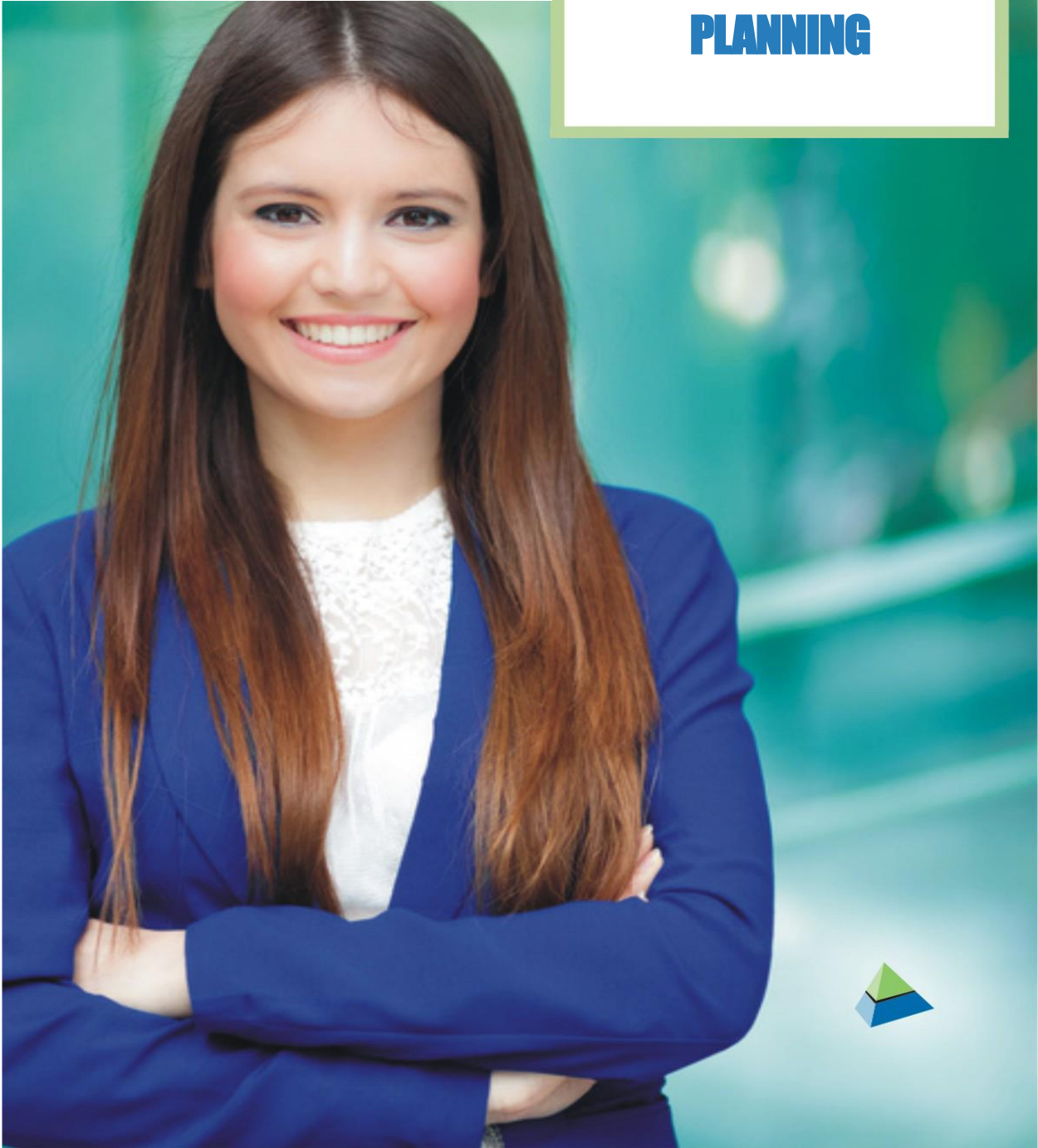


**BATCHMASTER® ERP**  
**18.2**

**User Guide**

**BatchMaster ERP with SAP Business One**  
BatchMaster Solutions  
for Process Manufacturers

**PLANNING**





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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
<b>ERP</b>	Enterprise Resource Planning
<b>MPS</b>	Master Production Scheduling
<b>MRP</b>	Material Requirements Planning
<b>QC</b>	Quality Control
<b>SDS</b>	Safety Data Sheet
<b>UoM</b>	Unit of Measure



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# 1 DOCUMENT OVERVIEW

## 1.1 What Is This Document All About?

This document gives an overview of the *Planning* function and how BatchMaster ERP can help process manufacturers. It explains features of the system in conversational 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 its use, or training another person.

## 1.3 What's New in this Release?

- *Export* button on *MPS* and *MRP Dashboard*.
- User-Specific Alerts for Automated MPS/MRP Execution.

## 1.4 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 and perform transactions.
- Explain the purpose of features to others, using examples.
- Identify the business uses for reports and inquiries.



## 2 PLANNING

The *Planning* module of BatchMaster ERP with SAP Business One (BatchMaster ERP) consists of two parts: MPS (Master Production Scheduling) and MRP (Material Requirements Planning.)

MPS considers finished item demand versus supply and suggests what needs to be produced, at what quantity, and when. The length of the planning horizon is up to you. When used correctly, MPS can help you:

- Determine the quantity and timing of completion of end items over the planning horizon.
- Improve customer satisfaction by providing products on time as promised.
- Avoid over- or under-loading the production facility, so that capacity is efficiently utilized and lower production costs can be realized.

MRP considers demand versus supply of materials and components to minimize unnecessary inventories and reduce costs. The output of an MRP 'run' is a schedule for obtaining raw materials and purchased parts. When used correctly, MRP helps to:

- Minimize last-minute 'rush' orders for production emergencies.
- Reduce out of stock situations.
- Reduce excess and obsolete inventory.

When demand for an item exceeds supply, the system generates suggested production orders (for make-type items) or suggested purchase orders (for buy-type items).

Item 'demand' can be driven by:	Item 'supply' consists of:
<ul style="list-style-type: none"><li>• Sales Orders</li></ul>	<ul style="list-style-type: none"><li>• Open production or purchase orders</li><li>• <u>Available</u> inventory in warehouse(s) that are visible to MPS and MRP</li></ul>
<ul style="list-style-type: none"><li>• Item forecasts</li></ul>	
<ul style="list-style-type: none"><li>• Warehouse transfers</li></ul>	
<ul style="list-style-type: none"><li>• Safety stock replenishment</li></ul>	
<ul style="list-style-type: none"><li>• Demand for a parent item</li></ul>	

Based on the *Planning Method* chosen on the *Item Master Details* screen, an item can be planned by MPS, MRP, or manually (no system suggestions). MPS Planned Batches can include intermediates if the SuperBatch function is used. See the *BatchMaster ERP with SAP Business One 18.2 – Production User Guide* for details.



The following figure depicts the process flow for Master Production Scheduling:



Not all of these steps are required, and some are done more often than others. Each step is discussed in detail in the following sections of this document.



## 3 PLANNING SETUP

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

### 3.1 Company Calendar

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

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

#	Holiday	Work Date	Day	User1	L
1	<input checked="" type="checkbox"/>	01/01/16	Friday		
2	<input type="checkbox"/>	01/02/16	Saturday		
3	<input type="checkbox"/>	01/03/16	Sunday		
4	<input type="checkbox"/>	01/04/16	Monday		
5	<input type="checkbox"/>	01/05/16	Tuesday		
6	<input type="checkbox"/>	01/06/16	Wednesday		
7	<input type="checkbox"/>	01/07/16	Thursday		
8	<input type="checkbox"/>	01/08/16	Friday		
9	<input type="checkbox"/>	01/09/16	Saturday		
10	<input type="checkbox"/>	01/10/16	Sunday		
11	<input type="checkbox"/>	01/11/16	Monday		
12	<input type="checkbox"/>	01/12/16	Tuesday		
13	<input type="checkbox"/>	01/13/16	Wednesday		
14	<input type="checkbox"/>	01/14/16	Thursday		
15	<input type="checkbox"/>	01/15/16	Friday		

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

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

**Holiday:** Select (check) any other non-work days for the year.

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



## 3.2 Planning Calendar

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

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

See [Section 3.3](#) for details on how demand ranges are used.

Planning Calendar	
Calendar Key	1
Description	Std Calander
<b>Demand Range 1</b>	
Interval	Daily
Custom Days	1
Number of Periods	10
<b>Demand Range 2</b>	
Interval	Weekly
Custom Days	7
Number of Periods	6
<b>Demand Range 3</b>	
Interval	Monthly
Custom Days	30
Number of Periods	10
Total Days	352
Total Periods	26
Add Cancel	

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

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

**Interval:** Four interval types are supported:

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



### Demand Range1 to Demand Range 3

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

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

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

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

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



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

Planning Calendar	
Calendar Key	99
Description	99
<b>Demand Range 1</b>	
Interval	Weekly
Custom Days	7
Number of Periods	52
<b>Demand Range 2</b>	
Interval	Weekly
Custom Days	7
Number of Periods	0
<b>Demand Range 3</b>	
Interval	Monthly
Custom Days	30
Number of Periods	0
Total Days	364
Total Periods	52

See [Section 3.3](#) for details on how demand ranges are used.



### 3.3 Planning Defaults

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

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



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

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

**Planning Calendar:** Select a *Planning Calendar*.

#### **Gross Demand Calculations**

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

- **Demand:** This option is generally used for the shortest (near) range planning. If this option is selected, the gross demand would be calculated by adding up the following four types of demand:



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

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

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

### Display Color

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



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



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

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

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

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

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

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

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



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

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

**Grouping Implemented:** Use this option when you want to consolidate demand from multiple warehouses to a single production warehouse. When you choose this option, the system will consolidate all requirements from various warehouses and generate production orders at a single warehouse.

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

**Run MPS External:** Select this option if you want to run MPS in console mode. It lets you continue working in the system while MPS is running. When you click “run MPS” the system populates a



temporary table with the required data and uses that table to perform calculations. When the MPS run is complete, the table is emptied and ready for the next run. The same process is used for “Run MRP External.”

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

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

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

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

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

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

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

## 3.4 Warehouse Groups

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

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



#	Warehouse	Warehouse Name
1	05	Mfg Warehouse
2	01	General Warehouse
3	02	West Cost Warehouse
4		

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

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

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



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

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

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



## 4 PLANNING MASTERS

Use these screens to define your forecasts, MPS/MRP controlled items, and order multiples.

### 4.1 Maintain MPS Items

**Go To: Planning → Planning Masters → Maintain MPS Items.**

Use this screen to maintain information about MPS-controlled items.

- Item Type (Make or Buy).
- Default Vendor.
- Lot Sizing Method.
- Economic Order Quantity (EOQ).
- Lead Time
- Minimum Tolerance Quantity



You can select only those items whose planning method is listed as MPS on the *Item Master Details* screen. You need to maintain information for MPS items on this screen in order to include them in MPS processing. (You can perform this task in bulk using the next option, *Pull MPS Items*).

MPS Item	⇒ Coffee Cocoa	☰ Coffee Cocoa
Warehouse	⇒ DEWAS	☰
Unit	⇒ KG	☰
Item Type	Make	▼
Last MPS Run Date	04/10/19	
Default Vendor		☰
Low Level Code	0	
Lot Sizing Method	Lot	▼
Economic Order Quantity	0.000	
Lead Time(days)	0	
Consider Safety Stock	<input type="checkbox"/>	
Minimum Tolerance Quantity	0	
Default Inventory Transfer WH		☰

OK Cancel



**MPS Item:** Specify an *MPS Item*.

**Warehouse:** Choose a *Warehouse*.

**Unit:** This read-only field displays the stock Unit of Measure (UoM) for the item.

The following fields are used by the MPS engine and override settings in the Item Master table:

**Item Type:** Select whether the item is Make-type or Buy-type.

**Last MPS Run Date:** This read-only field displays the date on which MPS was last run.

**Default Vendor:** Select a *Default Vendor* for the MPS Item. This field is enabled and mandatory only when the *Buy* option is selected in the *Item Type* field.

**Low Level Code:** This system-generated number denotes the hierarchy of the item in the entire range of MPS Items.

**Lot Sizing Method:** The value in this field can be either *Lot for Lot* or *EOQ*. If the *EOQ* (Economic Order Quantity) option is selected, any order quantities generated by the system will be in multiples of the *EOQ*. *Lot for Lot* means that the order quantity will be exactly equal to the demand quantity.

**Economic Order Quantity:** Enter the economic order quantity if you have chosen the *EOQ* option in the *Lot Sizing Method* field above. The *EOQ* is interpreted in the stock unit of the item.



If you have chosen the *Use multiple economic order quantities* option on the *Planning Defaults* screen, the system would pick the *EOQ* from the matrix you define in the *Order Multiples* screen. (See [Section 4.7.](#))

**Lead Time (days):** Enter a vendor lead time if the item is purchased. For make-type items, the system will automatically determine the lead time according to the process cell.

