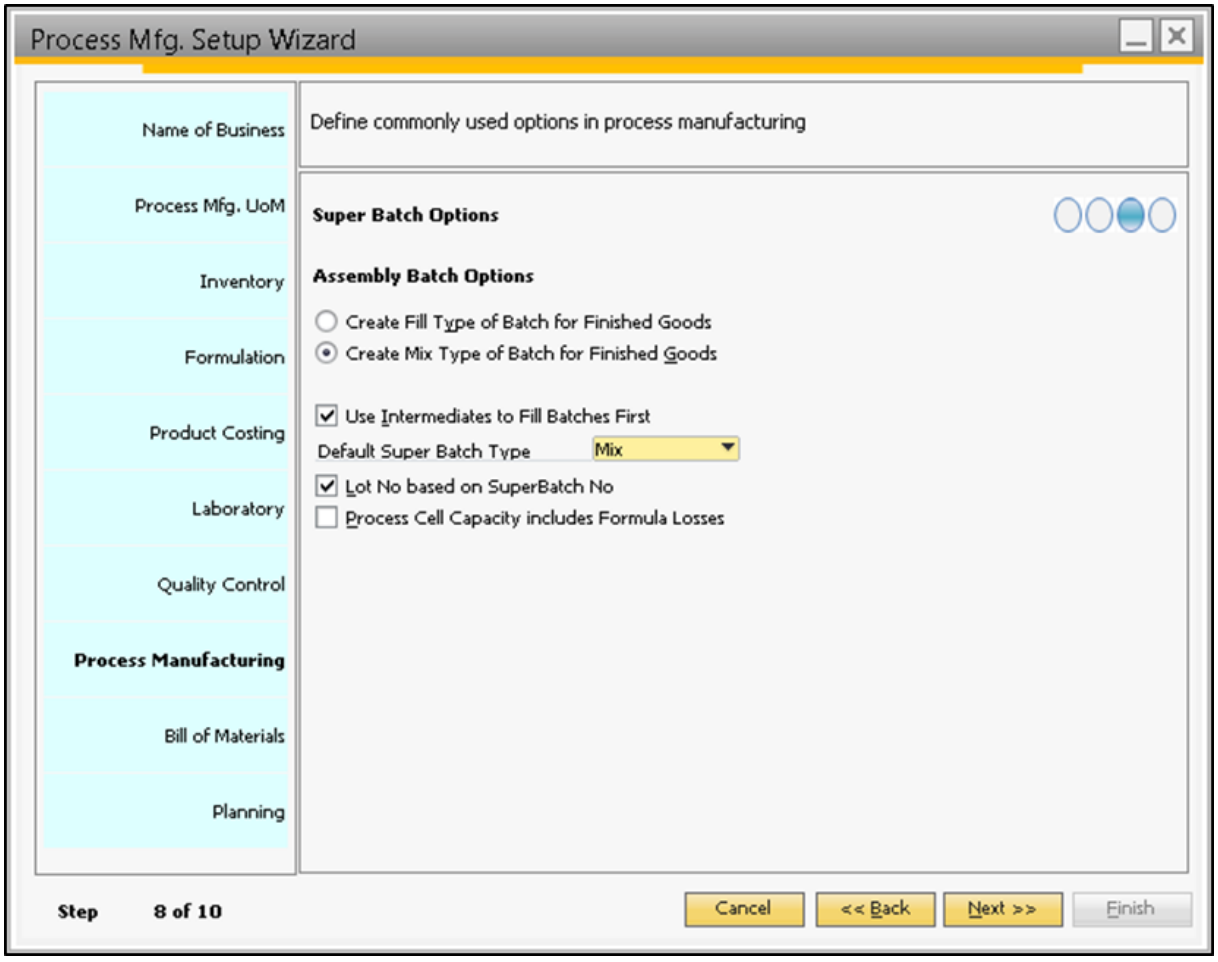
- **Backward:** Select the option to imply that the application calculates scheduled start date based on the end date.
- **Forward:** Select the option to imply that the application calculates scheduled end date based on the start date.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.18 Process Mfg – 3



Super Batch Options

Assembly Batch Options: When assembly-type super batch is created and if finished goods are created in low level batches, then the option selected in this section defines how these low-level batches are created: *Mix* or *Fill* type. The available options for this field are:

- **Create Fill Type of Batch for Finished Goods:** Select this option to indicate that the application creates a fill-type batch for the first level finished goods (BOM child of Assembly batch). This allows the application to reuse any intermediate, if already available.
- **Create Mix Type of Batch for Finished Goods:** Select this option to indicate that mix-type batch would be created to manufacture finished goods.

Use Intermediates to Fill Batches First: Select this checkbox to check the availability of intermediate. Only if the intermediate is unavailable, the application would automatically create sub-batches of the required quantity or the deficient quantity to fulfill the requirement of the super batch.

Default Super Batch Type: Specify the default type for the super batch. Available options are *Mix* or *Fill*.

Lot No Based on SuperBatch No: Select this option to instruct the system to create lot numbers based on super batch numbers.

Process Cell Capacity includes Formula Losses: Select this checkbox to auto-calculate the number of batch runs including the formula losses defined in the *Revision* tab of the *Formula Entry* screen. This number of runs is always computed on batch weight. This feature can be used for mix-type of batches only. Batch runs is the number of times the production has to take place in the process cell to produce the required quantity of finished good/intermediate.

For example, a process cell can produce 500 liters of orange juice, which means the process cell's capacity is 500 liter. Consider a production batch for 2000 liters of orange juice. In this case, the process cell has to work for four times to produce 2000 liters of orange juice.

If you have defined the formula loss of 20% in the *Formula Entry,* then the batch size in this case will be 2400 liters, so that the production can be made of 2000 liter of orange juice after deducting the formula loss.

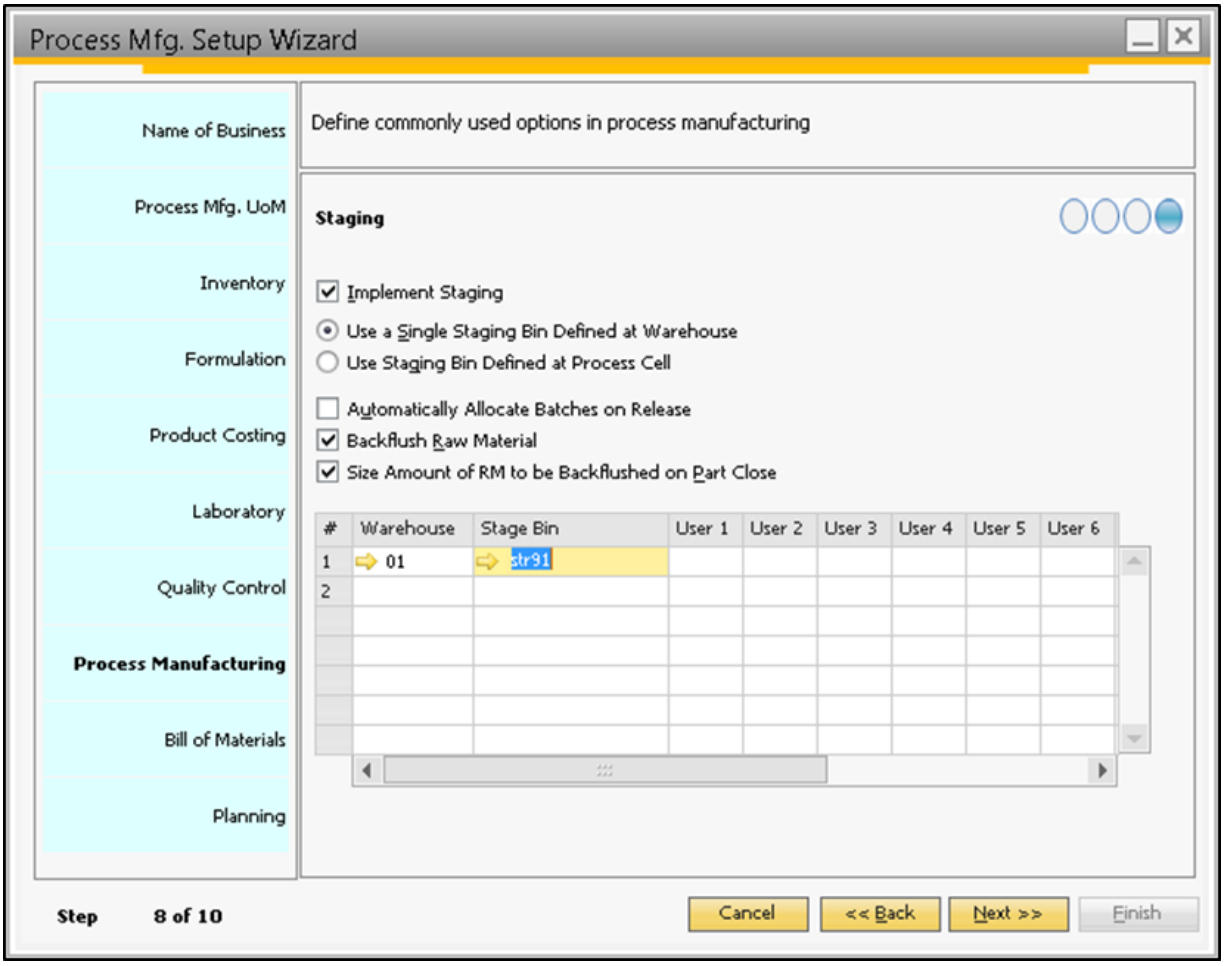
In such case, on selecting this checkbox, the system auto-calculates the number of runs to be performed by the process cell as per the batch weight. A process cell of 500 liters has to work for five times.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.19 Process Mfg – 4



Implement Staging: Check this option to apply staging during production. If staging is applied the production system picks material from the staging bin and allocations are done from the staging bin. Once material is allocated, the application automatically backflushes the material while part closing (part-close with sizing) or closing the batch.

Use a Single Staging Bin Defined at Warehouse: Check this option to use the staging bin defined at the warehouse level.

Use Staging Bins Defined at Process Cell: Check this option to use the staging bin defined at the process cell level.

Use a Single Lot if Possible: Select this option to select materials from a single lot while allocating raw materials for batches.

Automatically Allocate Batches on Release: Check this option to allocate raw materials for production automatically once the batches are released. If staging is not implemented, then the application tries to allocate lots based on lot picking method (FIFO/FEFO/LIFO) in the designated warehouse. If staging is implemented, then the application allocates lots from staging area, and if the material from staging is over, it allocates material from warehouse.

Backflush Raw Material: Check this option to back flush raw materials while part closing/full closing a batch. If material is allocated, then the application automatically issues the allocated material. If not, then the application attempts to pick material from staging area/warehouse (if staging not implemented) based on lot issue method defined in the *Item Master Details* screen.

Size Amount of RM to be Backflushed on Part Close: Check this option to size quantity of raw materials according to quantity of finished goods being posted.

Grid Level

The grid is enabled only when the *Implement Staging* checkbox is selected.

Warehouse: Specify the warehouse code.

