CORE² DYNAMICS

Key User Documentation

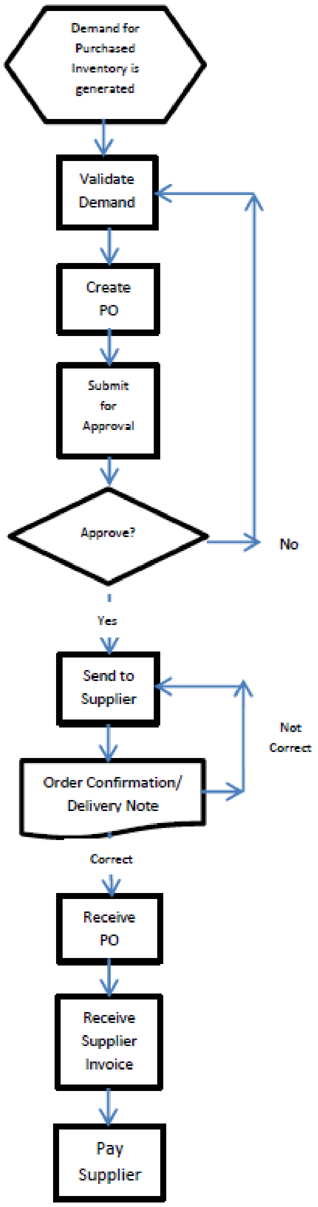
Procurement and Logistics – Business Central Core V5.00

Group Application – André Haft

Table of Content

1 Purchase

1.1 Master Process for Purchase and Procurement



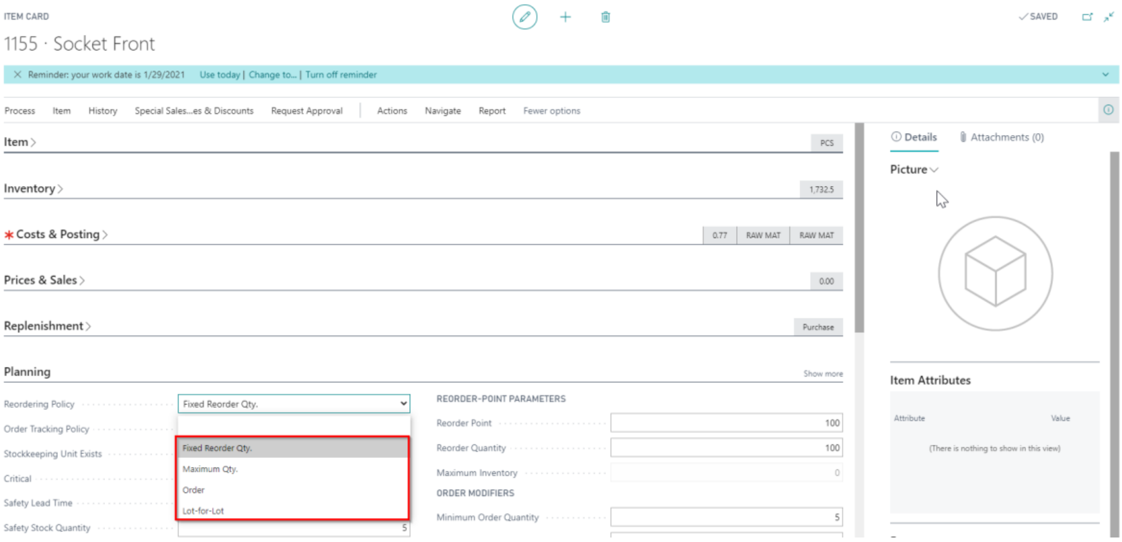
1.2 Requisition Management

1.2.1 Calculating the Requisition Plan

There are two different ways to calculate the requisition:

Using the standard BC requisition worksheet functionality as described below and adjusting the planning parameters at each item manually if necessary. To adjust the planning parameters ABC- and XYZ analysis reports are used. The planning parameters that are normally used in the companies are:

- Reordering Policy = "Order" without additional parameters
- Reordering Policy = "Fixed Reorder Qty." with parameters "Reorder Quantity" and Reorder Point.
- Reorder Policy = "Lot-for-lot" with parameters "Lot Accumulation Period" and "Rescheduling Period".



1.2.2 ABC- and XYZ Analysis Reports (CORE modification)

To adjust planning parameters, Phoenix Mecano companies use ABC- and XYZ analysis for getting adequate results. For the CORE exist two option fields "ABC-Status" (options A,B,C) and "XYZ-Status" (options X,Y,Z). The field "ABC-Status" will be filled with a report as described below. The field "XYZ-Status" has to be filled manually.

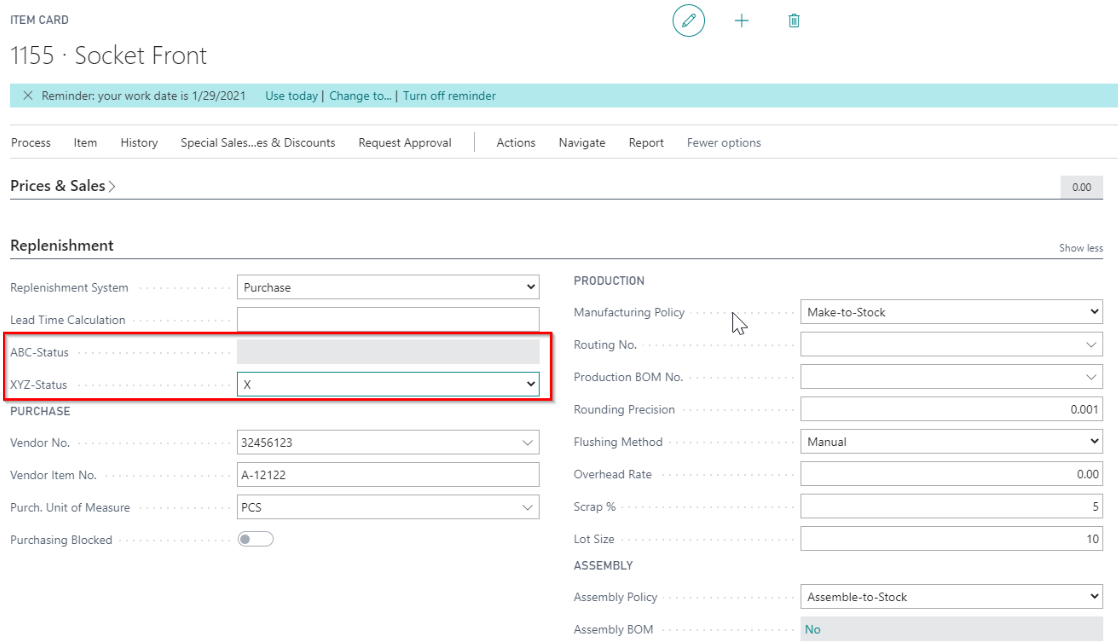
Any algorithm programmed for calculation is treated as local requirement for XYZ:

With the information of the two fields the planning parameters are adjusted. This is done by exporting the items, changing the planning parameters in Excel and reimporting them.

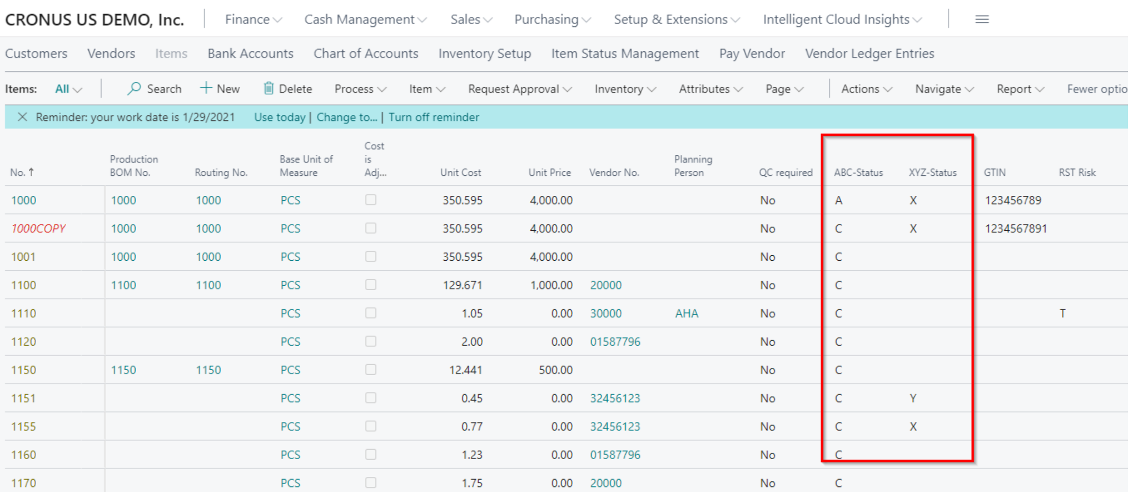
For im- and export the Configuration Package functionality (Rapid Start) can be used. If "Stockkeeping Units" are setup, the planning parameters of the "Stockkeeping Units" must also be changed.

The two fields have been added to the "Item Card" and "Item List" called "ABC-Status" and "XYZ-Status". They can both be found in the "Item Card" in the FastTab Replenishment.