**Consider Safety Stock:** Check this box to have the system generate an order suggestion to replenish safety stock of the item.



You can delete an item from the MPS file by right-clicking in the screen and selecting the *Remove* option.

**Minimum Tolerance Quantity:** Enter the quantity you need to set as the minimum tolerance quantity of the item for planning. This quantity will be considered as a benchmark and consolidated bucket demand occurring below it will always be ignored.

**Default Inventory From Warehouse:** The warehouse you specify here will default to the *Default Inventory Transfer Warehouse* field in the *MPS Production/Purchase Order* tab, on the *MPS/MRP dashboard*.



## 4.2 Pull MPS Items

**Go To: Planning → Planning Masters → Pull MPS Items.**

Use this utility to mass import all items with a planning method of MPS (defined on the *Item Master Details* screen). You can use this utility instead of maintaining MPS items individually.

Field	From	To
Item Code	FG1003	FG1007
Warehouse	05	05

**Item Code From:** Select a starting item by typing the item name or using the lookup feature. Leaving this field blank is the same as choosing the first item via the lookup, which is restricted to those items that have a planning method defined as MPS on the *Item Master Details* screen, and which currently do not have a record in the *Maintain MPS Items* file.

**Item Code To:** Select an ending item by typing the item name or using the lookup feature. Leaving this field blank is the same as choosing the last item via the lookup, which is restricted to those items that have a planning method defined as MPS on the *Item Master Details* screen, and which currently do not have a record in the *Maintain MPS Items* file.

**Warehouse From:** Select a starting warehouse by typing the warehouse name or using the lookup feature. Leaving this field blank is the same as choosing the first warehouse via the lookup.

**Warehouse To:** Select an ending warehouse by typing the warehouse name or using the lookup feature. Leaving this field blank is the same as choosing the last warehouse via the lookup.

**OK:** Clicking this button will open a grid displaying all those items within your selected range which have a planning method defined as MPS on the *Item Master Details* screen, and which currently do not have a record in the *Maintain MPS Items* file.

The grid is displayed on the following page.





**Unit:** Displays the stock UoM for the item.

**Order Lead Time:** Enter a vendor lead time if this item is purchased. For make-type items, the system will determine the lead time according to the process cell.

**Consider Safety Stock:** Check this box to have the system generate an order suggestion to replenish safety stock of the item.

**Minimum Tolerance Quantity:** Enter the quantity you need to set as the minimum tolerance quantity of the item for planning. This quantity will be considered as a benchmark and consolidated bucket demand occurring below it will be always ignored.

**Pull:** Click the *Pull* button to process all selected items.

**Cancel:** Click *Cancel* to exit the utility.

## 4.3 Maintain MRP Items

**Go To: Planning → Planning Masters → Maintain MRP Items.**

Use this screen to maintain information about MRP-controlled items such as:

- MRP Item Type (Make or Buy).
- Default Vendor.
- Lot Sizing Method.
- Economic Order Quantity.
- Lead Time.
- Minimum Tolerance Quantity



You can select only those items whose planning method is selected as *MRP* on the *Item Details* screen. You need to maintain information for *MRP Items* on this screen in order to include them in MRP processing. (You can perform this task in bulk using the *Pull MRP Items* screen.)



MRP Item	⇒ Chocolate	☰ Chocolate
Warehouse	⇒ 02	☰
Unit	⇒ KG	☰
Item Type	Buy	
Last MRP Run Date	04/10/19	
Default Vendor	⇒ V	☰
Low Level Code	0	
Lot Sizing Method	Lot	
Economic Order Quantity	0.000	
Lead Time(days)	0	
Consider Safety Stock	<input type="checkbox"/>	
Minimum Tolerance Quantity	0	
Default Inventory Transfer WH		☰

OK Cancel

**MRP Item:** Specify an *MRP Item*.

**Warehouse:** Choose a *Warehouse*.

**Unit:** This read-only field displays the stock UoM for the item.

The following fields are used by the MRP engine and override settings in the Item Master table:

**Item Type:** Select whether the item is Make-type or Buy-type.

**Last MRP Run Date:** This read-only field displays the date on which MRP was last run.

**Default Vendor:** Select a Default Vendor for the MRP Item. This field is enabled and is mandatory only when the *Buy* option is selected in the *Item Type* field.

**Low Level Code:** This system-generated number denotes the hierarchy of the item in the entire range of MPS and MRP items.

**Lot Sizing Method:** The value in this field can be either *Lot for Lot* or *EOQ*. If the *EOQ* option is selected, any order quantities generated by the system will be integral multiples of the *EOQ*. *Lot for Lot* means that the order quantity will be exactly equal to the demand quantity.

**Economic Order Quantity:** Enter an economic order quantity if you chose the *EOQ* option in the *Lot Sizing Method* field. The quantity is interpreted in the stock unit of the item.



If you selected the *Use multiple economic order quantities* option on the *Planning Defaults* screen, the system will pick the *EOQ* from the matrix you define in the *Order Multiples* field.



**Lead Time (days):** Enter a vendor lead time if this item is purchased. For make-type items, the system will automatically determine lead time according to the process cell.

**Consider Safety Stock:** Check this box to have the system generate an order suggestion to replenish safety stock of the item.

**Minimum Tolerance Quantity:** Enter the quantity you need to set as the minimum tolerance quantity of the item for planning. This quantity will be considered as a benchmark and consolidated bucket demand occurring below it will be always ignored.

**Default Inventory From Warehouse:** The warehouse you specify here will default to the *Default Inventory Transfer Warehouse* field in the *MPS Production/Purchase Order* tab on the *MPS/MRP dashboard*.

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

**Note:** You can delete an item from the MRP file by right-clicking in the screen and selecting the “remove” option.

## 4.4 Pull MRP Items

**Go To: Planning → Planning Masters → Pull MRP Items.**

Use this utility to mass import all items with a planning method of MRP (defined on the *Item Master Details* screen) instead of maintaining MRP items one by one.

Pull MRP Items				
Item Code	From	PK0010	To	RM0090
Warehouse	From	01	To	02

OK Cancel

**Item Code From:** Select a starting item by typing or using the lookup feature. Leaving this field blank is the same as choosing the first item via the lookup, which is restricted to those items that have a planning method defined as MRP on the *Item Master Details* screen, and which currently do not have a record in the *Maintain MRP Items* file.

**Item Code To:** Select an ending item by typing or using the lookup feature. Leaving this field blank is the same as choosing the last item via the lookup, which is restricted to those items that have a planning method defined as MRP on the *Item Master Details* screen, and which currently do not have a record in the *Maintain MRP Items* file.



**Warehouse From:** Select a starting warehouse by typing or using the lookup feature. Leaving this field blank is the same as choosing the first warehouse via the lookup.

**Warehouse To:** Select an ending warehouse by typing or using the lookup feature. Leaving this field blank is the same as choosing the last warehouse via the lookup.

**OK:** Clicking this button will open a grid which displays all those items within your selected range that have a planning method defined as MRP on the *Item Master Details* screen, and which currently do not have a record in the *Maintain MRP Items* file.

#	Select	Item Code	Warehouse Code	Item Type	Lot Sizing ...	Economic Order Qu...	Vendor	Unit	Order Lead T...
1	<input checked="" type="checkbox"/>	PK0010	02	Buy	Lot	0.000000	V10101	EACH	0
2	<input checked="" type="checkbox"/>	PK0011	02	Buy	Lot	0.000000	V10101	EACH	30
3	<input checked="" type="checkbox"/>	PK0012	02	Buy	Lot	0.000000	V10101	EACH	0
4	<input checked="" type="checkbox"/>	PK0015	02	Buy	Lot	0.000000	V10101	EACH	10
5	<input checked="" type="checkbox"/>	PK0016	02	Buy	Lot	0.000000	V10101	EACH	10
6	<input checked="" type="checkbox"/>	PK002	02	Buy	Lot	0.000000	VEN004	EACH	3
7	<input checked="" type="checkbox"/>	PK0020	02	Buy	Lot	0.000000		EACH	30
8	<input checked="" type="checkbox"/>	PK0024	02	Buy	Lot	0.000000	V10101	EACH	10
9	<input checked="" type="checkbox"/>	PK0025	02	Buy	Lot	0.000000	V10101	EACH	10
10	<input checked="" type="checkbox"/>	PK003	02	Buy	Lot	0.000000	VEN004	EACH	0
11	<input checked="" type="checkbox"/>	PK003A	02	Buy	Lot	0.000000	VEN004	EACH	0

**Select:** When the checkbox for a row is selected, the row becomes available for pulling into the *Maintain MRP Item* file.

The following fields are used by the MRP engine and override settings in the Item Master table:

**Item Code:** Based on your selection criteria, the value in this field contains items for which the order method is defined as MRP in the *Item Master Defaults* screen.

**Warehouse Code:** Displays the warehouse of the item.

**Item Type:** Select the *Item Type* (either Make or Buy).

**Lot Sizing Method:** The value in this field can be either *Lot for Lot* or *EOQ*. If the *EOQ* option is selected, any order quantities generated by the system will be integral multiples of the *EOQ*. *Lot for Lot* means that the order quantity will be exactly equal to the demand quantity.



**Economic Order Quantity:** Enter an economic order quantity if you chose the *EOQ* option in the *Lot Sizing Method* field. The quantity is interpreted in stock units of the item.



If you select the *Use multiple economic order quantities* option on the *Planning Defaults* screen, the system would pick the EOQ from the matrix defined in the *Order Multiples* screen.

**Vendor:** Select a default vendor for the item. This field is enabled (and is mandatory) only when the *Buy* option is selected in the *Item Type* field.

**Unit:** Displays the stock UoM of the item.

**Order Lead Time:** Enter a vendor lead time if this item is purchased. For make-type items, the system will automatically determine the lead time according to the process cell.

**Consider Safety Stock:** Check this box to have the system generate an order suggestion to replenish safety stock of the item.

**Minimum Tolerance Quantity:** Enter the quantity you need to set as the minimum tolerance quantity of the item for planning. This quantity will be considered as a benchmark and consolidated bucket demand occurring below it will be always ignored.

**Pull:** Click *Pull* to process all selected items.

**Cancel:** Click *Cancel* to exit the utility.

## 4.5 Forecast Entry

**Go To:** Planning → Planning Masters → Forecast Entry.

Use the *Forecast Entry* screen to enter sales forecasts for your finished goods. If yours is a make to stock business, forecast would be based on production history. If yours is a make to order business, forecast would be based on sales history.

### 4.5.1 Mandatory Inputs



Before maintaining forecasts you must set up Item Codes and Planning Calendars. You may want to define a separate Planning Calendar specifically for forecasting.





## Forecast Entry Grid

**Forecast Code:** Enter a unique code for the forecast.

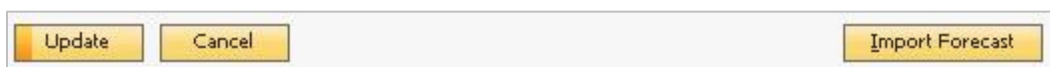
**Warehouse:** Enter the code for the warehouse to which the forecast applies. (The warehouse must have bins enabled.)

**Status:** The valid values for this field are *Active* and *Inactive*. Only *Active* forecasts are considered by the planning system.

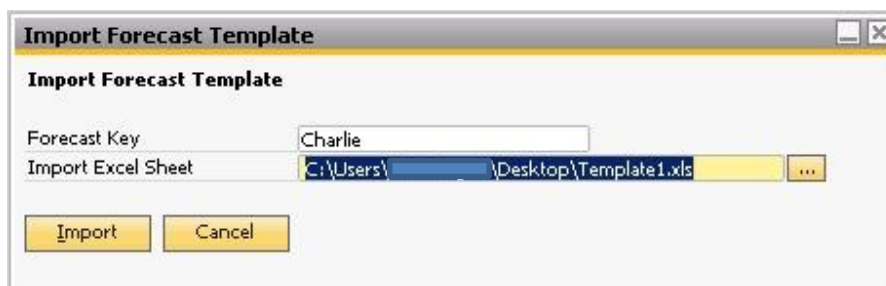
**Time Buckets:** Based on the *Planning Calendar* you selected, the system will automatically generate calendar periods where the forecast can be entered. Edit them if needed, and then enter quantities (or costs) in each field. If there is no forecast in a bucket, enter a zero (do not leave a bucket blank.)



When you enter a forecast, the system uses the first day of that period as the forecast date.  
**Weeks start on Monday, not Sunday.**



**Import Forecast:** Click this button to open the *Import Forecast Template* window.



**Forecast Key:** Enter the name to be used as the *Forecast Code* in the grid.

**Import Excel Sheet:** Browse to find the file you want to import.

**Import:** Click the *Import* button to import data.



When the import is complete, data will **NOT** appear in the *Forecast Entry* screen. You must use the 'find' feature on an item-by-item basis to view (and edit) the imported data.