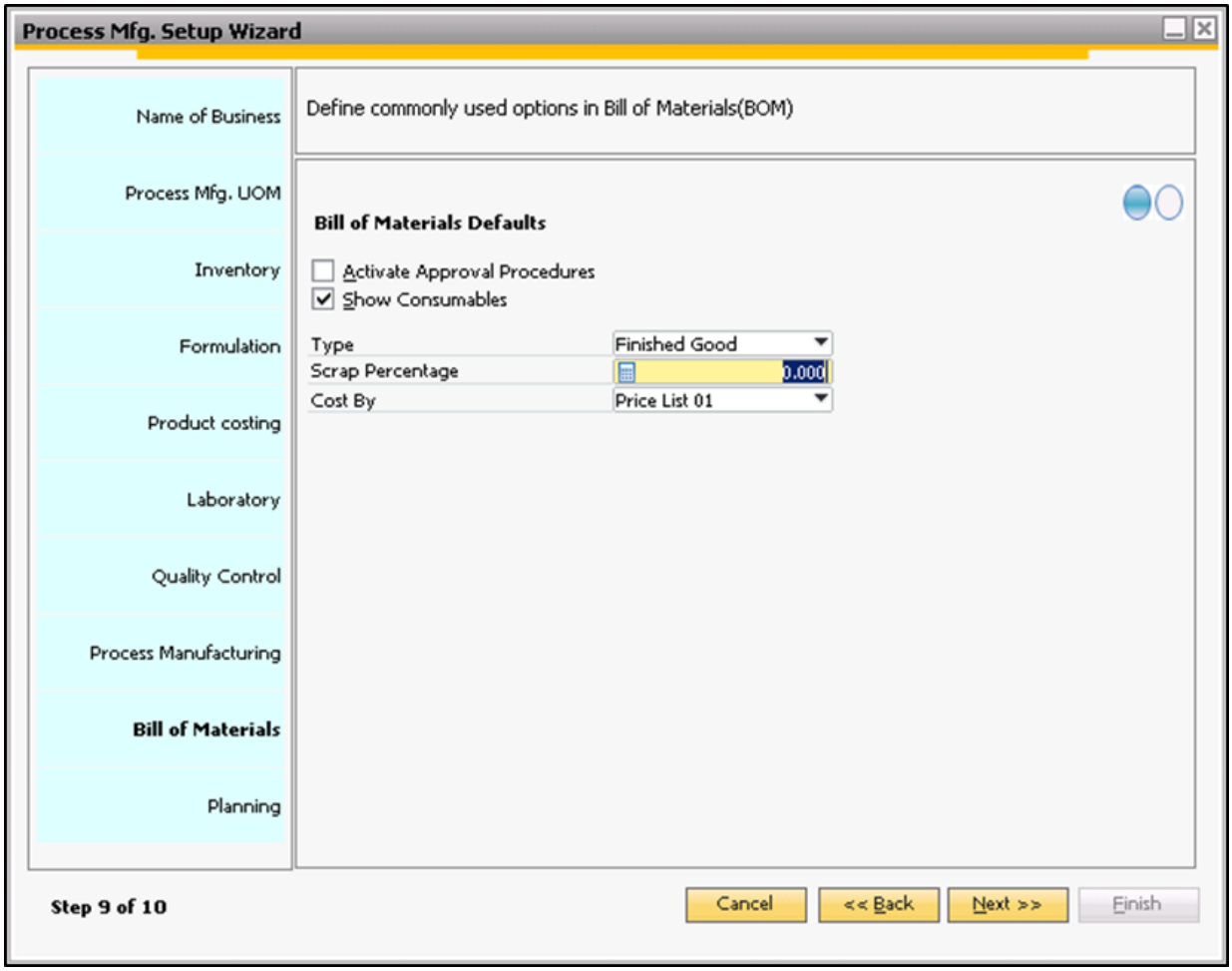
Stage Bin: Specify the staging bin, so that the production system picks material from the staging bin.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

2.10.2.20 Bill of Materials – 1



Activate Approval Procedures: Check this option to apply procedures for BOMs. When this option is checked, the *Send for Approval* button available on the *Bill of Material Entry* screen gets enabled. Once checked, you will not be able to uncheck this checkbox unless all the pending approvals for the BOMs have been processed, and their status changes to *Active* or *Cancelled*.

Show Consumables: Check this option to display Consumables tab on the *BOM Entry* screen. As a result, the items (other than raw materials) consumed during production process can be associated with the BOM.

Type: Select the default BOM type for creating a new BOM record, from the options listed in the drop-down menu. The options displayed in this drop-down menu are:

- **Finished Good**: The *Finished Good* type of BOM is created using a Formula and also includes the packaging material type of BOM.

- **Intermediate**: The Intermediate type of BOM is created using a formula, and it is used to produce end item in bulk quantities. This type of Bill of Material does not comprise of any packaging material.
- **Assembly**: The Assembly type of BOM comprises of assembly-type items and formula is not applicable for this type of BOM. Thus, the assembly-type of BOM comprises of assembly items meant for the manufacture of discrete assembly products that are easily countable, and identifiable.

Scrap Percentage: Specify the amount of scrap (in percentage) that is produced at the time of creating a new BOM. In other words, this indicates the standard percentage of finished goods that is scrapped during the manufacturing process. The default *Scrap Percentage* value is 0.00%. This field is informational only and is not used in any calculations.

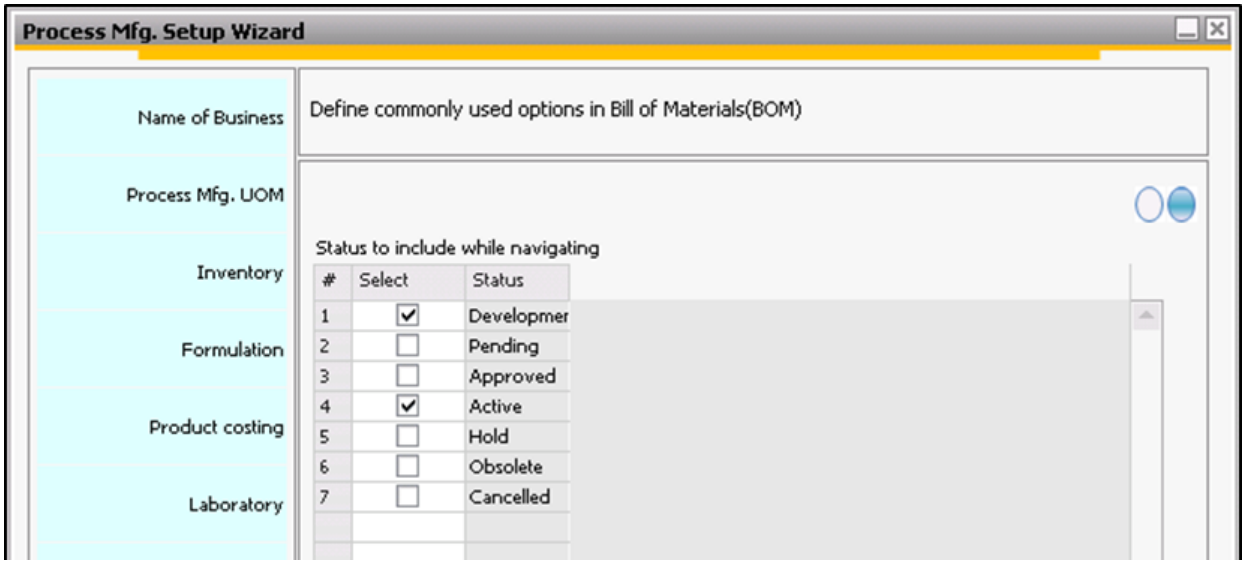
Cost By: Specify the default costing method to be used for evaluating cost. The costs methods dispalyed here in the drop-down list are pulled from the underlying database.

Cancel: Click this button to close the screen without saving the record.

Back: Click this button to navigate to the previous screen of the wizard.

Next: Click this button to navigate to the next screen of the wizard.

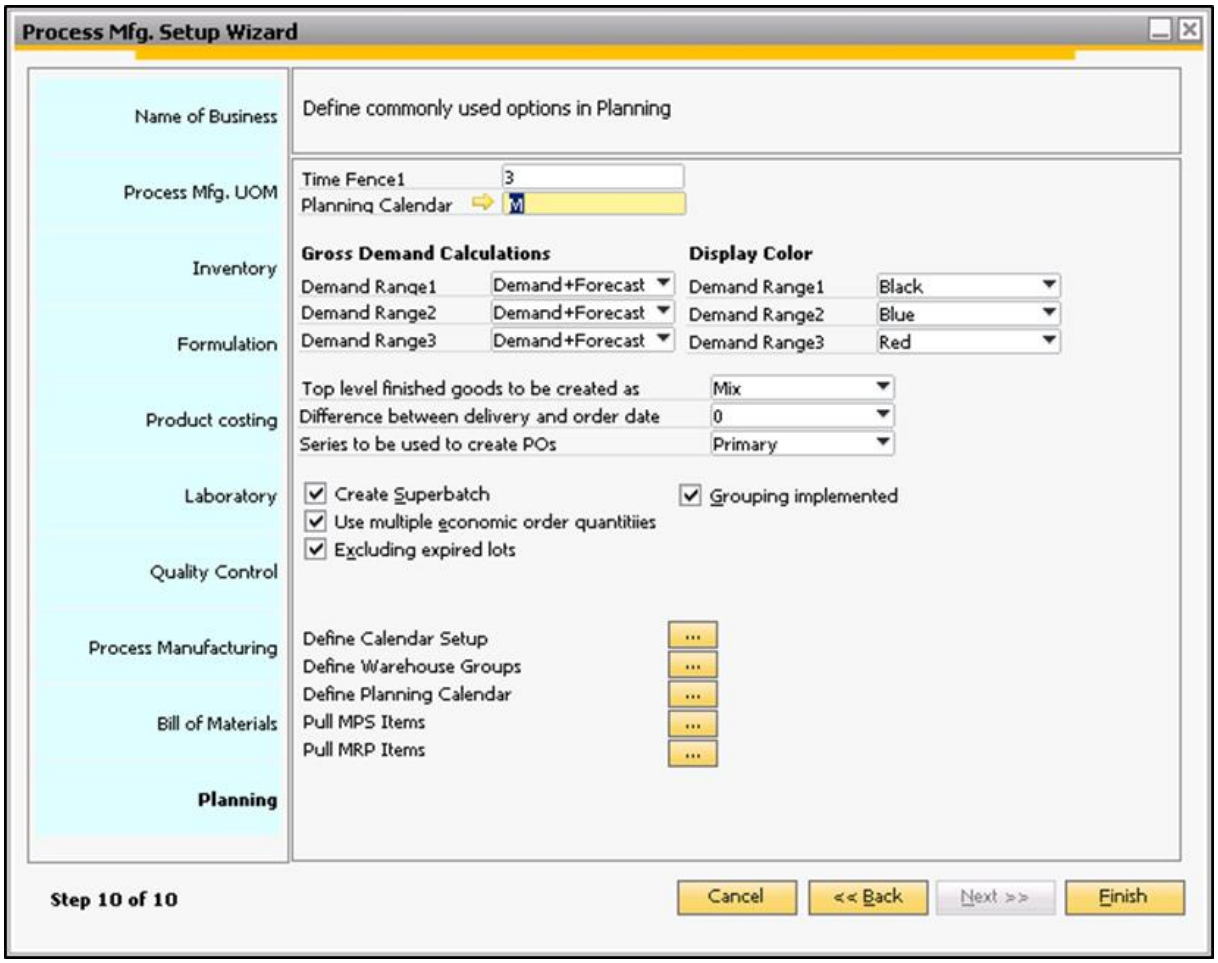
2.10.2.21 Bill of Materials – 2



Select the BOM statuses to be displayed while navigating. Click NEXT.

2.10.2.22 Planning

Here you specify the settings used when running MPS (Master Production Scheduling) and MRP (Material Requirements Planning.)



Time Fence 1: Specify the number of days in the first *Time Fence*. You may define two time fences. An exception order is generated for those MPS/MRP orders, whose delivery date falls within this time fence. If the time fence falls into a bucket (A Bucket is a period of planning), then the time fence stretches to the end of that period. Assuming that the time fence is of four days and the number of days in a period is 3, the time fence covers not only the first period of three days, but enters into the second period (of three days) as well, and hence the time fence stretches to the end of the entire second period; and the effective size of time fence becomes six days.

Planning Calendar: Specify the default planning calendar. This is a mandatory field. If no planning calendar is associated with the items using the *Forecast Entry* screen, this planning calendar is used as the default calendar.

