
DSM095 Purchase Plan Definition

Overview

A Plan Definition is used to define the planning components for selected Titles or groups of Titles, to the Purchase Planning Module. Based on this definition the Suggested Order Quantities are calculated.

Explanation

A Purchase Plan Method is established in **TMSDS/PP-MTH**. The Choices are 1=In total, 2= By warehouse or 3=Retail requisition.

The In Total option is used for National purchasing where the Suggested Order Quantity is assigned to the main warehouse which is the warehouse nominated in the Purchase Plan.

The By Warehouse option is used for purchasing by warehouse and therefore the Suggested Order Quantities are assigned to the warehouses listed in **TMSDS/SO-WH**.

When the Retail requisition option is used information not relevant to the method is hidden.

A Purchase Plan can be defined by Company, Title Key Level, Class Type or specific Title.

There are three Purchase Plan Re-order methods. The suggested order quantities can be calculated on:

- Manually entered sales figures if this method is selected, automatic suggested order are not generated for these titles.
- Forecasted Sales Quantities stored in the nominated Forecast ID
- Forecasted Quantities can be in Total or by Warehouse/Branch.
- Minimum and Maximum Quantities
- Min/Max can be by warehouse or nationally

For the calculation of Suggested Purchase Order quantities, the Purchase Plan Definition can retrieve stock information from all or only selected warehouses. Warehouse types like for example the stock quantities in Bond, Damages, Loan or Consignment warehouses can be excluded.

The formula for calculating available stock can be nominated per Purchase Plan. For example Forward Orders can be included on a Time Basis or not included at all or all Forward Orders can be included no matter when they are due for release. Quantities included or excluded in the available calculation are: On Order, On Board, Backorders, Reserved, Forward Orders, In Transit and Outstanding Returns.

Once Definitions have been established, the Requirements Generation option is run to generate Suggested Order Quantities (SOQ) based on the criteria set out in the various Purchase Plans.

Setup Requirements

Control Files to be established specifically for use by this process are:

TMSDS/IC-PP	User defined Purchase plan matrix
TMSDS/IC-TYPES	Add IC-PP to Classification
TMSDS/PO-COST	Where is the default cost for purchasing coming from?
TMSDS/POH-SMTH	What are the Purchase Order shipping methods?
TMSDS/PO-TYPE	Purchase Order Type Definition
TMSDS/PP-MTH	Is the Purchase Planning by Warehouse or National
TMSDS/IC-SPQ	Does the Supplier have different quantity packs?
TMSDS/IC-TYPES	Add IC-SPQ to Classification
TMSDS/PP-QRC	Is the Supplier quantity rounding method used
TMSDS/IM-UOM	If PP-QRC is not used this control file is used for Unit of measure
TMSDS/SO-CRTQ	Is next full Carton quantity used for purchase planning?
TMSDS/SEQ-ILFC	Search Sequence for Purchasing
TMSDS/SO-WH	Warehouses to be considered for purchase planning
TMSDS/WH-CSTB	Decision on National or Warehouse Costing method
TMSDS/PO-MAXL	Maximum line per Purchase order by supplier
XACTNOOP/NUMBER	Create automatic number range to be used in Purchase planning.

Other Control Files used by this process have been established for use elsewhere in the system and are listed at the end of this section.

Generate a warehouse purchase plan

Only warehouse exceptions need to be added to this list of warehouses. If the Stock Ratios and Rounding Methods as setup in the Header are applicable to most warehouses used in Suggested Order calculations, only list those differences. The system refers here first for conditions and then if details are not found here the Header parameters are used. Which warehouses to take into consideration when calculating the Suggested Order Quantities, are listed on **TMSDS/SO-WH**.

Once the Header details have been created, warehouse information can be added. Warehouse information is only required if the Purchase Plan Method parameter is set to:

- 2=By Warehouse on **TMSDS/PP-MTH** or
- 2 the warehouse Stock Ratios and Rounding Methods vary from the Header Default. To indicate which warehouses are valid for the Purchase Plan, the system refers to **TMSDS/SO-WH**.

Examples

This section illustrates examples concerning:

[Example 1: Create a National Purchase Plan](#)

[Example 2: Create a Warehouse Purchase Plan](#)

[Example 3: Change a National Purchase Plan](#)

[Example 4: Change a By Warehouse Purchase Plan](#)

