



M3 Procurement User Guide

Release 16.x

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About this Guide

Intended audience

M3 Business Engine User Documentation provides guidance for end users and consultants regarding understanding basic concepts and using key processes in M3 Business Engine. Further information about the available programs and functionality is available as field help texts.

Document structure

M3 Business Engine User Documentation is a task-oriented documentation, providing descriptions on performing specific procedures, defining settings, and running specific, step-by-step procedures. To some extent, this documentation set also contains conceptual documents, providing background information or describing requirements and how they are matched in M3 Business Engine.

This table provides a brief overview of the most common sections that appear in this document.

Introduction	Briefly describes what kind of information the document provides.
Outcome	Describes the consequence of a process completed or a concept run.
Uses	Explains how the results can be used.
How the system is affected	Describes, if applicable, any changes that have been implemented in M3.
Before you start	Describes the prerequisites of a process or a concept.
Parameters to set	Lists all relevant parameters with a detailed explanation.
Description	Describes, if applicable, the concept or the purpose of the concept and when and how it is run.
Outline	Provides an overview (often as a flow chart) of the activities in the process.
Activity description	Describes all the activities above and provides a summary of when, where and how to carry them out.
Follow these steps	Describes, if applicable, how to carry out a settings instruction.
Related topics	Lists other topics that contain relevant information.

More information

Information and help about accessing and using M3 Business Engine User Documentation is available as online help.

Access the help by clicking the question mark in the top right corner.

Related product information is available on [Documentation Central](#) and the Infor Support Portal.

- You can find documentation posted to the product records on the Download Products page. Look here first for installation guides and release notes.
- You can browse or search for product documentation on the Documentation page.

For questions, support or feedback, contact Infor Concierge.

Contacting Infor

If you have questions about Infor products or documentation, go to Infor Concierge at <https://concierge.infor.com/> and create a support incident.

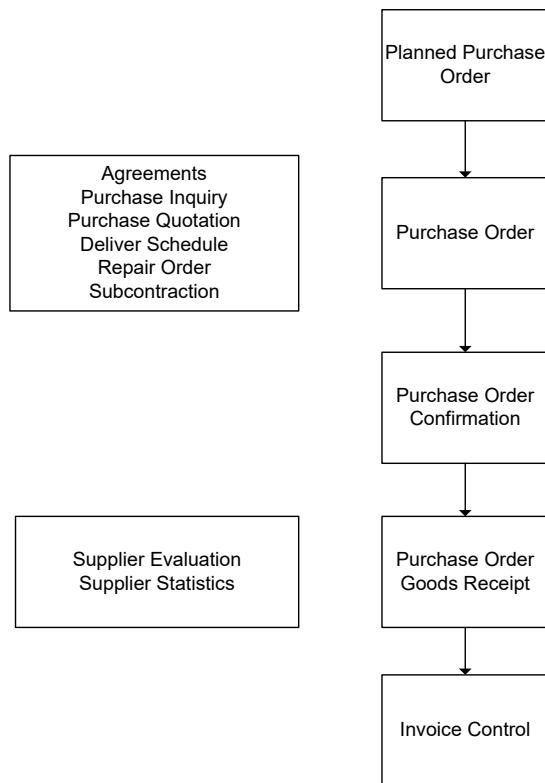
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Chapter 1: Procurement Overview

Procurement Overview

This document is an overview of the basic procurement flow, which includes purchase orders, confirmations, and goods receipt. This document also highlights some special functions in the procurement area.

Description



The basic procurement flow includes both the manual creation of purchase orders and their automatic creation from planned orders and purchase requisitions.

1 Planned Purchase Order

You can create Planned Purchase Order manually, through MRP calculation, or by PO Requisition.

2 Purchase Order

This step includes both the manual creation of purchase orders and their automatic creation from planned orders and purchase requisitions.

3 PO Confirmation

Confirming a purchase order can consist of one or more of these activities:

- Purchase order confirmation
- Shipment advice
- Transport notification.

These activities are optional and they can be performed independently from one another.

4 Good receipt

Goods receiving can be done in different ways and with different activities in M3. You can perform goods receipt and put-away. You can also perform quality inspection, either after the goods receipt or after the put-away. The quality inspection portion of the goods receiving flow is important. Normal inspection or extended inspection can be used, including inspection activities and inspection plans.

5 Invoice Control

To complete the procurement flow, invoice control is included. This includes booking supplier invoices in accounts payable and verifying them according to the purchase order.

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Chapter 2: Internal Sales

Internal Sales Overview

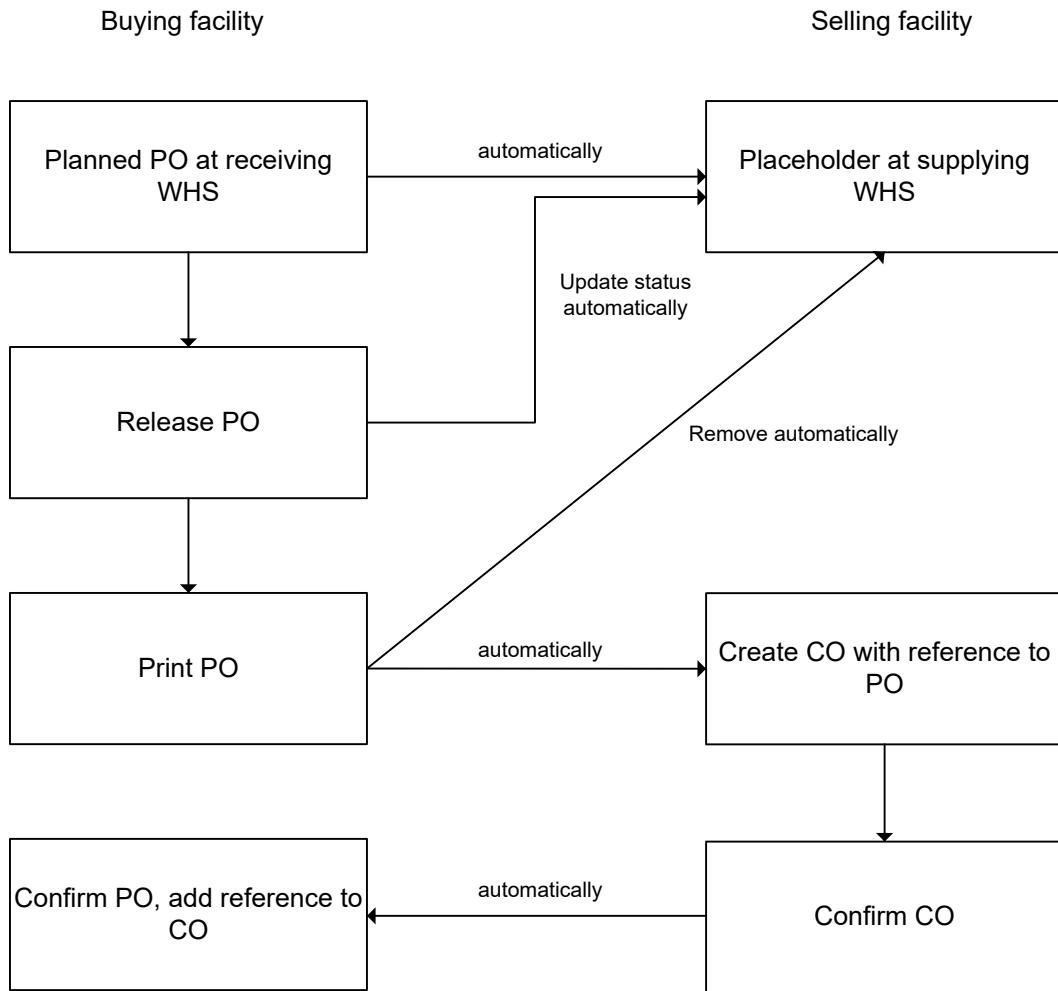
Introduction

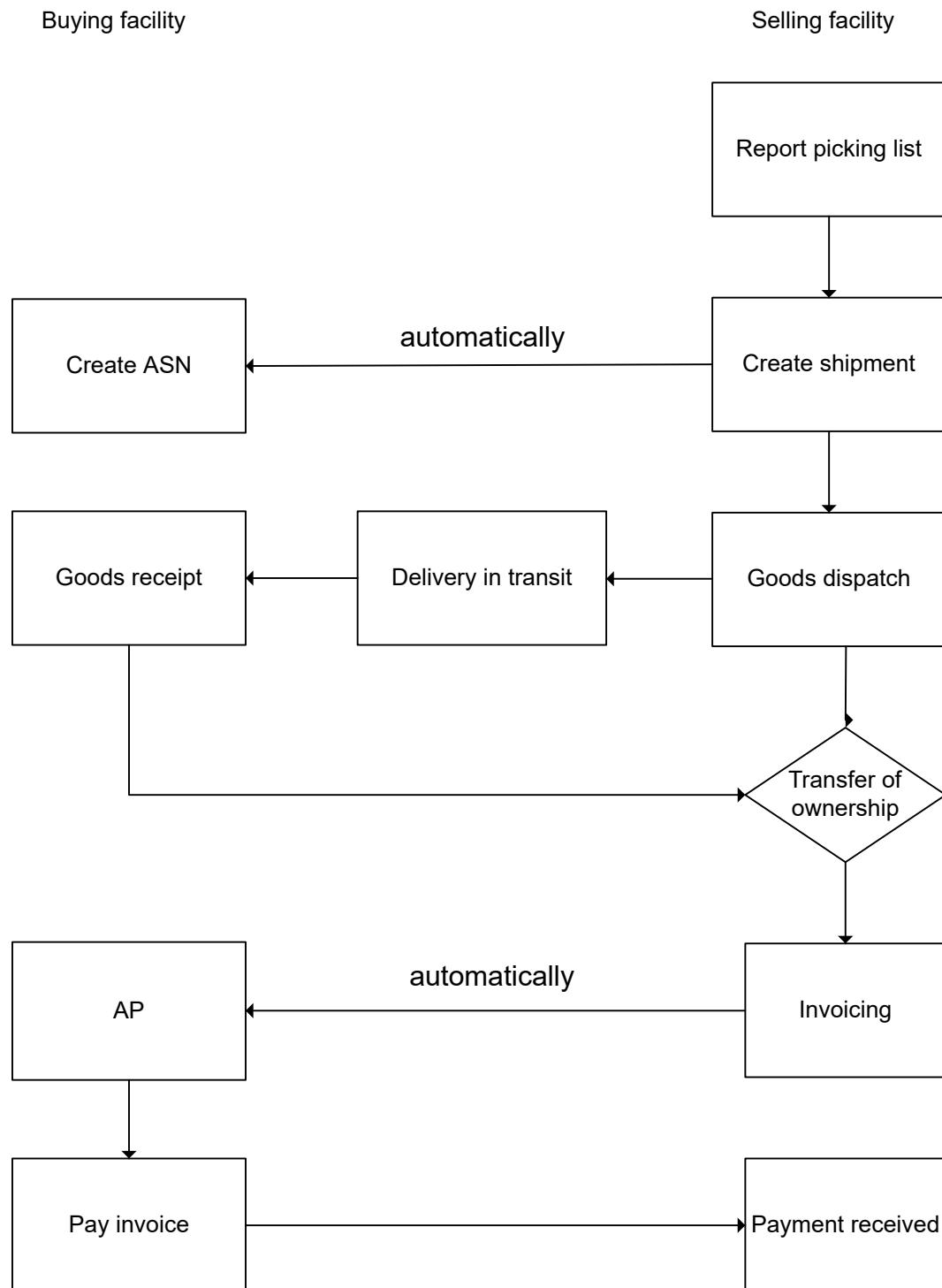
An internal sale is a sale where both buyer and seller belongs to the same M3 BE company. For a movement of goods between warehouses, where no sale takes place, we recommend using the distribution order functionality.

Since the internal sales functionality connects the Customer Order (CO) with the Purchase Order (PO), there are many benefits regarding automation and traceability with the internal sales process.

The internal sales process

The flowcharts illustrate the internal sales process.





The process starts with a planned PO at the buying facility. The planned PO automatically creates a reservation at the supplying warehouse.

When the PO is released, the status of the reservation is updated.

When the PO is printed and set to status '20', a CO with a reference to the PO is created automatically in the selling facility, using the CO batch entry. When the CO confirmation document is printed, the PO of the buying facility is automatically confirmed.

In the selling facility, the picking list is reported and a shipment is created. An ASN is automatically created in the buying facility.

The goods are sent and the delivery is in transit. Costing transactions are created for the goods in transit. The goods are received at the buying facility. Depending on when the change of ownership takes place, (set on the delivery terms), the selling facility creates an invoice. It is automatically sent to the buying facility and sent to the invoice matching process. An AP invoice is automatically created in the buying facility.

The internal sales solution impacts many M3 BE areas. These documents describe the internal sales functionality in detail:

- Purchase order process (see [Managing Internal Purchase Orders](#) on page 22)
- Customer order process (see [Managing Internal Customer Orders](#) on page 23)
- SCE and deliveries (see [Managing Goods in Transit](#) on page 39 and [Managing Deliveries for Internal Sales](#) on page 41)
- Material planning (see [Material Planning for Internal Sales](#) on page 42)
- Finance (see [Managing Invoicing for Internal Sales](#) on page 47)
- Traceability and integrations

For setup of the internal sales functionality, see [Defining Internal Sales](#) on page 18. For limitations in the internal sales process, see [Internal Sales Process Limitations](#) on page 17.

Internal Sales Process Limitations

The internal sales process is subject to key limitations across currency alignment, item handling, and financial and costing operations.

General limitations

- The customer order (CO) and purchase order (PO) must have the same currency for internal sales.
- Only the item basic unit of measure is allowed for internal sales.
- Item replacement on internal sales is not supported.
- The internal sales functionality is only available if you use ASN (Advance Shipment Notice).
- Rescheduling of PO when CO is postponed depends on being triggered by a new CO confirmation.
- The Internal sales process accepts only these valid categories:
 - 00- Normal Item
 - 05- Fixed Machine: You must set the Inventory accounting method equal to 1- 'Inv accounting'.
 - 07- Repairable Item: The purchase of subcontract and repair orders is not supported in this category when using the Service process and Service fields.

Finance limitations

- Goods in transit transactions for internal sales CO and PO are not included in the inventory reconciliation list created in 'Inventory Value. Print Reconcil List' (CAS530) or in the inventory valuation list created in 'Inventory Value. Open' (CAS180). Use 'Goods in Transit. Print' (CAS540) for reconciling goods in transit instead.
- You cannot use historic actual cost in combination with goods in transit.
- Corrective invoicing or credits are not supported for internal sales.
- Costing limitations: You cannot transfer a distribution costing model to internal sales, since the internal sales orders are based on PO and CO. Therefore, in the receiving facility, you cannot split the amount of goods based on the costing model.

Defining Internal Sales

Defining the internal supplier

You must define the internal supplier as 7-'Internal' in **Internal supplier** in 'Supplier. Open' (CRS620).

Defining the internal customer number

The customer number that is used for the internal customer order is assigned per supplier number and receiving warehouse in 'Supplier. Connect Our Customer Number' (CRS680). The receiving warehouse is defined as the warehouse of the purchase order header in 'Purchase Order. Open' (PPS200). The supplier can thereby assign the same customer number to several warehouses placing a purchase order against the supplier.

If the receiving warehouse is assigned the same customer number for all internal sales, this customer number can be defined in 'Warehouse. Open' (MMS005).

Note: There can only be one customer number per purchase order. If no customer number is defined in either (CRS680) or (MMS005), a stop message stating No Customer number connected to the receiving warehouse is displayed at PO line entry. In addition, upon automatic creation of a PO proposal, the stop message x1: Customer number for internal sales is not defined for the receiving warehouse is displayed if no valid customer number is found.

Defining the internal CO type

The customer order (CO) type that is used for the internal customer order is either defined per batch origin for internal sales in 'Settings - Batch Orders' (OIS278) or per supplier number and receiving warehouse in (CRS680). The later takes priority.

Defining the selling facility of the internal customer order

The financial owner of the customer order is defined by its selling facility. The selling facility can, for an internal sales order, either be defined per the customer or supplier record.

Each customer can be assigned to a facility on 'Customer. Open' (CRS610/B). This facility can be used as the selling facility of the internal customer orders. This is controlled by defining the **Facility** default setting *CUS in 'CO Type. Update Field Selection' (OIS014).

For the scenario that the selling facility differs for the same customer number, it can instead be defined per supplier in 'Supplier. Define Purchase Financial' (CRS624).

If a facility is defined in (CRS624), it is given the highest priority and always be used on the internal customer order. If left blank, the rule defined per order type in (OIS014) is used.

Defining the supplying warehouse of the internal customer order

The supplying warehouse defined per main supplier in 'Item. Connect Warehouse' (MMS002) is used for both the demand calculations and as the default supplying warehouse for the internal customer order.

Note: If a supplying warehouse is defined in (CRS624), it is set as supplying warehouse for that specific supplier in (MMS002) by default.

Note: The receiving warehouse of the purchase order can never be the same as the supplying warehouse of the customer order. A stop message is then displayed in (MMS002) and 'Purchase Order. Open Lines' (PPS201).

Once the purchase order is printed, the supplying warehouse is retrieved based on the purchase order line's item and receiving warehouse settings in (MMS002).

Note: The supplier defined in (MMS002) must match the supplier of the purchase order, else the supplying warehouse in (MMS002) is not set by default to the customer order line.

For business scenarios where a supplier number always equals a specific warehouse, it can be defined as the supplying warehouse per supplier in (CRS624).

In addition, each customer can be assigned to a supplying warehouse in 'Customer. Open' (CRS610), which may be used as the selling facility of the internal customer orders. This is controlled by defining the **Warehouse** default setting *CUS in 'CO Type. Update Field Selection' (OIS014).

The search for a default supplying warehouse on the internal CO header is performed in this hierarchy:

- 1 The supplying warehouse in (CRS624).
- 2 The supplying warehouse based on the CO type setting in (OIS014).

The search for a default supplying warehouse on the CO lines is performed in this hierarchy:

- 1 The supplying warehouse in (MMS002) for the purchase order line's item and receiving warehouse. If the supplier of the purchase order and the main supplier in (MMS002) are the same, then this supplying warehouse is used on the CO line.
- 2 The supplying warehouse in (CRS624).
- 3 The supplying warehouse based on the CO type setting in (OIS014).

To manage more advanced sourcing rules of supplying warehouses, a supply model may be defined for the internal customer order. The supply model is, however, only supported for sourcing of a firm purchase order and not the demand driven off a planned purchase order.

Defining warehouse interface settings for internal sales

Internal sales uses the warehouse interface functionality to transfer outbound delivery information to the purchase delivery note which is used for the goods receipt.

Number series 1 with number series type 17 must be defined in 'Number Series. Open' (CRS165). Qualifiers must exist in 'Order Init Stock Trans Qualif. Open' (MHS860).

Stock message partner and message type must be defined in 'Stock Msg Partner. Open' (MMS865) and defined in 'Settings - Deliveries' (CRS721) for internal sales.

Auto start jobs for warehouse interface must be active for creation of purchase delivery (MHS855 and MHS855T9).

Note: Creation of purchase delivery notes by the warehouse interface functionality requires activation of retrieve receipt/pick list in 'Warehouse. Open' (MMS005).

Settings on the delivery term

'Goods responsibility' (DELT) controls how goods in transit are updated when the goods in transit functionality is activated in 'Settings - Cost Accounting' (CAS900). Depending on the goods responsibility set for the delivery term in 'Delivery Term. Open' (CRS065), goods in transit transactions are created either for outbound or for inbound transactions.

Settings on the dispatch policy

The dispatch policy parameter '470 Ship-via control' must be set to 1-'Consignee' on 'Dispatch Policy. Open' (MWS010/H).

Batch order entry settings

An entry for batch source I-'Internal sales' must exist in 'Settings - Batch Orders' (OIS278). All the batch origin settings are similar as for the external batch origin A-'API'.

The setting **Source sales price** in (OIS278) controls whether the purchase price is accepted or disregarded as the sales price. In addition, the setting **Price/discount origin** is always activated for internal sales implying that the sales price origin is set to A-'API or internal sale' when the purchase price is used as the sales price of the CO.

Customer order type settings

A specific CO type must be defined for internal sales, since there are specific CO type settings required for an CO to be created based on an internal purchase order. This implies that the same CO type cannot be used for other types of orders, for example sales to external customers.

The CO type is enabled for internal sales through activating the 'Internal sales' setting on the E panel in 'CO Type. Open' (OIS010). Once activated, there are several CO type settings that are disabled both in (OIS010) and 'CO Type. Update Field Selection' (OIS014). Upon copy, the new CO type can be defined as internal sales by activating the 'Internal sales' setting on the copy panel C in (OIS010). The CO type settings are upon copy automatically set to qualify for internal sales.

The table outlines the required CO type setting in (OIS010) for internal sales.

Field in (OIS010)	Comment
Order category	The customer order category must be 1-'Normal order' for internal sales. Other order categories, such as 4-'Quotations', are not supported.
Preliminary CO	The setting must be set to 0-'Not allowed'.
Validate S/N	The setting must be set to 0-'No validation'. No support for sold against equipment information for spare part items.
Cash dsk active	The setting must be disabled. Cash desk payments are not supported for internal sales.
Chk plan split	The setting must be set to 0-'Not used'. Split of CO lines is not supported for internal sales.
Advance invoicing	The setting must be set to 0-'Adv invoicing and pmt req not allowed'.
Dispatch policy	The settings 540 or 545-'Consolidation fields' must be set to the field value OAICTR to ensure that only internal sales orders are consolidated into one delivery.
Packaging action	The setting must be disabled. There is no support to create an additional CO line and push the information to the internal PO.
Opening panel	The setting must be set to B-'Normal'.
Check sequence	The 'Check sequence - item ID' used to define the item search hierarchy at CO line entry in (OIS101) only allows for alternative 1-'Item file'. The reason for this setup is that the item number is always given by the internal purchase order. For kit items, the check sequence is hard coded to 3-'Kit items' and the product structure applied on the internal PO is always respected.
Shortage panel	The setting cannot be set to 2-'Alternate item'. Replacement items are not supported for internal sales.
Qty sign	The setting must be set to 2-'Only positive'. There is no support to create a credit order based on the internal purchase order.
Chk duplicates	The setting must be set to 0-'No check'. There is no support to control duplicates once placing the internal purchase order.
Several whs	The setting must be enabled. There is no support to control only one supplying warehouse once placing the internal purchase order.

Fixed Asset handling in Internal Sales transactions

In Internal sales between divisions, the handling of Fixed Assets (FA) depends on whether the asset requirement is in the sending division or the receiving division. These scenarios show how FA is handled in different divisions:

- **FA in the sending division**

The item is handled as FA in the sending or receiving division. The standard processes function correctly in this scenario.

- **FA in the receiving division**

If the item is FA in the sending division and must also be FA in the receiving division, you must register it through the purchase order (PO).

Note: You cannot register the item as FA in the receiving division by using '**44- Move to fixed asset**' in 'Equipment/Serialized Item. Open' (MMS240).

You must set up the '**300 Fixed asset type**' in 'Purchase Order Type. Open' (PPS095).

- **No FA in the sending division**

If the item is not an FA in the sending division, you can register it as a fixed asset in the receiving division without restrictions.

To register the FA, select '**44- Move to fixed asset**' in (MMS240) or set up '**300 Fixed asset type**' in (PPS095).

This table shows the different scenarios in FA handling in either the sending division or receiving division and their corresponding activation methods:

Scenario	Registration method	Is the scenario valid?
FA in the sending division	n/a	Yes
FA in receiving division through PO and the ' 300 Fixed asset type ' in (PPS095)	Immediate registration	Yes
FA in receiving division through late activation in (MMS240)	Select ' 44- Move to fixed asset ' in (MMS240)	No, this scenario is not valid if FA exists in the sending division.
No FA in sending division	Select ' 44- Move to fixed asset ' in (MMS240) or PO	Yes

Managing Internal Purchase Orders

A purchase order with a supplier defined with supplier type 7-'Internal' in 'Internal supplier' in 'Supplier. Open' (CRS620) is an internal purchase order. Internal purchase orders can be created manually using 'Purchase Order. Open' (PPS200), through the Purchase Order (PO) batch entry or by releasing a planned order.

If a planned purchase order is created with an internal supplier and a supplying warehouse can be found, a material reservation is created to represent the planned Customer Order (CO) issue (see also [Defining Internal Sales](#) on page 18 and [Material Planning for Internal Sales](#) on page 42).

Once an internal PO is printed and is set to status 20, an internal customer order is automatically created in the selling facility, using the CO batch entry. Each purchase order number is always connected to exactly one customer order number. Two planned purchase orders whose warehouses represent different customer numbers can never end up on the same purchase order.

'Active Supply Chain. Display' (MWS150) is used to view the relation between the customer order and purchase order.

After a purchase order has been printed, changes to existing order lines or header will not automatically update the customer order, even if the purchase order is re-printed. However, if a new line is added to the purchase order and printed, a new line will be added to the customer order. If a purchase order line has reached status 20, it may no longer be deleted.

Managing Internal Customer Orders

After an internal Purchase Order (PO) is printed, an internal Customer Order (CO) is automatically created within the selling unit.

All the internal customer orders are defined with an internal sales indicator. The sales indicator field (OAICTR) can be selected in the program view on 'Customer Order. Open Toolbox' (OIS300) to easier identify and manage the internal customer orders.

The CO is created through batch order entry in 'Batch Customer Order. Open' (OIS275).

An information browser category for the table MPOREF is defined in 'Information Browser Category. Open' (CMS010) as the batch source for internal sales. The same process applies when validating and managing externally retrieved customer orders through API to see the relationship between the internal purchase order and the internal customer order in 'Information Browser. Open' (CMS100).

Upon deleting an entire internal CO or a specific CO line, the corresponding PO lines are automatically updated to status 99='Purchase order deleted' without having to print the order confirmation. Note that for all other type of CO changes, the order confirmation must be printed to confirm the purchase order in 'Purchase Order. Confirm' (PPS250).

Copying of an internal CO is allowed, however, the copied CO is not classified as internal sales (the flag OAICTR is removed for the new order). Copying of an internal CO is, for example, applicable if a credit order is to be created.

To manage more advanced sourcing rules of supplying warehouse, a supply model may be defined for the internal customer order. If the rules are defined to split the order line, then additional purchase order lines are automatically created at time of CO entry.

After the internal CO has been created, you can change the warehouse on the customer order lines up until the picklist is created, with 'Customer Order. Mass Change Lines' (OIS258) or, for integrations, with OIS100MI.ChgWarehouse. To confirm the changes in (PPS250), the CO confirmation must be re-printed.

Sales statistics

The field UCICTR - 'Internal sales' is updated in the statistics (tables OSASTD and OSBSTD) and is available as a selection field in 'Dataset. Connect Selection Fields' (OSS403), so that you can get statistics split on internal and external sales.

Goods in transit

Goods in transit are created for a customer order when parameter 029 is activated in 'Settings - Cost Accounting' (CAS900). Depending on the goods responsibility set for the delivery term, goods in transit are created for outbound goods. Note that the customer order invoice for outbound goods in transit cannot be created until goods responsibility is transferred to the customer. The delivery is held in status 61 in 'Delivery. Open' (OIS150). The **Goods resp n t** check box on (OIS150/E) is selected to indicate that the delivery is held because goods responsibility is not transferred to the customer.

Order reference information

The table outlines the default values for reference information of the internal customer order's at time of internal CO creation.

Internal CO information	Comment	CO type set up in (OIS014)
Customer's order number	The field value is set to the PO number.	The default rule defined per CO type in 'CO Type. Update Field Selection' (OIS014) must be blank and the field selection must be set to 0 - 'Do not display field heading or content'.
Customer's order date	The field value is set to the PO's order date.	The default rule defined per CO type in (OIS014) must be blank and the field selection must be set to 0 - 'Do not display field heading or content'.
Your ref 1	The field value is set based on the CO type setting in (OIS014).	Currently, there is no option to retrieve contact information from the internal PO.
Our reference	The field value is by default based on the CO type setting in (OIS014). The field value is set on the PO's Your reference field at time of order confirmation in 'Purchase Order. Confirm' (PPS250).	
Contact method	The field value is set based on the CO type setting in (OIS014).	Currently, there is no option to retrieve contact information from the internal PO.

Internal CO information	Comment	CO type set up in (OIS014)
Quotation number	Quotation number reference is not supported for internal sales.	The default rule defined per CO type in (OIS014) must be blank and the field selection must be set to 0 - 'Do not display field heading or content'.
Original inv reference	Original invoice reference is not supported for internal sales.	The default rule defined per CO type in (OIS014) must be blank and the field selection must be set to 0 - 'Do not display field heading or content'.

Order information

The table outlines the default values for order information of the internal customer order at time of internal CO creation.

Internal CO information	Comment	CO type set up in (OIS014)
CO order type	The CO type used for internal sales is either defined per batch origin for internal sales in 'Settings. Batch Orders' (OIS278) or per supplier number and receiving warehouse in 'Supplier. Connect Our Customer Number' (CRSE680). The later takes priority.	There are several mandatory settings for the CO type used in internal sales. See the CO type set up comments for each field.
Currency	The field value is set based on the currency of the PO. It cannot be manually changed on the CO.	The default rule defined per CO type in (OIS014) must be blank and the field selection must be set to 0 - 'Do not display field heading or content'.
Language code	The language is retrieved from the customer record, not from the purchase order.	
Order line number	The field value is defined based on the CO type setting. Note: The PO and CO do not necessarily have the same line numbers.	
Order quantity	The field value is retrieved based on the purchase quantity and U/M of the PO line. Note: PO line must be entered in the basic U/M.	

Internal CO information	Comment	CO type set up in (OIS014)
Item number	The field value is set based on the PO lines item number. Note that the CO's item number can not be another item number than defined on the PO line. Supplier's item number and replacement items are not supported for internal sales.	
Item name	The field value is by default based on the item name of the PO line.	
Item description	The field value is by default based on the item description of the PO line.	
Serial number	The serial number can be manually specified and allocated on the internal CO. It can, however, not be specified and inherited from the internal PO.	
Alias number	An alias number can be retrieved based on the CO lines item number, but it cannot be manually specified or changed on the CO line.	The alias number field selection defined in (OIS014) must be set to 0 - 'Do not display field heading or content' or 1 - 'Display field (heading and content) but changes cannot be made'.
Project/Season	The field value is by default based on the CO type setting in (OIS014).	Select the field default value *INTPO in (OIS014), to retrieve the project/season based on the internal PO line.
Element/Delivery window	The field value is by default based on the CO type setting in (OIS014).	Select the field default value *INTPO in (OIS014), to retrieve the element/delivery window based on the internal PO line.
Priority	The field value is by default based on the CO type setting in (OIS014).	Select the field default value *INTPO in (OIS014), to retrieve the priority based on the internal PO line.

Delivery information

The table outlines the default values for delivery information of the internal customer order at time of internal CO creation.

Internal CO information	Comment	CO type set up in (OIS014)
Requested delivery date	The field value is set based on the PO's requested delivery date in the customer's time zone, which is why the place of load is defined on the delivery address. For internal sales, the place of load of the delivery address is set based on the receiving warehouse.	
Requested delivery time	The field value is set based on the PO's requested delivery date in the customers time zone, which is why the place of load is defined on the delivery address. For internal sales, the place of load of the delivery address is set based on the receiving warehouse.	
Delivery method	The field value is by default based on the CO type setting in (OIS014).	Select the field default value *INTPO on (OIS014/F), to retrieve the delivery method based on both the internal PO header and lines.
Delivery terms	The field value is by default based on the CO type setting in (OIS014).	Select the field default value *INTPO on (OIS014/F), to retrieve the delivery method based on both the internal PO header and lines.
Terms text	The field value is by default based on the CO type setting in (OIS014).	Select the field default value *INTPO on (OIS014/F), to retrieve the delivery method based on both the internal PO header and lines.
Packaging terms	The field value is by default based on the CO type setting in (OIS014).	Select the field default value *INTPO on (OIS014/F), to retrieve the delivery method based on both the internal PO header and lines.
Supply model	The field value is by default based on the CO type setting in (OIS014). If the supply model rules result in new CO lines, corresponding PO lines are automatically created at time of CO entry.	

Payment and conditions

The table outlines the default values for financial information of the internal customer order at time of internal CO creation.

Internal CO information	Comment	CO type set up in (OIS014)
Payment terms	The field value is by default based on the CO type setting in (OIS014).	N/A - The current solution does not provide an option to respect the payment term of the internal PO because this information is considered as always to be owned by the selling unit.
Payment method	The field value is by default based on the CO type setting in (OIS014).	N/A - The current solution does not provide an option to respect the payment method of the internal PO because this information is considered as always to be owned by the selling unit, but in the end the customer decides how to pay the invoice.
Payer	The field value is by default based on the customer master.	N/A - The current solution does not support to define an different payer on the internal PO itself. If to be applied, it must be defined per customer in 'Customer. Open' (CRS610).
Invoice recipient	The field value is by default based on the customer master.	N/A - The current solution does not support to define an different payer on the internal PO itself. If to be applied, it must be defined per customer in (CRS610).
Tax applicable	The field value is by default based on the customer master.	
Tax code	The field value is by default based on the customer master.	

Limitations

Order entry

- An order confirmation document (Doc ID 231) must be connected to the internal CO to trigger the supplier confirmation of the internal PO. No updates to an customer order is automatically updating the related purchase order.
- All kinds of updates on already printed purchase order lines do not automatically update the internal customer order, that is, changes such as purchase quantity, price, or address information, including the scenario that the selling unit has not yet confirmed the customer order and the purchase order is still in

status 20='Printed'. New purchase order lines can, however, be added and once the PO is reprinted, additional new order lines are created within the existing customer order.

- Manual entry of order lines is not supported.
- Delivery address information SPCL code is not supported.
- Planned split of CO lines in 'Dely Split Rule. Connect to Whs/Cust' (OIS472) is not allowed.
- You cannot set another delivery customer than the ordering customer.
- Rail station: The field value is left blank. Not supported because there is nothing that says that this field would always be the same for the PO and CO. The field is intended to be used for calculation of transport cost. Thus, it is most likely to be set on the side that is responsible for the transportation cost and be left blank on the other side. Another argument for the design is that the field is not printed on the PO document, which means that is not a field that is sent to an external supplier either
- The customer order cannot be in preliminary status.

Order processing

- Packaging action, set on (OIS010/J), is not supported.
- Transportation items are not supported.

Pricing

- Spare part sale with reference against the sold against equipment information is not supported, including pricing, warranty entitlement, and maintenance agreement.
- Service charges are not supported.

Invoicing

- Advance invoicing is not supported.

The table outlines the internal customer order header and line fields not supported for internal sale.

Internal CO	Disabled CO related options and functions	CO type set up in (OIS014)
Product (Sold against equipment information)	Upon selecting related option 52='Sold against' in 'Customer Order. Open Line' (OIS101), 'Customer Order. Open Line Toolbox' (OIS301) and 'Customer Order. Open Line Workbench' (OIS302), a stop message Not allowed for internal sales is displayed to the user.	The product field selection per CO type in (OIS014) must be set to 0 - 'Do not display field heading or content'.
Warranty type (Sold against equipment information)	Upon selecting related option 35='Apply goodwill' in (OIS101) a stop message Not allowed for internal sales is displayed to the user.	The product field selection per CO type in (OIS014) must be set to 0 - 'Do not display field heading or content'.
Position (Sold against equipment information)		The product field selection per CO type in (OIS014) must be set to 0 - 'Do not display field heading or content'.

Internal CO	Disabled CO related options and functions	CO type set up in (OIS014)
Maintenance agreement number (Sold against equipment information)	Upon selecting related option 33='Maintenance agmnt' in (OIS101) a stop message Not allowed for internal sales is displayed to the user.	The product field selection per CO type in (OIS014) must be set to 0 - 'Do not display field heading or content'.
Discount model		The discount model default rule defined per CO type in (OIS014) must be blank and the field selection must be set to 0 - 'Do not display field heading or content'.
Cash discount term		The discount model default rule defined per CO type in (OIS014) must be blank and the field selection must be set to 0 - 'Do not display field heading or content'.
Order discount generating		The discount model default rule defined per CO type in (OIS014) must be blank and the field selection must be set to 0 - 'Do not display field heading or content'.
Replacement item	Upon selecting related option 48='Related items' in (OIS101), (OIS301), and (OIS302), a stop message Not allowed for internal sales is displayed to the user.	The replacement item field selection must be set to 0 - 'Do not display field heading or content'.
Rail station	The field is not supported for internal sales because there is nothing that says that this field would always be the same for the PO and CO. The field is intended to be used for calculation of transport cost. Thus, it is most likely to be set on the side that is responsible for the transportation cost and be left blank on the other side. Another argument for the design is that the field is not printed on the PO document, which means that is not a field that is sent to an external supplier either.	

Internal CO	Disabled CO related options and functions	CO type set up in (OIS014)
Split of CO lines	Upon selecting related option 38='Split' in (OIS301), and (OIS302), a stop message 'Not allowed for internal sales' is displayed to the user.	
Pre-payment	Upon selecting related option 51='Prepaym details' in (OIS101), (OIS301), and (OIS302), a stop message Not allowed for internal sales is displayed to the user.	The standard document 360 - 'Payment document', 385 - 'Pre-payment request', 386 - 'Final payment request' are prevented to be connected to an CO type defined as internal sales.
Transportation items	Upon selecting related option 55='Transportation item info' in (OIS101), (OIS301), and (OIS302), a stop message Not allowed for internal sales is displayed to the user.	
Delivery address ID	Predefined address identities are not supported at internal CO entry. The CO header's unique delivery address and the line delivery addresses are always created based on the PO header and the line's final delivery address, including the ship-via address.	The default rule defined per CO type in (OIS014) must be blank.
Service charge ID		The product field selection per CO type in (OIS014) must be set to 0 - 'Do not display field heading or content'.

Customer and Purchase Order Confirmation for Internal Sales

Once an internal Purchase Order (PO) is printed, an internal Customer Order (CO) is automatically created within the selling unit. The PO lines remain in status 20 - 'Document printed and sent' while awaiting supplier confirmation. Once the internal CO is confirmed and an order confirmation is printed using 'Customer Order Print Confirmation' (OIS605), the PO lines are automatically confirmed in 'Purchase Order. Confirm' (PPS250).

Manage confirmation on an internal customer order

An order confirmation document (Doc ID 231) must be connected to the internal CO to trigger the supplier confirmation of the internal PO. You can configure the order confirmation document to be printed automatically at CO entry, or to be launched using related option 6 - 'Confirmation/Quotation' in 'Customer Order. Open' (OIS100).

Upon printing a copy of the CO confirmation, the related PO is not automatically reconfirmed. A reconfirmation of the PO can only be performed through related option 6 - 'Confirmation/Quotation' in (OIS100) by clearing the copy check box. Once you press Enter, a popup window showing the message 'Print a reconfirmation?' is displayed. Click OK.

A sales rep may also print the Letter of Excuse document (Doc ID 241) through 'Customer Order. Print Delivery Time Chgs' (OIS610). This printout will create an automatic update of the confirmation in (PPS250). The letter of Excuse will only confirm the quantity and delivery date.

Note: If a CO line or a complete CO is deleted, the corresponding PO lines are set to status 99 - 'Purchase order deleted' directly without printing the confirmation documents.

Manage confirmation on an internal purchase order

The purchase order confirmation in (PPS250) will set the PO lines status to either 33 or 35. If the supplier confirmed delivery date, quantities or price are within the predefined tolerance levels in 'Settings - Purchasing' (CRS780), the PO line status is set directly to 35 indicating that no additional review is required. Otherwise, status 33 is set.

33- Both price and delivery date are confirmed but not approved

35 -Both price and delivery date are confirmed and approved

Each time a confirmation is received, it is considered as a new confirmation for the entire PO and therefore all the PO lines are updated. However, PO lines in status greater than 35 - 'Purchase price and delivery date confirmed and approved' are always excluded. Also, if the PO line is partly goods receipt, the confirmation only applies to the remaining quantity and is therefore automatically split to a new PO sub line.

Purchase order confirmation may be entered manually in (PPS250). These PO lines are flagged as manually confirmed and this will prevent further automatic updates through customer order confirmation, unless the manual purchase order confirmation is reversed. A manual confirmation is, for example, applicable if the internal supplier informs about a partial delivery. Partial deliveries cannot be confirmed automatically through the customer order confirmation, and this must be a manual process.

Automatic customer and purchase order confirmation for internal sales

You can automatically confirm and update logistic and commercial fields (including line charges) on the purchase order (PO) while picking lists are issued in 'Picking List. Report' (MWS420). This ensures that the PO and customer order (CO) are synchronized before shipments are advised. The auto confirmation is controlled by a parameter in 'Settings - Purchasing' (CRS780), but when it is activated, you can disable the functionality for individual suppliers in 'Supplier. Define Purchase & Financial' (CRS624). Unlike the manual confirmation, the auto-confirmation does not print the CO confirmation document (ID 231). In addition, it is not required for the document to be connected to the customer order when using auto-confirmation. Also, the header charges are not updated during the auto-confirmation. If the manual confirmation is not performed before the automatic confirmation, any existing header charges on the purchase order will be

erased. Therefore, if synchronization of header charges between customer and the purchase order is required, you must perform the manual confirmation separately through 'Customer Order. Print Confirmation' (OIS605).

Note: Each time a picking list is issued, it is considered a new confirmation for the corresponding purchase order line. Additionally, you can specify the purchase order confirmation manually in 'Purchase Order. Confirm' (PPS250). In that case, the purchase order lines are marked as manually confirmed, which prevents further automatic updates.

Information included in the purchase order confirmation

Confirmed quantity

This field is updated with the CO lines order quantity minus its closed quantity.

For CO lines where the order quantity has been partially closed, the PO line is end marked at time of purchase order confirmation in (PPS250). If the entire CO line quantity is closed, the corresponding PO line is closed and set to status 99 - 'Purchase order deleted'.

The deviation quantity control activated through the setting 25 - 'Permitted quantity diff - API order confirmation' in 'Settings - Purchasing' (CRS780) is also applied for internal sales. If the limit is reached or exceeded, an email of type 210 is sent to the person responsible for the transaction. If message 210 is triggered, then status 33 is set on the order line. Otherwise, status 35 is set.

Confirmed delivery date

This field is updated with the CO lines confirmed delivery date and time.

The customer's requested delivery date and time on the CO is expressed in the time zone of the place of load defined on the CO's delivery address.

The control of permitted difference in calendar days, activated through the setting 26 - 'Permitted delay time diff - API order confirmation' in (CRS780), is also applied for internal sales. If the limit is reached or exceeded, a mailbox message of type 211 is sent to the person responsible for the transaction. If message 211 is triggered, then status 33 is set on the order line. Otherwise, status 35 is set.

Confirmed purchase price and purchase price quantity

These fields are updated with the sales price and sales price quantity of the CO lines.

The permitted price difference, activated through the setting 26 - 'Permitted delay time diff - API order confirmation' in (CRS780), is also applied for internal sales. If the limit is reached or exceeded, a mailbox message of type 212 is sent to the person responsible for the transaction. If message 212 is triggered, then status 33 is set on the order line. Otherwise, status 35 is set.

Note: Discounts are not supported for internal sales.

Confirmed 'Delivery method' and 'Delivery terms'

These fields are updated with the CO line's delivery method and delivery term.

Note: No deviation control is supported for these values within the purchase order confirmation in (PPS250).

Confirmed 'Harbor/Airport'

The harbor/airport of the CO line's delivery address is confirmed per PO line.

Confirmed 'Your reference 1'

This field is updated with our reference information on the CO header.

Confirmed 'Pick-up Address' and its 'Place of load'

Only manual confirmation of pick-up address is supported for internal sales. No functionality exists on the internal CO or dispatching warehouse to manage a pick-up address.

Limitations

- These purchase order confirmation statuses are not supported for internal sales:
31 = Delivery date confirmed
32 = Purchase price confirmed
- Confirmation of Ship-to-warehouse is not supported for internal sales.
- Confirmation of discount fields 1, 2, and 3 is not supported for internal sales.
- Document ID 231 - Customer order confirmation is printed only when you perform a manual confirmation through (OIS605).

Managing Internal Sales Pricing

To gain a price overview prior to entering the internal sales order, the price information must be maintained both in a purchase agreement and in one of the possible price origins of the customer order such as customer agreements or price lists. A synchronized pricing logic is not supported so a customer order price list cannot be applied within the purchase agreements.

Once the internal purchase order is printed, the purchase sales price can be carried over to the customer order. The setting 'Source sales price' in 'Settings – Batch Orders' (OIS278) controls whether the price is accepted or disregarded.

If disregarded, the Customer Order (CO) line retrieves the sales price based on its own price search sequence defined per CO type in 'co_Type_Open' (OIS010). If the purchase price is configured to be carried over to the customer order, the price origin of the customer order line is set to A - 'Price from external system via API'.

For both scenarios, the CO line's sales price is always confirmed in 'Purchase Order. Confirm' (PPS250) upon printing the customer order confirmation.

Limitations

- There is no synchronized pricing set up between the customer and purchase order. The purchase order agreements must be maintained separately from the customer order's price lists or blanked agreements. You can configure the internal sales so that the purchase price is carried over to the customer order and either way, the customer order's sales price is always confirmed back to the purchase order.
- Discounts such as order total, line or group discounts are not supported for internal sales orders. Neither are the cash discount terms.
- Service charges are not supported for internal sales.

Charges Synchronization between CO and PO

Background

In order to accurately calculate purchase order cost and to simplify matching the Customer Order (CO) invoice to the purchase order, external customer order charges will automatically update matching purchase order charges at CO confirmation.

Limitations

- Distributed costing elements are not supported.
- For header CO charges, only fixed amount charges are supported. If charges should be based for instance weight, volume or order value, use line charges instead.
- Charge synchronization will only take place at CO confirmation.
- There is no automatic recalculation of Purchase Order (PO) charge amounts based on actual catch weight recorded on ASN or at goods receipt.

Before you start

- CO header charges, line charges and line charge models must be defined and configured for customer order processing.
- A purchase costing model must be defined for purchase order processing.

Setup

In 'Customer Order Charge. Open' (OIS030), connect the each applicable CO header charge to a corresponding purchase costing element.

- The CO charge must be an external fixed amount charge
- The purchase costing element must be an external header charge with operator 20
- The CO charge debit frequency must correspond to the charge invoicing setting of the costing element.

In 'Order Line Charge. Open' (CRS275), connect each applicable CO line charges to a corresponding purchase costing element.

- The CO charge must be an external charge, and the calculation method should correspond to the operator of the purchase costing element.
- The purchase costing element must be an external line charge with operators 04, 05, 07, 08, 09, 10, 11, 12 or 20.
- The CO charge debit frequency must correspond to the charge invoicing setting of the costing element.

In 'Settings- Purchase' (CRS780), define a sequence number interval that should be used when creating new charges on a purchase order, in case the internal customer order has a charge that is not matching any already existing charge on the purchase order.

Update of PO charges at customer order confirmation

When an order confirmation is printed for an internal customer order, purchase order charges are updated this way:

- Amounts of CO charges are calculated and copied to the first corresponding charge of the PO, on both header and line level.
- The PO charges are updated with the ID (CRID) of the CO charge from which the amount is copied, to make it possible to tell which CO charge updated which PO charge. Note that a purchase costing element can be added several time to a PO.
- External PO charges that have no matching CO charge get 0.00 as charge amount. However, for sales tax or the use tax line charges with operator 90 or 91, the amount remains unchanged, since these conditions only apply to the PO.
- CO charges with no matching equivalent on the PO are added to the PO.
- Only external CO charges will update any PO charges, and only external PO charges are updated.

In case a re-confirmation of the customer order is printed, the PO charges are updated again with the new values.

Note: Printing a copy of a customer order confirmation does not update PO charges.

Update of PO charge when line is split

In case the a partial delivery of a customer order line, the shipment advise will cause a split of the purchase order line. If this happens, the operator and charge invoicing setting will determine how the charge amount is split between the original line and the new line. The purpose of the split logic is to match how the customer order invoice will calculate the charge amount for each invoiced delivery.

Charge inv	Operator	Split logic	Comment
1-Only once	20-Fixed amount	Full charge amount on sub-line 0. No charge amount on other sub-lines.	Charge included on first CO invoice only, with fixed amount
1-Only once	Other operators	Charge amount adjusted on sub-line 0, based on partial quantity. No charge amount on other sub-lines.	Charge included on first CO invoice only, with amount based on first delivery
2-Each invoice	20-Fixed amount	Full charge amount copied to all sub-lines.	Fixed charge amount per CO delivery, on each invoice
2-Each invoice	Other operators	Charge amount distributed by quantity between all sub-lines	Charge included on each CO invoice, with amount based on deliveries

Managing Internal Sales Delivery Address Information

The final delivery address on Purchase Order (PO) header and line will be assigned as the delivery address in the Customer Order (CO) batch entry as an order unique delivery address. In addition, the ship-via address identity of the PO header and line will be assigned as the ship-via on the CO's order unique delivery address.

The CO header's unique delivery address is either given an identity (#xxxx, where x is a number) identity or is left as blank, as controlled by the CO type setting 'Create address' in 'CO Type. Open' (OIS010). The CO line will inherit this address unless the PO sends in a unique line address.

The CO line's unique delivery address is given the identity * in combination with the order line number. If the same delivery address is received for several order line, then the * identity will be re-used for additional order line. This is to ensure that the order lines are consolidated into the same delivery.

For manual change of the ship-via address on an internal PO, a new ship-via address identity must be selected. Upon prompting on the 'Ship-via' field, the program 'Via Address. Open' (CRS300) is displayed for the user to select a new ship-via address identity. For an internal purchase order it is prevented to manually change the individual address lines of the ship-via address, as the internal customer order cannot accept the actual ship-via address lines but only a predefined ship-via identity.

The table outlines the default values for the internal customer order's delivery address information at time of internal CO creation.

Internal CO information	Comment
Company name	The field value is set based on the PO's final delivery address.
Address (ADR1-4)	The field value is set based on the PO's final delivery address.
City (TOWN)	The field value is set based on the PO's final delivery address.
County (FRCO)	The field value is set based on the PO's final delivery address.
State (ECAR)	The field value is set based on the PO's final delivery address.
Postal code (PONO)	The field value is set based on the PO's final delivery address.
Country (CSCD)	The field value is set based on the PO's final delivery address.
Planning node (PNOD)	N/A - Not supported for internal sales, since these values are not supported for any type of customer order.
SPCL code (SPLE)	The field value is left blank.
Geo code X, Y, Z	N/A - Not supported for internal sales, since these values are not supported for any type of customer order.

Internal CO information	Comment
Ship via	The field value is set based on the PO order header and line.
Rail station (RASN)	The field value is left blank. Not supported for internal sales, since there is nothing that says that this field would always be the same for the PO and CO. The field is intended to be used for calculation of transport cost. Therefore it is most likely to be set on the 'side' that is responsible for the transportation cost and be left blank on the other 'side'. Another argument for the design is that the field is not printed on the PO document, which means that is not a field that is 'sent' to an external supplier either.
Tel no (PHNO)	From buyer's user record (same logic as the PO document)
Fax (TFNO)	From buyer's user record (same logic as the PO document)
Your ref 1 (YREF)	From CO header
VAT reg no (VRNO)	The field value is set based on the buying warehouse only. Note! Is is never retrieved based on the customer master settings, since one customer record may correspond to any number of final delivery addresses (buying warehouses) that may have different VAT reg no.
Tax code (TAXC)	The field value is set based on the customer master.
Geo code (GEOC)	The field value is set based on the buying warehouse only. Note! Is is never retrieved based on the customer master settings, since one customer record may correspond to any number of final delivery addresses (buying warehouses).
Route	From CO header
Route departure	From CO header
Place	The field is set based on the receiving warehouse, which is the destination of the PO's final delivery address.
Unloading zone	N/A - Not supported for internal sales.
Delivery specification	N/A - Not supported for internal sales.
Delivery method	From CO header
Delivery term	From CO header
Terms text 2	From CO header

Internal CO information	Comment
Harbor/Airport	The field is set based on the internal PO.

Limitations

- Delivery address - Predefined customer order address identities are not supported for internal sale, which disables functionality such as transportation planning or using the address identity as control object for supply model, pricing etc.
- Pick up address - Pick-up addresses on the internal purchase order are not transferred to the customer order. The pick-up address type is not supported for any type of customer order sales (that is, nor external or internal customer sales).
- Ship-via address - It is not allowed to manually write a ship-via address on an internal purchase order. A new predefined ship-via address identity must instead be selected. As always, the dispatch policy parameter 470 'Ship-via control' must be set to 1-'Consignee' on (MWS010/H) if the ship-via address on the CO should be used for the delivery.
- Invoice address - Invoice address on the internal purchase order is not transferred to the internal customer order.
- Origin address - For global contract management (GCM). The origin addresses on the internal purchase order is not transferred to the internal customer order. The origin address type is not supported for any type of customer order sales (that is, nor external or internal customer sales).

Managing Goods in Transit

Goods in transit transactions are created for customer and purchase orders when the parameter 029 - 'Create goods in transit transactions for CO/PO' is activated in 'Settings – Cost Accounting' (CAS900). Depending on the goods responsibility set for the delivery term in 'Delivery Term. Open' (CRS065), goods in transit transactions are created either for outbound or for inbound transactions. Note that the customer order invoice for outbound goods in transit cannot be created until goods responsibility is transferred to the customer. The delivery is held in status 61 in 'CO Delivery. Open' (OIS150). The **Goods responsibility not transferred** check box on (OIS150/E) is selected to indicate that the delivery is held because goods responsibility is not transferred to the customer.

Goods responsibility is transferred to the customer by setting the goods reconciliation date for the goods in transit transaction. MWS073MI/ConfirmDelivery is used to confirm the delivery and sets the goods reconciliation date. This can also be manually managed by related option in 'Goods in Transit. Open' (MWS073).

Accounting rules for goods in transit - outbound

Goods in transit transactions for outbound are created in table MGITTR (based on the inventory accounting price) for customer orders when goods are issued from stock, and offset when goods receipt is confirmed at the buyer's address. This applies when goods responsibility is set to 2 or 3 for the delivery term.

These accounting transactions are created when goods are issued from stock:

Rule)	D/C	Name	Description
OI10-909	D	Goods in transit	Represents the goods in transit value from table MGITTR. This is created when parameter '029' is activated in (CAS900) and when goods responsibility on the delivery term is 2 or 3.
OI10-910	C	Inventory	Represents the inventory accounting price of the item.

These accounting transactions are created when goods receipt is confirmed at buyer's address:

Rule)	D/C	Name	Description
OI10-909	C	Goods in transit	Represents the goods in transit value from table MGITTR. This is created when parameter '029' is activated in (CAS900) and when goods responsibility on the delivery term is 2 or 3.
OI10-951	D	Goods delivered not invoiced	Represents delivered but not invoiced goods.

Accounting rules for goods in transit - inbound

Goods in transit transactions for inbound are created (based on the purchase price) when an ASN (Advance Shipping Notice) is sent from the supplier and offset when goods are received in 'Supplier Delivery Note. Open' (PPS360). This applies when goods responsibility is set to 1 for the delivery term.

For internal purchase orders (CO/PO - internal sales), inbound goods in transit transactions are also created when goods are confirmed as received or received at buyer's address even if goods responsibility is set to 2 or 3.

Goods receipt at the buyer's address is confirmed at delivery level using an API transaction or manually in (MWS073).

These accounting transactions are created when an ASN is sent from the supplier:

Rule)	D/C	Name	Description
PP09-224	C	Ordered not received	Represents the goods in transit value from table MGITTR.

Rule)	D/C	Name	Description
PP09-909	D	Goods in transit	Represents the goods in transit value from table MGITTR.

These accounting transactions are created when goods are received in (PPS360):

Rule)	D/C	Name	Description
PP10-224	D	Ordered not received	Represents the goods in transit value from table MGITTR.
PP10-909	C	Goods in transit	Represents the goods in transit value from table MGITTR.
PP10-910	D	Inventory	Represents the total inventory value.
PP10-225	C	Rcvd not invoiced - item	Represents the net total value of the purchase order line.
PP10-226	C	Rcvd not invoiced - in charge	Represents the external charge.
PP10-251	C	Internal line charges	Represents the internal charge.

To reconcile the value of goods in transit (table MGITTR) against what is booked on the account in GL, report 'Goods in Transit. Print' (CAS540) can be used. This list shows open goods in transit transactions per selected date. These three lists are available:

- Outbound
- Inbound
- Outbound/inbound

Managing Deliveries for Internal Sales

Dispatch of goods for internal sales follows the process of managing deliveries for customer orders. At the point where the outbound delivery is issued (all picking lists reported), a purchase delivery note is generated in 'Supplier Delivery Note. Open' (PPS360). A stock message partner and message type must be defined in 'Settings - Deliveries' (CRS721) for internal sales, as the warehouse interface functionality is used to transfer the outbound delivery information to the purchase delivery note. Any unexpected error preventing the purchase delivery note from being created will be visible in 'Order Init Stock Msg. Manage' (MHS850).

The Final delivery term (TEDF) and Final delivery method (MODF) that is set on a delivery in 'Delivery. Open Toolbox' (MWS410) must be carried over to the 'Purchase Order. Open Lines' (PPS201) when the picking list is reported. This is to ensure that the purchase order can fetch the correct planning date from how the delivery was shipped.

Note: Changing the TEDF in 'Delivery. Open Toolbox' (MWS410) is only allowed for deliveries without any transactions in 'Goods in Transit. Open' (MWS073). This is to ensure that the goods in transit are in sync when creating inbound and outbound transactions. This can only be done if the customer and purchase order have the same goods responsibility (DELT), which is controlled by the delivery term (TEDL) in 'Delivery Term. Open' (CRS065).

Material Planning for Internal Sales

Defining the supply network

When creating internal suppliers, define 'Internal sales facility' and 'Supplying warehouse' on 'Supplier. Define Purchase Financial (CRS624/G). Specify the selling facility and warehouse that the supplier represents. These fields are only visible for suppliers of supplier type 7 - 'Internal'.

If an internal supplier is associated with a supplying warehouse, it will automatically be proposed as supplying warehouse when selecting the supplier in 'Item. Connect Warehouse' (MMS002).

Material planning of planned purchases

An internal planned purchase order will automatically create a material reservation with order category 310 - 'Planned CO' at the supplying warehouse.

The supplying warehouse for the planned customer order issue is retrieved from:

- 1 (MMS002) if the supplier of the planned PO is equal to the supplier specified in (MMS002)
- 2 (CRS624) if a different internal supplier is used, or if the supplying warehouse in (MMS002) is blank.

If no supplying warehouse is found, no planned customer order issue is created, since it is not known at the planning stage which warehouse will be used. The customer order warehouse will then be assigned when the customer order is created, according to standard customer order logic.

Having a planned customer order issue is important if planning method 1 - 'Reorder point' or 2 - 'MRP' is used for the item at the supplying warehouse. The planned CO issue will:

- Affect the projected on-hand balance, so the MRP/RoP calculation will create a planned replenishment order if a shortage occurs.
- Consume forecast as if it were a customer order.
- Reduce the available-to-promise (ATP) quantity.

The planned CO issue will always reflect the current state of the planned purchase orders, with negative quantity. Its status will indicate the status of the planned PO. If a planned CO issue has been created, it will exist until the planned PO has been released and printed and it is replaced by the actual customer order.

Lead time management

Lead time for internal sales is handled similarly to normal purchasing, with one exception in 'Supplier Connect Transp Lead Times' (PPS010), where both fields 'Transportation lead time 1' (TLE1) and 'Transportation lead time 2' (TLE2) are always enabled for input, if the supplier has 'Supplier type' set to 7-'Internal supplier'. This makes possible to indicate the supplier's transportation lead time, which is any transportation lead time before the delivery point, when the supplier is still liable for the goods. Note that this depends on goods responsibility.

This table presents lead time components.

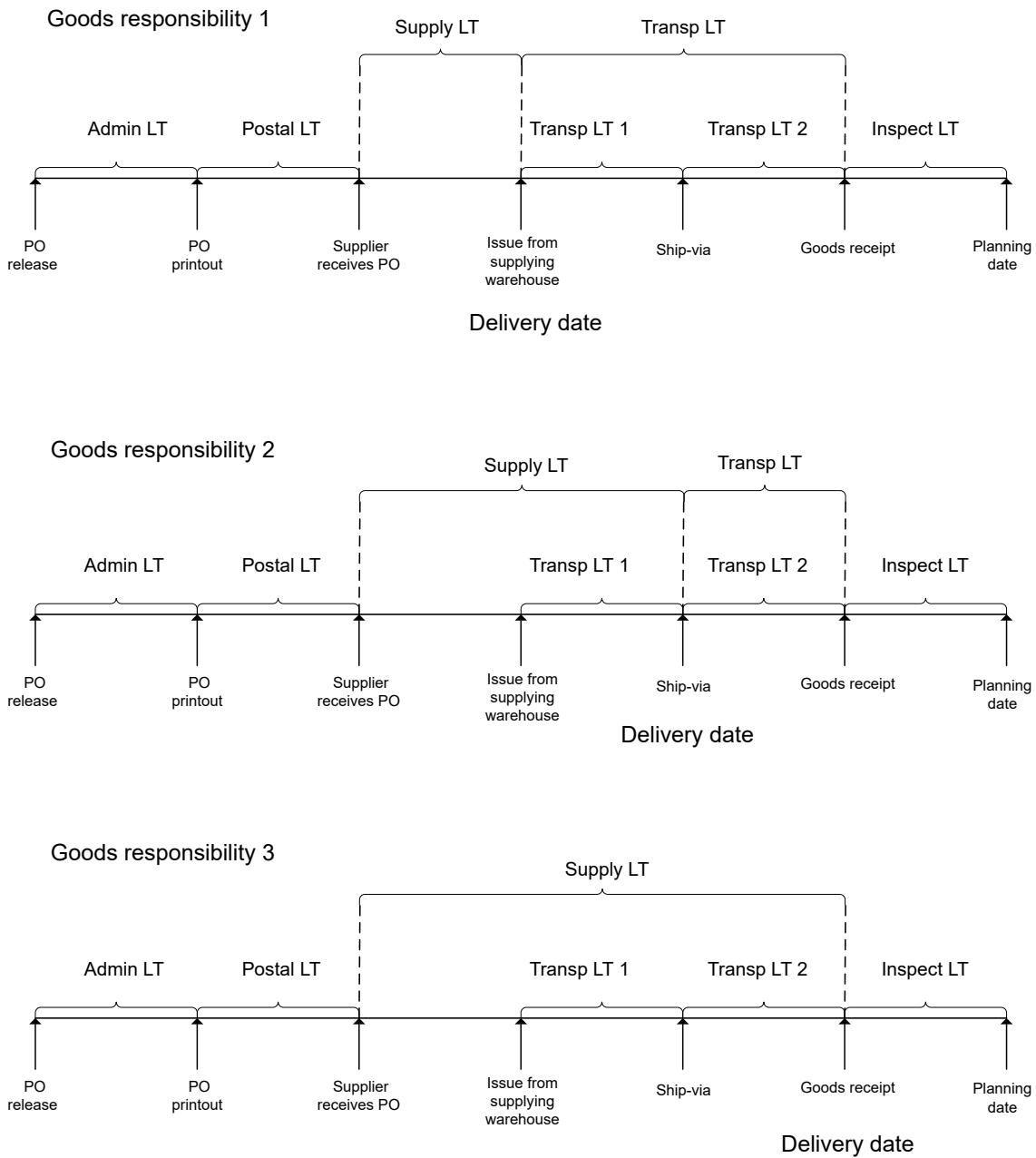
Lead time component	Description
Postal lead time	If time for communication with selling facility and CO registration is needed
Supply lead time	The total lead time for the supplier, which is the time provided in days and counted from the moment, when the supplier receives the order until the delivery date. This includes all transportation time for which the supplier is responsible. It works the same for internal and external suppliers.
Transportation lead time 1	<ul style="list-style-type: none"> With goods responsibility 1, TLE 1 belongs to the normal transportation lead time, after the delivery point. With goods responsibility 2 or 3, TLE 1 belongs to the supplier's transportation lead time.
Transportation lead time 2	<ul style="list-style-type: none"> With goods responsibility 1 or 2, TLE 2 belongs to the normal transportation lead time, after the delivery point. With goods responsibility 3, TLE 2 belongs to the supplier's transportation lead time.

The planning date in the material plan for the planned CO issue (order category 310) is calculated by subtracting the supplier's transportation lead time from the requested delivery date of the planned PO.

Note: Since supplier's transportation lead time is included in 'Supply lead time' (LEA1), any transportation lead time on the supplier's side is not included in the field 'Transportation lead time' (LEA3) in (MMS002). It also means that LEA1 should not be lower than the transportation lead time on the supplier's side as specified in (PPS010).

Note: Once released, the customer order will not check the supplier's transportation lead time in (PPS010) when calculating its planning date from the delivery date. The standard customer order logic will apply, which means that it is recommended to use route management to retrieve transportation time between CO issue date and delivery date.

The image presents the purchasing lead time components.



Planning Time Fence Calculation

If a supplying warehouse is specified in (MMS002), 'Planning Time Fence Horizon. Calculate' (MMS355) can be used to calculate the planning time fence for internally purchased item, similar to as for distributed items, by accumulating the lead time and safety time of the supplying warehouses until a purchased, manufactured or master scheduled level is found.

Low-level code calculation

If a supplying warehouse is entered in (MMS002), it will affect the low-level code calculation in the same way as if the item were distributed, increasing the distribution level. This will happen automatically when the supplying warehouse is changed.

The low-level codes are a prerequisite for the MRP calculation to be performed in the right order. This means that when MRP is calculated for an item, the warehouse that is supplied by internal purchase will be processed before the supplying warehouse. This is important since planned purchase orders created at the supplied warehouse affects the demand at the supplying warehouse.

Internal Sales for Kit Items

The inventory level of material shipped between warehouses as part of an internal sales order must be the same. Therefore, the product structure settings applied for the kit item within the internal Purchase Order (PO) is respected on the internal Customer Order (CO). In addition, it is not possible for an internal CO to create an kit item based on an standalone PO line. This solution will ensure the same item reservation level at goods dispatch, goods in transit and at PO goods receipt.

The kit's material is always retrieved from its related internal PO, since possible manual adjustments on the PO are to be respected. This implies that for internal sales the product structure in 'Product Structure Open' (PDS001) must only be maintained on the facility of the receiving warehouse. If a product structure is defined for the facility of the dispatching warehouse in (PDS001) it is never applied for an internal CO.

The inventory level of the kit item is defined in (PDS001) and this determines the reservation level on inventory. The options are 1 - 'At kit number level' and 2 - 'At material number level'. These settings are inherited from the internal PO line to the internal CO line.

The same rule applies for the price level setting in (PDS001), which is inherited from the internal PO line to the internal CO line. The PO's sales price of the kit can be carried over as the CO's sales price of the kit with price origin A - 'Price from external system via API or internal purchase order'. This is controlled through the setting 'Source sales price' in 'Settings - Batch Orders' (OIS278). If the PO's sales price is defined to be disregarded, the CO's sales price is based on its own price search sequence defined per CO type in 'CO Type Open' (OIS010).

Kit with reservation and pricing level on kit header

When kit items in the internal PO have the reservation level and pricing method set on the kit header, the same is applied at entry of the internal CO.

The internal PO creates order lines for both the kit header and its components, but only the PO line for the kit header contains price information. The quantity is also maintained per kit header but also displayed for information purposes on the kit lines.

The PO's kit header item number, order quantity and sales price is carried over and used when creating the corresponding CO batch order line. Once the CO batch order is transferred to a firm CO, the kit components are retrieved based on the internal PO's kit lines. You will get CO order lines for both the kit header and the kit lines, however, the kit lines are only for information purpose.

The supplier confirmation in 'Purchase Order. Confirm' (PPS250) is performed at the kit header level only. AP invoice matching is performed at the kit header level.

Kit with reservation level on the kit header and pricing level on kit components

When kit items in the internal PO have the reservation level on the kit header and pricing level set on the kit components, the same is applied at entry of the internal CO.

The internal PO creates order lines for both the kit header and its components. The kit header contains quantity information and a sum of the purchase prices for its kit lines. The kit lines contain the individual prices. The PO's kit header item number, order quantity are carried over and used when creating the corresponding CO batch order line. Once the CO batch order is transferred to a firm CO, the kit components and their sales prices are retrieved based on the internal PO's kit lines. You will get CO order lines for both the kit header and the kit lines, however, the kit lines are only for pricing information.

The supplier confirmation of order quantity in (PPS250) is performed at the kit header level and confirmation of sales prices is performed at the kit line level. Partial supplier confirmation creates a new PO line and sublines based on the confirmed kit header quantity. The new PO line will reference the same CO line, since it still holds the entire order quantity even though it will be partially delivered against several PO lines. The same logic applies to partial shipment advice and transport notification.

AP invoice matching is performed at the kit header level.

Kit with reservation and pricing level on kit components

When kit items in the internal PO have the reservation and pricing level set on the kit components, the internal CO will not create a kit item and instead only hold the components as stand-alone order lines.

The internal PO creates order lines for both the kit header and its components. Only the kit lines contain quantity and sales price information. The PO's kit lines item number, order quantity and sales price are carried over and used when creating the corresponding CO batch order lines. You will get standalone CO order lines for each kit component.

The supplier confirmation in (PPS250) is performed at the kit item level only. Partial supplier confirmation creates a new PO line and sublines based on the confirmed kit header quantity. The new PO line will reference the same CO line, since that CO line still holds the entire order quantity even though it will be partially delivered against several PO lines. The same logic applies to partial shipment advice and transport notification.

AP invoice matching is performed at the kit line level.

Kit with reservation level on kit components and pricing level on kit header

This kind of kit item is not supported for a purchase order. Therefore, it is not supported for internal sales and always treated as a normal item on the purchase order.

Internal Sales for Attribute Items

Order attributes

Order attributes that are to be inherited in the internal sales process must be defined with the same attribute identity in the attribute model of both the internal Purchase Order (PO) and Customer Order (CO). Then, at time of internal CO creation, the attribute values of the common attribute identities are inherited from the internal PO.

These order attributes cannot be manually changed on the internal customer order, since they are inherited and owned by the internal PO. The 'Generation reference' code of the attribute value is set to 07-'By order-init' on 'Attribute Value. Connect To' (ATS101/E).

Lot attributes

Lot attributes assigned to the item's lot number are shared between the internal CO and PO, since these are connected to the item's lot number and will follow the inventory movement.

Balance identity attributes

Balance identity attributes connected to the dispatching warehouse location will not be carried over to the receiving warehouse. At the dispatching warehouse, it is possible to allocate goods from several different locations with different balance identity attribute values, pack in the same package and ship on the same delivery. Since one delivery can include items with possibly several different balance identity attributes, it cannot be automatically carried over as a default value to the receiving warehouse. Instead at PO goods receipt the attribute values of the PO, as defined at PO entry, are applied as default values. The attributes must then, as any other PO receipt transaction, be manually changed to correspond to the correct attribute values for the receipt.

Managing Invoicing for Internal Sales

When an internal customer order is invoiced, a supplier invoice is automatically created in 'Supplier Invoice Batch. Open' (APS450). Information such as amounts, payment terms, currency, invoice date, base and from/to country are retrieved from the customer invoice details in 'Invoice. Display' (OIS350).

Information such as invoice header and line amount, payment terms, currency, and invoice date are retrieved from the customer invoice details in 'Invoice. Display' (OIS350) and 'Invoice. Display Lines' (OIS351). For invoices with M3 sales tax, details about tax amounts, tax jurisdictions, and tax codes are retrieved from 'CO Invoice. Display Tax Transactions' (OIS353), when invoice line type 3 is created for sales tax in (APS450).

For divisions with third party interface to Vertex or AvaTax, the corresponding information is taken from 'CO Invoice. Display Tax Transactions' (OIS354).

The geographical codes on the supplier invoice created in a division using M3 Sales tax are updated according to this way:

- 1 The deliver-to geographical code is retrieved from the supplier or the supplier's postal address.
- 2 The deliver-from and administrative-origin geographical codes are retrieved from the customer invoice when the supplier invoice is entered in a division using M3 Sales tax or Vertex.

- 3 The deliver-from and administrative-origin geographical codes are retrieved from the delivering warehouse of the customer order when the supplier invoice is entered in a division using AvaTax.

The supplier invoice will be automatically validated and assigned status 50 'Approved' if no error exists. Parameter 'Auto update' on FAM function 'AP50' in 'FAM Function. Open' (CRS405) controls if the invoice should be automatically updated in Accounts Payable.

Quality Management for Internal Sales

Copying of QMS test results from the sending warehouse to the receiving warehouse is possible utilizing the same setup as for the Distribution Order (DO) process with one addition. The QMS specification to be copied must be set with the check box 'Auto attach' enabled (AUAT) on 'Specification. Open' (QMS200/E) for the results to be transferred upon QI request creation.

Supply Chain Order for Internal Sales

This document describes the supply chain order for internal sales.

A supply chain order that involves the internal sales process follows the same rules as a typical supply chain order. The supply chain policy setup in 'Supply Chain Policy. Open' (CRS709) is considered in the supply chain order creation, downstream and upstream quantity, and date change of order within the chain.

The creation of internal orders, purchase orders (PO), and customer orders (CO) in the supply chain are based on internal sales setup.

See [Defining Internal Sales](#) on page 18.

Continuous supply chain explosion

If a supply chain is created with an internal purchase order and continuous explosion is used, the orders in the buying warehouse (external CO and internal PO) and selling warehouse (internal planned CO and supply order) are linked using one supply chain order. If stop explosion is used, the orders are only created in the buying warehouse. This order can be automatically linked to existing supply orders using the link exist order function, or through manual preallocation of internal planned CO in the selling warehouse.

See [Linking Supply Orders](#).

The connections of the orders in the supply chain are retained when the internal PO is printed and internal CO is created. The quantity and planning date update of an internal PO linked to an internal CO does not process upstream and downstream changes.

Note: In 'Active Supply Chain. Display' (MWS150), internal planned COs are not displayed. The internal CO is only shown as linked to orders from the buying and selling warehouse.

Chapter 3: Purchase Order Processing

Basic Settings for the Purchase Flow

This document explains the basic settings for the purchase order flow.

There are more settings you must define, depending on which type of purchase flow you want to set up, for example manual or automatic creation, goods receiving methods, subcontracting, agreements, and so on. These settings are described within each area.

Outcome

The fields described in this document are those in the programs that are related to the basic settings for procurement. These include the programs listed below as well as related programs, which are accessed by selecting options from these programs:

- 'Settings - Purchase' (CRS780)
- 'Internal Addresses. Open' (CRS235)
- 'Number Series. Open' (CRS165)
- 'System Calendar. Open' (CRS900)
- 'Supplier. Open' (CRS620)
- 'Supplier. Define Purchase & Financial' (CRS624)
- 'Supplier. Connect Item' (PPS040)
- 'Item. Open' (MMS001)
- 'Item. Connect Warehouse' (MMS002)
- 'Item. Connect Facility' (MMS003)

Uses

You must define basic settings in order to do work in the purchase order flow in M3, such as place a purchase order or receive goods in the system.

How the system is affected

See documents listed in the See Also section.

Before you start

No prerequisites are needed.

Follow these steps

- 1 Define general settings for the entire procurement area.
- 2 Enter basic data about suppliers and items into the system. You can then use a program to connect suppliers to items. These programs contain many fields, not all of which are necessary for the purchase order flow. The necessary fields are often mandatory in these programs.

General Settings	Supplier	Items	Purchase Order	Goods receiving
Settings - Purchase CRS780	Supplier CRS620	Items MMS001	Purchase Order Type PPS095	Goods Receiving Method PPS345
Internal Addresses CRS235	Supplier Purch Financial CRS624	Warehouse/Item MMS002		
Number Series CRS165		Facility/Items MMS003		
System Calendar CRS900	Supplier/Items PPS040			

- 3 After items and suppliers are entered, some additional settings are needed to place a purchase order. First, at least one purchase order type must exist. An order type is a set of parameters that specify how the order is treated through the purchase order flow. Different order types can be used for different flows, for example, normal order, inquiry order, or delivery schedule.
- 4 To be able to receive goods, at least one goods receiving method must be defined. The goods receiving method contains parameters that specify how the goods should be treated in the receiving flow. For example, is direct put-away used? Is quality inspection needed and, if so, when? Special functions are also available that can be used in the purchase flow and that require certain settings in the system. For example, agreements, delivery plans, purchase costing, and subcontracting all require special settings.
The setting programs for purchase orders, goods receiving, and so on are described in the Settings section of each of the procurement documents.

Priority for retrieval of settings

For some of the data, the same parameter can be set in different programs. This reduces unnecessary maintenance of program files. For example, the goods receiving method can be set in any of these three programs:

'Supplier. Connect Item' (PPS040)
'Item. Open' (MMS001)
'Purchase Order Type. Open' (PPS095).

The retrieval of settings that can be entered in multiple M3 programs is always done in priority order. In the case of the goods receiving method, the priority order is as listed above, that is, (PPS040) is checked first, followed by (MMS001) and finally (PPS095) until a valid goods receiving method is found.

If only one goods receiving method is used in a company's goods receiving process, it is easiest to place the goods receiving method in (PPS095) since that requires information to be updated in only one place. To avoid conflict about where different data is located, it is always easiest to use only one program for each parameter.

The supplier and item combination

In (PPS040), you can enter unique data for a specific supplier and item combination. You are not required to enter a record in this program in order to perform work in the purchase order flow. To avoid unnecessary maintenance of the item and supplier files, you should only create item/supplier combinations in this program if they are necessary. An appropriate use of this function is to specify certain terms depending on the supplier/item combination.

Example 1: Quality inspection is needed for one item, but other items purchased from the same supplier do not require inspection. A supplier/item combination for the first item is created in (PPS040). That record is then connected to a different goods receiving method than the others.

Example 2: The lead times often differ depending on the supplier from whom you purchase. Lead times can be entered in (MMS002). However, if lead times for the purchase of the same item differ from supplier to supplier, supplier/item combinations are created in (PPS040).

Whenever default data for an item or a supplier is required, the system searches for an approved item/supplier match. If the data is not found, it is defaulted from the item or supplier files.

Additional Settings for the Purchase Flow

This document explains the additional settings for the purchase order flow.

Settings

The fields described in this document are related to the additional settings for procurement which are accessed by selecting options from the 'PO Delivery Method Selection. Open' (PPS033) program.

PO delivery method selection (PPS033)

(PPS033) is used to control which delivery method should be applied on a purchase order. The selection of the delivery method is performed using control fields. The control fields for (PPS033) are defined in 'Generic Object Control Table. Open' (CMS017).

If (PPS033) is used, a new hierarchy for setting the delivery method is defined. This affects all planned purchase orders; and purchase orders and inquiries that are generated, created, updated, or copied. The hierarchy is defined as the delivery method in these programs:

- 'PO Delivery Method Selection. Open' (PPS033)
- 'Purchase Agreement. Open' (PPS100)

- 'Supplier. Define Purchase & Financial' (CRS624).

Note: (PPS033) does not affect which delivery method is used for delivery schedules.

Catch Weight in Purchase Order

This document describes the process by which Catch Weight is managed during procurement.

If necessary, reference the document for an introduction to the functionality available to support the concept of catch weight.

Outcome

Catch weight is managed in the purchase order flow.

Understand the setup and use of the catch weight solution in the purchase order flow from a logistics perspective.

Summary

Three scenarios are described:

- 1 Direct put away of goods
- 2 Goods receive and put away of goods
- 3 2-step put-away of goods

Settings

See also

Program ID	Field Heading	Description
(PPS345/E)	Direct put-away	Select if put-away is to be reported directly. If not selected, goods receipt, including any quality inspection, occurs before put-away. Direct put-away means that one report covers both goods receipt and put-away. Even if selected it is possible to override if, for instance, a quality inspection report is needed due to transportation damage.

Program ID	Field Heading	Description
(PPS345/F)	Two-step put-away	<p>Indicates whether two-step put-away is activated.</p> <p>0 = No</p> <p>1 = Yes</p> <p>2 = Yes, staged two-step put-away, i.e. located at a receiving area, waiting to be directed to the correct put-away location during put-away confirmation.</p> <p>This activation occurs in two places - in the stock zone, and in the goods receiving method or order type. For purchase orders, the activation is in goods receiving method. For manufacturing orders and DO/RO orders, it is in the respective order types.</p> <p>Both the stock zone and the goods receiving method/order type must have this field active for two-step put-away to commence.</p>

Direct Put-Away of Goods

Apply this method when a one-step process for receiving and putting-away received goods is used. Catch Weight will be entered in the goods receiving step.

- 1 Create purchase order in 'Purchase Order. Open' (PPS200).
- 2 Order 10 Pcs of item 4450BC and order 10 Pcs of item 4450BCPA (container method 4).
- 3 Start 'Purchase Order. Receive Goods' (PPS300/B). Select 4450BC and 'Change'.
- 4 On 'Receive Goods' (PPS300/E), receive 4 Pcs and 42 Kg. Specify a manual Lot no.
- 5 Go back to (PPS300/B). Receive remaining quantity of 6 Pcs.
- 6 On (PPS300/E), specify new location but same lot number. Receive 6 Pcs and 60 Kg.
- 7 Go back to (PPS300/B). Select 4450BCPA (10Pcs) and 'change'.
- 8 On 'Receive Goods' (PPS300/E), receive 10 Pcs. Option='14 - Purchase Order Line Split' can also be used.
- 9 'Purchase Order. Split Lines' (PPS302/B) is started. Specify number of balance IDs to receive which is 2 in this scenario (combinations of 'Lot no' and 'Container IDs'). Click 'Apply' on the B-panel.
- 10 Two lines are created. Specify 'Number', 'Lot no', 'quantity', 'container ID', and 'Catch Weight' per line. Select action 'Confirm Update'.
- 11 (PPS300/B) is redisplayed with two lines; 4450BC and 4450BCPA. Status is '75=Putaway completed'.
- 12 View stock balance IDs on 'Balance Identity. Open Toolbox' (MWS068/B). For the first PO-line, quantity in BUM and catch weight unit is stored in parallel on each stock balance ID. For the second PO-line there will be two balance IDs (5+5Pcs) on the same lot-number and location, but with different container IDs.

Goods Receive and Put Away of Goods

Apply this method when receiving is divided into 2 steps. The catch weight will be entered in the second put-away step using 'Purchase Order. Put Away Goods' (PPS320).

Note: Use the item details provided for scenario 1.

Copy the PO from scenario 1 and change 'GR-method' on panel 'Purchase Order. Open Line' (PPS201/F) for both lines to receive and put-away.

- 1 Receive Goods on (PPS300/B). Select 4450BC and 'change'. Order 10 Pcs (100 kg).
- 2 Receive goods on (PPS300/E). Specify the total quantity only. No catch weight.
- 3 (PPS300) is displayed. Select 4450BCPA and 'change'.
- 4 Receive goods on (PPS300/E). Specify the total quantity only. No catch weight.
- 5 Start 'Purchase Order. Put Away Goods' (PPS320/B). Specify the receiving number for first line, item 4450BC.
- 6 Start (PPS320/E). Specify Lot no, quantity (4Pcs), and received catch weight (42Kg).
- 7 View stock balance IDs on (MWS068/B). Result: 6 Pcs with 58 (100-42) kgs remaining on the fictive lot number.
- 8 PO-put-away on (PPS320/B). Put away the remaining quantity (6Pcs).
- 9 On (PPS320/E) specify Lot no, quantity (6Pcs) and received catch weight (60Kg).
- 10 Start (PPS320/B). Specify receiving number for the second line, item 4450BCPA.
- 11 Start (PPS320/E). Specify Lot no, quantity (6Pcs) and received catch weight (60Kg).
- 12 View stock balance IDs on (MWS068/B). Result: two balance IDs with same lot number but unique catch weight.
- 13 Evaluate results in (MWS068) and (MWS070).

Two Step Put-away of Goods

Apply this method when receiving is divided into 2 steps. The second step is a logistical move only.

- 1 Create purchase order in (PPS200). Order 10 Pcs (100 kg).
- 2 Receive goods on (PPS300/E). Select option='14 Purchase order line split'.
- 3 On 'Purchase Order. Split Lines' (PPS302/B), receive 2 lots and specify 'number', 'Lot no', 'quantity', and 'catch weight' per line. Select action 'Confirm Update'.
- 4 On 'Pending Put-Away. Process' (MWS460/B), select option 'Process' to enter the location to move to.
- 5 On (MWS460/E), specify the new location.
- 6 View stock balance IDs on (MWS068/B). The 2 lots have now been put into to their final locations and the catch weight entered at goods receipt has been retained.

Central Procurement in M3 BE

This document shows how purchasing in M3 BE can support a central procurement process of organizations. Central procurement is a process where a single team, a department, or a central purchasing department,

handles purchasing on behalf of an entire or a part of an organization, based on geographic location and products.

The central purchasing department is responsible for planning and management of purchasing activities for warehouses in different facilities. With the central procurement process, you can create central purchase orders for a purchase organization with purchase order lines for warehouses across facilities, while the purchase order is assigned and managed by the central purchasing department. With the central purchase order, you can direct the deliveries from the vendors to the demanding warehouse without going through a distribution center. Ownership and receipt of goods takes place at the demanding warehouses whilst the supplier invoice is sent to the central purchasing department. In the central procurement process, the central purchasing department is considered as providing a service for the warehouses in the organization. There is no intention to do any internal billing between the buying and receiving parties.

With this process, central buyers get a better visibility and overview of aggregated requirements, can drive relationships with preferred vendors and have the ability to create larger consolidated purchase orders that in the end can benefit from saved costs and quantity discounts.

The central procurement process should not be confused with distribution center procurement, where ownership of goods takes place before repackaging and distribution to demanding warehouses. In such a process, a distribution order or internal sales order can be used to distribute goods between a buying and selling parties and can be configured for internal billing.

Prerequisite

'Use of purchase organization for planning' must be activated for the company on 'Purchase – Settings' (CRS780/H).

Purchase organizations in central procurement

Purchase organizations are created in 'Purchase Organization. Open' (PPS099) and used for enabling central procurement in M3 BE purchasing. Purchase organizations in the central procurement process are used to simplify the planning of purchase requirements for central buyers and for consolidation of planned purchase orders for requirements across facilities.

Purchase organization for planning

Purchase organizations can be assigned to a 'Buying facility' in (PPS099). The buying facility represents the facility of the central purchase department. Planned purchase orders that are assigned to a purchase organization connected to 'Buying facility', will get the facility from the purchase organization. Then, planned purchase proposal or purchase orders panels can be set up and sorted with better aggregations such as supplier, facility, and purchase organization. This gives central buyers a better overview of all planned purchase orders for warehouses and products, that will be centrally purchased and should be consolidated.

Purchase organization for consolidation

'Purchase organization' is a mandatory consolidation object in 'PO Consolidation Group. Open' (PPS019) in the central procurement process. Planned purchase orders for warehouses within a division, that are assigned to the same purchase organization, can be consolidated to create purchase orders with purchase order lines on multiple facilities. The purchase order header on such consolidated orders is created on the facility of the central purchase department, that is the 'Buying facility' from the purchase organization.

One central purchasing department can manage multiple purchase organizations. In such a way, purchase organizations can be used as a level of consolidation that is lower than central purchase department but higher than warehouse or facility. This is useful, when a central purchase department is responsible for purchasing activities for a country, but PO consolidation must be split for different regions, for example the southern, northern, western, eastern regions. Separate purchase organizations can be created for each region, but for the same buying facility. This way separate PO can be created for each region, yet with the same buying facility as the facility of the purchase order head.

Organization of Purchasing

This section describes different variations of organizing your purchasing function to support central procurement and how to use the 'Purchase organization' and 'Buying facility' to achieve the desired method of purchasing.

Methods of purchasing

Central procurement

Purchase order creation across division is not supported.

Divisional central procurement

One purchase organization per division.

Regional procurement

Multiple purchase organizations per division. Each organization is responsible for a group of facilities or warehouses.

Assortment-based procurement

Multiple purchase organizations per division. Each organization is responsible for an assortment of products.

Local purchasing

One purchase organization per division. One or several divisions should be excluded from the central procurement.

Mixed forms of purchasing

Mixed forms of purchasing methods.

Central procurement across divisions

Central procurement across divisions is not supported in terms of the process described in this document. For across divisional stock transfers that can support internal billing and goods in transit management refer to the internal sales order solution.

Local purchasing

Exceptions can be set up to provide flexibility for both local and central procurement:

- For divisions or warehouses, where purchasing is managed locally.

- For products that should be purchased locally in warehouses, where procurement is usually managed centrally.

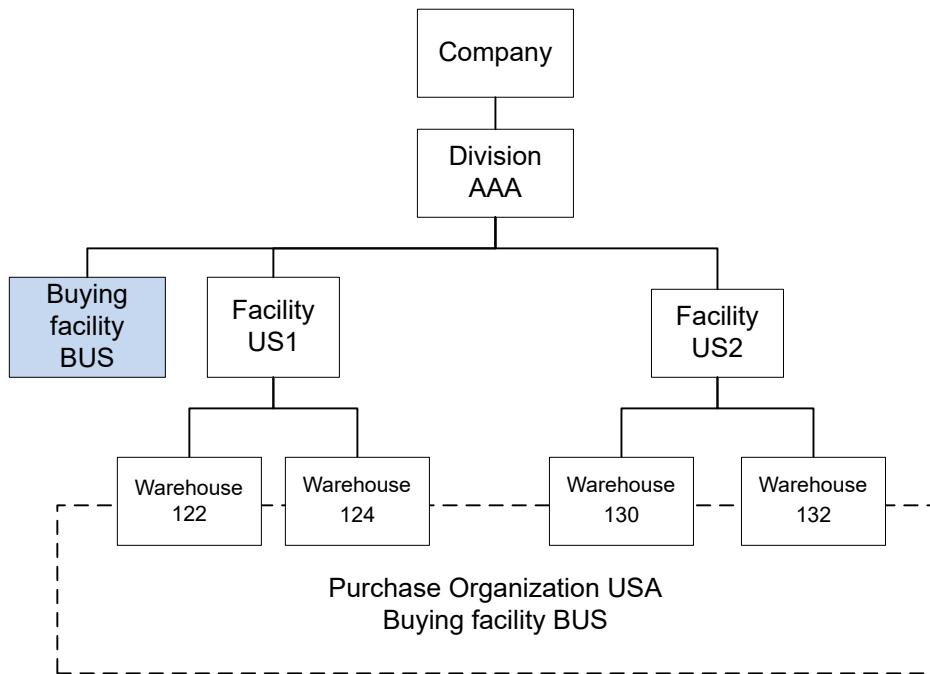
Example: Local purchasing for a warehouse

- 'Purchase Organization. Open' (PPS099)
Create type 1='Planning' purchase organizations (LOCAL).
 - Leave 'Buying facility' blank on Purchase Organization (LOCAL).
- 'Purchase Organization. Connect Warehouse' (PPS199)
Connect purchase organization (LOCAL) to all warehouses, where local purchasing should be permitted.
 - Action F14='Generate' can be used to connect a purchase organization to all warehouses in division, in one run.
 - Select the check box **Default purchase organization** to assign the purchase organization automatically to planned purchase orders created for the warehouses. Only one purchase organization can be a default purchase organization for a warehouse.

Planned purchase orders for warehouses connected to the default purchase organization (LOCAL) are assigned to the purchase organization (LOCAL) and to the facility of the warehouse.

Divisional central procurement

One central purchasing department is responsible for procurement activities for an entire division. Planned purchase orders are assigned to the facility of the central purchasing department. The central purchasing department creates and manages purchase orders for all warehouses within a division and submits orders to suppliers with delivery to the demanding warehouses.



Example:

(PPS099)

- Create type 1='Planning' purchase organization (USA).
- Assign 'Buying facility' (BUS) to purchase organization (USA).

(PPS199)

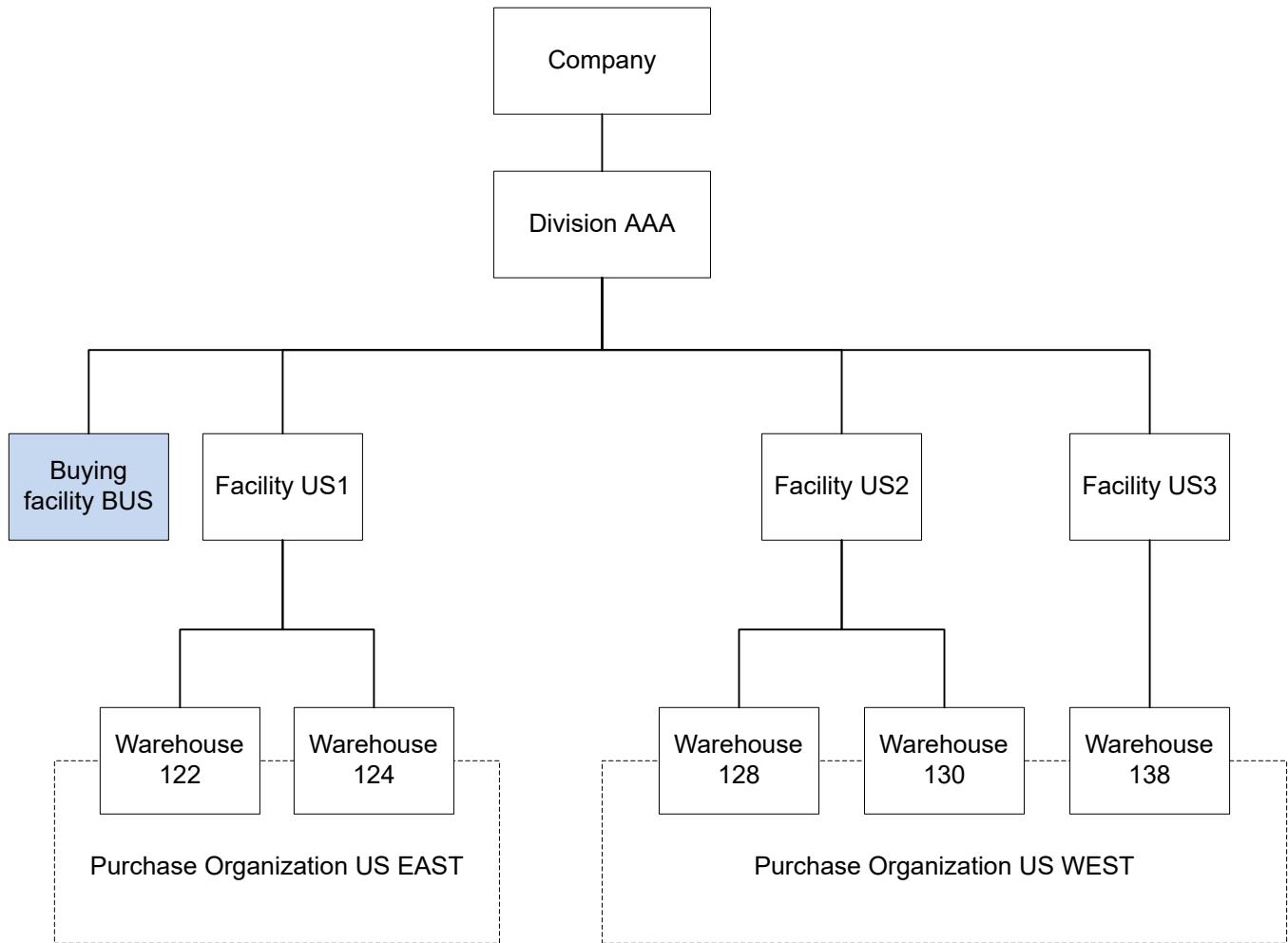
- Connect purchase organization (USA) to all warehouses with the division (AAA).
 - Action F14='Generate' can be used to connect a purchase organization to all warehouses in a division, in one run.
 - Select the check box 'Default purchase organization' to assign the purchase organization automatically to the planned purchase orders created for the warehouses.

Planned purchase orders for warehouses within division (AAA) are assigned to purchase organization (USA) and on facility (BUS).

Regional procurement

Central purchasing departments are responsible for procurement activities for different regions within a division.

Central purchasing department creates and manages purchase orders for a group of warehouses within a region and submits orders to suppliers with delivery to the demanding warehouses.



Example:

(PPS099)

- Create type 1='Planning' purchase organization (US-EAST) and (US-WEST).
 - Assign 'Buying facility' (BUS) to the 'Purchase Organization' (US-EAST).
 - Assign 'Buying facility' (BUS) to the 'Purchase Organization' (US-WEST).

(PPS199)

- Connect purchase organization (US-EAST) to all warehouses that are part of that region.
 - Action F14='Generate' can be used to connect a purchase organization to multiple warehouses, in one run.
 - Select the check box 'Default purchase organization' to assign the purchase organization automatically to the planned purchase orders created for the warehouses.
- Repeat the steps for purchase organization (US-WEST).

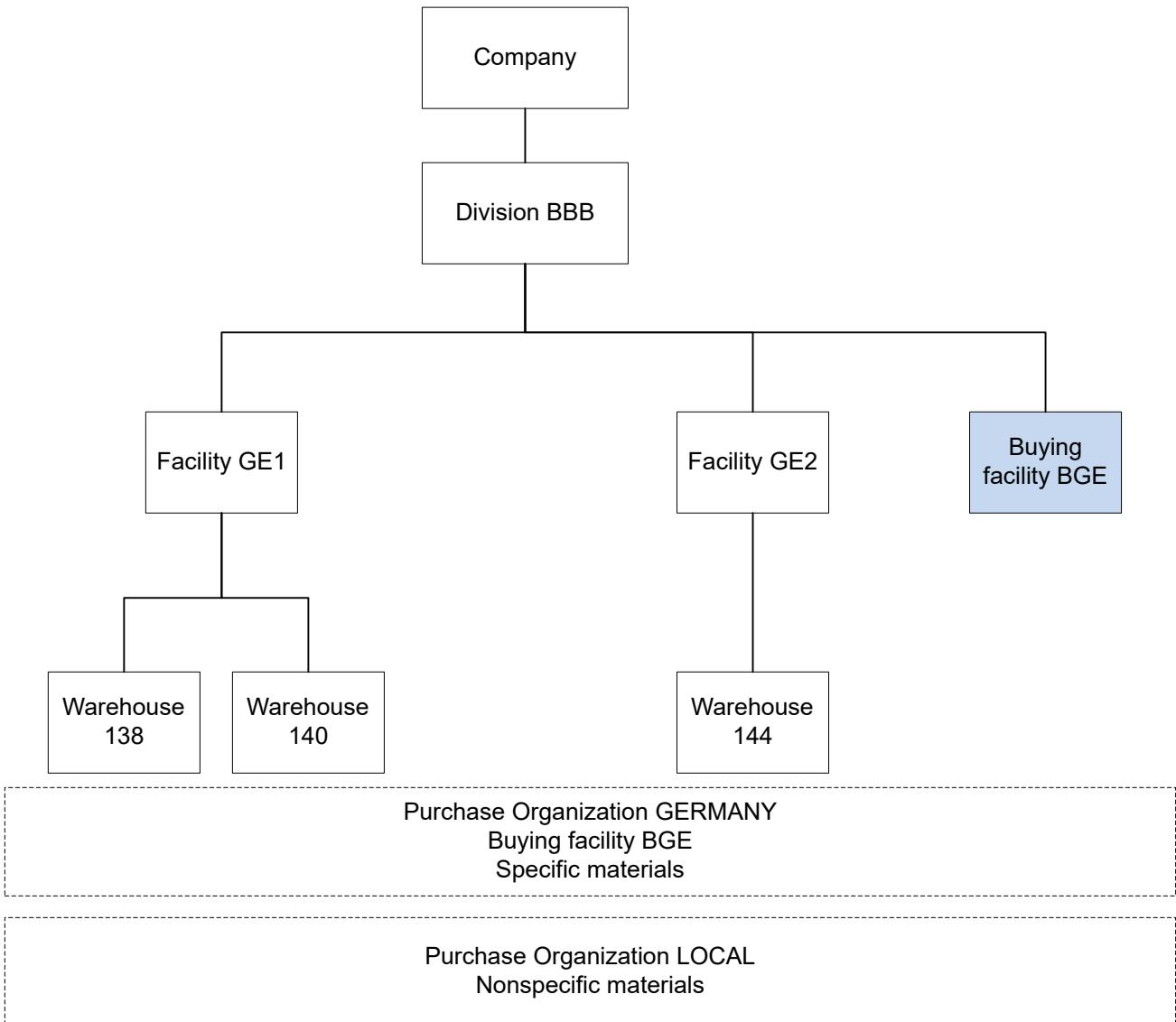
Planned purchase orders for warehouses in division AAA that are connected to default purchase organization (US-EAST) are assigned to the purchase organization (US-EAST) and to the facility (BUS).

Planned purchase orders for warehouses in division AAA that are connected to default purchase organization (US-WEST) are assigned to the purchase organization (US-WEST) and to the facility (BUS).

Product-based procurement

Central purchasing departments are responsible for procurement activities for different product groups within a division.

The central purchasing departments create and manage purchase orders for items connected to the purchase organization with demand in warehouses within a division. They also submit orders to suppliers with delivery to the demanding warehouses.



Example:

(PPS099)

- Create type 1='Planning' purchase organizations (GERMANY) and (LOCAL).
 - Assign 'Buying facility' (BGE) to the Purchase Organization (GERMANY).
 - Assign blank 'Buying facility' to the Purchase Organization (LOCAL).

(PPS199)

- Connect purchase organization (GERMANY) to all warehouses in division BBB.
 - Action F14='Generate' can be used to connect a purchase organization to all warehouses in a division, in one run.

- Leave the check box 'Default purchase organization' blank.
- Repeat the steps for the purchase organization that is LOCAL.

(CMS017)

- Create a priority, that includes a product related object from the available fields in the field group POPSL, for example 'Item group'.

(PPS198)

The purchase organization selection solution is used for assigning purchase organization automatically to the planned purchase orders. It overrides the default purchase organization for a warehouse in (PPS199).

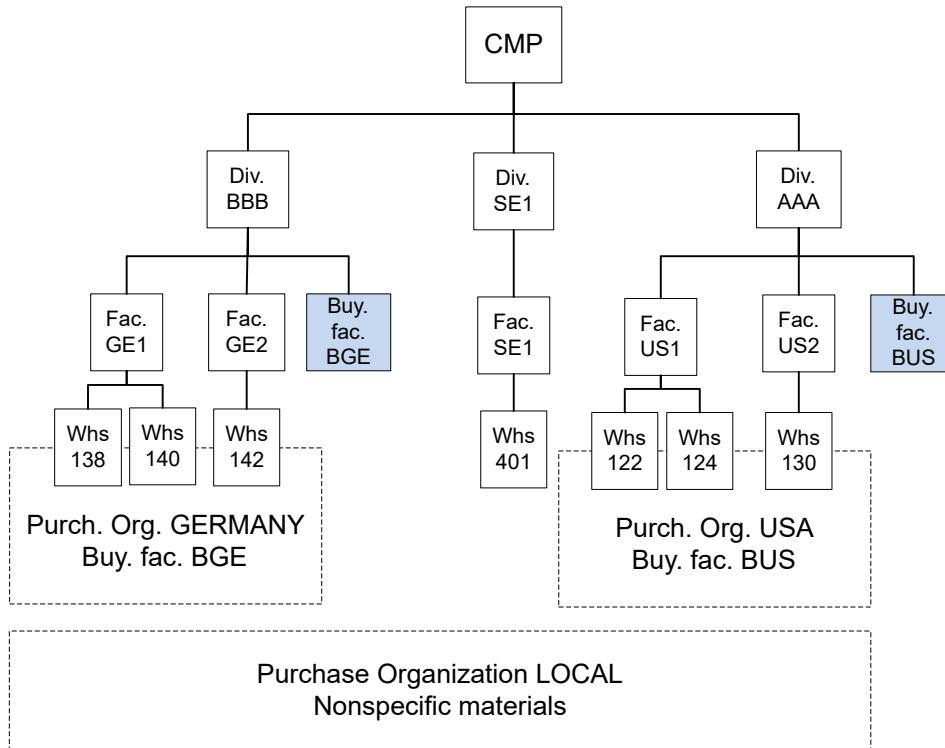
- Create a purchase organization selection record for item group (GRP_SPECIFIC) and assign it to purchase organization (GERMANY).
- Create a purchase organization selection record for item group (GRP_NONSPECIFIC) and assign it to the purchase organization (LOCAL).

Planned purchase orders for items connected to the item group (GRP_NONSPECIFIC) in warehouses within division BBB are assigned to the purchase organization (LOCAL) and the facility of the warehouse.

Planned purchase orders for items connected to item group (GRP_SPECIFIC) in warehouses within division BBB are assigned to the purchase organization (GERMANY) and to the facility (BGE).

Mixed forms of procurement

Mixed forms of the procurement methods can be used. For example, a central department represented as buying facility (X) can be responsible for procurement of the entire division. However, it can operate for multiple purchase organizations based on groups of warehouses or products for which planned purchase orders should be consolidated. At the same time, certain products can be excluded from being centrally purchased in those warehouses.



Example:

(PPS099)

- Create type 1='Planning' purchase organizations (GERMANY), (USA), and (LOCAL).
 - Purchase organization (GERMANY) has 'Buying facility' (BGE).
 - Purchase organization (USA) has 'Buying facility' (BUS).
 - Purchase organization (LOCAL) has blank 'Buying facility' and is used for local buying.

(PPS199)

- Connect purchase organization (USA) to all warehouses within division AAA.
 - Action F14='Generate' can be used to connect a purchase organization to a range of warehouses, in one run.
 - Select the check box 'Default purchase organization' to assign the purchase organization automatically to the planned purchase orders created for the warehouses.
- Connect purchase organization (GERMANY) to all warehouses within division BBB.
 - Action F14='Generate' can be used to connect a purchase organization to a range of warehouses, in one run.
 - Select the check box 'Default purchase organization' to assign the purchase organization automatically to the planned purchase orders created for the warehouses.
- Connect purchase organization (LOCAL) to all warehouses within division SE1.

- Action F14='Generate' can be used to connect a purchase organization to a range of warehouses, in one run.
- Select the check box 'Default purchase organization' to assign the purchase organization automatically to the planned purchase orders created for the warehouses.

(CMS017)

- Create a priority, that includes a product related object from the available fields in the field group POPSL, for example 'Item group'.

