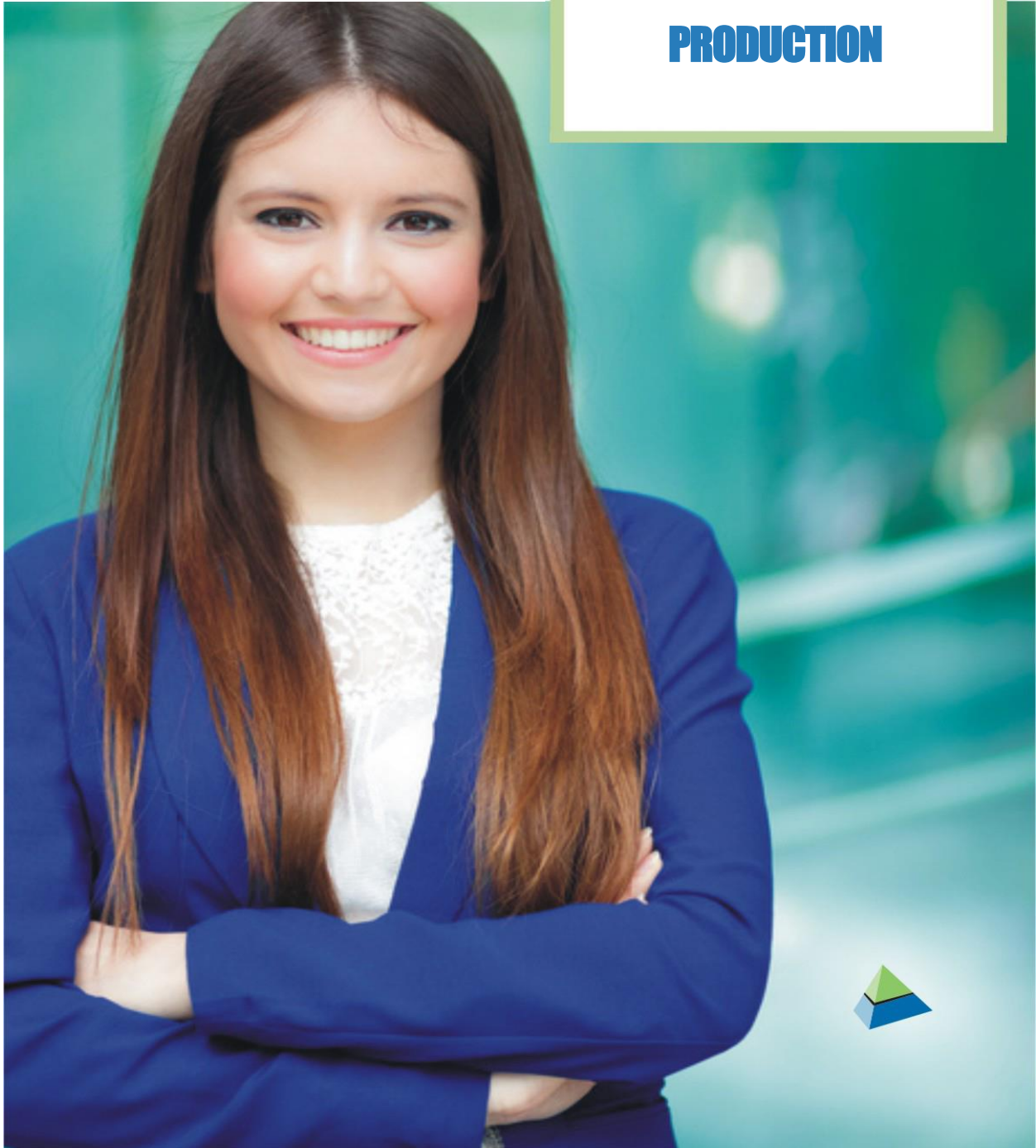


BATCHMASTER® ERP 18.2

User Guide

BatchMaster ERP with SAP Business One
BatchMaster Solutions for
Process Manufacturers

PRODUCTION





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About the Manual

Symbols & Conventions

Symbol	Description
	Note
	Mandatory setting
	Tips

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

Abbreviation	Description
BOM	Bill of Materials
ERP	Enterprise Resource Planning
FG	Finished Goods
QC	Quality Control
QTY	Quantity
UOM	Unit of Measure
WHSE	Warehouse
WIP	Work In Progress



Contents

1	DOCUMENT OVERVIEW.....	1
1.1	What Is This Document All About?	1
1.2	Who Should Read This Document?	1
1.3	Objectives.....	1
1.4	What's New in This Release?	1
2	OVERVIEW.....	3
3	PRODUCTION DEFAULTS	3
3.1	Batch Options Tab	4
3.2	SuperBatch Options Tab.....	10
3.3	Scheduling Options Tab.....	12
3.4	Staging/Picking Tab	13
3.5	Special Function	16
4	PROCESS CELL SETUP.....	16
4.1	Cell Setup	16
4.2	Process Cell Capacity Override.....	19
4.3	Process Stages	20
5	LOT TRACEABILITY LINK SETUP	22
6	BIN GROUP	23
7	PRODUCTION – DAILY USE	25
7.1	Labor Entry	25
7.1.1	Set-up: Labor Entry	31
7.2	Batch Entry	33
7.2.1	General Tab.....	36
7.2.2	Attachments Tab.....	37
7.2.3	Import From SO (Sales Order) Function.....	38
7.2.4	Select Batch to Rework	39
7.2.5	Go To Functions for Batch Entry	41
7.2.6	Creating a Batch	45
7.3	Batch Ticket	46
7.3.1	General Tab.....	47
7.3.2	Formula Tab	49
7.3.3	Finished Goods Tab	51
7.3.4	By Products Tab	55
7.3.5	Consumables Tab	56
7.3.6	Cost Tab	57
7.3.7	Attachments Tab.....	57
7.3.8	Issue Reversal.....	58
7.3.9	Go To Functions – Batch Ticket.....	60



7.4	Batch Close	68
7.4.1	Go To Functions at Batch Close	69
7.5	Batch Reversal	72
7.6	SuperBatch Entry.....	73
7.6.1	Top Item Tab	76
7.6.2	All Items Tab	77
7.6.3	Go To Functions for SuperBatch	78
7.7	SuperBatch Close	79
7.7.1	Finished Goods & BP Tab	80
7.7.2	Matl. Packaging and Consumables Tab.....	81
7.7.3	Labor Tab	81
7.7.4	Go To Functions	82
7.7.5	Closing a SuperBatch.....	83
7.8	Production Dashboard	85
7.9	Finished Good Allocation	89
7.10	Enhanced Production Picking.....	90
7.10.1	One Step Picking	90
7.10.2	One Step Bulk Staging.....	94
7.10.3	Two Step Picking	98
7.10.4	Key Terms of Production Pick Generation/Bulk Staging Document Generation	104
7.10.5	Picking status	104
7.10.6	Features supported with the Enhanced Picking System.....	105
7.10.7	Consider Actual Quantity in Picking	113
7.11	Production Picking (Normal Picking)	115
7.11.1	Production Pick Generation	116
7.11.2	Production Pick Entry.....	118
8	PRODUCTION UTILITIES.....	120
8.1	Transfer SO to Batch Wizard	120
8.2	Process Batches in Range	125
8.3	Lot Traceability Dashboard	126
8.3.1	Go To Options	128
8.3.2	Example: Tracing Lots	129
8.4	Production Scheduling	131
8.4.1	Production Scheduling Defaults.....	131
8.4.2	Production Scheduling Board.....	132
8.4.3	Scheduling Production Activities	142
8.4.4	Recap: Scheduling Production Activities.....	146
8.5	Labor Analysis Dashboard	148
8.6	Batch FG Return	150
8.7	Process Cell Utilization Dashboard.....	151
8.7.1	Recap: Process Cell Utilization	153
9	ROUTING	155
9.1	Activate the Routing.....	155
9.2	Shift Master.....	156



9.3	Work Center Setup	157
9.4	Work Center / Company Week offs Setup	158
9.5	Work Center Unavailable Time	159
9.6	Machine Setup	160
9.7	Process Stages	161
9.8	Modifications on Formula Entry screen	162
9.9	Modifications on the BOM Entry Screen	163
9.10	Modifications on the SAP Employee Master Screen	164
9.11	Routing Master.....	165
9.12	Stage Execution	167
10	PRODUCTION REPORTS	174
10.1	Batch Ticket Report	174
10.1.1	Generating a Batch Ticket Report	177
10.1.2	Batch Ticket Layout.....	181
10.2	Batch Pick List Report.....	184
10.2.1	Generating a Batch Pick List Report	185
10.3	Critical Material Report	187
10.3.1	Generating a Critical Material Report	187
10.4	Projected Material Availability By Batches Report.....	189
10.4.1	Report Selection Criteria.....	189
10.4.2	Report Details	191
10.4.3	Generate Purchase Requisition Screen	193
10.5	Batch in Process Report	194
10.5.1	Generating a Batch In Process Report	195
10.6	Open Batches Report	196
10.6.1	Generating an Open Batches Report	196
10.7	Batch Lot Detail Report	197
10.7.1	Generating a Batch Lot Detail Report	198
10.8	SuperBatch Lot Detail Report.....	199
10.8.1	Generating SuperBatch Lot Detail Report.....	199
10.9	SO Converted to Batch Report	200
10.9.1	Generating an SO Converted to Batch Report	201
10.10	Raw Material Requirement Analysis Report	201
10.10.1	Generating Raw Material Requirement Analysis Report	202
10.11	Formula Production Report.....	203
10.11.1	Generating Formula Production Report	205
10.12	Material Usage Report	207
10.12.1	Generating a Material Usage Report	208
10.13	Material Where Used Report	209
10.13.1	Generating a Material Where Used Report	210
10.14	Maximum Production by Stock Report	210
10.14.1	Generating a Maximum Production by Stock Report	211
10.15	Production Summary Report.....	213
10.15.1	Generating a Production Summary Report.....	215
10.16	Production Cost Summary Report.....	216



10.16.1	Generating Production Cost Summary/Production Cost History Report	218
10.17	Lot Recall Letter	219
10.17.1	Generating a Lot Recall Letter	220
10.18	Lot Traceability Report	221
10.18.1	Generating a Lot Traceability Report	221
10.19	Production History Summary Report	222
10.19.1	Generating a Production History Summary Report	224
10.20	Production History Detail Report	225
10.20.1	Generating a Production History Detail Report	227
10.21	GHS Labelling Report.....	228
10.21.1	Printing GHS Labels	229
10.22	Production Allocation Report.....	230
10.22.1	Printing Production Allocation Report	232
10.23	WIP Report	232
10.23.1	Generating a WIP Report	234



1 DOCUMENT OVERVIEW

1.1 What Is This Document All About?

This document gives an overview of the *Production Module* and how BatchMaster ERP can help process manufacturers. It explains the features of the system in reader-friendly language using general and industry-specific examples. After reading this you should be able to use the module in at least a basic way.

1.2 Who Should Read This Document?

This document is intended for anyone who is implementing the software, learning how to use it, or training another person.

1.3 Objectives

This document helps the reader:

- Identify the purpose and functioning of the features in BatchMaster ERP.
- Identify the industry-specific utility of each feature.
- Record data in the system to perform transactions.
- Explain the purpose of features to others using examples.
- Identify the purpose of standard reports and generate those reports.

1.4 What's New in This Release?

- WIP Report.
- Business Partner option on Batch Series Master screen.
- Backflush option on *Batch Ticket*, *Batch Close* and *Super Batch Close* screen.
- De-allocate Materials on *Batch Ticket* and *Batch Close* screen.
- Alternate item for BOM Items on *Batch Ticket* screen– Goto Option.
- Displays consumables based on the *Size with Batch* setting.
- *Process Cell* Filter option on *Bulk Staging Document Generation* screen



- Process Cell Utilization Dashboard.
- *Backflush* option on Production Dashboard.



2 OVERVIEW

The *Production Module* of BatchMaster ERP is where you create and edit production batches and then process them. Batches can be dependent (triggered by demand) or independent (opened by the planner regardless of demand). Sales order data can be imported into a batch, thus linking supply and demand right from the start of order processing. Batches can be linked together with a SuperBatch, making it easier to allocate materials and enforce dependent scheduling of production. The SuperBatch function can also calculate how many runs are needed to fill a production requirement given the capacity of relevant process cells.

Production allows you to schedule batches in advance or for immediate requirements. Once a batch has been opened, it can be sized or re-sized based on material availability, lot expiry, customer order size, and other factors. You can also track the status of each batch in process, seeing actual inventory usage, production cost data, and quality control test results.

3 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.



3.1 Batch Options Tab

Production Defaults

Batch Options | Super Batch Options | Scheduling Options | Staging/Picking | Special Function

☐ Check Yield% while Closing Batch
% Yield Fluctuation Allowed while Closing a Batch: 0.000

WIP Account for Assembly/Fill Batch: 525000000100101
FG Variance Account for Assembly/Fill Batch: 641900000100101
WIP Rounding Variance Account: 525000000100101
Default Production Warehouse: 01
Default Batch Type: Mix

☒ Require Labor Entry
☐ Rollup Labor in Production
Default Process Stage ID: 01
Calculate FG per unit cost on Part Close by: Batch Standard Cost

☐ Ask for confirmation before part closing/full closing a batch
☐ User Defined Dates
☒ BackFlush Labor
☒ Show All Finished Goods
☐ Show Co-Product/EG Template
Expiry Date Based on Date: Receipt Date
☐ Use lots of Active Ingredient: Expiry date based on Active Ingredient

Process Cell Capacity is based on: Finished Good Yield
☐ Allocate Lots to SO on Part Close/Full Close
Tolerance handling method: Warning

Batch Series
Define Series
Production Series: S01
MPS Series:
MRP Series:
SO Series: S01

ByProduct Costing
☒ Use Standard Cost
☐ Use BatchMaster Theoretical Cost

Third Party Manufacturing
Batch Start and Inv. Transfer Request Due Date Diff: 0
☐ Use Batch when Material is received from contractor

☒ Allow changes on Batch Close
☒ Post Item Revaluation for variance on batch close

Update Cancel

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.

Define Series	
Production Series	→ Main
MPS Series	→ Default
MRP Series	→ Phase-01
SO Series	→ CUST01



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.

3.1.1.1 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/yyyy)*, or *Day (dd/ddd/JD)*.

#	Type	Value	Size
1	Alphanumeric	10A-	4
2	Month(MM/MMM/mr)	MM	2

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:



Batch Series Master

Series ID:

#	Type	Value	Size
1	Alphanumeric	10A-	4
2	Month(MM/MMM/mr)	MM	2
3	Day(dd/ddd/DD)	dd	2
4	Year(yy/yyyy)	yy	2
5	Series	-01	3
6	Alphanumeric		0

☐ Generate New Series
☒ Every Month
☐ Every Year

Sample Value:

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:

Batch Series Master

Series ID:

#	Type	Value	Size
1	Customer		15
2	Alphanumeric	-B123-	6
3	Month(MM/MMM/mr)	MM	2
4	Series	01	2
5	Alphanumeric		0

☒ Generate New Series
☒ Every Month
☐ Every Year

Sample Value:

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.



3.2 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 is 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 on the basis of 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 on the basis of 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.

3.3 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.

The screenshot shows a software interface with four tabs: 'Batch Options', 'Super Batch Options', 'Scheduling Options', and 'Staging'. The 'Scheduling Options' tab is currently selected. Below the tabs, there is a label 'Scheduling Method' followed by a dropdown menu. The dropdown menu is open, showing the word 'Forward' as the selected option.

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.



3.4 Staging/Picking Tab

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

The screenshot shows the 'Production Defaults' dialog box with the 'Staging/Picking' tab selected. The dialog has several tabs: 'Batch Options', 'Super Batch Options', 'Scheduling Options', 'Staging/Picking', and 'Special Function'. The 'Staging/Picking' tab contains the following options:

- ☐ Implement Staging
 - ☐ Use Enhanced Staging/Picking System
 - ☒ Implement Picking Only(Batch by Batch)
 - ☐ Implement Staging Only(Bulk Staging)
 - ☐ Implement Both (Bulk Staging and Picking)
- Staging/Drop Bin
 - ☒ Use a Single Staging/Drop bin defined at Warehouse
 - ☐ Use Staging/Drop bin defined at Process Cell
- Backflush Feature
 - ☒ Full Batch Backflush ☐ Item-wise Backflush
 - ☒ Size Amount of RM to be Backflushed on Part Close
 - ☒ Allow receiving FG if Raw Material is not available in Backflush
 - ☒ Send alert when Backflush issue not processed
 - Select recipient for alert:

At the bottom of the dialog are 'Update' and 'Cancel' buttons. There is also a table with columns '#', 'Warehouse', and 'Stage Bin'.



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.



3.5 Special Function

The screenshot shows a window titled 'Production Defaults' with a tabbed interface. The 'Special Function' tab is selected. Inside the tab, there is a checkbox labeled 'Allow Standard Quantity Update For New Items Added On Batch.' which is currently unchecked. Below this checkbox is a label 'Batch Series Masking Based on Date' followed by a dropdown menu showing 'Server Date'. At the bottom of the window are 'OK' and 'Cancel' buttons.

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*.

4 PROCESS CELL SETUP

4.1 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 *Stage 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 would start operating.

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

View Process Cell Capacity Override						
Cell		Blender-1	Blender 1			
Formula/Item	Description	Capacity	UOM	Run Time(HH:...	Rank	Size Time Req. with Batc...
FM002	Formula for Cookie Baking	100	KG	12:08AM		☒



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.

4.2 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	Description	Run Time(DD:HH:MM)	Capacity	UOM	Rank	Size Time Req. with ...	Finished Goods	War...
➔	Mixer1	Mixer1	00:02:00	100.000	KG	2	☒	➔ Almond Milk Intermediate 01	01

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 DD:HH:MM format (i.e., the length of time the process cell would operate).

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 capacity 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 separately 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.

4.3 Process Stages

The *Process Stages* screen is where you define various steps or processes that must be performed on a machine, product, or batch. The Process Stage ID is then linked to one or more formulas so that the process stages are tied to any batch using those formulas. Users can then (1) check a box to indicate a task has been completed or (2) enter the number of actual labor hours spent on the task (see [Section 7.1](#)).

Go to: Administration → Setup → Production → Process Stages.

#	Stage ID	Description	Labor ID	Production Stage
	Mixing	Mixing Blender-1	⚡ Mix Labor	☒
	Filling	Filling Line-1	⚡ Fill Labor	☒
	QC	Quality Control	⚡ QC	☒

Process Stage ID: Specify a unique identification key for the process stage.



Description: Enter a description of the process.

Stage ID: Enter various stages (activities) applicable within the process.

Description: Enter a description of each activity.

Labor ID: Select the ID of the labor employed for a particular activity. While entering labor against a batch, the lookup will show all stages for which labor IDs have been assigned.

Production Stage: Selecting this checkbox means that the activity is applicable for production and is visible on the production batch. Labor hours can be recorded against the stage.

Add/Update (not shown): Click the *Add/Update* button to save your edits.

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

[illegible]

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



6 BIN GROUP

The Bin Group screen is applicable for the *Enhanced Staging/Picking System*. On this screen you can define a *Bin Group* and attach multiple bins to it. A bin attached to a bin group can be selected at the time of Staging/Picking. Also, when performing a Batch Issue, the lot selection screen will display bins of the attached bin group on the basis of the option you set for the *Enhanced Staging/Picking* in Production Defaults. If you selected the option:

Implement Picking Only(Batch by Batch): Lot can be selected from the Drop Bin available in the Bin Group.

Implement Picking Only(Bulk Staging): Lot can be selected from a Staging Bin in the Bin Group.

Implement Both (Bulk Staging/Picking): Lot can be selected from a Staging Bin in the Bin Group.

To access the Bin Group screen,

Go To: Administration → Setup → Production → Bin Group

#	Bin No	Bin Description	Bin Type	Default Bin
1	01-001		Drop Bin	☐
2	01-002		Drop Bin	☒
3	01-STAGE		Staging Bin	☒
4	01-SYSTEM-BIN-LOCATION		Staging Bin	☐

Bin Group: Specify a unique identification key for the *Bin Group*.

Warehouse: Select the warehouse in which the specified *Bin Group* exists.

Grid Details

Bin No: Select a bin to attach to the Bin Group.



Bin Description: Displays the bin location description of the selected bin.

Bin Type: Using this drop down you can specify whether the bin is a *Staging bin* or a *Drop bin*.

Default Bin: Selecting this checkbox means that the respective bin is the default Staging/Drop bin of the *Bin group*. You can set the Default *Staging* as well as *Drop* bin if you have implemented *Both Bulk Staging and Picking*. If you implemented *Picking only* the Default Drop bin only can be set here, while if you implemented *Staging only* then the Default Staging bin only can be attached. The Default *Staging/Drop* bin you defined in this field is defaulted at the time of Staging/Picking the item.

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

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



7 PRODUCTION – DAILY USE

7.1 Labor Entry

Use the *Labor Entry* screen to record and track the amount of time an employee spends working on different process stage tasks.

GoTo: Process Manufacturing → Labor Entry

Labor Entry	
Transaction ID	
Batch Number	LAB04
Labor ID	Fill Labor
Stage	Filling
Start Date	09/29/2016 08:00
End Date	09/29/2016 09:30
Batch Status	Released
Current Run No	1
Process Cell	Blender-1
Process ID	PSI02
Production Whse	05
Emp ID	Mike Gibson

Add Cancel Show all Transactions

Transaction ID: The identification key of the labor entry transaction, assigned when the **ADD** button is clicked.

Batch Number: Enter or choose the batch against which labor will be entered.

Labor ID: The type of labor to be entered against the batch.

Stage: The next process stage linked to the selected Labor ID.

Start Date: Enter the start date and time when the employee started working.

End Date: Enter the end date and time when the employee completed working.

Batch Status: Indicates the current status of the batch.

Current Run No: Displays the current run number of the batch.

Process Cell: Displays the process cell to be used for processing the batch.

Process ID: Displays the default process associated with the formula used in the batch.

Production Whse: Displays the warehouse where production occurred.

Emp ID: Use the drop-down menu to find the employee doing the labor entry.



Process Mfg. Defaults

Common Settings Inventory Bin Settings Additional Settings

☐ Lot Strength Implemented ☐ Enable UI Customization
☐ Create Draft PO

System Unit Metric ▾
Business Type ▾

☐ Use Excel API

☒ Disable Labor time masking

Labor Units Hours ▾
Hours
Minutes
Seconds

ErrorLog Path ..
Lookup Row Count 1000

Update Cancel



Leaving this checkbox unchecked will consider the default labor masking as DD:HH:MM



It is a onetime setting and cannot be modified if a Labor transaction is performed in the company database (Formula, BOM, Labor Entry/Production).



Case 1

If *Labor Units* is set to Hours with the *Cost Amount* set to 1\$ per hour, the Labor units at Batch Close is displayed as 1.

The screenshot shows the 'Process Mfg. Defaults' window with the 'Common Settings' tab selected. The 'Labor Units' field is set to 'Hours'. The 'Batch Close' window is open, showing the 'Batch Number' as N665, 'Type' as Mix, 'Status' as Released, 'Formula Key' as For FG001, 'Revision' as 0000000002, 'Warehouse' as , and 'Owner' as manager. The 'Production Stages' button is visible. Below the 'Batch Close' window, a table shows the 'Labor Units' for the batch:

#	Select	LineType	Labor ID	Description	Labor Units	Overhead ID	Status
1	☐	Labor	NL001	NL001	1.000		New
2	☐	Labor			0.000		New

Case 2

If *Labor Units* is set to Minutes with the *Cost Amount* at 1\$ per hour, the Labor Units at Batch Close will be displayed as 60 Units.

The screenshot shows the 'Process Mfg. Defaults' window with the 'Common Settings' tab selected. The 'Labor Units' field is set to 'Minutes'. The 'Batch Close' window is open, showing the 'Batch Number' as B0002, 'Type' as Mix, 'Status' as Released, 'Formula Key' as F1, 'Revision' as 0000000003, 'Warehouse' as , and 'Owner' as manager. The 'Production Stages' button is visible. Below the 'Batch Close' window, a table shows the 'Labor Units' for the batch:

#	Select	LineType	Labor ID	Description	Labor Units	Overhead ID	Status
1	☐	Labor	NL001	NL001	60.000		New
2	☐	Labor			0.000		New



Case 3

If *Labor Units* is set to *Seconds* with the *Cost Amount* at 1\$ Per Hour, the system will display the Labor Units at Batch Close as 3600.

#	Select	LineType	Labor ID	Description	Labor Units	Overhead ID	Status
1	☐	Labor	L1	L1	3,600,000		New
2	☐	Labor			0,000		New

Additionally, the Labor Units calculation is impacted if the Salary maintained for an employee on the *Employee Master* Screen is different to the Labor Cost you set for the labor on the *Labor/Additional Cost* screen.

Let's say you set the *Labor Units* as *Hour* and set the *Labor Cost* to 2 on the *Labor/Additional Cost* screen. It signifies that the labor charge is \$2 per hour.

Labor/Additional Cost ID	NL001
Description	NL001
Cost Amount	2.00
Labor Cost Account Number	111000000100101
Variance Account Number	112200000100101

On the Labor Entry screen, the time duration is still considered in *DD: HH:MM* format. Setting the *Start Time* as 05:00 and *End Time* as 06:00, the labor work duration will be calculated as 1 Hr.



Labor Entry				
Transaction ID	27		Batch Status	Released
Batch Number	B0002		Current Run No	1
Labor ID	NL001		Process Cell	
Stage	S1		Process ID	P002
Start Date	12/02/19	05:00	Production Whse	01
End Date	12/02/19	06:00	Emp ID	Emp001 L
OK		Cancel	Show all Transactions	

The Salary of an Employee attached on the Labor Entry is set to \$1 per hour.

Employee Master Data	
First Name	Emp001
Middle Name	
Last Name	Ln
Employee No.	1
Ext. Employee No.	
☒ Active Employee	
Job Title	
Position	
Department	
Branch	
Manager	
User Code	
Sales Employee	-No Sales Employ
Cost Center	
Office Phone	
Ext.	
Mobile Phone	
Pager	
Home Phone	
Fax	
E-Mail	
Linked Vendor	
Address Membership Administration Personal Finance Remarks Attach	
Salary	\$ 1.00 Hour
Employee Costs	0.00 Month
Bank Details	
Bank	
Account No.	

Now, you can see that the *Labor Cost* defined on the *Labor/Additional Cost* Screen and an employee selected at the *Labor entry* are in the ratio 2:1. Thus the calculated labor units for 1 quantity of FG batch will be .5 units.



It is the TIME which changes, not the RATE.



Batch Close

Batch Number: NC001
Type: Mix
Status: Released ☐ On Hold
Formula Key: For FG001
Revision: 0000000002
Warehouse:
Owner: manager Production Stages

Production W
Demand Type
Sales Order
Customer Key
Issue/Alloc/Re
Part Close / C
Pick Status

Finished Goods		Materials		By Products		Labor and Overhead	
#	Select	LineType	Labor ID	Description	Labor Units	Overhead ID	Status
1	☐	Labor	NL001	NL001	0.500		New
2	☐	Labor			0.000		New

7.1.1 Set-up: Labor Entry

1. Require labor entry at the *Production Defaults* screen.
2. Define the required process stages for the formula (and therefore any batch that uses the formula).
3. Attach the Process ID to the formula on the *Revision* tab of the *Formula Entry* screen.

Formula Entry

Formula: FM004
Description: All Purpose Seasoning
Revision: 0000000007
RM Cost By: Base Price
☒ Intermediate Cost By: 0 Calculate Cost

Items	Labor	Consumables	By Products	Revision	QC test
Effective Date			Fixed Cost Labor ID	Std-Labor	
Valid Untill			Fixed Cost Overhead ID	Std-OH	
Approved	05/01/2015		Fixed Cost Hours	00:15	
Approved By	manager		Setup Cost Labor ID	Std-Labor	
Last Updated	05/01/2015		Setup Cost Overhead ID	Std-OH	
Notes			Setup Cost Hours	00:15	
			Default Process ID	PSI02	
			Markup Factor	0.000000	
			Last Produced	05/01/2015	

4. Maintain employee data, including hourly wages, on the *Employee Master*.

Go To: Human Resources → Employee Master



Employee Master Data

First Name: John, Middle Name: , Last Name: Smith, Employee No.: 1, Ext. Employee No.: , ☒ Active Employee

Job Title: Production II, Position: General Labor, Department: Production, Branch: , Manager: , User Code: JohnS, Sales Employee: -No Sales Employ

Office Phone: , Ext.: , Mobile Phone: , Pager: , Home Phone: , Fax: , E-Mail:

Finance Tab:

Salary: 20.00 \$, Hour, Employee Costs: 0.00, Month

Bank Details: Bank: , Account No.: , Branch:

OK Cancel

5. Enter header information about the employee.



Any field containing a drop-down arrow can be defined for your specific needs (for example, “Position”).

6. Switch to the *Finance* tab and enter the employee’s salary information.



Note that entry of data on other tabs is not required for the labor entry function.



7.2 Batch Entry

Production starts with the *Batch Entry* screen. Remember that batches can only be created for items that have released (active) BOMs and formulas.

Go To: Process Manufacturing → Batch Entry.

Let's look first at the top portion of the screen:

Series: This field defines what information the batch number will contain (customer, month/day/year, etc.). You can select from a list or leave the field blank if you plan to enter the batch number manually.

Batch Number: This field provides a unique identifier for a production order. The Batch Number is auto-generated if you select the *Series* option in the prior field.

Batch Status: Defaults as *New*, meaning the batch can be fully edited but not yet used in production. The other possible statuses are:

- **Planned:** Created by the MPS/MRP engine. Can only be edited via the Planning workbench.
- **Firm:** You cannot change key parameters like formula, production quantities, and scheduled start and end dates. Setting a batch to *Firm* status is done via the Planning workbench.
- **Released:** The batch is released for production. Materials can be issued and/or allocated to it. Here you can change the size of the batch, if required, and can add more FGs to it.
- **Allocated/Partial Allocated:** All or some of the raw materials have been allocated to the batch. Allocated materials are not available for use in other batches. (It is possible to de-allocate some or all of the raw materials.)



- **Issued/Partial Issued:** All or some of the raw materials called out in the batch formula have been issued. Issues can be reversed. (See [Section 7.3.8](#))
- **Hold:** The batch has been put on hold for some reason. It cannot be edited unless its status is changed to *Released*.
- **Cancelled:** The batch is cancelled. The system will write off the cost of issued materials (and any labor cost) to the Material and Labor Variance Accounts defined for the Production warehouse.
- **Completed:** All production has been posted.
- **Closed:** No changes can be made.



An issued or allocated batch cannot be put on Hold. It must be Cancelled.

Batch Type: This field defines what the batch will be used for. The drop-down list lets you choose from *Mix*, *Fill*, *Assembly*, or *Rework*. Information required in the next field is dependent upon the *Batch Type*:

- When you select **Mix**, the system prompts you to enter a *Formula ID*.
- When you select **Fill**, the system prompts you to choose *Intermediate Key*.
- When you select **Assembly**, the system prompts you to enter the *Assembly Item No.*
- When you select **Rework**, the next field is not accessible. The Item Code must be entered in the grid section of the screen.

Revision No: The active revision of the formula, intermediate, or assembly item.

Warehouse (for a fill-type batch): The warehouse from which the intermediate will be issued.

Production Warehouse: The warehouse to which the product will be sent when the batch is closed.

Process Cell (optional): The cell to be used for the batch. With a mix-type batch, the system will default to the process cell linked to the formula. Entry is required if you want to use the *Process Cell Availability* scheduling tool.

Schedule: Select the *Forward* or *Backward* option from the drop-down box.

- When you choose **Forward**, the system will start scheduling the batch with the current date and calculate the date 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.

Active Ingredient Lot: Displays the lot number of the active ingredient.

Active Ingredient Item: Displays the unique key of the active ingredient item.



Additional Information: Click ► to display or ▼ to hide the following:

- **Draw From Whse:** Use this field to specify the supply warehouse. Overrides warehouse data from formula or BOM. If Picking is implemented then system will default the Production warehouse as *Draw from Whse*. You can modify it if needed.
- **Post To Whse:** Use this field to specify the destination warehouse for the batch. Overrides all other destination fields.

Owner (optional): The user who is responsible for the batch.

Demand Type (*Dependent* or *Independent*): *Dependent* means the batch was opened due to requirements from another source, like a sales order. *Independent* means a user opened the batch without specifying the reason for production.



You can associate a sales order (and therefore a customer) with the batch by one of two methods: (1) Use the [Import From SO Wizard](#), or (2) Change the *Demand Type* field to *Dependent*, then enter or look up the sales order number.

Sales Order: The sales order from which this batch was created.

Customer Key: The customer on the sales order from which this batch was created.

Source: Lists the demand source. Available options are *MPS*, *MRP*, *Sales Order*, and *Production* (for a manually entered batch).

Req Date: Lists the required date based on the source document or MPS/MRP plan. If the batch was entered manually, this field is left blank.

Sch Start Date: The date (and optional time) the batch run is to start.

Sch End Date: The date (and optional time) the batch run is to end.

Production Stages: This button is activated when you click the *Add* button to save the batch. Click to display a list of tasks associated with the batch. In the *Stages* grid of the new window you can mark each task *Completed*.

Production Stages			
Batch Number	A101		
Process Cell ID	Blender-1		
Process ID	DS01		
Description	Daily setup		
Stages			
#	Completed	Stage	Description
1	☐	Clean	Clean with special solution
2	☐	Rinse	Rinse with de-ionized water



Now let's look at the rest of the *Batch Entry* screen. For this, let's consider that we are making a finished good from scratch. Hence we use a Mix-type batch which calls for a formula (Apple Juice). It also requires the Finished Good item code (Apple Juice Can) which we select in the lower grid.

7.2.1 General Tab

Item Code: Varies according to the following:

- For a **mix**-type batch, enter an FG or intermediate item number.
- For a **fill**-type batch, enter an intermediate item number.
- The system automatically populates this field for an **assembly**-type batch. Only one assembly BOM can be selected in an assembly-type batch.
- For a **rework**-type batch, enter an FG or intermediate number. By using the Batch Ticket function, additional materials can be issued once the batch is released.

Whse: Displays the warehouse code of the item. (This field is informational only.)

Qty to Produce: The quantity of FG or intermediate to be made with this batch.

Unit: Displays the product unit of measure. (This field cannot be edited.)

Fill Level: The quantity of the product that goes into one saleable package. (This field can be edited.)

Fill Unit: Displays the fill unit of measure. (This field cannot be edited.)

Weight and Volume data: These fields display after the batch has been added.

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

Cancel: Click *Cancel* to exit the screen without saving any data.



The batch will be saved with *New* status, which means it can still be edited. For example, you might change the production dates, change the process cell, or decide to link the batch to a specific sales order.

Now, say, we are making an intermediate (bulk item) using a mix-type batch. Say, it calls for the same formula, but this time we will select the intermediate item code in the grid.

Notice that the *Fill Level* and *Fill Unit* columns are not used when an intermediate is produced. However, we can package the intermediate for shipping or storage using a *Container Unit*.



Container Unit: Click on this field and press the *Tab* key. The system will open a list of Container BOMs you have defined. Pick the one you want and click the *Choose* button. (For more details, see the “BatchMaster ERP with SAP Business One 18.2– Bill of Materials User Guide.”)

Pack Qty: Will be calculated by the system after you select the container.

Pack Fill Unit: Displays the *Fill Unit* of the container you selected.



Let’s say, we are making 100 gallons of an intermediate, and then packaging it in 32-ounce containers. Hence the pack quantity is:

- 100 gallons x 128 oz. per gallon = 12,800 oz.
- 12,800 oz. divided by 32 oz. per container = 400 containers.

7.2.2 Attachments Tab

On the *Attachments* tab, you can browse and locate the file(s) that you want to attach with this record. It must be located on a shared server.

General		Attachments	
#	Source Path	Target Path	File Name
1	\\workspace\Library\Tech-Writing\Inter	C:\Users\amitaj\Desktop\For John	BME-B1 16.3 Production User

Browse

Display

Delete

Source Path: Displays a network location for the attached document.

Target Path: Displays the directory where you want to store the attached file. This is the path you specified at the *Attachment Folder* in the *SAP General Settings* screen.

File Name: Displays the name of the file.

Attachment Date: Displays the date when the file is attached to the record.

Browse: Use this button to search and locate the path of the file which needs to be attached. It should be a network location.

Display: Use this button to view the attached file.

Delete: Use this button to delete the selected attached file from the grid.

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



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

Select Batch to Rework: See [Section 7.2.4](#)

Import from SO: See [Section 7.2.3](#)

7.2.3 Import From SO (Sales Order) Function

If desired, a batch can be created by pulling in demand data from a sales order (SO). This function displays a window that lists sales orders based on the formula selected in the batch. Once you have selected one or more sales orders, the system displays relevant finished goods. After you have selected the finished good(s) you want to produce, the system adds up all requirements for each item selected and opens a batch for the summarized quantity. If you try to import a sales order for which batches already exist, then the system would display a warning message.

Open the *Batch Entry* screen and choose a batch series or enter a batch number.

Import From SO

Click the button at the lower right of the *Batch Entry* screen to open a list of sales orders. Select the order(s) you want to fill by checking the appropriate box(es).

Copy Sales Orders Wizard

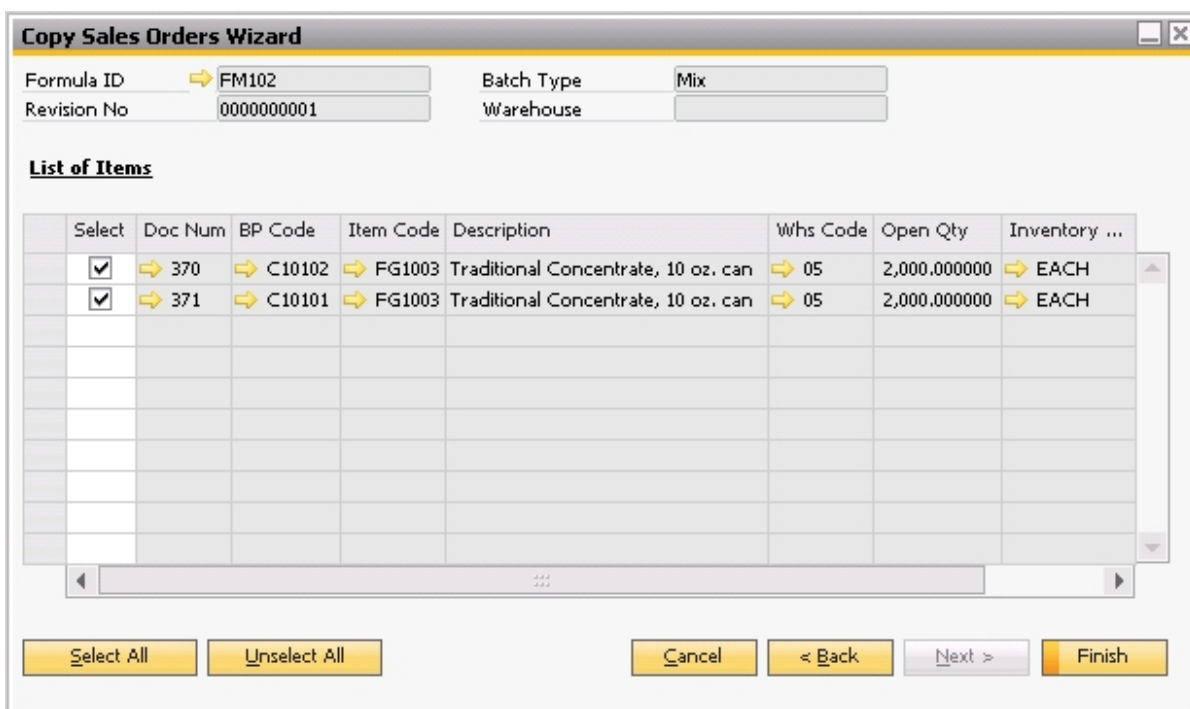
Formula ID: FM102 Batch Type: Mix
Revision No: 0000000001 Warehouse:

List of Sales Order

Select	Doc Num	Doc Date	BP Code	BP Name	Comments	Doc Due Date
☐	352	08/22/12	C70000	Aquent Systems	Based On Sales Quotations 340.	09/03/15
☐	355	04/16/14	C10101	Walmart		09/08/15
☐	358	05/05/14	C10101	Walmart		09/09/15
☐	359	05/05/14	C10101	Walmart		09/09/15
☐	362	05/22/14	C20000	Maxi-Teq	Based On Sales Quotations 362.	09/11/15
☐	366	11/21/14	C10101	Walmart		09/14/15
☐	368	01/26/15	C10101	Walmart		09/15/15
☐	369	03/03/15	C10102	Vons		09/22/15
☒	370	09/14/15	C10102	Vons		09/26/15
☒	371	09/14/15	C10101	Walmart		09/29/15

Select All Unselect All Cancel < Back Next > Finish

Click the *Next* button to verify your selections.



Choosing *Add* will update the record and leave the screen open for further analysis or editing.

Open the *Batch Entry* screen and choose a batch Series or enter a Batch Number.

Batch Entry	
Series	
Batch Number	R100
Batch Status	New ☐ On Hold
Batch Type	Rework

39



Click the *Select Batch to Rework* button at the bottom of the screen. The following window is displayed:

#	Select	Item Code	Description	Warehouse	Lot No	Quantity
1	☐	FG0011	Chocolate Chip Cookie Tray-05		FG0011-012	20.000000
2	☐	FG0011	Chocolate Chip Cookie Tray-05		FG0011-011	1.000000

Select: Select a specific batch number or a finished good or intermediate code.

Get Data: Click the *Get Data* button to search the database. The system will return lot number and quantity on hand data based on your selection.



Lots that have expired will not be displayed.



If you select a batch whose product is no longer in stock, you would get a “No record found” message.

Lower Grid

Select: Check the box next to each lot you want to rework.

Quantity: The on-hand quantity is displayed. You can edit (reduce) the quantity to rework, if desired.

Process: Click to create the rework batch, which can then be edited before saving.

Cancel: Click to close the screen without creating the rework batch.

When you release the rework batch and issue material, the lots and quantities you selected will be removed from inventory and issued to the batch. On the *Batch Close* screen you can also manually issue whatever materials are needed to complete the rework.



7.2.5 Go To Functions for Batch Entry

At the top of your screen is a Windows toolbar that shows the following:

**File \ Edit \ View \ Data \ Go To **

The *Go To* menu provides powerful functions that vary depending on the status of the batch you are analyzing. The option fields are active or grayed out based on the batch status and the screen you are using when you click on the *Go To* menu. These options are discussed below.

7.2.5.1 Miscellaneous Go to Functions

Release Batch: Click to change the batch status from New to Released. The batch is now ready to be started on the production floor. When automatic allocation is turned on, the system will also allocate raw materials for the batch.

Allocate Batch: BatchMaster ERP supports Bin-less Allocation from the 18.2 version. It means that when allocating a lot for the batch, the system does not display the Bin/Container no of the lot. The consolidated quantity available in the lot will be displayed for allocation. Use the Allocate Batch option to open the *Material Allocation* screen. On the Batch Allocation screen you can now select the lot and specify the quantity required to be allocated. The allocated quantity will be deducted from the overall quantity available in the lot irrespective of its Bin/Container No. By default, the lots for raw materials are automatically selected based on the issue method defined in *Item Master Details*. This option lets you allocate all raw materials, BOM items, and consumables for the batch, or allocate selected items only. It also allows manual allocation for the batch.



Batches can be automatically allocated upon Release based on the options selected in system setup. While allocating materials the system will check the following:

- **Lot issue method for raw materials.** For example, if raw materials need to be issued by FEFO, the nearest expiring raw material lots will be issued first. The system considers existing allocation of lots.
- When the **single lot option** is selected, the system would try to select a single lot.

Date Selection: Opens a calendar window when you are working with an editable date field.

Go To Batch Close: Opens the *Batch Close* screen with the current batch displayed.

Go To Batch Ticket: Opens the *Batch Ticket* screen with the current batch displayed.

De-Allocate Batch: This option reverses the allocation of materials and/or consumables to a batch. (You cannot deallocate once production has been reported against a batch.)

Production Goods Transaction Report: Displays the *Production Goods Transaction Report*.

Cancel Batch: Batches with status of New, Issued, Hold, and Allocated can be cancelled.



Put on Hold (applies to New or Released batches only): A batch on Hold cannot be used in production because it has no material allocated or issued to it.

Release Hold: Restores the batch to New or Released status.

Allocate FG: Opens the *FG Allocation* screen. See [Section 7.9](#).