**Add/Update:** Click *Add/Update* to save the forecast entry or edits.



## 4.5.2 Right-Click Options

At the header level, clicking *Remove* will delete the forecast for the item displayed. Clicking *Duplicate* will copy the forecast code and grid data into a new window, where you can enter a new item code. This is useful if you decide, for example, that the forecast for chocolate cookies should be the same as for vanilla cookies.

At the grid level, the *Copy* function can be used on one or more cells.

The **Maximize/Restore Grid** option is a toggle that re-sizes the grid for easy viewing.

The **Remove** option will remove all rows from the forecast.

The **Delete Row** option will remove the selected line item from the forecast.

The **Duplicate** option will allow you to pick a new item number and insert all the grid data, i.e. the forecast code, warehouse, and associated quantity in each cell.

**Insert Forecast:** Use the *Find* function to call up the item forecast you wish to modify. In the grid, add a new line with a forecast code and warehouse. Right-click on the new line item and select *Fill Forecast*. Now you can insert a fixed quantity across the grid. You can also fill the forecast based on production history date or sales history date. Click the *Apply* button, then click the *Update* button to save your edits or *Cancel* to ignore them.

**Fill Forecast:** Use the *Find* function to call up the item forecast you wish to modify. In the grid, select an existing line or add a new line with a forecast code and warehouse. Right-click on the desired line item and select *Fill Forecast*. Now you can insert a fixed quantity across the grid or increase the quantities by a percentage or a fixed amount. You can also fill the forecast based on production or sales as of any specific date. Modify the start and end dates if needed, then click the *APPLY* button. Finally, click the *Update* button to save your edits or *Cancel* to ignore them.

The **Zero Forecast** option will fill all cells with a quantity or dollar amount of zero.



### 4.5.3 Using the Forecast Entry Screen

To create a new forecast:

1. Select an item in the *Forecast Entry* screen. Either use the lookup button to search the existing list of items or type the item name directly into the field. Only items that are marked as planned by MPS or MRP will appear in the list.
2. Select the *Forecast Type* as either *Quantity* or *Amount*.
3. Select a Planning Calendar using the lookup button.
4. The *Cost Method* field becomes enabled only if the *Amount* option is selected in the *Forecast Type* field. If *Amount* is enabled, select a cost method.
5. Enter a date in the *Forecast Start Date* field.
6. Enter a unique forecast code in the *Forecast Code* field.
7. Specify a warehouse for the selected item forecast in the *Warehouse* field.
8. Select the Active status to use the forecast in planning.
9. Enter a quantity or cost figure in each cell. If the forecast is zero in a period, enter a zero (do not leave the cell blank).
10. Click the *Add* button to save the forecast, or click the *Update* button if you have modified an existing forecast.
11. Enter more items into the grid, if needed, repeating steps 1 through 9.



## 4.6 Generate Forecast Template

**Go To: Planning → Planning Masters → Generate Forecast Template.**

Use this utility to generate a CSV template that your staff can use to enter forecasts. Once the data is in the Excel spreadsheet, you can import it back into the system.

Forecast Start Date	09/19/17
Calendar Key	PC01
Item Group From	Items
Item Group To	Make
Item From	chocolatecoffee
Item To	coffee
Warehouse From	01
Warehouse To	01

Generate Forecast Template

File Name: FG001

Folder Path: C:\Users\njoshi2\Desktop

Export Current Forecasts

Generate Cancel

**Forecast Start Date:** The default start date for generating a Forecast Template is the current server date. The start date can be changed, if needed.

**Calendar Key:** Specify a valid Planning Calendar for the forecast. The Planning Calendar you select will provide planning bucket information for the forecast.

**Item Group From/To:** Select starting and ending item group ranges. Leaving these fields blank is the same as choosing the first or last applicable item group via the lookup.

**Item From/To:** Select starting and ending item ranges. Leaving these fields blank is the same as choosing the first or last applicable item via the lookup, which is restricted to those items that have a planning method defined as MPS or MRP on the *Item Master Details* screen, and a valid record in *Maintain MPS Item* or *Maintain MRP Item*.

**Warehouse From/To:** Select starting and ending warehouse ranges. Leaving these fields blank is the same as choosing the first or last warehouse via the lookup.

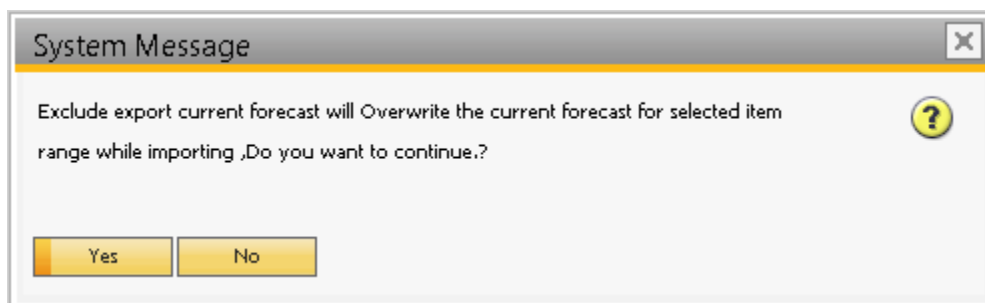
**File Name:** Enter a valid name for the forecast file.

**Folder Path:** Specify the path where the generated file should be saved.

**Export Current Forecast:** If this option is checked when generating a forecast template, any existing forecast for an item on a particular date will be summated and exported. While if you leave this



checkbox unchecked (Supported from BMM\_SP\_x63.57.69 version onwards) and click on the *Generate* button then the system prompts you a confirmation message as below.



If you click on *Yes*, the system will overwrite an existing forecast.

**Generate:** Click this button to generate the template. (From BMM\_SP\_x63.57.69 version onwards Forecast template will be exported in the Excel format.)

**Cancel:** Click *Cancel* to exit the utility.



## 4.7 Order Multiples

**Go To:** Planning → Planning Masters → Order Multiples.

When defining a single *Economic Order Quantity* on the *Maintain MPS/MRP Items* screen does not solve your business needs, you can specify an *Order Multiples* matrix. For example, you can define a matrix like the one shown below.

#	Economic Order Quantity
1	100.0000
2	500.0000
3	1,500.0000
4	4,000.000000
5	0.0000

**Item:** Enter or look up the appropriate value in the *Item* field. Only those Items that have the *MPS* or *MRP* option selected in the *Planning Method* field of the *Item Master Details* screen can be selected.

**Warehouse:** In the *Warehouse* field, select a valid warehouse for which this EOQ table is applicable.

**Economic Order Quantity:** Enter an ascending list of EOQ values in the *Economic Order Quantity* field, as appropriate. If a demand quantity falls between two EOQ values in the grid, the system will suggest an order quantity equal to the higher EOQ value. If demand exceeds the highest EOQ value, the system will make multiple order suggestions using the highest value and the planner will need to adjust order quantities.

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

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



## 5 PLANNING ACTIONS

### 5.1 MPS Expedite Report

**Go To: Planning → Planning Actions → MPS Expedite Report.**

BatchMaster ERP now provides you a way to generate the MPS Expedite Supply Report. The report can be generated to display suggested changes in delivery receipt date/Requested delivery date/Due date of the item to fulfill its demand. The report can include any combination of the following options:

**Expedite:** To accelerate the supply of item to meet its demand.

**Delay:** To postpone the supply of item to match its demand.

**Cancel:** To cancel the order of the item for which there is no demand.

**Non-Expedite:** Order is appropriate and need not require any modification.

The screenshot shows a dialog box titled "MPS Expedite Report". It contains the following fields and options:

- Item Code From: MPS\_ITEM
- Item Code To: MPS\_ITEM
- Warehouse From: (empty)
- Warehouse To: (empty)
- Make
- Buy
- Expedite Option :
  - Expedite
  - No Expedite
  - Cancel
  - Delay
- Buttons: OK, Cancel

**Item Code From:** Specifies the lower limit of a range of MPS Items that can be used to filter the items to be used to generate the report.

**Item Code To:** Specifies the upper limit of a range of MPS Items that can be used to filter the items to be used to generate the report.

**Warehouse From:** Specifies the lower limit of a range of warehouse locations that can be used to filter the items to be used for this report.

**Warehouse To:** Specifies the upper limit of a range of warehouse locations that can be used to filter the items to be used for this report.



**Make:** Select to include all Make types of item falling within the specified criteria.

**Buy:** Select to include all Buy types of item falling within the specified criteria.

**Expedite Option:** Specify whether the report should print for Expedite, No Expedite, Cancel, Delay orders.

							03/08/2019 11:05:01AM
<b>MPS EXPEDITE/DELAY SUPPLY REPORT</b>							
QASQL_WMS_58							
<b>Item Code</b>	MPS_ITEM						
<b>Warehouse</b>	01						
<b>Order No</b>	<b>Line No</b>	<b>Order Type</b>	<b>Quantity</b>	<b>Requested Date</b>	<b>New Date</b>	<b>Expedite Status</b>	
129	1	Purchase	500.000	03/14/2019	03/10/2019	Expedite	
<b>Following order receipts are suggested as on dates:</b>							
<b>Date</b>	<b>Demand</b>		<b>Suggested Orders</b>				
03/10/2019	1,000.000		500.000				
03/14/2019	0.000		0.000				

On the report you can also see the suggested MPS orders (with dates) to appropriately meet the demand of the item.

## 5.2 MRP Expedite Report

**Go To: Planning → Planning Actions → MRP Expedite Report.**

BatchMaster ERP now provides you a way to generate the MRP Expedite Supply Report. The report can be generated to display suggested changes in delivery receipt date/Requested delivery date/Due date of the item to fulfill its demand. The report can include any combination of the following options:

**Expedite:** To accelerate the supply of item to meet its demand.

**Delay:** To postpone the supply of item to match its demand.

**Cancel:** To cancel the order of the item for which there is no demand.

**Non-Expedite:** Order is appropriate and need not require any modification



MRP Expedite Report

Item Code From: L-001

Item Code To: L-001

Warehouse From: 01

Warehouse To: 01

Make  Buy

Expedite Option :

Expedite

No Expedite

Cancel

Delay

OK Cancel

**Item Code From:** Specifies the lower limit of a range of MRP Items that can be used to filter the items to be used to generate the report.

**Item Code To:** Specifies the upper limit of a range of MRP Items that can be used to filter the items to be used to generate the report.

**Warehouse From:** Specifies the lower limit of a range of warehouse locations that can be used to filter the items to be used for this report.

**Warehouse To:** Specifies the upper limit of a range of warehouse locations that can be used to filter the items to be used for this report.

**Make:** Select to include all Make types of item falling within the specified criteria.

**Buy:** Select to include all Buy types of item falling within the specified criteria.

**Expedite Option:** Specify whether the report should print for Expedite, No Expedite, Cancel, Delay orders.



03/08/2019 11:28:00AM						
<b>MRP EXPEDITE/DELAY SUPPLY REPORT</b>						
QASQL_WMS_58						
<b>Item Code</b>	L-001	None				
<b>Warehouse</b>	01					
<b>Order No</b>	<b>Line No</b>	<b>Order Type</b>	<b>Quantity</b>	<b>Requested Date</b>	<b>New Date</b>	<b>Expedite Status</b>
34	0	Purchase	542.856	03/13/2018	03/06/2019	Delay
34	1	Purchase	245.714	03/14/2018	03/06/2019	Delay
<b>Following order receipts are suggested as on dates:</b>						
<b>Date</b>	<b>Demand</b>	<b>Suggested Orders</b>				
03/13/2018	0.000	0.000				
03/14/2018	0.000	0.000				
03/06/2019	3,943.860	3,155.290				

On the report you can also see the suggested MRP orders (with dates) to appropriately meet the demand of the item.

### 5.3 Run MPS

**Go To: Planning → Planning Actions → Run MPS.**

Use the *Run MPS* option to run the MPS engine. The MPS system calculates demand and supply and then generates production or purchase recommendations based on those calculations.

The following demand sources are considered by the system:

- Forecasts.
- Sales Orders.
- Demand for MPS-type Materials from production batches of top-level items.
- Inventory transfer out requests.
- Draft inventory transfers out.
- Item Quantities below their minimum stock level.

The following supply sources are considered by the system:

- On-hand quantity, in nettable warehouses, that is not allocated to other orders.
- Scheduled purchase receipts.
- Scheduled production receipts.
- Existing MPS recommendations.



- Inbound inventory transfer requests.
- Draft inventory transfers in.



You can choose to run MPS as a service as well. With this feature you can choose to run MPS unattended on every day, day of the week, or day of the month. See the “Service Configurator Functional Document” for more details.