(PPS198)

The purchase organization selection solution is used for assigning purchase organization automatically to the planned purchase orders. It overrides the default purchase organization for a warehouse in (PPS199).

- Create a purchase organization selection record for division AAA and item group (GRP_NONSPECIFIC) and assign it to the purchase organization (LOCAL).
- Create a purchase organization selection record for division BBB and item group (GRP_NONSPECIFIC) and assign it to the purchase organization (LOCAL).

Planned purchase orders for warehouses within division AAA are assigned to the purchase organization (USA) and to the facility (BUS).

Planned purchase orders for items connected to product group (GRP_NONSPECIFIC) in warehouses within division AAA are assigned to the purchase organization (LOCAL) and the facility of the warehouse.

Planned purchase orders for warehouses within division BBB are assigned to the purchase organization (GERMANY) and to the facility (BGE).

Planned purchase orders for items connected to product group (GRP_NONSPECIFIC) in warehouses within division BBB are assigned to the purchase organization (LOCAL) and the facility of the warehouse.

Planned purchase orders for warehouses within division SE1 are assigned to the purchase organization (LOCAL) and to the facility of the warehouse.

Confirmation, Delivery Advice and Transport Notification for PO

This document explains how you report confirmation, delivery advice and transport notification for a purchase order (PO). Confirmation and/or delivery advice can be sent from the supplier or shipper during the delivery of goods from the supplier to your plant. This occurs after you have sent the PO to the supplier and before you have received the goods. With the help of the information in the confirmation and delivery advice, you can be assured of an exact delivery date for the ordered goods.

The confirmation and delivery advice contains transport information and important dates. You log the reported information as a transaction and the status of the PO is automatically raised. The status of a PO reflects its progress in this flow. Note: It is possible to use the status development only without logging transactions. However, this process document and the related instruction documents start from the fact that you wish to log the transactions.

Note: The reporting of confirmation and delivery advice can also be performed in 'Purchase Order. Display Lines' (PPS220) on a detailed or aggregated level. You can also monitor the status development for POs in this program.

Outcome

You have monitored the different steps of the delivery of your PO goods on their way to your plant. You have updated information about the transport; you know when and how the goods will be delivered. You also know about, for example, the bill of lading and the packing slip number.

The material plan is updated according to what transport agreements you have with the supplier. If transport lead time and goods responsibility have been specified, these will influence the dates presented.

You register the ordered goods as received in 'Purchase Order. Receive Goods' (PPS300).

It is possible to reverse the logging of confirmation, shipment advice and/or transport notification in 'Purchase Order. Display Line Trans' (PPS330).

These files are updated:

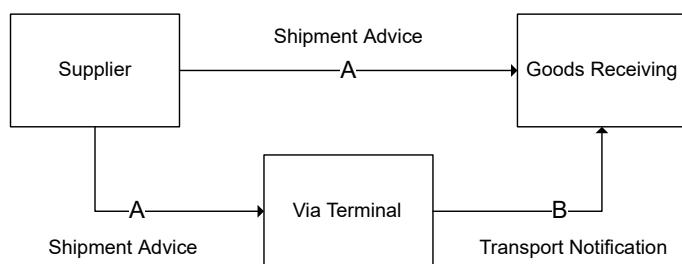
- Planning overview (MITPLO)
- PO lines (MPLINE)
- PO line transaction (MPLIND).

Before you start

A PO must have been created. See [Create, Release, and Display Purchase Order](#) on page 94.

Shipment advice and transport notification

This model shows the use of shipment advice and transport notification:



A is called shipment advice in M3. The supplier sends information about when the goods are shipped from the plant and how the goods will be transported. The goods are sent either directly to goods receiving or are sent through a terminal.

B is called transport notification in M3. If the goods are sent through a terminal, the receiver is informed of when and how the goods leave the through terminal by the use of transport notification.

Activity description

Note: The reporting methods listed here are optional and can be used independently of one another. They may also be used in a flow as three different steps.

You receive the delivery advice from the supplier by fax or letter, for example. Then you manually enter the information into the system. If the reporting is done automatically, such as by using EDI communications, you should not use the programs mentioned in this document. The status code connected to the PO will then automatically be raised to the respective level.

1 Report confirmation of PO

Report that the supplier has confirmed the PO, which means that the goods will be delivered. The supplier might have made changes, however, regarding delivery date, quantity, price and/or discount, which you report into the program. In some cases you have to split an order to have, for example, two deliveries instead of one.

Normally after this activity, the status of the PO is 35=Purchase price and delivery date confirmed and approved. If order data have been changed, one of these status codes may be used: 31=Delivery date confirmed, 32=Purchase price confirmed, 33=Purchase price and delivery date confirmed but not approved.

You report confirmation in 'Purchase Order. Confirm' (PPS250).

2 Report shipment advice for PO

Report that the supplier has advised the goods for shipment. The supplier may also have sent information about the transport, such as whether a transport through terminal will be used and the packaging of the goods. This includes, for example, shipment date, advised quantity, forwarding agent, bill of lading, delivery note number, and carrier name. You report the information into the program.

After this activity, the status of the PO is 40=Shipment advised.

You report shipment advice in 'Purchase Order. Advise Shipment' (PPS260).

3 Report transport notification

Report that a shipper has notified your goods for transportation, which means that the goods have been sent from the through terminal. You may also have received transport and packaging information that you report into the program. This includes, for example, shipment date, forwarding agent, delivery note number, carrier name and arrival date.

After this activity, the status of the PO is 45=Notified for transportation.

You report transport notification in 'Purchase Order. Notify Transportation' (PPS270).

Connect Manufacturer to a Control Object

This document explains how to use the advanced manufacturer control solution to connect manufacturers to a control object. The manufacturer information is then retrieved, validated on a purchase order line, and received into stock.

Outcome

A generic control object table is created with defined priority for setting up manufacturers.

A purchase order is created for goods requiring an approved manufacturer which are then received in the ordered warehouse.

A generic control table is used to retrieve default manufacturer to a purchase order line.

A generic control table is used to check that the specified manufacturer on the purchase order line is approved.

These tables are updated:

Table	Program
CROBJC	'Generic Object Control Table. Open' (CMS017)
MPAPMA	'Advanced Manufacturer Control. Open' (PPS042)
MPLINE	'Purchase Order. Open Lines' (PPS201)

Before you start

Define warehouse, facility, supplier, item, goods receiving method, and purchase order type.

Table 1:

Program ID/Panel	Field	The field indicates...
(PPS095/K)	780 Check appr manufacturer PO entry	<p>...whether to validate against approved manufacturer in (PPS042) for the specified record of the purchase order line.</p> <p>Alternatives:</p> <p>0 = No check of the approved manufacturer.</p> <p>1 = Yes, check that the manufacturer is approved if a value is specified.</p> <p>2 = Yes, approved manufacturer must be specified.</p> <p>When alternative 0 is selected, the field manufacturer is blank on the created planned purchase order and purchase order line.</p> <p>In this case, set the parameter to 2.</p>

Program ID/Panel	Field	The field indicates...
(PPS095/K)	790 Check appr manufacturer PO receipt	<p>...whether to validate against approved manufacturer in (PPS042) for the specified purchase order receipt.</p> <p>Alternatives:</p> <p>0 = No check of the approved manufacturer.</p> <p>1 = Yes, check that the manufacturer is approved.</p> <p>2 = Yes, but with a warning for unapproved. Allow goods receipt for both approved and unapproved manufacturer. Receipt for unapproved manufacturer must be rejected in quality inspection. This setting does not support the goods receiving methods Goods receipt/Put-away or Direct put-away to a status 2 location.</p> <p>In this case, set the parameter to 2.</p>
(CRS780/F)	(CRS780/F)	<p>...the check box to enable advanced manufacturer control from (PPS042). If you do not select the check box, manufacturers are managed from (PPS041).</p> <p>In this case, the check box must be selected.</p>
(CMS016/B)	Object control parameter	<p>...the available object control parameter where you can define your objects and values.</p>
(CMS017/B)	Program name	<p>...the program that is used for the object control table.</p> <p>In this case, specify (PPS042).</p>
(CMS017/E)	Status	<p>...the status for the generic object control table.</p> <p>The valid alternatives are:</p> <ul style="list-style-type: none"> • 10='Preliminary' • 20='Definite' • 90='Block/expired'
(CRS109/B)	Field group	<p>...a grouping of several fields from different files that regulate matrix entries.</p> <p>In this case, the APMFR field group must be selected.</p> <p>Field groups are system-defined and cannot be changed.</p>

Follow these steps

Create an object control table

- 1 Start 'Available Object Control Parameters. Open' (CMS016). Highlight 'Adv. Manufacturer' and select option 11='Object table detailed lines'.
- 2 Specify (PPS042) on the 'Generic Object Control Table. Open' (CMS017/B) panel.

- 3** On the E panel, set the status to 20.
 - Priorities from 0 to 9 in the sequence field:
By default, sequence 10 corresponds to priority 0, sequence 20 corresponds to priority 1, and so on up to sequence 100, which corresponds to priority 9.
 - From fields 1 to 5, specify which field is selected from the field group. Press F4 twice to select fields. This starts 'Field Group. Display Permitted Fields' (CRS109).
- 4** Specify APMFR in the 'Field group' on the (CRS109/B) panel.
- 5** Select fields to redisplay (CMS017/E).
Specify the facility, warehouse, and supplier as object field keys on the desired sequence.
- 6** Press Enter until 'Advanced Manufacturer Control. Open' (PPS042) is started.

Create values for the object control table

- 1** On the (PPS042/B) panel, define values for the fields in each priority.
- 2** The 'Start value 1, 2, 3, 4 and 5' fields are the first, second, third, fourth, and fifth values to be compared with the contents of a control object. From date is required but can be left blank, just make sure to specify the manufacturer valid for object field combination (X).
In this case, create a record for the facility, warehouse, and your supplier which is to be used in a purchase order. Click create to open panel E.
- 3** Specify the 'To date' (can be set to blank), priority from 0-9 and status. Set a manufacturer's priority to 1 for this record and specify status 20. Note that on the same object field combination, different manufacturers can exist on the same priority if it falls within the date range specified.
- 4** Repeat step 2 for a different manufacturer (Y). Set a priority for this record, and specify status 20.
- 5** Repeat step 2 for a different manufacturer (Z). Set a priority for this record, and specify status 90-'Blocked'.

Create a purchase order line

- 1** Start 'Purchase Order. Open' (PPS200/A). Specify the Facility, Warehouse, and Supplier pointing towards your newly created records in (PPS042).
Set the requested delivery date to today, specify an order type with a goods receiving method having Goods receipt/Quality inspection activities, and set the panel sequence to 1. Click Create to start 'Purchase Order. Open Lines' (PPS201/B).
- 2** On the (PPS201/B) panel, specify your desired item with an ordered quantity of 5. Before pressing Enter, set the panel sequence to EF.
- 3** On the (PPS201/E) panel, press Enter to start (PPS201/F). On this panel, notice that field manufacturer is defaulted with the priority 1 record you defined in (PPS042/B).
- 4** On (PPS201/F), try to change the manufacturer to Z as defined in step 5. The error message "Manufacturer <Z> is not approved for item <item>" is displayed because the record in (PPS042) is in status 90 (blocked).
- 5** Change back to manufacturer X and press Enter on (PPS201/F). Save your PO number then close (PPS201).

Perform a purchase order confirmation with a new manufacturer

- 1** Start 'Purchase Order. Confirm' (PPS250/B), specify your purchase order number, and click change on the order line to start (PPS250/E).
- 2** Change the Conf manufacturer to Z, as previously defined in (PPS042). Confirm the full quantity and press Enter to display (PPS250/B) again.
 - Note that no validations exist against (PPS042) in this program. This is due to the supplier controlling the confirmation process and manufacturer for delivery.
 - The confirmed manufacturer is updated on table MPLINE and is displayed on (PPS201/G).

Receive the goods

- 1 Start 'Purchase Order. Receive Goods' (PPS300/B). Specify the purchase order number and click change on the line to start (PPS300/E).
- 2 On (PPS300/E), report the receipt by specifying the location, lot number, and received quantity. Notice that the manufacturer value is taken from the confirmed value on (PPS201/G). If no confirmation is done on (PPS250), the manufacturer is taken from the specified value on the purchase order line (PPS201/F).
 - In this case, a warning message will be displayed indicating that it is acceptable to receive goods from an unapproved manufacturer, but the goods must be rejected later during quality inspection (PPS310). Approval of goods will not be allowed.

Note that if the goods receiving method does not contain a quality inspection step at this point of the report, an error message will be displayed indicating that this is mandatory for receipt.

 - Note that the manufacturer field will not be visible on (PPS300/E) if parameter P790 is equal to 0 in 'Purchase Order Type. Open' (PPS095/K).
 - The new manufacturer specified in (PPS300/E) is always updated to table MPLINE (PPS201/F).

Create and Connect Delivery Note and Package to a PO Line

This document explains how you create a purchase order line (PO line) and connect it to a delivery note and a package.

Import tracking in M3 supports the process of managing inbound logistical tracking, with shipments and containers. It allows order lines from a number of purchase orders to be combined into a single shipment from a supplier. Any valid purchase order line for that supplier can be used to create a shipment. It also makes it possible to receive by package or delivery level. Together with the use of APIs, a delivery note can easily be generated. This simplifies the goods receiving process since it enables you to report on an aggregated level.

A purchase delivery note in M3 (PPS360) contains detailed information about what is expected to be received on a purchase order. The information is sent by the supplier and can be updated automatically in M3 through an EDI/web interface or manually by the user in (PPS260).

A delivery note contains detailed information about items, quantities, and delivery dates, as well as package information such as the number of containers, pallets, boxes, and how the items are stored in the different packages.

In (PPS360), you can receive an entire delivery note or even a single package such as a box. This function is not possible in the regular goods receiving program in M3 (PPS300).

Outcome

- A delivery note is created and is connected to one or more purchase orders.
- The shipment can be advised again for the delivery note.
- The delivery note header is stored in the PDNHEA file.
- The package is stored in the PPTRNS file.
- Package details are stored in the PFTRNS file.

- Delivery notes/items are stored in the PDNLIN file.

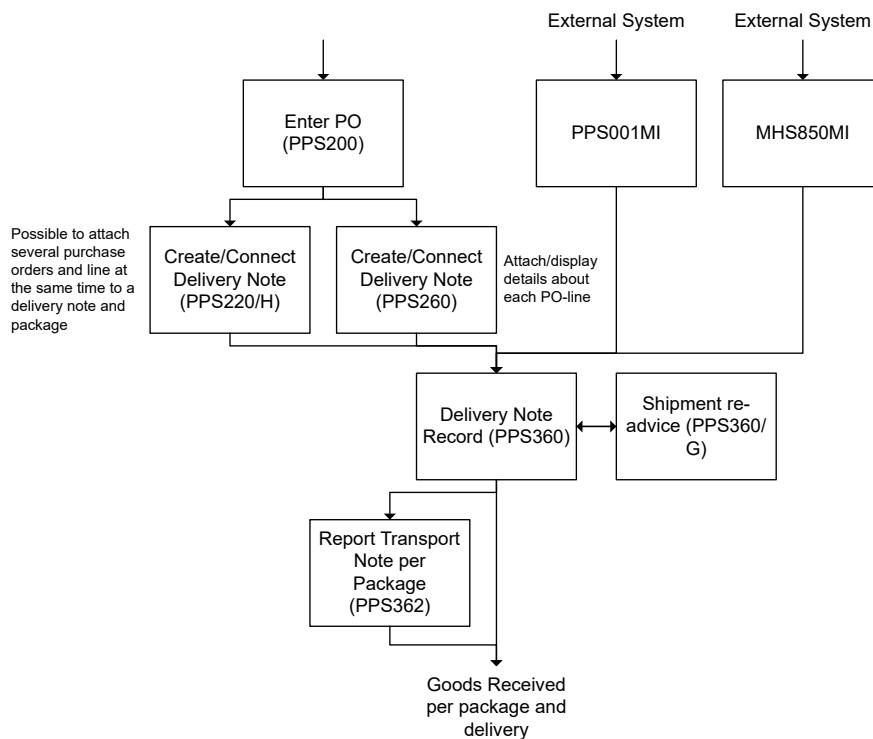
Package-based and delivery-based PO receiving through APIs enables easy implementation of receiving goods using bar code readers (or ultimately through RFID) to read package-level bar codes. It also improves warehouse efficiency and is important for both cross-docking and ship through at terminals.

With package-based and delivery-based PO receiving inbound logistical tracking is easier to manage with shipments and containers. Order lines from several purchase orders can be combined into a single shipment for one supplier. Any valid purchase order line for that supplier can be used to create a shipment. Processing is optimized when you can manage multiple purchase orders as a single entity.

Before you start

A purchase order must be created. See [Purchase Order](#) on page 137.

Follow These Steps



Create Delivery Note and Connect PO Line

- You create a purchase order in (PPS200) as usual. It is optional to report an order confirmation in (PPS250), as usual.
- Start 'Purchase Order. Display Lines' (PPS220).

In (PPS220) you can select user-defined views. These can be aggregated by supplier and delivery note, which enables you to display and select purchase order lines to connect to the shipment and to the package. These fields are an example of what can be included in the view (CRS020):

- IBSUNO – Supplier number
- IBSUDO – Delivery note number
- IBPUSL – Lowest status PO
- IBVDDT – Valid delivery date
- IBORQA – Ordered quantity
- IBADQA – Advised quantity

- 3 Select the supplier for which you want to connect a delivery note. Select option 26=Shipment advice. 'Purchase Order Advise Shipment' (PPS220/H) is started.
 - The 'Package no' and 'Incl in package' fields are added both in the header and subfile.
 - The last delivery/package (shipment/container) used will be defaulted when reporting shipment advice for a new aggregated line. The default values will be cleared when you exit (PPS220).
 - Option 28 = 'Delivery notes' starts (PPS360) where you can display and select delivery notes, if any are available.
- 4 You can fill in the **Delivery note no**, **Package no** and **Incl in package** fields in the header and repeat the values down on the aggregated line by selecting F18 = Repeat value. A pop-up window is displayed. Click OK.
- 5 You can also fill in the **Delivery note no**, **Package no** and **Incl in package** fields for each line. If these values are not filled in, no reporting for that specific record is done.
- 6 Press Enter/Next and then select F14 = Confirm update. Now a delivery note/package/ is included in a package record created and connected to a PO line in (PPS360).
The record will have status 46 = 'Shipment advised and delivery note connected.'
- 7 Alternatively, you can create and connect a delivery note to a single PO line in 'Purchase Order. Advise Shipment' (PPS260).
- 8 Select the PO line you want to connect to a delivery note. Open the E panel and fill in the **Delivery note** field.
The **Package no** and **Incl in package** fields will be displayed only if the setting "730 Automatic delivery note creation" is selected on (PPS095/K).
- 9 Press Enter. Now a delivery note/package/ is included in a package record created and connected to a PO line in (PPS360).
The record will have status 46 = 'Shipment advised and delivery note connected.'

10 Display the Connection between PO Line and Shipment, and Make Changes

(PPS360), (PPS361), (PPS362), and (PPS363) store information about delivery notes and their included packages, as well as shipment details and container details. This enables you to use deep structures consisting of containers, pallets and boxes.

Start 'Supplier Delivery Note. Open' (PPS360/B).

- Select sorting order 2, which sorts information by supplier and delivery note. The shipment date, valid delivery date, carrier name, and lowest and highest statuses are also displayed.
- Set the panel sequence to G in order to display only relevant information for import tracking.
- On the P panel, the 'Select display' field determines whether all delivery notes or only delivery notes for a specific supplier are displayed.

- Option 11=Item/Delivery note starts (PPS361).
- Option 12=Pckgs/Dely note (Packages/Delivery note) starts (PPS362).
- Option 13=Items/Package starts (PPS363).
- Option 20=PO lines starts (PPS220).
- Status 46='Shipment advised and delivery note connected.'
- Status 29=Errors from the uploading in MHS850MI API.

If errors were detected for the records that were uploaded from MHS850MI, the delivery is assigned status 29=Errors. You can then correct the data for 'Item no', 'Reference order' and 'Agreement no'.

On the (PPS363/B) panel you select option 20=Change data. The (PPS363/C) panel is displayed. Enter the correct values in the 'Item no', 'Reference order' and 'Agreement no' fields.

Redisplay the (PPS363/B) panel and select option 21='Check sts 29'. If the new values are correct, the status will be raised to 46.

Open the G panel.

- The G panel displays import tracking information. Some of the fields are user-defined fields with heading names entered in (CRS713).
- F13='Field select' opens the (PPS360/GP) panel, which determines the user-defined fields that are displayed and editable on the G panel.

11 Readvise Shipment

On the (PPS360/G) panel, the **Shipment date** field is used to advise the entire delivery note again. A warning is displayed before the transaction is made. This applies only for delivery notes created through (PPS260), (PPS220) or (PPS001MI). A new planning date will be calculated based on the new shipment date. PPS201 and MMS080 are updated with the new planning date.

12 Reverse Shipment Advice

There are four ways to reverse shipment advise:

- Delete entire delivery note from (PPS360/B) - reversal of advice for connected purchase orders.
- Delete package detail from (PPS363/B) - reversal of advice for specific purchase order line.
- Delete advice transaction in (PPS330) - reversal of advice for specific purchase order line. The record is deleted from PPS361-363 automatically.
- Delete advice reporting in (PPS260) - reversal of advice for specific purchase order line. The record is deleted from PPS361-363 automatically.

13 Report Transport Notification on Package Level

Start (PPS362) from option 12 on the (PPS360/B) panel. Transport notification can be reported with option 15 = 'Trans notificat' (only possible if the delivery note type is zero). The transport notification can also be reversed by selecting option 16 = 'Delete transp not'.

Parameters to Set

Program ID/Panel	Field	The field indicates ...
(PPS095/K)	730 Automatic delivery note generation	... if delivery note data for (PPS360) should be automatically generated when a purchase order is advised for shipment through (PPS220) or (PPS260). Select this check box.

Program ID/Panel	Field	The field indicates ...
(CRS624/F)	Shipment advice	<p>... how the supplier sends shipment advice.</p> <p>Alternatives:</p> <p>0 = Reported manually via (PPS260) or (PPS220).</p> <p>1 = Received via EDI (MHS850).</p> <p>2 = Reported manually via (PPS220) or (PPS260). A delivery note is automatically updated in 'Supplier Delivery Note. Open' (PPS360) for each delivery note number and delivery note date. Setting 730 must be selected on the (PPS095/K) panel.</p> <p>Select alternative 2.</p>

Create and Manage Purchase Orders for Central Procurement

This document explains how you can create planned purchase orders and purchase orders when central procurement is activated in the company. This document focuses only on the specific details of central procurement in the purchase order entry, that is, the use of the purchase organization and facility in the order entry.

The concept explained in this document also applies to the batch purchase orders in 'Purchase Order Batch. Open' (PPS370).

The use of purchase organizations in the purchase order entry is limited to order categories 20='Normal' and 70='Subcontracting'.

Outcome

In a company where central procurement is activated:

- planned purchase order is created for central vs. local buying.
- purchase order (PO) is created from the released planned purchase orders.
- purchase order is created manually for central buying by a central purchase department. Purchase order lines are created for warehouses on multiple facilities for which the central purchase department manages purchasing activities.
- purchase order is created manually for local buying.

For example, for purchasing items excluded from central procurement, or for creating purchase orders in a company where central procurement is enabled but in a division where purchasing is managed locally.

Before you start

You must enable central procurement and created purchase organizations for local and central buying with connected warehouses. See [Settings for Central Procurement](#) on page 158.

It is also required that you have completed the basic settings for the purchase flow:

- Specify basic settings for the purchase flow according to [Basic Settings for the Purchase Flow](#).
- Specify settings for the planned purchase order according to [Create and Release Planned Purchase Order](#).
- Specify settings for the purchase order according to [Settings for Purchase Order](#).

Ensure the process for creating purchase orders is understood, see [Create, Release, and Display Purchase Order](#).

Ensure the process for PO consolidation is understood, see [Settings for Release of Planned Purchase Order](#).

Create and release planned purchase order in central procurement

Manually create planned purchase order

- 1 Start 'Planned Purchase Order. Open' (PPS170/A).

A planned purchase order can be registered manually by using the A panel and specifying the warehouse and item number.

- 2 Select 'Create'.

- (PPS171/E) 'Purchase organization'
 - is mandatory for order category 20='Normal' and 70='Subcontracting', if central procurement is enabled in the company.
 - is automatically retrieved from programs in this order:
 - a 'Purchase Organization Selection. Open' (PPS198)
 - b 'Purchase Organization. Connect Warehouse' (PPS199), default purchase organization of the warehouse.
 - c If 'Purchase organization' is not found, the field is left empty and must be manually selected before the PPO can be released.
 - is editable. Changing the purchase organization triggers an update of the facility for the planned purchase order.
 - 'Buying facility' on 'Purchase Organization. Open' (PPS099/E) is applied.
 - If the selected purchase organization has an empty 'Buying facility' field, the facility of the warehouse is applied.
 - The selected 'Purchase organization' must be connected to the warehouse in (PPS199).

- (PPS171/E) 'Facility'
 - is not editable.
 - is retrieved from the purchase organization to which the planned purchase order is assigned, if the purchase organization is connected to a buying facility on (PPS099/E). A purchase organization with a 'buying facility' is used for central buying.

If the selected purchase organization is not connected to a 'buying facility', then the facility of the planned purchase order remains as the facility of the warehouse. A purchase organization where 'buying facility' is empty, is used for local buying.

- (PPS171/G) 'Consolidation group'

'Consolidation group' with 'Purchase organization' and 'Country' as consolidation objects, must be used for central buying.

Creating planned purchase orders automatically

Planned purchase orders that are missing purchase organization, have an invalid purchase organization, or are missing an applicable consolidation group, get status 00 and cannot be released. Warning message A1, A2, or A3 is applied to give more information about details that need to be adjusted.

Release and consolidation of the planned purchase orders

These consolidation objects are available only when central procurement is activated and they are mandatory to use in central buying:

- 'Purchase organization': Consolidation object that represents the purchase organization on the planned purchase order, which is available on 'Planned Purchase Order. Open' (PPS171/E).
- 'Country': Consolidation object that represents the country of the warehouse of the planned purchase order. The field is available on 'Warehouse. Open' (MMS005/E).

When central procurement is activated, these conditions apply for the purchase order consolidation:

- Planned purchase orders assigned to the same purchase organization and facility can be consolidated.
- Using a purchase organization with a buying facility makes it possible to consolidate planned purchase orders for warehouses that belong to different facilities.
- PO consolidation is not possible for warehouses that belong to different countries.
- You can break PO consolidation by warehouse, even if a purchase organization with buying facility is used. This is useful when certain suppliers cannot receive consolidated POs across warehouses or facilities, but the purchase must be still centrally managed.

When releasing a group of planned purchase orders for a purchase organization that uses 'Buying facility', the PO data are created in this way:

- The purchase order header is created on the facility of the planned purchase orders - the buying facility of the purchase organization.
- The purchase order header is created on the warehouse of the first planned purchase order in the sorting.
- The purchase order header is created on the purchase organization of the planned purchase orders.
- The PO lines are sorted by the ID of the warehouse.
- The PO lines are created on the facility of the warehouse of the PO line.
- The PO lines are created on the purchase organization of the planned purchase orders.

Register purchase order for central buying

Register PO header for central buying

- 1 Start 'Purchase Order. Open' (PPS200).
- 2 Open the A panel and specify mandatory fields, such as 'Facility', 'Warehouse', and 'Purchase organization'.
 - 'Facility': For a central purchase order header must be the facility from the purchase organization field 'Buying facility' on (PPS099/E).
 - 'Warehouse': Warehouse must be connected to the purchase organization in (PPS199).
 - 'Purchase organization': The selected purchase organization must be one configured for central buying that is, connected to 'Buying facility'. The buying facility of the purchase organization must be the same as the selected facility on the purchase order header. Purchase order lines can be created

for warehouses connected to the purchase organization of the purchase order header, and for any facility as long as it is within the division of the purchase order header.

3 Select 'Create'

- (PPS200/E)

'Purchase organization': Once the purchase order is created, the purchase organization cannot be changed.

- (PPS200/G)

The G panel displays address fields. The addresses impacted in the central procurement process are:

- 'Our Invoice address' is proposed from 'Internal Address. Open' (CRS235), based on the facility of the purchase order header. This way, invoices for central purchase orders can be directed to the address of the central purchasing department.
- 'Final destination' is proposed from (CRS235), based on the warehouse of the purchase order header. Purchase order lines specified for other warehouses get a destination address, based on the address of that warehouse.

Register PO lines for the central purchase order

PO lines are specified in 'Purchase Order. Open Lines' (PPS201). For a central purchase order, the purchase order lines can be created for warehouses in any facility, as long as these criteria are met:

- The warehouse is in the same division as the facility of the purchase order header.
- Selected warehouses must be in the same country. The country is specified for the warehouse in (MMS005). PO line 1 can be created on any country and the next PO lines must be created for the warehouses in the same country.
- The warehouse is connected to the purchase organization in (PPS199).
- 'Multiple warehouses in PO' are allowed for the purchase order type in 'Purchase Order Type. Open' (PPS095), parameter 340-341.

Register PO for local buying

Register PO header for local buying

1 Start (PPS200).

2 Open the A panel and specify mandatory fields that are related to the central procurement:

- 'Facility': For a local purchase, the facility of the purchase order header is the facility of the warehouse to which the goods are ordered.
- 'Warehouse': The selected warehouse must be connected to the selected purchase organization in (PPS199).
- 'Purchase organization': The selected purchase organization must be one that is configured for local buying, which means that the field 'Buying facility' is empty on (PPS099/E). When using the purchase organization for local purchases, purchase order lines can only be created for warehouses connected to the purchase organization of the purchase order header and belonging to the facility of the purchase order header.

3 Select 'Create'.

- (PPS200/E)

'Purchase organization': Once the purchase order is created, the purchase organization cannot be changed.

Register PO lines for local purchase order

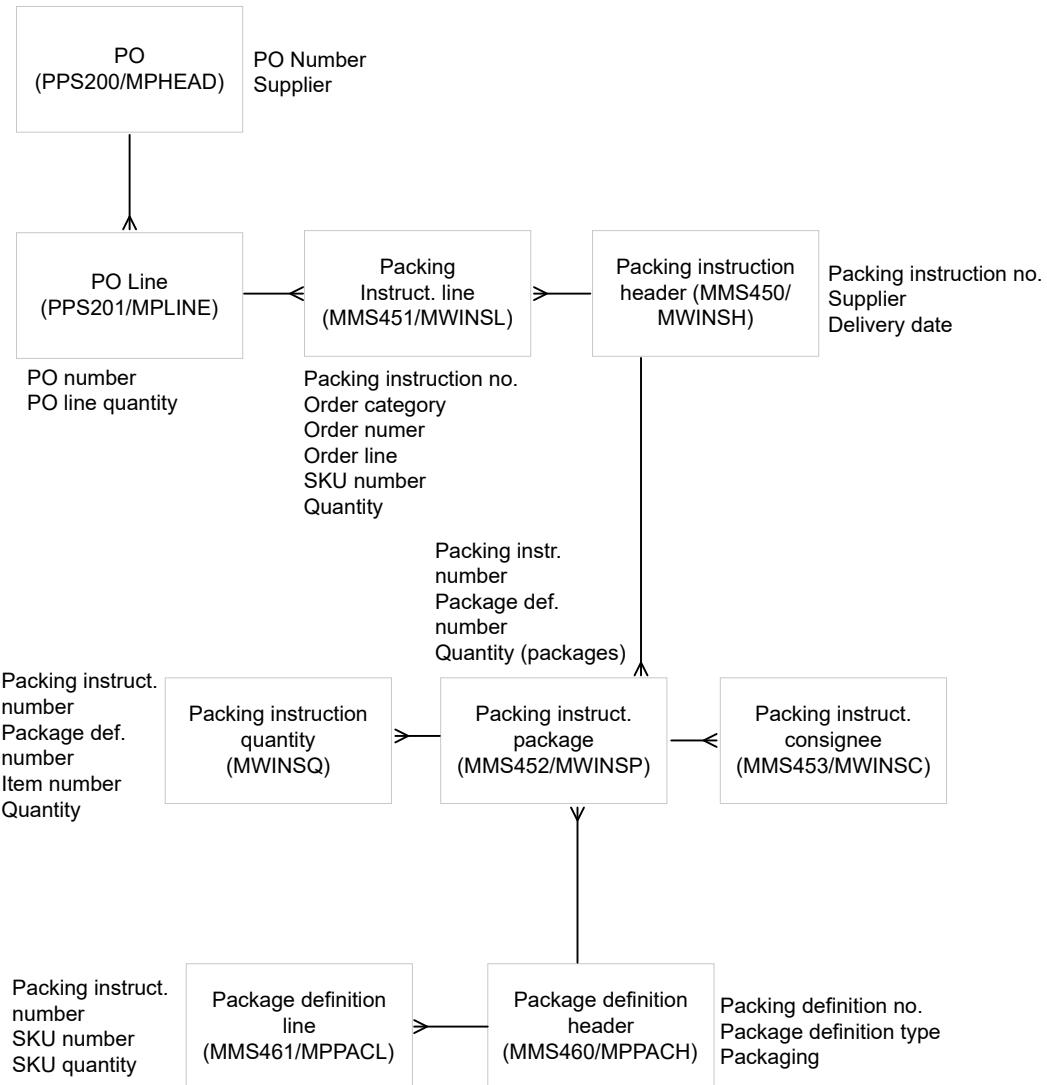
PO lines are specified in (PPS201). For local purchase orders, the purchase order lines can be created for any warehouses that belong to the facility of the purchase order header, as long as these criteria are met:

- Selected warehouses must be in the same country. The country is specified for the warehouse in (MMS005). PO line 1 can be created on any country and the next PO lines must be created for the warehouses in the same country.
- The warehouse is connected to the purchase organization in (PPS199).
- 'Multiple warehouses in PO' are allowed for the purchase order type in (PPS095), parameter 340-341.

Create Packing Instruction and Make Available for Supplier

Introduction

The solution for packing instructions to suppliers covers "how to pack" as well as mark-for instructions. It can be used both when using pre-packs (stocked kits) and when using discrete items (SKUs).



In the fashion industry, there is a strong requirement for functionality which makes it possible to work with pre-packs. A pre-pack is a predefined package with items in certain quantities as content. Examples can be pre-packs with items of the same style and with the same color and size (example: 10 T-shirts, White/Medium), or items with the same style or color (example: white T-shirts; 10 Small, 10 Medium, 10 Large), or items of different styles (assortment pack). The requirement is based on the fact that the pre-pack is the entity or level on which companies within the industry would like to use for planning and within logistics.

One possible way of setting up M3 BE to use pre-packs is to use stocked kits. A stocked kit is an item (inventory accounted) set up as a product in 'Product Structure. Open' (PDS001), and with the different items/SKUs defined in 'Product. Connect Materials/Operations' (PDS002) as included material. The program 'Kit. Create' (PDS017) is used to create fashion kits, which is a kit consisting only of SKUs for a specific style.

A requirement when creating purchase orders for pre-packs in the fashion industry is to provide information to suppliers about how many packages must be sent or forwarded to which final consignee, which is also

called 'mark-for' information in a mark-for/ship-to scenario. This scenario is similar to other fast-moving environments with cross-docking or direct shipments from supplier to the store or to the customer, without going through a Distribution Center. In M3 BE, packing instructions and mark for information can be created and connected to the purchase order lines. The packing instructions contain information about how to pack the ordered goods and how to mark the packages with information regarding the identity of the package (license plate) and what address label to put on it. This information is included on the purchase order document.

Packing instructions can however also be used in situations discrete items (SKUs) are used, that is, not only pre-packs. In such a scenario, the purchase order lines are set on SKU level, and the packing instructions are used to specify which of the ordered items should be packed together in which quantities and optionally, in which packaging material.

Package definition data

A package definition is a generic and reusable description of a package. It consists of a package definition header, which holds information like packaging and origin of the package definition, and package definition lines, which consists of item numbers and quantities. A package definition can be manually defined, and will then be a package definition type 1, or it can be created based on a kit (pre-pack) and will then be a package definition type 2. If it is a type 2 (a pre-pack), there is a reference to the Product number of the kit in the package definition header.

The package definitions are basic data tables and can be re-used by several packing instructions to carry package information.

Packing instruction data

A packing instruction always has a packing instruction header. The packing instruction is the entity that keeps a whole packing instruction together, and can be seen as a proposed delivery header.

The packing instruction line is the reference from the packing instruction to the purchase order to which it is connected. A whole or a part of a purchase order line can be connected to a packing instruction. Several purchase order lines can be connected to one packing instruction. The data model as such allows for lines from several purchase orders to be connected to one packing instruction, but the current solution will auto-create new packing instruction headers for each new purchase order (if set up on purchase order type).

The packing instruction package table is the link between the packing instruction and the package definition. It contains information about how many packages of each kind (that is, package definitions) the supplier should deliver within one packing instruction.

The packing instruction consignee table is the carrier of the marking information for a pack-age. It contains information about the final consignee of a package (customer number, warehouse, and so on) and address information. It can also contain an SSCC number in the case the supplier should receive information about which SSCC number to label each package with.

The packing instruction quantity table is a table used to keep track of quantities of items per package definition, and contains data that is not visible to the user. The above described principal data model is used regardless if the packing instructions are used in a pre-pack (kit) scenario or in a discrete item (SKU) scenario.

Before you start

Settings for activating the packing instructions functionality is done on the purchase order type on the 'Purchase Order Type. Open' (PPS095/I) panel:

- Parameter 560
The field indicates whether to automatically create packing instructions when a purchase order line is created. For alternative 1: When you create a purchase order line for a stocked kit item, packing instructions are created in order to inform the supplier about the content of the kit.
- Parameter 570
The field indicates whether mark-for consignee instructions are automatically created when a purchase order line is pre-allocated to an outbound order line. This functionality is limited to kit items only.
A mark-for consignee instruction is a packing instruction that indicates to the supplier the final destination of the goods.
- Parameter 580
The field indicates whether SSCC numbers should be generated for the created mark-for consignee information records. Either, the SSCC number information can be created for each package in a packing instruction, at the time the packing instruction is created. Or, SSCC number information can be created for each package that has any kind of mark-for consignee information connected to it.
- Parameter 590
The final parameter indicates how to activate the automatic printing of connected packing instructions when the purchase orders are printed.

Packing Instructions for pre-packs

Package definition based on kit

Package definitions are stored and maintained in 'Package Definition. Open Header' (MMS460) and 'Package Definition. Open Line' (MMS461).

The package definition for a kit can be created using F14 in (MMS460/A) based on a stocked kit in (PDS001) and (PDS002). It can also be created entirely automatically for a kit on a purchase order line. Then packing instructions are created in order to give information to the supplier about the content of the kit.

When a package definition has been created and the kit structure is changed, you must manually update the pre-pack structure, and vice versa, in order to keep the kit structure and the package definition structure synchronized. When you try to update one of these entities under these circumstances, a warning message will be given in order to inform about the needed manual update.

Follow these steps:

- 1 Start (MMS460/A). If no package definition number is entered, the new package definition number will become the same as the product number.
- 2 Specify facility and kit product number on (MMS460/A).
- 3 Press F14 to create the new package definition.

A package definition header is created in (MMS460) for the KIT item. Package definition lines are created for all items included in the KIT in (MMS461). The detail panel of the package definition line holds the fashion specific information for the SKU features.

This fashion-specific information is also available in the packing instruction printout and in the list-transactions of the APIs for packing instructions (MMS450MI).

Packing instructions automatically created for a kit PO

To create a package definition of type kit automatically, the purchase order line needs to be on the stocked kit level. Before this can be done, the parameter 560-'Packing instructions' must be set to 1 on the used purchase order type to enable the creation of packing instructions and package definition for stocked kits.

When a PO line is created (using PO proposal in 'Planned Purchase Order. Open' (PPS170) or manually in 'Purchase Order. Open Lines' (PPS201)), a check is done if there exists a package definition that corresponds to the ordered kit product. Otherwise, it is automatically created according to above, and then the packing instruction is automatically created using the package definition.

These are created for a PO line:

- a packing instruction header in 'Packing Instruction Header. Open' (MMS450)
- a packing instruction line in 'Packing instruction line. Open' (MMS451)
- a packing instruction package record in 'Packing instruction package. Open' (MMS452)

The packing instruction can be found by using related option 29 from 'Purchase Order. Open' (PPS200), 'Purchase Order. Open Lines' (PPS201), OR 'Purchase Order. Display Lines' (PPS220).

Mark for consignee information automatically created for kit PO

In 'Packing Instructions Consignee. Open' (MMS453), you can connect mark for consignee information to existing packing instructions. This marking information splits up the packing instructions into more detailed instructions, saying whom a package should be sent to. For example, for a packing instruction saying that 52 packages should be delivered, the mark for consignee information is saying "20 packages should be sent to store A and 32 packages to store B", including address information to the final consignee.

The trigger for creating mark-for information is a purchase order being pre-allocated to an outbound order, that is, Distribution Order or Customer Order. It is also possible to create mark-for information for a planned distribution order. The reason for this is to make it possible to send mark for information to suppliers earlier than the planned orders are actually released, as some customers want to be able to re-plan their orders until just before it is time to deliver the goods, and when it is usually too late to send the mark for instructions to the suppliers. Whether to create mark-for information also for planned orders is controlled through the parameter 570-'Create mark for instruction' on the purchase order type.

When a distribution order line is pre-allocated to a purchase order line, the logic will check if the DO has been created by a DO proposal and if so, check if there already exists a mark-for instruction that should be updated with the firm order number instead of creating a new instruction. Parameter 570 on the purchase order type should not be changed after order proposals or released orders have been pre-allocated to the purchase order as this might result in incorrect data.

For instance, if parameter 570 is changed from 2 to 1 on the purchase order type, after the planned distribution order has been created, and this is after this released, then the mark for details will not be deleted for the proposal when the mark for is generated for the released order line. The result is that invalid mark for data will remain for the proposal besides the information for the released lines.

At pre-allocation of an outbound order the package instruction is updated with mark for information in (MMS453).

On (MMS453/E), the package records are marked with the order category of the outbound order, the consignee, number of pre-allocated packages, the order number and order line number.

On (MMS453/F), the delivery address information will be populated, making it possible to put correct address labels on each package

SSCC marking information automatically created for a kit PO line

This functionality enables automatic generation of SSCC-numbers as marking information. The purpose is to be able to send complete 'mark for' information to the supplier or forwarding agent. The effect will be records in (MMS453) with a filled value in the SSCC number field. Since an SSCC number is unique for one package, the "number of packages" quantity field must always be 1 if an SSCC number exists on a record.

SSCC-numbers in M3 are created according to these logic:

- Initial digit: Hard coded to 3
- GS1-number: Unique for company / division in 'Settings - Packing' (CRS706)
- Sequence number: 'Number Series. Open' (CRS165), number series 05 A
- Check digit: Calculated

With the parameter 580 on the purchase order type (PPS095), it is decided if SSCC should be automatically created or not, as well as when they should be created.

If the pre-allocation is updated or deleted, the mark-for instructions are updated accordingly, that is, records are deleted if the pre-allocated quantity is reduced, or new ones are created if the pre-allocated quantity is increased."

Example 1) If parameter 580=1 – Create SSCC when mark-for instruction created

A packing instruction already exists with 14 pre packs ordered. 8 packages are being pre-allocated on a outbound order. 8 package instructions consignee records is created in (MMS453), each with a unique SSCC number and are marked for the outbound order.

Example 2) If parameter 580=2 – Create SSCC when packing instruction created

At the same time as the packing instruction is created for a Purchase Order line with 14 kits/prepacks, the same amount of (MMS453) records are created automatically, each with a unique SSCC number. When all or parts of the PO line are pre-allocated against a outbound order, the records in (MMS453) are updated/modified with mark-for instructions against the pre allocated outbound order.

Packing instructions for Discrete items/SKUs

Package definitions manually defined

Package definitions in (MMS450/MMS451) cannot only be based on kits/pre-packs, they can also be manually defined. A manually defined package definition will have package definition type 1. Manually defined package definitions can be used when manually creating packing instructions for purchase orders that are not based on pre-packs, but rather on discrete items (SKUs).

For a Purchase Order, it is possible to manually create packing instructions by using existing or creating new package definitions to describe the packages.

Follow these steps:

- 1 Create a new package definition on (MMS460/B).

- 2 On panel E, set the pkg status to 20-'Definite' and specify the 'packaging' to use.
- 3 In (MMS461), create the package definition lines one by one (using the option 'Create') or by using the Fashion Matrix. To use the Fashion Matrix, (MMS461/P) must be set up with these:
 - Full-screen opt=2
 - Search seq ali=8

When specifying a value that matches a selected alias type in the search sequence and selecting option 1-'Create' on (MMS460/B) opens (CRS207) where the quantities of the selected items can be specified.

You can repeat the step above several times to add SKUs from different style in to the same package definition. Several package definitions can be created for one style and a SKU can be included in several different package definitions.

Manual creation of package instructions for SKUs

If a purchase order exists, follow these steps:

- 1 Open (MMS450) by using related option 19 from (PPS200) or (PPS201) (or related option 29 from (PPS220)).
- 2 Click 'Create New' in (MMS450) to create a new packing instruction.
- 3 In (MMS452), all relevant available package definitions are displayed and possible to select. By specifying a number of packages"and pressing enter, the remaining quantity for each of the included items is reduced with an amount depending on the number of each item in the selected package definition (the standard quantity).
- 4 Select related option 11 to reach (MMS451). Here, the items in specified quantities included in the packing instruction are presented.

SSCC marking information in packing instructions for SKUs

When parameter 580-'Create SSCC for mark-for consignee instruction' in 'Purchase Order Type. Open' (PPS095) is set to 2-'Create SSCC when packing instruction created', an SSCC number instruction is created in (MMS453) for each package that is being created in 'Packing Instruction Package. Open' (MMS452).

If parameter 580 is set to 0 or 1, no SSCC number instructions are automatically created when the packing instructions are created.

Manual mark-for consignee instructions

There is no functionality for automatically creating mark for consignee information for packing instructions when the related Purchase Order is on SKU level, but it is always possible to manually enter marking instructions for the packages in (MMS453), for example, address information for the final consignee.

Packing instruction printout

A document has been created for the printout of packing instructions. In the end of the How to pack part of the packing instruction printout, the Fashion Matrix has been added. The Fashion Matrix is a summation of the SKUs that a pre-pack contains.

The control of who to send to has been solved by introducing two control fields for the packing instruction document, document number 260. The first field holds a value that says which type of receiver it is and the second field holds the value of the receiver. The two control fields are set up in 'M3 Document. Open' (CRS928).

Manual printout of packing instructions

The purpose is to be able to order printout of a selection of packing instructions. When ordering a printout manually it is possible to select receiver of the document and the content of the document.

The selection of packing instructions to print is made in program 'Packing Instruction. Print' (MMS456).

Automatic printout of packing instructions

To control the automatic print of the packing instructions, parameter number 590 is added to the purchase order type. This parameter controls if packing instructions connected to purchase orders with this purchase order type should be printed automatically when the purchase order document is printed.

Sent to fields in (MMS453)

Three additional fields show when packing instructions for consignee are sent to supplier, forwarding agent or warehouse. The field is automatically updated when the mark for information is printed. The date is displayed on (MMS453/B), (MMS453/E) and in API MMS450MI.

Packing instruction printout for purchase orders

This functionality enables printing packing instructions together with purchase order documents. It affects both when purchase order documents are printed automatically for purchase orders through (PPS914), as well as when these are printed manually through selection in 'Purchase Order. Print Document' (PPS600).

Parameter 590 'Print packing instruction' on the purchase order type on (PPS095/I) is used to control if packing instructions connected to purchase orders of the purchase order type should be printed automatically when the purchase order documents are printed. This parameter controls also which part of the packing instruction that should be printed - whether both the How to pack and the Mark for part of it should be printed, or only either one of them.

An equivalent parameter is also added to supplier on 'Supplier. Open' (CRS620/E), making it possible to control based on supplier whether and what part of packing instructions should be printed when purchase order documents are printed.

Media management functions

This functionality enables the user to manage the media control for the packing instruction printout. The printout is set up with its own document number 'Standard Document. Open' (CRS027) and is managed using the media control settings 'Std Document. Connect Media Ctrl Object' (CRS945).

API transactions for packing instructions

Packing instructions can be read out from M3 BE through API transactions in MMS450MI. There are three different transactions that can be used in different situations:

- LstPckInstByOrd lists all packing instruction header records that are connected to a purchase order or purchase order line.
- LstPckInstDet returns all details on a packing instruction and the related package definitions.
- LstPckInstCons returns all mark-for information records for a packing instruction header number.

Create a Purchase Order Requisition

This document explains how you can create a purchase order (PO) requisition. The PO requisition contains information about the requirement for stocked items, non stocked items, and services.

The PO requisition will be a planned purchase order after registration and can be further processed and released in 'Planned Purchase Order. Open' (PPS170).

Outcome

A PO requisition is manually created. A planned purchase order is also automatically created by the system.

Uses

A PO requisition is an easy way to enter a requirement into the system. It can be used for requisition of stocked items, non-stocked items, and services.

For example, production personnel can use PO requisitions to create requirements for non-stocked items and the buyer then releases the PO requisition in (PPS170).

How the system is affected

The PO requisitions are stored in the Planning Proposal Purchase (MPOPLP) file.

Before you start

- A number series must be created using number series type 23 in 'Number Series. Open' (CRS165).
- The starting conditions in this document must be met:
- The settings that determine how to create and release a planned purchase order must be met. See [Create and Release Planned Purchase Order](#) on page 100.

Follow these steps

- 1 Start 'Purchase Requisition. Open' (PPS180). A new requisition order can be created on the A panel or B panel.
A list of existing requisition orders are displayed on the B1 panel.
- 2 On the A or B panel enter the warehouse, item number, supplier, planned quantity, and planned delivery date.
- 3 Select Create. The E panel is displayed. A 'Planned order' is automatically created with a number series retrieved from 'Number Series. Open' (CRS165).
The default values for the supplier and buyer are displayed from 'Item. Connect Warehouse' (MMS002). You can also change the default values on this panel.
- 4 Press F20 = Generate PO number, to create a purchase order number for the requisition at this level. A PO number is displayed in the PO number field.
When a planned order is released in 'Planned Purchase Order. Open' (PPS170), this number is used as the created purchase order number.

- 5 Press Enter to display the B panel. You can view the created PO requisition either on the (PPS180/B) panel or as a planned purchase order in 'Planned Purchase Order. Open' (PPS170/B). The status of the planned purchase order is 20 = Purchase requisitions/planned work orders.

When the planned purchase order is released to a purchase order, the status in (PPS180) and (PPS170) will be raised to 60 = Released to create purchase/work order.

On the B panel, option 20 = Attr values will be activated if your item is connected to attributes.

PO requisitions can be printed in 'Purchase Requisition. Print' (PPS185) or press F16 = Print on the (PPS180/B) panel.

Create Purchase Organization for Planning

This document shows how to define a purchase organization used for procurement planning and for consolidation of planned purchase orders. This is useful for an organization, where a central purchasing department is responsible for buying goods on behalf of specific regions, or products, or the entire organization.

Purchase organizations for planning are used to enable creation of centrally managed purchase orders with order lines for warehouses in multiple facilities. This allows creating larger purchase order and saving costs for admin, taking advantage of quantity discounts, etc.

Outcome

Purchase organizations of type 1='Planning' are created in 'Purchase Organization. Open' (PPS099). The purchase organization codes are stored in table PPPORG.

Purchase organization is connected to a warehouse in 'Purchase Organization. Connect Warehouse' (PPS199). The purchase organization connection to a warehouse is stored in table PPPWHL.

Before you start

Use of purchase organization for planning must be activated on 'Settings - Purchasing' (CRS780/H), parameter 66-'Use of purchase organization: Price/Planning', field 'Use purchase organization for planning'.

A facility, that represents the central purchase department, must exist in 'Facility. Open' (CRS008).

Using purchase organizations for planning

Purchase organization for planning are used to enable creation of purchase orders with order lines on multiple facilities. This is achieved by using purchase organization as a consolidation object and connecting a 'buying facility' to the purchase organization.

Purchase organizations are created in (PPS099). Type 1='Planning' purchase organizations can only be created if the use of purchase organizations for planning is activated on (CRS780/H) parameter 66 'Use of purchase organizations: Price/Planning'. If this parameter is activated, it is mandatory to use purchase organization of type 1='Planning' on planned purchase order, purchase orders, and batch purchase orders. The purchase organizations can be defined for central buying or local buying.

Purchase organizations for planning can be used in these programs:

- (PPS099)
- (PPS199)
- (PPS198)
- 'Planned Purchase Order. Open' (PPS170)
- 'Purchase Order. Open' (PPS200)
- 'Purchase Order Batch. Open' (PPS370)

The use of purchase organizations for planning are limited to purchase orders with purchase categories 20='Normal', 70='Subcontracting', and 10='Inquiry'.

Purchase organization for central vs. local buying

Purchase organizations for planning are mandatory in the purchase order entry. You can configure purchase organizations for use in both central buying and local buying. Using purchase organizations configured for local buying is useful, for example, if procurement is done locally in a certain division or for certain products.

Purchase organization for central buying

A purchase organization for central buying is connected to a facility. The facility of the purchase organization represents the central purchasing department which monitors procurement activities for the purchase organization. The facility of the purchase organization overrides the facility of the planned purchase orders created for the purchase organization. The facility of the purchase organization indicates the facility that is buying the goods on behalf of the demanding warehouses.

When using purchase organizations for central buying, planned purchase orders can be consolidated or purchase order lines added for warehouses on any facility within a division as long as it is connected to the purchase organization. Organizations can create such orders to take advantage of quantity discounts, or cost savings in administration, freight, and other charges. Ownership of the goods is in the demanding warehouses, and delivery from the supplier is to the demanding warehouse, without going through a DC.

Purchase organization for local buying

A purchase organization for local buying is not connected to a facility. It does not impact the facility of the planned purchase orders. Purchase orders for which a local purchase organization is used, act as a general purchase order. The purpose of the local purchase organizations is to indicate that a purchase order is locally managed and can be useful for information and in statistics.

Purchase organization validation

A purchase organization of type 1='Planning' can be used by warehouses when entering orders and order lines by connecting warehouses to the purchase organizations in (PPS199).

Multiple purchase organizations can be connected to the one warehouse. This is useful, for example, when you want to do both local and central purchasing in a warehouse.

Assigning purchase organization to purchase orders

Purchase organization is mandatory on planned purchase order, purchase orders, and batch purchase order. It is manually selected in the order entry.

For planned purchase orders, the purchase organization can be automatically assigned when the order is created.

In (PPS199) a purchase organization can be marked as a 'default purchase organization' for a warehouse on the E panel. A purchase organization marked as the 'default purchase organization' for a warehouse is automatically assigned to the created planned purchase orders for that warehouse.

Exceptions to the use of the default purchase organization in (PPS199) are defined in (PPS198), such as for products that should be purchased locally.

Follow these steps

Create purchase organization for local purchasing

- 1 Start (PPS099).
- 2 On the B panel, specify alphanumeric characters.
- 3 Select 'Create' to create a record.
- 4 On the E panel, select purchase organization type 1='Planning' and press 'Enter'.
- 5 On the E panel, specify the description and name.
- 6 On the E panel, leave the field 'Buying facility' (BFAC) blank.
- 7 Press 'Enter' to exit.

Create purchase organization for central purchasing

- 1 Start (PPS099).
- 2 On the B panel, specify alphanumeric characters.
- 3 Select 'Create' to create a record.
- 4 On the E panel, select purchase organization type 1='Planning' and press 'Enter'.
- 5 On the E panel, specify the description and name.
- 6 On the E panel, specify a facility in the field 'Buying facility' (BFAC).

Selected facility represents the central purchasing department and it:

- overrides the facility of the warehouse on all planned purchase orders created for the purchase organization.
- is used as the facility of the purchase order head for all purchase orders created for the purchase organization.
- is used as the facility of the batch purchase order head for all batch purchase orders created for the purchase organization.

- 7 Press 'Enter' to exit.

Connect purchase organization to a warehouse

- 1 Start (PPS199) from the menu or through the related option 11='Purchase Organization. Connect Warehouse' in (PPS099).
- 2 On the B panel, select a purchase organization and click 'Apply'.
- 3 Specify the warehouse you want to connect to the selected purchase organization.

- 4 Select 'Create' to continue on the E panel.
- 5 Select the check box 'Default purchase organization', if the purchase organization should be the default.
 - Default purchase organization for a warehouse is automatically assigned to the created planned purchase orders. Rules to override this can be created in (PPS198).
 - Warehouse can be connected only to one default purchase organization.
- 6 Press 'Enter' to exit.

The purchase organization is now connected to the warehouse and is valid to use on purchase orders created for the warehouse.

Generate purchase organization connection to multiple warehouses

- 1 Start (PPS199) from the menu or through the related option 11='Purchase Organization. Connect Warehouse' in (PPS099).
- 2 On the B panel, select a purchase organization and click 'Apply'.
- 3 Select function key F14='Generate' to continue to the I panel.
- 4 On panel I, the open fields are used to specify ranges that determine for which warehouses a connection should be created to the purchase organization.
The division fields are not editable when working with purchase organizations that have a buying facility in (PPS099/E).
- 5 Select the check box 'Default purchase organization', if the purchase organization should be the default in the selection criteria.
 - Default purchase organization for a warehouse is automatically assigned to the created planned purchase orders. Rules to override this can be created in (PPS198).
 - Warehouse can be connected only to one default purchase organization. If there are warehouses in the selection criteria that are connected to a default purchase organization, the creation of those records will fail. Information of which records have failed is available in 'Application Message. Open' (CRS420), application message type 172.
- 6 Press 'Enter' to create the warehouse connections to the purchase organization.

Parameters to set

Program ID/Panel	Field	The field indicates...
(PPS099/B)	Purchase Organization	<p>...that the purchase organization is used to group warehouses for the use of purchase price agreements and purchase order planning. The field is defined in (PPS099). The purchase organization type determines the purpose of the purchase organization, which is purchase pricing or planning.</p> <p>Purchase organizations used for pricing are connected to the warehouses in 'Warehouse. Open' (MMS005) and purchase agreements in 'Purchase Agreement. Open' (PPS100). Purchase organizations for pricing are used for defining which warehouses to enable for use of the prices and conditions of specific agreements. Purchase organizations for pricing are limited to general purchase agreements, blanket agreements, and delivery schedule agreements.</p> <p>Purchase organizations used for planning are connected to the warehouses in (PPS199) and assigned to the planned purchase orders and purchase orders. Planned purchase orders that are connected to the same purchase organization can be consolidated to create cross-facility purchase orders for central buying. Purchase organizations for planning are limited to the purchase orders of the purchase categories 20='Normal' and 70='Subcontracting'.</p> <p>To activate the purchase organization for use in purchase pricing and purchase planning, set the '66 Use of purchase organization: Price/Planning' parameter in (CRS780).</p>

Program ID/Panel	Field	The field indicates...
(PPS099/E)	Purchase organization type	<p>...the purchase organization type, which determines the use of the purchase organization.</p> <p>Alternatives:</p> <ul style="list-style-type: none"> • 0='Price' • 1='Planning' <p>Type 0='Price' purchase organizations create price purchase organizations that are used for the grouping of warehouses that share regionally, or centrally negotiated purchase price agreements. The price purchase organizations are connected to warehouses in (MMS005) and purchase agreements in (PPS100). To activate the use of type 0 purchase organizations in the price origin search, use the '66 Use of purchase organization: Price/Planning' parameter on (CRS780/H).</p> <p>Type 1='Planning' purchase organizations are used for the grouping of warehouses for purchase planning and consolidation. Purchase organizations of type 1 are connected to the warehouses in (PPS199) and assigned to the planned purchase orders and purchase orders. The type 1 can only be created (and is mandatory) if the use of the purchase organizations for planning is activated on (CRS780/H).</p>
(PPS099/E)	Description	...the description of the current identity. It is a mandatory information.
(PPS099/E)	Name	...the name of the current identity. When you edit descriptions and names, and no name is specified, the first 15 positions from the description are treated as the name by default.

Program ID/Panel	Field	The field indicates...
(PPS099/E)	Buying facility	<p>...the buying facility of a purchase organization, which is used in the central procurement process to enable creating purchase orders with lines for multiple facilities. It represents the central procurement department in a central procurement process, buying centrally on behalf of a group of warehouses.</p> <p>The buying facility is automatically assigned to the planned purchase orders and to the purchase order header. It is set up as a general facility in 'Facility. Open' (CRS008) and can be connected to one or more purchase organizations.</p> <p>If the buying facility is assigned a value, the purchase organization can be used for central buying. Assigning a (planned) purchase order to a purchase organization that has a buying facility affects the facility of the order in such a way that the facility of the purchase organization overrides the facility of the order. Planned purchase orders or warehouses that are connected to the same purchase organization can be consolidated to one purchase order with lines for warehouses in multiple facilities.</p> <p>If the buying facility is blank, the purchase organization can be used for local buying. Assigning a (planned) purchase order to a purchase organization with a blank buying facility does not impact the facility of the order. The facility of the planned purchase order or purchase order remains as the facility of the warehouse.</p> <p>A buying facility can only be assigned to a purchase organization of type 1='Planning'.</p>
(PPS199/B)	Purchase Organization	...a purchase organization type 1='Planning'.
(PPS199/B)	Warehouse	...the warehouse that is connected to the purchase organization.

Program ID/Panel	Field	The field indicates...
(PPS199/E)	Default purchase organization	<p>...that you should select the check box, if the purchase organization should be the default purchase organization for the selected warehouse. The default purchase organization is automatically assigned to the planned purchase orders created for the warehouse. A warehouse can only be connected to one default purchase organization.</p> <p>Overriding rules for which purchase organization to assign to the planned purchase orders, based on objects related to a warehouse or a product, can be defined in (PPS198).</p>

Create, Release, and Display Purchase Order

This document explains how you create, release, and display a purchase order.

Outcome

The processes described in this document enables you to perform these actions:

- Automatically create a purchase order from a planned purchase order
- Manually create a purchase order from a planned purchase order
- Register and change a purchase order header
- Register and change purchase order lines
- Print purchase order documents and release a purchase order automatically or manually
- Display a purchase order

Before you start

- Specify basic settings for the purchase flow according to .
- Specify settings for planned purchase order according to [Create and Release Planned Purchase Order](#) on page 100.
- Specify settings for the purchase order according to [Settings for Purchase Order](#) on page 182.

Create PO from planned PO

- Automatically create PO from planned PO
- If a planned purchase order should automatically be released to a purchase order, you must specify these settings:

- 'Planning Policy. Open' (MMS037), parameter '022=Default status - planned orders when AM=A1' (Release and reschedule in the order). If planned orders with action message A1 should be released automatically, you must set this parameter to '60=Released order'.
- (MMS037), parameter '025=Default status - planned orders when AM=A2' (Release order). If planned orders with action message A2 should be released automatically, you must set this parameter to '60=Released order'.
- 'Item. Connect Warehouse' (MMS002/E), the 'Planning policy' field. You must connect a planning policy for the item/warehouse with the settings above '60=Released order'.
- Manually create PO from planned PO

For manual creation of a purchase order from a planned purchase order, see *Release Planned Purchase Order* in [Create and Release Planned Purchase Order](#) on page 100 .

Register/Change PO header

- 1 Start 'Purchase Order. Open' (PPS200). Open the P panel and specify the panel sequence. Press Enter. The panel sequence is EFGU1H in the text below.
- 2 Open the A panel. New purchase orders are always manually specified on the A panel.
- 3 When specifying a new purchase order, some of the fields in the A panel must be specified. The order must be connected to a supplier and a requested delivery date (the need date) must be specified. Specify the **Purchase organization** field. It is a mandatory step, if this field is available. If no order type is specified, the value from 'Supplier. Define Purchase & Financial' (CRS624/E) becomes the default.
- 4 The panel sequence determines the panels to go through when placing a new order. A standard setup for the sequence, both for the header and lines, can be defined in 'PO Type. Open' (PPS095).
- 5 If no PO number is manually written, a purchase order number will automatically be retrieved from the number series specified in (PPS095).
- 6 Select 'Create'.

- (PPS200/E)

The E panel contains data mostly defaulted from the supplier. The values can be changed manually on each order. If the purchase order is created from a planned purchase order, the values will be copied from the proposal.

- 'Final destination' is your goods receiving destination. This address is set in 'Internal Address. Open' (CRS235) and will be printed on the external documents.
- 'Language code' determines the language in which the external documents are printed. The language codes are set in 'Language. Open' (CRS010).
- If the telephone order field is marked, a text is printed on the order document, indicating that this order has been placed over the telephone.
- 'Harbor/airport' indicates the ID of the harbor or airport. It is needed for reporting purposes in trade statistics. This information is only relevant for exports or imports where the goods do not pass any customs office at the border.
- 'Purchase organization' indicates the organization, for which the purchase order is created. Purchase order lines can be created for warehouses that are connected to the purchase organization of the purchase order head in 'Purchase Organization. Connect Warehouse'

(PPS199). The field is not editable. The field is only available if use of purchase organization for planning is activated on (CRS780/H).

- (PPS200/F)

The F panel displays the agent, payment, and currency terms.

- Media profile - A media controlling object that is used as a filter in the media control table (CRS945). See .
- 'Delivery terms' - Some delivery terms require a delivery text (example: loading port if FOB is used). This text can be specified in the open line under delivery terms or can be collected from 'Supplier. Connect Delivery Term Text' (PPS014) which is accessed from 'Supplier. Define Purchase & Financial' (CRS624).
- Signature - If authorization is needed, the authorization code is specified in the signature field.
- 'Currency terms' and 'Agreed rate' are used for orders in foreign currencies. If currency terms are used on the order, M3 Business Engine will use the agreed rate instead of the exchange rate for the conversion from foreign to local currency.

- (PPS200/G)

The G panel displays different address fields. The address fields are opened for changes by activating the **Chg adr** check box, followed by Enter.

- 'Suppliers address' is proposed from 'Supplier. Connect Addresses' (CRS622). The others - 'Our Invoice address', 'Via address' and 'Final destination' - are proposed from (CRS235).

- (PPS200/U)

The U panel displays the user-defined fields. The settings for these fields are defined in 'User-Defined Fields. Open' (CMS082).

Register/Change PO lines

The order lines are specified in 'Purchase Order. Open Lines' (PPS201). A new panel sequence for the line is used. The panel sequence used in this description is EIFGU.

- (PPS201/P)

There are some fields on the parameter panel (PPS201/P) that control the flow.

- The first 'panel sequence' is valid when specifying a new order (options 1, 2, or 11 from (PPS200)).
- The second 'panel sequence' is valid when displaying the order (option 5 from (PPS200)).
- 'Entry option' enables different ways to register an order. For example, entry option 3 opens a full-screen entry so that you can specify several order lines at a time. Entry option 4 works together with the 'Full-screen option' and 'Check sequence' fields. With these fields, you can specify order lines in a matrix form or a list view. The matrix form is appropriate to use, for example, in the fashion industry. To use this form, alias numbers must be created for the items in 'Item. Connect Alias Numbers' (MMS025).
- 'Repair/subcontracting' parameter opens up extra fields used for purchase order categories '60=Repair' and '70=Subcontracting'. The fields are 'Lot no', Service' and 'Service process'.

- (PPS201/B)

'Item number' and 'order quantity' must be specified. 'Units and 'prices' will automatically be retrieved from an agreement (PPS100), the item/supplier (PPS040) or the item master file (MMS001) if registered in any of these fields.

- (PPS201/E)

- 'Our reference number' can either refer to an agreement number (1), an inquiry number (2), or a supplier quotation number (3). If a valid agreement exists in 'Purchase Agreement. Open' (PPS100), the agreement number will be retrieved automatically together with prices and conditions. If the agreement number says "9999999" the agreement is a general agreement, that is, a price is given in the item/supplier master. The Agreement documentation contains more information about agreements.
- 'Reference order number' - If the purchase order is created from another order, for example, a customer order generates the purchase order, the 'Reference order number' field will be filled in with the customer order number, line and a reference order category.
- 'Revision number' is a way to keep track of changes made on the order. 'Revision Control. Open' (CRS340) is accessed by selecting "Option 14" from 'Purchase Order. Open' (PPS200/B). In this program, a revision number, date, and a text describing why the revision is done is defined. Using a revision number enables you to print only revised lines on a purchase order.
- 'Recipient' - The content of the Recipient field is written on the detailed goods receiving document and can be used to inform the inventory staff who the goods are aimed for. You can also predefine the content of the field in (PPS095).
- 'Requested delivery date' - If the requested delivery date is too soon relative to the lead time, a warning is displayed if the setting is correct in (PPS095).
- These types of discounts can be specified or defaulted:
 - Discount 1: Discount from the supplier master
 - Discount 2: Discount from the agreement header
 - Discount 3: Discount from the agreement line
- 'Price text' - In M3 Business Engine, it is required to put in a price on each order line, but you can specify a price text instead of a price on the order line. This can be the case if the price of the purchased item is unknown and refers to, for example, a sample or a new article. This text is specified in a table behind the price text field in 'Purchase Price. Enter text' (CRS060).
- F11='Account Entry', will open the accounting string to be able to put in a manual account on a specific order line. This is commonly used for purchase on items that are not inventory accounted, where a cost account is used instead of the inventory account.
- (PPS201/I)

The I panel is for information purposes and includes reference details such as planned order number, requisition by, cost center, and accounting control object.
- (PPS201/F)

'Goods receiving method' - determines the steps in the receiving flow that will be taken for the specific order line, and is defined in (PPS345). The field is automatically retrieved from these places in this order:

 - 1** 'Supplier. Connect Item' (PPS040/E)
 - 2** 'Item. Open' (MMS001/F)
 - 3** (PPS095/E)

'Packaging' - an identity that shows how the item in the order line must be packed when it is shipped from the supplier. This is defined in 'Packaging. Open' (MMS050).

'Update material plan' - if the order quantities must update the material plan, select the 'Update material plan' parameter. The normal setting is to always have this parameter selected.

'Representative price' - displays how the price was specified: (1) manually or (2) from an agreement. The representative price code can also be set to zero if, for example, an item is purchased at an abnormal price. This means that the price should not have an effect on the history analysis. It also determines whether the given price should update the price in the item/supplier file.

'Part of order total discount' - determines whether the order line should be included in the total for the entire purchase order, which is the basis for the order total discount.

- (PPS201/G)
The G panel is for information purposes and includes the confirmed purchase order details.
- (PPS201/U)
The U panel displays the user-defined fields. The settings for these fields are defined in 'User-Defined Fields. Open' (CMS082).

Summary for the complete PO

The (PPS200/H) panel is a summary picture of the complete order.

- 'Total order discount' - If a total order discount exists, this will be calculated and displayed in the panel. You can adjust the total order discount.
- You can also specify a total order discount instead of the suggested percentage discount. The total order cost, net order value minus order discount, can also be adjusted.
- F14='Order total discounts' and F15='Charge limits', display the different limits at which discounts and charges are activated. This can be used to see whether a greater purchase quantity will give a better price due to the charge limits.

Charges can be divided into these categories:

- Service charges
- Freight charges
- Minimum order value
- Minimum order line value
- If a minimum limit value exists and is not reached, a warning message will be displayed (when leaving this screen) that the value is not exceeded. This function can be activated on (PPS095/H), parameter 330.

Print PO documents and release PO

A purchase order can be released automatically or manually. A purchase order is released when the purchase order document is printed (status '20 - Document printed').

- If a purchase order automatically should be raised to status '20 - Document printed', you must specify these settings:
 - 'Planning Policy. Open' (MMS037), parameter 005='Default status PO' must be set to status '15 - Ready for printout'. The purchase order is immediately ready for printing.
 - (PPS095), parameter '710=Automatic printouts of PO documents', you must select the check box if you want the purchase order to be automatically released.
- If a purchase order should be raised manually, follow these steps:
 - 1 On the (PPS200/B) panel, select the function key F14='Print documents'. 'Purchase Order. Print Documents' (PPS600) is started.
You can also start (PPS600) from the menu tree.
 - 2 Define some settings by pressing F13 to display the P panel.
The permanent layout of the document is controlled by parameter '030=Document variant – PO' in (PPS095). If that field is left blank, a standard document is printed.

- 3 Select the E panel as the opening panel and adjust the date format.
The panel sequence cannot be changed. It must be set to EF.
- 4 Define the field selection, cursor position, and whether From/To values should be required. Press Enter.
In the field selection, decide which field headings and field contents to display and whether editing is allowed.
- 5 The E panel is now displayed. Orders can be selected for printing by the PO number range fields or by specific order numbers by using the open fields at the bottom of the screen.
The status on the purchase order must be at least 15 to be able to print out the document. After printing, the status will be 20.

Display PO

'Purchase Order. Open' (PPS200) can be used to follow up existing orders, for example, orders that have been created automatically or released planned purchase orders.

Information about order lines can be accessed from 'Purchase Order. Display Lines' (PPS220).

(PPS220) has many different inquiries, and you can make your own information views. See .

Parameters to set

Program ID/ Panel	Field	The field indicates ...
(PPS200/P)	Panel sequence	<p>...which panel sequence is valid when creating a new order header. These are the panels:</p> <p>E = Delivery conditions F = Agent, payment, and currency terms G = Addresses I = Reference Details U = User-defined fields 1 = Order lines (PPS201) 2 = Payment table (PPS203) 3 = Activity list (PPS205) 4 = Revision (CRS340) 5 = Charges (PPS215) 8 = Reconcile received/not invoiced (APS370) H = Summary panel with order totals (PPS200)</p>

Program ID/ Panel	Field	The field indicates ...
(PPS200/P)	Repair/subcontract	...whether repair and subcontract order fields should be displayed on the purchase order panels. To display these fields, the ordertype category must be 10, 60, 65, or 70. Recommendation: Do not select this check box if you do not use repair or subcontract orders.

Create and Release Planned Purchase Order

This document describes how to work with planned purchase orders and how to release them to purchase orders.

Outcome

These topics are described:

- Work with planned purchase order
- Manually create planned purchase order
- Release planned purchase order
- Print planned purchase order
- Display planned purchase order in material plan.

Uses

After a planned purchase order is released, a purchase order is created with the values from the proposal.

How the system is affected

Planned purchase orders are stored in the MPOPLP table.

Before you start

Basic settings for the purchase flow must be specified according to [Basic Settings for the Purchase Flow](#) on page 49.

Follow these steps

Work with planned purchase order

- 1 Start 'Planned Purchase Order. Open' (PPS170/B).
 - Panel sequence

E = Delivery date, quantity, price etc.

F = Delivery terms, manufacturer etc.

G = Other information, for example, a representative price

- View, sorting order, and sorting options

The views, sorting options, and sorting orders are user defined in order to get a good presentation of the proposals. There are some predefined sorting options such as options 10, 20, 30, 40, and 50 which are created automatically using the existing logical files. These sorting options are connected to sorting orders 01, 20, 30, 40, and 50.

By working with user-defined sorting options, the sorting orders can aggregate information on flexible levels. For example, you can aggregate all the planned purchase orders to a special supplier and display this only on one line. How to create user defined information view is described in:

- Status – planned order

A purchase order proposal can, for example, be created from MRP and a purchase requisition as described earlier. The status of the planned PO will be 10 or more.

If we have failed to set some data that the system needs (example: purchase price), the order line will also show up here even if the system is set to create a purchase order immediately. If this is the case, the line will have status 00 and a warning message.

- Options

6='Print'. Starts 'Output. Select Media' (MNS212).

11='Release line - Release the planed PO'. The status is raised to 60='Released to create PO'. An auto job converts all released planned order lines to purchase orders. This can also be done manually by pressing F14='Create PO'.

12='Release supplier'. All planned PO for this selected supplier will be released.

14='Item/Warehouse'. Starts 'On hand. Display Summarized per Item/Whs' (MMS200/V).

15='Material plan'. Starts 'Material Plan. Open' (MMS080).

16='PO'. Starts 'Purchase Order. Open' (PPS200).

17='Purchase statistics'. Starts 'Purchase Statistics. Display' (PPS450).

18='Suppliers'. Starts 'Supplier. Open' (CRS620).

19='Close to orders'. Gives information about items close to their reorder point. Starts 'Availability. Display Items close to RoP' (MMS215).

20='Subcontract select'. Is used for procurement subcontracting. You can change operations and material in the subcontracting. Starts 'Planned PO. Select Subcontracting' (PPS177).

21='Charges'. Starts 'Planend PO. Connect Charges' (PPS172).

22='Attributes values'. Starts 'Attribute Value. Connect to' (ATS101).

30='Calculate sales prices'

31='Simulate sales price'

32='CO line'

33='Milestone chain'. Starts 'Milestone Chain. Open' (CRS096).

39='Pre-allocation'. Starts 'Pre-allocation. Performed Detailed' (MWS121).

40='DO' Starts 'DO/RO. Open' (MMS100).

41='Aggregated lines'

- 2 Open the (PPS171/E) panel. Many of the fields on this panel are defaulted from the supplier, item or the supplier/item file and can be changed manually.

Origin (Generation reference)

The Origin field indicates where the planned order is generated from. For example, 23 mean that the proposal is generated from a normal customer order.

Our reference number

If a valid agreement exists on the supplier, this agreement number will be displayed in this field together with code 1, referring to the agreement number.

Warning message

If something is wrong or missing on the planned order, a warning message is displayed. The field help (F1) gives information about the warning codes.

For example, A means that the supplier is missing in the supplier file. A warning message with a letter indicates that this error has to be corrected before proceeding.

After correction, F16='Check errors' can be used and the warning message field will be updated.

Purchase order number

A purchase order number can be generated for the planned order at this level. Click F20='Generate PO number' and a purchase order number will be displayed behind the order proposal number. When the planned order is released, the created purchase order will use this number as the purchase order number.

Planning policy

The planning policy is default in 'Item. Connect Warehouse' (MMS002).

Purchase organization

A purchase organization must be specified, if the use of purchase organization for planning is activated on 'Settings – Purchasing. Open' (CRS780). If the setting is not activated on (CRS780/H), the field is not visible. If the selected purchase organization has a 'buying facility' on 'Purchase Organization. Open' (PPS099/E), this facility is automatically assigned to the purchase order proposal.

- 3 Open the (PPS171/F) panel. Many of the fields in this panel are defaulted from the supplier, item or the supplier/item file. The user can change the proposed values.

Signature

For control reasons, a signature might be needed to release the planned purchase order. This is controlled by the authorization check parameter in 'Purchase Order Type. Open' (PPS095).

Requisition by

This field contains information on which user ordered or required the planned purchase order line. By clicking F9='Responsible info' more information about this user is presented (PPS171/H). This information might be useful to the planner or buyer.

Reference order number

The field indicates a relationship between processes or between processes and superior orders. The reference order number is always related to a reference order category.

For example, a purchase order line can be related to a customer order number indicating the customer order which led to a direct purchase. Similarly, a purchase order line can be related to a project number or manufacturing order.

Delivery terms, Payment terms, Goods rec method, etc.

The terms specified on this panel such as payment terms, delivery terms, and so on will be copied over to the purchase order after the release.

- 4 Open the (PPS171/G) panel. Some of the fields in this panel are defaulted from the supplier, item or the supplier/item file. The user can change the proposed values.

Update material plan

This field indicates whether the order proposal will be shown in 'Material Plan. Open' (MMS080). The parameter is defaulted from 'Purchase Order type. Open' (PPS095/F). Items with no inventory accounting are always defaulted to 0.

Manually create planned purchase order

- 1 Start 'Planned Purchase Order. Open' (PPS170/A).

A planned purchase order can be registered manually by using the A panel and specifying the warehouse and item number.

Fields from 'Item. Open' (MMS001), 'Supplier. Connect Item' (PPS040), and the Supplier files (CRS620-CRS624) will be defaulted on the E, F, and G panels.

Release planned purchase order

- 1 To release a planned purchase order, all warning messages for errors or stops must be handled. After correction, F16 on the E panel can be used and the warning message field will then be updated.

- 2 Automatically release planned PO to PO

If a planned purchase order should automatically be released to a purchase order, you must specify these settings:

- 'Planning Policy. Open' (MMS037), parameter '022 Default status - planned orders AM = A1' (release and reschedule in the order). If planned orders with action message A1 should be released automatically, you must set this parameter to 60='Released order'.
- (MMS037), parameter '025 Default status - planned orders when AM=A2' (release order). If planned orders with action message A2 should be released automatically, you must set this parameter to 60='Order released'.
- 'Item. Connect Warehouse' (MMS002/E), the 'Planning policy' field. You must connect a planning policy to the item/warehouse with the settings above (60='Order released').

- 3 Manually release one planned PO to one PO

Select the planned purchase order to be released and press option 11='Release Line'.

- 4 When you exit (PPS170) by clicking F3 or Close, 'Purchase Order. Create from Planned' (PPS913) will open. Here, you must specify the fields and press Enter to create a purchase order from the planned purchase order.

- 5 Manually release all planned POs, belonging to one supplier, to one PO

Select one planned purchase order for the supplier and then select option 12='Release Supplier'.

- 6 When you exit (PPS170) by clicking F3 or Close, (PPS913) will open. Here, you must specify the fields and press Enter to create a PO from the planned PO.
- 7 Manually release a number of planned POs, belonging to one supplier, to one PO
Select the planned purchase orders to be released for the supplier and press option 11='Release Line'.
The 'Co-Sorting Identity Order Proposal' Field
Use this field if you want to separate planned POs for one supplier. For example, if drawings should be attached to a certain planned PO line, you want this to be a separate PO for the supplier.
- 8 Specify a code (example: AA) for the planned POs that should be created as separate POs for this supplier.
Select option 11, and they will be released as separate POs.
If you select option 12, they will be released as separate POs and the rest of the planned POs for this supplier will be released as one PO.
When you create purchase inquiry, this field is used in the opposite way. Select all planned purchase inquiries to be released to one purchase inquiry. See documentation about Purchase Inquiry.
- 9 When you exit (PPS170) by clicking F3 or Close, (PPS913) will open. Here, you must specify the fields and press Enter to create a PO from the planned PO.
 - You can consolidate the release of planned purchase orders to one or more purchase orders. See the document Purchase Order Consolidation Group for further information.

Print planned purchase order

- 1 The planned purchase order is printed by using option 6='Print' from 'Planned Purchase Order. Open' (PPS170/B) or you can start 'Planned Purchase Order. Print' (PPS590) and print out from there.

Display planned PO in material plan

- 1 Start 'Material Plan. Open' (MMS080/B). Select the planned purchase orders to be displayed by specifying 250 in the 'Order category' field. 25 means purchase order and 0 means planned order.
Both the planned purchase order number and the supplier number are also displayed on the panel.

Parameters to set

Program ID/Panel	Field	The field indicates ...
(CRS165/B9)	Number series type	...a number series type. For the planned purchase order, use number series 36.
(MMS037/E)	005 Default status PO	<p>...the default purchase order status records should be assigned as a planned order.</p> <p>The valid alternatives are:10='Preliminary' - The purchase order should be completed before being printed.15='Ready for printout' - The purchase order is immediately ready for printing.</p> <p>The purchase order will be assigned the above status if is not changed in (PPS170).</p>

Program ID/Panel	Field	The field indicates ...
(MMS037/E)	022 Default status - planned orders AM = A1	<p>...the status to be assigned to automatically created planned orders with AM=A1.</p> <p>If planned orders with action message A1 should be released automatically, you must set this parameter to 60='Released order'.</p>
(MMS037/E)	025 Default status - planned orders AM = A2	<p>...the status to be assigned to automatically created planned orders with AM=A2.</p> <p>If the status value is set to 60, a purchase order will be created directly from the planned purchase order.</p> <p>These status levels are available:</p> <ul style="list-style-type: none"> 10='Planned order' 20='Firm planned order' 30='Firm planned order' 40='Firm planned order' 50='Firm planned order' 60='Released order' <p>If planned orders with action message A2 should be released automatically, you must set this parameter to 60='Released order'.</p>
(MMS037/H)	300 Amount limit to release planned orders	<p>the amount limit for automatically created purchase orders.</p> <p>If the order proposal line exceeds this amount, it will remain a proposal with status 05. Otherwise, a purchase order will be created automatically.</p>
(PPS095/G)	200 Should PO-proposal get a warning if std-price=0	<p>... whether a planned purchase order should get a warning message 98 if standard price equals 0.</p> <p>This is important when the standard price is used for creation of the financial transactions in the goods receiving flow, with the condition that the inventory accounting method for the item is 1 (standard cost).</p>
	340 Multiple warehouses per PO	<p>... whether you can enter purchase order lines with different warehouses for the same purchase order.</p> <p>If alternative 1='Yes' is entered, order type parameter 341 should also be set to 1.</p>
	341 Multiple delivery addresses per PO	<p>... whether you can use lines that represent different delivery addresses for the same purchase order.</p>

Program ID/Panel	Field	The field indicates ...
	350 Consolidation fence - PO	<p>... the number of calendar days that controls time allowances for the release of a planned purchase order.</p> <p>The number of days between the delivery dates of different order lines must be lower than the number of days entered here.</p> <p>This enables you to split purchase orders that contain lines where the delivery dates differ a lot in time. If the field is blank, no control is performed regarding the delivery dates.</p>
	370 Warning - delay date within lead time	<p>... if a warning should be given on a planned purchase order if the requested delivery time is earlier than the delivery date according to the lead time.</p>

Create and Split Lots in the Purchasing Flow

This instruction explains how to create and split lots in the purchasing flow.

Outcome

A lot number or an item with a serial number is created during goods receiving for purchased items.

A received quantity is split into the created lots.

This process is used to handle lots and serial numbers in the purchasing flow.

An item with a lot number is stored in the MILOMA file. Transaction history about a lot is stored in the MITTRA table.

Before you start

- The conditions in Lot/Serial Number Settings must be fulfilled.
- A purchase order containing items that are lot handled is created.

Follow These Steps

- 1 Open 'Purchase Order . Receive' (PPS300) and fill in the Item and Line fields. Open the (PPS300/E) panel.
 A lot number is either created automatically or has to be created manually on the (MMS300/E) panel.
 This depends on these settings:
 The **Lot numbering method** field on the 'Item. Open' (MMS001/E) panel
 The 080 parameter on the 'Goods Receiving Method. Open' (PPS345/E) panel.
- 2 Fill in the Quantity and Location fields if there is only one lot or serial number connected to the received item. The goods receiving for this order line is finished.

- 3 To use serial number handling or lot splitting, start 'Purchase Order. Create Item Lots' (PPS315) by pressing F17 on the (PPS300/E) panel.
- 4 On the (PPS315/B) panel, fill in the **No. of lots** and **Manufacturing date** fields (important for calculating expiration date) and press Enter. The same number of lines as there are lots will be opened.
- 5 If the lot number method on the (MMS001/E) panel is set to 1=Manually entered, then enter the lots/serial numbers and information about the lots and serial numbers here. Otherwise, the lot numbers are created and displayed automatically.
- 6 Confirm the updates by pressing F14 on the (PPS315/B) panel. Press F3 if you get a warning Creation of lots performed -continue? The (PPS300/E) panel is redisplayed.
- 7 To update the quantities for the created lots or serial numbers, press F14 on the (PPS300/E) panel. This starts 'Purchase Order. Split Lines' (PPS302/B).
- 8 Split the received transaction quantity into the created lots. The sum of the split quantities must equal the transaction quantity.
Note: If the item is serialized, then only one balance identity for each lot/serial number is allowed.
- 9 Confirm by pressing F14. The goods are received and separated into lots. The (PPS300/B) panel is displayed.

Custom Fields

This procedure should be used when creating user defined information or custom fields. Custom fields can be connected to items, supplier, purchase agreement headers and lines. The custom fields can be used to attach information to the different objects, but they can also be used in the purchase costing model and in formulas. In equipment, custom fields are called Technical Datasheet (TDS) fields. See process for information on how custom fields are used in processes related to equipment.

Before you start

- The item that will be connected to the custom fields is defined in 'Item. Open' (MMS001).
- The supplier that will be connected to the custom fields is defined in 'Supplier. Define Purchase & Financial' (CRS624).

Follow these steps

Follow the steps below to set up custom fields:

- 1 Create the fields that will be used to hold the user defined information. The information fields can be alphanumeric, numeric or a date. The type of content is left to the user to decide. The fields are defined in 'Custom Field. Open' (CMS470).
 - a In panel B or A enter the code for the custom field (Seed type, starch content etc).
 - b Select option 'Create' and (CMS470/E) will be displayed.
 - c The description of the custom field must be entered.
 - d The name will automatically be defaulted from the description (and truncated if necessary). Note, rather than the user entering data manually the system can display data based on an existing M3

field. In this case enter the field name with a forward slash followed by the file name. For example, MMITNO/MITMAS00 will display the item number of the record in question, this field is stored in the table MITMAS00 (00 must always be at the end of the file name). If used the heading should manually be changed.

- e The heading will automatically be defaulted from the description. Dot leaders will be automatically inserted at the end of the heading if space permits. The heading is used in many panels as the field title.
 - f The Field Type must be selected. The valid options are A (alphanumeric), N (Numeric) and D (Date).
 - g Enter the Field Length. This is not required for date fields. The maximum length for an alphanumeric field is 40 and 15 for numeric.
 - h The No. Decimal Places field should be filled in only for numeric fields. The default value is 0, and the maximum value is 6.
 - i Enter the meter. This is the unit that the field is being measured in (if required). Meters are defined in 'Meter. Open' (MMS051). Meters are primarily used for Technical Datasheets. Press Enter to save.
- 2 Create user defined field groups, used to create named groups of information fields that can later be connected to objects. The groups are defined in 'Custom Field Group. Open' (CMS471).
- a In panel B or A enter the code of the custom field group (Grain information, Nutrition etc).
 - b Select option 'Create' and the E screen will be displayed.
 - c The description of the custom field group must be entered.
 - d The name will automatically be defaulted from the description (and truncated if necessary). Press Enter to save.
- 3 Link custom fields to a field group. This involves linking, for example, nutrition information into a group that can be used for a number of similar food products. These are defined in 'Field Group. Connect Field' (CMS472).
- a In (CMS471), highlight the custom field group that you want to connect custom fields to and select option 11 'Custom fields' from the Related Options to go to (CMS472).
 - b In panel B or A enter a sequence number for the sequence that the custom fields in this group should be displayed.
 - c Select option 'Create' to go to panel E where the custom fields can be connected to the group.
- 4 Link custom field groups to items. The custom field groups are linked to an item through its' item group. Use option 11 in 'Item Group. Open' (CRS025) to enter program 'Connect Custom Field Group. Open' (CMS473). Enter the sequence number that the fields in the group should appear in when maintained or displayed. Select option create to go to CMS473/E where you can enter the details of the custom field group to connect to the item group.
- 5 Link custom field groups to suppliers. The custom field groups are linked to a supplier through its supplier group. Use option 11 in 'Supplier Group. Open' (CRS150) to enter program (CMS473). Enter the sequence number that the fields in the group should appear in when maintained. Select option create to go to (CMS473/E) where you can enter the custom field group to connect to the supplier group.
- 6 Link custom fields to supplier agreement header. The custom fields cannot be directly connected to agreement header. When an agreement is created for a supplier containing custom fields, the fields are copied to the agreement header and can be maintained for the agreement header using option 16 in 'Purchase Agreement. Open' (PPS100).

- 7 Link custom fields to supplier agreement lines. The custom fields cannot be directly connected to agreement lines. When an agreement line is created for an item containing custom fields, the fields are copied to the agreement line and can be maintained for the agreement line using option 13 in 'Purchase Agreement. Open Lines' (PPS101).
- 8 Link custom fields to supplier address. Custom fields can be linked to the supplier address where the address type is 04 (origin address). From supplier listing on 'Supplier. Open' (CRS620), select related option 11 addresses. Supplier. Connect Address (CRS622) is then displayed. Select related option 11, custom fields against the required address. Custom Field. Update (CMS474) is then displayed. Enter the required user defined information.

Item / Supplier

This term acts as a key to the basic information about an item that has been connected to a certain supplier.

This information is used for inquiries, processing agreements and purchase orders. However, subcontractor IDs and repair IDs retrieve this information in the same way as an item or service.

The key contains a combination of this information:

- Item number
- Supplier number
- Service process
- Service

The terms service and service process are only used for subcontracting orders and repair orders. For subcontracting the structure type for the bill of material must be specified as service process and the operation number as service.

Combinations of item/supplier are maintained in 'Supplier. Connect Item' (PPS040).

M3 Fashion Matrix Plug-ins for Purchase Order

M3 Fashion Matrix plug-ins for purchase order provide an improved interface for purchase order processing in M3 BE for Fashion-related orders. It enables the user to create and manage orders in matrix form and attach images to be shown in the product through Infor Document Management (IDM).

Adding a transaction to MDBREADMI

This process is required for M3 Fashion Matrix plug-ins to work properly.

- 1 Using the M3 BE programs, specify:
 - 'MI Repository. Open' (MRS001)
 - 'MI Transaction. Open' (MRS002)
 - 'MI Transaction. Layout' (MRS003)

- 2 Add this transaction: MDBREADMI.LstMITMAH10.

Input: STYN (Mandatory), ITNO (Not mandatory)

Output: ITNO, STYN, SQNX, FTIX, OPTX, TX15, SQNY, FTIY, OPTY, TY15, SQNZ, FTIZ, OPTZ, TZ15, SQFX, SQFY, SQFZ, SECH

Adding script to open the matrix

This procedure is required to initialize the button that will open M3 Fashion Matrix.

- 1 Open 'Purchase Order. Open' (PPS200)
- 2 Click Tools > Personalize > Scripts.
- 3 Create a new script by entering 'ViewMatrix' in the field 'Script' and click Add. Leave the field 'Argument' blank.

Starting M3 Fashion Matrix

Note: Since a line must be selected in (PPS200), a purchase order head must be created outside M3 Fashion Matrix. The purchase orders also must contain at least one purchase order line so that M3 Fashion Matrix can be opened properly. A user can then add additional lines in 'Purchase Order. Open Line' (PPS201) and in M3 Fashion Matrix.

- 1 After M3 Fashion Matrix is installed, the View matrix option is available on 'Purchase Order. Open' (PPS200/B).
- 2 Select a purchase order in the sub file, then click View matrix to display the selected purchase order in M3 Fashion Matrix.
- 3 From M3 Fashion Matrix, navigate back to (PPS200) by clicking Hide matrix.

Information from the purchase order header

Information from the purchase order header is displayed in the upper section of M3 Fashion Matrix.

- Purchase order number
- Supplier
- Purchase order type
- Season or Project number
- Delivery window or Project element
- Date type

Handling style item – Visibility

On the left side of the middle section in M3 Fashion Matrix, there is a list that displays every combination of style number, delivery date, and warehouse in a purchase order. An existing confirmed delivery date is displayed in the lower section of M3 Fashion Matrix with the detailed information.

When selecting a line in this list, a matrix displays the Stock Keeping Units or SKUs with their corresponding style numbers, transaction dates, and warehouses. The dimensions X and Y are displayed in the matrix, while the Z-option can be updated manually. The displayed information is retrieved from the style settings through

MI-transactions. Each matrix element represents an SKU of that specific style with a combination of an X-option and a Y-option.

The matrix also displays line total, column total, and the grand total quantities for the SKUs in the matrix. To only display the lines in the matrix that contain quantity, click Collapse. To expand the matrix, click Expand.

To display detailed information such as status, prices, and availability in the lower section of M3 Fashion Matrix, select an SKU in the matrix. You can also use IDM to connect an image to a specific item based on style. The image is displayed when the item is highlighted in M3 Fashion Matrix.

Creating new purchase order lines

A user can create new order lines using M3 Fashion Matrix plug-ins. To load the matrix, select a style number line in the list. The user can then update the quantity of an SKU, quantities in a current purchase order line in M3 BE, or add a new purchase order line in M3 BE.

To add a new purchase order line in M3 BE, specify a quantity to an SKU where the current quantity is zero. To update the quantity, select the matrix element and click Enter. The changed quantities will be marked in red. To generate the changes in the matrix, click Update matrix. This updates purchase order lines or generates new purchase order lines through MI-transactions.

Placing an order for new styles

A user can also place an order for new styles that are not in the purchase order. Click New style to open a new window and select a specific style number, delivery date, and warehouse. Click Add to create a new line in the Style list. Select the line to display a matrix with zero quantities in all matrix elements. Specify the required quantities as necessary.

Handling normal items

Normal items are discrete items that can be added to a purchase order in M3 Fashion Matrix. The order line that contains the normal item is displayed as a line in the list. If selected, detailed information about the normal item, such as status, prices, and availability are displayed in the lower section of M3 Fashion Matrix.

Adding normal items to a purchase order

- 1 In M3 Fashion Matrix, click New item to open a new window that shows the item number, quantity, transaction date, and warehouse. Specify the quantities for these fields.
- 2 Click Add to create a new order line through MI-transactions.

Updating normal item quantities in a purchase order

- 1 In M3 Fashion Matrix, select an order line, then specify the quantities for the normal item.
- 2 Click Update line to update the order quantity and delivery date through MI-transactions.

Handling delivery dates

Handling of dates in M3 Fashion Matrix is determined by the Date type or DT4T parameter on 'Supplier. Define Purchase Financial' (CRS624/E). This parameter governs how transport lead times are calculated. Transport lead times can be set up in 'Supplier. Connect Trans Lead Times' (PPS010).

The field value of Date type is displayed in the upper section of M3 Fashion Matrix. If the value of Date type is 1, 3, or 4: The requested delivery date or DWDT key is used in the list on the left side of the middle section in M3 Fashion Matrix. The requested delivery date is sent to M3 BE when creating new order lines, or changing existing order lines from M3 Fashion Matrix. The planning date is then adjusted based on the transport lead time.

If the value of Date type is 2: The planning date or PLDT is used as key in the list on the left side of the middle section in M3 Fashion Matrix. The planning date is sent to M3 BE when creating new order lines, or changing existing order lines from M3 Fashion Matrix. The requested delivery date is then adjusted based on the transport lead time.

Season handling

The item creation process in M3 BE lets a user assign a created SKU to a certain season. The logic for handling this in the customer order processing is defined by the parameter 185 - Season control on 'Purchase Order Type. Open' (PPS095/G) in M3 BE. This parameter specifies which items can be used in purchase order lines based on the season selected on the purchase order header.

Purchase order processes that involve season handling are the same for M3 Fashion Matrix and M3 BE. M3 Fashion Matrix does not allow users to specify erroneous SKUs on a purchase order.

Infor Document Management

You can use Infor Document Management to upload and connect images to the Fashion Matrix.

- 1 To start Infor Document Management in M3 H5/Infor Mingle, click the Application Menu icon and select Document Management.
- 2 Select Add Document, then select M3 Fashion from the list.
- 3 Drag the picture to Drop File Here. Optionally, you can click Drop File Here to upload the image through a standard file dialog.
Note: The resolution of uploaded images affects Infor Document Management performance. As image attribute, you need to specify the corresponding style to connect to the image. Even though the document type has color as an input field, M3 Fashion Matrix plug-ins browse the IDM based on only the style.
- 4 Click Save, then click Check in to upload the image.

Manage Purchase Order Claims

This document explains how you work with purchase order (PO) claims.

When goods are rejected in the quality inspection activity, a claim for the supplier is often created. Usually, either a replacement delivery or a credit note from the supplier is requested.

Outcome

Depending on the workflow, this outcome is expected:

- A claim is created manually or automatically in 'Return To Supplier. Open' (PPS390).
- A claim is approved.
- A claim note is printed.
- A requisition order is created for issuing the rejected goods.
- A picking list is released and the rejected goods are picked, reported and sent to the supplier.

The workflow differs depending on whether a replacement delivery or a credit note is requested.

If a replacement delivery is requested, a subnumber on the original purchase order line is created automatically, making it possible to receive the replacement delivery on the purchase order. The system can also remove the rejected goods from the rejected goods location automatically. This is done by using a requisition order. If a replacement delivery is requested, financial transactions are created in the issue of material.

This will not happen if a credit note is requested from the supplier.

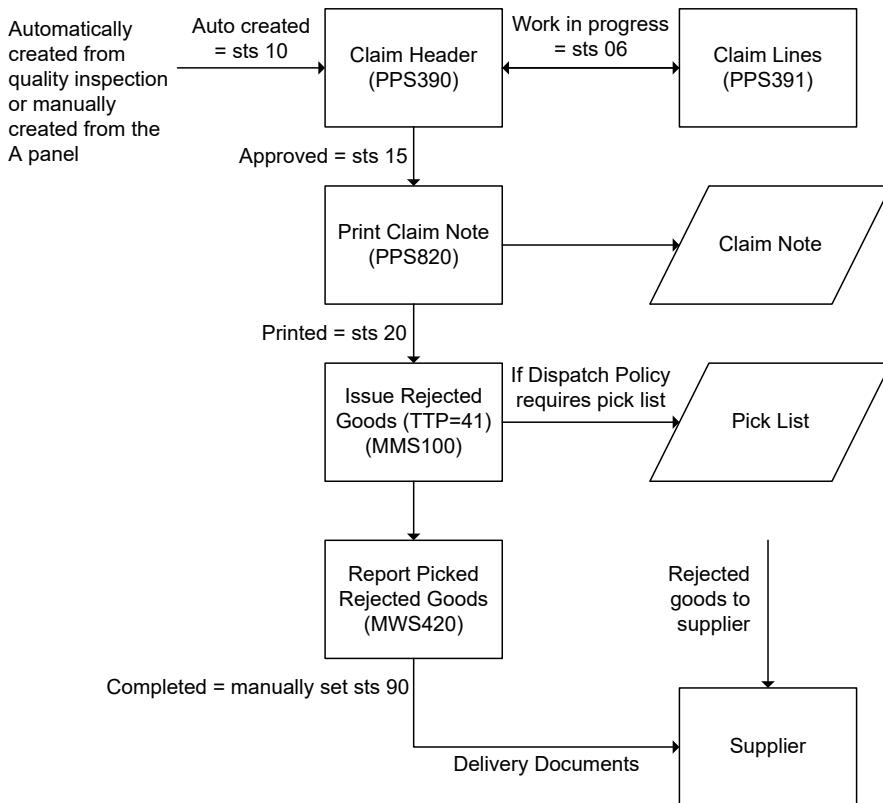
As part of this process, these tables are updated:

MPCLAH	Purchase Order Claim Header
MPCLAL	Purchase Order Claim Line

Before you start

- Settings must be specified according to [Basic Settings for the Purchase Flow](#) on page 49.
- Settings must be specified according to [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313.
- The goods must be reported as received (status is set to 50), see [Receive Purchased Goods](#) on page 297.

Follow these steps



Create claim manually

- 1 Start (PPS390/A).
- 2 The claim must be connected to a supplier who the claim is created against, and to the warehouse and facility that the goods are returned from.
- 3 Specifying a purchase order number is optional.
 - If a purchase order number is specified, it will be used for information purposes only and no data will be collected from the purchase order.
 - If a purchase order number is specified, the specified facility should be the facility of the purchase order head.
- 4 The panel sequence will be EF1 regardless of what is defined.
- 5 Select Create.

Create claim automatically

- 1 Depending on the settings in 'Settings - Purchasing' (CRS780), the **QI Result - auto claim** field, a claim will be created automatically if the QI result code is:
 - 2 = Approved with remarks
 - 3 = Partially rejected

4 = Rejected.

The QI result code is specified in 'Purchase Order. Inspect Goods' (PPS310) on the E panel.

2 The automatically created claim will have status 10='Preliminary'.

Status 10 is the normal status for automatically added claim errands when the quality inspection result is reported.

3 When the claim is automatically created from the quality inspection, the goods are placed in a location with status 3='Rejected'.

This location is defined in (CRS780).

4 Start (PPS390/B).

- The claim officer is the buyer for the specific order. It can be changed on the E panel.
- The claim reference is the person who reported the quality inspection. It can be changed on the E panel. Use view 2 on the B panel to sort on the claim reference.
- The search key is defined (ten-characters) when a new supplier is specified in (CRS620).
- The claim number is connected to the specific purchase order number and supplier.
- The claim status will be set to 10 (preliminary). After the claim is approved, the status is manually raised to 15, making it possible to print the claim note.

5 Open the E panel.

- Status. If the claim was created automatically from the quality inspection, you must now change the status from 05 to 06='Work with claim is active', because then, when you are finished with the claim, the status on the claim will be set to 15='Approved'.

You may select one of four actions to be taken. The selected action will be written on the claim note.

These alternatives are valid:

- Replacement delivery. A new delivery will be requested from the supplier. If this action is chosen, a new purchase order line is created as a subnumber to the original purchase order line.
- Supplementary delivery. A supplement for the order will be requested from the supplier.
- Credit to issue. A credit note for payment for the order will be requested from the supplier.
- Cost to repair. Repair costs will be requested from the supplier.

Supplementary details can be specified in the text block (user-defined button) and then printed on the claim note.

- Replacement delivery date. Proposed if a lead time for a replacement delivery is specified in the item/supplier table (PPS040).
- Claim notes. The text specified here will be printed on the claim note under the heading. The text may, for example, be a message to the supplier indicating what action you expect to be taken.
- Receipt date. The date when the goods for which a complaint was made were received.
- Transaction identity. Refers to the requisition and distribution order type that will be used to create an issue of rejected material (transaction type 41='Requisition order issue'). This order type is proposed from (CRS780). The issue will take place after the claim document is printed. The setup on the dispatch policy (MWS010) determines whether a picking list report is necessary or whether the withdrawal will be made immediately.
- Update material plan. Indicates if this pick out should be displayed in (update) the material plan.
- Media profile. Indicates how to send the claim information to the supplier.

6 Open the F panel. The F panel is used for addresses. These addresses are defaulted from 'Supplier.

Connect Address' (CRS622). These addresses can be changed by selecting the **Change/Add address** field.

- Supplier's postal address - where the claim note should be sent.
- Supplier's ship-via address - the address the transport goes through before it arrives at the final address.
- Supplier's receiving address - where to send the rejected goods.

Work with claim lines

- 1 Open 'Return To Supplier. Open Lines' (PPS391). When automatic creation of claims is used, the rejected items are displayed on the B panel.
- 2 Open the E panel.
 - The supplier item number is the item number used by the supplier for identifying an item.
 - The reject reason indicates the reason for rejection. It is defined in 'Reject Reason. Open' (CRS090). The reason code was specified in the quality inspection process.
 - The quality cost is the cost for the quality inspection performed. It is used for informational purposes only.
 - Separation indicates if this line will be moved to a new claim errand number. The field can be used to separate two claim lines that should be processed differently. For example, perhaps a supplier should credit one line and will send a replacement shipment for the other line.
 - F6 Text. The text specified during the quality inspection is displayed and can be changed in the text block. This text is displayed as a line text on the claim note.