Revert to New: Revert the *Released* status of a Batch/Super Batch to *New* status. This lets you resize the Finished Good Quantity.

View Picking/Bulk Staging Documents: Displays all the documents related to the batch.

Generate Picking Document: Opens the *Production Pick Generation* screen with Batch and Sch Start Date Range. See [Section Production Pick Generation](#) for more details.

Generate Bulk Staging Document: Opens the *Bulk Staging Document Generation* screen with Batch and Sch Start Date Range. See [Section 7.10.2](#) for more details.

7.2.5.2 New Activity

Use this option to create activities you want to tie to the batch. The system will auto-populate the values in the *Document Type* and *Document ID* fields.

Activity

Activity: Phone Call, Number: 5, Type: General, BP Code: , BP Name: , Contact Person: , Telephone No.: , Subject: , Assigned To: User, Assigned By: , BP Code: , BP Name: , Contact Person: , Telephone No.: , ☐ Personal

General | **Content** | **Linked Document** | **Attachments**

☐ Link Draft, Document Type: , Document Number: , Source Object Type: , Source Object No.: , ☒ Show Documents Related to the BP, Previous Activity: , Document Type: Batch Entry, Document ID: WBR0729, Revision No.: , Warehouse: , Add, Cancel



7.2.5.3 Related Activities

Select to access the *Activities Overview* window, which contains details for activities associated with the batch.

Activities Overview										
☐ Display Only Open Activities										
Number	Start Date	Start Time	Handled By	Activity	BP Code	BP Name	Co...	Status	Notes	A...
➡ 4	10/27/14	10:21AM	manager	Phone Call	➡ Ven01					man
➡ 6	10/27/14	10:24AM	manager	Task	➡ Ven01			Not Started		man

7.2.5.4 Relationship Map

A *Batch Relationship Map* displays all critical information about the batch in an easy-to-view manner.

Open the *Batch Entry* screen and find the batch you want to view. Right-click in the screen and select *Relationship Map* from the menu.

Settings

Batch Data

Item Data

Settings

☒ Allow Tooltips
Arrangement Strategy: Orthogonal
Flow Direction: Right

Batch No: B061000
Batch Type: Mix
Batch Status: Issued
Formula ID/Int/Assembly: FM003

FG Code: IN0020
Warehouse: 05
Standard Qty.: 10.000000
Actual Qty.: 8.000000
UOM: LB
Fill Level: 1.000000
Fill Unit: LB
System Weight (LB): 10.000000
System Volume (GAL): 1.199040

The *Settings* section helps you customize the way in which the information is displayed. Click the '+' button to expand this section. (Note: The expanded view is shown above.)



Allow Tooltips: Check this option to view tool tips as you mouse over critical data on the relationship map.

Arrangement Strategy: Select the desired option (*Orthogonal* or *Stagger*) to specify the way you want to arrange information.

Flow Direction: Specify the direction in which the entities containing information should be displayed. Available options are *Above*, *Below*, *Left*, and *Right*.

The *Batch Data* section shows basic information about the batch. Click the + button to display *Item Data*. (Note: The expanded view is shown.)

Use the hyperlinks to view master data information, as appropriate.

View Batch Options: Select an option from the drop-down menu to see additional data:

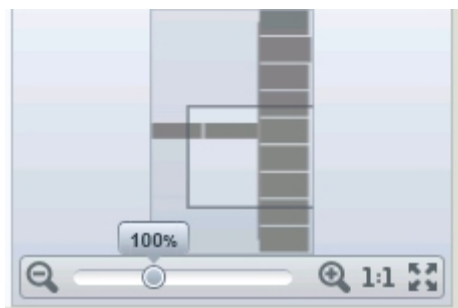
When you have made your selection, click the + button to expand the graphics.

View Advanced Batch Options: Select from the drop-down choices to see additional data:

When you have made your selection, click the '+' button to expand the graphics.



Adjusting the Graphics Image: In the lower right corner of the *Relationship Map* screen you will see a blank gray box. Place your cursor in the box to expand it.



Shadowed Image: Left-click and move the cursor to reposition the graphics in the window. (The image will vary depending on what data you have chosen to display.)

Slide Bar: Left-click and move the cursor to increase or decrease the image size.



Left-click to return the image to the center of the window.



Left-click to display the entire relationship map in the window.

OK/Cancel: Click either button to close the *Relationship Map* window.

7.2.6 Creating a Batch

Open the *Batch Entry* screen in the *Production Module*.

Enter the batch number in the *Batch Number* field. You can either specify the batch number manually or auto-generate it.

Select the type of the batch using the drop-down menu next to the *Batch Type* field. Available options are *Mix*, *Fill*, *Assembly*, and *Re-Work*.

Enter information based on the batch type selected.

- For a **mix-type batch**, enter the formula key and warehouse in the respective fields.
- For a **fill-type batch**, enter the intermediate key and warehouse in the respective fields.
- For an **assembly-type batch**, enter the assembly key and warehouse in the respective fields.

Select the Process Cell in which the batch is produced.

Enter the user responsible for the batch in the *Owner* field.



Select the appropriate option (*Independent* or *Dependent*) in the *Demand Type* field.

If you selected *Dependent*, enter the sales order for which the batch is created. A lookup function is available. The *Copy Sales Order* wizard will open. Once the sales order is pulled in, the customer associated with the sales order is displayed in the *Customer Key* field.

The *Req Date* field will be filled in if the batch was created from a sales order. Otherwise, enter the date.

Modify the *Sch Start Date* and *Sch End Date* fields, if needed.

Expand the *Additional Information* section and enter information, as desired.

- a. Enter the warehouse from which the raw materials should be drawn in the *Draw From Warehouse* field.
- b. Enter the warehouse to which the FGs are to be posted in the *Post To Warehouse* field.

Enter the items for which the batch is created and the information associated with the items in the grid.

- c. Select the Item Code of the desired item using the lookup available near the field.
- d. The related warehouse will automatically appear in the *Warehouse* field when the Item Code is input. If the Formula Key is not selected in the header section, the appropriate key will be added to the *Formula Key* field by default.
- e. Enter the quantity of the item to be produced in the batch in the *Qty to Produce* field.
- f. Repeat the steps to add other items to be produced, if appropriate.
- g. The Unit, Fill Level, and Fill Unit associated with the item will automatically appear in the respective fields when the Item Code is selected.
- h. The Order Weight, Order Volume, Batch Weight, and Batch Volume are calculated and displayed in the respective fields based on the input in the grid.
- i. Click the *Add* button to save the record.

7.3 Batch Ticket

Using the *Batch Ticket* screen, you can make changes or modifications to batches that are currently in process. These capabilities include:

- Add more FGs in the batch, and size the batch, if required.
- Allocate/de-allocate raw materials.



- Assign lot numbers to the intermediate or FG being produced.
- Drill-down to sales orders, *Batch Entry* screens, and *Batch Close* screens.
- Hold/Cancel a batch.
- Issue materials.
- Modify raw materials, byproducts, FGs, or intermediate items.
- Displays consumables based on the "Size with Batch" setting.

Go To: Process Manufacturing → Batch Ticket.

The *Batch Ticket Editor* contains seven functional tabs. Information from the batch record is imported to the screen. Only the material issue/allocation date can be changed here. Please refer to the [Batch Entry](#) section for a refresher on the fields and their purpose.

In order to use Backflush feature, ensure that the *Visible* and *Active* checkboxes are marked on the *Table Format* tab of the *Form Settings* screen for the screen on which *Backflush* checkbox is applicable. On marking *Visible* and *Active* checkboxes the *Backflush* checkbox is enabled on the respective backflush supported screen.

Column	Visible	Active
Qty. to Return Stock UOM	☒	☐
Qty. Returned	☒	☐
Qty. Returned Stock UOM	☒	☐
Qty. Used	☐	☐
Qty. Used Stock UOM	☐	☐
BOM RecordID	☐	☐
Status	☒	☐
Pick Status	☒	☐
Backflush	☒	☒
Lower Tolerance %	☒	☐
Upper Tolerance %	☒	☐
Allocated Qty	☒	☐
Allocated Qty. Stock UOM	☒	☐

7.3.1 General Tab



Information is imported from the Batch Editor. You can modify data in fields that are not grayed out.

General	Formula	Finished Goods	By Products	Consumables	Cost	Attachments
Required Date						Process Cell
Sch. Start Date	14/05/18	00:00				
Sch. End Date	14/05/18	00:00				
Actual Start Date	14/05/18	09:42				Description
Actual End Date		00:00				TEST FROM
Order Weight	3.000	KG				Notes
Order Volume	6.000	LT				
Batch Weight	3.000	KG				
Batch Volume	6.000	LT				
Produced Weight	0.000	KG				
Produced Volume	0.000	LT				
Theoretical Density	0.50					
Density Override	0.00					

Required Date: This refers to the required finish date for the batch. The field is populated automatically when the batch is created against a sales order. (The date defaults to the sales order delivery date.)

Sch. Start Date: The date on which batch production is scheduled to start.

Sch. End Date: The date on which batch production is scheduled to end.

Actual Start Date: The date on which the batch production actually started.

Actual End Date: The date on which the production ended.



Some of these date fields are populated by the system as the batch moves through production and is closed.

Order Weight: Displays the order weight based on the following:

- **Mix-type batch:** Planned formula weight.
- **Fill-type batch:** How much intermediate is being filled?

This field is not applicable to an assembly-type batch.

Order Volume: Displays the formula or intermediate volume. This field is not applicable to an assembly-type batch.

Batch Weight: Displays the total planned quantities of all the raw materials, including losses, expressed in system weight unit.

Batch Volume: Displays the total planned batch volume of all the raw materials, expressed in system volume unit.

Produced Weight: Displays the weight of the FG or intermediate actually produced, expressed in the system weight unit. The field's value is calculated as:



Produced Weight = Sum of (FG Quantity posted in stock UOM * Fill level expressed in system units)

Produced Volume: Displays the total volume of the FG or intermediate produced, expressed in system the volume unit. The field's value is calculated as:

Produced Volume = Produced Weight/Density override, if Density override >0, ELSE

Produced Volume = Sum of (FG Quantity posted in stock UOM * Fill level in system volume units)

Theoretical Density: Displays the theoretical density, which is defined as the ratio of total RM Weight to total RM Volume.

Density Override: The value in this field is taken from the *Formula Entry* screen. If the value is other than 0, it is used to calculate the order weight and volume, overriding the system-calculated theoretical density. (This field applies to mix-type batches only.)

Batch Ticket Printed: This field is checked if a batch ticket has been printed. (This is a read-only field.)

Process Cell: Displays the process cell associated with the batch. If required, you can change it.

Description: Displays the formula description for mix-type batches.

Notes: This field is used to enter additional information about the batch.

Update/OK (not shown): Click this button to save your work.

7.3.2 Formula Tab

General		Formula		Finished Goods	By Products	Consumables	Cost	
#	Select	LineType	Item Code	Item Description	Whse	Qty. Required	Labor Hours	Overhead ID
1	☐	BoilerPlate ▼	BP002	Preheat oven to 350° F		0.000000		
2	☐	Material ▼	IN0010	Chocolate Chip Cookie ➡ 05		12.502501		
3	☐	BoilerPlate ▼	BP003	Bake in the preheated c		0.000000		
4	☐	Labor ▼	Std-Labo	Standard Labor		0.000000	01:00	➡ Std-OH
5	☐	Material ▼				0.000000		



The *Formula* tab is disabled for an assembly-type batch.

The line items can be modified as required by production. In our example, we have added text to the formula.

#: System-maintained field that is automatically incremented with the addition of every new item row.



Select: Checking this box selects the line for manual material issue operations.

Line Type: The *Line Type* field is used to specify the type of information to be added in the corresponding row. This field has the following options:

- **Material:** The row is an ingredient.
- **Labor:** The row is an additional cost or a direct labor cost for the batch.
- **Boilerplate:** The row is boilerplate text. The description field shows the first 80 characters of the text; the complete text is printed in the *Batch Ticket* screen.
- **Text:** Specifies additional text information.

Item Code: Allows entry of or displays an ingredient, boilerplate text, a labor description, or user-entered text based on the selection made in the *Line Type* field.

Item Description: Allows entry of or displays the description or text associated with the *Item Code* on the same row. This column is read-only.

- When the *Type* is **Material**, this field stores the *Item Description*.
- When the *Type* is **Boilerplate**, this field stores the first 80 characters of the boilerplate text.
- When the *Type* is **Text**, this field stores the user-defined text.

Warehouse: Displays the warehouse from which to pull the raw material (ingredient). (Cannot be changed.)

Quantity Required: Displays the standard quantity of the material required. (This field is read-only.)

Labor Hours: Enter the number of labor hours spent on the batch.

Format = HH:MM.

Overhead ID: Enter the overhead code (if any) associated with the material or labor line.

ed Goods		By Products	Consumables	Cost		
Stock UOM	Unit	Actual Qty.	Qty. Issued	Qty. to Return	Loss	
		0.000000	0.000000	0.000000	0.00	
⇒ LB	⇒ LB	12.500000	0.000000	0.000000	0.00	
		0.000000	0.000000	0.000000	0.00	
		0.000000	0.000000	0.000000	0.00	
		0.000000	0.000000	0.000000	0.00	

Stock UOM: Displays the stock unit of the item (ingredient). (This field is read-only.)

Unit: Displays the unit in which the quantity of the ingredient items is expressed. By default, this unit comes from:



- The raw material unit selected in the formula, or
- When a production UoM is defined on the *Item Master Details* screen, the system will calculate the required quantity in production units (based on the conversion factor defined during set-up).

Actual Qty.: Defaults from the *Qty. Required* field for the row. This is the amount of material to be issued at a particular time. In the event you need to issue more or less than the quantity called out in the formula, follow these rules:

- If you have already issued the standard quantity and need to issue more, enter the incremental amount in the “actual quantity” field.
- If you have not issued material to the batch, enter the new desired quantity in the “actual quantity field.
- If you have issued the formula quantity and end up using less material, you can return material from the batch to stores inventory.

Qty Issued: Displays the total quantity of the item that has been issued. This is a read only column.

Qty to Return: Enter the quantity of material to be returned to stock.

Loss: Edit the percentage of material lost, if needed.

Backflush: Check this option to enable backflush feature for the respective Item. The system auto fetch backflush value from Formula Entry, BOM Entry, if required you can change the value. The Backflush feature is used to automate the consumption of raw materials or components in the production process. Instead of manually issuing materials for each batch, backflushing automatically deducts the required quantities from inventory based on predefined bill of materials (BOM) or production rules.

Update/OK (not shown): Click to save your work or close the screen.

7.3.2.1 Go To Functions For Formula Items

De-Allocate Batch: On the *Batch Ticket* screen, users can selectively deallocate specific items within an *Allocated* or *Partially Allocated* batch by checking the corresponding checkboxes and then using the *De-Allocate Batch* option in the context menu; deallocating only selected items from an *Allocated* batch will change its status to *Partially Allocated*, while deallocating all remaining allocated items from a *Partially Allocated* batch will revert its status to *Released*.

7.3.3 Finished Goods Tab

The *Finished Goods* tab displays the FG or intermediate that is to be produced from this batch.



7.3.3.1 Upper Grid

General		Formula	Finished Goods		By Products	Consumables		Cost
#	Select	FG Code	Description	Whse	Standard Quantity	Stock UOM	Unit	Actual Qty
1	☐	⇒ FG0011	Chocolate Chip Cookie Tray	⇒ 05	50.000000	⇒ EACH	⇒ EACH	30
2	☐				0.000000			

#: Displays the sequence of the rows in the grid. This number is automatically incremented when new rows are added.

Select: Checking this box selects the line or row.

FG Code: This field displays the item number of the intermediate or finished good produced in the batch. The *FG Code* can be included in the grid, as follows:

- All FGs as well as the intermediates that use the selected formula, in the case of a **mix**-type batch.
- All FGs that use the formula associated with the selected Intermediate Key, in the case of a **fill**-type batch.

Description: This field is used to describe the item.

Whse: Displays the warehouse associated with the item.

Standard Quantity: Displays the original quantity to produce.

Stock UOM: Displays the stock unit of the item.

Unit: Displays the unit in which the quantity of the item produced is expressed.

Actual Qty: Displays the quantity of the item expected to be produced in a batch. This may differ from the standard quantity due to scheduling, testing, or other reasons. You would also change this quantity when performing a partial closure of the batch. (**Note:** In the example above, a partial closure for 20 units has already been done.)

Qty Produced: Displays the quantity that was produced upon the completion or partial completion of the batch.

Status: Displays the status of the line item.

Fill Level (not shown): Displays the fill level of the selected item.



Fill UOM (not shown): Displays the unit (System Weight UoM or System Volume UoM, as specified on the BOM) in which the fill level of the FG is measured.

7.3.3.2 Lower Grid

#	Select	FG Code	Item Code	Item Description	Whse	Original ...	Qty. Required	Stock UOM	Unit
1	☐	FG0011	PK0011	Tray - 250GM CCC	05		50.000000	EACH	EACH
2	☐	FG0011	PK0012	Label - 250GM CCC	05		50.000000	EACH	EACH
3	☐	FG0011	PK0013	Plastic Wrap 12.5 µm	05		750.000000	ROLL	INCH
4	☐						0.000000		

Batch Weight12.502501

Order Weight12.500000

Produced Weight5.000000

Batch Volume1.499100

Order Volume1.498800

Produced Volume0.599520

OK

Cancel

The lower grid displays a list of sub-assembly or packaging items (BOM items) associated with the items in the upper grid.

#: Displays the sequence of the rows in the grid. This number is automatically incremented when new rows are added.

Select: Checking this box will select the row.

FG Code: Displays the item selected in the upper grid.

Item Code: Displays the sub-assembly or packaging item needed for production. You can also add items or raw materials if needed.

Description: This field describes the item associated with the Item Code.

Whse: Displays the location of the item.

Quantity Required: Displays the quantity of the item required to produce the required quantity of FG, as per the BOM.

Stock UOM: Displays the inventory unit of measure.

Unit: Displays the production unit of measure.

Overhead ID (optional): Enter the overhead code associated with the line item.

Actual Qty.: Displays the quantity of the BOM item to be issued to the batch. Can be modified as needed (for example, in the case of a partial closure or some sort of loss during production).

Qty Issued: Displays the total quantity of the BOM item that has been issued for production.



Qty to Return: The quantity of the packaging material to be returned to stock.

Qty Returned: The quantity of packaging material that has been returned to stock.

Status: Displays the status of the BOM item.

Backflush: Check this option to enable backflush feature for the respective BOM Item. The system auto fetch backflush value from Formula Entry, BOM Entry, if required you can change the value. The Backflush feature is used to automate the consumption of raw materials or components in the production process. Instead of manually issuing materials for each batch, backflushing automatically deducts the required quantities from inventory based on predefined bill of materials (BOM) or production rules.

Update/OK (not shown): Click this button to save your work or close the screen.

7.3.3.3 Go To Functions For BOM Items

Show Alternate Item: The *Show Alternate Item* option during production batch processing allows users to substitute standard BOM components with predefined alternatives.

The screenshot displays the SAP Batch Ticket interface. On the left, the 'Batch Ticket' header shows fields for Batch Number (Batch007), Type (Fill), Status (PartClosed), Intermediate Key (IN0001), Revision (0000000001), Warehouse (01), and Owner (manager). Below this is a table with columns #, Select, FG Code, and Description. The first row is selected. A context menu is open over the first row, with 'Show Alternate Item' highlighted. The menu also includes options like Delete, Maximize/Restore Grid, Add Row, Delete Row, Duplicate Row, Show Critical Materials, Batch Entry, Assign Lot#, New Activity, Related Activities, Return Material, View Onhand Information, Relationship Map, View Picking/Bulk Staging Documents, Generate Bulk Staging Document, Third Party Document Report, View Non Conformance, Related Inspection Transaction, Add Inspection Transaction, and What's This?. On the right, the 'Production Whse' (01) and 'Demand Type' (Independent) are shown. Below this is a table with columns for Consumables, Cost, and Attachments. The first row shows a quantity of 40.000. At the bottom, there are fields for Batch Weight (50.000), Order Weight (50.000), Produced Weight (10.000), Batch Volume (50.000), Order Volume (50.000), and Produced Volume (10.000). Buttons for 'Update' and 'Cancel' are at the bottom left.

Selecting this option opens a lookup displaying available alternates if defined; otherwise, a "No records found" message appears. Choosing an alternate from the lookup replaces the original BOM item in the



batch, enabling the consumption of the substitute and providing flexibility for material adjustments during production.

Note:

1. If a BOM item has already been issued, the system will prevent the selection of an alternate item.
2. This feature will function consistently with the existing alternate item functionality for formula items, ensuring user familiarity.
3. Tolerance limits and line loss values defined for the original BOM item in the BOM Entry screen is automatically applied to the selected alternate item.
4. Selected alternate items will be reflected in the Production Dashboard, Scheduling Board, and all related reports.

7.3.4 By Products Tab

A by-product is an item that results from production in addition to the FG or intermediate for which you have demand. For example, 'potato peels' are a byproduct of preparing potatoes for slicing and frying. Byproducts entered on the formula will automatically be added to the batch record and can be edited, or you can add byproducts directly to a specific batch.

General		Formula		Finished Goods		By Products		Consumables	Cost
#	Select	Item Code	Item Description	Whse	Standard Quantity	Stock UOM	Unit	Qty. to Produce	
1	☐	EXP01	EXP01	01	0.000	KG	KG	0.250	
2	☐			01	0.000			0.000	

Select: Checking this box will select the row for manual editing. For example, you could change the *Qty. to Produce* amount.

Item Code: Enter the Item Code of the byproduct you expect to be produced.

Description: Defaults from the *Item Master*.

Warehouse: Defaults from the *Item Master*. (Note: Cannot be changed here.)

Standard Quantity: If the byproduct is defined in the formula, the expected quantity (in the inventory UoM) will appear here.

Stock UOM: The unit in which this byproduct is stocked in Inventory.

Unit: The production unit in which the quantity of the item will be transacted after batch closure.



Toggle to UOM: Use this field to specify the unit to toggle between different unit of measures.

Qty to Produce: The expected by-product quantity for the batch, in the production UoM.

Qty. Produced: The quantity of byproduct actually obtained. (The system auto fills this field when batch production is reported.)

Status: The status of the production batch.

Overhead ID (optional): Enter the code for any overhead associated with the byproduct (i.e., the cost of collecting, packing, and moving byproduct to inventory).

7.3.5 Consumables Tab

The *Consumables* tab allows you to view and edit the indirect inventory items that are exhausted or consumed in the manufacturing process. Values shown on this tab default from the formula and BOM. You can add, modify, or delete line items, depending on your needs.

General		Formula		Finished Goods		By Products		Consumables		Cost	
#	Select	Item Code	Item Description	Whse	Qty. Required	Stock UOM	Unit	Qty. to Consume			
1	☐	⇒ F100	Filter, F100	⇒ 05	0.000000	⇒ EACH	⇒ EACH				1.000000
2	☐				0.000000						0.000000

#: Displays the sequence of the rows in the grid. This number is automatically incremented when new rows are added.

Select: Checking this box selects the consumable item for various operations.

Item Code: This field displays the unique code of the consumable item. The lookup shows all the inventory items.

Description: Provides a description of the consumable item selected in the *Item Code* field.

Whse: Displays the warehouse location of the consumable item.

Quantity Required: Displays the quantity of the consumable item used in the formula.

Stock UOM: Displays the unit in which the consumable item is stocked in the inventory.

Unit: Displays the unit in which the quantity of the consumable item is interpreted.

Quantity to Consume: Displays the quantity of the consumable item to be used in the manufacturing process.



Most of the time, you will not need to edit the *Quantity to Consume* field. Follow these steps when you have to issue consumable items in parts:

- Enter the required quantity.
- Save the record.
- Choose the **Go To → Issue Batch** menu to issue items.

Quantity Consumed: This field displays the actual quantity of the consumable item used in the manufacturing process.

Quantity to Return: See [Section 7.3.8](#).

Backflush: Check this option to enable backflush feature for the respective Item. The system auto fetch backflush value from Formula Entry, BOM Entry, if required you can change the value. The Backflush feature is used to automate the consumption of raw materials or components in the production process. Instead of manually issuing materials for each batch, backflushing automatically deducts the required quantities from inventory based on predefined bill of materials (BOM) or production rules.

Update/OK (not shown): Click this button to save your work or close the screen.

7.3.6 Cost Tab

These costs default from the formula and/or BOM associated with the batch. They can be edited if appropriate.

General	Formula	Finished Goods	By Products	Consumables	Cost	Attachments
Setup Costs Variable Costs						
Labor Hours DD:HH:MM		00:04:00		Labor Hours DD:HH:MM		00:01:00
Labor ID		Lab01		Labor ID		Labor Cost
Overhead ID		OH1		Overhead ID		OH01
Fixed Costs						
Labor Hours DD:HH:MM		00:03:40				
Labor ID		LC				
Overhead ID		Overhead Costing				

Update/OK (not shown): Click this button to save your work or close the screen.

7.3.7 Attachments Tab

On the *Attachments* tab, you can browse and locate the file(s) that you want to attach with this record. It must be located on a shared server.



General				Formula	Finished Goods	By Products	Consumables	Cost	Attachments
#	Source Path	Target Path	File Name	Attachment Date					
1	\\workspace\Library\Tech-Writing\Intern.		BME-B1 16.3 Administratio	26/02/19					

Browse

Display

Delete

Source Path: Displays a network location of the attached document.

Target Path: Displays the directory where you want to store the attached file. This is the path you specified at the *Attachment Folder* field in the *SAP General Settings* screen.

File Name: Displays the name of the file.

Attachment Date: Displays the date when file is attached with the record.

Browse: Use this button to search and locate the path of the file need to be attached. It should be a network location.

Display: Use this button to view the attached file.

Delete: Use this button to delete the selected attached file from the grid.

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

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

7.3.8 Issue Reversal

In the event you need to return some or all of the materials issued to a batch, follow these steps:

1. Open the *Batch Ticket* screen. Enter the number of the batch whose materials need to be returned, and then click the *Find* button.
2. When the batch data is displayed, switch to the *Formula* tab.
3. Scroll to the right to display the *Qty to Return* column. For each material being returned, enter the quantity.



General		Formula		Finished Goods		By Products		Consumables		Cost	
#	Type	Item Code	Item Description	Whse	Qty. Required	Labor Hours	Stock UOM	Unit	Qty. Issued	Qty. to Return	
1	ial	RM0034	Minced Onion	05	2.185986		LB	LB	0.985986	0.000000	
2	ial	RM0031	Black Pepper 28 Mesh	05	495.770695		LB	GM	297.770495	50.000000	
3	ial	RM0032	Chili Powder	05	1.165066		LB	LB	1.165066	0.165100	
4	ial	RM0035	Roasted Garlic Powder	05	2.185986		LB	LB	2.185986	0.186000	
5	ial	RM0033	Paprika	05	1.092993		LB	LB	1.092993	0.000000	
6	ial	RM0012	Salt	05	0.273248		LB	LB	0.273248	0.000000	
7	ial	RM0038	Tricalcium Phosphate	05	0.819745		LB	LB	0.819745	0.000000	
8	ial	RM0039	Ground Cumin Powder	05	1.092993		LB	LB	1.092993	0.000000	
9	ial	RM0040	Oregano	05	1.092993		LB	LB	1.092993	0.000000	
10	Plate	BP005	Weight all ingredients at		0.000000				0.000000	0.000000	
11	Plate	BP004	*COLLECT BLENDED S		0.000000				0.000000	0.000000	
12			QC Signature :		0.000000				0.000000	0.000000	
13		Std-Labo	Standard Labor		0.000000	00:50			0.000000	0.000000	
14	ial				0.000000				0.000000	0.000000	

Batch Weight

11.002003

Used Weight

0.000000

LB

Batch Volume

1.319185

Used Volume

0.000000

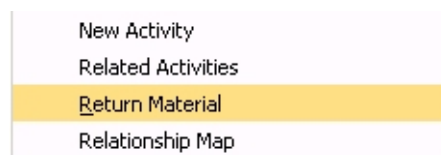
GAL

Update

Cancel

4. Click the *Update* button. When the batch is updated, the button label will say *OK*.

5. Right-click in the screen and select *Return Material* from the list.



The following window will appear.

[illegible]

6. In the top grid, select the line you want to return.
7. In the bottom grid, select the lot number(s) and quantity of each lot to be returned.

Auto Select: Click to have the system process the full return quantity based on each line item's LIFO/FEFO/FIFO issue rule defined at the *Item Master Details* screen.

Update: Click the *Update* button to process the return.

Cancel: Click the *Cancel* button to exit the screen without processing the return. Note that this does not reset the return quantities entered on the *Formula* tab in **step 3** above.

7.3.9 Go To Functions – Batch Ticket



Some options may not be available, depending on the status of the batch with which you are working.

Size Batch: Sizing the batch means varying the overall size of the batch or one or more ingredients in the batch. For example, you might be asked to produce an additional ten percent for QC sampling, or a



raw material shortage may force a reduction in the batch quantity. Any change in the Order Weight should be accompanied by a resizing of the batch.

You must select a sizing criterion from the following options:

- **Batch Weight:** Lets you enter the Batch Weight (target) to be achieved, and size the batch according to the target.
- **Batch Volume:** Lets you to enter the Batch Volume (target) to be achieved, and size the batch according to the target.
- **Finished Goods Ordered:** Lets you modify the Order Quantity of the end items and define a new Loss Factor and Loss Constant for the batch. The batch is then sized accordingly.
- **% of Formula in Process:** Lets you scale the formula being used based on the percentage entered on the *Size Batch* screen. For example, entering '200' in this field will double the Quantity Required on all the formula lines, and also double the Batch Weight.
- **Available Material:** When this option is selected, the system considers the available quantities of the raw materials and determines the limiting material (the raw material that has the lowest ratio of available quantity to required quantity among the various materials required for the batch). The batch is then scaled according to the limiting material.
- **Availability of One Material:** When this option is selected, the system lets you select any material and scales the batch up or down based on the available quantity of this material in the Item Warehouse. The availability of the other materials is ignored for this purpose.



- **Quantity of Material:** Displays a grid listing all the items with their corresponding warehouses. The system lets you select any material and then change the available quantity of that material, and the batch will be scaled accordingly.

Apply: Click the *Apply* button to process your changes.

Print Batch: Selecting the *Print Batch* option generates a report showing the Batch Ticket created.

Issue Batch: Clicking the *Issue Batch* option displays the *Material Issue* screen, where you can issue the Actual Quantity of raw materials and ingredients used. The screen displays Raw Materials and Consumable Items for which Back Flush item option is not marked.

Only items not marked for backflush are visible for manual issuance. If users need to manually issue a backflush item, they must first deselect the Backflush checkbox in the Batch Ticket screen. Upon reopening the Material Issue screen, the item will appear for manual processing. When the Size Amount of RM to be Backflushed option is enabled, the system will issue RM and packaging items proportionally during Partial Close based on the FG quantity received.

Top Grid: Highlight the material or BOM item you want to issue.

Bottom Grid: Select one or more lot(s) to be issued to the batch.

Select All: Click to select all the lots displayed for the given line item.



Auto Select: Click to issue full quantities of all materials or BOM items. The system will select lots based on the rules set for each item at the *Item Master Details* screen.

- If the material has not been allocated, you can change the *Qty to Issue*, as required.

#	Type	Item Code	Description	Whs Code	Qty Required	Available Qty	Lot Stren...	Qty Issued	UOM	Qty Req Stoc...	Sto...
1	Material	IN0040	Orange Juice Cr	05	5.500000	100.000000	100.000000	0.000000	GAL	5.500000	GA
2	BOM Item	PK0040	Bottle - 1L OJ	05	50.000000	100.000000	100.000000	0.000000	EACH	50.000000	EA
3	BOM Item	PK0041	Label - 1L OJ	05	50.000000	100.000000	100.000000	0.000000	EACH	50.000000	EA
4	Consumab	RM0004	Water	05	7.900000	100.000000	100.000000	0.000000	GAL	7.900000	GA

#	Select	Lot No	Expiry Date	Bin No	Inventory Type	Available Qty	Lot Stren...	Qty to Issue	UOM	Qty to Issue ...	Stock UOM	U...
1	☒	IN0040-001	12/05/16	05-A1-S	ALL	100.000000	1.000000	5.500000	GAL	5.500000	GAL	

- If material was allocated to the batch and you need to change the quantity to issue, you must first return to the *Batch Ticket* screen and:
 - De-allocate the material.
 - Change the quantity.
 - Click the *Update* button.
 - Re-allocate the material.
- Return to the *Material Issue* screen. Process the transaction(s) by clicking the *Issue* button.

Save: The *Material Issue* screen will retain lot selection for Issue if you save it. Click the *Save* button to save lots already being selected to issue. This lets you save and close the material issue screen, and return to it later. When you re-open the screen, the system retains the lot selections you made previously.

Date Selection: Choosing the *Date Selection* option opens a calendar window when you are working with an editable date field.



Allocate Batch: BatchMaster ERP supports Bin-less Allocation from version 18.2. It means that when allocating a lot for the batch, the system does not display the Bin/Container No of the lot. The consolidated quantity available in the lot will be displayed for allocation. Use the Allocate Batch option to open the *Batch Allocation* screen. On that screen, you can now select the lot and specify the quantity required to be allocated. The allocated quantity will be deducted from the overall quantity available in the lot irrespective of its Bin/Container No. By default, the lots for first line item of the batch is automatically selected based on the issue method defined in *Item Master Details*. Further, from this screen, you can allocate all raw materials, BOM items, and consumables for the batch, or allocate selected items only. It also allows manual allocation for the batch.



If Lot Strength is being used, the Batch Allocation screen populates by auto selecting the lot of all line items based on the issue method defined in *Item Master Details*.

Type	Item Code	Description	Whs Code	Qty Required	Available Qty	Display UOM	Qty Issued	Qty Allocation	Stoc...
1	Material	Sberry_pulp	01	13.333	1,926.489	KG	0.000	0.000	KG
2	Material	Sweetner	02	6.667	979.584	KG	0.000	0.000	KG

Sel	Lot No	LPN	Expiry Date	Available Qty	Qty Allocation	Qty Picked	Pick Req	Pick Doc No	Pick No
☒	B1		31/12/99	6.250	6.250	0.000			
☒	lot1		31/12/99	1,923.333	7.083	0.000			
☐	L10000		31/12/99	30.000	0.000	0.000			
☐	L20000		31/12/99	40.000	0.000	0.000			
☐	Bo		31/12/99	0.906	0.000	0.000			

2,000.489 13.333

Update Cancel Auto Select

Based on the options selected on the *Production Setup* screen, batches can be automatically allocated on release. While allocating materials, the system checks the following:



- **Lot issue method for raw materials.** For example, if raw materials need to be issued by FEFO, the nearest expiring raw material lots will be issued first. The system considers the existing allocation of lots.
- If the **single lot** option is selected, the system will try to select a single lot.

Upper Grid: Highlight the row of the material you want to allocate.

Lower Grid: Select the Lot No. for this item that you want to allocate to the batch.

- You can edit the *Qty Allocation* field to reduce the amount taken from a given lot and then select additional lots from which to allocate.
- You can allocate part of the quantity now and the rest at a later time.
- You can choose to allocate NONE of the part number at this time by not selecting any rows in the lower grid.

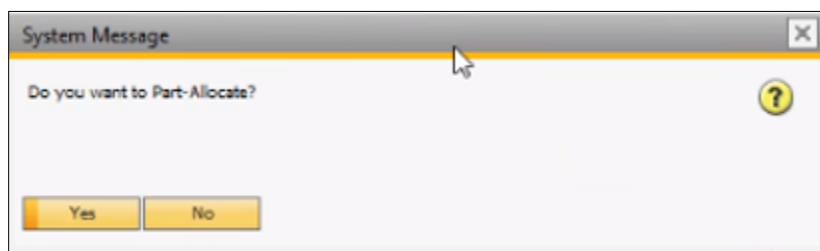
Auto Select: This Auto Select drop down shows two options,

- 1) Auto Select – Clicking on this option will override the manual selection and let the system fully allocate materials based on the rules set for each item on the *Item Details* screen. BatchMaster ERP will allocate the full amount of each required material. If it cannot do so, an error message will appear and you must handle the allocation manually.
- 2) Auto Select Remaining Items – This Option will not override manual selection but will auto-select the lots of items whose lot selection is pending, based on the rules set for each item on the *Item Details* screen.

Update: Click the *Update* button to save your work. The batch status will change from Released to Allocated.



If you select the lots for a few items and click the *Update* button, then lot allocation will be performed for the items for which you selected the lot and the system shows a warning message to confirm the Part-Allocation. Clicking on Yes will partially allocate the batch and set the batch status to *Partial Allocate*.





De-allocate Batch: This option de-allocates all the materials from the batch, allowing you to make changes to the allocations. You cannot de-allocate once production has been reported against the batch. You can reverse a material issue prior to closing the batch, if necessary.

Cancel Batch: This option lets you cancel a batch. If a batch is cancelled after materials have been issued to it, the materials and labor cost will be written off.

Put on Hold: This option lets you reset the status of a batch to Hold. A batch that is on Hold cannot be used in production because it has no material allocated or issued to it. (This applies to New or Released batches only.)

Release Hold: This option lets you reset the Hold status of a batch.

Go To Production QC: This operation will take you to the *Production QC* screen, where you can verify and work with the QC order associated with the batch. For more details, refer to the “*BME-B1 18.2 –QC User Guide.*”

Go To Batch Close: This option opens the *Batch Close* screen with the batch displayed.

Show Critical Materials: Selecting the *Show Critical Materials* option generates a report showing required materials with insufficient available quantity on hand. This could be caused by expired lots, incorrect bin locations, inventory on Hold due to QC issues, or inadequate supply.

Show Alternate Item: Choose this option to display an alternate item for the selected line item.

Batch Entry: Choose this option to open the *Batch Entry* screen with the batch displayed.

Allocate FG: Choosing this option will open the *FG Allocation* screen.

Assign Lot #: Choose this option to assign a lot number for item(s) being produced.

Production Goods Transaction Report: Choose this option to generate the *Production Goods Transaction Report*.

Print Label Report: Prints labels as defined by your business process.

New Activity: Opens the *Activity* editor.

Related Activities: Shows activities associated with the batch.

Return Material: See [Section 7.3.8](#).

View On hand Information: Displays in-stock, committed, allocated, expired, and available quantities for the selected material, including lot details.



Relationship Map: Shows relationship data for the batch.

View Picking/Bulk Staging Documents: Displays all the documents related to the batch.

Generate Picking Document: Opens the *Production Pick Generation* screen with Batch and Sch Start Date Range. See Section [Production Pick Generation](#) for more details.

Generate Bulk Staging Document: Opens the *Bulk Staging Document Generation* screen with Batch and Sch Start Date Range. See [Section 7.10.2](#) for more details.



7.4 Batch Close

The *Batch Close* screen is used to report partial or complete production of the intermediate, FG, or assembly item. When production is reported, any materials (raw, intermediate, or FG) that were allocated to the batch are relieved from inventory. If necessary, you can also issue raw materials from this screen. Further displays consumables based on the "Size with Batch" setting.

Here you will partially or completely close the batch by reporting partial or complete production of the order quantity. For field descriptions, please refer to the *Batch Entry* screen.

Go To: Process Manufacturing → Batch Close.

Batch Close

Batch Number: 24Aug029-001
Type: Mix
Status: Released
Formula Key: for_sberry_shake
Revision: 0000000002
Warehouse:
Owner: manager
Active Ingredient Lot:
Active Ingredient Item:
Production Stages
Deviations

Production Whse: 01
Demand Type: Independent
Sales Order:
Customer Key:
Issue/Alloc/Return Date: 26/02/19
Part Close / Close Date: 26/02/19
Pick Status: Released to Pick

☒ Show all Finished Goods

#	Select	FG Code	Description	Whse	Original Whse	Standard Quantity	Stock UOM	Unit	Actual Qty.	Qty. Produced	Status	Fill Level	Fill...
1	☒	Sberry	Sberry_juice	01		2.000	KG	KG	2.000	0.000	New	1.000	KG
2	☐					0.000			0.000	0.000	New	0.000	

#	Select	FG Code	Item Code	Description	Whse	Original Whse	Qty. Required	Stock UOM	Unit	Overhead ID	Actual Qty.	Qty. Issued	Qty...
1	☐						0.000				0.000	0.000	

Usage And Yield

Batch Weight: 2.000 Order Weight: 2.000 Produced Weight: 0.000
Batch Volume: 2.500 Order Volume: 2.500 Produced Volume: 0.000

OK Cancel

In the top grid, you can modify the Actual Quantity completed for the end items, if needed.

In the bottom grid, you can modify the quantity of BOM items (usually packaging) before closing the batch. (Scroll to the right to see the *Actual Quantity* field.)

- On the *Materials* tab, you can enter additional items used in production that were not originally part of the formula or BOM.



- On the *By Products* tab, enter or edit byproduct information.
- On the *Consumables* tab, enter or edit consumables information.
- On the *Labor and Overhead* tab, enter or edit cost data associated with the batch.

Finally, click the *Close* option available in the *Go To* menu. This will generate a report showing the resulting details on the *Batch Close* screen.

7.4.1 Go To Functions at Batch Close

Issue Batch: See *Go To Functions – Batch Ticket*

Assign Lot#: Using this button, you can assign the lot number for the batch going into inventory. If you have defined a lot number series (mask) for the product at the *Item Details* screen, the system will suggest the next lot number in sequence. This can be over-ridden, if desired.

Partial Close: Click this option to partially close the batch as you specify. This option lets you post some or all of the end items without the need to first post any raw materials, byproducts, etc.

Date Selection: See *Go To Functions – Batch Ticket*

Close Batch: Click this option to close the batch. Allocated materials will be backflushed if that option was selected in *Production Defaults*. Otherwise, Issue Batch must be performed before closing the batch. For Backflush item the system automatically issue the items on batch close.

Go to Production QC: This option generates a QC order:

- For the formula associated with the batch, if a QC test is linked to the formula.
- For any materials issued to the batch, if a production QC test is associated with the item.

The QC order can be edited and then processed in the usual way.

Show Critical Materials: See *Go To Functions – Batch Ticket*

Go to Batch Ticket: Click this option to display the batch on the *Batch Ticket* screen. You can make any required edits and then proceed with material issue and batch closure.

Put On Hold/Release Hold: See *Go To Functions – Batch Ticket*

Cancel Batch: See *Go To Functions – Batch Ticket*



Production Goods Transaction Report: Selecting this report option generates the following details.
(Note that Journal Entry account detail has been suppressed here.)

Production Goods Transaction Report											
Batch No	Transaction T...	Doc No	Item Code	Whs Code	Journal Entry	Debit/Credit	Account	Line Type	Lot No	Qty In Displa...	Display UOM
▼ A100											
	▼ Issue										
		59	B-01	01			525000000100 BOMItem			1000.000	EACH
		59	Filter	01			525000000100 Consumable			1.000	EACH
		59	Apple Pulp	01			525000000100 Material	Apple Pulp-03		300.056	LT
		59	Apple Pulp	01			525000000100 Material	Apple Pulp-04		100.000	LT
		59	Sugar	01			525000000100 Material	S1		97.514	KG
		59	Ascorbic acid	01			525000000100 Material	A1		2.500	KG
	► Journal Entry										
	▼ Receipt										
		57	Apple Juice	01				FinishedGood	Apple Juice-017	500.000	KG

Click the white arrow to return to the *Batch Close* screen, or *OK* to close the report.

Allocate/Deallocate Batch: See Go To Functions – Batch Ticket

Print Label Report: Prints product labels according to your specifications.

New Activity: See Go To Functions – Batch Ticket

Related Activities: See Go To Functions – Batch Ticket

View On Hand Information: See Go To Functions – Batch Ticket

Relationship Map: See Go To Functions – Batch Ticket

View Picking/Bulk Staging Documents: Displays all the documents related to the batch.

Generate Picking Document: Opens the *Production Pick Generation* screen with Batch and Sch Start Date Range. See Section [Production Pick Generation](#) for more details.

Generate Bulk Staging Document: Opens the *Bulk Staging Document Generation* screen with Batch and Sch Start Date Range. See [Section 7.10.2](#) for more details.

FG Return: Batch FG Return allows users to return Finished Goods (FG) when they were received incorrectly, applicable only for partially closed batches. This functionality helps rectify mistakes in the received quantity.



Access the *Batch FG Return* screen from the batch close screen's right-click menu to manage received and returned FG lots, select and process returns, and handle inventory revaluation and byproduct returns.



Note that the *FG Return* option is available on right click at the *Batch Close* screen if the selected batch is in *Partial Closed* status and *Post Item Revaluation for variance on batch close* checkbox is marked at the *Production Defaults* screen - *Batch Options* tab. Alternatively, you can also directly access *Batch FG Return* screen at the path: **Process Manufacturing** → **Production Utilities** → **Batch FG Return**. Refer [Batch FG Return](#) section for more details.