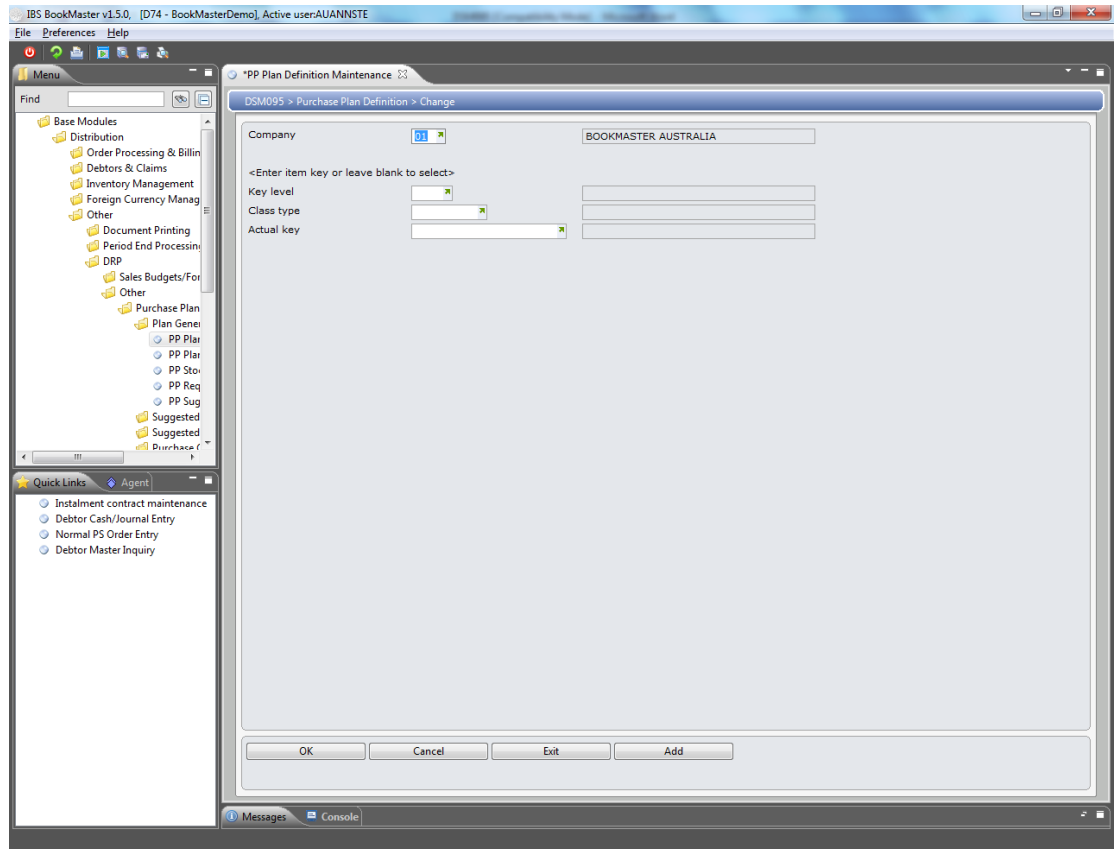
[Example 5: Delete a By Warehouse Purchase Plan](#)

Example 1: Create a National Purchase Plan

This example describes how to create a national purchase plan.

1. Select option **PP Plan Definition Maintenance** from Base Modules> Distribution> Inventory Management> Purchasing> Purchase Planning> Plan Generation menu.

DSM095 Purchase Plan Definition panel is displayed in change mode.