Print claim documents

- 1 To print the claim note, select function key F14='Print' on the (PPS390/B) panel.
The claim must be in status 15='Approved'. The status is set manually after a course of action has been decided for the claim.
- 2 'Claim. Print Document' (PPS820) is started.
Printouts can be made for a certain claim officer, for a special supplier or by specifying claim note numbers. After the claim note is printed, the status on the claim note will be raised to 20.
- 3 If you request a replacement delivery, the printout will also activate a requisition order for issuing of the rejected goods. The goods can be issued with or without a picking list depending on the settings on the issue's dispatch policy (MWS010). If the picking list must be reported, this is done in 'Picking List. Report' (MWS420).
- 4 For information about how to manage a requisition order issue, see .

Display transactions

These options are available to display transactions connected to a claim:

- **Display balance identity**
Start 'Balance Identity. Open Toolbox' (MWS068). Display the on hand balances on the locations for rejected items. You must select a view which includes the MLSTAS (status balance ID) field so you can select 3=Rejected. For more information about view, sorting orders, and sorting options, see .
- **Display transactions for replacement deliveries**
As stated earlier, a subnumber on the original purchase order line is created if a replacement delivery is requested from the supplier. This makes it possible to goods receive the replacement delivery.
Start 'Purchase Order. Open' (PPS200) and open the lines for the purchase order (PPS201/B). The **Purchase order line subnumber** field indicates the number of the subline.

A PO line can have several sublines where, for example, each subline can have different confirmed delivery dates.

Sublines for replacement deliveries from a claim are numbered with sub-numbers in consecutive order from 500.

- **Display stock transaction history**

Start 'Stock Transaction. Display History' (MWS070). See [Display Stock Transaction History \[Instruction\]](#). After the claim document is printed (status 20), the issue transaction will be created either immediately or after the picking list is reported.

Mass Change Aggregated Purchase Order Lines

This procedure is used to aggregate purchase order (PO) lines in 'Purchase Order. Display Lines' (PPS220) and simultaneously change information contained in several purchase order lines in one process.

The aggregated update functionality is accessible through the basic option 'Change' on (PPS220/B). To update many purchase order lines, an aggregated sorting order is required.

These fields can be changed this way:

- Delivery method
- Delivery terms
- External instruction
- Goods receiving method
- Harbor or airport
- Milestone chain
- Packaging
- Planning date
- Priority
- Project element
- Project number
- Purchase price
- Requisition by
- Terms text

Project number and project element mean season and delivery window if the industry is defined as fashion on 'Company. Open' (MNS095/E) and the **311 Project Management** check box on 'Company. Connect Division' (MNS100/J) is not selected.

Limitations

When an update is performed, a batch job is created. The lines are processed one after another, but during this time the lines are locked. When these lines are locked, you cannot validate any of them. If you validate the locked lines, they receive a failed status. You can see the reason for the failed lines by selecting action F17='Display error log' in (PPS220).

Follow These Steps

To change aggregated PO lines in (PPS220), proceed with these steps:

- 1 Start (PPS220/B).
- 2 Choose an aggregated sorting view.
- 3 Select an aggregated line and use the basic option 'Change'. (PPS220/E) is opened.
- 4 On (PPS220/E), you can define a new value for several different fields. For each field, a check box is available which should be selected to update the corresponding field. You can select the check box and leave the corresponding field blank to update the field with a blank value.
- 5 Use action F16='Validate' to simulate the update.
- 6 Information is shown about the number of lines affected and how many of them failed the simulation. Action F17='Display error log' is visible if there are failed order lines, and can be used to access more information about the cause of the failure.
- 7 Use action F14='Update' to update the PO lines contained in the selected aggregated line. This action can also be used without using action F16='Validate' first.

To close aggregated PO lines in (PPS220), proceed with these steps:

- 1 Start (PPS220/B).
- 2 Choose an aggregated sorting view.
- 3 Select an aggregated line and use related option 35='Close Order Line'. (PPS220/D) is opened.
- 4 Use action F16='Validate' to simulate the update.
- 5 Information about the number of lines affected and how many of them failed the simulation is displayed. Action F17='Display error log' is visible if there are failed order lines, and can be used to access more information about the cause of the failure.
- 6 Use action F14='Update' to update the PO lines contained in the selected aggregated line. This action can also be used without using action F16='Validate' first.

To close PO lines on (PPS220/B), proceed with these steps:

- 1 Start (PPS220/B).
- 2 Select a line and use related option 35='Close Order Line'.
- 3 'Purchase Order. Flag Line Complete' (PPS350/E) is opened. The values from the selected order line on (PPS220/B) are displayed. Proceeding from the E panel closes the selected order line.

Note that you cannot close aggregated and subtotal PO lines by using related option 35='Close Order Lines' in (PPS220).

If aggregation is used on (PPS220/B), where the key field used for aggregation is not included in the view, neither related option 35='Close Order Lines' or basic option 'Change' can be used.

Monitor and Follow Up Activities for a Purchase Order

This document explains how you monitor a purchase order and follow up on purchase order activities.

You can monitor a purchase order either at the header level or at the line level.

Outcome

The purchase order activities are monitored and application messages are activated. The purchase order header file (MPHEAD) and the purchase order line file (MPLINE) are updated.

You can monitor the activities of a supplier in terms of purchase order plans and delivery follow-up. This helps the buyer take necessary actions accordingly. For example, the buyer can send reminders to suppliers for delayed deliveries.

Before you start

- A purchase order must be created in 'Purchase Order. Open' (PPS200).
- Basic settings for suppliers and items must be defined. See [Settings for Supplier and Items](#) on page 201.
- The parameters in [Settings for Monitoring and Follow Up Activities for a Purchase Order](#) on page 160 must be set.

Follow these steps

Start (PPS200/A) and enter the purchase order number.

The B panel shows all purchase orders in a list view. Select the order line to monitor.

Select one of these steps depending on the level of monitoring with your purchase order:

- **Monitoring at PO Header Level**
 - 1 On the A panel, select option 13=Monitoring List. 'Purchase Order. Monitor' (PPS205/E) is displayed.
 - 2 On the E panel, the monitoring activity is performed depending on the monitoring date. If the monitoring activity is completed change the 'Monitoring performed' field from 0 to 1. Press Enter to save your changes and redisplay the A panel.
You can view the entire monitoring list in (PPS205/B1).The monitoring list can be viewed either by responsible or supplier or PO number. The monitoring status now changes from 10=Definite to 90=Completed.
- **Monitoring at PO Line Level**
 - 1 On the A panel, select option 11=Lines. 'Purchase Order. Open Lines' (PPS201/B1) is displayed.
 - 2 On the B1 panel, select the order line that you want to monitor and select option 14=PO Monitoring. (PPS205/E) is displayed.
 - 3 On the E panel, the monitoring activity is performed depending on the monitoring date. If the monitoring activity is completed change the 'Monitoring performed' field from 0 to 1. Press Enter to save your changes and redisplay the B1 panel.
Start (PPS205/B1), the monitoring status now changes from 10 = Definite to 90 = Completed.
A monitoring report can be printed from 'Purchase Order. Print Monitoring Report' (PPS650/E).

Follow Up Activities

- 1 Start 'Application Message. Open' (CRS420/B1).
- 2 On the B1 panel, you can see the list of all messages for activated message types. The message types for monitoring are:
 - 501 = Communication monitoring reported error.
 - 501 = Communication monitoring reported error.

Object Control for Purchase Organization

This document explains how to use the purchase organization selection solution to connect purchase organizations to a control object. The purchase organization information is then retrieved and validated on a planned purchase order during automatic or manual creation.

The purchase organization selection solution can be used for overriding the default purchase organization defined for a warehouse in 'Purchase Organization. Connect Warehouse' (PPS199). This is useful, for example, when certain products are purchased locally in a warehouse for which goods are usually centrally procured, or if one division in a company does all procurement activities locally.

The functionality is limited to planned purchase orders with purchase order category 20='Normal' and 70='Subcontracting'.

Outcome

A generic control object table is created with a defined priority for selection of the purchase organization for planned purchase orders.

A generic control table is used to retrieve default purchase organization to a planned purchase order.

These tables are updated:

- CROBJC in 'Generic Object Control Table. Open' (CMS017)
- PPPOS in (PPS198)
- MPOPLP in 'Planned Purchase Order. Open' (PPS170)

Prerequisites

- Use of purchase organization for planning must be activated on 'Settings Purchasing' (CRS780/H) parameter '66 - Use of purchase organization: Price/Planning'.
- Purchase organization of purchase organization type 1='Planning' must exist in 'Purchase organization. Open' (PPS099).
- In 'Field Group. Display Permitted Fields' (CRS109) field group POPSL must be generated.

Follow these steps

Create an object control table

- 1 Start 'Available Object Control Parameters. Open' (CMS016).
- 2 Select related option 11='Object table detailed lines' for 'Purchase Organization Selection. Open' (PPS198).
- 3 On (CMS017/B) specify 'PPS198' in the **'Program'** field and select 'Create'.
- 4 Specify status 20 on the E panel.

Priorities from 0 to 9 in the **'Sequence'** field:

By default, sequence 10 corresponds to priority 1, sequence 20 corresponds to priority 2, and so on, up to sequence 100, which corresponds to priority 10.

- 5 To select a field from the field group, press F4 in one of the fields for the specified priority.
In this example, for priority 1, select fields **'Division'** and **'Item group'** (ITGR).
- 6 Press **Enter** on (CMS017/E).
(PPS198) is started.

Create values for the object control table

- 1 Define values for the fields in each priority on (PPS198/B).
The 'Start value 1, 2, 3, 4 and 5' fields are the first, second, third, fourth, and fifth values to be compared with the content of a control object. You can leave the 'From date' field empty.
In this example, select division (X) for start value 1 and item group (Y) for start value 2, in priority 1.
- 2 Click 'Create' to open panel E.
- 3 On the (PPS198/E) select the purchase organization (A) to be used for the selected combination of objects.
- 4 Repeat step 2 and step 3 for a different set of objects.
- 5 Repeat step 2 and step 3 for different priorities.

Create a planned purchase order

- 1 Start 'Planned Purchase Order. Open' (PPS170/B)
- 2 Select function key F17='Create'.
- 3 Specify the warehouse and item number on (PPS170/A).
In this example, specify warehouse (X) and an item number with item group (Y).
- 4 Press **Enter**.
- 5 On (PPS171/E) the field **'Purchase organization'** is retrieved from the purchase organization selection table (PPS198) based on the objects.
 - In this example, purchase organization (A) is retrieved from priority 1, based on the division of the selected warehouse and the item group of the item.
 - If a purchase organization is not found based on the objects defined in (PPS198), the default purchase organization for the warehouse in (PPS199) is used.
 - If there is no default purchase organization for the warehouse in (PPS199), the **'Purchase organization'** field stays empty.
 - The purchase organization can be manually selected and changed.

Planned Purchase Order

This document describes how to work with planned purchase orders and how to release them to purchase orders in M3.

A planned purchase order is a proposal for a purchase order. The planned orders can be created in different ways in M3 both automatically and manually. The proposed values in the planned orders, for example the quantity, can be changed. After release of a planned purchase order a purchase order is created with the values from the proposal.

Outcome

A planned purchase order is created and is released to a purchase order. Planned purchase orders are stored in the MPOPLP table.

After a planned purchase order is released, a purchase order is created with the values from the proposal.

Before you start

Basic settings for the purchase flow must be specified according to .

Different ways to create a planned purchase order

This section describes the different ways in which a planned purchase order can be created.

- The system can automatically create planned purchase orders during an MRP run.
- A planned purchase order can be created automatically when a customer order is specified. This is called a customer-order-driven purchase order.
- A planned purchase order can be created automatically when a service order is specified.
- A planned purchase order can be created automatically when an item is subcontracted.
- A planned purchase order is created when a requisition order is specified.
- A planned purchase order can be specified manually.

Statuses

Each planned purchase order has a status which indicates its progress in the flow. For example, if the status is 00 then the planned order is stopped due to errors.

The errors can be reviewed through warning messages, which indicate what is missing or wrong in the planned order. If the warning message is a letter, then it is a stop message and the planned order cannot be released until the error is corrected.

If a planned order refers directly to a superior order (such as a direct purchase against a customer order), the planned order status cannot fall below 20.

When the planned order is for a firm planned order, the status is set to 20 at least, except for errors and warnings (status codes 00 and 05 as below).

A manually set status involves setting the status for the planning policy as default release status.

The valid alternatives are:

- 00 = Automatically assigned to indicate database errors or stop as defined in the message code.
- 05 = Automatically assigned to indicate a database warning as defined in the message code.
- 10 = Planned orders and manual status.
- 15 = Planned orders where the item has several suppliers. Automatic rescheduling of quantity not performed.
- 20 = Purchase requisitions/planned work orders and manually defined status.
- 30 = If the planning policy has status 60 (proposal - planned order) and the action is A1, then the status of the planned order is set to 30. Status 30 can also be set manually.
- 40 = Manual status.
- 50 = Manual or automatic status. The amount requires authorization processing.
- 55 = Automatically assigned when inquiries are created.
- 60 = Manual or automatic. Released to create purchase/work order.

Origin (Generation reference)

The Origin (Generation reference) field on the planned purchase order indicates how the planned order was created. For example, a value of 29 in this field means that the planned purchase order was created from a purchase requisition.

The valid alternatives are:

- 10 = Planned manufacturing order
- 18 = Manufacturing order, manually specified
- 20 = Planned purchase order
- 21 = Planned purchase order, generated through manufacturing order
- 22 = Planned purchase order, generated manufacturing order and subcontract order
- 23 = Planned purchase order, generated through customer order, not a direct delivery
- 24 = Planned purchase order, generated through customer order, direct delivery
- 26 = Planned purchase order, generated through maintenance order
- 27 = Planned purchase order, generated through material requisition
- 28 = Manually specified in the planned order routine
- 29 = Manually specified in the purchase requisition routine
- 30 = Planned purchase order, direct purchase
- 33 = Planned purchase order, generated through service order, not a direct delivery
- 34 = Planned purchase order, generated through service order, direct delivery
- 38 = Planned purchase order, generated through project order
- 40 = Planned purchase order, generated through e-Procurement
- 41 = Planned purchase order, generated through Scheduling Workbench
- 50 = Planned distribution order
- 58 = Distribution order, manually specified
- 60 = Planned maintenance order
- 61 = Deferred planned maintenance work order
- 62 = Forecast orders
- 63 = Maintenance work order, from removal
- 64 = Maintenance work order, historical (pre M3)
- 65 = Maintenance work order, from MOS326

- 66 = Maintenance work order, position based which has equipment updated in MOS070
- 67 = Maintenance work order, from condition based maintenance
- 68 = Maintenance work order, manually specified
- 69 = Maintenance work order, from inspection.

Planned Purchase Order Hub

Planned Purchase Order Hub is an M3 Experience Designer application that helps buyers and material planners manage planned purchase orders (PO). It consolidates planning data, supplier alternatives, and inventory insights to support better decision-making and reduce the time spent navigating multiple M3 programs. Users can create, edit, delete, and release planned purchase orders directly from the application, and access the related information when needed. Conditional styling is available in the application, and its integration with H5 enables users to quickly access related actions.

User story

A buyer or a material planner needs a single consolidated application to efficiently manage planned PO, enabling access to planning data, supplier alternatives, and inventory insights all in one place. The application streamlines decision-making and reduces the time spent navigating multiple M3 programs.

M3 Business Engine configuration

These M3 Business Engine (BE) configurations are required for the Planned Purchase Order Hub application to function properly:

- You must have planned PO set up in 'Planned Purchase Order. Open' (PPS170) to display information in the application.
- You must set the agreement type to 1 when creating a planned PO, and set 'Item' (ITNO) as the primary control object in 'Purchase Agreement Selection Field. Open' (CRS746) to display prices in the application.

See specific configuration per component in *Components*

Application authorization

You must have authorization to use the required M3 BE functions and API transactions before accessing and running the M3 Experience Designer application. This table shows the functions and transactions used by the Planned Purchase Order Hub application:

Function or API	Transaction	Information Category	View
LISTMI	ListDataAsCSV	M3_LIST_MPOPLP	M3_01_01
LISTMI	ListDataAsCSV	M3_LIST_MPAGRP	M3_01_01
LISTMI	ListDataAsCSV	M3_LISTMITBAL	M3_02_01
LISTMI	ListDataAsCSV	M3_LIST_MPURST	M3_01_01

Function or API	Transaction	Information Category	View
MMS080MI	LstMtPlByItmWhs		
MMS200MI	GetItmWhsBal		
MMS200MI	GetItmWhsBasic		
MMS200MI	SearchItem		
PPS115MI	LstAltSupplier		
PPS170MI	CrtPOP		
PPS170MI	RelPOP		
PPS170MI	UpdPlannedPO		
PPS170MI	DelPlannedPO		
PPS170MI	GetPlannedPO		
PPS170MI	SearchPOP		

Planned Purchase Order Hub application components and functions

Application Header

The application header contains the '**Purchase Order Hub**' button, which opens to the Purchase Order Hub application when you click it.

Planned Purchase Orders

The Planned Purchase Order Hub application starts with the Planned Purchase Orders data grid displaying the planned purchase orders connected to the user. You can create, edit, delete, release, and search for a planned order.

'Overview'

The '**Overview**' tab contains forms, a data grid and a chart:

- Order Details: This form displays fields, such as '**Reference type**', '**Requested delivery date**', '**Planning date**', and '**Release date**'. The form is loaded with data when you select a planned PO.
- Prices: This form displays price information. In this form, the data grid displays purchase prices connected to a planned PO. This data grid is filled with data when you select a planned PO.
- Status Breakdown: This chart shows the number of planned orders per status and is populated when you select a planned PO.

'Planning Information'

The '**Planning Information**' tab contains one data grid and one form. The Material Plan data grid displays the material plan for the item on the selected planned order, and the Planning Data form shows planning information, such as '**Allocated quantity**', '**On-hand approve**', '**Safety stock**', and '**Lead time**'. Both are filled with data when you select a planned PO.

'All Warehouses'

The '**All Warehouses**' tab contains two data grids. The Stock Balance All Warehouses data grid displays the stock balance in all warehouses for the item on the selected planned order and enables the user to create a distribution order. This data grid is loaded with data when you select a planned PO. The Material Plan Selected Warehouse data grid displays the material plan for the selected warehouse and item. This data grid is filled with data when you select a warehouse.

'Suppliers'

The '**Suppliers**' tab contains one form and two data grids.

- Current Supplier Details: Displays supplier information and is populated with data when you select a planned PO.
- Alternative Suppliers: Enables the user to change the supplier on the planned purchase order, as well as connect items to the supplier. This data grid is loaded with data when you select a planned PO.
- History: Shows historical data connected to the alternative supplier. This data grid is updated with data when you select a supplier.

Components

This table shows the components in the Planned Purchase Order Hub application with their corresponding details:

Component	Details
Application header	Component ID: appHeader Purpose: Displays the main application header with navigation and title M3BE data used: n/a Data services used: n/a Comment: Contains a button that opens the Purchase Order Hub application
Planned Purchase Orders data grid	Component ID: DataGrid_PlannedPO Purpose: Manages a list of planned purchase orders M3BE data used: 'Planned Purchase Order. Open' (PPS170) Data services used: List_PlannedPurchaseOrders, Delete_PlannedPO, and Update_PlannedPO_Status Comment: You must activate the MPOPLP table for search in the M3 Function Search Administration.
Material Plan data grid	Component ID: DataGrid_MaterialPlan Purpose: Shows material plan details for proposals M3BE data used: 'Material Plan. Open' (MMS080) Data services used: List_MaterialPlan Comment: n/a

Component	Details
Stock Balance All Warehouses data grid	<p>Component ID: DataGrid_StockBalanceAll</p> <p>Purpose: Displays stock balances across all warehouses</p> <p>M3BE data used: 'Balance Identity. Display' (MMS060)</p> <p>Data services used: List_StockBalanceAllWarehouses</p> <p>Comment: n/a</p>
Material Plan Selected Warehouse data grid	<p>Component ID: DataGrid_MaterialplanAllWarehouses</p> <p>Purpose: Displays material plan data for a selected warehouse.</p> <p>M3BE data used: 'Material Plan. Open' (MMS080)</p> <p>Data services used: List_MaterialPlanAllWarehouses</p> <p>Comment: n/a</p>
Alternative Suppliers data grid	<p>Component ID: DataGrid_AvailableSuppliers</p> <p>Purpose: Lists available suppliers for selected items.</p> <p>M3BE data used: 'Supplier. Display Alternate' (PPS115)</p> <p>Data services used: List_AlternativeSuppliers</p> <p>Comment: n/a</p>
History data grid	<p>Component ID: DataGrid_AltSupplierDetails</p> <p>Purpose: Displays history and details of alternative suppliers</p> <p>M3BE data used: 'Purchase Statistics. Display' (PPS450)</p> <p>Data services used: List_AlternativeSupplierStatistics</p> <p>Comment: You must activate the MPURST table for search in the M3 Function Search Administration.</p>
Price form	<p>Component ID: Form_POItemPrice</p> <p>Purpose: Displays purchase order item pricing</p> <p>M3BE data used: 'Planned Purchase Order. Open' (PPS170)</p> <p>Data services used: Get_PlannedPO</p> <p>Comment: n/a</p>

Component	Details
Prices data grid	<p>Component ID: DataGrid_Prices</p> <p>Purpose: Displays price listings related to planned purchase orders</p> <p>M3BE data used: 'Purchase Agreement. Enter Prices' (PPS102)</p> <p>Data services used: List_POAgreementPrices</p> <p>Comment: Requires the agreement type to be set to 1 on the planned PO. Set 'Item' (ITNO) to be the primary control object in 'Purchase Agreement Selection Field. Open' (CRS746). You must activate the MPAGRP table for search in the M3 Function Search Administration.</p>
Planning Data form	<p>Component ID: Form_PlanningData</p> <p>Purpose: Displays planning data related to planned orders</p> <p>M3BE data used: 'Item. Connect Warehouse' (MMS002)</p> <p>Data services used: Get_PlanningData</p> <p>Comment: It uses AFLM=1.</p>
Current Supplier form	<p>Component ID: Form_CurrentSupplier</p> <p>Purpose: Shows details for the current supplier</p> <p>M3BE data used: 'Planned Purchase Order. Open' (PPS170)</p> <p>Data services used: Get_SupplierInformation</p> <p>Comment: n/a</p>
Order Details form 1	<p>Component ID: Form_OrderDetails1</p> <p>Purpose: Displays order details for selected planned purchase orders</p> <p>M3BE data used: 'Planned Purchase Order. Open' (PPS170)</p> <p>Data services used: Get_PlannedPO</p> <p>Comment: n/a</p>

Component	Details
Order Details form 2	<p>Component ID: Form_OrderDetails2</p> <p>Purpose: Displays order details, including references and priorities</p> <p>M3BE data used: 'Planned Purchase Order. Open' (PPS170)</p> <p>Data services used: Get_PlannedPO</p> <p>Comment: n/a</p>
Status Breakdown chart	<p>Component ID: Chart_Status</p> <p>Purpose: Displays the number of planned orders per status</p> <p>M3BE data used: 'Planned Purchase Order. Open' (PPS170)</p> <p>Data services used: List_PlannedPurchaseOrders</p> <p>Comment: You must activate the MPOPLP table for search in the M3 Function Search Administration.</p>

Links and bookmarks

This table shows the links and bookmarks along with their purposes:

Link ID	Type	Purpose
Link_AltSupplierOpen	M3 Bookmark	Opens 'Supplier. Connect Item' (PPS040) to let the user connect an item to an alternative supplier
Link_CreateDOProp	M3 Automation	Creates a planned distribution order
Link_MaterialPlanOpen	M3 Bookmark	Opens 'Material Plan. Open' (MMS080) to let the user view material plan details
Link_POHub	M3 Bookmark	Opens the Purchase Order Hub application

Dialogs

This table shows the dialog ID and API programs with their purposes:

Dialog ID	API program	Purpose
SimpleDialog_ChangePlannedPO	PPS170MI/UpdPOP	A dialog for modifying planned purchase order details.

Dialog ID	API program	Purpose
SimpleDialog_ReleasePerBuyer	PPS170MI/RelPOP	A dialog to release planned purchase orders per buyer.
SimpleDialog_CreatePlannedPO	PPS170MI/CrtPOP	A dialog to create a new planned purchase order.
SimpleDialog_ChangePlannedPO-SUNO	PPS170MI/UpdPOP	A dialog to change the supplier for a planned purchase order.

Conditional styles

This table shows the conditional styles of the components in the Planned Purchase Order Hub application:

Component	Condition name	Target field	Condition	Styling
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=E	Background color: #FBE7E8 – light red Text color: #C31014 – red Text override: Price missing Icon: error Icon color: #C31014 – red
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1ME	Background color: #FBE7E8 – light red Text color: #C31014 – red Text override: CO credit stop Icon: error Icon color: #C31014 – red
Planned Purchase Orders data grid	Condition_POMSG1	POACTP	POACTP contains A	Text color: #C0064D4 – blue Icon: info Icon color: #C0064D4 – blue
Planned Purchase Orders data grid	Condition_POMSG1	POACTP	POACTP=B7	Text color: #DA1217 – red Icon: delete Icon color: #DA1217 – red

Component	Condition name	Target field	Condition	Styling
Planned Purchase Orders data grid	Condi-tion_POMSG1	POACTP	POACTP contains B and POACTP!=B7	Text color: #CD6200– orange Icon: search-results Icon color: #CD6200– orange
Planned Purchase Orders data grid	Condi-tion_POMSG1	POACTP	POACTP contains C	Text color: #DA1217– red Icon: clock Icon color: #DA1217– red
Planned Purchase Orders data grid	Condi-tion_POMSG1	POMSG1	POMSG1=A	Background color: #FBE7E8– light red Text color: #C31014– red Text override: Sup-plier not defined Icon: error Icon color: #C31014– red
Planned Purchase Orders data grid	Condi-tion_POMSG1	POMSG1	POMSG1=F	Background color: #FBE7E8– light red Text color: #C31014– red Text override: Au-thorization is re-quired Icon: error Icon color: #C31014– red

Component	Condition name	Target field	Condition	Styling
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=98	Background color: #FEF2E5– light orange Text color: #BB5500– orange Text override: Standard cost is zero Icon: alert Icon color: #BB5500– orange
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=15	Background color: #FEF2E5– light orange Text color: #BB5500– orange Text override: Not divisible by order multiple Icon: alert Icon color: #BB5500– orange
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=30	Background color: #FEF2E5– light orange Text color: #BB5500– orange Text override: Less than min order quantity Icon: alert Icon color: #BB5500– orange

Component	Condition name	Target field	Condition	Styling
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=40	Background color: #fef2e5– light orange Text color: #bb5500– orange Text override: Greater than max order quantity Icon: alert Icon color: #bb5500– orange
Planned Purchase Orders data grid	Condition_PORELD	PORELD	PORELD earlier than today	Text color: #da1217– red Text weight: bold
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=95	Background color: #fef2e5– light orange Text color: #bb5500– orange Text override: Del date missing in ship calendar Icon: alert Icon color: #bb5500– orange
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=50	Background color: #fef2e5– light orange Text color: #bb5500– orange Text override: Greater than max agreement qty Icon: alert Icon color: #bb5500– orange

Component	Condition name	Target field	Condition	Styling
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=55	Background color: #FEF2E5– light orange Text color: #BB5500– orange Text override: Greater than replenishment quantity Icon: alert Icon color: #BB5500– orange
Planned Purchase Orders data grid	Condition_POMSG1	POMSG1	POMSG1=B	Background color: #FEF2E5– light orange Text color: #BB5500– orange Text override: Item or supplier is missing Icon: alert Icon color: #BB5500– orange
Planned Purchase Orders data grid	Condition_PORELD	PORELD	PORELD=today	Text color: #CD6200– orange Text weight: bold
Planned Purchase Orders data grid	Condition_Open-PO	POSUNO	PUSUNO!=blank	Icon: launch Icon color: #0066D4– blue Hyperlink opens Supplier Overview application.
Planned Purchase Orders data grid	Condition_POPSTS	POPSTS	POPSTS=00	Background color: #FBE7E8– light red Text color: #C31014– red

Component	Condition name	Target field	Condition	Styling
Planned Purchase Orders data grid	Condition_POPSTS	POPSTS	POPSTS=60	Background color: #EBF9F1– light green Text color: #1C7F49– green Icon: apply-rule Icon color: #1C7F49– green
Planned Purchase Orders data grid	Condition_POPSTS	POPSTS	POPSTS=05	Background color: #FEF2E5– light orange Text color: #BB5500– orange
Prices data grid	Condition_HKTAEP	AJMAPR	AJMAPR =1	Background color: #CBEFDC– light green Text color: #156138– green Apply on whole row
Material Plan data grid	Condition_JX9PNB	ACTP	ACTP!=blank	Icon: launch Icon color: #0066D4– blue Hyperlink 'Action Message. Open per Item' (RPS002)
Material Plan data grid	Condition_F8YQNU	PLDT	PLDT earlier than today	Text color: #DA1217– red Text weight: bold
Material Plan data grid	Condition_YNBRQJ	PQOH	PQOH=<0	Background color: #FBE7E8– light red Text color: #C31014– red
Stock Balance All Warehouses data grid	Condition_XBN-VOC	MBSTQT	MBSTQT=0	Icon: alert Icon color: #BB5500

Component	Condition name	Target field	Condition	Styling
Material Plan Selected Warehouse data grid	Condition_VQ5OPF	ACTP	ACTP!=blank	Icon: launch Icon color: #0066D4- blue Hyperlink 'Action Message. Open per Item' (RPS002)
Material Plan Selected Warehouse data grid	Condition_EK7E48	PLDT	PLDT earlier than today	Text color: #DA1217- red Text weight: bold
Material Plan Selected Warehouse data grid	Condition_F9XOKQ	PQOH	PQOH=<0	Background color: #FBE7E8- light red Text color: #C31014- red
Alternative Suppliers data grid	Condition_AH6D5B	PAST	PAST=10	Icon: partially-supported Icon color: #CD6200- orange
Alternative Suppliers data grid	Condition_AH6D5B	PAST	PAST=20	Icon: apply-rule Icon color: #1F9254- green
Alternative Suppliers data grid	Condition_AH6D5B	PAST	PAST=90	Icon: apply-rule Icon color: #DA1217- red
Alternative Suppliers data grid	Condition_AH6D5B	PAST	PAST=40	Icon: apply-rule Icon color: #1F9254- green

Pricing - Purchasing

Pricing for purchasing refers to a set of rules regulating price proposals when planned purchase order are created and purchase orders are entered.

These rules are based on these statements:

- The price is retrieved from an agreement in 'Purchase Agreement. Open' (PPS100). If there is more than one valid price in the agreement, then the price with the nearest From date is proposed. Agreements are selected in priority order using the agreement priority field per agreement header.
- The price is retrieved from the combination Item/Supplier entered in 'Supplier. Connect Item' (PPS040).

- The price is retrieved from the item master 'Item. Open' (MMS001). Note that the supplier number is not checked.

The price date used is controlled through the date code from the supplier master.

If the purchase order is in a foreign currency, the price from the item master is recalculated to reflect the price in the currency of the purchase order.

Note that the price in a PO can be overridden with a price text code in the order line when the PO is printed. This code can refer to different texts. This means that a price can be specified on the order as a target price for invoice control or as a base when conducting order overviews.

Purchase Order

This document explains how to create, release and print a purchase order.

A purchase order is an order to a supplier requesting material or services.

A purchase order is placed when a purchase from a supplier takes place. The purchase order can be sent to the supplier in different ways, for example by paper, fax, email, or EDI. In some cases, the purchase is made over the telephone and no purchase order document is sent to the supplier.

A purchase order contains a header and one or more lines. The order header contains information common to the entire order, such as supplier agreement terms. The lines contain the items or services to be purchased.

A purchase order can be created in two ways, automatically from a planned purchase order or manually.

Outcome

If agreed with the supplier, you wait for an order confirmation, a shipment advice, and/or a transport notification of the purchase order. This is reported into these programs:

- 'Purchase Order. Confirm' (PPS250)
- 'Purchase Order. Advise Shipment' (PPS260)
- 'Purchase Order. Notify Transportation' (PPS270).

The next mandatory step is to receive the delivery of ordered goods to store them in your warehouse. This is performed in 'Purchase Order. Receive Goods' (PPS300).

How the system is affected

These tables are used for purchase orders:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line

Limitations

Many purchase order functions are available that are not described in this document. See this list together with references to other material.

Agreements

A purchase order can be connected to an agreement through the rules set in the group profile connected to the agreement line. In this way, predefined values from the agreement, such as agreed prices and discounts, are proposed by default when the purchase order is placed. The reference to the agreement is printed on the purchase order document.

Read more in the Agreement documentation.

Costing

A purchase order is connected to a purchase costing model. This model can consist of elements that represent charges and internal costs in the purchasing flow.

When a PO is connected to a Grower Agreement, the costing model is sourced from the agreement line.

Read more in the Procurement Costing documentation.

Authorization

You can use authorizations on purchase orders to provide users with the authorization required to place purchase orders and limit the purchased amount on specific orders.

Read more in the Authorization documentation.

Monitoring (confirmation, advice, and notification)

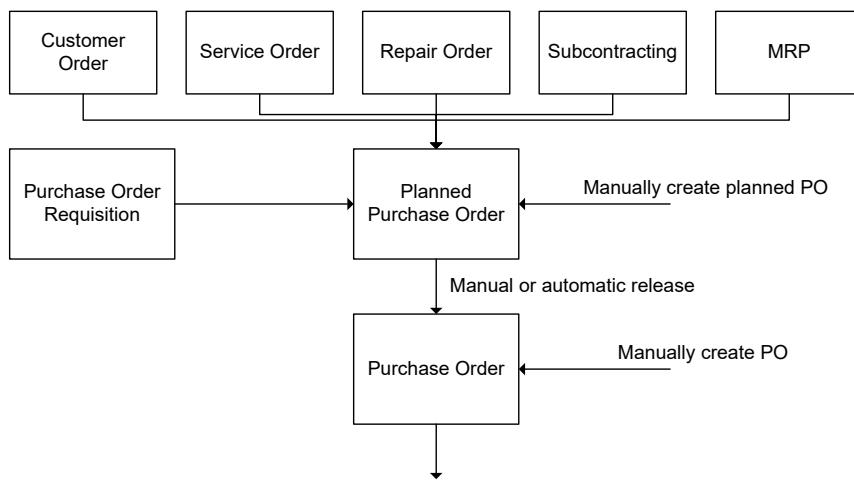
In the monitoring functions in M3, you can follow up on deliveries on placed purchase orders.

Read more in the Confirmation, Advice, and Notification documentation.

Before you start

- Basic settings for the purchase flow must be specified according to [Basic Settings for the Purchase Flow on page 49](#).
- Settings must be specified for a planned purchase order according to [Create and Release Planned Purchase Order on page 100](#).
- Settings must be specified for a purchase order according to [Settings for Purchase Order on page 182](#).

Outline



Structure of the purchase order

A purchase order consists of an order header and one or more order lines specifying the items to purchase. The header information is valid for the entire order and consists of information mainly concerning terms and addresses. Several values on these panels are defaulted from the supplier files (CRS620-CRS624).

The order line information is only valid for each order line and consists of information about the item, for example, prices, quantities.

Each purchase order has status fields indicating how far in the flow the purchase order has come. The status consists of a highest and a lowest status and is displayed for both the order lines and for the complete purchase order.

PO statuses

As stated earlier, the status on the order tells us how far in the flow the order has come. Both the order header and the order line have a highest and a lowest status.

If an order has more than one order line, the lowest status shows the status for the line that has reached the lowest position in the order flow. The highest status consequently shows the status for the order line that has reached the highest.

Example:

A confirmed purchase order has two order lines. The entire quantity on the first line (line 10) is goods received. Only half of the quantity on the second line (line 20) is goods received. The statuses on the order line and order header are as follows:

Line/Order Lowest status Highest Status

10 50 50

20 35 50

PO header 35 50

After a Purchase Order is entered, its status is usually 15. If authorization is needed, the status is 12. After the Purchase Order document is printed, the status is 20.

Prices

The price is automatically defaulted to the purchase order line when placing a purchase order. The price should be considered together with the price quantity, the purchase price U/M, currency and discount. The purchase price quantity represents the quantity of the item for which the purchase price applies.

Example:

If an item has a purchase price of \$150 and the purchase price quantity is 10, then the purchase price per purchase U/M is $150/10 = \$15$.

The Purchase Price U/M is the unit of measurement for which the price is expressed.

The purchase price is defaulted from these places and in this order:

- Agreement (PPS100)
- Item/Supplier (PPS040/F)
- Item (MMS001/H)

If no price is collected to the order line the price must be entered manually. A price text can also be used instead of a purchase price.

Texts

This chapter describes some ways to print text on the purchase order documents. Pre- and a post texts for the header can be defined in 'Purchase Order. Open' (PPS200). By pressing F19, Pre text and/or F20, Post text on any of the detail panels in (PPS200) the text written will come out on the PO documents.

A line text can be attached by pressing F6 in 'Purchase Order. Open Lines' (PPS201).

A more firm post text can be put on all purchase orders. This can be used to inform the supplier of a change of address, for example. The text is placed in 'General Text. Open' (CRS950) and connected to the parameter 13 in 'Settings - Purchasing' (CRS780).

It is also possible to put in longer item texts in 'Items. Open' (MMS001) and write this information on the Purchase Order as a line text. The item number and item descriptions may not be enough to describe the requirements for a specific item to the supplier. The text is placed under the Text function (F6) in (MMS001) and is connected to a purchase order type in 'PO type. Connect Text' (PPS096).

The same functionality exists for the Suppliers and the Item/Supplier combination.

Purchase Order Claims

This document explains how purchase order claims are managed.

When goods are rejected in the quality inspection activity, a claim for the supplier is often created. Usually, either a replacement delivery or a credit note from the supplier is requested.

Outcome

Claims are created manually or automatically. A replacement delivery or a credit note is then created.

These files are updated in M3:

- MPCLAH Purchase Order Claim Header
- MPCLAL Purchase Order Claim Line

The workflow differs depending on whether a replacement delivery or a credit note is requested.

If a replacement delivery is requested, a sub-number on the original purchase order line is created automatically, making it possible to receive the replacement delivery on the purchase order. It is also possible for the system to remove the rejected goods from the rejected goods location automatically. This is done by using a requisition order. If a replacement delivery is requested, financial transactions are created during the issue of material.

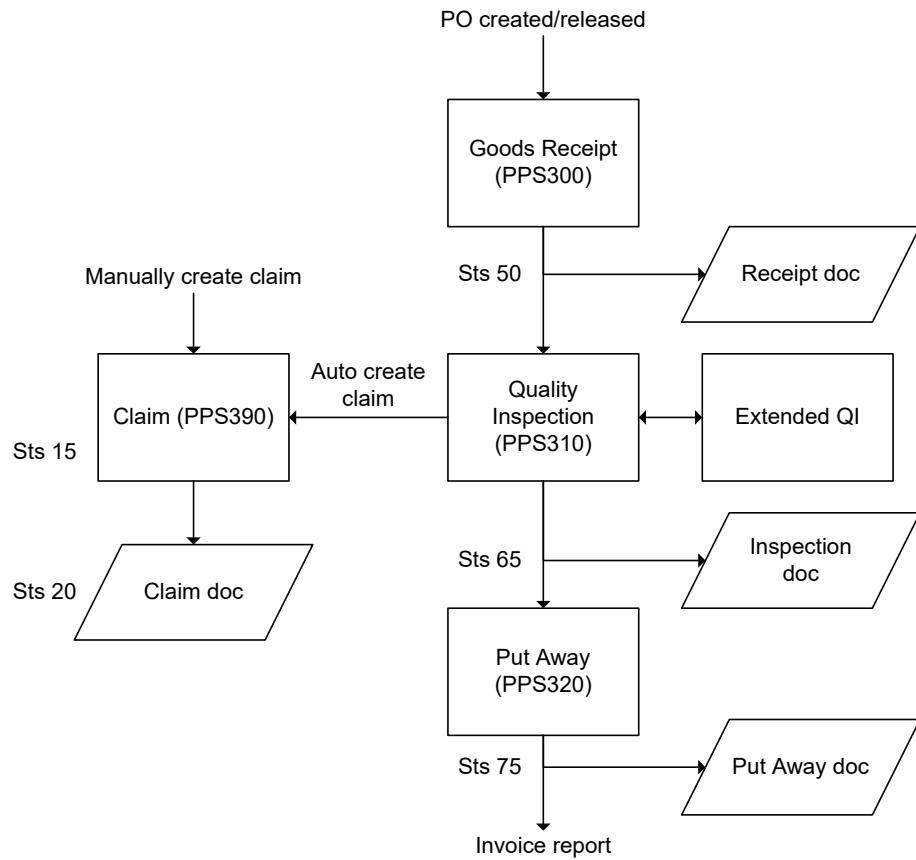
This will not happen if a credit note is requested from the supplier.

Before you start

- A purchase order must be created. See [Create, Release, and Display Purchase Order](#) on page 94.
- Settings in the document [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313 must be entered.
- The goods must be reported as received (status is set to 50). See [Receive Purchased Goods](#) on page 297

How claims are created

In M3, claims can be created manually in a specific program or automatically from the quality inspection. By setting the parameters, you can create the claim automatically if the goods are partially or fully rejected but also if the goods are approved but with remarks. For more information, see [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313.



Structure of a claim

A claim consists of a header and one or more lines. The program for claim headers is 'Return To Supplier. Open' (PPS390). The program for claim lines is 'Return To Supplier. Open Lines' (PPS391).

The lines correspond to the rejected order lines. Information about the claim, such as whether a replacement delivery or a credit note is requested, is added to the header, which is printed on the claim note.

Work with claims

The workflow differs depending on whether a replacement delivery or a credit note is requested.

If a replacement delivery is requested, a subnumber on the original purchase order line is created automatically, making it possible to receive the replacement delivery on the purchase order.

The system can also remove the rejected goods from the rejected goods location automatically. This is done by using a requisition order. This will not happen if a credit note is requested from the supplier.

If a replacement delivery is requested, financial transactions are created in the issue of material. The section "Financial Transactions" that follows provides a brief overview of the financial transactions.

For more information, see [Manage Purchase Order Claims](#) on page 112.

Claim statuses

The status of the claim indicates the progress of the claim in the flow. Some of the status codes are set manually for follow-up reasons. The valid alternatives are:

05 = Work with claims is in progress. When the work is completed, the status is set to 10.

06 = Work with claims is active. When the work is completed, the status is set to 15.

10 = Preliminary. This is the normal status for automatically added claim errands when the quality inspection result is reported.

15 = Approved. The status is set manually after an action is decided for the claim.

20 = Claim letter is printed.

40 = Claim errand is partially completed. Manually set status.

90 = Claim errand is completed. Manually set status.

Financial transactions

If a replacement delivery is requested, an issue of the material can automatically be created when the claim document is printed. This issue will create financial transactions for the financial system. The accounts setup on this transaction is often interesting.

After goods receipt, some financial transactions are created automatically. The value will be the cost price for the item (standard cost or average price depending on the inventory accounting cost method in 'Item. Open' (MMS001/E)) multiplied by the quantity. The opposite account will be an account often called Stored not invoiced. This account is used temporarily. After the purchase invoice is booked, this account will be zeroed. An example follows.

1 Example:

The cost price for an item is 25 dollars. After goods receipt of a quantity of 100, these financial transactions will be created:

Inventory PP 10/910	Delivered, not invoiced PP10/951
2500	2500
Accounting event	Accounting type
PP10=Stock Receipts PO	910=Inventory
	951=Delivered, not invoiced

If a part of the quantity, for example 20 pieces, is rejected and placed at a rejection location in the quality inspection, a claim is created automatically in 'Return To Supplier. Open' (PPS390). A replacement delivery is requested and the claim document is printed. After the material is issued, new financial transactions are created.

Inventory MM20/910	Delivered, not invoiced MM20/907
500	500

Accounting event MM20=Internal Stock issues	Accounting type 910=Inventory 907=Offset account stock trans
--	--

Since the inventory is decreased, the inventory account should be credited. The opposite account (Stored not invoiced) is preferable since this account will be credited again after the replacing delivery is goods-received.

The accounting transactions are created in a file called CINACC after 'Internal Account Entry. Create' (CAS950) is run. The transactions can be transferred to the financial system either immediately or in a special run. The transactions can be viewed in 'Internal Account Entry. Open' (CAS300) or by selecting option 21 in front of the transaction in 'Stock Transaction. Display History' (MWS070).

The account setup, defined in 'Accounting Rule. Set' (CRS395), determines which accounting strings these transactions will have.

Purchase Order Hub

Purchase Order Hub is an M3 Experience Designer Application that enables managing and monitoring purchase orders efficiently. Buyers and supply planners can view, edit, and confirm purchase orders in one application instead of navigating multiple M3 programs. The application supports several actions, such as printing, advising, and canceling orders. It also integrates with H5 for essential tasks such as order creation and printing.

User story

A supply planner or purchaser needs a unified application to efficiently manage and monitor purchase orders, avoiding navigation through multiple M3 programs and streamlining daily tasks.

M3 Business Engine configuration

M3 Business Engine (BE) configurations are required for the Purchase Order Hub application to function properly. You must have orders set up in the 'Purchase Order. Open' (PPS200) to display data in the application.

See specific configurations per component in *Components*

Application authorization

You must have authorization to use the required M3 BE functions and API transactions before accessing and running the M3 Experience Designer application. This table shows the functions and transactions used by the Purchase Order Hub application:

Function or API	Transaction	Information Category	View
CRS620MI	LstAddresses		
CRS620MI	GetAddress		

Function or API	Transaction	Information Category	View
CRS620MI	GetBasicData		
LISTMI	ListDataAsCSV	M3_LIST_MPHEAD	M3_01_01
LISTMI	ListDataAsCSV	M3_LIST_MITBAL	M3_02_01
MMS080MI	LstMtPlByItmWhs		
MMS200MI	GetItmWhsBasic		
MWS150MI	SelSupplyChain		
PPS001MI	AdviseAll		
PPS001MI	AdviseLine		
PPS001MI	FinishMark		
PPS001MI	ConfirmAll		
PPS001MI	ConfirmLine		
PPS200MI	AddLine		
PPS200MI	LstLine		
PPS200MI	UpdLine		
PPS200MI	UpdHead		
PPS200MI	GetHead		
PPS215MI	LstPOCharges		
PPS330MI	ListPOTrans		

Purchase Order Hub application components and functions

Application Header

The Application Header contains these buttons:

- '**Planned Purchase Order
- '**Supplier Overview****

Purchase Order Header

The Purchase Order Hub application starts with a Purchase Order Header data grid displaying the purchase orders. Purchase orders must be in the status range of 15 to 70 to be shown on the list. In this data grid, you can search, create, copy, confirm, change, advise, print, and cancel orders.

Purchase Order Lines

The Purchase Order Lines data grid displays order lines and is populated with data when you select an order. You can add, change, confirm, advise, and cancel lines.

'Purchase Order Header'

The '**Purchase Order Header**' tab contains the forms of Purchase Order Header and Supplier information. These data grids are populated with data when you select an order.

'Purchase Order Transactions'

The '**Purchase Order Transactions**' tab contains a data grid that displays transactions for a selected order. It is populated with data when you select an order.

'Charges'

The '**Charges**' tab contains a data grid that displays charges for the order lines. This data grid is populated with data when you select an order.

'Supply Chain'

The '**Supply Chain**' tab contains a data grid that displays supply chain information. This data grid is populated with data when you select an order.

'Planning Information'

The '**Planning Information**' tab includes a form and three data grids:

- Planning Parameters: This form displays fields, such as '**Item number**', '**Buyer**', '**Supplier**', and '**Planning method**'. The form is populated with data when you select an order line.
- Material Plan: This data grid shows fields, such as '**Planning date**', '**Alternative planning date**', '**Order category**', and '**Status**'. The Material Plan data grid is filled with data when you select an order line.
- Stock Balance All Warehouses: This data grid displays fields, such as '**Warehouse**', '**Description**', and '**Allocated quantity**'. The data grid is populated with data when you select an order line.
- Material Plan Selected Warehouse: This data grid shows fields, such as '**Planning date**', '**Alternative planning date**', '**Order category**', and '**Action message**'. This data grid is filled with data when you select warehouse.

Components

This table shows the components in the Purchase Order Hub application with their corresponding details:

Component	Details
Application header	Component ID: appHeader Purpose: Displays the main application header with navigation and title. M3BE data used: n/a Data services used: n/a Comment: Contains two buttons: one opens the Planned Purchase Order Hub application, and the other opens the Supplier Overview application.

Component	Details
Purchase Order Header form	<p>Component ID: Form_POHead</p> <p>Purpose: Displays purchase order header information</p> <p>M3BE data used: 'Purchase Order. Open' (PPS200)</p> <p>Data services used: Get_POInformation</p> <p>Comment: n/a</p>
Supplier Information form	<p>Component ID: Form_Supplier</p> <p>Purpose: Displays supplier details and contact information</p> <p>M3BE data used: 'Supplier. Open' (CRS620) and 'Supplier. Connect Address' (CRS622)</p> <p>Data services used: Get_Supplier</p> <p>Comment: n/a</p>
Purchase Order Transactions data grid	<p>Component ID: DataGrid_POTransactions</p> <p>Purpose: Displays the list of purchase order transactions</p> <p>M3BE data used: 'Purchase Order. Display Line Trans' (PPS330)</p> <p>Data services used: List_POTransactions</p> <p>Comment: n/a</p>
Line Charges data grid	<p>Component ID: DataGrid_POLineCharges</p> <p>Purpose: Displays charges related to purchase order lines</p> <p>M3BE data used: 'Purchase Order. Connect Charges' (PPS215)</p> <p>Data services used: List_POCharges</p> <p>Comment: n/a</p>
Purchase Order Header data grid	<p>Component ID: DataGrid_POHead</p> <p>Purpose: Displays purchase orders in a list</p> <p>M3BE data used: 'Purchase Order. Open' (PPS200)</p> <p>Data services used: List_POHead</p> <p>Comment: You must activate the MPHEAD table for search in the M3 Function Search Administration.</p>

Component	Details
Purchase Order Lines data grid	<p>Component ID: DataGrid_POLines</p> <p>Purpose: Displays purchase order lines</p> <p>M3BE data used: 'Purchase Order. Open Lines' (PPS201)</p> <p>Data services used: List_POLines</p> <p>Comment: n/a</p>
Supply Chain data grid	<p>Component ID: DataGrid_SupplyChain</p> <p>Purpose: Displays supply chain information</p> <p>M3BE data used: 'Active Supply Chain. Display' (MWS150)</p> <p>Data services used: List_SupplyChain</p> <p>Comment: n/a</p>
Material Plan data grid	<p>Component ID: DataGrid_Materialplan</p> <p>Purpose: Shows material planning data</p> <p>M3BE data used: 'Material Plan. Open' (MMS080)</p> <p>Data services used: List_MaterialPlan</p> <p>Comment: n/a</p>
Stock Balance All Warehouses data grid	<p>Component ID: DataGrid_StockBalance</p> <p>Purpose: Displays the stock balance for all warehouses information</p> <p>M3BE data used: 'Balance Identity. Display' (MMS060)</p> <p>Data services used: List_Stockbalance</p> <p>Comment: n/a</p>
Material Plan Selected Warehouse data grid	<p>Component ID: DataGrid_MaterialPlanSelectedWrhs</p> <p>Purpose: Shows the material plan for the selected warehouse</p> <p>M3BE data used: 'Material Plan. Open' (MMS080)</p> <p>Data services used: List_MaterialPlan_SelectedWrhs</p> <p>Comment: n/a</p>
Planning Parameters form	<p>Component ID: Form_PlanningParameters</p> <p>Purpose: Displays planning parameters for items on the orders</p> <p>M3BE data used: 'Item. Connect Warehouse' (MMS002)</p> <p>Data services used: Get_PlanningData</p> <p>Comment: n/a</p>

Links and bookmarks

This table shows the links and bookmarks along with their purposes:

Link ID	Type	Purpose
Link_CopyPO	M3 Automation	Opens 'Purchase Order. Open' (PPS200) with preset purchase order number to copy a purchase order
Link_CreatePO	M3 Automation	Opens 'Purchase Order. Open' (PPS200) and allows the user to create a new purchase order
Link_PlannedPOHub	M3 Bookmark	Opens the Planned Purchase Order Hub application with the selected supplier as the starting point
Link_PrintPODocument	M3 Automation	Opens 'Purchase Order. Print Document' (PPS600) to print a purchase order document with various purchase order fields set
Link_SupplierOverview	M3 Bookmark	Opens the Supplier Overview application with the selected supplier as starting point

Dialogs

This table shows the dialog ID and API programs with their purposes:

Dialog ID	API program	Purpose
Dialog_UpdatePOLine	PPS200MI/AddLine	A dialog for changing a purchase order line.
Dialog_AdvisePO	PPS001MI/AdviseAll	A dialog to advise on the entire purchase order.
Dialog_AdvisePOLine	PPS001MI/AdviseLine	A dialog to advise a specific purchase order line.
Dialog_ConfirmAll	PPS001MI/ConfirmAll	A dialog to confirm the entire purchase order.
Dialog_CancelPO	PPS001MI/FinishMark	A dialog to cancel the entire purchase order.
Dialog_CancelLine	PPS001MI/FinishMark	A dialog to cancel a specific purchase order line.

Dialog ID	API program	Purpose
Dialog_AddPOLine	PPS200MI/AddLine	A dialog to add a new purchase order line.
Dialog_ConfirmLine	PPS001MI/ConfirmLine	A dialog to confirm a specific purchase order line.
Dialog_ChangePOHeader	PPS200MI/UpdHead	A dialog to change the purchase order header details.

Conditional styles

This table shows the conditional styles of the components in the Purchase Order Hub application:

Purchase Order Header form	Condition name	Target field	Condition	Styling
Purchase Order Header form	Condition_LateReq-Date	IADWDT	IADWDT earlier than today and IA-PUSL<50	Background color: #FBE7E8– light red Text color: #C31014– red Icon: error Icon color: #C31014– red
Supplier Information form	Condition_HF2M43	STAT	STAT=20	Background color: #EBF9F1– light green Text color: #1C7F49– green

Purchase Organizations

This document gives an overview of the use of purchase organizations in M3 BE and explains the impact it has on the procurement processes.

Purchase organization

A purchase organization is an organizational level, that helps to subdivide purchase planning and pricing processes in organizations. Purchase organizations can be used for creating and managing centrally or regionally negotiated purchase price agreements for which prices and conditions should be available for a selected group of warehouses.

Purchase organizations are also used in the central procurement process to assign the responsibility of purchase planning for selected warehouses to a central purchase organization. The use of purchase

organizations makes it possible to consolidate planned purchase orders for a purchase organization, even for planned purchase orders in warehouses that belong to different facilities.

Purchase organizations are defined in 'Purchase Organization. Open' (PPS099). The purchase organization type determines the use of the purchase organization for purchase pricing or purchase planning.

Purchase organization type:

- 0='Price'.
- 1='Planning'.

Purchase organizations for pricing

Purchase organizations of type 0='Price' defines which warehouses enable the use of prices and conditions of specific purchase agreements. This is achieved by connecting price purchase organizations to warehouses and purchase agreements. The purchase organization to which a warehouse is connected will be used to search for a valid agreement in a purchase price search. Prices from the agreement connected to the purchase organization of the warehouse will be selected as the first priority in the price origin search.

Purchase organizations for planning

Purchase organization of type 1='Planning' are used to enable central procurement. The responsibility for procurement activities can be assigned to a central purchasing department which should buy goods for groups of warehouses (regions) or products.

The use of purchase organization for planning affects consolidation of the planned purchase orders. It also determines for which warehouses PO lines can be created on a purchase order. This is achieved by defining for which warehouses a purchase organization can buy, assigning purchase organizations to planned purchase orders based on various objects, and consolidating planned purchase orders using the purchase organization as a consolidation object.

Purchase organizations for planning can be defined for central purchasing by assigning it to 'Buying facility', which represents the central purchasing department. The 'Buying facility' of a purchase organization becomes the facility of the planned purchase orders and purchase orders managed by a central purchasing organization. In such a way, larger consolidated purchase orders can be created for warehouses across the facilities.

Purchase organizations for pricing vs. planning

Purchase organizations for purchase price agreements can be used independently of the use of purchase organizations for planning purposes, and vice versa.

Purchase Transaction

Reports against a purchase order are saved in purchase transactions. These reports regard:

- Order confirmation
- Delivery advice
- Transport notification

- Goods receiving
- Quality inspection
- Put-away.

The order type parameters determine if the first three report types mentioned above should be saved.

The purpose of a purchase transaction is to serve as complete documentation of reporting against the order line.

With deletion reports, the original incorrect report remains but with a transaction quantity of zero.

Inquires regarding purchase transactions can be made 'Purchase Order. Display Line Transactions' (PPS330).

Repair Order - Purchasing

A repair order is a purchase order for the repair of one or more items. These items usually have a serial number. With a repair order, these items can be sent to a repair supplier with a traceable on-hand balance but with the item remaining in the total on-hand balance.

The purchasing of a repair takes place in much the same way as the purchasing of material or service in M3 Procurement.

When purchasing a repair, repair IDs are used. These are the item or supplier number, service process, or service.

Repair order category

Repair orders are defined with a specific order category in the purchase order type. The order categories are:

- 60 Repair
- 65 Warranty repair.

The difference between these two is purely informative. They can be easily changed from one to the other.

Note: These repair order settings are required:

- Define the order type in 'PO Type. Open' (PPS095)

When the repair order is to be integrated in the Inventory Management module, these settings should be used:

- Parameter 150 Update Material Requirements 1
- Parameter 380 Inventory Accounting 1
- Parameter 381 Requisition type - repair order xx

By re-setting parameters 150 and 380 to 0, the intended functionality for traceable on-hand balance cannot be used, even though a repair order can be processed in other ways. The value for parameter 381 is set by the user.

- Define Location Values in 'Stock Location. Open' (MMS010)

When an item is shipped for repairs using a requisition order, its item number and serial number are moved to a location with the same ID as the supplier number.

If this location is not defined in (MMS010), it is created automatically. The values used for this are copied from the location ID entered in parameter 34 in 'Settings – Purchasing' (CRS780). If more than one warehouse is used, then the location must exist for these in (MMS010).

- Define Value for Requisition Order Type Using 'Req/Distr Order Type. Open' (CRS200)
Integration with the Transportation Planning is also possible. This is necessary, for example, for freight processing. For this, an appropriate dispatch policy must be connected to the order type.

Enter and print order

Consider these points when specifying purchasing orders:

- **Addresses for shipping to the supplier**

Address codes for delivery-to-address are displayed in the G panel in the order header in 'Purchase Order. Open' (PPS200). The user can override this code. The address code is proposed from the first address code with address type 5 (Final delivery address) listed for the supplier. Only addresses with this address type can be overridden for the same supplier.

In the order line overview in 'Purchase order. Open Lines' (PPS201), service process, service and serial number are opened for entry together with item number and amount.

Purchase order type parameter 110 controls whether predefined service processes or services are required. The actual item number can be changed in existing order lines. This is unique for repair orders. However, no new basic data from the new item number is displayed in the order line. If this basic data is questionable, then this functionality should not be used.

When using (PPS201), the panel (PPS202/E) is always displayed last in sequence, regardless of selected panel sequence. This panel is unique to repair orders and contains information specific to these, such as bill of lading number.

Purchase order type parameter 177 controls if a specific costing model is applied to the planned purchase order or purchase order line. If left empty, the costing model is retrieved with 'Item. Connect Facility' (MMS003) or (CRS780).

When specified by PO type parameter 381, requisition transactions are created when the repair order is printed. However, the specified repair ID must be entered and have status 3 for this to happen. Stock locations with status 3 and the same serial number as the repair order will then be indicated on the requisition picking list.

- **Receiving**

When receipt is reported, the item is automatically transferred to the reported stock location. This transfer is made without a minus transaction being entered in the transaction history (MWS070). The status is automatically reclassified from 3 to 1 or 2. With direct put-away the status becomes 2, otherwise it is 1.

Report Confirmation of PO

This document explains how you report that the supplier has confirmed your purchase order (PO) and that the goods will be delivered, and how you make changes to order data such as delivery date, quantity, price and discount.

Outcome

A PO is confirmed and the supplier will deliver the goods you have ordered. Some information may have been changed, however. For example, the ordered quantity may not be available, the price may have changed for the item or the supplier may not be able to deliver the goods within the requested time.

These files are used for the programs in the flow:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line

You can advise shipment for the PO in 'Purchase Order. Advise Shipment' (PPS260) and/or notify transportation in 'Purchase Order. Notify Transportation' (PPS270). The next mandatory step is to receive the ordered goods in 'Purchase Order. Receive Goods' (PPS300). It is possible to reverse the logging of order confirmation in 'Purchase Order. Display Line Trans' (PPS330).

Before you start

A PO must have been created. See [Create, Release, and Display Purchase Order](#) on page 94.

Follow These Steps

- 1 Start 'Purchase Order. Confirm' (PPS250/B).

Confirm the Complete PO

- 2 On the B panel, confirm the complete PO by pressing F14=Confirm all.
- 3 The F panel is opened, enter the confirmed delivery date and supplier order number, if there is one. On the confirmation report from the supplier, you find the supplier's own order number, which is useful when you receive the goods.
- 4 Review 'Your reference' and change if necessary. Press F14 again.

The status of the complete PO is now raised to 35=Purchase price and delivery date confirmed and approved. You have finished the reporting and can quit the program.

Confirm a Specific Order Line

- 5 On the B panel, select the specific order line you want to confirm and select option 12=Confirmation. Note: You cannot add any information to the order line with this action. The status on this specific order line is now raised to 35.
- 6 On the E panel, review 'Your reference' and change if necessary. Enter 'Supplier order number' (optional field). On the confirmation report from the supplier, you find the supplier's own order number, which is useful when you receive the goods.
- 7 Enter the data that the supplier has confirmed; that is, confirmed delivery date, confirmed quantity, confirmed purchase price, confirmed purchase price quantity and confirmed discounts. The data from your original order line is displayed on the right-hand side of the panel. If ordered discount is denied and confirmed discount 1, 2 or 3 is to be set to zero, enter 1='Update confirmed discount' to clear the discount.

If it is probable that you will receive the delivery on another date than confirmed, you can enter a 'Deviating confirmed delivery date'. The deviating date will then act as the basis for planning, but not for the supplier delivery time follow-up.

- 8 If you have changed order data, enter a status manually based on the changes you have made.

Alternatives when entering status manually:

31=Delivery date confirmed

32=Purchase price confirmed

33=Purchase price and delivery date confirmed but not approved.

Note: If order line status is not raised manually, despite order data changes, the status will automatically be 35 when you quit the program.

Split a PO Line

- 9 On the E panel, fill in the quantity to confirm In the 'Confirm quantity' field and the date in the 'Confirmed delivery date' field. Press Enter. The system now calculates the rest of the quantity, which is not confirmed. You can now confirm this quantity and fill in another delivery date, or you can leave this blank and confirm another time.

Reverse of a PO Confirmation

- 10 An order line confirmation can be reversed by deleting the transaction in (PPS330). After the deletion, a new order confirmation can be entered on the line in (PPS250).

Following up on PO Confirmations

- 11 There is functionality for following up on confirmations and also to produce a Purchase order confirmation reminder document from the system. This is done in 'Purchase Order. Print Confirm Reminder ' (PPS670).

Parameters to Set

Program ID/Pan- el	Field	The field indicates ...
(PPS095/H)	360 PO status -confirmed- after printing	... whether the purchase order should be assigned a confirmed status when being printed (status 35).
(PPS095/I)	530 PO transaction - order confirmation	... whether an order confirmation should lead to creation of lines in the purchase order's transaction file. This file can be viewed in (PPS330) and is used for infor- mation purposes only. This parameter must always be activated.

Report Shipment Advice for PO

This document explains how you report that the supplier has advised the ordered goods for shipment from the plant. The shipment advice also contains information about when your goods have been sent, as well as transport and packaging facts, which you report into the system.

Outcome

A PO is shipment advised and the goods are about to be delivered to your plant. You have updated information about the transport, you know when and how the goods are shipped and whether a via terminal is used. You also know about, for example, the forwarding agent, bill of lading, packing slip number and carrier name.

The files used for the programs in the flow are:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line].

You can notify transportation for the PO in 'Purchase Order. Notify Transportation' (PPS270).

The next mandatory step is to receive the ordered goods in 'Purchase Order. Receive Goods' (PPS300).

It is possible to reverse the logging of shipment advice in 'Purchase Order. Display Line Trans' (PPS330).

Before you start

A PO must have been created. See [Create, Release, and Display Purchase Order](#) on page 94.

Follow These Steps

Advise Shipment for the Complete PO

- 1 Start 'Purchase Order. Advise Shipment' (PPS260/B).
- 2 On the B panel, advise shipment for the complete PO by pressing F14=Confirm all.
- 3 On the F panel, enter the shipment date, forwarding agent, bill of lading, delivery note number and carrier name (optional fields). Press F14='Confirm all' again.

The status of the complete PO is now raised to 40=Shipment advised. You have finished the reporting and can quit the program.

Advise Shipment for a Specific Order Line

- 1 Start 'Purchase Order. Advise Shipment' (PPS260/B).
- 2 On the B panel, select the specific order line you want to advise for shipment and then select option 12=Confirmation.

Note: You cannot add any information to the order line with this action.

The status on this specific order line is now raised to 40.

Adjust an Order Line

- 1 On the B panel, select option 'Open' for the order line you wish to adjust.
- 2 On the E panel, review that the shipment date and advised quantity are correct.
- 3 Enter forwarding agent, bill of lading, delivery note number and carrier name (optional fields).
- 4 Press Enter to save your changes and to redisplay the B panel.

Reverse a Shipment Advice

A shipment advice can be reversed by deleting the transaction in 'Purchase Order. Display Line Trans' (PPS330). After the deletion, a new shipment advice can be entered on the line in 'Purchase Order. Advise Shipment' (PPS260).

Parameters to Set

Program ID/Panel	Field	The field indicates ...
(PPS095/I)	531 PO transaction - shipment advice	<p>... whether a shipment advise should lead to creation of lines in the purchase order's transaction file</p> <p>These lines are for information purposes only and enable follow-up of transport times.</p> <p>This parameter must always be activated!</p>

Report Transport Notification for PO

This document explains how you report that a shipper has notified the ordered goods for transportation from a through terminal. The transport notification also contains information about when your goods are sent from the through terminal, as well as transport and packaging facts, which you report into the system.

Outcome

A PO is notified for transportation and the goods are about to be delivered to your plant. You have updated information about the transport; you know when and how the goods will be delivered. You also know about, for example, the forwarding agent, the bill of lading, packing slip number and carrier name.

The files used for the programs in the flow are:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line.

You register the ordered goods as received in 'Purchase Order. Receive Goods' (PPS300).

It is possible to reverse the logging of transport notification in 'Purchase Order. Display Line Trans' (PPS330).

Before you start

A PO must have been created. See [Create, Release, and Display Purchase Order](#) on page 94.

Follow These Steps

Specify Transport Notification for the Complete PO

- 1 Start 'Purchase Order. Notify Transportation' (PPS270/B).
- 2 On the B panel, specify transport notification for the complete PO by pressing F14=Confirm all.

- 3** On the F panel, enter the shipment date, forwarding agent, bill of lading, delivery note number, carrier name (optional fields) and arrival date. Press F14='Confirm all' again.

The status of the complete PO is now raised to 45=Notified for transportation. You have finished the reporting and can quit the program.

Specify Transport Notification for a Specific Order Line

- 1** On (PPS270/B), select the specific order line for which you want to specify transport notification and then select option 12=Confirmation.

Note: You cannot add any information to the order line with this action.

The status on this specific order line is now raised to 45.

Adjust an Order Line

- 1** On (PPS270/B), select option 'Open' for the order line you wish to adjust.
- 2** On the E panel, review that the shipment date and notified quantity are correct.
- 3** Enter the forwarding agent, bill of lading, delivery note number and carrier name (optional fields), and enter the arrival date.
- 4** Press Enter to save your changes and to redisplay the B panel.

Reverse of a Transport Notification

A transport notification can be reversed by deleting the transaction in (PPS330). After the deletion, a new transport notification can be entered on the line in (PPS270).

Parameters to Set

Program ID/Panel	Field	The field indicates ...
(PPS095/I)	532 PO transaction - transport notificat	<p>... whether a transport notification should lead to creation of lines in the purchase order's transaction file.</p> <p>These lines are for information purposes only and enable follow-up of transport times.</p> <p>This parameter must always be activated.</p>

Settings for Central Procurement

This document summarizes the required set up for activating and using the central procurement solution in the purchasing processes.

Outcome

An understanding of the setup required to activate central procurement in M3 BE.

Before you start

No special settings required.

Enable Central Procurement in company

The activation or deactivation of the central procurement is done on company level and applies for all divisions within the company.

- 1 Start 'Settings - Purchasing' (CRS780).
- 2 On panel H, set parameter '66 Use of purchase organization: Price/Planning' to 1='Yes', field 'Use purchase organization for planning'.

Activating the parameter has this effect:

- 'Purchase organization' of type 1='Planning' can be created in 'Purchase Organization. Open' (PPS099).
- The 'Purchase organization' field is available on planned purchase orders or orders, and batch purchase orders, and is mandatory for purchase order categories 20='Normal' and 70='Subcontracting'.
- Purchase orders with category 10='Inquiry' are assigned to a purchase organization when created from 'Purchase Inquiry. Create for Planned PO' (PPS173).
- Purchase orders with purchase order lines for multiple facilities can be created if a purchase organization configured for central buying is used when creating a planned purchase order or a purchase order.
- The buying facility from a purchase organization of type 1='Planning' can be used as the facility for planned purchase orders and purchase order headers. The buying facility represents the central purchase department that manages the purchase order.
- 'Purchase organization' and 'Country' are available as consolidation objects in 'PO Consolidation Group. Open' (PPS019).

Create facilities

A facility must be created in 'Facility. Open' (CRS008) to represent the facility of the central purchasing department. With this facility, central buyers create and manage planned purchase orders and purchase orders. No special set up is required for the facility. The facility is connected to a purchase organization in (PPS099).

Create purchase organizations

At least one purchase organization for planning must be created in (PPS099) and configured for use in central buying. It must have a purchase organization of type 1='Planning' and the buying facility that is created to represent the central purchase department.

If there is a requirement to do local procurement in the company, a purchase organization of type 1='Planning' with blank 'Buying facility' must be created. This purchase organization can be used for local buying.

Connect warehouses to the purchase organizations

The purchase organizations must be connected to the warehouses in 'Purchase Organization. Connect Warehouse' (PPS199). This connection defines for which warehouses a purchase organization can buy.

One purchase organization can be assigned as the 'default purchase organization' for a warehouse.

Exceptions to the use of the default purchase organization can be defined in 'Purchase Organization Selection. Open' (PPS198).

Create rules for purchase order selection

An object control table, where rules for assigning purchase organizations to planned purchase orders are based on item or warehouse related information, can optionally be created in (PPS198). The rules are based on objects related to 'item' or 'warehouse'. Defined rules overrides the use of default purchase organization in (PPS199) for assigning purchase organization to a planned purchase order.

PO consolidation group

A PO consolidation group that uses 'Purchase organization' and 'Country' as consolidation objects, must be created in (PPS019).

Purchase authority

If purchase authority is used for managing access to facilities in 'Purchase Authority. Open' (PPS235), it is recommended that central buyers have an access granted to all facilities for which they manage procurement activities.

Settings for Monitoring and Follow Up Activities for a Purchase Order

This document explains how to define the settings for purchase order (PO) monitoring and for activity follow-up.

Outcome

The parameters that control how to monitor the purchase order process and follow-up activities are defined.

Uses

You can manage the monitoring and follow-up activities for suppliers.

How the system is affected

The purchase order header file (MPHEAD) and the purchase order line file (MPLINE) are updated.

Before you start

A monitoring list must be defined in 'Monitoring Activity List. Open' (PPS035).

Follow these steps

Define Monitoring List

- 1 Start 'Monitoring List. Open' (PPS035).
- 2 Fill in the fields on the B and E panels.

Connect Monitoring List to Supplier

- 1 Start 'Supplier. Define Purchase & Financial' (CRS624)
- 2 Go to the E panel and fill in the 'Monitoring List' field.
The monitoring list connected to the supplier is defaulted to the POs of this supplier.
- 3 On the (CRS624/E) panel, press F4 in the 'Monitoring List' field to select the monitoring list that you want to set up for this supplier.

Connect Monitoring List to PO Header and PO line

- 1 Start 'Purchase Order. Open' (PPS200) and go to the E panel. Fill in the 'Monitoring List' field.
If a monitoring list is connected to the supplier, the monitoring list is retrieved from 'Supplier. Define Purchase & Financial' (CRS624).
If monitoring list is changed on the E panel, activities connected to the previous monitoring list are lost.
- 2 Start 'Purchase Order. Open Lines' (PPS201) and go to the F panel. Fill in the 'Monitoring List' field.
Different monitoring lists can be connected to every order line of the same PO.

Activate Application Messages

- 1 Start 'Settings - Application Messages' (CRS424).
- 2 On the B panel, you can see all the application message types and their status. If you want to change the activity code for a message type, select option 2 = Change. The E panel will be displayed.
- 3 In the 'Activity code' field, select 1 = Yes to activate the application message type. Press Enter. The activity code is displayed on the B panel.
It is not possible to create user-defined message types.

Parameters to set

Program ID/Panel	Field	The field indicates ...
Define Monitoring List		
(PPS035/B)	Monitoring list	...a list with actions to perform for a purchase order. The action date for each action is entered as days before/after the delivery date or order date.
(PPS035/E)	Date code	...the date to use when calculating the monitoring date. The valid alternatives are: 0 = Requested delivery date 1 = Order date

Program ID/Panel	Field	The field indicates ...
(PPS035/E)	Monitoring lead time	<p>...the monitoring lead time, expressed in days. The monitoring is based on the date code as set per monitoring list.</p> <p>Monitoring is done either forward or back from the order date.</p> <p>Example: If you want to have monitoring two days before the order date, you enter 2-.</p> <p>If you want to have monitoring two days after the order date, you enter 2.</p>
(PPS035/E)	Remark	... any remarks that are entered.
Connect Monitoring List to Supplier		
(CRS624/E)	Monitoring list	<p>...a list with actions to perform for a purchase order.</p> <p>The action date for each action is entered as days before/after the delivery date or order date.</p>
Connect Monitoring List to PO header		
(PPS200/E)	Monitoring list	<p>...a list with actions to perform for a purchase order.</p> <p>The action date for each action is entered as days before/after the delivery date or order date.</p>
Connect Monitoring List to PO line		
(PPS201/F)	Monitoring list	<p>...a list with actions to perform for a purchase order.</p> <p>The action date for each action is entered as days before/after the delivery date or order date.</p>
Activate Application Messages		
(CRS424/E)	Activity Code	<p>... if application message type should be active. The valid alternatives are:</p> <p>0 = No</p> <p>1 = Yes</p>

Settings for Purchase per Company and Division

This document explains how you define general settings for the entire purchase area, including system calendar settings, number series settings, general purchase settings, and internal address settings.

Outcome

Settings are defined in these programs:

- 'System Calendar. Open' (CRS900)

When a date is specified in M3, the system checks that the date was defined in the system calendar.

The system calendar is stored in the CSYCAL file.

- 'Number Series. Open' (CRS165)

The number series defines the various numbering systems used in M3:

20 *	=	Purchase orders
21 *	=	Goods receipt
22 *	=	Receiving/warranty claim
23 1	=	PO requisitions
24 1	=	Purchase quotations, RFQ
25 *	=	Purchase agreements
36 1	=	Planned purchase order
78 A	=	Self-billing agreement
79 *	=	Self-billing invoices
95 P	=	Milestone chains

Number series are stored in the CSYNBR table.

- 'Settings - Purchasing' (CRS780)

Settings for purchase are defined according to the purchase principles of your divisions and your company.
Settings for purchase are stored in the CSYPAR table.

- 'Internal Addresses. Open' (CRS235)

Internal addresses are defined to be used by your company for the supplier invoices, delivery addresses, ship-via addresses, and so on.

Internal addresses are stored in the CIADDR table.

Before you start

No prerequisites are needed.

Follow these steps

Create system calendar

A system calendar must be created for the company (blank division). Usually, at least two calendar years from the current date should have been defined.

- 1 Start 'System Calendar. Open' (CRS900).
- 2 Select 'Settings' (F13) on the B panel.
- 3 On the P panel, select 'Generate calendar' (F13). This displays 'System Calendar. Create Days' (CRS905/A).

- 4 Specify a range in the **From Year** and **To year** fields.
- 5 Specify these values in the **General capacity**, **Production day**, **Goods receiving day**, **Delivery day** fields on the E panel.
- 6 Select 'Start generation' (F13). The generation takes place online and not in a batch job.

Define system calendar day

- 1 Start 'System Calendar. Open' (CRS900/B).
- 2 Select a date in the display file, and then on the File menu, click Open.
- 3 Specify these values in the **General capacity**, **Production day**, **Goods receiving day**, **Delivery day** fields on the E panel.
- 4 Click Next to finish.

Create number series

- 1 Start 'Number Series. Open' (CRS165). Number series must be maintained from division blank
- 2 Specify a number series type and a number series.
- 3 Open the E panel and fill in the fields.

Settings - Purchase

- 1 Start 'Settings - Purchase' (CRS780). These settings are maintained from division blank, but they can be overridden per division.
- 2 Fill in the fields on the E, F, G, and H panels.

Create internal address

- 1 Start 'Internal Addresses. Open' (CRS235).
- 2 On the B panel, these combinations are valid:

Addr type	Addr key 1	Addr key 2	Addr key 3
Final destination or goods receiving address	Blank	Warehouse	Stock zone
Ship via or FOB address	Supplier number	Delivery terms	Warehouse
Invoicing address	Blank	Free-format invoice address	Blank
Optional address	Optional address information, free	Blank	Blank
Internal address	Internal address key.	Blank	Blank

- 3 Fill in the fields on the B and E panels.

Parameters to set

'System Calendar. Open' (CRS900)

Program ID/Panel	Field	The field indicates...
(CRS900/E) (CRS905/E)	General capacity	...the portion of a workday that can be load planned. This portion is entered as a percentage for each day. Example: A company normally works 8 hours on Mondays. If on a certain Monday it only works 4 hours, 50% should be entered as the general capacity percentage in (CRS900) for that Monday. If the employees in a certain work center only work 2 hours this particular Monday, 50% should be entered as the actual capacity percentage for the current combination and for Monday.
(CRS900/E) (CRS905/E)	Production day	...if the date selected is flagged as a production day in the system calendar. You cannot create capacity for a work center on days that are not flagged as production days.
(CRS900/E) (CRS905/E)	Goods receiving day	...whether goods can be entered as received in M3 on a specific weekday. Example: If goods receiving can take place on a Monday, specify 1 on the Monday field. If goods receiving cannot take place on a Saturday, specify 0 in the Saturday field.
(CRS900/E) (CRS905/E)	Delivery day	... whether deliveries can be specified in M3 on a specific weekday.
(CRS905/E)	From year To year	... the year from which and to which the calendar should be created.

'Number Series. Open' (CRS165)

Program ID/Panel	Field	The field indicates...
(CRS165/B)	Number series type	...the purpose of each number series. If a number series listed below is marked with an asterisk (*), it is optional. In this case, more than one number series may be used for each number series type. For purchase these series are:
20 *	=	Purchase orders
21 *	=	Goods receipt
22 *	=	Receiving/warranty claim
23 1	=	PO requisitions
24 1	=	Purchase quotations, RFQ
25 *	=	Purchase agreements
36 1	=	Planned purchase order
78 A	=	Self-billing agreement
79 *	=	Self-billing invoices
95 P	=	Milestone chains

'Settings - Purchasing' (CRS780)

Program ID/Panel	Field	The field indicates...
(CRS780/B)	Division	...a division. This is an ID for a legal unit within a company group. These settings can be for a blank division, which indicates the entire company, or for a specific division.
(CRS780/E)	02 Flag as completed permitted at put away	<p>...whether it is possible to flag an order as completed at any of the different reporting steps during put away. The use of a completion flag permits quality inspection and put-away with a lower quantity than the received quantity without the system having to wait for any remaining quantity.</p> <p>The valid alternatives are:</p> <p>0 = No, it is not possible to flag an order as completed at any of the reporting steps.</p> <p>1 = Yes, it is possible to flag an order as completed at any of the reporting steps.</p> <p>Example: 10,000 screws have been received, but after being weighed, there are actually only 9,997 screws. In this case the completion flag can be set manually so that the three screws do not remain for put-away at a later date.</p> <p>You can configure the system to eliminate small differences automatically with an automatic completion flag by selecting parameter 04='Deletion limit – put-away deviation'.</p> <p>This parameter can also be combined with parameter 10='Deviation limit – accepted receipts', which controls which deviating quantities are accepted by the system.</p>
(CRS780/E)	03 Default exchange rate type	<p>...the exchange rate type proposed for a supplier, if this has not already been entered in 'Supplier. Define Purchase & Financial' (CRS624). The exchange rate type is used when maintaining exchange rates. The exchange rate type is also connected to customers, suppliers, price lists, year-end procedures, and budget procedures.</p> <p>The alternatives are valid:</p> <p>01 = Variable rate</p> <p>02-99 = Can be used optionally.</p> <p>Exchange rate types are defined in 'Exchange Rate Type. Open' (CRS056).</p>

Program ID/Panel	Field	The field indicates...
(CRS780/E)	04 Deletion limit – put-away deviation	<p>...the limit for when a balance ID with a remaining quantity is automatically deleted at put-away. The limit is expressed as a percentage and is calculated on the received quantity.</p> <p>A remaining quantity is created when a quantity is reported with a lower number at put-away than what was reported at goods receipt. A remaining quantity measured within the deviation limit is automatically deleted.</p> <p>Example: The deletion limit equals 0.06%. At goods receipt, a quantity of 10,000 pieces is reported according to the delivery note. However, at put-away, an actual quantity of 9,995 pieces is reported. The insignificant remaining quantity of 5 pieces is now automatically deleted since it falls within the deletion limit.</p> <p>If an insignificant remaining quantity falls outside of the deletion limit, or if the value in this field is 0, the order line must be manually flagged as completed in (PPS320) to be deleted.</p> <p>This parameter can be combined with parameter 10='Deviation limit – accepted receipts', which controls which deviating quantities are accepted.</p> <p>This parameter can also be combined with parameter 02='Flag' as completed permitted at goods receiving', which permits manual control of the completion flag.</p>
(CRS780/E)	05 Default location – rejected quantity	...the stock location proposed for a rejected quantity when reporting quality inspection (QI) in 'Purchase Order. Inspect Goods' (PPS310).
(CRS780/E)	06 Default order type – claims	<p>...the requisition order type proposed for the issue of rejected material when managing claims.</p> <p>The requisition order type can be changed when a claim is reported in 'Return To Supplier. Open' (PPS390).</p> <p>Requisition order types are defined in 'Req/Distr Order Type. Open' (CRS200).</p>
(CRS780/E)	07 Default order type – subcontracting	<p>...the requisition order type used in order to issue material when managing subcontracted orders.</p> <p>Requisition order types are defined in (CRS200).</p>

Program ID/Panel	Field	The field indicates...
(CRS780/E)	10 Deviation limit – accepted receipts	<p>...the limit for when receipts deviating in quantity are still accepted. The limit is expressed as a percentage and is calculated on the ordered/confirmed quantity.</p>
		<p>All received quantities up to the upper limit of deviation are accepted by the system. If the limit is exceeded, a warning is generated. To stop an order that exceeds the limit and make it impossible to receive the order, parameter 510 in (PPS095) must be selected.</p>
		<p>The limit of deviation also indicates what is flagged as completed. All receipts from the lower limit and up are automatically flagged as completed. This means that no remaining quantity exists even though the received quantity may be lower than the ordered/ confirmed quantity.</p>
		<p>Example: If the ordered quantity is 100 pieces and the deviation limit is 2%, all receipts up to 102 pieces are accepted. Receipts in excess of 2% generate a warning or a stop. All receipts from 98 pieces and upwards for the order line are also automatically flagged as completed.</p>
		<p>You can configure the system to eliminate small differences automatically with an automatic completion flag by selecting parameter 04='Deletion limit – put-away deviation'.</p>
		<p>This parameter can also be combined with parameter 02='Flag as completed permitted at goods receiving', which permits manual control of the completion flag.</p>
(CRS780/E)	11 QI result – auto claim	<p>...which QI results reported in (PPS310) automatically create a claim in 'Return To Supplier. Open' (PPS390).</p>
		<p>The alternatives are valid:</p>
		<p>1 = No transfer</p>
		<p>2 = QI results 3 and 4 create claims</p>
		<p>3 = QI results 2, 3 and 4 create claims.</p>
		<p>The QI result codes are 1=Fully approved, 2=Approved with remarks, 3=Partly rejected, 4=Rejected.</p>

Program ID/Panel	Field	The field indicates...
(CRS780/E)	12 Restart PO number series when end value is reached	<p>... whether the purchase order number series (purchase order type 20) should be restarted when the final number has been reached.</p> <p>Note: This setting only can be done in division blank, since type 20 number series are always valid for all divisions in a company.</p>
(CRS780/E)	13 Fixed post-text on PO document	<p>...the text ID for the text printed at the bottom of purchase orders and purchase inquiries.</p> <p>The text may inform the supplier about a future address change, closure for vacation, etc. The text is not copied to the purchase order or inquiry.</p> <p>Texts are defined in 'General Text. Open' (CRS950).</p>
(CRS780/E)	14 Placement of supplier address	<p>...whether the supplier address should be printed to the left or to the right on external documents.</p> <p>External documents are purchase orders, purchase inquiries, agreements and payment reminders.</p> <p>The alternatives are valid:</p> <p>0 = Supplier address on the left 1 = Supplier address on the right.</p>
(CRS780/E)	15 Page break on stock zone – put-away doc	<p>...whether a page break should be made for each new stock zone on the put-away document.</p> <p>The alternatives are valid:</p> <p>0 = No, no page break for each new stock zone on the put-away document 1 = Yes, page break for each new stock zone on the put-away document.</p>
CRS780/F	16 Print supplier on put-away document	<p>...whether the supplier name should be printed on the put-away document in (CRS676). The supplier name is then printed for each line where the supplier is different than for the previous line.</p> <p>The alternatives are valid:</p> <p>0 = No, the supplier name is not printed on the put-away document. 1 = Yes, the supplier name is printed on the put-away document.</p>

Program ID/Panel	Field	The field indicates...
CRS780/F	17 Default order priority on PO lines	<p>...the neutral order priority that is proposed on the purchase order lines when a purchase order is created. The value can be overwritten per order.</p> <p>Number 1 has the highest priority.</p> <p>Priorities are defined in 'PO Priority. Open' (PPS230).</p>
CRS780/F	18 Default PO type – subcontracted operations	<p>...the purchase order type that is proposed when a planned purchase order for subcontracted operations is created and when no purchase order type has been entered for the operation in 'Supplier. Connect Item' (PPS040). This is valid for manufacturing orders.</p> <p>Purchase order types for subcontracted operations are defined in 'PO Type. Open' (PPS095).</p>
CRS780/F	19 Print external instructions on goods receipt document	<p>...whether the external instructions for an item should be printed on the detailed goods receipt document in (PPS307). The text to be printed must be defined in 'External Instruction. Open' (MMS135) and then connected to the item in 'Item. Open' (MMS001).</p> <p>The alternatives are valid:</p> <p>0 = No, the external instructions should not be printed on the goods receipt document.</p> <p>1 = Yes, the external instructions should be printed on the goods receipt document.</p>
CRS780/F	20 Several lines per claim	<p>...whether it should be permitted to have more than one order line on each automatically created claim transferred from (PPS310).</p> <p>By allowing only one line the claim process is simplified, such as when a request for a replacement delivery is made on the claim header and not on the claim lines.</p> <p>To have several lines automatically created on one claim, the lines must have these values in common: facility, warehouse, purchase order number, claim status 10=Preliminary, delivery note number and receiving date. Claims are processed in (PPS390).</p> <p>The alternatives are valid:</p> <p>0 = No, a claim can only have one line.</p> <p>1 = Yes, a claim can have several lines.</p>

Program ID/Panel	Field	The field indicates...
CRS780/F	21 General costing model – subcontracting	<p>...the general costing model used for subcontracted orders. For example, you have added elements for setup price and extra transportation charges to this costing model.</p>
		<p>It is possible to connect different costing elements to a costing model. Each element may be connected to an optional number of costing models or IDs.</p>
		<p>Costing models are defined in 'Purchase Costing Model. Open' (PPS285).</p>
CRS780/F	24 Prefix – non-item numbered PO lines	<p>...the item number prefix used for items where the number or name is not printed on the purchase order. Only the description of the item is printed.</p>
		<p>You only need to use one of the positions of the prefix, since a blank position is disregarded. For example, if 'X' is specified, no item names beginning with 'X' is printed.</p>
		<p>The prefix is useful for non-stocked items, which are only ordered occasionally.</p>
CRS780/F	25 Permitted quantity difference – EDI order confirmation	<p>...the limit for permitted difference, expressed as a percentage, between the requested quantity and the confirmed quantity for an order confirmed through EDI or the API PPS001MI.</p>
		<p>If the limit is exceeded, a mailbox message of type 210 is sent to the person responsible for the transaction.</p>
		<p>The message is sent only if this message type is activated in 'Settings - Application Messages' (CRS424).</p>
CRS780/F	26 Permitted delivery time difference – EDI order confirmation	<p>...the limit for the permitted difference in calendar days between the requested delivery date and the confirmed delivery date for an order confirmed through EDI or the API PPS001MI.</p>
		<p>If the limit is exceeded, a mailbox message of type 211 is sent to the person responsible for the transaction.</p>
		<p>The message is sent only if this message type is activated in (CRS424).</p>

Program ID/Panel	Field	The field indicates...
CRS780/F	27 Permitted price difference – EDI order confirmation	<p>...the limit for permitted price difference, expressed in local currency, between the requested price and the confirmed price for an order confirmed through EDI or the API PPS001MI.</p>
		<p>If the limit is exceeded, a mailbox message of type 212 is sent to the person responsible for the transaction.</p>
		<p>The message is sent only if this message type is activated in (CRS424).</p>
CRS780/F	28 Use advanced manufacturer control	<p>...the check box to enable advance manufacturer control from (PPS042). If you do not select the check box, manufacturers are managed from (PPS041).</p>
CRS780/F	30 Fixed post-text – purchase inquiry reply	<p>...the text ID for the text printed at the bottom of the purchase inquiry reply document in 'Purchase Inquiry. Print Reply Document' (PPS610).</p>
		<p>The text must be defined as external or internal/external and the language code must be the same as the supplier's.</p>
		<p>Texts are defined in (CRS950).</p>
CRS780/G	31 Fixed post-text – quotation reply	<p>...the text ID for the text printed at the bottom of the quotation reply document in 'Request for Quotation. Print Reply Doc' (PPS612), which is reached from 'Request for Quotation. Open' (PPS130).</p>
		<p>The text must be defined as external or internal/external and the language code must be the same as the supplier's.</p>
		<p>Texts are defined in 'General Text. Open' (CRS950).</p>
CRS780/G	32 Planning policy – subcontracting	<p>...the planning policy used for subcontracted orders. The controlling parameters to be considered in (MMS037) are '022 Default status – planned orders when AM=A1' and '025 Default status – planned orders when AM=A2'.</p>
		<p>In the planning policy, you define the rules for how planned orders are generated and how action and warning messages are to be applied, among other things.</p>
		<p>Planning policies are defined in 'Planning Policy. Open' (MMS037).</p>

Program ID/Panel	Field	The field indicates...
CRS780/G	33 Lead time days per week	<p>...the lead time used for all purchased items for planning purposes, such as calculating the action date for a planned order.</p> <p>The alternatives are valid:</p> <p>5 = 5 days a week, calculated on the number of production days in the company calendar.</p> <p>7 = 7 days a week, calculated on all days in the calendar week.</p>
		<p>The lead time can only be changed for purchased items (acquisition code=2). For manufactured items (acquisition code=1) and distributed items (acquisition code=3) the lead time is always expressed in production days.</p>
CRS780/G	34 Location template – repair order	<p>...the location ID template used to create a temporary location for the issue of repair order items.</p> <p>When a repair order is created, the parameters from the location ID template are copied to an automatically created location ID, where the repair order items are symbolically placed. The created location gets the supplier number as the location ID.</p> <p>The location ID template is defined in 'Stock Location. Open' (MMS010).</p>
CRS780/G	35 Default PO type – repair order from maintenance	<p>...the purchase order type used for repair orders from maintenance, if no order type has been entered in 'Supplier. Connect Item' (PPS040) or 'Service. Define per Product' (MOS300).</p> <p>Purchase order types are defined in 'PO Type. Open' (PPS095).</p>
CRS780/G	36 General purchase costing model	<p>...the costing model generally used for all purchased items if no other model exists. The costing model should normally be entered per item/facility in 'Item. Connect Facility' (MMS003).</p> <p>Costing models are defined in 'Purchase Costing Model. Open' (PPS285).</p>

Program ID/Panel	Field	The field indicates...
CRS780/G	37 Default priority order – price calculation	<p>...the priority for retrieving the purchase price when a purchase price is calculated in 'Purchase/Distribution Costing. Calculate' (PCS280). The result of this calculation is found in M3 Product Costing.</p> <p>The search starts from the left. The alternative selected in the field farthest to the left has the highest priority. The alternative selected in the next field has the second highest priority, and so on.</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 1 = Purchase price in agreement 2 = Purchase price in the item/supplier file 3 = Purchase price in the item file 4 = Average cost 5 = Price on latest invoice in the purchasing statistics 6 = The lowest price of alternatives 4 and 5. If one of the values is 0, the other value is selected. 7 = Cost in supplying facility <p>Note: Alternative 5 retrieves the latest net invoice price for each facility. The price is converted into local currency using the current exchange rate.</p> <p>The default values specified here in (CRS780) can be overridden per calculation in (PCS280).</p>
CRS780/G	38 Goods receipt allowed in 'PO. Display Lines' (PPS220)	<p>...whether goods receipt can be done in 'Purchase Order. Display Lines' (PPS220).</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 0 = No, goods receipt is done in (PPS300) according to the regular goods receiving routine. 1 = Yes, goods receipt can be done in (PPS220).

Program ID/Panel	Field	The field indicates...
CRS780/G	40 Accounting dimension for cost center	<p>...the dimension type used for a cost center.</p> <p>For example, when creating a requisition order in (PPS180), you have to enter the cost center against which a purchase should be charged.</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 0 = No cost center check 2 = Accounting dimension 2 3 = Accounting dimension 3 4 = Accounting dimension 4 5 = Accounting dimension 5 6 = Accounting dimension 6 7 = Accounting dimension 7
CRS780/G	41 Default PO type – direct purchase from maintenance	<p>...the order type used for a direct purchase of items through a maintenance order in 'Work Order. Open' (MOS100) if no order type has been defined for the repair ID in 'Supplier. Connect Item' (PPS040).</p> <p>Purchase order types are defined in 'PO Type. Open' (PPS095).</p>
CRS780/G	42 Default work center – purchase repair order	<p>...the subcontracting work center to be used when creating a purchase repair order connected to a work order. An operation is also automatically created on the work order.</p>
CRS780/G	43 Check supplier capability before approval	<p>...whether to check that an assortment is connected to a supplier when the supplier is defined in 'Supplier. Open' (CRS620).</p> <p>When you raise the supplier status to 20=Approved in (CRS620), a check is made against the capability file in (PPS012).</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 0 = No, a capability check is not done. 1 = Yes, a capability check is done.
CRS780/G	44 Create planned requisition order – subcontracting	<p>...whether to create a planned requisition order when a planned purchase order for subcontracted items without a manufacturing order is created.</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 0 = No, a planned requisition order is not created. 1 = Yes, a planned requisition order is created. <p>Note: We recommend that the value in this field is 1.</p>

Program ID/Panel	Field	The field indicates...
CRS780/G	45 Default media profile	<p>...the media profile used on a purchase order or claim after it has been printed or sent the first time. The media profile entered here replaces the original media profile.</p>
		<p>You define and control the media profile in 'Standard Document. Connect Media Control Object' (CRS945). The media profile is then maintained in 'Media Profile. Open' (CRS033).</p>
CRS780/H	50 Default Trade-in Supplier	<p>In the trade-in scenario, the customer who wants to trade-in their equipment needs to also be a supplier (for example: the supplier on the purchase order that is created by the dealer to buy the trade-in equipment from the customer). The purchase settings therefore need to contain a template supplier number. This template supplier is used to take the customer information and create the supplier from it. The trade-in supplier has a special supplier type (supplier type 9).</p>
CRS780/H	51 Default PO type Trade-in purchase	<p>The default PO type used for a trade-in purchase through a customer order. This can be overruled in (OIS145) 'Customer Order. Acquire Sales Item'.</p>
CRS780/H	52 General Costing Model Trade-in	<p>The costing model used for trade-in transactions.</p>
CRS780/H	53 Batch origin trade-in	<p>The purchase batch origin used when creating a trade-in purchase order from the customer order.</p>
CRS780/H	58 Allow same agreement number	<p>... whether it is possible to use the same agreement number for different suppliers in 'Purchase Agreement. Open' (PPS100).</p>
		<p>The alternatives are valid:</p>
		<p>0 = No, creation of the same agreement number is not allowed.</p>
		<p>1 = Yes, creation of the same agreement number is allowed.</p>
		<p>You can only enter or update the setting for a blank division. The setting is valid for all the divisions that are connected to the company.</p>

Program ID/Panel	Field	The field indicates...
CRS780/H	66 Use of purchase organization: Price/Planning - Priority order for price search	<p>...the priority order for a price search from purchase agreements in (PPS100), and whether to take the purchase organization in the search sequence into consideration or not. Including the purchase organization in the price sequence allows for grouping of warehouses that should share regionally or centrally negotiated purchase agreements. This is achieved by connecting warehouses in (MMS005) and purchase agreements in (PPS100) to purchase organizations. Purchase organizations used for a price search are defined as purchase organization type 0='Price' in (PPS099).</p> <p>The alternatives are valid:</p> <p>0 = A price search with no purchase organization is used. The standard price search hierarchy is used from purchase agreement in (PPS100), item or supplier in (PPS040), or item in (MMS001).</p> <p>1 = A price search taking the purchase organization into consideration is activated. The price is searched for from a purchase agreement connected to the purchase organization of the warehouse in (MMS005). If no price is found from an agreement with a purchase organization, the standard price hierarchy is used.</p> <p>Changing the parameter from 1 to 0 invalidates any purchase agreement that is connected to a purchase organization.</p>

Program ID/Panel	Field	The field indicates...
CRS780/H	66 Use of purchase organization: Price/Planning - Use purchase organization for planning	

Program ID/Panel	Field	The field indicates...
		<p>...if the use of purchase organizations for planning purposes is activated for the company. This parameter can only be updated for a blank division.</p> <p>Purchase organizations used for planning are created in 'Purchase Organization. Open' (PPS099) and represented by the purchase organization type 1='Planning'.</p> <p>Purchase organizations for planning are used to enable central procurement in which a central department is responsible for procurement activities on behalf of groups of warehouses (regions) and products. The central department, represented as a facility connected to the purchase organization, can create consolidated purchase orders for warehouses and products for a purchase.</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 0 = Purchase organization for planning is not used for planned purchase orders. 1 = Use of purchase organization for planning is mandatory for planned purchase orders. With this alternative: <ul style="list-style-type: none"> - Purchase organization is made available and mandatory to use for planned purchase orders or purchase orders and batch purchase orders for purchase order category 20-'Normal', 70-'Subcontracting' and 10-'Inquiry'. - Purchase organization can be automatically assigned for planned purchase orders, either by assigning a 'default purchase organization' for a warehouse in 'Purchase Organization. Connect Warehouse' (PPS199) or using the object control table 'Purchase Organization Selection. Open (PPS198)'. - Validity of purchase organization for warehouses can be defined using 'Purchase Organization. Connect Warehouse' (PPS199). - Purchase orders with purchase order lines for multiple facilities can be created, if a purchase organization that is connected to a 'buying facility' is used when creating a planned purchase order or a purchase order. - The buying facility from a purchase organization can be used as the facility for planned purchase orders and purchase order headers, indicating that the order is managed by a central purchase department.

Program ID/Panel	Field	The field indicates...
		<p>ment.</p> <ul style="list-style-type: none"> - 'Purchase organization' and 'Country' are made available as consolidation. <p>Purchase organizations for purchase price agreements can be used independently of the use of purchase organizations for planning purposes.</p>

'Internal Addresses. Open' (CRS235)

Program ID/Panel	Field	The field indicates...
(CRS235/B)	Internal address type	<p>...the address type that is used internally for the current address.</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 1 = Final destination or goods receiving address 2 = Ship-via or FOB address 3 = Invoicing address 4 = Optional address 5 = Internal address.
(CRS235/B)	Address key 1	<p>...the primary search criteria that M3 uses to find the correct address. The information specified here depends on the address type that was entered in the Internal address type field.</p>
(CRS235/B)	Address key 2	<p>...the secondary search criteria when searching for the correct address on a purchase order.</p>
(CRS235/B)	Address key 3	<p>...the kind of information that can be specified as an address key.</p>
(CRS235/E)	Address 1,2,3,4	<p>...an address line.</p>
(CRS235/E)	Ship-via address	<p>...the address the transport goes through before it arrives at the final address.</p>

Settings for Purchase Order

This document explains how you define settings for creating and releasing a purchase order.

Outcome

Basic data for creating and releasing a purchase order is defined.

These tables are used for purchase orders:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line

Before you start

- Specify basic settings for the purchase flow according to [Basic Settings for the Purchase Flow](#) on page 49.
- Specify settings for planned purchase orders according to [Create and Release Planned Purchase Order](#) on page 100.

Follow these steps

Settings for the PO type

- 1 Start 'Purchase Order Type. Open' (PPS095).
- 2 Fill in the fields on the E, F, G, H, I, J, and K panels.

Texts connected to the purchase order - Header or lines

You can specify longer item texts and write this information on the purchase order as a line text (PPS201). The item number and item descriptions might not be sufficient to describe the requirements for a specific item to the supplier. The text is placed under the text function (F6) in 'Item. Open' (MMS001) and is connected to a purchase order type in 'PO Type. Connect Text' (PPS096).

The same function exists for the Suppliers/Financial (CRS624) and the Item/Supplier (PPS040) combination.

- 1 Option 11='Text table' on the (PPS095/B) panel starts (PPS096).
- 2 Specify 2='Item. Open' (MMS001) on the 'Text type' field.
- 3 If the text in (MMS001) is saved as a text block, you must specify the ID for the text block in the 'Text block' field. If not, you can leave this field blank.
- 4 On the E panel, select 3-'PO line text' on the 'Text category' field.
- 5 Press Enter. The text for the item will be printed on the purchase order line.
For connecting text from 'Supplier. Define Purchase Financial' (CRS624), select 'Text type' 1 and 'Text category' 1 or 2.
For connecting text from 'Supplier. Connect Item' (PPS040), select 'Text type' 3 and 'Text category' 3.

Pre-text and post text on the purchase order

- 1 Pre-text and post text for the header can be defined in 'Purchase Order. Open' (PPS200). By clicking F19='Pre-text' or F20='Post-text' on any of the detail panels in 'Purchase Order. Open' (PPS200), the text will be displayed on the purchase order documents.
- 2 A line text can be attached by clicking F6 in 'Purchase Order. Open Lines' (PPS201).
- 3 A more permanent post-text can be placed on all purchase orders. This can be used to inform the supplier of a change of address, for example. The text is placed in 'General Text. Open' (CRS950) and connected to parameter 13 in 'Settings – Purchasing' (CRS780).

Parameters to set

Settings for the purchase order type

Program ID/ panel	Field	The field indicates ...
(PPS095/E)	Purchase order category	... indicates the category of order (for example: normal order, delivery schedule, consignment order, subcontract) to which a purchase order type is connected.
(PPS095/E)	010, 011, 012 Panel sequence predefined panel sequences used for the header and the lines in 'Purchase Order. Open' (PPS200).
(PPS095/E)	020 Number series - PO	...the number series used for the purchase order. You can specify different series for different facilities. The number series type for PO is 20. Also, the number series for goods receiving and claims must be specified (parameters 021 and 022).
(PPS095/E)	030 Document variant - PO	... the layout for the purchase order document. For the standard document, the value is left blank. Values 30 and 40 enable you to print the order lines in a matrix form.