7.5 Batch Reversal

In the event you close or partially close a batch in error, you can reverse the closure. Upon reversal, materials will be returned to the warehouse from which they were issued and the batch status will be *Cancelled*. Therefore a new batch must be created and processed to record your production. For better traceability:

1. Using *Batch Entry*, create the replacement batch and save with *New* status.
2. Reverse the original batch using the steps outlined below.
3. Using *Batch Entry*, release the replacement batch and continue normal processing.

Go to: Process Manufacturing → Batch Reversal.

Batch Number	→	B051002-002
Batch Type		Mix
Batch Status		Closed
Formula ID	→	FM003
Revision		0000000005
Warehouse	→	05
Process Cell		Blender-1
Sch. Start Date		05/29/15 00:00
Sch. End Date		05/29/15 00:00
Reversal Notes		CLOSED IN ERROR. SEE NEW BATCH C051002-002

Reverse Cancel

Batch Number: Enter the ID of the batch you need to reverse and press the *Tab* key. Batch details will be filled in.

Reversal Notes: Enter appropriate comments. It is suggested you enter the replacement batch number, if applicable.

Reverse: Click this button to reverse and cancel the original batch.

Cancel: Click the *Cancel* button to exit the screen without processing the reversal.



Reversals **cannot** be performed on:

- SuperBatches.



7.6 SuperBatch Entry

Using the *SuperBatch Entry* option, you can set up a batch to produce a finished good and its intermediates in the same process.

[Go To: Process Manufacturing → SuperBatch Entry.](#)

Series: Select the desired series (mask) to use in defining the SuperBatch Number. Different series can be used for easy identification of batches. These values are retrieved from the *Batch Series Master*.

SuperBatch Number: You can manually enter a batch number. (Used only if no series is chosen above.)

Batch Status: A batch or SuperBatch starts out with a status of *New*. Please refer to *Batch Entry* for explanation of the other possible statuses.

SuperBatch Type: You may select either *SuperBatch* or *Batch with Runs*.

- When *SuperBatch* is selected as the type, batches for both the FG(s) and intermediate(s) are created.
- Using the *Batch with Runs* option, only the FG will be produced. The system considers the capacity of the process cell selected for the batch and splits the quantity to be produced equally among the batches. The planner can edit these quantities if needed prior to releasing the *SuperBatch*.

Batch Type: Defines what the batch will be used for. The dropdown lists the available types as *Mix*, *Fill*, or *Assembly*. The selection you make determines what data is required next:

- When you select *Mix* as the type, the system prompts for a Formula ID.
- When you select *Fill* as the type, the system prompts for an Intermediate Key.
- When you select *Assembly* as the type, the system prompts for an Assembly Item No.

Warehouse: The warehouse from which the intermediate will be pulled (fill-type batch only).



Production Warehouse: The warehouse into which the SuperBatch will close.

Process Cell: The cell in which the SuperBatch will be run. Defaults from the formula or BOM, depending on the type of batch chosen.

Owner: The user responsible for the batch.

Demand Type: *Independent* means the SuperBatch was opened without a tie to a sales order. *Dependent* means a sales order will be tied to the SuperBatch.

Sales Order: For a *Dependent* demand type, enter the number of the order to which the SuperBatch will be tied.

Customer Key: The customer associated with the sales order.

Source: Either Sales Order (*Dependent* demand) or Production (*Independent* demand).

Req Date (*Dependent* demand only): The delivery date of the associated sales order.

Fill from Inventory: (Not available when the SuperBatch type is *Batch with Runs*).

- If this option is set to *Yes*, the related intermediates are taken from the available inventory. If the Available Quantity of an intermediate covers the required quantity, a sub-batch does not get created for this intermediate.
- If the Available Quantity of an intermediate is less than the required quantity, a sub-batch will be created for the remaining quantity.

$$\text{Available Quantity} = [\text{On Hand Quantity}] + [\text{On Order Quantity in Production}] - [\text{Quantity Committed to Production}]$$

Sch Start Date: System suggestion. (Can be overridden.)

Sch End Date: System calculation. (Can be overridden.)

No. of Runs: (Used when the SuperBatch type is *Batch with Runs*.) In this field, based on the capacity of the process cell, the system will calculate how many passes through the cell will be needed to complete the desired production quantity. Adjacent to this field a lookup button is provided. Using it you can override the number of runs based on process cell capacity settings made at the *Production Default screen*. Clicking this button prompts the screen to choose any option from *Create Runs to Fulfil required quantity*, *Round quantity to next full run* and *Equally divide quantity between runs*.

- **Create runs to fulfill required quantity:** If you mark this checkbox, the number of runs will be calculated on the basis of 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 on the basis of 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.

Show Explosion: Click this button to load the Super Batch Explosion tree in the left side of the *All Items* Tab.

Additional Information: Click the right-arrow button (►) to display. Click the down-arrow button (▼) to hide.

Draw From Whse: Use this field to specify the supply warehouse. Overrides warehouse data from formula or BOM.

Post To Whse: Use this field to specify the destination warehouse for the batch. Overrides all other destination fields.

Project: Enter the project number associated with the batch. (See [Section 7.2](#))

Distr. Rules: Enter the distribution rules associated with the batch. (See [Section 7.2](#).)



7.6.1 Top Item Tab

#	Item Code	Item Description	Whse	Qty to Produce	Unit	Fill Level	Fill Unit	Contai...
1	FG0020	All Purpose Seasoning - 1 LB	05	50.000000	EACH	1.000000	LB	
2	FG0080	Spice Blend - 1 LB	05	50.000000	EACH	1.000000	LB	
3			05	0.000000		0.000000		

Order Weight: 100.000000 Batch Weight: 100.000000
Order Volume: 11.990407 Batch Volume: 11.990407

Add Cancel Schedule Import From SO

Item Code: Select the end-item from the lookup window or enter it manually.

Whse Code: Cannot be changed here.

Qty to Produce: Enter the quantity to be made with this SuperBatch. The system calculates the Order Weight and Volume and the Batch Weight and Volume and displays them in their respective fields.

Add: Click to create the SuperBatch. At this time the system:

- Calculates and displays the Order Weight, Order Volume, Batch Weight, and Batch Volume.
- Creates sub-batches for the intermediates associated with the selected formula.
- Displays the sub-batches on the All Items tab.

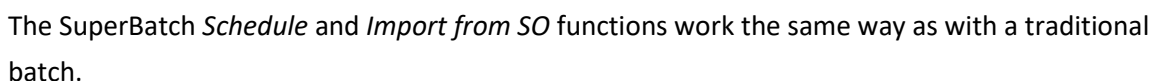


The left side of the screen will be blank until you click the *Show Explosion* button. Click it to load the Super Batch Explosion tree, showing a relationship between its sub-batches.

The right side of the screen provides information about each sub-batch. Not shown are:

- **FG Whse:** The destination warehouse for the item(s).
- **Qty to Produce:** Calculated based on the order quantity of the Top Item.
- Unit of measure.
- Required date, scheduled start date, and scheduled end date.
- Actual start and end dates.
- **Apply Date:** The date the sub-batch items were issued to the SuperBatch.

You cannot make any edits on this tab. Edits to the sub-batches can be done using the *Batch Entry* or *Batch Ticket* functions.





7.6.3 Go To Functions for SuperBatch

At the top of your screen is a Windows toolbar with the following options:

File | Edit | View | Data | Go To |.

The *Go To Menu* provides powerful functions that are dependent on the status of the batch you are analyzing. The options are active or grayed out based on that status and the screen you are using when you click on the *Go To* menu. These functions are summarized below.

Release SuperBatch: Releases the Super Batch. It can now be accessed using the *Batch Ticket* screen. When automatic allocation is turned on, the system will also allocate raw materials for the batch.

Allocate SuperBatch: Allocates the actual quantity of the BOM lines and the formula raw materials for all the batches contained in a SuperBatch. This option is enabled only if the status of the Super Batch is *New*. See also 'Allocate Batch' in *Batch Entry*.

De-Allocate SuperBatch: Reverses all raw material allocations to all sub-batches. This cannot be done once any material has been issued.



Specific sub-batches can be deallocated using the *Batch Ticket* function if material has not been issued to that batch.

Cancel SuperBatch: Cancels the entire SuperBatch and its sub-batches. A cancelled SuperBatch cannot be reopened. It must be deleted.

Release Hold: Releases a SuperBatch from *Hold* status and returns it to *New* or *Released*.

Put on Hold: Holds the entire SuperBatch until it is released using the *Release Hold* function. No operations, other than Release Hold, can be done for a SuperBatch under this status.

Allocate FG: Opens the *FG Allocation* screen.

Production Goods Transaction Report: Generates the *Production Goods Transaction Report*.

SuperBatch Close: A shortcut to the *SuperBatch Close* screen.

New Activity: Opens the *Activity* editor.

Related Activities: Shows activities associated with the batch.

Relationship Map: Shows relationship data for the batch.

Revert to New: Revert the *Released* status of a Batch/Super Batch to *New* status. This lets you resize the Finished Good Quantity.

View Picking/Bulk Staging Documents: Displays all the documents related to the batch.

Generate Picking Document: Opens the *Production Pick Generation* screen with Batch and Sch Start Date Range. See Section [Production Pick Generation](#) for more details.



Generate Bulk Staging Document: Opens the *Bulk Staging Document Generation* screen with Batch and Sch Start Date Range. See [Section 7.10.2](#) for more details.

7.7 SuperBatch Close

Using this screen you can close or partially close all the sub-batches contained in a SuperBatch. Once the sub-batches are completely closed, the SuperBatch can also be closed. In our example, an intermediate (dough) and a finished good (chocolate chip cookies) were produced.

In the upper grid, check the box next to the sub-batch you want to close. Its associated FG or intermediate will be displayed in the lower grid.

Part Close Date: If any of the associated sub-batches have been partially closed, the latest date of those transactions will display in the header.

Production Stages: Click to access any stages associated with the SuperBatch. (See [Section 4.3.](#))

Go To: Process Manufacturing → Super Batch Close.

Super Batch Close

Series: Batch
Super Batch No: B112014
Super Batch Type: Super Batch
Batch Type: Mix
Status: Released ☐ On Hold

Sales Order:
Customer:
Demand Type: Independent
Source: Production
Part Close Date:

► Usage And Yield

#	Select	Batch No	Batch Type	Batch Status	Formula ID	Description	Revision	Whse	Req Date
1	☒	B112014-002	Mix	Released	FM001	Formula for Dough	0000000006		
2	☐	B112014-001	Mix	Released	FM002	Formula for Cookie Baking	0000000002		

Production Stages

Selected Batch: B112014-002

Finished Goods & BP | Matl. Packaging and Consumables | Labor

#	Select	LineType	Item Code	Description	Whse	Original ...	Quantity Required	Qty. Req. Stock UOM	Stock UOM
1	☐	FinishedGood	IN0010	Chocolate Chip Cookie Dough	05		10.002000	10.002000	LB
2	☐	FinishedGc					0.000000	0.000000	

OK Cancel



7.7.1 Finished Goods & BP Tab

This tab displays the FG or intermediate produced by the batch. It also displays the byproduct(s), if any, that were produced by the batch.

Selected Batch: B112014-001

Finished Goods & BP Matl. Packaging and Consumables Labor									
#	Select	LineType	Item Code	Description	Whse	Quantity Required	Qty. Req. Stock UOM	Stock UOM	UOM
1	☐	FinishedGood	FG0010	Chocolate Chip Cookie Box - 1LB	05	10.000000	10.000000	EACH	EACH
2	☐	FinishedGc				0.000000	0.000000		

Select: Marking the *Select* checkbox lets you edit limited data on the associated line (cells in white).

Line Type: The type of information displayed in the corresponding row.

Item Code: The unique identification code of the item being produced.

Description: The description of the item being produced.

Whse: The warehouse location for the item.

Quantity Required: Displays the original production quantity of the FG or intermediate.

Qty. Req. Stock UOM: Displays the original production quantity expressed in the stock UoM.

Stock UOM: The unit in which this FG or byproduct is stocked in inventory.

UOM: The production unit of measure of the item.

Actual Qty. (not shown): Displays the quantity of the intermediate, finished good, or by-product produced, expressed in the production UoM.

Actual Qty. Stock UOM (not shown): Displays the quantity of the FG or byproduct produced, expressed in the stock UoM.

Qty. Received (not shown): Displays the quantity of the FG or byproduct received into inventory, expressed in the production UoM.

Qty. Received Stock UOM (not shown): Displays the quantity of the FG or byproduct received into inventory, expressed in the stock UoM.

Loss (not shown): Enter the loss incurred in handling this FG or byproduct.

Overhead ID (not shown): The unique identifier of the overhead cost incurred in producing the item.

Status (not shown): Displays the status of the sub-batch.



7.7.2 Matl. Packaging and Consumables Tab

Selected Batch: B112014-001

Finished Goods & BP Matl. Packaging and Consumables Labor										
#	Select	LineType	Item Code	Description	Whse	Original ...	Quantity	Qty. Req. Stock UOM	Stock UOM	Unit
1	☐	BoilerPlate ▼	BP002	Preheat oven to 350° F			0.000000	0.000000		
2	☐	Material ▼	IN0010	Chocolate Chip Cookie ➡ 05			10.002000	10.002000	➡ LB	➡ LB
3	☐	BoilerPlate ▼	BP003	Bake in the preheated c			0.000000	0.000000		
4	☐	BOMItem ▼	PK0010	Box - 1LB CCC ➡ 05			10.000000	10.000000	➡ EACH	➡ EACH
5	☐	BOMItem ▼	PK0015	Label - 1LB CCC ➡ 05			10.000000	10.000000	➡ EACH	➡ EACH
6	☐	BOMItem ▼	PK0013	Plastic Wrap 12.5 µm ➡ 05			400.000000	0.266666	➡ ROLL	➡ INCH

This tab displays information about the raw materials, consumables, and packaging used in production. The information is taken from the formula and/or BOM associated with the item produced in the sub-batch. You can add data rows before sub-batch closure, as needed. Column descriptions are the same as for the *Finished Goods & BP* tab. Item-specific backflushing settings are honored on the *Super Batch* screen.

7.7.3 Labor Tab

Selected Batch: B112014-001

Finished Goods & BP Matl. Packaging and Consumables Labor										
#	Select	Labor ID	Description	Labor Hours	Overhead ID	St...				
1	☐	➡ Std-Labor	Standard Labor	01:30		New				
	☐			00:00		New				
3	☐									

Setup Costs
Labor Hours 00:00
Labor ID
Overhead ID

Variable Costs
Labor Hours 00:00
Labor ID
Overhead ID

Fixed Costs
Labor Hours 00:00
Labor ID
Overhead ID

Update Cancel

Select: Marking this checkbox selects the item whose data you need to edit. You can also add new Labor lines from this screen.

Labor ID: Enter/select a direct labor code.

Labor Hours: Enter the number of hours, formatted as **HH:MM**.

Overhead ID: Enter an Overhead code, if required.



You can repeat these entries for Setup Costs, Variable Costs, and Fixed Costs.

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

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



7.7.4 Go To Functions

Print Batch: Prints the *Batch Ticket Report* for the SuperBatch and sub-batches.

Assign Lot #: Use this field to assign lot numbers for the items produced.

Close All Batches: Click this option to close all batches together in one operation. You must have allocated or issued all raw materials to all batches before using this function.

Part Close Selected Batch: Click this button to partially close the selected sub-batch.

Close Selected Batch: Choose this option to close the selected sub-batch.

Issue Selected Batch: Click this option to issue material to the selected sub-batch.

Issue All Materials: Select this option to issue all the materials to all batches.

Show Critical Materials: Prints the associated report for the sub-batches.

SuperBatch Explosion: Click this option to view the relationships between the intermediates contained in each sub-batch and the final product (FG). It also allows you to size either the individual sub-batches or the Super Batch itself.

Production Goods Transaction Report: Click this button to generate the *Production Goods Transaction Report*.

Cancel SuperBatch: Click this button to cancel the batch. A cancelled batch can only be purged or deleted. The status of the batch changes to *Cancelled*.

Cancel Selected Batch: Use this button to cancel unwanted sub-batch.

Put on Hold: Sets the status of the SuperBatch and all sub-batches to *Hold*. A batch that is on *Hold* cannot be used in production because it has no material allocated or issued to it. (This applies to *New* or *Released* batches only.)

Release Hold: Resets the *Hold* status to *New* or *Released*.

Allocate SuperBatch: Allocates the actual quantity of the BOM lines and the formula raw materials for all the batches contained in a SuperBatch. See also 'Allocate Batch' in *Batch Entry*.

De-Allocate SuperBatch: Reverses all raw material allocations to all sub-batches. Cannot be done once any material has been issued.



Specific sub-batches can be de-allocated using the *Batch Ticket* function if material has not been issued to that batch.

New Activity: Opens the *Activity* editor.

Related Activities: Shows activities associated with the batch.

Relationship Map: Shows relationship data for the batch.

Go To Production QC: If Production QC is implemented on the selected batch line then clicking this option navigates you to the *QC Order QA* screen to perform the *Production QC*.

View Picking/Bulk Staging Documents: Displays all the documents related to the batch.

Generate Picking Document: Opens the *Production Pick Generation* screen with Batch and Sch Start Date Range. See Section [Production Pick Generation](#) for more details.

Generate Bulk Staging Document: Opens the *Bulk Staging Document Generation* screen with Batch and Sch Start Date Range. See [Section 7.10.2](#) for more details.

7.7.5 Closing a SuperBatch

Closing a Batch (contained within a SuperBatch)

1. Open the *SuperBatch Close* screen.
2. Select a SuperBatch using the lookup in the *SuperBatch No.* field.
3. The upper grid displays a list of batches associated with the SuperBatch.
4. Select a batch in the upper grid to view the details (finished goods, byproducts, raw materials, consumables, BOM items, and labor costs) associated with the batch in various tabs of the lower grid.
5. Specify the *Actual Qty* of the finished goods and byproducts produced in the *Finished Goods & BP* tab of the lower grid.
6. Modify information associated with raw materials, consumables, BOM items, and labor in the respective tabs, as needed.
7. Click the *Issue Material* option from the *Go To* menu to issue materials, if this has not already been done.



8. Click the *Close Selected Batch* option from the *Go To* menu to close the batches selected on the upper grid.

Closing a SuperBatch

1. Open the *SuperBatch Close* screen.
2. Select a SuperBatch using the lookup in the *Super Batch No.* field.
3. Select a batch in the upper grid to view the details (finished goods, byproducts, raw materials, consumables, BOM items, and labor costs) associated with the batch in various tabs of the lower grid.
4. Specify the *Actual Qty* of the finished goods and byproducts produced in the *Finished Goods & BP* tab of the lower grid.
5. Modify information associated with raw materials, consumables, BOM items, and labor in the respective tabs, as needed.
6. Modify more batches, as needed.
7. Click the *Issue Material* button to issue materials, if not already done.
8. Select the *Close all Batches* option from the *Go To* menu.



7.8 Production Dashboard

The *Production Dashboard* displays details pertaining to a batch such as finished goods, intermediate manufactured in the batch, raw material required, and sub-assembly items used, in a hierarchical form.

	Batch No	FG Item Code	FG Item Description	Quantity	UOM	Scheduled Start Date	Scheduled Start Time
1	Batch007	FG00011	Mixed Fruit Jam	50,000	KG	12/30/22	01:00 AM
2	Batch008	FG00011	Mixed Fruit Jam	50,000	KG	12/20/22	01:00 AM
3	Batch009	FG00011	Mixed Fruit Jam	50,000	KG	12/20/22	01:00 AM
4	Batch010	FG00011	Mixed Fruit Jam	50,000	KG	12/20/22	01:00 AM
5	Batch011	FG00011	Mixed Fruit Jam	50,000	KG	12/20/22	01:00 AM
6	Batch012	FG00011	Mixed Fruit Jam	50,000	KG	12/20/22	01:00 AM
7	Batch013	FG00011	Mixed Fruit Jam	50,000	KG	12/20/22	01:00 AM
8	Batch014	FG00011	Mixed Fruit Jam	50,000	KG	12/20/22	01:00 AM
9	Batch015	FG00011	Mixed Fruit Jam	100,000	KG	12/20/22	01:00 AM
10	Batch016	FG00011	Mixed Fruit Jam	100,000	KG	12/22/22	01:00 AM
11	Batch017	FG00011	Mixed Fruit Jam	50,000	KG	12/21/22	01:00 AM
12	Batch018	FG00011	Mixed Fruit Jam	50,000	KG	12/21/22	01:00 AM
13	Batch019	FG00011	Mixed Fruit Jam	50,000	KG	12/21/22	01:00 AM
14	Batch020	FG00011	Mixed Fruit Jam	50,000	KG	12/21/22	01:00 AM
15	Batch021	FG00011	Mixed Fruit Jam	50,000	KG	12/21/22	01:00 AM
16	Batch022	FG00011	Mixed Fruit Jam	50,000	KG	12/21/22	01:00 AM
17	Batch023	FG00011	Mixed Fruit Jam	50,000	KG	12/21/22	01:00 AM
18	Batch024	FG00011	Mixed Fruit Jam	50,000	KG	12/21/22	01:00 AM

Date Type: Specify the type of date based on which batches will be filtered and displayed on the dashboard. The options available are *Scheduled Start Date*, *Scheduled End Date*, *Actual Start Date*, *Actual End Date*, *Entry Date*, *Batch Ticket Print Date*, and *Record Date*.

Date From: Specify the lower limit of a range of dates (*Date Type* selected) based on which batches are filtered and displayed on the dashboard.

Date To: Specify the upper limit of a range of dates (*Date Type* selected) based on which batches are filtered and displayed on the dashboard.

Statuses: Choose one or more batch statuses to filter the range of batches. Available options are *New*, *Released*, *Hold*, *Cancelled*, *Closed*, *Allocated*, *Partially Allocated*, *Issued*, and *Part Closed*.

Show Hold Batches also: Select this checkbox to view the batches of *hold* status also.

Display: Click this button to display batches that satisfy the filter criteria.

Save Layout: Clicking this button saves the desired dashboard layout for future use.



You can use the field chooser (top left button on the grid) to select columns. You can pin/unpin certain columns and save the layout.

Delete Layout: Click this button to delete the layout applied on the dashboard.

Export to Excel: Clicking this button transfers dashboard data to an Excel sheet.



Full Batch Backflush Checkbox:

This checkbox enables automatic posting of all raw materials for the selected batch. It's auto selected when Full Batch Backflush is set as the default in Production Defaults. The system ignores item-level UDF flags (Item Backflush = Yes/No) and backflushes all materials. Multiple production orders can be selected. The label has been updated from "Backflush Raw Materials" to "Full Batch Backflush" for consistency.

Item-wise Backflush Checkbox:

This allows selective backflush based on item-level settings. When set as default, the checkbox is auto selected. Materials are issued only for items marked for backflush; others trigger the Issue Materials screen. Only one production order can be selected—if multiple is chosen, a message appears: "Full batch backflush is not selected, select only one row." This avoids opening multiple issue screens.

Batch Operations

From this section you can perform various batch operations such as Release, Allocate, De-Allocate, Hold, Release Hold, Issue, Part Close, Close and Cancel the selected batches from dashboard. A message will be displayed on message field such as success or failed.

Print Reports

You can print different types of reports such as Batch Ticket, FG Label and Critical Materials for a single or multiple batches

Batch Analysis

To perform detail analysis of the batch, the *Material Availability by Batches* selection you can directly launch the Projected Material Availability Report that helps you to quickly analyze the anticipated material availability before actually allocating the batch.

Show Filter

Mark this checkbox to enable filter based on available data at selected column.

Show Group By

Mark this checkbox to appear drag field, where you can group the required field which you drag.

Color Legend: The *Color Legend* section, at the top-right corner of the dashboard displays the colors used to indicate various batch statuses. such as:

Upper Grid: Display the batch details with its type, used formula and various details.



#	Message	Select	Batch No	Batch Status	Batch Ty	Formula ID	Formula Description	Revision No	Intermediate/Asse
		☐	B31726-001	Partial/Allocated	MDX	FOR_COC_CO...	Formula for choclata coff...	0000000001	
		☐	B31726-002	Allocated	MDX	FOR_COFFEE	Formula For Coffee	0000000001	
		☐	B31727-001	Partial/Allocated	MDX	FOR_COC_CO...	Formula for choclata coff...	0000000001	
	success	☒	B31727-002	Allocated	MDX	FOR_COFFEE	Formula For Coffee	0000000001	
		☒	COFFEE001-...	Closed	MDX	FOR_COC_CO...	Formula for choclata coff...	0000000001	
		☒	COFFEE001-...	Closed	MDX	FOR_COFFEE	Formula For Coffee	0000000001	
		☐	COFFEE891	RELEASE	MDX	FOR_COC_CO...	Formula for choclata coff...	0000000001	

Message: This field displays success or failure message if operations are performed on batches.

Select: Marking this checkbox lets you perform operation on selected batch.

Batch No: This field displays unique identifier for batch.

Batch Status: This field displays status of batches such as New, Released, Allocated etc.

Batch Type: This field displays type of batch such as Mix, Fill or Assembly.

Formula ID: This field displays unique identifier for formula.

Formula Description: This field displays the description of formula ID.

Revision No: This field displays revision no of the formula.

Intermediate / Assembly: This field displays BOM items of intermediate or assembly type.

Intermediate / Assembly Description: This field displays description of BOM Item.

Whs Code: Displays the warehouse to which the item belongs.

Super Batch No: This field shows unique identifier for super batch.

Scheduled Start Date: This field displays start date based on batch entry screen.

Scheduled Start Time: This field displays start time of the batch.

Scheduled End Date: This field displays the scheduled end date of the batch.

Scheduled End Time: This field displays the scheduled end time of the batch.

Actual Start Date: This field displays the start scheduled date of the batch.

Actual End Date: This field displays the end scheduled date of the batch.

Create Time: This field shows the time when the batch was created.

Update Time: This field shows the last update time of the batch.

Lower Grid: Displays the details of Items used in batch with item type such as finished good, intermediate or raw material.



Production Item									
#	Sequence No.	Batch Number	Item Code	Item Description	Warehouse Code	LineType	Standard Qty	Standard Qty. DispUOM	
1	1	COFFEE001-002	coffee	Intermediate Item	01	FinishedGood	2.680000	2.680000	
2	2	COFFEE001-002	coffeepowder	Power of Coffee	01	Material	2.615000	2.615000	
3	3	COFFEE001-002	sugarcube	Sugar Granules act as...	01	Material	0.785000	0.785000	
4	4	COFFEE001-002	milkpowder	Powder of Milk to Add...	01	Material	1.308000	1.308000	

Sequence No: This field displays auto generated sequence number.

Batch Number: This field displays unique identifier of batch number.

Item Code: This field displays unique identifier of Item.

Item Description: This field displays description of item number.

Warehouse Code: This field displays the warehouse to which the item belongs.

Line Type: This field displays type of line item such as finished good, material, BOM Item etc.

Standard Quantity: This field displays the on hand quantity of the material.

Standard Qty. DispUOM: This field displays on hand quantity of the items in stock UOM.

Actual Qty.: This field displays required quantity of raw materials.

Actual Qty. DispUOM: This field displays the required quantity of the item in stock UOM.

Issued Received Qty.: This field displays issued or received quantity of items.



7.10 Enhanced Production Picking

The Enhanced Production Picking is included in BatchMaster ERP from version 18.2 onwards. On the *Production Defaults* screen, the *Use Enhanced Picking System* checkbox is now introduced. Checking it implements the advance picking, while if you leave this checkbox unchecked then the normal picking process will be there to use.

Production Defaults

Batch Options | Super Batch Options | Scheduling Options | Staging/Picking

☒ Implement Staging

☒ Use Enhanced Staging/Picking System

☐ Implement Picking Only (Batch by Batch)

☐ Implement Staging Only (Bulk Staging)

☐ Implement Both (Bulk Staging and Picking)

Staging/Drop Bin

☐ Use a Single Staging/Drop bin defined at Warehouse

☐ Use Staging/Drop bin defined at Process Cell

#	Warehouse	Staging Bin Group
➡	01	➡ BG1

OK Cancel

With the enhanced picking option you can perform picking in the following ways:

7.10.1 One Step Picking

In the One step picking process the material can be picked from a storage bin and dropped directly to the production unit. Such a process is useful if we pick the material by individual batch. To use One-step picking, BatchMaster Advanced Picking provides you an option *Implement Picking Only (Batch by Batch)*.

Implement Picking Only (Batch by Batch)

On the Production Defaults screen, selecting the *Use Enhanced Staging/Picking System* option will let you select the *Implement Picking Only (Batch by Batch)*.



Production Defaults

Batch Options Super Batch Options Scheduling Options Staging/Picking

☒ Implement Staging
☒ Use Enhanced Staging/Picking System
☒ Implement Picking Only(Batch by Batch)
☐ Implement Staging Only(Bulk Staging)
☐ Implement Both (Bulk Staging and Picking)

Staging/Drop Bin
☒ Use a Single Staging/Drop bin defined at Warehouse
☐ Use Staging/Drop bin defined at Process Cell

#	Warehouse	Staging Bin Group
➔	01	➔ BG1

☐ Automatically Allocate Batches on Release
☒ Backflush Raw Material
☒ Size Amount of RM to be Backflushed on Part Close
☐ Allocate on Staging
☐ Show allocated Lots only on Bulk Staging Document Entry

Update Cancel

To perform picking Batch by Batch, open the *Production Pick Generation* screen. On this screen, specify a range of batches for which you wish to generate pick documents and click *OK*.

Production Pick Generation

Status Open

Sch Start Date From 04/02/19 To 04/02/19

Batch Number From BS006 To BS008

☐ Pick intermediate for Super Batch

Split Pick List by
☐ Warehouse
☐ Item Group
☐ Partial and full quantity

OK Cancel



On the *Select Batches for picking* screen, select the batches which need to be picked and click the *Release to Pick* button.

#	Sel	Sch StartDate	Batch No	Batc...	Batc...	FormulaID	Int\Assembly code	Process Cell
1	☒	04/02/19	BS006	Mix	Released	for_sberrry_shake		
2	☒	04/02/19	BS007	Mix	Released	for_sberrry_shake		
3	☒	04/02/19	BS008	Mix	Released	for_sberrry_shake		

On the *Released Pick Documents* screen you will see that separate pick documents are generated for each batch. Assign the *Picker* who will pick the materials and update the record.

#	Select	Pick Doc No.	Pick Date	Picker	Remarks
1	☒	P-115	04/02/19	manager	
2	☒	P-116	04/02/19	manager	
3	☒	P-117	04/02/19	manager	

#	ItemCode	Description	Warehouse	Quantity to Pick	Pick UOM
1	Sberrry_pulp	Sberrry_pulp	01	4.000	CAN
2	Sberrry_pulp	Sberrry_pulp	01	0.667	KG
3	Sweetner	Sweetner	02	4.333	KG



View the Pick document on the *Production Pick Generation* screen.

On this screen, specify the Quantity required to be picked in the *Picked Quantity* field displaying in the upper grid. Select the lot from which the material will be picked.



The selected lot should be available in a bin other than the Drop bin specified in the attached Bin Group.

Production Pick Entry

Pick No. P-117
Pick Date 04/02/19
Picker manager
Status Picked

Remarks
Printed No

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Line Status
1	Sberry_pulp	01	4.000	4.000	CAN	01	01-002	Picked
2	Sberry_pulp	01	0.667	0.667	KG	01	01-002	Picked
3	Sweetner	02	4.333	4.333	KG	02	02-002	Picked

Pick Lot Detail

#	Lot No	Picked Qty	Pick UOM	LPN NO	Container No	Pick Warehouse	Pick Bin	Drop Warehouse	Drop Bin	Reason Code	HASHCODE
1	B42	0.667	KG		0	01	01-003	01	01-002		3
2		0.000	KG			01		01	01-002		7

OK Cancel Show Batch Detail Drop

Click the *Drop* button.

The *Line status* will be changed from *Picked* to *Dropped* and the order status changes to *Closed*.

Production Pick Entry

Pick No. P-117
Pick Date 04/02/19
Picker manager
Status Closed

Remarks
Printed No

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Line Status
1	Sberry_pulp	01	4.000	4.000	CAN	01	01-002	Dropped
2	Sberry_pulp	01	0.667	0.667	KG	01	01-002	Dropped
3	Sweetner	02	4.333	4.333	KG	02	02-002	Dropped

Pick Lot Detail

#	Lot No	Picked Qty	Pick UOM	LPN NO	Container No	Pick Warehouse	Pick Bin	Drop Warehouse	Drop Bin	Reason Code	HASHCODE
1	B5	4.000	CAN		0	01	01-003	01	01-002		4

OK Cancel Show Batch Detail Drop



7.10.2 One Step Bulk Staging

BatchMaster ERP makes provision for Bulk staging, by means of which you can collect and stage material required in multiple batches to a staging warehouse. To understand a significance of bulk staging, let's assume a scenario when multiple production orders are planned in an entire day or different shifts and the inventory needed to produce them is almost the same. In such a case it is more feasible and convenient first to collect and stage all the required material in bulk at the staging area. To implement One Step Bulk Staging, BatchMaster ERP provides an option of *Implement Staging Only (Bulk Staging)*, under the Enhanced Staging/Picking System. To perform Bulk Staging:

On the Production Defaults Screen, choose the option *Implement Staging Only (Bulk Staging)*.

Production Defaults

Batch Options Super Batch Options Scheduling Options Staging/Picking

☒ Implement Staging

☒ Use Enhanced Staging/Picking System

☐ Implement Picking Only (Batch by Batch)

☒ Implement Staging Only (Bulk Staging)

☐ Implement Both (Bulk Staging and Picking)

Staging/Drop Bin

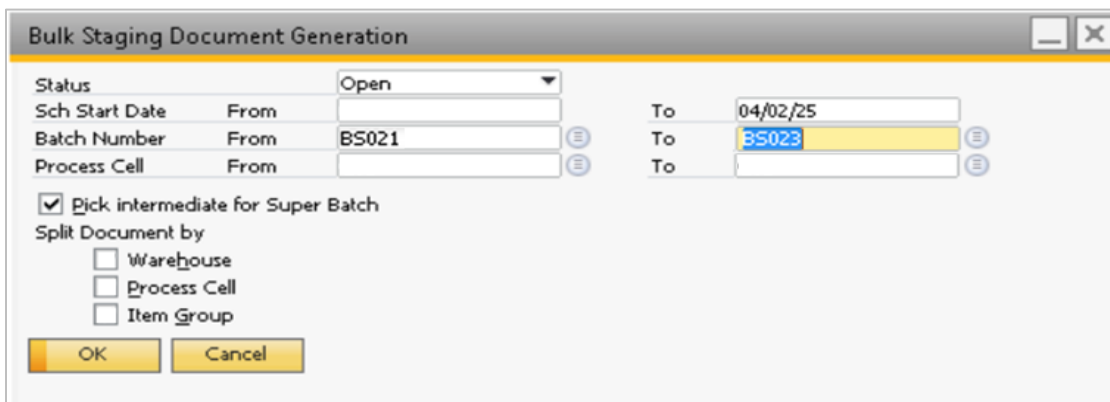
☒ Use a Single Staging/Drop bin defined at Warehouse

☐ Use Staging/Drop bin defined at Process Cell

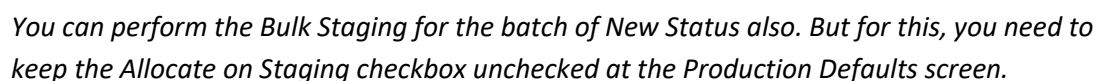
#	Warehouse	Staging Bin Group
	01	BG1

Update Cancel

Open the *Bulk Staging Document Generation* Screen. On this screen you can generate a bulk staging document for the items required in a range of batches. Here you can also specify a range of process cells for filtering your production batches.



- Select a range of batches for which Bulk staging is needed and click the *Release to Bulk Staging* button.

[illegible]



On the *Released Bulk Staging Documents* screen you can view a single bulk staging document to stage materials of all the selected batches. On this screen, specify the name of a picker and *Update* the record.

Released Bulk Staging Documents

☐ Open ☒ Released

#	Select	Doc No.	Doc Date	Picker	Remarks
1	☒	B-7	05/02/19	manager	

Bulk Line Detail for doc B-7

#	ItemCode	Description	Warehouse	Quantity to Stage	Pick UOM
1	Sberry_pulp	Sberry_pulp	01	12.000	CAN
2	Sweetner	Sweetner	02	12.000	KG

☐ Select/Unselect All

OK Print Assign Picker

View the generated Bulk Staging Document on the *Bulk Staging Document Entry* Screen. On this screen specify the material quantity required to be picked in the Picked Quantity field. Choose the Staging Bin for all lines and click the *Stage* button.



Bulk Staging Document Entry

Doc No. B-7
Doc Date 05/02/19
Picker manager
Status Picked

Remarks
Printed No
☐ Show Allocated Lots only
☐ Consider Staging Block

Line Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Staging Warehouse	Staging Bin	Line Status
1	Sherry_pulp	01	12,000	12,000	CAN	01	01-STAGE	Picked
2	Sweetner	02	12,000	12,000	KG	02		Picked

Lot Detail

#	Lot No	Picked Qty	Pick UOM	LRN NO	Container No	Pick Warehouse	Pick Bin	Staging Warehouse	Staging Bin	Reason Code
1	B42	12,000	CAN		0	01	01-003	01	01-STAGE	
2		0,000	CAN			01		01	01-STAGE	

OK Cancel Show Batch Detail Stage

The line status changes to *Staged* and Document status to *Closed*.

Bulk Staging Document Entry

Doc No. B-7
Doc Date 05/02/19
Picker manager
Status Closed

Remarks
Printed No
☐ Show Allocated Lots only
☐ Consider Staging Block

Line Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Staging Warehouse	Staging Bin	Line Status
1	Sherry_pulp	01	12,000	12,000	CAN	01	01-STAGE	Staged
2	Sweetner	02	12,000	12,000	KG	02		Staged

Lot Detail

#	Lot No	Picked Qty	Pick UOM	LRN NO	Container No	Pick Warehouse	Pick Bin	Staging Warehouse	Staging Bin	Reason Code
1	B42	12,000	CAN		0	01	01-003	01	01-STAGE	

OK Cancel Show Batch Detail Stage



7.10.3 Two Step Picking

To understand the significance and process of performing Two Step Picking let's assume a scenario when multiple production orders are planned in an entire day and the inventory needed to produce them is almost the same. In such a case it is more feasible and convenient first to collect and stage all required material in bulk at the staging area. Further, from the staging warehouse an exact quantity required in each individual batch can be picked. In BatchMaster ERP, you can achieve this by using the option, *Implement both (Bulk Staging and Picking)* in the *Production Defaults*.

Production Defaults

Batch Options Super Batch Options Scheduling Options Staging/Picking

☒ Implement Staging

☒ Use Enhanced Staging/Picking System

☐ Implement Picking Only(Batch by Batch)

☐ Implement Staging Only(Bulk Staging)

☒ Implement Both (Bulk Staging and Picking)

Staging/Drop Bin

☒ Use a Single Staging/Drop bin defined at Warehouse

☐ Use Staging/Drop bin defined at Process Cell

☐ Automatically Allocate Batches on Release

☒ Backflush Raw Material

☒ Size Amount of RM to be Backflushed on Part Close

☐ Allocate on Staging

☐ Show allocated Lots only on Bulk Staging Document Entry

#	Warehouse	Staging Bin Group
➡ 01	➡ BG1	

Update Cancel

Selecting this option you perform Two Step Picking where first, through the *Bulk Staging* you will stage all the required materials in bulk to the staging area. Secondly, through a standard picking process, you pick an exact quantity of the item required in an individual batch from the Staging warehouse and drop to the Production warehouse.



To perform Bulk Staging, generate the Bulk Staging Document for the selected batch range, select and *Release the batches for Bulk Staging*. This will generate a single bulk staging document to stage all materials of the selected batches.

Bulk Staging Document Generation

Status: Open

Sch Start Date: From BS021 To BS023

☒ Pick Intermediate for Super Batch

Split Document by:

- ☐ Warehouse
- ☐ Process Cell
- ☐ Item Group

Select Batches for Bulk Staging

☐ Open ☐ Released

#	Select	Batch No	Batch...	Sch StartDate	Batch...	FormulaID	Inf\Assembly code	Process Cell
1	☒	BS021	Mix	05/02/19	Released	for_sberry_shake		
2	☒	BS022	Mix	05/02/19	Released	for_sberry_shake		
3	☒	BS023	Mix	05/02/19	Released	for_sberry_shake		

Released Bulk Staging Documents

☐ Open ☒ Released

#	Select	Doc No.	Doc Date	Picker	Remarks
1	☒	B-7	05/02/19	manager	

Bulk Line Detail for doc B-7

#	ItemCode	Description	Warehouse	Quantity to Stage	Pick UOM
1	Sberry_pulp	Sberry_pulp	01	12.000	CAN
2	Sweetner	Sweetner	02	12.000	KG

Release to Bulk Staging

View the generated bulk document on the *Bulk Staging Document Entry Screen*, enter the quantity required to be picked and click the *Stage* button. All the materials will be staged to the staging bin and the document status changes to *Closed*. This completes the Bulk Staging step.



Bulk Staging Document Entry

Doc No. B-7
Doc Date 05/02/19
Picker manager
Status Picked

Remarks
Printed No
☐ Show Allocated Lots only
☐ Consider Staging Stock

Line Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Staging Warehouse	Staging Bin	Line Status
1	Sberry_pulp	01	12.000	12.000	CAN	01	01-STAGE	Picked
2	Sweetner	02	12.000	12.000	KG	02		Picked

Lot Detail

#	Lot No	Picked Qty	Pick UOM	LPN NO	Container No	Pick Warehouse	Pick Bin	Staging Warehouse	Staging Bin	Reason Code
1	B42	12.000	CAN		0	01	01-003	01	01-STAGE	
2		0.000	CAN			01		01	01-STAGE	

OK Cancel Show Batch Detail Stage

Bulk Staging Document Entry

Doc No. B-7
Doc Date 05/02/19
Picker manager
Status Closed

Remarks
Printed No
☐ Show Allocated Lots only
☐ Consider Staging Stock

Line Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Staging Warehouse	Staging Bin	Line Status
1	Sberry_pulp	01	12.000	12.000	CAN	01	01-STAGE	Staged
2	Sweetner	02		12.000	KG	02		Staged

To pick the material from the staging bin to the production warehouse we perform *Production Picking*. Open the *Production Pick Generation Screen*, specify the Batch Range for which material needs to be picked and click OK.

Production Pick Generation

Status Open

Sch Start Date From 05/02/19 To 05/02/19

Batch Number From BS021 To BS023

☐ Pick intermediate for Super Batch

Split Pick List by

- ☐ Warehouse
- ☐ Item Group
- ☐ Partial and full quantity

OK Cancel



This will display the *Release Pick Documents* screen. Here specify the Picker who will pick the materials and click the *Update* button.

Released Pick Documents

☐ Open ☒ Released

#	Select	Pick Doc No.	Pick Date	Picker	Remarks
1	☒	⇒ P-118	05/02/19	manager	
2	☒	⇒ P-119	05/02/19	manager	
3	☒	⇒ P-120	05/02/19	manager	

Pick Line Detail for Pick doc P-120

#	ItemCode	Description	Warehouse	Quantity to Pick	Pick UOM
1	⇒ Sberry_pulp	Sberry_pulp	⇒ 01	4.000	CAN
2	⇒ Sweetner	Sweetner	⇒ 02	4.000	KG

☐ Select/Unselect All

Now open the *Production Pick Entry* screen to perform picking of individual batches. On this screen search and select the batch for picking, then enter the quantity required to be picked in the *Picked Quantity* field. Specify the *Pick bin* and *Drop bin*.



The pick bin should be the Stage bin where materials are already staged for picking.



Production Pick Entry

Pick No. P-118
Pick Date 05/02/19
Picker manager
Status Picked

Remarks
Printed No

Pick Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Line Status
1	Sberry_pulp	01	3.000	3.000	CAN	01	01-002	Picked
2	Sberry_pulp	01	0.667	0.667	KG	01	01-002	Picked
3	Sweetner	02	3.333	3.333	KG	02	02-002	Picked

Pick Lot Detail

#	Lot No	Picked Qty	Pick UOM	LPN NO	Container No	Pick Warehouse	Pick Bin	Drop Warehouse	Drop Bin	Reason Code	HASHCODE
1	B42	3.000	CAN		0	01	01-STAGE	01	01-002		4
2		0.000	CAN			01		01	01-002		9

OK Cancel Show Batch Detail Drop

Click the *Drop* button. The material will be picked from the stage warehouse and dropped to the picking bin. This completes the batch picking. Similarly, you can perform material picking for other batches.