Gross Demand Calculations:

Demand Range1: The value in this field decides how gross demand for a range will be calculated. The value can be one of:

- **Demand:** If this option is selected, the *Gross Demand* will be calculated by adding up the following four types of demands:
  - Sales Orders
  - Warehouse Transfers (the 'transfer out' from this warehouse)
  - *MPS* type raw materials remaining to be issued to production batches that are not on *Hold*
  - The quantity by which *On Hand Quantity* is less than the *Safety Stock* as defined in the *Item Master Data* form
- **Forecast:** If this option is selected, the *Gross Demand* will be equal to the demand generated only from the forecast entries of *Active* status.
- **Demand and Forecast:** If this option is selected, the *Gross Demand* will be calculated by adding up the following:
  - Sales Orders
  - Warehouse Transfers (the 'transfer out' from this warehouse)
  - *MPS* type raw materials remaining to be issued to production batches that are not on *Hold*
  - The quantity by which *On Hand Quantity* is less than the *Safety Stock* as defined at the *Item Master Data* form
  - Forecast entries of *Active* status
- **Greater of Demand or Forecast:** If this option is selected, the gross demand will be equal to the greater of either demand or forecast.

Demand Range2: The value in this field decides how the gross demand for a range will be calculated. The options for this field are same as that of *Demand Range 1*.

Demand Range3: The value in this field decides how the gross demand for a range will be calculated. The options for this field are same as that of *Demand Range 1*.

Display Color

Demand Range1, 2, 3: Specify the color to be used to display values in the *MPS Planning Worksheet*.

Top Level Finished Good batch to be created as: The following are the options:

- **Mix:** When a batch is created (using a *Finished Good* type BOM) using the *Transfer MPS Production Order* screen, that batch will be a *Mix* type batch, by default.
- **Fill:** When a batch is created (using a *Finished Good* type BOM) using the *Transfer MPS Production Order* screen, that batch will be a *Fill* type batch, by default.

Difference between Delivery Date and Order Completion Date (Days): Specify whether the order delivery is possible on the same day of completion. When the value is set as 0 (Zero), the system understands that the finished goods can be delivered on the same day of production completion. When the value is 1 (One), the system understands that a gap of one day is required between production completion and delivery.

Series to be used to create POs: Provide the starting number of the sequence in which the POs will be created. The default value of this field is 0 (Zero). The other value in the drop-down menu is *Primary*.

Create Super Batch: Check this option if you want to transfer MPS/MRP production orders to super batches without creating separate batches for intermediates. In such a case, BatchMaster ERP does not suggest separate production orders for intermediates, whose demand arose only as dependent demand from a super batch. Thus, checking this option prevents creation of duplicate orders.

Use multiple economic order quantities: Check this option to use multiple EOQs (multiple economic order quantities for an item are defined) while suggesting purchase orders. The EOQ for an item will be taken as the upper limit of the range in which the order quantity of that item falls.

For example, there are three EOQs: 50 kg, 100 kg, and 150 kg for a buy-type item. If the demand for the item is 70kg, then the system will suggest a purchase order for 100 kg (upper limit of 50 – 100kg).

Grouping Implemented: Check this option to implement grouping for production activities. If grouping is implemented on items, then the demand for an item arising from multiple grouped warehouses will be fulfilled by carrying out the production activity in one of the warehouses.

Example: If the production warehouse is 01 and it is grouped with warehouses 01, 02 and 03. Then if there is a demand for the item (make-type) in warehouse 02 and warehouse 03, then MPS order will be generated for the item in warehouse 01 to fulfill the demands. Similar is the case with MRP orders for buy-type item.

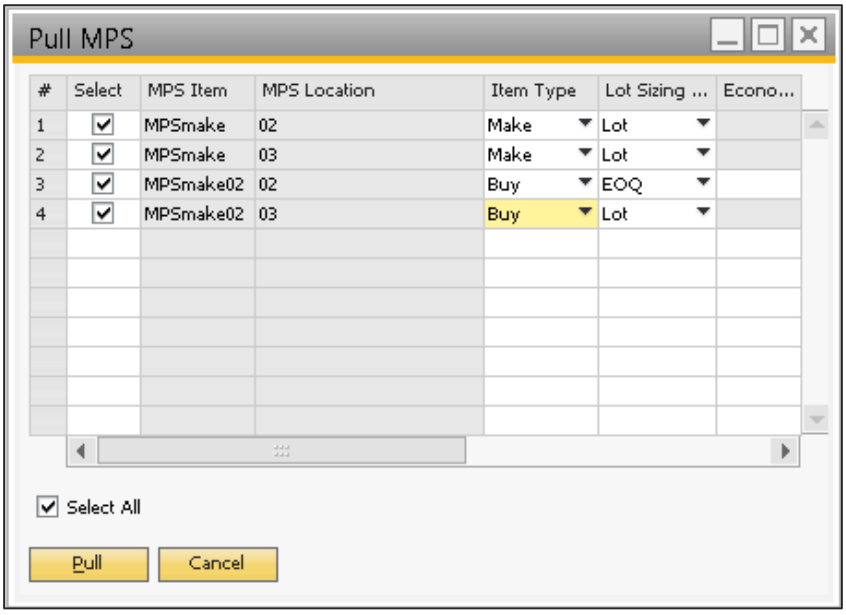
Excluding expired lot: Check this option to exclude the expired lots of inventories while calculating the inventories of raw material and intermediates to set up the MPS.

Define Calendar Setup: Click to open the *Company Calendar Setup* screen, which helps you to define the working days and holidays within a calendar year. The company calendar created here serves as the base calendar for running MPS/MRP for an item.

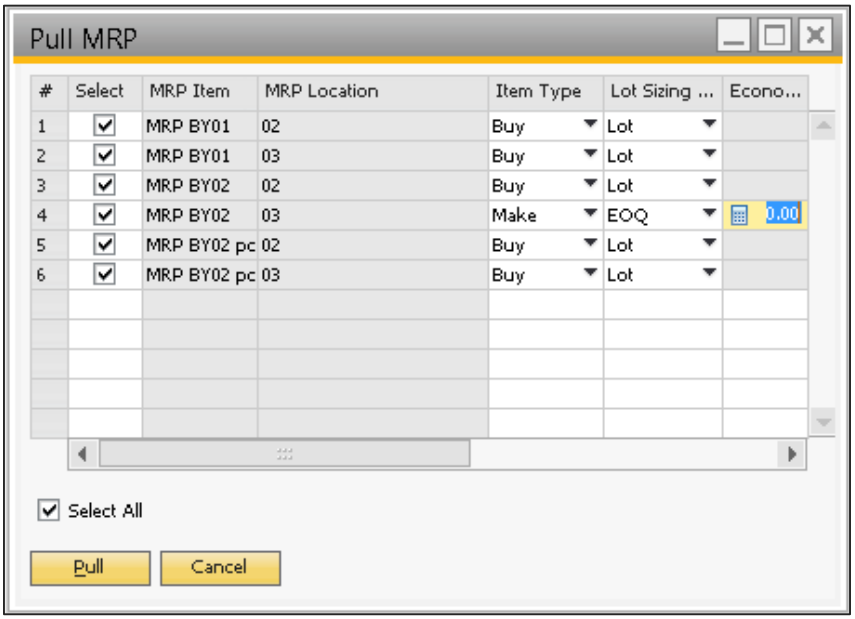
Define Warehouse Groups: Click to open the *Warehouse Groups* screen.

Define Planning Calendar: Click to open the *Planning Calendar* screen, which helps you to create a calendar that the MPS and MRP functionalities use when making calculations and estimations with respect to the forecast, demand, purchase, and production functions.

Pull MPS Items: Click to open the *Pull MPS Items* screen, where you can add MPS-processed items on the *Pull MPS Items* screen. The screen picks up those items the order method for which is marked as *MPS* in the *Item Master Details* screen. Refer to the *BME-B1 18.2 Planning User Guide* for details.



Pull MRP Items: Click to open the *Pull MRP Items* screen, where you can add MRP Items to the *Maintain MRP Items* screen. It picks up those items the *Order Method* for which is marked as MRP in the *Item Master Details* screen. Refer to the *BME-B1 18.2 Planning User Guide* for details.



2.10.3 Data Transfer Workbench

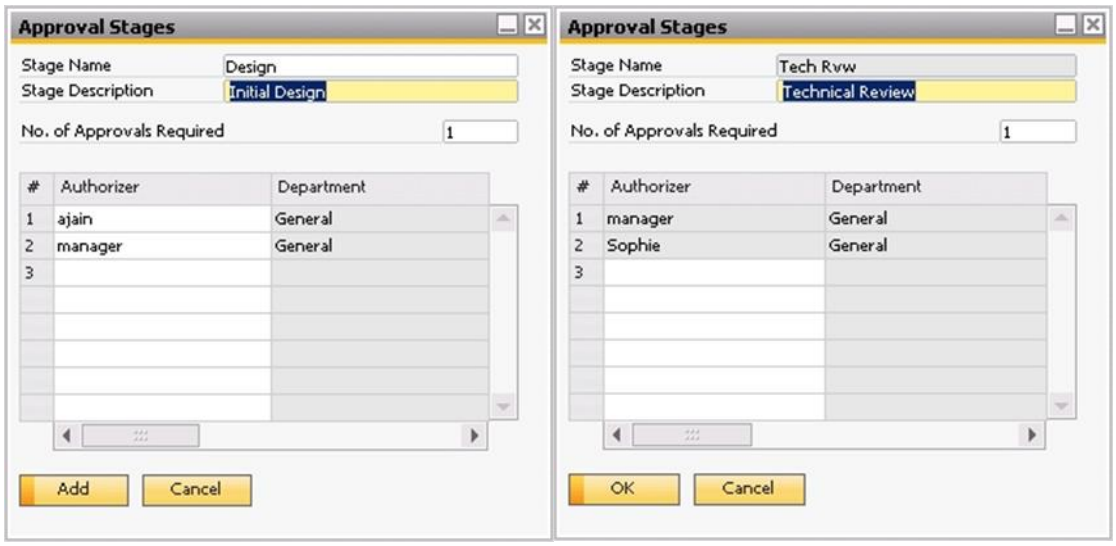
Please refer to the *BME-B1 18.2 Data Transfer Workbench Guide* for full details on this utility.

3 APPROVAL PROCEDURE SETUP

3.1 Approval Stages

Using the *Approval Stages* screen, you define the stages (business process steps) at which approval is required when creating or modifying formula or BOM records. In the case of multiple stages, the formula or BOM will be 'approved' only when it is accepted by all the approvers in their order of hierarchy. Once the record is accepted by an approver, an alert is sent to the next-in-line approver.

Go To: Administration → Setup → Process Mfg. Approval Procedures → Approval Stages. Switch to ADD mode.



If necessary, switch to 'Add' mode by pressing **Ctrl + A**.

Stage Name: The unique name for the stage (business step) in which approval is required. A maximum of 10 alpha-numeric characters can be used in this field. If you make the stage name somewhat generic, it can be used in multiple approval procedures.

Stage Description: A description of the stage created.

Number of Approvals Required: The minimum number of approvals required to take the document to the next stage. Note that the number of approvers does not have to equal the number of approvals required. For example, you can define three people who can approve a document, and require acceptance by only two of the three to move the document to the next step.

Authorizers: User(s) who can approve documents at this stage. With the cursor in the *Authorizers* field, press *Tab* on your keyboard to display the *User Table*.

Department: The department to which the authorizer belongs. This is a read-only field.

Add: Click the *Add* button to save the record.

Cancel: Click the *Cancel* button to exit the screen without saving your changes.

3.1.1 Creating Approval Stages

Open the *Approval Stages* screen. Switch to the 'Add' mode by pressing **Ctrl + A**.

Enter the name of the approval stage (business step) in the *Stage Name* field.

Enter a description of the stage (business step) in the *Description* field.

Specify the minimum number of approvals required to move the document to the next stage.

In the *Authorizers* column, enter the user(s) who can approve documents at this stage (one user per row of the grid).

Click the *Add* button to save the record.

3.2 Approval Templates

Using the *Approval Templates* screen, you design a workflow through which formulas/recipes or BOMs need to pass for verification and approval. This workflow is defined based on the originator of the document. The workflow templates can be used multiple times, avoiding the need to set up a new approval structure for each document.