Card:



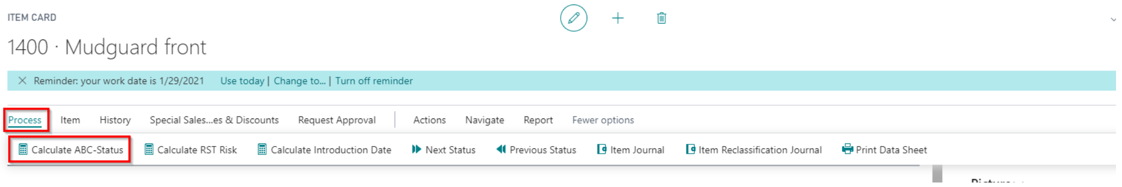
List:



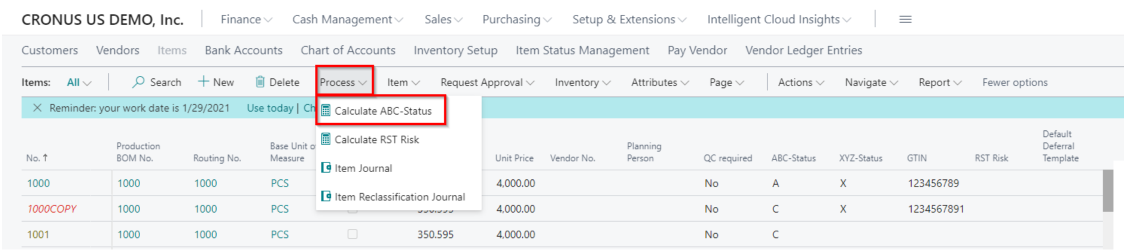
No. ↑	Production BOM No.	Routing No.	Base Unit of Measure	Cost is Adj...	Unit Cost	Unit Price	Vendor No.	Planning Person	QC required	ABC-Status	XYZ-Status	GTIN	RST Risk
1000	1000	1000	PCS		350.595	4,000.00			No	A	X	123456789	
1000COPY	1000	1000	PCS		350.595	4,000.00			No	C	X	1234567891	
1001	1000	1000	PCS		350.595	4,000.00			No	C			
1100	1100	1100	PCS		129.671	1,000.00	20000		No	C			
1110			PCS		1.05	0.00	30000	AHA	No	C			T
1120			PCS		2.00	0.00	01587796		No	C			
1150	1150	1150	PCS		12.441	500.00			No	C			
1151			PCS		0.45	0.00	32456123		No	C	Y		
1155			PCS		0.77	0.00	32456123		No	C	X		
1160			PCS		1.23	0.00	01587796		No	C			
1170			PCS		1.75	0.00	20000		No	C			

The "XYZ-Status" is an option field with the options "X,Y,Z". The value is selected manually by the user.

The "ABC-Status" cannot be changed manually. It is calculated. The action for this can be found under Process –> Calculate ABC-Status on item card.

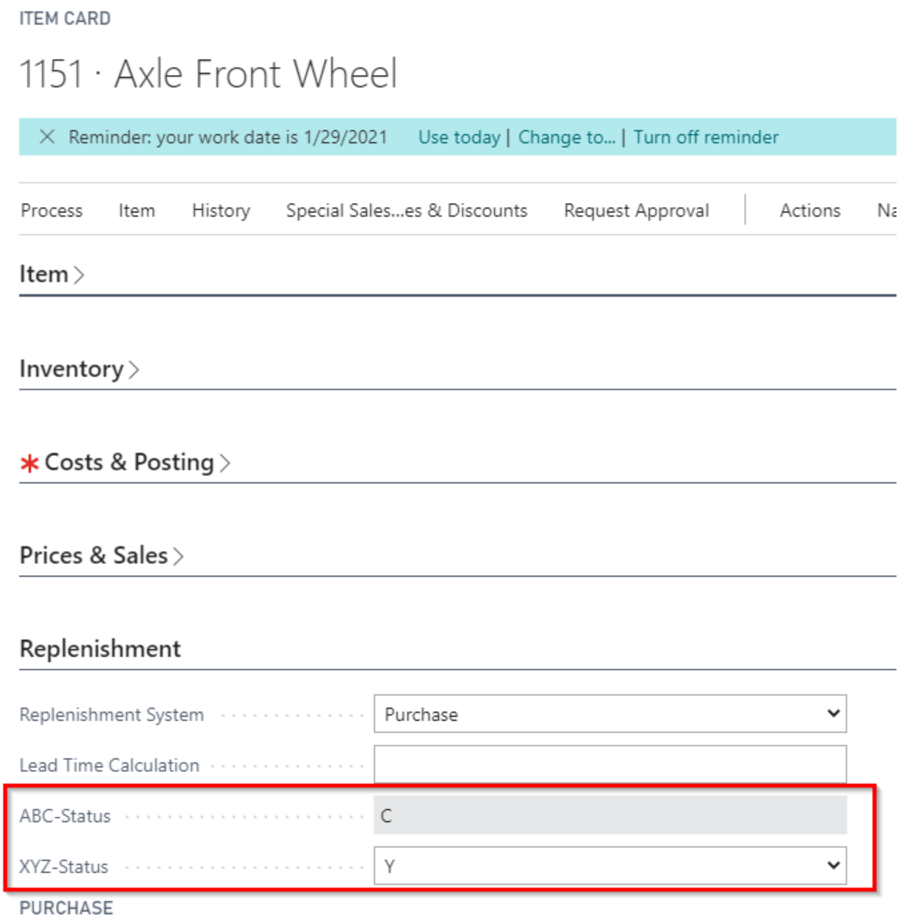


And on item list under Process –> Calculate ABC-Status.



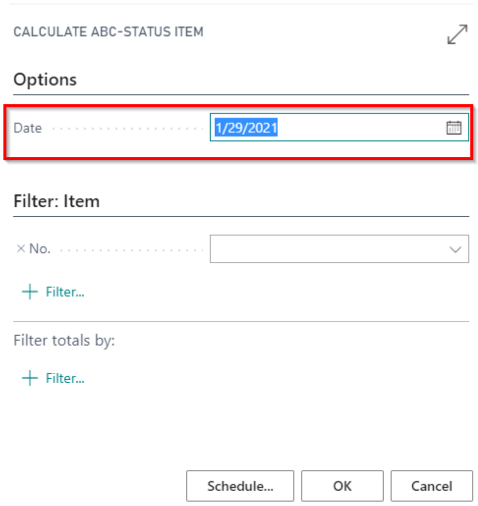
The algorithm for the ABC-Status will be established as follows:

- The "volume of usage" is calculated (calculation: Unit Cost * Quantity in base unit of measure). Usage means either the consumption in a production order, or the sale of items, i.e. the bases for this calculation are the "Item Ledger Entries" that are created because of consumption or sale.
- The volume is calculated for every item for the last 12 months.
- The resulting list is sorted according to the volume. The items with the highest volumes first, downwards.
- The total volume is calculated and defines the 100 %.
- All items have "ABC-Status" = A that are in the range of the first item, down to the item where the sum of the volume is less or equal 80 %.
- The item belonging to the next 15 % are categorized as B.
- All other items are categorized as C.



1.2.3 *Reports for calculation ABC- and RST-Status*

The reports for calculation RST-and ABC-Status in the items as well as the ABC-Status calculation for the customer and vendor have all received a date field in the request page.



The user can define a date and from there the ABC-Status is calculated for the past twelve months, going back from the user defined date. For the RST-Status it is six months going back from the user defined date.

Instead of calculating one year back from the date defined by the user for the ABC-Status, calculation will now go back one year and jump forward one day, so that the calculation via ledger entries is correct. Sames goes for the RST-Status, where calculation goes back 6 months and then jumps forward one day.

Action for the batch report will be found on the Item Card and Item List.

Test case:
Make sure the new fields "ABC-Status" and "XYZ-Status" can be found on the Item List and Item Card.
The "XYZ-Status" should be editable on the card, as this field should be filled by the user.
"ABC-Status" should not be editable, as the field will be filled via the new batch report.
Before running the report, take ten items and manually calculate, which status each item should have, A, B or C.
Note down your results. Now run the new report and set the filter on the field "No." for your ten items. After the report has finished, compare the results on the item card or list with your own. If you have manually calculated it right, the report should have given the same ten items the same status.

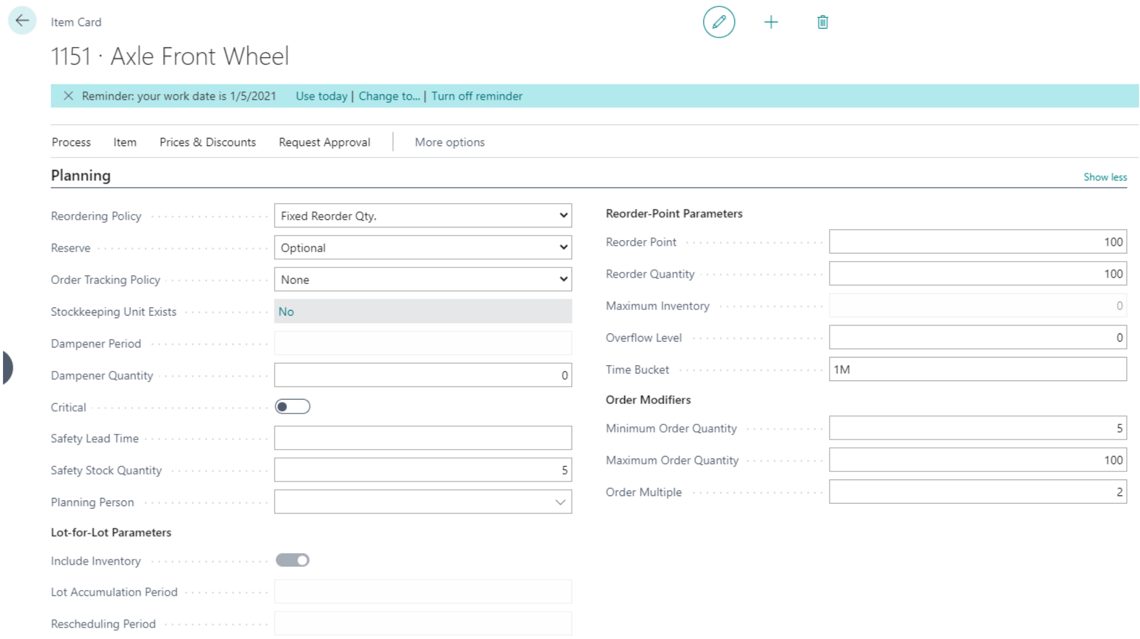
Refere to testscripts: TSTPL0024, TSTPL0041, TSTPL0055, TSTPL0056

1.2.4 Planning Parameters

In BC, the Requisition Management functionality helps automate and coordinate the purchasing process. The requisition worksheet is the central processing tool, and it offers the following features:

- Calculates a current and detailed purchase order plan upon demand
- Creates actual purchase orders from the plan’s requisition lines
- Manages stockkeeping units that are replenished by transfer and creates the corresponding transfer orders
- Helps manage drop shipments and special orders

- Manages designated purchase order lines from other areas of the application
- Manages manually created requisition lines
- Controls the flow of relevant information between departments



The planning parameters are setup in the item card, fasttab "Planning". The most important parameters are:

- The **Reordering Policy** field is used to calculate the lot size for each planning period when this item must be replenished.
- **Reorder Quantity** field is used as the standard lot size for order proposals.
- **Reorder Point** field sets the inventory level at which the planning engine will suggest a new purchase order.
- **Time Bucket** field specifies the planning horizon that the planning engine must consider when either the Fixed Reorder Qty. or Maximum Qty. reordering policies are used.
- **Dampener Period:** This field is used to avoid minor rescheduling of existing supply out in time. Changes from the supply date until one dampener period from the supply date will not generate any action messages.
- **Dampener Quantity:** Specifies a dampener quantity to block insignificant change suggestions for an existing supply if the quantity by which the supply would change is lower than the dampener quantity.