MPS recommendations can be generated with any of the statuses listed below:

- **Planned:** The system has recommended the order. A Planned order is deleted by the system in the next MPS run and regenerated.
- **Firm Planned:** The order is planned but not yet ready to be converted to an actual production order or purchase order. MPS does not modify or delete a Firm Planned order during a subsequent MPS run.
- **Confirmed:** The order is ready to be transferred to an actual production or purchase order. MPS does not modify/delete a confirmed order during a subsequent MPS run.
- **Exception:** If the order is past due or falls within the time fence, MPS would flag it as an exception. The planner will evaluate each exception order and decide accordingly on whether or not to release it. An exception order is deleted during a subsequent MPS run.

### 5.3.1 Mandatory Inputs



Data must be maintained in the following screens before running MPS:

- *Company Calendar Setup.*
- *Planning Calendar Setup.*
- *Planning Defaults*
- *Maintain MPS Items*
- *Forecast Entry (optional).*



### Select Item Range For MPS

**MPS Item From:** Specifies the lower limit of a range of MPS Items that can be used to filter the items to be used for this MPS run. Leaving this field blank has the same effect as selecting the first available MPS Item using the lookup feature.

**MPS Item To:** Specifies the upper limit of a range of MPS Items that can be used to filter the items to be used for this MPS run. Leaving this field blank has the same effect as selecting the last available MPS Item using the lookup feature.

**MPS Warehouse From/To:** Specifies the upper and lower limit of a range of warehouse locations that can be used to filter the items to be used for this MPS run. Leaving this field blank has the same effect as selecting the first available warehouse location using the lookup feature. If you are using the warehouse grouping function, entering the primary warehouse in either field instructs the system to consider demand from the secondary warehouses as well.

### Select Date Range For MPS

**Demand Start Date:** Displays the current date at the time of the MPS run. This is a read-only field.

**Demand End Date:** Displays the *Demand End Date*. Defaults to the date from today to the number of days specified in the *Planning Period* field on the Planning Default Screen. Let's say, today is 10/06/19 and *Planning Period* defined at the *Planning Defaults* screen is 10 then the *Demand End Date* will be calculated as 20/06/19. You can modify this field, if needed.

**MPS Run Date:** Displays the date on which the MPS engine is being run.



**Skip low level code:** If this option is checked when MPS runs, the system will calculate demand only for the top-level items. It will not calculate demand for intermediates within top-level formulas. We recommend that you leave this option unchecked.

### **Generate Planned Orders as**

**Planned:** Select this option if you want MPS to generate Planned orders. This is the default option.

**Firm-planned:** Select this option if you want MPS to generate Firm Planned orders.

**Confirmed:** Select this option if you want MPS to generate Confirmed orders.



Use *Firm Planned* or *Confirmed* options only when you do not want to review system-generated recommendations before transferring them to actual orders.

**Run:** Click *Run* to generate MPS suggested orders.



System sends user-specific alerts for automated MPS/MRP execution. To ensure designated users are promptly informed about the start, success, or failure of scheduled MPS/MRP runs.

For this feature:

- A Planning Alerts dropdown is available at the *User Setup* screen, that allows users to opt-in or opt-out of receiving alerts. By default, this is set to No, ensuring alerts are only sent to users who explicitly enable them.
- The alert system provides real-time messages such as:
  - "MPS Service Started" and "MPS Service Executed Successfully"
  - "MRP Service Started" and "MRP Service Executed Successfully"
  - "MPS/MRP Service Failed", including detailed exception messages for troubleshooting

**Cancel:** Click *Cancel* to exit the screen without running the MPS engine.



## 5.4 MPS Dashboard

Go To: Planning → Planning Actions → MPS Dashboard.

Use the *MPS Dashboard* to review and transfer order recommendations after MPS has been run. You can view a demand and supply summary of each *MPS Item* as well as a detailed planning worksheet. You can also review your purchase and production recommendations, edit them, and transfer them to purchase and production orders, respectively.

### 5.4.1 MPS Planning Worksheet Tab

	Time Fe	Planning Zone													
	12/16/22	12/17/22	12/18/22	12/19/22	12/20/22	12/21/22	12/22/22	12/23/22	12/24/22	12/25/22	12/26/22	12/27/22	12/28/22	12/29/22	12/30/22
Demand				100,000											
Proj Available Balance				100,000											
MPS				100,000											
MPS Release				100,000											
Supply															
ATP															
Cumulative ATP															

#### MPS Item

**Item Code:** Displays the code of the Item.

**Description:** Displays the description of the Item.

**Item Group:** Displays the group code of the item.

**Whse Code:** Displays the Warehouse code.

**Unit:** Displays the stocking UoM for the Item.

**Safety Stock :** Displays the safety stock quantity defined at Item Master Data at Inventory tab at Minimum Inventory field.



**EOQ:** Displays the economic order quantity if maintained for the item on the Maintain MPS item screen.

**Available Quantity:** Displays the quantity of the Item currently available in stock.

**MPS Planning Worksheet:** Click this button to open MPS Planning worksheet for the selected item.

**Item with Demand only:** Choose this option to view only the items for which demand is occurred.

**Show Group Bar:** Choose this option to get the Group bar above the grid.

**Export:** Choose this option to export the data. On clicking the above dropdown option, the system displays two options:

- Export to **Excel:** Use this option to export the upper grid data into an Excel spreadsheet. The exported excel file can be shared, and available in an easily printable format.
- Export to **PDF:** Use this option to export the upper grid into a PDF document.

### **MPS Item With Summary**

The lower grid displays a summary of planning data for each planning bucket for the Item highlighted in the upper grid.

**Time Fence 1:** This is the 'protected' area, so all items falling within this area will be flagged as exception orders.

**Planning Zone:** All orders within this area will be normal orders (either planned, firm planned, or confirmed) depending on the choice made in *Planning Defaults*.



## MPS Planning Worksheet

Select the *MPS Planning Worksheet* to display a snapshot of demand and supply data for each planning bucket, captured by the system at the time of the MPS run for the *Item Code/Warehouse* combination displayed in the header.

	Planning Zone									
	09/19/17	09/20/17	09/25/17	10/02/17	10/09/17	10/16/17	10/23/17	10/30/17	11/06/17	12/01/17
Forecast	50.000		100.000	150.000	10.000.000					
Customer Orders										
Warehouse Transfers										
Dependent Demand										
Gross Demand			100.000	150.000	10.000.000					
Proj Available Balance										
Planned Orders		100.000	150.000							
Firm Planned Orders										
Confirmed Orders										
MPS Release		100.000	150.000		10.000.000					
MPS			100.000	150.000						
Production Orders										
Purchase Orders										
WareHouse Orders										
ATP			100.000	150.000						
Cumulative ATP			100.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
Exception Orders	10.000.000									

Item Code	Whse Code	Document No	Demand Quantity	Demand Date	Run Date
chocolatecoffee	01	FK01	50.000	09/19/17	09/19/17

The different columns on the screen are:

**Time Fence 1:** Displays how many periods fall within the time fence, and all orders falling within the time fence.

**Planning Zone:** All other buckets not falling within the time fence are grouped under this column.

	Time Fence 1	Planning Zone								
	09/19/17	09/20/17	09/25/17	10/02/17	10/09/17	10/16/17	10/23/17	10/30/17	11/06/17	12/01/17
Forecast										
Customer Orders										
Warehouse Transfers										
Dependent Demand										
Gross Demand										
Proj Available Balance										
Planned Orders										
Firm Planned Orders										
Confirmed Orders										
MPS Release										
MPS										
Production Orders										
Purchase Orders										
WareHouse Orders										
ATP										
Cumulative ATP										
Exception Orders										

Item Code	Whse Code	Document No	Demand Quantity	Demand Date	Run Date
chocolatecoffee	01	FK01	50.000	09/19/17	09/19/17



## Planning Zone First Bucket Calculations

**Forecast:** The sum of all the active forecasts entered on the Forecast entry screen for the particular item.

**Customer Orders:** Sum of all the sales orders where the delivery date is past due will fall in the first bucket + any sales order falling in first bucket.

**Warehouse Transfer/Out:** Sum of all the past due Inventory Transfer Out Requests/Drafts will fall in the first Bucket + Inventory Transfer Requests/Drafts falling in the first bucket.

**Gross Demand:** All Qualified Demands as per the planning defaults setting.

**Dependent Demand:** The sum of demand for intermediates and raw materials that comes from MPS Planned orders and Production Orders falling in the First Bucket.

**Proj Available Balance:** Available Quantity + MPS + Production Orders + Purchase Order - Gross Demand.

**Planned Orders:** The total planned order quantity for the item in the first bucket.

**Firm Planned Orders:** The total firm planned order quantity for the item in the First Bucket.

**Confirmed Orders:** The total confirmed order quantity for the item in the First Bucket.

**MPS Release:** The total of the planned, firm planned, and confirmed orders for the item in the First Bucket.

**MPS:** MPS release orders of previous buckets or the current bucket ending in the current bucket.

**Production Orders:** Sum of already existing Production Orders for the particular item in the First Bucket.

**Purchase Orders:** Sum of already existing Purchase Orders for the particular item in the First Bucket.

**Warehouse Orders:** Sum of incoming Inventory transfer requests and drafts and incoming inventory transfers in the First Bucket.

**ATP:** The Available to Promise = MPS + Production Orders + Purchase Orders + Warehouse Transfer In – Sales Orders – Warehouse Transfer Out – Dependent Demand + Next Bucket ATP ( For Last Bucket It will be 0 and will only be considered if Previous ATP is negative ) + Onhand Stock (For First Bucket only).

**Cumulative ATP:** The cumulative quantity of ATP.



**Exception Orders:** This will be based on Past due demand or Capacity constraints creating a start date in the past for any future demands.

### **Planning Zone Second Bucket Onwards (Calculations)**

**Forecast:** The sum of all the active forecasts entered on the Forecast entry screen for the particular item for that bucket.

**Customer Orders:** Sum of all Sales orders in that respective Bucket.

**Warehouse Transfer/Out:** Sum of all the past due Inventory Transfer Out Requests/Drafts + Inventory Transfer Requests/Drafts falling in the current bucket.

**Gross Demand:** All Qualified Demands as per the planning defaults setting.

**Dependent Demand:** The sum of demand for intermediates and raw materials that comes from MPS Planned orders and Production Orders falling in the given Bucket.

**Proj Available Balance:** PAB1 (Previous) + MPS + Production Order + Purchase Order - Gross Demand.

**Planned Orders:** The total planned order quantity of the item for a given bucket.

**Firm Planned Orders:** The total firm planned order quantity of the item for a given bucket.

**Confirmed Orders:** The total confirmed order quantity for the item for a given bucket.

**MPS Release:** The total of the planned, firm planned, and confirmed orders for the item for a given bucket.

**MPS:** MPS release orders of previous buckets or the current bucket ending in the current bucket.

**Production Orders:** Sum of already existing Production Orders of the item in the current bucket.

**Purchase Orders:** Sum of already existing Purchase Orders of the item in the current bucket.

**Warehouse Orders:** Sum of incoming Inventory transfer requests and drafts and incoming inventory transfers in the current bucket.

**ATP:**  $MPS + Production Orders + Purchase Orders + Warehouse Transfer In - Sales Orders - Warehouse Transfer Out - Dependent Demand + Next Bucket ATP$  ( For Last Bucket It will be 0 and will only be considered if Previous ATP is negative)

**Cumulative ATP:** The cumulative quantity of ATP.

**Exception Orders:** There will be no exceptions in planning buckets.



Click on any line in the *MPS Planning Worksheet* and the details will show in the space below:

Forecast	50.000		100.000	150.000	10.000.000					
Customer Orders										
Warehouse Transfers										
Dependent Demand										
Gross Demand			100.000	150.000	10.000.000					
Proj Available Balance										
Planned Orders	100.000		150.000							
Firm Planned Orders										
Confirmed Orders										
MPS Release	100.000		150.000		10.000.000					
MPS			100.000	150.000						
Production Orders										
Purchase Orders										
Warehouse Orders										
ATP			100.000	150.000						
Cumulative ATP			100.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
Exception Orders	10.000.000									

Item Code	Whse Code	Document No	Demand Quantity	Demand Date	Run Date
chocolatecoff...	01	FK01	50.000	09/19/17	09/19/17



## 5.4.2 MPS Production Order Tab

Use the *MPS Production Order* tab to view all MPS production recommendations. You can perform the following actions on this tab:

- Modify quantities, start date, and end date of a given order.
- Change or assign a process cell.
- Change the status of an order, say from Planned to Confirmed.
- Combine one or more orders in a single order.
- Transfer orders to production batches.
- Remove orders, if required.