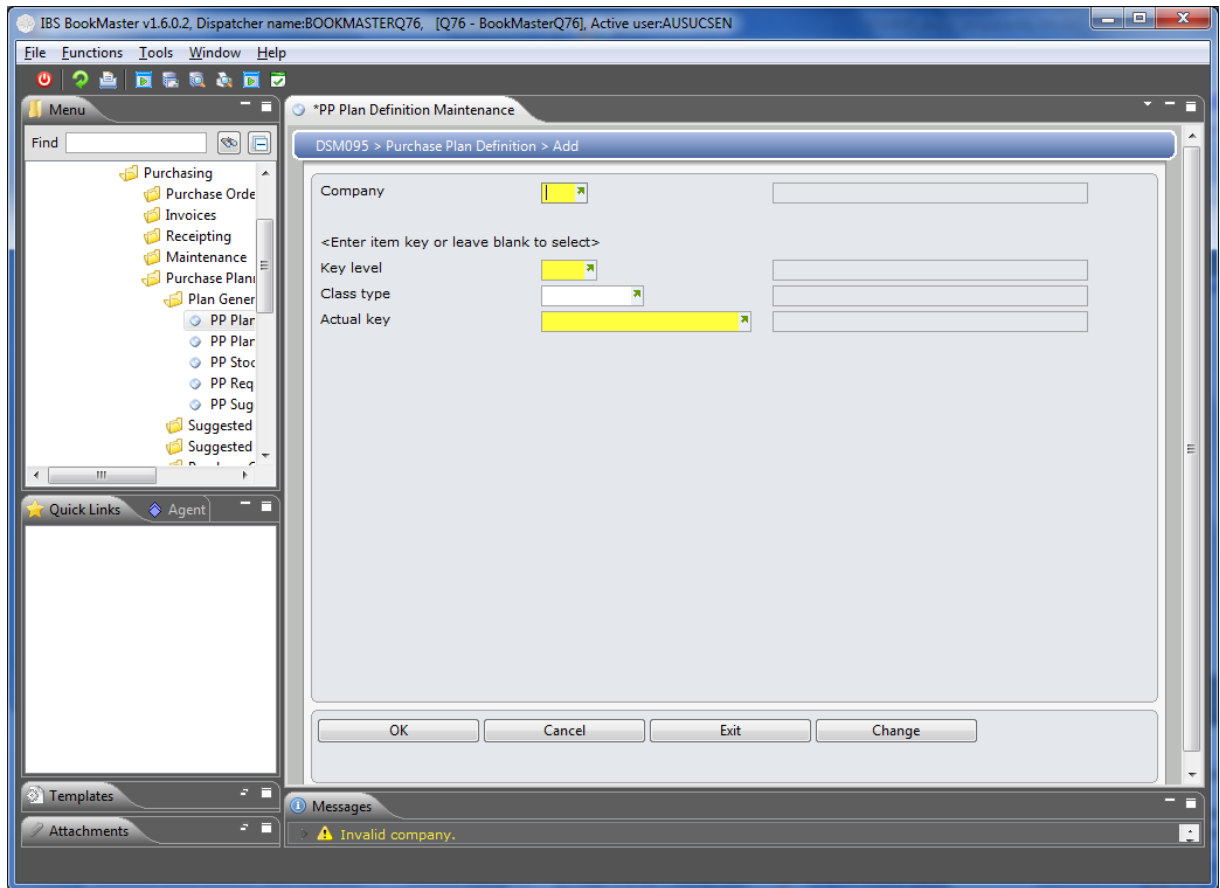
Functions

Add

Access purchase plan definition for the addition of a national purchase plan.

2. Select the item key level or classification type and click **Add**.

DSM095 Purchase Plan Definition panel is displayed in add mode.



Relevant Fields

Company

Enter the company. Purchasing warehouse is company dependent and is defined in control file TMSDS/SO-WH. These Title Level codes are not the same as the Level Codes used in the Title Masterfile.

Key level

In Plan Definition Maintenance indicate the level at which you want to create a purchase plan definition, for example, type of sale, ISBN, subject etc.

Target title level ILVL

In Target Maintenance, this field defaults to the current customer and title level for the target title level. These may be overridden.

Class type

In Purchase Plan Maintenance, whether or not an entry in Class Type is required depends on the entry made in the Title Key Level field. For example Title Key Level I2 does not require an entry here and skips to the next field which is the Actual Key field. Title Key Level I1 also skips this field. If the Title Level field is I9, no entry is required in this field. If I7 is selected in Title Key Level a Class Type entry is required.

Actual key

The entry required in this field depends in the entry made in either Title Key Level or Class Type. For example Title Key Level I2 skips Class Type and requires an entry of a code in TMSDS/IM-IL4. If I1 was the code entered in the Title Key Level field then the entry in this field would be the Actual ISBN. If this is the case, search for a valid title. If the Title

Level field is 19, no entry is required in this field or the Class type field.

3. Select purchase plan hierarchy and click **Details**.

DSM095 Purchase Plan Definition panel is displayed in add mode.

Relevant Fields

Purch plan re-ord meth

In Purchase Plan Maintenance, three re-order methods are available:

Manually, no suggested orders are generated.

Forecast, use sales quantities which are stored in the nominated Forecast ID.

Min/Max, suggested orders are generated based on the minimum and maximum stock ratio quantities a warehouse should hold.

If Forecast (1) is selected, the parameter set in TMSDS/PP-MTH determines whether the Purchase Plan is National or by Warehouse. If 0 for Manual this is used in the Low Stock Report.

In Suggested Order Generation a re-order method is selected. A Purchase Plan is setup to calculate Suggested Order Quantities based on various methods. The Suggested Order Generation process can be run for all methods at one time or it can be run for only the Forecast method Purchase Plans or only the Minimum/Maximum