- **Rescheduling Period:** This field is used to determine whether the action message should reschedule an existing order or cancel it and create a new order. The existing order will be rescheduled within one rescheduling period before the current supply and until one rescheduling period after the current supply.
- **Lot Accumulation Period:** With reordering policy Lot-for-Lot, this field is used to accumulate multiple supply needs into one supply order. From the first planned supply, the system accumulates all supply needs in the following lot accumulation period into one supply, which is placed on the date of the first supply. Demand outside the lot accumulation period is not covered by this supply.

1.2.5 Requisition Worksheet

The requisition worksheet is used to calculate a plan that determines which items to order, the quantities and when to order items. This worksheet includes two main batch jobs.

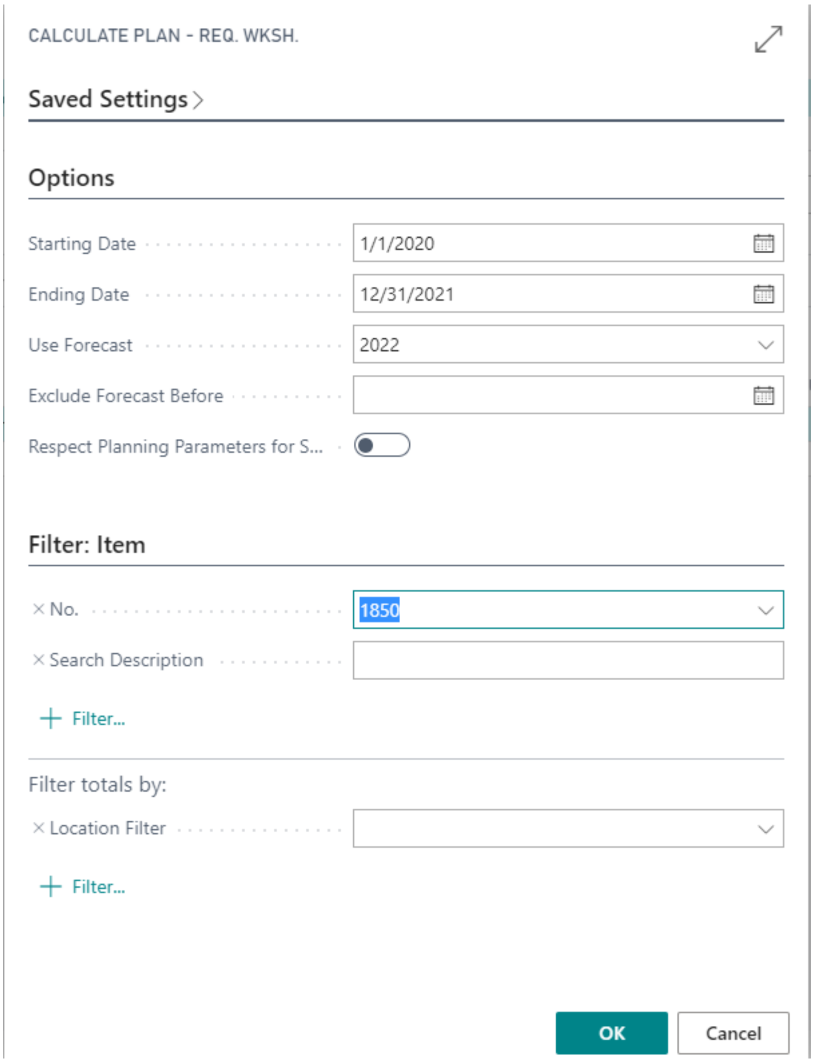
General Remark

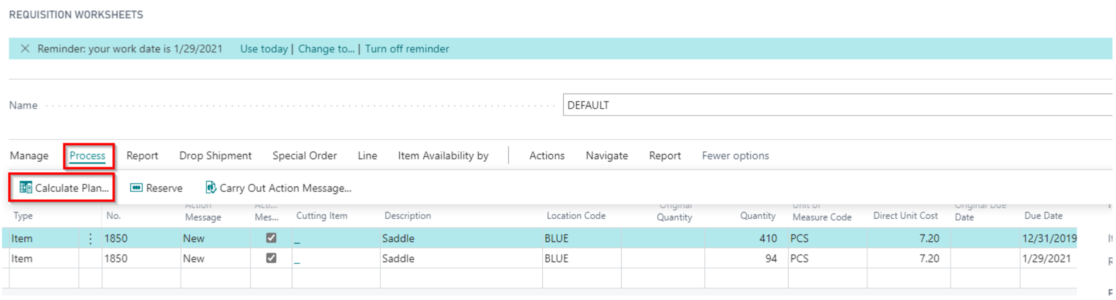
Please take note that all different sales status (open, released, pending prepayment, pending approval) generate demands when requisition worksheet or planning worksheet were run.

Calculate Plan Batch Job

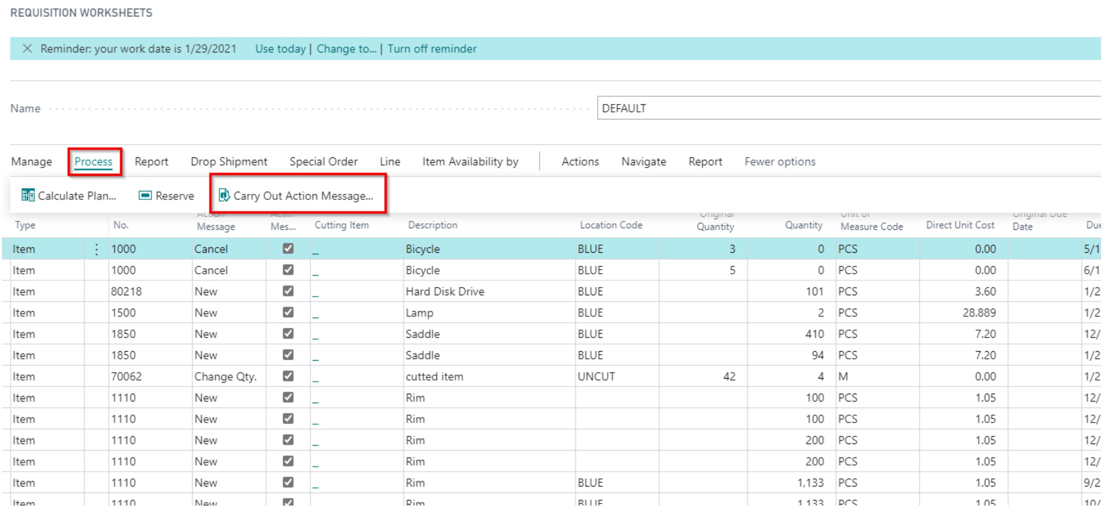
Calculates a requisition plan for items and stockkeeping units set up for replenishment by a purchase or transfer order. The batch job performs the following functions:

- Investigates the demand and supply situation of the item and calculates the projected available balance. The balance is defined as: Inventory + Scheduled Receipts + Planned Receipts – Gross Requirement.
- Determines the net requirements for the item.
- Creates an item replenishment plan to fulfill its net requirements. The plan is presented in the requisition worksheet as requisition lines accompanied by action messages that suggest specific user actions.





Each requisition line is the result of a unique, time-specific supply and demand situation. Additionally, each line can be a unique combination of planning parameters.