Program ID/ panel	Field	The field indicates ...
(PPS095/E)	040 Goods receiving method	...the method that determines processing of the goods receiving flow. Depending on the method, quality inspection can be performed and certain documents can be printed.
(PPS095/E)	050 Media profile	<p>...how the document should be sent to the supplier and if a copy should be printed. The value is defaulted from these places and in this order:</p> <ul style="list-style-type: none"> • Purchase Order Type (PPS095) • Item/Supplier (PPS040) • Std Doc/Media Profile (CRS945) <p>The media controlling object that is used as a filter in the media control table is in 'Std Document. Connect Media Ctrl Object' (CRS945).</p> <p>The media profile can be set in an M3 Business Engine transaction, for example a purchase order, to be one of the media controlling components for a printout.</p> <p>For example, if a media profile is set on a purchase order together with the supplier number, it will be a media controlling object for the purchase order printout. If the combination does not exist in the media control table, the system only searches for the media profile. If that combination does not exist, the system only searches for the supplier number. If none of the previous combinations exist, the system finally searches for a blank media profile and a blank supplier number. When a valid combination is found, the purchase order will be printed for all the media that are set for the valid combination.</p>

Program ID/ panel	Field	The field indicates ...
(PPS095/E)	060 Reference order category	<p>...the category that the reference order number represents.</p> <p>This parameter only places a default value in the 'Reference order category' field on (PPS201/E).</p>
(PPS095/E)	070 Authorization check	<p>... when to perform a purchase authorization check against the authorization rules in 'Purchase Authority. Open' (PPS235).</p> <p>Alternatives:</p> <ul style="list-style-type: none"> • 1 = Never • 2 = During the processing of a purchase order proposal. • 3 = When a purchase order is created manually or automatically. • 4 = In both scenarios described in alternatives 2 and 3. • 5 = No check, external approval required. <p>When alternative 5 is used, a created planned PO or purchase order will always require an authorization approval, regardless of the purchase authorization rules in (PPS235). The approval can only be done by using API (PPS170MI) and (PPS200MI). A new approval is needed if the line amount is increased.</p>
(PPS095/F)	110 Mandatory item/supplier record	<p>... whether the connection between an item and supplier in (PPS040) is required to specify the order lines.</p> <p>Automatic order proposals are assigned a lower status when item numbers are not connected to a supplier.</p>
(PPS095/F)	120, 121 Printout method item name and printout method item description	<p>... the item descriptions that should be used on the documents and the hierarchy of collecting these.</p>

Program ID/ panel	Field	The field indicates ...
(PPS095/F)	130 Print PO lines	... whether the purchase order lines should be printed on the purchase order. For example, if the purchase is an expensive investment, you can print a text block on the document instead of the order lines.
(PPS095/F)	140 PO split on reference person	...if a purchase order should be split into different order numbers when order lines refer to different supplier contacts.
(PPS095/F)	150 Update material plan	... whether the material plan should be updated. Alternative 2 is used for orders (example: subcontracts) which should be displayed in the material plan without affecting the projected on-hand balance. It can also be used for direct goods deliveries. During order line entry, you can override the alternative specified here.
(PPS095/F)	160 Multiple agreements per PO	... if purchase orders can contain more than one agreement number.
(PPS095/F)	161 Agreement check - PO entry	... whether you can compare the agreement number on the purchase order lines with the number in the agreement file.
(PPS095/F)	170 PO deletion method - PO	... which method should be used when a purchase order is manually deleted. It is either assigned status 99 or it is removed.
(PPS095/F)	175 Initial provisioning order if this order type is for initial provisioning orders. Initial provisioning is the purchase of, for example, maintenance material at a good price when purchased with an investment in a fixed asset.

Program ID/ panel	Field	The field indicates ...
(PPS095/F)	176 Update pre-allocation when qty chg	<p>... whether the preallocation maintenance program is triggered by a change of quantity on a pre-allocated order.</p> <p>Note that a warning is always issued if there is a preallocated quantity. If you ignore the warning and this field indicates that the maintenance program is triggered, then 'Preallocation. Perform Detailed' (MWS121) is displayed immediately to update the preallocation. In (MWS121), the header information will show a negative quantity to allocate. You must delete preallocations until this quantity is greater than or equal to 0.</p> <p>For customer order types, only values 0 and 2 are relevant. For purchase order types, only values 0 and 1 are relevant. For order types for manufacturing orders and distribution orders, all values are relevant.</p>
(PPS095/F)	177 Costing model - subcontracting	<p>... the costing model used for a repair or subcontracting order. The costing model overrides the costing model defined in 'Item. Connect Facility' (MMS003) and 'Settings – Purchase' (CRS780).</p>
(PPS095/G)	190 PO type check	<p>...whether the purchase order should be reconciled for each supplier against the table of approved purchase order types.</p> <p>In 'Supplier. Connect Purchase Order Types' (PPS011) you can connect valid order types to the suppliers (accessed by selecting option 15 from (CRS624)). PO Type check (190) specifies if a check on the supplier's valid purchase order types must be done and if so, if it should be a warning or a stop.</p>

Program ID/ panel	Field	The field indicates ...
(PPS095/G)	210 Maximum number of PO lines	... how many order lines can be included in a purchase order. Note that blank means 999 lines.
(PPS095/G)	220 Update item file with purchase price	... indicates if the item file should be updated with the price on the invoice. With value 2, the main supplier can also be updated on 'Item. Connect Warehouse' (MMS002/E).
(PPS095/G)	225 Retrieve price from last invoice	... if the price should be retrieved from the latest invoiced price in the supplier statistics if the Item price is 0. The last invoiced price will be retrieved for each combination of facility and supplier.
(PPS095/G)	250 PO to agent	... whether the purchase order should be sent to the agent instead of directly to the supplier. If an agent is not specified, the order is sent to the supplier regardless of the alternative specified above.
(PPS095/G)	260 Revision check	... whether a check should be made to see if this is the most recent revision of the item. If a more recent revision is found, a warning will be issued. The check compares the revision found in the item field with the revision in the engineering change order routine.
(PPS095/G)	280 Purch costing calc on each line	... whether the purchase expenditures should be used during purchase order entry.

Program ID/ panel	Field	The field indicates ...
(PPS095/G)	290 Goods recipient in location file	<p>... how the recipient field on the purchase order should be processed.</p> <p>1 = User-defined format without a location validity check.</p> <p>2 = If a value is specified, a check is done to ensure that the location has been defined in 'Stock Location. Open' (MMS010). If it has not been defined, an error message will be displayed.</p>
(PPS095/H)	320 Representative price	<p>... whether the specified purchase price is representative.</p> <p>0 = No</p> <p>The price should not affect the price history analysis. It may, for example, contain expensive support purchases.</p> <p>1 = Manually specified price</p> <p>2 = Price according to agreement</p> <p>This code is always displayed by default on the purchase order line. If the purchase price is changed on the line and the value in this field is 2, the code is automatically set to 1.</p>
(PPS095/H)	330 Check maximum service charge limit	<p>... whether the charge table should be checked. If the amount falls short of the maximum limit, a warning is displayed.</p> <p>The charge table refers to charges or functions defined in (PPS009).</p> <p>This field is used for reply time purposes only.</p>
(PPS095/H)	340 Multiple warehouses per PO 341 Multiple delivery addresses per PO	<p>... if purchase order lines with different warehouses or delivery addresses on the same purchase order number can be specified.</p>

Program ID/ panel	Field	The field indicates ...
(PPS095/H)	350 Consolidation fence - PO	... the number of calendar days that controls time allowances for the release of a planned purchase order.
		The number of days between the delivery dates of different order lines must be lower than the number of days specified here.
(PPS095/H)	360 PO status -confirmed- after printing whether the purchase order should be assigned a confirmed status when it is printed.
(PPS095/H)	370 Warning - dely date within lead time	... if a warning should be issued when a purchase order is specified with a requested delivery time earlier than the delivery date according to the lead time.
(PPS095/I)	510 Stop if excess delivery	... whether a purchase order should be stopped if the received quantity exceeds the ordered/confirmed quantity plus the tolerance/deviation limit. The tolerance limit can be found in the item/supplier file (PPS040). If it is not specified, it can be found in parameter 10 in (CRS780).

Program ID/ panel	Field	The field indicates ...
(PPS095/I)	520 Get buyer from agreement	<p>... if you want the system to prioritize the buyer specified for the purchase agreement when selecting which buyer to use as the default buyer for purchase orders.</p> <p>If you select the check box, the system will determine which buyer to use as defaulted buyer by using this priority:</p> <ol style="list-style-type: none"> 1 The buyer specified in the purchase agreement in 'Purchase Agreement. Open' (PPS100). 2 The buyer specified for the item/warehouse combination in 'Item. Connect Warehouse' (MMS002). 3 The responsible specified for the item/supplier combination in (PPS040). 4 The buyer specified for the supplier in (CRS624). <p>If you do not select the check box, the system will determine which buyer to use as the default buyer by using this priority:</p> <ol style="list-style-type: none"> 1 The buyer specified for the item/warehouse combination in (MMS002). 2 The responsible specified for the item/supplier combination in (PPS040). 3 The buyer specified for the supplier in (CRS624). <p>The default buyer can be overridden when you process purchase orders.</p>

Program ID/ panel	Field	The field indicates ...
(PPS095/I)	530 PO transaction - order confirmation 531 PO transaction - shipment advice 532 PO transaction - transport notification	... whether an order confirmation, advice, or notification should lead to the creation of lines in the purchase order's transaction file. These fields must always be activated.
(PPS095/I)	540 Completion flag open - goods receipt	... whether you can update the completion mark of the purchase order line during goods receipt reporting.
(PPS095/I)	550 Packaging action	... whether a packaging action is taken. The action taken is set by the packaging type parameters in 'Packaging. Open' (MMS050). See .
(PPS095/J)	610 Invoice reporting	... whether invoice reporting should occur. If the value in this field is set to 0, a purchase order line is closed and ready for statistics upon complete put-away, that is, invoice reporting is not permitted.
(PPS095/J)	620 Auto display accounting string	... whether a separate accounting string for manual accounting should be displayed automatically when a purchase order is specified.
(PPS095/J)	630 Invoicing permitted	... indicates if an invoice for the purchase order should be accepted or not.
(PPS095/J)	640 Manual update of due date	... if the due date for payments can be specified manually on the purchase order (PPS200/F).

Program ID/ panel	Field	The field indicates ...
(PPS095/J)	650 Partial payment permitted	<p>.... whether it is possible to specify a payment table for a purchase order belonging to this order type.</p> <p>The payment table specified is taken into consideration for liquidity reports, for example 'Purchase Order. Print Follow-up' (PPS640), but not during invoice reporting.</p>
(PPS095/K)	710 Automatic printout of PO documents	<p>...if the purchase order document should be automatically printed when the purchase order is created from a planned purchase order.</p> <p>Note: This check box must be selected if you want the purchase order to be automatically released (status 20='Document printed').</p>
(PPS095/K)	730 Automatic delivery note generation	<p>...if delivery note data for 'Supplier Delivery Note. Open' (PPS360) should be automatically generated when a purchase order is advised for shipment through 'Purchase Order. Display Lines' (PPS220) OR 'Purchase Order. Advise Shipment' (PPS260).</p>
(PPS095/K)	720 Supplier performance affected	<p>... whether this purchase order should affect the supplier's performance evaluation.</p>
(PPS095/K)	740 Vendor statistics update	<p>... whether vendor statistics should be updated.</p>
(PPS095/K)	750 DO type for supply chain rebuild	<p>... the distribution order type to use for a supply chain rebuild. This is required to trigger a supply chain rebuild when the ship-to warehouse of a purchase order line is changed.</p>

Program ID/ panel	Field	The field indicates ...
(PPS095/K)	760 Inventory bypass	... whether inventory bypass is enabled. This means that purchased items are expected to be received at the supplying warehouse set on (MMS002/E) instead of the warehouse to which the item was ordered. A supply chain rebuild will ensure that the goods are transferred to the demand warehouse. This can be used when a supplier prefers to deliver to a central warehouse, instead of the one to which the goods were ordered.
(PPS095/K)	770 Frozen requested delivery date	... if the requested delivery date should be considered frozen by the MRP calculation. If enabled, MRP will not suggest an alternative planning date, and will not set any rescheduling action message. If a material shortage occurs before the planned receipt date, new planned orders will be created even if the quantity of the frozen date order would be sufficient to cover it. If the frozen date order is within the lead time, the order will be handled as any other purchase order by MRP.
(PPS095/K)	780 Check appr manufacturer PO entry	<p>... whether to validate against approved manufacturer in 'Supplier Item. Connect Manufacturer' (PPS041) for the entered record of the purchase order line.</p> <p>0 = No</p> <p>1 = Yes, check that the manufacturer is approved if a value is entered.</p> <p>2 = Yes, approved manufacturer must be entered.</p>

Program ID/ panel	Field	The field indicates ...
(PPS095/K)	790 Check appr manufacturer PO receipt	<p>... whether to validate against approved manufacturer in (PPS041) for the entered purchase order line receipt record.</p> <p>0 = No</p>
		<p>1 = Yes, check that the manufacturer is approved.</p>
		<p>2 = Yes, but with warning for unapproved. Allow goods receipt of both approved and unapproved manufacturer. Receipt for unapproved manufacturer must be rejected in quality inspection. This setting does not support goods receiving method 'Goods receipt/Put-away' or 'Direct put-away' to a status 2-'Location'.</p>
(PPS095/K)	795 X-hire rental PO or Loan	<p>... indicates if the PO type is a loan or an X-hire.</p> <p>Note: The parameter is only visible when PO category is 80-'Loan'.</p>
(PPS095/K)	796 X-hire subline number	<p>... indicates the PO subline number assigned for X-hire purchase orders.</p> <p>Note: The parameter is only visible when PO category is 80-'Loan'. Subline number can only be set if parameter 795 is set to 1 in (PPS095).</p>
(PPS096/B)	Text type	<p>... where the text block (the text) is retrieved from, as follows:</p> <ul style="list-style-type: none"> • 1 = Supplier/purchase (CRS624) • 2 = Item (MMS001) • 3 = Item/supplier (PPS040)
(PPS096/E)	Text category	<p>... the type of text block.</p> <p>Note: If you have selected text type 2='Item', then you must select text category 3='Purchase order line text'.</p>

Settings for planned POs should be automatically released to POs

Program ID/ panel	Field	The field indicates ...
(MMS037/E)	022 Default status - planned orders AM = A1	<p>...the status to be assigned to a planned order when it gets action message A1='Release and reschedule', during material planning.</p> <p>If planned orders with action message A1 should be released automatically, you must set this parameter to 60='Released'.</p>
(MMS037/E)	025 Default status - planned orders AM = A2	<p>... the status to be assigned to automatically created planned orders.</p> <p>If planned orders with action message A2 should be released automatically, you must set this parameter to 60='Released'.</p>
(MMS002/E)	Planning policy	<p>...the planning policy which contains a number of rules, determine how generation of planned orders, action messages, and warning messages are to be applied.</p> <p>You must connect a planning policy for the item/warehouse with the settings above 60='Released'.</p>

Settings for PO should automatically have status 20='PO Printed' (Released)

Program ID/ panel	Field	The field indicates ...
(MMS037/E)	022 Default status - planned orders AM = A1	<p>...the status to be assigned to a planned order when it gets action message A1='Release and reschedule', during material planning.</p> <p>If planned orders with action message A1 should be released automatically, you must set this parameter to 60='Released'.</p>

Program ID/ panel	Field	The field indicates ...
(MMS037/E)	025 Default status - planned orders AM = A2	<p>... the status to be assigned to automatically created planned orders.</p> <p>If planned orders with action message A2 should be released automatically, you must set this parameter to 60='Released'.</p>
(MMS002/E)	Planning policy	<p>...the planning policy which contains a number of rules, determine how generation of planned orders, action messages, and warning messages are to be applied.</p> <p>You must connect a planning policy for the item/warehouse with the settings above 60='Released'.</p>
Program ID/ panel	Field	The field indicates ...
(MMS037/E)	005 Default status PO	<p>...the default purchase order status records should be assigned as a planned order.</p> <p>Select status 15='Ready for print-out'. The purchase order is immediately ready for printing.</p> <p>The purchase order will be assigned the above status if it is not changed in 'Planned Purchase Order. Open' (PPS170).</p>
(PPS095/K)	710 Automatic printout of PO documents	<p>...if the purchase order document should be automatically printed when the purchase order is created from a planned purchase order.</p> <p>Select the check box if you want the purchase order to be automatically released (status 20='Document printed').</p>

Settings for Release of Planned Purchase Order

Abstract

Purchase order consolidation groups are used in the release function for planned purchase orders and can be defined as a way of determining how planned purchase orders are consolidated into one or more discrete purchase orders.

Records are created and maintained in 'PO Consolidation Group. Open' (PPS019), where it is possible to select a list of objects and fields to consolidate by. The records can then be connected to the supplier in 'Supplier. Define Purchase Financial' (CRS624/E) and/or 'Purchase Order Type. Open' (PPS095/H), whereas the latter will override the PO consolidation group of the supplier (CRS624).

The file containing the planned purchase order will create a sorting order based on the PO consolidation group that will be used in the release flow. If no PO consolidation group is created, the function will use a default sorting order. The key for the default sorting order contains the company number, facility, supplier, PO consolidation group, order type, and currency code.

Limitations

The autojob (MMS940) can generate a different result depending on the waiting time of the job. This could happen when function program PPS914 (Create PO from planned orders) has handled all records that have been released from (MMS940) before the function is ready for release of planned purchase orders. This can lead to a new purchase order being created, even if the record has the same consolidation value as the record that was handled prior to this one.

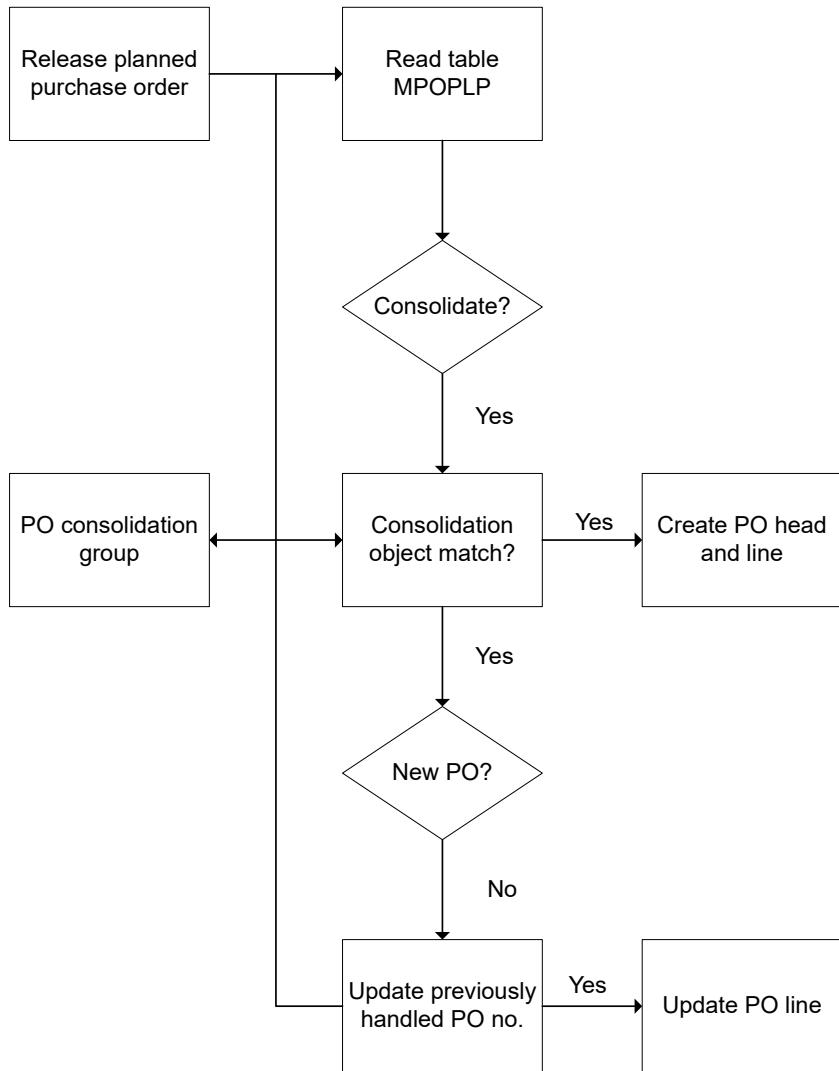
Outcome

- A purchase order consolidation group is created.
- A purchase order consolidation group is entered for a supplier and an order type.

Before you start

The basic settings for the supplier must be entered according to Settings for Supplier and Items.

The basic settings for a purchase order type must be entered according to Settings for Purchase Order.

Flowchart**Workflow**

Example of planned purchase order release

This table shows an example of 10 released planned purchase orders with different consolidation characteristics:

Record	Supplier	Order type	Consolidation key	Sorting key	PO number
1	Supplier A	ABC	DFT	Buyer = Per Delivery term= 001 Del method= Truck	PO001

Record	Supplier	Order type	Consolidation key	Sorting key	PO number
2	Supplier 1	ABC	001	Buyer = Per Delivery term= 001 Del method= Truck	PO002
3	Supplier 1	ABC	001	Buyer = Per Delivery term= 001 Del method= Truck	PO002
4	Supplier 1	ABC	001	Buyer = Per Delivery term= 001 Del method= Truck	PO002
5	Supplier 1	ABC	002	Delivery term= 001 Del method= Truck	PO003
6	Supplier 2	ABC	001	Buyer = Per Delivery term= 001 Del method= Truck	PO004
7	Supplier 2	ABC	001	Buyer = Per Delivery term= 001 Del method= Truck	PO004
8	Supplier 2	BCD	002	Delivery term= 001 Del method= Truck	PO005
9	Supplier 2	BCD	002	Delivery term= 001 Del method= Train	PO006
10	Supplier 2	CDE	003	Delivery term= 001 Stock zone= AB1	PO007

The table is sorted in the same order as each record consolidation key. This is how the records are handled:

- Record 1: Is a planned PO with the supplier 'Supplier A' as the first record. Therefore, the first PO is created: PO001.
- Record 2: Contains a new supplier, which will then be compared to the previous record to see if the record matches. This is not the case, why PO PO002 is created.
- Record 3: Contains the same fields as the previous record, why it will be added to the same PO: PO002.
- Record 4: Contains the same fields as the previous record, why it will be added to the same PO: PO002.
- Record 5: This record contains the same supplier as the previous record, but this record has been manually changed to contain a new consolidation key. This means that the record does not match the previous record, why a new PO is created: PO003.
- Records 6 and 7: Contain a new supplier and will also create a new PO, PO004, where both lines will be added.

- Record 8: Contains the same supplier as the previous one, but this record contains a new order type that is set up with consolidation key 002. This order type consolidation key will override the supplier's consolidation key, why PO PO005 is created.
- Record 9: Contains the same supplier, order type, and consolidation key, but the value for the delivery method is changed to 'Train' for this record. Therefore it does not match the previous record and PO PO006 is created.
- Record 10: The last record in this batch run contains a new order type that contains a new consolidation key, which then creates PO PO007.

It is important that the consolidation keys create the sorting key and decide how the released planned PO will be sorted and then handled in function program PPS914 (Create PO from order proposals). As you see in the table above, the work file is sorted in the same order as the sorting key, in the index table. Records with the same key field (supplier etc.) and also the same sorting key will then be consolidated.

Note: The sorting key can contain different values from the planned PO, as displayed in the illustration above for PO PO006 and PO007. They have the same value in the 'Key' field, but the delivery method is 'Truck' in one planned PO and 'Train' in the other planned PO. This scenario will then separate the planned POs into two different POs.

Follow these steps

At least one PO consolidation group must exist to enable a control of how the planned purchase orders are to be consolidated. If no group is created, the system will automatically create a default group with a default key setup.

- 1 Open 'PO Consolidation Group. Open' (PPS019) and define a record on the B panel. The PO consolidation group is used to create the sorting key that will be created for all planned purchase records in 'Planned Purchase Order. Open' (PPS170) and 'Planned Purchase Order. Open' (PPS171).
- 2 On the E panel, select which objects and fields to consolidate by.
- 3 Open 'Supplier. Define Purchase Financial' (CRS624) for your selected supplier, go to panel E, and attach your PO consolidation group.
- 4 Open 'Purchase Order Type. Open' (PPS095) and attach your PO consolidation group on the H panel.

Settings for Supplier and Items

This document explains how to set purchase basic data for supplier, item, and connect supplier/item information.

Outcome

Supplier, item, and supplier/item information is defined.

- **Supplier settings**

The supplier file may be updated from two main programs: 'Supplier. Open' (CRS620) and 'Supplier. Define Purchase & Financial' (CRS624). A supplier number record must be specified in both programs to be able to use the supplier in the purchase order flow. From these programs, many other supplier-related

programs are reached, for example, programs used for addresses, charges, and transport times. The main and related supplier programs are illustrated in the figure below.

- **Item settings**

Three main M3 programs are used for entering items. General information about the item is specified in 'Item. Open' (MMS001). Items are then connected to warehouses in 'Item. Connect Warehouse' (MMS002). Finally, items are connected to facilities in 'Item. Connect Facility' (MMS003). These programs are described in the Product Data documentation. Only the fields relating to procurement are described here.

- **Supplier/item settings**

In 'Supplier. Connect Item' (PPS040), unique data for a specific supplier and item combinations are specified. You are not required to enter a record in this program to perform work in the purchase order flow. To avoid unnecessary maintenance of the item and supplier files, you should only create item/supplier combinations in this program if they are necessary. An appropriate use of this function is to specify certain terms depending on the supplier/item combination.

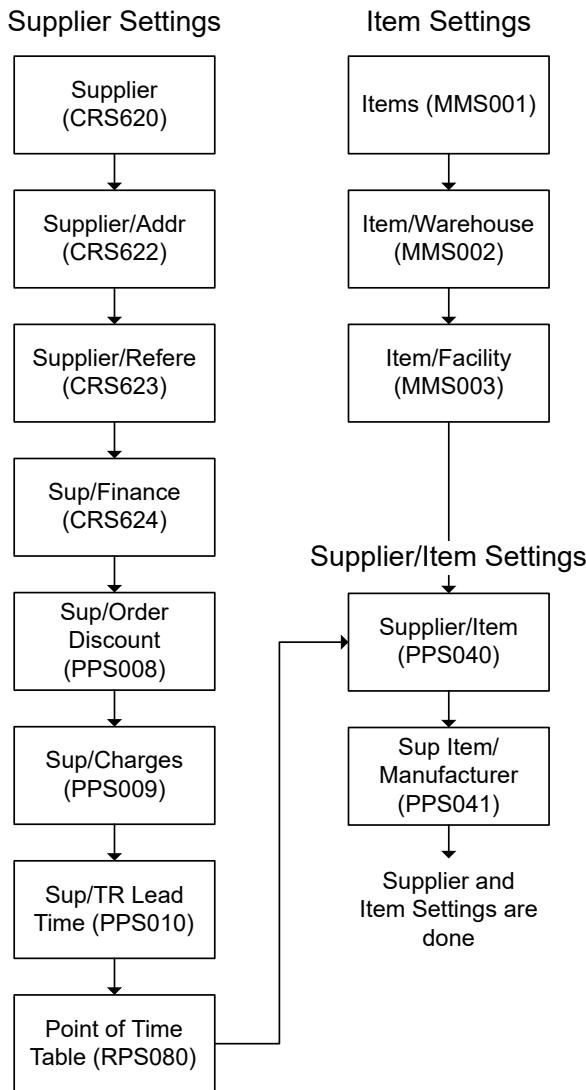
These files are some of the most important files used for the mentioned programs:

CIDMAS	Vendor Master
CIDADR	Vendor Address
CIDREF	Vendor Reference person
CIDVEN	Vendor Master Purchase & Financial
MITVEN	Item/Vendor
MITMAS	Item Master
MITMAD	Item Master Additional data
MITMPR	Item Master Price & Sales data
MITBAL	Warehouse/item stock and planning values
MITFAC	Facility/item

Before you start

No prerequisites are needed.

Outline



Specify supplier settings

The supplier file may be updated from two main programs: (CRS620) and (CRS624). A supplier number record must be specified in both programs to be able to use the supplier in the purchase order flow. From these programs, many other supplier-related programs are reached, for example, programs used for addresses, charges, and transport times.

- 1 Start (CRS620). Specify panel sequence EFT1235.
- 2 Fill in appropriate fields on the panels.

3 Start 'Supplier. Connect Address' (CRS622) through option 11 from (CRS620). Fill in appropriate fields on the panels. Custom fields can be linked with an address where the address type is 04 (Origin address) using related option 11 (custom fields) on (CRS622/B).

4 Start 'Supplier. Connect Reference' (CRS623) through option 12 from (CRS620). Fill in appropriate fields on the panels.

From (CRS623/B), you can replace an existing reference for a supplier by using option 14 (Replace ref). The program will not change the reference on existing orders, but the new reference will be valid on new orders. Option 14 also updates the reference field in (PPS040).

If you use divisions in M3, you may want to define different supplier values for the various divisions. For example, a big supplier often has locations in different cities or different countries for which division-specific currency codes must be defined. Such division-specific values for selected fields can be specified in 'Supplier. Open/Division' (MFS620).

5 Start (CRS624) through option 13 from (CRS620). Fill in appropriate fields on the panels.

The program consists mostly of values used in the purchase order and invoicing flows. These values are defaulted on the purchase order when the order is entered.

A record must first exist in this program to be able to enter a purchase order into the system. If no record exists, an error message is displayed when the purchase order is specified in 'Purchase Order. Open' (PPS200).

6 Start 'Supplier. Connect Order Total Discount' (PPS008) through option 12 from (CRS624).

Here, a value-dependent order total discount per supplier can be specified. The discount is displayed as the Order total discount on the H panel of 'Purchase Order. Open' (PPS200/H). If an order total discount table exists, F14 (Order tot disc) is highlighted on the H panel, and the function key can be used to see the next discount level in the table.

7 Start 'Supplier. Connect Charges' (PPS009) through option 13 from (CRS624). Fill limit values and charges.

8 Start 'Supplier. Connect Transp Lead Times' (PPS010) through option 14 from (CRS624).

9 These are the other options in (CRS624):

- Option 15 calls 'Supplier. Connect Purchase Order Types' (PPS011) where valid order types are entered for a specific supplier. For a check on valid order types upon purchase order registration to be done, the PO Type Check parameter (parameter 190) in 'Purchase Order Type. Open' (PPS095) must be selected.
- In 'Supplier. Connect Assortment' (PPS012) which is reached through option 16, quality classes per supplier and item group, product group or procurement group are defined. The quality classes are specified in 'Quality Class. Open' (PPS020).
- In 'Supplier. Connect Quality Audit Types' (PPS013) which is reached through option 17, you can follow up on quality activities performed on a specified supplier. Audit types are specified in 'Quality Audit Type. Open' (PPS025) and are used to classify the type of audit performed. One audit type could, for example, be an annual audit or an audit performed on new suppliers. The date for the audit and a status code indicating whether the audit is performed or not are specified in (PPS013).
- 'Supplier. Connect Delivery Term Text' (PPS014) which is reached through option 18, enables you to enter an extra text per delivery term. If the delivery term is FOB, for example, the loading port is entered in the delivery term text field and printed on the purchase order document. You may specify this text manually each time an order is entered but if it is placed here, it will be defaulted as the standard value.

- 10** Start 'Point of Time Table. Open' (RPS080) through option 19 from (CRS624). Specify a point of time table which can be used if you, for example, have a certain day of the week when you receive deliveries from your supplier.

Specify item settings

- 1** Start (MMS001). Fill in appropriate fields on the panels.

Several programs related to (MMS001) can be reached with options from the B panel. See the figure below for a description of some programs.

- In 'Item. Connect Alternate U/M' (MMS015) which is reached through option 12, alternate quantity and price units of measurement are entered. The possible alternate units are entered together with the conversion factor between them.
- In 'Item. Define Relations' (MMS020) which is reached through option 13, relations between items are entered. If an item is to be replaced by another, the related item is entered in this program.
- In 'Item. Connect Alias Number' (MMS025) which is reached through option 14, alias numbers are entered for the items. Alias numbers can be used for customer order entry and in the purchase order entry. To be able to use matrix and list view entry in 'Purchase Order. Open Lines' (PPS201), alias numbers with alias type 88 must be specified in (MMS025). The alias type indicates the type of alias number. To be able to use the alias number in (PPS201), alias numbers 2 and 3 must be defined in the check sequence on the P panel.
- In 'Item. Enter Names/Language' (MMS030) which is reached through option 15, the item name and description are entered in different languages. The foreign language names are displayed as default during entry of new customer or purchase order lines and printed on the external documents for those customer/suppliers who are connected to the language.

- 2** Start (MMS002). Fill in appropriate fields on the panels.

- 3** Start (MMS003). Fill in appropriate fields on the panels.

The administrative lead time which is one of the components in the total lead time, is specified on the E panel. This is the time required for administrative activities before a purchase order is released.

On the E panel, the current average and cost price which are used for inventory accounting, are displayed. The average price history can be viewed in 'Average Cost. Display/Update History' (CAS371), which is reached through option 12 from the B panel or F14 from the E panel.

Specify supplier/item settings

- 1** Start (PPS040). Fill in appropriate fields on the panels.

- Option 11 calls 'Purchase Agreement. Open' (PPS100), which is used to enter agreements for a certain supplier. Read more about agreements in the Agreement documentation.
- Option 12 calls 'Purchase Statistics. Display' (PPS450) and option 13 calls 'Supplier Item. Connect Manufacturer' (PPS041).

- 2** Start (PPS041) which is reached through option 13 from (PPS040). (PPS041) is used to enter manufacturers for a certain product, for informational purposes only.

Supplier settings parameters

Program ID/Panel	Field	The field indicates...
(CRS620/B)	Sorting order	<p>...which information is to be displayed on the panel.</p> <p>Six different sorting orders can be used to search for suppliers.</p> <p>Generic search can be of big help when searching for a supplier where only parts of the name are known. (Sorting order 5 and * around the known part of the name, for example *Partner*, will return all suppliers with the word Partner in the supplier name).</p>
(CRS620/B)	Supplier type	<p>...different suppliers, agents, insurance companies, payees only etc.</p> <p>Supplier type zero is the type for normal suppliers.</p>
(CRS620/E)	Status	<p>...the supplier status.</p> <p>20 is used to specify an approved supplier. If a supplier is to be deleted this is best performed by setting the status to 90 (deactivated). This prevents purchase orders from being linked to the supplier identity.</p> <p>05 is used to specify a template type supplier. This type of supplier status cannot be used for purchase order related transactions, except for copying a supplier.</p>
(CRS620/E)	Search key	<p>...a search key.</p> <p>It is a user-defined short name for the supplier, which can be used as a search key in one of the inquiries. If no search key is entered, the first 10 positions of the 'Name' field will be used automatically.</p>
(CRS620/E)	Facsimile number	<p>...the fax number to which the list should be sent when documents are printed directly to a fax machine.</p>

Program ID/Panel	Field	The field indicates...
(CRS620/E)	Language	...the language in which external documents are printed. The language codes are entered in 'Language.. Open' (CRS010).
(CRS620/E)	Harbor/airport	...the ID of the harbor or airport. It is used for reporting purposes only in trade statistics. The IDs are specified in 'Harbor/Airport.. Open' (CRS073).
(CRS620/E)	Media profile	...a media controlling object that is used as a filter in the media control table/CRS945.
(CRS620/E)	Company communication address	...the net file (Internet or email) address.
(CRS620/F)	User defined fields	...user-defined text that can be used for selecting reports or for individual information. The fields are of different length and one of them is numeric. The field names can be user-defined in 'Settings - User-defined Supplier Fields' (CRS713).
(CRS622/B)	Address type	...the type of address to use.
(CRS622/E)	Address no	...a short number for the address ID.
(CRS622/E)	Printout code	...the supplier's name or address line 1 should be printed first.
(CRS623/B)	Reference type	...which supplier references to use, for example, purchase reference (=10) and repair or subcontract reference (=15).
(CRS623/B)	Reference	...a reference ID.
(CRS623/E)	Your reference 1	...the name of the person that is to be contacted in matters concerning customer or purchase orders.

Program ID/Panel	Field	The field indicates...
(CRS624/E)	Supplier group	...a user-defined field for identifying different groups of suppliers. The groups are entered in 'Supplier Group. Open' (CRS150). Custom fields can be associated with the supplier group using related option 11 (conn u-d fld gr) in (CRS150/B).
(CRS624/E)	Buyer	...the regular buyer responsible for purchasing. The buyer entered on the item in 'Item. Connect Warehouse' (MMS002), if any, is used on planned orders generated by M3.
(CRS624/E)	Authorized	...authorizing supplier invoices in 'Supplier Invoice. Record' (APS100). This value is proposed as the default when you enter a purchase invoice.
(CRS624/E)	Order type	...an order type. It is used as a default order type when a purchase order is entered for the specified supplier.
(CRS624/E)	Monitoring list and Monitor class	...the list and level for this supplier. It is used for following up on deliveries and transportation. Read more about monitoring in the Monitoring documentation.
(CRS624/E)	Delivery terms, Freight terms, Delivery method and Packaging terms	...are defaulted on the purchase order and printed on the purchase order document.
(CRS624/E)	Statistical supplier	...if the statistics for another supplier should be updated when a purchase order is placed by this supplier. If no supplier number is entered, the supplier number on the record is used in the statistics.

Program ID/Panel	Field	The field indicates...
(CRS624/E)	ABC cls suppl and ABC method sup	...the suppliers depending on, for example, purchased volume. The classification can be finished either manually or automatically in 'ABC Classification Supplier' (PPS445). Read more about ABC Classification in the Statistics documentation.
(CRS624/E)	PIN Code	...the PIN (Personal Identity Number) code for an M3 telephone or an Internet order. The customer enters the password when placing an order.
(CRS624/E)	Disc calc mtd	<p>...the method for calculating the purchase order line's total discount.</p> <p>The total discount can be counted as a total of D1, D2, and D3 (=0) or as a chain discount (=1).</p> <p>The chain discount is calculated as $(100-D1)*(100-D2)*(100-D3)$ where D1 is the discount defined by the supplier, D2 is the discount defined by the agreement and D3 is the discount defined by number/agreement.</p>
(CRS624/E)	Point of time table (Shipment table)	...the ID for the point of time table.
(CRS624/F)	VAT code	VAT code is set to default when an invoice is entered for this supplier. VAT codes are defined in 'VAT Code. Open' (CRS030).
(CRS624/F)	Currency, exchange rate type and payment terms	These are defaulted on the purchase order header.
(CRS624/F)	Tolerance Payment	...within how many days after the due date an invoice must be paid.
(CRS624/F)	Supplier statistics and no yrs statistics	<p>...if and for how long statistics should be saved for this supplier.</p> <p>Read more about statistics in the Supplier Statistics documentation.</p>

Program ID/Panel	Field	The field indicates...
(CRS624/F)	Invoice approval conditions	...when an invoice should be approved. An invoice may be approved before goods receipt, after goods receipt, and after put-away.
(CRS624/F)	Automatic invoice approval code	...enables you to recode an invoice automatically after goods receipt.
(PPS007/E)	Supplier discount	<p>...a general discount in percentage for purchase order lines belonging to this supplier is entered.</p> <p>This discount is displayed as Discount 1 on the order line in 'Purchase Order. Open Lines' (PPS201/E).</p> <p>Discount 1 is one of three possible discounts to use on the order line. Discounts 2 and 3 can be retrieved from the agreement header and agreement line.</p>
(PPS008/B)	Limit value	...the lowest order value for a certain discount.
(PPS008/E)	Order total discount generating	...which discount percentage is to be used when the item value of the order equals or exceeds the limit. The discount is displayed as the Order total discount on the H panel of 'Purchase Order. Open' (PPS200/H). If an order total discount table exists, F14 (Order tot disc) is highlighted on the H panel, and the function key can be used to see the next discount level in the table.
(PPS009/E)	Charge type	...the type of charge.
(PPS009/E)	Limit value	<p>...the purchase order limit from which charges are debited, or new terms of delivery become valid.</p> <p>When creating or changing a purchase order, a warning will be issued if the limit is exceeded.</p> <p>The charges are not added to the purchase order automatically.</p>

Program ID/Panel	Field	The field indicates...
(PPS009/E)	Charges	...the charge to apply when the purchase amount falls below the charge limit.
(PPS009/E)	Delivery terms	...the delivery terms for a purchase order whose total exceeds the order value limit.
(PPS010/B)	Delivery term	...the transport lead time for this supplier and delivery term.
(PPS010/B)	Warehouse	...the transport lead time for this supplier and warehouse.
(PPS010/B)	Delivery method	...the transport lead time for this supplier and delivery method.
(PPS010/B)	Place of load	...the transport lead time for this supplier and place of load.
(PPS010/E)	Goods responsibility	...when the liability for a delivery is transferred from the supplier to the buyer. The date on which liability is transferred is defined as the delivery date.
(PPS010/E)	Transportation lead time 1	...the number of workdays needed to transport to the transport station from the supplier. Transport lead time 1 also includes time for order processing.
(PPS010/E)	Transportation lead time 2	...the number of workdays needed to transport to the final destination from the transport station. Transport lead time 1 together with Transport lead time 2 gives the total distribution time, in workdays, from when the purchase order is sent to the supplier until the goods are received at the final destination.
(RPS080/B)	Point of time table	...the ID for the point of time table. The point of time table ID is unique per facility, warehouse and point of time table type. This means that the same ID can be used for different settings of these parameters.

Program ID/Panel	Field	The field indicates...
(RPS080/B)	Point of time type	<p>...the type of times contained in the table.</p> <p>20 = Points of time used for supplier calendar.</p>

Item settings parameters

Program ID/Panel	Field	The field indicates...
(MMS001/E)	Item number, Name and Description	<p>...ID's for the item. These are used on purchase order documents if no supplier identifications are entered on the E panel in (PPS040).</p>
(MMS001/E)	Status	<p>...the item status. It must be 20 or above (but not 80, 90, or 99) to use the item for purchase orders.</p>
(MMS001/E)	Item type, Item group, Product group and Procurement group	<p>...user-defined fields for selecting and following up in the statistics. Often item group and product group are used for following up in manufacturing while sales and procurement groups are used for purchase statistics.</p> <p>The groups can also be used in forecasting and agreements.</p> <p>Custom fields can be associated with the item group using related option 11 (conn u-d fld gr) in 'Item Group. Open' (CRS025/B).</p>
(MMS001/E)	Inventory accounting	<p>...whether the item should be inventory accounted and the inventory accounting method specifies what method to use for the inventory accounting. The valid inventory accounting method alternatives for purchased items are:</p> <p>0 = Zero cost 1 = Standard cost 2 = Average cost 4 = Actual cost.</p> <p>This field is also defined for the facility/item combination in (MMS003).</p>

Program ID/Panel	Field	The field indicates...
(MMS001/E)	Basic U/M	...the unit of measure in which the balance information of the item is stored. If alternate units of measure are allowed, a 1 or 2 must be entered in the 'Alt U/M in use' field.
(MMS001/E)	Make/buy code	...whether the item is a manufactured item (1=) or a purchased item (=2). The values will control some mandatory fields in the item programs.
(MMS001/E)	Lot control method and Lot number method	...lot controlled items and are described in the Lot & Allocation Control documentation.
(MMS001/F)	Purchase order U/M	...the unit of measure (U/M) in which the quantity on the purchase order is expressed.
(MMS001/F)	Purchase price U/M	...the purchase price unit, U/M, which is the U/M in which the purchase price has been expressed.
(MMS001/F)	External instruction	...reference code for a standard text connected to the item. The text is entered in 'External Instruction. Open' (MMS135) and printed on external purchase order documents
(MMS001/F)	Internal instruction	...are printed on the goods receipt document (the document name is PPS307), if entered in 'Internal Instruction. Open' (MMS145).
(MMS001/F)	Goods receiving method	...the method that controls processing of the goods receiving flow. It is defaulted on the purchase order line if entered here. The method can also be collected from (PPS040) or 'Purchase Order Type. Open' (PPS095).

Program ID/Panel	Field	The field indicates...
(MMS001/F)	Gross weight, Net weight and Volume	...item weight and volume per basic U/M. This can be used to specify the current load on the stock locations. The information is displayed on the F panel in 'Stock Location. Open' (MMS010).
(MMS001/H)	Currency	...what currency the purchase price is expressed in.
(MMS001/H)	Supplier number	...the supplier number. This number is mainly for informational purposes, but is also used as a default proposal during entry in (PPS180) and (PPS170).
(MMS002/E)	Planner	...the person responsible for item acquisition for each warehouse. Planned purchase orders can be sorted on planners.
(MMS002/E)	Acquisition code	...how acquisitions are to be done in case of requirements. The acquisition code is 2 for purchased items
(MMS002/E)	Planning method	...how the item is planned: manually, MRP-planned, reorder point planned etc.
(MMS002/E)	Supply lead time	...the supply lead time in days. The supply lead time can be updated manually on the E panel or from (PPS040) for the main supplier.
(MMS002/E)	Lead time	...the sum of administration, transmission, supply, transportation, and inspection time. Not all of these have to be used; often only the supply lead time is used to identify the total lead time for the item. The supply lead time can be updated manually on the E panel above or from (PPS040) for the main supplier.

Program ID/Panel	Field	The field indicates...
(MMS002/E)	Planning policy	...a number of settings for how planned orders action and warning messages are to be generated.
(MMS002/E)	Order type	...the order type used for automatically created orders (from a MRP run, for example) is entered.
(MMS002/E)	Supplier number	...the main supplier for the item.
(MMS002/E)	Multiple supply	...which kind of supply is to be connected to the item. If multiple supplies are allowed, other suppliers can be used but the supplier entered in the supplier field will be defaulted. The item can also be connected to several suppliers according to a percentage entered in 'Item. Define Sourcing Rules' (RPS090), the Share field.
(MMS002/F)	Order multiple	...the minimum acquisition quantity in the basic unit of measurement (U/M).
(MMS002/G)	Location	...the normal stock location for the item that is proposed upon receipt, issue.
(MMS002/G)	Storage method	...whether this location is the only valid location for the item, or if it can multiple-stored.
(MMS002/G)	Inspection location	...a default value, if quality inspection is done, for the location used after the goods receipt. If no location is entered here, the location entered in 'Goods Receiving Method' (PPS345), parameter 050, is used.
(MMS002/G)	Buyer	...the person normally responsible for purchase of this item. The field can be used as a selection criterion in 'Planned Purchase Order. Open' (PPS170) and 'Purchase Order. Open' (PPS200).

Program ID/Panel	Field	The field indicates...
(MMS002/G)	Distr/sup cal	<p>...how a check of the distribution and supplier delivery calendars is to be performed when an order's delivery date is determined.</p> <p>This field checks if a point of time table in 'Point of Time Table. Open' (RPS080) is used</p>
(MMS002/G)	History storage method	<p>...if and how stock transactions are stored in the stock transaction history file.</p> <p>If no transactions are created in 'Stock Transaction. Display History' (MWS070) after a goods receipt, for example, this parameter could have been turned off.</p>
(MMS003/E)	Inventory accounting	<p>...whether the item should be inventory accounted and the inventory accounting method specifies what method to use for the inventory accounting. The valid inventory accounting method alternatives for purchased items are:</p> <ul style="list-style-type: none"> 0 = Zero cost 1 = Standard cost 2 = Average cost 4 = Actual cost.
(MMS003/F)	Costing model - purchasing	<p>...the ID of the costing model used for each item.</p> <p>The costing model is displayed in 'Purchase Costing Model. Open' (PPS285). Purchase costing is described in the Purchase Costing documentation.</p> <p>If no purchase costing model is entered in this field, the model is defaulted from 'Settings – Purchasing' (CRS780).</p>

Supplier/item settings parameters

Program ID/Panel	Field	The field indicates...
(PPS040/B)	Status	...the status of an item/supplier combination.
(PPS040/E)	Record type	...whether the item is a normal item (=1), a subcontracted item (=2) or a repair item (=3).
(PPS040/E)	Suppl item no, Suppl item name and Suppl item desc	If entered on this panel, the supplier fields (Suppl item no, Suppl item name and Suppl item desc) are printed on the purchase documents. If parameter 121 in 'Purchase Order Type. Open' (PPS095) is set to 4, the item description will not be printed.
(PPS040/E)	Lead time for replenishment delivery	...the lead time in days for a replacement delivery.
(PPS040/E)	Supply lead time	...the normal lead time for a delivery. The lead time is entered in days. Parameter 33 in 'Settings - Purchasing' (CRS780) determines whether a week is comprised of five or seven days. The lead time can also be entered in 'Item. Connect Warehouse' (MMS002).
(PPS040/E)	Lead time	...the total lead time for the product, including time for administration, transmission, supply, transportation, and inspection.
(PPS040/E)	Order type	...the default value when placing a purchase order. If values are entered both on the supplier/item combination and in the supplier or item files separately, the system always selects values from (PPS040) first.

Program ID/Panel	Field	The field indicates...
(PPS040/E)	Goods receiving method	<p>...the method that controls processing of the goods receiving flow.</p> <p>The proposal comes from one of three sources according to the priority ranking:</p> <ol style="list-style-type: none"> 1 Combination of item and supplier 2 Item 3 Purchase order type.
(PPS040/E)	Order multiple	...the minimum acquisition quantity in the basic unit of measure (U/M).
(PPS040/F)	External safety stock	...the minimum safety stock level the supplier should have and is used for information purposes only.
(PPS040/F)	Country of origin	... is used for trade statistics and the countries are entered in 'Country. Open' (CRS045).
(PPS040/F)	Packaging	<p>...a packing identity defined in 'Packaging. Open' (MMS050).</p> <p>The free-format text connected to the package is printed on the purchase order and acts as an external packaging description to the supplier.</p>
(PPS040/F)	Valid from - to	...the date from which an agreement takes effect.
(PPS040/F)	Purchase price	<p>...the purchase price.</p> <p>Purchase prices can also be entered here together with 'Valid from' and 'to' dates.</p>
(PPS040/F)	Currency	...the currency for the entered purchase price.
(PPS040/F)	Exchange rate type	...the exchange rate type for the entered purchase price.
(PPS040/F)	Media profile	...how the document will be sent to a partner.

Program ID/Panel	Field	The field indicates...
(PPS040/F)	Current full cost	...an actual cost calculated from 'Purchase Costing. Calculate' (PPS290).
(PPS040/F)	Setup price 1 and 2	...the setup price. It is specified on the purchase agreement line and can be copied to the purchase order line or entered/changed manually on the purchase order line.
(PPS040/G)	The G panel	The G panel is used for quality inspection, if quality inspection tasks and plans are used. The fields are described in the extended Quality Inspection documentation.
(PPS040/H)	The H panel	The H panel is used for user-defined fields. The settings for these fields are defined in 'User-Defined Fields. Open' (CMS082).
(PPS041/B)	Manufacturer	...the company or organization that manufactured the item, regardless of who delivered it.
(PPS041/B)	Manufacturer priority	...the manufacturer's priority in comparison to other manufacturers.
(PPS041/B)	Manufacturer approved	...if the manufacturer is approved.

Country of origin

Country of origin defines the country where goods have been produced. In M3, countries are defined in the program 'Country. Open' (CRS045). For the purchase order process, the country of origin can be defined in these programs:

- (CRS620) – Mandatory
- (PPS040)
- 'Purchase Agreement. Open Lines' (PPS101)
- (MMS003)

On (CRS620/E), the country field is mandatory and from here is used as the default value when creating agreement lines for an item in (PPS101).

When the country of origin is used, for example when creating order proposals in 'Planned Purchase Order. Open' (PPS170) or purchase orders in 'Purchase Order. Open' (PPS200), the country of origin updates in this order:

- 1 From (PPS101) – MPAGRL (if country of origin exists)
- 2 From (PPS040) – MITVEN (if country of origin exists)
- 3 From (MMS003) – MITFAC (if country of origin exists)
- 4 From (CRS620) – CIDMAS (where country of origin is mandatory)

Russia-specific master data

This functionality must be set up for divisions configured with country version RU in 'Company . Connect Division' (MNS100/L).

Once the functionality has been set up, the Russia-specific master data is stored in the corresponding Russia master tables.

Follow these steps:

- 1 Start (CRS620) and include panel X (Country specific) in the sequence.
- 2 Search for the specific supplier and use the option Change.
- 3 Navigate to 'Supplier RU. Open' (CRRU03). Specify values in the required fields and click Next.
- 4 The options Change, Delete, and Display can be used. The Delete option deletes both the supplier master and Russia-specific master data for supplier.

Status - Purchase Order

The status of a purchase order indicates its stage in the order flow.

The status of a purchase order is displayed in the order header and in the order lines. The order header displays the lowest and highest status in the order lines. The order line also contains a lowest and highest status.

Status - Request for Quotation

The status of a Request for Quotation (RFQ) is used to show the progress of the RFQ in the RFQ flow. Some of the statuses are set manually and some automatically.

These status values are used:

- 00 - RFQ in progress (automatic)
- 10 - RFQ ready, (automatic)
- 20 - RFQ document printed/sent(automatic)
- 30 - Supplier has declined to give quotation (manual)
- 40 - Supplier has confirmed that quotation will be submitted (manual)
- 50 - Quotation received and values updated (automatic)
- 60 - Quotation not accepted, send No-Thank-You letter(manual)

- 65 - Quotation not accepted, do not send No-Thank-You letter (manual)
- 70 - No-Thank-You letter sent (automatic)
- 80 - Quotation accepted (manual)
- 90 - Agreement created from RFQ (automatic).

Status - Supplier Agreement

The status of a supplier agreement is used to show the progress of an agreement in the agreement flow.

These status values are used:

- 00 - Entry
- 01-09 - Preliminary / user defined
- 10 - Preliminary / default status
- 11-19 - Preliminary / user defined
- 20 - Completed agreement
- 30 – Distributed/Printed agreement
- 40 - Valid agreement
- 80 - Fulfilled
- 90 - Cancelled agreement.

The status of a supplier agreement cannot be changed to 40 unless the supplier has a status of 20=approved.

If status is <20 or >=80, the agreement is not used in purchase order line entry.

Status 01-09 or 11-19 (user defined) allows the agreement process to be configured as required for the specific industry and procurement requirements, enabling stricter process control at the outset of agreement creation. This is useful in some industries with complex procurement processes where it is necessary to track the progress of agreements, prior to purchase order creation, at a granular level.

If status is 20, 30 or 40, the agreement is valid and can be associated with a purchase order line.

Status 80 indicates that the actual received quantity is equal to or greater than the agreed quantity. This can either be set manually or automatically. Parameter 'Auto Fulfillment' on the Agreement controls whether or not this is set automatically.

Supplier Calendar

A supplier calendar indicates which days of the week or dates are approved shipping days for each supplier.

The supplier calendar is used for both automatically created and manually entered purchase orders. For the former group, the shipment date is calculated based on the need date.

These conditions must be met in order to use the calendar to control the purchase order and planned purchase order dates:

- It is specified that a check should be made against a supplier calendar for each combination of item/warehouse.
- It is specified that a check should be made against a supplier calendar for the supplier.
- Current shipment days are entered for the supplier.

Supplier Overview

Supplier Overview is an M3 Experience Designer Application that makes accessing and updating information related to suppliers easier. It primarily supports roles involved in inbound processes. The application consolidates data from multiple M3 programs and panels into one interface so users can find, update, and manage supplier data. It includes a comprehensive overview of basic supplier data, supplier addresses, references, financial details, invoices, agreements, and related purchase orders and claims. It supports conditional styling and integrates with H5 to provide access to related information and actions.

User stories

- A supplier master data administrator needs updated supplier addresses and references using the Supplier Overview application to maintain accurate and updated supplier records without navigating multiple screens.
- A buyer, purchaser, or purchasing manager suggests viewing all relevant supplier information, such as basic data, addresses, references, and financial details in one consolidated screen to quickly assess and update supplier status and details without switching between multiple M3 programs.

M3 Business Engine configuration

M3 Business Engine (BE) configurations are required for the Supplier Overview application to function properly. You must have suppliers set up in 'Supplier. Open' (CRS620) to display data in the Supplier Overview application.

See specific configurations per component in *Components*

Application authorization

To access and run the M3 Experience Designer application, you must have authorization to use the M3 BE functions and API transactions that the application requires. This table shows the functions and transactions that are used by the Supplier Overview application:

Function or API	Transaction	Information Category	View
CRS620MI	AddAddress		
CRS620MI	AddSupplierRef		
CRS620MI	GetAddress		

Function or API	Transaction	Information Category	View
PPS390MI	LstClaimBySuno		
PPS390MI	LstClaimLine		
PPS100MI	AddAgrHead		
CRS620MI	DelAddress		
CRS620MI	DelSupplierRef		
CRS620MI	GetBasicData		
PPS100MI	GetAgrHead		
CRS620MI	GetSupplierRef		
APS260MI	Lst		
PPS100MI	LstAgrHeadBySup		
PPS100MI	LstAgrLine		
LISTMI	ListDataAsCSV	M3_LIST_MPHEAD	M3_01_01
PPS200MI	SearchLine		
CRS620MI	SearchSupplier		
CRS620MI	LstAddresses		
APS200MI	SearchSupInvoic		
CRS620MI	LstSupplierRef		
PPS100MI	UpdAgrHead		
CRS620MI	UpdSupplier		
CRS620MI	UpdAddress		
CRS620MI	UpdFinanceSupplier		
CRS620MI	UpdSupplierRef		

Supplier Overview application components and functions

Index List and details header

The Supplier Overview application starts with an index list, displaying suppliers and some data connected to each supplier. The details header shows the supplier that has been selected in the index list, including key details, such as type, status, and contact information.

'Supplier Details'

The '**Supplier Details**' tab includes one form and two tabs. When you click a supplier in the index list, the form and data grids are filled with data for the selected supplier.

- **Basic Data:** This form displays basic data about the selected supplier. To update the basic data, you must specify the needed information in the fields and click '**Save**'.
- **'Supplier Address':** This tab contains a data grid that lists all addresses for a supplier and a form that displays address details. The form displays data when you select an address in the data grid. You can add and delete addresses using the buttons available above the data grid. To update address details, you must specify the needed information in the fields and click '**Save**'.
- **'Supplier References':** This tab contains a data grid that lists all references for a supplier and a form that displays reference details. The form displays data when you select a reference in the data grid. You can add and delete references using the buttons available above the data grid. To update the reference details, you must specify the needed information in the fields and click '**Save**'.

'Financial Details'

The '**Financial Details**' tab includes one form and one data grid. When you click a supplier in the index list, the form and data grids are populated with data for the selected supplier. You can update and save financial details displayed in the form by clicking '**Save**'. The data grid lists invoices for the selected supplier and includes a button that opens 'Acc Payable. Display' (APS200).

'Agreements'

The '**Agreements**' tab includes two data grids and one form. The Agreements data grid displays agreements related to the supplier selected in the index list. This data grid also includes a button that opens the 'Purchase Agreement. Open' (PPS100). When you select an agreement, the Agreement Details and Agreement Lines components are populated. The Agreement Details form includes a '**Save**' button for saving changes made to any editable field.

'Purchase Order'

The '**Purchase Order**' tab includes two data grids. The Purchase Order data grid is populated when a supplier is selected in the index list, and includes filters, search, and a button with links to Purchase Order Hub and Planned Purchase Order Hub applications. The Purchase Order Lines data grid is populated when a purchase order is selected.

'Claims'

The '**Claims**' tab includes two data grids. The Claims data grid is populated when you select a supplier from the index list. Additionally, when you select a claim, the Claim Lines data grid is populated.

Components

This table shows the components in the Supplier Overview application with their corresponding details:

Component	Component details
Application header	Component ID: appHeader Purpose: Displays the name of the application M3BE data used: n/a Data services used: n/a Comment: n/a

Component	Component details
Details header	<p>Component ID: DetailsHeader_Supp</p> <p>Purpose: Shows detailed supplier information header</p> <p>M3BE data used: 'Supplier. Open' (CRS620)</p> <p>Data services used: Supplier_Basic</p> <p>Comment: n/a</p>
Index list	<p>Component ID: IndexList_Suppliers</p> <p>Purpose: Provides searchable supplier list</p> <p>M3BE data used: 'Supplier. Open' (CRS620)</p> <p>Data services used: Search_Suppliers</p> <p>Comment: You must activate the CIDMAS table for search in the M3 Function Search Administration.</p>
Basic Data form	<p>Component ID: Form_SupplierBasic</p> <p>Purpose: Manages basic supplier information</p> <p>M3BE data used: 'Supplier. Open' (CRS620)</p> <p>Data services used: Get_SupplierData, Upd_SupplierData</p> <p>Comment: n/a</p>
Agreements data grid	<p>Component ID: DataGrid_AgreementHeader</p> <p>Purpose: Displays list of supplier agreements</p> <p>M3BE data used: 'Purchase Agreement. Open' (PPS100)</p> <p>Data services used: List_AgreementHead</p> <p>Comment: n/a</p>
Agreement Details form	<p>Component ID: Form_Agreements</p> <p>Purpose: Manages detailed agreement information</p> <p>M3BE data used: 'Purchase Agreement. Open' (PPS100)</p> <p>Data services used: Get_AgreementHead_Details and Upd_AgreementHead</p> <p>Comment: n/a</p>
Agreement Lines data grid	<p>Component ID: DataGrid_AgreeLines</p> <p>Purpose: Shows agreement line items</p> <p>M3BE data used: 'Purchase Agreement. Open Line' (PPS101)</p> <p>Data services used: List_AgreementLines</p> <p>Comment: n/a</p>

Component	Component details
Purchase Orders data grid	<p>Component ID: DataGrid_POHead</p> <p>Purpose: Lists purchase orders</p> <p>M3BE data used: 'Purchase Order. Open' (PPS200)</p> <p>Data services used: ListPO</p> <p>Comment: You must activate the MPHEAD table for search in the M3 Function Search Administration.</p>
Purchase Order Lines data grid	<p>Component ID: DataGrid_POLine</p> <p>Purpose: Displays purchase order line details</p> <p>M3BE data used: 'Purchase Order. Open Lines' (PPS201)</p> <p>Data services used: ListPOLine</p> <p>Comment: You must activate the MPLINE table for search in the M3 Function Search Administration.</p>
Claims data grid	<p>Component ID: DataGrid_ClaimHead</p> <p>Purpose: Lists claims</p> <p>M3BE data used: 'Return To Supplier. Open' (PPS390)</p> <p>Data services used: ClaimHead</p> <p>Comment: n/a</p>
Claim Lines data grid	<p>Component ID: DataGrid_ClaimLine</p> <p>Purpose: Shows claim line details</p> <p>M3BE data used: 'Return to Supplier. Open Lines' (PPS391)</p> <p>Data services used: ClaimLine</p> <p>Comment: n/a</p>
Address Details form	<p>Component ID: Form_AddressLines</p> <p>Purpose: Manages address details</p> <p>M3BE data used: 'Supplier. Connect Address' (CRS622)</p> <p>Data services used: AddressLines and UpdateAddress</p> <p>Comment: n/a</p>
Addresses data grid	<p>Component ID: DataGrid_SuppAddress</p> <p>Purpose: Displays supplier addresses</p> <p>M3BE data used: 'Supplier. Connect Address' (CRS622)</p> <p>Data services used: SupplierAdress, DeleteAddress</p> <p>Comment: n/a</p>

Component	Component details
Financial Details form	Component ID: Form_SupplierFinance Purpose: Manages supplier financial information M3BE data used: 'Supplier. Define Purchase & Financial' (CRS624) Data services used: FinacialSupplier and UpdateFinancial Comment: n/a
Invoices data grid	Component ID: DataGrid_SupplInvoice Purpose: Lists supplier invoices M3BE data used: 'Acc Payable. Display' (APS200) Data services used: SupplierInvoice Comment: You must activate the FPLEDG table for search in the M3 Function Search Administration.
Reference data grid	Component ID: DataGrid_SuppRef Purpose: Displays supplier references M3BE data used: 'Supplier. Connect Reference' (CRS623) Data services used: SuppReferences and DeleteSuppRef Comment: n/a
Reference Detail form	Component ID: Form_SuppRefLines Purpose: Manages detailed supplier reference information M3BE data used: 'Supplier. Connect Reference' (CRS623) Data services used: GetSuppRef and UpdateSuppRef Comment: n/a

Links and bookmarks

This table shows the link IDs and bookmarks in the Supplier Overview application with their corresponding purposes:

Link ID	Type	Purpose
Link_AccountsPayable	M3 Bookmark	Opens the program 'Acc Payable. Display' (APS200)
Link_Agreement	M3 Bookmark	Opens the program 'Purchase Agreement. Open' (PPS100)

Link ID	Type	Purpose
Link_PlannedPOHub	M3 Bookmark	Opens the Planned Purchase Order Hub application
Link_POHub	M3 Bookmark	Opens the Purchase Order Hub application

Dialogs

This table shows the dialog ID and API program with their corresponding purposes:

Dialog ID	API Program	Purpose
Dialog_AddAddress	CRS620MI/AddAddress	A dialog for adding a new supplier address.
Dialog_AddRef	CRS620MI/AddSupplierRef	A dialog for adding a supplier reference.

Conditional Styles

This table shows the conditional styles of the components in the Supplier Overview application:

Component	Condition name	Target field	Condition	Styling
Details header	Condition_DLSM9V	STAT	STAT=20	Text color: #1C7F49- dark green Text weight: normal
Details header	Condition_DLSM9V	STAT	STAT=30	Text color: #DA1217- red Text weight: normal
Details header	Condition_DLSM9V	STAT	STAT=10	Text color: #CD6200- orange Text weight: normal
Details header	Condition_DLSM9V	STAT	STAT=90	Text color: #CD6200- orange Text weight: normal

Component	Condition name	Target field	Condition	Styling
Details header	Condition_DLSM9V	STAT	STAT=05	Text color: #0066D4- blue Text weight: normal
Index list	Condition_Status	STAT	STAT=30	Text color: #DA1217- red Text weight: bold
Index list	Condition_Status	STAT	STAT=20	Text color: #1C7F49- dark green Text weight: bold
Index list	Condition_Status	STAT	STAT=10	Text color: #CD6200- orange Text weight: bold
Index list	Condition_Status	STAT	STAT=05	Text color: #0066D4- blue Text weight: bold
Index list	Condition_Status	STAT	STAT=90	Text color: #CD6200- orange Text weight: bold
Agreements data grid	Condition_W8P3S9	UVDT	See the application	Text color: #DA1217- red Icon: error Icon color: #DA1217- red
Agreements data grid	Condition_Expire60days	UVDT	See the application	Text color: #CD6200- orange Icon: alert Icon color: #CD6200- orange
Purchase Orders data grid	Condition_WV5XYK	IADWDT	See the application	Text color: #DA1217- red Icon: alert Icon color: #DA1217- red

Component	Condition name	Target field	Condition	Styling
Claims data grid	Condition_U0BVE0	CLAL	CLAL=90	Background color: #E0E0E1-light gray Text color: #3B3B3F-dark gray Text weight: normal
Financial Details form	Condition_C2WM5W	CSCD	UserContext = CSYS	Text weight: normal
Text weight: normal	Condition_PPLHVH	DUDT	See the application	Text color: #DA1217-red Icon: alert Icon color: #DA1217-red Text weight: normal

Supply Chain Rebuild

This document includes a description of the process of changing the receiving warehouse on a purchase order (PO) line and how this can trigger a supply chain rebuild (SCR). This means rebuilding a supply chain when working with purchase orders depending on the warehouse to which the delivery will be shipped, so that the goods always reach their intended destination. Three business scenarios are supported:

- Ad Hoc change with supply chain rebuild

In this case, the warehouse where the goods will be shipped is not known in advance. The ship-to warehouse can be entered after the purchase order has been created, during purchase order confirmation or at shipment advice. This will trigger a supply chain rebuild if a distribution order (DO) type for SCR is entered on the PO type.

For more details, see *Workflow - Supply Chain Rebuild* in this document.

- Inventory bypass

In this case, it is known in advance where the goods will be shipped, depending on the warehouse to which they are ordered. Inventory bypass is triggered during the initial order creation and involves no extra confirmation for the new warehouse. It will always automatically trigger a supply chain rebuild.

For more details, see *Inventory Bypass* in this document.

- Ad Hoc change without supply chain rebuild

In this case, the ship-to warehouse is changed after the purchase order has been created due to a change in the point of demand. In this case, a supply chain rebuild is not desired, as the goods should stay at the ship-to warehouse, or be distributed to the final goods destination by some other means. In this case,

no DO type for SCR should be entered on the PO type. It is only applicable to POs that are not part of any supply chain.

Background

After a purchase order has been created, there is a possibility that the supplier delivers to another warehouse than the warehouse entered on the purchase order line. This means that the supply chain may require some adjustment. Furthermore, the planner may request a change of ship-to warehouse due to the demand point having changed.

Limitations

- The ordering warehouse and the goods receiving warehouse must belong to the same division.
- All purchasing activities (such as quality inspection) must take place in the ship-to warehouse.
- This functionality is not available for PO lines that are connected to a customer order line, service order line, or rental agreement line of line type 2 (direct delivery).
- This functionality is only available for purchase order category 20.
- The warehouse may not be changed on PO lines that generate fixed assets.
- DO type for SCR must exist on the PO type to enable a supply chain rebuild.
- For inventory bypass, only acquisition code 2 (Purchasing) is allowed.
- PO connected to a supply chain does not allow a change of ship-to warehouse if a DO type for SCR is missing on the PO type.
- The change of a warehouse address is not available when changing ship-to warehouse for a PO splitting.

Before you start

- 1 Set **Allow change of ship-to warehouse** = 1 in 'Settings – Purchasing' (CRS780/H) for your division.
- 2 Create a normal PO type (category 20) in 'Purchase Order Type. Open' (PPS095).
- 3 If supply chain rebuild should be enabled, select an appropriate DO type in the '750 DO type for supply chain rebuild' setting in (PPS095/K).
- 4 Enable the '760 Inventory bypass' setting in (PPS095/K), depending on whether you will use inventory bypass instead of confirming a new ship-to warehouse.

Workflow - supply chain rebuild

When a PO line is updated with the new warehouse where the goods will be received, the supply chain may have to be rebuilt to avoid undesired effects, such as unwanted planned purchase orders. In general, DOs will be generated to transfer the goods to the warehouse where the demand arose. Such distribution orders that are generated by a supply chain rebuild are called SCR distribution orders.

Example:

- If a purchase order is generated by the MRP due to a planned shortage, but the goods receipt is moved to another warehouse, MRP might generate a new planned PO unless we transfer the original purchase order to the original warehouse.
- If a purchase order is part of a supply chain, but the goods receipt is moved to another warehouse, the supply chain will break unless we adjust it using new distribution orders.

To enable this, a DO type must be entered in (PPS095/H) in the '750 DO type for supply chain rebuild (P750)' field. This DO type will be used in the creation of SCR distribution orders.

A supply chain rebuild can be triggered during these events:

- PO line creation. In the case of inventory bypass, see the relevant chapter.
- Purchase order confirmation, when changing the ship-to warehouse.
- Manual shipment advice, when changing the ship-to warehouse.
- EDI shipment advice (MHS850 message type 29), if the message states a different warehouse than is indicated on the PO line.

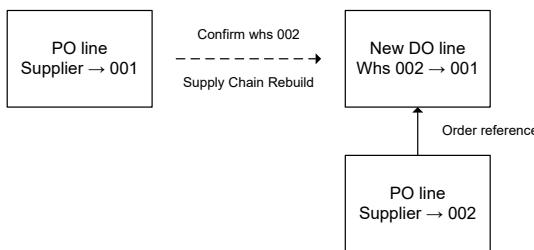
The aim of a supply chain rebuild is always to move goods between two warehouses, and it tries to use a distribution chain. Searching for a suitable distribution chain is as simple as possible: The first chain with a matching From and To warehouse will be used. If one is found, the order type of the SCR distribution orders will be determined by the sequences in the chain. If no suitable distribution chain is found, a single SCR distribution order is generated from the ship-to warehouse to the top-level warehouse.

All distribution orders that are generated will get generation reference 52, 'Planned distribution order, generated via supply chain rebuild'. These distribution orders will be order-initiated, and there will be an order reference from the PO line to the DO line. This means that the connection between the PO line and SCR distribution order line will always be one-to-one.

How the distribution orders are generated depends on whether the purchase order is part of a supply chain and the type of supply chain.

- **Unreferenced PO**

The simplest scenario is when a purchase order has no relation to other orders. It could be manually created or generated by MRP. It lacks preallocation and an order reference. In this case, SCR distribution orders will be shipped from the ship-to warehouse to the ordering warehouse of the PO line.

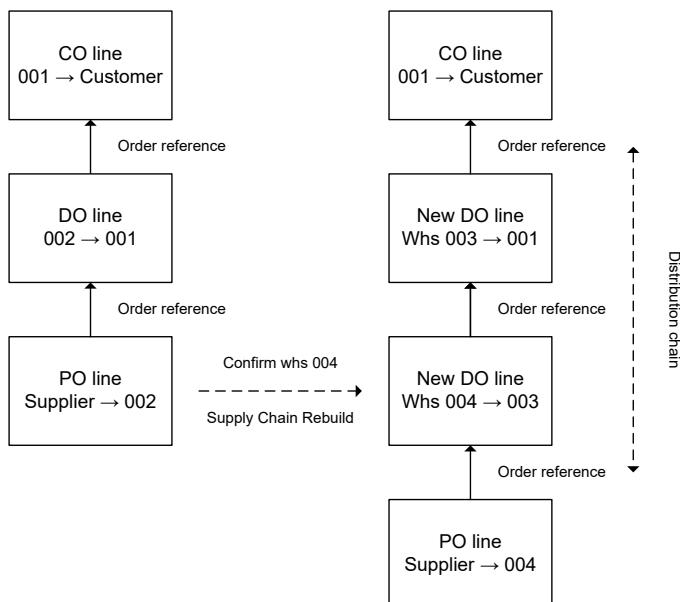
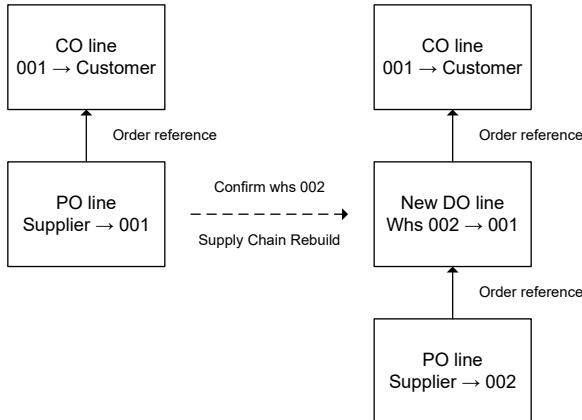


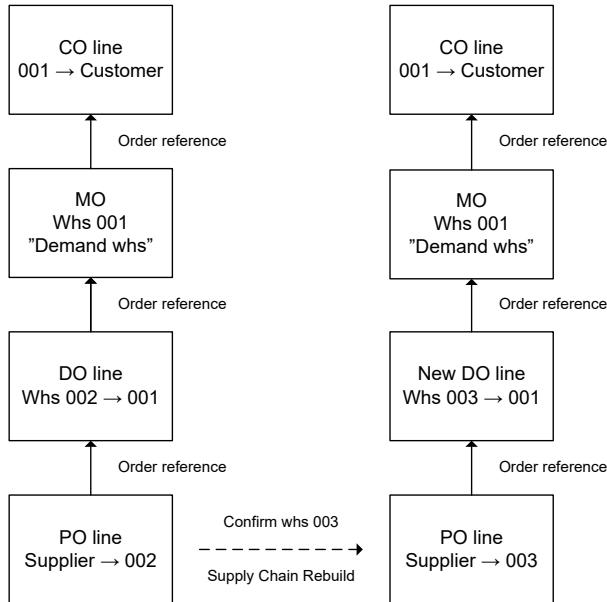
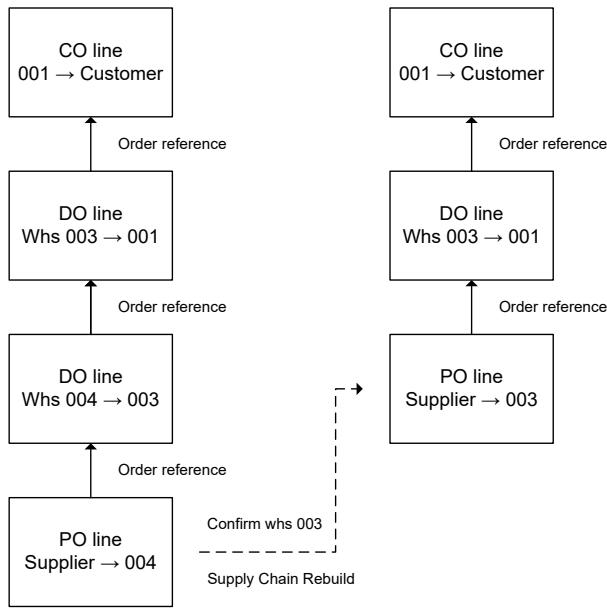
- **PO with order reference**

A purchase order that has an order reference, which it does when created from a CO line of type 1 or due to planning method 3 (Order-initiated), will act differently. Orders that refer to each other can form a supply chain, and there will always be a one-to-one relationship between order lines. If the supply chain contains distribution orders, it can to some degree actually be rebuilt to better fit the new situation after a warehouse change.

A supply chain rebuild will remove any existing distribution orders that are supplied by the purchase order, until either the top level or another order category is found (which will then be considered to be the top level). The rebuild will then generate SCR distribution orders between the ship-to warehouse and the top-level warehouse.

If the ship-to warehouse of the PO line is found in an existing distribution order, no complete rebuild is necessary. The purchase order will simply set a reference to that distribution order, and any obsolete distribution order on lower levels will be deleted. See the examples in these figures:

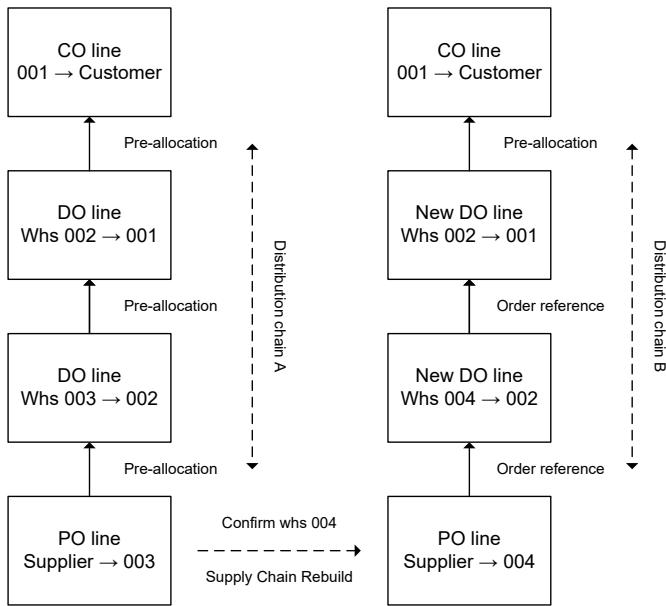




- **PO created by supply model**

When the purchase order is created by a supply model (CTS100 or CTS200), the supply chain rebuild will act in the same way as for a purchase order with an order reference, attempting to rebuild the supply chain using a distribution chain.

In a supply chain created by a supply model, preallocations are used, but there is still a one-to-one relationship between order lines.

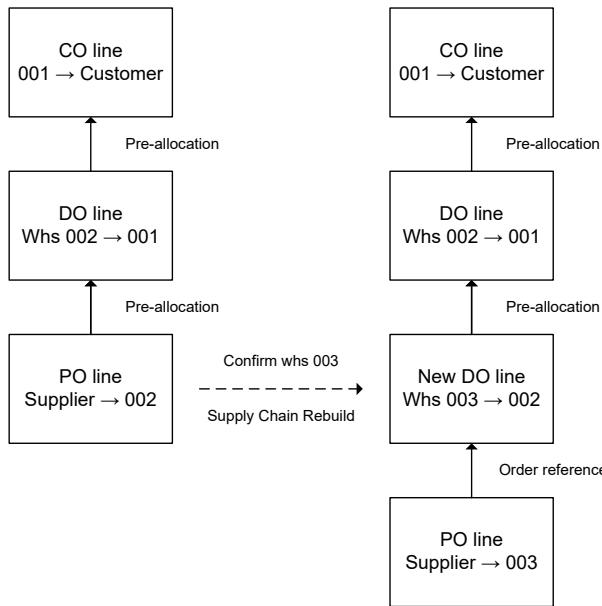


- **PO created by orders connected to a supply chain**

In this case, another order holds a preallocation against the purchase order. The supply chain rebuild will behave similarly as in the case with the unreferenced purchase order, generating SCR distribution orders from the ship-to warehouse to the ordering warehouse of the PO line. The SCR distribution order line will get a preallocation to the level above in the supply chain, taking the PO line's place.

If a purchase order has been generated by a supply model or an order initiation, the supply chain rebuild will try to rebuild all distribution orders (if any) that the purchase order supplies, but this behavior is not possible in the case with a supply chain order. A supply chain order is very flexible and may be very complex; a single PO line can supply several orders on the higher level, and a higher level can be supplied by several orders on the lower level. It can also be regenerated at any time.

Due to this complexity, the supply chain rebuild may not alter any existing distribution orders in the supply chain. It will just add a new one to re-link the purchase order into the supply chain order.



- Multiple warehouse changes**

If further warehouse changes are made after a supply chain rebuild (for example reconfirmation after noticing a mistake, or a confirmation to another warehouse on a purchase order that involves an inventory rebuild), the existing SCR distribution orders will be removed and regenerated to fit the new situation.

- Reversing transactions**

Reversing a transaction that changed the ship-to warehouse (for example through deleting a confirmation or advice transaction in 'Purchase Order. Display Line Trans' (PPS330)) will restore the original warehouse and trigger a supply chain rebuild to that warehouse. In most situations, this means that all SCR distribution orders will be removed.

- Date and quantity changes**

When the PO quantity is changed by the line being edited or a different quantity being confirmed/advised, this will also update the SCR distribution orders. An update to the planned/confirmed receipt date will also update the date of the SCR distribution orders, according to the rules for the specific supply chain type.

- Splitting PO lines**

PO lines can be split when a partial quantity is confirmed or advised without the line being flagged as complete. Limitation: This is only allowed when there is no order-initiated, one-to-one relation somewhere in the supply chain that is being rebuilt.

When a line is split, two lines can be created, potentially with different ship-to warehouses. The supply chain will be rebuilt for both subnumbers, if required. This works even if a supply chain was rebuilt prior to the split, e.g. in the inventory bypass scenario. Afterward, any preallocation that existed for the PO line (or SCR distribution order line) will be split between the two subnumbers.

Inventory bypass

During inventory bypass, a different ship-to warehouse is automatically assigned immediately when a purchase order is manually created or released, triggering a supply chain rebuild. You can use inventory bypass when you know that a purchased item normally ships to another warehouse than the one where it was requested. As the default ship-to warehouse, the **Supplying warehouse (SUWH)** field in 'Item. Connect Warehouse' (MMS002/E) is used. The warehouse and the supplying warehouse must belong to the same division (this is a limitation in the MUC scenario). However, this is not verified in (MMS002).

To use inventory bypass, enable '760 Inventory bypass' in 'Purchase Order Type. Open' (PPS095/K).

When a PO line is created, M3 verifies that these settings are defined:

- Inventory bypass = 1 and the DO type for supply chain rebuild is defined in (PPS095).
- The item/warehouse record is set to acquisition code = 2 (Purchased).
- (MMS002) contains a valid supplying warehouse.

If all this is true, the ship-to warehouse of the PO line will be updated, triggering a supply chain rebuild that will generate distribution orders from the supplying warehouse to the ordering warehouse.

Follow these steps

This work flow describes the process of confirming a new ship-to warehouse:

- 1 Open 'Purchase Order. Confirm' (PPS250), filter on your purchase order number, and click 'Change' on the desired PO line.
 - You can confirm a purchase order with several lines from the F panel (function key F14).
- 2 The E panel shows the default information from the line including the **Ship-to warehouse** field. In this field, specify the desired warehouse in which the goods are to be received and click Enter.
 - A confirmation of a new ship-to warehouse will move the material demand to this warehouse. This is reflected in 'Material Plan. Open' (MMS080), 'Purchase Order. Open Lines' (PPS201) and (PPS330).
 - The supply chain will be rebuilt, taking the new ship-to warehouse into consideration. This is where the goods are received and where subsequent PO activities take place before shipment to the ordering warehouse.

The PO addresses on 'Purchase Order. Change Line Addresses' (PPS213/E) such as the ship-via address and destination address are also updated according to the addresses defined in 'Internal Address. Open' (CRS235).

A distribution order is automatically created from a new ship-to warehouse back to the ordering warehouse using the order type specified in (PPS095/K). You can view the reference order number in (PPS201/E).

- Confirming a ship-to warehouse always triggers a recalculation of purchase order charges. In addition, the geographic code or VAT code found for the item/warehouse will be retrieved again depending on the tax settings. No new prices will be retrieved according to the new warehouse.

Note: (MMS002) must contain a valid record for the items that are confirmed to a new ship-to warehouse.

- 3 Open (MMS080). A filtering on the ordering warehouse will show that the purchase order has been moved to the new confirmed ship-to warehouse in which the goods will be received. Distribution orders are also created in the affected warehouses in order for the goods to be finally received in the ordering warehouse if supply chain rebuild is enabled.

This work flow describes the process of a shipment advice to a new ship-to warehouse:

- 1 Start 'Purchase Order. Advise Shipment' (PPS260/B1).
- 2 On the B panel, select the specific order line you want to advise for shipment and then select option 'Change'. You can ship an advised purchase order with several lines from the F panel (function key F14).
- 3 The E panel shows default information from the line including the **Ship-to warehouse** field. In this field, specify the desired warehouse and click Enter.

Change of a new ship-to warehouse moves the material demand to this warehouse. This is reflected in (MMS080), (PPS201) and (PPS330).

Supply chain will be rebuilt, taking the new ship-to warehouse into consideration.

Distribution order is automatically created from this warehouse back to the ordering warehouse using the order type specified on (PPS095/K). You can view the reference order number on (PPS201/E).

The PO addresses on 'Purchase Order. Change Line Addresses' (PPS213/E) such as the ship-via address and destination address are also updated according to the addresses defined in 'Internal Address. Open' (CRS235).

The status on this specific order line is now raised to 40.

Reverse the purchase order in (PPS330)/(PPS250)

- 1 Perform the steps in (PPS250) and (MMS080) as described above.
- 2 Delete the PO transaction from (PPS330). The demand is moved back to your ordering warehouse in (MMS080), and any related distribution orders are also deleted.
 - When reversing a transaction with a status of 35, the warehouse is always updated by the value from the ordering warehouse.
 - The same result is achieved from (PPS250).

Reverse the purchase order in (PPS330)/(PPS260)

- 1 Perform the steps in (PPS260) and (MMS080) as described above.
- 2 Delete the PO transaction from (PPS330). The demand is moved back either to your ordering warehouse in (MMS080) or to your confirming warehouse. Any related distribution orders are also deleted or regenerated.

When reversing a transaction with a status 40, the warehouse is always updated by the value either from the ordering warehouse or from the confirming warehouse.

The same result is achieved from (PPS260).

Perform goods receipt

- 1 Receive your purchase order in 'Purchase Order. Receive Goods' (PPS300) by entering your ship-to warehouse on panel A and your order number.
- 2 On panel B, click 'Change' to access panel E. From there, receive the goods by entering the received quantity and then clicking Enter.

Receiving the goods will capture statistics for both the ordering and receiving warehouses, which can be viewed in 'Item Statistics. Display' (MMS090/E). The **Ordered purchase quantity** field will be updated at the ordering warehouse, regardless of where it was delivered. The PO goods receipt will also update the **Purchased quantity** field of the receiving warehouse.

Outcome

- The purchase order has been received at the ship-to warehouse.
- The supply chain is rebuilt according to the new ship-to warehouse if applicable, which means the goods will be distributed to the point of demand.

Settings descriptions

Program ID	Field heading	Description
(CRS780/H)	57 Allow change of ship-to warehouse	If this setting is disabled, it is not possible to change the ship-to warehouse at confirmation or shipment advice, and inventory bypass is disabled.
(PPS095/K)	750 DO type for supply chain rebuild	The DO type that will be used by the distribution orders generated by a supply chain rebuild (unless this is overruled by distribution chain settings).
(PPS095/K)	760 Inventory bypass	Enable this to activate inventory bypass when applicable.
(MMS002/E)	Acquisition code	Inventory bypass is only applicable for items with 'Acquisition code' = 2 (Purchased).
(MMS002/E)	Supplying warehouse	If inventory bypass is used, this will be the default ship-to warehouse.

Target Buying

'Purchase Planning' (PPS190) supports a streamlined process of target buying a group of items or a product line on an aggregated level. To support purchasing products on a regular basis, a time interval called the review cycle is used.

(PPS190) shows a list of product lines for which a buyer is responsible. The list contains information about what needs to be purchased at what point in time, and how many purchasing targets are met. Purchasing targets are set up per product line and warehouse in 'Purchase Planning Settings. Open' (PPS195) and can be expressed as target costs, weights, volumes, or quantity.

For each product line and warehouse, the buyer can review the planned purchase orders at item level through 'Purchase Planning Details. Open' (PPS191). In (PPS191), you can create more planned orders if required to meet targets, access various information related to the items and planned orders, or release a selection to a purchase order.

You can also view a history of past purchases per product line and warehouse in 'Purchase Release History. Open' (PPS194).

This functionality is activated per supplier by enabling the level of purchase planning setting on 'Supplier. Define Purchase & Financial' (CRS624/E).

Terms used in this document

Term	Description
Target buying	Aggregating the purchase planning process over a group of similar items to meet a determined purchasing target in terms of weight, cost, or volume.
Product line	A logical grouping of items purchased together on the same purchase order from the same supplier into the same warehouse.
Review cycle	The time frame (in calendar days) between the releases of purchase orders.
Target fill-up	Creating new planned orders until a target value is reached.
Line buy	A purchase order to buy all items included in a product line, with quantities to cover the demand for an entire review cycle.
Emergency buy	A purchase order for a single or a few items within a product line, purchased to avoid a shortage before the next planned line buy.
Target value	The total cost, weight, volume, or quantity required for each purchase order or load, depends on the selected target type.
	A supplier may require that a load carrier be filled to a certain limit to allow an order to be placed, or to avoid extra delivery charges. For example, a truck must be filled with at least 18 pallets, or a certain minimum cost must be reached to get a discount.
Actual value	The cost, weight, volume, or quantity of a planned purchase order, depends on the selected target type. The total actual value per combination of supplier, product line, and warehouse is compared to the target value and the maximum value.
Maximum value	A limit for how large an order can be, usually affected by physical nature. For example, a weight limit for a truck load.

Limitations

- Fashion processes are not supported.
- Working with a buyer's planned orders is limited to only one user at a time.
- Planned orders for different product lines or different warehouses cannot be released into a single purchase order. The purchase planning screen must be filtered per buyer, supplier, product line, and warehouse when performing the release.
- The product value of existing planned purchase orders is not automatically updated when changing the value of the item or item/warehouse.
- The purchase order categories allowed when releasing planned purchase orders from (PPS191) are limited to 20-'Purchase order' and 25-'Consignment order'.

Before you start

- 1 Define product lines in 'Product Line. Open' (CRS099).
- 2 Define the product line level to be used for target buying in 'Settings-Purchasing' (CRS780/H).
- 3 Assign product lines to items on 'Item. Open' (MMS001/F) OR 'Item. Connect Warehouse' (MMS002/F). Only items with a product line set on (MMS001/F) or (MMS002/F), depending on the value of product line level on (CRS780/H), are subject to the target buying process.
- 4 Set 'Planning level' to 1-'Prod line, whs' on 'Supplier. Define Purchase Financial' (CRS624/E) for each supplier that must be used for target buying.
- 5 Create settings in 'Purchase Planning Settings. Open' (PPS195) for each combination of supplier, product line, and warehouse that must be used for target buying. See the 'Settings descriptions' section. (PPS195) can be accessed from (CRS624) using related option 22.
- 6 Configure the planning parameters in 'Item. Connect Warehouse' (MMS002).
- 7 In 'Purchase Planning Priority Rules. Open' (PPS197), define a sequence of rules for displaying priorities in (PPS190), (PPS191), and (PPS192). When creating a new sequence, select a rule, specify a value (depending on the rule) and a planning priority number between 1 and 5.

Note: You can define different rules that all lead to the same priority number. See the 'Priority rule example' for more details.

Settings descriptions

Program ID/Panel	Field heading	Description
(CRS624/E)	Planning level	A supplier with this field set to 1-'Product line, whs' is used for target buying. Entries for this supplier are created in (PPS195).
(CRS780/H)	55 Batch origin – purchase planning	This field defines the batch origin policy used when creating purchase orders in (PPS191).
(CRS780/H)	64 Product line level	This field defines the product line level to be used for the target buying process.

Program ID/Panel	Field heading	Description
(MMS001/E)	Product line	This field defines in which product line the item number is included.
(MMS001/F)	Gross weight	If target weight is used, a gross weight per basic U/M must be defined for each item.
(MMS001/F)	Volume	If target volume is used, a volume per basic U/M must be defined for each item.
(MMS015/B)	Alt U/M type, Alt U/M	If target quantity is used, the unit of measure entered on (PPS195/E) must be defined with type 1 for each item.
(MMS002/E) (MMS002/F)	Lead time Order quantity Annual demand	If an order quantity is specified, it is used for the planned orders generated by the target fill-up. If no order quantity is specified, it is calculated as the daily demand (annual demand/work days per year) multiplied by the number of lead time days.
(MMS002/F)	Product line	This field defines in which product line the item/warehouse is included.
(MMS002/G)	Buyer	This field defines the buyer that is used as the default buyer for planned purchase orders. This buyer must match the buyer responsible for the product line on (PPS195/E).
(PPS195/E)	Target type	<p>These alternatives are valid:</p> <ul style="list-style-type: none"> • 1 - Weight • 2 - Volume • 3 - Cost • 4 - Quantity <p>This field determines the target value used by the purchase planning programs (PPS190) and (PPS191) and how the total or actual value is calculated.</p>

Program ID/Panel	Field heading	Description
(PPS195/E)	Target weight Target volume Target cost Target quantity	Depending on the target type, this target value must be met. The target fill-up continues until the actual value of the planned orders exceeds the target value. See 'Fill-up logic'.
(PPS195/E)	Maximum weight Maximum volume Maximum cost Maximum quantity	This field defines a limit for how large an order can be. The limit is often affected by physical nature. For example, a weight limit for a truck load. If several values are specified, all of them are checked. Maximum value equal 0 means that there is no limit.
(PPS195/E)	Currency	This field defines the currency used for 'Target cost', 'Maximum cost', and the calculated total or actual cost in (PPS190) and (PPS191).
(PPS195/E)	Unit of measure	This field defines the unit of measure used for 'Target quantity', 'Maximum quantity', and the calculated total or actual quantity in (PPS190) and (PPS191).
(PPS195/E)	Buyer	<p>This field defines the buyer for the product line for the supplier in the warehouse.</p> <p>This buyer is set as a default buyer for planned purchase orders in (MMS002).</p> <p>Note: Only items that are connected to this buyer in (MMS002) are included in the target fill-up.</p>
(PPS195/E)	Order type	<p>This field defines the purchase order type that is proposed for the purchase orders released from (PPS191).</p> <p>If left blank, the released purchase orders get the order type of the planned purchase order. This action may result in the purchase order being split into several orders, one per order type.</p>

Program ID/Panel	Field heading	Description
(PPS195/E)	Review cycle	This field defines the planned number of days between PO releases. By default, only planned POs with a release date within one review cycle are included in the (PPS191) selection.
(PPS195/E)	Fill-up logic	<p>This field determines when the target fill-up stops. These alternatives are valid:</p> <ul style="list-style-type: none"> • 1 - Below max The fill-up continues until the target value is reached ($\text{actual value} \geq \text{target value}$) and stops before any maximum value is exceeded. • 2 - Disregard max The fill-up continues until the target value is reached ($\text{actual value} \geq \text{target value}$) but does not check maximum values. If a maximum value is exceeded, a warning message is displayed in (PPS191).
(PPS195/E)	ABC type	This field is used to define the type of the ABC class range, which limits the items used by the target fill-up.
(PPS195/E)	ABC class (from/to)	If specified, only planned purchase orders for items in this ABC class range are generated by the target fill-up.
(PPS195/E)	Priority	This field defines the (PPS170) order priority (PRIP) assigned to planned orders generated by the target fill-up.

Program ID/Panel	Field heading	Description
(PPS195/E)	Auto fill-up	<p>This field determines if planned POs are created in (PPS690) when the target level is not met. These alternatives are valid:</p> <ul style="list-style-type: none">• 0 = No automatic fill-up Automatic target fill up is not performed.• 1 = Fill up if over the threshold Automatic target fill-up is performed when the target threshold is exceeded.• 2 = Fill up always Automatic fill-up is always performed.

Program ID/Panel	Field heading	Description
(PPS195/E)	Fill to next multiple	<p>This field defines when to allow fill-up to a multiple of the target value. These alternatives are valid:</p> <ul style="list-style-type: none"> • 0 = Not used • 1 = Yes, manually If the maximum value is exceeded, the system performs target fill-up to the next multiple of the target, when used by (PPS191). • 2 = Yes, automatically This alternative is similar to alternative 1, but is also used by (PPS690). This parameter can be used, for example, when the current load does not fit in a single load carrier, but can fill two loads instead. Example: If the target value is 8, with a maximum of 10, the actual value is 11 (greater than maximum), and this setting is enabled, fill-up continues to the next multiple of the target value, $8 * 2 = 16$, with a new maximum of 20. If this double maximum is exceeded, the next multiple is 3, and the target value $8 * 3 = 24$, and so on.

Program ID/Panel	Field heading	Description
(PPS195/F)	Release below target	<p>This field determines whether to release the planned purchase orders when the target value is not met. These alternatives are valid:</p> <ul style="list-style-type: none"> • 0 = Allow all Release of all planned purchase orders is allowed regardless of the target value fulfillment. • 1 = Allow per item line Release of all planned purchase orders below the target value is not allowed, but release of purchase order per item line is always allowed. • 2 = Do not allow No release of planned purchase orders below the target value is allowed.

Program ID/Panel	Field heading	Description
(PPS195/F)	Auto release	<p>This field determines if (PPS690) may automatically release a purchase order. If set to 0, no purchase order is created. If greater than 0, it indicates which purchase planning priority the target buying must have to qualify for automatic release.</p> <p>For example, if 'Auto release' = '2-High priority', and at least one planned PO in the selection has priority 1 or 2, the priority is sufficient for automatic release. On the other hand, if the highest priority planned PO in the selection had priority 3, the target buying would not be a candidate for release.</p> <p>(PPS690) releases a purchase order if all of these conditions are met:</p> <ul style="list-style-type: none"> • Auto release > 0 and the target buying has sufficient priority. • The target threshold is reached. See 'Target threshold'. • The target is fulfilled. • No maximum value is exceeded. <p>If 'Fill to next multiple' = 2-'Yes, automatically', the target multiple is taken into consideration when checking the target and maximum.</p>

Program ID/Panel	Field heading	Description
(PPS195/F)	Target threshold	<p>This field defines a threshold as a percentage of the target value used to determine if automatic release is allowed. To pass, the current actual value for a portion of the included planned orders must exceed the target multiplied by this percentage. See 'From priority'.</p> <p>Valid values are from 0 through 100.</p>
(PPS195/F)	From priority	<p>The field indicates which planned orders are included when the target threshold is checked.</p> <p>Example: With a target value of 80, a target threshold of 50 % and 'From priority' set to 3, the threshold is passed if the actual value of all planned orders of priority 1, 2, and 3 is equal to or greater than 40 ($80 * 50 \%$).</p> <p>By setting this priority, low-priority planned orders (such as orders generated by target fill-up or suggested by MRP for deletion) can be excluded from the auto fill-up or release check. This function prevents the automatic release of a purchase order where only a small portion of the order quantity is required.</p>

Priority rule example:

The priority assigned in (PPS197) is an internally used planning priority, which primarily signals to the buyer how important it is to take some action for the product line in (PPS191).

Rules are parsed in sequential order. When a matching rule with a priority number is found, no further rules are evaluated. If no matching rule is found, priority 5 (lowest) is automatically assigned.

If two or more sequences must both be evaluated as true to get a priority number, use the "AND" operator on the first sequence, and assign a priority number to the last sequence.

Assign priorities according to these recommendations:

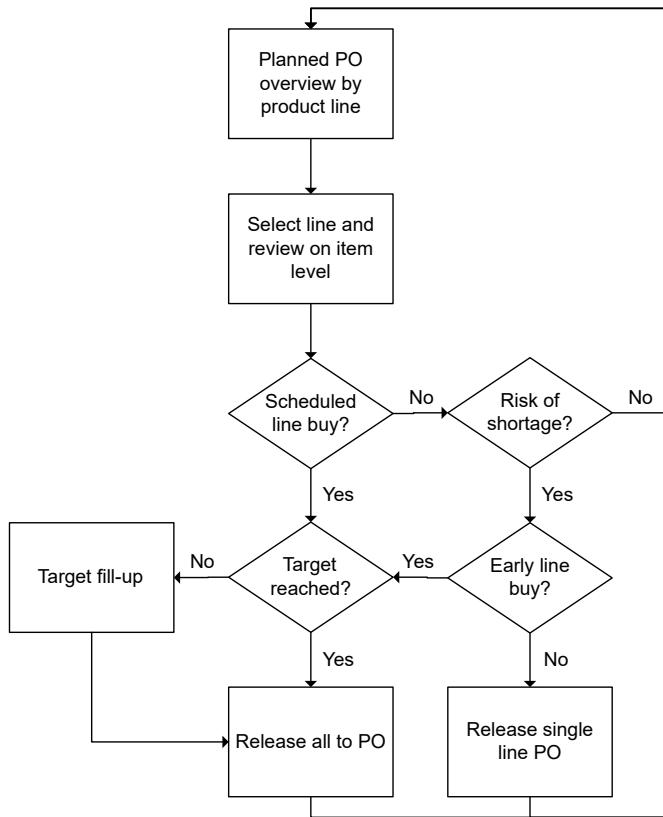
- Set late planned orders (with action message A1) to planning priority 1-'High'.

- Set planned orders generated from a customer order, with a customer priority lower than or equal to 3 (that is, 1, 2, or 3) to planning priority 1-'High'.
- Set any other planned order with an order reference to planning priority 2-'Normal'.
- Set planned orders that are due for release, but not late (with action message A2) to priority 3-'Normal'.
- Set planned orders that MRP has suggested for deletion (action message B7) to priority 5-'Low'.
- Set everything else to priority 5-'Low'.

This table shows how to set it up in (PPS197):

Sequence number	Rule	Value	AND	Priority	Comment
10	01-Action message	B7		5-Low	B7 = Delete order
20	01-Action message	A1		1-High	A1 = Release and reschedule
30	03-Origin	23	AND		23 = From customer order
40	02-Priority higher than	3		1-High	True for order prio 1, 2, 3
50	04-Order referenced			2-Normal	Rule 04 requires no value
60	01-Action message	A2		3-Normal	A2 = Release order

Flowchart



Follow these steps

Use this process to work with target buying; that is aggregated purchase planning on a product line level.

- 1 Start (PPS190). The active user is set as the buyer by default. The program lists all product line/warehouse combinations that are connected to the buyer in 'Purchase Planning Settings. Open' (PPS195). Aggregated information about the planned purchase orders is displayed, such as target values, target fulfillment, priority, and number of planned orders. By default, in (PPS190), the lines are ordered by priority, with the highest on top.

The information in (PPS190) provides a basis for deciding on a course of action. Examples:

- The 'Planned release date' shows when the next line buy is planned according to the review cycle.
- A fulfilled target may indicate that it is time to make a line buy.
- If the 'Release date' is reached, at least one of the included planned orders must be released or it will be late.
- Depending on the setup, the planning priority may also indicate that planned orders require urgent attention.

- 2 Select a product line in the list. Use alternative 11='Details' to access 'Purchase Planning Details' (PPS191). The item numbers included in the product line for the selected supplier and warehouse are displayed, along with aggregated information about the planned purchase orders per item number.

Planned purchase orders with a planned release date earlier than one review cycle from the current date are included in the selection by default.

(PPS191) also has a number of related options to use included planned orders, display on-hand inventory information, review planning setting in 'Item. Connect Warehouse' (MMS002), perform MRP calculations, display forecasts and statistics, and so on.

- 3** If planned orders are late or risk becoming late, decide whether to perform an early line buy or an emergency buy:
 - A line buy is appropriate if the current planned orders have reached the purchasing targets, or are so close that the extra carrying costs for ordering more than needed are lower than the extra ordering costs for an emergency buy. Go to step 4.
 - An emergency buy is appropriate if the current planned orders are far from the purchasing targets (for example, if early in the review cycle or there is plenty of stock left of the other items in the product line) and the carrying costs for a full line buy ahead of schedule are higher than the extra ordering costs associated with buying a single item. Go to step 6.

4 Perform a line buy

If the target value is not reached, use F15='Create planned orders' to perform a target fill-up. The planned orders are created in (PPS191) until the selected target value is exceeded. Use the fields 'Target type' and 'Target value' to control the target fill-up.

In 'Purchase Planning Settings. Open' (PPS195), you can define maximum values for purchasing cost, weight, or volume. If such a value is exceeded, decide if a line buy must be made below purchasing targets (respecting the maximum value) or if the maximum value can be ignored in favor of meeting the purchasing target.

The field 'Fill-up logic' controls whether the fill-up stops before it exceeds any maximum (1), or continues until the target is reached regardless of limits (2).

The action F18='Delete planned orders' deletes all planned orders that have been generated by the target fill-up.

Item numbers can be excluded from the line buy by deleting the corresponding line in (PPS191). This does not affect any existing planned orders.

- 5** To perform a line buy, release the planned orders into a purchase order by selecting the action F19='Release all'.
- 6** Perform an emergency buy

To perform an emergency buy, select the item to purchase and select alternative 19='Release one line' to create a purchase order.
- 7** Follow up

Optionally, review the newly created purchase order by using alternative 12='History' in (PPS190). 'Purchase Release History. Open' (PPS194) is displayed, listing all released purchase orders for the product line and warehouse, with the most recent release on top. Alternative 11='Purchase order lines' starts 'Purchase Order. Display Lines' (PPS220).
- 8** Repeat the steps up to 'Perform an emergency buy' until all purchase orders are created.

Target buying as a submitted job

'Purchase Planning. Generate' (PPS690) can be used to perform target buying automatically as a batch job. For each product line, it can be included in the selection:

- 1 Perform fill-ups to target level.
- 2 Create line buys (purchase orders based on the included planned POs).

These actions depend on the settings in 'Purchase Planning Settings. Open' (PPS195). In addition to these settings, (PPS690) can only create purchase orders if:

- The target level is reached.
- No maximum value is exceeded.

The outcome of (PPS690) is equivalent to performing the corresponding actions in (PPS191).

Selection of included planned POs

The selection fields in (PPS690) control which product lines and planned POs are included in the job selection. (PPS690) can perform target fill-up and release for a product line or warehouse only if at least one planned PO is included in the selection.