Production Pick Entry

Pick No. P-118
Pick Date 05/02/19
Picker manager
Status Closed

Remarks
Printed No

Pick Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Line Status
1	Sberry_pulp	01	3.000	3.000	CAN	01	01-002	Dropped
2	Sberry_pulp	01	0.667	0.667	KG	01	01-002	Dropped
3	Sweetner	02	3.333	3.333	KG	02	02-002	Dropped

Pick Lot Detail

#	Lot No	Picked Qty	Pick UOM	LPN NO	Container No	Pick Warehouse	Pick Bin	Drop Warehouse	Drop Bin	Reason Code	HASHCODE
1	B42	3.000	CAN		0	01	01-STAGE	01	01-002		7

OK Cancel Show Batch Detail Drop



7.10.4 Key Terms of Production Pick Generation/Bulk Staging Document Generation

Pick Intermediate for Super Batch: If this option is selected, the system will pick the materials for an intermediate item if you generate a bulk/pick list for a sub batch of a super batch, irrespective of *fill from inventory* being selected.

Split Document by

In Bulk Staging, you can generate multiple bulk staging documents based upon one of the following selected options:

Warehouse: A separate bulk staging document will be generated for each individual warehouse.

Item Group: On the basis of the Item Group attached to the item, the system generates an individual pick document for each item group.

Process Cell: The bulk staging document will be generated for individual Process cell.

7.10.5 Picking status

Picking Status is assigned at the Pick order level as well as at the Pick order Line level.

7.10.5.1 Pick Order Status

Released – It is displayed when the Pick Order is ready to be picked.

Partially Picked – Displays when some of the items lots, but not all, are staged.

Picked – All of the items lots are picked.

Closed– The Released, Picked, Partially picked lines will be cancelled on closing the order.

7.10.5.2 Pick Order Line Status

Released – Pick Order line is ready to be picked.

Partially Picked – Pick line for which some lots are staged, but not all lots have been staged.

Picked – Pick Line for which all lots have been picked.

Cancelled – You have the option to manually cancel picking for a line with status *Released*.

Staged - The status changes to Stage as you stage the lot.

Dropped: Status changes to dropped when user finally pick the document.



7.10.6 Features supported with the Enhanced Picking System

Partial Picking: BatchMaster ERP now supports Partial as well as Full picking. On the *Production Pick Entry* screen, when you specify partial quantity of lot for picking and press the Stage button, the system performs picking for the specified quantity and sets the pick line status as *Partially Picked*.

Production Pick Entry

Pick No. P-50
Pick Date 18/03/25
Picker manager
Status **Partially Picked**
Remarks
Printed Yes

Pick Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Line Status
1	002	01	1.375	0.075	KG	01	01-001	Partially Picked
2	Bio_Med_Filter	01	1.000	0.000	EA	01		Released
3	Flavor	01	0.049	0.000	KG	01		Released
4	Gasoline	01	4.000	0.000	LT	01		Released
5	S_berry	01	1.375	0.000	KG	01		Released

Pick Lot Detail

#	Lot No	Picked Qty	Pick UOM	LPN NO	Container No	Pick Warehouse	Pick Bin	Drop Warehouse	Drop Bin	Reason Code	HASHCODE
1	B21	0.075	KG			01	01-SYSTEM	01	01-001		1
2		0.000	KG			01		01	01-001		2

OK Cancel Show Batch Detail Drop

If you click on the *Drop* button, the system displays a message as below to generate a new line of the item to pick the remaining quantity.

System Message

Some of the lines are partially picked. Do you want to generate new line(s) with remaining quantity?

Yes No

If you click *Yes*, the system inserts a new pick line of the item to pick the remaining quantity.



Production Pick Entry

Pick No. P-50
Pick Date 10/01/15
Picker manager
Status Partially Picked

Remarks
Printed Yes

Pick Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Line Status
1	002	01	1.975	0.075	KG	01	01-001	Dropped
2	Bio_Med_Filter	01	1.000	0.000	EA	01		Released
3	Flavor	01	0.049	0.000	KG	01		Released
4	Gasoline	01	4.000	0.000	LT	01		Released
5	S_berry	01	1.975	0.000	KG	01		Released
6	002	01	1.900	0.000	KG	01	01-001	Released

Picking from Multiple lots: You can now pick the required quantity of the item from multiple lots.

Production Pick Entry

Pick No. P-11
Pick Date 03/10/18
Picker QA1
Status Partially Picked

Pick Detail

#	Item Code	Pick Warehouse	Quantity to Pick	Picked Quantity
1	Sberry_pulp	01	3.000	3.000
2	Sweetner	02	1.250	0.000
3	water	01	1.250	0.000

Pick Lot Detail

#	Lot No	Picked Qty	Pick UOM	LPN NO	Container No	Pick Warehouse	Pick
1	B1	1.000	KG		0	01	
2	lot1	2.000	KG		0	01	

Picking from Multiple Warehouse: The Enhanced Picking System supports multiple warehouse picking. If your raw material warehouse and production warehouse are at different locations then the system performs an inventory transfer from the raw material warehouse to the *Draw from* warehouse specified on the Batch Entry screen.

Let's say your formula raw materials are at different locations and you have specified the *Draw From Whse* location as the production warehouse where you finally need to stage the material. As you perform the picking, the system automatically performs an inventory transfer from the raw material warehouse to the *Draw from Warehouse* location.



Batch Entry

Series
Batch Number: BP0019
Batch Status: Released ☐ On Hold
Batch Type: Mix
Formula ID: for_sberry_shake
Revision No: 0000000005
Warehouse:
Production Whse: 01
Process Cell:
Schedule: Forward
Active Ingredient Lot:
Active Ingredient Item:
☐ User Defined Date

Additional Information
Draw From Whse: 04
Post To Whse:

Released Pick Documents

☐ Open ☒ Released

#	Select	Pick Doc No.	Pick Date	Picker	Remarks
1	☒	P-22	03/10/18		

Pick Line Detail for Pick doc: 25

#	Item Code	Item Description	Whse	Qty to Produce	Unit	Fill
1	Sberry_juice	Sberry_juice	01	2.000	KG	

#	Item Code	Description	Warehouse
1	Sberry_pulp	Sberry_pulp	01
2	Sweetner	Sweetner	02

Production Pick Entry

Pick No.: P-22
Pick Date: 03/10/18
Picker: Bli
Status: Picked
Remarks:
Printed: No

Pick Detail

#	Item Code	Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	L..
1	Sberry_pulp	01	1.000	1.000	KG	04	04-SYSTEM-B: Pick	2.000
2	Sweetner	02	0.500	0.500	KG	04	04-SYSTEM-B: Pick	2.500

Import From SO

You can view the inventory transfer being performed from the formula warehouse to the *Drop From Warehouse* (Production Warehouse) on the *Inventory Transfer* screen.

Inventory Transfer

Business Partner:
Name:
Contact Person:
Ship To:

Number: 78
Series: Primary
Posting Date: 03/10/18
Document Date: 03/10/18

From Warehouse: 01
To Warehouse: 04
To Bin Location:
Price List: Last Purchas

Contents Attachments

#	Item No.	Item Description	From Warehouse	From Bin Locations	To Warehouse	To Bin Locations	First To-Bin-Location	Quantity	Item Cost	UoM Code
1	Sberry_pulp	Sberry_pulp	01	1	04	1	04-SYSTEM-BIN-LOCATION	1	\$ 4.99	Manual
2	Sweetner	Sweetner	02	0.5	04	0.5	04-SYSTEM-BIN-LOCATION	0.5	\$ 2.00	Manual



Exclude item from picking: On the *Item Master Details* screen, an *Exclude Item from Picking* checkbox is provided. If you check it the system will exclude that item from picking.

Item Master Details

Item Number → water
Description → water
Alternate Desc →
GTIN →

Inventory | Quality Control | UoM Conversion | Batch Options

Production UoM →
Planning Method → NONE
Lot Strength → 100.000

QC Lead Time(days) → 0
Sample Quantity → 0.000
Sample UoM →
Sample Instructions →

HMIS Personal Protection →
NFPA Code → 1 2 3 4

Hazard Information for BOL
☐ Hazardous Material
UN/NA ID →
Hazmat Shipping Name →
Hazmat Class →
Hazmat Packaging Group →
☒ Exclude item from picking
Pick UoM →

Picking in desired Pack Unit: With the Enhanced Picking system you can pick the item lot in a desired Pack unit. On the *Item Master Details* screen, the *Pack UOM* field is available to specify the pack unit of the item. Also, the *Quantity Per Pick UOM* field is added to specify a unit conversion between the Item *Stock UOM* and the *Pick UOM*.

Item Master Details

Item Number → Sberry_pulp
Description → Sberry_pulp
Alternate Desc →
GTIN →

Inventory | Quality Control | UoM Conversion | Batch Options

Production UoM →
Planning Method → MPS
Lot Strength → 100.000

QC Lead Time(days) → 0
Sample Quantity → 0.000
Sample UoM →
Sample Instructions →

Batch Ticket

Batch Number → BPU09
Type → Mix
Status → Released
Formula ID → for_sberry_shake
Revision → 000000005
Warehouse →
Owner → manager
Active Ingredient Lot →
Active Ingredient Item →

On Hold
Production Stages
Deviations

General | Formula | Finished Goods | By Products | Consumables | Cost

NFPA Coc

#	lect	LineType	Item Code	Item Description	Whse	Original W...	Qty. Required	Labor Hours DD:HH:MM	Stock UOM
1		Material	Sberry_pulp	Sberry_pulp	01		5.000		KG
2		Material	Sweetner	Sweetner	02		2.500		KG

Hazard Ir
☐ Hazardous Material
UN/NA ID →
Hazmat Shipping Name →
Hazmat Class →
Hazmat Packaging Group →
☐ Exclude item from picking
Pick UoM → CAN
Quantity per pick UOM → 2.000

Released Pick Documents

Open | Released

#	Select	Pick Doc No.	Pick Date	Picker	Remarks
1	☒	P-24	03/10/18		

Pick Line Detail for Pick doc 27

#	ItemCode	Description	Warehouse	Quantity to Pick	Pick UOM
1	Sberry_pulp	Sberry_pulp	01	3.000	CAN
2	Sweetner	Sweetner	02	2.500	KG



Split Pick List: You can generate multiple picklists based on the following selected options:

Warehouse: Separate Pick document will be generated for each individual warehouse.

The screenshot shows the 'Production Pick Generation' dialog with the following settings: Status: Open, Sch Start Date: 04/10/18, Batch Number: B2027 to B2028. The 'Split Pick List by' section has 'Warehouse' checked. The 'Select Batches for picking' table shows two batches: B2027 (Released) and B2028 (Released). The 'Released Pick Documents' table shows two documents: P-34 and P-35, both dated 04/10/18. The 'Pick Line Detail for Pick doc 37' shows two items: Sberry_pulp and Sberry_pulp, both assigned to Warehouse 01. The 'Pick Line Detail for Pick doc 38' shows two items: Sweetner and Sweetner, both assigned to Warehouse 02.

#	Select	Pick Doc No.	Pick Date	Picker	Remarks
1	☒	P-34	04/10/18		
2	☐	P-35	04/10/18		

#	ItemCode	Description	Warehouse
1	Sberry_pulp	Sberry_pulp	01
2	Sberry_pulp	Sberry_pulp	01

#	ItemCode	Description	Warehouse
1	Sweetner	Sweetner	02
2	Sweetner	Sweetner	02

Item Group: On the basis of the Item Group attached to the Item, the system generates an individual pick document for each item group.

The screenshot shows the 'Production Pick Generation' dialog with the following settings: Status: Open, Sch Start Date: 04/10/18, Batch Number: B2030 to B2030. The 'Split Pick List by' section has 'Item Group' checked. The 'Item Master Data' table shows two items: water and Sweetner, both assigned to Item Group Grp03. The 'Released Pick Documents' table shows three documents: P-36, P-37, and P-38, all dated 04/10/18. The 'Pick Line Detail for Pick doc 41' shows one item: water, assigned to Item Group Grp03. The 'Pick Line Detail for Pick doc 40' shows one item: Sweetner, assigned to Item Group Grp03.

#	Select	Pick Doc No.	Pick Date	Picker	Remarks
1	☐	P-36	04/10/18		
2	☐	P-37	04/10/18		
3	☐	P-38	04/10/18		

#	ItemCode	Description	Item Group
1	water	water	Grp03

#	ItemCode	Description	Item Group
1	Sweetner	Sweetner	Grp03



Full and Partial Quantity: With this option checked you can split the pick list on the basis of the picking unit of the item. The system will generate a pick document for the full quantity of the item in its pick UOM as defined at the *Item Master Details* screen, and another pick document will be generated for the remaining partial quantity of the item. Let's understand a scenario in detail. The item Sberry_pulp, stock UOM is KG and pick UOM is CAN. The conversion between Stock UOM and Pick UOM is 1 CAN = 2 KG.

Item Master Details

Item Number: Sberry_pulp
Description: Sberry_pulp
Alternate Desc:
GTIN:
Production UOM:
Planning Method: MPS
Lot Strength: 100.000
USDA Code: 02075

QC Lead Time(days):
Sample Quantity:
Sample UOM:
Sample Instructions:
Item No.: Manual Sberry_pulp
Description: Sberry_pulp
Foreign Name:
Item Type: Items
Item Group: Items
UoM Group: Manual
Price List: Price List 01

General Purchasing Data Sales Data Inventory Data

Set G/L Accounts By: Warehouse
UoM Name: KG

HMIS Personal Protection:
NFPA Code: 1 2 3 4
Hazard Information for BOL
☐ Hazardous Material
UN/NA ID:
Hazmat Shipping Name:
Hazmat Class:
Hazmat Packaging Group:
☐ Exclude item from picking/Staging
Pick UOM: CAN
Quantity per pick UOM: 2.000

For batch BN1004, the Qty required of the item Sberry_pulp is 9.333 kg.

Batch Ticket

Batch Number: BN1004
Type: Mix
Status: Released
Formula ID: for_sberry_shake
Revision: 0000000014
Warehouse:
Owner: manager
Active Ingredient Lot:
Active Ingredient Item: Sberry_pulp

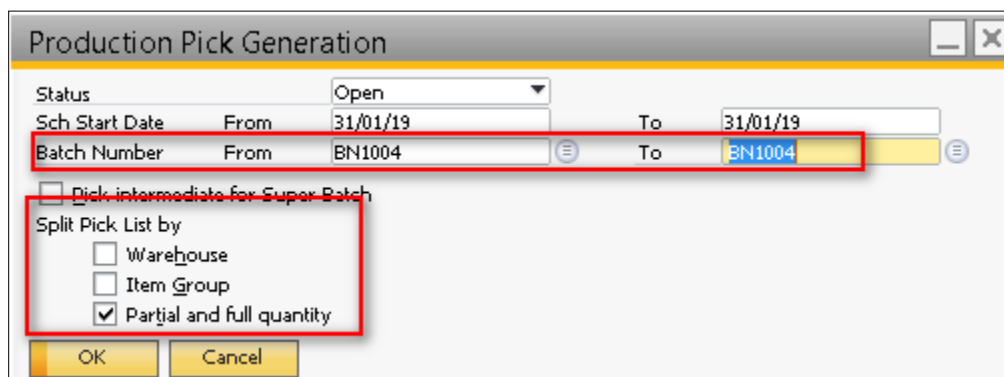
Production Stages
Deviations

General Formula Finished Goods By Products Consumables

#	Select	LineType	Item Code	Item Description	Whse	Original Whse	Qty. Required
1	☐	Material	Sberry_pulp	Sberry_pulp	01		9.333



Let's split the pick list by *Partial and Full Quantity*.

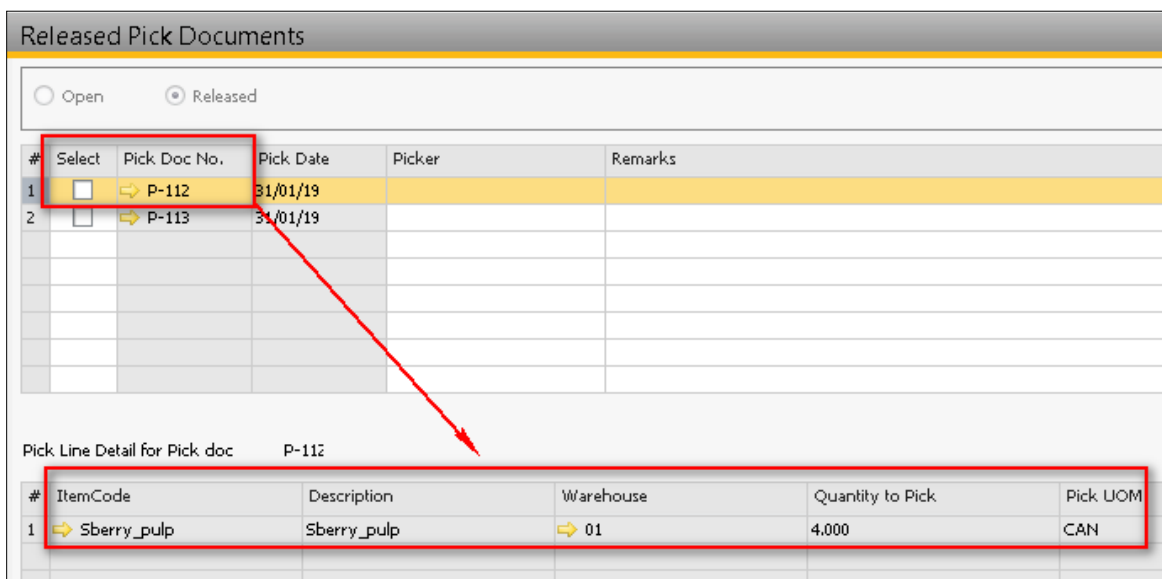


The 'Production Pick Generation' dialog box shows the following configuration:

- Status: Open
- Sch Start Date: From 31/01/19 To 31/01/19
- Batch Number: From BN1004 To BN1004
- ☐ Pick intermediates for Super Batch
- Split Pick List by:
 - ☐ Warehouse
 - ☐ Item Group
 - ☒ Partial and full quantity
- Buttons: OK, Cancel

On the Released Pick Documents screen, you will observe that two different pick documents are generated to pick the item.

As the Quantity Required of Sberry_Pulp is 9.333 KG, the system generated a pick document for the full quantity of 4 CANS (1 CAN = 2 KG).



The 'Released Pick Documents' screen shows two pick documents, P-112 and P-113, both dated 31/01/19. A red box highlights the first two rows, and a red arrow points from the first row to the 'Pick Line Detail' section below.

#	Select	Pick Doc No.	Pick Date	Picker	Remarks
1	☐	P-112	31/01/19		
2	☐	P-113	31/01/19		

#	ItemCode	Description	Warehouse	Quantity to Pick	Pick UOM
1	Sberry_pulp	Sberry_pulp	01	4.000	CAN

For the remaining 1.333 kg another pick document will be generated.



Released Pick Documents

☐ Open ☒ Released

#	Select	Pick Doc No.	Pick Date	Picker	Remarks
1	☐	P-112	31/01/19		
2	☒	P-113	31/01/19		

Pick Line Detail for Pick doc P-113

#	ItemCode	Description	Warehouse	Quantity to Pick	Pick UOM
1	Sberry_pulp	Sberry_pulp	01	1.333	KG
2	Sweetner	Sweetner	02	4.667	KG

Lot Strength

Lot Strength is supported on Picking Document. Thus on the basis of lot strength of the selected lot of solute system will adjust the quantity of solute and solvent to pick.

Show Allocated Lots only

If you select it then at the time of Bulk Staging, on the lot selection screen, system displays only the lots already allocated to choose from.

Consider Staging Stock



This option will not be available if the Allocation on Staging option is checked on the Production defaults screen.

On the *Bulk Staging Document Entry* screen, *Consider Staging Stock* checkbox is provided. Opting it, you get a provision to use a material stock already available at the staging bin. Thus, for every new *Staging Document* you do not require to additionally stage the material quantity if it is available at the staging warehouse.

Also, when you opt this checkbox, following fields get added in the Line Details grid.

Staging Bin Stock: Displays the total material stock at the respective staging warehouse.

Staging Stock to be considered: To enter the quantity required to be considered from the staging warehouse.



During staging, it is completely optional for a user to use complete, partial or no quantity from the staging bin.



Let's say, we have a staging bin 01-001 where we had sufficient stock to use for the Staging document, but we used partial quantity from the staged bin and remaining quantity we staged from other lot.

The screenshot shows the 'Bulk Staging Document Entry' window. The 'Line Detail' table has the following data:

#	Item Code	Pick Warehouse	Quantity to Pick	Staging Bin Stock	Staging Stock to be consid...	Picked Quantity	Pick UOM	Staging Warehouse	Staging Bin	Line Status	In...
1	S_berry	01	2.667	405.786	1.000	1.667	KG	01	01-001	Picked	
2	Water_001	01	1.333	1.007.000	0.000	1.333	LT	01	01-001	Released	

The 'Lot Detail' table below it shows:

#	Lot No	Picked Qty	Pick UOM	LPN NO	Expiry Date	Container No	Pick Warehouse	Pick Bin	Staging Warehouse	Staging Bin	Reason Code
1	063371	1.667	KG			0	01	01-SYSTEM-BIN-LOCATION	01	01-001	
2		0.000	KG				01		01	01-001	

Buttons at the bottom include 'OK', 'Cancel', 'Show Batch Detail', and 'Stage'. Checkboxes for 'Show Allocated Lots only' and 'Consider Staging Stock' are visible in the top right.

7.10.7 Consider Actual Quantity in Picking

BatchMaster ERP now consider the Item *Actual quantity* at the time of picking instead of its *Standard Quantity*. Thus, after finishing the complete picking process if you modify an *Actual Quantity* of the batch item then system confirms you to perform the picking process again. If you click on Yes then system will again create the pick document to perform the picking for the modified *Actual Quantity*.

Let's say we have a batch as below for which Picking is completed for the *Actual Quantity* as 11.

The screenshot shows the 'Batch Ticket' window for Batch Number BN012. The 'General' tab is active, showing details like Type (Mix), Status (Released), and Warehouse (manager). The 'Finished Goods' tab is also visible, showing a table with the following data:

#	Select	LineType	Item Code	Item Description	Whse	Original Whse	Qty. Required	Labor Hours DD:HH:MM	Stock UOM	Unit	Toggle to UoM	Act...
1	☐	Material	S_berry	S_berry	01	01	11.000		KG	KG		
2	☐	BoilerPl:	BP_I001	Mix well			0.000					
3	☐	Labor	Lab01	Labor			0.000	01:21:50				

You perform the complete Picking of the item. The Document *Status* changes to *Closed*.



Production Pick Entry

Pick No. P-53
Pick Date 26/08/19
Picker
Status Closed

Remarks
Printed No

Pick Detail

#	Item Code	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Lot Strength	AvgLot Strength	Actual Lot Qty	Orig...	Remaining Qty	Stages
1	S_berry	11.000	11.000	KG	01	01-STAGE	100.000	100.000	11.000	11.000	0.000	

Pick Lot Detail

#	Lot No	Picked Qty	Lot Strength	Pick UOM	LPN NO	Equivalent Qty
1	L00E1	11.000	100.000	KG		11.000

Show Batch Detail

Pick Doc No. P-53

#	BatchNo.	ItemCode	Description	Warehouse	Quantity	Stock UOM
	BN012	S_berry	S_berry	01	11.000	KG

#	LotNo.	Lot Status	Allocated Quantity	Stock UOM
	L00E1	ALL	11.000	KG

Now, modify an *Actual Quantity* of the item and click the *Update* button. System confirms you to Initiate the picking process again for the new *Actual Quantity*.

Batch Ticket

Batch Number BN012
Type Mix
Status Allocated
Formula ID For_sberry_pulp
Revision 0000000009
Warehouse
Owner manager
Active Ingredient Lot
Active Ingredient Item

Production Stages
Deviations

General Formula Finished Goods By Products Consumables Cost Attachments

#	Select	LineType	Item Code	Item Description	Whse	Original Whse	Qty. Required	Labor Hours DD:HH:MM	Stock UOM	Unit	Toggle to UoM	Actual Qty.	Lot Stren
1	☐	Material	S_berry	S_berry	01	01	11.000		KG	KG		15	100
2	☐	BoilerPl	BP_0001	Mix well			0.000					0.000	100
3	☐	Labor	Lab01	Labor			0.000	01:21:50				0.000	0
4	☐	Material					0.000					0.000	0

System Message

The item has already picked.Do you want to initiate picking process again for 15.000000 quantity?

Yes No

If you click on Yes then system will again generate the pick document for the batch to perform the picking process for the specified *Actual Quantity*.



Production Pick Entry

Pick No. P-54
Pick Date 26/08/19
Picker manager
Status Closed

Remarks
Printed No

Pick Detail

#	Item Code	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Lot Strength	AvgLot Strength	Actual Lot Qty	Orig...	Remaining Qty	Stages
1	S_berry	15.000	15.000	KG	01	01-STAGE	100.000	100.000	15.000	15.000	0.000	

Pick Lot Detail

#	Lot No	Picked Qty	Lot Strength	Pick UOM	LPN NO	Equivalent Qty.	Container No	Pick Warehouse	Pick Bin	Drop Warehouse	Drop Bin	Reason Code	HASHCODE
1	MLot001	15.000	100.000	KG		15.000	0	01	01-001	01	01-STAG		2

Show Batch Detail

Pick Doc No. P-54

#	BatchNo.	ItemCode	Description	Warehouse	Quantity	Stock UOM
	BN012	S_berry	S_berry	01	15.000	KG

OK

Show Batch Detail

7.11 Production Picking (Normal Picking)

If you do not want to use advanced picking, but instead wish to pick material items with the normal picking process, then leave the *Use Enhanced Picking System* checkbox unchecked.

Production Defaults

Batch Options Super Batch Options Scheduling Options Staging

☒ Implement Staging

☐ Use Enhanced Picking System

☒ Use a Single Staging Bin Defined at Warehouse

☐ Use Staging Bins Defined at Process Cell

☐ Automatically Allocate Batches on Release

☒ Backflush Raw Material

☒ Size Amount of RM to be Backflushed on Part Close

#	Warehouse	Stage Bin
	01	

☐ Exclude Stage Bin from Allocation

☐ Issue from Stage Bin

Update Cancel



7.11.1 Production Pick Generation

Using the *Production Pick* screen, you can generate the pick list for the items that are to be picked for selected batches. Specify the status of the batch for which the pick list is to be generated using the drop-down menu at the *Status* field. The possible statuses could be:

- **Open:** Shows entire batches for which a pick list is to be generated.
- **Released:** Shows batches for which a pick list has been generated but items are yet to be picked.
- **Picked:** Shows batches for which a pick list has been generated and items have been picked.

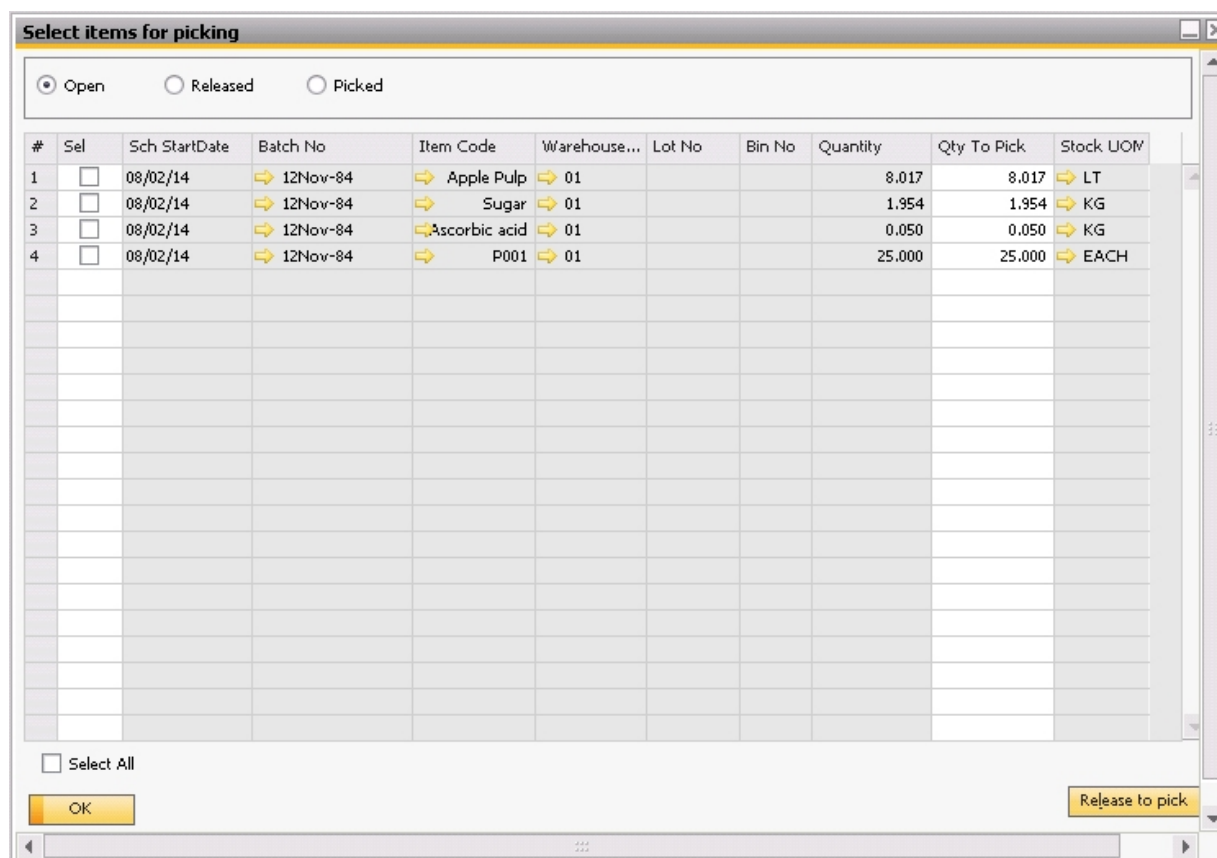


This function requires implementation of *Production Staging* as part of system setup. Bin-level transactions and staging are not supported with Starter Pack licenses.

To make the filter criterion more specific, complete one or more additional fields: the *Scheduled Start Date From* and *To* range, the *Batch No. From* and *To* range, the *Business Partner ID From* and *To* range, and the *Item Code From* and *To* range.

Go To: Process Manufacturing → Production Pick Generation.

Finally, click the *OK* button to access the *Select items for picking* screen. Here you can view the batches with *Open*, *Released*, and *Picked* status by selecting the respective radio buttons available at the top of the screen.



Click the *Release to Pick* button. The system will display a window showing the ingredients that have been released for picking. (Note the *Pick Doc No*, which you will use on the *Production Pick Entry* screen.)

Select items for picking

☐ Open
 ☒ Released
 ☐ Picked

Pick Doc No	Item Code	Warehou...	Lot to Pick	Picking Bin	Picked Qty	Status
➡ 7	➡ Apple Pul	➡ 01			8.017	Open
➡ 7	➡ Sugar	➡ 01			1.954	Open
➡ 7	➡ Ascorbic	➡ 01			0.050	Open
➡ 7	➡ P001	➡ 01			25.000	Open

7.11.2 Production Pick Entry

Go To: Process Manufacturing → Production Pick Entry.

The screen defaults to *Find* mode. Enter the *Pick Doc No.* from the previous step and click the *Find* button (not shown). The system will fill in the Pick Date, User ID, Picker ID, and items that are ready for pick.

Production Pick Entry

Pick No.
Pick Date
Picker
Status

p-39
04/10/18
manager
Partially Picked

SAP Business One 9.2 - QASQL_WMS_58

Remarks

Printed

No

Pick Detail

#	Item Code	Warehouse	Quantity to Pick	Picked Quantity	Pick UOM	Drop Warehouse	Drop Bin	Line Status
1	Sberry_pulp	⇒ 01	1.000	0.500	⇒ CAN	⇒ 01	⇒ 01-002	Partially Picked
2	Sweetner	⇒ 02	0.500	0.500	⇒ KG	⇒ 02	⇒ 02-SYSTEM-BIN-LOCATION	Picked
3	water	⇒ 01	0.500	0.500	⇒ kg	⇒ 01	⇒ 01-002	Picked

Pick Lot Detail

#	Lot No	Picked Qty	Pick UOM	LPN NO	Container No	Pick Warehouse	Pick Bin	Drop Warehouse	Drop Bin	Reason Code	HASHCODE
1	B1	0.500	⇒ CAN		0	⇒ 01	⇒ 01-SYSTEM-BIN-LOCATION	⇒ 01	⇒ 01-002		1
2		0.000	⇒ CAN			⇒ 01		⇒ 01	⇒ 01-002		8

OK

Cancel

Show Batch Detail

Auto Pick from Allocation

Slage

Remarks (optional): Enter any remark(s) associated with the picking activity.

Picked Quantity: Specify the quantity required to be picked.

Drop Bin: Displays the bin where the picked material will be staged.

Line Status: Displays the current status of the line

Pick Lot Detail grid

Lot no: For lot-tracked items, enter/select the lot number of the lot from which quantity needs to be picked.

Picked Qty: Enter the quantity of the item that is actually picked. Note that you can pick the quantity from multiple lots.

Drop Bin: Displays the bin where the picked material will be staged.



Reason Code (optional): Choose an appropriate Reason code signifying a reason the item was picked, partially picked, or not picked. This field is informational only.

Show Batch Detail: Use this button to view the Batch lot details in a separate window.

Auto Pick from Allocation: Use this button to auto pick the item lot already being allocated on batch. Clicking this button ask you to replace the current picked lot by the allocated lot. If you choose Yes system will replace the picked lot by the allocated lot.

Stage: Click this button to move the picked items to the staging location.

Update: Click the *Update* button to save your work but not move the picked items to the staging location.



8 PRODUCTION UTILITIES

8.1 Transfer SO to Batch Wizard

Using the *Transfer SO to Batch Wizard* utility, you can directly create production order(s) for one or more sales orders. If the different sales orders are for the same item, you can also consolidate all the sales orders to create a single production order.

To begin the process, open the *Transfer SO to Batch Wizard* screen:

**Go To: Process Manufacturing → Production Utilities →
Transfer SO to Batch Wizard.**

In **step 1**, specify the customer or range of customers whose sales order(s) are to be converted into production order(s). Leaving this field blank is equivalent to selecting the first and last options from the range. To make the sorting of sales orders more specific, you can also specify the delivery dates. Leaving this field blank is also equivalent to selecting the first and last options from the range. By default, the system will display the current server date.

The screenshot shows the 'Create Batches from Sales Orders' wizard window. The title bar reads 'Create Batches from Sales Orders'. Below the title bar, a subtitle states 'Use this wizard to convert one or more sales orders to production orders'. The main area contains four input fields: 'Customer From' with a dropdown arrow and a search icon, showing 'Dev'; 'Customer To' with a dropdown arrow and a search icon, showing 'RKL'; 'Delivery From' with a date field showing '01/08/13'; and 'Delivery To' with a date field showing '01/08/13'. At the bottom left, it says 'Step 1 of 6'. At the bottom right, there are four buttons: 'Cancel', '< Back', 'Next >', and 'Finish'.



Click the *Next* button to take you to the *Create Batches from Sales Orders* screen. This screen displays the sales orders that satisfy the filter criteria in **step 1**.

Create Batches from Sales Orders

To generate production orders select one or more sales orders from table below and click next

Select	Doc Num	Doc Date	BP Code	BP Name	Doc Due Date	Comments
☒	1	02/04/13	Dev	Dev	02/04/13	
☒	2	02/04/13	Dev	Dev	02/04/13	
☒	5	03/04/13	Dev	Dev	03/04/13	
☒	9	04/04/13	Dev	Dev	04/04/13	
☒	12	04/04/13	Dev	Dev	04/04/13	

Select All Unselect All

Step 2 of 6

Cancel < Back **Next >** Finish

At this screen, mark the checkbox(es) of the sales order(s) for which production order(s) need to be created. You can click the *Select All* button instead of marking each checkbox individually.

Click the *Next* button to take you to a screen that displays the items for the sales orders selected above.

Mark the checkbox(es) of the item(s) for which production order(s) need to be created, or click the *Select All* button instead of marking each checkbox individually. Click the *Next* button to take you to

step 4, which is a screen offering different consolidating options to let you define how production orders should be created.

[illegible]

Create Batches from Sales Orders

Now use consolidation options to define how production orders will be created

Consolidate

☒ No Consolidation
☒ Formula & Sales Order wise

☐ Consolidate By
☒ Formula Wise
☐ Then By
☐ Then By

Customer
 Delivery Date

Create

☒ Batch
 FG Batch Type **Mix**

☐ Super Batch
 Top Batch Type **Mix**
☐ Fill from Inventory

Series **Default**

On Error **Move to next production order**

Step 4 of 6

Cancel < Back **Next >** Finish

- To consolidate different production orders, select the *Consolidate By* option. Choosing this option will consolidate multiple production orders to be generated for the same customers,



same delivery dates, or with the same formula, depending on the criteria selected (*Then By Customer, Then By Delivery Date, or Formula Wise, respectively*).

- Select the No Consolidate option to generate separate production orders for sales orders.

Click the *Next* button to continue to **step 5**, where a screen displays the production orders that will be generated for the selected sales orders. Note that the displayed data is grouped as per the options selected in **step 4**. To view production order details, you need to focus on each respective line, which will display its details in the grid below.



Details of production orders are maintained on the BOM associated with the respective item. Hence, it is mandatory to have BOMs created for those items whose sales orders are to be converted into production orders using the *Transfer SO to Batch Wizard*.

This screen also has a *View allocation* option. Clicking the button takes you to the *FG Allocation* screen.

Finally, click the *Finish* button to generate the required production orders.

Create Batches from Sales Orders

The list below shows production orders that will be generated. Data is grouped by the options selected previous step of wizard

#	Formula ID	SO Number	Req Date	Customer	Cu...
1	Form_MS	19	02/08/13	Dev	Dev

#	hse	Qty to Produce	Unit	Fill Level	Fill Unit
1	01	2.000	KG	1.00	KG

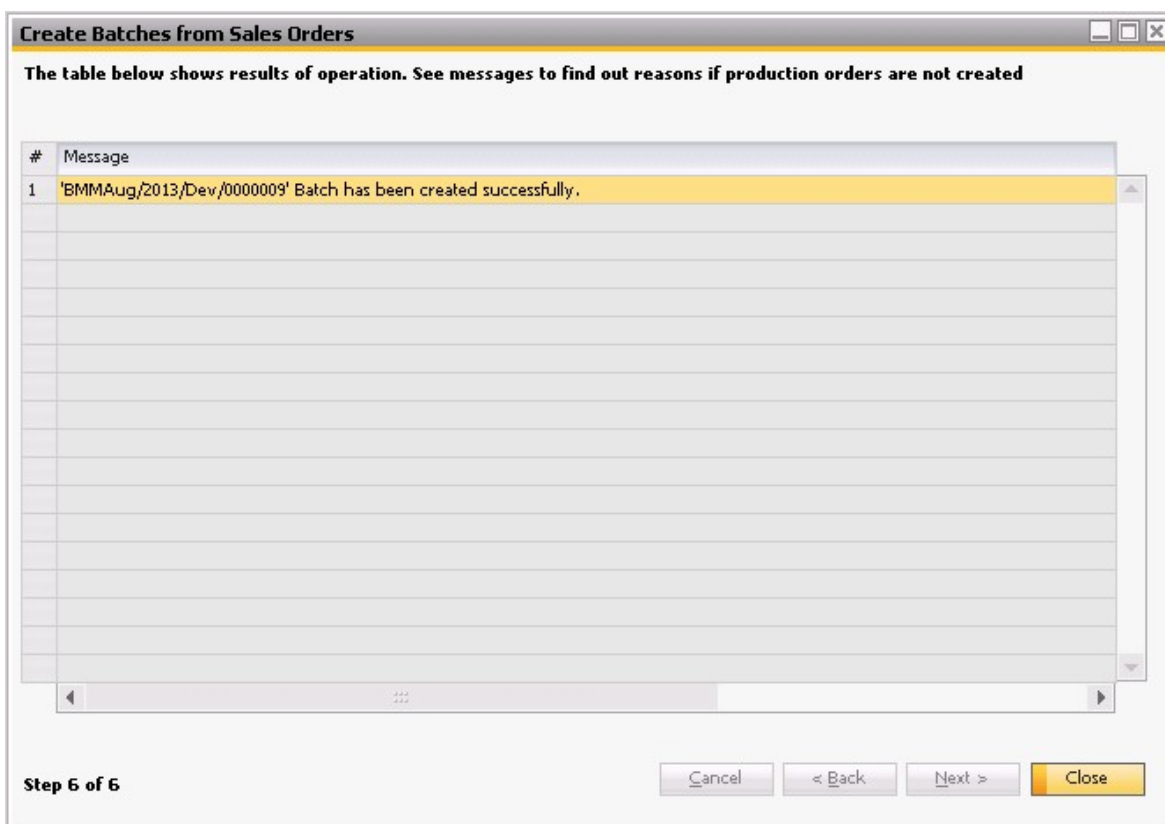
This is the required quantity specified in the respective SO.

View Allocation

Step 5 of 6

Cancel < Back Next > **Finish**

In **step 6** you can view a screen that displays the results of the operation. You can access messages and also find out the reasons why production orders do not get created for any particular item(s).



Click the *Close* button to exit the utility.



8.2 Process Batches in Range

Using the *Process Batches in Range* utility, you can hold, release, allocate, de-allocate, unhold, or archive a particular batch or range of batches, depending upon their current batch status.

Go To: Process Manufacturing → Production Utilities → Process Batches in Range.

#	Select	Batch No	Batch Type	Formula...	Ass/Int.Key	FG Code
1	☐	⇒ A102	Mix	⇒ FM009		⇒ FG0030
2	☐	⇒ A103	Mix	⇒ FM008		⇒ IN0031
3	☐	⇒ DV001	Mix	⇒ FM102		⇒ IN0102
4	☐	⇒ SB-1001-002	Mix	⇒ FM102		⇒ IN0102
5	☐	⇒ SB-1001-003	Mix	⇒ FM101		⇒ IN0101
6	☐	⇒ SB-1001-001	Fill		⇒ IN0102	⇒ FG1003
7	☐	⇒ DV005	Mix	⇒ FM101		⇒ IN0101

Specify one or more of the following options: *Schedule Start Date* range, *Batch Number* range, and *Batch Status*.

Click the *Get Data* button to display the batches in the grid.

Mark the checkboxes corresponding to batches on which action is to be performed, and then select the desired action from the drop-down menu at the *Process Batch* field. In our example, 'New' batches can either be released or put on hold.

Finally, click the *Process* button to execute the specified action on selected batch (es).



8.3 Lot Traceability Dashboard

The *Lot Traceability Dashboard* helps you track your inventory usage. Using this utility, you can view:

- The movement of raw material lots from purchase receipt to production issue.
- The movement of intermediate lots from production completion to production issue or sales order shipment.
- The movement of finished good lots from production completion to sales order shipment.

Selection Criteria

☒ Lot Explosion ☐ Where Used

Select

Item: Almond Milk Intermediate

Desc: Almond Milk Intermediate

Vendor Lot#: 125004

Lot From:

Lot To:

☐ Single Level ☒ Multi Level

Export To:

Process

Display Settings

Color Scheme

Pur Receipt, Sales Return, Op Bal, Pur Return, Sales Issue, WH Out, Pur Invoice, Sales Invoice, WH In, Prod.Receipt, A/R Cr Memo, Prod. Issue, Goods Receipt, Mat. Return, Goods Issue, A/P Credit Memo

Current Node

Key: Value

Production Issue: BAL01

Item: Almond

Warehouse: 01

Grid View

Almond Milk Intermediate(125004 - 01)

Milk_Almond(AS1)

Almond(BAL_001)

Show data of parent of lot ☐ Show Data of Selected lot ☒

Transaction Type	Item Code	Whs Co	Rece	Vendor Lot N	Receipt Docu
Sales Issue	Almond Milk...	01		125004	
Production Receipt	Almond Milk...	01	10.000		BAL01

Transaction Type	Item Code	Whs Co	Lot	Receipt Docu	Vendor Lot No
Production Issue	Almond	01	BAL_001		VN_AL-001
Production Issue	Milk_Almond	01	AS1		

Analysis View

Settings +

Sales Issue (BAL01)

Production Receipt (BAL01)

Production Issue (BAL01)

Purchase Receipt (BAL01)

Lot Explosion: Choose this option if you want to view the composition of a finished good lot.