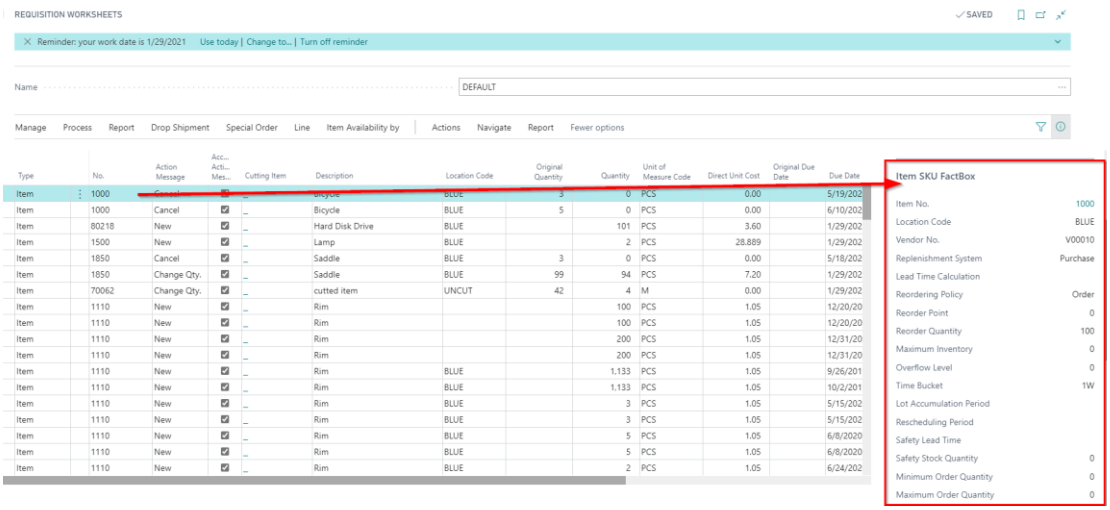


Carry Out Action Message Batch Job

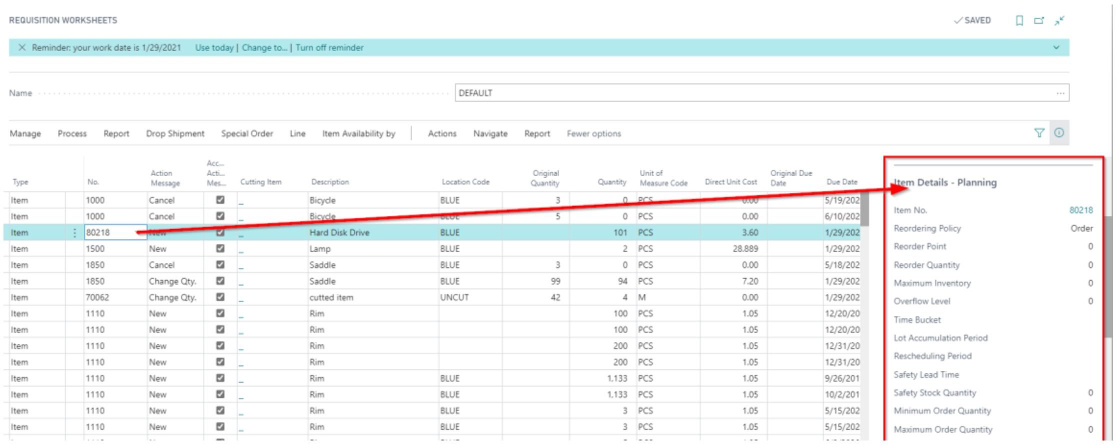
As soon as the purchasing agent is satisfied with the requisition worksheets lines, the Carry Out Action Msg.-Req. batch job is used to convert the lines to purchase or transfer orders. Changes to the requisition lines can be made before the batch job runs.

1.2.6 Planning and Req. Worksheet Addon (Modify Pages and New Page) (CORE modification)

In case an item has stockkeeping units (=SKU) for the specific location the FactBox "Item SKU FactBox" will be displayed in the Planning and / or Requisition Worksheet Line. The FactBox "Item Details – Planning" will be hidden.



In case an item has no stockkeeping units created for the specific location the FactBox "Item Details – Planning" will displayed in the Planning and / or Requisition Worksheet Line. The FactBox "Item SKU FactBox" will be hidden.



Depending on the FactBox typ opens the item card or the stockkeeping unit card (in an editable mode) if the user choose the related link for the item no. in the FactBoxes. Furthermore this fields have been added to the FactBox "Item SKU FactBox" and "Item Details – Planning":

- Vendor No,
- Lead Time Calculation
- Inventory
- Qty on Purch. Order
- Qty on Sales order
- Qty on Prod. Order
- Qty on Component
- Discrete Order Quantity
- Manufacturing Policy
- Qty in Transit
- Planned Order Receipt (Qty)
- FP Order Receipt (Qty)
- Rel. Order Receipt (Qty)
- Planned Order Release (Qty)
- Purch. Req. Receipt (Qty)
- Purch Req Release (Qty)
- Qty on Assembled Order

In case an item has no stockkeeping units created for the specific location the FactBox "Item Details – Planning" will displayed in the Planning and / or Requisition Worksheet Line. The following fields are added to this FactBox:

"Purchase (Qty.)"
"Sales (Qty.)"

1.2.7 Vendor Item No. (CORE modification)

It is possible to see and edit the BC standard field "Vendor Item No." on purchase document lines.
Therefore the field "Vendor Item No. (70)" will be provided (editable) in the table:
Purchase Lines (39)

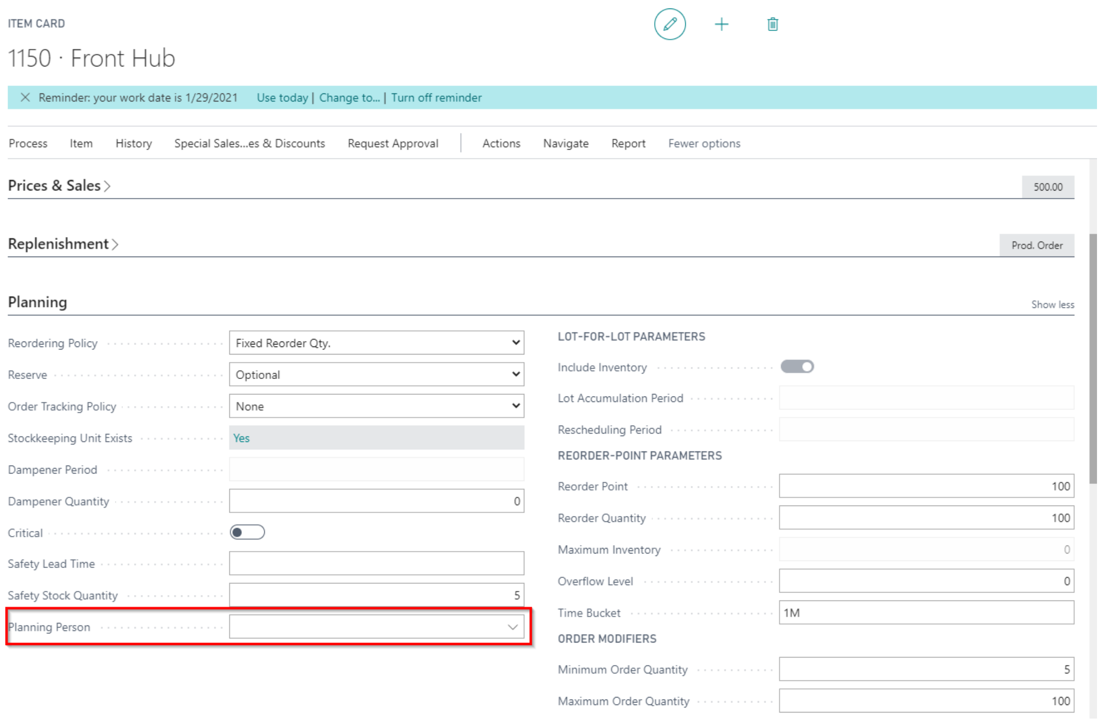
The field "Vendor Item No. (70)" will be provided in the following pages for purchase document lines:

- Purchase order – Purchase Order Subform (54)
- Purchase quote – Purchase Quote Subform (97)
- Blanket purchase order – Blanket Purchase Order Subform (510)
- Purchase return order – Purchase Return Order Subform (6641)
- Purchase invoice – Purch. Invoice Subform (55)
- Purchase credit memo – Purch. Cr. Memo Subform (98)

1.2.8 Responsibility for Planning (CORE modification)

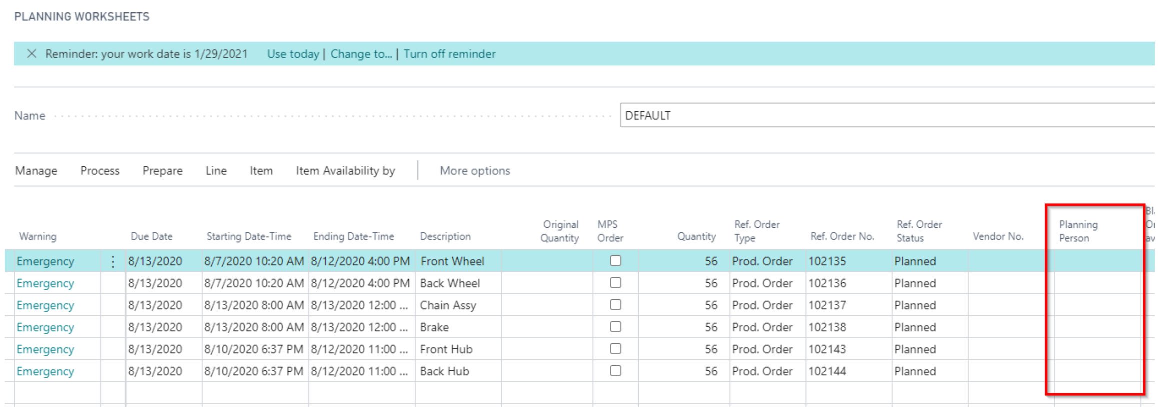
The items at Phoenix Mecano are assigned to different persons responsible for planning. They use different requisition worksheets and run the planning batch job only for her / his items. In order to do this a customization in the core was made.

Item card FastTab Planning and Item list:
The field "Planning Person" is inserted for the CORE (table "item") in the "Item card" and "Item List". The field contains the responsible purchaser (table relation to "Salesperson / Purchaser") for that item. The batch job "Calculate Plan..." is extended with the possibility to filter on the "Planning Person".



Requisition –, Planning – and Subcontracting Worksheet:

The field" Planning Person" is also inserted to the "Requisition –", "Planning –" and "Subcontracting Worksheet" (table "Requisition Line").



Test case:

Look at the Item Card and check if the field "Planning Person" exists in the Tab Planning and if the table relation to the Salesperson / Purchaser (Table 13) is given.

When creating a new item line in one of the worksheets, the field "Planning Person" should be filled automatically when selecting and validating the item.

Refere to testscripts: TSTPL0025, TSTPL0052, TSTPL0053

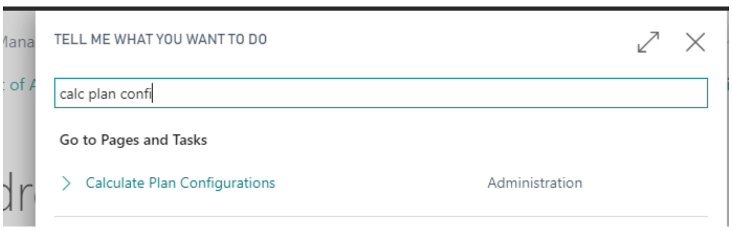
1.2.9 Running MRP and MPS in the Job Queue (CORE modification)

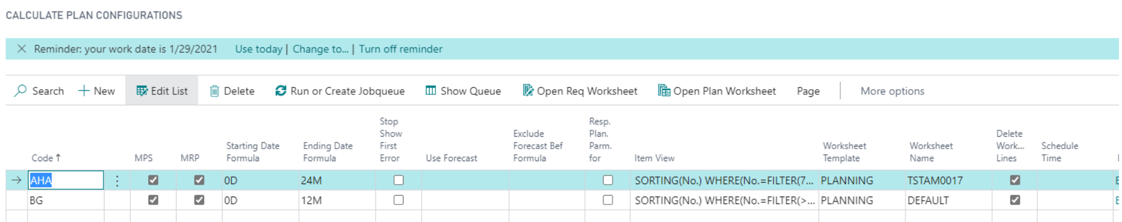
The standard BC functionality via MRP and MPS does not deliver a batch function with different parameters for different planning persons. The User can only run the MRP and MPS with different parameters in a manual way.