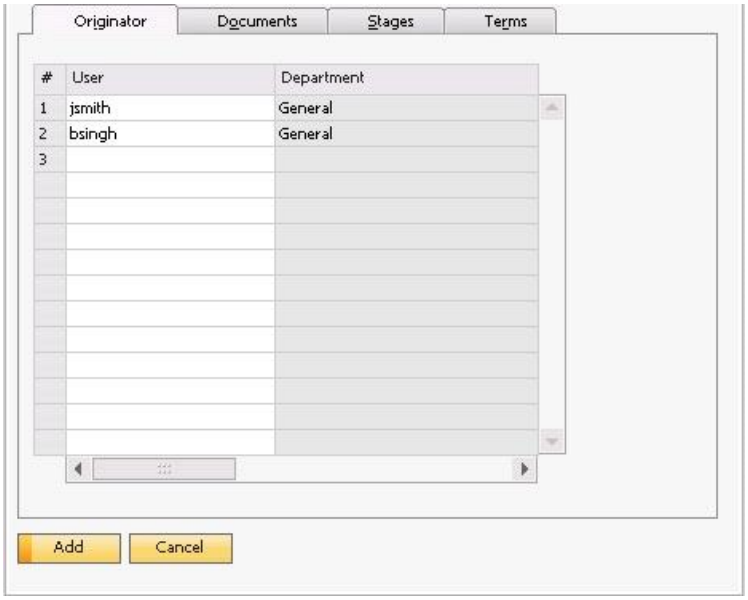
Go To: Administration → Setup →
Process Mfg. Approval Procedures → Approval Template.

Press **Ctrl + A** to switch to 'Add' mode.

Define a unique name for the template (maximum 10 alpha-numeric characters) and enter a description.

Active: Uncheck the box if the template is not ready for use or is later discontinued.

3.2.1 Originator Tab



User: Specify the users, one in each row, whose documents must follow the approval process. You can choose from the list of active users by clicking in the cell, then pressing *Tab*.

Department: The department to which the user belongs.

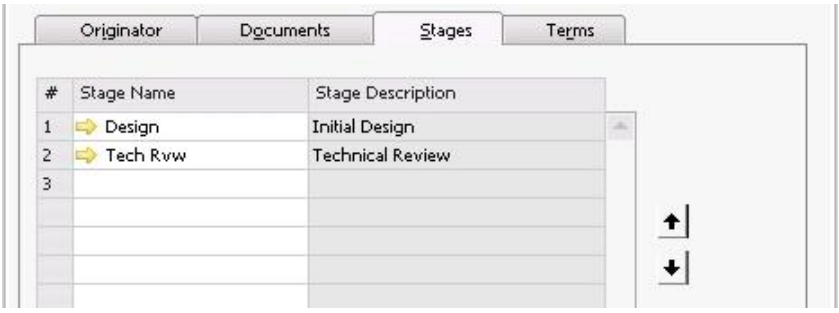
Add: Click the *Add* button at any time to save your work.

Cancel: Click the *Cancel* button to exit the screen without saving your changes.

3.2.2 Documents Tab

Checking a box applies the template to the function. Check as many boxes as apply. Click ADD or UPDATE to save your edits.

3.2.3 Stages Tab

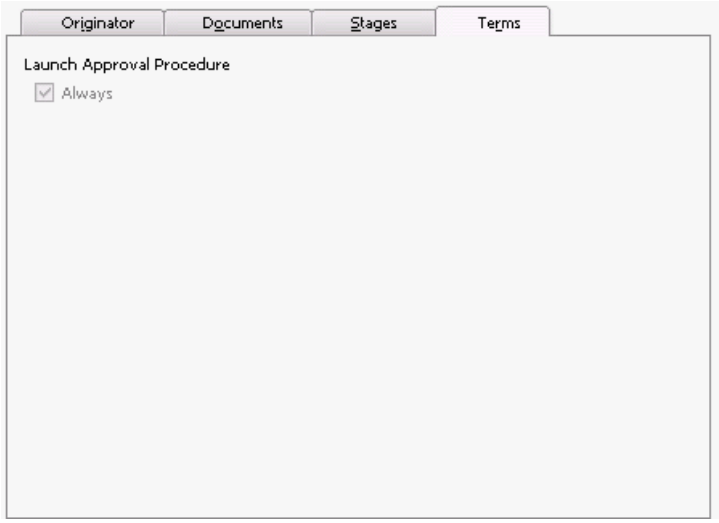


Stage Name: Define the stages (process steps) at which document approval is required before the document moves to the next process step. For a lookup, put the cursor in the cell and tab out.

Stage Description: View the description of the stage. This is a read-only column.

Stages are processed in the order in which they are listed. To promote or demote a stage, click on its sequence number, then click the up arrow or down arrow.

3.2.4 Terms Tab



Launch Approval Procedure: When you have provided the required information in the preceding tabs, select this checkbox to launch the approval procedure. Then click the *Add* or *Update* button at the bottom of the screen to save your work.

3.2.4.1 Creating an Approval Template

1. Open the *Approval Template* screen, and switch to the *Add* mode by pressing **Ctrl + A**.

1. Enter the approval template name in the *Name* field. (This field has a maximum of 10 alpha-numeric characters.)

2. Enter the related description in the *Description* field.

3. If you do not want the template to be active yet, uncheck the box.

4. Switch to the *Originator* tab. In the *User* column, specify the users whose edits require approval. For example, edits by user John Smith (**jsmith**) require approval, but edits by his boss, Ann Jones, do not.

5. Switch to the *Documents* tab to select the documents that require approval(s).

6. Switch to the *Stages* tab. Add stages (one in each row) in the sequence in which the document must be approved.

7. On the *Terms* tab, select the *Launch Approval Procedure* checkbox, if enabled.

8. Click the *Add* button to save the record.

3.3 Approval Procedure Review

1. First we created *Approval Stages*, which correspond to key business process steps.

    a. In our example we created a stage called *Design*. The authorized approvers are 'ajain' and 'manager,' only one of whom needs to approve a document at the *Design* stage before it can move to the next business process step.

    b. Similarly, we created a stage called *Tech Rvw* with authorized approvers 'manager' and 'Sophie', only one of whom needs to approve a document before it will become *Active* and be released for use in the system.

2. Next we created *Approval Templates.* They define whose documents must be approved, which documents must be approved, and at what stages (business process steps) the approvals must be done.

    a. Our template is called *Formulas*. It lists 'jsmith' and 'bsingh' as users whose documents require approval. This is done on the *Originator* tab of the *Approval Template* screen.

b. The documents that must be approved for ‘jsmith’ and ‘bsingh’ are formulas. BOMs are exempt. This selection is made on the *Documents* tab.

c. The stages (business process steps) at which approvals are needed are *Design* and *Tech Rvw*.

d. Since the template is ready for use, we left the *Active* field checked.

3. In daily use, the workflow will be as follows:

a. Smith wants to make a change to an existing formula. He opens the *Formula Entry* screen and creates a new revision of the formula, which defaults to *Development* status. When Smith is finished, he clicks the *Send for Approval* button.

b. Users ‘ajain’ and ‘manager’ are authorized to approve the *Design* stage. Each of them receives an alert from the system that an approval action is needed. Only one of them needs to approve the formula. (Note: If both parties needed to approve, they could do so in any order.)

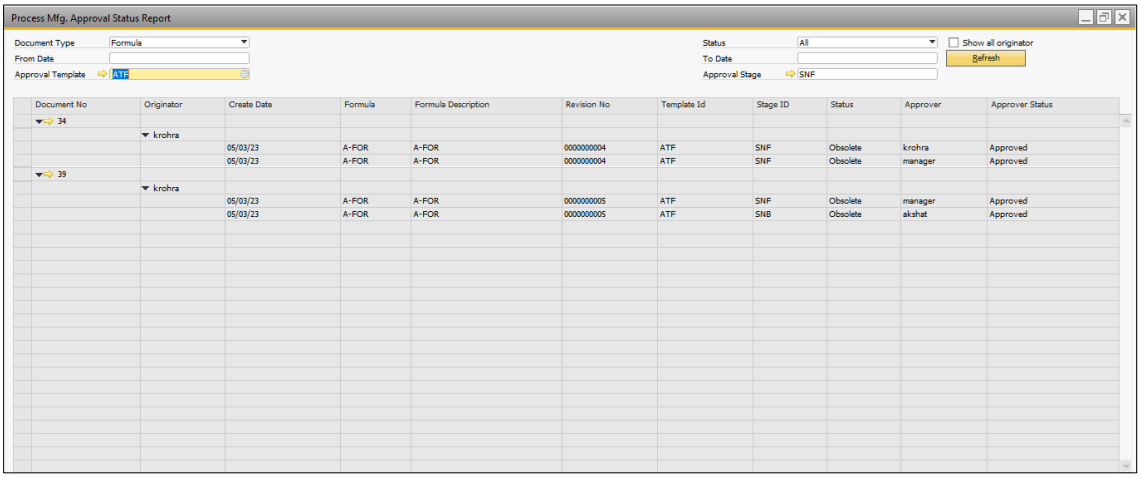
c. If the required number of authorized users (in this case, one) approves the formula change, the next group of approvers will receive an alert that approval is needed. Once either ‘manager’ or ‘Sophie’ approves the formula in the *Tech Rvw* stage, the status changes to *Active* and the formula can be used in production.

- If the change is not approved, the formula would stay in *Development* status. It could be further modified and re-submitted for approval.
- The steps are the same for creating a new formula, since new formulas start out in *Development* status.

Placing a formula on *Hold*, releasing the *Hold*, or making the formula *Obsolete* do not require approval.

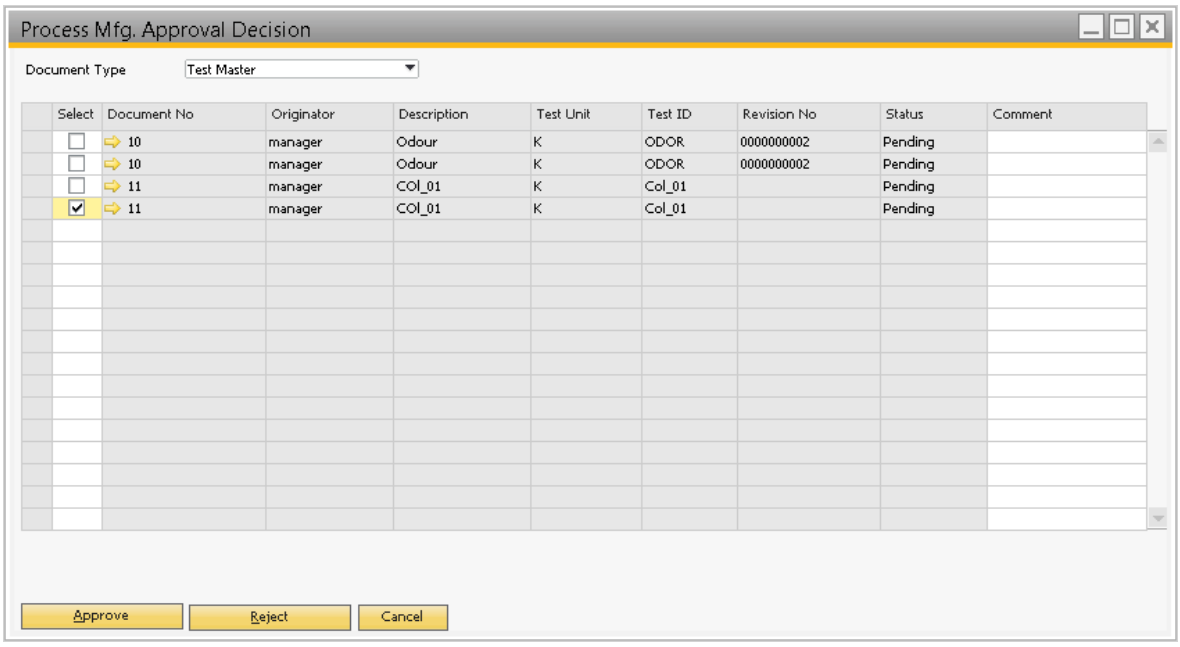
3.4 Process Mfg Approval Status Report

This dashboard is specifically designed for the originator to check the Approval status of Process Mfg documents. On this dashboard you can view the current Approval status of BatchMaster documents such as Formula, Bill of Material, Test Master, Test Method, Define QC . If you have the Nutra add-on installed, you can also view the Business Partner Catalog No and Deviation Management documents. Various filter criteria such as Date range (on which document was created), Approval status (Pending, Approved and Rejected) are available to view precise details. If the login user is a Superuser, then an additional checkbox *Show All Originator* is available to view the documents of all different originators.