Excluded W/H type 1-5	<p>Forecast methods.</p> <p>For the calculation of Suggested Purchase Order quantities, the Purchase Plan Definition can retrieve stock information from all or only selected warehouses. Indicate to the system specific warehouse types are excluded like for example the stock quantities in Bond warehouses or Consignment warehouses. There are 5 exclusion options. When maintaining Warehouse details on a Purchase Plan using the Warehouse option, the system validates a Warehouse selected does not belong to a Type Excluded here. TMSDA/SO-WH can also be setup to indicate warehouses for which Suggested Orders are to be calculated and whether or not to include other warehouse requirements in the quantities ordered on one specific warehouse. An example of the use of this parameter is if there is a form of regional or centralized purchasing and the orders are placed on one specific warehouse then distributes the stock received to other sub warehouses.</p>
Forecast ID	<p>In Definition Maintenance, this code identifies a specific Sales Budget or Forecast Definition. When Generating a Budget or Forecast or Maintaining a Budget or Forecast this ID will be required to access the Budget details. In Purchase Plan Maintenance, which Forecast figures to use in a Purchase Plan Type Reorder method of 1=Forecast, is indicated by the ID code entered in this field. In Budget/Forecast Transfer to History a From Forecast ID is mandatory. The Forecast ID should be set up using DSM295.</p>
Minimum stock ratio	<p>The minimum number of month's stock that should be kept is recorded and used when determining the suggested order quantity. Stock levels are calculated to be above the minimum and no higher than the Maximum number of month's stock to be held. These minimum and maximum months can also be defined per warehouse. The figure in this field is the default. If a warehouse has a different requirement, it is added to the warehouse list (2=warehouses).</p> <p>In the Header Screen of a Purchase Plan a minimum and maximum stock level, stated in months, can be stipulated. To specify stock level requirements of the warehouse, the minimum amount of stock to be kept in the warehouse is entered. A maximum stock level is also indicated and the system calculates stock requirements in order to supply sufficient stock for the maximum number of months. If a warehouse has the same Stock Ratio requirements as the default setup on the Header, there is no need to create a warehouse record here.</p>
Maximum stock ratio	<p>The maximum number of month's stock that should be kept is recorded and used when determining the suggested order quantity. Stock levels are calculated to be above the minimum and no higher than the Maximum number of month's stock to be held. These minimum and maximum</p>

months can also be defined per warehouse. The figure in this field is the default. If a warehouse has a different requirement, it is added to the warehouse list (2=warehouses).

In the Header Screen of a Purchase Plan a minimum and maximum stock level, stated in months, can be stipulated. To specify stock level requirements of the warehouse, the minimum amount of stock to be kept in the warehouse is entered. A maximum stock level is also indicated and the system calculates stock requirements in order to supply sufficient stock for the maximum number of months. If a warehouse has the same Stock Ratio requirements as the default setup on the Header, there is no need to create a warehouse record here.

Rounding method

Create a National Purchase Plan

A number of Rounding conditions can be applied when determining the final Suggested Order Quantity. These are:

- round up to the nearest full carton quantity
- take the Economic Order Quantity (EOQ) into account
- consider the Title's Unit of Measure
- consider the Supplier's Pack Quantity

The additional Rounding method selection in this field is applied to all the above mentioned conditions. The rounding method choices are:

0 = none

1 = round up

2 = round down

3 = round to the nearest.

For example, a 1 in this field rounds up a quantity to the next EOQ or Supplier's Pack quantity.

Create a Warehouse Purchase Plan

There is default Rounding Method on the Header Screen. If a warehouse has the same requirements as this default, an entry is not required in this section or this field.

The sequence is as follows:

1=Adjust the suggested order quantity based on the quantity per carton if flag is set-up as 'Y' in TMSDS/SO-CRTQ.

2=Adjust the resulting quantity from title 1 above based on the economic order quantity (EOQ) defined in DSM070.

[Menu: 1>(Distribution), 20>(Purchasing), 50>(Purchase Planning), 3(Warehouse Stock Level Definition Maintenance)]. The warehouse is based on the PSI header warehouse.

3=Adjust the resulting quantity from title 2 above based on either by unit of measure (UOM) or supplier pack quantity depending on the definition in TMSDS/PP-QRC

The unit of measure is derived from the Title Masterfile while the supplier pack quantity is derived from Title Classification IC-SPQ. The values for IC-SPQ are set up in TMSDS/IC-SPQ.

The above adjustment parameters can be used individually or in any combination. If no parameters are set-up, suggested order quantity displays as per the original

computed suggested order quantity.