Field heading	Selection type	Description
Responsible	Range	This field is used to select planned POs based on their responsible/planner set in (MMS002).
Product line	Range	This field is used to select planned POs based on the product line of the item.
Warehouse	Range	This field is used to select planned POs based on the warehouse.
Supplier	Range	This field is used to select planned POs based on supplier.
Release date	Upper limit	<p>This field defines the latest release date that at least one included planned purchase order must have for the product line to qualify for automatic fill-up or release. Use this field to avoid performing fill-up or release of purchase orders that are not yet due for release.</p> <p>Note that regardless of the value in this field, planned purchase orders with a release date within the review cycle are included in the selection.</p> <p>See the corresponding field help for more information and examples.</p>

Outcome

- With every release, a record in 'Purchase Release History. Open' (PPS194) is created.
- With every release, a purchase order is created through the batch order entry. The purchase order status is visible in (PPS194). Non-order-initiated items are aggregated into one line per item number. The order-initiated items or supply chain orders are displayed as separate lines on the purchase order.
- After a line buy release, if no more planned purchase orders remain, the product line/warehouse is set to priority 9-'No orders' in (PPS190).
- The target fill-up creates planned purchase orders with the generation reference 42.

Chapter 4: Purchase Agreements

Agreement Type - Purchasing

Agreement types are used in purchasing to classify supplier agreements. These can be blanket agreements, delivery schedule agreements and such.

Agreement types are defined in 'Purchase Agreement Type. Open' (PPS110). When entering an agreement, the agreement type selected will call agreement-specific fields for processing.

These parameters are used to define an agreement type:

- Number series
- Delivery schedule agreement
- Volume based agreement
- Lead time-influenced agreement
- Discount agreement
- Item / Supplier check
- Blanket agreement
- Loan agreement
- Exchange agreement
- Automatic closing of agreement line
- Self-billing agreement.
- Grower Agreement
- Auto Fulfillment

Description

Purchase agreement

A normal agreement is used when prices, yearly requirements, delivery times, etc. are agreed. There are no call-offs or delivery schedules. A purchase order is created when needed with the appropriate quantities.

Blanket agreement

A blanket agreement is used to reserve a larger quantity from a supplier for later purchase or call-off. Each time a call-off is made the quantity ordered is reduced. A blanket agreement requires that the warehouse where delivery will be received is specified in each agreement line. As well, the availability survey for the warehouse is updated with the ordered quantity.

These fields specific to this agreement type are opened:

- Warehouse

- Update material plan.

Delivery schedule agreement

Delivery schedule agreements are used when regular deliveries are made from a supplier.

These fields specific to this agreement type are opened:

- Definitive delivery schedule
- Preliminary delivery schedule
- Forecast days
- Number of print generations
- Warehouse

Grower agreement

Grower agreements are used in industries such as agriculture where the supplier is paid based on product quality combined with an agreement unique settlement model.

- Parameter **Grower agreement** must be specified.
Note: This option is only available where parameter 409 '**Grower Contract Management**' is set in 'Company. Connect Division' (MNS100/K) ..
- Where the agreement line status is to be automatically updated when the received quantity covers the agreed quantity, the 'Auto Fulfillment' parameter must also be specified.
- Self-Billing must be activated.

Note: This agreement type cannot be used in association with a Freight Agreement, Loan Agreement or Exchange Agreement.

Create Agreements with Supplier

This document explains how you create an agreement with a supplier.

Outcome

An agreement is created. You can attach the agreement to the purchase orders. The list of the agreements can also be printed for further reference.

These files are updated:

- Purchase Agreement Header (MPAGRH)
- Purchase Agreement Line (MPAGRL)
- Purchase Agreement Prices (MPAGRP).

The agreement is applicable for both planned purchase orders and purchase orders. The agreement can be mapped manually or automatically to purchase orders on 'Purchase Order. Open' (PPS200/A) and planned purchase orders in 'Planned Purchase Order. Open' (PPS170).

Before you start

- Define the parameters in [Define Settings for Agreements](#) on page 263.
- Define the group ID on 'Purchase Agreement Selection Field. Open' (CRS746/B).
- For Grower Agreements, set the object control parameters for 'Costing Model Sel Table. Open' (PPS038) in 'Available Object Ctrl Parameters. Open' (CMS016).
- For Purchase Organization, the purchase organization identifier is defined in 'Purchase Organizations. Open' (PPS099) and setting a priority to search for the price is defined in 'Settings – Purchasing' (CRS780).

Follow these steps

Create an agreement

- 1 Start 'Purchase Agreement. Open' (PPS100).
- 2 Click F13 to activate the P panel. Set the panel sequence to EFG12 and press Enter.
- 3 Select a sorting order.
- 4 Specify the supplier and agreement type (if sorting order 1 is used), and select New.
- 5 On the E panel, specify the text, valid from, valid to, agreement date, status, period of notice, buyer, agreement priority, reference, update purchase quantity, object access group, currency, packaging terms, exchange rate type, delivery method, discount 2, delivery terms, payment terms, freight terms, supplier agreement number, and purchase organization.

Specify a purchase organization if this agreement should only be valid for warehouses belonging to the purchase organization. The field is only enabled when using these agreement types:

- Normal Agreement
- Blanket Agreement
- Delivery Schedule Agreement.

The agreement date specifies when the agreement was created. The renewal date specifies when the agreement should be renewed. This renewal date is disabled when the agreement is changed to status 40.

The priority code is used as selection criteria when a quotation is copied to an agreement. If a line is coded with priority 1, the affected supplier is converted as the main supplier during the period of validity of the agreement. Also, the main supplier specified on 'Item. Connect Warehouse' (MMS002/E) can be updated by running 'Item. Update from Purchase Agreements' (PPS950)..

The 'Update purchased quantity' field indicates if the purchased quantity on the agreement line (PPS101) must be updated with the recently reported quantity when performing purchase activities. The valid alternatives are:

- 0 = No update
- 1 = Update when planned orders are created
- 2 = Update when purchase orders are registered
- 3 = Update when planned orders are created and when performing other purchase order activities such as confirm, advise shipment, notify transport, goods receiving, quality inspection with reject, and processing of claims
- 4 = Update during purchase orders entry and when performing other purchase order activities such as confirm, advise shipment, notify transport, goods receiving, quality inspection with reject, and processing of claims

Alternatives 1 to 4 must be specified for the purchased quantity in order to reduce the agreed quantity. These options are used for blanket agreements or other agreement types.

Alternatives 3 and 4 can be used in these examples:

- The purchased quantity and purchased amount accumulators are updated on the related agreement line when:
 - PO line is confirmed, advised, notified, or goods received with a greater quantity than the last reported quantity.
 - PO line is confirmed, advised, notified, or goods received with a lower quantity than the last reported quantity and the 'Flagged compl' check box is selected.
 - Quality inspection is performed with reject quantity, then the accumulators are reduced on the related agreement line. Note that the approved quantity during inspection does not affect the update of accumulators.
 - Claim is processed with PO subline created.
- The accumulators are not updated on the related agreement line when PO line is partially confirmed, advised, notified, or goods received with the 'Flagged compl' check box cleared.

- 6 On the F panel, the agreement amount and purchase amount are updated.
- 7 For Grower Agreements, a costing model for the settlement is suggested according to settings in 'Costing Model Sel' (PPS038). Accept the suggested model or manually select another.
- 8 Press Enter to continue to 'Purchase Agreement. Open Lines' (PPS101/B).
- 9 On the B1 panel, specify the group ID. Select New.
- 10 On the E panel, specify the purchase price, discount 3, agreed quantity, purchase commitment, and unit of measure for purchase price and agreement quantity.

The agreed quantity indicates the quantity specified in the agreement.

The purchase commitment indicates if a buyer must purchase a specific volume. The volume is defined by the agreement quantity.

The valid alternatives are:

0 = No agreed volume.

1= Yes, but the agreed volume is only for information purposes.

2= Yes, the agreed volume is the minimum quantity permitted.

3= Yes, the agreed volume is the maximum quantity possible. If the accumulated ordered quantity is exceeded, a warning is issued when you enter a purchase order or create the purchase order from a planned order for the proposal line. Press Enter to return to (PPS101/B).

4 = Yes, the agreed volume is the maximum quantity possible. If the accumulated ordered quantity is exceeded, the user cannot release a planned order that generates a purchase order or create a purchase order line. The purchased quantity is not updated when the error message in the planned order is triggered.

The status of the agreement is 10 by default and it can be manually changed based on the type of the agreement.

The unit of measure of the agreement quantity (that is, agreed quantity, purchased quantity, received quantity and renewal quantity) and purchase price can be defined on the agreement level. This is possible when the group ID combination has an item number of product number with 'Alternate U/M in use' set to 2. These fields are protected once the agreement is connected to a planned order or purchase order line.

The purchase price unit of measure is retrieved from the agreement line, and is by default set on a planned order and purchase order line upon creation. This serves as the highest priority in retrieving the unit of measure. If there is no defined unit of measure, it will be retrieved from 'Supplier. Connect Item' (PPS040), and then 'Item. Open' (MMS001).

- 11** If the agreement type is a Grower Agreement, a costing model field is displayed on the G panel. Populate this where required if the fixed VAT code on 'Costing Element. Open' (PPS280) is to be overridden.
- 12** Select option 11='Prices'. 'Purchase Agreement. Enter Prices' (PPS102) is displayed. (PPS102) is only displayed if the agreement is connected to an agreement type that allows volume-based prices and discounts.
- 13** On the B panel, you can specify the From quantity, purchase price, and discount 3. The normal price is the representative purchase price for the item displayed on (PPS101/B) and is used for purchase costing.
- 14** Once an agreement line has been created on a Grower Agreement, you can connect quality inspection specifications to ensure that all required tests are executed at receipt of goods. See .
- 15** If custom fields are attached to the item, these fields will be copied onto the purchase agreement line. Select option 13='Custom fields' to start 'Custom Field. Update' (CMS474), enabling you to maintain the custom fields for the agreement line.
- 16** If custom fields are attached to the supplier, these fields will be copied onto the purchase agreement header. Select option 16='Custom fields' to start 'Custom Field. Update' (CMS474), enabling you to maintain the custom fields for the agreement header.
- 17** For agreements of type Grower Agreement, you can associate a base origin with an agreement line using related option 16='Base origin'. This is used to identify the original location of the seeds from which a crop was grown.
- 18** If the agreement type is an X-hire agreement, a rental duration field is displayed on the E panel. In this field you specify the default agreed invoice period defined in U/M, set for the 'X-hire invoice item' that is defined in 'Settings – Rental Agreements' (STS699).

Printing agreements

- 1** Start 'Purchase Agreement. Print Report' (PPS535).

An agreement can also be printed using option 6 on 'Purchase Agreements. Open' (PPS100/B).

- 2** Select the alternatives to limit the records to be printed.

The available alternatives are:

- Agreement number
- Supplier number
- Buyer
- Agreement priority
- Valid range
- Agreement utilization rate
- Renewal date
- Group ID.

- 3** Select the date format, report layout, and report text.

The layout specifies the information available in the report.

- 4** Press Enter to submit the printing job.

If the status of the agreement is less than 30, it is raised to 30 when the printing job is submitted.

Create Purchase Organization for Pricing

This document shows how to define a purchase organization used in purchase pricing and how to create the necessary set up for using purchase organization for pricing in the purchase price search. Purchase organizations for pricing define which warehouses to allow to use the prices and terms of certain agreements.

Outcome

A purchase organization of type 0='Price' is created and connected to a warehouse on 'Warehouse. Open' (MMS005/E), and added to a new purchase agreement on 'Purchase Agreement. Open' (PPS100/E).

The purchase organization codes are stored in the PPPORG table.

Before you start

- Purchase organization for pricing must be activated on 'Settings - Purchasing' (CRS780/H), parameter '66 - Use of purchase organization: Price/Planning', field 'Priority order for price search'.
- A warehouse must exist in (MMS005).

Using purchase organizations for pricing

Purchase organizations for pricing define which warehouses to allow to use the prices and terms of certain agreements. This is achieved by connecting the price purchase organizations to the warehouses and purchase agreements. The purchase organization to which the warehouse is connected, will be used for searching for a valid agreement in the purchase price determination. Prices from the agreement connected with the purchase organization of the warehouse are selected first in the search for price origin.

Purchase organizations for pricing can be used in these programs:

- 'Purchase Organization. Open' (PPS099)
- (MMS005)
- (PPS100)

Use of the purchase organizations for pricing is limited to the general purchase agreements, blanket agreements, and delivery schedule agreements.

Global vs. Regional Purchase Agreements

Global Agreements

If the 'Purchase Organization' is empty on the agreement header, then the purchase agreement is valid for all warehouses within the company.

Regional Agreements

To create regionally applicable agreement, a purchase organization must be specified on the agreement header and all warehouses, that use the prices and conditions of the agreement, must be connected to the purchase organization in (MMS005).

Warehouses on different divisions can be connected to the same purchase organization.

Group ID on agreement lines

The group ID on agreement lines can define the objects for which the purchase agreement is valid in a more detailed way. Available combinations of objects are defined in 'Purchase Agreement Selection Field. Open' (CRS746).

Follow these steps

Create Purchase Organization for pricing

- 1** Start (PPS099).
- 2** Specify alphanumeric characters on the B panel.
- 3** Select 'Create' to create a record.
- 4** Select purchase organization type 0='Price' on the E panel and press 'Enter'.
- 5** Specify the 'Description' and 'Name'.

Connect Purchase Organization to a warehouse

- 1** Start (MMS005).
- 2** Specify the purchase organization on the E panel. It must be a purchase organization of type 0='Price'.

Connect Purchase Organization to the purchase agreement

Purchase organization can only be selected when entering a new purchase agreement.

- 1** Start (PPS100).
- 2** Select 'Create' to create a record.
- 3** Specify the purchase organization for pricing on the E panel. It must be a purchase organization of type 0='Price'.

Parameters to set

Program ID/ Panel	Field	The field indicates ...
(PPS099/B)	Purchase Organization	<p>...the purchase organization groups warehouses for the use of purchase price agreements or purchase order planning. The field is defined in (PPS099). The purchase organization type determines the purpose of the purchase organization purchase pricing or planning.</p> <p>Purchase organizations used for pricing are connected to the warehouses in (MMS005) and purchase agreements in (PPS100). Purchase organizations for pricing are used for defining which warehouses to allow to use the prices and terms of certain agreements. Purchase organizations for pricing are limited to normal purchase agreements, blanket agreements, and delivery schedule agreements.</p> <p>Purchase organizations used for planning are connected to the warehouses in (PPS199) and assigned to the planned purchase orders and purchase orders. Planned purchase orders that are connected to the same purchase organization can be consolidated to create cross-facility purchase orders for central buying. Purchase organizations for planning are limited to the purchase orders of the purchase categories 20='Normal' and 70='Subcontracting'.</p> <p>To activate the purchase organization for use in purchase pricing or purchase planning, set the '66 Use of purchase organization: Price/Planning' parameter in (CRS780).</p>

Program ID/ Panel	Field	The field indicates ...
(PPS099/E)	Purchase organization type	<p>...the purchase organization type, which determines the use of the purchase organization.</p> <p>Alternatives:</p> <ul style="list-style-type: none"> • 0='Price' • 1='Planning' <p>Type 0='Price' purchase organizations create price purchase organizations that are used for the grouping of warehouses that share regionally, or centrally negotiated purchase price agreements. The price purchase organizations are connected to warehouses in (MMS005) and purchase agreements in (PPS100). To activate the use of type 0 purchase organizations in the price origin search, use the '66 Use of purchase organization: Price/Planning' parameter on (CRS780/H).</p> <p>Type 1='Planning' purchase organizations are used for the grouping of warehouses for purchase planning and consolidation. Purchase organizations of type 1 are connected to the warehouses in (PPS199) and assigned to the planned purchase orders and purchase orders. The type 1 can only be created (and is mandatory) if the use of the purchase organizations for planning is activated on (CRS780/H).</p>
(PPS099/E)	Description	... the description of the current identity. It is a mandatory information.
(PPS099/E)	Name	...the name of the current identity. When you edit descriptions and names and no name is specified, the first 15 positions from the description are treated as the name by default.

Define Settings for Agreements

This document explains how to define purchase agreement for a supplier.

Outcome

The customer and supplier can enter an agreement that covers items, prices, discounts, and terms and conditions for a specific period of time.

These files are updated:

- Purchase Agreement Header (MPAGRH)
- Purchase Agreement Line(MPAGRL)
- Purchase Agreement Prices (MPAGRP)

The purchase agreement types defined on 'Purchase Agreement Type. Open' (PPS110/B) can be used while purchase agreements are created in (PPS100).

Before you start

A number series that has type 25 must be defined in 'Number Series. Open' (CRS165).

Follow These Steps

- 1 Start 'PO Type. Open' (PPS095).
- 2 On the F panel, select 'Multiple agreements per PO' and 'Agreement check - PO entry'.
- 3 Start (PPS110).
- 4 On the B panel, enter a new agreement type using three alphanumeric characters.
- 5 Select New to create a record.
- 6 On the E panel, enter the name, description, and number series. Depending on the type of agreement, select the options Delay schedule agreement, Volume based, Lead time, Discount agreement, Blanket agreement, Loan agreement, Exchange agreement, Close line auto, and Self-bill activity.
- 7 Press Enter to continue to the B panel.

Parameters to Set

Program ID/Panel	Field	The field indicates ...
(PPS095/F)	Multiple agreements per PO	<p>...whether a purchase order contains more than one agreement number.</p> <p>These alternatives are valid:</p> <p>0 = No</p> <p>1 = Yes</p> <p>When you enter alternative 0, automatically created purchase orders are divided and manually created orders are locked for entry.</p>
(PPS095/F)	Agreement check - PO entry	<p>...if the agreement number on the purchase order lines can be compared to the number in the agreement file.</p> <p>These alternatives are valid:</p> <p>0 = Agreement number is not mandatory. If an agreement number is entered, then it must correspond to the number in the agreement file. If not, then an error message is displayed.</p> <p>1 = Agreement number is mandatory. If an agreement number is not entered or does not correspond to a number in the agreement file then an error message is displayed.</p>

Program ID/Panel	Field	The field indicates ...
(PPS110/B)	Agreement type	<p>...how a purchase agreement is processed in different situations.</p> <p>Agreement type 999 is fixed and refers to a general agreement. A general agreement is an agreement whose price information is updated in (PPS040).</p>
(PPS110/E)	Number series	<p>...how to define the ID of the number series that will be used for purchase agreements.</p> <p>A number series is identified by the numbers series type.</p>
(PPS110/E)	Delay schedule agreement	<p>...if the fields for delivery schedule ranges are to be opened in the purchase agreement.</p> <p>These alternatives are valid:</p> <p>0 = No</p> <p>1 = Yes.</p>
(PPS110/E)	Volume based	<p>...if the agreement can include volume-based prices and discounts.</p> <p>These alternatives are valid:</p> <p>0 = No</p> <p>1 = Yes</p>
(PPS110/E)	Lead time	<p>...whether it is possible to update the supplier's lead time on a purchase agreement.</p> <p>These alternatives are valid:</p> <p>0 = No</p> <p>1 = Yes</p>
(PPS110/E)	Discount agreement	<p>...whether the agreement is a discount agreement.</p> <p>These alternatives are valid:</p> <p>0 = No</p> <p>1 = Yes</p>
(PPS110/E)	Blanket agreement	<p>...if the purchase agreement can include blanket agreement lines.</p> <p>These alternatives are valid:</p> <p>0 = No</p> <p>1 = Yes</p> <p>The blanket agreement line is used for reserving a greater quantity at the supplier's end. The quantity decreases each time a purchase order is created.</p> <p>On the blanket agreement line, it can be determined if the agreed quantity must be updated and as well as when the reservation must be entered in the material plan.</p>

Program ID/Panel	Field	The field indicates ...
(PPS110/E)	Loan agreement	<p>...if the purchase agreement is a loan agreement.</p> <p>These alternatives are valid:</p> <p>0 = No</p> <p>1 = Yes</p> <p>A loan agreement is mainly used in the maintenance business to enable temporary loaning of items and spare parts until a new one can be repaired or bought.</p> <p>To calculate the daily cost for the loaned item charges can be defined in (PPS104).</p>
(PPS110/E)	Exchange agreement	<p>...if the purchase agreement is an exchange agreement.</p> <p>These alternatives are valid:</p> <p>0 = No</p> <p>1 = Yes</p> <p>An exchange agreement is mainly used in the maintenance business to sell old items and buy new items.</p>
(PPS110/E)	Close line auto	<p>...whether the agreement lines must be closed when the agreed quantity is supplied.</p> <p>These alternatives are valid:</p> <p>0 = No, status remains 20</p> <p>1 = Yes, status is changed to 90=Closed</p> <p>Note: This is valid only if the agreed quantity is indicated on the agreement line.</p>
(PPS110/E)	Self-bill activity	<p>...whether the purchase agreement must be connected to a self-billing agreement.</p> <p>Self-billing agreements are used when supplier invoices are generated from received lines.</p> <p>These alternatives are valid:</p> <p>0 = No, the purchase agreement must not be connected to a self-billing agreement.</p> <p>1 = Yes, the purchase agreement must be connected to a self-billing agreement.</p>

Managing Agreements with Suppliers

You can manage supplier agreements by creating, printing, canceling, and updating them to reflect current purchasing terms and conditions. You can also correct the incorrect agreement lines by performing a recalculation.

Outcome

A purchase agreement is created and printed as a valid agreement. Also, you can cancel a valid agreement. A canceled agreement becomes an old agreement, which can then be updated and created as a different agreement.

Uses

You can use the purchase agreement in planned purchase orders and in purchase orders.

How the System Is Affected

These files are updated:

- Purchase Agreement Header (MPAGRH)
- Purchase Agreement Line (MPAGRL)
- Purchase Agreement Prices (MPAGRP)
- Purchase Agreement Types (MPAGRT)
- Purchase Order Header (MPHEAD)
- Purchase Order Line (MPLINE)
- Planned Purchase Orders (MPOPLP)

Before you start

You must define the parameters first before you manage purchase agreements with suppliers.

See the parameters in [Define Settings for Agreements](#) on page 263

Follow These Steps

1 Create a Purchase Agreement

Create a purchase agreement when appropriate quantities such as price, yearly requirements, and delivery times are agreed upon with the supplier.

A purchase agreement can be created manually from 'Purchase Agreements. Open' (PPS100) and defaulted to a purchase order when an order is placed with a supplier.

An agreement can consist of lines, and the lines can represent agreements on special items or groups of items. The prices can be volume-based, which means that a price list can be registered for the item.

An agreement can also be created manually or automatically from a quotation. When a purchase quotation is approved, it can be copied to an agreement from 'Purchase Agreement. Create fr Quotation' (PPS150) or by selecting option 32 in 'Request for Quotation. Open' (PPS130).

2 Print a Purchase Agreement

You can print a purchase agreement for physical references. Use **Option 6- Print Documents ON 'Purchase Agreements. Open'** (PPS100/B). You can also print the purchase agreement from 'Purchase Agreement. Print Documents' (PPS530/E) by raising the status to 30.

An agreement report, displaying data from the agreement lines, can be printed from 'Purchase Agreement. Print Report' (PPS535/E).

3 Cancel a Purchase Agreement

You can cancel a purchase agreement when the agreement expires and you no longer need it. You can manually cancel a purchase agreement by changing the status to 90 on 'Purchase Agreements. Open' (PPS100/B).

4 Update a Purchase Agreement

You can update a specific agreement with new data. Depending on your choice, you can generate new agreement lines on an existing agreement or create a new agreement in 'Purchase Agreement. Mass Update' (PPS125).

Correction of incorrect agreement lines

You cannot manually change some values on the purchase agreement lines. For example, the fields '**Purchased quantity**' and '**Purchased amount**' are accumulated automatically during the processing of a purchase order. If the displayed values are incorrect, you can perform a recalculation of the agreement lines using the program 'Purchase Agreement. Recalculate Values' (PPS952). In the program, you can specify the supplier and agreement to be recalculated. The program computes the purchased quantity and amount for all agreement lines based on all purchase order proposals and firm purchase order lines connected to the agreement. The values are computed based on the setting '**Update purchased quantity**' on the agreement header, since this setting determines whether both planned and firm purchase order lines are included. You can recalculate only one agreement at a time since many agreement lines may require an update.

When you initiate the recalculation of an agreement, you can select the checkbox '**Print changes**' on (PPS952/E). If selected, a report is generated that includes the updated agreement and a list showing the before and after values for '**Purchased quantity**' and '**Purchased amount**' for all agreement lines.

Note: You must only run (PPS952) on special occasions when you know the values on purchase agreement lines have been computed incorrectly. You must not run the program as a precaution, and therefore, you cannot schedule the update as a recurring job. Also, do not run the program when high system activity exists. Ongoing MRP calculation can change and initiate new purchase order proposals connected to the agreement being updated, which can result in incorrect values after the recalculation job finishes.

Mass Update Agreements with Supplier

This document explains how you perform mass update of agreement with a supplier.

Outcome

An agreement is either updated with new agreement lines on an existing agreement or creates a new agreement.

These files are updated:

- 'Purchase Agreement Header' (MPAGRH)
- 'Purchase Agreement Line' (MPAGRL)
- 'Purchase Agreement Prices' (MPAGRP)

Before you start

- Define the parameters in 'Define Settings for Agreements'.
- Define the group ID on 'Purchase Agreement Selection Field. Open' (CRS746/B).
- For 'Purchase Organization', the purchase organization identifier is defined in 'Purchase Organizations. Open' (PPS099) and setting a priority to search for the price is defined in 'Settings - Purchasing' (CRS780).
- In 'Settings - Application messages' (CRS424) use an action F14='Create message types'. On (CRS424/B), search for message type '171' and activate on (CRS424/E).

Follow these steps

Mass update of an agreement

- 1 Start 'Purchase Agreement. Open' (PPS100).
- 2 Select a sorting order.
- 3 Specify the supplier and agreement type (if sorting order 1 is used), and press Enter.
- 4 On the B panel, highlight the selected supplier and agreement to update and use related option 15-'Mass Update'. (PPS125/E) is opened.
- 5 On (PPS125/E), enable 'New Agreement' or 'Update agreement'. For 'New agreement', define the agreement group ID. The fields 'New curr code', 'Exchange rate type', 'Valid from' (mandatory), 'Valid to', 'Adjustment pct', 'Adjustment amount', 'Percentage threshold', 'Purchase organization' and 'Country of origin' constitute the changes you can do while creating a new agreement line. Specify a value which is not occupied by another agreement and it will become the agreement number of your new agreement. If you choose not to do this, you will automatically receive the next agreement number in the used agreement number series.
- 6 On (PPS125/F), you can select on the fields 'OBV1-OBV4' from your selected group ID.
- 7 Click 'Next' and you will get a confirmation message displayed on the screen. Once you confirm, the job PPS126CL will be submitted and displayed back on (PPS125/E).
- 8 The new agreement is created with status 10-'Preliminary'.
- 9 On (PPS125/E), you can enable 'Update agreement' while disabling 'New Agreement'. You can also define the 'Supplier', 'Agreement number', and 'Agreement group ID'. The updated 'Valid from' and 'Valid to' dates need to be within the 'Valid from' and 'Valid to' dates of the existing agreement. Also, the 'Valid from' date needs to be after any existing 'Valid from' date on existing agreement lines of the agreement which you intend to update. When you specify the 'Valid to' date, the program updates the existing agreement line with the value of 'Valid to' date prior to 'Valid from' date of the newly created agreement line, and two new agreement lines are created. The first new line contains the 'Valid from' date and 'Valid to' date as set in (PPS125), while the 'Valid from' date of the second new line contains the day after the 'Valid to' date of the previous line. Moreover, 'Valid to' date is blank if the agreement header 'Valid to' date is also blank. Otherwise, the value is equal to the agreement header.

- 10** On (PPS125/E), you can specify value for the 'adjustment amount' along with the 'percentage threshold'. The fields are used to calculate for the new purchase price of the new or existing agreement line. If the calculated new purchase price is within the percentage threshold limit, a new agreement line is created with the original purchase price and the adjustment amount, while another new line is also generated with the original purchase price. Also, you can specify negative value for the 'adjustment amount'. If the 'adjustment amount' is set while field 'Percentage threshold' is equal to zero, the calculated new purchase price is updated with the adjustment amount and the original purchase price.
- Note:** During the mass update of purchase agreement, if the calculated new purchase price does not decrease below the defined threshold limit, an error log is sent to 'Application Message. Open' (CRS420) with application message type 171 'Error exists for mass update of purchase agreement'. There are also other detailed messages, linked to this application message and recorded in 'Detailed Mail Message. Open' (CMS421). The 'Data identity reference' field in (CMS421) reflects the sequence number of the line that failed to update. Additionally, in (CMS421), related option 11-'Open' can also be selected and it leads the user on (PPS101/E), allowing a display view of the record that failed to update.
- 11** On (PPS125/F), you can make selections on the fields 'OBV1-OBV4' from your selected group ID.
- 12** Click 'Next' and a confirmation message will be displayed on the screen. Once you confirm, the job PPS126CL will be submitted and displayed back on (PPS125/E).
- 13** The new agreement is created with status 10-'Preliminary'.

Use Agreements in Purchase Order

This document explains how you use agreements in planned purchase orders and purchase orders.

Outcome

A planned purchase order and a purchase order with a valid agreement are created.

How the system is affected

These files are updated:

- Purchase Order Header (MPHEAD)
- Purchase Order Line (MPLINE)
- Planned Purchase Orders (MPOPLP)

Before you start

- An agreement must be created. See [Create Agreements with Supplier](#) on page 256 .
- A planned purchase order must be created. See [Create and Release Planned Purchase Order](#) on page 100 .
- A purchase order must be created. See [Create, Release, and Display Purchase Order](#) on page 94 .

Follow these steps

Use an agreement in a planned purchase order

- 1** Start 'Planned Purchase Order. Open' (PPS170). Select the planned purchase order that should be linked to the agreement.
- 2** Select Change to continue to 'Planned Purchase Order. Open' (PPS171).
- 3** On the E panel, the 'Our reference number' field displays the value of reference type 1.
Reference type 1 indicates the Agreement number.
The purchase price, discount 2, and discount 3 are automatically retrieved from the valid agreement.

Use an agreement in a purchase order

- 1** Start 'Purchase Order. Open' (PPS200).
- 2** On the A panel, manually specify a new purchase order.
The agreement number can be manually specified.
- 3** On the E panel, the 'Our reference number' field displays the value of reference type 1.
Reference type 1 indicates the agreement number.
- 4** Press Enter to continue to 'Purchase Order. Open Lines' (PPS201).
- 5** On the E panel, the 'Our reference number' field displays the value of reference type 1.
Reference type 1 indicates the agreement number.
The purchase order line automatically retrieves the agreement number from the purchase order header.
- 6** Press Enter to return to (PPS201/B1), where a new purchase order line is created.

Chapter 5: Goods Receiving

Extended Quality Inspection in the Receiving Flow

This document explains extended quality inspection using quality inspection tasks and plans.

Quality inspection in the receiving flow can be done in different ways and with different activities.

The settings on the goods receiving method specify whether the quality inspection is mandatory, optional, or depends on a quality inspection plan connected to the item/supplier combination. A counter can be connected to the quality inspection plan so the inspection is done at specific intervals. If different types of inspection must be done, separate quality inspection tasks can be used.

Outcome

This document describes how to perform these actions:

- Report quality inspection tasks
- Work with quality inspection plans
- Print quality inspection documents
- Display quality inspection statistics
- Define quality classification
- Perform quality inspection audits.

Uses

- The next step can be to store the goods in a location 'Purchase Order. Put Away Goods' (PPS320).
- If goods are rejected during the quality inspection, a claim can be created in 'Return To Supplier. Open' (PPS390).

How the system is affected

Important files used for the flow program are:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line
- MPLIND Purchase Order Line transactions
- MPQDCA Quality data for control activities
- MPQFUH Quality data for follow up on heading level
- MPQFUT Quality data for follow up on task level
- MPQCTA PO Quality control tasks

- MPGRMT Goods receiving method
- MPGRDO Goods receiving method – documents.

Before you start

- Settings must be entered according to [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313.
- The goods must be reported as received (status is set to 50), see [Receive Purchased Goods](#) on page 297.

Introduction

Quality inspection in the receiving flow can be done in different ways and with different activities. This material describes extended quality inspection using quality inspection tasks and plans.

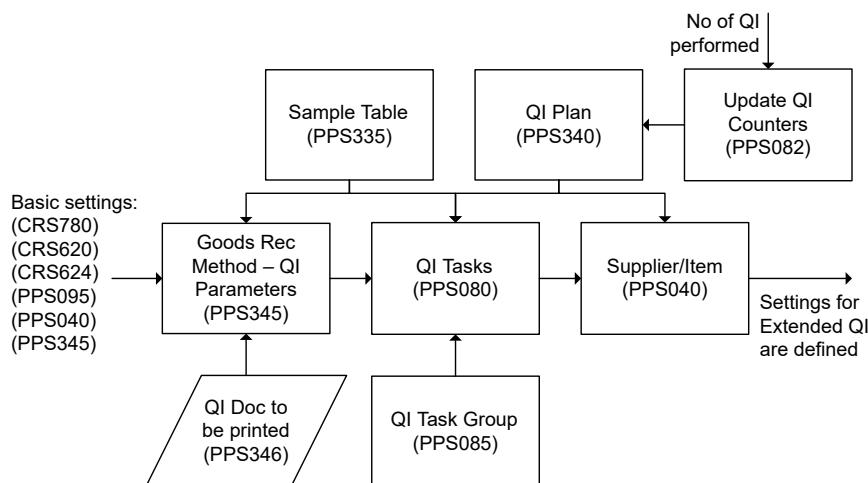
The goods receiving method (PPS345) describes how the order is managed after the goods receipt and, if quality inspection is used, how the quality inspection is performed. The goods receiving method is defaulted on the purchase order line in 'Purchase Order. Open Lines' (PPS201/F) and can be changed manually. The default value is retrieved from these places and in this order:

- 'Supplier. Connect Item' (PPS040/E)
- 'Item. Open' (MMS001/F)
- 'Purchase Order Type. Open' (PPS095/E)

The goods receiving method also determines which documents are printed in the quality inspection. If goods are rejected during the quality inspection, a claim can be created automatically and managed in the claim routine.

Quality classes can be used to group suppliers depending on the quality of their deliveries. In the quality inspection statistics, information about the quality inspection results is given. The statistics can be helpful in classifying the suppliers.

The figure describes the flow for define settings for extended quality inspection:



Quality inspection tasks

In some cases the quality inspection is done in several steps. For example, if an item must have a special surface appearance and special measurements, two inspection activities are done. One activity checks the surface of the purchased item, and the other activity checks the measurements of the item. These steps might have to be followed up separately in the statistics. If so, quality inspection tasks must be created in M3 for each of the steps. The tasks are defined in 'Quality Inspection Task. Connect to Item' (PPS080).

Quality inspection plan and sample table

A quality inspection plan is used when different quality inspections are done for different occasions. For example, when an item is received the first time, all of the items are inspected and for subsequent deliveries a check is made only on a smaller number (for example 10%) of the items if the quality proved satisfactory the first time. If no failures occur in the long run, the inspections can be reduced further to infrequent sample tests.

A quality inspection plan together with a sample table can be set in 'Goods Receiving Method. Open' (PPS345). The quality inspection plan and the sample table field on the goods receiving method only works as a default value when an item / supplier combination is created in (PPS040).

If a quality inspection plan is used, a counter keeps count of the quality inspection level for the next received quantity.

Quality inspection statistics

The quality inspection statistics are a display of the different inspection results, in reporting date order, for a specific supplier (inquiry 1) or for an item (inquiry 2).

Quality classification

A quality class can be used for quality classification. The class can be defined for:

- Suppliers (CRS624/E)
- Item/supplier combinations (PPS040/F)
- Delivery group per supplier (PPS012)

The quality class is user-defined and is set manually. The quality class can, for example, be used to indicate how reliable the supplier/delivery group is. Another purpose of the quality class can be to display whether or not the supplier/delivery group is quality-certified (by ISO9000, for example).

Quality audit

A quality assurance audit can be an activity performed, for example, each year to update the quality classes. Information about this audit can be given in 'Supplier. Connect Quality Audit Types' (PPS013).

Printout of quality inspection documents

Different kinds of quality inspection documents can be printed automatically after quality inspection is reported. The goods receiving method controls which documents are printed. Option 11 in 'Goods Receiving

Methods. Open' (PPS345/B) displays all documents connected to the receiving flow for a certain method. These documents must also be defined in 'Document. Open Standard' (CRS027).

Examples of document numbers connected to the quality inspection flow are:

70H Marking label

70I Quality inspection result

70J Picking list for inventoried items after rejection in the inspection report

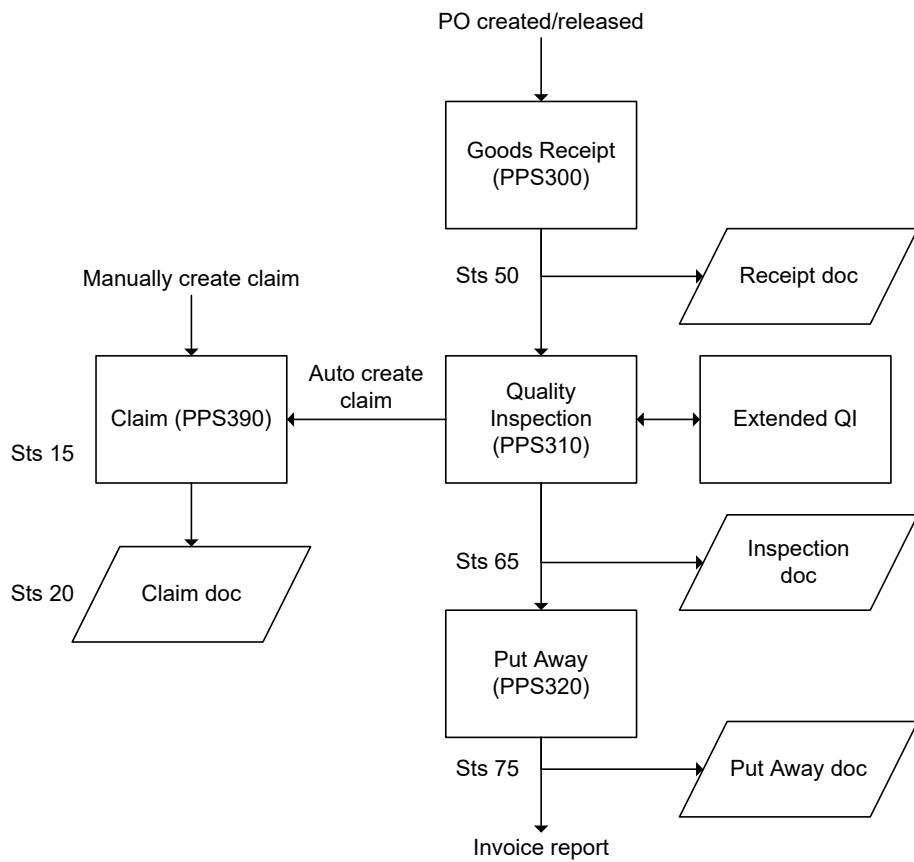
70B Quality inspection, PO goods receiving

As a base for quality inspection reporting, the quality inspection document (70B) should be used. This is printed if quality inspection is to be performed after goods receiving reporting. The document to be printed must be defined in the used goods receiving method.

Goods Receiving Flow for Purchase Orders

This document explains how you receive the goods connected to your purchase order (PO) that have arrived from the supplier, and how you put them away in your plant with or without quality inspection (QI).

The status of a PO line reflects its progress in the goods receiving process.



The three goods receipt activities (receive goods, inspect quality, and put-away goods), can be combined into these flows:

- Receive Goods
- Receive Goods – Inspect Quality – Put Away Goods
- Receive Goods – Put Away Goods – Inspect Quality
- Receive Goods – Put Away Goods
- Receive Goods – Inspect Quality

Outcome

The goods connected to your purchase order are received and put away at your plant. Quality inspection could have been carried out and reported. If some goods are rejected during quality inspection, a claim is created. Appropriate documents are printed, and all reported transactions are logged in the PO line transaction file. For stocked items, the on-hand balance is updated and the items are made available.

Internal account entries are created. Provided that the PO line is finished, purchase statistics are updated with information such as delivery time variance, interest costs for early deliveries, and QI results. The inventory value rises since new goods were added to the existing stock.

You view the balance identity of the goods in 'Balance Identity. Open Toolbox' (MWS068), and the historical stock transactions in 'Stock Transaction. Display History' (MWS070). Also, you can monitor the status development of the purchase order or PO line in 'Purchase Order. Display Lines' (PPS220).

Usually, if a claim is created, it is created automatically in 'Return To Supplier. Open' (PPS390).

You match the invoice connected to the purchase order in 'Supplier Invoice. Record' (APS100).

You can reverse the reporting of goods receipt, quality inspection, and put-away in 'Purchase Order. Display Line Transactions' (PPS330).

These files are updated:

- Planning overview (MITPLO)
- PO lines (MPLINE)
- PO line transaction (MPLIND)
- Stock transaction history (MITTRA)
- On-hand balance (MITLOC)
- Item/warehouse (MITBAL).

Before you start

- A purchase order must be created. See [Create, Release, and Display Purchase Order](#) on page 94.
- Settings in the document [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313 must be specified.
- Settings must be specified according to [Basic Settings for the Purchase Flow](#) on page 49.

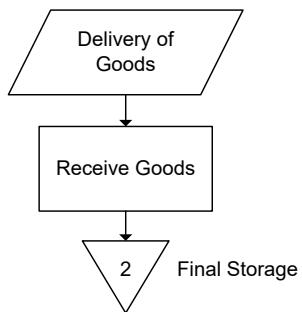
Lot control in the purchase flow

If you control lots and serial numbers in the purchasing flow, the conditions must be fulfilled in: .

Description

This table describes the five goods receiving flows and the field values that are required for each flow:

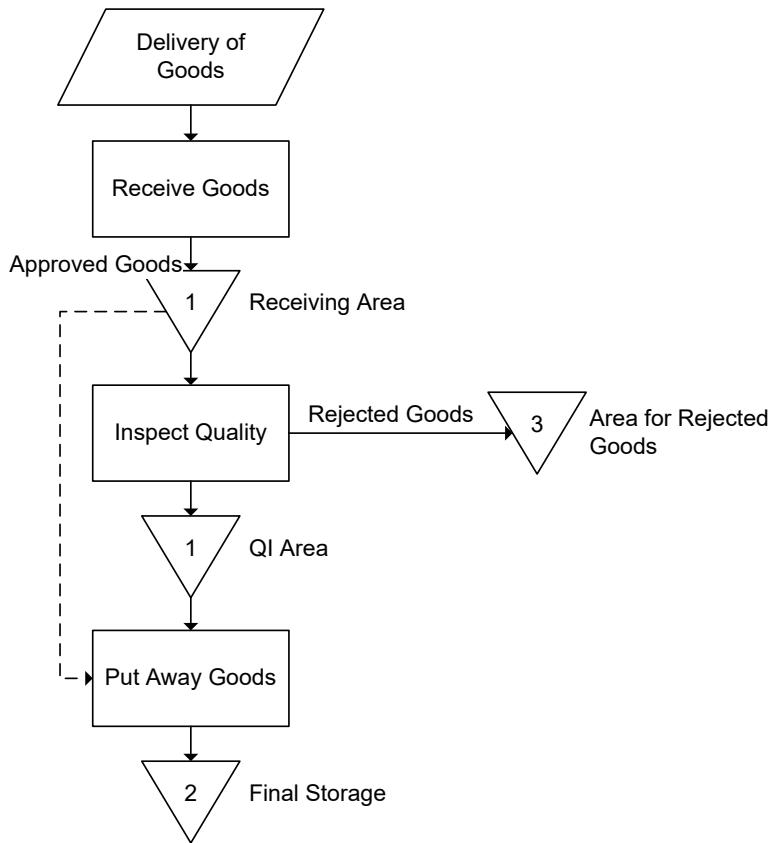
Parameters in (PPS345)	Flow 1	Flow 2	Flow 3	Flow 4	Flow 5
010 Direct put-away	1	0	0	0	0
020 Inspection point	0/1	1	2/4	1	3/5
040 QI reporting	1	2-5	2	1	2

Flow 1 - Receive goods with direct put-away

This flow is used when goods receipt and put-away are reported in the same activity, which is called direct put-away. The goods are placed in the final location directly after goods receipt, and the balance-ID status of the goods is 2. This flow involves the least possible reporting.

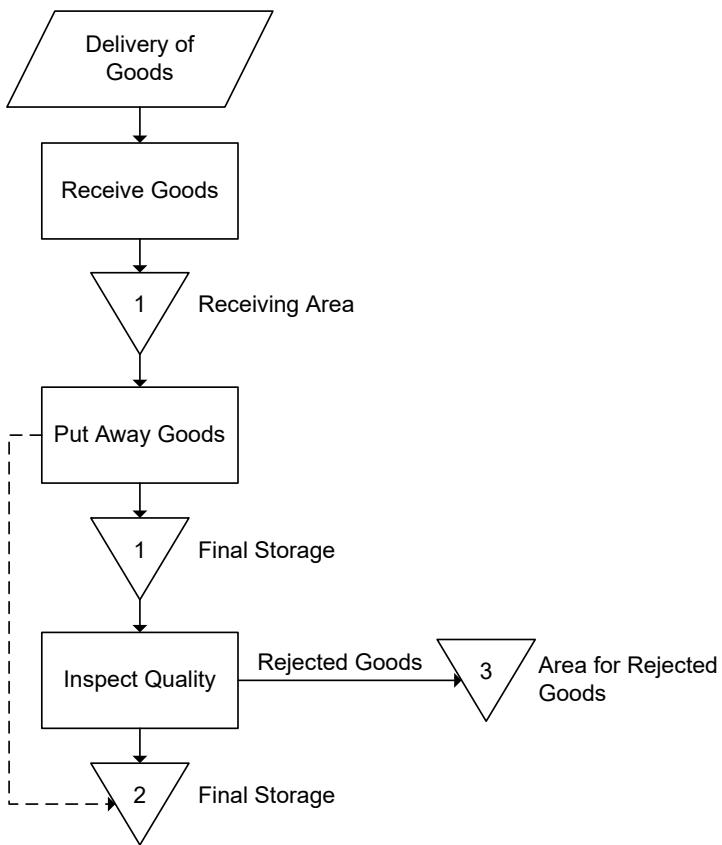
As a variant of this flow, you can perform direct put-away towards a status 1 location without other goods receiving activities. This option is enabled by having 'Inspection point' defined as 0 instead of 1.

Flow 2 - Receive goods with QI before put-away

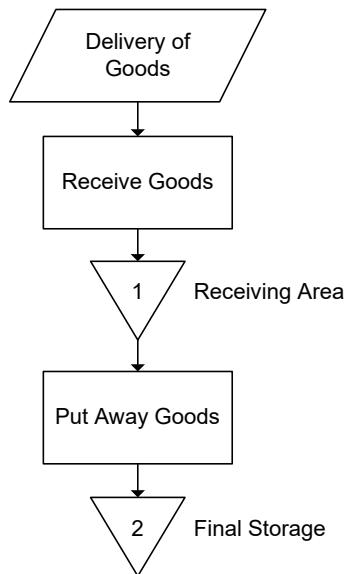


This flow is used when the three activities are performed as separate steps after one another and can involve different people and roles within the organization. The balance-ID status of the goods is not 2 until final storage after quality inspection and put-away.

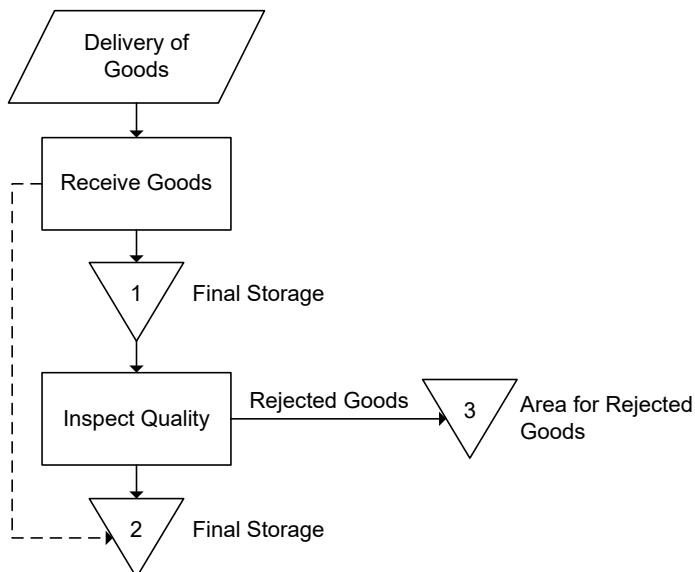
As a variant to the quality inspection, you can have dynamic quality control, which means that the quality inspection is only carried out on certain occasions or with certain intervals. This is defined by the goods receiving method and the QI plan.

Flow 3 - Receive goods with QI after put-away

This flow is used when the three activities are performed as separate steps after one another (and can involve different people and roles within the organization), and when the quality inspection is carried out after put-away. The balance-ID status of the goods is not 2 until after put-away and quality inspection. Note: After put-away, the goods are placed in a status 2 location, but the balance-ID status of the goods is 1 until after quality inspection.

Flow 4 - Receive and put-away goods

This flow is used when no quality inspection is carried out but when the put-away is chosen as a separate activity, such as when different people and roles within the organization report the goods receipt and put-away.

Flow 5 - Receive goods and inspect quality

This flow is used when you want to inspect the goods, but do not want to use put-away as a separate activity. Put-away is included in the receive goods activity.

Note: After receive goods with put-away, the goods are placed in a status 2 location, but the balance-ID status of the goods is 1 until after quality inspection.

As a variant to quality inspection, you can have dynamic quality control, which means that the quality inspection is only carried out on certain occasions or with certain intervals. This is defined by the goods receiving method and the QI plan.

Activity description

1 Receive goods

The receiving of goods is the mandatory first activity for all goods receiving flows. You register the quantity as received, and the quantity is assigned a specific goods receiving number. The number is used throughout the goods receiving flow.

Example of the use of receiving numbers:

PO number	PO line	Receiving number
7070488	010	90035001
	020	90035002
	030	90035003
	All the PO lines	90035000

The first PO line has a receiving number that ends with 1, the second PO line ends with 2, and so on. To be able to view the entire purchase order in the programs described later in this document, you use the receiving number that ends with 0.

You choose a location for storage when registering goods receipt. If direct put-away is used (flow A), you report final storage and the location chosen must have status 2-'Approved' available. If goods receipt is the first step of several activities (flows B, C, D, and E), the location chosen must have status 1-'Under inspection' awaiting approval.

If direct put-away is used (flow A), you can create lots or lot numbers, choose a location and choose a location for cross-docking, if defined by the goods receiving method.

A document is automatically printed, if defined by the goods receiving method. After the goods are registered as received, the status of the PO line is 50. However, when direct put-away is used, the status of the PO line is 75-'Put-away complete'. For a purchase order or PO line that has status 75, the next step will be supplier invoice matching.

You receive goods in 'Purchase Order. Receive Goods' (PPS300).

2 Inspect the quality of goods

You inspect the quality of the received goods according to your specifications in the goods receiving method. There it is specified whether quality inspection is mandatory or optional, or if dynamic quality control is used, and which reporting alternative is valid. An example of a reporting alternative is "always performed with mandatory reporting."

You report the QI results by the use of the goods receiving number assigned to each quantity (normally the same as a PO line) during goods receipt. The QI results are specified as approved, approved with remarks, partly rejected or rejected. If an item is reported as rejected, you can have the error automatically transferred into a claim. This is defined in 'Settings - Purchasing' (CRS780).

You choose a location for storage when reporting quality inspection. If quality inspection occurs before put-away (flow B), the location chosen must have status 1-'Under inspection' awaiting approval. If quality inspection is the last activity in the flow (flows C and E), the goods are already located at the final storage location.

If defined by the goods receiving method, you can create lots or lot numbers when reporting the QI results. This is useful if a delivery contains more than one lot or serial number, or when the delivery will be made in different containers.

A laboratory inspection control can be connected to the quality inspection. This is defined for the item by the inspection code, which can create a laboratory inspection request. The laboratory inspection is reported separately in 'Lab Inspection Request. Open' (LIS200). The result is then approved in (PPS310).

A document is automatically printed, if chosen by the goods receiving method. Normally after QI is reported, the status of the purchase order is 65-'Quality inspection completed'. Other possible status codes are 60-'Quality inspection partially performed', 64-'Rejected after quality inspection, course of action not determined in claim routine', and 69-'Rejected after quality inspection, course of action determined in claim routine'.

You report QI results in 'Purchase Order. Inspect Goods' (PPS310).

You can connect a QI plan to your goods receiving method. In the QI plan you may set inspection level and sample table, and specify certain inspection tasks.

You can use dynamic quality control, which means that the quality inspection depends on the QI plan connected to the item/supplier combination. In that case, a counter is connected to the QI plan, and the quality inspection is performed only at specific intervals.

Claims

When goods are rejected in the quality inspection activity, a claim to the supplier is often created. The usual way of handling this transaction is to demand either a replacement delivery or a credit note from the supplier.

In M3, claims can be created manually in a certain program but they can also be created automatically from the quality inspection.

3 Put-away goods

Use this activity to report final storage of the goods, if it is chosen as a separate activity. You report put-away by the use of the goods receiving number assigned to each PO line (or quantity) during goods receipt.

During put-away you can create lots or lot numbers and choose a location and a location for cross-docking, if defined by the goods receiving method. This is useful if a delivery contains more than one lot or series number, or when the delivery will be made in different containers.

A document is automatically printed, if chosen by the goods receiving method. Usually, after put-away is reported, the status of the purchase order or PO line is 75-'Put-away complete'. If only one part of the received quantity is put away, the status of the PO is 70-'Put-away partially completed'. For a purchase order or PO line that has status 75, the next step will be supplier invoice matching.

You report put-away in 'Purchase Order. Put away Goods' (PPS320).

Goods receiving documents

Different kinds of receiving documents can be printed automatically after goods receipt is reported. The goods receiving method controls which documents are printed. Option 11='Documents', on the (PPS345/B) panel opens 'Goods Receiving Method. Connect Documents' (PPS346). This program displays all documents

connected to the receiving flow for a certain method. These documents must also be defined in 'Std Document. Open' (CRS027).

Document numbers connected to the goods receiving flow are:

Goods receiving - purchasing:

- 70A = Hazardous goods label
- 70B = Quality inspection
- 70C = Receipt document totaled
- 70D = Receipt document detailed
- 70E = Receipt document item number/package

Quality inspection - purchasing:

- 70H = Marking label
- 70I = Quality inspection result
- 70J = Picking list for inventoried items after rejection in the inspection report

Put-away - purchasing:

- 70L = Receipt document
- 70N = Receipt document
- 70O = Marking label PO receipt report
- 700 = Way bill Variant 20=CMR variant 60=Swedish

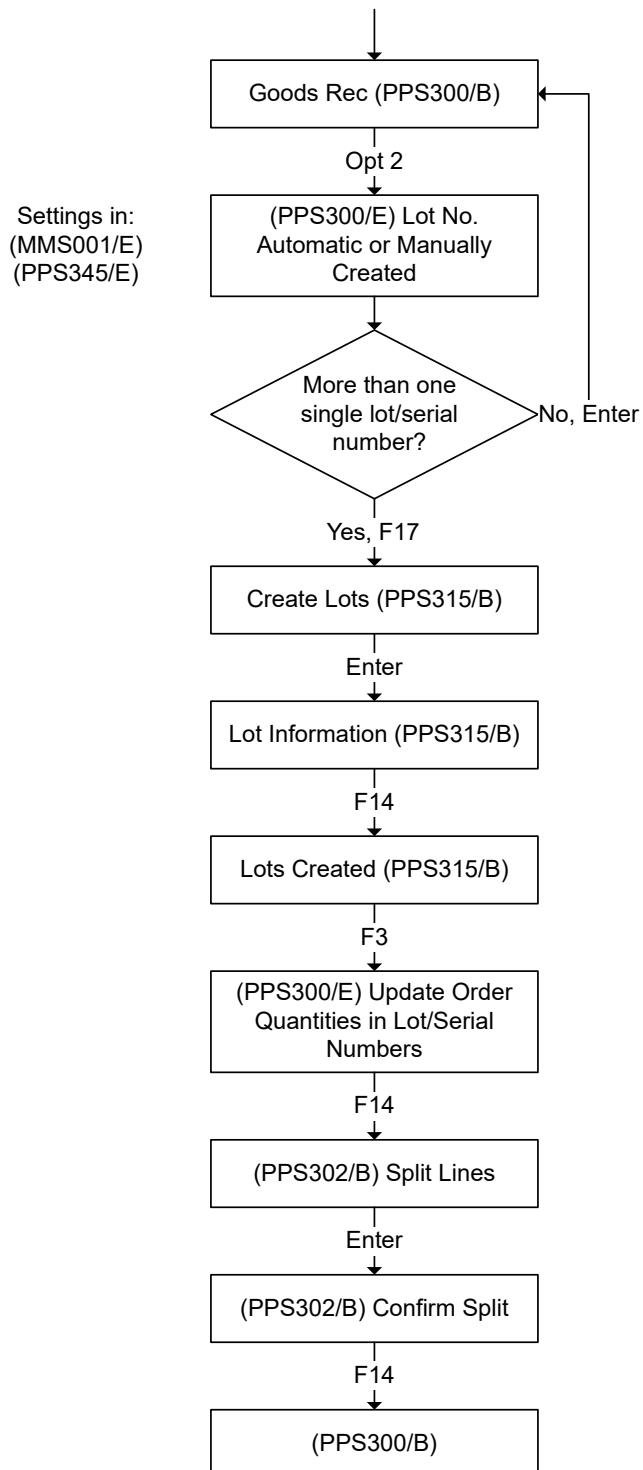
Lot handling in the PO receiving flow

Outcome

A lot number or an item with a serial number is created during goods receiving for purchased items.

A received quantity is split into the created lots.

Outline



- 1 Goods receipt is performed in 'Purchase Order. Receive' (PPS300). A lot number is created automatically or has to be created manually.

- 2 In cases of serial number handling and/or lot splitting, then 'Purchase Order. Create Item Lots' (PPS315) must be started where lots/serial numbers are created. Information about lot and serial numbers is also specified here.
- 3 The next activity is to split the transaction quantity into the created lots or serial numbers. This is done on 'Purchase Order. Split Lines' (PPS302/B). Click F14 on the (PPS300/E) panel to start this program.
- 4 **Note:** The lot can be split later during quality inspection in 'Purchase Order. Inspect Goods' (PPS310) if this process is part of the goods receiving flow.

Click F14 on the (PPS302/B) panel to confirm and complete the goods receiving and lot handling, and return to the (PPS300/B) panel.

Cross-docking of received goods

The cross-docking function in M3 identifies when stock being received is required for issue within a short time. It then directs the stock to the appropriate cross docking location instead of to the ordinary location. The triggers that cause cross-docking are demand in combination with a stock shortage.

Cross-docking results in an allocation to the demand order that caused the cross-docking.

The demands can be internal or external orders, or acquisition orders. Internal orders include material manufacturing orders, distribution orders, move orders and requisition orders. External orders are customer orders. Acquisition orders can be manufacturing orders, purchase orders, distribution orders (receiving warehouse) and requisition orders (order category 40).

Outcome

The goods connected to an acquisition order (PO, DO, RO, or MO material) are received, cross-docked and put in a location where they are available for dispatch.

The cross-docked goods are used when you release the demand order for dispatch and report the picking list, for example in 'Delivery. Open Toolbox' (MWS410). This can be done either manually or automatically depending on the dispatch flow.

See .

Perform Extended Quality Inspection

Quality inspection in the receiving flow can be done in different ways and with different activities. This document describes extended quality inspection using quality inspection tasks and plans.

Outcome

These activities regarding extended quality inspection are described:

- Report Quality Inspection Tasks
- Work with Quality Inspection Plans
- Print Quality Inspection Documents
- Display Quality Inspection Statistics

- Define Quality Classification
- Perform Quality Audit for Supplier

Important files used for the flow program are:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line
- MPLIND Purchase Order Line transactions
- MPQDCA Quality data for control activities
- MPQFUH Quality data for follow up on heading level
- MPQFUT Quality data for follow up on task level
- MPQCTA PO Quality control tasks
- MPGRMT Goods receiving method
- MPGRRDO Goods receiving method – documents

Before You Start

- Settings must be entered according to [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313.
- The goods must be reported as received (status is set to 50). See [Receive Purchased Goods](#) on page 297

Follow These Steps

The flow for working with quality inspection tasks is almost the same as working with normal quality control. Rejected and approved quantities are reported in 'Purchase Order. Inspect Goods' (PPS310). If several tasks will be reported, the quantities are reported on the E panel of this program as usual and then 'Purchase Order. Enter Inspection Result' (PPS311/F) is used for reporting the tasks.

1 Report Quality Inspection Tasks

The (PPS310/E) panel is filled in with the total quantities and, if there is more than one inspection task, the (PPS311/F) panel is used for reporting task by task.

- 2 On the (PPS311/F) panel, the quality inspection task number is displayed.
- 3 If the task quality inspection result is 2 (Approved with remarks), the remarked numbered of items is entered in the 'Quantity not approved' field.
- 4 The 'Inspected quantity' field and the 'Quality inspected rejected quantity' field are used if just a sample of the received quantity is inspected (a sample table is used).

Example: The received quantity was 1000 pieces and 10% were inspected. Of the 100 inspected pieces, 23 were not approved. Because of the size of the failure, 23%, the total quantity will be rejected. In this case the rejected quantity was 1000, the inspected quantity 100 and the Quality inspection/rejected quantity 23.

5 Work with Quality Inspection Plans

The inspection activity to be performed is printed on the quality inspection – specification document. The document is printed after goods receipt and must be connected to the goods receiving method. See the settings instruction for more information about this.

6 Print Quality Inspection Documents

Different kinds of quality inspection documents can be printed automatically after quality inspection is reported. The goods receiving method controls which documents are printed. Option 11=Documents in 'Goods Receiving Methods. Open' (PPS345/B) displays all documents connected to the receiving flow for a certain method. These documents must also be defined in 'Document. Open Standard' (CRS027).

Examples of document numbers connected to the quality inspection flow are:

- 70H – Marking label
- 70I – Quality inspection results
- 70J - Picking list for inventoried items after rejection in the inspection report
- 70B - Quality inspection, PO goods receiving

As a base for quality inspection reporting, the 70B - quality inspection document should be used. This is printed if quality inspection is to be performed after goods receiving reporting. The document to be printed must be defined in the used goods receiving method.

7 Display Quality Inspection Statistics

The quality inspection statistics are a display of the different inspection results, in reporting date order, for a specific supplier (inquiry 1) or for an item (inquiry 2).

Start 'Inspection Statistics. Display' (PPS465). The inspection result is displayed together with a reject reason (for result 3 and 4).

- 8 Open the E panel for more detailed information about the quality inspection, for example, inspected quantity, approved quantity, rejected quantity, quality inspection level and so on.
- 9 The quality inspection statistics can be printed from 'Inspection Statistics. Print' (PPS880).
- 10 Quality inspection analysis can be printed from 'Inspection Statistics- Print Analysis' (PPS875). This analysis will display, for each supplier and item, the number of batches inspected divided into the different quality inspection results. The results can also be divided into two periods to show if quality is improving or deteriorating.

Read more about statistics in the Statistics documentation.

11 Define Quality Classification

A quality class can be used for quality classification. This is defined in 'Quality Class. Open' (PPS020). The class can be defined for:

- Suppliers (CRS624/E)
- Item / Supplier combinations (PPS040/F)
- Delivery group per supplier (PPS012/E). Take option 16 on (CRS624/B)

The quality class is user-defined and is set manually. The quality class can, for example, be used to indicate how reliable the supplier / delivery group is. Another purpose of the quality class can be to display whether or not the supplier / delivery group is quality-certified (ISO9000, for example).

12 Perform Quality Audit for Supplier

A quality assurance audit can be an activity performed, for example, each year to update the quality classes.

In 'Supplier. Connect Quality Audit Types' (PPS013) you enter the audits that should be performed or if they already have been performed. You also enter the type of audit (defined in PPS025).

(PPS013) is started from option 17 from Supplier. Define Purchase & Financial (CRS624/B).

Perform Goods Receipt per Package and Delivery

This document describes how you receive goods for a purchase order and report the receipt on the delivery note level, item level, package level, or items per package level.

Delivery notes and packages are used to store details for shipments and containers. This also allows usage of deeper structures with containers, pallets, and boxes then possible with the modification.

Outcome

- Good receipt is performed for a delivery note (and, if there exists package in two levels).
- If necessary, goods receipt is reversed for the delivery note or parts it.

Uses

- Package-based and delivery-based goods receipt through application programming interfaces (APIs) enables you to easily receive goods using bar code readers (or ultimately through RFID) to read package bar codes.
- Package-based and delivery based goods receipt improves warehouse efficiency and is important for both cross-docking and shipping through at terminals.
- You can better support the management of inbound logistical tracking, with Shipments and Containers.
- Order lines from several purchase orders can be combined into a single shipment for that supplier. Any valid purchase order line for that supplier can be used to create a shipment. Many processing benefits result from the ability to manage multiple purchase orders as a single entity.

How the System Is Affected

- The delivery note header is stored in the PDNHEA file.
- The package is stored in the PFTRNS file.
- Package details are stored in the PPTRNS file.
- The delivery note/items are stored in the PDNLIN file.

Before you start

- A purchase order must be created. See [Purchase Order](#) on page 137.
- A purchase order line must be connected to a delivery note and package. See [Create and Connect Delivery Note and Package to a PO Line](#) on page 70.

Follow These Steps

Report Receipt on Delivery Note Level

- 1 Start 'Supplier Delivery Note. Open' (PPS360/B).
- 2 Select an inbound delivery with status 46 (Advised for shipment and delivery note is connected).
- 3 Make changes and updates for the delivery note on the E and F panels.
- 4 Perform goods receipt by selecting option 14=Goods receipt. The delivery status will be raised to 50 (Goods received).

Report Receipt on Item Level

- 1 On the (PPS360/B) panel, select option 11=Items/Delivery note. This starts 'Delivery Note. Update Items' (PPS361).
 - On the B panel the option 12=Pckgs/Dely note starts (PPS362).
 - Option 13=Items/Package starts (PPS363).
- 2 Select option 14=Goods receipt. The status for this particularly PO line will be raised to 50 (Goods received).

Report Receipt on Package Level

- 1 On the (PPS360/B) panel, select option 12=Pckgs/Dely note (Packages/Delivery note). This starts 'Delivery Note. Update Packages' (PPS362).
 - Option 11=Item/Delivery note starts (PPS361).
 - Option 13=Items/Package starts (PPS363).
- 2 You can enter a remark on the E panel for the package.
- 3 Select option 14=Goods receipt. The status for this particular package will be raised to 50 (Goods received). Alternatively, you can perform goods receipt by selecting F14=Receive all.

Report Receipt on Items per Package Level

- 1 On the (PPS360/B) panel, select option 13=/Items/Packages. This starts 'Delivery Note. Update Items per Package' (PPS363).
 - Option 11=PO transactions starts (PPS330).
- 2 You can change the received quantity on the E panel for the item (included in the package).
- 3 Select option 14=Goods receipt. The status for this particular package will be raised to 50 (Goods received).
- 4 Alternatively, you can perform goods receipt by selecting F14=Receive all.

Correct Errors on Records Uploaded from MHS850MI

If errors were detected in the uploading from MHS850MI, the delivery receives status 29 (Errors). You can then correct the data for 'Item no', 'Reference order' and 'Agreement no'.

- 5 On the (PPS363/B) panel you select option 20=Change data. The (PPS363/C) panel is opened. Enter the correct values in the 'Item no', 'Reference order' and 'Agreement no' fields.
- 6 Redisplay the B panel and select option 21=Check sts 29. If the new values are correct; the status will now be raised to 46.

Reverse the Goods Receipt

You can reverse a goods receipt with connected delivery note in two ways:

- 1 Delete the entire delivery note in (PPS360/B). The delivery note is deleted in (PPS360-363). Manually delete the receiving transaction and the advice transactions in (PPS330) in order to update the purchase order. Start again with the advice process.
- 2 Delete the specific receiving transaction in (PPS330). No reverse of the goods receiving transactions are made back to (PPS360-363). The delivery note remains in status 50. Therefore, delete the advice transaction in (PPS360) and then report the advice again.

Perform Quality Inspection of Goods

This document describes the regular quality inspection in the receiving flow in M3. Quality inspection in the receiving flow can be done in different ways and with different activities. This document describes the most usual and easiest ways to perform a quality inspection.

Outcome

- The goods have been inspected, and the results are reported into the system.
- Approved goods that have not yet been put away are now ready for put-away.
- For goods that already have been put away, the balance identity status of the goods is raised, which means they are now available. Documents may have been printed.
- Rejected goods are placed in a location for obsolete goods, and the errors reported may have created a claim.
- Purchase and inspection statistics are updated according to the quality inspection results.
- After a quality inspection is reported, the status is set to 65.

Important files used for the flow program are:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line
- MPLIND Purchase Order Line transactions
- MPGRMT Goods receiving method
- MPGRDO Goods receiving method – documents

Uses

- A claim can be automatically created in 'Return To Supplier. Open' (PPS390).
- The next step can be to store the goods in 'Purchase Order. Put Away Goods' (PPS320).
- You can view the balance identity of the goods in 'Balance Identity. Open Toolbox' (MWS068), and the historical stock transactions in 'Stock Transaction. Display History' (MWS070). Also, you can monitor the status development in 'Purchase Order. Display Lines' (PPS220).
- You can reverse the reporting of quality inspection in 'Purchase Order. Display Line Transactions' (PPS330).

Before you start

- Settings must be specified according to [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313.
- Settings must be specified according to [Basic Settings for the Purchase Flow](#) on page 49.
- The goods must be reported as received (the status is set to 50). See [Receive Purchased Goods](#) on page 297.

Follow these steps

- 1 Start 'Purchase Order. Inspect Goods' (PPS310/A).
- 2 Select the warehouse for this inspection.

3 Specify the receiving number.

You can find the receiving number on the goods receipt document, or in 'Purchase Order. Display Line Transactions' (PPS330).

A receiving number that ends with 000 indicates that the entire purchase order is displayed on the next panel (the B panel).

You can also specify the purchase order number and the line number. Then, the E panel is immediately displayed and you will not see the B panel.

4 On the B panel, select a sorting order.

5 Select one of these steps:

- **Report order lines as approved directly (B panel)**
- **Report parts of order line as approved/rejected, or make adjustments**

Report order Lines as approved directly (B panel)

For the order lines you want to approve, specify 1 in the 'QI' field, and the approved quantity. Click F14=Confirm update.

The QI result code 1='Fully reported'.

Approved quantity and QI result are proposed on the B panel if 'Propose approved quantity' has been selected in (PPS310/P).

The status of the order line(s) is now 65='Quality inspection completed'.

If you quit the program, one or more documents are automatically printed, if defined by the goods receiving method.

Report parts of order line as approved/rejected, or make adjustments

1 On the B panel, open the order line you want to adjust.

2 On the E panel, select a QI result code and specify the approved quantity.

Information about 'APPROVAL' (approved goods) is displayed on the left side of the E panel, and information about 'REJECTED' (rejected goods) is displayed on the right side.

Approved quantity and QI results are displayed on the E panel if 'Propose approved quantity' has been selected in (PPS310/P).

The QI result codes are:

0 = Partially reported approved quantity

1 = Fully approved

2 = Approved with remarks

3 = Partially rejected

4 = Rejected.

3 Ensure that the proposed location for approved quantity is correct, and that the location has the correct status.

The location statuses are:

1 = Under inspection – awaiting approval

2 = Approved goods – available

3 = Rejected goods.

NOTE: If quality inspection is performed before put-away and you assign the goods QI code 1, 2 or 3, the location must still be a status 1 location. This is necessary until the goods are reported as put away, which is done in 'Purchase Order. Put Away Goods' (PPS320).

- 4 Select 'Flagged as completed' if any potential remaining quantity is not to be backordered.
Note: The 'Flagged as completed' field should be selected when any remaining quantity is not to be backordered. If it is not selected, purchase and supplier statistics will never be updated, and the order line will be processed as non-completed.
- 5 Fill in a remark and the number of packages (optional fields).
The text in the Remark field will be seen in the balance identity if the quantity has a unique identity, such as a lot number or a receiving number.
The number of packages determines how many labels, such as hazard labels and marking tags, should be printed per location ID.
If lot control is used, you can create lots by pressing F17=Create lots.
If lots are used, you can split an order line into smaller lots by pressing F14=PO line split.

Report rejected goods

- 1 For rejected goods, specify the rejection reason and rejected quantity.
- 2 Check that the proposed location for the rejected quantity is correct, and that the location has status 3, or change the location. Specify a remark for the rejected goods (optional field).
The text in the Remark field will be seen in the balance identity if the quantity has a unique identity, such as a lot number or a receiving number.

Finish the reporting of Quality Inspection

Press Enter to save all changes made on the E panel.

If the quality inspection result is 1='Fully approved', the B panel is redisplayed and the status of the specific order line is 65='Quality inspection completed'. When quitting this program, one or more documents are automatically printed, if defined by the goods receiving method.

Enter inspection results (for goods with QI result 2 or higher)

- 1 On the E panel in (PPS311), specify the 'Quantity in stock approved with remarks', 'Inspected quantity', 'Inspected (QI) and rejected quantity' and text (optional fields).
The values specified on this panel are used for information purposes only. The free text will be printed on the claim note.
'Inspected quantity' refers to the amount of the approved quantity that was inspected.
'Inspected (QI) and rejected quantity' refers to the amount of the rejected quantity that was inspected.
The rejected quantity will automatically create a claim in 'Return To Supplier. Open' (PPS390), if defined in 'Settings - Purchasing' (CRS780).
- 2 Press Enter to save your changes and to redisplay the B panel.
The status of the rejected quantity (or that order line) is now either 64='Rejected after quality inspection, course of action not determined in claim routine' or 69='Rejected after quality inspection, course of action determined in claim routine'. The status of approved lines is 65='Quality inspection completed'.
Upon quitting this program, one or more documents are automatically printed, if defined by the goods receiving method.

You can view and reverse the line transactions in 'Purchase Order. Display Line Transactions' (PPS330).
Note: By reversing the line transaction, you also reverse the status.

In 'Balance Identity. Open Toolbox' (MWS068) you can view the balance identity for an item. The current location for a selected item is displayed. The balance-ID statuses are:

- 1 = Under inspection - awaiting approval
- 2 = Approved - available
- 3 = Rejected.

Put Away Goods

This document explains how you report put-away for goods, if put-away is chosen as a separate activity in the goods receiving flow. If quality inspection (QI) has been carried out, for example, and the goods are approved, the goods will be placed in their final location.

Outcome

The put-away activity is used to report final storage. The goods will consequently be placed in their final location after put-away. The status proposal of the location indicates whether the location is approved or not. Normally the status of the location used after put-away is 2 (Approved).

After the put-away the status is usually 75. If only a part of the received quantity is put away, the status is 70 (Put-away partially completed). This can be the case if some of the received quantity is rejected during quality inspection and only the approved quantity is put away without the completion flag selected.

You can view the balance identity of the goods in 'Balance Identity. Open Toolbox' (MWS068), and the historical stock transactions in 'Stock Transaction. Display History' (MWS070). Also, you can monitor the status development in 'Purchase Order. Display Lines' (PPS220).

You match the invoice connected to the purchase order in 'Supplier Invoice. Record' (APS100).

You can reverse the reporting of put-away in 'Purchase Order. Display Line Trans' (PPS330).

Important files used for the flow program are:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line
- MPLIND Purchase Order Line transactions
- MPGRT Goods receiving method
- MPGRDO Goods receiving method – documents

Follow these steps

- 1 Start 'Purchase Order. Put Away Goods' (PPS320/A).
- 2 Select the warehouse for this put away.
- 3 Fill in the receiving number.

You can find the receiving number on the goods receipt document, or in (PPS330).

In this instruction a receiving number that ends with 000 is used, which means that the entire PO is displayed on the next panel (the B panel).

You can also fill in the PO number and the line number, but then the E panel is immediately displayed and you will not see the B panel.

- 4 On the B panel, select a sorting order.

Report put-away for order lines without making adjustments

- 1 On the B panel, fill in the stored quantity for the order lines you wish to report put-away for, and specify 1 in the 'Completion flag' field if any potential remaining quantity is not to be backordered.

Stored quantity is proposed on the B panel if 'Propose stored quantity' has been selected in (PPS320/P).

Note: It is critical that 'Completion flag' is set to 1 if any remaining quantity is not to be backordered. If it is not set, purchase and supplier statistics will never be updated, and the order line will be managed as non-completed.

- 2 Verify that the proposed location is correct and has the correct location status.

The proposed location is retrieved from 'Item. Connect Warehouse' (MMS002).

The location statuses are:

- 1 = Under inspection – awaiting approval
- 2 = Approved goods – available
- 3 = Rejected goods

- 3 Press F14=Confirm update.

The status of the specific order line(s) is now 75=Put-away complete. If put-away is performed before QI (flow C), the order line status is 51=Put-away, but not quality inspected.

You may continue to the next step or quit the program. If you quit the program, one or more documents are automatically printed, if defined by the goods receiving method.

Report put-away for order line and make adjustments

- 1 On the B panel, open the order line you want to adjust.

- 2 On the E panel, fill in a remark and the stored quantity.

The E panel displays the received quantity from (PPS300), and possibly approved and rejected quantity from (PPS310).

Stored quantity is displayed on the E panel if 'Propose stored quantity' has been selected on (PPS320/P).

The text in the Remark field will be seen in the balance identity if the quantity has a unique identity, such as a lot number or a receiving number.

- 3 Select 'Flagged as completed' if any potential remaining quantity should not be backordered.

Note: It is critical that the 'Flagged as completed' field is selected if any remaining quantity is not to be backordered. If it is not selected, purchase and supplier statistics will never be updated, and the order line will be processed as non-completed.

- 4 Verify that the proposed location is correct, and that the location has the correct status.

The proposed location is retrieved from (MMS002). If the storage method on the item is multiple, as determined in (MMS002).

- 5 On the E panel, you can also select F16=Select location to start 'Location. Select' (MMS160).

The location statuses are:

- 1 = Under inspection – awaiting approval
- 2 = Approved goods – available
- 3 = Rejected goods

6 Back to the (PPS320/E) panel, fill in the number of packages (optional field).

The number of packages determines how many labels, such as hazard labels and marking tags, should be printed per location ID.

7 Press Enter to save your changes and to redisplay the B panel.

The status of the specific order line(s) is now 75, but if put-away is performed before QI (flow C) the order line status is 51.

Upon quitting this program, one or more documents are automatically printed, if defined by the goods receiving method.

Work with completion flags

Usually an order line is marked as completed automatically when the reported quantity is the same as the ordered quantity. However, an order can be marked as completed even if the reported quantity is less than the ordered amount and no more quantities will be reported for the order. This can be carried out in three different ways:

- 1** The order line can be flagged as completed manually either during the goods receiving (PPS300/E) or at the put-away (PPS320/E), assuming this has been set up correctly.
- 2** The order line can be marked as completed automatically if the reported amount is within the tolerance limit. This limit is set on the item/supplier combination (PPS040/F).
- 3** The order or a separate order line can be marked as completed manually from a separate 'Purchase Order – Flag Line Complete' (PPS350), where you can also invoicing-flag completion and reverse invoicing-flag completion.

If quality inspection is used, the order can also be marked as completed manually during quality inspection reporting (PPS310/E).

Reversing a goods receipt

A goods receiving transaction can be undone by selecting option 4 in (PPS330). The delete option does not take the transaction away from the transaction file. Instead, it undoes the transaction by zeroing the quantity.

Displaying goods receiving transactions

In (PPS330), different transactions on a special purchase order and line are displayed. This functions as a sort of log of the transactions done in the flow. A transaction can be, for example, a purchase order confirmation transaction or a goods receiving transaction.

This panel also shows the receiving number. Every order line gets a receiving number after the goods receipt. This number is used as identification on a special goods receipt in the flow and is also printed on the goods receiving documents.

On the E panel some information is displayed. One of the fields, 'Next Activity', specifies the next planned activity in the goods receiving flow and is automatically set on the order line. The next activity is displayed with different codes with these meanings:

- 1 = Quality inspection and then put-away
- 2 = Put-away and then quality inspection
- 3 = Put-away
- 4 = Quality inspection (non-stocked items checked)
- 9 = No more activities

Put away goods at a cross-docking location

The cross-docking function in M3 identifies when stock being received is required for issue within a short time. It then directs the stock to the appropriate cross docking location instead of to the ordinary location. The triggers that cause cross-docking are demand in combination with a stock shortage.

The goods connected to an acquisition order (PO, DO, RO or MO material) are received, cross-docked, and put in a location where they are available for dispatch. See .

Quality Inspection

Quality inspection is performed on received goods according to the specifications in the goods receiving method, parameter 040='Quality inspection reporting' in 'Goods Receiving Method. Open' (PPS345/E). There it is specified whether QI is mandatory or optional, or if dynamic quality control is used, and which reporting alternative is valid. An example of a reporting alternative is 'always performed with mandatory reporting'.

As long as no parameters are changed, the same goods receiving method is always proposed when a certain item is purchased from a supplier. However, it can be changed manually for each purchase order line. In this way a different receiving method can be assigned when ordering, so that an item that is usually not inspected will instead be inspected.

Receive Purchased Goods

This document explains how you receive the goods connected to your purchase order (PO). You will also learn how to reverse a goods receipt and how to display the created transactions.

Outcome

The goods are received at your plant and are assigned unique receiving numbers. Supplier statistics are updated with lead times and interest costs for early deliveries. The inventory value rises. Documents may have been printed.

If direct put-away has been chosen, the goods are now part of the available stock and the goods receiving process is finished. For all other flows the goods are now ready for quality inspection (QI) or separate put-away.

You can view the balance identity of the goods in 'Balance Identity. Open Toolbox' (MWS068), and the historical stock transactions in 'Stock Transaction. Display History' (MWS070). Also, you can monitor the status development in 'Purchase Order. Display Lines' (PPS220).

It is possible to reverse the registering of a goods receipt in 'Purchase Order. Display Line Trans' (PPS330).

Important files used for the flow program are:

- MPHEAD Purchase Order Header
- MPLINE Purchase Order Line
- MPLIND Purchase Order Line transactions
- MPGRMT Goods receiving method
- MPGRDO Goods receiving method – documents
- CINACC Internal account entries

Before you start

- Settings must have been specified according to [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313.
- Settings must have been specified according to [Basic Settings for the Purchase Flow](#) on page 49.

Follow these steps

- 1 Start 'Purchase Order. Receive Goods' (PPS300/A).
- 2 Select the warehouse for this goods receiving.
- 3 Fill in the purchase order number and delivery note number. Press Enter.
If the delivery note number is specified, the number will be displayed on each order line. The delivery note number is useful for identifying purposes.
If the goods are delivery-scheduled items, the Item number and Quantity must be specified instead of the purchase order number.

Report order lines as received directly

- 1 On the B panel, specify the received quantity for the order lines you want to receive, and specify 1 in the 'Completion flag' field if any potential remaining quantity should not be back-ordered.
'Received quantity' and 'Completion flag' are proposed on the B panel if 'Propose approved quantity' has been selected in (PPS300/P).
Note: Set 'Completion flag' to 1 if any remaining quantity is not to be back-ordered. If it is not set, purchase and supplier statistics will never be updated, and the order line will be processed as non-completed.
- 2 Ensure that the proposed location is correct and that it has the correct location status.
You can only change the location while you are on the B panel if direct put-away (flow A) is used. If you need to change location and direct put-away is not used you have to open the order line (go to step 7).
If the storage method on the item is multiple, as determined in 'Item. Connect Warehouse' (MMS002), you can also select option 11 to start 'Location. Select' (MMS160). This is valid when using direct put-away.
- 3 Press F14=Confirm Update.

The received order lines now have one of three statuses: 50='Goods received' for lines with flow 2, 3 and 4, 51='Put away, but not quality inspected' for lines with flow 5, or 75='Put-away complete' for lines with flow 1 (direct put-away).

When you quit the program, one or more documents are automatically printed, if defined by the goods receiving method.

Add/Change information to order line

- 1 On the B panel, open the order line you want to adjust.
- 2 On the E panel, specify a remark (optional) and the received quantity. Select 'Flagged as completed' if any potential remaining quantity should not be backordered.

The text in the Remark field will be seen in the balance identity if the quantity has a unique identity, such as a lot number or a receiving number.

'Received quantity' and 'Completion flag' are proposed on the B panel if 'Propose approved quantity' has been selected in (PPS300/P).

If lot control is used, you can create lots by pressing F17=Create lots.

If lots are used, you may split an order line into smaller lots by pressing F14=PO line split.

See how goods receive lots in: .

Note: Select the 'Flagged as completed' field if any remaining quantity is not to be backordered. If the field is not selected, purchase and supplier statistics will never be updated, and the order line will be processed as non-completed.

- 3 Ensure that the proposed location is correct and has the correct status.

If 'Receive Goods with QI before put-away' (flow B) is used, a location with status 1='under inspection – awaiting approval' is needed.

If 'Storage method' on the item is multiple, as determined in (MMS002), you can also select F16 to start (MMS160). This is valid when using direct put-away (flow A).

- 4 Specify the number of packages (optional field).

The number of packages determines how many labels, such as hazard labels and marking tags, should be printed per location ID.

- 5 Press Enter to save your changes and to redisplay the B panel.

The received order line now has one of three statuses: 50='Goods received' for a line with flow B, C or D, 51='Put away, but not quality inspected' for a line with flow E, or 75='Put-away complete' for a line with flow A (direct put-away).

Upon quitting this program one or more documents are automatically printed, if defined by the goods receiving method.

You can view and reverse the line transactions in (PPS330), which is reached through option 14=Display PO Transactions. Note: By reversing the line transaction, you also reverse the status.

In 'Balance Identity. Open Toolbox' (MWS068) you can view the balance identity for an item. The current location for a selected item is displayed. The balance-ID statuses are:

- 1 = Under inspection - awaiting approval
- 2 = Approved - available
- 3 = Rejected.

Reversing a goods receipt

A goods receiving transaction can be undone by selecting option 4 in (PPS330). The delete option does not take the transaction away from the transaction file, but instead it undoes the transaction by zeroing the quantity.

Displaying goods receiving transactions

In (PPS330), different transactions on a special purchase order and line are displayed. This functions as a sort of log of the transactions done in the flow. A transaction could be, for example, a purchase order confirmation transaction or a goods receiving transaction.

- 1 On this panel, the **receiving number** is also displayed. Every order line gets a receiving number after the goods receipt. This number is used as identification on a special goods receipt in the next flow and is also printed on the goods receiving documents.
- 2 On the E panel, some information is displayed. One of the fields, 'Next Activity', specifies the next planned activity in the goods receiving flow and is automatically set on the order line. The next activity is displayed with different codes with these meanings:
 - 1 = Quality inspection and then put-away
 - 2 = Put-away and then quality inspection
 - 3 = Put-away
 - 4 = Quality inspection (nonstock items checked)
 - 9 = No more activities.

Cross-docking of received goods

The cross-docking function in M3 identifies when stock being received is required for issue within a short time. It then directs the stock to the appropriate cross docking location instead of to the ordinary location. The triggers that cause cross-docking are demand in combination with a stock shortage.

The goods connected to an acquisition order (PO, DO, RO or MO material) are received, cross-docked and put in a location where they are available for dispatch. See .

Receive Purchased Goods for Russia

In Russia, when goods are imported in foreign currency, the currency rate on the day when the goods cross the border is used by the customs office to show the inventory value in RUB currency.

In M3 Business Engine, at goods receipt in 'Purchase Order. Receive Goods' (PPS300), the current exchange rate from the rate table is used to calculate the acquisition cost to local currency amount and the historic actual cost in 'Stock Transaction. Display History' (MWS070) when the purchase price is in foreign currency. The exchange rate type is retrieved from 'Purchase Agreement. Open' (PPS100) or from 'Supplier. Define Purchase Financial' (CRS624) for the PO.

Limitations

This applies only to the Russian market and only for inventory accounted items with a normal order type that is being validated by Russian customs.

Exchange rate at goods receipt

You can enter an exchange rate date and exchange rate in 'Purchase Order. Receive Goods' (PPS300) to use for the currency conversion and later calculate average price and historic actual cost.

Workflow for receiving items in (PPS300)

- 1 Receive the items on 'Purchase Order. Receive Goods' (PPS300/B) by entering the purchase order number, warehouse, quantity, exchange rate date and exchange rate. The exchange rate date is mandatory while exchange rate can be left blank. Enter the 'receiving group number' and 'supplier document number'. Both fields can be left blank.
- 2 Select 'Actions' > 'Confirm Update' (F14) to receive the items.
- 3 After receiving the items, 'RU Document Lines. Open' (CRRU21/E) is opened where you can edit the details. Once displayed, records in 'RU Document Header. Open' (CRRU20) and (CRRU21) have already been created.
- 4 The created records can be viewed in (CRRU20) and (CRRU21). The exchange rate date and exchange rate are not possible to delete but can be changed.

Workflow for receiving items in (PPS302)

- 1 Receive the items in 'Purchase Order. Receive Goods' (PPS300) by selecting the item, then select option 'Change'. Enter a quantity and select 'Actions' > 'Purchase Order Split Lines' (F14) to receive the items.
- 2 'Purchase Order. Split Lines' (PPS302) is opened. Specify the number of lots. The subfile will be populated depending on the number of lots specified. Select 'Actions' > 'Confirm Update' (F14) to receive the items.
- 3 (CRRU21/E) is not opened after receiving the goods on (PPS302/B).
- 4 The created records can be viewed in (CRRU20) and (CRRU21). The exchange rate date and exchange rate are not possible to delete but can be changed.

Workflow for RU Document Line (CRRU20MI)

- 1 Start mforms\\mitest.
- 2 Set 'Program' to CRRU20MI [RU Document Head].
- 3 Click on the transaction list button.
- 4 These are the available transactions:
 - AddRUDoc (AddRUDoc) = add Russia specific document header data.
 - ChgRUDoc (ChgRUDoc) = change or edit Russia specific document line data.
 - GetRUDocUnique (GetRUDocUnique) = retrieve Russia specific document line data based on specific document header unique ID.
 - GetRUDocRecGrp (GetRUDocRecGrp) = retrieve Russia specific document line data based on specific receiving group number.
 - LstRUDocRecGrp (LstRUDocRecGrp) = list all Russia specific document line data based on specific receiving group number.

After specifying values for exchange rate date and exchange rate in 'Purchase Order. Receive Goods' (PPS300) on the B panel, the record is created in (CRRU20).

Settings for Extended Quality Inspection

Quality inspection (QI) in the receiving flow can be done in different ways and with different activities. This document describes the settings for extended quality inspection, using quality inspection tasks and plans.

Outcome

These settings regarding extended quality inspection are described:

- Connect QI Tasks to an Item (PPS080)
- Create Sample Table (PPS335)
- Create QI Plans (PPS340)
- QI Parameters in the Item/Supplier Combination (PPS040)
- Update QI Counters (PPS082)

Important files used for the flow program are:

MPHEAD	Purchase Order Header
MPLINE	Purchase Order Line
MPLIND	Purchase Order Line transactions
MPQDCA	Quality data for control activities
MPQFUH	Quality data for follow up on heading level
MPQFUT	Quality data for follow up on task level
MPQCTA	PO Quality control tasks
MPGRMT	Goods receiving method
MPGRDO	Goods receiving method – documents

Before you start

- Settings must be specified according to [Basic Settings for the Purchase Flow](#) on page 49
- Settings must be specified according to [Settings for Goods Receiving, Quality Inspection, Claims and Put-Away](#) on page 313

Follow these steps

Connect QI tasks to an item (PPS080)

- 1 Start 'Quality Inspection Task. Connect to Item' (PPS080).

- 2 Specify the information:

Connect QI Tasks to an Item (PPS080)

Program ID/ Panel	Field	The field indicates ...
(PPS080/B)	Inspection task	...quality inspection tasks used in goods receiving. Only numeric values can be specified. You can define unique quality inspection texts, tools, etc. for each task.
(PPS080/B)	Valid from	.. the date the quality inspection task will be activated.
(PPS080/B)	Service process Service	These fields are used for subcontracting or repair purchase orders. See separate documentation for subcontracting and repair purchase orders.
(PPS080/E)	Description	... the description of the quality inspection task. The description is printed on the quality inspection specification when the inspection is to be performed in the purchase component group
(PPS080/E)	Status – quality inspection task	... the status of the quality inspection task. The status is manually changed. These alternatives are valid: 10=Preliminary task, never used for quality inspection 20=Valid task, only possible alternative for performing a quality inspection 90=Closed task, task is no longer valid. Only quality inspection tasks that have status 20 will be included in the inspection documentation after goods receiving.

Program ID/ Panel	Field	The field indicates ...
(PPS080/E)	Valid to	<p>... the last validity date for the quality inspection.</p> <p>When this date has passed, the active quality inspection tasks will become inactive. They will then not appear on quality inspection specifications received when reporting goods receipt.</p>
(PPS080/E)	Document ID	<p>... the unique ID of a document. It can be specified manually, generated from a number series or created as a combination of different IDs.</p> <p>Documents are created in (CRS230).</p> <p>How the ID is created for each document type is specified in (CRS236)</p>
(PPS080/E)	Task group	<p>...is used in order to categorize quality inspection tasks. Task groups are created in 'Quality Inspection Task Group. Open' (PPS085).</p>
(PPS080/E)	QI plan	<p>..a quality inspection plan (QI plan), which contains several user-defined values for dynamic quality inspection in the goods receiving routine.</p> <p>The QI plan is specified in the goods receiving method (PPS345). The goods receiving method for a purchase order line determines which plan should be used for each item received.</p> <p>The QI plan is only of interest if the parameter '040 QI reporting' is set to 4 or 5.</p> <p>For more information about QI plans, see the section that follows.</p>

Program ID/ Panel	Field	The field indicates ...
(PPS080/E)	Sample table	<p>... a sample table.</p> <p>Sample tables are used if random sampling methods are used during quality inspection.</p> <p>The sample table that can be specified on the goods receiving method (PPS345) acts only as a default proposal for the item/supplier combination (PPS040).</p> <p>Note: If a sample table is used, you can only set the '020 Inspection point' field to 1=QI is reported before put-away. or 2=QI is reported after put-away in the goods receiving methods (PPS345/E).</p> <p>For more information about sample tables, see the chapter that follows.</p>
(PPS080/E)	Independent QI task	<p>...is used to determine whether this particular inspection task should have its own logic or follow the item number's logic.</p> <p>These alternatives are valid:</p> <p>0 = No, follow the item's logic.</p> <p>1 = Yes, this task should be independent of the general results of the quality inspection and other tasks. The general inspection result or another task inspection result will not affect this task's result.</p> <p>Logic refers to the inspection according to the quality inspection plan.</p>
(PPS080/E)	QI time	...the time needed to perform the quality inspection task.

Program ID/ Panel	Field	The field indicates ...
(PPS080/E)	QI time code	<p>...the quality inspection time of the task.</p> <p>These alternatives are valid:</p> <p>0=Per unit 1=Per 10 units 2=Per 100 units 3=Per 1,000 units 9=Task's total time (not quantity-dependent).</p>
(PPS080/E)	QI Responsible	<p>... who is responsible for the quality inspection of purchased items. It can be either a person or department.</p>
(PPS080/E)	Tool 1 - 5	<p>... one of the several tools that can be used when performing a quality inspection task.</p> <p>The tools are printed on the quality inspection specification when the goods are specified as received.</p>

Create Sample Table (PPS335)

- 3 Start 'Sample Table. Open' (PPS335).
- 4 Specify the information (as described in the table):

A sample table is defined to set the range for the quality inspection levels 1 to 3. The range indicates the acceptable errors you have for different quantity intervals.

Create Sample Table (PPS335)

Program ID/ Panel	Field	The field indicates ...
(PPS335/B)	Sample table	<p>... a sample table.</p> <p>Sample tables are used if random sampling methods are used during quality inspection.</p> <p>The sample table that can be specified on the goods receiving method (PPS345/G) act only as a default proposal for the item/supplier combination.</p>

Program ID/ Panel	Field	The field indicates ...								
(PPS335/B)	Quality inspection level	<p>... the quality inspection level used for shipments. The valid alternatives, when you use QI inspections, are:</p> <p>1 = Intense 2 = Normal 3 = Reduced Three different levels (1-3) should be created for each sample table used.</p> <p>Example:</p> <table border="1"> <thead> <tr> <th>Sample ta- ble</th><th>QI level</th></tr> </thead> <tbody> <tr> <td>001</td><td>1</td></tr> <tr> <td>001</td><td>2</td></tr> <tr> <td>001</td><td>3</td></tr> </tbody> </table> <p>The quality inspection levels are only of interest if the parameter '040 QI reporting' is set to 4 or 5 in the goods receiving method (PPS345).</p>	Sample ta- ble	QI level	001	1	001	2	001	3
Sample ta- ble	QI level									
001	1									
001	2									
001	3									
(PPS335/E)	To quantity	<p>... the quantity to which an inspection quantity applies. The quantity applies up to the next entered To value.</p>								
(PPS335/E)	Inspection quantity	<p>... the sample quantity or sample percentage for the current quantity received.</p> <p>The quality inspection code is used in the sample table to define if the sample quantity is a percentage or a fixed quantity.</p>								
(PPS335/E)	Number of accepted errors	<p>... the number of accepted errors on the quantity specified as accepted, when the quality inspection result was reported.</p>								

Program ID/ Panel	Field	The field indicates ...
(PPS335/E)	Quantity type	<p>... if the figure for quality inspection and accepted errors for this goods receiving quantity is a number or a percentage.</p> <p>These alternatives are valid:</p> <p>1=Quantity</p> <p>2=Percentage.</p> <p>This is an information-only field.</p>

Create QI Plans (PPS340)

- 1 Start 'Quality Inspection Plan. Open' (PPS340).
- 2 Specify the information (as described in the table):

The quality inspection plan describes an inspection cycle where different actions can be taken depending on the previous inspection results. For more information about QI plans, see [Extended Quality Inspection in the Receiving Flow](#) on page 272.

Create QI Plans (PPS340)

Program ID/ Panel	Field	The field indicates ...
(PPS340/B)	QI plan	<p>... several user-defined values for dynamic quality inspection in the goods receiving routine.</p> <p>The QI plan is specified in the goods receiving method. The goods receiving method for a purchase order line determines which plan should be used for each item received.</p> <p>If a quality inspection task has been assigned a QI plan of its own, this plan will override the one defined according to the order line's goods receiving method.</p> <p>The quality inspection levels are only of interest if the parameter '040 QI reporting' is set to 4 or 5 in the goods receiving method (PPS345).</p>

Program ID/ Panel	Field	The field indicates ...
(PPS340/E)	Initial quality inspection level	<p>... the quality inspection level of the first shipment received for the item/supplier combination.</p> <p>These alternatives are valid:</p> <ul style="list-style-type: none"> 1 = Intensive 2 = Normal 3 = Reduced (4 = No quality inspection. Not valid here) <p>The quality inspection levels are only of interest if the parameter '040 QI reporting' is set to 4 or 5 in the goods receiving method (PPS345).</p>
(PPS340/E)	Approved batches - level change 1 to 2	<p>... how many approved inspections should be performed before quality inspection level 1=Intensive is moved to level 2=Normal.</p> <p>If this field is 0, the level is never lowered to this level, but instead is decreased to the first available level not equal to 0.</p>
(PPS340/E)	Approved batches - level change 2 to 3	<p>... how many approved inspections should be performed before quality inspection level 2=Normal is moved to level 3=Reduced.</p> <p>If this field is 0, the level is never lowered to this level, but instead is decreased to the first available level not equal to 0.</p>
(PPS340/E)	Approved batches - level change 3 to 4	<p>This field indicates how many approved inspections should be performed before quality inspection level 3=Reduced is moved to level 4=No inspection.</p> <p>If this field is 0, the level is never lowered to this level, but instead is decreased to the first available level not equal to 0.</p>

Program ID/ Panel	Field	The field indicates ...
(PPS340/E)	Batches QI level 4 - without QI	... which inspection level to use upon exit inspection level 4=No inspection.
		This field is only used if the field's number of batches in inspection level 4 deviates from 0
(PPS340/E)	When QI result is 2 - return to QI level	... which quality inspection level to return to if the quality result is 2=Approved with remarks.
(PPS340/E)	When QI result is 3 - return to QI level	... which quality inspection level to return to if the quality result is 3=Partially rejected.
(PPS340/E)	When QI result is 4 - return to QI level	... which quality inspection level to return to if the quality result is 4=Rejected.
(PPS340/F)	Level if X batches of Y are rejected	... which inspection level to apply for the next batch if the minimum X number of batches are rejected out of the last Y number inspected.
		For more information concerning parameters X and Y, refer to the next field in this panel.
		These parameters can only increase the inspection level, never decrease it.
(PPS340/F)	Number of rejected batches	... how many rejected batches are needed in order for the next delivery of this item/supplier combination to receive a higher quality inspection level.
(PPS340/F)	Number of batches	... the number of inspected batches to be used in the formula used for determining if a higher quality inspection level is needed for the next delivery.

QI Parameters in the Item/Supplier Combination (PPS040)

- 1 Start 'Supplier. Connect Item' (PPS040).
- 2 Specify the information (as described in the table):

The quality inspection plan and the sample table field specified on the goods receiving method (PPS345/G) only works as a default value when an item/supplier combination is created in (PPS040).

These fields are also displayed on 'Goods Receiving Method. Open' (PPS345/G). On the (PPS345/E) panel, the '030 Copy standard parameters' field indicates if the standard quality inspection parameters set in (PPS345/G) should be copied, when you set these parameters for the item/supplier combination, to (PPS040/G).

QI Parameters in the Item/Supplier Combination (PPS040)

Program ID/ Panel	Field	The field indicates ...
(PPS040/G)	Inspection text	... text to print on certain goods receiving documents when quality inspection is performed. This information is specified for the item/supplier combination and may be proposed by default from the goods receiving method.
(PPS040/G)	150 Are quality inspection tasks used	... if several inspection operations for a quality inspection are possible for an item number. If No is selected, no search for inspection operations will take place during goods receipt reporting.
(PPS040/G)	160 Lowest permitted quality inspection lvl	... the lowest possible quality inspection level in the goods receiving routine.
(PPS040/G)	170 Quality inspection level - new revision	... the quality inspection level for the next receipt, if this is made on a new construction level.
(PPS040/G)	180 Quality inspection plan	... contains several user-defined values for dynamic quality inspection in the goods receiving routine.
(PPS040/G)	190 Sample table	... a sample table. Sample tables are used if random sampling methods are used during quality inspection.
(PPS040/G)	200 Minimum quality inspection interval	...the minimum number of days between the quality inspections in the goods receiving routine.

Program ID/ Panel	Field	The field indicates ...
(PPS040/G)	210 QI level after minimum QI interval	... the quality inspection level for the next receipt after the minimum inspection interval in days has been passed. This means that quality inspection should be performed, because the number of days since the previous inspection is greater than the value indicated in the field.
(PPS040/G)	220 Display attribute screen at quality insp	... whether the attribute screen should be displayed during quality inspection in (PPS310).

Update QI Counters (PPS082)

Here you can manually change the inspection counters values, to affect the inspection plan.

- 1 Start 'Quality Inspection Task. Update Counter' (PPS082)
- 2 Change values according to the descriptions in the table.

The inspection counter keeps the quality inspection plan in order. It recognizes the current quality inspection level and remembers the quality inspection result for the last 10 inspected batches.

The inspection counter values can be changed manually to affect the inspection plan.

Update QI Counters (PPS082)

Program ID/ Panel	Field	The field indicates ...
(PPS082/E)	Not inspected lots	<p>... the number of lots received but not quality inspected since the last delivered lot was inspected.</p> <p>The information is used to determine if the inspection level should be changed or not for the next delivery.</p> <p>This field is reset automatically when a quality inspection is reported for a combination of item/supplier or item/supplier/operation.</p>

Program ID/ Panel	Field	The field indicates ...
(PPS082/E)	Inspected lots	... the number of batches which were quality inspected according to a certain inspection level. The information is used to determine if the inspection level should be changed or not for the next delivery. The field is reset automatically when the level is changed.
(PPS082/E)	Current QI level	... the level applied to the previous delivery for this combination of item/supplier. Based on the inspection plan parameter, the next delivery will be assigned the new inspection level.
(PPS082/E)	Last insp result 1 lot before Last insp result 2- 9) lot before	... the result for the inspected batch before the last inspected. The result for up to the last 10 inspected batches is displayed. If quality inspection statistics are used, the 10 latest results can be used to determine if a quality inspection is to take place for the next lot for this ID.
(PPS082/E)	QI result last batch	... the last quality inspection result
(PPS082/E)	Last quality inspection date	... the last date when a quality inspection was performed on this ID.

Settings for Goods Receiving, Quality Inspection, Claims and Put-Away

This document explains how you define settings for the purchase order goods receiving flow.

These areas are included:

- Goods receiving

- Documents
- Quality inspection
- Claims
- Put-away

Outcome

All the above-mentioned settings are defined.

After goods receiving and put-away are performed, the supplier invoice can be reported.

Important files used for these settings are:

MPHEAD	Purchase Order Header
MPLINE	Purchase Order Line
MPLIND	Purchase Order Line transactions
MPGRMT	Goods receiving method
MPGRDO	Goods receiving method – documents
CINACC	Internal account entries

Before you start

- Basic settings for the purchase flow must be entered according to [Basic Settings for the Purchase Flow](#) on page 49.
- Settings must be entered for a purchase order according to [Settings for Purchase Order](#) on page 182.

Lot control in the purchase flow

- If you control lots and serial numbers in the purchasing flow, the conditions must be fulfilled in:

Follow these steps

Settings for goods receiving

- 1 Start 'Settings - Purchase' (CRS780). These settings are maintained from division blank, but they can be overridden per division.
- 2 Fill in the fields on the E, F, and G panels, described in the Parameters to set table.
- 3 Start 'PO Type. Open' (PPS095). Fill in the fields on the E and I panels, described in the Parameters to set table.
- 4 Start 'Goods Receiving Method. Open' (PPS345). Fill in the fields on the B, E, F and G panels, described in the Parameters to set table.