3.5 Process Mfg Approval Decision

Use the *Process Mfg Approval Decision Report* to Approve/Reject a selected document. For the selected Document Type, the dashboard displays all the documents whose approval is pending by the logged in user (Approver). The user can Approve/Reject the document. You no longer need to search for the document in the Message/Alert window, instead you can view it on the dashboard to Approve/Reject. Also, if the Message/Alert is deleted, you can still obtain the document from the dashboard. You can *Approve/Reject* multiple documents at once.

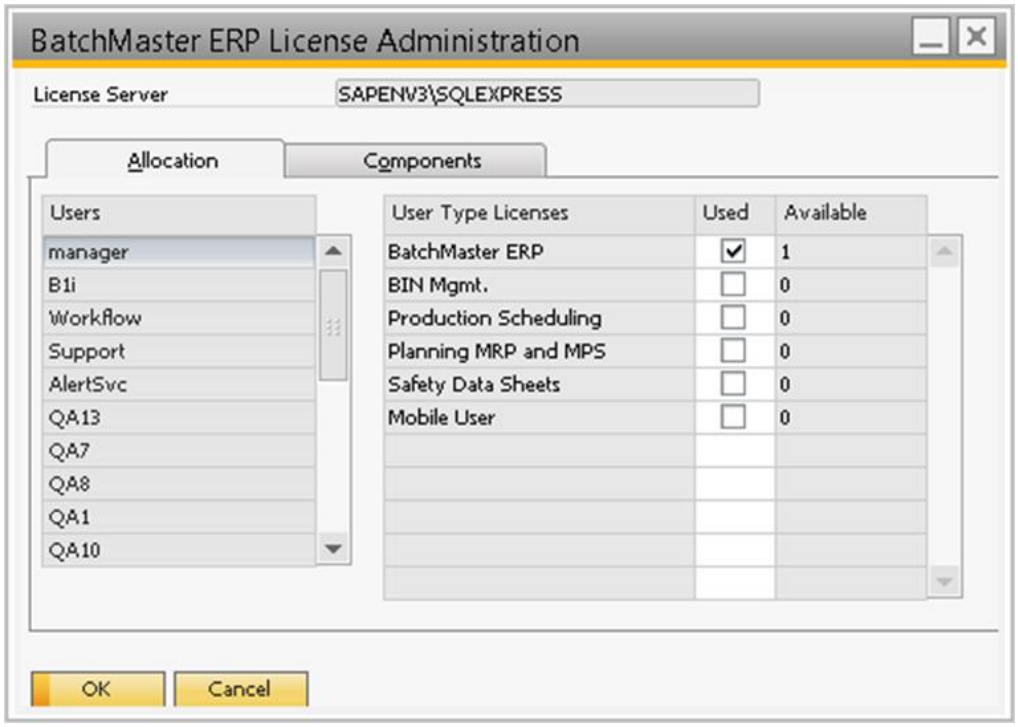


4 LICENSE ADMINISTRATION

This screen lists the licenses you need to allocate so that users can access the process manufacturing features of BME-B1. The data listed will vary depending on the number and types of licenses purchased. For more details you can consult the *BME-B1 18.2 License Mapping Guide* and the *BME-B-1 18.2 Installation Guide for OEM or SSP Users*.

Go To: Administration → License → Process Mfg License → License Administration

In the left window, highlight the user for whom you want to allocate a license.



License Server: This read-only field displays the server which contains the license for your BatchMaster applications.

Allocation tab

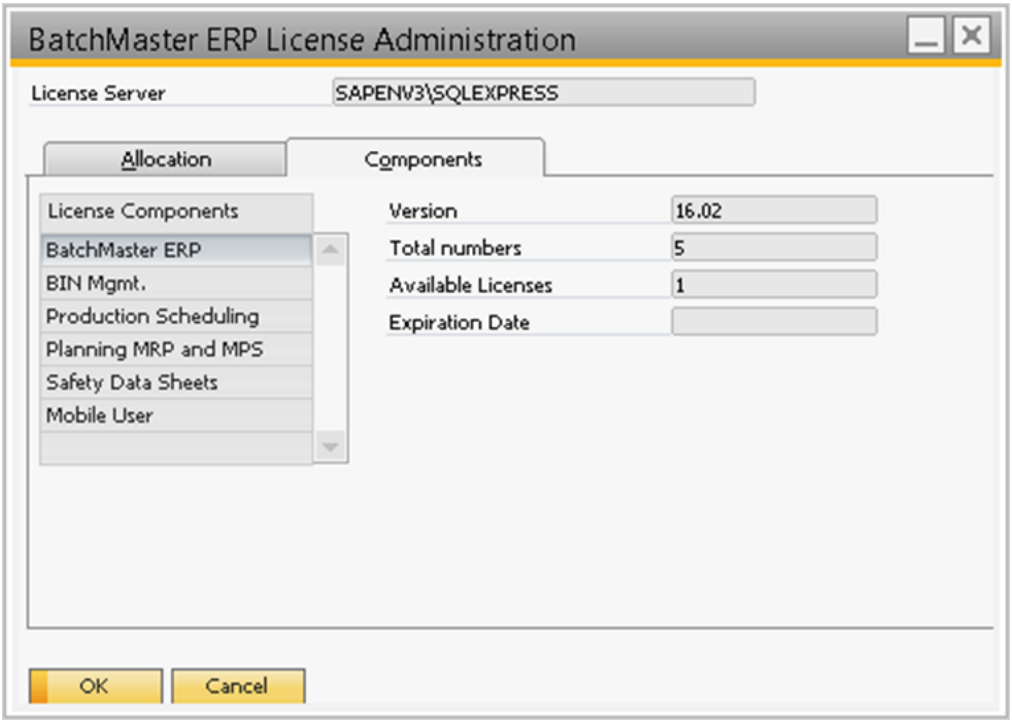
Users: This table lists the system users.

User Type Licenses: This grid displays the licenses provided with your BatchMaster ERP product.

Used: Select the checkbox to provide the access of the module that corresponds to the user.

Available: This read-only field displays the number of licenses available. When you select a checkbox that corresponds to a module, the list is reduced by one.

Components Tab



License Components: This field displays the list of components of your OEM or non-OEM license.

Version: This read-only field displays the version of your BatchMaster ERP product.

Total number: This field displays the total number of licenses provided with your BatchMaster ERP product.

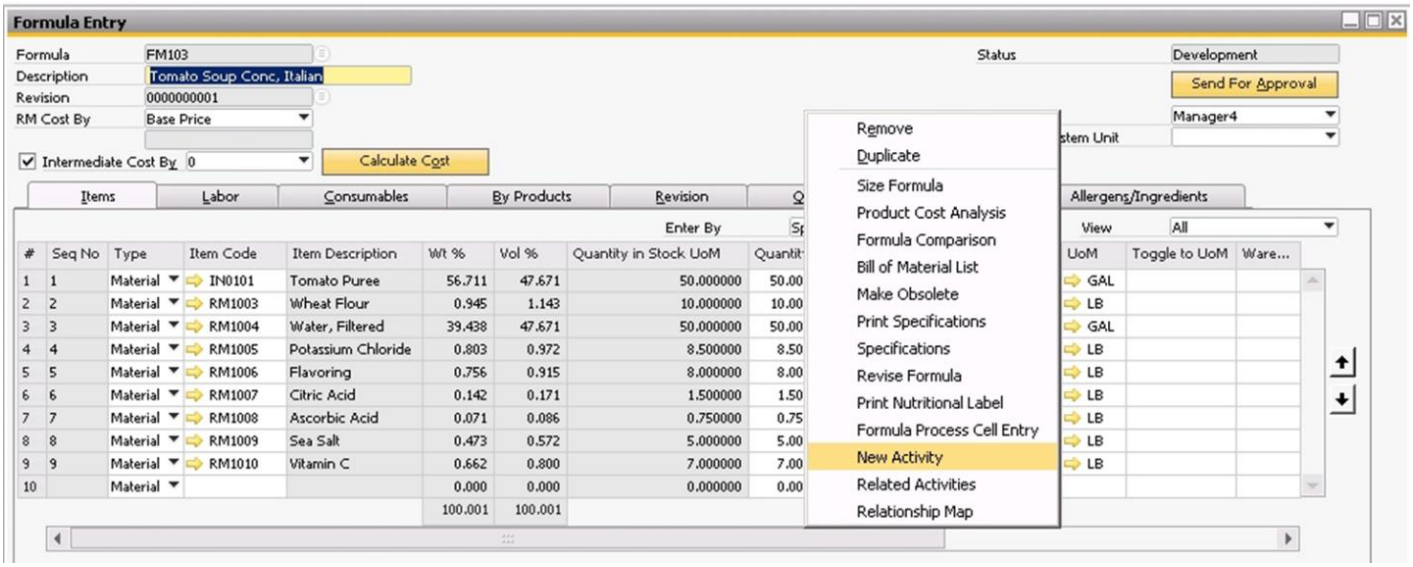
Available Licenses: This read-only field displays the total of the *Available* field in the *Allocation* tab.

Expiration Date: This field displays the date on which your license will expire.

5 ACTIVITIES

The Activities function of SAP Business One has been enhanced to include many of the process manufacturing modules: Formula Entry, Product Cost Analysis, Physical Property Analysis, Bill of Materials Entry, Quality Control Orders, Production Batches and SuperBatches.

The purpose of an activity is to record important business transactions. These could be meetings, phone calls, customer audits… any situation you want to document for future reference. There is no limit to the number of activities you can associate with a formula, QC order, etc. You can add to the activity record at any time. Activities are generally accessed by right-clicking in the appropriate data entry screen, as shown below:



#	Seq No	Type	Item Code	Item Description	Wt %	Vol %	Quantity in Stock UoM	Quantit	UoM	Toggle to UoM	Ware...
1	1	Material	IN0101	Tomato Puree	56.711	47.671	50.000000	50.00	GAL		
2	2	Material	RM1003	Wheat Flour	0.945	1.143	10.000000	10.00	LB		
3	3	Material	RM1004	Water, Filtered	39.438	47.671	50.000000	50.00	GAL		
4	4	Material	RM1005	Potassium Chloride	0.803	0.972	8.500000	8.50	LB		
5	5	Material	RM1006	Flavoring	0.756	0.915	8.000000	8.00	LB		
6	6	Material	RM1007	Citric Acid	0.142	0.171	1.500000	1.50	LB		
7	7	Material	RM1008	Ascorbic Acid	0.071	0.086	0.750000	0.75	LB		
8	8	Material	RM1009	Sea Salt	0.473	0.572	5.000000	5.00	LB		
9	9	Material	RM1010	Vitamin C	0.662	0.800	7.000000	7.00	LB		
10		Material			0.000	0.000	0.000000	0.00			
					100.001	100.001					