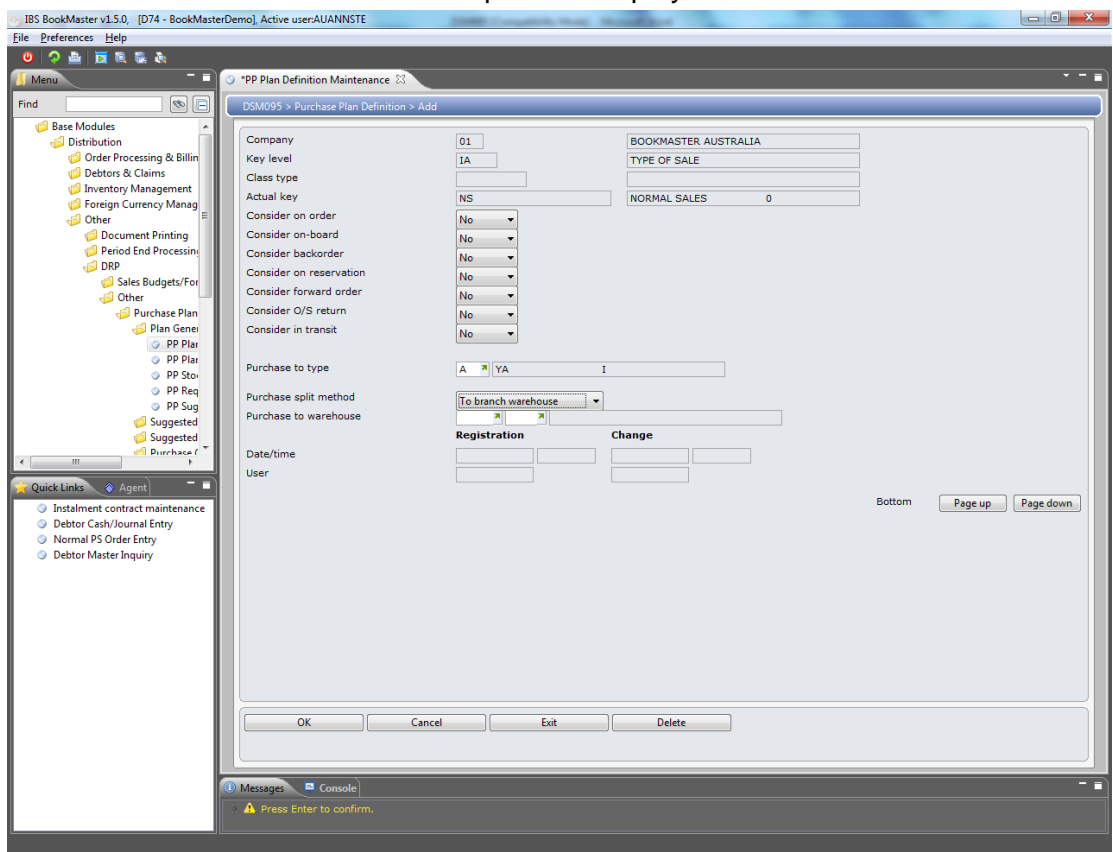
Shipping method

The status defaults to B meaning the batch has entered balances against it.
In Work With A/R Batches select the batch status to filter by. Valid choices are:
1=All displays all batches
2=Open displays only those batches that are open
3=Active displays only active batches
4=Balance displays only those batches with entered balances and are at status B.

4. Page Down.

To calculate an item's suggested purchase quantities, the available stock quantity in the selected warehouse needs to be determined first. The system can be instructed to consider stock quantities that are on order, on-board, allocated to backorder, reservation orders, forward orders and/or outstanding returns, in the calculation of available stock. This effectively means that these outstanding order quantities will be deducted from the available stock quantity, in other words, the order quantity is increased by the order quantity that is outstanding.

DSM095 Purchase Plan Definition panel is displayed in add mode.



Relevant Fields

Consider on order

The available stock quantity needs to be calculated before the suggested purchase quantity can be determined. On Order is the Purchase Order Quantity still to be supplied.

No=No do not include on-order quantities

Consider on board	In total=take into consideration all on-order purchase order quantities (In total)
	By month=take into consideration on-order purchase order quantities based on the ETA, estimated time of arrival (By month), from Purchase Order Details.
	NOTE: By month is not valid for Min/Max Re-order Method.
	The available stock quantity needs to be calculated before the suggested purchase quantity can be determined. On Board is the Purchase Order Quantity included in a Shipment.
	No=No do not include on board quantities
	In total=take into consideration all on board quantities (In total)
	By month=take into consideration on board quantities based on the ETA, estimated time of arrival (By month), from Shipment Masterfile.
	NOTE: By month is not valid for Min/Max Re-order Method.
Consider backorder	The available stock quantity needs to be calculated before the suggested purchase quantity can be determined.
	No=No do not include sales backorder quantities
	In total=take into consideration all sales backorder quantities (In total).
Consider on reservation	The available stock quantity needs to be calculated before the suggested purchase quantity can be determined. Stock can be reserved for customers.
	No=No do not include reserved quantities
	In total=take into consideration all reserved quantities (In total)
	By month=take into consideration reserved quantities based on the Release Date (By month), taken from Outstanding Detail File.
	NOTE: 2 is not valid for Min/Max Re-order Method.
Consider forward order	The available stock quantity needs to be calculated before the suggested purchase quantity can be determined. Forward Orders are sales orders created for delivery in the future.
	No=No do not include forward order quantities
	In total=take into consideration all forward order quantities (In total)
	By month=take into consideration forward order quantities based on the Release Date (By month), taken from Outstanding Detail File.
	NOTE: By month is not valid for Min/Max Re-order Method.
Consider O/S	The available stock quantity needs to be calculated before

returns

the suggested purchase quantity can be determined. Outstanding Returns are goods expected to come back into stock.