PM needs a possibility to calculate the demands for items via MRP and MPS in a batch job. Also it should be possible to add different parameters like filters for specific items, item groups, planning person, location codes and so on to run the MRP and MPS.

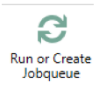
For this requirement a new setup table has been added. The setup table allows to define multiple calculation runs with different parameters for different planning persons. The setup table has a code that identifies the configuration (to allow multiple configurations) and all the option that are available as a user when running the calculate plan manually (staring / ending dates, MPS / MRP, etc..). Part of this setup is an option to specify what worksheet the suggestions should be created in. In column "item view" the sorting and specific filters on the item table will be set. This way the complete MRP run can be separated into different worksheets.

When entering "Calculate Plan Configuration" in the search box and clicking on the related link, the Calculate Plan Configurations opens.



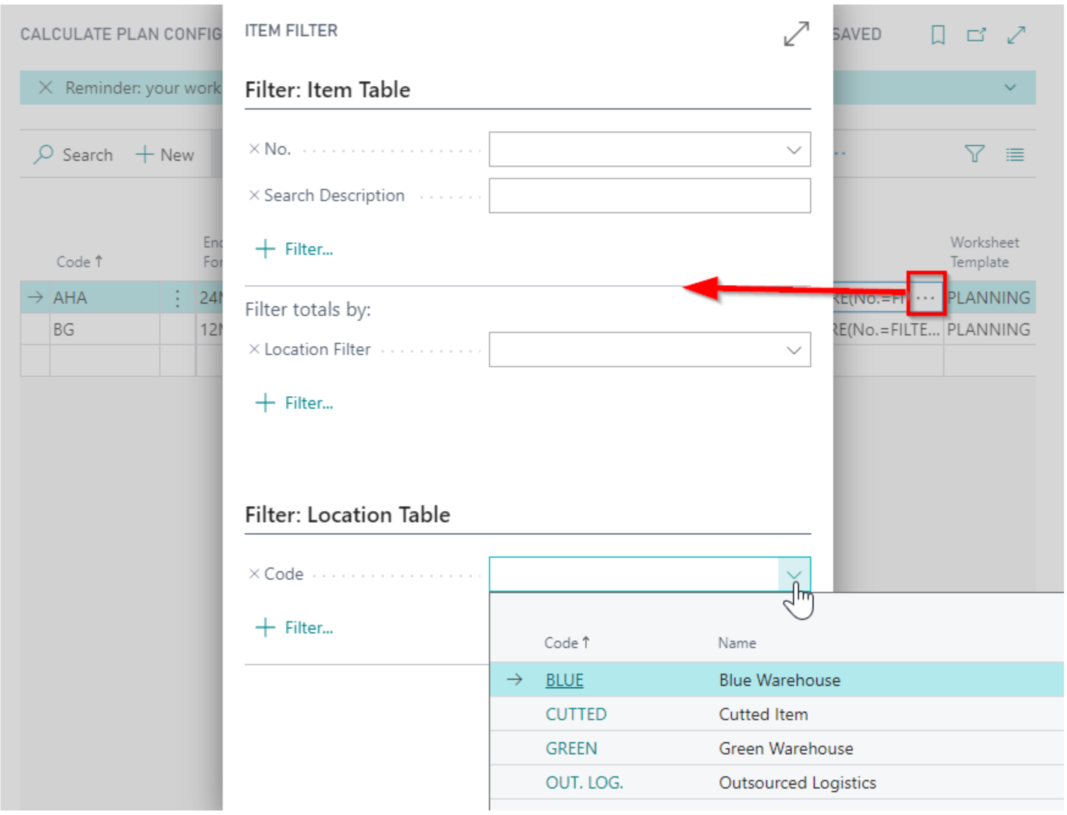


- Code = Code (by choice)
- MPS = A plan is created by using the code. This is required for the project queue because the code is entered in the parameter field

- MRP = Specifies whether to calculate a master production schedule (MPS) based on independent demand. The results will appear on the planning worksheet, and can be changed. It is then possible to calculate a materials requirement plan (MRP) to include the corresponding demand
  Starting Date = Specifies the date to use for any new orders. This date is used to evaluate inventory. If inventory is below the reorder point, then the replenishment order is scheduled forward from this date.
  (e.g. Starting from Today, 0D muss be entered). Only supply and demand events with due dates on or after the starting date are considered by the planning run. Any events with due dates before the planning starting date are consolidated into one emergency supply order for the item to arrive on the planning starting date.
- Ending Date = Specifies the date where the planning period ends. Demand is not included beyond this date. (e.g. End 2 months from today, 2M must be entered)
    - Filter for Today = 0D,
    - Filter for 2 weeks from today = 2W
    - Filter for 6 Months from today = 6M
- Stop and Show First Error = Specifies whether to stop the planning run when it encounters an error. If the planning run stops, then a message is displayed with information about the first error. If an error exists, then only the successful planning lines that were made before the error was encountered are included in the planning worksheet. This does not work over the Job Queue, but it works when pressing the button 

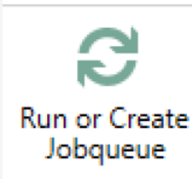
  manually. If this field is not selected, then the Calculate Plan batch job continues, until it is completed. Errors will not interrupt the batch job. If one or more errors exist, then a message is displayed after completion saying how many items are affected. The Planning Error Log window then opens to provide more details about the error and links to the affected item card or cards.
- Use Forcast = Specifies a forecast that should be included as demand when running the planning batch job
- Exclude Forecast Before = Specifies, which part of the selected forecast should be included into the planning run. Entering a date excludes forecast demands before that date

- Respect Planning Parameters for Exception Warnings: By default, this field is not selected.
- Item View = Filter for Item and Location. By clicking on: ... the item filter page opens.



- Worksheet Template = Select the Worksheet Template for Req. Worksheet or Planning Worksheet
- Delete Worksheet Lines = Clear existing Worksheet lines, meaning all existing lines will be removed only in this worksheet
- Worksheet Name = Select an Worksheet Name
- Schedule Time = Insert the time for starting the Job Queue.

By default, the button is pressed the first time for this record



then creates a job for each day with 00:00 start time. If a time is stored here, this is taken as new Start time in the job Queue

- Batch Status = Only information field about the status

1.3 Creation Date – CORE Modification

It should be possible to see a Creation Date on purchase documents.

Therefore a new field "Creation Date" will be provided in the following tables:

- Purchase Header (38)
- Purchase Line (39)
- Purchase Header Archive (5109)

Field Name	Type	Description
Creation Date	Date	Filled automatically by the system when purchase documents will be created. Will be filled with the corresponding system date (not workdate) and the time stamp. For purchase archive documents the rea-tion Date will be copied from source docu-ments to the archive without any changes.

When new purchase documents will be created, this new field will be filled automatically by the system with the corresponding System Date (not workdate) and time stamp.

A document can be generated via the function "new" as well as via the following functions examples:

Source Document	Function	Target Docuement
Purchase Quote	Make Order	Purchase Order

This function will also work for every way a document is created, such as:

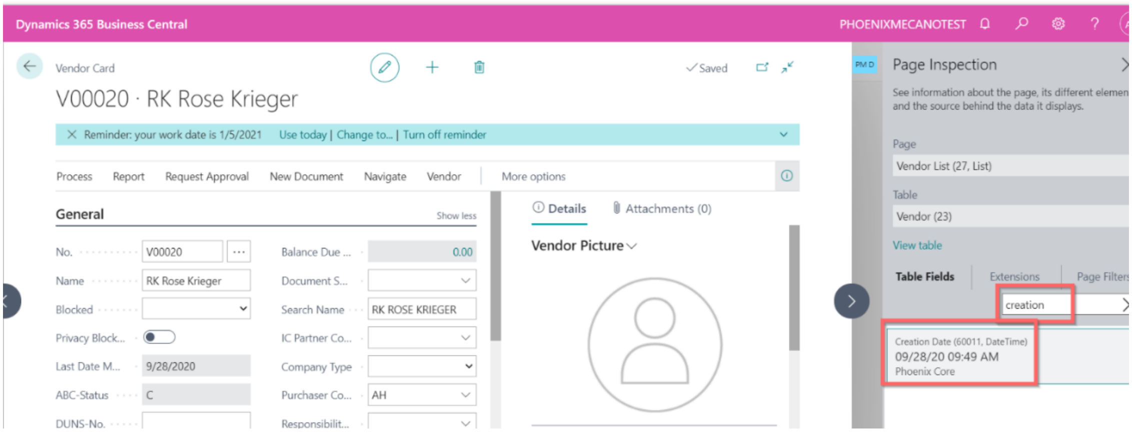
- Call from blanket order
- Out of requisition worksheet
- From an archived version
- Based on return orders
- Copy from another doc
- Etc.

This new field "Creation Date" will also be filled in purchase archive documents. In the archive documents the field will be filled with the value from the corresponding source document (will be copied).

The new field "Creation Date" will not be visible on any page.
When a purchase document will be copied by using the function "copy", then the new documents or items need to get a new creation date according to the actual system date. That means that the field "Creation Date" will not be copied into the new documents or items.