5.1 Activity Data Prerequisites

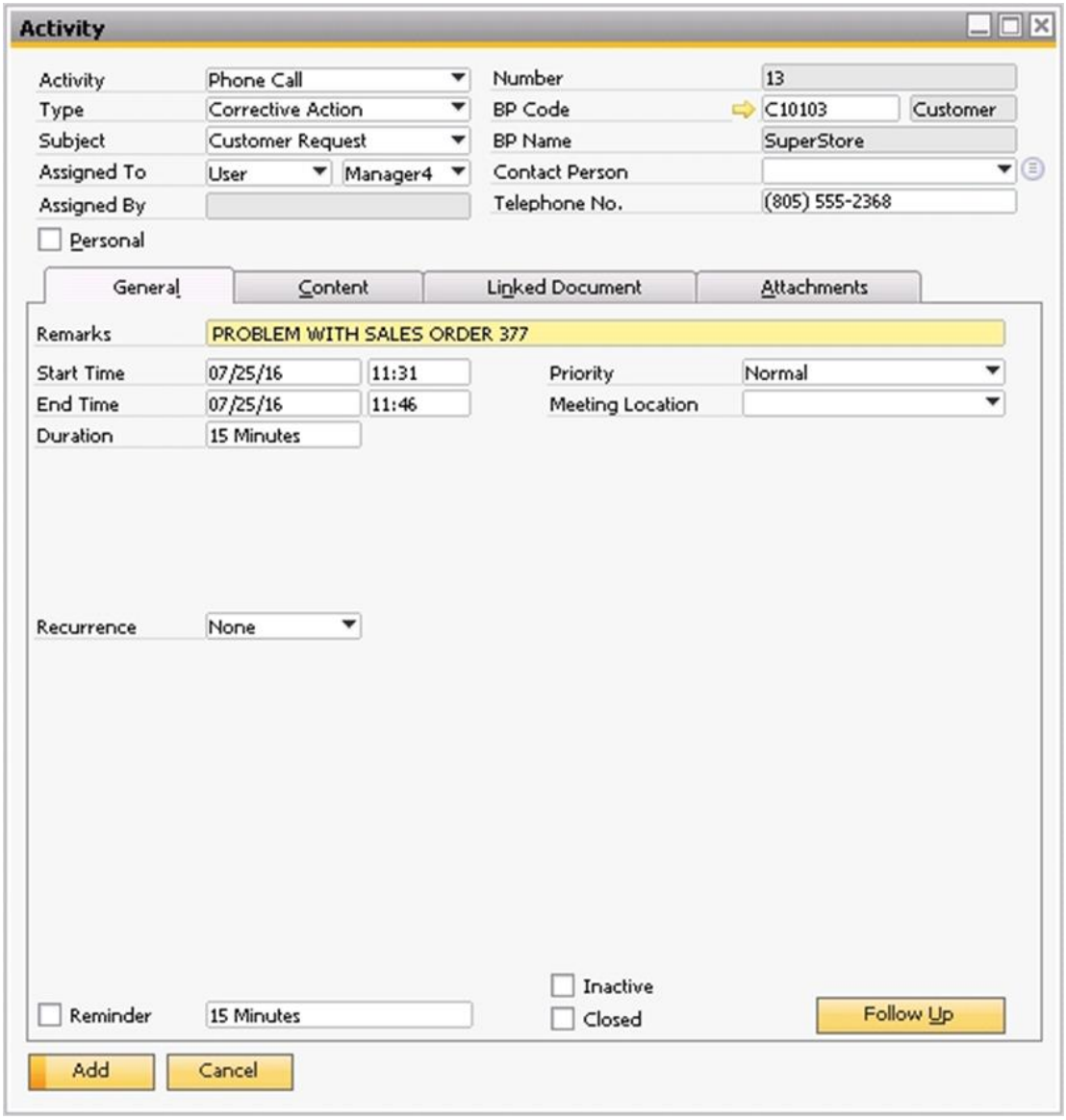
Activity Classes – pre-defined by the system

Activity Types – pre-defined plus you can add new ones

Activity Subjects – pre-defined plus you can add new ones

Business Partner Records – required for every activity record. You should define a business partner code for your company so you can create internal activities (those not directly associated with a business partner.)

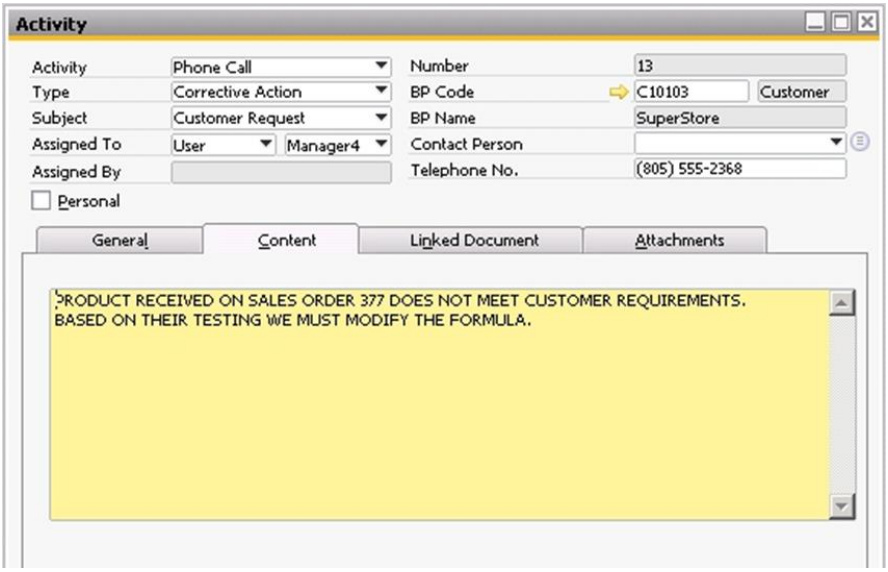
5.2 The General Tab



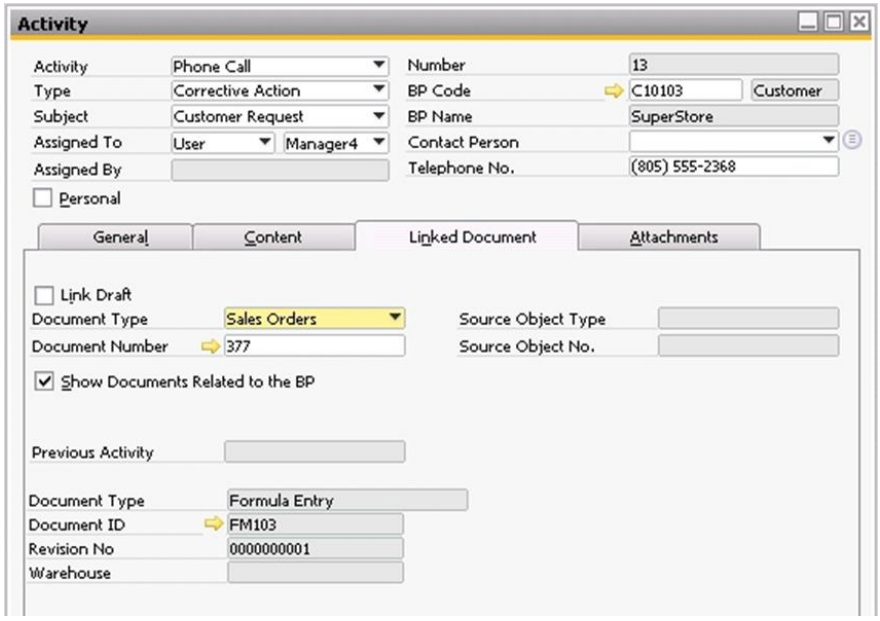
On the general tab, we assign the activity to a user and provide a summary of the activity. The system suggests a start time and a duration of 15 minutes, which we can modify. If the activity is on-going we can define a recurrence frequency, and a reminder can be set up so the user doesn't forget to address the issue. As always, clicking the ADD or UPDATE button will save your edits, and the CANCEL button will discard them.

5.3 The Other Tabs

On the content tab we provide a more detailed description of the activity, which can be pasted from a Word document or an Email for convenience and accuracy.



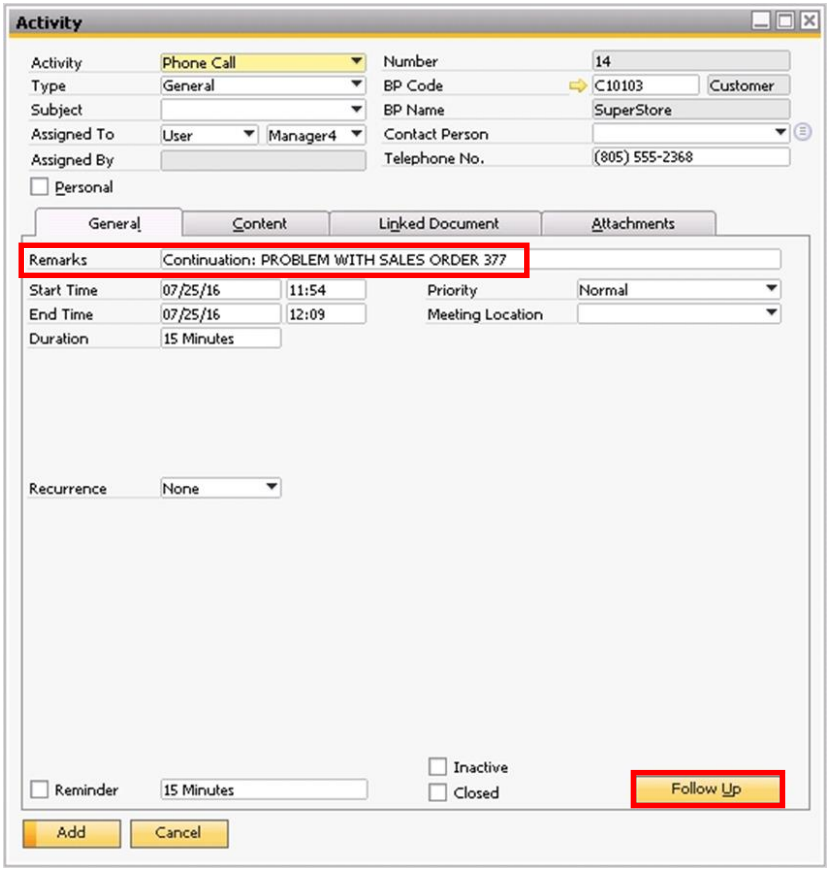
On the content tab we provide a more detailed description of the activity, which can be pasted from a Word document or an Email for convenience and accuracy.



On the documents tab we can link a sales order, purchase order, or any other customer-facing document to the activity. On the Attachments tab (not shown) we can link most file types to the activity for easy reference.

5.4 Linking Activities

After an activity record has been saved, you can link additional activities to it by clicking the follow-up button.



The remarks from the original activity will default in, and the original activity number will display on the Linked Documents tab. Note that once an activity has been marked closed any additional edits must be done by creating a follow-up activity.

6 UTILITIES

6.1 Bin-Sync Utility

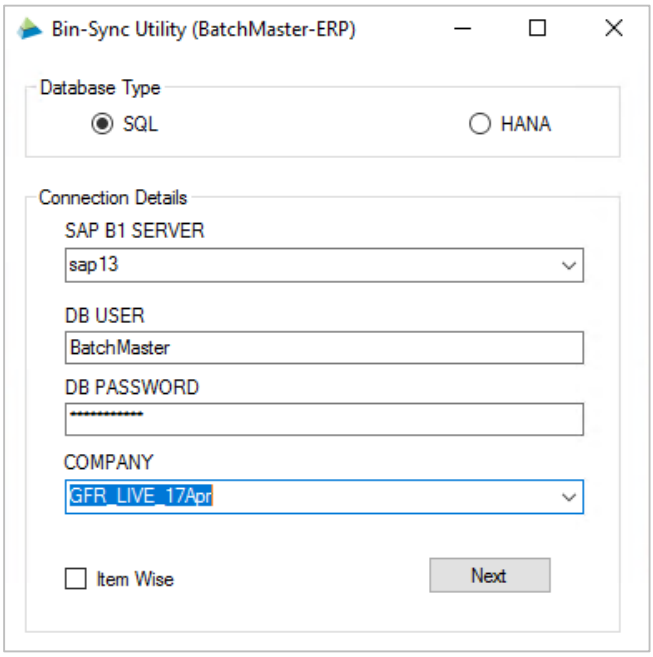
The *Bin-Sync Utility* displays the items with quantity discrepancies when you log into the utility. It includes key details such as Item Code, Lot, Bin, SAP Quantity, BMM Quantity, and Pallet Information. The UI provides the ability to edit and update quantities directly within the utility. The *Edit Quantities* tab is provided on the utility for allowing you to select a specific item, lot, bin, or pallet combination and

adjust the quantity as needed. In addition, performance optimization is applied to the utility for handling larger datasets efficiently, reducing the time required to load and process mismatched data.