The screenshot displays the 'MPS Dashboard' window with the 'MPS Production Order' tab selected. The interface includes a top navigation bar with 'Planning WorkSheet', 'MPS Production Order', and 'MPS Purchase Order'. Below this, there are several control panels: 'Refresh', 'Save Layout', 'Delete Layout', 'Excel', 'Demand Pegging', 'Save', and 'Update Inv. Order'. A 'Color Scheme' panel shows checkboxes for 'PLANNED', 'FIRM PLANNED', 'CONFIRMED', 'EXCEPTION', and 'TRANSFERRED'. A 'Change Status To' panel has buttons for 'Confirm', 'Planned', and 'Firm Planned'. A 'Combine Orders' panel has checkboxes for 'Club With Formula', 'Create Super Batch', and 'Super Batch With Runs', along with 'Transfer Order' and 'Inv. Transfer Order' buttons. The main area is a data grid with columns: 'Select', 'Order No', 'Item Code', 'Item Description', 'Whse Code', 'Fill UOM', 'Confirm Qty', and 'Batch'. The grid contains 14 rows of data, with rows 15-18 highlighted in yellow (Planned), rows 19-22 in cyan (Firm Planned), and rows 23-26 in magenta (Confirmed). The grid also has a 'Drag a column header here to group by that column' prompt and 'OK' and 'Cancel' buttons at the bottom.

**Refresh:** Choose the *Refresh* button to retrieve orders.

**Save Layout:** You can add or remove columns in the grid or group the data. To retain your settings, click the *Save Layout* button. You can enter a setting name or override a setting named *Default*.

**Delete Layout:** Click this button to remove a layout that was previously saved.

**Excel:** Click the *Excel* button to export the grid contents to MS Excel or a PDF document.



**Show All:** Check this option to display all orders.

**Orders for Selected Item:** Choose this option to display orders only for a specific item. Select the required item in the grid below, select this option, and click the *Show* button to display orders for the selected item only.

**Demand Pegging:** Click this button to view pegging information. See [Section 5.5](#).

**Update Inv Order:** Use this button to specify the Inventory Transfer *From Warehouse*. Sometimes you may be required to generate the Inventory Transfer Request from a *From Warehouse* other than the *Default Inventory Transfer From Warehouse* you set for the item on the *Maintain MPS/MRP Item* screen. In such case you can use this button to specify the *From Warehouse*. Further, on performing the Inventory Transfer Order, the system will generate the Inventory Transfer Request document from this new *From Warehouse* to the Planned Purchase/Production warehouse.

**Color Scheme:** Displays all available order statuses. You can select one or more options and click the *Refresh* button to filter the list.

**Change Status To:** Allows you to change the status of one or more rows. Select one or more rows and then select the *Confirm*, *Planned*, or *Firm Planned* option to change the status of all selected rows to that status.

**Combine Orders:** Allows you to combine two or more orders for the same item into a single order. Select one or more rows from the table and click the *Combine Orders* button to perform this operation.

**Transfer Order:** Use this function to transfer MPS recommendations to actual production batches. Note that you can only transfer Confirmed orders. You can choose to combine items with the same formula into a single batch, and you can elect to create SuperBatches. (Refer to the *BME-B1 18.2 Production User Guide* an explanation of SuperBatch.)

- **Club with Formula:** Check this option to combine finished goods with the same formula in a single batch.
- **Create SuperBatch:** Select this option to create a SuperBatch instead of a production batch.
- **Super Batch with Runs:** Select this option to create a Super Batch with Runs. On transferring the order, the System will calculate the number of runs on the basis of Process cell capacity and accordingly creates the sub-batches.



On the *Production Default* Screen, the *Calculate Run based on Process Cell Capacity* checkbox must be checked.



**Inventory Transfer Order:** Click this button to generate the Inventory transfer request for the confirmed selected order to transfer stock from the *Default Inventory Transfer Warehouse* to the current planning production warehouse.

### **Order Grid**

**Select:** Use this field to select a row.

**Order Number:** Displays a system-generated order number.

**Item Code:** Displays the Item Code. A hyperlink is available in this field to directly navigate to *the Item Master, Planning worksheet, Bill of Material Entry* or *View On hand information* screen.

**Item Description:** Displays the description of Item code.

**Whse Code:** Displays the code for the Warehouse where the item is stored.

**Fill UoM:** Displays the Fill UoM when the item is a Finished Good.

**Confirm Qty:** Specify the quantity you wish to confirm. By default, this value is equal to the Planned quantity recommended by MPS.

**Batch Type:** Displays the type of batch (*Fill, Mix, or Assembly*).

**Process Cell:** Displays the process cell. The system assigns a default process cell based on the *Formula/Process Cell Capacity* record at the time of the MPS run. It can be changed, if required.

**Confirm Start:** Displays the start date. You can modify this field if needed. By default, this field is the same as the *Planned Start Date*, which is an MPS recommended date.

**Confirm End:** Displays the end date or due date of the order. You can modify this field if needed. By default, this field is the same as the *Planned End Date*, which is an MPS recommended date.

**Confirm Date:** Displays the start date. You can modify this field if needed. By default, this field is the same as the Planned Start Date, which is an MPS recommended date.

**Formula Key/Asm Key/Int Key:** Based on the Batch Type of the item, this field displays the *Formula, Intermediate Key, or Assembly Item Code*.

**Batch Number:** Once the item has been transferred to a production batch, this field displays the actual Batch Number.

**Batch Series:** Displays the information of batch default from Batch Series Master.



**Default Inventory Transfer WH:** Defaults the *Inventory From* Warehouse specified on the *Maintain MRP item* screen. If required, you can change this warehouse. The warehouse you specify here will be used as the *From warehouse* to transfer the required stock to the Production warehouse to support the current production planning.

**Inv Transfer Request Document No:** Displays the Inventory Transfer Request document's number generated against the transferred order. A hyperlink is provided at this field to navigate to the respective Inventory Transfer Request document.

### 5.4.3 MPS Purchase Order Tab

Use this tab to view all MPS purchase recommendations. These are normally for items that you purchase for direct resale. Raw material and packaging purchases are usually planned via MRP.

You can perform following actions on this tab:

- Modify quantities, start date, and end date of a given order.
- Change or assign a vendor.
- Change the status of an order (e.g., from Planned to Confirmed).
- Combine one or more orders into a single order.
- Transfer orders to Purchase Orders.

Remove orders, if required.

Order No	Item Code	Whse Code	Plan Run Date	Item Desc	Start Date	End Date	Confirm S
1	Coffee	03	27/09/18	Coffee	27/09/18	27/09/18	27/09/18
2	Coffee	UJJAIN	27/09/18	Coffee	27/09/18	27/09/18	27/09/18
3	Coffee FG01	UJJAIN	27/09/18	Coffee FG01	27/09/18	27/09/18	27/09/18
4	M_STBSHAKE	02	27/09/18	Strawberry Shake	27/09/18	27/09/18	27/09/18
5	M_STBSHAKE	03	27/09/18	Strawberry Shake	27/09/18	27/09/18	27/09/18
6	M_STBSHAKE	05	27/09/18	Strawberry Shake	27/09/18	27/09/18	27/09/18
7	M_STBSHAKE	06	27/09/18	Strawberry Shake	27/09/18	27/09/18	27/09/18
8	M_STBSHAKE	AHMDN	27/09/18	Strawberry Shake	27/09/18	27/09/18	27/09/18
9	M_STBSHAKE	BHOPAL	27/09/18	Strawberry Shake	27/09/18	27/09/18	27/09/18
10	M_STBSHAKE	DEWAS	27/09/18	Strawberry Shake	27/09/18	27/09/18	27/09/18
11	M_STBSHAKE	UJJAIN	27/09/18	Strawberry Shake	27/09/18	27/09/18	27/09/18
12	Orange Pulp_FG	01	27/09/18	Finished Goods f...	27/09/18	27/09/18	27/09/18
13	Peach-asm	02	27/09/18	Asm	27/09/18	27/09/18	27/09/18



**Refresh:** Click the *Refresh* button to retrieve orders.

**Save Layout:** You can add or remove columns in the grid or group the data. To retain your settings, choose the *Save Layout* option. You can enter a setting name or override a setting named *Default*.

**Delete Layout:** Click this button to remove a layout that was previously saved.

**Excel:** Click the *Excel* button to export the grid contents to MS Excel or a PDF document.

**Update Inv Order:** Use this button to specify the Inventory Transfer *From Warehouse*. Sometimes you may be required to generate the Inventory Transfer Request from a *From Warehouse* other than the *Default Inventory Transfer From Warehouse* you set for the item on the *Maintain MPS/MRP Item* screen. In such case you can use this button to specify the *From Warehouse*. Further, on performing the Inventory Transfer Order, the system will generate the Inventory Transfer Request document from this new *From Warehouse* to the *Planned Purchase/Production* warehouse.

**Color Scheme:** Displays all available statuses. You can select one or more of the options listed below and click the *Refresh* button to filter the list.

**Change Status to:** Allows you to change the status of one or more rows to the desired status. Select the desired row(s) and choose the *Confirm*, *Planned*, or *Firm Planned* option.

**Combine Orders:** Allows you to combine two or more orders for the same item into a single order. Select one or more rows from the table and click the *Combine Orders* button to perform this operation.

**Multiple EOQ:** Click this button to create the purchase orders as multiples of the item's EOQ.

**Combine PO:** For the selected orders in a grid, checking this option if you click on *Transfer To PO* button then system will club purchase requests created for the same vendor and create a single purchase order for the required items.

**Create Draft PO:** Choose this option to create a draft PO instead of an actual PO.

**Transfer to PO:** Use this function to transfer MPS recommendations to actual POs. Additionally, you can choose to transfer to a draft PO instead of directly creating a PO.

**Inventory Transfer Order:** Click this button to generate the Inventory transfer request for the confirmed selected order to transfer stock from the *Default Inventory Transfer Warehouse* to the current planning production warehouse.

### Order Grid

**Select:** Use this field to select a row.

**Order Number:** Displays a system-generated *Order Number*.



**Item Code:** Displays the *Item Code*. A hyperlink is available in this field to directly navigate to the *Item Master*, *Planning worksheet*, *Bill of Material Entry* or *View On hand information* screen.

**Whse Code:** Displays the *Warehouse Code* for the item.

**Plan Run Date:** Displays the date on which MPS was last run.

**Order Quantity:** Displays a system-recommended quantity.

**Start Date:** This is the date which is calculated based on the Lead Time of the MPS/MRP Item so that the demand date can be met. This will be the Required Date in the Purchase Order/Draft generated.

**End Date:** This is the system suggested demand End Date i.e. the date on which particular raw material is needed. This date is calculated considering the setting made on *Difference between delivery and order date (in days)* field of planning defaults.

**Confirm Start:** Displays the *Confirm Start Date*, which can be edited. By default, this field is equal to the *Start Date*, which is a system-generated field.

**Confirm End:** Displays the *Confirm End Date* or *Due Date*, which can be edited if needed. By default, this field is equal to the *End Date*, which is a system-generated field.

**Confirm Quantity:** Displays the *Confirmed Quantity*, which can be edited if needed. By default, this value is equal to the *Order Quantity*.

**Confirm Date:** Displays the date on which the order was confirmed.

**Transfer Date:** Displays the date on which the order was transferred to a PO or Draft PO.

**Vendor:** Displays the *Vendor*. This field can be edited if needed.

**PO No:** Displays the purchase order number of the transferred order. A hyperlink is provided at this field clicking which you can navigate to the respective purchase order.

**Purchase UOM:** Displays defaults the Purchase UOM of the item as maintained on Item Master Data screen after transferring the order.

**Purchase UOM Quantity:** Displays the order quantity in Purchase UOM.

**On Hand Quantity:** Displays the system generated *On Hand Quantity* of the item.

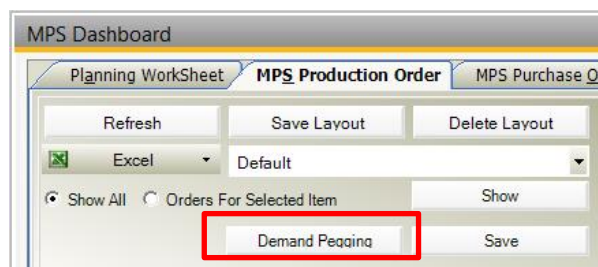
**Default Inventory Transfer WH:** Defaults the *Inventory From Warehouse* specified at the *Maintain MRP item* screen. If required, you can change this warehouse. The warehouse you specify here will be used as the *From warehouse* to transfer the required stock at the Production warehouse to support the current production planning.

**Inv Transfer Request Document No:** Displays the Inventory Transfer Request document's number of the transferred order. A hyperlink is provided at this field to navigate to the respective Inventory Transfer Request document.