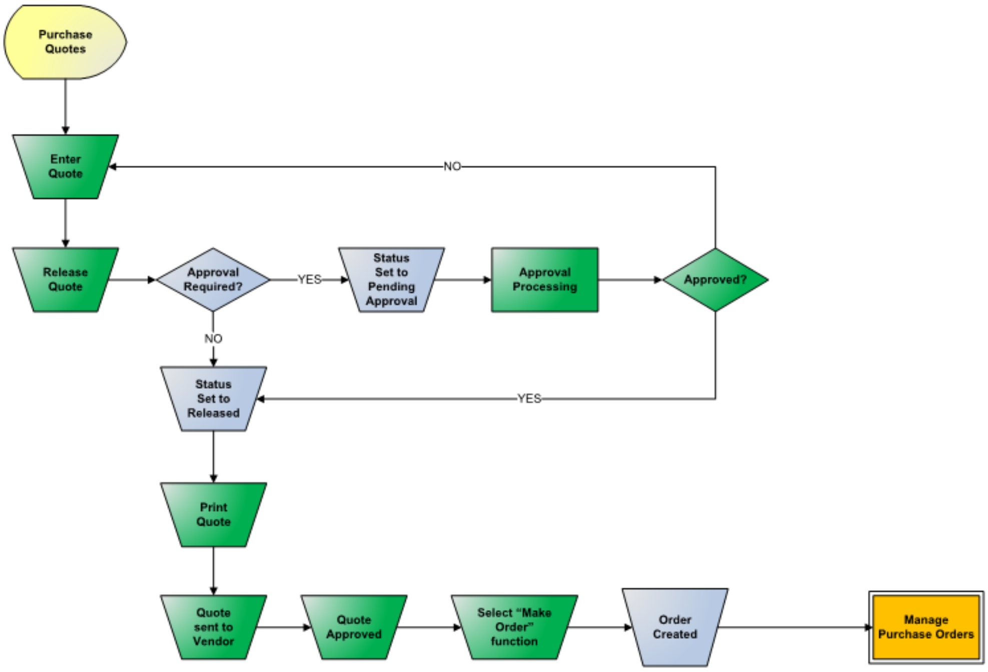
1.4 Creation Date on Vendor Card – CORE modification

It is necessary to have creation date on table / page vendor. This field is only for analyses and therefore not displayed on the vendor card. It can be checked via "STRG+CTRL+F1"



Note: This field is only filled for new created vendors.

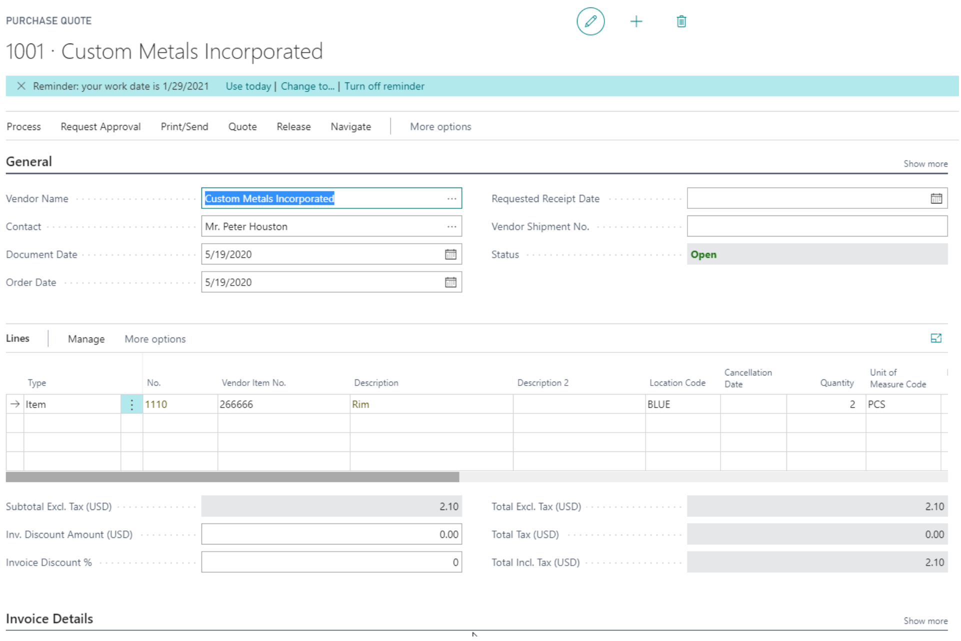
1.5 Purchase Quotes



Purchase Quotes are rarely used by PM. If quotes are used they are created manually. The quote is printed and sent to the vendor.

When the vendor sends his offer the prices can be inserted and if the offer is accepted the batch job Make Order can be used to create a purchase order.

In order to send the Purchase Quote also to other vendors, the batch job Copy Document is used.

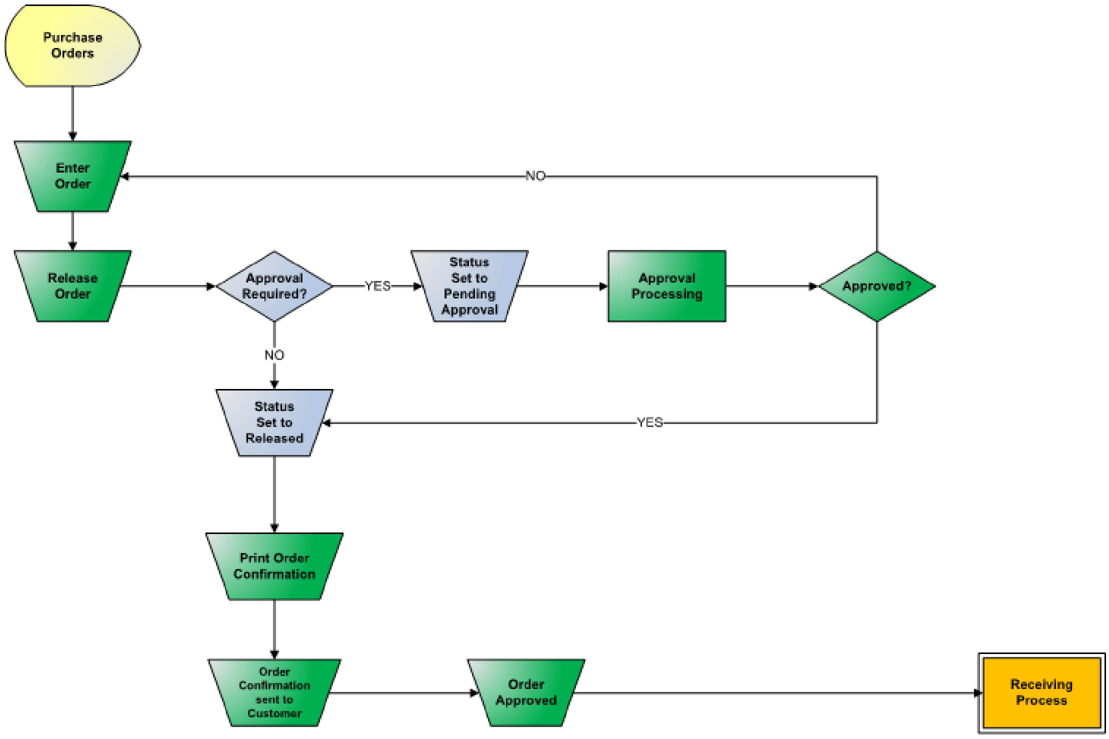


1.6 Purchase Orders

1.6.1 Creating Purchase Orders

Purchase Orders can be created

- Manually
- Out of the Requisition Worksheet using the batch job Make Order
- Out of the Purchase Blanket Order using the batch job Make Order
- Using the Drop Shipment functionality (see below)
- Using the Special Orders (not discussed in the workshop)



1.6.2 Purchase Prices and Purchase Discounts

Cost information for each item can be found on the item card. When an item is selected on a purchase order line, the program automatically retrieves the last direct cost stored on the item card and copies it to the purchase order line.

When a vendor offers an item at a reduced cost or with a discount from the standard price that may depend on other criteria, such as the order date or a minimum order quantity, the one-cost-per-item-card model cannot accommodate these added requirements.

The purchases prices and line discounts offer a pricing functionality additionally to the standard item card. Discounts can also be applied at the invoice level based on the total invoice amount.

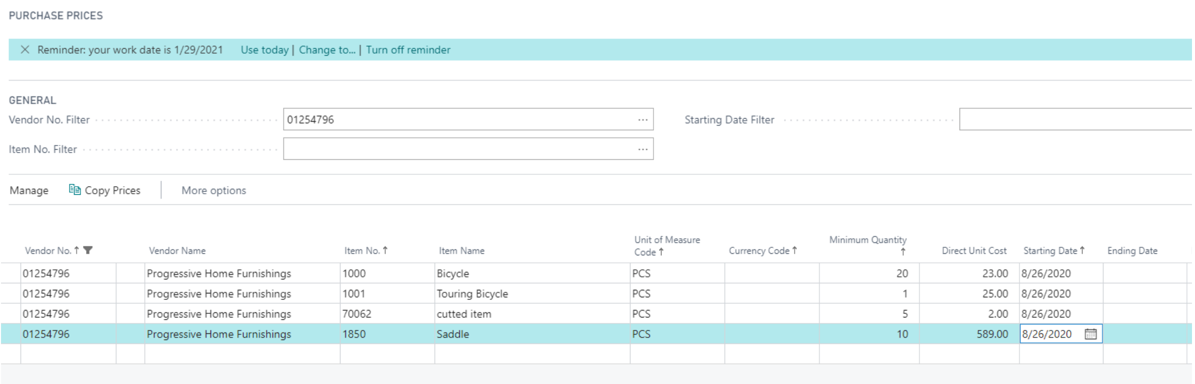
1.6.2.1 Purchase Price

Purchase prices are alternative prices for an item based on a combination of item number, vendor, and optionally, one or more of the following criteria:

- Item variant
- Unit of measure
- Minimum quantity purchased
- Order date
- Currency paid

When a purchasing agent creates a purchase order, BC will do the following:

- Checks, if alternative purchase prices are set up for the vendor
- Determines which alternative prices apply based on if their conditions are met by the purchase header and line details
- Selects the best price from among the applicable alternative prices
- To make sure opportunities obtain a better price are not missed, the purchasing interface also notifies purchasing agents that alternative prices exist, even if the conditions to apply them, can currently not be met.