Where Used: Choose this option if you want to find where a particular material lot was used.

Item Code: Choose finished good or raw material code whose structure should be displayed.

Desc: Displays the description of the item code, as mentioned on the *Item Master Data* screen.

Vendor Lot #: Specify the vendor lot number for which you want to view lot-related information.



You can use either *Vendor Lot #* or the *Lot From* and *Lot To* range to pull desired lot details. Both criteria will not work together.



Lot From: Select the lower limit of the lot number range based on which complete composition of finished good lots should be displayed. If you leave this field blank, then system will assume the first lot number in alphabetical order.

Lot To: Select the upper limit of the lot number range based on which complete composition of finished good lots should be displayed. If you leave this field blank, then system will assume last lot number in alphabetical order.



Always specify a range of lot numbers. Lot explosion is a data-intensive operation and you may want to limit the operation for the desired lot range.

Export To: Choose the drop-down button to export the data displayed in the grid to Microsoft Excel or a PDF file.

Multi Level: Select this option to display data of all the items in the hierarchy of the selected lot.

Single Level: Select this option to display data of the items that are in the next level of hierarchy of the selected lot.

Grid View

The table in the grid view displays information on the lots satisfying the above-specified filter criteria.

Transaction Type: Displays the transaction through which the lot was received.

UOM: Displays the unit in which the lot quantity is measured.

Lot No: Displays the unique identification code of the lot.

Item Code: Displays the unique identification code of the item to which the lot belongs.

Item Name: Displays the item name corresponding to the item code.

Whs Code: Displays the warehouse to which the item lots belongs.

Doc Date: Displays the date on which the document/transaction was recorded.

Quantity: Displays the quantity of the item lot.

BP Code: Displays the business partner associated with the transaction through which the lot was received.

Doc No: Displays the unique identification code of the document associated with the item lot.



Analysis View



This view can be viewed only if the ***Display data on analysis view of lot traceability dashboard*** option is checked on the *Process Mfg Defaults* screen.

The analysis view displays the relationship map of the lot information. A relationship map is a pictorial representation of the information to help you analyze data quickly and easily. Also, it provides links to relevant master records.

Settings

The *Settings* section helps you customize the way in which the information is displayed. Click the '+' button to expand this section.

Allow Tool Tips: Check this option to view Tool Tips as you mouse over critical data on the relationship map.

Arrangement Strategy: Select the desired option (*Orthogonal* or *Stagger*) to specify the way you want to arrange information.

Flow Direction: Specify the direction in which the entities containing information should be displayed. Available options are *Above*, *Below*, *Left*, and *Right*.

Search Lot#: Specify the lot number that you want to locate.

8.3.1 Go To Options

The features in the *Lot Traceability Dashboard* do not end here. More options are available by right-clicking on the nodes in the *Analysis View* grid, as outlined below:

Lot Explosion: Explode all the lots of that particular finished good or item.

Where Used: View the usage of the raw materials in different lots.

Lot Recall Report: View the report for recalling lots, if a lot is defective.

Expand Next Level: Select this option to view lots of the next level.

Expand All: Select this option to expand all the lots till the last level.

Inventory Putaway: Selecting this option opens the *Inventory Putaway* screen. You can transfer the inventory from one bin to another using this feature.



Warehouse Transfer: Selecting this option opens the *Inventory Transfer* screen. You can transfer the inventory from one warehouse to another using this feature.

Change Inventory Type: Selecting this option opens the *Inventory Types* screen. You can change the inventory type of the selected lot using this feature.

8.3.2 Example: Tracing Lots

Consider the following example. Premium Food Manufacturers produces and sells apple jam. A couple of days ago, they received a complaint from one of their customers that a particular pack of the product was bad. The customer mentioned the batch number in the complaint. Let us now see how the *Lot Traceability Dashboard* helped the manufacturer trace the defective lot.

Selection Criteria

☒ Lot Explosion ☐ Where Used

Select

Item: F_Apple Jam

Desc.: Apple Jam

Vendor Lot#:

Lot From: A01-Ma-003

Lot To: A01-Ma-003

☒ Single Level ☐ Multi Level

Export To: ▼ Process

Display Settings

Color Scheme

Pur Receipt	Sales Return	Op Bal.
Pur Return	Sales Issue	WH Out
Pur Invoice	Sales Invoice	WH In
Prod.Receipt	AR Cr Memo	
Prod. Issue	Inv.Receipt	
Mat. Return	Inv. Issue	

Current Node

Key	Value
Production Rec...	A01-Mar0005
Item	F_Apple Jam
Warehouse	PRD
Lot#	A01-Ma-003
Receipt Date	3/2/2015 12:00:00 AM

To resolve the complaint, first we need to select the *Lot Explosion* option to find the raw material lots consumed by the 'Apple Jam' lot. Since 'Apple Jam' involves intermediates, the right choice here would be *Multi Level*.



Select '**F_Apple Jam**' in the *Item* field. Select the location '**PRD**,' the primary storage location, in the *Warehouse* field. Select the lot number '**A01-Ma-003**' as the lower and upper limit of the range, since we want to trace a particular FG lot. If you wish you can specify either the *Vendor Lot #* to trace the lot details on the basis of vendor lot number, or the *System Lot #*.

You have specified all the filter criteria and you are now ready to view the data. Click the *Process* button.

Grid View

Left pane (Tree View):

- F_Apple Jam(A01-Ma-003)
 - F_Apple(1-001)
 - F_Ground Allspice(16-016)
 - F_Brown Soft Sugar(b10)
 - F_Lemon Juice(b10)
 - F_Pectin(b91)
 - F_Caster Sugar(CS-01)
 - F_Ground Nutmeg(GN-01)

Right pane (Table):

☐ Show Data of all parents of lots ☒ Show Data of immediate of lots

Transaction Type	UOM	Lot No	Item Code	ItemName
Production Issue	KG	CS-01	F_Caster Sugar	Caster Sug:
Warehouse Transfer In	KG	CS-01	F_Caster Sugar	Caster Sug:
Production Issue	GRAM	16-016	F_Ground Allspice	Ground Alls
Production Issue	GRAM	GN-01	F_Ground Nutmeg	Ground Nut
Warehouse Transfer In	GRAM	GN-01	F_Ground Nutmeg	Ground Nut
Production Issue	ML	b10	F_Lemon Juice	Lemon Juice
Production Issue	GRAM	b91	F_Pectin	Pectin

During investigation, we find that a particular lot of lemon juice, 'b10' (F_Lemon Juice-PRD), was sub-standard. So, we locate the lot of lemon juice on the grid view to find the transactions involved with the specific lots of jam selected on the left pane. From the transaction, we find that material from the lot was issued once for manufacturing.

Analysis View

Settings: ☒ Receipt **A01-Mar0005**

Warehouse: **F_Apple Jam PRD**

Lot#: **A01-Ma-003**

Expiry Date: **08/29/2015**

Receipt Date: **03/02/2015**

Lot Status: **Release**

Quantity: **1.00 KG**

Onhand	Total Received	Total Issued
1	1	0

Production Issue **A01-Mar0005**

Item	Warehouse	Lot#	Expiry Date	Receipt Date
F_Ground Allspice	PRD	16-016	01/01/0001	02/28/2015

Production Issue **A01-Mar0005**

Item	Warehouse	Lot#	Expiry Date	Receipt Date
F_Ground Nutmeg	PRD	GN-01	08/27/2015	02/28/2015

Production Issue **A01-Mar0005**

Item	Warehouse	Lot#	Expiry Date	Receipt Date
F_Lemon Juice	PRD	b10	01/01/0001	02/28/2015

Production Issue **A01-Mar0005**

Item	Warehouse	Lot#	Expiry Date	Receipt Date
F_Pectin	PRD	b91	01/01/0001	02/28/2015

You can analyze the transactions quickly using the relationship maps in the *Analysis* view. Click the '+' button on the *Production Receipt* transactions to display the other transactions involved below. Click the hyperlink on the issue transaction '**A01-Mar0005**' to view the corresponding batch ticket for more details.



8.4 Production Scheduling

8.4.1 Production Scheduling Defaults

Using the *Production Scheduling Default* screen, you can configure production planning options. It helps you to determine the way data will be displayed on the Gantt chart.

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

The screenshot shows a window titled "Production Scheduling Default" with the following fields and options:

Difference to keep between two batches while auto scheduling		Minutes
APS Planning Period	30	Days
Show Backdated Orders for	7	Days
Batch Band Width on Gantt Chart	1	Rows
☐ Schedule batch according to process cell capacity		
☐ Show filter row on grid		
☒ Grid Process Cell Dropdown Based on Override		
☒ Show Closed Batches		
OK Cancel		

Difference to keep between two batches while auto scheduling: This field is used to specify the duration in minutes of the next staging batch when schedule is generated against the process cell capacity. The system will auto insert the specified duration between the batches which are overlapping.

Planning Period: In this field you are required to specify the planning horizon to determine the time period for which periodic production planning will be displayed on the dashboard. The default Value in this field is displayed as 30.

Show Backdated Orders for: This option is used to define a planning horizon which considers the earlier days planned order. Using it you can view the backdated planned orders on the Gantt chart. The value specified in this field will determine the *From* date in the filter criteria. The default Value displayed in this field is 7 days.

Batch Band Width on Gantt chart: This option will decide the width of the Process Cell band on the Gantt chart.

Schedule batch according to Process Cell Capacity: Checking this box means when we move a batch from one process cell to another on the Gantt chart the batch end date and time will be calculated according to Process Cell capacity.

Show Filter Row on Grid: Check this option to view a new filter row with a Batch Details grid on the Production Scheduling Board.



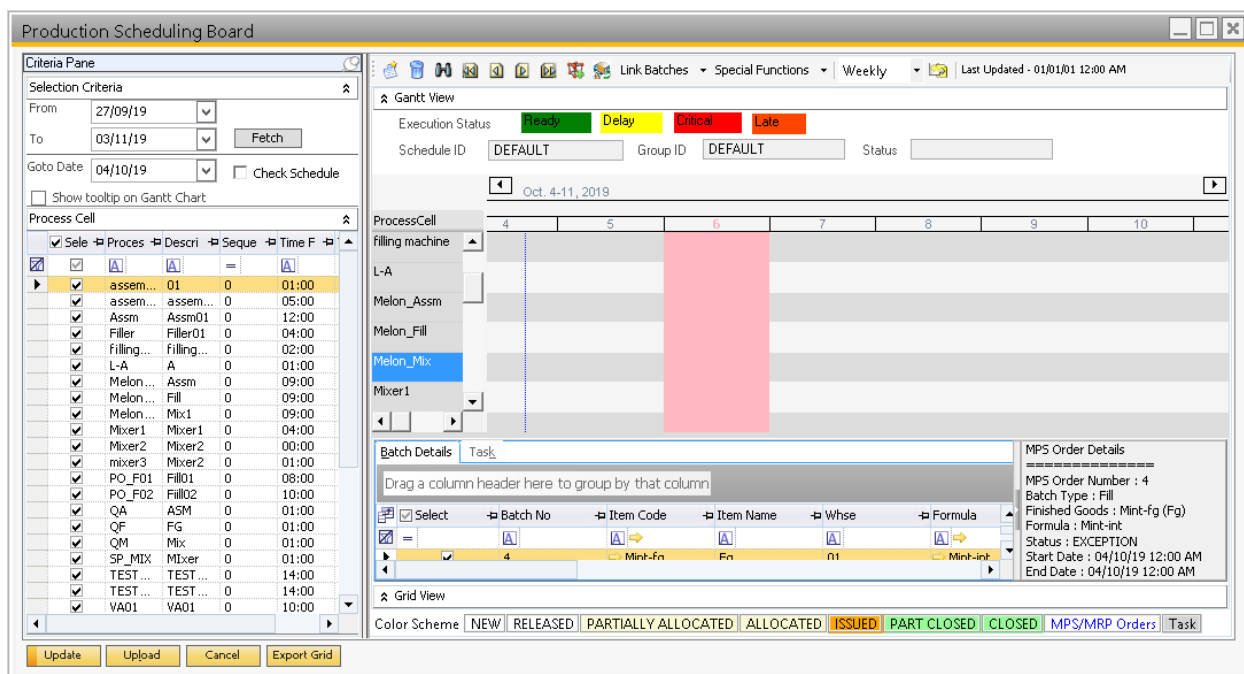
Grid Process Cell Dropdown Based on Override: If you check this option then in the Batch details grid the process cell dropdown will recall only the process cells defined on the *Process cell capacity override Master* screen. If you leave it unchecked, the dropdown will display the process cells on the basis of the applicable Batch Type.

Show Closed Batches: If you select this option then only closed batches will be displayed, otherwise the dashboard will prevent displaying batches of closed status.

Ok/Cancel: Click to save your work, or click **Cancel** to abort.

8.4.2 Production Scheduling Board

The *Production Scheduling Board* allows you to view and analyze your production batches with distinct color codes based on their statuses and schedule them appropriately. You can visualize the plan that ensures optimum usage of resources and production completion dates consistent with customer order deliveries. While working with the *Production Scheduling Dashboard*, the system now allows you to drag and drop the previous batches to the next batch by pressing the shift key, without any batch conflicts.



Criteria Pane

Selection Criteria

From: Specify the lower limit of a range of dates based on which batches are filtered and displayed on the dashboard.



To: Specify the upper limit of a date range based on which batches are filtered and displayed on the dashboard.

Check Schedule: Select this checkbox to display the batches on Gantt chart at node levels with distinct color codes based on their statuses.



- **Ready** – This implies that the batch has all the required materials available and is ready to start.
- **Delay** – This status signifies that the materials required for the batch are on order and would not be available on or before the batch scheduled start date.
- **Critical** – It is displayed for the batch which does not have sufficient raw materials to continue production and are not ordered yet.
- **Late** – This status signifies that the batch is linked to the sales order and will not be ready till its Delivery date.

Fetch: Click this button to reflect changes with colored batches on the dashboard according to checked schedule criteria such as ready, delay, critical, late and fetch status.

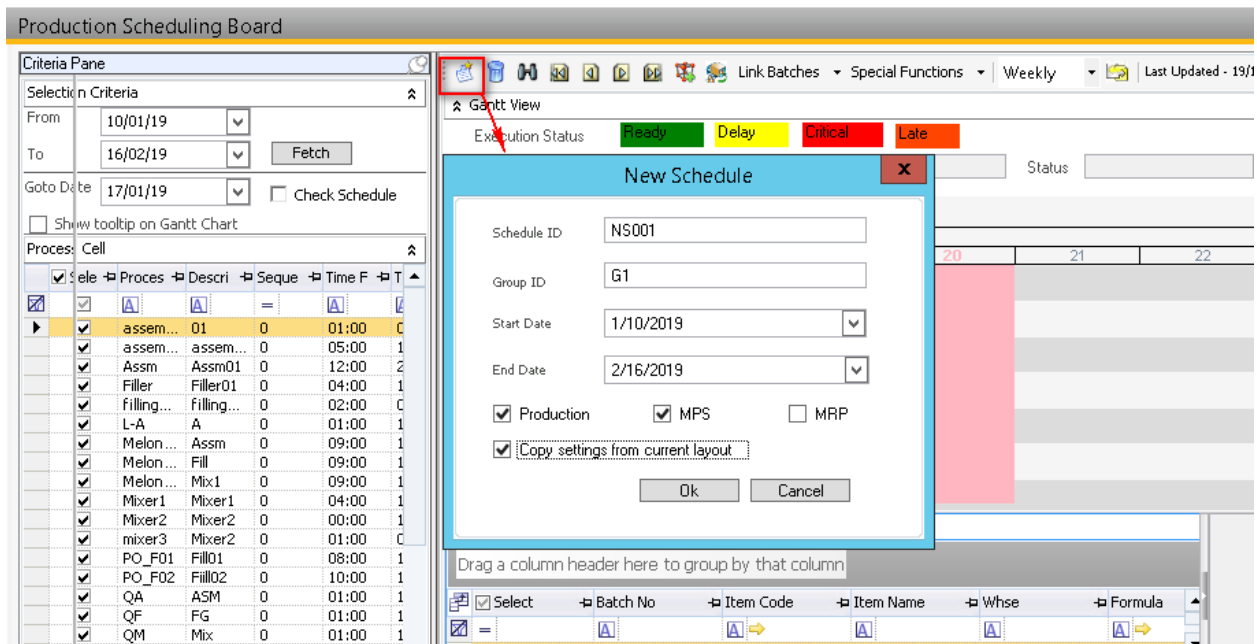
Go To Date: Specify the date whose data you wish to view on the Gantt chart. After specifying the date when you click on the *Fetch Data* button you will be directed directly to that particular date on the Gantt chart.

Show Tooltip on Gantt chart: Select this checkbox to view tooltips on the Gantt chart.

Process Cell: The grid below displays all available Process Cells with details. In the grid you can select the process cell whose data is required to be viewed and schedule on the dashboard.

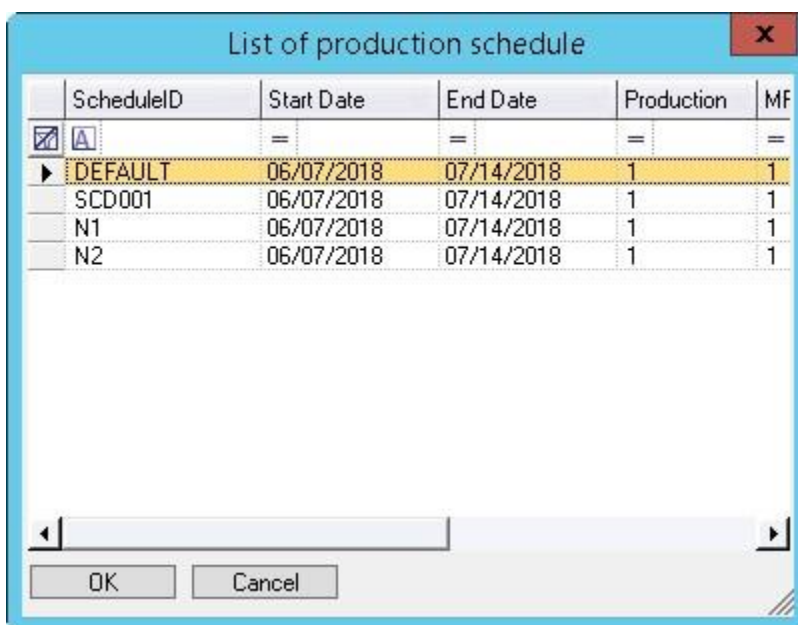
A Multiple scheduling feature is supported from BMM_SP_x63.57.69 version onwards. On the Production Scheduling dashboard the following options are added:

Create Schedule: Use the Create Schedule button to create and save a schedule for Production/Planning or both. You can also create a copy of the last open schedule



Delete Schedule: Use this button to delete the selected unwanted schedule.

Show Lookup: Click this lookup button to view a list of production schedules and navigate to the desired schedule.



Navigation buttons: These buttons help you easily navigate through schedules.



Click this button to navigate to the first schedule.



Click this button to navigate to the previous schedule.



 Click this button to navigate to the next schedule.

 Click this button to navigate to the last schedule.

Schedule ID: Displays the unique ID of the Production schedule.

Group ID: This field shows the Group Identification code of the schedule.

Upload: Uploads the schedule.

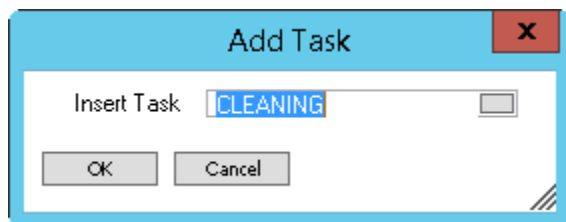
Status: Displays the current status of the schedule. A schedule can have the following statuses:

New: Until a schedule is saved.

Updated: When you click the *Update* button to save the schedule, its status changes to Updated.

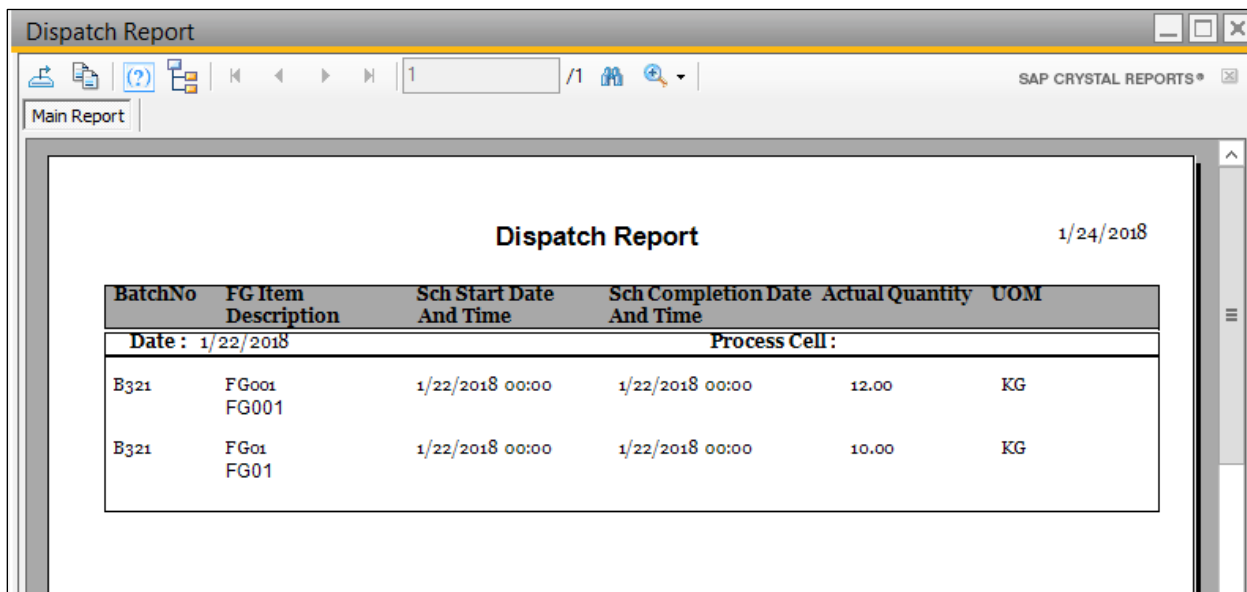
Uploaded: When the schedule is uploaded, the Status changes to *Uploaded*.

Add Task and Generate Schedule: Using this button you can add a user task or an activity to run in between manufacturing process as well as to auto generate the batch schedule.



The 'Add Task' dialog box has a title bar with a close button. Inside, there is a text field labeled 'Insert Task' containing the word 'CLEANING'. Below the text field are two buttons: 'OK' and 'Cancel'.

Print Dispatch Report: Click this button to generate report of the scheduled batches.



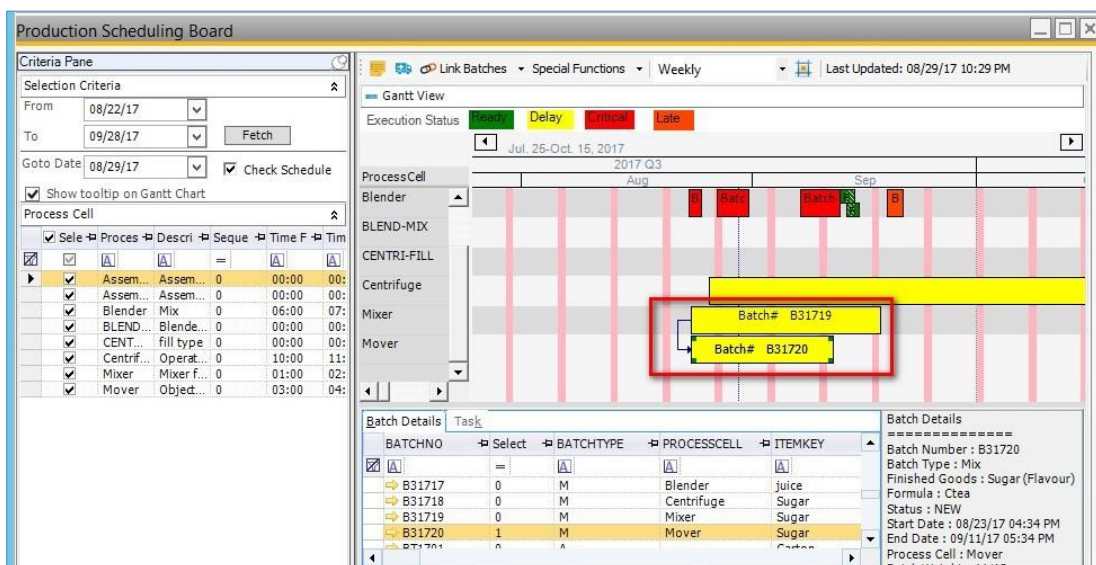
The screenshot shows a 'Dispatch Report' window with a toolbar and a table of data. The table has columns for BatchNo, FG Item Description, Sch Start Date And Time, Sch Completion Date And Time, Actual Quantity, and UOM. The data is filtered by Date: 1/22/2018 and Process Cell: B321.

BatchNo	FG Item Description	Sch Start Date And Time	Sch Completion Date And Time	Actual Quantity	UOM
Date : 1/22/2018					
Process Cell :					
B321	FG001	1/22/2018 00:00	1/22/2018 00:00	12.00	KG
B321	FG01	1/22/2018 00:00	1/22/2018 00:00	10.00	KG

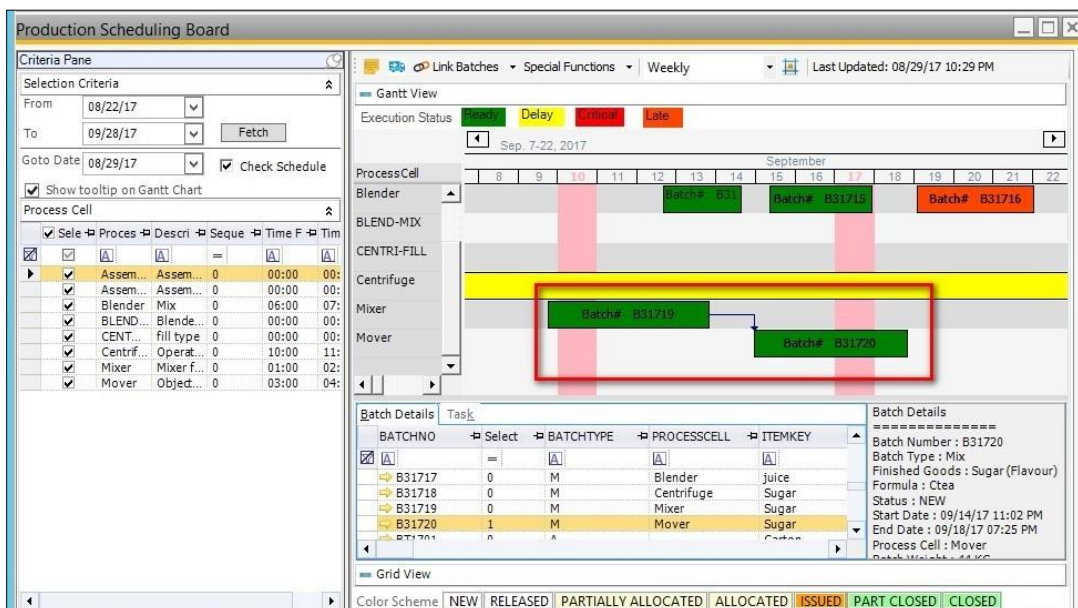


Link Batches: Use this feature during production scheduling to define dependencies between two or more batches. You can link the batches using the following options:

Start to Start: Click this option to link two batches, such that the production of the source batch and the target batch begins at the same time. In the example below, we established the link *Start to Start* between Batches *B31719* and *B31720*. Both batches will be starting together the same date/time.

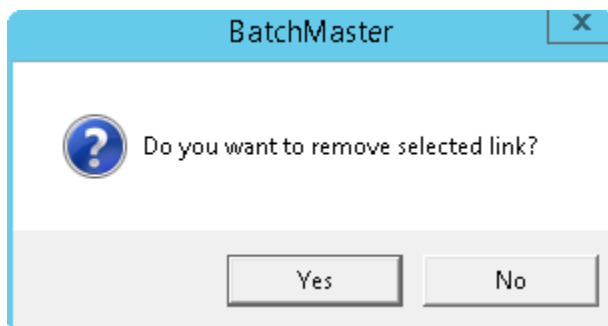


Finish to Start: Click this option to link two batches such that the production of target batch starts after the completion of production of source batch. In the example below, batches *B31719* and *B31720* are linked as *Finish to Start*.



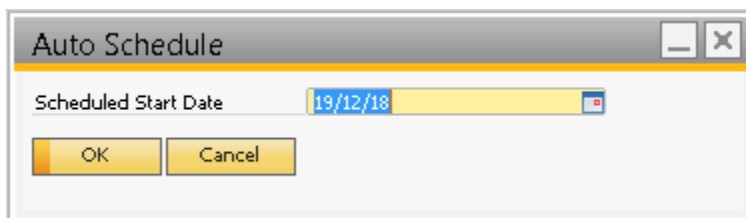


Remove Link: Click this option to remove the link established between batches. To remove existing link, right click on the link and choose an option Remove Link. A confirmation message as below gets displayed. To remove the link click on Yes button.



Special Functions

Generate Schedule: Use this button to auto generate a schedule based upon the specified Scheduled Start Date.



To Generate Schedule,

1. In the Batch Grid, group the batches on a Process Cell.
2. Apply sorting on any field or provide sort codes to arrange the batches in a specific order.
3. Click the *Generate Schedule* button. This will display the *Auto Schedule* screen where you specify the date from which the schedule will be generated for the first batch. Accordingly the system will schedule the remaining batches by assigning them Scheduled Start and End dates in a sequence.

Full View of Schedule Calendar: Click this button to provide a zoom-in view of the scheduled calendar of the Production Scheduling Dashboard. The information in this screen is read-only, thus the full-window view does not support making any changes. This window provides details of the process cell attached to the existing Batches/Orders/Tasks.



Material Availability Report: On clicking this option, the *Projected Material availability* report is displayed. The report shows the planning details, critical material of the batches which are scheduled in the process cell selected in the grid.

Projected Material Availability Report										
Batch Number	Start Date	End Date	Order Weight	Batch Weight	Formula ID/IntermediateKey	Description	Batch Type	Process Cell Id	ProcessCell Deso	
B31713	08/27/2017	08/28/2017	100.000000	99.999000	flavour	Added Flavour	MIX	Blender	Mix	
Item Code	Item Description	Whs Code	UOM	Qty. Required	Opening PAB	Closing PAB	Shortage	Next Available Supply Date		Next Availab
cardamom	Falvor Added to T	01	KG	33.333	800.000	766.667	No			
gingermix	Additive Flavor	01	KG	33.333	1,000.00	966.667	No			
powdermilk	Substitute Materi	01	KG	33.333	1,000.00	966.667	No			
B31704	08/31/2017	09/02/2017	400.000000	437.537000	Hottea	Patent Formula fo	MDX	Blender	Mix	
Item Code	Item Description	Whs Code	UOM	Qty. Required	Opening PAB	Closing PAB	Shortage	Next Available Supply Date		Next Availab
Ginger	Herbal Product	01	KG	1,000.000	1,200.00	200.000	No			
Ginger	Herbal Product	01	KG	1,000.000	200.000	-800.000	Yes			
Ginger	Herbal Product	01	KG	1,000.000	0.000	-1,000.000	Yes			
Ginger	Herbal Product	01	KG	16.736	0.000	-16.736	Yes			
Milk	Base	01	KG	167.364	1,252.93	1,085.573	No			
Sugar	Flavour	01	KG	50.209	1,250.00	1,199.791	No			
Tea	Granules	01	KG	100.000	899.000	799.000	No			
Tea	Granules	01	KG	119.546	799.000	679.454	No			
Teaflavour	Non Herbal	01	KG	83.682	1,350.00	1,266.318	No			
Teaflavour	Non Herbal	01	KG	100.000	1,266.31	1,166.318	No			
Teaflavour	Non Herbal	01	KG	600.000	1,166.31	566.318	No			

Reset Sorting: Click this button to reset the dashboard to the default sorting.

Multiple Column Sorting: Use this button to apply sorting on multiple fields.

Sort Options

Sort By	Order By
STARTDATETIME	ASC
QUANTITY	ASC

Add Level

Delete Level

Apply



Schedule Interval: From this drop-down menu you can choose the desired calendar format (i.e., you can choose the style for visualizing the production schedule). Available options are:

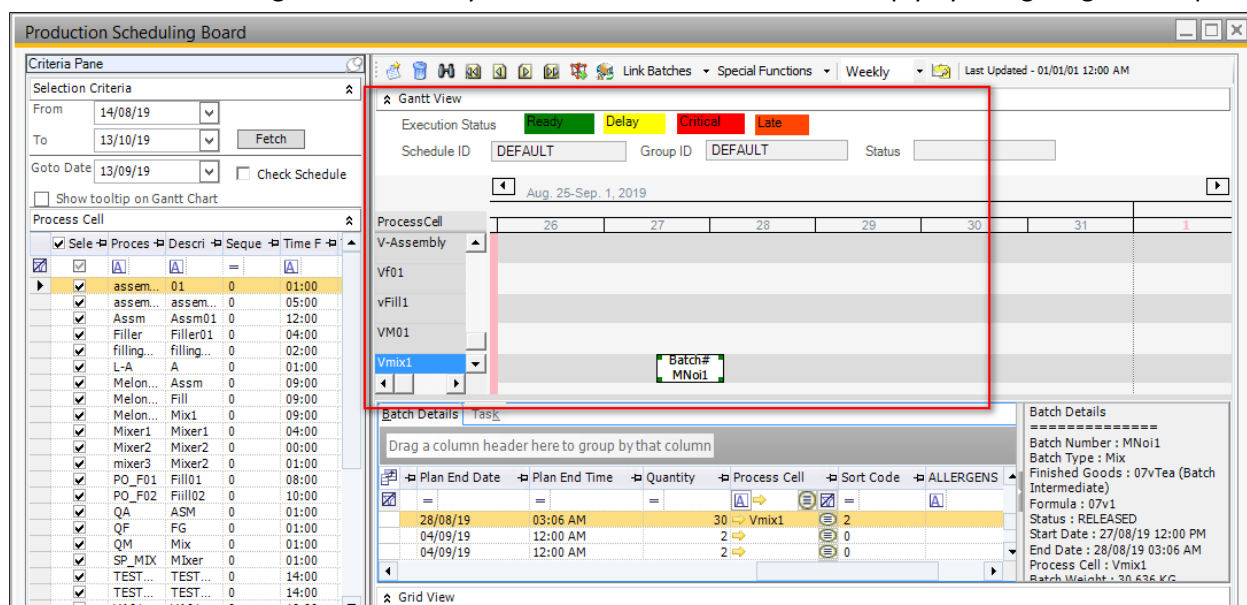
- Daily.
- Weekly.
- Monthly.

Last Updated On: This field displays the Date/Time when user last clicked on the *Update* button.

On the dashboard you can view and work with your data in the following two ways:

Gantt View of Dashboard

In the Gantt view you can see the selected Process cells on the left and a corresponding Gantt chart on the right. In this view you can reschedule the batches simply by doing drag and drop.



Right Click Menu options on Gantt view

Lock: Clicking this option locks the selected batch on dashboard. The locked batches cannot be moved or resized until it is unlocked.

Unlock: Using this button you can unlock the selected locked batch.

Add Link Start to Start: Click this option to link two batches, such that the production of the source batch and the target batch begins at the same time

Add Link Finish to Start: Click this option to link two batches, such that the production of the target batch begins after the finishing of source batch.

Remove Link: Using this option you can break a link established between two batches.



Insert Task here: Using this option you can add a new task at the current position.

Insert Task Before: This option is useful to add a new task just before the selected batch.

Insert Task After: Use this option to add a new task just after the selected batch.

Remove Task: You can remove selected tasks displayed at Gantt view.

Grid View of Dashboard

In this view the dashboard data will be displayed in spread sheet format.

The screenshot shows the 'Production Scheduling Board' window. On the left is a 'Criteria Pane' with filters for 'From' (14/08/19), 'To' (13/10/19), and 'Goto Date' (13/09/19). Below it is a 'Process Cell' list with various tasks like 'assem...', 'Assm...', 'Filler...', 'L-A...', 'Melon...', 'Mixer...', 'QA...', 'QM...', 'SP_MDX...', 'TEST...', 'VA01...', and 'V-Asse...'. The main area is the 'Gantt View' showing a timeline from August 26 to September 1, 2019. A task 'Batch# MN01' is highlighted. Below the Gantt view is the 'Batch Details' tab, which is expanded to show a table of batch data. The table has columns: 'Batch No', 'Item Code', 'Item Name', 'Whse', 'Formula', 'Formula Desc', 'Batch Type', and 'Plan Start D'. The data includes rows for 'BN012', 'BN111', 'BR1', 'NB001', 'MN01', and 'NW001'. To the right of the table is a 'Batch Details' sidebar showing information for 'Batch Number: MN01', 'Batch Type: Mix', 'Finished Goods: 07vTea (Batch Intermediate)', 'Formula: 07v1', 'Status: RELEASED', 'Start Date: 27/08/19 12:00 PM', 'End Date: 28/08/19 03:06 AM', 'Process Cell: Vm01', and 'Batch Weight: 30.636 KG'.

Batch Details Tab

The Batch Details tab displays batch-related information such as Item description, Item Code etc. Using this information, you can schedule or update the batches accordingly.

The screenshot shows the 'Batch Details' tab in the 'Production Scheduling Board' window. The table has columns: 'BATCHNO', 'Select', 'BATCHTYPE', 'ITEMKEY', and 'LOCATION'. The data includes rows for 'B31717', 'BT1701', 'BT1702', 'BT1704', 'BT1705', 'BT1707', 'BT1708', 'BT1709', 'BT1710', 'BT1711', and 'RT1712'. To the right of the table is a 'Batch Details' sidebar showing information for 'Batch Number: B31704', 'Batch Type: Mix', 'Finished Goods: Teaflavour (Non Herbal)', 'Formula: Hottea', 'Status: RELEASED', 'Start Date: 08/31/17 01:00 PM', 'End Date: 09/02/17 05:26 AM', 'Process Cell: Blender', and 'Batch Weight: 438 KG'.



Task Tab

Apart from routine production jobs, there are other tasks that need to be executed such as machine maintenance schedules and regular shut downs that may slow down your production process. This tab displays such tasks and their associated details. You can also add and delete tasks.

☒	CENT...	fill type	0	00:00	00:
☒	Centrif...	Operat...	0	10:00	11:
☒	Mixer	Mixer f...	0	01:00	02:
☒	Mover	Object...	0	03:00	04:

Batch Details		
Task Id	Description	Default Time(Minutes)
A	A	=
CHOPPER	CUTTING IN APPROXIMATE IN UNIFOR...	900
CLEAN	PERFORM CLEANING	600
CRACKING	GRINDER IS USED	3000
CUTTING	PERFORM THRASHING	1030
DRY	GRYER MACHINE IS USED.	0
ROTATE	CENTRIFUGAL	1380

Add Task Delete Task

Batch Details
=====

Batch Number : B31720

Batch Type : Mix

Finished Goods : Sugar (Flavour)

Formula : Ctea

Status : NEW

Start Date : 09/14/17 11:02 PM

End Date : 09/18/17 07:25 PM

Process Cell : Mover

Batch Weight : 44 KG

Add Task: Click this button to schedule a user task, an activity to run between manufacturing processes for a specified length of time.

User Defined Task

Task ID

Cleaning

Description

Cleaning

Default Time

00:01:00

(DD :HH : MM)

Update

Cancel

Delete Task: Click this button to delete the selected task.

Update: Click the *Update* button to temporary save the modified scheduling board in the newly added fields in Production and planning tables. The updated data will be viewed when you reopen the scheduling board or click on the *Fetch* button.

Upload: Click the *Upload* button to finally save the modified scheduling board in Production and planning tables.

Cancel: Click this button to exit from the screen without saving any changes.

Export Grid: Use this button to export the Batch Details grid data in the Excel.



Production Scheduling Board

Criteria Pane
 Selection Criteria
 From: 27/09/19 To: 03/11/19 Fetch
 Goto Date: 04/10/19 ☐ Check Schedule
☐ Show tooltip on Gantt Chart

Process Cell
☒ Sele ☒ Proces ☒ Descri ☒ Seque ☒ Time F

	Sele	Proces	Descri	Seque	Time F
assem...	01	0	01:00		
assem...	assem...	0	05:00		
Assm	Assm01	0	12:00		
Filler	Filler01	0	04:00		
filling...	filling...	0	02:00		
L-A	A	0	01:00		
Melon ...	Assm	0	09:00		
Melon ...	Fill	0	09:00		
Melon ...	Mix1	0	09:00		
Mixer1	Mixer1	0	04:00		
Mixer2	Mixer2	0	00:00		
mixer3	Mixer2	0	01:00		
PO_F01	Fill01	0	08:00		
PO_F02	Fill02	0	10:00		
QA	ASM	0	01:00		
QF	FG	0	01:00		
QM	Mix	0	01:00		
SP_MIX	Mixer	0	01:00		
TEST ...	TEST ...	0	14:00		
TEST ...	TEST ...	0	14:00		
VA01	VA01	0	10:00		

Update Upload Cancel **Export Grid**

Link Batches Special Functions Weekly Last Updated - C

Gantt View
 Execution Status: Ready Delay Critical Late
 Schedule ID: DEFAULT Group ID: DEFAULT Status:
 Oct. 4-11, 2019

ProcessCell
 filling machine
 L-A
 Melon_Assm

Batch Details Task
 Drag a column header here to group by that column

Select	Batch No	Item Code	Item Name	Whse	Formula
☒	9	L-INT	INT	01	L-F01
☒	4	Mint-fg	Fg	01	Mint-int
☒	6	Mint-int	Int	01	Mint Form
☒	8	X-INT	INT-MPS	01	X-MPS
☒	11	MPSBOM	MPS	01	MPS01

Grid View
 Color Scheme: NEW RELEASED PARTIALLY ALLOCATED ALLOCATED ISSUED PART CLOSED CLOSED

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Select	Batch No	Item Code	Item Name	Whse	Formula	Formula Desc	Batch Type	Plan Start Date	Plan Start Time	Plan End Date	Plan End Time	Quantity	Process Cell
2	1	B1212	Sberry_pulp_001	Sberry_pulp_001	01	For_sberry_pulp00	for_sberry_pulp00	Mix	7/31/2019	7/31/2019	7/31/2019	7/31/2019	2	
3	1	B1456	Sberry_pulp_001	Sberry_pulp_001	01	For_sberry_pulp00	for_sberry_pulp00	Mix	7/31/2019	7/31/2019	7/31/2019	7/31/2019	2	
4	1	BN1100	Sberry_juice	Sberry_juice	01	for_sberry_juice	for_sberry_juice	Mix	7/31/2019	7/31/2019	7/31/2019	7/31/2019	1	
5	1	TB1	Sberry_juice001	Sberry_juice001	01	for_sberry_juice	for_sberry_pulp	Mix	7/31/2019	7/31/2019	7/31/2019	7/31/2019	1	
6	1	B1213	Sberry_juice	Sberry_juice	01	for_sberry_juice	for_sberry_juice	Mix	8/1/2019	8/1/2019	8/1/2019	8/1/2019	10	
7	1	B214	Sberry_juice	Sberry_juice	01	for_sberry_juice	for_sberry_juice	Mix	8/1/2019	8/1/2019	8/1/2019	8/1/2019	10	
8	1	B216	Sberry_juice	Sberry_juice	01	for_sberry_juice	for_sberry_juice	Mix	8/1/2019	8/1/2019	8/1/2019	8/1/2019	4	
9	1	5	Sberry_juice	Sberry_juice	01	for_sberry_shake	for_sberry_shake	Mix	8/1/2019	8/1/2019	10/4/2019	10/4/2019	10786.01	mixer3
10	1	5	L-FG	FG	01	L-INT		Fill	8/2/2019	8/2/2019	10/4/2019	10/4/2019	1272	filling machine
11	1	LP01	Sberry_pulp	Sberry_pulp	01	For_sberry_pulp	For_sberry_pulp	Mix	8/5/2019	8/5/2019	8/5/2019	8/5/2019	5	
12	1	NB12	NSberry_pulp_001	NSberry_pulp_001	01	New_for_sberry_pi	New_for_sberry_pi	Mix	8/5/2019	8/5/2019	8/5/2019	8/5/2019	10	
13	1	O002	Oreo_Shake	Oreo_Shake	01	For_Oreo_Shake	For_Oreo_Shake	Mix	8/6/2019	8/6/2019	8/6/2019	8/6/2019	2	
14	1	O1001	Oreo_Shake	Oreo_Shake	01	For_Oreo_Shake	For_Oreo_Shake	Mix	8/6/2019	8/6/2019	8/6/2019	8/6/2019	5	
15	1	PCN01	Sberry_pulp	Sberry_pulp	01	for_sberry_juice	for_sberry_juice	Mix	8/7/2019 9:00 AM	8/7/2019 9:00 AM	8/7/2019 5:00 PM	8/7/2019 5:00 PM	10	Mixer1
16	1	BI91	Sberry_pulp	Sberry_pulp	01	For_sberry_pulp	For_sberry_pulp	Mix	8/8/2019	8/8/2019	8/8/2019	8/8/2019	5	
17	1	PCN03	Sberry_juice	Sberry_juice	01	for_sberry_juice	for_sberry_juice	Mix	8/8/2019 9:00 AM	8/8/2019 9:00 AM	8/10/2019 4:00 PM	8/10/2019 4:00 PM	1200	
18	1	B2213	Sberry_pulp_001	Sberry_pulp_001	01	For_sberry_pulp00	for_sberry_pulp00	Mix	8/12/2019	8/12/2019	8/12/2019	8/12/2019	1	
19	1	BNISPO1	Sberry_pulp	Sberry_pulp	01	For_sberry_pulp	For_sberry_pulp	Mix	8/12/2019	8/12/2019	8/12/2019	8/12/2019	2	
20	1	BN012	Sberry_pulp	Sberry_pulp	01	For_sberry_pulp	For_sberry_pulp	Mix	8/26/2019	8/26/2019	8/26/2019	8/26/2019	1	
21	1	BN111	Sberry_pulp	Sberry_pulp	01	For_sberry_pulp	For_sberry_pulp	Mix	8/26/2019	8/26/2019	8/26/2019	8/26/2019	2	
22	1	BR1	Sberry_pulp	Sberry_pulp	01	For_sberry_pulp	For_sberry_pulp	Mix	8/26/2019	8/26/2019	8/26/2019	8/26/2019	2	
23	1	N001	Sberry_pulp	Sberry_pulp	01	For_sberry_pulp	For_sberry_pulp	Mix	8/26/2019	8/26/2019	8/26/2019	8/26/2019	3	
24	1	N001	Sberry_pulp_001	Sberry_pulp_001	01	For_sberry_pulp00	for_sberry_pulp00	Mix	8/26/2019	8/26/2019	8/26/2019	8/26/2019	4	

8.4.3 Scheduling Production Activities

8.4.3.1 Adding a Task

1. Choose the record using the choose data record button present on the standard toolbar.
2. Move to the *Task* Tab.
3. Click the *Add Task* button.