Parameters to set - Settings for goods receiving

Program ID/Panel	Field	The field indicates...
(CRS780/E)	10 Accepted deviation	<p>... the limit for when receipts deviating in quantity are still accepted. The limit is expressed as a percentage and is calculated on the ordered/confirmed quantity.</p>
		<p>All received quantities up to the upper limit of deviation are accepted by the system. If the limit is exceeded, a warning is issued. To stop an order that exceeds the limit and make it impossible to receive the order, parameter 510 in (PPS095) must be selected.</p>
(CRS780/F)	19 Print external instr on goods rec doc	<p>... whether the external instructions for an item should be printed on the detailed receipt document in (PPS307).</p>
		<p>The text to be printed must be defined in (MMS135) and then connected to the item in (MMS001).</p>
(CRS780/G)	38 Goods receipt allowed in (PPS220)	<p>... whether goods receipt can be done in (PPS220).</p>
(PPS095/E)	021 Number series - goods receiving doc	<p>... the number series to use for the receiving number during entry in the goods receiving routine. The number series is set up in 'Number Series. Open' (CRS165), series type 21.</p>
(PPS095/E)	040 Goods receiving method	<p>... the method that controls processing of the goods receiving flow.</p>
		<p>The goods receiving method is set to default on the purchase order line from these places and in this order:</p>
		<ol style="list-style-type: none"> 1 Item/supplier file (PPS040/E) 2 Item master file (MMS001/F) 3 Purchase order type (PPS095/E)

Program ID/Panel	Field	The field indicates...
(PPS095/I)	510 Stop if excess delivery	<p>... whether a purchase order should be stopped if received quantity exceeds the ordered/confirmed quantity plus the tolerance/deviation limit.</p>
(PPS095/I)	540 Completion flag open - goods receipt	<p>... whether it should be possible to update the completion flag of the purchase order line during goods receipt reporting.</p>
(PPS095/I)	550 Packaging action	<p>... whether a packaging action is taken. For more information about packaging actions, see:</p>
(PPS345/B)	Goods receiving method	<p>... the method that controls processing of the goods receiving flow.</p>
		<p>The goods receiving method is set to default on the purchase order line from these places and in this order:</p> <ol style="list-style-type: none"> 1 Item/supplier file (PPS040/E) 2 Item master file (MMS001/F) 3 Purchase order type (PPS095/E)
(PPS345/E)	080 Create lot number during goods receipt	<p>... where, in the goods receiving process, the manual lot number should be entered. For more information, see:</p>
(PPS345/F)	110 Shortage check - goods receipt	<p>... whether reservations should be checked against the on-hand balance when received goods are reported.</p>

Program ID/Panel	Field	The field indicates...
(PPS345/G)	220 Display attribute screen at quality insp	... whether the attribute screen should be displayed during goods receipt in (PPS300).

Settings for documents

Basic settings for document output must be specified according to:

Different kinds of receiving documents can be printed automatically after goods receipt is reported. Which documents are printed is controlled by the goods receiving method.

'Goods Receiving Method. Connect Documents' (PPS346) shows all documents connected to a goods receiving method. These documents must also be defined in 'Std Document. Open' (CRS027).

Program ID/Panel	Field	The field indicates...
(PPS346/B)	Document number	... the unique ID of a document.
(CRS027/B)		See step action list for goods receiving documents.
(PPS346/E)	Number of copies	... the number of copies that should be printed.
(PPS346/E)	External or internal document	When you print internal documents, the local language is used. When you print external documents, the language of the customer is used.
(PPS346/E)	Print document	... if a document should be printed automatically.

- 1 To Generate Standard Documents**, start 'Document. Open Standard' (CRS027). Document numbers connected to the goods receiving flow are:

Goods receiving - purchasing:

70A	=	Hazardous goods label
70B	=	Quality inspection
70C	=	Receipt document totaled
70D	=	Receipt document detailed
70E	=	Receipt document item number/package

Quality inspection - purchasing:

70H	=	Marking label
70I	=	Quality inspection result

70J	=	Picking list for inventoried items after rejection in the inspection report
Put-away - purchasing:		
70L	=	Receipt document
70N	=	Receipt document
70O	=	Marking label PO receipt report
700	=	Way bill Variant 20=CMR variant 60=Swedish

- 2** Press F14='Generate standard' to generate these standard documents.

Connect Documents to a Goods Receiving Method

- 3** On the (PPS345/B) panel you select option 11=Documents, to start 'Goods Receiving Method. Connect Document' (PPS346).
On the top of the (PPS346/B) panel the selected goods receiving method is displayed.
- 4** Press F4 in the 'Document number' field and select a document. Press Create and fill in the fields in the E panel.
- 5** Repeat for all documents you want to connect to this goods receiving method.

Settings for quality inspection

- Start (CRS780). These settings are maintained from division blank, but they can be overridden per division.
- Fill in the fields on the E and F panels, described in the Parameters to set table.
- Start 'Item. Connect Warehouse' (MMS002) Fill in the 'Inspection location' field on the G panel, described in the Parameters to set table.
- Start 'Goods Receiving Method. Open' (PPS345). Fill in the fields on the B, E and G panels, described in the Parameters to set table.

Parameters to set - Settings for quality inspection

Program ID/Panel	Field	The field indicates...
(CRS780/E)	05 Default location - rejected quantity	... the stock location proposed for a rejected quantity when reporting quality inspection in (PPS310).
(CRS780/E)	11 QI result - auto claim	... which quality inspection results reported in (PPS310) automatically create a claim in (PPS390).

Program ID/Panel	Field	The field indicates...
(CRS780/F)	19 Print external instr on goods rec doc	... whether the external instructions for an item should be printed on the detailed receipt document in (PPS307). The text to be printed must be defined in (MMS135) and then connected to the item in (MMS001).
(MMS002/G)	Inspection location	<p>... the location where goods received are stored while waiting to be quality inspected in the purchase component group.</p> <p>This location must be of status 1 (MMS010/E, the 'Status proposal' field). If the item is to be inspected, this location is proposed by default in (PPS300).</p> <p>If the location is blank per item/warehouse, the location is proposed by default from the goods receiving method (PPS345).</p>
(PPS345/B)	Goods receiving method	<p>... the method that controls processing of the goods receiving flow.</p> <p>The goods receiving method is defaulted on the purchase order line from these places and in this order:</p> <ol style="list-style-type: none"> 1 Item/supplier file (PPS040/E) 2 Item master file (MMS001/F) 3 Purchase order type (PPS095/E)
(PPS345/E)	020 Inspection point	... when the quality inspection should be reported.
(PPS345/E)	030 Copy standard parameters	... if the standard quality inspection parameters defined in the goods receiving method should be copied when you set these parameters for the item/supplier combination on (PPS040/G). Proposed values can be changed on the panel.

Program ID/Panel	Field	The field indicates...
(PPS345/E)	040 Quality inspection reporting	... whether quality inspection reporting should be performed and whether it should be done dynamically according to user-defined rules.
(PPS345/E)	050 Quality inspection address - default	... the default location for the quality inspection.
(PPS345/E)	060 QI address if default is missing	... the default administrative location. It is proposed during receipt for quality inspection if the inspection address is missing for the item/warehouse and if the inspection address of the goods receiving method is blank.
(PPS345/E)	070 Inspection lead time	... the time normally required for goods receipt, quality inspection, and put-away. Inspection lead time is not allowed for direct put-away.
(PPS345/E)	090 Put-away address - default	... the location proposed by default when the next step is put-away. Used after quality inspection but before put-away. The location must have status 1 in (MMS010) and may not have the same ID as the location before quality inspection according to parameter 050 in the goods receiving method.
(PPS345/G)	Inspection text	... text to be printed on certain goods receiving documents when quality inspection is performed. This information is entered for the item/supplier combination and may be proposed by default from the goods receiving method.

Program ID/Panel	Field	The field indicates...
(PPS345/G)	150 Are quality inspection tasks used	... if several inspection operations for a quality inspection are possible for an item number. If No is selected, no search for inspection operations will take place during goods receipt reporting.
(PPS345/G)	160 Lowest permitted quality inspection lvl	... the lowest possible quality inspection level in the goods receiving routine.
(PPS345/G)	170 Quality inspection level - new revision	... the quality inspection level for the next receipt, if this is made on a new construction level.
(PPS345/G)	180 Quality inspection plan	... contains several user-defined values for dynamic quality inspection in the goods receiving routine.
(PPS345/G)	190 Sample table	... a sample table. Sample tables are used if random sampling methods are used during quality inspection.
(PPS345/G)	200 Minimum quality inspection interval	...the minimum number of days between the quality inspections in the goods receiving routine.
(PPS345/G)	210 QI level after minimum QI interval	... the quality inspection level for the next receipt after the minimum inspection interval in days has been passed. This means that quality inspection should be performed, because the number of days since the previous inspection is greater than the value indicated in the field.
(PPS345/G)	220 Display attribute screen at quality insp	... whether the attribute screen should be displayed during quality inspection in (PPS310).

Settings for claims

- 1 Start 'Settings - Purchase' (CRS780). These settings are maintained from division blank, but they can be overridden per division.

- 2** Fill in the fields on the E and F panels, described in the Parameters to set table.

Parameters to set

Program ID/Panel	Field	The field indicates...
(CRS780/E)	06 Default order type claims	<p>... the order type to be proposed on the claim header. This order type will handle the requisition order for issuing the rejected goods from the location if a replacement delivery is demanded.</p> <p>The requisition order type is entered in 'Requisition/Distribution Order Types. Open' (CRS200).</p> <p>Here you must select stock transaction type 41=Requisition order issue.</p>
(CRS780/E)	11 QI result - auto claim	<p>... which quality inspection results reported in (PPS310) automatically create a claim in (PPS390).</p> <p>The valid alternatives are:</p> <ul style="list-style-type: none"> 1=No transfer 2=QI result 3 and 4 create claims 3=QI result 2, 3 and 4 create claims.
(CRS780/F)	20 Several lines per claim	<p>... whether it should be permitted to have more than one order line on each automatically created claim transferred from (PPS310).</p> <p>By allowing only one line the claim process is simplified, such as when a request for a replacement delivery is made on the claim header and not on the claim lines.</p>
(PPS040/E)	Lead time for replacement delivery	<p>... the lead time for a replacement delivery. It is used when calculating a default delivery date for a replacement delivery. This value is displayed in the claim routine.</p>

- 3** Start 'Supplier. Connect Item' (PPS040/E) and fill in the 'Lead time for replacement delivery' field.

Settings for put-away

- 1** Start (CRS780). These settings are maintained from division blank, but they can be overridden per division.
- 2** Fill in the fields on the E and F panels, described in the Parameters to set table.
- 3** Start 'Item. Connect Warehouse' (MMS002). Fill in the 'Location' field on the G panel, described in the Parameters to set table.
- 4** Start (PPS040) and fill in the 'Tolerance limit' field on the F panel.
- 5** Start 'Goods Receiving Method. Open' (PPS345). Fill in the fields on the B, E, F and G panels, described in the Parameters to set table.

Parameters to set - Settings for put-away

Program ID/Panel	Field	The field indicates...
(CRS780/E)	02 Flag as completed permitted	... whether it is possible to flag an order as completed at put-away. The use of a completion flag permits put-away with a lower quantity than the received quantity without the system having to wait for any remaining quantity.
(CRS780/E)	04 Deletion limit - put-away deviation	... the limit for when a balance ID with a remaining quantity is automatically deleted at put-away. The limit is expressed as a percentage and is calculated on the received quantity. A remaining quantity is created when a quantity is reported with a lower number at put-away than what was reported at goods receipt. A remaining quantity measured within the deviation limit is automatically deleted.
(CRS780/E)	15 Page break for stock zone - put-away doc	... whether a page break should be made for each new stock zone on the put-away document.
(CRS780/F)	16 Print supplier on put-away document	... whether the supplier name should be printed on the put-away document in (CRS676). The supplier name is then printed for each line where the supplier is different than the previous.

Program ID/Panel	Field	The field indicates...
(PPS040/F)	Tolerance limit	... the tolerance limit, as a percentage, for automatic finish marking in the goods receiving routine.
(MMS002/G)	Location	... the default location that is proposed upon receipt, issue, etc. The location in 'Purchase Order Put Away Goods' (PPS320) is defaulted from the location entered in this field.
(PPS345/B)	Goods receiving method	... the method that controls processing of the goods receiving flow. The goods receiving method is defaulted on the purchase order line from these places and in this order: 1 Item/supplier file (PPS040/E) 2 Item master file (MMS001/F) 3 Purchase order type (PPS095/E)
(PPS345/E)	010 Direct put-away	if put-away should be reported directly or if the goods receipt, including any quality inspection, should occur before put-away. Direct put-away means that one report covers both goods receipt and put-away.
(PPS345/F)	140 Two step put-away	... whether the two-step put-away is activated. This activation occurs in two places: in the stock zone and in the goods receiving method or order type. See more about this in:
(PPS345/G)	220 Display attribute screen at put-away	... whether the attribute screen should be displayed during put-away in (PPS320).

Settings for cross-docking

For more details, see

Statistical Quality Inspection

Statistical quality inspection refers to parameter-controlled values and the quality inspection history of an item. Together, these determine if quality inspection should be performed and how often.

To be able to use statistical quality inspection the item/supplier records must have been specified in 'Supplier. Connect Item' (PPS040).

When receipt is reported in 'Purchase Order. Receive Goods' (PPS300), the good receiving method and the goods receiving flow for each order line are checked. If goods receiving method for the order line is 4 or 5, statistical quality inspection should be performed.

Control logic

If statistical quality inspection is to be performed, this is indicated:

- The proposed location is specified as a quality inspection location.
- The **Next activity** field in 'Purchase Order. Display Line Transactions' (PPS330) indicates that quality inspection is to be performed.

Conditions

Statistical quality inspection is performed if any of these conditions are found in (PPS040):

- There is no item/supplier combination.
- The **Standard of approval** field indicates that standard of approval is required and is not reported.
- The inspection level for the next batch is 1, 2, or 3 on the G panel.
- The current delivery is a new revision (it differs from previously received orders) and parameters in the G panel indicate that an inspection is to be performed.
- On the G panel, the minimum inspection interval in days is less than the difference between the current date and the previous inspection date.
- An inspection should be performed according to the quality inspection plan.

If an inspection is to be performed based on conditions 1-5, the reasons are indicated in the detailed receipt documents in 'Receipt Document' (PPS307).

Inspection level

There are four quality inspection levels:

- 1 - Intensive
- 2 - Normal
- 3 - Reduced
- 4 - None.

If quality inspection is always performed (not statistical quality inspection), the inspection level is always 2.

Sampling quantities can be connected to different inspection levels (see 1-3 above). This is done by specifying the applicable sample table for the item/supplier combination in (PPS040/G).

Example of a quality inspection plan

For (a) below, this applies: Periodic inspection should be performed so that only every third delivery is inspected at a reduced inspection level.

For (b) below, this applies: If a delivery is rejected, the next two deliveries are inspected at a normal inspection level.

These examples result in this quality inspection plan, as defined in 'Quality Inspection Plan. Open' (PPS340/E):

- No. of approved batches - level change 1 to 2 No. deliveries: 0
- No. of approved batches - level change 2 to 3 No. deliveries: 2(b)
- No. of approved batches - level change 3 to 4 No. deliveries: 1(a)
- No. of batches at QI level 4 - without QI No. deliveries: 2(a)
- After QI level 4 - go to QI level No. deliveries: 3(a)

Inspection level 2 is also specified in the parameters which refer to the level to apply after rejection (b).

If the above check indicates that quality inspection should not be performed, a check is still made against parameters in (PPS340/F). Here, it should be indicated that inspection will be performed at a determined level if X of the last Y deliveries were rejected. For example, as long as two of the last ten deliveries are rejected, an intensive inspection should be performed.

Quality inspection tasks

Each quality inspection task can be regulated by a quality inspection plan. This means that each task is considered as a unique item.

The tasks are updated in 'Quality Inspection Task. Connect to Item' (PPS080).

Example

An item has two operations. One of them is inspected every other time and the second operation every fourth time. A quality inspection plan corresponding to every other time is then specified for the item. For the operation to be inspected every fourth time, a default quality inspection plan is entered.

Counters for quality inspection plans

If an error is detected afterward, the counters can be changed so that the next delivery is inspected. This is done by changing the item counters in 'Quality Inspection Task. Update Counter' (PPS082), reached from (PPS040/G). Counters for quality inspection tasks can also be changed in (PPS082), reached from (PPS080).

Note: The inspection and inspection level for the next delivery can also be influenced by the parameter settings in (PPS040/G).

If receipt is performed for an ID and the inspection level for the next delivery is filled in, this is then used and deleted for the item/supplier combination.

Chapter 6: Core Remanufacturing

Cost Accounting and Component Exchange between Customer and Company

This document describes the end to end process of component exchange between customer and company from a cost accounting perspective.

Outcome

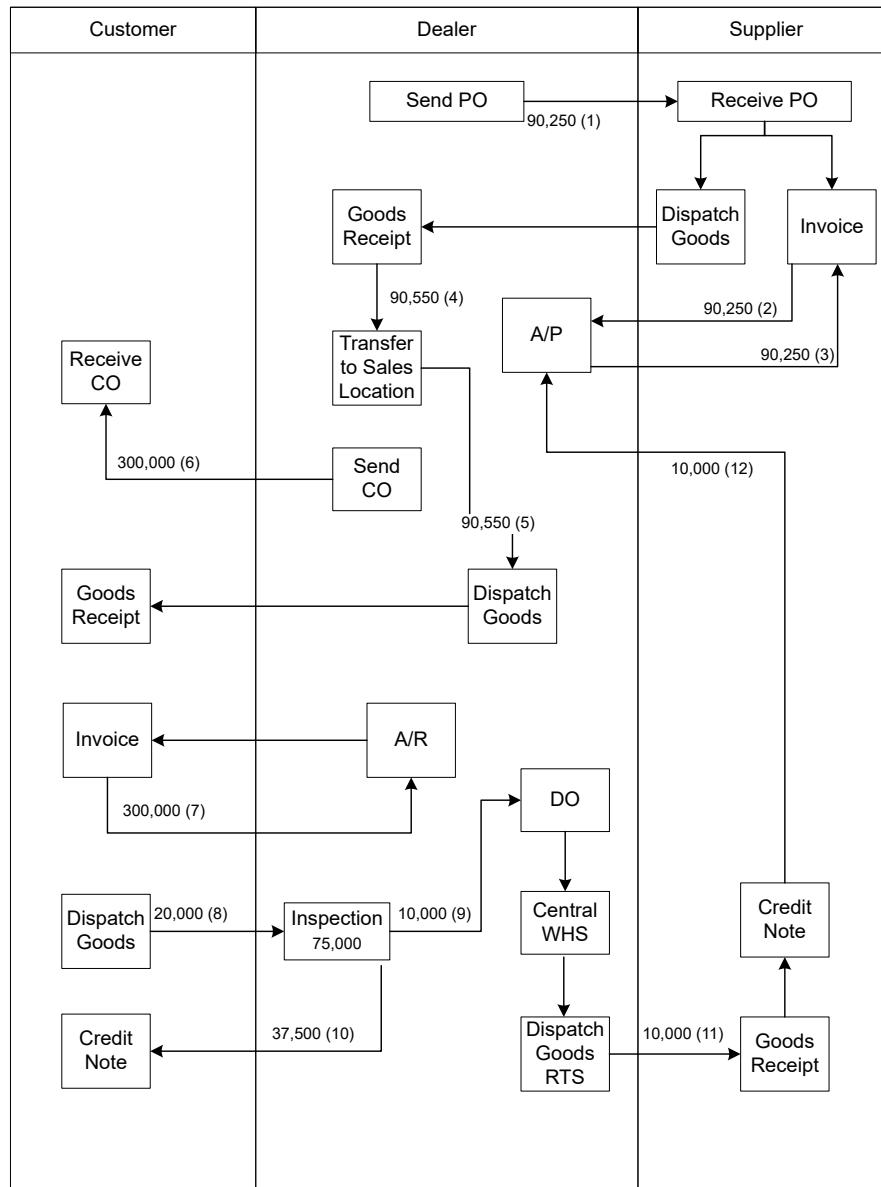
All steps in the process are complete, the customer is issued with a credit note for the residual value of the core component and the physical component is returned to the supplier and accounted for. A Core is defined as a component or subassembly such as an engine, gearbox, or fuel pump that can be rebuilt or remanufactured and is often available as part of a dealer exchange program.

Process summary

The flow chart describes the complete core process. Actors are customer, dealer and supplier. The process starts when a dealer makes an acquisition of a core to be put into the core fleet. The invoice matching header in the costing model states what the supplier invoice will contain and the inventory accounting header states what the inventory value of the core will be.

In this example:

- 20,000 is the external core charge.
- Once the core exists on an allocatable location at the dealer's local warehouse it can be allocated to a customer order.
- It is sold with a net price of 225000 + 75000. This is the core charge to the customer.
- When the customer returns the used core to the dealer the inventory value of the core is the external core charge (20000) since that is the amount the dealer can claim from the supplier.
- If the condition of the returned core is lower than expected the inventory accounting price is affected. In this scenario the condition after inspection is partial, meaning that a lower inventory accounting price (10000) is retrieved from the costing element and the core charge to the customer is reduced to 37500. When the customer is credited -10000 will be the cost of the goods sold.
- After the inspection of the return order the core can either be shipped directly to the supplier from the local warehouse or shipped with a distribution order to the central warehouse. The latter is the case with this scenario and on the central warehouse the inspected core items are selected and returned to the supplier with a 'return to supplier' order.



Core costing model

These figures describe what the costing model of a core may look like. The core charge from the supplier is configured as an external charge using cost operator '77-core charge supplier'.

Inventory accounting

Costing element	Amount (dollars)	Comment
Costing base: Net price	70000	Cost of goods

Costing element	Amount (dollars)	Comment
Ordering cost	250	External charge from the supplier
Overhead	150	Internal charge
Cost for inter-facility transfer	150	Internal charge
Core charge	20000	External charge from the supplier
Total for accounting	90550	

Invoice matching

Costing element	Amount (dollars)	Comment
Costing base: Net price	70000	Cost of goods
Ordering cost	250	External charge from the supplier
Core charge	20000	External charge from the supplier
Total for accounting	90250	

Cost Accounting

See for details of the applicable accounting events.

Core Tracking

Core is defined as a component or subassembly such as an engine, gearbox, or fuel pump that can be rebuilt or remanufactured and is often available as part of a dealer exchange program.

In this context, Core refers to failed material or used parts and is the raw material available for re-manufacture after the customer has no more use for it and has returned it. The core value is added to the part price at the outset of the sale to help ensure its return and is refunded when the part is returned. If the core material or used parts are not returned the value is lost.

Core transactions should be tracked in order to know which components must be returned to suppliers or which are expected back from the customers. Tracking can take place:

- When selling or buying a remanufactured component.
- At delivery of a component.
- When the customer returns a core.
- When crediting a refund.

This document introduces core tracking and explains how to keep track of open core transactions.

Outcome

All core transactions are updated in core entitlement table (MITCEN) and can be viewed in 'Core Entitlement. Open Toolbox' (MWS090) where different views can be used to display outstanding cores.

A core entitlement is created between customer A and supplier X when A purchases a product from X and where the product sales price includes a core charge. A then undertakes to return the core to X in order to receive the core refund.

Before you start

Settings must be defined as specified in and [Defining Settings for Component Exchange with Supplier in Core Management Process](#)

Create Core Policy

The core policies are used to control how the customer return and supplier return records are managed.

For customer returns, this controls where the inventory cost should be taken from; how the system will recognize core attritions; how the lot number structure is used and which screen to use when performing the inspection.

For supplier returns, this controls how to combine worn or dirty remanufactured parts into one return record and what can be included (i.e. excess cores).

The policies are applied based on a control table through program 'Core Policy Selection Table. Open' (CRS161) and are not directly connected to the item number.

Outcome

You have created a new Core Policy.

Before you start

A costing element for core charge must exist in 'Costing Element. Open' (PPS280).

Required attribute ID's must be created in 'Attribute. Open' (ATS010).

Attrition attribute values must be created in 'Option. Open' (PDS050).

Follow these steps

- 1 Start 'Core Policy. Open' (CRS162).
- 2 Enter a core policy ID.
- 3 Select Options > Create.
- 4 E-panel open.

- 5 Configure relevant values and connect attribute ID's and costing element created.
- 6 Click 'Next'.
- 7 A new core policy is created.
- 8 'Close' to finish.

Create Core Policy Selection Table

This document describes how to create a core policy selection table. In direct relation to the core policy itself, this program controls which policy should be applied. This is performed through a control table.

Outcome

You have created a core policy selection table.

Before you start

A core policy must be set up in 'Core Policy. Open' (CRS162).

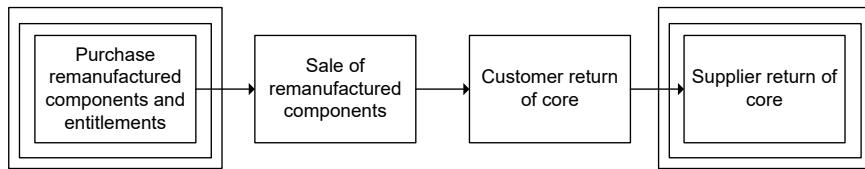
A generic object control table (CMS017) must exist.

Follow these steps

- 1 Start 'Core Policy Selection Table. Open' (CRS161).
- 2 Select relevant 'Priority' created in 'Generic Object Control Table. Open' (CMS017).
- 3 Specify relevant information and 'Fr dt'.
- 4 Select Options > Create.
- 5 The E panel opens.
- 6 Specify 'Core policy'.
- 7 Click Next.
A selection table is created.
- 8 To finish, click Close.

Defining Settings for Component Exchange with Supplier in Core Management Process

This document explains the settings you must define when creating terms and conditions for a purchase order in the component exchange with a supplier.



Outcome

You have defined the settings to be able to buy remanufactured components and return a core.

Follow these steps

1 Define an attribute model

Specify the ID of the attribute model and a description in 'Attribute Model. Open' (ATS050/B). Select related option 11='Model lines' to start 'Attribute Model. Connect Attributes' (ATS051).

On the B panel in (ATS051), create one attribute for the sales process which will indicate different attributes for retrieving the sales price and discounts for the sold component.

Create an attribute for the condition in the same way. This will determine the costing of the sold or returned core.

On the E panel in (ATS051), specify these values:

- Attribute type = Alphanumeric
- Controlling object = Lot master
- Main attribute = Attribute 1, for example.

Select the processes in which the attribute should be included, for example customer order, manufacturing order, and purchase order.

Create an attribute for the condition in the same way. This will determine the costing of the sold or returned core. You select the value 1='Cst attribute 1' in the 'Cost attribute' field on the E panel in (ATS051).

In (ATS051), select related option 22='Attribute values' to start 'Attribute Matrix. Open' (ATS020) and specify the attribute values in 'Attribute Matrix. Enter Values' (ATS021).

Example of attribute values for sales:

- Remanufactured
- New
- Used equipment.

Examples of attribute values for conditions:

- As new
- Before failure
- After failure
- 50% of full core
- No refund.

2 Define a costing model for purchase

A costing model must be defined for the purchase order process to trigger the core charge amount on the purchase order.

You define a costing model in these steps:

- Create costing elements

Start by defining a costing element in 'Costing Element. Open' (PPS280/B). This element must be the same as parameter 46='Costing element' for return of core price in 'Settings – Purchasing' (CRS780/G).

Create a connection to the attributes that check the pricing using the check boxes 'Invoice charge quantity' and 'Markup' in (PPS280/E).

Select related option 12='Costing values' to start 'Costing Element. Enter Values' (PPS282). On the B panel, define the attribute values that should give a price. On the E panel, define the price setting rules.

- Define a costing model

After you create costing elements, you must define a costing model to be used for the purchase order line. You define a costing model in 'Purchase Costing Model. Open' (PPS285). To connect elements, select related option 11='Costing element/Model' to continue to 'Costing Model. Connect Elements' (PPS286).

- Connect the costing model to items and purchase settings

At purchase order line entry, charges are created by using the costing model from the 'Costing model' field on the F panel in 'Item. Connect Facility' (MMS003).

Alternatively, you can specify the costing model to be used at purchase order line entry on the G panel in 'Settings Purchasing' (CRS780).

At purchase order line entry in 'Purchase Order. Open Lines' (PPS201), the attribute values that were defined in 'Attribute Value. Connect to' (ATS101) are added to the order line. If the attribute values correspond to the settings of the costing element, then a charge will be connected to the purchase order line. The attribute settings of the purchase order line also check if the order line will be core processed or treated as an ordinary purchase order line.

3 Define charges for purchase

Charges for a purchase must also be defined. You define the charges in these steps:

- Create a line charge

You define the line charge in 'Order Line Charge. Open' (CRS275). Select the control object that determines the charge percentage or the amount (if an amount charge).

- Define a calculation factor

You define the calculation factor or the amount for the charge (for example 0.1=10%) in 'Order Line Charge. Enter Amount' (CRS277).

4 Define settings for purchase order workflow

You define workflow settings for purchase order in these steps:

- Specify the requisition order type

You must define order types for the requisition that will be used for the core return and claim. The order types are defined in 'Req/Distr Order Type. Open' (CRS200).

The order type ID is user defined, so you can give it a name that is easy to remember.

You must use transaction type 41 for the returns.

- Return order type

The return order type must be defined in 'Return Order Type. Open' (PPS399). The return order type checks the supplier return process by using the defined return-to-supplier order category. In (PPS399), you also connect the return order type to the requisition order type, which you use to manage the return process from the warehouse to the supplier.

- The order type ID is user defined, so you can give it a name that is easy to remember. You can use the same ID as on the requisition order type, for example.
- Select the return order category according to the intended use. The category defines which headings to display in the panels and which fields are mandatory. The valid alternatives are:
 - 1 – Claim
 - 2 – Return of core

A return order type with order category 2-'Core return' must exist for the core process.

- Settings for purchase order

The general settings for a purchase order must be defined in 'Settings – Purchasing' (CRS780).

For the core management process, these settings must be defined:

- On panel E: Setting 09 – Default return-to-supplier order type, core return. The default order types for return of core and for claim must be defined in 'Return Order Type. Open' (PPS399)
- On panel G: Setting 46 – Costing element for return of core price. This setting indicates the costing element you should use when you return a core as a part of the return-to-supplier process in 'Return To Supplier. Open' (PPS390). The costing element is used to calculate the price of the order lines containing cores that should be sent back to the supplier for a refund.

- Purchase costing model

The purchase costing model must be defined in 'Purchase Costing Model. Open' (PPS285). The purchase costing model must have a costing element that is specified in the same way as setting 46 (Costing element for return of core price) in 'Settings Purchase Order' (CRS780). The costing details are defined in 'Costing Model. Connect Elements' (PPS286).

5 Define settings for Core

You define core terms in 'Core Terms. Open' (CRS168). In order to perform the core process, you must populate these fields on the E panel:

- Attr ID purch
- Attr value purch

The values you specify in these two fields must be used in the attribute model of the item that has current core terms.

a General terms for customer orders, purchase orders and work orders:

- 'Core terms' – The core term ID is user defined, and indicates the ID of the terms for the core return. The terms include information such as description, aging and return date.
- 'Language' – You can define the terms for each division and language.
- 'Name' – Standard field for giving the terms a name.
- 'Terms text' – A description of the terms. This text is printed on the customer order invoice.
- 'Start date code' – The start date used to calculate the return date of the core. The date can be calculated from the delivery date or from the invoice date.
- 'Refund limit days' – The number of days when no refund is given. The date for no refund is calculated based on the start date code.

b Customer terms:

- 'Return customer' – The number of days from the start date after which the core must be returned by the customer. After the calculated return date, the aging reduction is activated.
- 'Aging reduction' – The percentage by which the refund is reduced based on how late the core is returned. The percentage uses two decimal places. The reduction is calculated based on the aging reduction method.
- 'Aging reduction method' – Defines how the reduction of refund is calculated: per late day or after late return.
 - Per late day: For each day after the requested return date the amount is reduced by the percentage defined in the 'Aging reduction' field. For example, if the core is returned two days late and the aging reduction is 2%, the amount is reduced by 4%.
 - After late return: If the core is returned after the requested return date then the entire amount is reduced by the percentage defined in the 'Aging reduction' field. For example, if core is returned two days late and the aging reduction is 50%, then the amount is reduced by 50%.
- Aging text – A description of the aging terms. This text is printed on the customer order invoice.

c Supplier terms:

- Return supplier – The number of days from the start date after which the core must be returned by the supplier. No aging reduction is activated in the supplier flow, but after the refund limit no refund of the core can be expected.

6 Settings in the Item Master (MMS001)

a Core item

The core item is the item which is purchased, sold, and returned by the customer to the supplier.

- a** Specify 'Lot ctrl method' on the E panel in (MMS001). This cannot be set to 0-'Lot control not used'.
- b** Specify an attribute model for the remanufactured item in the 'Attribute model' field on the G panel in (MMS001).
- c** In the 'Core terms' field on the K panel in (MMS001), specify the ID of the core terms you defined in 'Core Terms. Open' (CRS168). This field is also essential for all items that are part of the core management process.
- d** In the 'Core ch item no' field on the K panel in (MMS001), specify the ID of the core charge item you defined in (MMS001). The core charge item is used on the core charge line when entering customer orders. It is also used on the invoice specification when entering maintenance customer orders.
- e** In the 'Core reman item' field on the K panel in (MMS001), specify the ID of the core reman item you defined in (MMS001). The field indicates the item used by default for a core return in 'Customer Return. Open' (OIS390/A). This is used in the internal remanufacturing process when the core return is used as a raw material in the finished product. The item number used should have a prefix indicating its similarity to the other items in the same acceptance group.
- f** Select 1='Supplier reman' in the 'Exchangeable' field on the K panel in (MMS001). The field indicates whether or not the item is available as a part of a supplier exchange program. The item is usually a larger component or a subassembly such as an engine, gear box or fuel pump, which can be rebuilt or remanufactured. This field is essential for all items that are part of the core management process.
- g** In the 'Accept group' field on the K panel in (MMS001), specify the ID of the acceptance group you defined in 'Acceptance Group. Open' (CRS169). The acceptance group is used to group

items which have interchangeable entitlements. A core return can be created against an entitlement for any item number within the same acceptance group. The core refund will be calculated for the returned part number. Hence the core refund may be lower if the returned core is replaced from the assortment.

- h In the 'Cstng mod core' field on the K panel in (MMS001), specify the ID of the costing model defined in 'Sales Costing Model. Open' (OIS022). The core charge costing model is used to calculate the core charge and the core refund.
- Core charge

The core charge is a non-material item and is required in the core management process. A core charge item must be defined and connected to the discount model with the discount item. This item must have a separate item type with item category 13='Non-material item' specified on the G panel in 'Item. Open' (MMS001).

 - a You must first define the item type in 'Item Type. Open' (CRS040). Select the item category 13='Non-material item'. This item category indicates that this is a core charge item.
 - b In (CRS040) select option 11='Field control' to start 'Item Type. Select Fields' (MWS041). Configure the item type fields so that the 'Non-material type' field is displayed on the G panel in (MMS001) and the 'Exchangeable' field and 'Core terms' field are displayed on the K panel in (MMS001).
 - c Field 'Inv accounting' needs must be 0-'No inv account' on E panel in (MMS001).
 - d In the 'Item category' field on the G panel in (MMS001), specify 13='Non-material' since this item is a charge, not a physical item and will not be stored.
 - e 'Non-mtrl type' field should be set to 01-'Core crg item' on the K panel in (MMS001).

7 Settings for item warehouse (MMS002)

- Remanufactured component
 - a In field 'Supplier' on the E panel in 'Item. Connect Warehouse' (MMS002), a supplier must be defined.
 - b 'Container mgt' field on the G panel in (MMS002) must be set to 7-'Container for Packages'.
- Core charge
 - a The core charge item must exist in (MMS002), however no specific settings are required.

8 Settings for item and facility (MMS003)

- Remanufactured Component
 - a The costing model must be set in 'Item. Connect Facility' (MMS003). On the E panel, select 2-'Average cost' in the 'Inv acc method' field.
 - b 'Attribute cost' must be activated on (MMS002/E).
 - c Optional: On the F panel, specify the ID of the costing model in the 'Costing model' field. This field is used to set the core price. Costing models are defined in 'Costing Model. Open' (PPS285).
- Core charge
 - a The costing model must be set in 'Item. Connect Facility' (MMS003). On the E panel, select 0-'Zero' in the 'Inv acc method' field.

Managing Component Exchange between Customer and Company

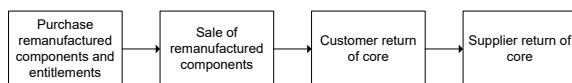
A Core is defined as a component or subassembly such as an engine, gearbox, or fuel pump that can be rebuilt or remanufactured and is often available as part of a dealer exchange program.

In this context, Core refers to failed material or used parts and is the raw material available for re-manufacture after the customer has no more use for it and has returned it. The core value is added to the part price at the outset of the sale to help ensure its return and is refunded when the part is returned. If the core material or used parts are not returned the value is lost.

The use of attribute cost on the core return is key to the process as it facilitates the management of inventory accounting and inventory valuation issues on the core return order. It simplifies the core process and reduces the risk associated with manual updates and intervention. The actual core charge can be retrieved from the supplier and used as an inventory accounting price.

This is valuable to the equipment dealer as it helps ensure that the returned core item is valued depending on the attribute combination at goods receipt in 'Customer Return. Open' (OIS390) with the person responsible for receiving the goods affecting the actual inventory value with the action in 'Attribute Values. Connect to' (ATS101). At this point if the default attribute combination is selected the item will be placed into inventory with the inventory accounting price of a new sellable item when the actual returned value of the used core item is much lower.

This document provides a high level summary of this component exchange process and includes a number of links to detailed documents that explain each step in the process.



Outcome

You have bought components and the components are put into a component exchange fleet.

The MITCEN table in M3 is updated with core entitlement.

A core entitlement is created between customer A and supplier X when A purchases a product from X and where the product sales price includes a core charge. A then undertakes to return the core to X in order to receive the core refund.

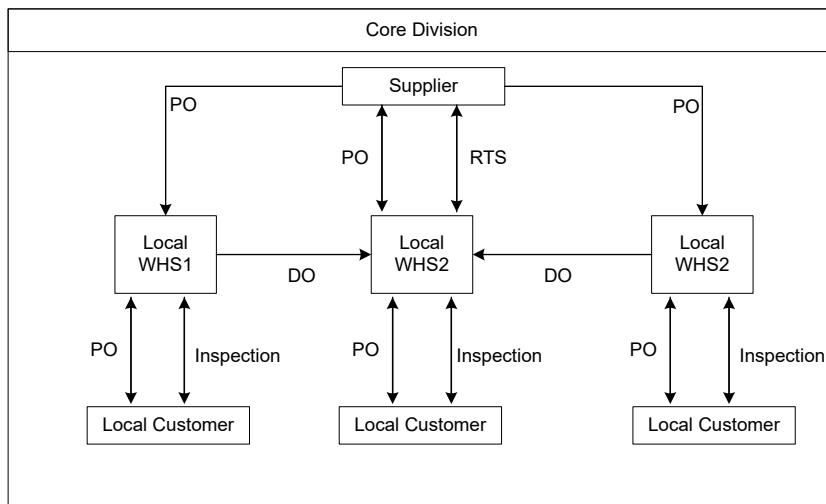
The components can be used in the component exchange process where malfunctioning components, such as cores, are exchanged for new or remanufactured components.

Before you start

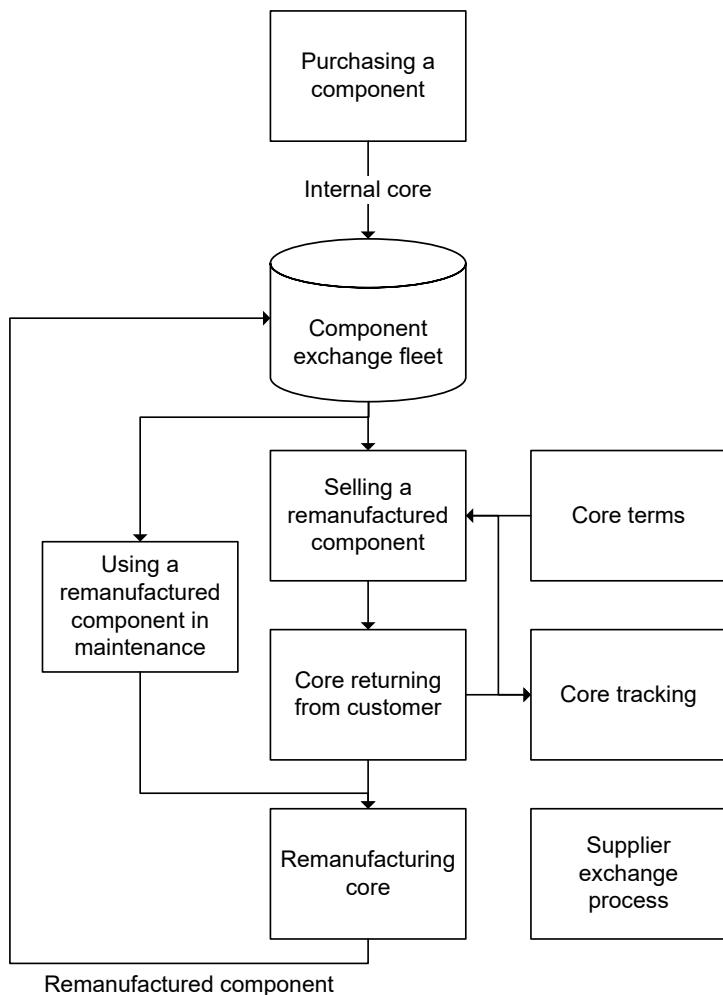
Settings must be defined as specified in and [Defining Settings for Component Exchange with Supplier in Core Management Process](#).

Process summary

The below illustration describes a core process for a large dealer. The division is comprised of several local warehouses and one central warehouse. Each local warehouse makes the acquisitions to the core fleet. Once the returned core has been inspected it is shipped to the central warehouse where it is repacked and returned to the supplier.



Follow these steps



1 Purchasing a component for component exchange fleet

You purchase components that you want to reserve for the component exchange fleet. When you receive the goods, the different components are reclassified as Remanufactured. The components are put into stock in the component exchange fleet and they are used in the component exchange program.

You purchase the component in 'Purchase Order. Open' (PPS200).

The goods receipt is performed based on the goods receiving method, either direct put-away or one-stage or two-stage inspection. This is performed in 'Purchase Order. Receive Goods' (PPS300) and in 'Purchase Order. Inspect Goods' (PPS310).

2 Selling a remanufactured component

A remanufactured component is sold to the customer in 'Customer Order. Open' (OIS100). When you sell a remanufactured component the attributes on the component will automatically trigger the addition of a core charge item to the order. A record will be created in 'Core Entitlement. Open Toolbox' (MWS090) indicating that a worn component is expected in return.

3 Customer returning the core

The customer receives a credit when returning the core. The value of this credit is based on the defined core terms and the condition (state of wear and tear) of the returned core. The returned core must be inspected to determine its condition.

You enter the core return in 'Customer Return. Open Line' (OIS391).

The inspection result is entered in 'Customer Return. Display Inspection Result' (OIS392).

4 Remanufacturing core

A returned core is repaired or remanufactured and then returned into the stock of remanufactured components.

If the remanufacturing is done by the company in-house, a work order is created for the remanufacturing. When the remanufacturing is completed, the work order is closed and the attribute on the component is changed from Worn to Remanufactured at that time. When the work order is closed, the component is put into the remanufactured stock.

If the remanufacturing is done by a third-party repair shop or a supplier, a work request is created for the remanufacturing. When the request is released to become a work order, a repair purchase proposal is created and is then released to become a repair purchase order. The component is sent away for repair to the supplier.

When the remanufacturing is completed, the component is sent back to the company. At goods receipt on the repair order the attributes for the component are entered and the work order is updated. When the work order is closed, the component is put into the remanufactured stock.

The component can also belong to the supplier exchange program. In that case, the core is sent back to the supplier on a return-to-supplier order connected to the purchase order for the remanufactured component.

5 Using the remanufactured component in maintenance

A remanufactured component is issued to a maintenance work order and a core is returned.

The component can be manually issued in 'Work Order. Open Line (MOS101) or in 'Req/Distr Order. Open' (MMS100) or can be a part of a predefined service bill of material in 'Service. Open' (MOS300).

When the issue is reported, either by confirming the picking list or making a direct issue, the invoice specification in 'Maintenance CO. Check Preliminary Invoice Spec' (COS170) is updated.

When the update is done, a line for the core charge is automatically triggered in the same way as you sold the component on a normal customer order.

Return of the core is performed in the same way as for return from sales order in (OIS390), (OIS391) and (OIS392).

When the return is entered, the line for the return automatically updates the core entitlement file (MITCEN).

6 Core tracking

Core tracking is used to keep track of open core transactions. For example, it is important to track which components must be returned to suppliers and which must be returned from customers. The concept supporting the MITCEN (Core entitlement) table is to create one master file to hold the entire entitlement. You can track core components in the Core Tracking Portal, which is a separate application.

7 Supplier exchange process

The terms for the purchase of remanufactured components are directly retrieved from the item master definition, and no specific agreement or order type needs to be used. The purchase can be done in a normal purchase order. When the item is defined as exchangeable in (MMS001/K) and the attribute

entered matches the purchase attribute defined for the core term, a record is automatically updated in the core entitlement file.

Purchasing a Component for Component Exchange with Supplier

This document explains how to manage a component exchange agreement with a supplier.

Outcome

You have defined an agreement with a supplier where you buy a component from the supplier and in exchange return a core.

A Core is defined as a component or subassembly such as an engine, gearbox, or fuel pump that can be rebuilt or remanufactured and is often available as part of a dealer exchange program.

The core entitlement table (MITCEN) is updated and can be viewed in 'Core Entitlement. Open Toolbox' (MWS090).

A Core Entitlement is created between customer A and supplier X, when A purchases a product from X and where the product sales price includes a core charge. A then undertakes to return the core to X in order to receive the core refund.

Before you start

Settings must be defined as specified in and [Defining Settings for Component Exchange with Supplier in Core Management Process](#).

Follow these steps

1 Create Exchange Purchase Order for Purchase of Component:

You create an exchange purchase order in 'Purchase Order. Open' (PPS200) with category 20 (Normal purchase order) and you add a purchase order line in 'Purchase Order. Open Line' (PPS201). When you buy an attribute-controlled item, a pop-up window is displayed with the available attributes. Select the attribute Remanufactured. A record in the core tracking table (CORETR) with the return date is created based on defined core terms.

2 Receive Goods with Attribute Remanufactured:

Depending on the settings that you have created, the goods are either received in 'Goods Receipt. Open' (PPS300) or in 'Quality Inspection. Open' (PPS310). An attribute for remanufactured component is selected if that is not yet set on the purchase order line.

3 Invoice Received from Supplier for Invoice Matching:

Account entries for exchange purchase orders are created and the account for purchased remanufactured components is updated with the cost.

4 Create Account Entries:

Accounting transactions are generated.

Purchasing Components for the Component Exchange Fleet

This document explains how you buy components that should belong to the component exchange fleet.

Outcome

You have a fleet of components in stock. The components are reclassified as remanufactured.

The core entitlement file (MITCEN) is updated with core transactions.

A core entitlement is created between customer A and supplier X when A purchases a product from X and where the product sales price includes a core charge. A then undertakes to return the core to X in order to receive the core refund.

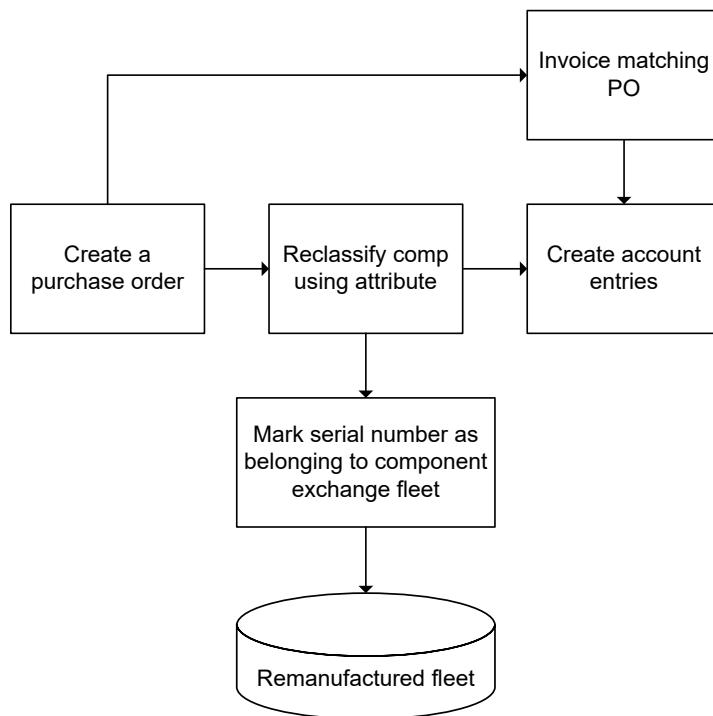
You use the components in the component exchange process where malfunctioning components, such as cores, are exchanged for new or remanufactured components.

A Core is defined as a component or subassembly such as an engine, gearbox, or fuel pump that can be rebuilt or remanufactured and is often available as part of a dealer exchange program.

Before you start

- Settings must be defined as specified in:
[Defining Settings for Component Exchange with Supplier in Core Management Process](#) on page 331
- Attributes for the core must be defined in 'Attribute Model. Open' (ATS050).
- The order type must be set to category 20='Normal purchase order' in 'Purchase Order Type. Open' (PPS095).

Follow these steps



1 Create a Purchase Order

You create a purchase order in 'Purchase Order. Open' (PPS200) and add a line in 'Purchase Order. Open Lines' (PPS201).

2 Reclassify Component Using Attribute

You can reclassify the component using attributes in two ways. The component is given the applicable attributes, for example Remanufactured, in:

- 'Purchase Order. Receive Goods' (PPS300) when receiving goods.
- 'Purchase Order. Inspect Goods' (PPS310) during quality inspection.

3 Mark Serial Number as Belonging to Component Exchange Fleet

If the purchased component should belong to the component exchange fleet, you must give it a serial number. You can define the component as a serialized item by using an item type, which has a serial number template created in 'Item Type. Open' (CRS040). The serial number template must be defined with an equipment type for remanufactured components in 'Equipment/Serialized Item. Open' (MMS240).

4 Create Account Entries

Accounting transactions are generated.

5 Match the Invoice with Purchase Order

When the invoice is matched, the status of the core tracking record is updated to indicate the progress of the process.

Remanufacturing Core

This document explains how cores are repaired or remanufactured and then returned to stock in a specific condition.

A Core is defined as a component or subassembly such as an engine, gearbox, or fuel pump that can be rebuilt or remanufactured and is often available as part of a dealer exchange program.

Outcome

The core is remanufactured and put into the remanufactured fleet. The remanufactured component is ready to be sold again to the customer.

How the system is affected

The core entitlement table (MITCEN) is updated and can be viewed in 'Core Entitlement. Open Toolbox' (MWS090).

A Core Entitlement is created between customer A and supplier X, when A purchases a product from X and where the product sales price includes a core charge. A then undertakes to return the core to X in order to receive the core refund.

Before you start

Settings must be defined as specified in and [Defining Settings for Component Exchange with Supplier in Core Management Process](#).

Follow these steps

1 Create work request for internal repair or subcontracting

You create a work request for the repair of the core and you select an appropriate service. Services can be either a generic service, a repair, or a more specific service for the component, for example an overhaul.

You can use a generic service for initial inspections in order to determine what must be done. Specific services have all operational steps and material requirements predefined.

The target attribute can be defined on the service. This means that after the work order is closed, the component is assigned, for example, the attribute Remanufactured.

The work request can be manually or automatically released to a work order.

You create a work request in 'Work Request. Open' (MOS170) or in 'Work Request. Quick Entry' (MOS185).

2 Return remanufactured component to stock

When the work is completed, all material issues are reported and time transactions are specified, and the work order is closed. When you close a work order a stock location must be defined as put away, if it is not already predefined. In this scenario the stock location is the warehouse and location for the remanufactured fleet.

You close the work order in 'Work Order. Close' (MOS050).

3 Select new attribute at closing of order

When you close the work order, an attribute that describes the condition of the component must be selected. The attribute can be retrieved from the service definition or manually selected from the predefined item attributes.

4 Create account entries

Accounting transactions are generated.

Returning Cores to Supplier

This document explains how to manage core returns to a supplier.

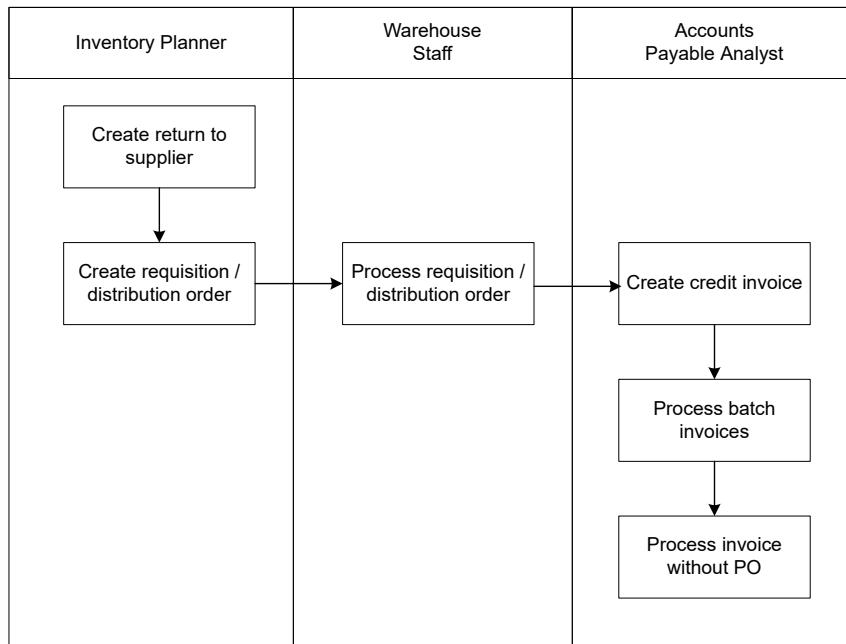
When you return the core to the supplier, a return-to-supplier order must be created to monitor the return.

A Core is defined as a component or sub-assembly such as an engine, gearbox, or fuel pump that can be rebuilt or remanufactured and is often available as part of a dealer exchange program.

Scenario story

Core items have been returned from several customers, inspected, and are ready to be returned to the supplier. Instead of making several single returns, these items are stored to make periodic returns.

A return note is printed and sent to the supplier. When a confirmation is communicated, a requisition order is created for return and extract from the inventory. The items are shipped back to the supplier and a credit invoice is received.



Outcome

You have created a return-to-supplier order and sent it to the supplier.

The core entitlement table (MITCEN) is updated and can be viewed in 'Core Entitlement. Open Toolbox' (MWS090). A core entitlement is created between customer A and supplier X when A purchases a product from X and where the product sales price includes a core charge. A then undertakes to return the core to X in order to receive the core refund.

A credit invoice is received from the supplier.

Before you start

Settings must be defined as specified in and [Defining Settings for Component Exchange with Supplier in Core Management Process](#).

Follow these steps

1 Create a return-to-supplier order

You can create a return-to-supplier order in two ways:

- Manually in 'Return To Supplier. Open' (PPS390).
- Automatically during stock analysis in 'Balance Identity. Open Toolbox' (MWS068), by using related option 20='Return to Supplier – Core'. You make the required corrections and changes to the order in 'Return To Supplier. Open' (PPS390), which is the last step in the return-to-supplier order process.

The return price is determined by the core terms and the condition (wear and tear) of the returned core.

2 Print the return-to-supplier document

You print the return-to-supplier order from 'Return to Supplier. Print Document' (PPS820).

A requisition is automatically created and allocated to the lot or location specified in (PPS390).

3 Report delivery

You report the delivery in 'Balance Identity. Open Toolbox' (MWS068). The picking list and delivery documents are printed and the core is picked up and packed. The documents for return-to-supplier are enclosed.

4 Match invoice

A credit invoice is received from the supplier for invoice matching. The credit invoice is matched against the return-to-supplier order in 'Supplier Invoice. Record' (APS100). The status of the core tracking record is updated to Closed.

You can monitor the return-to-supplier order to check whether or not a credit invoice is returned from the supplier in 'Purchase Order. Print Received/Not Invoiced' (APS580).

5 Create account entries

Accounting transactions are generated at stock withdrawal and at supplier invoice matching in 'Internal Account Entry. Create' (CAS950). The account entries are checked by accounting rules in 'Accounting Rule. Set' (CRS395).

Chapter 7: Authorization

Define Purchase Authorization for User

This document explains how you define authorization to place purchase orders and/or limit the purchased amount on a certain order.

Outcome

The authority settings are done on the line level when the planned purchase order is processed and/or on the order level when purchase orders are manually or automatically created

The information is stored in the purchase authority (MPAUTD) table.

Users are entered in a special file where a hierarchy by authorization level is built. A user with authorization level 1 can change and update all authorization information for other users

Before you start

Program ID/Panel	Field	The field indicates ...
(PPS095/E)	070 Authorization check	<p>... if and when authorization should be checked. The valid alternatives are:</p> <p>1 = No check 2 = Authorization checked at line level while the planned purchase order is processed (PPS170) 3 = Authorization checked at order level while purchase orders are manually or automatically created (PPS200) 4 = Authorization checked in accordance with both 2 and 3 above (PPS170 and PPS200).</p>
(PPS235/B)	Authorized	...the name of the user to whom system access will be given
(PPS235/E)	Authorization Level	<p>... the user's authority level. The user can be defined with authority levels 1 to 9, where 1 is the highest authority.</p> <p>Users with authority level 1 have full authority to make changes to other users' authority.</p> <p>Users with authority level 2 to 9 are authorized to access and change the authority for users with the same or lower authority levels.</p>

Program ID/Panel	Field	The field indicates ...
(PPS235/E)	Signature	...a pin code of four alphanumeric characters used to authorize planned purchase orders and purchase orders.
(PPS235/E)	Max Line Amount	...the maximum order line amount that the user is authorized to approve. Example: If the user is defined with an authority of order lines for EUR 100 the system will check if the estimate value of the purchase order line is less than or equal to EUR 100. A user cannot release a purchase order line that is over that budget.
(PPS235/E)	Max Order Amount	...the maximum order amount that the user is authorized to approve. Example: If the user is defined with an authority of EUR 1000, the system will check if the estimated value of the purchase request in (PPS235) is less than EUR 1000. A user cannot release or edit a request that is over that budget.
(PPS235/E)	Order Type	...an order type or range of types to which the user has authorization. If maximum authorization should be given to the user, these fields should be left blank and the include/exclude flag should be set to '2'.
(PPS235/E)	Facility	...a facility or range of facilities to which the user has authorization. If maximum authorization should be given to the user, these fields should be left blank and the include/exclude flag should be set to '2'.
(PPS235/E)	Warehouse	...a warehouse or range of warehouses to which the user has authorization. If maximum authorization should be given to the user, these fields should be left blank and the include/exclude flag should be set to '2'.

Follow These Steps

- 1 Start 'PO Type. Open' (PPS095/E). Activate the 'Authorization check' field by selecting between parameters 1, 2 or 3.
 - 2 Start 'Purchase Authority. Open' (PPS235).
 - 3 Select an sorting order.
 - 4 Select a user ID and an authorization level (if sorting order 2 is used), and select New to display the E panel.
 - 5 On the E panel, specify an authorization level (when sorting order 1 is used), a signature, maximum line amount and a maximum order amount (optional).
 - 6 Specify the restrictions if any (order type, facility and warehouse). Also specify whether the selected objects are to be included in or excluded from the user's authority.
- If, for example, all fields are left blank and the flag is set to 2, the user will be fully authorized.

Use Authorization in Procurement

This document explains how you authorize a planned purchase order and a purchase order.

Outcome

Based on the authorization level defined, the authorized users are allowed to release planned purchase orders and purchase orders.

The information is stored in Authorization Table (MPAUTD).

Authorization is provided to unauthorized users to place purchase orders and limit the purchase amount on a specific order.

For example, a user can be authorized to place a purchase order for a maximum amount of money. If the user tries to place an order that exceeds the allowed amount, the purchase order will be stopped. It will then have to be authorized by a user with higher authority for further processing.

Before you start

Settings for purchase order authorization must be defined. See [Define Purchase Authorization for User](#) on page 347.

Follow These Steps

Authorization of Planned PO

- 1 Start 'Planned Purchase Order. Open' (PPS170/B).
2 Select the planned purchase order that requires authorization.
The status of the purchase order must be 50 with the warning message code 'F'.
3 Authorize the planned purchase order by entering the user signature on (PPS171/F).
4 Press Enter to finish and return to (PPS170/B).
The warning message code 'F' is not displayed now.
Now you can release the planned purchase order by selecting option 11=Release.

Authorization of a PO

- 1 Start 'Purchase Order. Open' (PPS200/B1).
The purchase order status must be 12=Order stopped authorization required.
2 Authorize the purchase order by entering the user signature on (PPS200/F). Press Enter.
The purchase order now has status 15=Ready for printout. (If the order is stopped because of accounting errors it will instead be assigned status 13 or 14.)
The status of the purchase order is now 20=Document printed/sent.

Chapter 8: Purchase Order Batch Entry

M3 Business Engine Administrator's Guide for Purchase Order Batch Entry

This document describes settings required to run Purchase Order Batch Entry (POBE) in M3.

Before you start

These prerequisites must be completed before you can run 'Purchase Order Batch Entry':

- Create number series

These number series must exist in 'Number Series. Open' (CRS165) (blank division) to run 'Purchase Order Batch Entry':

- Purchase orders: 'Number series type' (NBTY) = '20' with a 'Number series' (NBID). NBID can be set to any value. Several number series with NBTY= '20' can exist.
- Message number: 'Number series type' (NBTY) = 'PE' and 'Number series' (NBID) = '1'.
- Detailed message log: 'Number series type' (NBTY) = '44' and 'Number series' (NBID) = 'D'.

- Activate application messages

The application message '175= Errors detected during POBE' must be activated. You can do it on (CRS424/E). If application message '175' is missing in 'Settings - Application Messages' (CRS424), press F14 on (CRS424/B). The application message '175' will then automatically be created.

Note: Make sure the user has a record in 'Email Address. Open' (CRS111) to receive emails when errors are detected in the POBE.

- Purchase order batch origin

At least one PO batch origin (BAOR) must exist in 'Purchase Order Batch Origin. Open' (PPS090) to run POBE with one of the these parameters:

- 10 no series

Enter the 'Number series' (NBID) that is used for the purchase orders created through this 'PO batch origin'. The 'Number series type' (NBTY) '20' with the chosen 'Number series' (NBID) must exist in (CRS165) (blank division).

- 20 auto level

These alternatives are valid:

- 1 = Order entry, means that the purchase orders created through the POBE in the interface (PPS370) will stop in status 20 and wait for manual processing of the records.

- 2 = Process, means that the purchase orders created through the POBE in the interface (PPS370) is automatically processed to status 90 if no errors are found.
- 30 process method
This parameter is only valid if auto level = 2 (Process).
These alternatives are valid:
1 = Batch job, a job is submitted for the processing of records entered through MI program (PPS370MI) or manually in the interface 'Purchase Order Batch. Open' (PPS370).
(One more alternative 'Auto job' might be added in the future)
- 40 deletion method
These alternatives are valid:
 - 1 = Raise status, status is raised to 90 on record when it is completed.
 - 2 = Delete record, record is deleted when it is completed.
- 50 existing PO
These alternatives are valid:
 - 0 = PO batch entry not allowed for existing PO. It means that POBE cannot be used to add data to existing PO or delete an existing PO line.
 - 1 = Allow PO batch entry for existing PO. It means that POBE can be used to add data to existing PO or delete an existing PO line.

Description

PPS370MI is the main input program for 'Purchase order batch entry'. The other possibility is to manually add records in (PPS370) and 'Purchase Order Batch. Open Lines' (PPS371) up to 'Purchase Order Batch. Connect Text' (PPS376).

Note: No validations are made interactively in PPS370-376. Option 25-'Validate' should be used instead, to validate the data entered in the POBE.

Empty fields are filled with default values. If a field has '?' as a value, the program sets this field to blank/zero regardless of default values.

Limitations

You can use only the order category 20 (normal PO) in the first version of POBE.

The header of the existing PO is not editable with POBE.

You can use POBE only to delete an existing PO line and not specific PO line data, such as accounting, addresses, charges, or text.

Available options in different statuses

These statuses are used in the POBE:

- 10=Order entry in progress
- 20=Order entry finished
- 23=Error during pre validation (*Error in validation process*)

- 25=Pre validated
- 90=Transferred, no errors

It is possible to edit the data manually in the interface tables through interface programs PPS370-376 if status is below 90 = 'Transferred'. The updated data will then be used in the continuing process. If a record with status 25 is changed the status is lowered to 20. The MI-transactions can only change and update a PO in the interface if the status is 10='Order entry in progress'.

The table lists the available options in different POBE statuses:

Status:	10	20	23	25	90
Options:					
Create in PPS370/371	x	-	-	-	-
Create via MI-program	x	-	-	-	-
Change in PPS370/371	x	x	x	x	-
Change via MI-program	-	-	-	-	-
Copy	-	-	-	-	-
Delete in PPS370/371	x	x	x	x	x
Delete via MI-program 'Delete Entry' (Deletes entire MSGN)	x	-	-	-	-
PPS370 Option 20=Finish Entry	x	-	-	-	-
PPS370/371 Option 25=Validate	-	x	x	x	-
PPS370 Option 30=Process	-	x	x	x	-

'Purchase Order Batch Origin. Exceptions' (PPS091)

(PPS091) makes it possible to have special parameter settings for a certain 'Supplier'.

'Purchase Cost. Connect Supplier Costing Element' (PPS288)

In (PPS370) and PPS370MI, it is possible to update values from external system for purchase costing elements connected to the purchase order head or -lines displayed in (PPS215). These values are used in the purchase order processing and invoice matching.

To get the integration between the external system and M3 to work regarding updates of costing elements on a PO or a PO-line a setup in (PPS288) is required. A **supplier** costing element should be defined for handling cost updates sent from suppliers such as charges and handling costs. This supplier costing element is then connected to a purchase costing element in M3, defined in 'Costing Element. Open' (PPS280).

Costing elements in M3 connected to supplier costing elements requires that distribution method (DIMT) on (PPS280/E) is set to 1 = 'Line-unique expenditures' or 2 = 'Header-unique expenditure, should not be distributed'. Method 3 = "Distribute between header and lines" can not be used in current version of POBE.

The currency code used for the values entered in 'Purchase Order Batch. Connect Charges' (PPS375) is always equal to the currency on 'Purchase Order Batch. Open' (PPS370/E).

Transactions

These transactions are available in PPS370MI:

- **Transaction StartEntry**

The purpose of StartEntry is to retrieve the 'Message number' (MSGN) and to decide if the 'Message Number' is for adding the new batch records or adding batch records that will add data to data or delete data on the existing PO.

The 'Message number' is used to group the 'PO batch information' that are sent together. In all other MI-transactions a valid 'Message number' needs to be entered.

The input fields are 'Purchase Order batch origin' (BAOR) and 'Purchase order batch entry code' (PBEC). Output field is 'Message number' (MSGN).

- **Transaction AddHead**

The purpose of 'AddHead' is to create a 'PO batch head' (MXHEAD).

The output of 'AddHead' is a 'PO number' (PUNO).

These fields are mandatory: 'Message number' (MSGN) 'Facility' (FACI), 'Warehouse' (WHLO), 'Supplier' (SUNO) and 'Req. delivery date' (DWDT).

The field 'PO head reference' (HREF) is optional. 'PO head reference' can in combination with 'Supplier' be used, instead of 'PO number' (PUNO), in the transactions 'AddLine', 'AddAddress', 'AddCharge', 'AddText' and 'AddAccStr'.

- **Transaction AddLine**

The purpose of 'AddLine' is to create a 'PO batch line' (MXLINE).

The output of 'AddLine' is a 'PO line' (PNLI) on a 'PO number' (PUNO).

It is also possible to directly create both a 'PO batch head' (MXHEAD) and a 'PO batch line (MXLINE) through 'Addline'.

Use these examples to fill in 'Addline' details:

- **Create line using PO number**

This case will create a 'PO batch line' (MXLINE) to an existing 'PO batch head' (MXHEAD).

The transactions 'StartEntry' and 'AddHead' must have been run to have a valid 'Message number' (MSGN) and 'PO number' (PUNO).

These fields are mandatory: 'Message number' (MSGN), 'PO number' (PUNO), 'Item no' (ITNO) and 'Ordered qty' (ORQA).

The fields 'Facility' (FACI), 'Warehouse' (WHLO), 'Supplier' (SUNO) and 'Requested delivery date' (DWDT) should be left blank.

The field 'PO line' (PNLI) is optional. If 'PO line' is left blank or set to zero, it will automatically be fetched.

The field 'PO line reference' (LREF) is optional. 'PO line reference' can in combination with 'Supplier' (SUNO) and 'PO head reference' (HREF) be used in the transactions 'AddAddress', 'AddCharge', 'AddText' and 'AddAccStr' instead of 'PO line' (PNLI).

- **Create line using PO head reference**

This case will create a 'PO batch line' (MXLINE) to an existing 'PO batch head' (MXHEAD).

The transactions 'StartEntry' and 'AddHead' must have been run to have a valid 'Message number' (MSGN) and 'PO head reference' (HREF).

These fields are mandatory: 'Message number' (MSGN), 'PO head reference' (HREF), 'Item no' (ITNO) and 'Ordered qty' (ORQA). The fields 'Facility' (FACI), 'Warehouse' (WHLO), 'Supplier' (SUNO) and 'Requested delivery date' (DWDT) should be left blank.

The field 'PO line' (PNLI) is optional. If 'PO line' is left blank or set to zero, it will automatically be fetched.

The field 'PO line reference' (LREF) is optional. 'PO line reference' can in combination with 'Supplier' (SUNO) and 'PO head reference' (HREF) be used in the transactions 'AddAddress', 'AddCharge', 'AddText' and 'AddAccStr' instead of 'PO line' (PNLI).

- **Create head and line**

This case will create a 'PO batch line' (MXHEAD) and a 'PO batch line' (MXLINE).

A valid 'Message number' (MSGN) must exist ('StartEntry').

These fields are mandatory: 'Message number' (MSGN), 'Facility' (FACI), 'Warehouse' (WHLO), 'Supplier' (SUNO), 'Requested delivery date' (DWDT), 'Item no' (ITNO) and 'Ordered qty' (ORQA).

The field 'PO head reference' (HREF) must be left blank.

The field 'PO line' (PNLI) is optional. If 'PO line' is left blank or set to zero, it will automatically be fetched.

The field 'PO line reference' (LREF) is optional. 'PO line reference' can in combination with 'Supplier' (SUNO) be used in the transactions 'AddAddress', 'AddCharge', 'AddText' and 'AddAccStr' instead of 'PO line' (PNLI).

- **Transaction AddCharge**

The purpose of 'AddCharge' is to create a 'PO batch charge' (Mxoexp).

When a 'PO batch' is transferred to a real purchase order (MPHEAD, MPLINE etc.) the charges according to the costing model are connected to the PO-head or PO-head.

When transferred to M3 the 'PO batch charge' (Mxoexp) will update or create the 'PO charge' (Mpoexp).

Work in progress flag

There is a 'work in progress' flag and a 'job number' on the purchase order head in the interface (MXHEAD). Function programs will always check these fields before performing any operations on a PO in the interface to make sure that there is not some other job currently working on the batch order. The 'work in progress' flag can have these values:

- 0 = Not in progress
- 1 = Finish entry in progress
- 2 = Update in progress
- 4 = Delete in progress
- 8 = Validate in progress
- 9 = Transfer in progress

Reset-scenarios

The listed scenarios describe some typical settings in POBE.

- **Rollback of entry**

Some orders have been entered through PPS370MI. FinishEntry has not been called yet. For some reason you wish to regret the entire input and perform a rollback on entire entry.

Solution:

Send MI-transaction "DeleteEntry XXXXX". Everything on that entry is deleted. Check Inquiry Type 4 before and after in (PPS370).

- **Continue FinishEntry after system crash (or dump)**

System is crashing during ongoing FinishEntry. No answer is received if transaction has finished or not. Did all orders get status 20 and were sent for further processing?

Solution:

Re-run FinishEntry when system is up running again: "FinishEntry XXXXX". Either we get the answer transaction ready or automatic reset is performed on the entry and FinishEntry is run again. Check Inquiry type 4 and 5 before and after.

- **Continue processing after system crash (or dump)**

FinishEntry ready but system crashed while the entry is being processed further.

Solution:

Continue processing the entry by using Inquiry Type 5 and option '35 - PO Batch Selection' --> (PPS378). All orders that are not already processed is processed. Any locked orders are automatically reset first (not finished orders in MPHEAD will then be roll-backed). Check (PPS370) Inquiry Type 4 and 5 as well as (PPS200) before and after.

- **Reset single order after system crash (or dump)**

A single order can be locked on many places in the process after a system crash (status 10, 20, 23, 25, 90).

Solution:

Reset the order to status 20 (or 10) by using option '40 Reset' (not fully created order in MPHEAD is then rolled back). Check (PPS370) Inquiry Type 1, 5 and (PPS200) before and after.

Purchase Order Batch Entry

This document is an overview of Purchase Order Batch Entry (POBE).

Outcome

You should consider the value of a PO batch entry as a building block to the various solutions:

- Simple integration to e-procurement.
- Possible to upload Purchase Orders from third part Purchase optimization applications.
- Integration to freight cost handling systems.
- Integration from external purchase order applications is possible since the interface is build in accordance with M3 API architecture.
- Possibility for suppliers to create there own purchase order from a replenishment point.
- Integration to third party purchasing or planning systems.

These tables are updated:

- Purchase Order Batch Origin (MPPBOR)
- PO Batch Origin. Connect Exceptions (MPPBOX)
- PO batch head (MXHEAD)
- PO batch line (MXLINE)
- PO batch address (MXPOAD)
- PO batch charges (MxoEXP)
- Accountings – PO batch line (MXCCST)
- PO batch text (MXTEXT)
- PO head (MPHEAD)
- PO line (MPLINE)
- PO address (MPPOAD)
- PO charge (MPOEXP)
- PO Accountings String (CACCST)
- PO Text (MXYTXH / MXYTXL)

Description

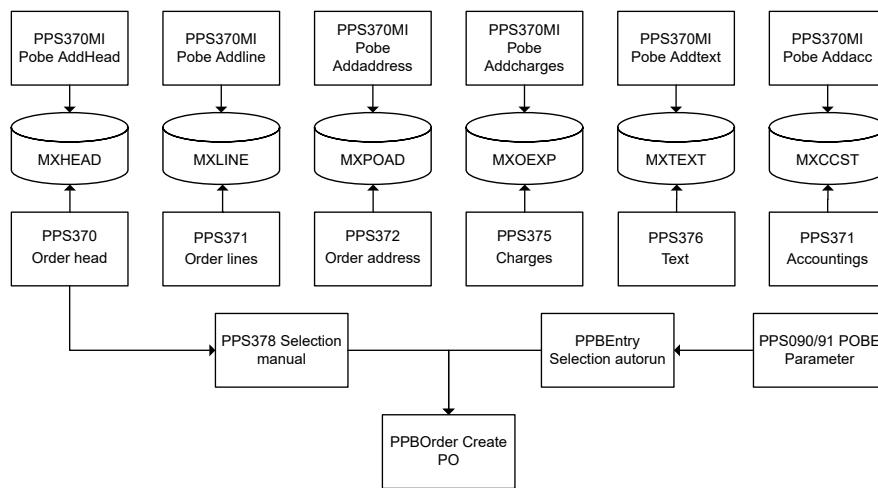
- You can maintain incoming data, receive a complete set of data to add PO batch head, PO batch address, PO batch line. PO batch charges, PO batch, Accounting String, and PO batch text through M3 functions with Purchase Order Batch Entry.
- You can also receive key value for M3 and everything is created according to the default value from M3's supplier data, item data and order type data.
- You can validate, and check errors on received data and error log automatically created. The log is created from the validation part of the PO batch entry record. The log is created through M3's internal mail function.
- You can create purchase orders in M3 automatically or by manual transfer (parameter setup). You can reset function to restart or rollback interrupted transactions.
- You can add or delete a PO line on the existing PO, as well as add a PO line address, accounting string and text, charge on the existing PO line using the Purchase Order Batch Entry.

- You can update the existing PO line as well as PO line address, accounting string, and charge on the existing PO using the Purchase Order Batch Entry.

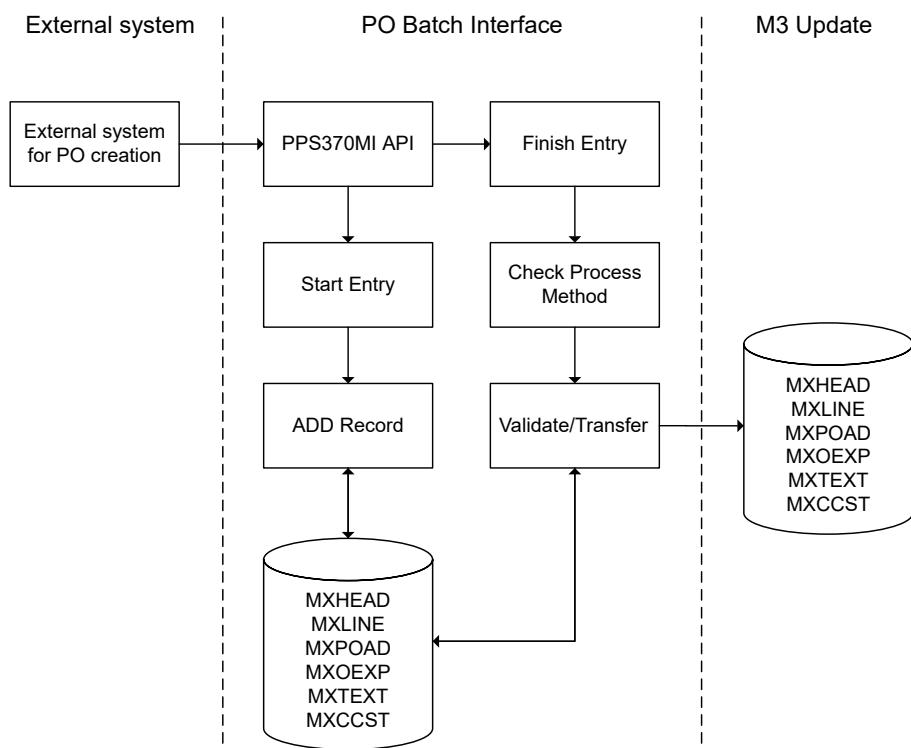
Limitations

- In the first version of POBE you can use only order category 20 (normal PO).
- You cannot edit the header on the existing PO records through POBE.

Overview program and functions



Purchase order batch entry overview



Settings for Purchase Order Batch Entry

This document explains how you define the settings for purchase order batch entry.

Outcome

The parameters that control purchase order batch entry are defined.

Use the settings for purchase order batch entry to enter a purchase batch order in 'Purchase Order Batch. Open' (PPS370).

These tables are updated:

- Purchase Order Batch Origin (MPPBOR)
- PO Batch Origin. Connect Exceptions (MPPBOX)

Before You Start

- A number series of type 20 must be defined in 'Number Series. Open' (CRS165).
- A number series of type PE with number series ID 1 must be defined in (CRS165).

- A number series of type 44 with number series ID D must be defined in (CRS165).
- The application message type 175 must exist in 'Settings - Application Messages' (CRS424).

Follow These Steps

- 1 Start 'Purchase Order Batch Origin. Open' (PPS090).
- 2 On the B panel, specify the batch origin and select 'New'.
- 3 On the E panel, specify these parameters: '10 number series', '20 level of automation', '30 process method', '40 deletion method', and '50 existing PO'.
- 4 Press 'Enter'.
- 5 To create 'Exceptions for a Supplier', start 'PO Batch Origin. Connect Exceptions' (PPS091), through option 11='Exceptions', on the (PPS090/B) panel. Specify the supplier and open the E panel. Specify the exceptions for this supplier.

Parameters to Set

Program ID/ Panel	Field	The field indicates...
(PPS090/B)	Batch origin	<p>...the purchase-order batch origin.</p> <p>The batch origin uniquely identifies each external or internal system using the PO batch entry in order to create purchase orders in M3. Controlling parameters for this process are defined per batch origin (PPS090) or per batch origin and supplier (PPS091).</p>
(PPS090/E)	10 number series	<p>...the number series used for PO batch entry.</p> <p>The number series type is 20. The purchase order number used in the interface (PPS370) will be kept in M3 (PPS200).</p>

Program ID/ Panel	Field	The field indicates...
(PPS090/E)	20 level of automation	<p>...the level of automation when you use PO batch entry.</p> <p>The alternatives are valid:</p> <p>1 = Order entry. The purchase orders created through the POBE in the interface (PPS370) will stop in status 20 and wait for manual processing of the records.</p> <p>2 = Process. The purchase orders created through the POBE in the interface (PPS370) will be automatically processed to status 90 if no errors are detected.</p>
(PPS090/E)	30 process method	<p>...the process method when you use PO batch entry.</p> <p>This parameter is only valid if the auto level is 2 (Process).</p> <p>The alternative is valid:</p> <p>1 = Batch job. A job is submitted for the processing of records entered through the MI program (PPS370MI) or manually in the interface (PPS370).</p>
(PPS090/E)	40 deletion method	<p>...the deletion method for records in the PO batch entry (PPS370).</p> <p>The alternatives are valid:</p> <p>1 = Raise status. The status is raised to 90 on the record when it is completed.</p> <p>2 = Delete record. The record is deleted when it is completed.</p>
(PPS090/E)	50 existing PO	<p>...if PO batch entry is allowed for the existing POs or not.</p> <p>The alternatives are valid:</p> <p>0 = PO batch entry not allowed for existing PO.</p> <p>1 = PO batch entry allowed for existing PO.</p>

Manage Purchase Order Batch Entry

This document explains the work flow for purchase order (PO) batch entry.

Outcome

A purchase batch header is created, validated, and processed. It contains an address, charges, and a text block.

A purchase order batch entry is used for bulk purchase order entries.

These tables are updated:

- Purchase Order Batch Origin (MPPBOR)
- PO Batch Origin. Connect Exceptions (MPPBOX)
- PO batch header (MXHEAD)
- PO batch line (MXLINE)
- PO batch address(MXPOAD)
- PO batch charges(MXOEXP)
- Account entries – PO batch line (MXCCST)
- PO batch text (MXTEXT)

Before you start

The parameters in [Settings for Purchase Order Batch Entry](#) on page 358 must be defined.

Follow these steps

Receive data for the batch PO through PPS370MI

PPS370MI (Purchase Order Batch Entry) is used to process external information to create a purchase order in M3.

The API program PPS370MI transfers data sent from the external system to M3 and creates records in the interface tables. The interface data are displayed and maintained in the interface programs named PPS370, PPS371, PPS372, PPS375, or PPS376.

These API transactions exist:

- StartEntry - Retrieves a 'Message number' used for grouping PO batch information sent together
- AddHead - Creates the PO batch header in the M3 interface table MXHEAD
- AddLine - Creates the PO batch line in the M3 interface table MXLINE. The record in MXLINE is a new batch record or a batch record for adding a PO line to the existing PO.
- AddAddress - Creates an address for a PO batch header or line in the M3 interface table MXPOAD. The record in MXPOAD is a new batch record or a batch record for adding an address to the existing PO line.
- AddCharge - Creates a charge for a PO batch header or line in the M3 interface table MXOEXP. The record in MXOEXP is a new batch record or a batch record for adding a charge to the existing PO line.
- AddAccString - Adds an accounting string for a PO batch line in the M3 interface table MXCCST. The record in MXCCST is a new batch record or a batch record for adding an accounting string to the existing PO line.

- AddText - Adds text for a PO batch header or line in the M3 interface table MXTEXT. The record in MXTEXT is a new batch record or a batch record for adding text to the existing PO line.
- CrtPOLineDlt - Creates a batch record in MXLINE to delete the existing PO line.
- FinishEntry - Changes the status from 10 to 20 on an entire 'Message number' (containing several batch purchase orders) and starts the processing of the batch information
- DeleteEntry - Deletes an entire 'Message number'. 'DeleteEntry' is done instead of 'FinishEntry'. Only a 'Message number' in status 10 can be deleted.
- GetBatchHead - Obtains information about the PO batch header from the interface table MXHEAD
- GetBatchLine - Obtains information about the PO batch line from the interface table MXLINE
- LstBatchHead - Lists information about the PO batch headers from the interface table MXHEAD.
- LstBatchLine - Lists information about the PO batch lines from the interface table MXLINE.

See [Purchase Order Batch Entry](#) on page 356.

You can also only receive key values for the purchase order while all other required information is created according to the default values for the supplier 'Supplier. Open' (CRS620), item (MMS001/002), and order type 'Purchase Order Type. Open' (PPS095). The purchase order number can be passed from the external system but it can also be left blank. The purchase order number is then generated according to the number series 'Number Series. Open' (CRS165).

Validate and check errors in received data

Validation can be performed in one of these ways:

- From PPS370MI through the FinishEntry transaction
- Directly from 'Purchase Order Batch. Open' (PPS370), 'Purchase Order Batch. Open Lines' (PPS371), 'Purchase Order Batch. Connect Address' (PPS372), 'Purchase Order Batch. Connect Charges' (PPS375), 'Purchase Order Batch. Connect Text' (PPS376), and so on using the Validate option
- Directly from (PPS370) using the Process option.

The statuses of the header, line, address, charge, or text for the PO batch are as follows:

- 10 - Order entry in progress
- 20 - Order entry completed
- 23 - Error during validation
- 25 - Validation successful
- 90 - Transferred, no errors detected.

Settings in 'Purchase Order Batch Origin. Open' (PPS090) and 'PO Batch Origin. Connect Exceptions' (PPS091) control how the validation process is performed, as follows:

- 'Auto level' determines whether the API transaction FinishEntry should stop in status 20 or continue to process the transaction to status 90.
- 'Process' method determines whether the processing is performed in a batch run or in an auto job. The capability to use auto jobs is not currently included in this M3 version. The validation and transfer process will therefore always be performed in a batch run if you use the API program PPS370MI to begin with.

You can also validate an entire batch order in (PPS370) or a single batch order line in (PPS371). The validation is always performed interactively from (PPS370/371), and so on.

Transfer data into M3 BE database

As with validation, transfer is possible by using any of these options:

- PPS370MI through the FinishEntry transaction (in a batch run)
- Directly from (PPS370) using the Process option (interactive).

The process is determined by the settings in (PPS090) and (PPS091). The order must be validated before the transfer can start, regardless of whether a separate validation has been made. The transfer process results in new records in the existing M3 tables and batch order tables.

Unexpected problems such as power cuts, which result in an interrupted transfer, will keep a work-in-progress flag and a job number on the purchase header in the interface. If a purchase order with several PO lines in the interface is transferred successfully to M3 except for one PO line, then the status of the interface PO would be 25/90. Also, the PO header in M3 will have status 06/06. This status indicates that the transfer is not completed. The PO line with the error can be processed again, when the power supply is working, including validation and transfer in the interface (PPS370-376).

Purchase order created

The result of the transfer process is a new purchase order (PO) in M3 that can be maintained and used as if it were created directly in 'Purchase Order. Open' (PPS200) and 'Purchase Order. Open Lines' (PPS201). The addition, changing, copying, or deletion of purchase order lines, as well as order confirmation, shipment advice, transportation notification, goods receipt, and invoice control are all possible for a purchase order created through POBE. Charges and text management are also included in this version.

One limitation is that only purchase order category 20-'Normal' can be used in this version.

Work with batch PO data manually in the PO batch entry

You can create and change batch PO data manually in the PO batch entry programs. These sections describe how to do this.

Manually create batch purchase order

- 1 Start (PPS370).
- 2 Press F13 to activate the P panel. Set the panel sequence to EFU1. Press Enter to return to (PPS370). You cannot access (PPS370/A) from the P panel. You can only select F17 on (PPS370/B) to open (PPS370/A).
- 3 On the A panel, specify the facility, warehouse, supplier, order type, request delivery date, and PO batch origin. The supplier's default order type is used if the order type is left blank.
- 4 Specify purchase organization if it is available on the panel. The field is available if the use of purchase organizations for planning is activated on 'Settings – Purchasing. Open' (CRS780/H).
- 5 Press Enter to continue to the E panel.
The message number and purchase order number are created automatically.
- 6 Press Enter to continue to the F panel.
- 7 Press Enter to continue to the U panel.
The U panel displays the user-defined fields. The user-defined fields are maintained in 'User-defined Fields. Open' (CMS082) for the purchase order head table (MPHEAD).
Note: The U panel displays the maximum field length for the user-defined fields, but the specified data will be validated against the field length defined in (CMS082).
- 8 Press Enter to continue to (PPS371).
- 9 Press F13 to activate the P panel. Set the panel sequence to EFU.
- 10 Press Enter to return to (PPS371/B).

- 11** On the B panel, specify the line, item, and quantity. Click Create.
- 12** On the E panel, click F11='Account Entry' to open a dialog box.
- 13** Specify the account details and click OK.
- 14** Press Enter to continue to the F panel.
- 15** Press Enter to continue to the U panel.

The U panel displays the user-defined fields. The user-defined fields are maintained in (CMS082) for the purchase order line table (MPLINE).

Note: The U panel displays the maximum field length for the user-defined fields, but the specified data will be validated against the field length defined in (CMS082).

- 16** Press Enter to return to (PPS371/A).
A purchase order line with status 10 is created.
- 17** Press F3 to continue to 'Purchase Order Batch. Open' (PPS370/A).
Click F13 to open the P panel and set the opening panel as B1.
- 18** Press Enter to continue to (PPS370/B1).
A purchase order batch header with status 10 is created.

Manually connect address for batch PO header

- 1** Click F12='PO Batch Address' to continue to (PPS372).
- 2** On the B1 panel, specify the PO address type and click Create.
- 3** On the E panel, specify the company name, address lines, city, state, postal code, and country.
- 4** Press Enter to continue to (PPS372/B1).
- 5** Press F3 to continue to (PPS370).

Manually connect charges for batch PO header

- 1** Click F15='PO Batch Charges' to continue to (PPS375).
- 2** On the B panel, specify the serial number and supplier costing element. Click Create.
- 3** On the E panel, specify the costing markup.
- 4** Press Enter to continue to (PPS370/B1).

Manually connect text for batch PO header

- 1** Click F16='PO Batch Text' to continue to (PPS376).
- 2** On the B panel, specify the text box and sequence number. Click Create.
- 3** Press Enter to continue to (PPS370/B1).
- 4** Click F16='Finish Entry' to complete the batch entry.
The status is updated from 10 to 20.
- 5** Select the PO batch header record and then select F25='Validate'.
The status is updated from 20 to 25.
- 6** Select the PO batch header record and then select F30='Process'.
 - The status is updated from 25 to 90.

- The record will disappear from (PPS370) if parameter 40 is set to 2 on (PPS090/E).
- A new purchase order is created on (PPS200).

Manually connect address for batch PO line

- 1 Click F12='PO Batch Address' to continue to (PPS372).
 - 2 On the B1 panel, specify the PO address type. Click Create.
 - 3 On the E panel, specify the company name, address lines, city, state, postal code, and country.
 - 4 Press Enter to continue to (PPS372/B1).
 - 5 Press F3 to continue to (PPS371).
- A plus sign is displayed in the record for the address column.

Manually connect charges for batch PO line

- 1 Click F15='PO Batch Charges' to continue to (PPS375).
 - 2 On the B panel, specify the serial number and supplier costing element. Click Create.
 - 3 On the E panel, specify the costing markup.
 - 4 Press Enter to continue to (PPS371/B1).
- A plus sign is displayed in the record for the charge column.

Manually connect text for batch PO line

- 1 Click F16='PO Batch Text' to continue to (PPS376).
 - 2 On the B panel, specify the text box and sequence number. Click Create.
 - 3 Press Enter to continue to (PPS371/B1).
- A plus sign is displayed in the record for the text column.
- 4 Click F16='Finish Entry' to complete the batch entry.
The status is updated from 10 to 20.
 - 5 Select the PO batch header record and then select F25='Validate'.
The status is updated from 20 to 25.
 - 6 Select the PO batch header record and then select F30='Process'.

Work with batch PO data manually in the PO batch entry to add or delete the existing PO line or to add PO line data

You can manually create, add, and delete records in the MX-tables which will add to or delete the existing PO data with the PO batch entry programs. These sections describe how to do this.

Prerequisites for updating existing PO lines in the batch entry:

- 1 'Entry code' (PBEC) must be set to '1' on (PPS370/A).
- 2 The batch origin must have 50-'Existing PO' set to '1' on (PPS090/E).
- 3 Value in the 'Opcd' column must be set to one of these:
 - 1='Create'
 - 2='Change on existing PO'

- 4='Delete'
 - 9='No change' (Creates a copy of the existing PO line)
- 4** A copy of the PO header must be created in the batch entry (PPS370).

Manually create a copy of the PO header:

- 1** Start (PPS370/B).
- 2** Click F17='Create PO Batch Header'.
- 3** Set 'Entry code' to '1' on (PPS370/A).
- 4** Specify the existing PO number and PO batch origin.
- 5** Press 'Enter' to continue on (PPS371/B).

A copy of the PO header has been created and a new message number has been assigned to the existing PUNO in the batch entry.

Manually create a copy of the existing PO line

- 1** On (PPS371/B) specify the 'Line number' of the existing PO line.
- 2** Specify '9' in 'OPCD' and click 'Create' to add the copy of the existing PO line.

If you want to add data to the existing PO line, that is, addresses, charges, texts, and accounting, a copy of the PO line must be created in the batch entry at first to connect the new data to the existing PO line. Specifying 9 in 'OPCD' field creates a copy of the PO line where the copy of the existing line is uneditable but data can be added to the line. It is indicated by the plus sign in the columns on (PPS371/B) when data are added. When adding the addresses, charges, texts, and accounting, 'OPCD' must be set to 1 because the data are created for the copy of the existing PO line.

The manual input and management of 'OPCD' is only necessary when you create records manually. 'OPCD' is automatically set for the API transactions. When you use the Add-transactions to add data to the existing record, 'OPCD' is automatically managed for each transaction, and follows the same logic as 'OPCD' when operates interactively. For the CrtDltPOLine transaction, 'OPCD' is automatically set to 4 for the 'Delete' record.

Manually create an 'Add' record to add a PO line to the existing PO

- 1** On (PPS371/B) specify the 'Line number' of the existing PO line.
- 2** Specify '1' in 'OPCD' and click 'Create' to create the 'Add' record for the existing PO.

Manually create a 'Delete' record to delete a PO line of the existing PO

- 1** On (PPS371/B) specify the 'Line number' of the existing PO line.
- 2** Specify '4' in 'OPCD' and click 'Create' to create the 'Delete' record for the existing PO line.

Manually add an address for the existing PO line

- 1** Click F12='PO Batch Address' on the line to continue on (PPS372/B) from (PPS371/B).
- 2** Specify the 'PO address type' on the B panel and specify '1' in 'OPCD' field.
- 3** Click 'Create'.
- 4** Specify the 'Company name', 'Address lines', 'City', 'State', 'Postal code', and 'Country' on the E panel.

- 5 Press 'Enter' to continue on (PPS372/B).
- 6 Press F3 to continue on (PPS371/B).

A plus sign is displayed in the 'Address' column.

Manually add charges for the existing PO line

- 1 Click F15='PO Batch Charges' on the line to continue on (PPS375/B) from (PPS371/B).
- 2 Specify the 'Serial number' and 'Supplier costing element' on the B panel.
- 3 Specify '1' in 'OPCD' field.
- 4 Click 'Create'.
- 5 Specify the 'Costing markup' on the E panel.
- 6 Press 'Enter' to continue on (PPS371/B1).

A plus sign is displayed in the 'Charge' column.

Manually add accounting string for the existing PO line

- 1 Create a copy of the existing PO header and line on (PPS370/A) and (PPS371/B).
- 2 Click F11='Account Entry' on (PPS371/B).
- 3 Specify the accounting information in the pop-up window.
- 4 Press 'Enter' to continue on (PPS371/B1).

A plus sign is displayed in the 'A/C' column.

Manually add text for the existing PO line

- 1 Click F16='PO Batch Text' to continue on (PPS376) from (PPS371/B).
- 2 Specify the 'Text box' and 'Sequence number' on the B panel.
- 3 Specify '1' in 'OPCD' field.
- 4 Click 'Create'.
- 5 Press 'Enter' to continue on (PPS371/B1).
A plus sign is displayed in the text column.
- 6 Click F16='Finish Entry' to complete the batch entry.
The status is updated from 10 to 20.
- 7 Select the PO batch header record and then click F25='Validate'.
The status is updated from 20 to 25.
- 8 Select the PO batch header record and then click F30='Process'.

Work with batch PO data manually in the PO batch entry to update or change the existing PO line or PO line data

You can manually create update-records with the PO batch entry programs in the MX-tables which update and change the existing PO line data. These sections describe how to do this.

Manually update accounting string for the existing PO line

- 1** Create a copy of the existing PO header and line on (PPS370/A) and (PPS371/B).
- 2** Click F11='Account Entry' on (PPS371/B).
- 3** Specify the accounting information in the pop-up window.
- 4** Press Enter to continue on (PPS371/B1).

Manually update an address for the existing PO line

- 1** Create a copy of the existing PO header and line on (PPS370/A) and (PPS371/B).
- 2** Specify 'PO address type' on the B panel and specify 2 in 'OPCD' field.
- 3** Click 'Create'.
- 4** Specify the changes on the E panel for 'Company name', 'Address lines', 'City', 'State', 'Postal code', and 'Country'.
- 5** Press Enter to continue on (PPS372/B).
- 6** Press F3 to continue on (PPS371/B).

A plus sign is displayed in the 'Address' column.

Manually update charges for the existing PO line

- 1** Create a copy of the existing PO header and line on (PPS370/A) and (PPS371/B).
- 2** Specify 'Serial number' and 'Supplier costing element' on the B panel.
- 3** Specify '2' in the 'OPCD' field.
- 4** Click 'Create'.
- 5** Specify the changes for 'Costing markup' on the E panel.
- 6** Press Enter to continue on (PPS371/B1).

A plus sign is displayed in the 'Charge' column.

Manually update a PO line on the existing PO

- 1** Specify the 'Line number' of the existing PO line on (PPS371/B) .
- 2** 2. Specify '2' in the 'OPCD' field.
- 3** Click 'Create' to create the update-record for the existing PO.
- 4** Specify the changes for the PO line in panels E, F, G, and U.

Automatically add a PO line to the existing PO from the customer order flow

Adding PO lines or PO line data can be automated and you can use it to automatically add a PO line to the existing PO from the customer order flow.

To do so, settings for Purchase Order Batch Entry are appropriately adjusted to automation in the purchase order batch origin. It is used in the field 'Batch origin - pur planning' (WPBAO1) on 'Settings – Purchasing' (CRS780/H).

The appropriate settings for 'Purchase Order Batch Origin. Open' (PPS090/E) used on (CRS780/H) to facilitate automatically adding a PO line to an existing PO from the Customer order flow are:

- Parameter 10 'No. series' set to 1.
- Parameter 20 'Auto level' set to 2.
- Parameter 30 'Process mtd' set to 1.
- Parameter 40 'Del method' set to 2.
- Parameter 50 'Existing PO' set to 1.

Manually convert to a new record

You can use related option 45='Convert to new' when you want to add or delete existing PO lines or PO line data, but the existing PO record no longer allows for changes.

After running 'Convert to new', you can see a message informing that a new purchase order number has been created in the batch entry. The pre-existing 'Message number' (MSGN) will be re-used.

The new record has 'Entry code for purchase order batch' (PBEC) equal to 0 and 'Operation code for purchase order batch' (POBO) equal to 0, indicating it is a new entry and will not be added to the existing PO record. Data will be copied over from the previous record in status 23, to the new record.

'Convert to new' is only allowed for a record with 'PBEC' equal to 1 and 'POBO' equal to 1, when the record is in status 23. It means that it can only be used on a batch entry which purpose is to add or delete existing PO lines, or existing PO line data.

- 1** On the B panel on (PPS370/B), right click a record and use a related option 45='Convert to new'.
Message will be displayed indicating which purchase order number has been created.
- 2** The new batch entry record is displayed on (PPS370/B).

Chapter 9: Supplier Evaluation and Statistics

Create and Display Supplier Statistics

This document explains how you create and display supplier statistics. It also explains how you print supplier statistics.

Outcome

Detailed supplier statistics are generated.

Uses

Use the supplier statistics to perform these actions:

- Summarize the totals for all the suppliers and period as well as a count of key factors for each supplier.
- Compare different suppliers based on the performance supplier value.
- Print and use for further analysis.

How the System Is Affected

The purchase statistics are updated in the MVENST file.

Before you start

The parameters in [Define Settings for Supplier Evaluation and Statistics](#) on page 373 must be defined.

Follow These Steps

Create Supplier Statistics

- 1 Start 'Supplier Statistics. Create' (PPS435).
- 2 Press F13 to open the P panel. Set the opening panel as B and press Enter.
- 3 On the B panel, enter the report version and click Create.
Report versions are stored under optional IDs in a separate file that contains sets of selections and sorting parameters for created reports.
- 4 On the E panel, enter the supplier and the period.
Two different period ranges can be selected.
- 5 Press Enter to return to PPS435.

- 6 On the B panel, select the created record and then select option 9 = Run to display the E panel again.
- 7 Enter the supplier and the period.
- 8 Press Enter.
The job is submitted.

Display Supplier Statistics

- 1 Start 'Supplier Statistics. Display' (PPS440).
- 2 Press F13 to open the P panel. Set the panel sequence as EFG, enter the maximum number of records, and select one of the options in 'Column display'.
'Column display' indicates how totals in statistics columns must be calculated and presented.
The valid alternatives are:
 - 0 = Not displayed
 - 1 = The cumulated total for all the record displayed on the screen
 - 2 = The average calculated for each column is displayed on the screen.
- 3 Press Enter.
- 4 On the B panel enter the supplier number, yearly statistics, and period (if sorting order 1 is used). Press Enter.
The placed orders and the invoiced value for the mentioned period are displayed.
Select the sorting order based on the way you want to display the data.
- 5 Select one of the records and then select basic option 5 = 'Display' to continue to the E panel.
 - Information is displayed about placed and reported purchase order lines and invoices during a specific period.
 - Order indicates how many purchase orders were entered for this period.
 - The purchase order lines are separated into three different priority classes:
 - 1= Extremely urgent
 - 2= Urgent
 - 3= NormalThese classes are connected to the priority specified on the purchase order line. The different priorities are defined in 'Purchase Order Priority. Open' (PPS230).
A parameter on the priority code controls whether the follow-up of delivery time values in the supplier statistics should be updated. This makes it possible to delete lines from a performance evaluation when the customer has not kept to the agreed lead time.
 - The invoice field indicates the number of invoices and lines booked during the period, the total invoiced amount, and incorrect invoices. The last field refers to the invoice remark reason in 'Supplier Invoice. Update Reported' (PPS400/E) and must be updated manually.
 - Scroll backward and forward between the periods using F7 (Scroll backward) and F8 (Scroll forward), respectively.
 - 6 Press Enter to continue to the F panel.
 - Details about delays, inspections, and claims during a specific period are displayed.
 - In the left column, the average delay days and average early days fields display the average time for delayed and early deliveries. The ranges are defined in 'Settings - Purchase Statistics' (PPS430).

- At the bottom of the left column the numbers of inspected batches as well as the quality inspection result are displayed.
- The delivery time discrepancy class 1-5 fields display the delivery time discrepancy for the closed lots. They are divided into different delivery time ranges depending on when the lot was delivered. An early cost of capital amount is calculated for the early deliveries based on the interest rate entered in 'Settings - Purchase Statistics' (PPS430).
- The value received field is calculated as: Received quantity * (Invoiced price - Discount)
- Information about closed claim errands during the period is displayed at the bottom of the right column. The number of automatically created claims, the total claim amount, and the number of manually created claims are displayed in the fields for the number of receiving claims, value claims, and number of other claims.

- 7** Press Enter.
- 8** Performance values for the supplier during the period are calculated and accumulated on the G panel. These values can be used as a measurement when different suppliers are evaluated.

- Five performance values are calculated, as follows:

SP Performance supplier

DP Performance delivery time

EDC Early Delivery Cost

DQ Delivery Quality

IQ Invoice Quality

- The Performance Supplier value (SP) is a summary performance value when the results of the four other values are taken into consideration. The optimal value of SP is 1 (the perfect supplier).
- The performance value is calculated by weighing the factors as delivery time (DT), delivery quality (DQ), invoice quality (IQ), and interest cost for early deliveries (EDC).

The formula is:

$$SP = K10 \cdot DP + K11 \cdot DQ + K12 \cdot EDC + K13 \cdot IQ$$

- K10-K13 are different weight factors indicating how important each aspect is to our business. If the quality aspects are very important, more important than the delivery quality, this factor will be given a higher priority. The different weights are preset in 'Parameters - Purchase Statistics' (PPS430) and are displayed on the bottom of the G panel. For more information about K-factors, See Managing Supplier Evaluation and Statistics.

- 9** Press Enter to return to PPS440/B.

Print Supplier Statistics

- 1** Start 'Supplier Statistics. Print' (PPS860).
- 2** On the E panel, you can select different selection fields, such as supplier group, quality class, and buyer.
- Two different period frames can be selected.
 - Sorting order can be marked, using numerical values. The lowest numerical value is given the highest priority.
 - Activate the 'Page break' check box to print totals at line breaks.
 - Activate the 'Tot' check box to print totals at line breaks.
- 3** Press Enter.

The printing job is submitted.

Define Settings for Supplier Evaluation and Statistics

This document explains how you define settings for supplier evaluation and statistics.

Outcome

The parameters that control supplier evaluation and statistics are defined.

These files are updated:

- Purchase Statistics (MPURST)
- Supplier Statistics (MVENST)

The parameters are used to display purchase statistics, summarize supplier statistics, supplier evaluation statistics, delivery time statistics, quality inspection statistics, and ABC classification.