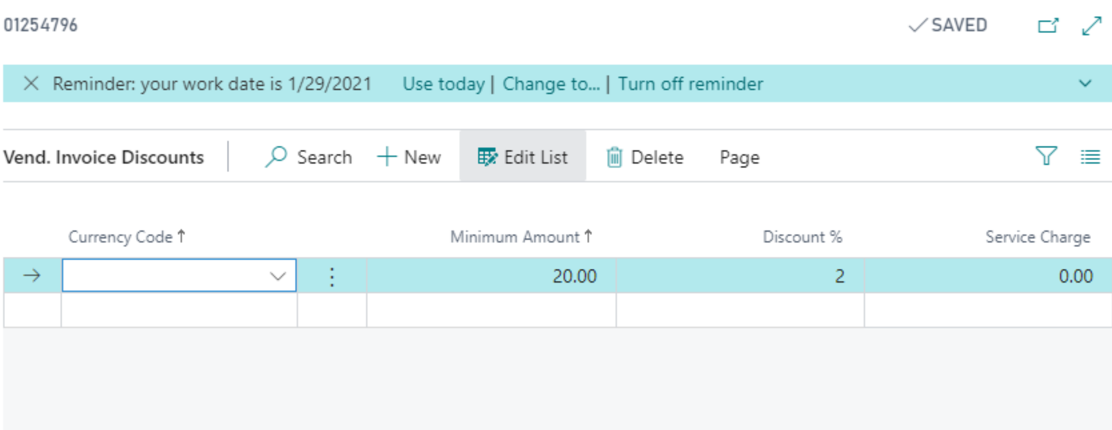
Vendor No.	Vendor Name	Item No.	Item Name	Unit of Measure Code	Currency Code	Minimum Quantity	Direct Unit Cost	Starting Date	Ending Date
01254796	Progressive Home Furnishings	1000	Bicycle	PCS		20	23.00	8/26/2020	
01254796	Progressive Home Furnishings	1001	Touring Bicycle	PCS		1	25.00	8/26/2020	
01254796	Progressive Home Furnishings	70062	cutted item	PCS		5	2.00	8/26/2020	
01254796	Progressive Home Furnishings	1850	Saddle	PCS		10	589.00	8/26/2020	

1.6.2.2 Invoice and Line Discounts

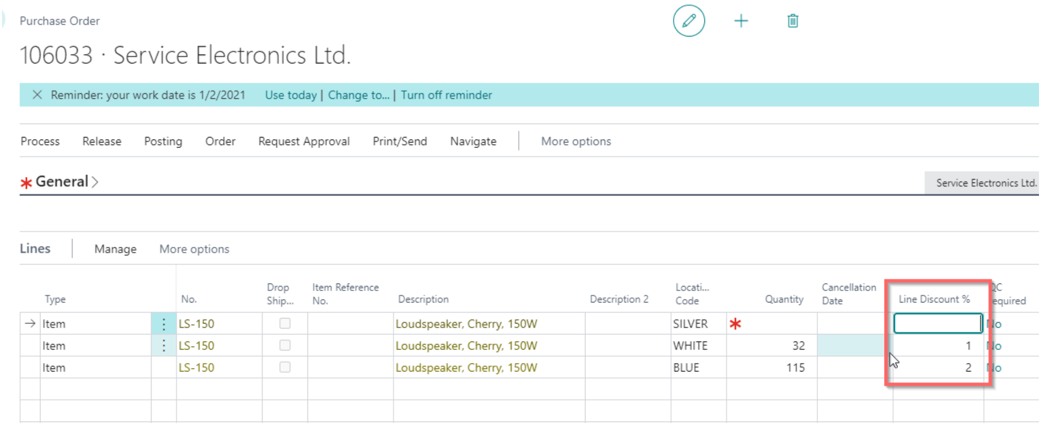
There are several ways to reflect the agreed upon discounts that will apply when goods are purchased from different vendors. The commonly used discount type is an invoice discount. This is a percentage discount that is granted when the total invoice amount exceeds a certain minimum.

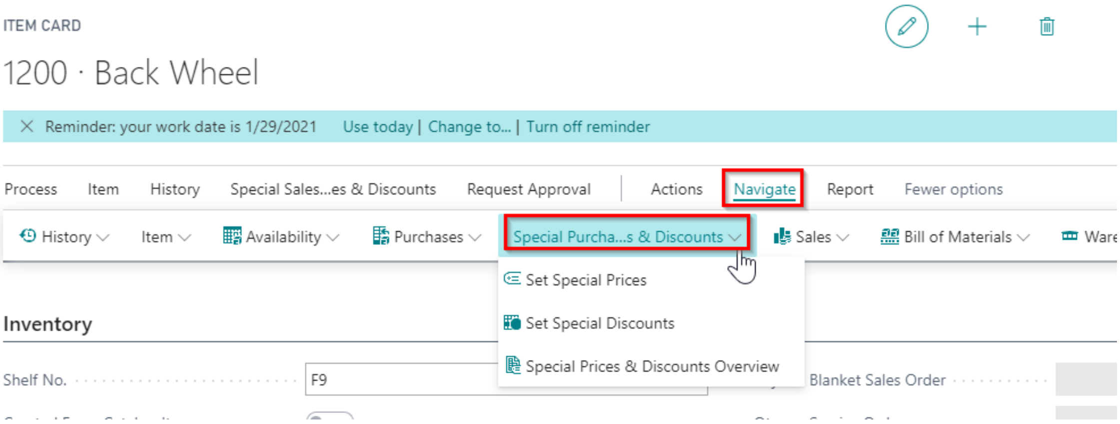
A purchase line discount is a more complex discount. The line discount calculates percentage for each purchase line, if the line meets certain conditions.

Option	Description
No Discounts	The program will not post discounts but instead will subtract them from the invoice amount before posting.
Invoice Discounts	The program will post invoice discounts when the invoice is posted. However, the program will not post line discounts.
Line Discounts	The program will post line discounts when the invoice is posted. However, the program will not post invoice discounts.
All Discounts	The program will post both invoice and line discounts when the invoice is posted.



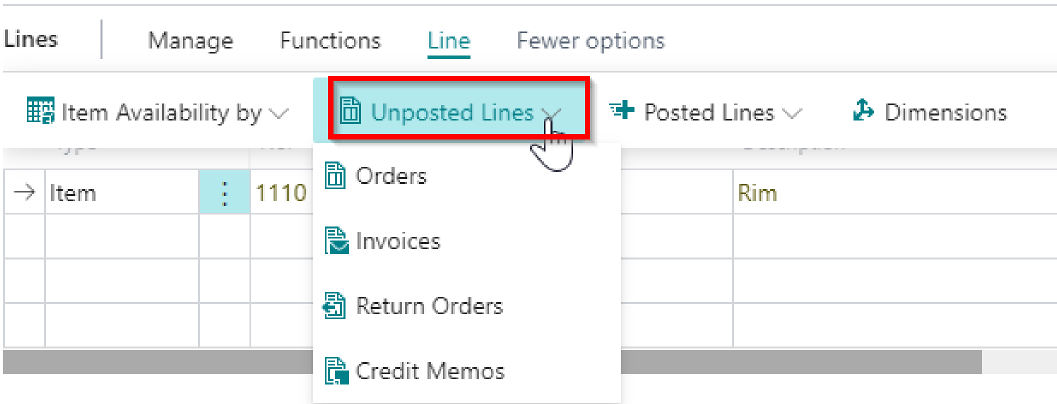
On the Item List or Item Card you can open the page for the Purchase Prices and Line Discounts.





1.6.3 *Ordered Quantity in Blanket Purchase Order*

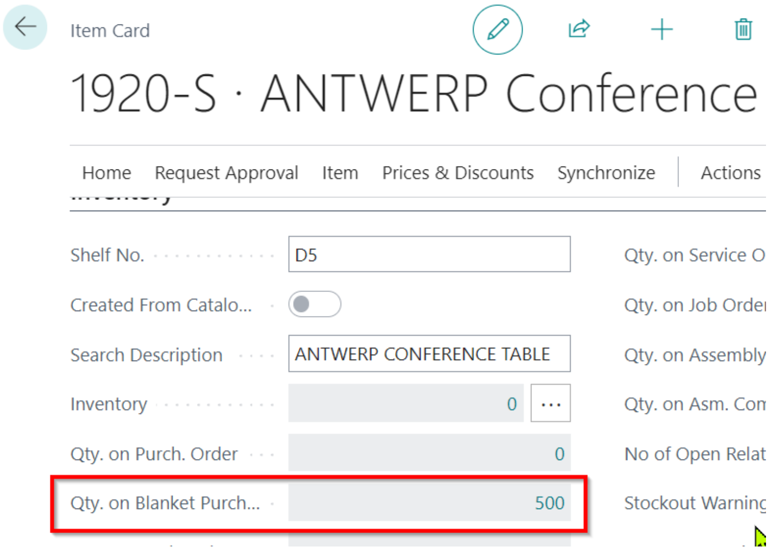
The information about which part of the blanket order is in an order but not yet posted can be seen under Lines / Unposted Lines / Orders.



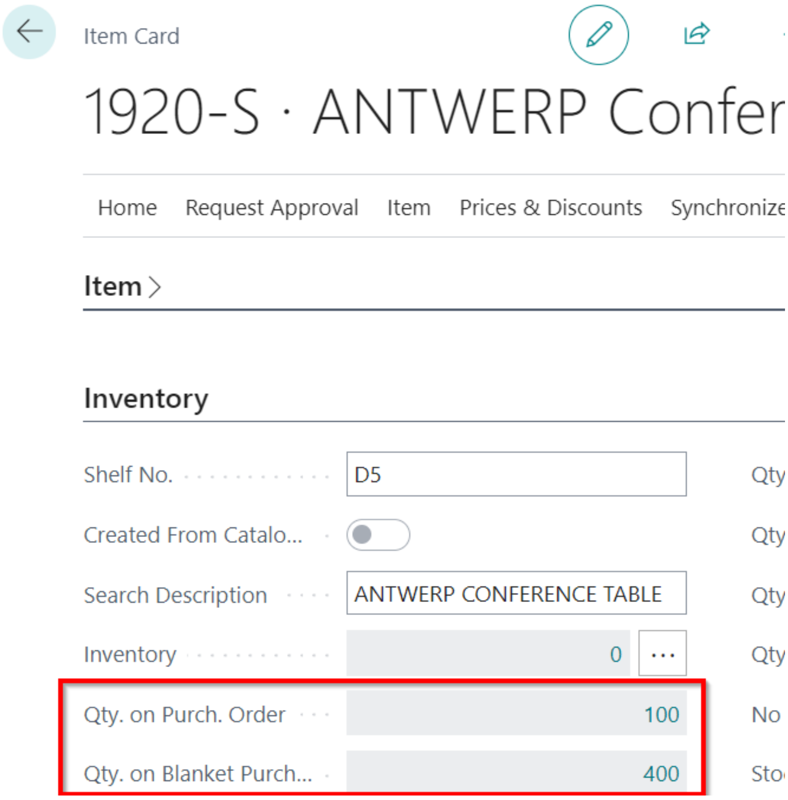
There is no need for customization, standard BC will be used.