4. Observe that the *User Defined Task* screen appears.
 - a. Specify the *Task ID*.
 - b. Specify the associated description.
 - c. Specify the duration of the task in DD: HH:MM format.
 - d. Click *OK* to save the task.
5. The created task will get displayed on the tab.

8.4.3.2 Add Task and generate schedule

1. Choose the record using the choose data record button present on the standard toolbar to add task.
2. Observe that the *Add Task* screen appears.

Insert Task

OK Cancel

3. Select the Task at the *Insert Task* field using the lookup available near the field.
4. The list of tasks created using the *Add Task* button on the *Task* tab is displayed.

Task Id	Description	Default Time(Minutes)
CHOPPER	CUTTING IN APPROXIMATE IN UNIFORM...	900
CLEAN	PERFORM CLEANING	600
CRACKING	GRINDER IS USED	3000
CUTTING	PERFORM THRASHING	1030
DRY	GRYER MACHINE IS USED.	0
ROTATE	CENTRIFUGAL	1380

Batch Details
Batch Number : B31720
Batch Type : Mix
Finished Goods : Sugar (Flavour)
Formula : Ctea
Status : NEW
Start Date : 09/14/17 11:02 PM
End Date : 09/18/17 07:25 PM
Process Cell : Mover
Batch Weight : 44 KG

5. Select the Task and Click *Ok*.
6. The system will display the selected task at the *Insert Task* field.

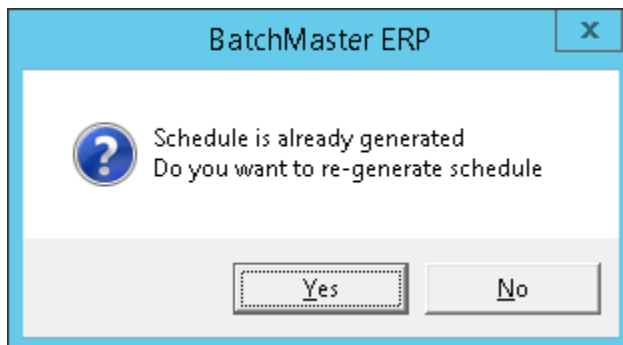
Insert Task

OK Cancel

7. Click *Ok* to generate the schedule.



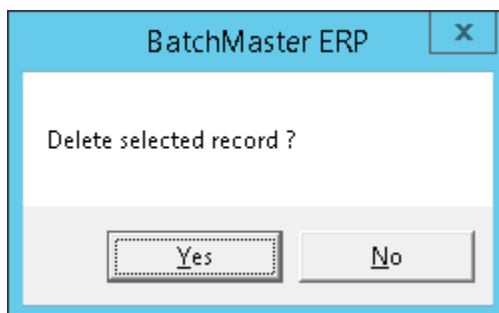
8. If you have already generated the schedule, when you click the *Add Task and Generate Schedule* button, the system displays a message:



Click *Yes* to regenerate the Schedule or *No* to get back to the Production Scheduling Dashboard screen.

8.4.3.3 Delete a Task

1. Choose the record using the choose data record button present on the standard toolbar.
2. Move on to the *Task* Tab.
3. Click the *Delete Task* button.
4. The system displays the message:



5. Click *Yes* to delete the Task or *No* to get back to the previous screen.

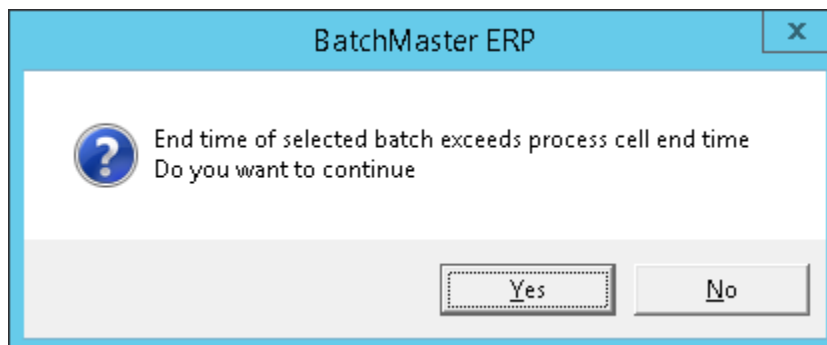
If the task is already attached to any schedule the system restricts deleting the record, displaying:
"Cannot delete task. Task already exists for schedule".

8.4.3.4 Reschedule a batch

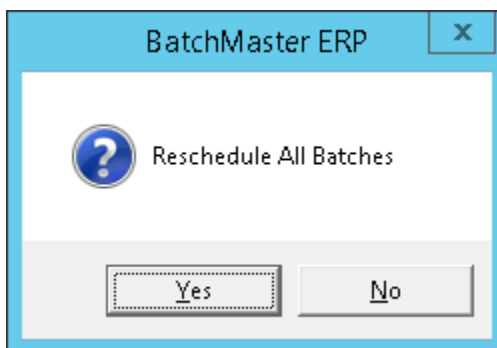
1. On the Gantt chart present in the upper portion of the dashboard, click on the desired batch to select the batch.
2. Reschedule the batch by dragging and dropping the batch to the desired date and time.



3. If there are no conflicts the system will reschedule the batches and reflect the changes on the *Batch Details* tab.
4. If the end time of the selected batch exceeds the process cell time the system displays the confirmation message as:



5. Click *Yes* to reschedule the batches / *Order* or *No* to get back to the previous screen.
6. In case you press *Yes* system again displays a confirmation message as:



7. Click *Yes* to reschedule all the existing batches of the schedule or *No* to reschedule only the selected batch.

8.4.3.5 Linking Batches

1. On the Gantt chart, select the source batch. Source batch is the one based on which the schedule of target batch changes.
2. From the Link Batches drop-down menu, select the desired option.
 - i. Select *Start to Start* option to link the batches such that the production of target batch begins as soon as that of source batch begins.
 - ii. Select the *Finish to Start* option to link the batches such that the production of the target batch begins after the completion of the source batch.



3. Click and drag your mouse from the source batch to the target batch to create a link between the batches.
4. Observe that an arrow appears between the two batches and the target batch is scheduled based on the link option and the schedule of the source batch.
5. Click the *Update* button to save the changes made to the schedule.

8.4.3.6 Release a batch

1. In the batch detail grid, check/modify the batch start and end date/time.
2. Select the batch line, right click on it and choose an option *Released*. This will release the batch line. The *Released* status batch becomes non-editable from the dashboard.

8.4.3.7 Uploading the batches to BatchMaster ERP

1. Choose the record using the choose data record button present on the standard toolbar.
2. Make the changes to the batches and click on the *Update* button to save the changes made to the schedule.
3. Select rescheduling of batches via the changed *Start* and *End* date on the *Batch Details* grid.
4. Observe that a message stating that *All the schedules in the group will be cancelled* when you upload the changes. The system asks you to confirm the upload.
5. Click *Yes* to upload the changes.
6. Observe that a message indicating successful upload appears on the screen.

8.4.4 Recap: Scheduling Production Activities

1. Launch the Production Scheduling Dashboard:

Process Manufacturing → Production Utilities

2. Click on the desired batch in the Gantt chart in the upper portion of the dashboard to select the batch.
3. Reschedule the batch by dragging and dropping it to the desired date and time.
4. Link batches.
 - a. Select the source batch from the Gantt chart. The source batch is the one based on which the schedule of the target batch changes.



- b. Select the desired option from the drop-down menu next to the *Link Batches* field.
 - Select the *Start to Start* option to link the batches such that production of the target batch begins concurrently with the source batch.
 - Select the *Finish to Start* option to link the batches such that the production of the target batch begins after the source batch is completed.
5. Click and drag your mouse from the source batch to the target batch to create a link between the batches.
6. An arrow appears between the two batches. The target batch is scheduled based on the link option and the schedule of the source batch.
7. Upload the changes made to the batches to BatchMaster ERP.
8. Click the Update button.
9. Check the rescheduling of batches via the changed Start Date and End Date on the Batch Details grid.
10. The following message appears: 'All the schedules in the group will be cancelled when you upload the changes.' The dashboard asks you to confirm the upload.
11. Click Yes to upload the changes.
12. A message indicating successful upload appears on the screen.



8.5 Labor Analysis Dashboard

Use the *Labor Analysis Dashboard* to get a comprehensive view of labor employed for production batches. This dashboard lets you analyze batch-wise labor details including start and end time, number of hours, and the process stage for which the labor was engaged.

Labor Analysis Dashboard

Filter Criteria
Batch Status
☐ Open
☐ Close

Batch
From
To

Date Type
Scheduled Start Date
From Date
To Date
07/31/2014

Refresh Export To Excel Save Layout Delete Layout Print Preview

Drag a column header here to group by that column.

Labor ID	Employee Name	Stage	Start Date	Start Time	End Date	End Time	No. Of Hours
ab01	manager manager	stage01	07/17/14	00:00	07/17/14	02:00	04:00

OK Cancel

Activate Windows

Refresh: Click this button to display data on the basis of applied filter criteria.

Export To: Choose the drop-down button to export the data displayed in the grid to Microsoft Excel or a PDF file.

Save Layout: You can add/remove columns in the grid or group the data. Choose the *Save Layout* button to retain your settings. You can enter a setting name or override a *Default* setting.

Delete Layout: Click this button to remove a layout.

Show Search: Check this option to enable search capability in dashboard grid columns.

Filter Criteria

Batch Status: You can filter the records to be displayed on the dashboard based on the batch status. Available options are *Open* and *Close*.

- **Open:** Check this option to draw batches with open status on the dashboard.
- **Close:** Check this option to draw batches with closed status on the dashboard.



Batch From: Specify the lower limit of the batch range to be considered for filtering the batch records on the dashboard.

Batch To: Specify the upper limit of the batch range to be considered for filtering the batch records on the dashboard.

Date Type: This field is used to decide the date option to be considered for obtaining records on the dashboard. The *From Date* and *To Date* fields will filter data based on the date type selected. Available options for this field are:

- **Schedule Start Date:** Select this option when you need to filter the batch records as per the *Schedule Start Date* using the *From Date* and *To Date* fields.
- **Schedule End Date:** Select this option when you need to filter the batch records as per the *Schedule End Date* using the *From Date* and *To Date* fields
- **Actual Start Date:** Select this option when you need to filter the batch records as per the *Actual Start Date* using the *From Date* and *To Date* fields.
- **Actual End Date:** Select this option when you need to filter the batch records as per the *Actual End Date* using the *From Date* and *To Date* fields.

From Date: Specify the lower limit of the date range to be considered for filtering the records.

To Date: Specify the upper limit of the date range to be considered for filtering the records.

TransID: Specify the labor entry transaction ID for the labor entry performed for the batch.

BatchNo: Specify the batch number of the batch for which labor entry was performed.

Labor ID: Specify the labor ID of the labor employed for the batch.

Employee Name: Specify the employee name of the labor as entered on the *Labor Entry* screen.

Stage: Specify the process stage in which the particular labor was occupied for work.

Start Date: Specify the date on which the labor started working.

Start Time: Specify the time at which labor started working.

End Date: Specify the date until which the labor continued working.

End Time: Specify the time until which the labor continued working.

No. Of Hours: Specify the number of hours for which the labor was employed to work for the batch.



8.6 Batch FG Return

Using the *Batch FG Return* screen, you can return Finished Goods (FG) when they were received incorrectly, applicable only for partially closed batches. This helps you to rectify mistakes in the received inventory quantity.



You can also access the *Batch FG Return* screen from the *Batch Close* screen's right-click menu to manage received and returned FG lots, select and process returns, and handle inventory revaluation and byproduct returns.

Go To: Process Manufacturing → Production Utilities → Batch FG Return.

#	Sel.	Doc No	Item Code	Item Desc	Whs Code	Bin No	FG Return Bin...	LPN No	Container No	Lot No	Lot Status	Price	Line Total	Quantity Re...
1	☒	7	FG00011	Mixed Fruit Jam	01	01-SYSTEM-B	01-SYSTEM-B		0	Lot001	ALL	0.00	0.00	10.000

#	Doc No	Item Code	Item Desc	Whs Code	Bin No	LPN No	Container No	Lot No	Price	Line Total
---	--------	-----------	-----------	----------	--------	--------	--------------	--------	-------	------------

In the *Batch No* field, select a Partial Close batch from which you want to return full/partial quantity.

Click the *Get Data* button to display the batch Items in the grid.

Select the desired checkbox in the *Receipt Transactions* grid.

In the *FG Return Bin No* field, select a bin location.

In the *Qty To Return* field, specify the item quantity you want to return. Click the *Process* button and click *Yes* to the warning message.



Batch FG Return

Batch No: Batch015 [Get Data]

Receipt Transactions

#	Select	Doc No	Item Code	Item Desc	Whs Code	Bin No	FG Return Bin No	LPN No	Container No	Lot No	Lot Status	Price	Line Total	
1	☒	17	FG00011	Mixed Fruit Jam	01	01-SYSTEM-B	01-SYSTEM-BIN-LOCA	LPN001	0	IS	ALL	82.59	578.13	7

System Message

This will return finish good. Do you want to Continue?

Yes No

Return Transactions

#	Doc No	Item Code	Item Desc	Whs Code	Bin No	LPN No	Container No	Lot No	Price	Line Total
---	--------	-----------	-----------	----------	--------	--------	--------------	--------	-------	------------

OK Cancel

Eventually, the system displays the item return transaction with return quantities in the *Return Transactions* grid as shown below:

Batch FG Return

Batch No: Batch015 [Get Data]

Receipt Transactions

#	Select	Doc No	Item Code	Item Desc	Whs Code	Bin No	FG Return Bin No	LPN No	Container No	Lot No	Lot Status	Price	Line Total	Quantity Received (Stock UOM)	Qty Returned (Stock UOM)	UoM	Quantity Received (Display UOM)	Qty Returned (Display UOM)
1	☒	17	FG00011	Mixed Fruit Jam	01	01-SYSTEM-BIN-LOCATION	LPN001	0	IS	ALL	82.59	578.13	7.000	2.000	KG	7.000	2.000	

Return Transactions

#	Doc No	Item Code	Item Desc	Whs Code	Bin No	LPN No	Container No	Lot No	Price	Line Total	Quantity (Stock UOM)	Quantity (Display UOM)
1	17	FG00011	Mixed Fruit Jam	01	01-SYSTEM-BIN-LOCATION	LPN001	0	IS	82.30	124.60	2.000	2.000
									0.00	0.00	0.000	0.000

OK Cancel

8.7 Process Cell Utilization Dashboard

The Process Cell Utilization Dashboard provides an analytical view of process cell performance, focusing on how production capacities are planned, allocated, and utilized. This dashboard enables real-time monitoring of cell-wise workload distribution, helping production planners and managers make informed decisions to optimize resource allocation and improve operational efficiency.

The dashboard consolidates essential capacity metrics, including:

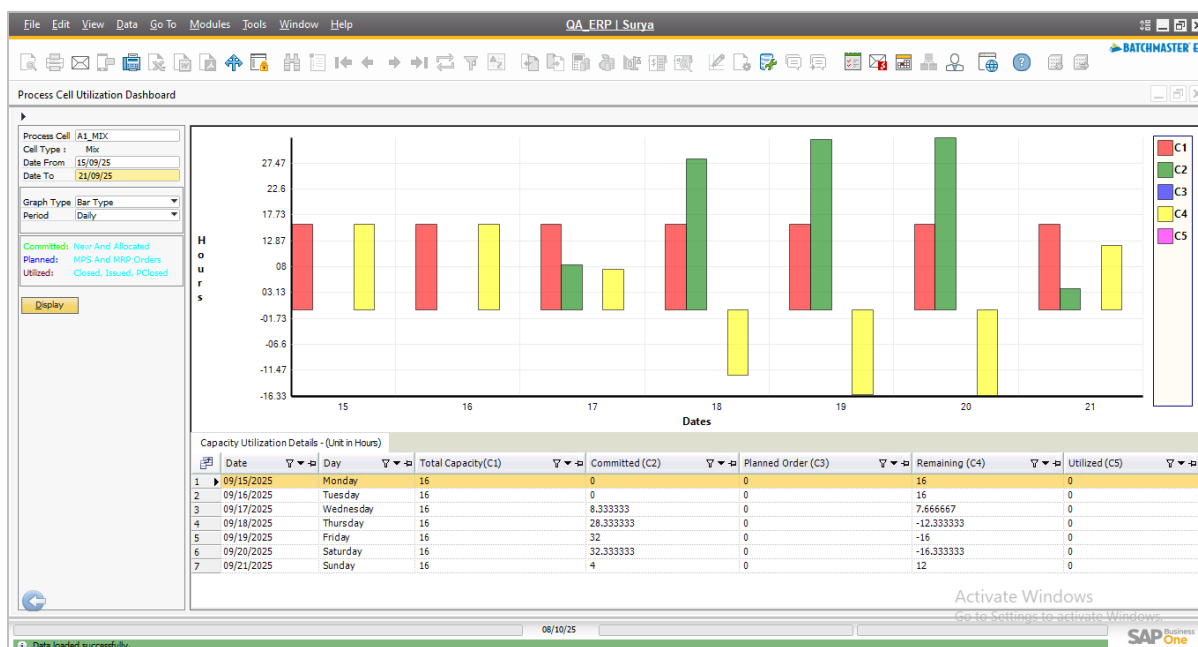
- Total Available Capacity
- Committed and Planned Workloads
- Remaining and Actual Utilization



Users can analyze this data across daily or weekly periods, enabling proactive management of production bottlenecks and better workload balancing.

To begin the process, open the *Transfer SO to Batch Wizard* screen:

**Go To: Process Manufacturing → Production Utilities →
Process Cell Utilization Dashboard.**



Process Cell: Lookup field to select a specific process cell from the database. Once selected, the corresponding cell type is displayed beside the cell code.

Date Range Filter (Date From and Date To): Allows users to define the analysis period. A calendar icon opens the date picker to select a start and end date. Utilization data is displayed based on this range (daily or weekly).

Graph Type: Displays utilization trends in a Bar Chart format. Currently, the default visualization type is Bar.

Period: Provides options to display data in Daily or Weekly intervals for flexible analysis.

Graph Section: A visual chart area where utilization data is plotted:

- **X-axis:** Represents Dates
- **Y-axis:** Represents Hours

Displays weekly utilization based on the selected date range.



Capacity Metrics Table: Summarizes cell-wise utilization metrics in tabular form:

- **Date:** Day-wise utilization for the selected period.
- **Total Capacity (Hours):** Defined in the Process Cell Setup screen based on operational time.
- **Committed (Hours):** Capacity utilized in New, Allocated, and Released batches.
- **Planned (Hours):** Capacity assigned to Planning batches.
- **Remaining (Hours):** Calculated as Total Capacity – (Committed + Planned).
- **Utilized (Hours):** Represents actual hours consumed in Issued, Part Closed, and Closed batches. |

Each metric is represented by distinct color codes on the chart for quick identification. If the Remaining Capacity becomes negative, the corresponding bar extends below the axis, visually indicating overutilization.

8.7.1 Recap: Process Cell Utilization

1. Open the Dashboard:

Navigate to the Process Cell Capacity Utilization Dashboard from the Production or Planning module.

2. Select a Process Cell:

- Click the Process Cell Lookup field.
- Choose the desired cell from the list.
- The corresponding Cell Type will be displayed automatically.

3. Define the Analysis Period:

- Click the Calendar icon in the Date Range field.
- Select the Start and End dates.
- The system will automatically update the chart and data grid for the selected period.

4. Choose the Period Type:

- From the Period Dropdown, select Days or Weeks to adjust how utilization data is displayed.

5. View Graphical Representation:



- The Bar Chart visualizes utilization in hours along the Y-axis and dates along the X-axis.
- Hover over bars to view specific metric values such as Total, Committed, Planned, and Remaining capacities.

6. Interpret the Data:

- Review the color-coded bars for each metric to assess workload balance.
- Bars extending below the X-axis indicate capacity overuse.
- Use this insight to reallocate resources or reschedule workloads as needed.



9 ROUTING

BME-B1, through Routings, lets you define a process detailing a sequence of operations to be followed to manufacture the product in a single batch production order.

Routing defines the movement path of raw materials through various machines and operations from the beginning point of the manufacturing process to the time of its completion in its finished form. Routing thus determines what work will be performed on the manufactured goods, where it will be performed, and who will do it. It establishes the operations, their path and sequence, and the proper class of machines and personnel required for each operation. Using it, you can easily optimize the supply chain to get the finished item at the earliest time at the minimum cost.

9.1 Activate the Routing

Enabling Routing is a one-time irreversible process in the company database. On the *Process Mfg Default* screen, on the Common Settings tab, the *Advance Routing Implemented* checkbox is provided. Selecting it activates Routing in the database and imposes on any batch to be processed the defined routing stages.

The screenshot shows the 'Process Mfg. Defaults' dialog box with the 'Common Settings' tab selected. The 'Advance Routing Implemented' checkbox is checked and highlighted with a red rectangle. Other visible settings include 'System Unit' set to 'Metric', 'Business Type' set to 'Food and Beverages', 'Labor Units' set to '0', and 'Lookup Row Count' set to '1000'.



- Implementing routing overrides the Process Stages functionality.
- *Default Process ID* field will be disabled on the *Production Default* screen.



9.2 Shift Master

Use the *Shift Master* screen to define the work shifts of your organization. On this screen you can set the *Start Time* of the shift, *Shift duration* and the *Break duration*. Accordingly, the system calculates the available working time per shift.

Shift Master		
Shift ID	S1	
Shift Description	Shift 1	
Start Time	08:00	
Shift Duration	08:00	HH:MM
Break Duration	00:30	HH:MM
OK Cancel		

Shift Id: The unique identifier of the work shift.

Shift Desc: The name or description of the working shift. This is a mandatory field.

Shift Time: Mention the time at which the work shift begins.

Shift Duration: Enter the total work duration of the shift.

Break Duration: Enter the duration of the break, if any, in the *Break Duration* field. The *Break Duration* should be less than the *Shift duration*.



9.3 Work Center Setup

On the *Work Center Setup* screen you can create and maintain process areas involved in the manufacturing process. The work centers can be a type of machine/group of machines or labor used in processing the raw materials into finished items.

A Work Center can be involved in multiple routing operations.

Work Center Id	WK2
Work Center Description	Work Center 2
Work Center Type	Machine
Labor Id	LB01
Labor Rate	100.0000
Overhead Id	OH01
Overhead Cost/Percent	10.0000
Capacity Per Shift	1,000.000
No of Labors	5

Work Center Id: It is a unique identifier of the Work Center.

Work Center Description: Enter the name or description of the Work Center.

Work Center Type: Select the Work Center type as man-based or machine based. This field is mandatory and helps to define whether the kind of work being performed at the Work Center will be manual labor-intensive or machine intensive. A man work center could be a packaging area comprising of labor while a machine work center will be comprised of machines and associated labor.



This field is editable only in *Add* mode.

Labor Id: Enter the unique id of the labor to capture the Standard labor cost.

Labor Rate: Displays the labor rate you set for the selected labor at the *Labor/Additional Cost* screen.

Overhead Id: Enter the unique overhead key to capture the Standard Overhead cost.

Overhead Rate: Displays the overhead cost you set for the selected overhead key on the *Overhead cost* screen.

Capacity per shift: Enter the standard capacity of the work center, per shift. Based upon this capacity, Work Center overload can be validated.

No of Labors: Enter the number of labor units required to work on the work center.



9.4 Work Center / Company Week offs Setup

From the screen you can define the default weekly schedule at a Company/Work Center level and shift level.



The system will always prefer the shift schedule defined for a Work Center and will override the company level shift schedule.

#	Days	Start Ti...	End Time
1	Monday	08:00	16:00
2	Tuesday	08:00	16:00
3	Wednesday	08:00	16:00
4	Thursday	08:00	16:00
5	Friday	08:00	16:00
6	Saturday	08:00	16:00
7	Sunday	08:00	16:00

Schedule Type: In this field you can select the option as Company or Work Center for which you are defining the shift schedule.

Work Center ID: Select the work center for which scheduling is defined.

Work Center Description: Displays the name or description of the Work Center.

Shift Id: Select the shift of the Work Center for defining the schedule.

Set Available shifts: In the grid, with respect to week days you can determine the start and end time of the work center shift.



9.5 Work Center Unavailable Time

Use this screen to maintain the down time of the Work Center. On the screen you can specify the date and time when the work center is not available to use.



The unavailability of the Work Center you are defining here should not overlap.

Transaction No: This field gets auto generated for every new record.

Source: Using the dropdown available here you can specify that the source of Work Center downtime is either *Holiday* or because of some *Task*.

Description: Enter an appropriate reason of unavailability of the Work Center.

WorkCenter ID: Search and select a unique code of the Work Center for which you are maintaining the downtime.

Work Description: Enter the description specifying the unavailability/downtime of the Work Center.

Start Date: Enter the start date from when the Work Center is not available to use

End Date: Specify the end date of the unavailability of the Work Center.

Start Time: Enter the start time from when the Work Center is not available to use

End Time: Enter the end time of the unavailability of the Work Center.

Days: Select the day for which the Work Center will not be available to use. You can select specific day here or can select *All* to specify that for the selected day the Work Center will not be available for the specified schedule.

Add: Click on this button to add the record.



Machine Rate: Enter the rate per hour of the machine. The cost you mention here will be used to calculate the standard and actual manufacturing and operational cost of items.

Overhead ID: Enter the overhead key need to associate with the machine.

Man Machine Ratio: Specify the number of labor required to operate the machine.

Machine Image Path: Search and select the image you need to use to recognize the machine.

9.7 Process Stages

Use this screen to define a process template, containing all the stages for a specific process. The template can be further associated with *Formula* and *BOM* masters.

#	Stage ID	Stage Description	Mandatory	Record Output	QC	Backflush Material
1	Mixing	Mixing	☐	☒	☐	☒
2	Proofing	Proofing	☐	☐	☐	☐
3	QC1	QC1	☒	☐	☒	☐
4	Ovenising	Ovenising	☐	☒	☐	☐
5	QC2	QC2	☒	☐	☒	☐
6	Wrapping	Wrapping	☐	☐	☐	☒

Process ID: Enter a unique key to identify the process.

Process Description: Give a name or description of the process.

Stage ID: Enter an identification key of the stage involved in the process

Stage Description: Give the name or description of the stage.

Mandatory: Check this checkbox if you want the stage to be performed mandatorily.

Record Output: Check it to specify that the output will be recorded for the stage. Selecting it, when you perform the respective stage, the system will let you record the output details on the *Record Labor Transaction* screen.

QC: With this checkbox selected you can specify that QC completion is mandatory for this stage.



Backflush Material: Check this checkbox to specify that system will automatically issue raw material assigned at the stage.

Auto Complete: With this option as selected system will auto close the stage if the previous stage is closed. Also, the stage will be skipped from *Active Next stage* operation.

9.8 Modifications on Formula Entry screen

With *Routing* implemented, the *Default Process ID* lookup retrieves the Process ID defined on the *Process Stages Master* screen. Here you can associate the *Process Stage* with the formula.

Items	Labor	By Products	Revision	QC test	Attributes	Attachments
Effective Date	09/10/20	Fixed Cost Labor ID			Warehouse	01
Valid Until		Fixed Cost Overhead ID			Policy	A
Approved		Fixed Cost Hours DD:HH:MM	00:00:00		Class	FG
Approved By		Setup Cost Labor ID			Default Process Cell ID	
Last Updated	09/10/20	Setup Cost Overhead ID			Yield	100.000
Notes		Setup Cost Hours DD:HH:MM	00:00:00		Loss Factor	0.000
		Default Process ID	Bakery		Loss Constant	0.000
		Markup Factor	0.000		Density Override	0.000
		Last Produced	09/10/20		Theoretical Density	1.000
		Formula Lot Size	0.000			

Variable Cost	Max Weight	Labor Hour...	Labor ID	Cost ...	Overhead ID	Overhea...	Overhea...

Material Cost				
				2,900.00
Labor Cost				0.00
Total	(KG)	150.000	(L)	150.000
Cost Per	(KG)	19.33	(L)	19.33

On the screen, the *Stage Id* field is available to use on the *Items*, *Labor*, *By Products*, *Consumable*, *Revision*, *QC test* tabs for the line.



The *Stage Id* for which the QC and Auto Complete checkboxes are selected on the *Process Stages* screen will not be available for selection on the *Items*, *Labor*, *By Products*, *Consumable*, *Revision* tabs. On the *QC test* tab you can only retrieve those stages for which QC is selected on the *Process Stage Master* screen.



Formula Entry

Formula: FM1
Description: Formula 1
Revision: 000000002
RM Cost By: Price List 01
Intermediate Cost By: Price List 01
Calculate Cgst

Status: Active
Refresh Price
Make Active
Owner: manager

Type	Item Code	Item Des...	Wt %	Vol %	Quantity in Stock	UOM	Quantity	Item Cost	Extended Cost	UOM	Wareh...	Ov...	Stage Id	Loss	Cost By	Stages
1	Material	RM1	Raw Material	33.333	33.333	50.000	50.000	10.00	500.00	KG	01	01	Mixing	0.000	Price List	
2	Material	RM2	Raw Material	40.000	40.000	60.000	60.000	20.00	1,200.00	KG	01	01	Mixing	0.000	Price List	
3	Material	RM3	Raw Material	26.667	26.667	40.000	40.000	30.00	1,200.00	KG	01	01	Mixing	0.000	Price List	

100.000 100.000 2,900.00

Remarks

Material Cost: 2,900.00
Labor Cost: 0.00
Total (KG): 150.000 (L): 150.000
Cost Per (KG): 19.33 (L): 19.33

OK Cancel View Complete Formula

9.9 Modifications on the BOM Entry Screen

On the *BOM Entry* screen, for *Finished Goods* and *Intermediate BOMs*, the *Process ID* attached at the Formula Level will be defaulted in the *Default Process ID* field. If required, you can override the defaulted value with the desired *Process ID*.

Bill of Material Entry

Item: FGMIX
Description: Finished Goods Mix
Warehouse: 01
Type: Intermediate
Formula: FM1
Fill Level: 0.000

Status: Active
Revision: 000000002
Cost By: 0
Owner: manager
Refresh Prices
Make Active

Default Intermediate
Revision
Whs Code
UOM

Effective Date: 09/10/20
Valid Until
Approved: 09/10/20
Approved By: manager
Last Updated: 09/10/20
Notes

Labor ID
Labor Hours DD:HH:MM: 00:00:00
Overhead ID
Default Process Id: Bakery
Default Stage: Wrapping

Comments

BOM Cost: 0.00
Calculate Cost
View Complete BOM

OK Cancel



For a Finished Good item, you can set the *Default Stage* at which you will be receiving the FG. If it is a *Finished Good* BOM, then an intermediate item for a *Fill* type of batch will also be associated with the *Default stage*.

Bill of Material Entry

Item: FGMIX
Description: Finished Goods Mix
Warehouse: 01
Type: Intermediate
Formula: FM1
Fill Level: 0.000

Status: Active
Revision: 0000000002
Cost By: 0
Owner: manager

Refresh Prices Make Active

Default Intermediate:
Revision:
Whs Code:
UOM:

Effective Date: 09/10/20
Valid Until:
Approved: 09/10/20
Approved By: manager
Last Updated: 09/10/20
Notes:

Labor ID:
Labor Hours DD:HH:MM: 00:00:00
Overhead ID:
Default Process Id: Bakery
Default Stage: Wrapping

For a packaging item, the Process stage can be attached in the Items grid.

Bill of Material Entry

Item: FGMIX
Description: Finished Goods Mix
Warehouse: 01
Type: Intermediate
Formula: FM1
Fill Level: 0.000

Status: Active
Revision: 0000000002
Cost By: 0
Owner: manager

Refresh Prices Make Active

Default Intermediate:
Revision:
Whs Code:
UOM:

#	Line ID	Seq No	Type	Item Code	Item Description	Warehouse	Stage Id	Make/Buy	Labor Hours DD:HH:MM	Quantity in Stock	UOM	Quantity	UOM	To...
1	1	1	Material	RM4	Raw Material 4	01	Wrapping	Buy		10.000	KG	10.000	KG	
2	2	2	Material	RM5	Raw Material 5	01	Wrapping	Buy		50.000	KG	50.000	KG	
3			Material						00:00:00	0.000		0.000		

9.10 Modifications on the SAP Employee Master Screen

The SAP *Employee Master* screen is enhanced to associate a Work Center and specify whether the respective employee is a *Production Manager* or not.

Employee Master Data

First Name: John
Middle Name: Van
Last Name: Dam

Employee No.: 1
Employee Code: 1
Ext. Employee No.:
☒ Active Employee

Job Title: Mgr
Position:
Department:
Branch:
Manager:
User Code: manager
Sales Employee: -No Sales Employ

Office Phone:
Ext.:
Mobile Phone:
Pager:
Home Phone:
Fax:

General

BMM Work center:
BMM Is Production Manager: Yes



9.11 Routing Master

Use the *Routing Master* screen to define a sequence in which the process stages will be performed on the manufacturing item. On the screen you can specify to which Work Center an item will be routed during the course of production, how much time an item would consume to be produced at the work center, machine time, queue time, set-up time, run time, wait time, move time etc.

#	Sequen...	Stage Id	Work ...	Machin...	Lot Size	Run Qty	Queue ...	Setup ...	Run Time	Wait Time	Move ...	O...
10		Mixing	WK1	M1	1,000.000	100.000	00:00:00	00:00:10	00:00:30	00:00:05	00:00:05	00:00:00
20		Proofing	WK1	M2	1,000.000	100.000	00:00:05	00:00:05	00:00:30	00:00:05	00:00:05	00:00:00
30		QC1	WK1	M2	1,000.000	100.000	00:00:05	00:00:00	00:00:05	00:00:05	00:00:05	00:00:00
40		Ovenising	WK2	M3	1,000.000	100.000	00:00:05	00:00:05	00:00:50	00:00:05	00:00:05	00:00:00
50		QC2	WK2	M3	1,000.000	100.000	00:00:00	00:00:05	00:00:05	00:00:05	00:00:05	00:00:00

Routing For: Use this field to specify that you are maintaining the routing for *Finished Good* or *Formula*.

Process Cell ID: In the field, search and select the Route Id you defined on the *Cell Master* screen.

Formula: For *Mix/Fill* type of process cell, the field displays all active formulas you can select from.

Finished Goods: In the field, for a *Mix/Fill* type of process cell, you can specify the active finished good BOM associated with the selected Formula. For an *Assembly* type of process cell you can select the active Assembly BOM attached to the formula.

Warehouse: Shows the warehouse being associated with the BOM on the *BOM Entry* screen.

Generate Multiple Runs: With this option selected, Batch Stage lines will split on the basis of the stage *Run quantity*. If you leave it unchecked, only one run will be generated per stage and the stage schedule will be generated based on the run quantity.



Is Default Route: Select it to set this route as the default Route to be considered in the planning engine for this finished good item.

View Route: Use this button to see the associated formula route for the FG.

Route Stage Definition

Sequence No: Enter the execution sequence number for the stage. On the basis of the sequence number the stage execution will be performed. For the stages you need to execute in parallel their sequence number must be same. This field value is auto generated with the increment of 10 places. For the Formula Routing the sequence begins from 10 while for FG routing the first sequence number will be 100.

Stage ID: Displays all *Stages IDs* contained in *Formula* and *BOM Masters*.

Work Center ID: Displays the Work Center involved in the execution of the stage.

Machine ID: Displays the machine involved in the Work Center for this execution stage.

Lot Size: Enter the average lot size you are planning to manufacture at the respective process stage. It will be on the basis of setup time inclusion in the stage schedule.

Run Qty: Specify the routing run quantity to be produced at the process stage.

Queue time: It is the buffer time for the run.

Setup Time: Time required to prepare for stage execution. It is based upon the specified lot size.

Run Time: Enter the run time required to execute the process stage, based upon the routing run quantity.

Wait Time: Wait time of Work Center before moving to next operation.

Move Time: Time require to move the material to the next Work Center.

Other Time: Enter any additional time constraint if require.

Labor ID: Attach the labor for stage execution.

Overhead ID: Attach the overhead id for stage execution.

No of Labor: Enter the number of labor units required to perform the stage operation.

Size time by Batch: Select this checkbox to size the timing on the basis of batch quantity.



9.12 Stage Execution

From the *Stage Execution* screen, for the *Assigned* user, you can work on defined routing stages. For a *Released* batch, you can access the *Stage Execution* screen by clicking on the *Production Stages* button.

The **Batch Entry** screen displays various fields for batch management. On the right side, the **Production Stages** button is highlighted with a red rectangular box.

Field	Value
Series	
Batch Number	B001
Batch Status	Released
Batch Type	Mix
Formula ID	FM1
Revision No	000000002
Warehouse	
Production Whse	01
Process Cell	R1
Schedule	Forward
Owner	manager
Demand Type	Independent
Sales Order	
Customer Key	
Source	Production
Req Date	
Sch Start Date	09/22/20 1:21PM
Sch End Date	09/23/20 10:06AM
No. of Runs	1
Project	
Distr. Rules	

☐ User Defined Date

Additional Information

On the *Stage Execution* screen, with respect to the batch, you can view the route stages carried from the *Routing Master*, based upon the *Route ID (Process Cell ID)* attached to the batch. Based upon the run quantity, the system will calculate the number of runs and accordingly add the process stage lines. Also, on the basis of size by run quantity, for the selected *Route* stage, the system will show *Formula/Finished Goods/Byproduct/Consumable* in the lower grid, associated with the stage. Further, on the *Active* stage, you can perform distinct batch operations, such as *Material Issue*, *Material Return*, *Receipt FG*, *Record Labor transactions*, and perform *Stage QC*.

The **Stage Execution** screen displays a table of stages and a lower grid for materials. The **Batch No.** is PRD0000002 and the **Route Id** is R1. The **Assigned User** is manager.

#	Sequence	Stage	RunNo	RunQty	StageQty	WorkCenter	LaborId	Overhead ID	Machine ID	Active	Status	Est Lab Time	Est Machin...
1	10	Mixing	1	500.000	500	WK1	LB01	OH01	M1	☒	Close	00:00:00	00:00:00
2	20	Proofing	1	500.000	0	WK1	LB01	OH01	M2	☒	Close	00:00:00	00:00:00
3	30	QC1	1	500.000	0	WK1	LB01	OH01	M2	☒	New	00:00:00	00:00:00
4	40	Ovenising	1	500.000	0	WK2	LB01	OH01	M3	☐	New	00:00:00	00:00:00
5	50	QC2	1	500.000	0	WK2	LB01	OH01	M3	☐	New	00:00:00	00:00:00
6	110	Wrapping	1	500.000	0	WK3	LB01	OH01		☐	New	00:00:00	00:00:00

Formula Finished Goods By Products Consumables Attachments

#	Select	LineType	Item Code	Item Description	Whse	Original ...	Qty. Required	Labor Hours DD:H...	Stock UOM	Unit
1	☐	Material	RM1	Raw Material 1	01		166.667		KG	KG
2	☐	Material	RM2	Raw Material 2	01		200.000		KG	KG
3	☐	Material	RM3	Raw Material 3	01		133.333		KG	KG
4	☐	Material					0.000			

Received Stage input: 0 Stage Weight: 0
Received Stage Output: 0 Stage Volume: 0

OK Cancel



From the *Stage Execution* context menu, the following operations can be performed.

Activate Next Run: By default system activates the process stage sequentially and after closing an active stage the next stage is activated. You can manually activate the next stage run by clicking on the *Active Next Run* option.

Stage Execution													
Batch No. ➔ B002		Route Id ➔ R1		Assigned User manager									
#	Sequence	Stage	RunNo	RunQty	StageQty	WorkCenter	LaborId	Overhead ID	Machine ID	Active	Status	Est Lab Time	Est Machin...
1	10	Mixing	1	200.000	200	WK1	LB01	OH01	M1	☒	Close	00:01:00	00:01:00
2	20	Proofing	1	200.000	200	WK1	LB01	OH01	M2	☒	New	00:01:00	00:01:00
3	30	QC1	1	200.000	0	WK1	LB01	OH01	M2	☒	New	00:00:10	00:00:10
4	40	Ovenising	1	200.000	0	WK2	LB01	OH01	M3	☐	New	00:01:40	00:01:40
5	50	QC2	1	200.000	0	WK2	LB01	OH01	M3	☐	New	00:00:10	00:00:10
6	110	Wrapping	1	200.000	0	WK3	LB01	OH01		☐	New	00:02:00	00:02:00

Close Stage Run: After performing the stage operations, close an active run using the *Close Stage Run* option.

Stage Execution													
Batch No. ➔ B002		Route Id ➔ R1		Assigned User manager									
#	Sequence	Stage	RunNo	RunQty	StageQty	WorkCenter	LaborId	Overhead ID	Machine ID	Active	Status	Est Lab Time	Est Machin...
1	10	Mixing	1	200.000	200	WK1	LB01	OH01	M1	☒	Close	00:01:00	00:01:00
2	20	Proofing	1	200.000	200	WK1	LB01	OH01	M2	☒	New	00:01:00	00:01:00
3	30	QC1	1	200.000	0	WK1	LB01	OH01	M2	☒	New	00:00:10	00:00:10
4	40	Ovenising	1	200.000	0	WK2	LB01	OH01	M3	☐	New	00:01:40	00:01:40
5	50	QC2	1	200.000	0	WK2	LB01	OH01	M3	☐	New	00:00:10	00:00:10
6	110	Wrapping	1	200.000	0	WK3	LB01	OH01		☐	New	00:02:00	00:02:00



Material Issue: From the Stage Execution screen, selecting the *Issue Material* option from the context menu opens the *Stage Run wise Material Issue* screen, displaying the materials to be issued for the stage.