No=No do not include outstanding return quantities

In total=take into consideration all outstanding return quantities (In total)

Consider in transit

The available stock quantity needs to be calculated before the suggested purchase quantity can be determined. In transit quantities are Stock Transfers not yet received by the Receiving Warehouse.

No=No do not include in transit quantities

In total=take into consideration all in transit quantities (In total)

Purchase to type

In Purchase Plan Maintenance, Purchase Order Types can be entered.

These codes are made up of two characters, where the first character is the Purchase Order Type dictating the number sequence. The second character defines whether this applies to Inventory Items (Y) or Non-inventory Items (N) and lastly whether these should appear on automatically produced purchase orders (A) or manually produced (M).

A - YA where A is a type setup in the Number File and this defines the number sequence to be used on the Purchase Order. YA stands for Y = yes for inventory and A = Automatically generated.

M - YM where M is a type and this defines the number sequence to be used on the Purchase Order. NM stands for N = non inventory and M = manual.

The automatic production of Purchase Orders requires a Purchase Order number sequence to be nominated and an indication given of which titles are to be included on automatic purchase orders and which are to be left for manual Purchase Order creation.

In Requirements Generation Purchase the Purchase to type field defaults from **TMSDS/PP-HUB** if suggested orders are from Retail.

Purchase split method

A Suggested Order Quantity can be calculated using all the warehouse requirements and can be either split across these warehouses or used in total to raise orders on one warehouse, being the warehouse nominated in the Purchase To Warehouse field. If Forecasting is the Purchase Plan Re-order Method, ensure the Forecast ID agrees with the Split Code. For example use a National Forecast ID with a Split Code of 1. which indicates National Purchase Orders.

1=None – do not split suggested order quantities across warehouses

2=To branch warehouse – purchase orders will be split

across branch warehouses

Even if the Purchase Plan Method is set as 2=Warehouse in **TMSDS/PP-MTH** this Purchase Split Method can be set as None. An example of when this would be done is if by exception purchases for a specific expensive title to be consolidated to one warehouse, then the Purchase To Warehouse field must indicate the warehouse on which the Purchase Order is to be placed.

Purchase to warehouse

The warehouse for which the purchase orders are created if the Purchase Plan method is National Forecast or National Minimum/Maximum. The warehouse nominated must be valid for the Company previously nominated. This carries through to Suggested Order Generation. If Purchase Planning is run as National this is the warehouse used to determine the Economic Order Quantity.

5. Key in required fields and click **OK**.

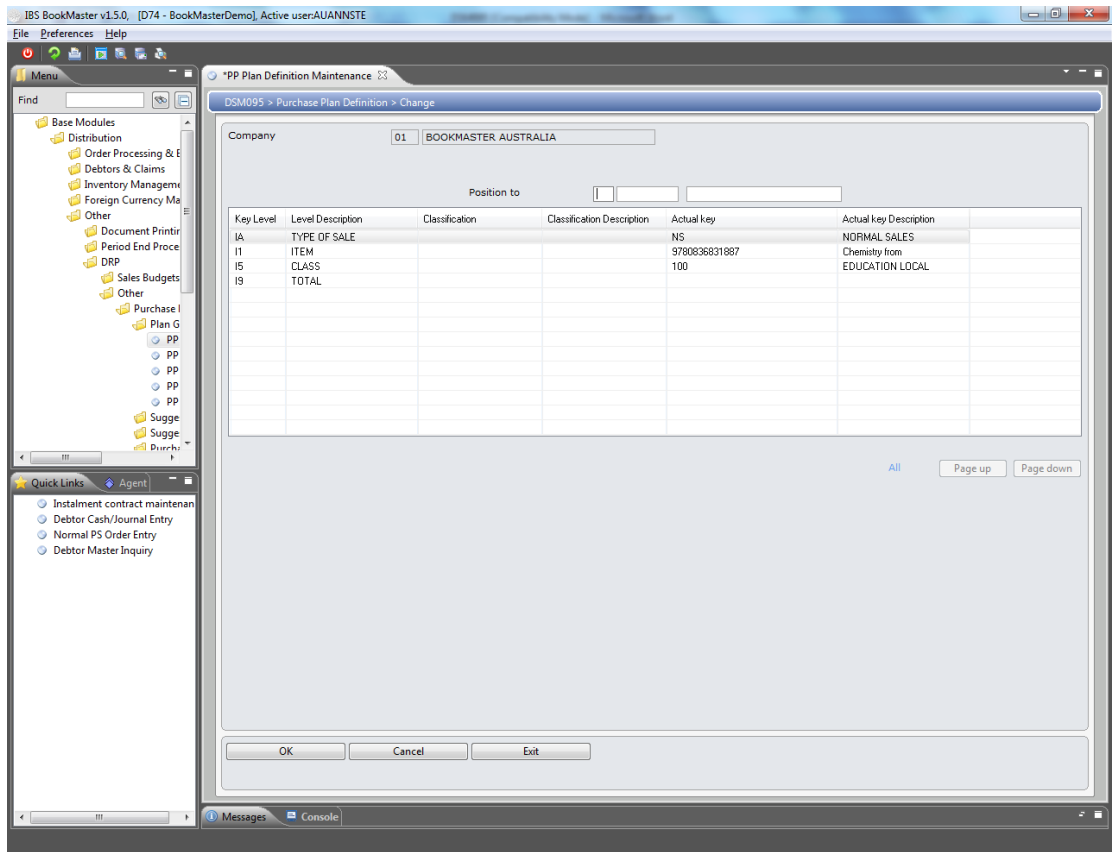
A national purchase plan addition is completed successfully.