- The login screen of the *Bin-Sync Utility* is provided with the option to select the *Database Type* (*SQL* or *HANA*) followed by fields for *Connection Details* (*SAP B1 SERVER, DB USER, DB PASSWORD,* and *COMPANY*).
- A checkbox labelled as *Item Wise* is available to display the data item-wise. Click the *Next* button to proceed to the next step.

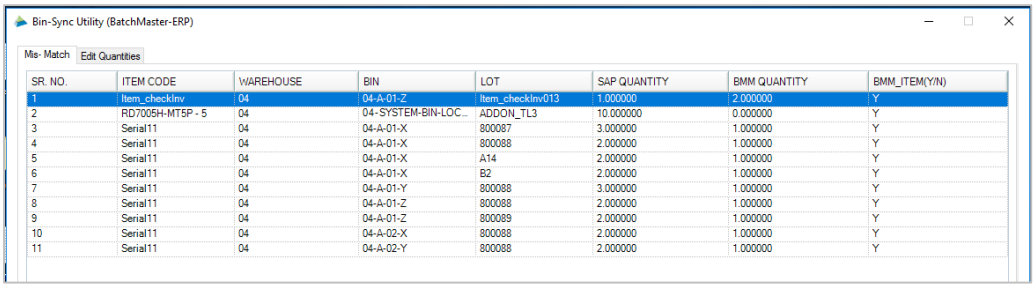
While using this utility, it will be strongly recommended not to edit records with quantities that have system-generated Quantity Reservation Lot Statuses. For instance, quantities having Lot statuses with prefixes such as - PLN, WT, etc.

Go To: Administration → Utilities →Bin Sync Utility.



6.2 When *Item Wise* Checkbox is Unchecked

If the *Item Wise* checkbox is unmarked, click the *Next* button to load the Mismatched Items data. This screen displays two tabs: *Mis-Match* and *Edit Quantities*.



SR. NO.	ITEM CODE	WAREHOUSE	BIN	LOT	SAP QUANTITY	BMM QUANTITY	BMM_ITEM(Y/N)
1	Item_checkInv	04	04-A-01-Z	Item_checkInv013	1.000000	2.000000	Y
2	RD7005H-MT5P - 5	04	04-SYSTEM-BIN-LOC...	ADDON_TL3	10.000000	0.000000	Y
3	Serial11	04	04-A-01-X	800087	3.000000	1.000000	Y
4	Serial11	04	04-A-01-X	800088	2.000000	1.000000	Y
5	Serial11	04	04-A-01-X	A14	2.000000	1.000000	Y
6	Serial11	04	04-A-01-X	B2	2.000000	1.000000	Y
7	Serial11	04	04-A-01-Y	800088	3.000000	1.000000	Y
8	Serial11	04	04-A-01-Z	800088	2.000000	1.000000	Y
9	Serial11	04	04-A-01-Z	800089	2.000000	1.000000	Y
10	Serial11	04	04-A-02-X	800088	2.000000	1.000000	Y
11	Serial11	04	04-A-02-Y	800088	2.000000	1.000000	Y

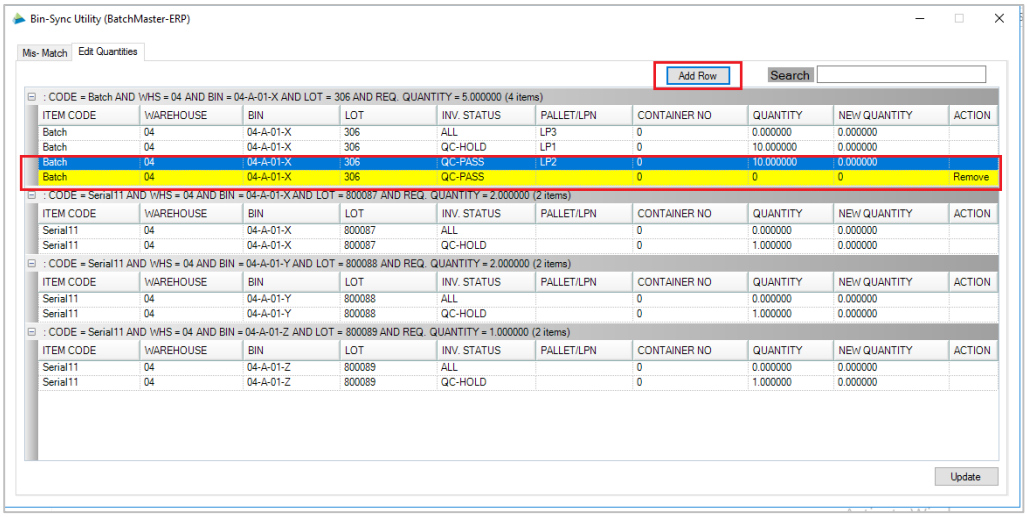
In the *Mis-Match* tab, the following details of mismatched items are displayed:

- ITEM CODE
- WAREHOUSE
- BIN
- LOT
- SAP QUANTITY– Quantity of that Particular Item-Lot in SAP tables
- BMM QUANTITY - Quantity of that Particular Item-Lot in BMM tables
- BMM_ITEM(Y/N) – Whether the item is available in the @BMM_ITEM table.

In the *Edit Quantities* tab, only mismatched quantity items with multiple records for the Item-Warehouse-Bin-Lot combination displays. Multiple records may exist due to different LPNs, Inventory Status, or Container No. Initially, the data is grouped by Item-Warehouse-Bin-Lot combination, and expanding the group displays the individual records for that combination, including Inventory Status, LPN No, and Container No from the @BMM_BINDETAIL table.

In the *Edit Quantities* tab, a *NEW QUANTITY* field is provided to input the required quantities, i.e., the mismatched number of quantities for the specific Item-Warehouse-Bin-Lot combination. *Add Row* button is available if you want to add quantities for a specific Item-Lot on a new pallet. To add a new row, you need to click on the existing row corresponding to the Item-Warehouse-Bin-Lot-Inventory Status combination you want to replicate. After selecting a row, click the *Add Row* button to insert a new row with the same combination. You can enter the Pallet and the New Quantity in the respective fields. The newly added row gets highlighted with yellow color for identification purposes. Under *Action* field, *Remove* option is available for deleting the newly added row, if needed. On clicking the *Update* button, a new line is inserted with the Item-Warehouse-Bin-Lot-Inventory Status combination and enter the *PALLET/LPN*, and *NEW QUANTITY*.

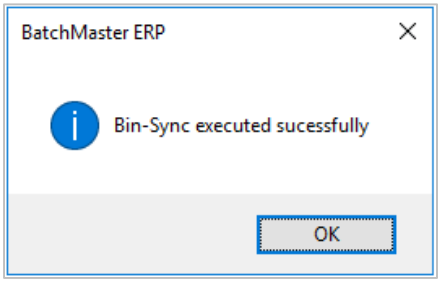
If the item is containerized, the system automatically generates container numbers based on the default container size specified on the *Item Master Details* screen. The container number is assigned sequentially, utilizing the next available consecutive container number in the database for the item. Container numbers are invisible in the utility, both initially and after the upgrade.



- Mismatched items with a single record for the Item-Warehouse-Bin-Lot combination in the @BMM_BINDETAIL table displays in the *Mis-Match* tab and not in the *Edit Quantities* tab, as the system automatically update the required quantity for that single combination.

- A Search Box is provided to filter the data as needed. Click the *Update* button to process the utility and update the quantity for the mismatched items in the @BMM_BINDETAIL table with the remark – 'Updated By Bin Sync utility'

On clicking *Update* button, the system displays a message as shown below:



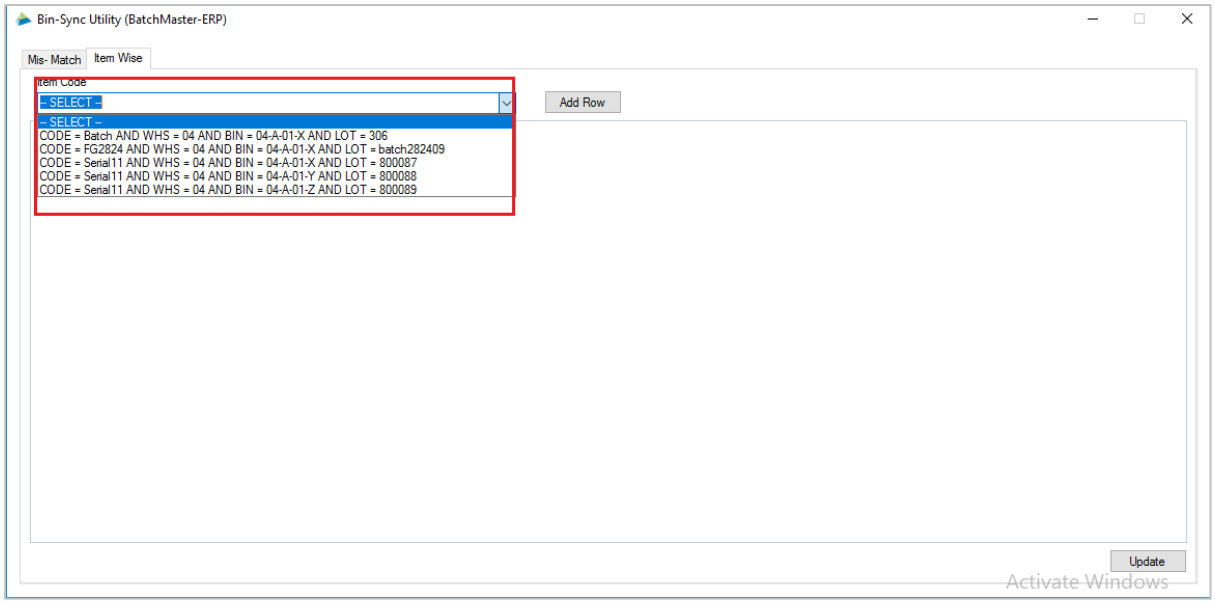
6.3 When *Item Wise* Checkbox is Checked

If the *Item Wise* checkbox is checked, click the *Next* button to load the Mismatched Items data. The screen displays two tabs: *Mis-Match* and *Item Wise*.

In the *Mis-Match* tab, the same data displays when the Item Wise checkbox is unchecked, as mentioned earlier. This includes details such as Item Code, Warehouse, Bin, Lot, SAP Qty, BMM Qty, and BMM Item (Y/N).

In the *Item Wise* tab, a dropdown field is provided where all the mismatched items are listed. Upon selecting an item from the dropdown, only the data for that specific item displayed, particularly where there are multiple records for the Item-Warehouse-Bin-Lot combination and user can input the required quantities in the *New Quantity* column.

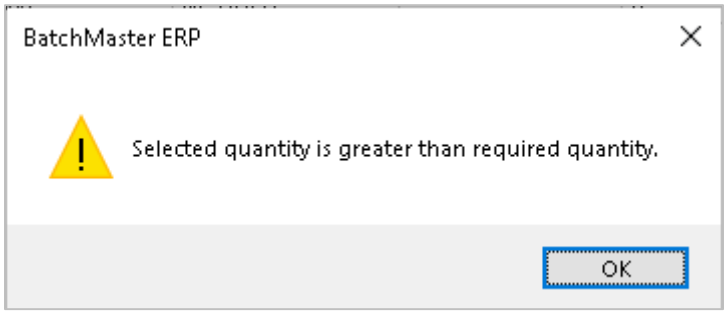
In the *Item Wise* option, *Add Row* functionality works, with specifications that are consistent with those described in the points mentioned above.