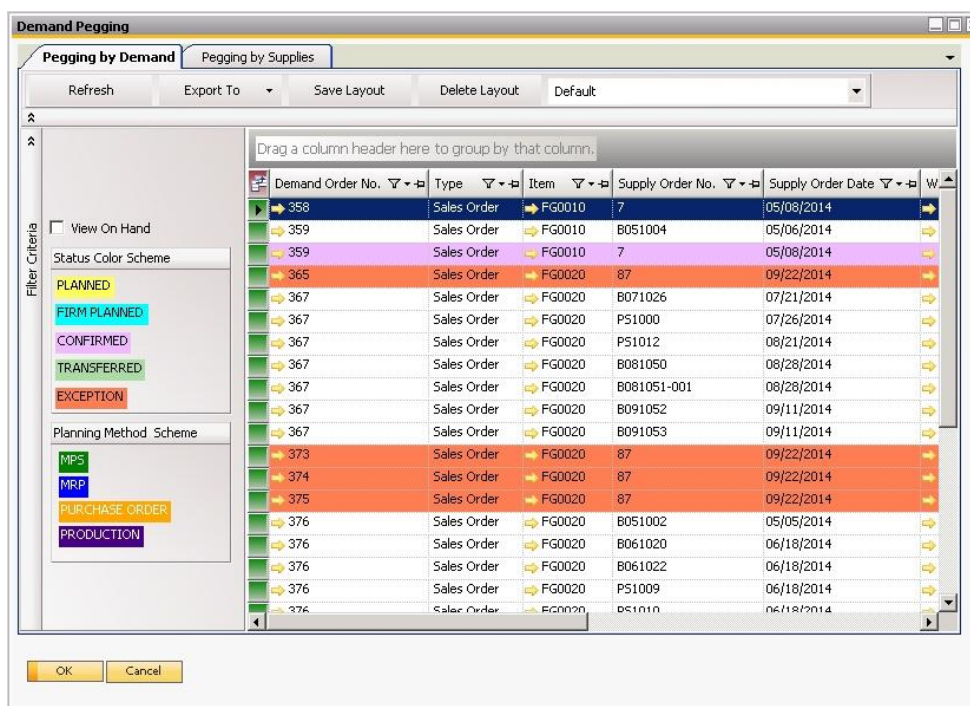
## 5.5 Demand Pegging Dashboard

Use the *Demand Pegging Dashboard* (accessed from the *MPS Production Order* tab of the *MPS Dashboard*) to see the source of demand and to determine why a production order or purchase order was suggested.



### 5.5.1 Pegging by Demand Tab

This tab displays all demand documents such as sales orders and pegs them against all supply documents like MPS recommendations, open POs, etc.



**Refresh:** Click the *Refresh* button to display data.

**Export To:** Choose the drop-down menu to export the data displayed in the grid to Microsoft Excel or a PDF file.



**Save Layout:** You can add or remove columns in the grid or group the data. To retain your settings, click the *Save Layout* button. You can enter a setting name or override a setting named *Default*.

**Delete Layout:** Click this button to remove a layout that was previously saved.

**View On Hand:** Check this box if you want to view the on-hand quantities of items for the selected demand pegging criteria.

The left panel contains a legend that states the color scheme for different statuses of an item. A legend for the color scheme of the planning methods is also available.

When you want to group columns to create a header-level grouping for the grid, you can drag and drop any column in the dialog box above the grid.

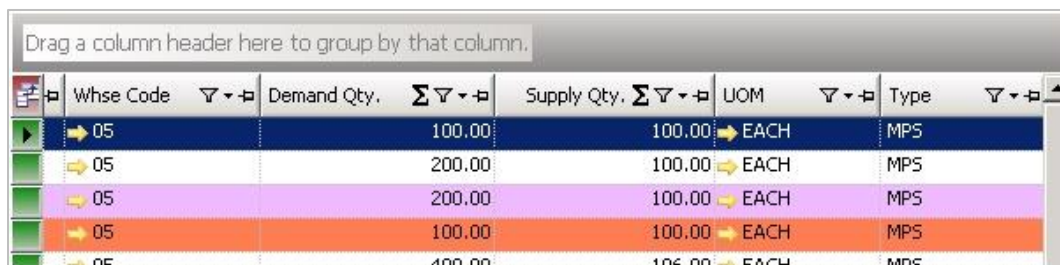
**Demand Order Number:** The number of the document driving demand for the item.

**Type:** Displays the type of supply document (production batch, MPS suggested order, PO, etc.).

**Item:** Displays the *MPS Item Code*.

**Supply Order No:** Displays the supply order that will satisfy demand.

**Supply Order Date:** Displays the supply order due date.



Whse Code	Demand Qty.	Supply Qty.	UOM	Type
05	100.00	100.00	EACH	MPS
05	200.00	100.00	EACH	MPS
05	200.00	100.00	EACH	MPS
05	100.00	100.00	EACH	MPS
05	400.00	106.00	EACH	MPS

**Whse Code:** Displays the *Warehouse Code*.

**Demand Quantity:** Displays the demand quantity of the actual sales order.

**Supply Quantity:** Displays the supply quantity that is pegged to the given sales order. A given supply document can cater to multiple sales orders, and vice versa.

**UoM:** Displays the stocking unit of the item. All quantities shown in this grid are converted to and displayed in the stocking UoM of the item.

**Type:** Displays whether MPS, MRP, etc.



## 5.5.2 Pegging by Supplies Tab

This tab gives an alternate view of pegging. Use this view to see why a purchase or production order was created. Pegging information is displayed against actual demand documents such as sales orders.

PO No.	PO Date	Vendor ID	Item	Location	UOM
426	06/18/2014	V10101	RM0015	05	LB
427	06/18/2014	V10101	RM0015	05	LB
428	07/04/2014	V10101	RM0015	05	LB

Doc No.	Demanddate	ITEMDESC	Location	DemandQty	Unit
PS1000	07/26/2014	RM0015	05	6.1212	LB

PO No.	PO Date	Vendor ID	Item	Location	UOM
430	07/14/2014	V10101	RM0015	05	LB
436	07/30/2014	V10101	RM0010	05	LB

Doc No.	Demanddate	ITEMDESC	Location	DemandQty	Unit
B071043	07/31/2014	RM0010	05	4.635045	LB

PO No.	PO Date	Vendor ID	Item	Location	UOM
440	09/19/2014	V10101	RM0014	05	LB

**Refresh:** Click this button to refresh the data displayed in the grid, which is based on the filter criteria.

**Export To:** Click the drop-down button of this function to export the data displayed in the grid to a Microsoft Excel or PDF file.

**Save Layout:** Click this button to save the layout for future reference.

**Delete Layout:** Click this button to delete an already saved layout.

**Default:** Use this setting as default by assigning a unique name for the setting in this field.

**View On Hand:** Check this box if you want to view the on-hand quantities of items for the selected demand pegging criteria.

The left panel contains a legend that states the color scheme for different statuses of an item. A legend for the color scheme of the planning methods is also available.



To group columns to create a header-level grouping for the grid, drag and drop any column in the dialog box above the grid.

**PO No:** This field is used to display the PO number that is the source of supply.

**PO Date:** The value of this field is defaulted to the Order Date of the selected PO.

**Vendor ID:** Displays the ID of the Vendor for whom this PO was raised.

Item	Location	UOM	PO Status
RM0015	05	LB	Close
RM0015	05	LB	Close
RM0015	05	LB	Close

**Item:** Displays the *MRP Item Code*.

**Location:** The warehouse into which the item is to be received.

**UoM:** The unit of measure for this item on the PO.

**PO Status:** Displays the current status of the PO.

When the grid is expanded, additional information on the original Demand for this item is available.

Doc No	Demanddate	ITEMDESC	Location	DemandQty	Unit
PS1000	07/26/2014	RM0015	05	6.1212	LB

**Doc No:** Displays the *Document Number* of the demand source. It may be a Sales Order Number, a Batch Number, etc.

**Demand Date:** The date on which the demand must be fulfilled. For a Production Batch, this is the *Scheduled Start Date*; for a Sales Order, it is the *Expected Delivery Date*.

**ITEMDESC:** Displays the *MRP Item Code*.

**Location:** Displays the *Location* at which the specified quantity of the selected item is present.

**DemandQty:** This field displays the quantity required to fulfil the demand.

**Unit:** This field displays the UoM in which the demand is expressed.



## 5.6 Run MRP

**Go To: Planning → Planning Actions → Run MRP.**

Use MRP to plan your raw material purchasing. You typically run MRP after you have firmed up your production schedule. The MRP system calculates demand and supply and then generates purchase recommendations based on those calculations. It may also recommend production batches for intermediates if these have not been scheduled from MPS through SuperBatches.

The following demand sources are considered by the system:

- Forecasts.
- Sales Orders.
- Demand from production batches of top-level items.
- Demand from parent item's MPS recommendations.
- Inventory transfer out requests.
- Draft inventory transfers out.
- Quantities below minimum stock level.

The following supply sources are considered by the system:

- On-hand quantity.
- Scheduled purchase receipts.
- Scheduled production receipts.
- MRP recommendations.
- Inbound inventory transfer requests.
- Draft inventory transfers in.

An MRP recommendation can be generated with any of the statuses listed below:

- **Planned:** The system has recommended the order. A *Planned* order is deleted by the next MRP run and regenerated.
- **Firm Planned:** The order is planned but not yet ready to be converted to an actual production order or PO. The system does not modify or delete a Firm Planned order during an MRP run.



- **Confirmed:** The order is ready to be transferred to an actual order. The system does not modify or delete a confirmed order during an MRP run.
- **Exception:** If the order is past due or falls in a time fence, the system would flag the order as an exception. The planner will evaluate each exception order and decide accordingly. An exception order is deleted during an MRP run.



You can choose to run MRP as a service as well. With this feature you can choose to run the MRP system unattended on every day, day of the week, or day of the month. See the “Service Configuration User Guide” for more details.

### 5.6.1 Mandatory Inputs



Data must be maintained in the following screens before MRP is run:

- *Planning Setup.*
- *Planning Calendar.*
- *Maintain MRP Item.*
- *Forecast Entry (optional).*
- *Company Calendar Setup.*

You should have run MPS and firmed your production planning before running MRP.

**Run MRP**

**Select Item Range For MRP**

MRP Item From → RM0031

MRP Item To → RM0035

MRP Warehouse From → 01

MRP Warehouse To → 05

**Select Date Range For MRP**

Demand Start Date: 10/12/2014

Demand End Date: 11/11/2014

MRP Run Date: 10/12/2014

Skip low level code

Generate Orders as:

Planned    Firm Planned    Confirmed

Run   Cancel

#### Select Item Range For MRP

**MRP Item From:** Specifies the lower limit of a range of *MRP Items* that can be used to filter the items to be used for this MRP run. Leaving this field blank has the same effect as selecting the first available *MRP Item* using the lookup feature.



**MRP Item To:** Specifies the upper limit of a range of *MRP Items* that can be used to filter the items to be used for this MRP run. Leaving this field blank has the same effect as selecting the last available *MRP Item* using the lookup feature.

**MRP Warehouse From/To:** Specifies the upper and lower limit of a range of warehouse locations that can be used to filter the items to be used for this MPS run. Leaving this field blank has the same effect as selecting the first available warehouse location using the lookup feature. If you are using the warehouse grouping function, entering the primary warehouse in either field instructs the system to consider demand from the secondary warehouses as well.

### **Select Date Range For MRP**

**Demand Start Date:** Displays the current date at the time of the MRP run. This is a read-only field.

**Demand End Date:** Displays the *Demand End Date*. Defaults to the date from today to the number of days specified in the *Planning Period* field on the Planning Default Screen. Let's say, today is 10/06/19 and *Planning Period* defined at the *Planning Defaults* screen is 10 then the *Demand End Date* will be calculated as 20/06/19. You can modify this field, if needed.

**MRP Run Date:** Displays the date on which the MRP engine is being run.

**Skip low level code:** If this option is checked when MRP runs, the system will calculate demand only for those items which have an MPS or other actual demand. It will calculate demand for intermediates within top-level formulas if this option was unchecked during *Run MPS* and demand for those intermediates was created; however, it will not expand to any lower levels. We recommend that you leave this option unchecked.

### **Generate Orders as**

**Planned:** Select this option if you want MRP to generate *Planned* orders. This is the default option.

**Firm Planned:** Select this option if you want MRP to generate *Firm Planned* orders.

**Confirmed:** Select this option if you want MRP to generate *Confirmed* orders.



Use the *Firm-Planned* or *Confirmed* options only when you do not want to review system-generated recommendations before transferring them to actual orders.



## 5.7 MRP Dashboard

Go To: **Planning** → **Planning Actions** → **MRP Dashboard**.

Use the *MRP Dashboard* to review and transfer order recommendations after MRP has been run. You can view a demand and supply summary of each *MRP Item* as well as a detailed planning worksheet. You can also review your purchase and production recommendations, edit them, and transfer them to purchase and production orders, respectively.