Before you start

Program ID/Panel	Field	The field indicates ...
(PPS095/B)	Purchase order type	...an order type. The order type is a combined ID for the settings that determine how an order is processed in the processing flow during order entry.
(PPS095/K)	720 – Supplier performance effect	...if the purchase order should affect the supplier's performance evaluation.
(PPS095/K)	721 – Vendor statistics update	...if the vendor statistics need to be updated.
(CRS624/E)	ABC class supplier	...the supplier's ABC class. The ABC class is used to classify suppliers and is based on the yearly purchase volume when it is calculated automatically. You can also enter the ABC class manually (method 0).
(CRS624/E)	ABC method supplier	...the ABC class. Select the check box to update the ABC class automatically. Clear the check box to update it manually.
(CRS624/F)	Supplier statistics	...a check box. If the statistics should be calculated for the supplier; select the check box.
(CRS624/F)	Number of years of statistics	...the number of years for which the accumulated supplier statistics should be saved.
(PPS430/B)	Division	...a division. This is an ID for a legal unit within a company group. Division is a key value for the financial system in M3. One division can consist of several facilities. Facilities are used in material and production management and for purchasing purposes.

Program ID/Panel	Field	The field indicates ...
(PPS430/E)	Period type MPM/MAI	<p>...which period type (1-5) should be used in M3 MPM.</p> <p>Five period types can be defined using (CRS910). For each application, enter the period type.</p>
(PPS430/E)	Accumulation method - supplier performance	<p>...which method must be used when the accumulated supplier performance values for each supplier are calculated in the supplier statistics.</p> <p>These alternatives are valid:</p> <p>1 = Moving average</p> <p>2 = Exponential smoothing.</p> <p>The accumulated performance value is calculated according to the moving average method:</p> $Y(t) = (Y(t-1) + Y(t-2) + \dots + Y(t-n))/n$ <p>Y = Accumulated value for the current period.</p> <p>Y(t-1) = Accumulated value period t-1</p> <p>n = Number of periods included in calculation, as specified in the supplier statistics.</p> <p>The accumulated performance value is calculated according to the exponential smoothing method:</p> $Y(t) = (1-A) * Y(t-1) + A * Y$ <p>Y = Actual valued for period t.</p> <p>Y(t) = Accumulated value for the current period (t).</p> <p>Y(t-1) = Accumulated value period (t-1).</p> <p>A = Smoothing constant [0 to 1].</p>
(PPS430/E)	Delivery discrepancy days range 1 – 5	<p>...the start and the end values used to classify a purchase order with regards to its delivery time.</p> <p>The delivery discrepancy range is a classification similar to early deliveries, late deliveries or deliveries on time.</p> <p>Example:</p> <p>Six order lines have discrepancy days equal to -34, -13, 1, 0, 5 and 16. This in combination with this discrepancy range gives this classification:</p> <p>Discrepancy range 1 = (-999 to -15 days) = 1</p> <p>Discrepancy range 2 = (-14 to -6 days) = 1</p> <p>Discrepancy range 3 = (-5 to +5 days) = 3</p> <p>Discrepancy range 4 = (+6 to +14 days) = 0</p> <p>Discrepancy range 5 = (+15 to +999 days) = 1</p>
(PPS430/E)	Early delivery - cost of capital pct	...the interest rate that is included in the calculation of the cost that arises for early deliveries.

Program ID/Panel	Field	The field indicates ...
(PPS430/E)	Weighing factor K10	<p>...the weighing factor for delivery time performance used for supplier evaluation.</p> <p>You can enter a value between 0 and 1.</p> <p>Weighing factor K10 affects the supplier's performance evaluation along with K11, K12, and K13 according to this formula:</p> $(K10 * \text{delivery deviation}) + (K11 * \text{delivery quality}) + (K12 * \text{interest cost early delivery}) + (K13 * \text{invoice quality}) \text{ where,}$ $K10 + K11 + K12 + K13 = 1.$
(PPS430/E)	Weighing factor K11	<p>...the weighing factor for delivery quality used for supplier evaluation.</p> <p>You can enter a value between 0 and 1.</p> <p>Weighing factor K11 affects the supplier's performance evaluation along with K10, K12, and K13 according to this formula:</p> $(K10 * \text{delivery deviation}) + (K11 * \text{delivery quality}) + (K12 * \text{interest cost early delivery}) + (K13 * \text{invoice quality}) \text{ where,}$ $K10 + K11 + K12 + K13 = 1.$
(PPS430/E)	Weighing factor K12	<p>...the weighing factor for the relative cost of early deliveries in connection to supplier evaluation.</p> <p>You can enter a value between 0 and 1.</p> <p>Weighing factor K12 affects the supplier's performance evaluation along with K10, K11, and K13 according to this formula:</p> $(K10 * \text{delivery deviation}) + (K11 * \text{delivery quality}) + (K12 * \text{interest cost early delivery}) + (K13 * \text{invoice quality}) \text{ where, } K10 + K11 + K12 + K13 = 1.$
(PPS430/E)	Weighing factor K13	<p>...the weighing factor for invoice quality used for supplier evaluation.</p> <p>You can enter a value between 0 and 1.</p> <p>Weighing factor K13 affects the supplier's performance evaluation along with K10, K11, and K12 according to this formula:</p> $(K10 * \text{delivery deviation}) + (K11 * \text{delivery quality}) + (K12 * \text{interest cost early delivery}) + (K13 * \text{invoice quality}) \text{ where, }$ $K10 + K11 + K12 + K13 = 1.$
(PPS430/E)	Weighing factor K30	<p>...the weighing factor used while calculating the delivery quality.</p> <p>Factors K30, K31 and K32 collectively affect the delivery quality.</p> <p>K30 affects the number of approved lots with remarks.</p> <p>K31 affects the number of partly rejected lots.</p> <p>K32 affects the number of rejected lots.</p> <p>You can enter a value between 0 and 1. The sum of K30 + K31 + K32 = 1.</p>

Program ID/Panel	Field	The field indicates ...
(PPS430/E)	Weighing factor K4	<p>...the weighing factor used while calculating the interest costs for early deliveries.</p> <p>K4 indicates the weight that must be placed on the early deliveries, in regards to the overall supplier performance evaluation. The lower the value for factor K4, the lesser the emphasis given to early deliveries.</p> <p>You can enter a value between 0 and 1.</p>
(PPS430/E)	Period factor K2	<p>...a period factor, in days, used for delivery follow-up.</p> <p>K2 is a weighing factor that determines the number of delivery delays that affect the supplier performance evaluation.</p> <p>A higher number indicates a higher tolerance for delivery delays.</p>
(PPS430/E)	Weighing factor K5	<p>...the weighing factor used to calculate the invoice quality.</p> <p>K5 indicates the weight that must be placed on the supplier's invoice quality with regards to the overall supplier performance evaluation. The lower the value for factor K5, the lesser the emphasis given to invoice quality.</p> <p>You can enter a value between 0 and 1.</p>
(PPS430/E)	Number of periods in moving average calc	<p>...the number of periods used for the calculation of the accumulated supplier performance values according to the moving average calculation method.</p>
(PPS430/E)	Smoothing constant	<p>...the weight to be given between the previous period's value and the current period's value.</p> <p>The smoothing constant is used when calculating the accumulated supplier performance values according to the exponential smoothing method.</p> <p>You can enter a value between 0 and 1.</p>

Follow These Steps

- 1 Start 'PO Type. Open' (PPS095).
- 2 On the K panel, select 'Supplier performance effect' and 'Vendor statistics update'.
- 3 Start 'Supplier. Define Purchase & Financial' (CRS624) for a supplier.
- 4 On the F panel, select 'Supplier Statistics' and input the 'No of years of statistics'.
- 5 Start 'Settings - Supplier Statistics' (PPS430).
- 6 On the B panel, enter the division and select the Create option.
- 7 On the E panel, enter the period type MPM/MAI, accumulation method - supplier performance, delivery discrepancy days range 1-5, early delivery - cost of capital percentage, weighing factor K10, weighing factor K11, weighing factor K12, weighing factor K13, weighing factor K30, weighing factor K4, period factor K2, weighing factor K5, number of periods in moving average calculation, and smoothing constant.

- 8 Press Enter.

Display Delivery Time Statistics

This document explains how you show and print delivery time statistics. It also explains how you print the internal lead time and the transport lead time.

Outcome

Detailed delivery time statistics are generated and printed. The purchase statistics are updated in the MPURST file.

Use the delivery time statistics to perform these actions:

- Show a specified supplier's delivery times on delivered lines, for an item as well as in a summarized format.
- Check the supplier delivery status
- Check how the total order amount is divided.

Before you start

The parameters in [Define Settings for Supplier Evaluation and Statistics](#) on page 373 must be defined.

Follow These Steps

Display Delivery Time Statistics

- 1 Start 'Delivery Time Statistics. Display Detail' (PPS460).
- 2 On the B panel, enter the supplier number, facility, warehouse, priority, actual delivery date, number of discrepancy days, and scale.
- 3 Press Enter.
 - The Discrepancy days field indicates the difference in days between actual delivery date and planned delivery date.
 - A negative value indicates an early delivery and a positive value a delayed delivery.
 - The percentage displayed on the panel is the discrepancy amount compared with the discrepancy factor in the header.
- 4 Select Option 15 = 'Summary' to move to 'Delivery Time Statistics. Display Sum' (PPS461).
- 5 On the B panel, enter the supplier number, facility, warehouse, priority, actual delivery date, number of discrepancy days, and scale.
- 6 Press Enter.
 - The summarized delivery time statistics is displayed.
 - An optimal delivery time performance must have all orders (100%) in the middle, interval 0-0.

Print Delivery Time Statistics

- 1** Start 'Delivery Time Statistics. Print' (PPS870).
- 2** On the E panel, enter the supplier group, supplier number, buyer, order type, facility, warehouse, priority, item type, item group, procurement group, ABC classification, volume, item number, and number of discrepancy days.
 - Two different ranges can be selected.
 - Sorting order can be marked using numerical values. The lowest numerical value is given the highest priority.
 - Activate the 'Page break' check box to print totals at line breaks.
 - Activate the 'Prt Tot' check box to print totals at line breaks.
 - Activate the 'Prt Pct' check box if percentages must be included when the total is printed.
- 3** Press Enter.

The printing job is submitted.

Print Internal Lead Time

- 1** Start 'Purchase Order. Print Internal Lead Time' (PPS680).
- 2** On the E panel, enter the facility, warehouse, buyer, supplier number, order type, purchase order number, receiving date, goods receiving method, and item number.
 - Two different ranges can be selected.
 - Sorting order can be marked using numerical values. The lowest numerical value is given the highest priority.
 - Activate the 'Page break' check box to print totals at line breaks.
- 3** Press Enter.

The printing job is submitted.

Print Transport Lead Time

- 1** Start 'Purchase Order. Print Transport Lead Time' (PPS685).
- 2** On the E panel, enter the facility, warehouse, buyer, supplier number, order type, purchase order number, receiving date, goods receiving method, and item number.
 - Two different ranges can be selected.
 - Sorting order can be marked using numerical values. The lowest numerical value is given the highest priority.
 - Activate the 'Page break' check box to print totals at line breaks.
- 3** Press Enter.

The printing job is submitted.

Display Purchase Statistics

This document explains how you display purchase statistics. The detailed purchase statistics contain information about the closed purchase order lines for each item or for each supplier.

Outcome

Detailed purchase statistics are generated. The purchase statistics are updated in the MPURST file.

Use the purchase statistics to perform these actions:

- Access the old and closed purchase orders
- Evaluate the performance of different suppliers
- Follow up on purchases of different items
- Print and use for further analysis.

Before you start

The parameters in [Define Settings for Supplier Evaluation and Statistics](#) on page 373 must be defined.

Follow These Steps

Display Detailed Purchase Statistics

- 1 Start 'Purchase Statistics. Display' (PPS450).
- 2 Press F13 to activate the P panel. Set the opening panel to A and the panel sequence to EFGH1.
- 3 Press Enter.
- 4 On the B panel, enter the item number, buyer, invoice date, facility, and warehouse (for sorting order 1 and 2).
- 5 On the B panel, enter the supplier number, buyer, item number, invoice date, facility, and warehouse (for sorting order 3).
- 6 On the B panel, enter the supplier number, buyer, purchase order number, purchase order line, facility, and warehouse (for sorting order 4).
- 7 Press Enter.
- 8 You can view this information in the panels indicated:
 - Detailed date and quantity information about the purchase order line: E panel.
 - Price and delivery information: F panel.
 - Information about an item: G panel.
 - The summary of the statistics for the purchase order line: H panel. The 'Discrepancy days' field is calculated in number of working days.
- 9 Press Enter to continue to 'Purchase Order. Display Invoice Trans' (PPS410).

Display Purchase Order Invoice Transaction

- 1 On the B panel, the purchase order number, supplier number, warehouse, item number, and status are automatically retrieved.
 - The supplier invoice numbers that are booked against this purchase order line are displayed.
 - If the entire quantity on the purchase order line is invoiced on the same invoice, only one entry appears in this program.
 - Status 80/85 on an order line means that invoice reporting has started but the whole quantity has not been invoice-reported.

Print Purchase Statistics

- 1** Start 'Supplier Quotation. Print Price Evaluation' (PPS865).
- 2** On the B panel, enter the supplier group, supplier number, buyer, order type, facility, warehouse, priority, item type, item group, procurement group, ABC classification, volume, item number, and currency.
 - Two different ranges can be selected.
 - Sorting order can be marked, using numerical values. The lowest numerical value is given the highest priority.
 - Activate the 'Page break' check box to print totals at line breaks.
- 3** Press Enter.

The printing job is submitted.

Display Quality Inspection Statistics

This document explains how you display quality inspection statistics. It also explains how you print quality inspection statistics and quality analysis statistics.

Outcome

Detailed quality inspection statistics are generated. The purchase statistics are updated in the MPURST file.

Use the quality inspection statistics to perform these actions:

- Display the results from the reported quality inspections, both for specific suppliers and for specific items.
- Print and use for analysis.

Before you start

The parameters in [Define Settings for Supplier Evaluation and Statistics](#) on page 373 must be defined.

Follow These Steps

Display Quality Inspection Statistics

- 1** Start 'Inspection Statistics. Display' (PPS465).
- 2** Press F13 to open the P panel. Set the opening panel to B and press Enter.
- 3** On the B panel, enter the supplier number, entry date, QI result ranges, facility, and warehouse (for sorting order 1).
- 4** Press Enter.
 - Different inspection results in reporting date order for a specific supplier are displayed by the quality inspection statistics.
 - The QI result field indicates the quality inspection result.

The alternatives are valid:

0 = Partially reported approved quantity (in case of material shortages)

1 = Fully approved

2 = Approved with remarks

3 = Partially rejected

4 = Rejected.

- 5 On the B panel, enter the item number, entry date, facility, warehouse, service process, and supplier-Select the QI result ranges (for sorting order 2).
- 6 Press Enter.
The inspection result and the reason for rejection are displayed.
- 7 On the B panel, enter the item number, entry date, facility, warehouse, service process, supplier, and quality inspection task. Select the QI result ranges (for sorting order 3).
- 8 Press Enter.
The inspection result, together with the service process, supplier, and quality inspection task are displayed.
- 9 Select one of the records, and click Display to continue to the E panel.
This information is displayed: Receiving number, supplier number, manufacturer, item number, service process, service, QI task, QI result, reject reason, approved quantity, rejected quantity, inspected quantity, QI/rejected quantity, quantity in stock approved with remark, and QI level.

Print Quality Inspection Statistics

- 1 Start 'Inspection Statistics. Print' (PPS880).
- 2 On the E panel, enter the facility, warehouse, supplier group, supplier number, responsible, buyer, order type, item type, item group, procurement group, ABC class, volume, and item number.
 - Two different period ranges can be selected.
 - Sorting order can be marked, using numerical values. The lowest numerical value is given the highest priority.
 - Activate the **Page break** check box to print totals at line breaks.
- 3 Press Enter.
The printing job is submitted.

Print Quality Analysis Statistics

- 1 Start 'Inspection Statistics. Print Analysis' (PPS875).
- 2 On the E panel, enter the facility, warehouse, supplier group, supplier number, responsible, buyer, order type, item type, item group, procurement group, ABC class, volume, and item number.
 - Two different period ranges can be selected.
 - Sorting order can be marked, using numerical values. The lowest numerical value is given the highest priority.
 - Activate the **Page break** check box to print totals at line breaks.
 - Activate the **Prt Tot** check box to print totals at line breaks.
 - Activate the **Prt Pct** check box if percentages must be included when the total is printed.
- 3 Press Enter.
The printing job is submitted.

Managing Supplier Evaluation and Statistics

This document explains how to perform supplier evaluation and how supplier statistics can be used to evaluate the performance of different suppliers.

Outcome

Use supplier evaluation and statistics to analyze this information:

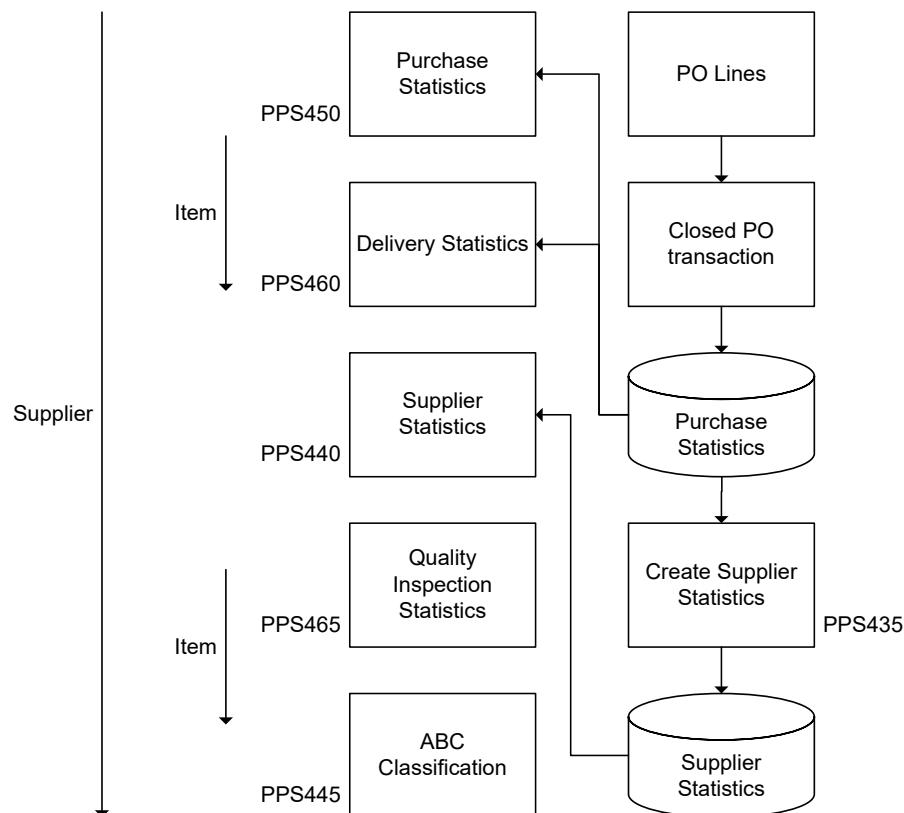
- The quantity of a particular item that was bought in a year compared to the previous years
- The delivery precision of the supplier and its effectiveness
- The number of goods and which goods were rejected during quality inspection
- The relationship between invoiced prices and purchase order prices.

For more information, refer to the related documents listed in the See also section.

Before You Start

The parameters in [Define Settings for Supplier Evaluation and Statistics](#) on page 373 must be defined.

Follow These Steps



1 Purchase Statistics

Purchase statistics contain information about the closed purchase order lines for each item or for each supplier. Depending on how this value is set in 'Purchase Order Types. Open' (PPS095), the purchase order line is closed. It is ready for statistics upon completion of put-away or ready for statistics after invoice reporting.

You can re-create purchase statistics in 'Purchase Statistics. Re-Create' (PPS910).

2 Delivery Statistics

Delivery time measurement enables you to view a supplier's delivery performance on a summarized or detailed level. The statistics are available both on screen and as a report.

On the summarized level, you measure the delivery performance of the supplier by filtering the possibilities of order priority, delivery time period, discrepancy days, facility, and receiving warehouse.

On the detailed level, the same information is measured in a combination of item and supplier. It is displayed on 'Delivery Time Statistics. Display Detail' (PPS460/B).

In the reports, you can display the statistics in the supplier's language. This makes it easy to be in constant contact with the suppliers and discuss appropriate measures for improvements and results.

The statistics report enables you to compare the current and previous half-year periods in order to preview and monitor trends.

The statistics contain aggregated information on the number of purchase order lines and supplier evaluation. This is displayed in 'Supplier Statistics. Display' and printed in 'Supplier Statistics. Print' (PPS860).

3 Supplier Statistics

Supplier evaluation statistics contain measurements of four factors:

- Delivery time
- Quality
- Invoice quality
- Interest expense for early deliveries.

You can measure the progress of individual suppliers, as well as measure suppliers against each other based on the past performance by creating key performance indicators.

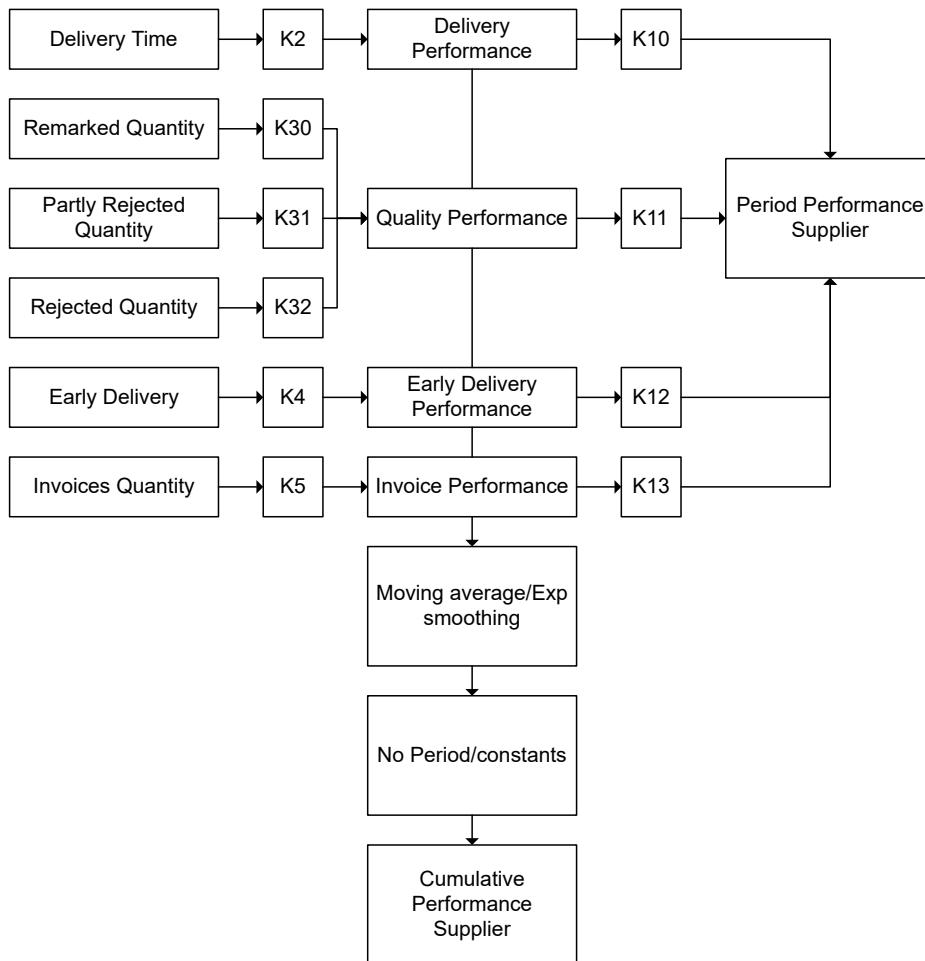
These key factors are calculated automatically according to the setup in 'Settings – Purchase Statistics' (PPS430).

The setup in PPS430 is the input to calculate a summary performance value for the suppliers during a specific period. The optimal value of the performance is 1 (Perfect Supplier). The performance value is calculated by weighting these factors:

- Delivery time (K10)
- Interest cost for early deliveries (K11)
- Delivery quality (K12)
- Invoice quality (K13)

The factors K10-K13 are weights that reflect the importance of each factor. For example, if all the factors are equally important to the company, you can set the factors to 0.25 each. If the delivery times and the delivery quality are the only factors that are important, you can set each of these to 0.5 and let the other two be zero.

Connection between K Factors



Period factor K2 is used to calculate delivery performance. K2 indicates the tolerance level for delivery delays. The higher the value on this field, in days, the more tolerant it is to supplier delays. The formula is:

$$\text{Delivery Performance} = \frac{1 - \text{Number of Delay days}}{\text{Number of Closed Orders} \times \text{K2}}$$

K30-K32 are factors used to calculate the delivery quality.

$$\text{Quality Performance} = \frac{1 - (\text{K30} \times \text{NoAppr lots} + \text{K31} \times \text{NoPartlyRejLots} + \text{K32} \times \text{NoRejLots})}{\text{Number of lots}}$$

The factors K4 and K5 indicate the tolerance for early deliveries and invoice quality.

Cost Early Delivery	
Performance Early Delivery = 1 – K4 x	
Value Received	
Number of incorrect Invoices	
Invoice Performance = 1 – K5 x	
Number of Invoices	

4 Quality Inspection Statistics

Quality inspection is performed in 'Inspection Statistics. Display' (PPS465), 'Inspection Statistics. Print' (PPS880), and 'Inspection Statistics. Print Analysis' (PPS875).

(PPS880) offers a detailed list of inspections performed with a description of the results. Reports can be selected using language codes.

(PPS875) is a detailed list displaying two periods in parallel; facilitating supplier development analysis. You can select reports using language codes.

5 ABC Classification

You can use ABC classification as a method to classify suppliers. Based on the yearly purchase volume, ABC classification is calculated automatically. It can also be updated manually.

The suppliers are classified into different groups depending on different aspects such as quality and delivery time.

The ABC classification details are updated in 'Supplier. Define Purchase & Financial' (CRS624). If automatic update of the ABC Class field is selected, the update is done in 'ABC Classification Supplier' (PPS445).

The details of the ABC classification can be printed in (PPS445).

Update and Print ABC Classification for Suppliers

This document explains how you update and print an ABC classification for suppliers.

Outcome

The suppliers are classified into different groups depending on factors such as quality and delivery time.

Uses

Use the ABC classification to perform these actions:

- Classify suppliers based on the yearly purchase volume
- Print and use for analysis.

How the System Is Affected

ABC classifications are updated in the MPURST file.

Before you start

The parameters in [Define Settings for Supplier Evaluation and Statistics](#) on page 373 must be defined.

Follow These Steps

Update ABC Classification Statistics

- 1 Start 'Supplier. Define Purchase & Financial' (CRS624).
- 2 On the B panel, select the supplier to be updated and then select the Change option.
- 3 On the E panel, enter the 'ABC class – supplier' and select the 'ABC method – supplier'.
 - The field 'ABC method – Supplier' indicates how that the ABC class is updated. The valid alternatives are:
0 = Manually
1 = Automatically
 - The option automatically indicates that classes are defined automatically when the program 'ABC Classification Supplier' (PPS445) is run.
 - The calculated or manually defined ABC class is entered in the ABC class supplier field.
- 4 Press Enter.

Print ABC Classification Supplier

- 1 Start 'ABC Classification Supplier' (PPS445).
- 2 Press F13 to open the P panel. Set the opening panel to E and press Enter.
- 3 On the E panel, enter the supplier type, supplier group, supplier number, search key, quality class, buyer, and ABC class for supplier. Press Enter.
 - Two different period ranges can be selected.
 - The valid alternatives for supplier types are.
0 = Supplier
1 = Agent
2 = Only payee
3 = Supplier group
5 = Forwarding agent
6 = Insurance company
8 = Miscellaneous suppliers
- 4 On the F panel, enter the period ranges, ABC classification basis, update, update method 0, class A-J, and report text.
 - The ABC classification indicates a value used as the basis for calculating the ABC class. The valid alternatives are:
1 = Invoiced amount for period

2 = Number of order lines in period

3 = Accumulated supplier performances valid at a specific period.

- If the last alternative is selected, the 'From' or 'To' period ranges must be either empty or equal.
- The update field determines if the calculation updates the supplier or it is simulation. A report is printed listing proposed ABC classes.
- Select the "Update method 0" check box to manually update the suppliers.
- The ABC class can be divided into a maximum of 10 different subclasses using the Class A to J fields. It is not limited to three classes as the name ABC class indicates. The sum of the percentages entered in the fields must be equal to 100.

5 Press Enter.

The printing job is submitted.

Chapter 10: Grower Contract Management

Grower Contract Management (GCM) - Overview

Companies buying crops, livestock, or aqua culture from their suppliers often do this based on an agreement stating what to deliver, how much to deliver, what quality, where to deliver from, and how the settlement for the delivery will be calculated against a complex pricing model.

The final settlement with the grower is a self-billing process where the receiver calculates what to pay the supplier. A settlement document is produced listing the details of what has been delivered and what additions or deductions have been made to the base price. Both the base price and the bases for additions or deductions are often changed after an initial settlement and payment, and this requires the settlement to be re-calculated a number of times, and the difference to be paid or claimed.

The Grower Contract Management (GCM) module supports this process by leveraging procurement functionality that has been tailored specifically to the needs of the industry and the settlement process.

Purpose

This document describes how the GCM module is used to manage the settlement process of those companies engaged in the purchase of crops, livestock, or aqua culture and covers these topics:

- GCM module settings and configuration prerequisites
- Agreement level configuration and capability
- Calculation level setup and configuration
- Supported settlement calculations, incorporating this data:
 - Prerequisite configuration
 - Inputs
 - Outputs
- Settlement process for a grower agreement including GCM specific processes, and procedures

GCM company / division setup

To activate the full functionality of the GCM module, parameter 409-'Grower Contract Management' must be selected on 'Company . Connect Division' (MNS100/K) for the required company and division.

To get the full benefit from the GCM module, parameter 407-'Quality Management' must also be set to Quality Management System (QMS).

Parameter 065-'Create accounting entries at goods receipt' should be 1 or 2 on 'Settings – Cost Accounting' (CAS900/H). Parameter 'Transfer to auto-generated invoice' should be set to 0 in 'Purchase Agreement. Open

for Self-Billing' (PPS112). This is to ensure that all charges have been calculated and accounted before the 'Self-billing' or 'Request for supplier invoice' agreement is generated.

When the GCM module is active, you can decide on these functionalities:

- Differentiation of GCM agreements
- Costing model for purchase agreements
- Block settlement
- Settlement Printing Model
- Recalculate settlement for a grower agreement
- Override VAT on a grower agreement

Differentiation of GCM agreements

To ensure that the required business rules, processing, and workflow specific to the GCM module is enforced, the agreements used by the GCM module are categorized as 'Grower Agreements' and set up with invoice type 'Self Billing' or 'Request for Supplier Invoice' in 'Purchase Agreement Type. Open' (PPS110).

See [Agreement Type - Purchasing](#) on page 255.

Support for agreement process tracking

In addition to the standard set of statuses available to procurement and because of the complexities involved in the settlement process, you must determine the current status of the grower agreement and the number of additional statuses utilized. Some of the statuses are available as user-defined status fields and enable the user to modify the state change to suit the needs of their own process. These agreement settings can be viewed and managed from 'Purchase Agreement. Open' (PPS100).

See [Create Agreements with Supplier](#) on page 256.

See [Status - Supplier Agreement](#) on page 221.

Specification of product location as part of agreement

To ensure complete traceability of the farmed product, the originating physical location of the product is categorized as a supplier level address type. Specifically, address type 04 is used to define the origin address, which is connected to purchase order proposals and purchase order lines according to the selections made in 'Supplier Address Sel Table. Open' (PPS036), accessed through related option 11 in 'Available Object Ctrl Parameters. Open' (CMS016).

The origin address can be manually changed on 'Planned Purchase Order. Open' (PPS171/E). For a purchase order line the origin address can be changed on 'Purchase Order. Open Lines' (PPS201/E). The change can be done if the status of the line has not reached 31.

If more than one origin address per supplier exists, control table records need to be created for Supplier Address (SAORAD) in 'Generic Object Control Table. Open' (CMS017). Selection rules must also be defined in (PPS036).

If only one origin address is specified for a supplier, the origin address is automatically retrieved.

Origin address can be included in the Group ID for purchase agreements, and become one of the selection criteria when a purchase order is connected to an agreement.

Specification of user defined information for agreements

To facilitate customization specific to business requirements, a number of custom fields can be associated with an item and a supplier; and the grower agreement header and line.

When a purchase agreement is created for a supplier, the custom fields are copied from the supplier to the agreement header. The custom fields copied to the header are local to the header and can be maintained by using related option 16 in 'Purchase Agreement. Open' (PPS100).

When a line is added to a purchase agreement, the custom fields are copied from the item to the agreement line. The custom fields copied to the line are local to the line and can be maintained by using related option 13 in 'Purchase Agreement. Open Lines' (PPS101). Custom fields are copied only if item number is selected in the **Purchase Agreement Selection** field.

These custom fields are also available for use in the purchase costing model and formulas.

See [Custom Fields](#) on page 107.

Costing model for grower agreement

To help with the complex settlement calculations often required for grower agreements, the costing model is associated directly with the agreement line in (PPS101). It is then carried forward to the purchase order and eventually used for the price calculation in the settlement process.

To enable this association, control table records must be created for 'Costing Model Sel Table. Open' (PPS038) by using (CMS016) and (CMS017).

See [Purchase Order](#) on page 137.

Base origin for grower agreement

To ensure that the seeds, purchased by the grower to grow a product such as wheat or corn (the base origin), can be traced back to their origin, and also to ensure that all parties involved in the agreement such as the processor, government and the eventual customer, have visibility of this, the base origin must be associated with the grower agreement at line level.

The base origin can either be associated with the agreement line manually in (PPS101) or through a customer order created by the batch order entry API and connected to the agreement through the OIS100MI/AddBatchLnInfo.

See [Base Origin for Grower Agreement](#) on page 399.

See [Create Agreements with Supplier](#) on page 256.

Define attribute

A number of weight columns are required for price calculations in a grower settlement. Examples are dry weight, net weight, and weight per volume. The calculation of these weights must be configurable and recalculated each time the base values are changed (or value requested). The values are not open for manual maintenance. A parameter for dynamic calculation of attribute values is available to support this. The value to calculate is defined in the program for default attribute values. Data fields specific to the dynamic calculation are available.

See .

See .

See .

Define deductions and additions

Several of the settlement calculations supported by the GCM module are derived from matrix based additions, deductions and selection values that can be defined in 'Selection Matrix. Open' (PDS090). For example, if a results value is within a predefined range, an amount to add or subtract can be specified based on the terms and conditions agreed at the outset of the agreement.

See [Selection Matrix - Procurement](#) on page 401.

See [Create Selection Matrix - Procurement](#) on page 401.

Configure formula for grower agreement

Formula functionality in 'Formula. Open' (CRS570) can be used to cater for the complex settlement calculations often required for grower agreements in these ways:

- The result of a matrix table look up can be re-used as one of the factors in a formula.
- Custom fields defined for a supplier or item can be used as part of a formula.
- The difference between a date range as a number of days can be used in a formula against an applicable factor type.
- The delivered quantity and weight can be used as base for calculation of various other weight values.

See .

See [Selection Matrix - Procurement](#) on page 401.

See [Create Selection Matrix - Procurement](#) on page 401.

Configure pricing model for grower agreement

Pricing functionality on 'Costing Element. Open' (PPS280/E) can also be used to configure the pricing model to the specific needs of the settlement process in these ways:

- Configurable custom columns can be used to customize the pricing model in a way that satisfies the needs of the settlement process.
- Formula can be used to calculate the amount of money to pay the grower.
- Formula can be used to calculate the costing quantity.
- A number of different cost operators can be used to define the required costing calculation.

See .

Override VAT on a grower agreement

In support of cases where the eventual consumer of grower and commodity produce may differ, and the resulting requirement for VAT variation, flexibility to override the fixed VAT code on Purchase costing elements is available.

Where object control parameters are configured for VAT override in (CMS016) and a costing model is specified at line level on an agreement configured as 'Grower Agreement Type' in (PPS110), the VAT code that is usually

retrieved from 'Costing Element. Open' (PPS280) is overridden based on an alternate costing model specified in 'VAT Exception. Open' (TXS020).

See [Override VAT on a Grower Agreement](#) on page 411.

Register quality tests against a grower agreement

QMS based Quality Inspection (QI) specifications can be associated with grower agreements at line level in (PPS101) to ensure that all required tests are executed during the growing period at the area of origin, and connected with the agreement line.

Note:

We recommend receiving purchased goods only by using the 'Direct put-away' method for items configured with **Location characteristics** set to 1-'Bulk', which are used in a grower contract process. This recommendation applies regardless of QMS being activated or not.

The reason for this recommendation is that changing the lot number to a static '9999999999-99' at any point in the process can lead to potential issues in charge calculation and subsequent update of the self-billing status.

See .

See [Create Agreements with Supplier](#) on page 256.

Fulfillment of agreement header and line

Where the parameter 'Auto fulfillment' is selected in (PPS110), if the quantity received during goods receipt is greater than or equal to the agreed quantity, the status of the agreement line will be set to 80.

You can also manually set this status to 80-'Fulfilled' at agreement line level on (PPS101/E) and at agreement level on 'Purchase Agreement. Open' (PPS100/E).

Following this, the accumulated received quantity are displayed on panels B and E of (PPS101).

See [Create Agreements with Supplier](#) on page 256.

See [Status - Supplier Agreement](#) on page 221.

Block settlement

To ensure that all required test results and information have been received prior to settlement of a grower agreement through the QMS, it is possible to specify a result as mandatory and block the settlement process, either manually or automatically, until such times as all required information has been received and mandatory tests have passed.

See [Block Settlement](#) on page 406.

See .

See .

Settlement printing model

The settlement printing model, managed in 'Settlement Printing Model. Open' (PPS385), has two purposes:

- To ensure that the attribute values are displayed to the user in a logical order.
- To control what attributes and quality results are printed on the settlement document and in what order.

The setting is performed per purchase costing model, allowing a different outcome for each model.

See [Settlement Printing Model](#) on page 407.

See [Settlement Document](#) on page 408.

Create settlement for a grower agreement

When all required information concerning the goods receipt is in place, the status in 'PO Line. Display Received to Self-Bill' (PPS118) is set to 20 and no manual block exists.

The receipt is ready to be transferred as a proposal in 'Supplier Invoice Batch. Open' (APS450). This is performed in 'Suppl Inv Proposal. Generate for SB' (PPS116), where you can select what should be transferred.

The proposal is created with 'Invoice batch type' = 10 (Self-billing) in (APS450) if the invoice type is 'Self Billing' on the connected agreement in (PPS110). To create the actual settlement, the proposal must be verified, printed, and transferred to AP (Accounts Payable). All steps can be performed through related options or actions.

The proposal is created with 'Invoice batch type' = 15 (Supplier Invoice Request) in (APS450) if the invoice type is 'Request for Supplier Invoice' on the connected agreement in (PPS110). After the supplier invoice request is printed, the expectation is that the settlement has been agreed with the supplier and no more changes will be done. The supplier then sends an invoice.

If the settlement must be changed, the supplier invoice request must be reset to the 'New' status in (APS450), and then deleted. This action resets the status in (PPS118) to enable changes. A new supplier invoice request is transferred to (APS450) once (PPS116) has been generated.

Recalculate settlement for a grower agreement

Because the set of charges that make up a settlement may change both before and after the first settlement has been processed, the settlement will be recalculated around the changes received, and the difference (positive or negative), in charges between the current and previous self-bill invoice, will be charged or credited to the customer, and printed on the final settlement document.

If all required prerequisites have been met, and there is no settlement block in place, the settlement process is called when a change is registered against one of its' base constituents, where a base constituent is either an attribute or costing element.

Attributes can be either be changed in 'Lot/Serial Number. Open/Connect to Item' (MMS235) OR 'QI Request. Open' (QMS300), while costing elements can be changed manually in 'Costing Element. Open' (PPS280).

For other changes to the base of the settlement such as changes to a matrix or costing element, a re-calculation can be triggered for selected deliveries in 'Recalculation selection' (PPS283).

Goods receipt date is always used to recalculate attributes and charges.

See [Recalculate Settlement for a Grower Agreement](#) on page 409.

Deduct customer order invoices during grower agreement settlement

Where a company is engaged in a grower agreement with a farmer, the company often sell goods or services related to the fulfillment of the agreement. The value of these good and services can be deducted from the amount owed to the farmer during the invoicing and settlement process, as opposed to billing for them separately. To distinguish these customer invoices from invoices for goods not related to an agreement a dedicated payment method indicating 'paid by settlement' is available. If necessary, these amounts can also be reversed and canceled after they are invoiced by changing this payment method.

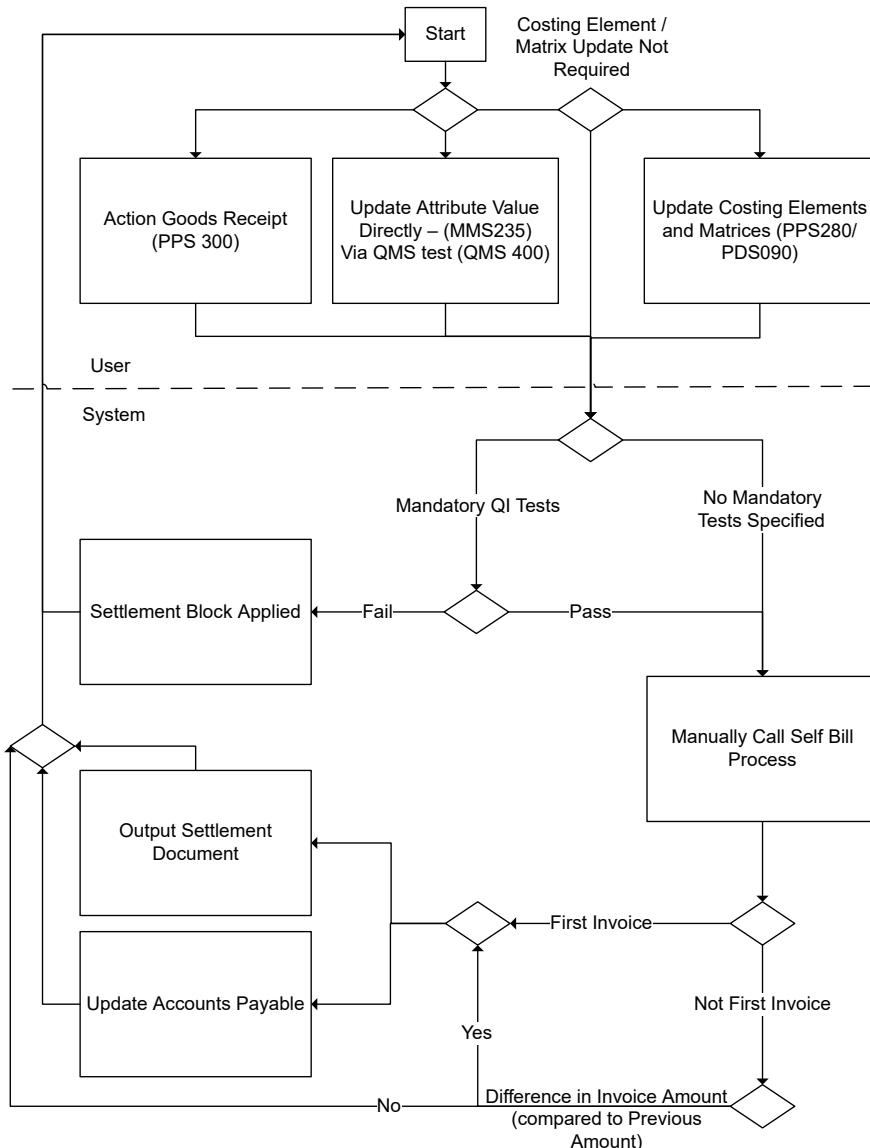
See [Deduct Customer Order Invoices during Grower Agreement Settlement](#) on page 412.

Process control for settlement in PPS118

To support the process of settlement and ensure that the required information is available, several related options are available in (PPS118).

See [Process Control for Settlement in PPS118](#) on page 415.

Settlement process for a grower agreement



Grower Contract Management (GCM) - Worked Examples

Supported Settlement Calculations

Below are a number of examples that demonstrate how different features of M3 Business Engine can be used in the settlement process for a Grower Agreement. The results can be used to display information online and/or in the settlement document. They can also be used as part of the price calculation when setting up

the module elements in 'Costing Element. Open' (PPS280). The examples are based on a processor buying grain from growers.

For all examples mentioned, attributes must be connected to the Item via an Attribute Model or via a Quality Specification. Costing elements must be connected to a Costing Model that again is connected to the Agreement Line.

A task can be solved in different ways using different combination of Attributes, Matrixes, Formulas, Custom fields and Costing Elements. It is important to remember that one tool can provide information to another tool, where the required information is not available. For example, although there is no option to use Custom field information from agreement in a matrix lookup, a custom field can be used in a formula, that again can be used as a matrix selection column.

1. Calculate quantity at basis dry weight from received quantity

This example describes how to calculate theoretical dry weight of grains based on the received weight, the measured water content, and pollutions in the received batch of grain. The formula that is used is:

Quantity Basis Dry Weight = (Delivered Quantity – (Deliver quantity * (100-%foreign objects)/100) * (100 – water content %)/(100-basis water %)

1 Pre-requisite configuration:

- A numeric attribute to hold measured water content percentage is created in 'Attribute. Open' (ATS010). It is recommended that this is a **quality controlled** attribute.
- A numeric attribute to hold measured pollution and foreign object weight or percentage content is created in (ATS010). It is recommended that this is a **quality controlled** attribute.
- A formula to calculate dry weight using the received weight, minus the weight in the attribute for foreign objects, and, reduced by the value held by the attribute for water content, is created in 'Formula. Open' (CRS570) .
- A numeric attribute to hold the calculated dry quantity is created in (ATS010). The **dynamically calculated** option must be selected for the attribute.
- The default value for the attribute for dry quantity is set to the formula created in 'Attribute Matrix. Enter Default Values' (ATS030).

2 Inputs:

- Quantity received on purchase order, captured in 'Purchase Order. Receive Goods' (PPS300).
- Test result of water content, captured in 'M3 QI Test Results. Open' (QMS400).
- Test result of pollution, captured in (QMS400).

3 Outputs:

- The formula can be used as a quantity factor in a price calculation using the costing operators 15 "Price per calculated quantity", 26 "Minimum price" and 27 "Maximum price".
- The attribute for calculated dry quantity can be used for informational purposes in the settlement document and online in 'Purchase Order. Connect Charges' (PPS251).
- The attribute for water content can be:
 - Used as matrix lookup in example 2.
 - Included in the settlement document when included in the Settlement Printing Model.

2. Price deduction for drying grain to standard water content

This example describes how to register price deduction where the water content is higher than the basis water content. The example uses the result of the "calculation of quantity to basis water" content.

The grower will get a price deduction based on a table lookup using water content percentage rounded to 0.5%. Deduction is: Quantity Basis Dry Weight * result of table look-up. The table to look-up differs per item group. The table below is an example of price deduction per weight unit dependent on water content in percent.

Water Content	Markup
15,5	-3,5
16,0	-4,5
16,5	-6,7
17,0	-8,7
17,5	-14,4
18,0	-16,7
18,5	-20,5

1 Pre-requisite configuration:

- A formula using the attribute for water content is created to calculate water content and rounded to the nearest 0.5%.
- A numeric **dynamically calculated** attribute is created using the formula above as the default value.
- A matrix per item group to hold the markup per half percent water content is created. The matrix should use the attribute above as selection key.
- A formula per item group is created, returning the value from the matrix, for the same item group.

2 Inputs:

- Quantity received on purchase order, captured in (PPS300).
- Test result of water content, captured in (QMS400).
- Updated price markup in matrixes, captured in (QMS400).

3 Outputs:

- The formula returning the matrix can be used as a formula in costing markups in 'Costing Element. Enter Values' (PPS282).
- The costing element should use item group as cost distribution key on 'Costing Element. Open' (PPS280/E).
- The costing element should use costing operator 15 and the formula for calculating basis dry weight as quantity.

3. Correction of bulk density based on water content.

This example describes how to calculate corrected bulk density based on water content. The corrected bulk density is calculated using bulk density for basis dry weight, corrected by a weight table for different intervals of water content. A matrix per grouping is required where the correction depends on any kind of product grouping. The table is an example of this:

Water content less than	Weight correction
15,5	0
16,0	1
17,0	2
18,0	3
19,0	4
20,0	5
21,0	6
22,0	7
23,0	8
24,0	9
25,0	10
26,0	11
greater than 26	12

1 Pre-requisite configuration:

- A matrix holding the weight correction is created. The matrix should use the attribute for water content as selection key and the **Value in range** parameter set for the lookup to the correct water content interval.
- A formula is created that returns the calculated bulk density, based on the base bulk density and corrected with the value from the matrix for the same item group.
- A numeric **Dynamically calculated** attribute is created for the corrected bulk density using the formula above as default value.

2 Inputs:

- Test result of water content, captured in 'M3 QI Test Results. Open' (QMS400).
- Updated values in the weight correction matrix, captured in 'Selection Matrix. Open' (PDS090).

3 Outputs:

- The formula returning the matrix can be used as formula in costing markups in (PPS282).
- The costing element should use item group as cost distribution key on (PPS280/E).
- The costing element should use costing operator 15 and the formula for calculating basis dry weight as quantity.
- The attribute for bulk density can be included in the Settlement Document when included in the Settlement Printing Model.

4. Calculation of interest based on delay in settlement calculation.

This example describes how to add interest to a settlement when the duration from delivery to settlement has passed an agreed number of days.

1 Pre-requisite configuration:

- A custom field is connected to the agreement via the supplier, stating number of days allowed before a settlement should be done.
 - A custom field is connected to the agreement via the supplier stating the interest rate.
 - A formula is created that returns the interest percentage in the custom field, where the calculation of current date minus received date is greater than the allowed date given in the custom field.
- A cost element of type 06 is created – **% of net/net so far** - using the above formula as costing markup.

2 Outputs:

- A possible price line in the settlement for delayed settlement interest.

Base Origin for Grower Agreement

Purpose

This document explains the process by which the base origin can be associated with the line of a Grower Agreement by connecting the item lots of a customer order shipment to the agreement line. The base origin is a term used to refer to the seeds required to grow a product such as wheat or corn.

Outcome

One or many item lots on a customer order delivery is associated with a Grower Agreement line and traceability to the base origin of the agreement is in place.

Main Programs

- 'Purchase Agreement. Open' (PPS100)
- 'Purchase Agreement. Open Line' (PPS101)
- 'Agreement Line - Base Origin. Open' (PPS108)
- 'Customer Order .Delivered Lots' (OIS358)

Introduction

To ensure that the seeds which are purchased to grow a product such as wheat or corn (the base origin) can be traced back to the original agreement with the supplier, the base origin must be associated with the grower agreement at line level. This also ensures that all parties involved in the agreement such as the processor, government, and the eventual customer have visibility.

In practice, the processor that the seeds were purchased from is generally the end customer or recipient of the crop once it is mature enough to be sold back.

The base origin can either be associated with the agreement line manually, or through a customer order created by the batch order entry API and connected to the agreement through OIS100MI/AddBatchLnInfo.

Where a grower uses a third-party web based application to manage contracts with suppliers and customers, and the batch of seeds are ordered as part of this process, the details of the seed purchase along with its base

origin are interfaced to M3 along with the agreement details using an API, and systematically associated with the agreement line.

Where manual intervention is required to associate the base origin with the agreement line, the steps below should be followed.

Before you start

- GCM module is selected in 'Company. Connect Division' (MNS100).
- Agreement line is connected to an agreement of type Grower Agreement as defined in 'Purchase Agreement. Open' (PPS100).
- Specify Supplier customer number in 'Supplier. Define Purchase & Financial' (CRS624/E).

Follow these steps

Once the prerequisites have been confirmed, follow these steps:

- 1 Navigate to 'Purchase Agreement. Open Line' (PPS101) through 'Purchase Agreement. Open' (PPS100).
- 2 Select an agreement line and select related option 16-'Base origin'.
- 3 'Agreement. Connect to base origin' (PPS108) is displayed, listing all customer order deliveries for the Agreement line item.
- 4 To view an existing customer order delivery, double click Delivery to display the E panel.
- 5 To edit an existing connection, highlight the required customer order delivery and select **Options > Change**. The required amendments can then be made in the E panel.
- 6 To delete an existing connection, highlight the required customer order delivery and select **Options > Delete**.
- 7 If required, update the 'Carryover Qty' and 'Approved' fields. The carryover quantity will either be reported externally or by telephone and a decision will then be made as to whether the type or quality of seeds is acceptable.
- 8 To create a new connection:
 - a Click the Connect Delivery.
 - b 'Customer Order. Delivered Lots' (OIS358) is displayed listing the deliveries, including the direct deliveries made to the customer connected to the supplier. The deliveries are sorted in descending order by requested delivery date and are displayed together with the corresponding delivery number. The delivery number for direct deliveries is 900. Some of the listed item lots may already have been manually or automatically connected with an agreement line.
 - c Select the delivery to connect to the purchase agreement line.

Selection Matrix - Procurement

Description

A selection matrix can be one of these element types:

- A type of element used in defining mark up for a purchase costing element, used when configuring the purchasing model for specific settlement requirements. For more details on configuring the purchase costing element refer to [Settings for Purchase per Company and Division](#) on page 162.
- A type of product configuration element used when products are configured. For more details on configuring products, refer to [Configure Product](#).

The matrix is in the form of a table. It can be used with up to 6 manually entered selection columns and at least one response column. Where the Matrix is populated using an API, it can be used with 9 selection columns.

Restrictions

Note that whilst different elements are available to product and procurement using Selection Matrix configuration, system enforced segregation does not exist. Where the procurement configuration elements, attribute and formula are used in product configuration, or other areas where Matrix is used, a blank or zero key value, and corresponding matrix value, where one exists, will be returned.

Where the selection matrix is used to satisfy procurement settlement requirements:

- Column types specific to procurement configuration must be used.
- The applicable column types provide the flexibility for results to be retuned based on captured attribute characteristics or a formula.

Create Selection Matrix - Procurement

Description

This document describes how to configure Selection Matrix for the settlement specific requirements of some procurement processes.

This document explains:

- How to configure the Matrix for procurement settlement purposes.
- How this configuration impacts the procurement settlement process in industries such as agriculture with complex grower contract settlement requirements.

Restrictions

These restrictions apply to Column Types Attribute and Formula:

Whilst different column types are available to product and procurement using Selection Matrix configuration, system enforced segregation does not exist. Where the Procurement Configuration Elements, Attribute and

Formula are used in product configuration, or other areas where Matrix is used, a blank or zero key value, and corresponding matrix value, where one exists, will be returned.

Before you start

These prerequisites must be met:

- Where attribute is being used in a Procurement Matrix, the required Attribute must be correctly configured in 'Attribute. Open' (ATS010).
- Where formula is being used in a Procurement Matrix, the required formula must be correctly configured in 'Formula. Open' (CRS570).

Manually create selection matrix

- 1** Start 'Selection Matrix. Open' (PDS090). Include panels E and 1 in the panel sequence.
- 2** Specify a name for the new selection matrix.
- 3** Specify Mtp = 1.
- 4** Select Options \ Create. (PDS090/E) is displayed
- 5** Specify the panel header information:
 - Description (required)
 - Matrix tp (required)
 - Name (default proposed by system / if not manually specified)
 - Matrix group (optional)
- 6** Specify this information:
 - Responsible (defaults from user ID)
 - Basic U/M to be applied to the output / result of Matrix
 - Matrix Table. For 'Selection Matrix – Procurement'

Note: For Matrix Table. For 'Selection Matrix – Procurement', the available options are attribute only, formula only, and a combination of attribute and formula.

Attribute only

This selection returns a result based on a measurement captured or reported manually through 'MO Operation. Report' (PMS070) or through the Quality Management System (QMS), based on the attribute key value specified in 'Column'.

The 'Attribute only' selection can be used as a single record Matrix, or as part of range. For example, protein levels in grain crop purchased may be analyzed after receipt at different points in time. By configuring the Matrix with multiple Attribute Ctp entries for each measurement range and result, all possible expected measurement values can be accounted for.

This procedure contains the available columns along with the instructions on the set-up of the Attribute Matrix using two Attribute key values in a range:

- 1** Set 'Ctp' to Attribute.
- 2** In the 'Column' field, specify the name of an existing attribute or use F4 to browse and select a predefined attribute.

- 3** In 'Ran', select if the entry forms part of an Attribute range matrix. A selection matrix can be minimized by using ranges for columns containing only digits. A column can only be defined with range limits if it has a numeric column identity. To be defined with range limits means that the numeric values for the matrix line act as a From value for the line.

The 'Name' field displays the name associated with the selected attribute.

- 4** Repeat steps 1-3 for the second attribute.

- 5** Click Next.

'Selection Matrix. Enter Values' (PDS091) is displayed.

- 6** Specify this information in (PDS091):

a Valid From Date: Specify the date from which the matrix is active. Where used, this removes the need to edit and maintain existing matrices. A new Matrix can be created with a later valid from date that overrides previous versions of the same / similar matrix. Leave this blank if a date restriction does not apply.

b Values: Specify the values for the attribute key columns entered in step 2 and press enter. Where valid from dates apply to the Matrix lines, the entries valid at the current date are displayed.

For example, where Water Content and Protein Content attributes have been selected as Matrix 'range' values, these values could be specified:

Water content	Protein content	Val Fr	Percent
5	22	141001	-8
5	22	141101	-3
15	33		3
25	44		6
35	55		9

- If Water Content is <= 15 and Protein Content is > 22, then the result is 3%.
 - If Water Content is < 15 and Protein Content is < 33, and the date is 141023, then the result is -8%.
 - If Water Content is > 15 and Protein Content is < 55, then the result is 6%.
 - If Water Content is > 25 and Protein Content is > 55, because the values are greater than the highest defined values, then the highest result is returned = 9.
 - If Water Content is < 5 and Protein Content is < 22, then the result is 0 because the values are smaller than the lowest entry
- c** If Simulation of the selection matrix is required, select option 13 'retrieve values'. Specify the appropriate values for simulation and begin the simulation.

Formula only

This selection returns a result based on a formula and result defined in 'Formula. Open' (CRS570).

The 'Formula only' selection can be used as a single record Matrix, or as part of range.

This procedure contains the available columns that can be used in a Formula Matrix, along with instructions on how the set-up should be completed:

- 1 Set 'Ctp' to Formula.
- 2 In the 'Column' field, specify the name of the predefined formula or use F4 to Browse and select the required formula.
- 3 In the 'Res' field, specify the name of the Result variable to be used or use F4 to browse available results.
- 4 In 'Ran', select if the selected formula forms part of a range matrix. A selection matrix can be minimized by using ranges for columns containing only digits. A column can only be defined with range limits if it has a numeric column identity. To be defined with range limits means that the numeric values for the matrix line act as a From value for the line.

The 'Name' field displays the name associated with the selected formula.

- 5 Click Next

'Selection Matrix. Enter Values' (PDS091) is displayed.

- 6 **Valid From Date:** Specify the date from which the matrix is active. This removes the need to edit and maintain existing matrices. A new Matrix can be created with a later valid from date that overrides previous versions of the same / similar matrix.

'Selection Matrix. Enter Values' (PDS091) is displayed.

- 7 **Values:** Specify the values for the formula key column/s entered in step 2. and press enter. Where valid from dates apply to the Matrix lines, the entries valid at the current date are displayed.

For example, where a Formula for the calculation of fat content has been selected as a range Matrix, these values could be specified:

Calc Fat In	Val Fr	Percent
5		3
10		6
15		8
20	141001	-16
20	141101	-18

- If the formula result is > 15 and the date is >141001 and <141101 then the result is -16%
 - If the formula result is <10 but >5 then the result is 3%
 - If the formula result is <5 then the result is 0
- 8 If Simulation of the selection matrix is required, select option 13 'retrieve values'. Specify the appropriate values for simulation and begin the simulation.

Combination of Attribute and Formula

It is also possible to create a Matrix with both Attribute and Formula column types(**ctp**). Each of these respective entries are created as per the steps listed against **Attribute only** and **Formula only**.

6 matrix records are available where required and any combination of attributes and formulas can be combined as a means to creating the key to the matrix.

Automatically generate matrix

- Matrix values can be automatically generated based on manually specified values and a specified interval. Values for both the column key range and the corresponding results must be specified. For example, when using a Matrix to handle a water content attribute, the price deduction may change every 5%. Instead of specifying each value manually, start and end values with an interval can be specified for column key values and results.
- When in (PDS090), highlight the Matrix for which values should be generated and select Option 14='Generate Values'.
- 'Selection Matrix. Create Values' (PDS092) is displayed.
- Specify the values for the column key range in fields 'From', 'To' and 'Interval'.
- If existing Matrix values must be cleared before generating the values, select 'Clear Matrix'.
- Specify the values for the Matrix results in fields 'Start Matrix Values' and 'Interval'.
- Where a date restriction is required this can be specified in the 'Valid From' field
- For example, where a Matrix has been set up with:
 - Attribute Water Content as key column
 - U/M as %
- When these values are specified on 'Selection Matrix. Create Values' (PDS092):
 - From / To / Interval entered as 1 / 51 / 10
 - 'Start Matrix Values' / 'Interval' as 3 / 6
 - 'Valid from' date as 141007
- The corresponding Matrix values generated will be as per the below table. These can be viewed in 'Selection Matrix. Enter Values' (PDS091).

Water content	Val fr	Result
1	141007	3%
11	141007	9%
21	141007	15%
31	141007	21%
41	141007	27%
51	141007	33%

Output

A selection matrix is created which can then be associated with an Item Lot. When an order is initiated for an item that is connected with the lot, the Matrix is referenced at the required points in the process to capture the deductions and additions applicable to the purchase order.

Block Settlement

Background

A settlement is based on a number of quality tests. Some of these will be required and some will be optional for the settlement. Settlement will be blocked until all required tests have passed. A required test is a test that is marked as required in the QMS module.

Purpose

This document explains how the Settlement Process for a Grower Agreement is blocked when required quality test results or other important information have not been received at time of goods receipt.

Outcome

Where mandatory quality test results or other important information has not been received prior to goods receipt a systematic block will be placed on the Settlement process.

Main programs

'PO Line. Display Received to Self-Bill' (PPS118)

Before you start

The conditions required to support the registering of quality test results received at the farm must be satisfied. In summary, these are:

- A finalized agreement with a supplier containing at least one agreement line must exist.
- Required quality test results are tied to the item.
- All required tests and conditions have been specified in QMS.
- A self-billing agreement must exist for the supplier.

Workflow

- When goods are received against a Purchase Order associated with a Grower Agreement, the Self Billing process will be triggered and Settlement will take place if all required conditions have been met.
- The final settlement with the grower is a self-billing process where the receiver calculates what to pay the supplier. A settlement document is produced listing the details of what have been delivered and what additions and/or deductions have been made to the base price. Both the base price and the bases for additions/deductions are often changed after an initial settlement and payment, and this requires the settlement to be re-calculated a number of times and the difference to be paid or claimed.
- Where quality test results, or other pre-requisites, specified as mandatory in QMS for the Grower Agreement, have not been received, the Self Billing status will be set to 15 (qualified, required information missing) and the Settlement process will be blocked.
- On receipt of all required results and information from 'MO Operation. Report' (PMS070) or through the Quality Management System (QMS), the self-billing status will be set to 20 (ready for settlement) and the downstream settlement process and activities will begin.

- The Self Billing status for a purchase order is displayed within the B1 panel of 'PO Line. Display Received to Self-Bill' (PPS118).
- In addition to the systematic update of the Self Billing status described above, it is also possible to manually apply a self-billing settlement block in 'PO Line. Display Received to Self-Bill' (PPS118) using related option 13 (block / unblock) against the Purchase Order record displayed on the B1 panel of PPS118. Once blocked using this method, the 'block self-bill' flag will be set on both the B and the E panel of PPS118. This can be manually unblocked using the same action.

Settlement Printing Model

Purpose

This document explains:

- How the settlement process for Grower Agreements is configured to define the order in which an attribute connected to a QMS-test should be added to the item.
- How the settlement printing process for Grower Agreements can be configured to print a pre-defined list of applicable quality test results and attributes.

Outcome

The sequence of quality test results and attribute information for the Grower Agreement is defined.

The test results and attributes required on the settlement document are defined.

Main programs

- 'Settlement Printing Model. Open' (PPS385)
- 'Connect Test and Attribute Lines. Open' (PPS386)

Before you start

- Parameter 'Grower Contract Management' must be set on the K panel of 'Company. Connect Division' (MNS100).
- The business is familiar with the rules required to order quality results and attributes along with their impact on the settlement calculation.

Follow these steps

Follow these steps to configure:

- Sequence in which test results and other required information is pulled into the settlement process.
 - Test result information to be included on the Settlement Document print output.
- Open (PPS385).
 - Either enter the costing model ID that the sequencing rules will be applied to or use F4 browse on the Model field.

- 3** Select the date from which the sequencing rules should be active against the specified costing model.
- 4** Choose Options \ Create.
- 5** New model displayed.
- 6** With the new model highlighted, right click and choose related option 11 (connect test and attribute lines).
- 7** B panel of (PPS386) displayed, with previously selected costing model, valid from date and sequence number listed in the panel header frame.
- 8** Enter sequence number and choose Options \ Create.
- 9** E panel displayed.
- 10** Populate these fields on the details frame:
 - Element Type (QMS test or attribute)
 - Test/attribute
 - If QMS test has been selected, use the F4 Browse action to select the required test. Using the browse action twice against this field displays 'Test Template. Open' (QMS100).
 - If Attribute has been selected, use the F4 Browse action to select the required attribute. Using the browse action twice against this field displays 'Attribute. Open' (ATS010).
 - Print on Settle. Select one of these options to specify whether or not, and under what conditions, the specified attribute or QMS test should be included on the settlement document:
 - 0 – Value not printed
 - 1 – Value printed
 - 2 – Value printed if $\neq 0$
- 11** Click Next.
- 12** 'Connect Test and Attribute Lines. Open' (PPS386) is displayed.
- 13** Repeat as required for all required QMS tests and attributes to be included in the calculation and printing model.

Settlement Document

Background

Grower Agreements, used for the purchase of crops and livestock, can be subject to a number of different Quality Inspection (QI) tests, in addition to calculations performed against the attributes model of the goods received on the PO. The results of these tests and calculations are used in the invoice and settlement process to determine the level of charges applicable.

In some cases, the information, elements and results associated with the QI tests and attributes need to be output on the Settlement Documentation and listed in a particular order, placing the most common tests such as those to calculate water content at the top. The settings described in the [Settlement Printing Model](#) on page 407 explain how to configure this associated output on the Settlement Document. The information

output on the settlement document is not visible on screen as this is captured and processed on the print stream file.

Follow these steps

To print the settlement document follow these steps:

- 1 Launch 'Supplier Invoice Batch Open' (APS450).
- 2 To print a single self-bill invoice record, highlight the required invoice and choose related option 6 (print).
- 3 To print multiple invoices as part of a batch, select Actions \ F17 from the drop down menu and then enter required invoice number range and batch details in 'Supplier Invoice Batch. Select Operation' (APS455).

The document printed is the standard Self-billing document with information blocks included in the streamfile for QMS-tests and attributes.

Once printed, updates to the ledger must be performed using 'ctrl 9' as per the standard self-billing process.

Recalculate Settlement for a Grower Agreement

Background and purpose

The set of charges that make up a settlement may change both before and after the first settlement has been processed. When this occurs, the settlement is recalculated around the changes received, and the difference (positive or negative), in charges between the current and previous self-bill invoice, will be charged or credited to the customer, and printed on the final settlement document.

This document explains the process by which the settlement is iteratively recalculated for a Grower Agreement, following changes made to the associated costing elements and attributes.

Outcome

If all required pre-requisites have been met, and there is no settlement block in place, the settlement process is called when a change is registered against one of its' base constituents.

Main programs

'Supplier Invoice Proposal. Generate for SB' (PPS116)

'Costing Element. Open' (PPS280)

'Recalculation selection' (PPS283)

'PO Line. Display Received to Self-Bill' (PPS118)

Restrictions

The functionality to trigger recalculation for multiple settlements is only allowed on goods receipts with an agreement type marked for settlement.

Before you start

A valid self-billing agreement for the supplier of status 20 must exist in 'Purchase Agreement. Open For Self-Billing' (PPS112). A Settlement Block, as defined in the [Block Settlement](#) on page 406 document does not exist.

Recalculate settlement following changes to costing elements or attributes

An invoice of any status, with type self-bill, and associated with a Grower Agreement, can be subject to recalculation, if changes are received against any of its base elements, as described below:

1 Change of attribute values

Attributes can be attached to quality inspection (QI) tests and if required, the tests can be specified as mandatory in the Quality Management System (QMS) in 'Test Template. Open' (QMS100).

Attribute values can either be changed at attribute level or through QMS. When changed, a recalculation of settlement is triggered, regardless of settlement status, and the invoice amounts of the current settlement are compared with the amounts of the previous, so that any difference can be identified.

a Change at attribute level:

An attribute can be changed at attribute level using related option 28 (attributes) in 'Lot/Serial Number. Open/Connect to Item' (MMS235).

b Change through QMS:

A test in QMS could be connected to an attribute. When entering a test value in 'QI Test Results. Open' (QMS400), the value is automatically updated on the attribute.

Once changed, a settlement recalculation is triggered based on the new test results.

2 Change to costing element

Where the final price is not known at the time of initial goods receipt and is dependent on future market and government conditions, the Grower Agreement will be set up to reflect this, and allow the price on the associated cost element/s and formulas to be amended where required.

Prices on a cost element can be changed manually in (PPS280) or through an API. If changing the element manually, related option 12 (Costing values) brings you to 'Costing Element. Enter Values' (PPS282), where you can change the markup.

Related option 13 (recalculate selection) in (PPS280) can be used to manually call for a recalculation of this cost element, returning the E panel of (PPS283), where the selection parameters for what should be recalculated is set. Selection can be done on these details:

- Delivery date
- Purchase costing model
- Agreement type
- Facility
- Supplier

- Item
- Purchase order number
- Purchase order type

Recalculation is started with F14 (Interactive) or F16 (Launched)

After recalculation

If the result of the recalculation differs from the previous amount, the difference is added in internal accounting (CINACC) against the existing accounting number for this receipt.

If the receipt was already invoiced a new invoice can be made with the differences.

The status after recalculation can either be 15 (qualified, required information missing) or 20 (ready for settlement). If the recalculation does not result in a difference, the status will not change.

Override VAT on a Grower Agreement

Background

In support of cases where the eventual consumer of grower and commodity produce may differ, and the resulting requirement for VAT variation, flexibility to override the fixed VAT code on Purchase costing elements is available. This document describes the configuration required against the Grower Agreement and VAT set up to achieve this.

Outcome

Because Grower Agreements are set up as Self Billing, where VAT override is configured, this will systematically be applied at line level during invoicing.

Main programs

- 'Available Object Ctrl Parameters. Open' (CMS016)
- 'VAT Exception. Open' (TXS020)
- 'Costing Element. Open' (PPS280)
- 'Purchase Agreement. Open Lines' (PPS101)

Configure VAT override on Grower Agreement

Where object control parameters are configured for VAT override in 'Available Object Ctrl Parameters. Open' (CMS016), and a Costing Model is specified at line level on an agreement specified as type Grower Agreement in 'Purchase Agreement Type. Open' (PPS110), the VAT code that would normally be retrieved from 'Costing Element. Open' (PPS280) is overridden based on an alternate costing model specified in 'VAT Exception. Open' (PPS280).

Follow these steps

Set up object control

- 1 Using sorting order '2-Program' in 'Available Object Ctrl Parameters. Open' (CMS016/B1), search for program TXS020.
- 2 Select related option 11 (ob tbl det lin) against the TXS020 record returned.
'Generic Object Control Screen' (CMS017/B1) is displayed.
- 3 Create or double click on the record with "start value 2 = 3" (replacement VAT code for purchases).
'Generic Object Control Screen' (CMS017/E) is returned.
- 4 Specify Costing model ID 'IBWSCA' at the required sequence / priority level and click next. Normally IBWSCA is combined with other fields on a priority level. See 'Define VAT Exceptions' for rules around priority set up.
'VAT Exception. Open' (TXS020/B1) is displayed which can then be closed.

Define costing model on agreement line

- 1 Start 'Purchase Agreement. Open' (PPS100) for the required agreement.
- 2 Navigate to 'Purchase Agreement. Open Lines' (PPS101).
- 3 Specify Costing Model as required for each of the lines on the agreement.
The specified costing model ID is copied from the agreement line to the PO-line and can also be viewed at the purchase order line level in program 'Purchase Order. Open Lines' (PPS201).
- 4 When goods are received against a Purchase Order with agreement line set up in this way, the self-billing process is triggered and the VAT code that would normally be retrieved from the costing element is overridden.

Deduct Customer Order Invoices during Grower Agreement Settlement

Main programs:

- 'AR Payment Method. Open' (CRS076)
- 'Supplier Invoice Batch. Open' (APS450)
- 'Supplier Invoice Batch. Open Lines' (APS451/E)
- 'Supplier. Define Purchase Financial' (CRS624/E)

Background

Where a company is engaged in a grower agreement with a farmer, the company often sell goods or services related to the fulfillment of the agreement. The value of these good and services can be deducted from the amount owed to the farmer during the invoicing and settlement process, as opposed to billing for these separately. To distinguish these customer invoices from invoices for goods not related to an agreement a

dedicated payment method indicating 'paid by settlement' is available. If necessary these amounts can also be reversed and cancelled after they are invoiced by changing this payment method.

Purpose

This document explains the process by which:

- 1 The amounts associated with the customer order for the sale of goods or services to the farmer are deducted from the total invoice amount during the grower agreement settlement process.
- 2 Customer invoice amounts can be removed from a validated invoice.
- 3 Customer invoice amounts can be excluded from the grower settlement process by changing the payment method on the customer order or invoice.

Before you start

1 Payment method set up for customer order:

Parameter 'paid by settlement' must be set on the customer's payment method. To do this follow these steps:

- In 'AR Payment Method. Open' (CRS076/E) ensure that parameter 'paid by settlement' is selected.
- The 'paid by settlement' parameter will be active if:
 - Payment class is '0-cash payment'
 - GCM module is activated in MNS100 for the company and division
- When 'paid by settlement' parameter is set, the below parameters must be de-selected:
 - Upd coupon ledg
 - Letter of credit
 - Group due date

2 Supplier number must be connected to customer number in 'Supplier. Define Purchase Financial' (CRS624/E)

Follow these steps

- Create a customer order with a payment method that has the 'paid by settlement' parameter set. Deliver and invoice the order.
- A check is performed to confirm that the supplier connected to the customer has a valid self billing agreement in 'Purchase Agreement. Open for Self Billing' (PPS112). If a valid agreement is found, the customer invoice details are stored for later use in the settlement process.
- In 'Supplier Invoice Batch. Open' (APS450), highlight the required self-billing invoice and select related option 8='validation'.
- 'Supplier Invoice Batch. Select Operation' (APS455) is displayed. Confirm selections and click next.
- The customer invoice amounts previously stored are included in the settlement as deductions (type 07) if:
 - They are not yet invoiced.
 - They match the currency of the supplier invoice.
 - The currency is local currency.
- The customer invoice amounts are then:

- Deducted from the total supplier invoice amount.
- Either partly or completely paid by the settlement process. If partly paid, the remaining amount is retrieved the next time the self-billing batch invoice is updated. The status on the type 07 invoice line indicates whether partly (status 20) or completely (status 30) paid by settlement.
- (APS450) is then returned displaying an increase in invoice header status.
- Print invoice using related option 6='print'.
- Update invoice to AP using related option 9='update to AP ledger'.
- Detailed information for the type 07, customer invoice amounts, can be viewed in 'Supplier Invoice Batch. Open Lines' (APS451/E).

Note: Customer invoices created in 'Customer Invoice. Enter' (ARS100) and 'Customer Invoice. Enter Manual' (ARS120) are also eligible for this process.

Remove customer invoice amounts from a validated invoice

If the invoice status has not yet reached '90-Updated In APL', the customer invoice amounts, invoiced and settled using the above process, can be reversed and removed from the self-bill invoice.

Note: Self-billing invoice must have a status of between 20 and 50

Action required

Highlight an invoice record in 'Supplier Invoice Batch. Open' (APS450) and select option 23='re-set to status new'.

Outcome

- Invoice header is updated to status 10
- Customer order lines of type 07 are permanently removed from the invoice and made available for use against other invoices for the supplier:customer connection
- The total invoice amount is adjusted to reflect the removal of the customer invoice amounts.

Exclude customer invoice amounts from settlement

The above process explains the pre-requisite set up and workflow required to include applicable customer invoice amounts in the grower agreement settlement process as a deduction of the total supplier invoice amount.

Where required, the customer invoice amounts can be excluded from this settlement process, by ensuring that the customer order or invoice is not associated with a payment method where the 'paid by settlement' parameter is set.

Follow these steps

- If not yet invoiced, update the 'Payment mtd AR' parameter in 'Customer Order. Open' (OIS100/H) to change the payment method on the customer order.
- Through 'Acc Receivable. Display' (ARS200), update the 'Payment method' parameter in 'Customer Invoice. Change' (ARS201/E) to change the payment method on the invoice.

Limitations

- Currency of the customer invoice must match the self billing invoice.
- Currency must be in local currency.

- It is not possible to attach a customer order invoice to a selected self-billing invoice through the user interface or API.

Process Control for Settlement in PPS118

To support the process of settlement and ensure that the required information is available, these related options are available in 'PO Lines. Display Received to Self-Bill' (PPS118):

Related options for settlement in (PPS118)

- Related option 13='block / unblock': Updates the 'block self-bill' flag, displayed on both B and E panels of PPS118.
- Related option 15='Charges': Opens 'Purchase Order. Connect Charges' (PPS215) where actual charges for the receipt are displayed. Option12='Charges' in 'Purchase Order. Display Line Transactions' (PPS330) is used for the same purpose.
- Related option 16='QI Request': Opens 'QI Request. Open' (QMS300) where actual QI-requests for the receipt are displayed. Option46='QI Request' in 'Lot/Serial Number. Open/Connect to Item' (MMS235) is used for the same purpose.
- Related option 20='Attribute Values': Opens 'Attribute Value. Connect To' (ATS101) where actual attribute values for the receipt/lot number are displayed. Option-28='Attribute Values' in (MMS235) is used for the same purpose.

Chapter 11: Request for Quotations

Accept/Reject Purchase Inquiry and Create Purchase Order

This document explains how you accept or reject a purchase inquiry after evaluation of the supplier response. It also explains how you create a purchase order for the accepted inquiry.

Outcome

A purchase inquiry is accepted or rejected. "No thank you" letters are printed for rejected inquiries. Purchase orders are created for accepted inquiries.

These files are updated:

- Purchase Order Header (MPHEAD)
- Purchase Order Lines (MPLINE)

A new purchase order is created for accepted inquiries in 'Purchase Order. Open' (PPS200/C).

Before you start

- A number series of type 20 must be defined in 'Number Series. Open' (CRS165).
- A purchase inquiry that has status 20 must be created in 'Purchase Order. Open' (PPS200). See [Create Purchase Inquiry Manually](#) on page 419

Follow These Steps

Accept Purchase Inquiry

- 1 Start 'Purchase Order. Open' (PPS200).
- 2 On the E panel, select the accepted purchase inquiry and manually set the status to 80 (Quotation accepted).
- 3 Go to Step 6 to copy the accepted purchase inquiry to a purchase order.

Reject Purchase Inquiry

- 1 Start 'Purchase Order. Open' (PPS200).
- 2 On the E panel, select the rejected purchase inquiry and manually set the status either to 60 or 65 (Quotation not accepted).

"No thank you" letters for the rejected quotations are printed from 'Purchase Inquiry. Print Reply Document' (PPS610/E). The status is automatically set to 70 after printing.

Copy the Accepted Purchase Inquiry to a Purchase Order

- 1 On the PPS200/B panel, select the accepted purchase inquiry and then select Copy.
- 2 On the C panel, change the order type with order category to 020 (Normal order). Select Copy order lines and Copy line text if you want to copy the purchase order lines and user-defined text to the new purchase order.

A purchase order number can be entered manually or generated automatically.

- 3 Press Enter.
- 4 On the E, F and G panels, you can information about the delivery items, addresses, and goods receiving method.

A new purchase order is created in the PPS200/B panel.

The status of the new purchase order is 15.

The status of purchase inquiry changes to 90 after it is copied to the purchase order.

Parameters to Set

Program ID/Panel	Field	The field indicates ...
(CRS780/F)	30 Fixed post-text - purchase inquiry reply	<p>...the ID for the text printed at the bottom of the purchase inquiry reply document in 'Purchase Inquiry. Print Reply Document' (PPS610).</p> <p>The text must be defined as internal or external, and the language code must be the same as that of the supplier.</p> <p>Texts are defined in (CRS950).</p>

Approve/Reject a Purchase Quotation and Create Agreements from Quotation

This document explains how you approve/reject Purchase Quotation after evaluating the suppliers' responses and then create a Purchase Agreement for the accepted Quotation.

Outcome

A Purchase Quotation is accepted or rejected. 'No thank you' letters are printed for rejected Quotation and a purchase agreement is created for the accepted Quotation.

These files are updated:

- Agreements Header (MPAGRH)
- Agreements Line (MPAGRL)

The accepted purchase quotation is used to create a purchase agreement in 'Purchase Agreement. Create fr Quotation' (PPS150).

Before you start

- A number series of type 24 must be defined in 'Number Series. Open' (CRS165).
- An Agreement type must exist in 'Purchase Order Type. Open' (PPS095).
- A Purchase Quotation with status less than 50 must exist in 'Request for Quotation. Open' (PPS130).

Follow These Steps

Accept Purchase Quotation

- 1 Start (PPS130).
- 2 On the E panel, select the accepted purchase quotation and manually set the status to 80 (Quotation accepted).
- 3 Go to **Create Agreement from quotation** to create a purchase agreement for the accepted quotation.

Reject Purchase Quotation

- 1 Start (PPS130).
- 2 On the E panel, select the rejected purchase inquiry and manually set the status to either 60 or 65 (Quotation not accepted).
 - 'No thank you letters' for the rejected quotations are printed from 'Request for Quotation. Print Reply Doc' (PPS612). You can also use option 38 = 'Prt answer' from (PPS130)
 - The status is set automatically to 70 after printing.

Create Agreement from quotation

- 1 Start 'Purchase Agreement. Create fr Quotation' (PPS150). You can also use option 32 = 'Crt Agreement' from (PPS130).
- 2 On the E panel enter, the Priority code(s), Facility, Supplier number, Agreement type and activate Crt for style.
Activate Crt for style to create agreement for style items. This is generally used in the fashion industry.
- 3 If the quotation is not complete or some data is missing in the header and/or on the lines, select the copy code and enter the supplier and the agreement number.
 - The Supplier Number and Agreement Number fields refer to the supplier and agreement mentioned above
 - Information can be copied automatically from an existing agreement and supplier by specifying the copy code.

The alternatives are valid:

- 0 = The agreement created must not be supplemented
- 1 = The agreement header created must be supplemented with information from the supplier and the agreement entered in the E panel.
- 2 = The agreement header and lines must be supplemented with information from the supplier and the agreement entered in the E panel.

- 4 Press Enter.

- 5** On the F and the G panels, enter information about the Status, Agreement Priority and Renewal date. The Valid from and Valid to dates are retrieved up from the Quotation. These can be modified. The status of the agreement must be set manually. The alternatives are valid:
 - 10 = Preliminary agreement (some data may be missing)
 - 20 = Complete agreement (can not be used)
 - 30 = Agreement sent/printed
 - 40 = Valid agreement (can be used).
- 6** Press Enter.
The status of the purchase quotation changes to 90.
- 7** Start 'Purchase Agreement. Open' (PPS100).
The agreement created, can be displayed and the information on the header and lines can be changed.

Create Purchase Inquiry Manually

This document explains how you create a purchase inquiry manually for a supplier.

Outcome

A purchase inquiry is created manually.

These files are updated:

- Purchase Order Header (MPHEAD)
- Purchase Order Lines (MPLINE)

The purchase inquiry is used to request and evaluate price quotes from different suppliers. Purchase inquiries are accepted or rejected depending on the price offered. The accepted inquiries are copied to a purchase order in 'Purchase Order. Open' (PPS200).

Before you start

- A purchase order type with order type category 010 must be defined in 'Purchase Order Type. Open' (PPS095).
- A number series of type 20 must be defined in 'Number Series. Open' (CRS165).

Follow These Steps

- 1** Start (PPS200).
- 2** On the A panel, enter the facility, warehouse, request delivery date, and order type.
The order category of purchase order type must be 010 for inquiries.
- 3** Press Enter.
- 4** On the E, F and G panels, enter information about the delivery items, addresses, and goods receiving method.

- 5 Press Enter to display 'Purchase Order. Open Lines' (PPS201/B).
- 6 On the B1 panel, enter the items to include in the purchase inquiry.
The purchase inquiry is created. The (PPS200/B) panel is displayed.
- 7 Press F15 = Inquiry Doc in (PPS200/B) or use 'Purchase Inquiry. Print Document' (PPS605) to print the inquiry document.
The status changes from 15 to 20 after the inquiry is printed.
The printed documents are sent to the suppliers. The suppliers return the documents along with price quotes. If necessary, a reminder can be printed from 'Purchase Inquiry. Print Reminder' (PPS675).

Create Purchase Inquiry from a Planned PO

This document explains how you create a purchase inquiry for a supplier from a planned purchase order.

Outcome

A purchase inquiry is created from a planned purchase order.

These files are updated:

- Planned Purchase Orders (MPOPLP)
- Purchase Order Header (MPHEAD)
- Purchase Order Lines (MPLINE)

The purchase inquiry is used to request and evaluate price quotes from different suppliers. A purchase order is created for the supplier who offered the best price by copying the purchase order inquiry on 'Purchase Order. Open' (PPS200/C).

Before you start

- A planned purchase order must exist in 'Planned Purchase Order. Open' (PPS170).
- A number series of type 20 must be defined in 'Number Series. Open' (CRS165).

Follow These Steps

- 1 Start (PPS170).
- 2 On the B panel, enter a co-sorting ID for the lines to be included in the purchase inquiry. The lines are marked with a two-letter combination, for example AA.
- 3 Press Enter to save your changes.
- 4 Select F15 = Create Inquiry. 'Purchase Inquiry. Create from Planned PO' (PPS173/E) is displayed.
If you have marked lines with two different suppliers; two different inquiries will be created.
If you have marked lines with the same supplier but two different item numbers; two lines, one for each item number, will be created on the inquiry.
The supplier number displayed here is a suggestion for the planned purchase order.

- 5** On the E panel, enter the necessary information. The different fields are:
- Order type. The order type must be an order type based on purchase order category 10 (Inquiry).
 - Co-sorting identity. The selected ID is displayed and can be changed.
 - Clear co-sorting. This field indicates whether the letter combination should be cleared after the inquiry is created. It is easier to find the planned purchase order lines if the field is not cleared.
 - Our reference no. This field indicates the reference number that is found on the purchase order lines.
 - Request delivery date. The request delivery date is the date on which you would like the items delivered.
 - Follow-up date. This field indicates an optional date for monitoring an agreement, using own report templates.
 - Create interact. Inquiries can be created interactively or in a batch run by selecting this check box. A maximum of ten suppliers can be entered.
- 6** Press Enter. The purchase inquiry is created. The (PPS170/B) panel is displayed. The status of the planned purchase order changes from 15 to 55 after the inquiry is created. The created purchase inquiries from all the suppliers are displayed in (PPS200). Both purchase orders and purchase order inquiries are displayed. To select only the inquiries, specify the appropriate order type (010) as the selection criterion. The inquiry will have status 15 if not yet printed

Parameters to Set

Program ID/Panel	Field	The field indicates ...
(PPS095/E)	Number series - PO	...the number series to use when purchase order numbers are entered for the purchase order type.
(PPS095/G)	PO Type check	...whether the purchase order should be reconciled for each supplier against the table of approved purchase order types. The alternatives are valid: <ul style="list-style-type: none"> • 1 = No • 2 = Yes, warning which can be overridden • 3 = Yes, warning which cannot be overridden.
(CRS780/F)	30 Fixed post-text - purchase inquiry reply	...the ID for the text printed at the bottom of the purchase inquiry reply document in 'Purchase Inquiry. Print Reply Document' (PPS610). The text must be defined as internal or external, and the language code must be the same as the supplier's. Texts are defined in (CRS950).

Create Request for Purchase Quotation

This document explains how you create a Mass Request for Quotation and a Request for Quotation for an individual supplier.

Outcome

A purchase Request for Quotation is created.

These files are updated:

- Purchase Quotation Header (MPPQTH)
- Purchase Quotation Line (MPPQTL)
- Purchase Quotation current price (MPPQTC)
- Purchase Quotation new price (MPPQTCN)

The RFQ number is used as a reference for the purchase agreement with a supplier in 'Purchase Agreement. Open' (PPS100).

Before you start

- A number series of type 24 must be defined in 'Number Series. Open' (CRS165).
- A purchase agreement type must be defined in 'Purchase Agreement Type. Open' (PPS110).
- Text must be entered in 'General Text. Open' (CRS950).
- Supplier(s) must be defined in 'Supplier. Open' (CRS620).

Follow These Steps

Mass request for Purchase Quotation

- 1 Start 'Request for Quotation. Mass Create' (PPS131).
- 2 Press F13 to activate the P panel. Set the panel sequence to EFG and press Enter.
- 3 On the B panel, enter the RFQ number and select Create.
If the RFQ number is not entered, a number from the central number series is automatically assigned as the RFQ number.
- 4 On the E panel, enter the Create by supplier, Text, Buyer, RFQ date, From date, To date, Last reply date, Currency and Exchange rate type.
- 5 On the F panel, enter the File selection, Price selection, Quantity base and Calculation method.
- 6 On the G panel, select relevant options to restrict the choice of items.

The valid alternatives are:

Select only purchase items.

Select only definite items (status 20).

Exclude items supplied by single supplier.

Exclude items with order qty and reorder point = 0.

Exclude items with order qty and reorder point method = 0.

Exclude items with annual demand = 0.

- Exclude items without put-away date.
 Exclude items with issue date > 12 months.
- 7** Press Enter to move back to (PPS131).
 An RFQ number is created
- 8** Select option 9 = Run, to create the quotation lines for the selected RFQ.
 The quotations are created and displayed in 'Request for Quotation. Open' (PPS130).

Request for Quotation for Individual Supplier

- 1** Start (PPS130).
- 2** Press F13 to activate the P panel. Set the panel sequence to E and press Enter.
- 3** On the B panel, enter the supplier and RFQ number.
 If the RFQ number is not entered, a number from the central number series is automatically assigned as the RFQ number.
- 4** On the E panel, enter the Text, Buyer, Status, RFQ date, Status, Last reply date, From date, To date, Reference, Currency, Exchange rate type, Exchange rate, Current discount 2, New discount 2 and Supplier quotation number.
 The status is manually set to 10.

Requests for Quotation Lines

- 1** Press Enter to move to 'Request for Quotation. Open Lines' (PPS133).
 You can enter the quotation items manually or view/update items that are created automatically.
- 2** Press F13 to activate the P panel. You can define field security for the B and E panels.
 These alternatives are valid:
 0 = Do not display field heading or content.
 1 = Display field (heading and content), but changes cannot be made.
 2 = Display field (heading and content) and contents can be changed
- 3** Select Sorting order 1 (Item Number).
- 4** On the B panel, enter the Item and the Priority type and select Create.
- 5** On the E panel, enter the Priority, Annual demand, Order Multiple, Setup price, New purchase price, New supplier lead time and New Discount 3.
 Priority is used to identify the most favorable quotations for an item. When lines are mass-created this value is automatically set to 5.
- 6** Press Enter to redisplay (PPS133/B).

Parameters to Set

Program ID/Panel	Field	The field indicates ...
CRS780/G	31 Fixed post-text - quotation reply	... the text ID for the text printed at the bottom of the quotation reply document in (PPS612). Texts are defined in 'General Text. Open' (CRS950).

Evaluate Purchase Quotations and Print Analysis

This document explains how you evaluate suppliers' replies for the Purchase Quotation.

Outcome

The replies from the suppliers are analyzed and the system automatically calculates which item is the cheapest.

These files are updated:

- Purchase Quotation current price (MPPQTC)
- Purchase Quotation new price (MPPQTCN)

The evaluated Request for Quotation is used as a reference for the purchase agreement with the supplier in 'Purchase Agreement. Open' (PPS100).

Before you start

An RFQ number must be defined in 'Request for Quotation. Open' (PPS130). See [Create Request for Purchase Quotation](#).

Follow These Steps

- 1 Start (PPS130).
- 2 On the B panel, select the request for quotation number to be evaluated and select option 11 = Details. 'Request for Quotation. Open Lines' (PPS133) is displayed.
- 3 Entering price for the supplier (if sorting order 2 is used). More detailed information is displayed on the E panel.
An asterisk (*) in the Table field indicates that a price table is connected in 'Request for Quotation. Enter Prices' (PPS134).
- 4 Select the item number to update price (if sorting order 1 is used).

Define a Price Table with different Prices for different Quantities

You can define a price table with varying prices for different quantities. Prices vary depending on the quantity bought.

- 1 Select option 11=Prices. (PPS134) is displayed.
- 2 On the B panel, enter the From quantity, New Purchase price, Discount 3, Normal price, and Current purchase price.
 - **Note:** The columns to the left displays new prices/discounts and the columns to the right display current prices/discounts.
 - One of these prices must be marked as the 'Normal price'. In the Npr column the normal price is marked as 1. This price is used as the representative price for this item in calculations.
 - Data from some of these fields is automatically retrieved during mass creation of purchase quotation.
- 3 Press Next to save data.
- 4 Press F3. (PPS133/B) panel is redisplayed.
When reporting is complete, the status is 50=Received and values updated.

Calculate the Total Purchase Cost of the Item

- 1** On the (PPS130/B) panel, select option 37 = 'Costing Cal'. 'Purchase Inquiry Costing. Calculate' (PPS292) is displayed.
- 2** On the E panel, enter the Request for Quotation number(s) for costing calculation.
The calculation gives the total purchase cost of the item, including the cost elements specified in the purchase cost model. For example, freight, internal distribution cost, etc.
- 3** Press Enter to submit job.
- 4** Press F3 twice. (PPS130/B) panel is redisplayed.
- 5** Select option 31 = 'Cal priority'. 'Request for Quotation. Calc Priority' (PPS580) is displayed.
- 6** On the E panel, specify the Priority code.
The valid alternatives are:
0 = Do not assign a priority
1 = New net price
2 = New cost price
3 = New purchase price
- 7** The analysis is best viewed in 'Supplier Quotation. Analyze' (PPS140). You can also use option 12 = 'Quotation analyze' in (PPS130).

Print Analysis

The analysis can be printed in 'Supplier Quotation. Print Analysis' (PPS555). You can also use option 34 = 'Print' in (PPS130).

Negotiate Price

- 1** Start 'Supplier Quotation. Negotiate About Prices' (PPS145). You can also use option 13 = 'Price negotiate' in (PPS130).
- 2** On the B panel enter, the Price, Annual demand, New Purchase price and discount 3 can be modified.
The effect of an increase or decrease on demand, price and/or discount can be simulated in the program
- 3** Press F14 = Save data.
You can use F17 = 'Reset data' if you want to start all over again,
- 4** The Price list table can be reached using option 11 = 'Quot Price'.
New Purchase price and Discount 3 are displayed.
- 5** The Analysis can be reached using option 12 = 'Quot Analysis'
The priority can be changed for different items based on the updated price.

Print Negotiation

Price negotiation document can be printed using 'Supplier Quotation. Print Negotiation Report' (PPS565). You can also use option 36 = 'Negotiatn List' in (PPS130).

Managing Purchase Inquiries

This document explains how you create a purchase inquiry for different suppliers, print a purchase order inquiry, and copy the accepted purchase inquiry to a purchase order.

Outcome

A purchase inquiry is created for different suppliers. The supplier who offers the best price is selected, and the supplier details are copied to a purchase order. "No thank you" letters are printed and sent to the other suppliers.

These files are updated:

- Planned Purchase Orders (MPOPLP)
- Purchase Order Header (MPHEAD)
- Purchase Order Lines (MPLINE)

The purchase inquiry can be used for the purchase of items that are not regularly bought. When there is no agreement with any particular supplier, a purchase inquiry is created to request price quotes from different suppliers.

Before you start

- A purchase order type with order type category 010 must be defined in 'Purchase Order Type. Open' (PPS095).
- A number series of type 20 must be defined in 'Number Series. Open' (CRS165).

Follow These Steps

1 Create Purchase Inquiry

Create a purchase inquiry when there is no agreement with any particular supplier.

A purchase inquiry can be created either automatically from a planned purchase order or manually in 'Purchase Order. Open' (PPS200).

2 Print and Evaluate Purchase Inquiry

You can print a completed purchase inquiry by selecting F15 = Print in (PPS200) or by using 'Purchase Inquiry. Print Document' (PPS605). The status of the purchase inquiry changes to 20 after it is printed.

The documents are then sent to the suppliers. The suppliers return the documents along with a price quote. If necessary, a reminder can be printed from 'Purchase Inquiry. Print Reminder' (PPS675).

3. Accept/Reject Purchase Inquiry

The received supplier quotes are evaluated manually. The status of rejected purchase order inquiries is manually set to 60 or 65 with or without a "No thank you" letter.

You can print "No thank you" letters for the rejected purchase inquiries from 'Purchase Inquiry. Print Reply Document' (PPS610/E). The status of a rejected purchase inquiry is automatically set to 70 after it is printed.

The status of accepted purchase order inquiries is set to 80. The purchase inquiry is then copied to a normal purchase order.

3. Copy the Purchase Inquiry to a Purchase Order

The accepted purchase inquiry is copied to a normal purchase order. The order type of the copied purchase inquiry must be changed to a normal order type on (PPS200/C).

After the purchase inquiry is copied to the purchase order, the purchase inquiry status is automatically set to 90, and a new purchase order that has status 15 is created.

Managing Purchase Quotation Requests

This document explains how you create a request for quotation, print and send quotation, report and evaluate quotation, accept and reject a quotation, and create a purchase agreement from an accepted quotation.

Outcome

A purchase agreement is created for the accepted quotation. The supplier quoting the best price is selected and the supplier details are copied to a purchase agreement. 'No thank you' letters are printed and sent to the other suppliers.

These files are updated:

- Purchase Quotation Header (MPPQTH)
- Purchase Quotation Line (MPPQTL)
- Purchase Quotation current price (MPPQTC)
- Purchase Quotation new price (MPPQTCN)
- Agreements Header (MPAGRH)
- Agreements Line (MPAGRL)

The purchase agreement created from the purchase quotation can be used both in planned purchase orders and purchase orders.

Before you start

The parameters mentioned in [Create Request for Purchase Quotation](#) on page 422 must be defined.

Follow These Steps

1 Enter Mass Request for a Quotation

The purchase quotations can be entered manually or created automatically through mass creation or copied from another quotation.

You can mass create quotations in 'Request for Quotation. Mass Create' (PPS131).

2 Enter Request for Quotation for a Single Supplier

You can create a request for quotation for a single supplier in 'Request for Quotation. Open' (PPS130).

3 Print and Send Quotation

You can print a completed purchase quotation by using option 33 = 'Print RFQ' in (PPS130) or by using 'Request for Quotation. Print' (PPS550). The status of the purchase quotation changes to 20 after printing.

A quotation report can be printed using 'Suppl Quotation. Print Report' (PPS560). You can also print it using option 35 = 'Quotation list' in (PPS130).

The quotation analysis can be printed as an analysis report using option 34 = 'Quot Analys Lst' from (PPS130). You can also print it from 'Suppl Quotation. Print Analysis' (PPS555).

A negotiation report can be printed using option 36 = 'Negotiatn list' from (PPS130). You can also print the negotiation report from 'Suppl Quotation. Print Negotiation Report' (PPS565).

4 Report and Evaluate Quotation

The replies from the suppliers are entered using 'Request for Quotation. Open Lines' (PPS133). You can also use option 11 = 'Details' from (PPS130).

The Purchase quotation is evaluated using the calculation program in 'Purchase Inquiry Costing. Calculate' (PPS292). You can also use option 37 = 'Costing Calculation' from PPS130.

The calculation is then run using option 31 = 'Calculate Priority' from (PPS130).

You can print 'No thank you' letters for the rejected purchase quotation from 'Request for Quotation. Print Reply Doc' (PPS612). You can also print the letters using option 38 = 'Prt answer' from (PPS130). The status of the rejected quotations is automatically set to 70 after printing.

5 Create a Purchase Agreement from Quotation

A purchase agreement for the accepted quotation can be created using 'Purchase Agreement. Create fr Quotation' (PPS150). You can also use option 32 = 'Crt Agreement' from (PPS130).

If the quotation is not complete or some data is missing in the header and/or on the lines, you can select the copy code to copy the purchase agreement. The purchase quotation status is automatically set to 90.

The created agreement can be displayed and changed in 'Purchase Agreement. Open' (PPS100)

Chapter 12: PO with Subcontracting

Define Basic Settings for Subcontracting

This document explains how you define the settings for subcontracted item.

Outcome

The parameters that control subcontracting item are defined.

The settings for subcontracting can be used to create a product structure in (PDS001), item in (MMS001) and item/warehouse in (MMS002).

These files are updated:

- Planning Proposal Purchase (MPOPLP)
- Purchase Order Header (MPHEAD)
- Purchase Order Lines(MPLINE)

Before you start

- A product costing model must have been created in 'Costing Model. Open' (PCS025).
- A purchase costing model must have been created in 'Purchase Costing Model. Open' (PPS285).

Follow these steps

Define purchase order type

Two purchase order type with order type category 70 for the subcontracting flow must be defined in 'Purchase Order Type. Open' (PPS095).

One for subcontracted operations which on the (PPS095/F) panel normally has 150 Material plan update= 2, update material plan but not balance.

Another for subcontracted items which on the (PPS095/F) panel normally has 150 Material plan update= 1, update both material plan and balance.

- 1 Start (PPS095). Specify a PO type with purchase category 70=Subcontract.
- 2 On the F panel, select Printout method item name and item description (120 and 121) specify how the item name and descriptions are printed on the purchase order document.
- 3 The material plan update (150) field on the F panel controls whether or not the material plan and/or the balance id should be updated. The valid alternatives are:

The 'Material update' field for subcontracted operations which on the (PPS095/F) panel must have 150 Material plan update= 2, update material plan but not balance

The 'Material update' field for subcontracted items which on the (PPS095/F) panel must have 150 Material plan update= 1, update material plan and balance

- 4 Select or specify the appropriate values on the F panel, based on your review of the 'Parameter to Set' table.
- 5 Press Enter.

Define purchase settings

- 1 Start 'Settings - Purchasing' (CRS780).
- 2 On the E panel select Default order type – subcontracting.
The Default order type - subcontract (07) field defines the requisition order type used for handling the issue of subcontracted materials. This order type is also used to create the dummy requisition order used to get the freight document. See chapter 2.1.3 for a description of the important settings on this order type.
- 3 On the F panel, select 'Default PO type – subcontracting operations and General Costing Model – subcontract'.
The Default PO Type – subcontract operations (18) field specifies the purchase order type used in the subcontracting flow. This order type is used if no order type is set on the item/supplier combination in 'Supplier. Connect Item' (PPS040).
- 4 On the F panel select General Costing Model – subcontract.
The General Costing Model - subcontract (21) field specifies the ID of the purchase costing model used for the subcontracting operations. A special costing model can be used for the subcontracted operation in order to take care of costs related to the subcontracting, for example, freight costs, extra subcontracting add-ons, and so on.
This model works together with the finished product's product costing model. In the product costing model, the D01 element contains the cost component for the subcontracted operation. By using the subcontract costing model, costs other than the actual cost for the work performed by the subcontractor can be considered, for example, freight costs. etc. The standard cost can be created from 'Product Costing. Calculate Selected Items' (PCS200) where the **Calc Purch Items** check box must be selected. The purchase price for the subcontracted operation is placed in an agreement (a general or a normal agreement).
- 5 On the G panel select the parameter for 'Planning policy – subcontracting and repair' and check Create planned requisition orders – subcontracting.
The subcontracted orders can be planned differently from normal orders. This is controlled from the Planning policy – subcontracted orders (32) parameter. The planning policy is used when the planned purchase order is created for the subcontracted order.
- 6 Press Enter.

Settings for requisition/distribution type

- 1 Start 'Req/Distr Order Type. Open' (CRS200).
- 2 If Accumulate gross weight in order header (60) is activated, the gross weight for the total of the order lines is accumulated in the order header.

- 3 If a dummy requisition should be created in order to get the freight documents, the Allow issue on non-stocked items (70) field must be set to 1.
- 4 Reference text type (105) specifies the requested contents of the reference text field used as additional information in material plans and historical stock transactions. If values 03, 04 or 05 are chosen, the reference order number will be shown in the text field.
- 5 Dispatch policy (255). The field indicates the dispatch policy design. A dispatch policy contains settings for how the dispatch should work, and is assigned to each order type. Dispatch policies are defined in (MWS010).
- 6 Press Enter.

For more information about how to manage RO/DO, allocation, and dispatch policy, see .

Parameters to set

Program ID/ Panel	Field	The field indicates ...
Settings for purchase order type category 70		
(PPS095/F)	120 Print out method – item name	<p>...the method for transferring the item name to the purchase order.</p> <p>The alternatives are valid:</p> <p>1 = Name is taken from the item/supplier file (PPS040). If there is no name, the field will be left blank.</p> <p>2 = Name is taken from the item/supplier file. If there is no name, it will be taken from the item/language file (MMS030). If the name is still missing, it will be taken from the item file. A warning will be issued if the purchase order language differs from the local language.</p> <p>3 = Name is taken from the item/supplier file. If there is no name, it will be taken from the item/language file (MMS030). If the name is still missing, it will be taken from the item file. No warning will be issued if the order purchase language differs from the local language.</p> <p>4 = To be used only when creating inquiry from planned order. Name is taken from the planned order. If there is no name, the field will be left blank.</p>

Program ID/ Panel	Field	The field indicates ...
(PPS095/F)	121 Printout method – item description	<p>...how the technical description of the purchase order's items is retrieved.</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 1 = Description is taken from the item/supplier file. If there is no description, the field will be left blank. 2 = Description is taken from the item/supplier file. If there is no description, it will be taken from the item/language file (MMS030). If the description is still missing, it will be taken from the item file. A warning will be issued if the purchase order language differs from the local language. 3 = Description is taken from the item/supplier file. If there is no description, it will be taken from the item/language file (MMS030). If the description is still missing, it will be taken from the item file. No warning will be issued if the order purchase language differs from the local language. 4 = Description is retrieved in the same way as in alternative 2, but is never printed on the purchase order. 5 = To be used only when creating inquiry from planned order. Description is taken from the planned order. If there is no description, the field will be left blank.