Stage Run wise Material Issue

Batch Number: B001, Batch Status: Released, Batch Type: Mix, Process Cell: R1, Stage: Mixing, Run Id: 1, Formula ID: FM1, Revision No: 0000000002, Warehouse: , Runs No.: 1, Issue Date: 09/22/20

#	Type	Stage	RunId	Item Code	Description	Whs Code	Qty Required	Available Qty	SO Commit...	Qty Issued	UOM
1	Material	Mixing	1	RM1	Raw Material 1	01	33.333	9,499.999	0.000	0.000	KG
2	Material	Mixing	1	RM2	Raw Material 2	01	40.000	9,400.000	0.000	0.000	KG
3	Material	Mixing	1	RM3	Raw Material 3	01	26.667	9,600.001	0.000	0.000	KG

Select Lines to Issue

Lot Qty Available to Issue: 9499.999

#	Select	Lot No	SAP Lo...	Contai...	LPN	Expiry Date	Bin No	Vendor ...	Batch A...	Lot Status	Qty to Issue	Available Qty
1	☒	RM1-B1	Released			12/31/99	01-SYS			ALL	33.333	9,499.999

☐ Select All

Issue Cancel Save Auto Select

Material Return: Using this screen you can return the material being issued in the particular stage.

Return Material

Batch Number: B003, Batch Status: Issued, Batch Type: Mix, Process Cell: R1, Formula ID: FM1, Revision No: 0000000002, Warehouse: , Runs No.: 1

#	Stage	RunId	Item Code	Description	Whs Code	Qty to Return	Qty Returned	Qty Issued	UOM	Qty to Return...	Qty...
1	Mixing	1	RM1	Raw Material 1	01	10.000	0.000	100.000	KG	10.000	

#	Select	Lot No	Contai...	Expiry Date	Issue Bi...	Bin No	Lot Status	Qty to Return	Issued Qty	Issued Qty S...	U...
1	☒	RM1-B1	0	12/31/99	01-SYS	01-SYS	ALL	10.000	66.667	66.667	
2	☐	B21	0	12/31/99	01-SYS	01-SYS	ALL	0.000	33.333	33.333	

Update Cancel



Stage QC: If the upcoming stage is a QC stage and you activate the next stage, then the QC orders are generated. The QC order will be generated on the basis of the number of runs obtained in the respective stage.

Quality Control Order - QA

QC No.	PRDQC0000010	Reference Doc. No.	PRD000011	No.	1
QC Type	Production QC	Reference Doc. Type	Production Batch	BP Code	
Status	New	Owner		Stage Id	Inspection
Req Date	08/28/20	Notes		Run ID	1
Completed Date				Ref Run ID	1

#	Item Code/F...	Description	Revision No	Warehouse	Lot	Test Qty	Accepted Qty	Rejected Qty	Scrapped Qty
1	Sponge1	Sponge1	0000000003			0.000	0.000	0.000	0.000
2	FG1	FinishedGoods1		01		1,000.000	0.000	0.000	0.000
3						0.000	0.000	0.000	0.000

Sample Set: ALL

Copy Test Results Duplicate Sample

Selected Item: Sponge1 Lot:

#	Sample No	Test Code	Description	Test Unit	Category	Test Method	Inspection	Measuring	Print On COA	Cont...
1	1	Moisture	Moisture		Physical	Chemical Anal	Sampling	PassFail	☐	
2	1	Moisture	Moisture		Physical	Chemical Anal	Sampling	PassFail	☐	
3									☐	

OK Cancel QA Approval Evaluate QC Copy From



A Stage defined as a QC Stage is by default a mandatory stage and can't be closed until you complete the QC Test for the stage.



Routing Labor Entry: The labor/overhead associated with the stage on the *Routing Master* screen is displayed here to record the Routing stage labor. From this screen you can record output (if you enabled the option on the *Process Stages* screen) for the stage given by the employee attached with the Work Center or for all employees.

The screenshot shows the 'Record Labor Transaction' window. It contains two columns of input fields. The left column includes Transaction (8), Batch No (B002), Stage Status (New), Work Center (Wk1), and Labor Id (LB01). The right column includes Transaction Date (09/22/20), Stage (QC1), Run No (1), Machine (M2), and Overhead (OH01). Below these fields is a checkbox for 'Show All Employee'. A table with 7 columns (#, Employee, Start Time, Time Duration, Output, Accepted, Rejected) is shown, with the first row containing '1', 'John', '09:00', and '2.000'. At the bottom, there are input fields for 'Total Stage Input' (0) and 'Total Stage Output' (0), and three buttons: 'OK', 'Cancel', and 'Show All Transaction'.

#	Employee	Start Time	Time Duration	Output	Accepted	Rejected
1	John	09:00	2.000			

Transaction ID: A unique key to identify the Labor Transaction.

Transaction Date: Displays the date on which transaction is posted.

Batch No: Displays a unique key for the batch for which the transaction is made.

Stage: Shows the process stage of the batch for which the transaction is posted

Stage Status: Displays the current status of the stage.

Run No: This field shows the run number of the process stage.

Work Center: Shows the Work Center for which the labor transaction is posted.

Machine Id: The field displays the unique id of the machine Id of the Work Center for which the Labor is posted.

Labor Id: Shows a unique key of the Labor attached on the *Routing Master* process stage.

Overhead ID: Displays the attached *Overhead* Key.



Show All Employees: Selecting this checkbox displays all the employees to record the labor transaction. If you leave this checkbox unchecked then only the employee attached to the Work Center on the *Employee Master* screen will be displayed here.

Labor Grid Lines

Employee Id: Shows the unique key of the employee for which the labor transaction is posted.

Start Time: This will capture the start time of the process stage

Time Duration: Enter the total time duration of the process stage.

Output: This field is editable if you have chosen the *Record Output* option on the *Process Stages* screen.

Accepted: The accepted output is recorded here for the transaction.

Rejected: The rejected Output is recorded here for the transaction.



10 PRODUCTION REPORTS

10.1 Batch Ticket Report

Go to: Production → Production Reports → Process Manufacturing Reports.

A batch ticket document empowers your production personnel by reporting how much raw material is required, manufacturing instructions, packaging, consumables, Finished Good and other information.

The report also prints the personal protection equipment pictograms with *Allergen Information*. The personal protection pictograms for the items are picked from *Item Master Details* screen, if maintained.



You can choose to display only the desired batch tickets on the report using the filter parameters. Once the filter criteria have been employed on the data, BatchMaster displays the results as a Crystal Report, which can be printed and exported.

Batch Ticket Report- Selection Criteria

Batch No Range

Batch No From: BnewCoA
Batch No To: BnewCoA

Super Batch Range

Super Batch No From: [Yellow bar]
Super Batch No To: [Empty box]

Batch Status

Batch Status: ☐ [Yellow bar]

Formula Range

Formula ID From: for_sberry_shake
Formula ID To: for_sberry_shake

Schedule Start Date

Schedule Start Date From: 01/01/01
Schedule Start Date To: 01/01/49

Schedule End Date

Schedule End Date From: 01/01/01
Schedule End Date To: 01/01/49

Print Boilerplates: ☒
Print Literal Text: ☒
Print Labor Line: ☒
Print Lot Details: ☒
Print BOM Info: ☐
Print Consumable: ☒
Print FG Allocation: ☒
Print ByProduct Info: ☒
Print Notes: ☒
Print Super Batch: ☒
Print QC: ☒



Batch Number Range

Batch Number From: Specify the lower limit of the range of batch numbers to filter and display batch tickets. You can select the desired batch using the lookup near the *Batch Number From* field.

Batch Number To: Specify the upper limit of the range of batch numbers to filter and display batch tickets. You can select the desired batch using the lookup near the *Batch Number To* field.

Super Batch Number Range

Super Batch Number From: Specify the lower limit of the range of Super Batch numbers to filter and display batch tickets. You can select the desired Super Batch using the lookup near the *Super Batch Number From* field.

Super Batch Number To: Specify the upper limit of a range of Super Batch numbers to filter and display batch tickets. You can select the desired Super Batch using the lookup available near the *Super Batch To* field.

Batch Status

Batch Status: Select the batch statuses to filter batches associated with any of the selected statuses while generating the report.

Formula ID Range

Formula ID From: Specify the lower limit of the range of formulas to filter and display batch tickets of the batches that use a formula falling in this range. You can select the desired formula using the lookup near the *Formula ID From* field.

Formula ID To: Specify the upper limit of the range of formulas to filter and display batch tickets of the batches that use a formula falling in this range. You can select the desired formula using the lookup near the *Formula ID To* field.

Schedule Start Date Range

Schedule Start Date From: Specify the lower limit of the range of scheduled start dates to filter and display batch tickets of the batches whose scheduled start dates fall in this range.

Schedule Start Date To: Specify the upper limit of the range of scheduled start dates to filter and display batch tickets of the batches whose scheduled start dates fall in this range.



Schedule End Date Range

Schedule End Date From: Specify the lower limit of the range of scheduled end dates to filter and display batch tickets of batches whose scheduled end dates fall in this range.

Schedule End Date To: Specify the upper limit of the range of scheduled end dates to filter and display batch tickets of batches whose scheduled end dates fall in this range.

Print Boilerplates: Select this checkbox to print the formula boilerplates associated with the selected batches in the report.

Print labor line: Select this checkbox to include labor-related data in the report.

Print BOM Info: Select this checkbox to print BOM information associated with the selected batch tickets in the report.

Print FG Allocation: Select this checkbox to print FG allocation information (if finished goods have been allocated for a specific sales order) in the report.

Print Notes: Select this checkbox to print any notes (additional information displayed in the *Notes* field of the *Batch Ticket* screen) in the report.

Print Literal Text: Select this checkbox to print any literal text (from the *Batch Ticket* screen) in the report.

Print Lot Details: Select this checkbox to print the lot details of finished goods and raw materials associated with the selected batches in the report.

Print Consumables: Select this checkbox to print the consumable-related information (consumables used in the production of FG in these batches) in the report.

Print Byproduct Info: Select this checkbox to print byproduct information (byproducts obtained in the production process) in the report.

Print Super Batch: Select this checkbox to print the Super Batch tickets in the report.

Print QC: Select this checkbox to print the QC details of the batch in the report

Print: Click the *Print* button to generate the report.

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



10.1.1 Generating a Batch Ticket Report

1. Use the lookups next to the *Batch No From* and *Batch No To* fields to specify the lower and upper limits of the range of batch numbers whose batch tickets should be filtered and displayed in the report.
2. Use the lookups next to the *Super Batch No From* and *Super Batch No To* fields to specify the lower and upper limits of the range of Super Batch numbers whose batch tickets should be filtered and displayed in the report.
3. Use the *Browse* button in the *Batch Status* field to select batch statuses to filter batch tickets associated with any of the selected statuses.
4. Use the lookups next to the *Formula ID From* and *Formula ID To* fields to specify the lower and upper limits of the range of formula IDs to filter batch tickets of the batches that use formulas falling in this range.
5. Use the lookups next to the *Schedule Start Date No From* and *Schedule Start Date To* fields to specify the lower and upper limits of the range of scheduled start dates to filter batch tickets of batches whose scheduled start dates fall in this range.
6. Use the lookups next to the *Schedule End Date No From* and *Schedule End Date To* fields to specify the lower and upper limits of the range of scheduled end dates to filter batch tickets of batches whose scheduled end dates fall in this range.
7. Select the desired options to print additional details in the report. Available options are *Boilerplates*, *Literal Text*, *Labor Cost*, *Lots*, *BOMs*, *Consumables*, *FG Allocation*, *Notes*, *Byproducts*, and *Super Batch*.
8. Click the *Print* button to generate the report.

An example of a generated *Batch Ticket Report* is provided on the following page.

Batch Ticket Report					
Main Report		1 / 2		SAP CRYSTAL REPORTS	
Batch Number	Batch Type	Owner	manager	Production WBS	02
Status	Mix			Demand Type	Dependent
Formula ID	Closed			Demand Source	Sales Order
Revision No.	for_sberrry_shake	for_sberrry_shake		Sales Order #	164
Current Run #	0000000002	Customer Code	C01	Total Runs	1
Sch.Start Date	1	Customer Name	C01	Process Cell	
Sch.End Date	14/08/18	Act. Start Date	13/08/18	Theoretical Density	0.80
Order Weight	14/08/18	Act. End Date	13/08/18	Density Override	0.00
Order Volume	5.000 KG	Batch Weight	5.000 KG		
Setup Time	6.250 LT	Batch Volume	6.250 LT		
Setup Labor	0:00:00	Variable Time	0:00:00	Fixed Time	0:00:00
Setup Overhead	0.00	Variable Labor	0.00	Fixed Labor	0.00
	0.00	Variable Overhead	0.00	Fixed Overhead	0.00
Previous Batch Ticket					
Date					
Notes					
FG/BATCH OUTPUT DETAILS					
SNO	ITEM CODE	DESCRIPTION	ORDERED QTY		
1	Sberrry_juice	Sberrry_juice	0.00 KG		
Fill Level: 1.000 KG					
		01-002	5.000 KG		
RAW MATERIAL DETAILS					
SNO.	ITEM CODE	DESCRIPTION	STD QTY	ISSUED QTY	
1	Sberrry_pulp	Sberrry_pulp	0.000 KG	2.500 KG	

SNO.	ITEMCODE	DESCRIPTION	STDQTY	ISSUEDQTY
1	Sberry_pulp	Sberry_pulp	0.000 KG	2.500 KG
		Return (-)		0.00
<u>Lot Number:</u>		<u>Bin Number:</u>	<u>Qty.</u>	
B1		01-SYSTEM-BIN+LOCATION	2.500KG	
SNO.	ITEMCODE	DESCRIPTION	STDQTY	ISSUEDQTY
2	Sweetner	Sweetner	0.000 KG	1.250 KG
		Return (-)		0.00
<u>Lot Number:</u>		<u>Bin Number:</u>	<u>Qty.</u>	
B2		01-SYSTEM-BIN+LOCATION	1.250KG	



BatchMaster ERP with SAP Business One 18.2 – Production User Guide

SAP CRYSTAL REPORTS

Batch Report

SNO.	ITEMCODE	DESCRIPTION	STD QTY	ISSUED QTY
3	water	water	0.000 kg	1.250 kg

Return (-) 0.00

Lot Number	Bin Number	Qty
01-SYSTEM-BIN-LOCATION		1.250kg

QC Test

Batch # BnewCoA

Product : Sberry_juice

SNO	TEST ID	TEST DESC	NORMAL VALUE	LOWER VALUE	UPPER VALUE	RESULT
1	COLOUR	COLOUR	Pass / Fail			Pass
Remark						
2	COLOUR	COLOUR	Pass / Fail			Pass
Remark						
3	COLOUR	COLOUR	Pass / Fail			Pass
Remark						
4	COLOUR	COLOUR	Pass / Fail			Pass
Remark						



10.1.2 Batch Ticket Layout

You can create multiple Batch Ticket layouts from **Reports and Manager** → **Add-On Layouts** → **Batch Ticket Layout**.

The screenshot shows the 'Report and Layout Manager' window. On the left, a tree view under 'Add-On Layouts*' is expanded to 'Batch Ticket Layout'. The main area displays a table of layouts and a configuration form for the selected layout.

#	Layout ID	Layout Name	Type	Language
1	A0010001	Batch Ticket Report	Crystal Reports	English

ID	A0010001	Description	
Name	Batch Ticket Report		
Layout Type	Crystal Reports		
Last Updated	03/15/18	Printer	Microsoft XPS Docume
Author	himanshu	1st Page Printer	None
Status	Active	No. of Copies	1
B1 Version		Localization	
Crystal Reports		Language	English

Buttons: OK, Cancel, Refresh, Advanced, Edit, Delete, Export, Import

The layouts you create here can be printed for the batch ticket using the *Print preview* icon on the toolbar.



File Edit View Data Go To Modules Tools Window Help

Main Menu **To print the Batch Ticket Layout**

Batch Ticket

Batch Number	BF5001	Production Whse	01
Type	Mix	Demand Type	Independent
Status	Released	Sales Order	
Formula ID	F001	Customer Key	
Revision	0000000001	Last Issue/Alloc Date	03/23/18
Warehouse			
Owner	manager		

Production Stages
Deviations

General	Formula	Finished Goods	By Products	Consumables	Cost
Required Date				Process Cell	
Sch. Start Date	11/14/17	00:00			
Sch. End Date	11/14/17	00:00			
Actual Start Date	11/14/17	17:00			
Actual End Date		00:00			
Order Weight	2.000	KG			
Order Volume	2.000	L			
Batch Weight	2.000	KG			
Batch Volume	2.000	L			
Produced Weight	0.000	KG			
Produced Volume	0.000	L			
Theoretical Density	1.00				
Density Override	0.00				

Description	F001
Notes	

The Printed Batch Ticket Layout displays as below.



Batch Ticket Report

SAP CRYSTAL REPORTS®

Main Report

BATCH TICKET REPORT													
BN1635P													
Batch Number	000001	Q number	Production	Who	01								
Batch Type	PS	Release	Who Code	Release	01								
Status	Released	Who Code	Release	01	01								
Formula ID	000000001	Customer Code	Release Order	0									
Revision No.	1	Customer Name	Total Runs	1									
Current Run #	11/14/17	Act. Start Date	Process Call	1.00									
Sub Start Date	11/14/17	Act. End Date	Theoretical Density	0.00									
Sub End Date	200 KG	Batch Weight	Density Override	0.00									
Order Volume	2000	Batch Volume	Total Std Cost	0.00									
Setup Time (Min)	0000	Variable Time (Min)	Fixed Time (Min)	0000									
Setup Labor	0.00	Variable Labor	Fixed Labor	0.00									
Setup Overhead	0.00	Variable Overhead	Fixed Overhead	0.00									
Previous Batch Ticket Date	23-Jan-2018												

Notes

Item Code	Who Code	Quantity	Unit	Weight Required	Volume Required	Q R ID
Material	01	Standard	1.000	KG	1.000	1.000
	01	Issued	KG			
	01	Return (-)	KG			
	01	Return (-)	KG			
Material	01	Standard	1.000	KG	1.000	1.000
	01	Issued	KG			
	01	Return (-)	KG			
	01	Return (-)	KG			

FINISHED GOOD INFORMATION

Item Code	Description	Who Code	Quantity	Unit
01	01	01	2.000	KG
			Actual Qty	0.00
			Actual Qty	0.00
Lot Number	Bin Number	Std Quantity	Actual Quantity	Unit
		2.000	0.00	

Current Page No.: 1

Total Page No.: 2

Zoom Factor: 50%



For a customized Batch Ticket Report you need to make the corresponding changes in Batch Ticket Layout as well. Production Dashboard supports Batch Ticket layout only and Batch Ticket Screen supports both Batch Ticket layout and report.



10.2 Batch Pick List Report

Go to: **Production → Production Reports → Process Manufacturing Reports.**

The *Batch Pick List Report* lets you view items that have been picked for specific batches. You can also view the actual quantity, warehouse, and the quantities of the items picked.

Batch Pick List Report- Selection Criteria

Batch No Range

Batch No From: batch01-002
Batch No To: batch01-003

Schedule Start Date Range

Schedule Start Date From: [Date Picker]
Schedule Start Date To: [Empty]

Schedule End Date Range

Schedule End Date From: [Empty]
Schedule End Date To: [Empty]

Pick Doc No Range

Pick Doc No From: [Empty]
Pick Doc No To: [Empty]

OK Cancel

Batch No. Range

Batch No. From: Specify the lower limit of the range of batch numbers to filter and display pick lists of the batches whose batch numbers fall in this range. You can select the desired batch using the lookup near the *Batch No. From* field.

Batch No. To: Specify the upper limit of the range of batch numbers to filter and display pick lists of the batches whose batch numbers fall in this range. You can select the desired batch using the lookup near the *Batch No. To* field.

Schedule Start Date Range

Schedule Start Date From: Specify the lower limit of the range of scheduled start dates to filter and display pick lists of the batches whose scheduled start dates fall in this range. You can select the desired date using the lookup near the *Schedule Start Date From* field.



Schedule Start Date To: Specify the upper limit of the range of scheduled start dates to filter and display pick lists of the batches whose scheduled start dates fall in this range. You can select the desired date using the lookup near the *Schedule Start Date To* field.

Schedule End Date Range

Schedule End Date From: Specify the lower limit of the range of scheduled end dates to filter and display pick lists of batches whose scheduled end dates fall in this range. You can select the desired date using the lookup near the *Schedule End Date From* field.

Schedule End Date To: Specify the upper limit of the range of scheduled end dates to filter and display pick lists of batches whose scheduled end dates fall in this range. You can select the desired date using the lookup near the *Schedule End Date To* field.

Pick Doc No. Range

Pick Doc No. From: Displays the lower limit of the range of document numbers of the pick lists that have been created to pick items for specified batches.

Pick Doc No. To: Displays the upper limit of the range of document numbers of the pick lists that have been created to pick items for specified batches.

Print: Click the *Print* button to generate the report.

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

10.2.1 Generating a Batch Pick List Report

1. Use the lookups next to the *Batch No From* and *Batch No To* fields to specify the lower and upper limits of the range of batch numbers whose pick lists should be filtered and displayed in the report.
2. Use the lookups next to the *Schedule Start Date No From* and *Schedule Start Date To* fields to specify the lower and upper limits of the range of scheduled start dates to filter pick lists of the batches whose scheduled start dates fall in this range.
3. Use the lookups next to the *Schedule End Date No From* and *Schedule End Date To* fields to specify the lower and upper limits of the range of scheduled end dates to filter pick lists of the batches whose scheduled end dates fall in this range.
4. Use the lookups next to the *Pick Doc No From* and *Pick Doc No To* fields to specify the lower and upper limits of the range of document numbers of the pick lists that should be displayed in the report.



5. Click the *Print* button to generate the report.

An example of a generated *Batch Pick List Report* is provided below.

							09/13/2019 3:46:36PM
BATCH PICK LIST REPORT- EXPLOSION							
QASQL_WMS_58							
Batch No	batch01-002			Sch.Start Date	05/15/2018	Act. Start Date	05/14/2018
Formula ID	-			Sch.End Date	05/15/2018	Act. End Date	05/14/2018
Revision No	0000000001			Batch Weight	10.000	Batch Type	Fill
Batch Status	Closed	Process Cell ID	Filler	Batch Volume	5.000		
Pick Doc No.	Item Code	Description	Whs Code	Whs Desc	Actual On Hand Qty	UOM	Pick Qty UOM
8	mango pulp	Intermediate	01	General Warehouse-01	192.000	KG	10.00 KG
PICK LIST - MAIN							
Batch No	batch01-002						
Item Code	Description	Whs Code	Pick Bin	Drop Bin	Lot No	Picked Qty UOM	
mango pulp	Intermediate	01	01-SYSTEM-BIN- LOCATION	01-STAGE	batch001	10.000	KG



10.3 Critical Material Report

Go to: Production → Production Reports → Process Manufacturing Reports.

For the batch, you can generate this report using the *Show Critical Materials* option from the right click menu/Go To option on the Batch Entry, Batch Ticket, Batch Close, Super Batch Close screens.

The *Critical Material Report* shows complete details of those materials which are short in inventory and are needed to meet production obligations. The system calculates the:

Quantity Available for production = On-hand Quantity – Production Allocation Quantity

Batch No Range

Batch No. From: Specify the lower limit of the range of batch numbers to display critical material needs in these batches.

Batch No. To: Specify the upper limit of the range of batch numbers to display critical material needs in these batches.

Apply Date: Specify an actual Start Date for the batch.

Print: Click the *Print* button to generate the report.

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

10.3.1 Generating a Critical Material Report

The easiest and most relevant way to generate this report is:

1. Recall the batch for which the report needs to be generated on the *Batch Entry*, *Batch Ticket*, *Batch Close*, or *Super Batch Close* screen.
2. Select the *Show Critical Materials* options from the Right click pop up menu or Go To Option.

You can also generate this report for a range of batches from the Critical Material Report screen in the Process Manufacturing Reports Menu. On the screen:

1. Use the lookups next to the *Batch No From* and *Batch No To* fields to specify the lower and upper limits of the range of batch numbers to display critical material needed in these batches in the report.
2. Select the date on which the report should be generated in the *Apply Date* field.



Critical Material Report

Batch No Range:

Batch No From: 001

Batch No To: 1002

Apply Date: 10/27/14

Print **Cancel**

3. Click the *Print* button to generate the report.

An example of a generated *Critical Material Report* is displayed below.

03/06/2019 11:51:42								
CRITICAL MATERIAL REPORT								
QASQL_WMS_58								
Batch No. PAB-70-007			Actual Start Date 16/07/18					
Item Code	Warehouse	Required Qty (R)	OnHand Qty (OH)	Allocated Qty (A)	Qty Available For Production (OH-A)	Ordered Qty (O)	Committed Qty (C)	UOM
Apple pulp	01	27.788	5.000	0.000	5.000	7.174	0.000	KG

Report Details

- **Batch No.:** Batch number for which the report is being printed.
- **Item Code:** Formula and BOM Items used in the Batch.
- **Warehouse:** Warehouse of the Item.
- **Required Quantity (R):** Actual Quantity of item required in the Batch in Stock UOM.
- **On Hand Quantity (OH):** On hand Quantity of the Item available in the Warehouse in Stock UOM.
- **Allocated Quantity (A):** Allocated Quantity of Item from given Warehouse in Stock UOM.
- **Quantity Available for Production (OH - A):** On hand Quantity – Allocated Quantity in Stock UOM.
- **Ordered Quantity (O):** Quantity that are to be received by Purchase Orders and BMM Production on and before the Actual Start Date of the Batch in Stock UOM.
- **Committed Quantity (C):** Quantity that are to be sent by all Open Sales Orders and not cancelled, from the given warehouse in Stock UOM.
- **UOM:** Stock UOM



10.4 Projected Material Availability By Batches Report

Go to: Process Manufacturing → Production Reports

The *Projected Material Availability Report* presents detail-level information about currently critical, on hand, committed-to-sales, committed-to-production, and projected available materials. You can use the report criteria to run the report for the range and combination of items and warehouses, or to compare the demand and supply of materials. Optionally, you can apply *Item Group* and *Item Properties* filters. You can also run this report to display records that pertain only to the critical batches.

The data in the report is displayed in groups that are based on the batch start date and time records. The projected available balances (PAB) are calculated after offsetting the raw material demands from the current batch demands. The batches with insufficient raw materials or available finished goods are displayed in red. Click the *Generate Purchase Requisition* button to generate a purchase order or a purchase requisition for the raw materials that relate to the deficit finished goods.

You can drill down to the *Demand Supply* report from the *Opening PAB* column to display the demand and supply details for the desired combination of items and warehouses. You can also use the *Total Supply Qty* column to drill down to the details of the supply of raw materials to view the *Total Supply Report*. A drilldown on this read-only screen takes you to the supply document.

10.4.1 Report Selection Criteria

The screenshot shows a dialog box titled "Projected Material Availability Report - Selection Criteria". It contains the following fields and options:

- Scheduled End Date: 12/03/17
- Item From: Rm001
- Item To: Rm002
- Batch From: Assb-001
- Batch To: FG001-002
- Process Cell From: (empty)
- Process Cell To: (empty)
- Warehouse From: 01
- Warehouse To: Ind
- ☒ Item Group
- ☐ Item Properties
- ☐ Display critical items only
- OK button
- Cancel button



Scheduled End Date: Enter the scheduled end date for batches.

Item From: Enter the start value in the range of items.

Item To: Enter the end value in the range of items.

Batch From: Specify the lower range of the batch number of the batch for which material availability is required to be viewed.

Batch To: Specify the upper range of the batch number of the batch for which material availability is required to be checked.

Process Cell From: Enter the start value in the range of Process cell.

Process Cell To: Enter the end value in the range of Process cell.

Warehouse From: Enter the start value in the range of warehouses.

Warehouse To: Enter the end value in the range of warehouses.

Item Group: Select this checkbox to display the records according to item groups.

Item Properties: Select this checkbox to group the records displayed according to the item properties.

Display Critical Items Only: Select this checkbox to display only those records that contain critical items.

OK: Click this button to generate the report.

Cancel: Click this button to discard the changes and exit.



10.4.2 Report Details

Save Layout: You can add/remove columns in the grid or group the data. Choose the *Save Layout* button to retain your settings. You can enter a setting name or override a *Default* setting.

Projected Material Availability Report

Default Save Layout

Drag a column header here to group by that column

Batch Number	DemandType	SO Number	Customer Key	BatchStatus	Start Date	End Date	Order Weight	Batch Weight	Formula 1
BFD	1	0		Allocated	10/31/2017	10/31/2017	10.000000	10.000000	F001
BSO001	2	1		Released	10/31/2017	11/03/2017	2000.000000	2000.000000	F001
BC001	1	0		Released	11/03/2017	11/12/2017	50.000000	50.000000	F001
B1new	1	0		Released	11/10/2017	11/10/2017	20.000000	20.000000	F001
BN	1	0		Released	11/13/2017	11/13/2017	1.000000	1.000000	F001
BFS001	1	0		Released	11/14/2017	11/14/2017	2.000000	2.000000	F001
Assb-002	2	0		New	11/14/2017	11/14/2017	100.000000	100.000000	F001
FG001-002	2	0		New	11/15/2017	11/15/2017	50.000000	50.000000	F001

Cancel Export to Excel Export to PDF Generate Purchase Requisition



When any raw material is insufficient for a batch, the batch header is shown against a red background, and the raw material is shown in black. Click on the headers to select the corresponding values in the report. You can expand each formula for details pertaining to insufficient raw materials.



Projected Material Availability Report

Default Save Layout

Drag a column header here to group by that column

Batch Number	DemandType	SO Number	Customer Key	BatchStatus	Start Date	End Date	Order Weight	Batch Weight	Formula 1
BFD	1	0		Allocated	10/31/2017	10/31/2017	10.000000	10.000000	F001
BSO001	2	1		Released	10/31/2017	11/03/2017	2000.000000	2000.000000	F001
Item Code	Item Description	Whs Code	UOM	Qty. Required	Opening PAB	Closing PAB	Shortage	Next Avail	
1	Rm001	01	KG	1,000.000	-9,776.00	-10,776.000	No		
2	Rm002	01	KG	1,000.000	-10,468.0	-11,468.000	No		
BC001	1	0		Released	11/03/2017	11/12/2017	50.000000	50.000000	F001
B1new	1	0		Released	11/10/2017	11/10/2017	20.000000	20.000000	F001
BN	1	0		Released	11/13/2017	11/13/2017	1.000000	1.000000	F001
BFS001	1	0		Released	11/14/2017	11/14/2017	2.000000	2.000000	F001
Assb-002	2	0		New	11/14/2017	11/14/2017	100.000000	100.000000	F001
FG001-002	2	0		New	11/15/2017	11/15/2017	50.000000	50.000000	F001

Cancel

Export to Excel

Export to PDF

Generate Purchase Requisition

Formula Grid

Item Code: This column displays the item code or identifier.

Item Description: This column displays the name of the item.

Whs Code: This column displays the warehouse that contains the item.

UOM: This column displays the unit of measure for the item.

Qty. Required: This column displays the quantity required in the batch in order to fulfill the order.

Opening PAB: The system loops through all the items and batches, calculates the PAB based on the demand and supply for a date, and displays this value in the PAB table.

Today's closing PAB becomes the opening PAB for tomorrow. But any negative closing PABs are taken as 0 (zero) in opening PABs for the next day.

Closing PAB: This column displays the value which is derived by deducting the demands (*Qty Required*) from the opening balances (*Opening PAB*).



Item Code: This column displays the item code or identifier.

Description: This column displays the item identifier.

Quantity Required: This column displays the quantity required.

Quantity to Order: This column displays the quantity to order.

Unit: This column displays the unit of measure for the item.

Vendor: This column displays the vendor code or identifier.

Vendor Name: This column displays the vendor name.

Purchase Requisition: Click the *Purchase Requisition* option, and then click the *Generate* button to perform the required action.

Purchase Order: Click the *Purchase Order* option, and then click the *Generate* button to perform the required action.

Generate: Select the rows for which you want to generate either a purchase requisition or a purchase order. Select either the *Purchase Requisition* or *Purchase Order* option. Now, click the *Generate* button to complete the request.

10.5 Batch in Process Report

Go to: Process Manufacturing → Production Reports

The *Batches in Report* screen lets you generate a report that displays a list of batches whose production is in progress.



You can choose to display only the desired details on the report using the filter parameters. Once filter criteria are employed on data, BatchMaster displays the results as a Crystal Report which you can print or export.

The screenshot shows a dialog box titled "Batch In Process Report". It has two input fields: "Batch No From" containing the text "batch6thapil" and "Batch No To" containing the text "bt5th april". Below these fields are two buttons: "Print" and "Cancel".



Batch No. From: Specify the lower limit of the range of batch numbers to display batches which fall in this range. You can select the desired batch using the lookup next to the *Batch No. From* field.

Batch No. To: Specify the upper limit of the range of batch numbers to display batches which fall in this range. You can select the desired batch using the lookup next to the *Batch No. To* field.

Print: Click the *Print* button to generate the report.

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

10.5.1 Generating a Batch In Process Report

1. Use the lookups next to the *Batch No. From* and *Batch No. To* fields to specify the lower and upper limits of the range of batch numbers to filter and display batches in process associated with the selected range in the report.
 - c. Click the *Print* button to generate the *Batch In Process Report*.

An example of a generated *Batch In Process Report* is provided below.

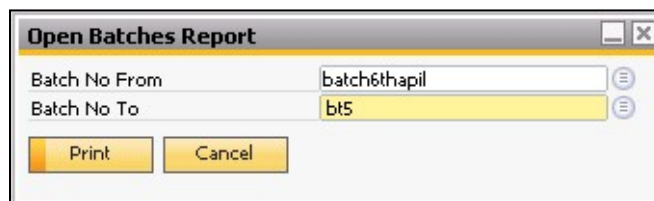
Batch In Process Report												
Batch No	DemandTypeDesc	DemandSource	Super Batch No	Batch Type	Formula ID	Revision No	Item Code	WhsCode	Description	Batch Status	ProcessCellId	EntryDate
batch6thapil	Independent	Batch Entry		Mix	Final Form	0000000001			Final Form	Released		06/04/13
batch6thapril2	Independent	Batch Entry		Mix	Final Form	0000000001			Final Form	Released		06/04/13
BMMApr/2013//0000001	Independent	Batch Entry		Mix	Final Form	0000000001			Final Form	New		04/04/13
BMMJul/2013//0000002	Independent	Batch Entry		Mix	Final Form	0000000001			Final Form	New	Mixer	22/07/13
BT1	Independent	Batch Entry		Mix	Final Form	0000000001			Final Form	Released		02/04/13
BT2	Independent	Batch Entry		Fill		0000000002	MS	01		Released		02/04/13
BT3	Independent	Batch Entry		Mix	Final Form	0000000001			Final Form	Released		04/04/13
bt4	Independent	Batch Entry		Assembly		0000000001	AI	01		Released		04/04/13
bt5	Independent	Batch Entry		Assembly		0000000001	AI	01		New		04/04/13
bt5th april	Independent	Batch Entry		Mix	Final Form	0000000001			Final Form	Released		05/04/13



10.6 Open Batches Report

Go to: Process Manufacturing → Production Reports

The *Open Batches Report* lets you view all open batches (i.e., batches with *New* or *Released* status).



Batch No. From: Specify the lower limit of the range of batch numbers to display the open batches that fall within this range. You can select the desired batch using the lookup next to the *Batch No. From* field.

Batch No. To: Specify the upper limit of the range of batch numbers to display the open batches that fall within this range. You can select the desired batch using the lookup next to the *Batch No. To* field.

Print: Click the *Print* button to generate the report.

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

10.6.1 Generating an Open Batches Report

1. Use the lookups next to the *Batch No. From* and *Batch No. To* fields to specify the lower and upper limits of the range of batch numbers to filter and display open batches in the report.
2. Click the *Print* button to generate the report.

An example of a generated *Open Batches Report* is provided below.



Open Batches Report										
Batch No	Super Batch No	Formula ID	Revision No	Formula Description	Batch Status	Scheduled Start Date	Scheduled End Date	LineType	Warehouse	It...
▼ batch6thapril		Final Form	0000000001	Final Form	Released	06/04/13	06/04/13	FinishedGood	01	BI
		Final Form	0000000001	Final Form	Released	06/04/13	06/04/13	Material	01	M
		Final Form	0000000001	Final Form	Released	06/04/13	06/04/13	BOMItem	01	S
		Final Form	0000000001	Final Form	Released	06/04/13	06/04/13	ByProduct	01	C
		Final Form	0000000001	Final Form	Released	06/04/13	06/04/13	Consumable	01	WA
▼ batch6thapril2		Final Form	0000000001	Final Form	Released	06/04/13	06/04/13	FinishedGood	01	BI
		Final Form	0000000001	Final Form	Released	06/04/13	06/04/13	Material	01	M
		Final Form	0000000001	Final Form	Released	06/04/13	06/04/13	BOMItem	01	S
▼ BMMApr/2013//00000001		Final Form	0000000001	Final Form	New	04/04/13	04/04/13	FinishedGood	01	BI
		Final Form	0000000001	Final Form	New	04/04/13	04/04/13	Material	01	M
		Final Form	0000000001	Final Form	New	04/04/13	04/04/13	BOMItem	01	S
▼ BMMAug/2013/Dev/00000004		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	FinishedGood	01	BI
		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	Material	01	M
		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	BOMItem	01	S
▼ BMMAug/2013/Dev/00000005		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	FinishedGood	01	BI
		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	Material	01	M
		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	BOMItem	01	S
▼ BMMAug/2013/Dev/00000006		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	FinishedGood	01	BI
		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	Material	01	M
		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	BOMItem	01	S
▼ BMMAug/2013/Dev/00000007		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	FinishedGood	01	BI
		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	Material	01	M
		Final Form	0000000001	Final Form	New	01/08/13	01/08/13	BOMItem	01	S

10.7 Batch Lot Detail Report

Go to: Production → Production Reports → Process Manufacturing Reports.

The *Batch Lot Detail Report* screen lets you generate a report that displays lot details of the raw materials used in batches.

Batch Lot Detail Report- Selection Criteria

Batch No Range

Batch No. From

Batch No. To

B001

B001

OK

Cancel

Batch Number Range

Batch No. From: Specify the lower limit of the range of batch numbers to display lot details of raw materials in these batches. You can select the desired batch using the lookup next to the *Batch No. From* field.



Batch No. To: Specify the upper limit of the range of batch numbers to display lot details of raw materials in these batches. You can select the desired batch using the lookup available next to the *Batch No. To* field.

Print: Click the *Print* button to generate the report.

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

10.7.1 Generating a Batch Lot Detail Report

1. Use the lookups next to the *Enter Batch No. From* and *Enter Batch No. To* fields to specify the lower and upper limits of the range of batch numbers to filter and display lot details of raw materials in the report.
 - d. Click the *Print* button to generate the report.

An example of a generated *Batch Lot Detail Report* is provided on the following page.

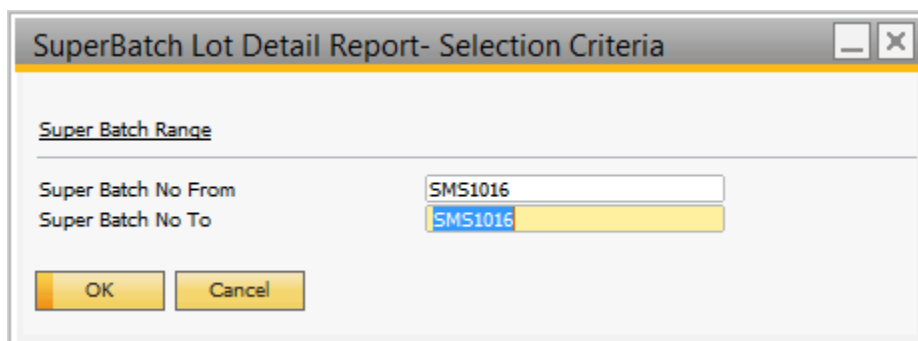
BATCH LOT DETAIL REPORT						
QASQL_WMS_58						
Batch No		B001		Status		Closed
Whs Code		01	<u>Qty in Stock</u>		<u>UOM</u>	<u>Qty in Display</u> <u>UOM</u>
Item Code		S_berry	OrderQty		6.000 KG	6.000 KG
Description		S_berry	ActualQty		0.000 KG	0.000 KG
			Qty Issued		6.000 KG	6.000 KG
Processed Lot	Lot / Bin Number		Qty	Stock UOM	Qty.	Display UOM
	SBR001/01-SYSTEM-BIN-LOCA TION		6.000	KG	6.000	KG
Processed Lot Total			6.000 KG			
Whs Code		01	<u>Qty in Stock</u>		<u>UOM</u>	<u>Qty in Display</u> <u>UOM</u>
Item Code		Sberry_pulp	OrderQty		6.000 KG	6.000 KG
Description		Sberry_pulp	Qty To Produce		0.000 KG	0.000 KG
			Qty Produced		6.000 KG	6.000 KG
Processed Lot	Lot / Bin Number		Qty	Stock UOM	Qty.	Display UOM
	SPI001/01-001		6.000	KG	6.000	KG



10.8 SuperBatch Lot Detail Report

Go to: Production → Production Reports → Process Manufacturing Reports.

The *SuperBatch Lot Details Report* screen lets you generate a report that displays lot details of each Super Batch and the component sub-batches. Using this report, you can view lot details of all the items involved in the Super Batch without having to open each Super Batch in the *Super Batch Entry* screen.



Super Batch Range

Super Batch Number From: Specify the lower limit of the range of Super Batch numbers to filter and display lot details of materials associated with the batches. You can select the desired Super Batch using the lookup next to the *Super Batch Number From* field.

Super Batch Number To: Specify the upper limit of the range of Super Batch numbers to filter and display lot details of materials pertaining to these batches. You can select the desired Super Batch using the lookup next to the *Super Batch Number To* field.

Print: Click the *Print* button to generate the report.

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

10.8.1 Generating SuperBatch Lot Detail Report

1. Use the lookups in the *Super Batch No From* and *Super Batch No To* fields to specify the lower and upper limits of the range of Super Batch numbers to display lot details of materials associated with the selected batches.
2. Click the *Print* button to generate the report.

An example of a generated *SuperBatch Lot Detail Report* is provided below.



09/13/2019
3:55:24PM

SUPERBATCH LOT DETAIL REPORT							
QASQL_WMS_58							
Super Batch No		SMS1016					
Batch No	Lot / Bin Number	Item Code /Description	Whs Code	Qty in Stock	UOM	Qty in Display	UOM
SMS1016-003	01-SYSTEM-BIN-LOCATION	IM-ab r2-ab	01	60.000	KG	60.000	KG
<u>Selection Criteria</u>					Printed By : manager		
Super Batch :		FROM : SMS1016 TO : SMS1016					

10.9 SO Converted to Batch Report

Go to: Production → Production Reports → Process Manufacturing Reports.

The *SO Converted to Batch Report* screen lets you generate a report for batches which have been created from sales orders.

SO Converted to Batch Report

Sales Order Range :

Sales Order From: 17

Sales Order To: 18

Doc Date Range

Doc Date From: 30/07/13

Doc Date To: 30/07/13

Print Cancel

Sales Order Range

Sales Order From: Specify the lower limit of the range of sales orders to display batches created from these sales orders. You can select the desired sales order using the lookup next to the *Sales Order From* field.

Sales Order To: Specify the upper limit of the range of sales orders to display batches created from these sales orders. You can select the desired sales order using the lookup next to the *Sales Order To* field.

Doc Date Range

Doc Date From: Specify the lower limit of a range of document dates (SO Date) to display batches created from these sales orders. You can also select the desired date using the lookup next to the *Doc Date From* field.



Doc Date To: Specify the upper limit of a range of document dates (SO Date) to display batches created from these sales orders. You can also select the desired date using the lookup next to the *Doc Date To* field.

Print: Click the *Print* button to generate the report.

Cancel: Click the *Cancel* button to close the screen without executing the utility.

10.9.1 Generating an SO Converted to Batch Report

1. Use the lookups next to the *Sales Order From* and *Sales Order To* fields to specify the lower and upper limits of the range of sales order numbers to display batches created from these sales orders.
2. Use the lookups next to the *Doc Date From* and *Doc Date To* fields to specify the lower and upper limits of the document dates (SO creation date) to display batches created from these sales orders.
3. Click the *Print* button to generate the report.

An example of a generated *SO Converted to Batch Report* is provided on the following page.

SO CONVERTED TO BATCH REPORT					
Nikhil_SDK					
Batch No: BMMAug/2013/Dev/0000004					
Formula ID: Final Form		Batch Type: Mix		Status: New	
				Process Cell: Mixer	
SO Number	Finished Goods	Location	Customer	Order Quantity	Unit
12	BMS Bottled Milk Shake	01 GeneralWarehouse	Dev	2.00	KG
Batch No: BMMAug/2013/Dev/0000005					
Formula ID: Final Form		Batch Type: Mix		Status: New	
				Process Cell: Mixer	
SO Number	Finished Goods	Location	Customer	Order Quantity	Unit
1	BMS Bottled Milk Shake	01 GeneralWarehouse	Dev	5.00	KG
Batch No: BMMAug/2013/Dev/0000006					
Formula ID: Final Form		Batch Type: Mix		Status: New	
				Process Cell: Mixer	
SO Number	Finished Goods	Location	Customer	Order Quantity	Unit
9	BMS Bottled Milk Shake	01 GeneralWarehouse	Dev	6.00	KG

10.10 Raw Material Requirement Analysis Report

Go to: Process Manufacturing → Production Reports

The *Raw Material Requirement Analysis Report* screen lets you generate a report that displays the quantities of formula ingredients required to produce a specific quantity of finished good.