### 5.7.1 MRP Order Summary Tab

Item Code	DESCRIPTION	Item Group	Whse Code	Vendor	Unit	Available Quantity	Safety Stock
1 RM0003	Apple	Fruits	01	V001	KG	0.000	
2 RM0004	Orange	Fruits	01	V001	KG	0.000	
3 RM0005	Apple Cider Vinegar	Items	01	V001	LT	0.000	
4 RM0006	Cinnamon Stick	Items	01	V001	KG	0.000	
5 RM0007	Star Anise	Items	01	V001	KG	0.000	
6 RM0001	Sugar	Items	01	V001	KG	80.000	

	Time Fence 1		Planning Zone								
	12/16/22	12/17/22	12/18/22	12/19/22	12/20/22	12/21/22	12/22/22	12/23/22	12/24/22	12/25/22	12/26/22
Demand				32.680							
Proj Available Balance	32.680	32.680	32.680	32.680	32.680	32.680	32.680	32.680	32.680	32.680	32.680
MRP				32.680							
MRP release				32.680							
Supply											
ATP											
Cumulative ATP											

**Item Code:** Displays the *MRP Item Code*.

**Description:** Displays the item's description.

**Whse Code:** Displays the *Warehouse* for which planning is done.

**Vendor:** Displays the *Vendor* for a purchase recommendation.

**UOM:** Displays the stock *Unit of Measure* for the item, in which all planning is done.

**Available Quantity:** Displays the *On Hand Quantity* captured by the system at the time of the MRP run.

**Safety Stock:** Displays the *Safety Stock* level for the item.

**EOQ:** Displays the *Economic Order Quantity* for the item.



**Demand:** The total of the *Demand* for the specified period of time.

**Supply:** The total of the new and open PO quantities.

**Item with Demand only:** Choose this option to view only the items for which demand has occurred.

**Show Group Bar:** Choose this option to get the Group bar above the grid.

**Export:** Choose this option to export the data. On clicking the above dropdown option, the system displays two options:

- Export to **Excel:** Use this option to export the upper grid data into an Excel spreadsheet. The exported excel file can be shared, and available in an easily printable format.
- Export to **PDF:** Use this option to export the upper grid into a PDF document.

**Refresh:** Click the *Refresh* button to display planning data.

### **Lower Grid**

This portion of the screen displays a summary of planning data for each planning bucket for the item highlighted in the upper grid.

**Time Fence 1:** The 'protected' area; all items falling within this area will be flagged as exception orders.

**Planning Zone:** All orders within this area will be normal orders (either *Planned*, *Firm Planned*, or *Confirmed*) depending on the choice made in *Planning Defaults*.

### **MRP Planning Worksheet**

Click the *MRP Planning Worksheet* button to open a detailed *Planning Worksheet*. The *Planning Worksheet* displays summarized demand and supply data for each planning bucket, captured by the system at the time of the MRP run.



MRP Planning Worksheet											
Item Code	Bottle	Coffee Bottle	Warehouse	01	Available Quantity	1511.000	EACH	EQQ	0	Safety Stock	0
	Time Fence 1	Planning Zone									
	09/19/17	09/20/17	09/21/17	09/22/17	09/23/17	09/24/17	09/25/17	09/26/17	09/27/17	09/28/17	
Forecast											
Customer Orders											
Warehouse Transfers											
Dependent Demand			1,000.000								
Gross Demand			1,000.000								
Proj Available Balance											
Planned Orders			1,000.000								
Firm Planned Orders											
Confirmed Orders											
MRP Release			1,000.000								
MRP			1,000.000								
Production Orders											
Purchase Orders											
WareHouse Orders											
ATP	1,511.000										
Cumulative ATP	1,511.000	1,511.000	1,511.000	1,511.000	1,511.000	1,511.000	1,511.000	1,511.000	1,511.000	1,511.000	
Exception Orders											

### Planning Zone First Bucket Calculations

**Forecast:** The sum of all the active forecasts entered on the Forecast entry screen for the particular item.

**Customer Orders:** Sum of all the sales orders where the delivery date is past due will fall in the first bucket + any sales orders falling in first bucket.

**Warehouse Transfer/Out:** Sum of all the past due Inventory Transfer Out Requests/Drafts will fall in first Bucket + Inventory Transfer Requests/Drafts falling in the first bucket.

**Dependent Demand:** The sum of demand for intermediate and raw materials that comes from the demand of MPS Planned Orders and Production Orders falling in the First Bucket.

**Gross Demand:** All Qualified Demands as per the planning defaults setting.

**Proj Available Balance:** Available Quantity + MRP + Production Orders + Purchase Orders - Gross Demand.

**Planned Orders:** The total planned order quantity for the item in the first bucket.

**Firm Planned Orders:** The total firm planned order quantity for the item in the First Bucket.



**Confirmed Orders:** The total confirmed order quantity for the item in the First Bucket.

**MRP Release:** The total of the planned, firm planned, and confirmed orders for the item in the First Bucket.

**MRP:** MRP release orders of previous buckets or the current bucket ending in the current bucket.

**Production Orders:** Sum of already existing Production Orders for the particular item in the First Bucket.

**Purchase Orders:** Sum of already existing Purchase Orders for the particular item in the First Bucket.

**Warehouse Orders:** Sum of incoming Inventory transfer requests and drafts and incoming inventory transfers in the First Bucket.

**ATP:** Available to Promise = MRP + Production Orders + Purchase Orders + Warehouse Transfer In – Sales Orders – Warehouse Transfers Out – Dependent Demand + Next Bucket ATP ( For Last Bucket It will be 0 and will only be considered if Previous ATP is negative ) + Onhand Stock (For First Bucket only).

**Cumulative ATP:** The Cumulative ATP is the sum of ATPs starting from the first period of the planning horizon to the latest period mentioned.

**Exception Orders:** This will be based on Past due demand or Capacity constraints creating a start date in the past for any future demands.

#### **Planning Zone Second Bucket Onwards (Calculations)**

**Forecast:** The sum of all the active forecasts entered on the Forecast entry screen for the particular item.

**Customer Orders:** Sum of all Sales orders in the respective Bucket.

**Warehouse Transfer/Out:** Sum of all the past due Inventory Transfer Out Requests/Drafts + Inventory Transfer Requests/Drafts falling in the current bucket.

**Gross Demand:** All Qualified Demands as per the planning defaults setting.

**Dependent Demand:** The sum of demand for intermediates and raw materials that comes from the demand of MPS Planned Orders and Production Orders falling in a given bucket.

**Proj Available Balance:** PAB1 (Previous) + MRP + Production Orders + Purchase Orders - Gross Demand.

**Planned Orders:** The total planned order quantity of the item for a given bucket.

**Firm Planned Orders:** The total firm planned order quantity of the item for a given bucket.



**Confirmed Orders:** The total confirmed order quantity of the item for a given bucket.

**MRP Release:** The total of the planned, firm planned, and confirmed orders of the item for a given bucket.

**MRP:** MRP release orders of previous buckets or the current bucket ending in the given bucket.

**Production Orders:** Sum of already existing Production Orders of the item in the given bucket.

**Purchase Orders:** Sum of already existing Purchase Orders of the item in the given bucket.

**Warehouse Orders:** Sum of incoming Inventory transfer requests and drafts and incoming inventory transfers in the given bucket.

**ATP:**  $MRP + \text{Production Orders} + \text{Purchase Orders} + \text{Warehouse Transfer In} - \text{Sales Orders} - \text{Warehouse Transfer Out} - \text{Dependent Demand} + \text{Next Bucket ATP}$  (For Last Bucket It will be 0 and will only be considered if Previous ATP is negative).

**Cumulative ATP:** The cumulative quantity of ATP.

**Exception Orders:** There will be no exceptions in planning buckets.

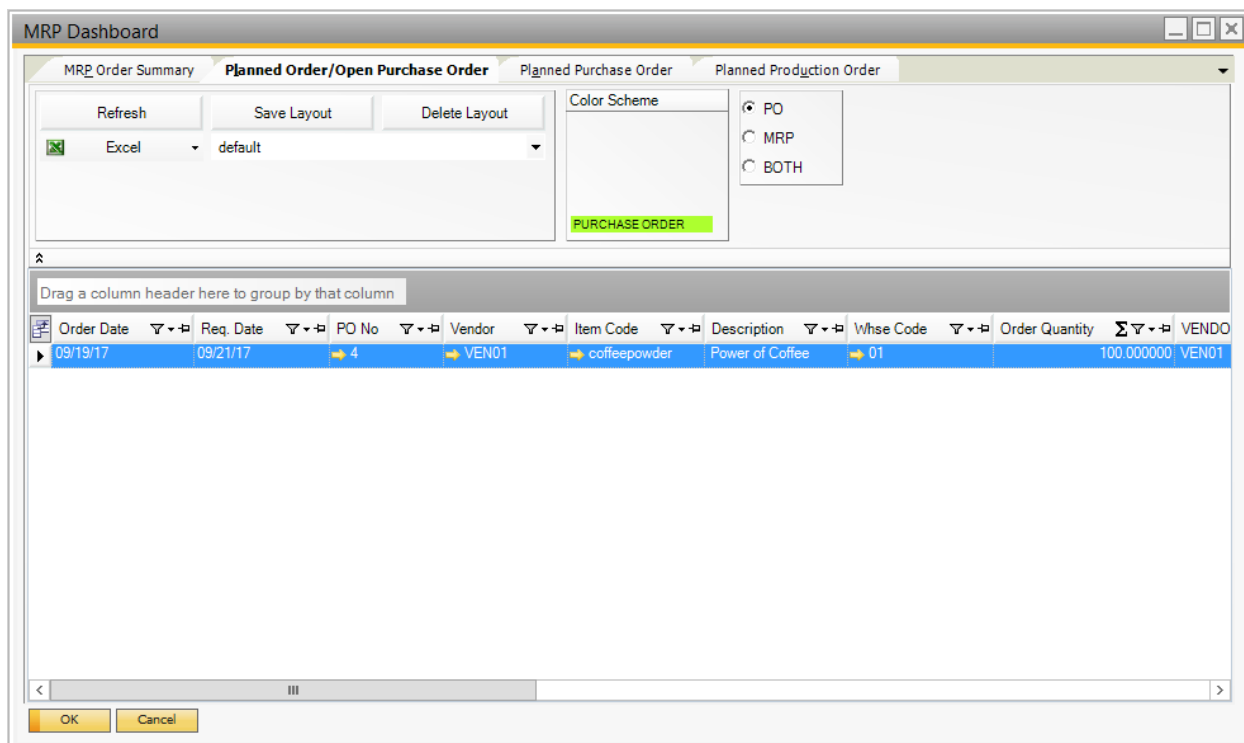
The different columns in the *MRP Planning Worksheet* screen are:

- **Time Fence 1:** Displays periods that fall within the time fence (i.e., the 'Protected Zone').
- **Planning Zone:** Displays all other buckets that do not fall within the time fence.

When you highlight any line in the *MRP Planning Worksheet*, the details that make up that line are displayed in the area below the grid.

## 5.7.2 Planned Order/Open Purchase Order Tab

Details about planned POs and production orders and open POs can be obtained using this tab. You can view MRP purchase recommendations as well as open POs.



**Refresh:** Click this button to display orders. You can choose to view PO, MRP, or both types of orders using the checkboxes in the upper right space of the tab.

**Save Layout:** You can add or remove columns in the grid or group the data. To retain your settings, click the *Save Layout* button. You can enter a setting name or override a setting named *Default*.

**Delete Layout:** Select this option to remove a layout that was previously saved.

**Excel:** Click this button to export the grid contents to an MS Excel or PDF document.

**Color Scheme:** Displays a color legend so that you can quickly identify MRP recommendations for various statuses.

**PO:** Select this option to view information with PO criteria.

**MRP:** Select this option to include MRP Items on the fields.

**BOTH:** Select this option to include both PO and MRP criteria to display information on fields.

### **Order Detail Grid**

**Order Date:** Displays the date on which order was placed.

**Request Date:** Displays the requirement order date.



**Purchase Order Number:** Displays a system-generated planned order number or a purchase document number.

**Vendor:** Displays the *Vendor*, which can be edited.

**Item Code:** Displays the *Item Code*. A hyperlink is available in this field to directly navigate to *the Item Master, Planning worksheet* or *View On hand information* screen.