Program ID/ Panel	Field	The field indicates ...
(PPS095/F)	150 Material plan update	<p>...if the item's material plan should be updated.</p> <p>The alternatives are valid:</p> <p>0 = No.</p> <p>1 = Yes, update both the material plan and balance.</p> <p>2 = Yes, update the material plan but not balance.</p> <p>Alternative 2 is used for orders (subcontracts for example) which should be displayed in the material plan without affecting the projected on-hand balance. It can also be used for direct goods deliveries. During order line entry, you may override the alternative specified here.</p> <p>Note: Two purchase order type with order type category 70 for the subcontracting flow must be defined in 'Purchase Order Type. Open' (PPS095).</p> <p>One for subcontracted operations which on the PPS095/F panel normally has 150 Material plan update= 2, update material plan but not balance</p> <p>Another for subcontracted items which on the (PPS095/F) panel normally has 150 Material plan update= 1, update both material plan and balance</p>
(PPS095/F)	177 Costing model - subcontracting	<p>...the costing model used for subcontracted orders.</p> <p>When the field is filled, it overrules the costing model defined in 'Item. Connect Facility' (MMS003) and (CRS780).</p>

Purchase settings

Program ID/ Panel	Field	The field indicates ...
(CRS780/E)	07 Default order type – subcontracting	...the requisition order type used in order to issue material when managing subcontracted orders. Requisition order types are defined in (CRS200).
(CRS780/F)	18 Default PO type – subcontracting operations	...the PO type that is proposed when a planned PO for subcontracted operations is created and when no PO type has been specified for the operation in (PPS040). This is valid for manufacturing orders.
		Note: This is a setting valid for subcontracted operations not subcontracted items.
(CRS780/F)	21 General Costing Model - subcontract	...the general costing model used for subcontracted orders. For example, you have added elements for setup price and extra transport fees to this costing model. Costing models are defined in (PPS285).
(CRS780/G)	32 Planning policy – subcontracting and repair	...the planning policy used for subcontracted orders. The controlling parameters to be considered in (MMS037) are '022 Default status - planned orders when AM=A1' and '025 Default status - planned orders when AM=A2'. In the planning policy, you define the rules for how planned orders are generated and how action and warning messages are to be applied, among other things.
		Planning policies are defined in (MMS037).
(CRS780/G)	44 Create planned requisition order – subcontracting:	...that a planned requisition order is created when a planned PO for subcontracted items without a manufacturing order is created. We recommend selecting this field.

Program ID/ Panel	Field	The field indicates ...
Settings for requisition/distribution type		
Note: For more information about how to manage RO/DO, allocation, and dispatch policy, see .		
(CRS200/G)	105 Reference type text	<p>...the requested contents of the reference text field which are used as additional information in material plans and historical stock transactions.</p> <p>The alternatives are valid:</p> <ul style="list-style-type: none"> 01 = From-To warehouse 02 = From-To location 03 = Reference order category, reference order number, line, job reference 1 positions 1-13 04 = Reference order category, reference order number, line, To location 05 = Reference order category, reference order number, line, marking positions 1-13.

Define Settings for Subcontracted Item

This document explains how you define the settings for subcontracting item.

Outcome

The parameters that control subcontracting item are defined.

Subcontracting of items occurs when all operations in a structure are subcontracted.

No manufacturing order is used for this flow but the product structure (a bit more simplified) must still be defined in 'Product. Open' (PDS001).

Before you start

Settings in [Define Basic Settings for Subcontracting](#) on page 429 must be fulfilled.

Follow these steps

Refer to the 'Parameters to Set' table to identify which settings element details best corresponds to the company's subcontracting needs and how they should be configured.

Create a subcontracted item

- 1** Here are only fields of interest for subcontracting explained.
For more details on creating an item, see .
- 2** Start 'Item Type. Open' (CRS040). Create an item type with Item category 03=Subcontracted
- 3** Start 'Item. Open' (MMS001).
- 4** On the E panel select the parameter 'Make/buy code' as 'Manufactured' for finished item and 'Purchase' for the component.
- 5** On the G panel the 'Item Category' is defaulted with the same category as in the item type (03=Subcontracted).

Connect subcontracted item to materials & operations

In the product structure, the material and operations for the subcontracted item are described.

Here are only fields of interest for subcontracting explained.

For more details on creating a product structure, see .

- 1** Start 'Product Structure. Open' (PDS001).
- 2** On the B panel select the subcontracted item in the Product field and select enter a product structure type.
- 3** Fill in appropriate fields on the E, F and G panel.
- 4** Press Enter and start 'Product. Connect Materials/Operations' (PDS002/U).
 - Here the material lines as well as the subcontract operation are specified. The material lines should be connected to the number of the subcontract operation.
 - The operation line in the structure is connected to a work center; the work center is specified in 'Work Center. Open' (PDS010) and must be of resource type 2 =Subcontracted.
 - The supplier number of the supplier performing the operations is specified on the G panel in 'Work Center. Open' (PDS010/G). If this is done, the supplier is defaulted when adding the subcontracted operation to the product structure in 'Product. Connect Materials/Operations' (PDS002).
- 5** On the (PDS002/E) panel you define settings for the material line.
 - The 'Subcontract control' field on the E panel (material lines) indicates how the material issue is done, that is, through a connection to a subcontractor or by direct purchase.
If the 'Material method - subcontracting parameter' field on (PDS002/P) is switched off, then the 'Subcontract control' field on the E panel field is not displayed. Set the parameter on by using F13 (Parameters) from the B panel in (PDS002) to call (PDS002/P).
 - If the 'Material method - subcontracting parameter' field on (PDS002/P) is switched off, then the 'Subcontract control' field on the E panel field is not displayed. Set the parameter on by using F13 (Parameters) from the B panel in (PDS002) to call (PDS002/P).
 - The 'Issue method' field. The usual way to perform material issue for subcontracted items is through general stock transactions (= Alternative 1 or 2). Alternative 0 is usually used for subcontracted operations where a manufacturing order exists.
- 6** On the (PDS002/G) panel there are two fields of special interest:
 - The 'Subcontract control' parameter controls whether or not a planned purchase order and a requisition order should be created. For subcontracted items this parameter is usually set to 1= Purchase order and requisition order are created, in which case both a purchase order and a requisition order are created in the subcontracting flow. This parameter can be defaulted from the P panel

- The 'Production day's' field, the lead time for the subcontracted operation is specified. This time is always independent of volume. The lead time is used to calculate the expected delivery date of the subcontracted goods from the supplier.
- 7** On the PDS002/H panel there are also two fields of special interest;
- The **supplier number** predefined on the work center used for the subcontracting operation in 'Work Center. Open' (PDS010) is displayed and can be changed on the H panel.
 - If another supplier performs work on the subcontracted item, that supplier's number is specified in the **Next supplier** field. This supplier's address is printed as the Deliver to address on the purchase order document to the first supplier, informing the first supplier where to deliver the goods. The address is defined as address type 05 in 'Supplier. Connect Address' (CRS622).

Supplier information

The product structure, items and suppliers must exist to be able to work with subcontracting items. As for subcontracted operations, an item/supplier record must be defined in 'Supplier. Connect Item' (PPS040).

Here are only fields of interest for subcontracting explained. How to create a supplier/item connection is explained in [Settings for Supplier and Items](#) on page 201.

- 1** On the B1 panel choose sorting order 4, this displays subcontracted operations. Select the item number for the subcontracted product.
- The 'Service process' (Spc) field specifies the product structure type and the Service field the number of the subcontracted operation.
 - It is very important to specify the subcontracted operation number as it is specified in 'Product. Connect Materials/Operations' (PDS002) since this field is alphanumeric. (Do not forget the leading zeros).

An agreement with the subcontractor can be specified in 'Agreement. Open' (PPS100). The agreement lines for service processes are displayed using sorting order 2. More about agreements; Managing Agreements with Supplier [Process]

- 2** Open (PPS040/E)
- The 'Record type' field indicates the type of ID for the item/supplier combination and has to be 2 for subcontracted operations.
 - 'Supplier item number', 'Supplier item name' and 'Supplier item description' are printed on the purchase order document if specified. These fields can be used to inform the supplier about the subcontracted operation. The supplier-related fields are printed according to the printout method fields on the order type in 'PO Type. Open' (PPS095).
 - The order type used for the created purchase order is specified on the panel. The order type must be of category 70. If no order type is specified, the order type defined in 'Settings – Purchasing' (CRS780) is used. See the Settings section in chapter 4.
 - The goods receiving method specifies what activities to perform in the receiving flow.

Parameters to set

Program ID/ Panel	Field	The field indicates ...
(MMS001/E)	Make/buy code	<p>...whether the item is manufactured in-house or purchased.</p> <p>The valid alternatives are:</p> <ul style="list-style-type: none"> 1 = Manufactured 2 = Purchased.
(MMS001/G)	Item category	<p>...item category that best represents the characteristics of each item.</p> <p>The valid alternatives are:</p> <ul style="list-style-type: none"> 00 = Normal item 02 = Phantom item 03 = Subcontracted item 04 = Tool 05 = Fixed machine 07 = Repairable item 08 = Recyclable item. 11 = Extended Catalog Item (ECI) 12 = Non-coded Extended Catalog Item <p>The alternatives are used for control and informational purposes.</p> <p>A subcontracted item refers to an item purchased as a service but recorded as a normal item after the last subcontracted operation is completed.</p> <p>Recyclable items can also, broadly, be considered repairable. However, repairable items require greater operational follow-up than recyclable items.</p> <p>ECI and Non-coded ECI are only to be used in combination with line types 1 and 2 in customer order entry.</p> <p>When using an ECI template item in customer order entry, a new item is created based on item master data from the template item.</p>

Program ID/ Panel	Field	The field indicates ...
(MMS002/E)	Order Type	<p>...the order type that is planned to be in connection with procurement.</p>
		<p>The acquisition method defines which acquisition process (purchase, manufacturing or distribution) is used by the order type.</p>
		<p>The order type is a group ID for a number of rules which determine how the order is processed in the order flow.</p>
(MMS002/E)	Supplier	<p>...the supplier considered as the main supplier for an item.</p>
(PPS040/B1)	Service Process	<p>... the service process for subcontract or repair purchase orders.</p> <p>You can predefined service processes in (PPS040). The service process must be defined in the structure type file.</p>
		<p>Purchasing using this ID is then nearly the same as purchasing material using an item number. In other words, the predefined values can be obtained as default values.</p>
(PPS040/E)	Record type	<p>... the type of ID for the item/supplier combination.</p>
		<p>The valid alternatives are:</p>
		<p>1 = Item</p>
		<p>2 = Item, structure type and operation number. Applies to subcontract purchasing, where a structure type should be specified in the service process and an operation number should be specified left-justified.</p>
		<p>3 = Item, service process and service number. Applies to repair orders.</p>

Program ID/ Panel	Field	The field indicates ...
(PPS040/E)	Status item/sup	<p>... the status of an item/supplier combination.</p> <p>The valid alternatives are:</p> <ul style="list-style-type: none"> 00 - 09 = Registration in progress 10 = Preliminary 20 = Approved 90 = Deactivated.
(PDS002/U1)	Sequence number	<p>...the sequence number of a bill of material. This number is included in every key ID for material in a product structure or manufacturing order.</p> <p>The sequence number of a bill of material for a kit item may not be greater than 99.</p> <p>The number should contain 4 positions. It can be specified manually.</p>
(PDS002/U1)	Component number/work center	...a component number if the line is a material line, or work center if the line is an operation.
(PDS002/E)	Quantity	...quantity of each component used in the bill of material/structure of a product.
(PDS002/E)	Subcontract control	<p>...how the creation of stock transactions for the current item should be processed if there is a connection to a subcontractor or direct purchase.</p> <p>The valid alternatives are:</p> <ul style="list-style-type: none"> 0 = Issue performed from manufacturing order. 1 = Issue performed through general stock transactions, without possibility to override. 2 = Same as alternative 1, but the issue can be changed in the planned order. 3 = Planned purchase order is created with direct delivery from supplier to subcontractor.

Program ID/ Panel	Field	The field indicates ...
(PDS002/E)	Supplier	...indicates the unique identity of a supplier.

Define Settings for Subcontracted Operations

This document explains how you define the settings for subcontracted operations.

Outcome

The parameters that control subcontracting operations are defined.

Subcontract operations applies when one or more of the operations in a product structure is subcontracted and one or more of the operations is done inside your own factory.

For example, in the manufacturing of a chair, the cutting and the gluing operation may be done within the factory while painting is subcontracted. This way of working with subcontracting is called subcontracted operations.

The workflow is usually administrated through a manufacturing order.

Before you start

Settings in [Define Basic Settings for Subcontracting](#) on page 429 must be fulfilled.

Follow these steps

Note: See the 'Parameters to set' table to identify which settings element details best correspond to the company's subcontracting needs and how they should be configured.

Product structure for subcontracted operations

In the product structure, the material and operations for the subcontracted item are described.

Here, only the fields of interest for subcontracted operations are explained. To learn about how to create a product structure, see .

- 1 Start 'Product Structure. Open' (PDS001).
- 2 On the B panel, select the manufactured item in the 'Product' field and select a product structure type in the 'Stp' field.
- 3 Fill in appropriate fields on the E panel.
- 4 On the F panel, fill in the number of subcontracted operations.
The product structure must consist of at least one subcontracted operation.
- 5 Press Enter and start 'Product. Connect Materials/Operations' (PDS002/U).
Specify the material lines and subcontract operation.

- 6 The subcontracted operation in the structure is connected to a work center. The work center is specified in 'Work Center. Open' (PDS010) and must have resource type 2='Subcontractor in a routing'. Usually, a special work center is used for the subcontracted operation.
- 7 The supplier number of the supplier performing the operations is specified on (PDS010/G). If this is done, the supplier is defaulted when adding the subcontracted operation to the product structure in (PDS002).
- 8 The supplier number of the supplier used for the subcontracted operation is specified on (PDS010/G). If this is done, the supplier is defaulted when specifying the subcontracted operations in the product structure in (PDS002).
- 9 On the subcontracted operation in (PDS002), some settings are specified on the E, G, and H panels.
- 10 Settings for the material lines are done on the E panel.
The subcontract control field on the E panel (material lines) indicates how the material issue is done, that is, if there is a connection to a subcontractor or direct purchase. These are the valid alternatives:
 0 = Issue performed from manufacturing order
 1 = Issue performed through general stock transactions, without the possibility to override
 2 = Same as alternative 1 but the issue can be changed in the planned order.
 - The usual way to perform material issue for subcontracted operations is from the manufacturing order (=0). Alternatives 1 and 2 are usually used for subcontracted items where no manufacturing order exists.
 - If this field is not shown on the E panel, the material method - subcontracting parameter on the P panel (PDS002/P) can be switched off. The panel is reached by using F13 (Parameters) from the B panel in (PDS002).
- 11 On the (PDS002/G) panel, there are two fields of special interest:
 - The 'Subcontract control' parameter controls whether or not a planned purchase order and a requisition order should be created. For subcontracted items, this parameter is usually set to 1='Purchase order' and requisition order are created, in which case both a purchase order and a requisition order are created in the subcontracting flow. This parameter can be defaulted from the P panel.
 - The 'Production day's' field and the lead time for the subcontracted operation is specified. This time is always independent of volume. The lead time is used to calculate the expected delivery date of the subcontracted goods from the supplier.
- 12 On the (PDS002/H) panel, reached by using Page Down from the G panel, specify unit for the subcontracted operation.
These prices are only for information and will not be used to calculate the inventory value for the operation.
 - The supplier number predefined on the work center used for the subcontracting operation in 'Work Center. Open' (PDS010) is displayed and can be changed on this panel.
 - If another supplier performs the operation after the subcontracted operation, the supplier number of the other supplier is specified in the Next supplier field. This supplier's address is printed as a deliver to address on the purchase order document to the first supplier, informing the first supplier where to deliver the goods. The address is defined as address type 05 in 'Supplier. Connect Address' (CRS622).

Supplier information

The product structure, items and suppliers must exist to be able to work with subcontracting items. As for subcontracted operations, an item/supplier record must be defined in 'Supplier. Connect Item' (PPS040).

Here, only fields of interest for subcontracting are explained. To learn about how to create a supplier/item connection, see [Settings for Supplier and Items](#) on page 201.

- 1** On the B1 panel, choose sorting order 4 to display subcontracted operations. Select the item number for the subcontracted product.

- The 'Service process' (Spc) field specifies the product structure type and the Service field the number of the subcontracted operation.
- It is important to specify the subcontracted operation number as it is specified in (PDS002) since this field is alphanumeric. (Do not forget the leading zeros).

An agreement with the subcontractor can be specified in 'Agreement. Open' (PPS100). The agreement lines for service processes are displayed using sorting order 2. See [Managing Agreements with Suppliers](#) on page 267 to learn more about agreements.

- 2** Open (PPS040/E).

- The 'Record type' field indicates the type of ID for the item/supplier combination and has to be 2 for subcontracted operations.
- 'Supplier item number', 'Supplier item name', and 'Supplier item description' are printed on the purchase order document, if specified. These fields can be used to inform the supplier about the subcontracted operation. The supplier-related fields are printed according to the printout method fields on the order type in 'PO Type. Open' (PPS095).
- The order type used for the created purchase order is specified on the panel. The order type must be of category 70. If no order type is specified, the order type defined in 'Settings – Purchasing' (CRS780) is used. See the Settings section in chapter 4.
- The goods receiving method specifies what activities to perform in the receiving flow.

Parameters to set

Program ID/ Panel	Field	The field indicates ...
(PDS010/E)	Resources Type	<p>...the type of resource a work center is. These alternatives are valid:</p> <ul style="list-style-type: none"> • 1 = Resource for an operation for routing. Capacity is calculated from the data specified for the work center or during shift planning from a shift model. • 2 = Subcontractor in a routing. • 4 = Rough-cut capacity planning resource with capacity based on the work centers used. • 5 Rough-cut capacity planning resource with capacity calculated as in alternative 1. • 6 = Work center resource in MM3 Scheduling Workbench (SWB). This may be a single machine or operator, or a group of identical machines. This type of resource may belong to more than one work center group having alternative 1. <p>Note: When the M3 SWB flag is active in 'Facility. Open' (CRS008), the majority of information is specified on type 6 resources. Most fields for the type 1 work center are hidden, with these exceptions:</p> <ul style="list-style-type: none"> • Included in work center, Capacity type, Number of shifts and Utilization rate fields in (PDS010/E). The information in these fields is used in the product lead time calculation and must be specified both for type 1 and type 6 resources. - Default resource (mandatory) (PDS010/F). • All fields in (PDS010/G) as well as the Preparation and Post-operation time fields in (PDS010/K). These are copied from the Default resource when you create a new type 1 work center. They will be copied into routings when you create new routings. New manufacturing orders (and MO proposals) will use these routings' values. • Restriction U/M (optional) on (PDS010/K).
(PDS010/G)	Supplier	<p>...the supplier's number in purchase order processing. This number is displayed as default when new subcontract operations are added to the routing, and must be specified if the work center is type 2.</p>

Managing Subcontracting in Procurement

This document explains how subcontracting is handled in procurement. Subcontracting is done in two ways.

The first one in which one or more of the operations in a product structure is subcontracted and the other of the operations is done inside your own factory.

The second type is when all operations in a structure are subcontracted.

Outcome

Subcontracting for operations and subcontracting for items will be done.

Uses

A finished product with the subcontracted operation is updated in the stock and the corresponding financial transaction is performed.

How the system is affected

Refer to the related settings instruction documents to see how the system is affected.

Before you start

The settings in these documents must be fulfilled.

- See [Define Basic Settings for Subcontracting](#) on page 429
- See [Define Settings for Subcontracted Item](#) on page 435
- See [Define Settings for Subcontracted Operations](#) on page 441

Follow these steps

Product structure with subcontracted operations

1 Manufacturing Order

The workflow for subcontracting operations is usually administrated through a manufacturing order. A manufacturing order is created in 'Manufacturing Order. Open' (PMS100).

Materials can be reserved on the manufacturing order in 'Material Plan. Open' (MMS080) for the component that needs to be sent to the subcontractor.

2 Planned Purchase Order

When a manufacturing order is entered for the finished product, a planned purchase order for the subcontracted operation is created automatically in 'Planned Purchase Order. Open' (PPS170). Sorting and selection of orders is done by using sorting orders and views.

3 Release Planned Purchase Order

The planned purchase order is released in (PPS170). See [Create and Release Planned Purchase Order](#) on page 100.

4 Requisition Order

When the purchase order is printed and reached status 20, a requisition order is created in 'Req/Distr Order. Open' (MMS100). The requisition order is used to create freight document for the delivery of the material to the supplier and is often called a dummy requisition order.

The created requisition order in 'Req/Distr Order. Open' (MMS100) is created automatically from 'Create GST from sub contracting proposals' (MMS117).

5 Report Stock Issue

The stock is reported through 'Picking List. Report' (MWS420). See .

6 Purchase Order

The planned purchase order is released as a normal order and creates a purchase order for the subcontracted operation in 'Purchase Order. Open' (PPS200).

7 Goods Receiving Method

After the supplier has finished the work, the goods are sent back to the company. When the goods are delivered, the goods are received in the same way as normal goods by using 'Purchase Order. Receive Goods' (PPS300). The goods receiving method controls what activities are done in the receiving workflow.

When the subcontracted item is goods-received, the manufacturing order status is updated. The subcontracted operation gets status 90, reported.

8 Invoice Matching

You can perform the invoice matching for the purchase order in Matching Supplier Invoices to Purchase Orders in 'Supplier Invoice. Record' (APS100). See .

Product structure with only subcontracted items

1 Planned Purchase Order

A planned purchase order for the subcontracted operation is created automatically in 'Planned Purchase Order. Open' (PPS170). Sorting and selection of orders is done by using sorting orders and views.

2 Release Planned Purchase Order

The planned purchase order is release in (PPS170). See [Create and Release Planned Purchase Order](#) on page 100.

3 Requisition Order

When the purchase order is printed and reached status 20, a requisition order is created in 'Req/Distr Order. Open' (MMS100). This will happen provided that the issue of material is done from the manufacturing order. The requisition order is used to create freight document for the delivery of the material to the supplier and is often called a dummy requisition order.

The created requisition order in 'Req/Distr Order. Open' (MMS100) is created automatically from 'Create GST from sub contracting proposals' (MMS117).

4 Report Stock Issue

The stock is reported through Picking List. Report (MWS420). See .

5 Purchase Order

The planned purchase order is released as a normal order and creates a purchase order for the subcontracted operation in 'Purchase Order. Open' (PPS200).

6 Goods Receiving Method

After the supplier has finished the work, the goods are sent back to the company. When the goods are delivered, the goods are received in the same way as normal goods by using 'Purchase Order. Receive Goods' (PPS300). The goods receiving method controls what activities are done in the receiving flow.

When the subcontracted item is goods-received, the manufacturing order status is updated. The subcontracted operation gets status 90, finish-marked

7 Invoice Matching

You can perform the invoice matching for the purchase order in Matching Supplier Invoices to Purchase Orders in 'Supplier Invoice. Record' (APS100). See .

8 Occasional Subcontracting

Subcontracting is often used when capacity problems exist in the company's production plant. Sometimes, one of the operations for a certain manufacturing order is subcontracted and another supplier performs the operation on this special order.

Occasional Subcontracting

This is an alternative way of subcontracting operations.

Sometimes, when there are capacity problems, one of the operations for a certain manufacturing order is subcontracted and an external supplier performs the operation on this special order.

Outcome

An operation is rescheduled from in-house to be performed by an external supplier, and planned purchase order is created.

As part of this process, these files are updated:

- MPOPLP Planning Proposal Purchase
- MPHEAD Purchase Order Header
- MPLINE Purchase Order Lines
- MGHEAD Stock Transaction, Header
- MGLINE Stock Transaction, Lines
- MPSURL Subcontracting Requisition Lines

Before You Start

- Settings in [Define Basic Settings for Subcontracting](#) on page 429 must be fulfilled.
- Settings in [Define Settings for Subcontracted Operations](#) on page 441 must be fulfilled.

Follow These Steps

These steps describe the scenario when a manufacturing order is placed on the end product and an operation shall now be rescheduled from in-house to be performed by an external supplier.

- 1** The product structure of the manufacturing order is changed in 'Manufacturing Order. Open Lines' (PMS101).
- 2** Delete the in-house operation (work center) and create a new operation with the sub contracted work center. Redisplay (PMS101/B).
- 3** When you press Close on the (PMS101/B) panel, 'Manufacturing Order. Reschedule' (PMS010/A) is started. Select option 'Create' and the rescheduling is initiated.
The rescheduling is carried out by an autojob.
- 4** Next step is to create the planned purchase order. Open (PMS101) again. Open the G panel. Select F14= Crt sub contr. A planned purchase order can now be found in 'Planned Purchase Order. Open' (PPS170).
- 5** The rest of the subcontracted operation flow is the same as the normal flow, see [Workflow for Subcontracted Operations](#) on page 453.

Subcontract Operation

A subcontract operation is an operation performed by external resources. In this case, an external resource is denoted by a work center having resource type 2.

Description

Subcontract operations which are not performed by internal resources (work centers) are specified in a routing. These operations are indicated as service processes for each item and supplier, to be used during purchasing. When a manufacturing order is created, the subcontract operation or service process can be automatically specified as a planned order for purchase. It can then be purchased in the same way as for normal items.

Subcontract Order – Purchasing

A subcontract order refers to a purchase order for an operation performed by a subcontractor. Purchasing subcontract work functions according to the same principles used in purchasing material or services in the M3 Procurement module.

There are two types of subcontract orders in M3:

- A subcontracting order integrated with a manufacturing order (MO).

A planned subcontract order is created when the MO is created, regardless of status.

- Subcontracting order without MO.

This is designed for companies that do not have in-house production, but administrate operations chains using material either purchased directly or delivered to the subcontractor from an in-house inventory. This

refers to items with item category 3 in 'Item. Open' (MMS001) and acquisition code 2 in 'Item. Connect Warehouse' (MMS002). This functionality is described in a separate section below.

Both types of subcontract order must be defined with order category 70 in 'PO Type. Open' (PPS095). M3 also supports delivery of material to the subcontractor.

Prerequisites

Subcontracting orders require these settings:

Defining general purchasing settings (CRS780)

- Parameter 07 - Requisition type for subcontracting. Specifies the requisition order type to be used when creating requisitions for delivery of material to the subcontractor.
- Parameter 18 - Standard PO type for subcontracting. Specifies the PO type to apply for planned subcontract orders.
- Parameter 21 - General costing method for subcontracting. Specifies the costing method to apply for the subcontract operations.
- Parameter 32 - Planning policy for subcontract order. Specifies the planning policy values retrieved for all planned subcontract orders.

Defining PO type

PO types are defined in (PPS095). 0 or 2 must be entered for parameter 150 - Update material plan. Entering value 0 means that the subcontract purchase will not be displayed in the material plan. The value 2 means that the subcontract purchase is displayed in the material plan, showing actual status but projected on-hand balance is not adjusted upwards for it. Otherwise available on-hand balance would be adjusted upwards twice, since the MO does this. On-hand balance for items with subcontract orders without MO is adjusted upwards during the last operation, regardless of the value entered for this parameter.

Delivery address

A final destination address and any ship-via address must be specified for the subcontractor in order for the correct suggestion to be made. When no address is present, the subcontractor's mailing address is proposed.

Defining values for the requisition type (CRS200)

To connect integration to Transportation Planning, an appropriate Dispatch policy must be connected to the requisition order type. This integration is required for certain processing, such as for bills of lading, etc.

Basic data for production

The work centers that are subcontractors must be defined as resource type 2 (Subcontract) in 'Work Center. Open' (PDS010).

- Operation Lines

The subcontract control field must be defined for the subcontract operation and subcontractor in 'Product Structure. Open' (PDS001). When several subcontract operations are defined in sequence, Next subcontractor should be specified in the subcontract operation. The address of the next subcontractor will then be entered as the delivery address in the purchase order for the first subcontractor. The value in the 'Production days' field will control the lead time for the operation.

- Material Lines

The transaction control field must be defined for the material lines. This parameter determines whether material used in the subcontract operation should be requisitioned using an MO picking list or using the requisition routine. When the requisition routine is specified in this parameter, then the order type used is determined by parameter 07 in 'Settings – Purchasing' (CRS780).

Subcontract order integrated with MO

When entering an MO, a planned PO is created for operations with a work center having resource type 2 (subcontract). This is done regardless of status. However, the status of the planned PO is determined by the values in the planning policy. The planning policy is defined by parameter 32 in (CRS780).

If the value in the Transaction control field (in the corresponding material lines) specifies that a requisition should be created, then this is done when the subcontract order is printed. Scheduled issue date for the requisition will then be the current date. When the requisition is created, the requisition reservation replaces the MO reservation. This is all displayed in 'Material Plan. Open' (MMS080).

After the PO is created, it is integrated in these ways:

- If a requisition is entered, the issued quantity as stated in the requisition is also updated into the MO.
- When the start date, quantity manufactured, or completion date is changed in the MO or when the MO is deleted, then an automatic warning is given that a subcontractor order is included. The date is not changed automatically.
- When the subcontract order is received, manufactured quantity and operation status in the MO are updated. Automatic receipt and material issue are also possible.

For items to be sent to a subcontractor, the product number is printed on the requisition. In this case, if the preceding operation was in-house, then that operation number is also printed on the requisition. However, the requisition line is not affecting inventory. Weight can be entered in the Initial weight field for the subcontract operation on 'Product Structure. Open' (PDS002/E).

The processing described above makes it possible for a complete picking list to be proposed. This includes proposed information about weight.

Subcontract order without an MO

This refers to items with item category 3. For these there is a structure for one or more levels with one or more subcontract operations. Importantly, only subcontract operations are used here. These structures are displayed using option 20=Subcontracting selection from 'Planned Purchase Order. Open' (PPS170/B). A structure is displayed for an indented bill of material with lines for material and operations.

- Display of the material lines and proposed steps is affected by the value in the transaction control field. Material can be purchased directly to the subcontractor or delivered from in-house inventory.
- Operation lines and delivery date for included material as stated in the planned PO, are based on the production days defined in the operation lines. Any changes made before release must be done manually.
- Planned POs for material purchased directly to the subcontractor, and operations are created on (PPS171/E), when the planned PO is released using F14=Create planned PO. These planned orders function as normal purchase orders then.
- A requisition for material to be issued is also created. This occurs when the first subcontract order or direct purchase connected to (the first seven positions in) the planned PO number becomes a purchasing order.
- When the purchasing order is created, then all tracking can be done by inquiring for the planned order number in 'Purchase Order. Display Lines' (PPS220). This displays all purchase orders connected to the first seven positions in the planned PO number and their current status.

- When the last subcontract operation is received, on-hand balance is updated for the item with item category 3 originally created in the planned PO.

Workflow for Subcontracted Items

In this document the workflow for subcontracting is described when working with subcontracted items, that is when all operations in a product structure is executed by a subcontracted supplier.

Outcome

A finished product with the subcontracted item(s) is updated in the stock and the corresponding financial transaction is performed.

Subcontracted items apply when all of the operations in a product structure is subcontracted and done by a subcontracted supplier.

The workflow is administrated without a manufacturing order.

These files are updated in M3:

- MPOPLP Planning Proposal Purchase
- MPHEAD Purchase Order Header
- MPLINE Purchase Order Lines
- MGHEAD Stock Transaction, Header
- MGLINE Stock Transaction, Lines
- MPSURL Subcontracting Requisition Lines

Before you start

- Settings in [Define Basic Settings for Subcontracting](#) on page 429 must be fulfilled.
- Settings in [Define Settings for Subcontracted Item](#) on page 435 must be fulfilled.

Follow these steps

1 Create a planned PO and release to a PO

- When a demand is created in the system on the subcontracted item, for example, from the MRP or from a customer order, a planned purchase order is created in 'Planned Purchase Order. Open' (PPS170).
- In (PPS170), sorting and selection of orders is done by using sorting orders and views.

Only fields of interest for subcontracting are explained here. How to create a planned PO is explained in [Planned Purchase Order](#) on page 122.

Origin code specifies from where the planned purchase order was created. By using origin code 20, only planned purchase orders are displayed on the panel.

You can reschedule the subcontracted order (available on hand etc.) by using option 20=Subcontracting Selection.

- On the (PPS170/E) panel, the purchase price is set to default from a general or a normal agreement. The price on the general agreement is entered on the F panel in 'Supplier. Connect Item' (PPS040). If no price is entered in the agreements, the price must be specified manually.
The planned purchase order is released as a normal order and creates a purchase order for the subcontracted operation in 'Purchase Order. Open' (PPS200). The purchase order type used for the creation of the purchase order is displayed on the E panel in (PPS170). The purchase order type is defaulted from the item/supplier combination in (PPS040).
- On the (PPS171/B) panel, the work center as well as the subcontracted operation's number is displayed.
The defaulted supplier and delivery date can be changed and new planned purchase orders created by using F14 (Crt PO Prop).
If several subcontracted operations exist in the product structure for different suppliers, this program is used to plan and make changes to the planned purchase order.

2 A requisition order is created

When the purchase order is printed and reaches status 20=Released, a requisition order is created in 'Req/Distr Order. Open' (MMS100). This will happen provided that the issue of material is done from the manufacturing order.

The Status indicates how far in the flow the requisition order has come. Status 44 means that the picking list is printed but not yet reported.

On the requisition order type used for this transaction, you can set up whether or not picking list reporting is needed.

When the picking list is reported, the status on the requisition order is set to 99.

Requisition and distribution orders are described in greater detail in the requisition and distribution order documentation.

3 Report picking list

The material required to produce the finished product is printed on the picking list and reported in 'Picking List. Report' (MWS420). Two picking lists are reported: One for the material issues (transaction type 11) and one for the freight documents (transaction type 41).

How to report picking lists are described in .

4 Receive goods from the subcontracted supplier

After the supplier has finished the work, the goods are sent back to the company. When the goods are delivered, the goods are received in the same way as normal goods by using 'Purchase Order. Receive Goods' (PPS300). The goods receiving method controls what activities are done in the receiving flow.

How to receive goods are described in [Goods Receiving Flow for Purchase Orders](#) on page 275.

- More than one subcontracted supplier is used**

In some cases more than one supplier is used for subcontracting and the material is sent to a second supplier for further operations. On the purchase order document sent to the first supplier, the second supplier's address is printed in the Deliver to field. After the first supplier has sent the goods to the second, a fictive goods receipt should be done on the first purchase order.

- Update the On-hand Balance**

Whether the on-hand balance of the item is updated depends on the settings on the order type. For subcontracted items, this parameter is usually set to 1 (= both the material plan and the projected balance is updated).

The goods receipt creates financial transactions in the flow.

Workflow for Subcontracted Operations

In this document, the workflow for subcontracting is described when working with subcontracted operations and manufacturing orders.

Outcome

A finished product with the subcontracted operation is updated in the stock and the corresponding financial transaction is performed.

Subcontract operations applies when one or more of the operations in a product structure is subcontracted and one or more of the operations is done inside your own factory.

For example, in the manufacturing of a chair, the cutting and the gluing operation may be done within the factory while painting is subcontracted. This way of working with subcontracting is called subcontracted operations.

The workflow is usually administrated through a manufacturing order.

Important tables used for these settings are:

MPOPLP	Planning Proposal Purchase
MPHEAD	Purchase Order Header
MPLINE	Purchase Order Lines
MGHEAD	Stock Transaction, Header
MGLINE	Stock Transaction, Lines
MPSURL	Subcontracting Requisition Lines

Before you start

- Settings in [Define Basic Settings for Subcontracting](#) on page 429 must be fulfilled.
- Settings in [Define Settings for Subcontracted Operations](#) on page 441 must be fulfilled.

Follow these steps

Create a planned PO and release to a PO

When a manufacturing order is specified for the finished product, a planned purchase order for the subcontracted operation is created automatically in 'Planned Purchase Order. Open' (PPS170). How to create a manufacturing order is described in .

- 1 In (PPS170), sorting and selection of orders is done by using sorting orders and views.

Note: Fields of interest for subcontracting are only explained here.

How to create a planned PO is explained in [Planned Purchase Order](#) on page 122.

Origin code specifies from where the planned purchase order was created. By using origin code 21, only planned purchase orders created from manufacturing orders are displayed on the panel.

- 2 On the (PPS171/E) panel, the purchase price is used as default from a general or a normal agreement. The price on the general agreement is specified on the F panel with the basis on the price priority that is retrieved from an agreement in 'Purchase Agreement. Open' (PPS100), followed by 'Supplier. Connect Item' (PPS040), then in 'Item. Open' (MMS001), and 'Product. Connect Materials/Operations' (PDS002). If no price is specified in the agreements, the price must be specified manually.
- 3 On the F panel, the manufacturing order number is displayed together with the number of the subcontracted operation in the product structure and the schedule number, if it exists.
 - The reference order category (digit 1 after the line number) specifies what the order number refers to. One (1) means that the reference is a manufacturing order number. After release of the planned purchase order, this reference will follow on to the purchase order.
 - The planned purchase order is released as a normal order and creates a purchase order for the subcontracted operation in 'Purchase Order. Open' (PPS200). The purchase order type used for the creation of the purchase order is displayed on the E panel in (PPS170). The purchase order type is used as default from the item/supplier combination in (PPS040) or in 'Settings - Purchase' (CRS780).

A requisition order is created

When the purchase order is printed and reaches status 20='Released', a requisition order is created in 'Req/Distr Order. Open' (MMS100). This will happen provided that the issue of material is done from the manufacturing order.

The requisition order is not inventory-accounted and only used to create freight document for the delivery of the material to the supplier and is often called a dummy requisition order.

The status indicates how far in the workflow the requisition order has come. Status 44 means that the picking list is printed but not yet reported. On the requisition order type used for this transaction, you can set up whether or not picking list reporting is needed. When the picking list is reported, the status on the requisition order is set to 99. Requisition and distribution orders are described in greater detail in the requisition and distribution order documentation.

Report picking list

Picking lists are reported in 'Picking List. Report' (MWS420). There are usually two picking lists to report: one for the material issues (transaction type 11) and one for the freight documents (transaction type 41). For more information on reporting picking lists, see .

Receive the goods from the subcontracted supplier

After the supplier has finished the work, the goods are sent back to the company. When the goods are delivered, the goods are received in the same way as normal goods by using 'Purchase Order. Receive Goods' (PPS300). The goods receiving method controls what activities are done in the receiving flow. For more information on receiving goods, see [Goods Receiving Flow for Purchase Orders](#) on page 275.

- More than one subcontracted supplier is used

In some cases more than one supplier is used for subcontracting and the material is sent to a second supplier for further operations. On the purchase order document sent to the first supplier, the second supplier's address is printed in the 'Deliver to' field. After the first supplier has sent the goods to the second, a fictive goods receipt should be done on the first purchase order.

- If the operation is the last operation in the product structure

Whether the on-hand balance on the material is updated depends on the settings on the order type after the goods receipt. If the operation is the last operation in the product structure it is preferable to update both the material plan and the projected balance.

- Close the subcontracted operation

When the subcontracted item is goods-received, the manufacturing order status is updated. The subcontracted operation gets status 90='Fully reported'. The goods receipt also creates financial transactions.

Additional operations subsequent to the subcontracted operation in the product structure, if any, are then carried out.

- After the last subcontracted operation

After the last operation, the manufacturing order receipt is the next activity. This transaction can also be set so it is conducted automatically upon reporting of the subcontracted operation. After receipt of the manufacturing order is reported, the status on the manufacturing order header will be 90/90. How to report an MO is described in .

Chapter 13: Purchase Delivery Schedules

Connect a Purchase Order to a Purchase Delivery Schedule

This document explains how you connect a planned purchase order and a purchase order to a purchase delivery schedule.

Outcome

A planned purchase order and a purchase order with a purchase delivery schedule are created.

The purchase order for a purchase delivery schedule is delivered as ordered goods in 'Purchase Order. Receive Goods' (PPS300).

These files are updated:

- Purchase Order Header (MPHEAD)
- Purchase Order Line (MPLINE)
- Planned Purchase Orders (MPOPLP)

Before You Start

- A purchase order must be created with the purchase delivery schedule. Demands in the delivery schedule within the firm time limit must be displayed as firm purchase order lines and demands outside the firm time limit as planned purchase orders. See [Create and Print Purchase Delivery Schedules](#) on page 459.
- The parameters in [Create Agreement for Purchase Delivery Schedules](#) on page 457 must be defined.
- A planned purchase order must be created. See [Create and Release Planned Purchase Order](#) on page 100.
- A purchase order must be created. See [Create, Release, and Display Purchase Order](#) on page 94.

Follow These Steps

Display Purchase Order Attached to the Purchase Delivery Schedule

- 1 Start 'Purchase Order. Open' (PPS200).
- 2 Select the purchase order attached to the purchase delivery schedule. Select option 11='Lines' to continue to 'Purchase Order. Open Lines' (PPS201).
- 3 Select the purchase order line and then select the Display option.
 - The first line, 'Ln blank' with Status 00, indicates that the order is connected to a delivery schedule and the line cannot be deleted.
 - New deliveries are created as new lines in 'Purchase Order. Open lines' (PPS201).

Use Purchase Delivery Schedule in a Planned Purchase Order

- 1 Start 'Planned Purchase Order. Open' (PPS170).
- 2 On the P panel, set the panel sequence to E.
- 3 Press Enter to continue to the B1 panel.
- 4 Select the planned purchase order for the delivery schedule and select the Display option.
 - The E panel displays the planned delivery date. This date is the date displayed in the delivery schedule when the order is not released.
 - The delivery schedule agreement number is also displayed in the 'Our reference number' field.
 - The status and action messages help determine the action for the planned purchase order.
- 5 Select the planned purchase order that needs to be released and then select option 11 = 'Release line'.
- 6 Press F3 to close and continue to 'Purchase Order. Create from Planned' (PPS913).
- 7 On the E panel, enter the buyer, supplier number, facility, and purchase order number.
 - Two different period ranges can be selected.
- 8 Repeat the initial steps to check if deliveries are created as new lines in 'Purchase Order. Open lines' (PPS201).

Create Agreement for Purchase Delivery Schedules

This document explains how you create an agreement in purchase delivery schedules and how you print the agreement.

Outcome

An agreement for a purchase delivery schedule is created. You can attach the agreement to the purchase orders, and print a list of agreements for further reference.

Uses

A purchase delivery schedule can be created with the price and discounts retrieved from the valid agreement.

How the System Is Affected

These files are updated:

- Purchase Agreement Header (MPAGRH)
- Purchase Agreement Line (MPAGRL)
- Purchase Agreement Prices (MPAGRP)

Before you start

- An agreement type for purchase delivery schedule must be defined in 'Agreement Type. Open' (PPS110).
- The parameters in [Define Settings for Agreements](#) on page 263 must be defined.

- The parameters in [Define Settings for Purchase Delivery Schedules](#) on page 460 must be defined.

Follow These Steps

Delivery Schedule Agreement

- Start 'Purchase Agreement. Open' (PPS100).
- Press F13 to open the P panel. Set the panel sequence to EF12 and press Enter.
- On the B panel, enter the supplier number and agreement type. Select New.
- On the E panel, select the valid parameters.
All the parameters are the same as that of a normal agreement.
- On the F panel, enter the warehouse, firm delivery schedule, preliminary delivery schedule, forecast days, and number of print generations.
 - All the other parameters are the same as that of a general agreement.
 - The 'Firm delivery schedule' field controls the creation/updation of the purchase order. Only the first delivery creates an order, the deliveries following that will only update the existing order with a new order line. Orders outside the firm delivery days are to be considered as preliminary and forecast. These orders are printed on the delivery schedule document and created as planned purchase orders.
 - The length of the 'Firm delivery schedule' is set to the same length or shorter than the lead time for the item. The length of the 'Preliminary delivery schedule' is often set to the same length as the planning time fence. The 'Forecast days' are set to the same length as the forecast period or planning horizon.
 - The 'Number of print generations' field indicates how many printouts of the delivery schedule should be saved and stored. Every time a delivery schedule is sent to the supplier, it is also captured for further analysis.
 - Warehouse is mandatory for a delivery schedule agreement since it affects the material planning.

Purchase Delivery Schedule Agreement Lines

- Press Enter to continue to Purchase Agreement. Open Lines (PPS101).
- On the B panel, enter the group ID, item number, and start Date. Select New.
- On the E panel, enter the setup price, purchase price, discount 3 (if required).
- On the F panel, enter the renewal quantity, renewal amount, bonus item, bonus generating, order total discount base, goods receiving method, and warranty limit 1-4. Press Enter.

Print Purchase Delivery Schedule Agreement

- Start 'Purchase Agreement. Print Document' (PPS530).
- On the B panel, enter the supplier number, agreement number, buyer, status, valid from, agreement date, agreement type, group ID, supplier agreement number, and supplier number/agreement number.
 - Two different period ranges can be selected.
 - Sorting order can be marked, using numerical values. The lowest numerical value is given the highest priority.
- Press Enter.
The printing job is submitted.

Create and Print Purchase Delivery Schedules

This document explains how you create a purchase delivery schedule either automatically or manually. It also explains how you print the purchase delivery schedule.

Outcome

A purchase delivery schedule is created automatically or manually, which in turn triggers the creation of purchase order lines or planned purchase orders connected to the delivery-scheduled purchase order.

Use the purchase delivery schedule to perform these actions:

- Purchase frequently used products where a partner relationship exists between the supplier and customer
- Present both purchase orders and planned purchase orders in one document.

As part of this process, these files are updated:

- Delivery schedule prints (MPDEPR)
- Planned Purchase Order (MPOPLP)
- Purchase Order – Header (MPHEAD)
- Purchase Order – Line (MPLINE)
- Purchase Order Transactions (MPLIND)

Before you start

- An agreement type for purchase delivery schedule must be defined in 'Agreement Type. Open' (PPS110).
- The parameters in [Define Settings for Agreements](#) on page 263 must be defined.
- The parameters in [Define Settings for Purchase Delivery Schedules](#) on page 460 must be defined.

Follow these steps

Automatic creation of a purchase delivery schedule

- 1 Create a demand for the delivery schedule item by entering the safety stock in 'Item. Connect Warehouse' (MMS002) or by creating a customer order in 'Customer Order. Open' (OIS100).
- 2 Start 'Material Plan. Open' (MMS080).
- 3 On the B panel, enter the warehouse and item number.
- 4 Select option F18 = MRP Calculation.
A planned purchase order is created.
- 5 Start 'Purchase Delivery Schedule. Open' (PPS210).
- 6 On the B panel, enter the warehouse for sorting order 1. Press Enter.
A delivery schedule is automatically created and connected to a purchase order, with status 15.

Manual creation of a purchase delivery schedule

- 1 Start 'Purchase Delivery Schedule. Open' (PPS210).
Note: It is not possible to manually create a delivery schedule through (PPS200).
- 2 Press F13 to open the P panel and set the opening panel to A. Press Enter.

- 3** On the A panel, enter the warehouse, item number, supplier number, order type, and agreement number. Select New.
- 4** On the E panel, enter the proposed quantity below the time axis.
 - The date displayed in the delivery schedule is controlled from the parameters on panel P of (PPS210/P). The displayed day could be Monday (=1), Tuesday (=2), Wednesday (=3), Thursday (=4) or Friday (=5).
 - The character in front of the date indicates if the date lies in the firm (*) or in the preliminary (-) range.
 - If the line is open, the order quantity can be re-planned from here.
 - If changes are made, this will directly affect the purchase order or the connected planned purchase order.
 - If more than one order lies in the period, the line will be closed.
 - If these orders have to be re-planned this must be done from the purchase order or the planned purchase order.
- 5** On the F panel, enter the ship-via address and final destination address. Press Enter.
The final destination is the optional address field that, if filled in, overrides the goods receiving address of the company.

Print a purchase delivery schedule

- 1** Start (PPS210).
- 2** Select the Delivery schedule with status 15.
Status 15 = Ready for printout.
- 3** Select option F14 = 'Prt dely sched' to continue to 'Purchase Delivery Schedule. Print' (PPS615/E).
- 4** Enter the facility, supplier number, printout code, control changes, and report layout.
 - Two different period ranges can be selected.
 - Activate the control change parameter if changes to the delivery schedules should be checked for buyers and suppliers.
 - If a check is requested, and changes were made within the agreement's preliminary time horizon and the schedule has status 20 (printed), then the status of the delivery schedule is changed to 15 (selected for printing).
- 5** Press Enter.
 - The printing job is submitted.
 - The purchase delivery schedule is assigned status 20 after it is printed.

Define Settings for Purchase Delivery Schedules

This document explains how you define the settings for purchase delivery schedules.

Outcome

The parameters that control purchase delivery schedules are defined.

These files are updated:

- Delivery schedule prints (MPDEPR)
- Planned Purchase Order (MPOPLP)
- Purchase Order – Header (MPHEAD)
- Purchase Order – Line (MPLINE)
- Purchase Order Transactions (MPLIND)

The parameters defined are used to create delivery schedules manually or automatically in 'Purchase Delivery Schedule. Open' (PPS210).

Before you start

- An item must exist in 'Item. Open' (MMS001).
- The item must be connected to a warehouse in 'Item. Connect Warehouse' (MMS002).

Follow these steps

Define purchase order type

- 1 Start 'PO Type. Open' (PPS095). Select order category 30 or 40. Select New.
- 2 On the E panel, enter the 'Number series – PO' and press Enter.
- 3 On the F panel, select the 'Mandatory item/supplier record' and 'Agreement check - PO entry' (optional). Press Enter.
- 4 On the G panel, select the 'PO type check' (optional) and press Enter.
- 5 On the H panel, select the parameter 'Representative price' and press Enter.
- 6 On the I panel, select the parameter 'Use buyer from agreement first' (optional) and press Enter.

Settings for Item. Connect Warehouse

- 1 Start (MMS002).
- 2 On the E panel, enter the acquisition code, period frame, planning policy, planning horizon, lead time, order type, and supplier. Press Enter.
- 3 On the F panel, enter the order policy and press Enter.
- 4 On the G panel, enter the buyer and the distribution/supplier calendar check and press Enter.

Settings for Supplier. Connect Item

- 1 Start 'Supplier. Connect Item' (PPS040).
- 2 On the E panel, enter the order type and the goods receiving method.
- 3 Press Enter.

Parameters to set

Program ID/Panel	Field	The field indicates ...
Settings for Purchase Order Type		

Program ID/Panel	Field	The field indicates ...
(PPS095/E)	020 Number series - PO	<p>...the number series used while entering purchase order numbers for the purchase order type.</p> <p>You can define alternative number series for different facilities.</p>
(PPS095/F)	110 Mandatory item/supplier record	<p>...the connection between an item and supplier in (PPS040). This is mandatory in order to enter the order lines.</p> <p>Select the check box if the connection is mandatory.</p> <p>Automatic order proposals are assigned a lower status when item numbers are not connected to a supplier.</p>
(PPS095/F)	160 Multiple agreements per PO	<p>...that the purchase orders are allowed to contain more than one agreement number.</p> <p>For a rolling delivery schedule this must be set to 1. For a time limited delivery schedule this must be set to 0.</p> <p>If you do not select the check box, automatically created purchase orders will be divided, and manually created orders will be locked for entry.</p>
(PPS095/G)	190 PO type check	<p>...whether the purchase order should be reconciled for each supplier against the table of approved purchase order types.</p> <p>These alternatives are valid:</p> <p>1 = No.</p> <p>2 = Yes, warning which can be overridden.</p> <p>3 = Yes, warning which cannot be overridden.</p>
(PPS095/H)	320 Representative price	<p>...that the specified purchase price is representative.</p> <p>These alternatives are valid:</p> <p>0 = No. The price should not affect the price history analysis. It can, for example, contain expensive support purchases.</p> <p>1 = Manually specified price.</p> <p>2 = Price according to agreement.</p> <p>This code is always displayed by default on the purchase order line. However, if the purchase price is changed on the line and the value in this field is 2, the code is automatically set to 1.</p>

Program ID/Panel	Field	The field indicates ...
(PPS095/I)	Get buyer from agreement	<p>...how the system prioritizes the buyer involved in the purchase agreement when you select which buyer is the default buyer for purchase orders.</p> <p>If you select the check box, the system uses this priority:</p> <ul style="list-style-type: none"> The buyer entered in the purchase agreement in (PPS100). The buyer entered for the item/warehouse combination in (MMS002). The parameter; responsible entered for the item/supplier combination in (PPS040). The buyer entered for the supplier in (CRS624). <p>If you do not select the check box, the system uses this priority:</p> <ul style="list-style-type: none"> The buyer entered for the item/warehouse combination in (MMS002). The responsible entered for the item/supplier combination in (PPS040). The buyer entered for the supplier in (CRS624). <p>The default buyer can be overridden when purchase orders are processed.</p>

Settings for Item. Connect Warehouse

(MMS002/E)	Acquisition code	<p>...how the acquisition must be performed in case of requirements (immediate or planned) for each item/warehouse.</p> <p>The valid alternative for a delivery scheduled item is:</p> <p>2 = Purchasing</p>
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Program ID/Panel	Field	The field indicates ...
(MMS002/E)	Period frame	<p>...a period frame template that is used to group days into appropriate periods. Each template ID is user-defined and can include up to 50 periods/columns with varying lengths.</p> <p>The period frame template entered per planning unit is also used for forecast distribution, if appropriate. Each period template is defined by entering three pieces of information in four intervals:</p> <ul style="list-style-type: none"> - Number of periods/columns - Unit multiplier, that is the number of units that will form the period/column - Unit, expressed in one of these alternatives: <p>These alternatives are valid:</p> <ul style="list-style-type: none"> 1 = Days 2 = Weeks 3 = System periods <p>In addition, it is possible to determine the way in which eventual changes from one unit to another are processed by specifying whether overlapping should be used.</p>
(MMS002/E)	Planning policy	<p>...the rules that determine how to use the generation of planned orders, action messages and warning messages.</p> <p>A delivery scheduled item normally uses a planning policy set with automatic release (status 60 if A1, A2).</p>
(MMS002/E)	Planning horizon	<p>...the planning horizon, which is entered for each item/warehouse and indicates the number of days covered by the requirements planning from the current system date.</p> <p>There may be requirements beyond the date fixed by the planning horizon, but these are not considered when orders are generated.</p> <p>To support long-term planning, it is possible to override the planning horizon for each simulated version of the requirements planning.</p>

Program ID/Panel	Field	The field indicates ...
MMS002/E	Lead time	<p>...the lead time for each item. This is the time required to meet a requirement from the time acquisition activities are started to the time the requirement is fulfilled.</p> <p>Lead time includes:</p> <ul style="list-style-type: none"> - Administrative time - Transmission time - Supply lead time - Transportation time - Inspection time <p>For a delivery scheduled item, this lead time determines when the purchase proposals will be released automatically or receive action message A1/A2. This lead time will also normally correspond to the number of days defined in the purchase agreement as "firm days."</p>
MMS002/E	Order type	<p>...a combined ID for settings that determine how the order is processed during order entry and in the processing flow.</p> <p>Order types for purchasing are defined per order category in PPS095.</p>
MMS002/E	Supplier no	...the supplier who is considered the main supplier for an item.

Program ID/Panel	Field	The field indicates ...
(MMS002/F)	Order policy	<p>...the process to calculate order quantity for each item/warehouse. The alternatives are described in more detail below.</p> <p>Normally method 11 = "Lot for Lot" is used when using delivery schedule.</p> <p>Fixed quantity/variable period. These alternatives are valid:</p> <ul style="list-style-type: none"> 00 = Manually entered quantity 01 = Fixed quantity calculated from run-out time. 02 = Economic order quantity - Wilson's formula. <p>Variable quantity/fixed period. These alternatives are valid:</p> <ul style="list-style-type: none"> 11 = Discrete order quantity 12 = Manually entered run-out time 13 = Economic run-out time 15 = Run-out time using point-of-time table <p>Variable quantity/variable period. The valid alternatives are:</p> <ul style="list-style-type: none"> 21 = Least unit cost 23 = Period-based order quantity without balance check 24 = Period-based order quantity with balance check 25 = Up to maximum on-hand balance <p>Regardless of the order policy (OP) you use, the expected requirements are converted into one or more replenishment orders.</p> <p>All of the methods can be used when material requirements planning (MRP) is used. MRP is a time-phased method, which means that a time dimension is added to the traditional inventory status information. Since all requirements and inventories always relate to a specific date, planning can be accomplished with greater precision.</p>
(MMS002/G)	Buyer	<p>...the buyer normally responsible for purchasing.</p> <p>The buyer can, for example, be responsible for purchase orders, agreements, item/supplier combinations, or item/warehouse combinations.</p> <p>The specified buyer for each item/warehouse is copied to the planned orders generated by M3.</p>

Program ID/Panel	Field	The field indicates ...
(MMS002/G)	Distribution/supplier calendar check	<p>...how the distribution and supplier delivery calendars are checked when an order's delivery date is determined.</p> <p>These alternatives are valid:</p> <ul style="list-style-type: none"> 0 = Calendars are not used 1 = Back scheduling 2 = Forward scheduling 3 = The closest date possible is selected, regardless of whether a previous or later delivery date is selected <p>The acquisition method determines which calendar is used. For distribution orders, this field is selected for the item/warehouse (MMS002)</p>
Settings for Supplier. Connect Item		
(PPS040/E)	Order Type	<p>...a combined ID for settings that determine how the order is processed during order entry and in the processing flow. Order types for purchasing are defined per order category in PPS095.</p>
(PPS040/E)	Goods receiving method	<p>...the method that controls processing of the goods receiving flow. Depending on the method, quality inspection might be performed; certain documents can be printed, and so on.</p> <p>On the purchase order line, a default goods receiving method is proposed. This method can be overridden. The proposal comes from one of three sources according to this priority ranking.</p> <p>These alternatives are valid:</p> <ul style="list-style-type: none"> 1 = Combination of item and supplier 2 = Item 3 = Purchase order type

Order policy methods

All methods are maintained manually. These three pieces of information are: 1. Order multiple - the order quantity must always be a multiple of this quantity. 2. The minimum order size - the minimum quantity that can be ordered. 3. The maximum order size - the maximum quantity that can be ordered.

For those methods based on a fixed-order quantity, the quantity is always increased when the daily requirement is greater than the fixed-order quantity (increases to the order multiple).

Detailed description of the alternatives:

- 00 The quantity is manually entered. 01 Fixed quantity calculated from run-out time - the number of run-out days is entered either per item/warehouse or per sales volume class - the requirement is based

on the selections made in connection with the calculation, which include: - Yearly requirements - Running yearly usage - Historic usage - Forecasted usage.

- 02 EOQ according to Wilson's formula.
$$\frac{2 * \text{Year's required} * \text{Ordering cost}}{\text{Carrying cost} * \text{stock/costing price}} \text{ Square root}$$
- 11 Discrete order quantity - when using this method, an order is created for each requirement even if there are several requirements for the same day.
- 12 Manually entered run-out time - the order quantity is calculated dynamically according to the logic used in MRP - as requirements arise, orders are placed that cover the number of days entered manually as the run-out time.
- 13 Economic run-out time - the order quantity is calculated dynamically according to the logic used in MRP - as requirements arise, orders are placed that cover the number of days entered manually as the run-out time This formula applies: The order quantity is calculated according to Wilson's formula, and then divided by the average usage per calendar day. This average usage is based on the yearly volume or on running yearly usage. The run-out time = EOQ/daily requirement. The run-out time is calculated in the same function which calculates the fixed quantities.
- 15 Requirements are summarized according to the planning points specified in the Point of Time table - example: If the planning points specified are set up as every day at 10:00, then the system will summarize all requirements between day one 10:01 to day two 10:00, then summarize requirements between day two 10:01 to day three 10:00, and so on.
- 21 Least unit cost - this method estimates different order quantities by accumulating one daily requirement at a time - afterwards, the order receives the quantity that has the least unit cost - this formula applies: Interest lay days.

Inv. cost ----- * ----- *(price * ord. qty.) 100 365 (ordering cost + Inv. cost).

Unit cost ----- Number of units in the order.

Interest Inv. interest according to parameter.

Lay days Number of calendar days that elapse from the order's delivery date, up to and including the last requirement's date the order covers.

- 23 Period-based order quantity without balance check - this method is developed specifically for environments where a requirements-determined order initialization is desirable, while at the same time production should be balanced and evenly distributed according to the max/min order quantities per day - the method requires that a production rate is established for the product.
- 24 Period-based order quantity with balance check - this method is based on the same principle as method 23, with a few exceptions - the method considers the opening balance for each period and evens out the surplus requirements both backwards and forwards - as with the other cases, neither released nor fixed planned orders may be rescheduled automatically.
- 25 Up to maximum on-hand balance - this method is mainly designed for reorder point determined ordering, which means that the order quantity is always calculated so the calculated balance after the transaction is the same as the maximum on-hand balance minus one.

Delivery Schedule - Purchasing

A delivery schedule specifies the time for delivery of goods or services from a supplier to a customer, and often covers a half to one-year period. The schedule is usually divided into periods with different status codes. Normally, the quantity requirements closest in time are direct orders. Next periods can be preliminary, where the customer promises to purchase material for products that are to be delivered in the delivery schedule. Other periods can contain quantities that are purely forecasted requirements.

Types of delivery schedules

The category selected for the purchase order type when the delivery schedule is created regulates the type of schedule to be used. There are three types of schedules:

Rolling

These delivery schedules are valid for an indefinite period of time and contain requirements that are updated regularly.

Time-limited

The validity period for these delivery schedules should correspond to the period stated in the purchase agreement.

Quantity-limited

Here, the total quantity on the order must not exceed the maximum quantity specified in the purchase agreement.

Blanket releases

Blanket releases for the delivery schedule are divided into three periods depending on the order level. They are processed and saved differently for different order levels.

Definite releases

Blanket releases having a delivery date within the item's planning time fence are definite. They are saved as purchase order lines.

Preliminary releases

Blanket releases within the preliminary period defined in the purchase agreement are preliminary. They are saved as planned purchase orders with status 15. This indicates that the quantity is locked but that the delivery date can be changed.

Forecast releases

Blanket releases after the preliminary period are forecasts. They are saved as planned purchase orders with status 10. This indicates that both quantity and delivery date can be changed.

Managing Purchase Delivery Schedules

This document explains how you create a purchase delivery schedule and use it for purchases of frequently used products.

Outcome

A purchase delivery schedule is created and printed.

These files are updated:

- Delivery schedule prints (MPDEPR)
- Planned Purchase Order (MPOPLP)
- Purchase Order - Header (MPHEAD)
- Purchase Order - Line (MPLINE)
- Purchase Order Transactions (MPLIND)

The production of the items that are required in the future can be planned in order to meet demand.

Before you start

The parameters in [Define Settings for Purchase Delivery Schedules](#) on page 460 must be defined.

Follow these steps

1 Demand

You can create a demand for the delivery schedule item by entering the safety stock in 'Item. Connect Warehouse' (MMS002) or by creating a customer order in 'Customer Order. Open' (OIS100).

2 Agreement for Purchase Delivery Schedule

An agreement regulates how and when the delivery schedule can be changed between the supplier and customer. Delivery schedules have three time limits: frozen, preliminary and forecast.

Within the forecast time limit, both time and quantity can be changed. In the preliminary period, there can be rules or intervals that determine how quantity and time can be changed.

Each agreement is connected to an agreement type. The agreement type controls the purchase delivery schedule. The status of the agreement must be set to 40. Agreements with other statuses cannot be used.

The delivery schedule items are entered in 'Purchase Agreement. Open Lines' (PPS101). The line type should be 1 for an item.

You can print agreement documents by selecting option 6 from 'Agreements. Open' (PPS100) or in 'Purchase Agreement. Print Document' (PPS530).

3 Purchase Order with Purchase Delivery Schedule

A purchase order is created when the delivery schedule is created. Each line will be assigned a sequence number (a line number).

Demand within the preliminary and the forecast time limits will create planned purchase orders. When the planned orders connected to a delivery scheduled item are released, they will be attached to the purchase order created from the delivery schedule.

The status and action messages help determine the action for the planned purchase order.

4 Delivery Schedule

There are two types of delivery schedules: rolling, which uses purchase order category 30, and time-limited, which uses purchase order category 40. Rolling agreements have no limitations on purchased quantities or the valid time intervals for purchases. When the allowed quantity is fully executed, the system searches for a new agreement number from which to continue the count.

You can create delivery schedules manually in 'Delivery Schedule. Open' (PPS210). This can be the case if the customer does not use forecasting and wants to work with delivery schedules and inform the supplier about future demands.

With delivery schedules, item number and quantity are used instead of purchase order and purchase order line number.

You can print delivery schedules by selecting option F14 from 'Delivery Schedule. Open' (PPS210/B), to continue to 'Delivery Schedule. Print' (PPS615). You can also print a delivery schedule by directly displaying 'Delivery Schedule. Print' (PPS615).

You can use the user-defined views in 'Delivery Schedule. Print' (PPS615) to create a default setup for your panel selections.

5 Goods Receipt

The goods receiving flow is the same for purchase delivery schedules as for regular purchased items. The flow is set up on the goods receiving method which determines if quality control is required.

When a delivery schedule item is received in 'Purchase Order. Receive Goods' (PPS300), only the item number and the quantity must be entered. The system automatically proposes the deduction of open lines in the age sequence.

If the delivery schedule item is purchased from several suppliers, the correct supplier must be selected in the S panel of 'Purchase Order. Receive Goods' (PPS300/S).

Perform Goods Receipt for Delivery Schedule Items

This document explains how you receive goods for purchase delivery schedule items.

Outcome

The goods connected to your delivery schedule are received and put away at the plant.

How the System Is Affected

- View the balance identity of the goods in 'Balance Identity. Open Toolbox' (MWS068).
- Perform a quality inspection for the goods in 'Purchase Order. Inspect Goods' (PPS310).
- Monitor the status development in 'Purchase Order. Display Lines' (PPS220).
- Match the invoice connected to the purchase order in 'Supplier Invoice. Record' (APS100).

How the System Is Affected

These files are updated:

- Planning overview (MITPLO)

- PO lines (MPLINE)
- PO line transaction (MPLIND)
- Stock transaction history (MITTRA)
- On-hand balance (MITLOC)
- Item/warehouse (MITBAL)
- Accounts payable (FPLEDX)

Before you start

The parameters in [Connect a Purchase Order to a Purchase Delivery Schedule](#) on page 456 must be set.

Follow These Steps

- 1 Start 'Purchase Order. Receive Goods' (PPS300).
- 2 Press F13 to open the P panel, and set the opening panel to A. Press Enter.
- 3 On the A panel, enter the item number and quantity. Press Enter.
 - If the delivery-scheduled item is purchased from several suppliers, the correct supplier must be selected on (PPS300/S).
 - The F panel will be displayed if the goods receiving method is direct put-away. Otherwise (PPS300/B) will be displayed.
- 4 On the F panel, enter the location and lot number, number of packages, delivery number, and lot reference.
 - The report date is proposed by default.
 - The received quantity will be proposed and distributed starting with the first open PO line.
 - If a receipt is greater than the order quantity on one line, the remaining quantity will be deducted from the next line.
 - If the received quantity is greater than all available quantities on the PO lines, the last line will get the remaining quantity proposed.
- 5 Press Enter.
 - The job is submitted.
 - After goods receipt, the received quantity is deducted from the remaining quantity and will be removed from the delivery schedule.

Chapter 14: Supplier Rebate for Purchasing

This document describes the supplier rebate on purchase.

Supplier rebates are retrospective payments received from a supplier in return for meeting agreed purchasing targets within specific period. These rebates are common in wholesale distribution and can greatly impact organizational performance by incentivizing distributors to increase sales volumes or revenues. It is important not to confuse this with Supplier Rebate on Sales, which is based on sales transactions.

Supplier Rebate Agreements Overview

Supplier Rebate Agreements is a solution that manages the supplier rebates driven by the purchase transactions within M3 Business Engine.

This solution affects and integrates with these existing M3 processes:

Supplier Rebate in Purchasing includes these functions:

Function	Description
Agreement maintenance	Defines how the supplier rebate agreement is modeled in the system. This function also describes the agreement settings and the other required master data.
Agreement selection	Defines the process of selecting and attaching an agreement model to a purchase order during an order entry. This function also determines the agreements valid to a purchase order line, once it is invoice-matched.
Rebate calculation	Defines how rebate computation is done based on invoiced quantities, prices, the agreement conditions, and the agreement structure.
Claim Generation	Defines the process of summarizing all the eligible purchase transactions and applying agreement structure and terms, to ultimately calculate the rebate amounts and to also generate a supplier claim accordingly.

Supplier Rebate Agreement Components

The basic setup uses an agreement model to define a collection of agreements and it also holds multiple sequences of agreements to apply and evaluate against a Supplier invoice for purchases made.

The agreement number contains detailed conditions, criteria, and terms used for rebate calculation. The structure also includes a selection matrix for the covered suppliers, warehouses, items, or classification of items, which customers can use to determine which purchase orders and lines are eligible for rebate accrual.

Different options for rate management are also defined as well as settings for the number series, agreement type, and agreement group. There are options available to define the lifespan of the agreement, and how the settlement frequency should affect the agreement structure.

The diagram shows the relationships between the database tables and its cardinality. The blue boxes are new entities directly related to the creation and management of supplier rebate agreements. The yellow boxes are existing M3 programs or tables where new fields are added. The gray boxes also illustrate the existing M3 programs or tables where the new standard data is added.

Supplier Rebate on Purchase Limitations

Beyond general purchasing and financial limitations, there are limitations that are directly related to and built in to the Supplier Rebate functionality.

General Limitations

- To generate a claim for Supplier Rebate on Purchase, only ‘Supplier Rebate Agr Claim Schedule. Open’ (PPS484) may be used. Using ‘Suppl Inv Proposal. Generate for Claim’ (PPS123) independently is not available.
- The listed price sources are not supported for rebate computation and accrual:
 - Freight agreement
 - Discount agreement
 - Loan agreement
 - Exchange agreement
 - X-hire agreement
 - Consignment agreement
- The listed field groups are not supported in the selection matrix of the agreement:
 - Kit items
 - Feature
 - Feature Group
- There is currently no functional support for consolidated reports for accruing or non-accruing purchase transactions.
- Supplier Rebate agreements on purchasing utilizing a configuration for percentage growth year on year is not supported.

- Migration of data from legacy systems is not supported.

Limitations in rebate calculation and accruals management

- If a period is open but claimed (Status 70) in ‘Sup Rebate Agr Trans per Period. Display’ (PPS483), and an invoice is matched for an eligible purchase order, there is no possibility to add the preliminary rebate transaction to the generated claim invoice.
- If a period is closed (Status 90) within the agreement as indicated in (PPS483) and an invoice is matched for an eligible purchase order, the accrual is allocated to the next open period.
- Agreement Model Lines which are dependent on a base line within the same model cannot generate rebate independently. These agreements are directly driven by and dependent on the generating and paying value of the base model line.
- There is currently no functional support for a dispute, resolve, or chargeback process.
- An automated method for reversing, recalculating, and regenerating claims, based on changes in agreement structure and terms, is not supported.
- Any recalculation of claimed records is not supported.
- External charges on the purchase orders are not included in the rebate computation and accrual.
- Rebate computation for purchase order (PO) returns is not available.
- If the **Generating unit** of the agreement is set to **3 – Quantity** where the purchase order unit of measure does not match the agreement unit of measure, you must set a unit conversion record in ‘Item. Connect Alternate U/M’ (MMS015). If there is no unit conversion configured, the purchase transaction is excluded for rebate computation.
- If the **Generating unit** is set as **1 – Net purchase price**, discounts are included but charges are excluded in the rebate computation.
- If the **Generating unit** is set as **2 – Gross purchase price**, both discounts and charges are excluded in the rebate computation.
- Visibility of expected or pending accruals is not available. The accrual amount is calculated as the purchase order is invoice matched and **Option 10 – Update from Invoice** has been executed.
- You must complete the goods receipt and the invoice matching process prior to the rebate computation for purchase orders.

Financial Limitations

- The claiming division set to the agreement will be the only division eligible for accumulating rebate accruals and therefore the only division that may deduct the accrued amount from future supplier invoices where applicable.
- Agreement maintenance in a central division is not supported.
- Using multiple divisions in which the claim will be raised or allocated to is not supported.
- Only invoice batch type **50 – Supplier claim** is supported.
- Using Credit Notes as a settlement method is not supported.
- No accounting entries are made when preliminary supplier rebate transactions are created.

Supplier Rebate Activation

This section contains the basic settings and maintenance to define before creating supplier rebate agreement models and agreements. Know the basic settings required to activate the agreement functionality in general.

Configuring supplier rebate settings

Set up the supplier rebate agreement functionality.

The supplier rebate functionality is maintained in a central (blank) division.

- 1 Navigate to '**Settings - Purchasing**' (**CRS780**).
- 2 Enable the parameter **72 - 'Activate supplier rebate'**.

Setting this parameter takes effect on all other available divisions within the company.

Defining a supplier rebate agreement group

A supplier rebate agreement group indicates the group where a supplier rebate agreement belongs.

Deleting a supplier rebate agreement group when it is connected to an active supplier rebate agreement or supplier rebate agreement model line is not available.

- 1 Navigate to '**Supplier Rebate Agreement - Group. Open**' (**PPS482**).
- 2 Enable any required parameter or additional settings.

Defining a supplier rebate agreement type

A supplier rebate agreement type is a general classification of agreements for identification and sorting purposes. It controls the number series when creating supplier rebate agreements and how the settlement process is conducted.

Deleting a supplier rebate agreement type when connected to an active supplier rebate agreement is not available.

- 1 Navigate to '**Supplier Rebate Agreement - Type. Open**' (**PPS472**).
 - a Specify a number series for the supplier rebate agreement.
The number series is managed at a company-level and is predefined in 'Number Series. Open' (**CRS165**) with **SR** as the number series type.
 - b Select the settlement process to use.
- 2 Additionally, specify a supplier agreement type when creating a supplier rebate agreement in '**Supplier Rebate Agreement. Open**' (**PPS475**).

Defining a supplier rebate agreement table

A supplier rebate agreement table defines the scope of the supplier rebate agreement using a control table and a selection matrix.

Deleting a supplier rebate agreement table is not available in these instances:

- The supplier rebate agreement table is connected to a supplier rebate agreement model line in (PPS471).
- The supplier rebate agreement table is used in an active supplier rebate agreement.

1 To define control objects, navigate to '**Generic Object Control Table. Open**' (**CMS017**).

2 Build a selection matrix.

This build defines the agreement table criteria (for example, warehouses, items, procurement group, supplier, etc.), that determines if a PO line is qualified for rebate accrual and which agreements should apply.

The control objects used for 'Sup Rebate Agr - Sel Matrix. Open' (PPS474) are from the field group (PPSRA) which is defined in 'Field Group. Open' (CRS108).

A supplier rebate agreement table is populated in 'Supplier Rebate Agreement. Open' (PPS475).

3 Additionally, for each agreement table, define the priorities.

You can define 10 priorities each with a maximum of 5 fields as criteria.

4 Optionally, verify the valid to and from dates in (PPS474) against the **Accrs date type** set in '**Suppl Rebate Agr - Model Lines. Open**' (**PPS471**).

This verification determines the validity of the selected matrix upon retrieval of valid supplier rebate agreements during the calculation of rebate.

Defining a supplier rebate selection matrix

The selection matrix identifies the supplier rebate agreement number to evaluate for eligibility, and use, for a given criteria. The selection table in 'Supplier Rebate Agreement Table. Open' (PPS473) is then used to determine which criteria is qualified for the supplier rebate agreement.

You can base the criteria on item file fields (for example, item group, product group, hierarchy level 1), supplier fields or other fields included in the field group PPSRA (PP: Selection table - Supplier Rebate), which are defined in the agreement table at creation.

For each supplier invoice line being evaluated, the system reads the selection matrix in order of priority until a valid criterion is found. The connected agreement is referenced for the computation of the rebate amount.

Deleting a selection matrix when it is connected to an active supplier rebate agreement is not available.

Defining supplier rebate function parameters

You must manually activate and correctly setup the supported parameters to fully utilize the supplier rebate functionality, as well as the supplier rebate agreements.

Detailing in a list the activation steps and required settings:

Program Name	Field	Description
Number Series. Open (CRS165/E)	Number Series Type	Define a number series to use with number series type (NBTY) SR .
Settings - Purchasing (CRS780/I)	Activate supplier rebate	Select the checkbox for parameter 72 - 'Activate supplier rebate' in blank division. This takes effect in all divisions of the company.
Accounting Rule. Set (CRS395)		Define rebate claim against supplier for accounting event AP50 and accounting type 421.
Purchase Order Type. Open (PPS095/F)	Generate supplier rebate	Define a purchase order type where the checkbox for parameter 178 - 'Generate supplier rebate' is selected.
PO Consolidation Group. Open (PPS019/E)	Consolidation Group	Define a PO consolidation group that includes a checkbox for the Supplier Rebate Agreement model. Selecting this checkbox gives an option to include the Supplier Rebate Agreement model as an object within the PO consolidation process.
Supplier Claim Invoice Settings. Open (PPS122)	Type	Define a supplier claim invoice setting where the Type (PPT3) is 1 - 'Purchase' .
Supplier. Define Purchase & Financial (CRS624/E)	Order type	Connect the supplier to a purchase order type with parameter 178 - 'Generate supplier rebate' selected.
	Sup reb agr mod	Connect the supplier to a supplier rebate agreement model to use when computing rebates. This is maintained in (PPS470).

	Sup reb clm inv	Select the checkbox for Sup reb clm inv (SCIP) to allow creation of supplier rebate claim invoices for this supplier when (PPS123) is executed. Connect a Claim inv setting ID (SCIR) to control the creation and handling of supplier rebate claim invoices. This is maintained in (PPS122).
	Consolidation grp	Connect the supplier to a consolidation grp to indicate how supplier rebate agreement models affect releasing of planned purchase orders to purchase orders.
Supplier. Define Purchase & Financial (CRS624/F)	Payment mtd AP	Connect the supplier to a payment method with a payment class not set to 0 - 'Cash' . (limitation in initial release)
Supplier. Open/Division (MFS620)	Sup reb agr mod	To define different supplier rebate agreement model values for the various divisions, connect the supplier to a different model in (MFS620).
	Sup reb clm inv	To define different supplier rebate claim invoice setting values for the various divisions, connect the supplier to a different Claim inv setting ID (SCIR) in (MFS620).

Purchase Agreement. Open Lines Sup rebate gen
(PPS101/E)

Select field value **1** or **2**. This field indicates if the item, based on its price source, contributes or not to the supplier rebate generating and paying total.

Alternatives:

- **0 - Does not affect**
- **1 - Generating** - indicates that the item contributes to the generating amount. The generating amount is the value to use in determining the percentage in the scale used to calculate the rebate. This value is not accumulated in the rebate base.
- **2 - Paying** - indicates that the item contributes to both the generating amount and rebate base. The rebate base is the value multiplied to the rebate rate to get the rebate amount. Items that pay out rebate also generate rebate.

Purchase Agreement Type. Open Agreement type
(PPS110/E)

Define a purchase agreement type to use when setting up a purchase agreement to source the prices from.

The listed types of purchase agreements are not supported in the initial release. Do not select the checkboxes corresponding to these values:

- Freight agr (FAGR)
- Disc agreement (DSCA)
- Loan agreement (LOAI)
- Exchange agrmt (EXHI)
- X-hire agmt (XHIR)
- Consignment agr (COAG)

Supplier. Connect Item (PPS040/F)	Sup rebate gen	Select field value 1 or 2 . This field indicates if the item, based on its price source, contributes or not to the supplier rebate generating and paying total. Alternatives: <ul style="list-style-type: none">• 0 - Does not affect• 1 - Generating - indicates that the item contributes to the generating amount. The generating amount is the value to use in determining the percentage in the scale used to calculate the rebate. This value is not accumulated in the rebate base.• 2 - Paying - indicates that the item contributes to both the generating amount and rebate base. The rebate base is the value multiplied to the rebate rate to get the rebate amount. Items that pay out rebate also generate rebate.
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Item. Open (MMS001/H)	Sup rebate gen	<p>Select field value 1 or 2. This field indicates if the item, based on its price source, contributes or not to the supplier rebate generating and paying total.</p> <p>Alternatives:</p> <ul style="list-style-type: none"> • 0 - Does not affect • 1 - Generating - indicates that the item contributes to the generating amount. The generating amount is the value to use in determining the percentage in the scale used to calculate the rebate. This value is not accumulated in the rebate base. • 2 - Paying - indicates that the item contributes to both the generating amount and rebate base. The rebate base is the value multiplied to the rebate rate to get the rebate amount. Items that pay out rebate also generate rebate.
Supplier Rebate Agreement - Type. Open (PPS472)	Supplier rebate agreement type	Define a supplier rebate agreement type to use when creating the supplier rebate agreement. This is maintained in (PPS472).
Supplier Rebate Agreement - Group. Open (PPS482)	Supplier rebate agreement group	Define a supplier rebate agreement group to use when creating the supplier rebate agreement. This is maintained in (PPS482).
Suppl Rebate Agreement. Open (PPS475)	Agreement status	Define a supplier rebate agreement in (PPS475) and set status 40 - 'Active' . The supplier rebate agreement contains the conditions and rules for computing the rebates.
Suppl Rebate Agr - Scale Rates. Open (PPS476)	Scale rate	When the applicable rebate rate varies with purchased volume, scaled rates are defined for the supplier rebate agreement in (PPS476). This is accessed by using related option 12 - 'Supplier rebate scaled rates' from (PPS475).

Supplier Rebate Agreement Table. Open (PPS473)	Supplier rebate agreement table	Define a supplier rebate agreement table in (PPS473). This holds the scope of the supplier rebate agreement with the use of a control table and a selection matrix.
Suppl Rebate Agr - Sel Matrix. Open (PPS474)		Build up a selection matrix using the control objects defined in ' Generic Object Control Table. Open ' (CMS017). The selection matrix indicates the criteria (for example, warehouses, items, procurement group, supplier, etc.) that a PO line might qualify with, to find valid supplier rebate agreements. Control objects used for 'Suppl Rebate Agr - Sel Matrix. Open' (PPS474) are from the field group (PPSRA) defined in 'Field Group. Open' (CRS108).
Sup Rebate Agr Calculation. Open (PPS477/E)	Report version	Define a report version to use when running (PPS477) to compute for supplier rebate amounts.

Supplier Rebate Agreement Values

Set up and configure the supplier rebate agreement values, fields, units, and scale rates.

Defining a supplier rebate agreement

Create a supplier rebate agreement.

1 Navigate to '**Suppl Rebate Agreement. Open**' (**PPS475**).

2 Specify the supplier rebate agreement type.

The supplier rebate agreement type is defined from 'Supplier Rebate Agreement - Type. Open' (PPS472).

The supplier rebate agreement number is automatically generated.

3 Specify the mandatory supplier rebate agreement information:

Valid from/valid to date

Specify the validity date of the supplier rebate agreement.

Agreement status

Specify the status of the supplier rebate agreement.

The initial status of newly created agreements is **10-'Preliminary'**.

When the agreement is approved within the organization, the status is set to **20-'Internally approved'**.

At this status, the supplier rebate agreement is not yet valid to accrue rebates.

When the agreement is approved by the supplying party, the status is set to **30-'Externally confirmed'**.

At this status, the agreement is still not valid to accrue rebates.

A supplier rebate agreement is valid when the status is set to **40-'Active'**.

It is deemed invalid for accrual and existing transactions are put on hold when the status is set to **70-'On Hold'**.

When the agreement is fully settled, or when the specified valid-to-date has expired, you can set the status to **90-'Finished'**. At this status, the agreement is no longer valid to accrue rebates. It is mandatory to specify the status of the agreement. Only status 10 is allowed upon agreement creation, the status is subject to change as the creation is completed and the agreement number has been saved.

Note: Deletion of a supplier rebate agreement is not permitted when the status is higher than 30 or if the status is set to 99. Deletion is also not permitted if the supplier rebate agreement is connected to a selection matrix.

Supplier rebate claiming division

Select the division where the supplier rebate claim is raised.

Supplier rebate agreement group

Select the group to where the supplier rebate agreement belongs.

Hold settlement

Select this option to put the settlements for the agreement on hold in (PPS475/E).

Generating unit

Select the unit of the generating value in the agreement. This value is used to retrieve the rebate rate from the scale.

Paying unit

Select the unit of the paying amount in the agreement. The paying amount is used to multiply with the rebate rate to get the rebate amount.

Currency and exchange rate type

Select the currency exchange rate to follow. Regardless of the local currency, all purchase orders are converted to the agreement's currency. You must specify the exchange rate type to convert PO currency to the agreement's currency.

Period type

Select the period type to use. This field value is defined in 'Company . Connect Division' (MNS100).

Settlement frequency

Select the number of periods between each settlement.

Payee

Specify the name of the supplier or another legal entity for rebate claim settlement.

Defining generating values

Generating and paying amounts are accumulated for the valid PO invoice lines by batch in 'Sup Rebate Agr Calculation. Open' (PPS477).

It is mandatory to specify the generating and paying unit of the supplier rebate agreement in (PPS475). The generating unit and paying unit are not editable for supplier rebate agreements.

Scale U/M is the unit of measure (U/M) for limit values in the scale if the generating unit used is **3-'Quantity'**.

Each PO line has the **Sup rebate gen** field which indicates if the item, based on its price source, contributes or not to the supplier rebate generating and paying total.

1 Select the **Sup rebate gen** value from these options:

- **0 - Does not affect supplier rebate agreement** - No effect.
- **1 - Generating** - The PO line contributes to the generating amount. The generating amount is the value to use in determining the percentage in the scale used to calculate the rebate.
- **2 - Paying** - The PO line contributes to both the generating and rebate base. Items that pay out rebate also generate rebate.

2 The value for **Sup rebate gen** is derived from the price source. You can change the value for the parameter with these programs:

- Purchase agreement in (PPS101)
- Item/supplier in (PPS040)
- Item in (MMS001)

The value of the field in the source of the purchase price is set to the PO line in (PPS201), PO batch line in (PPS371), or to the planned PO in (PPS171).

Generating unit

Generating unit indicates the unit of the generating value in the supplier rebate agreement. This value is used to retrieve the rebate rate from the scale. It is stated in the currency of the agreement.

You can set the generating unit as one of these options:

- 01-Net purchase price
- 02-Gross purchase price
- 03-Quantity

Note: A configuration for an alternative scale unit of measure is mandatory when generating unit is set to **3 - Quantity** and the unit of measure on the purchase order line differs from the agreement unit of measure.

You must set the configuration in 'Item. Connect Alternate U/M' (MMS015).

Paying unit

The Paying unit indicates the unit of the rebate base paying amount in the supplier rebate agreement. The rebate base paying amount is multiplied with the rebate rate to compute the rebate amount.

This unit is stated in the currency of the agreement.

You can set the paying unit as one of these options:

- 01-Net purchase price
- 02-Gross purchase price

Defining scale rates

The scale code indicates how agreement rates are retrieved from an agreement scale to calculate the rebate amounts when using a scale rate in (PPS476).

You can specify the scale code as one of these options:

- **Best rate** - The same rate is applied to the entire initial generating value according to the last limit passed.
- **Graduated rate** - The parts of the initial generating value get different rates. The portion of the generating value that lies between two limits, or exceeds the last limit, is given the rate of the lower (or last) limit.

Supplier Rebate Agreement Model

A supplier rebate agreement model connected to a purchase transaction is a holder for a collection of supplier rebate agreements to validate for each PO line. It defines the sequence and potential dependency within agreements, affecting how rebates are to be calculated. The agreement model is connected to the supplier in 'Supplier. Define Purchase & Financial' (CRS624/E) and defaulted on the purchase order.

When a purchase order is copied, the supplier rebate agreement model is copied unless the parameter 'Retr new data' in 'Purchase Order. Open' (PPS200/C) is selected. This retrieves the supplier rebate agreement model from the supplier setup in (CRS624/E).

Setting up a supplier rebate agreement model

- 1 Define a supplier rebate agreement model:
 - a Supplier rebate agreement models are maintained in 'Supplier Rebate Agreement Model. Open' (PPS470).
 - b The supplier rebate agreement model in the purchase transactions (Planned Purchase order, Purchase Order Batch, Firm Purchase Order) are inherited either from the 'Supplier Purchase & Finance'

- (CRS624), ‘Supplier Open/Division’ (MFS620), or manually specified or changed during order creation.
- c As a default, the supplier rebate agreement model in the header is inherited into the line but manual override is applicable. This occurs for a Batch Purchase Order, Planned Purchase Order, and Firm Purchase Order. The agreement model on the purchase order header is editable until a purchase order line is added, at this stage, the agreement model of the order header is write-protected.
- 2 The supplier rebate agreement model contains sequences that you can define in ‘Supplier Rebate Agr – Model Lines. Open’ (PPS471). Specify these items to define the supplier rebate agreement model lines:
- Supplier Rebate Agreement Group, defined in ‘Supplier Rebate Agreement – Group. Open’ in (PPS482).
 - Supplier Rebate Agreement Table, defined in ‘Supplier Rebate Agreement Table. Open’ in (PPS473), holds the selection matrix that identifies the supplier rebate agreement number valid for a given criterion. This is connected to the model line to indicate the list of agreements to evaluate.
 - Accruals date type indicates the date to use when evaluating the purchase transaction against the agreement. The Supplier Invoice date is currently the only Accruals date available.
 - Accruals Management indicates how the rebate accruals are managed. The current alternative is process by batch using (PPS477).

Specifying a Dependent sequence is optional. Specify the sequence number in the supplier rebate agreement model to which the model line is dependent on. This means its rebate amount is computed as a portion of the rebate amount of the base model line.

Agreement Selection

Complete the supplier rebate agreement pre-requisite configuration tasks and order selection setup.

Configuring supplier rebate for purchase pre-requisite tasks

As a pre-requisite, set the general settings for Supplier Rebate for Purchase and activate it's functionality within the company.

See [Supplier Rebate Activation](#) on page 476.

See [Supplier Rebate Agreement Values](#) on page 483.

Selecting agreement at order creation

A valid Supplier Rebate Agreement Model is retrieved from the supplier file and attached to the purchase order header upon creation of a planned purchase order, purchase order batch, and manual purchase order.

The agreement model on the order header is eligible for change until an order line is added. The default behavior is that the order lines inherit the agreement model set to the order header.

You can add, change, or delete agreement models until order line creation in these programs:

- ‘Purchase Order Batch. Open’ (PPS370/F)
- ‘Purchase Order. Open’ (PPS200/F)
- ‘Planned Purchase Order. Open’ (PPS171/E)

If one or multiple order lines are added to the order, you can alter the agreement model on the order lines in these programs:

- ‘Purchase Order. Open Lines’ (PPS201/E)
- ‘Purchase Order Batch. Open Lines’ (PPS371/G)

Rebate Calculation

This section contains the steps and various options in calculating the rebates in supplier rebate on purchase.

Calculating rebates for supplier rebate on purchase

Any calculations run for one or more supplier rebate agreements are initiated by running **Option 10 – Update from Invoice** in the program ‘Suppl Rebate Agr Calculation. Open’ (PPS477). You can run this option as an on-demand job or as a scheduled job.

You must create a record in (PPS477), where the supplier rebate agreement number is specified in combination with a valid invoice date range in which supplier invoices is filtered and read by the program. Upon saving the record, the user can use the **Run** option from the B-panel of (PPS477) to execute the job based on the previously set parameters.

- The Supplier, Order Type, Item, Supplier Rebate Agreement model, the selection matrixes, and the tables connected to the Supplier Rebate Agreement are checked to determine which Supplier Invoices and purchase orders are eligible for Rebate Accrual.
- The Supplier Invoices within the invoice date range specified are read and compared to the structure and setup of the supplier rebate agreements.
- The contents of the Supplier Invoice and respective Purchase Orders are evaluated using the structure and settings in the Agreement Model, Model Lines, Agreement, Agreement Table, and Selection Matrix.

The calculation basis used to calculate the rebate amounts are derived from the settings in each of the individual supplier rebate agreement connected to the agreement model and model lines.

The listed settings and data for each agreement are considered at Rebate Calculation after determining the eligibility for rebate accrual using the data points mentioned:

- Generating Unit
- Paying Unit

- Percentage
- Scale U/M
- Scale Code
- Guaranteed rebate
- Currency
- Exchange rate

The calculation reads the Supplier Rebate Agreement settings and runs a calculation according to the sequence of agreements in 'Suppl Rebate Agr - Model Lines. Open' (PPS471).

If interdependency between Supplier Rebate Agreements exists, the dependent agreements is calculated as a portion of the rebate amount of the base model line. This means that the calculation basis for the dependent agreement is the base agreement with the base agreements calculated rebate subtracted. The result of this subtraction is the base amount upon which the dependent agreement uses to determine the rebate amount. The dependent agreements rebate amount is viewed as **Net after previous**.

Using rebate calculation methods

PPS477 offers more options beyond calculating rebate amounts. You can use these options to further extend the functionality in order to perform mass update of rates, or to manually close transactions or agreements.

You can use these options:

- 10 – Update from invoice
- 20 – Update Rate
- 30 – Close Agreement

Option 10 – Update from Invoice

Update option **10 - Update from invoice** is the normal monthly batch run. The system reads invoice-matched purchase order and determines eligibility for a supplier rebate agreement using the supplier rebate agreement model and selection matrix. The option is also used intermittently to calculate rebate amounts per agreement manually. Rebate rates are then calculated and applied per agreement depending on the agreement structure and terms.

If changes are made to agreement structure, such as applicable rate, percentages, or scale rates, running option **10 - Update from invoice** will register the changes at calculation.

The rebate calculation is primarily based upon the invoice matched purchase order and the date of invoicing. If the invoice date occurs in a period of the agreement that has been fully processed and closed, the rebate accrual is allocated to the next open period if there is one.

Option 20 – Update Rate

Update option **20 - Update rate** updates existing transactions based on a new or changed flat rate or changes in the scale rates.

Option 30 – Close Agreement

Update option **30 - Close agreement** reads all existing transactions of the selection criteria and cancels unclaimed accruals that are no longer valid. Processing of transactions with prior claims is still permitted. This covers scenarios such as removal of closing the supplier rebate agreement at an earlier date that requires unclaimed accruals.

Calculating rebates with dependent agreements

You can set Supplier Rebate Agreements with inter-dependencies as detailed in section for defining Supplier Rebate Agreement Model. The functionality is optional and you can use it to determine which model line uses dependency, which sequence the dependent agreement is calculated, as well as which model line is used as a base model line.

See [Supplier Rebate Agreement Model](#) on page 486.

When using the dependency, the dependent agreement is calculated as a portion of the rebate rate of the base model line. In practice, the calculation base for the dependent line is the base model line with the base model line rebate amount subtracted. This is considered the net amount upon which the dependent agreement that is next in sequence, will apply the rebate rate to.

If **Option 30 – Close agreement** is run from (PPS477) and the specified agreement number is a base model line which has dependent agreements, the dependent agreements is also affected by the option in the exact same way as the base model agreement.

All update options performed from (PPS477) for a base model line which has dependent agreements cause the dependent agreements to take effect in the exact same way as the base model line, depending on which of the update options are used.

Any agreement that is a dependent agreement, meaning that it is connected to a base model line, cannot accrue independently of the base model line.

Claim Generation

This section contains the claim generation, period management, and supplier rebate monitoring tasks.

Claim generation and period management

Upon setting the supplier rebate agreement status to **40 - Active** in (PPS475), a record in ‘Sup Rebate Agr Trans per Period. Display’ (PPS483) is automatically generated with the date range and a set number of periods according to the validity dates and settlement frequency. A record in ‘Supplier Rebate Agr Claim Schedule. Open’ (PPS484) is also automatically generated, from which calculation, claim generation, and

closure is done. The record in (PPS484) visualizes the agreement period, settlement frequency and accumulated values during the period according to the agreement structure, terms and generated values.

When the record is automatically generated, default values are assigned. The record is of type **20 - Periodic claim invoice settlement** and the from and to-periods are retrieved from the agreement terms in (PPS475).

The initial status of the record is **10 - Preliminary** indicating that no final calculation, claim generation or closing has taken place. If the record has status **10 - Preliminary**, it is not possible to generate a claim. To generate a claim, the related option '**15 - Supplier rebate agreement calculation**' must be used to ensure a final calculation has been performed, prior to claim generation.

At this stage, you can only use the related option **30 - Close Period**. If this option is used for a record in status 10, the corresponding period is closed if no accrual records exist, without ability to re-open the period or re-generate. A warning is issued prior to closing the period.

When option **15 - Supplier rebate agreement calculation** is selected, 'Sup Rebate Agr Calculation. Open' (PPS477) is started. The **Supplier rebate agreement number**, as well as the **Valid from** and **Valid to** dates are set as default. The Update Option is set to default **10 - Update from Invoice** value. When proceeding from (PPS477), the job is submitted and the status of the record in (PPS484) is raised to **30 - Computed Rebate**. It is now possible to use related option **20 - Generate claim**. The user can check the accumulated values on the agreement level in (PPS475) or the transaction file (PPS478).

When related option **20 - Generate claim** is used, a claim invoice is generated in 'Supplier Invoice Batch. Open' (APS450) with **Invoice batch type** value set as **50 = Supplier claim**. The status of the record in (PPS484) is raised to **70 - Included in batch invoice for supplier rebate claim** value. The status per period range in (PPS483) is updated to **70 - Included in batch invoice for supplier rebate claim**. The function utilizes 'Suppl Inv Proposal. Generate for Claim' (PPS123) when generating a Supplier Claim.

Ensure that the record in (APS450) is updated to the AP ledger and ensure that all records in the transaction file (PPS478) have the rebate status set as **8 - Updated to APL** in (PPS478) before related option **30 - Close period** is used in (PPS484). If no update to AP ledger has been done, an error message is displayed in (PPS484) if the user attempts to close the period after the claim invoice has been generated, without updating to the AP ledger.

Once all invoice batch numbers associated with the agreement number are updated to AP ledger in (APS450), the record may be closed and the status in (PPS484) is updated to **90 - Closed**. Additionally, the accumulated rebate accruals for the agreement and period is updated to status **8 = Updated in accounts payable** in (PPS478).

Status **90 Blocked/Expired** is automatically set to the record in (PPS483). If the last period of the agreement is processed at this stage, status **90 - Finished** is set to the supplier rebate agreement in (PPS475).

Monitoring supplier rebate agreements

All Supplier Rebate transactions for each agreement number are viewed in 'Sup Rebate Agr Transaction File. Display' (PPS478). The program shows all rebate transactions for each division and agreement with further filtering possible. The **Rebate transaction status** field indicates the last action performed for the record.

These statuses are available for each record in the transaction file:

- 1 – Preliminary
- 3 – Computed
- 7 – Included in a batch invoice for supplier rebate claim
- 8 – Updated in accounts payable
- 9 – Cancelled

The transaction file also shows the values for Rebate rate, Generating Value, Rebate Base value, Net Amount, Supplier invoice number, Invoice batch number, and Rebate amount per transaction, enabling detailed monitoring for each transaction and agreement.

The transaction file (PPS478) also enables an overview of changes to rates and rebate amounts following changes in the agreement structure which affect the calculated rate, such as the percentages and scale rate tiers. If **Option 10 – Update from Invoice** or **Option 20 – Update Rate** is run through (PPS477), changes are immediately reflected in (PPS478), enabling ease of access and control over the result of the calculation and changes made to the agreement structure and terms.

Note: Changes are only applied to records with rebate status **1 – Preliminary**, or **3 – Computed**.

Managing accruals per period

Depending on the settlement frequency and period type used for each Supplier Rebate Agreement, a set number of periods is generated and visible in ‘Sup Rebate Agr Trans Per Period. Display’ (PPS483). The record is generated upon setting the supplier rebate agreement status to **40 - Active** in (PPS475).

The generating total value, the total rebate base amount, the agreed amount and status for each period and year, for each Supplier Rebate Agreement Number can be viewed in (PPS483). The accruals for each period is viewed in this program and the status field indicates if the period is **10 – Active**, **70 – Claimed**, or **90 – Blocked/Expired**.

Upon running Option 10 – Update from Invoice through (PPS477), the active period shows the total values in each column and the record is set in **Status 10 – Active**, until a claim invoice is generated.

The Generating Total value and the Total rebate base are continuously updated throughout the lifetime of the Agreement, until it is closed or expired in (PPS475), (PPS478), and PPS483).

If a period is erroneously closed prematurely and one or more transactions are not included, the rebate transaction is allocated to the next open period if available. This is viewed in either (PPS484) or in (PPS478).

Supplier Rebate on Purchase Workflow

This section outlines the workflow within supplier rebate on purchase.

The workflow is influenced by the settlement frequency, number of periods and the agreement structure. The settlement frequency of the agreement directly influences the number of periods that are generated and managed under the lifespan of the supplier rebate agreement.

The settlement frequency also determines how many periods that belong to the same group and should be a determining factor in when to perform the final calculation and claim generation, followed by closure of the current period.

The purpose of the instructional outline is to detail the steps involved in calculating and generating a supplier claim.

Displaying transactions per agreement within the division

- 1 Start (**PPS478**) to view all rebate transactions per agreement.
- 2 Transactions in **Status 1 (Preliminary)** or **3 (Computed)** are eligible to final calculation and will be included in a new claim invoice.
- 3 Transactions in **Status 7 (Included in claim)** have been claimed and will be excluded from a new claim invoice unless a reversal is performed.
- 4 Transactions in **Status 8 (Updated to APL)** or **Status 9 (Cancelled)** will be excluded from any calculation or claim generation.

Displaying and verifying the periods of the agreement

- 1 Start (**PPS483**), view the periods per agreement, and ensure that the previous periods have been calculated, claimed, and closed where applicable.
- 2 The transactions previously checked in (**PPS478**) should correspond to the current active period.

Checking the claim schedule per agreement

- 1 Start (**PPS484**), ensure that previous records, for previous periods, are fully processed where applicable.
- 2 The current period should be in **Status 10 – Preliminary** or **Status 30 – Computed Rebate**.

Performing the final calculation for the period group and agreement

- 1 In (**PPS484**), select related option **15 – Supplier rebate agreement calculation**.
- 2 (**PPS477**) is opened. The agreement number, invoice date range, supplier and update option are defaulted and write-protected. Click **Next** to proceed with rebate calculation.
- 3 The rebate accruals will be calculated based on the accumulated values of the transactions previously viewed in (**PPS478**).

- 4 Optionally, open (**PPS478**) to ensure that all rebate transactions have been calculated for the agreement, the status of each rebate transaction included in the selected range from the record in (**PPS484**) is status **3 – Computed**.
- 5 The status of the record in (**PPS484**) is raised to **30 – Computed rebate**.
- 6 In (**PPS484**), select related option **20 – Generate** claim.
- 7 (**PPS123**) is opened. The agreement number, rebate reference type and invoice date are defaulted and write-protected. Click **Next** to proceed with claim generation.
- 8 The supplier claim invoice is generated.

Viewing accruals and transactions

- 1 Total generating value, the total rebate base value and total claimed value can be viewed on the agreement level in (**PPS475**) or viewed in (**PPS483**) and (**PPS484**).
- 2 Total rebate per transaction can be viewed in (**PPS478**).

Recalculating accruals

- 1 If changes are made within the agreement structure that affect the eligibility of purchase transactions, or changes have been made to the rebate rate or scaled rates, mass-recalculation is available in (**PPS477**).
- 2 This requires a record in (**PPS477**) that is configured with update option **20 – Update rate**.
- 3 An agreement number and supplier must be specified on the record. When related option **9 – Run** is used from the B-panel of (**PPS477**), all rebate transactions in status **1** or status **3** are recalculated according to changes made to agreement terms or structure.

Managing a claim invoice

- 1 The claim record can be viewed, managed and processed in (**APS450**) after generating the supplier claim in (**PPS484**).
- 2 The invoice batch number is displayed in (**PPS478**) per transaction and agreement, together with the original supplier invoice number and the accumulated values per transaction.
- 3 The claim invoice must be updated to the AP ledger before proceeding with the closing in (**PPS484**), as the status must be set to status **90 – Updated** in APL, in (**APS450**).

Additionally, these accounting entries are created and displayed in (**GLS200**):

- **AP50/200** Accounts payable
- **AP50/421** Rebate claim against the supplier
- **AP50/440** Claim adjustment

- 4 The rebate transaction status is raised to **8 – Updated** in (**PPS478**), when an update to APL is done.

Reversing a claim invoice

- 1 If errors are discovered and a reversal of the claim invoice is warranted, it can be deleted in (**APS450**) if the record is below status **90 – Updated** to APL.
- 2 Deleting a claim invoice will reset the rebate transaction status to **3 – Computed**, from status **7 – Claimed** for applicable records.
- 3 The period status will be reverted to **10** in (**PPS483**), and the status in (**PPS484**) will be reverted to **30 – Computed**.

Closing a period

- 1 After updating the claim invoice to the AP ledger and ensuring that no further claims will be made within the period, the period is closed by using related option **30 – Close** period, in (**PPS484**).
- 2 The period status in (**PPS483**) will be set to **90 – Blocked/Expired**.
- 3 The status of the record in (**PPS484**) will be set to **90 – Closed**.
- 4 The status of the transactions will remain unchanged, as **8 – Updated** in APL.

Closing an agreement

- 1 Closing an agreement can be done manually or automatically, either by (**PPS484**) or (**PPS477**).
- 2 If related option **30 – Close** period is used in (**PPS484**) for the last period or last group of periods, and preceding periods are closed, the agreement will be closed and the agreement status will be set to **90 – Finished**, in (**PPS475**).
- 3 If warranted, the agreement can be closed manually by using (**PPS477**). This requires a record created with the update option set to **30 – Close Agreement**, and an agreement number and supplier must be specified. This option will close all rebate transactions in status **1** or **3**, raising the status to **9**. If the status of all rebate transactions are greater than **8**, the agreement will be closed.