Example 2: Create a Warehouse Purchase Plan

This example describes how to add a warehouse purchase plan.

1. Repeat steps 1 as in [Example 1: Create a National Purchase Plan](#)
2. Key in required fields and click **OK**.

DSM095 Purchase Plan Definition panel is displayed in change mode.



Options

[Header](#)

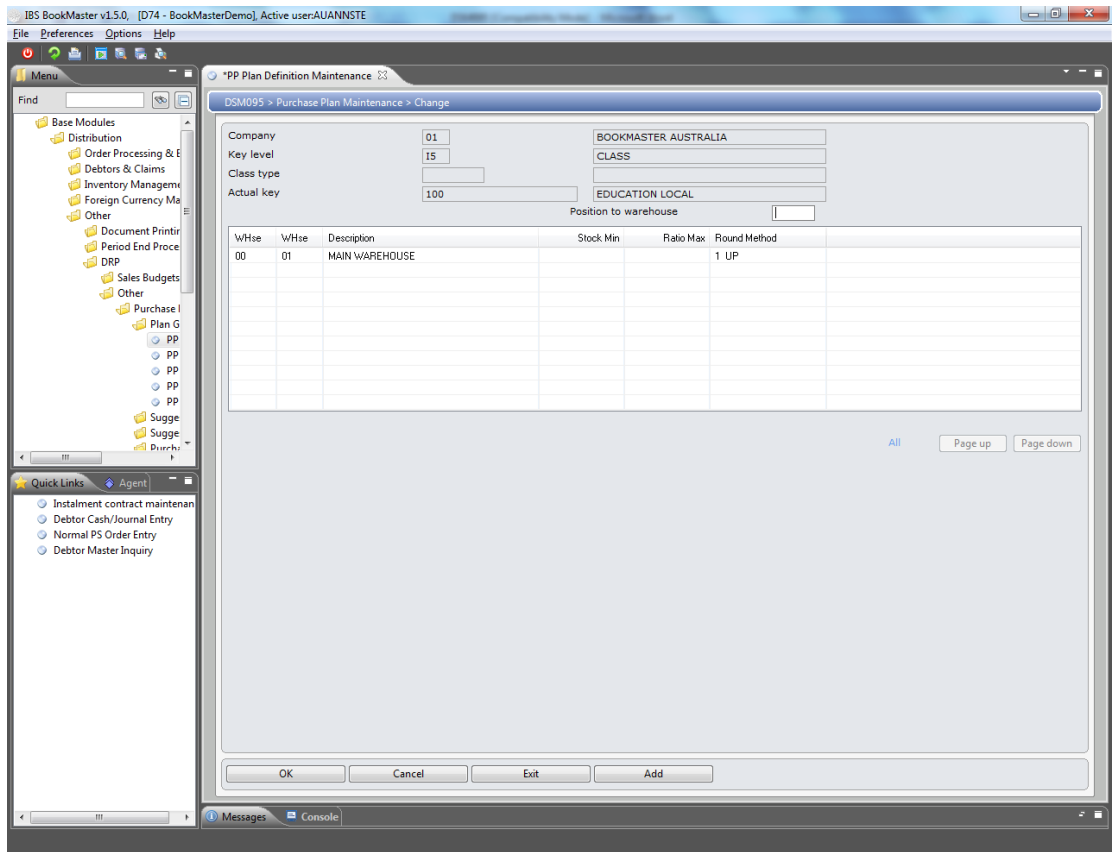
Access purchase plan definition to view the header details.

[WHS details](#)

Access Purchase plan definition to view and add warehouse details.

3. Select the item level requiring warehouse details and click **WHS details**.

DSM095 Purchase Plan Definition panel is displayed in change mode.



Options

Select

This is used to select the warehouse for maintenance.