Raw Material Requirement Analysis Report	
Finished Good Key	BMS
Finished Good Location	03
Finished Good Qty	
Finished Good Unit	KG
OK Cancel	

Finished Good Key: Specify the unique identification code of the finished good whose requirements for raw material should be displayed on the report.

Finished Good Location: Select the warehouse of the finished good item.

Finished Good Quantity: Specify the quantity of the finished good for which raw material requirement analysis should be done.

Finished Good Unit: Specify the unit in which the quantity of finished good is measured.

OK: Click the *OK* button to generate the report.

Cancel: Click the *Cancel* button to close the screen without executing the utility.

10.10.1 Generating Raw Material Requirement Analysis Report

1. Use the lookup next to the *Finished Good Key* field to specify the finished good for which the raw material requirement analysis should be done.
2. Select the location of the desired finished good using the lookup next to the *Finished Good Location* field.
3. Specify the quantity of the finished good for which raw material requirement analysis should be done in the *Finished Good Qty* field.
4. Select the unit in which the Finished Good Quantity is interpreted in the *Finished Good Unit* field.
5. Click the *OK* button to generate the report.



An example of a generated *Raw Material Requirement Analysis Report* is provided below.

Raw Material Requirement Analysis Report

SAP CRYSTAL REPORTS *

Main Report

02-Aug-2013
1:15:09 am

RAW MATERIAL REQUIREMENT ANALYSIS REPORT

Nikhil_SDK

Item Code	B_M_S	Formula ID	Form_MS
Description	Bottled Milk Shake		
Whs Code	01		

Quantity Required	Quantity Onhand	Unit	OrderWeight	OrderVolume
10.00	2.00	KG	5.00	5.00

FORMULA LINES

LineType	Item Code	Whs Code	Qty Required	Unit	Qty Onhand	Unit
Material	SG		10.00	KG	17.50	KG
Material	MLK		0.00	KG	5,036.00	KG
Material	FL		0.00	KG	5,000.00	KG
Material	Water		0.00	LT	0.00	LT

BOM LINES

10.11 Formula Production Report

Go to: Production → Production Reports → Process Manufacturing Reports.



You can use this report to find the total quantity of finished goods produced using the selected formulas over a period of time. This report also displays the overall material cost of the finished goods and the quantity (weight or volume) of the finished goods produced. In addition, the report displays the average cost and production yield for the selected duration. These numbers are also converted to monthly and annual averages.

Formula Production Report- Selection Criteria

Formula Range

Formula ID From: For_sberry_pulp
Formula ID To: For_sberry_pulp

Formula Class Range

Formula Class From:
Formula Class To:

Completion Date Range

Actual End Date From: 11/07/19
Actual End Date To: 12/09/19

Enter Measured: By Weight

OK Cancel

Formula Range

Formula ID From: Specify the lower limit of the range of formulas whose production yield should be displayed on the report. You can select the desired formula using the lookup available near the *Formula ID From* field.

Formula ID To: Specify the upper limit of the range of formulas whose production yield should be displayed on the report. You can select the desired formula using the lookup next to the *Formula ID To* field.

Formula Class Range

Formula Class From: Specify the lower limit of the range of formula classes that can be used to filter the formulas specified in the *Formula Range* section. You can select the desired formula class using the lookup next to the *Formula Class From* field.

Formula Class To: Specify the upper limit of the range of formula classes that can be used to filter the formulas specified in the *Formula Range* section. You can select the desired formula class using the lookup next to the *Formula Class To* field.



Completion Date Range

Actual End Date From: Specify the lower limit of the range of dates on which the production of finished goods (using the selected formulas) is complete. You can select the desired date using the lookup next to the *Actual End Date From* field.

Actual End Date To: Specify the upper limit of the range of dates on which the production of finished goods (using the selected formulas) is complete. You can select the desired date using the lookup next to the *Actual End Date To* field.

Measured In: Specify the unit parameter in which the quantity of the items in the report should be interpreted. Available options are:

- By Weight.
- *By Volume.*

Print: Click the *Print* button to generate the report.

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

10.11.1 Generating Formula Production Report

1. Use the lookups next to the *Enter Formula ID From* and *Enter Formula ID To* fields to specify the lower and upper limits of the range of formulas whose production yield should be displayed on the report.
2. Use the lookups next to the *Enter Formula Class From* and *Enter Formula Class To* fields to specify the lower and upper limits of the range of formula classes to filter the formulas in the *Formula Range* section.
3. Use the lookups next to the *Enter Completion Date From* and *Enter Completion Date To* fields to specify the lower and upper limits of the range of dates on which the production of finished goods (using the selected formulas) is complete.
4. Select the measuring parameter (*By Weight* or *By Volume*) using the lookup in the *Measured In* field.
5. Click the *Print* button to generate the report.



An example of a generated *Formula Production Report* is provided below.

09/12/2019 5:40:28PM							
FORMULA PRODUCTION REPORT							
QASQL_WMS_58							
By Weight							
Order By: Formula ID							
Formula ID / Revision No	Material Cost	Total		Average / Month		Average / Year	
		Cost	QtyWt	Cost	QtyWt	Cost	QtyWt
For_sberry_pulp-00000000 03	1.08	6.48	6.000	197.10	182.500	2,365.20	2,190.000
For_sberry_pulp							
For_sberry_pulp-00000000 05	3.02	15.10	5.000	459.29	152.083	5,511.50	1,825.000
For_sberry_pulp							
For_sberry_pulp-00000000 06	14.35	114.76	8.000	3,490.62	243.333	41,887.40	2,920.000
For_sberry_pulp							
For_sberry_pulp-00000000 07	18.36	36.72	2.000	1,116.90	60.833	13,402.80	730.000
For_sberry_pulp							
Total :				5,263.91	638.750	63,166.90	7,665.000
Total Listed Records : 4							



10.12 Material Usage Report

Go to: Production → Production Reports → Process Manufacturing Reports.

Use this report to find out your raw material usage in production over a period of time. The report displays the quantity of items used, by volume or by weight. This report also displays the total and average material cost of the items, and the total and average usage of the items on a monthly and annual basis.

The dialog box titled "Material Usage Report- Selection Criteria" contains the following fields and sections:

- Item Key Range**
 - Item No. From: Sberry_pulp
 - Item No. To: Sberry_pulp
- Warehouse Range**
 - WareHouse From: 01
 - WareHouse To: 01 (with a dropdown arrow)
- Date Range**
 - Activity Date From: (empty)
 - Activity Date To: (empty)

At the bottom are "OK" and "Cancel" buttons.

Item Code Range

Item Code From: Specify the lower limit of the range of items in production that should be displayed on the report. You can select the desired item using the lookup next to the *Item Code From* field.

Item Code To: Specify the upper limit of the range of items in production that should be displayed on the report. You can select the desired item using the lookup next to the *Item Code To* field.

Warehouse Range

Warehouse From: Specify the lower limit of the range of warehouses that can be used to further filter the items selected in the *Item Code Range* section. You can select the desired warehouse using the lookup next to the *Warehouse From* field.

Warehouse To: Specify the upper limit of the range of warehouses that can be used to further filter the items selected in the *Item Code Range* section. You can select the desired warehouse using the lookup available near the *Warehouse To* field.



Date Range

Activity Date From: Specify the lower limit of the time period for which material usage should be displayed on the report. You can select the desired date using the lookup next to the *Activity Date From* field.

Activity Date To: Specify the upper limit of the time period for which material usage should be displayed on the report. You can select the desired date using the lookup next to the *Activity Date To* field.

Print: Click the *Print* button to generate the report.

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

10.12.1 Generating a Material Usage Report

1. Use the lookups next to the *Enter Item Code From* and *Enter Item Code To* fields to specify the lower and upper limits of the range of items whose usage in production should be displayed on the report.
2. Use the lookups next to the *Enter Warehouse From* and *Enter Warehouse To* fields to specify the lower and upper limits of the range of warehouses that can be used to further filter the items selected in the *Item Code Range* section.
3. Select the lower and upper limits of the time period for which the material usage should be displayed on the report in the *Enter Activity Date From* and *Enter Activity Date To* fields, respectively.
4. Select the desired report type: *Raw Material Usage Report* or *Raw Material Usage Report (History)*.
5. Click the *Print* button to generate the report.

An example of a generated Material Usage Report is provided below.



09/12/2019
5:50:37PM

MATERIAL USAGE REPORT								
QASQL_WMS_58								
Item No. Description	Whs Code	Average Material Cost	Total		Average/ Month		Average/Year	
			Cost	Qty UOM	Cost	Qty UOM	Cost	Qty UOM
Sberry_pup	01	4.99	990.25	198.335 KG	1.72	0.344 KG	20.61	4.129 KG
Sberry_pup								
			990.25		1.72		20.61	
			990.25		1.72		20.61	

Selection Criteria

Item Code : FROM Sberry_pulp TO Sberry_pulp
Warehouse : FROM 01 TO 01
Activity Date : ALL

Printed By : manager

10.13 Material Where Used Report

Go to: Production → Production Reports → BMM Reports.

The *Material Where Used Report* screen lets you generate a report that displays formulas in which a specific material or a range of materials is used. This report is especially useful for costing, auditing, or regulatory purposes. You can also examine how a single material is used of evaluate the potential impact of changing materials in a formula.

Material Where Used Report

Item Code Range :

Item Code From AI

Item Code To SG

Print

Cancel

Item Code Range

Item Code From: Specify the lower limit of the range of items whose usage in batches should be displayed in the report. You can select the desired item using the lookup next to the *Item Code From* field.



Item Code To: Specify the upper limit of the range of items whose usage in batches should be displayed in the report. You can select the desired item using the lookup next to the *Item Code To* field.

Print: Click the *Print* button to generate the report.

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

10.13.1 Generating a Material Where Used Report

1. Use the lookups available near the *Item Code From* and *Item Code To* fields to specify the lower and upper limits of the range of items to display the batches that use or produce the items associated with the selected range.
2. Click the *Print* button to generate the report.

An example of a generated *Material Where Used Report* is provided on the following page.

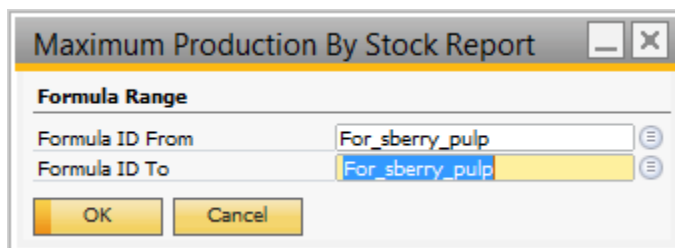
MATERIAL WHERE USED REPORT								
Nikhil_SDK								
Item Code : AI		Whs Code 01						
Description Assem It		Whs Name General Warehouse						
Item Type	Batch No	Status	Batch Type	Formula ID	StdQty	ActQty	Issued Qty	UOM
FinishedGood	bt5	New	Assembly	AI	2.00	2.00	0.00	KG
FinishedGood	bt4	Released	Assembly	AI	2.00	2.00	0.00	KG

Item Code : Assem It		Whs Code 01						
Description Assem It		Whs Name General Warehouse						
Item Type	Batch No	Status	Batch Type	Formula ID	StdQty	ActQty	Issued Qty	UOM
BOMItem	bt5	New	Assembly	AI	20.00	20.00	0.00	KG
BOMItem	bt4	Released	Assembly	AI	20.00	20.00	0.00	KG
BOMItem	2aug1	Closed	Mix	Form_MS	2.00	0.00	2.00	KG
BOMItem	SB-001-001-01	Released	Mix	Form_MS	1.00	1.00	0.00	KG
BOMItem	SB-001-001-02	Released	Mix	Form_MS	1.00	1.00	0.00	KG

10.14 Maximum Production by Stock Report

Go to: Process Manufacturing → Production Reports

Use this *what-if* report to find out how much you can produce with available raw material inventory. Enter a range of formulas you want to produce and the system will display the quantities that can be produced with the available raw material in the warehouse.



Formula Range

You can filter the finished goods whose maximum producible quantity should be displayed on the report using the formulas used to produce these finished goods.

Formula ID From: Specify the lower limit of the range of formulas to filter the finished goods. You can select the desired formula using the lookup next to the *Enter Formula From* field.

Formula ID To: Specify the upper limit of the range of formulas to filter the finished goods. You can select the desired formula using the lookup available next to the *Enter Formula To* field.

Print: Click the *Print* button to generate the report.

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

10.14.1 Generating a Maximum Production by Stock Report

1. Use the lookups next to the *Enter Formula From* and *Enter Formula To* fields to specify the lower and upper limits of the range of formulas used to filter the finished goods whose maximum producible quantity should be displayed in the report.
2. Click the *Print* button to generate the report.

An example of a generated *Maximum Production By Stock Report* is provided below.



9/13/2019
4:13:38PM

MAXIMUM PRODUCTION BY STOCK REPORT

QASQL_WMS_58

Formula ID For_sberrypulp		Revision No.		0000000009		
FG / Intermediate	BOM Whs Code	Max.Prod Qty	Unit	Total Stock Qty	Unit	Fill Level Fill Unit
Sberrypulp	02	2,537.00	KG	0.00	KG	0.00
Sberrypulp	General Warehouse					
Sberrypulp	01	0.00	KG	7,080.66	KG	0.00
Sberrypulp	General Warehouse-01					

FORMULA LINE DETAILS

Item Code	Warehouse	Qty Required	Unit	Onhand Qty	Unit	
S_berry	01	1.00	KG	2,646.00	KG	(Sized based on availability of Formula item)
S_berry						

Selection Criteria

Printed By : manager

Formula ID : FROM For_sberrypulp TOFor_sberrypulp



10.15 Production Summary Report

Go to: **Production → Production Reports → Process Manufacturing Reports.**

Use this report to view a summary of details related to production activities, such as batch numbers, formulas used in production, completion dates, customers for whom the goods are produced, quantity of finished goods manufactured, and the quantity or cost of raw materials used in production activities.

Production Summary Report- Selection Criteria

Batch Range:

Batch No from

Batch No To

Formula Range :

Formula ID From

Formula ID To

Customer Key Range:

Customer From

Customer To

Completion Date:

Completion Date From

Completion Date To

Enter Measured:

Report Type

OK Cancel

Batch Ranges

Batch No From: Specify the lower limit of the range of batch numbers that can be used to filter data displayed on the report. You can select the desired batch number using the lookup next to the *Batch No From* field.

Batch No To: Specify the upper limit of the range of batch numbers that can be used to filter data displayed on the report. You can select the desired batch number using the lookup next to the *Batch No To* field.



Formula Range

Formula ID From: Specify the lower limit of the range of formulas that can be used to filter data displayed in the report. You can select the desired formula using the lookup next to the *Formula ID From* field.

Formula ID To: Specify the upper limit of the range of formulas that can be used to filter data displayed on the report. You can select the desired formula using the lookup next to the *Formula ID To* field.

Customer Key Range

Customer From: Specify the lower limit of the range of customers that can be used to filter data displayed in the report. You can select the desired customer using the lookup next to the *Customer From* field.

Customer To: Specify the upper limit of the range of customers that can be used to filter data displayed in the report. You can select the desired customer using the lookup next to the *Customer To* field.

Completion Date

Completion Date From: Specify the lower limit of the range of completion dates that can be used to filter data displayed in the report. You can select the desired date value using the lookup next to the *Completion Date From* field.

Completion Date To: Specify the upper limit of the range of completion dates that can be used to filter data displayed on the report. You can select the desired date value using the lookup next to the *Completion Date To* field.

Enter Measured: Specify the unit parameter in which the quantity of the items in the report should be interpreted. Available options are:

- By Weight
- By Volume

Report Type: Select the desired report type. Available options are:

- *Production Cost Summary Report*
- *Production Cost Summary Report (History)*

Print: Click the *Print* button to generate the report.

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



10.15.1 Generating a Production Summary Report

1. In the *Batch No From* and *Batch Number To* fields, select the lower and upper limits of the range of batch numbers to filter production details on the report.
2. In the *Formula ID From* and *Formula ID To* fields, select the lower and upper limits of the range of formulas to be used to filter production details in the report.
3. In the *Customer From* and *Customer To* fields, select the lower and upper limits of the range of customers to be used to filter production details on the report.
4. Select the lower and upper limit of a range of completion dates, in the *Completion Date From* and *Completion Date To* fields, to filter production details in the report.
5. Select the measuring parameter (*By Weight* or *By Volume*) using the lookup available near the *Measured In* field.
6. Select the *required Report Type* from *Production Report Summary/Production Report Summary (History)*.
7. Click the *Print* button to generate the report.

An example of a generated *Production Summary Report* is provided below.

09/13/2019
4:16:14PM

PRODUCTION SUMMARY REPORT						
QASQL_WMS_58						
Batch No.	Formula ID	Description	End Date	Customer Weight Code	Yielded	Raw Material Cost/SysWt
B001	For_sberry_pulp	For_sberry_pulp	08/21/2018		6.00	1.08

Total Number Listed : 1

Selection Criteria

Batch

Formula

Customer

Completion Date

Measured

Report Type

FROM : B001 TO : B001

ALL

FROM : C01 TO : Carry

ALL

By Weight

Production Summary Report

Printed By : manager



10.16 Production Cost Summary Report

Go to: Production → Production Reports → Process Manufacturing Reports.

Use this report to view a summary of various costs associated with production batches. The information displayed in the report includes material costs, packaging cost, BOM/Formula Consumable costs, BOM/Formula labor & overhead costs, total production cost, total quantity, total cost per unit etc.

You can choose to display only the desired batches using the filter criteria. In other words, you can filter batches that:

- Use specific formulas (Formula Range).
- Produce specific items (Item Code Range).
- Produce items associated with specific warehouses (Warehouse Range).
- *Pertain to a specific time period defined by completion dates (Completion Date Range).*

Production Cost Summary Report- Selection Criteria

Formula Range

Formula ID From: For_sberry_pulp
Formula ID To: For_sberry_pulp

Item Code Range

ItemKey From: 001
Item Key To: Z_RM01

Warehouse Range

Warehouse From: 01
Warehouse To: UJJAIN

Completion Date Range

Completion Date From: 01/01/01
Completion Date To: 01/01/49

Report Type: Production Cost Summary Report

OK Cancel

Formula Range

Enter Formula ID From: Specify the lower limit of the range of formulas that can be used to filter data displayed on the report. You can select the desired formula using the lookup next to the *Enter Formula ID From* field.



Enter Formula ID To: Specify the upper limit of the range of formulas that can be used to filter data displayed on the report. You can select the desired formula using the lookup next to the *Enter Formula ID To* field.

Item Code Range

Enter Item Code From: Specify the lower limit of the range of items that can be used to filter data displayed on the report. You can select the desired item using the lookup next to the *Enter Item Code From* field.

Enter Item Code To: Specify the upper limit of the range of items that can be used to filter data displayed on the report. You can select the desired item using the lookup next to the *Enter Item Code To* field.

Warehouse Range

Enter Warehouse From: Specify the lower limit of the range of warehouses that can be used to further filter the items selected in the *Item Code Range* section. You can select the desired warehouse using the lookup next to the *Enter Warehouse From* field.

Enter Warehouse To: Specify the upper limit of the range of warehouses that can be used to further filter the items selected in the *Item Code Range* section. You can select the desired warehouse using the lookup next to the *Enter Warehouse To* field.

Completion Date Range

Enter Completion Date From: Specify the lower limit of the range of completion dates that can be used to filter data displayed in the report. You can select the desired date using the lookup next to the *Enter Completion Date From* field.

Enter Completion Date To: Specify the upper limit of the range of completion dates that can be used to filter data displayed on the report. You can select the desired date using the lookup next to the *Enter Completion Date To* field.

Enter Report Type: Select the desired report type. Available options are:

- *Production Cost Summary Report*
- *Production Cost Summary Report (History)*

Print: Click the *Print* button to generate the report.

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



10.16.1 Generating Production Cost Summary/Production Cost History Report

1. Use the lookups next to the *Enter Formula ID From* and *Enter Formula ID To* fields to select the lower and upper limits of the range of formulas to filter production cost details displayed in the report.
2. Use the lookups next to the *Enter Item Code From* and *Enter Item Code To* fields to select the lower and upper limits of the range of item codes to filter production cost details displayed in the report.
3. Use the lookups next to the *Enter Warehouse From* and *Enter Warehouse To* fields to select the lower and upper limits of the range of warehouses to filter items specified in the *Item Code Range* section.
4. Use the lookups next to the *Enter Completion Date From* and *Enter Completion Date To* fields to select the lower and upper limits of the range of completion dates to filter production details in the report.
5. Use the drop-down next to the *Enter Report Type* field to select the desired type of report.
6. Click the *Print* button to generate the report.

An example of a generated *Production Cost Summary Report* is provided below.

PRODUCTION COST SUMMARY REPORT									
QASQL_WMS_58									
Batch Number	Finished Good Key	Formula ID	Material Cost	Container Cost	Cons. Cost	Labor & Overhead	Total Cost	Total Unit Produced	RMC / Per Unit
	Whs Code	Batch Completed							
B001	Sberry_pulp	For_sberry_pulp	6.48	0.00	0.00	0.00	6.48	6,000 KG	1.08
B12N0	Sberry_pulp 01	8/21/2018 12:00:00AM							
	Sberry_pulp	For_sberry_pulp	15.10	0.00	0.00	0.00	15.10	5,000 KG	3.02
B554	Sberry_pulp 01	4/12/2019 12:00:00AM							
	Sberry_pulp	For_sberry_pulp	42.28	0.00	0.00	1567.46	1609.74	4,000 KG	402.44
BCo12	Sberry_pulp 01	4/15/2019 12:00:00AM							
	Sberry_pulp	For_sberry_pulp	36.72	0.00	0.00	1159.80	1196.52	2,000 KG	598.26
m15	Sberry_pulp 01	4/19/2019 12:00:00AM							
	Sberry_pulp	For_sberry_pulp	36.24	0.00	0.00	1159.80	1196.04	2,000 KG	598.02
PGTR01	Sberry_pulp 01	4/16/2019 12:00:00AM							
	Sberry_pulp	For_sberry_pulp	36.24	0.00	0.00	1093.80	1130.04	2,000 KG	565.02
	Sberry_pulp 01	4/16/2019 12:00:00AM							
Total Costs :			173.06	0.00	0.00	4980.86	5153.92		
Total Number Listed : 6									
Printed By : manager									
Selection Criteria									
Formula ID : FROMFor_sberry_pulpTOFor_sberry_pulp									
Item Code: FROMSberry_pulpTOSberry_pulp									



09/12/2019
5:57:11PM

PRODUCTION COST SUMMARY REPORT										
Batch Number	Finished Good Key	Formula ID	Material Cost	Container Cost	Cons. Cost	Labor & Overhead	Total Cost	Total Unit Produced	Unit	RMC / Per Unit
Whs Code		Batch Completed								
Total Costs :										
Total Number Listed : 0						Printed By : manager				
<u>Selection Criteria</u>										
Formula ID :		FROMFor_sberry_pulpTOFor_sbeny_pulp								
Item Code :		FROMSberry_pulpTOSbeny_pulp								
Warehouse :		FROM01T001								
Warehouse :										
Completion Date :		ALL								
Report Type :		Production Cost Summary Report (History)								

10.17 Lot Recall Letter

Go to: Process Manufacturing → Production Reports

Use this tool to generate product recalls for finished goods have been sold. You can give a range of lot numbers or lot creation dates if you do not know lot numbers.

You can choose to generate lot recall letter for those item lots that are:

- Associated with a specific range of lots (Lot Range).
- Attached with a specific time period defined by the dates in which the lots were created (Lot Creation Date Range).

Lot Recall Letter⌵ ⌵

Item Code

FG03

⌵

Lot From

Sep1374

⌵

Lot To

Sep1374

⌵

Lot Created From

09/24/13

Lot Created To

09/24/13

📅

OK

Cancel

Item Code: Specify the item for which the lot recall letter is to be generated.

Lot From: Specify the lower limit of a range of lots that should be recalled.



Lot To: Specify the upper limit of the range of lots that should be recalled.

Lot Created from: Specify the lower limit of the time period (defined by the dates in which the lots were created) based on which item lots can be filtered.

Lot Created to: Specify the upper limit of the time period (defined by the dates in which the lots were created) based on which item lots can be filtered.

OK: Click the *OK* button to generate the report.

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

10.17.1 Generating a Lot Recall Letter

1. Use the lookup next to the *Item Code* field to select the item for which the lot recall letter is to be generated.
2. Use the lookups next to the *Lot From* and *Lot To* fields to specify the lower and upper limits of the range of lots to be included in the *Lot Recall Letter*.
3. Use the lookups next to the *Lot Created From* and *Lot Created To* fields to specify the lower and upper limits of the time period, defined by the lot creation date, to filter lots included in the *Lot Recall Letter*.
4. Click the *OK* button to generate the *Lot Recall Letter*.

An example of a generated *Lot Recall Letter* is provided below.

Lot Recall Letter
September 24, 2013
Dear
Please be advised that is voluntarily recalling following lot numbers of , due to the lack of assurance of product sterility .
Item Key :
Item Description :
Item Lot Number :
Our records indicate that you may have received this product. Immediately examine your inventory and determine if this product is in your possession. If so, please discontinue the use of the product and return it in accordance with the information contained in this letter . If you have distributed any of the from either of the above product lots, immediately contact your accounts, advise them of the recall situation and have



10.18 Lot Traceability Report

Go to: Process Manufacturing → Production Reports

The *Lot Traceability* screen helps you track your inventory usage. Using this utility, you can:

- View complete composition of a finished good lot to the last level.
- Find where a particular raw material lot is used.

Lot Traceability Report

Item Code: FinG001

Lot From: L98

Lot To: L98

☒ Lot Explosion ☐ Where Used

OK Cancel

Item Code: Specify the item for which the lot explosion should be executed.

Lot From: Specify the lower limit of the range of lots that should be included in the lot explosion.

Lot To: Specify the upper limit of the range of lots that should be included in the lot explosion.

Lot Explosion: Choose this option if you want to view the lots used in a particular finished good or item.

Where Used: Choose this option if you want to find where a particular material lot was used.

OK: Click the *OK* button to generate the report.

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

10.18.1 Generating a Lot Traceability Report

1. Select the desired item using the lookup available next to the *Item Code* field. This is a mandatory step.
2. Use the lookups available near the *Lot From* and *Lot To* fields to select the lower and upper limits of the range of lots to be included in the explosion.
3. Choose the required option of *Lot Explosion* or *Where Used*.
4. Click the *OK* button to generate the report.

An example of a generated *Lot Traceability Report* is provided on the following page.



Lot Traceability					
Main Report					
03/15/2018 11:19:35					
LOT TRACEABILITY REPORT					
BM163SP					
Item Code FinG001		Lot Number L98			
FinG001					
Level	Date	Quantity	UOM	Document Details	Transaction Type
	01/10/2018	32.000	KG	30	Goods Receipt PO
Current Page No.: 1		Total Page No.: 2		Zoom Factor: Page Width	

10.19 Production History Summary Report

Go to: Production → Production Reports → Process Manufacturing Reports.

The Production History Summary Report screen lets you generate a report showing a summary of information on production batches. This information includes completion date, labor and overhead costs, usage of raw materials, and production yield.

You can choose to filter batches that are:

- Associated with a specific time period defined by completion dates of batches (Completion Date Range).
- Associated with specific batch numbers (Batch Number Range).
- Associated with specific batch status.
- Fulfill needs of specific customers (Customer Range).
- Use specific formulas (Formula Range).



Production History Summary Report

Formula Range

Formula Key From: Final Form

Formula Key To: Form_MS

Batch Number Range

Batch Number From:

Batch Number To:

Batch Status: Closed

Completion Date Range

Completion Date From: 30/07/13

Completion Date To: 30/07/13

Customer Range

Customer From: Dev

Customer To: RKL

Print Cancel

Formula Range

Formula Key From: Specify the lower limit of the range of formulas that can be used to filter data displayed in the report. You can select the desired formula using the lookup next to the *Formula Key From* field.

Formula ID To: Specify the upper limit of the range of formulas that can be used to filter data displayed in the report. You can select the desired formula using the lookup next to the *Formula ID To* field.

Batch Number Range

Batch Number From: Specify the lower limit of the range of batch numbers that can be used to filter data displayed in the report. You can select the desired batch using the lookup next to the *Batch Number From* field.

Batch Number To: Specify the upper limit of the range of batch numbers that can be used to filter data displayed in the report. You can select the desired batch using the lookup next to the *Batch Number To* field.

Batch Status: Specify the batch statuses to be used while filtering batches to be included in the report. You can select the desired status using the drop-down next to the *Batch Status* field.



Completion Date Range

Completion Date From: Specify the lower limit of the range of completion dates that can be used to filter data displayed in the report. You can select the desired date using the lookup next to the *Completion Date From* field.

Completion Date To: Specify the upper limit of the range of completion dates that can be used to filter data displayed in the report. You can select the desired date using the lookup next to the *Completion Date To* field.

Customer Range

Customer From: Specify the lower limit of the range of customers that can be used to filter data displayed in the report. You can select the desired customer using the lookup next to the *Customer From* field.

Customer To: Specify the upper limit of the range of customers that can be used to filter data displayed in the report. You can select the desired customer using the lookup next to the *Customer To* field.

Print: Click the *Print* button to generate the report.

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

10.19.1 Generating a Production History Summary Report

1. Use the lookups next to the *Formula Key From* and *Formula Key To* fields to select the lower and upper limits of the range of formulas to filter production history details on the report.
2. Use the lookups next to the *Batch Number From* and *Batch Number To* fields to select the lower and upper limits of the range of batch numbers to filter production history details on the report.
3. Use the drop-down next to the *Batch Status* field to select the desired status to be used to filter production history details.
4. Use the lookups next to the *Completion Date From* and *Completion Date To* fields to select the lower and upper limits of the range of completion dates to filter production history details.
5. Use the lookups next to the *Customer From* and *Customer To* fields to select the lower and upper limits of the range of customers to filter production history details.
6. Click the *Print* button to generate the report.



An example of a generated *Production History Summary Report* is provided on the following page.

PRODUCTION HISTORY SUMMARY REPORT					
Nikhil SDK					
Batch No	2aug1	Formula	Form_MS-Final Form		
Customer		Total Weight Used	2.00		
Entry Date	08/02/2013	Total Volume Used	2.00		
Start Date	08/02/2013	Total FG Weight Yielded	2.00		
Completion Date	08/02/2013	Total BY Product Weight Yielded	0.00		
Batch Type	Mix	Total FG Volume Yielded	2.00		
Density	1.00	Total BY Product Volume Yielded	0.00		
Key	Standard Cost	Actual Cost	Variance	% V	
Fixed Labor	0.00				
Fixed Overhead	0.00				
SetUp Labor	0.00				
SetUp Overhead	0.00				
Variable Labor	0.00				

10.20 Production History Detail Report

Go to: Production → Production Reports → Process Manufacturing Reports.

Use this report to display detailed information about a batch. In addition to the information displayed in the *Production History Summary Report*, this report displays detailed information about all the items contained within a batch, such as item warehouse, quantity of items, cost specifications of the items, and cost variances.

You can choose to filter batches that:

- Are associated with a specific batch number (Batch Number Range).
- Are associated with a specific time period defined by completion dates of batches (Completion Date Range).
- Are attached with a specific batch status.
- Fulfill needs of specific customers (Customer Range).
- Use specific formulas (Formula Range).



Production History Detail Report

Formula Range
Formula Key From: Final Form Formula Key To: Form_MS

Batch Number Range
Batch Number From: Batch Number To:

Completion Date Range
Completion Date From: 30/07/13 Completion Date To: 30/07/13

Customer Range
Customer From: Dev Customer To: RKL

Batch Status: Closed

Print FG Info ☒ Print ByProduct Info ☒
Print Formula Line ☒ Print Lot Details ☒

Print Cancel

Formula Range

Formula Key From: Specify the lower limit of the range of formulas that can be used to filter data displayed in the report. You can select the desired formula using the lookup next to the *Formula Key From* field.

Formula Key To: Specify the upper limit of the range of formulas that can be used to filter data displayed in the report. You can select the desired formula using the lookup next to the *Formula Key To* field.

Batch Number Range

Batch Number From: Specify the lower limit of the range of batch numbers that can be used to filter data displayed in the report. You can select the desired batch using the lookup next to the *Batch Number From* field.

Batch Number To: Specify the upper limit of the range of batch numbers that can be used to filter data displayed in the report. You can select the desired batch using the lookup next to the *Batch Number To* field.

Completion Date Range

Completion Date From: Specify the lower limit of the range of completion dates that can be used to filter data displayed in the report. You can select the desired date using the lookup next to the *Completion Date From* field.



Completion Date To: Specify the upper limit of the range of completion dates that can be used to filter data displayed in the report. You can select the desired date using the lookup next to the *Completion Date To* field.

Customer Range

Customer From: Specify the lower limit of the range of customers that can be used to filter data displayed in the report. You can select the desired customer using the lookup next to the *Customer From* field.

Customer To: Specify the upper limit of the range of customers that can be used to filter data displayed in the report. You can select the desired customer using the lookup next to the *Customer To* field.

Batch Status: The drop-down next to this field is used to specify the statuses to be included while filtering batches to be displayed in the report.

Print FG Info: Mark this checkbox to include historical details of finished goods produced in the selected batches.

Print ByProduct Info: Mark this checkbox to include historical details of by-products produced in the selected batches.

Print Formula Line: Mark this checkbox to include historical details of formula ingredients used in the selected batches.

Print Lot Details: Mark this checkbox to include lot details of the selected items.

Print: Click the *Print* button to generate the report.

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

10.20.1 Generating a Production History Detail Report

1. Use the lookups next to the *Formula Key From* and *Formula Key To* fields to select the lower and upper limits of the range of formulas to filter production history details in the report.
2. Use the lookups next to the *Batch Number From* and *Batch Number To* fields to select the lower and upper limits of the range of batch numbers to filter production history details in the report.
3. Use the lookups next to the *Completion Date From* and *Completion Date To* fields to select the lower and upper limits of the range of completion dates to filter production history details in the report.



4. Use the lookups next to the *Customer From* and *Customer To* fields to select the lower and upper limits of the range of customers to filter production history details in the report.
5. Use the drop-down next to the *Batch Status* field to select the desired status to filter production history details of batches.
6. Include information on finished goods, by-products, formula ingredients, and item lots by checking the respective options available on the screen.
7. Click the *Print* button to generate the report.

An example of a generated *Production History Details Report* is provided below.

PRODUCTION HISTORY DETAIL REPORT					
Nikhil_SDK					
Batch No	2aug1	Formula ID	Mix	Form_MS - Final Form	
Customer		Batch Type		Completion Date	08/02/2013
Entry Date	08/02/2013	Start Date	08/02/2013	Density	1.00
Total Weight Used	2.00	Total FG Weight Yielded	2.00	Total FG Volume Yielded	2.00
Total Volume Used	2.00	Total BY Product Weight Yielded	0.00	Total BY Product Volume Yielded	0.00
Revision No	0000000001				
Labor / Overhead		Standard Cost	Actual Cost	Variance	% Var
Fixed Labor		0.00			
Fixed Overhead		0.00			
SetUp Labor		0.00			
SetUp Overhead		0.00			
Variable Labor		0.00			
Variable Overhead		0.00			
Material Cost		20.00	40.00	20.00	
Labor Cost		0.00	0.00	0.00	

10.21 GHS Labelling Report

Go to: Process Manufacturing → Production Reports

The Globally Harmonized System (GHS) defines and classifies the hazards of chemical products and communicates health and safety information on labels and safety data sheets (SDSs).

The *GHS Label* screen allows you to print a GHS label for a specific lot of an item by reading data from the SDS library. When the system is unable to find details for the formula, then it will pick label details for individual raw materials from the library.



Lot No	FG0020-002
Item Code	FG0020
Location	05
Batch Number	BT-0018

Process Cancel

Lot No: Specify the lot for which you want to print a GHS label. Once you have selected the lot number, the other fields such as *Item Key*, *Location*, and *Batch No* will automatically display the corresponding details.

Item Code: Displays the item key of the lot for which the GHS label is being printed.

Location: Displays the location of the item lot.

Batch No: Displays the batch in which the item lot was produced.

Process: Click the *Process* button to print the label.

Cancel: Click the *Cancel* button to close the screen without printing the label.

10.21.1 Printing GHS Labels

1. Specify the production lot for which you want to print the GHS label.
2. Click the *Process* button to print the GHS label.

An example of a generated GHS label is displayed below.

GHS LABELLING REPORT
David's Chem Process Inc.
FG0020 Lot No : FG0020-002
;; FW ; D ; MP ; BP
White Epoxy Enamel 5 PL
Product of US SDS available
Current Page No.: 1 Total Page No.: 1 Zoom Factor: 100%



The *Item-Lot Wise* report displays as below.

Production Allocation Report

From Item: Sberry_pulp To Item: Sberry_pulp
From Warehouse: 01 To Warehouse: 01
From Lot: B1 To Lot: SPL001
View Allocation: Item-Lot Wise ☐ Show Expired Lots Only [GetData](#)

Item Code	Item Desc	Whs Code	WhsName	Lot No	Lot Status	Expiry Date	Qty Allocated	UOM	Batch No	FG	OnHand Lot Qty	Qty Available Fo...
▼ Sberry_pu												
▼ Sberry_pul												
	▼ 01											
		▼ General										
			▼ B1									
				ALL			0.250	KG	BP009	Sberry_juice01	6.25	6.25
				ALL			0.500	KG	BA123	Sberry_juice01	6.25	6.25
				ALL			0.500	KG	BP009	Sberry_juice01	6.25	6.25
				ALL			1.000	KG	19Sep032	Sberry_juice01	6.25	6.25
				ALL			1.000	KG	Acts001	Sberry_juice01	6.25	6.25
				ALL			1.000	KG	Bpick003	Sberry_juice01	6.25	6.25
				ALL			2.000	KG	m11	Sberry_juice01	6.25	6.25
				ALL			5.250	KG	B1011	Sberry_juice	6.25	6.25
				ALL			1.000	KG	B1700	Sberry_juice01	6.25	6.25
			▼ BS01									
				ALL		20/09/18	1.000	KG	BTC01	Sberry_juice01	100.00	100.00
				ALL		20/09/18	2.000	KG	bt14	Sberry_juice01	100.00	100.00
				ALL		20/09/18	50.000	KG	SN2	Sberry_juice01	100.00	100.00

[OK](#) [Cancel](#)

Batch Wise report displays as below

Production Allocation Report

From Batch: 002 To Batch: 005
From Warehouse: To Warehouse:
From Lot: To Lot:
View Allocation: Batch Wise ☐ Show Expired Lots Only [GetData](#)

Batch No	Item Code	Item Desc	Whs Code	WhsName	Lot No	LPN	Lot Status	Expiry Date	Qty Allocated	UOM	FG	On Hand Lot Qty	Qty Availabl...
▼ 003													
	▼ TEST RM												
		▼ TEST RM											
			▼ 01										
				▼ General Wareh									
					▼ 1								
							ALL		1.200	KG	FG-TEST	36.20	36.20

[OK](#) [Cancel](#)

Show Expired Lots Only: Select this checkbox if you wish to display only the expired lots falling within the specified filter criteria.

Get Data: Use this button to load the data on the basis of specified filter criteria.



10.22.1 Printing Production Allocation Report

1. Specify the range of Item, Warehouse, Lot combinations for which you want to print the report.
2. Using the *View Allocation* dropdown, select the desired option from Item-Lot wise and Batch Wise.
3. Select/Unselect the *Show Expired Lots Only* checkbox as required.
4. Click the *Get Data* button to load the Production Allocation details.

Production Allocation Report

From Item: Sberry_pulp To Item: Sberry_pulp
From Warehouse: 01 To Warehouse: PRD
From Lot: B21 To Lot: Z_RM01_001
View Allocation: Item-Lot Wise ☐ Show Expired Lots Only

Item Code	Item Desc	Whs Code	WhsName	Lot No	LPN	Lot Status	Expiry Date	Qty Allocated	UOM	Batch No	FG	OnHan...
▼ Sberry_pul												
	▼ Sberry_pul											
		▼ 01										
			▼ General Warehouse-0									
				▼ B42								
						ALL		0.667	KG	BS008	Sberry_juice	1,000.00
						ALL		0.667	KG	BS021	Sberry_juice	1,000.00
						ALL		6.000	KG	BS021	Sberry_juice	1,000.00
						ALL		8.000	KG	BS023	Sberry_juice	1,000.00
						ALL		9.333	KG	BS022	Sberry_juice	1,000.00
				▼ BS01								
						ALL	20/09/18	1.000	KG	BTC01	Sberry_juice001	100.00
						ALL	20/09/18	2.000	KG	bt14	Sberry_juice001	100.00
						ALL	20/09/18	50.000	KG	SN2	Sberry_juice001	100.00
				▼ f5								
						ALL		8.000	KG	BS008	Sberry_juice	15,000.00
				▼ L1000								
						PASS		13.330	KG	B1010	Sberry_juice	22.00

10.23 WIP Report

Go to: Process Manufacturing → Production Reports → WIP Report.

The WIP (Work In Progress) Report provides a comprehensive view of ongoing production or project activities, tracking unfinished work, resource utilization, and cost accumulation. It ensures accurate financial reporting by detailing labor, material, and overhead costs, aiding in revenue recognition and compliance with accounting standards.

This report helps managers identify bottlenecks, optimize resource allocation, and improve production efficiency while preventing overproduction or underutilization. It is crucial for project tracking, forecasting completion timelines, and maintaining audit readiness.

All batch number which are in issued and Part Closed status will be list down which comes under range selected in selection criteria.



WIP Account Range:

WIP Account From: Specify the lower limit of the range of WIP account number that can be used to filter data displayed on the report. You can select the desired WIP account number using the lookup next to the *WIP Account From* field.

WIP Account To: Specify the upper limit of the range of WIP account number that can be used to filter data displayed on the report. You can select the desired WIP account number using the lookup next to the *WIP Account To* field.

Batch No Range:

Batch No From: Specify the lower limit of the range of batch numbers that can be used to filter data displayed on the report. You can select the desired batch number using the lookup next to the *Batch No From* field.

Batch No To: Specify the upper limit of the range of batch numbers that can be used to filter data displayed on the report. You can select the desired batch number using the lookup next to the *Batch No To* field.

Formula ID Range:

Formula From: Specify the lower limit of the range of formulas whose Work in progress data should be displayed on the report. You can select the desired formula using the lookup available near the *Formula ID From* field.



Formula To: Specify the upper limit of the range of formulas whose Work in progress data should be displayed on the report. You can select the desired formula using the lookup next to the *Formula ID To* field.

Date Range

Schedule Start Date From: Specify the lower limit of the range of scheduled start dates to filter and display WIP Data whose scheduled start dates fall in this range.

Schedule Start Date To: Specify the upper limit of the range of scheduled start dates to filter and display WIP Data whose scheduled start dates fall in this range.

OK: Click this button to generate the WIP report based on the entered criteria.

Cancel: Click this button to close the selection criteria screen without generating a report.

10.23.1 Generating a WIP Report

1. In the *WIP Account From* and *WIP Account To* fields, select the lower and upper limits of the range of *WIP Account* to filter WIP details on the report.
2. In the *Batch No From* and *Batch Number To* fields, select the lower and upper limits of the range of batch numbers to filter WIP details on the report.
3. In the *Formula ID From* and *Formula ID To* fields, select the lower and upper limits of the range of formulas to be used to filter WIP details in the report.
4. Select the lower and upper limit of a range of dates, in the *Schedule Start Date From* and *Schedule Start Date To* fields, to filter WIP details in the report.
5. Click the *OK* button to generate the report.



WIP REPORT						
QA_ERP						
WIP ACCOUNT :- 111000000100101						
S.No	Batch No.	Start Date	Expected Completion Date	Total Material WIP	Total FG Received	WIP Cost
1	A0108	15-Jan-2025	15-Jan-2025	1.00	1.00	0.00
2	A0110	15-Jan-2025	15-Jan-2025	0.00	242.40	-242.40
3	A0111	15-Jan-2025	15-Jan-2025	0.00	1.00	-1.00
4	A0405	10-Apr-2024	10-Apr-2024	1.00	1.00	0.00
5	A0408	10-Apr-2024	10-Apr-2024	0.00	0.00	0.00