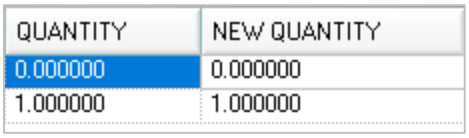
- For the mismatched items with a single record for the Item-Warehouse-Bin-Lot combination in the @BMM_BINDETAIL table, system automatically updates the required quantity for that specific combination.

Bin-Sync Utility now validates following points:

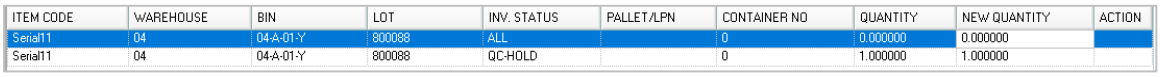
- If you enter a quantity greater than the required quantity, a validation message appears. The following message prompts when quantity in SAP is greater than BMM:



- If the quantity in BMM is greater than the quantity in SAP, the *NEW QUANTITY* field, by default, displays the available quantity for that specific combination from the Bin Detail table.

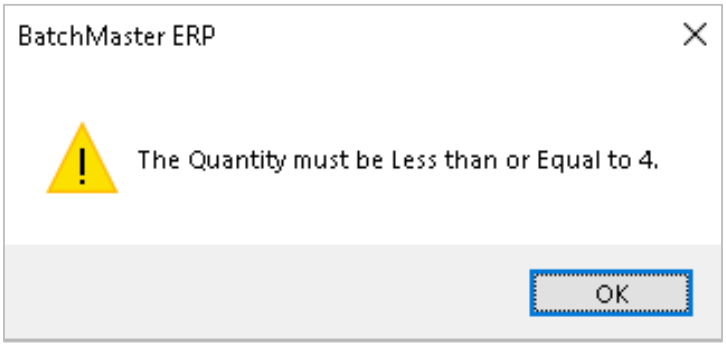


QUANTITY	NEW QUANTITY
0.000000	0.000000
1.000000	1.000000

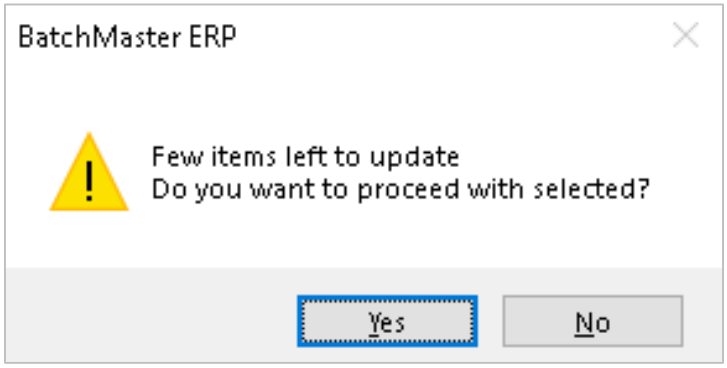


ITEM CODE	WAREHOUSE	BIN	LOT	INV. STATUS	PALLET/LPN	CONTAINER NO	QUANTITY	NEW QUANTITY	ACTION
Serial11	04	04-A-01-Y	800088	ALL		0	0.000000	0.000000	
Serial11	04	04-A-01-Y	800088	QC-HOLD		0	1.000000	1.000000	

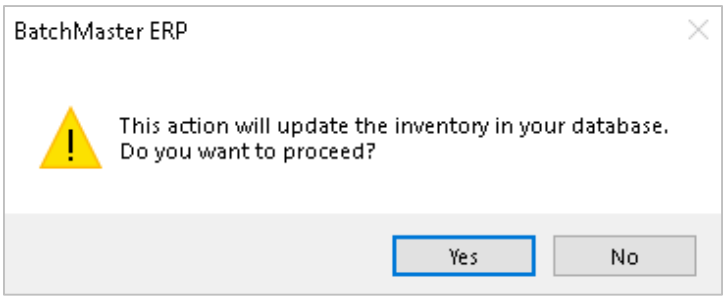
- For containerized items, if you enter a quantity greater than its default container size, a validation message appears:



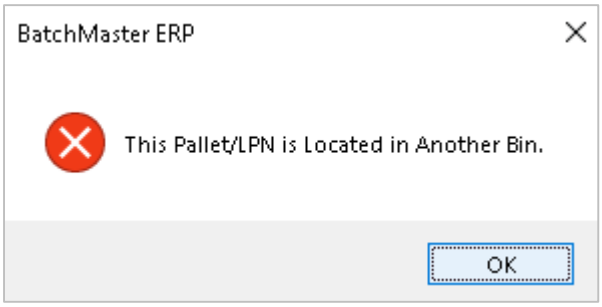
- If you enter the required quantity for partial items, a confirmation message appears as:



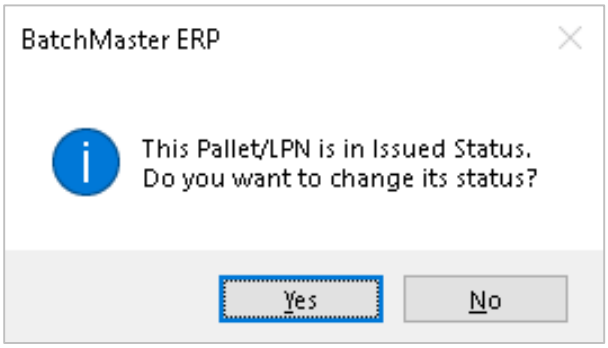
- On clicking the *Update* button a confirmation message appears as:



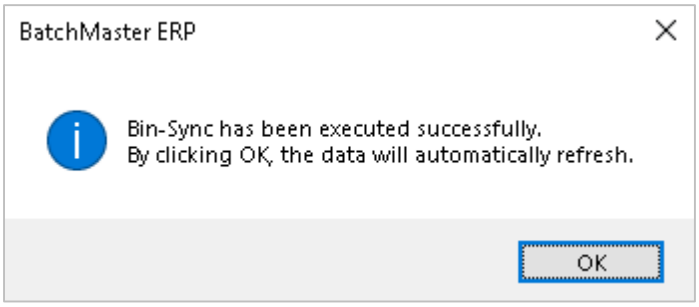
- If you enter a pallet number that is already associated with another bin, a validation message appear as:



- If you enter a pallet number that is associated with the same bin but has an *Issued* status in the @BMM_Palletmaster table, a confirmation message appear as:



- Upon clicking the *Update* button, a pop-up message appear as:



- While executing the BinSync Utility, if there are multiple items with mismatched quantities and you enter quantity for only a subset of items, upon hitting the *Update* button, a warning message display as:

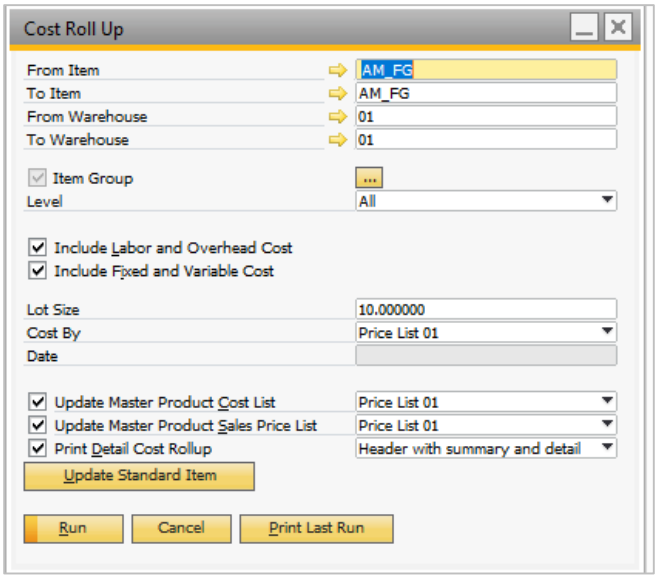
Upon clicking *OK* button, the data automatically refresh, displaying only the remaining mismatched items.

7 COST ROLL UP

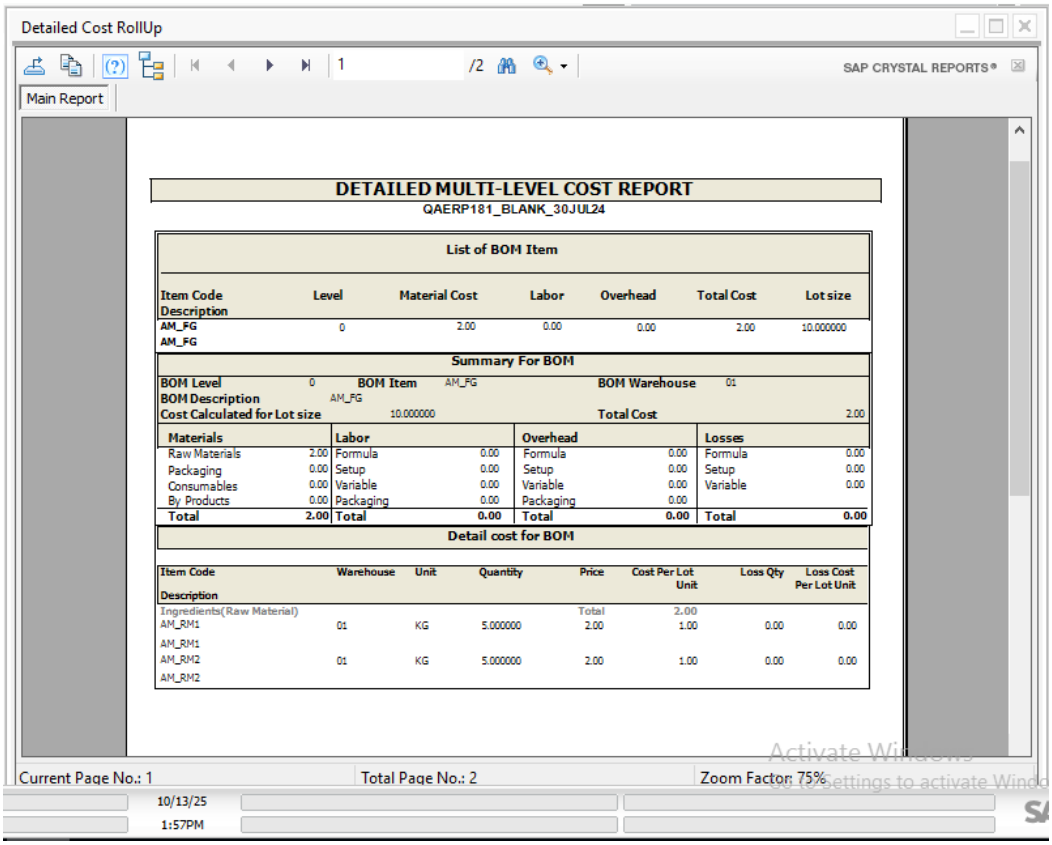
This enhancement introduces the ability to display the *Cost By* parameter within the Cost Roll-Up Report in BatchMaster Web. Previously, while users could select the Cost By option in the report's selection criteria, it was not reflected in the final printed or exported report.

With this update, the selected *Cost By* value will now appear in both the report header and summary sections, along with other applied filters such as item, plant, and date range.

Go To: Product Costing → Costing Utilities → Cost Roll Up



All selected filter criteria (such as Item Code, Plant, and Date Range) are already displayed in the report header. With this enhancement, the “Cost By” field will now also appear in the same manner, showing the value selected by the user during report generation.



8 HANDLING EXTRA FINISHED GOODS QUANTITY WITH BACKFLUSH IN THIRD-PARTY MANUFACTURING BATCHES

This feature adds a validation control during Finished Goods (FG) receipt in Third-Party Manufacturing batches to prevent over-receipts beyond the defined production quantity. It ensures accurate reporting and inventory control. When users enter an Actual Quantity greater than the Standard Quantity in FG receipt, the system displays a validation message to confirm the action:

“You are about to receive a quantity greater than the production quantity for this order. Do you want to proceed?”

- Yes: Proceeds with the entered quantity.
- No: Cancels the action, allowing quantity correction.