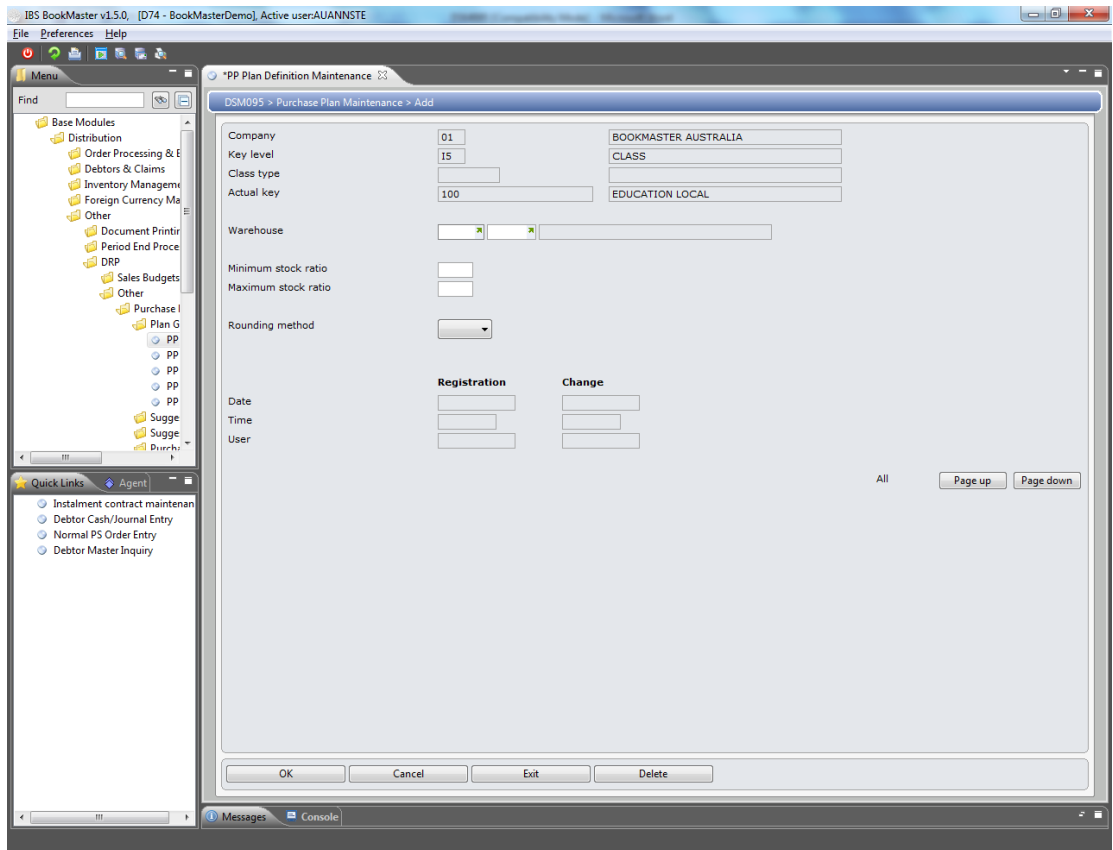
Functions

Add

Access purchase plan definition for addition of warehouse details.

4. Click **Add**.

DSM095 Purchase Plan Maintenance panel is displayed in change mode.



Functions

[Delete](#)

This deletes the selected warehouse details.

Relevant Fields

[Warehouse](#)

In Purchase Plan Maintenance this is the warehouse electing to have suggested order calculation criteria.

In Pack Availability Report the entry of a stock on hand warehouse is optional.

In Requested Order Cycle Reset enter the hub warehouse/satellite warehouse combination for which you want to reset the requested order cycle. Once the warehouse has been entered the status for the warehouse displays in the Status field. G=GENERATION IN PROGRESS or A=ACTIVE.

In Requested Order Generation and Retail Order Requisition enter the hub warehouse/satellite warehouse combination for which you want to generate requested orders. This also applies to the Purchase to Warehouse field in Purchase Order Creation.

In Retail Receipts Entry this is the warehouse into which to receipt retail titles.

5. Key in required fields and click **OK**.

Warehouse details get added.

Example 3: Change a National Purchase Plan

This example describes how to change a national purchase plan.

1. Repeat step 1 as in [Example 2: Create a Warehouse Purchase Plan](#)
2. Select a record to be maintained and click **Header**.
DSM095 Purchase Plan Definition panel is displayed in change mode.
3. Make required changes and click **OK**.

Example 4: Change a By Warehouse Purchase Plan

This example describes how to change a by warehouse purchase plan.

1. Repeat steps 1 as in [Example 2: Create a Warehouse Purchase Plan](#)
2. Select a record and click **Select**.
DSM095 Purchase Plan Maintenance panel is displayed in change mode.
3. Make required changes and click **OK**.

Example 5: Delete a By Warehouse Purchase Plan

This example describes how to delete a by warehouse purchase plan.

1. Repeat steps 1 as in [Example 2: Create a Warehouse Purchase Plan](#)
2. Select a record and click **Delete**.
Record gets deleted.