**Description:** Displays the item's description.

**Item Code:** Displays the *Item Code*.

**Whse Code:** Displays the *Warehouse Code* for the item.

**Order Quantity:** Displays a system recommended quantity.

**Name:** Displays Name or Description of the vendor.

**Address 1, 2.....:** Displays address of the vendor.

**City:** Displays city of the vendor.

**State:** Displays state of the vendor.

**Zip:** Displays zip code of the address of vendor.

**Country:** Displays country of the vendor.

**Contact Person:** Displays the vendor's contact person.

**Phone:** Displays phone number of the vendor.



## 5.7.3 Planned Purchase Order Tab

	Select	Order No	Item Code	Whse Code	Item Desc	Plan Run Date	Start Date	End Date
1	<input type="checkbox"/>	82	X-RMMRP1	01	MRP	19/07/18	19/07/18	19/07/18
2	<input type="checkbox"/>	83	FG01 MRP2	INDORE	FG01 MRP2	28/09/18	28/09/18	28/09/18
3	<input type="checkbox"/>	84	FG01 MRP2	LJJAIN	FG01 MRP2	28/09/18	28/09/18	28/09/18
4	<input type="checkbox"/>	85	001	01	RM1	28/09/18	28/09/18	28/09/18
5	<input type="checkbox"/>	86	Sugar	01	Sugar	28/09/18	28/09/18	28/09/18
6	<input type="checkbox"/>	87	002	01	RM2	28/09/18	28/09/18	28/09/18
7	<input type="checkbox"/>	88	003	01	RM3	28/09/18	28/09/18	28/09/18
8	<input type="checkbox"/>	89	Chino	01	Chino oo	28/09/18	28/09/18	28/09/18
9	<input type="checkbox"/>	90	07vSugar	01	serial	28/09/18	28/09/18	28/09/18
10	<input type="checkbox"/>	91	07vSugar	01	serial	28/09/18	01/10/18	01/10/18
11	<input type="checkbox"/>	92	Topings	01	Topings	28/09/18	28/09/18	28/09/18
12	<input type="checkbox"/>	93	Q-RM1	01	RM	28/09/18	28/09/18	28/09/18
13	<input type="checkbox"/>	94	Peach-s	01	RMS	28/09/18	28/09/18	28/09/18

Use the *Planned Purchase Order* tab to view all MRP purchase recommendations. You can perform the following actions on this tab:

- Modify quantities, start date, and end date of a given order.
- Change or assign a Vendor.
- Change the status of an order (for example, from *Planned* to *Confirmed*).
- Combine one or more orders into a single order.
- Transfer orders to POs.
- Remove orders, if required.

**Refresh:** Click the *Refresh* button to retrieve orders.

**Save Layout:** You can add or remove columns in the grid or group the data. To retain your settings, click the *Save Layout* button. You can enter a setting name or override a setting named *Default*.

**Delete Layout:** Choose this option to remove a layout that was previously saved.

**Excel:** Click this button to export the grid contents to an MS Excel or a PDF document.



**Demand Pegging:** Click this button to open a *Demand Pegging Dashboard* ([Section 5.3](#)).

**Update Inv Order:** Use this button to specify the Inventory Transfer *From Warehouse*. Sometimes you may be required to generate the Inventory Transfer Request from a *From Warehouse* other than the *Default Inventory Transfer From Warehouse* you set for the item on the *Maintain MPS/MRP Item* screen. In such case you can use this button to specify the *From Warehouse*. Further, on performing the Inventory Transfer Order, the system will generate the Inventory Transfer Request document from this new *From Warehouse* to the *Planned Purchase/Production* warehouse.

**Color Scheme:** Displays all available statuses. You can select one or more options and click the *Refresh* button to filter the list.

**Change Status to:** Allows you to change the status of one or more rows. Select one or more rows and click the *Confirm*, *Planned*, or *Firm Planned* and *Save* button.

**Combine Orders:** Choose this button to combine two or more orders into a single order. You can only select orders for the same item. Select one or more rows from the table and click the *Combine Orders* button to perform this operation.

**Multiple EOQ:** Click this button to create POs as multiples of the Economic Order Quantity.

**Combine PO:** Select this option to create a single PO from multiple PO suggestions for a vendor.

**Create Draft PO:** Select this option to create a draft PO instead of an actual PO.

**Transfer to PO:** Use this function to transfer MPS recommendations to actual POs. You can also choose to transfer to a draft PO instead of directly creating a PO.

**Inventory Transfer Order:** Click this button to generate the Inventory transfer request for the confirmed selected order to transfer stock from the *Default Inventory Transfer Warehouse* to the current planning production warehouse.

### Order Grid

**Select:** Use this field to select a row.

**Order Number:** Displays a system-generated Order Number.

**Item Code:** Displays the *Item Code*. A hyperlink is available in this field to directly navigate to the *Item Master*, *Planning worksheet* or *View On hand Information* Screen.

**Whse Code:** Displays the Warehouse Code for the item.

**Item Description:** Displays the description of Item.



**Plan Run Date:** Displays the date on which MRP was last run.

**Start Date:** Displays the planned start date.

**End Date:** Displays the planned end date.

**Confirm Start Date:** Displays the confirmed start date, which can be edited. By default, this field is equal to the start date, which is a system-generated field.

**Confirm End Date:** Displays the confirmed end date or due date, which can be edited. By default, this field is equal to the end date, which is a system-generated field.

**Order Quantity:** Displays a system-recommended quantity.

**Confirm Quantity:** Displays the confirmed quantity, which can be edited. By default, this value is equal to the order quantity.

**Confirm Date:** Displays the date on which the order was confirmed.

**Transfer Date:** Displays the date on which the order was transferred to a PO or draft PO.

**Vendor:** Displays the Vendor, which can be edited.

**PO No:** Displays the purchase order number of the transferred order. A hyperlink is provided at this field clicking which you can navigate to the respective purchase order.

**Purchase UOM:** Displays defaults the Purchase UOM of the item as maintained on Item Master Data screen after transferring the order.

**Purchase UOM Quantity:** Displays the order quantity in Purchase UOM.

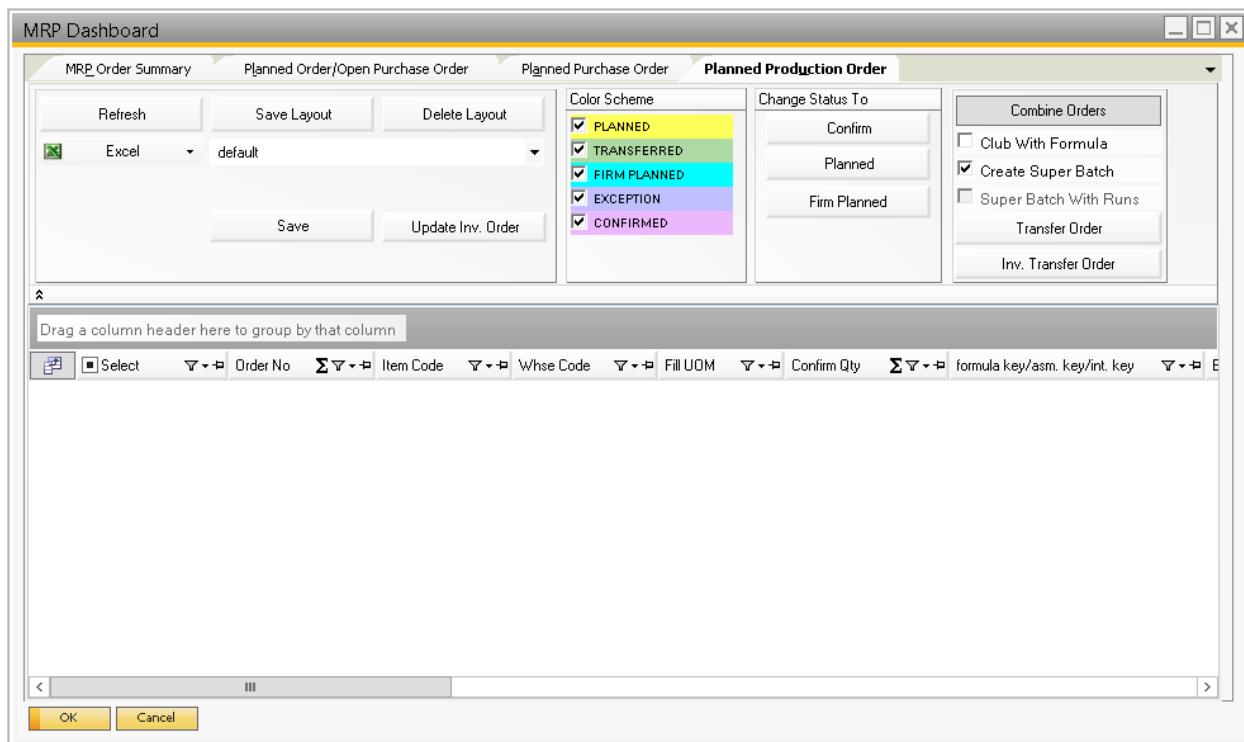
**On Hand Quantity:** Displays the on-hand quantity of the item.

**Default Inventory Transfer WH:** Defaults the *Inventory From* Warehouse specified on the *Maintain MRP item* screen. If required, you can change this warehouse. The warehouse you specify here will be used as the *From warehouse* to transfer the required stock at the Production warehouse, to support the current production planning.

**Inv Transfer Request Document No:** Displays the Inventory Transfer Request document's number of the transferred order. A hyperlink is provided at this field to navigate to the respective Inventory Transfer Request document.



## 5.7.4 Planned Production Order Tab



Use the *Planned Production Order* tab to view all MRP production recommendations. You can perform the following actions on this tab:

- Modify quantities, start date, and end date of a given order.
- Change or assign a process cell.
- Change the status of an order (for example, from *Planned* to *Confirmed*).
- Combine one or more orders into a single order.
- Transfer orders to production batches.
- Remove orders, if required.

**Refresh:** Click the *Refresh* button to retrieve orders.

**Save Layout:** You can add or remove columns in the grid or group the data. To retain your settings, click the *Save Layout* button. You can also enter a setting name or override a setting named *Default*.

**Delete Layout:** Select this option to remove a layout that was previously saved.

**Excel:** Click this button to export the grid contents to an MS Excel or a PDF document.



**Save:** Click this button to save any modifications you made in the order grid.

**Update Inv Order:** Use this button to specify the Inventory Transfer *From Warehouse*. Sometimes you may be required to generate the Inventory Transfer Request from a *From Warehouse* other than the *Default Inventory Transfer From Warehouse* you set for the item on the *Maintain MPS/MRP Item* screen. In such case you can use this button to specify the *From Warehouse*. Further, on performing the Inventory Transfer Order, the system will generate the Inventory Transfer Request document from this new *From Warehouse* to the Planned Purchase/Production warehouse.

**Color Scheme:** Displays all available statuses. You can select one or more options and click the *Refresh* button to filter the list.

**Change Status to:** Allows you to change the status of one or more rows. Select one or more rows and click the *Confirm*, *Planned*, or *Firm Planned* button to perform this operation.

**Combine Orders:** Select this option to combine two or more orders into a single order. Note that you can select only orders for the same item. Select one or more rows from the table and click the *Combine Orders* button to perform this operation.

**Transfer Order:** Use this function to transfer MPS recommendations to actual production batches. You can also choose to combine items with the same formula into a single batch. Available options are:

- **Combine With Formula:** Choose this option to combine finished goods with the same formula in a single batch.
- **Create Super Batch:** Choose this option to create a Super Batch instead of a production batch.
- **Super Batch with Runs:** Select this option to create a Super Batch with Runs. On transferring the order, the System will calculate the number of runs on the basis of Process cell capacity and accordingly create the sub-batches.



You can only transfer *Confirmed* orders.

**Inventory Transfer Order:** Click this button to generate the Inventory transfer request for the confirmed selected order to transfer stock from the *Default Inventory Transfer Warehouse* to the current planning production warehouse.

### Order Grid

**Select:** Use this field to select a row.

**Order Number:** Displays a system-generated Order Number.



**Item Code:** Displays the unique identifier for the Item Code. A hyperlink is available in this field to directly navigate to *the Item Master, Planning worksheet* or *View On hand information* screen.

**Whse Code:** Displays the Warehouse Code for the item.

**Fill UOM:** Displays the fill UOM if the item is a Finished Good.

**Confirm Qty:** Specifies the confirmed quantity. By default, this value is equal to the planned quantity, which is a system-maintained field.

**Formula Key/Asm Key/Int Key:** Based on the *Batch Type* of the item, this field displays the formula key, intermediate key, or assembly item code.

**Batch Number:** Once the item is transferred to a production batch, this field displays the actual *Batch Number*.

**Process Cell:** Displays the Process Cell. The system assigns a default Process Cell from the *Production, Formula/Process Cell Capacity* record at the time of the MPS run. It can be changed, if required.

**Conf. Start:** Displays the confirmed start date, which can be modified. By default, this field is the same as the planned start date, which is a system-maintained field.

**Conf. End:** Displays the confirmed end date or due date of the order, which can be modified. By default, this field is the same as the planned end date, which is a system-maintained field.

**Batch Series:** This is the batch series specified for MRP orders on the Productions Defaults screen. You can change the default series using the available lookup.

**Confirm Date:** Displays the date on which the order was confirmed.

**Container UOM:** Displays Unit of Measurement for containerized item.

**Default Inventory Transfer WH:** Defaults the *Inventory From* Warehouse specified on the *Maintain MRP item* screen. If required, you can change this warehouse. The warehouse you specify here will be used as the *From warehouse* to transfer the required stock at the Production warehouse to support the current production planning.

**Inv Transfer Request Document No:** Displays the Inventory Transfer Request document's number of the transferred order. A hyperlink is provided at this field to navigate to the respective Inventory Transfer Request document.