1.6.4 *Modififcation for field "Qty in Blanket Purchase Irder at Item Card" Core Modification*

In case a new Blanket Purchase Order is created the Qty at item card would be visible in field "Qty in Blanket Purchase Order"



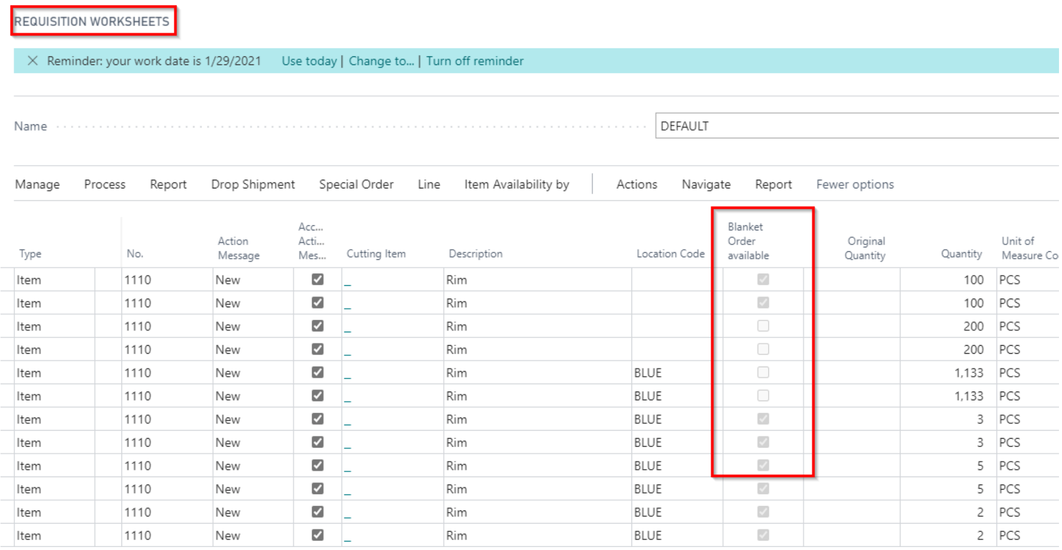
In case a Blanket Purchase Order is created and a call of is also done Business Central calculate the correct Qty at Item card.



1.6.5 *Blanket Purchase Orders from the Requisition Worksheet (CORE modification)*

Often in the requisition worksheet the planning person has to decide whether they can create an order out of a blanket order or not. Therefore a field that indicates if there are blanket orders for the item is required.

There is a field "Blanket Order available" in the "Requisition Worksheet". The field value is "Yes", if there is a blanket order line with the same item with enough quantity, so that a purchase order can be generated out of the blanket order.



Type	No.	Action Message	Acc... Acti... Mes...	Cutting Item	Description	Location Code	Blanket Order available	Original Quantity	Quantity	Unit of Measure Co
Item	1110	New	☑	_	Rim		☑		100	PCS
Item	1110	New	☑	_	Rim		☑		100	PCS
Item	1110	New	☑	_	Rim		☐		200	PCS
Item	1110	New	☑	_	Rim		☐		200	PCS
Item	1110	New	☑	_	Rim	BLUE	☐		1,133	PCS
Item	1110	New	☑	_	Rim	BLUE	☐		1,133	PCS
Item	1110	New	☑	_	Rim	BLUE	☑		3	PCS
Item	1110	New	☑	_	Rim	BLUE	☑		3	PCS
Item	1110	New	☑	_	Rim	BLUE	☑		5	PCS
Item	1110	New	☑	_	Rim	BLUE	☑		5	PCS
Item	1110	New	☑	_	Rim	BLUE	☑		2	PCS
Item	1110	New	☑	_	Rim	BLUE	☑		2	PCS

In order to create the purchase order out of a blanket order, the requisition line is deleted, the "Qty. to Receive" is filled with the quantity of the requisition line and the function "Make Order…" is used to create the purchase order.

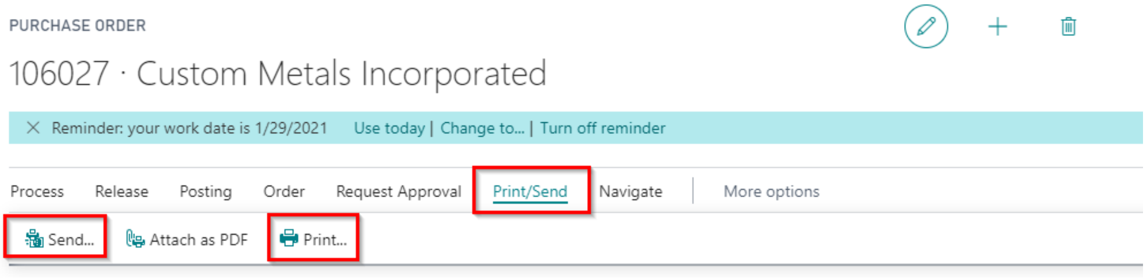
Test case:
If not already existing, create a blanket order with one or more items.
Afterwards, go to the requisition worksheet. Create a line with one of the items from the blanket order. Then, click somewhere out of the line before selecting it again. The program should find the blanket order in the background and set the field "Blanket Order available" to "yes". Create a second line in the worksheet and select an item that is not in a blanket order. The field "Blanket Order available" should stay on "no".
Go back to the blanket order, create an order and post it. When you returning to the worksheet the field should display "no" in the line with the same item as in the blanket order.
Refere to testscript: TSTPL0026

1.6.6 Importing a Vendor Price List

Phoenix Mecano decided to use the "Configuration Package" (Rapid Start) functionality to import vendor price lists. There is no need for a customization in the core.

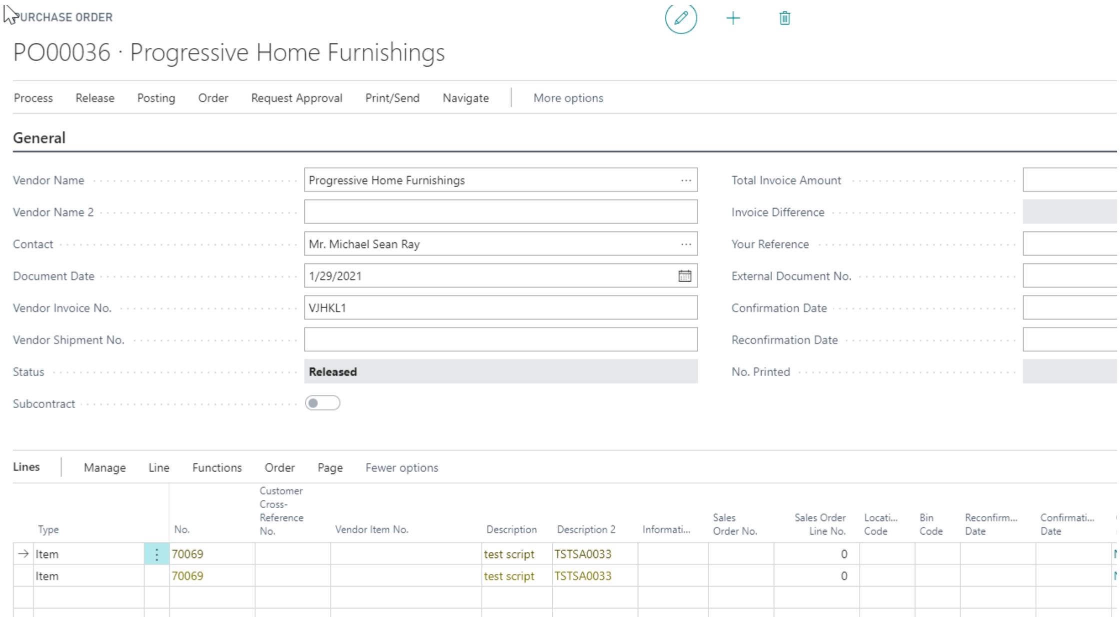
1.6.7 Sending the Purchase Order to the supplier

After the order is approved (see the next chapter), the order is manually printed as PDF and manually sent via email. Use the Print button in the Purchase Order List or Purchase Order Card.



1.6.8 Confirmation from the supplier (CORE modification)

There will be a common solution to support both, Sales and Purchasing Approval.
For further information, see 1.3.3. in the Sales Key User Document.
For suppliers of Phoenix Mecano it is obligatory to send a confirmation. When the confirmation arrives in standard BC the purchase order must be re-opened, to insert the confirmed information. Afterwards the purchase order must be released again. If approvals are setup, the document must also be approved again. To avoid re-opening and restarting the approval process, BC will be customized so that the approval process won't start a second time, if not needed.



Test case:

Create an order and release it. Afterwards, change the "Promised Receipt Date". No error message should occur with the release status of the order. Do the same to the "Expected Receipt Date".

Try to change the "Direct Unit cost" in an item line. If you decrease the cost, no error message about the release status should occur. If you increase the cost, an error message should appear and the process should stop.

Try to change the Quantity in an item line. If you decrease the quantity, no error message about the release status should occur. If you increase the quantity, an error message should appear and the process should stop.

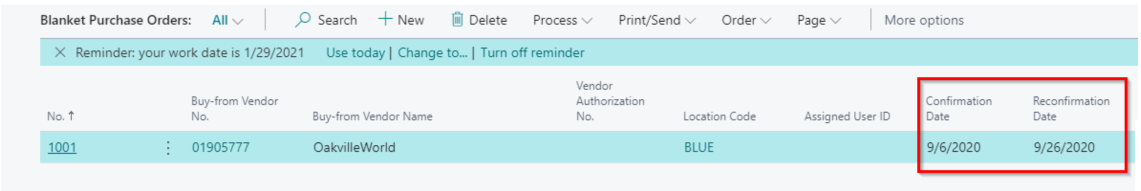
Refere to testscript: TSTPL0027

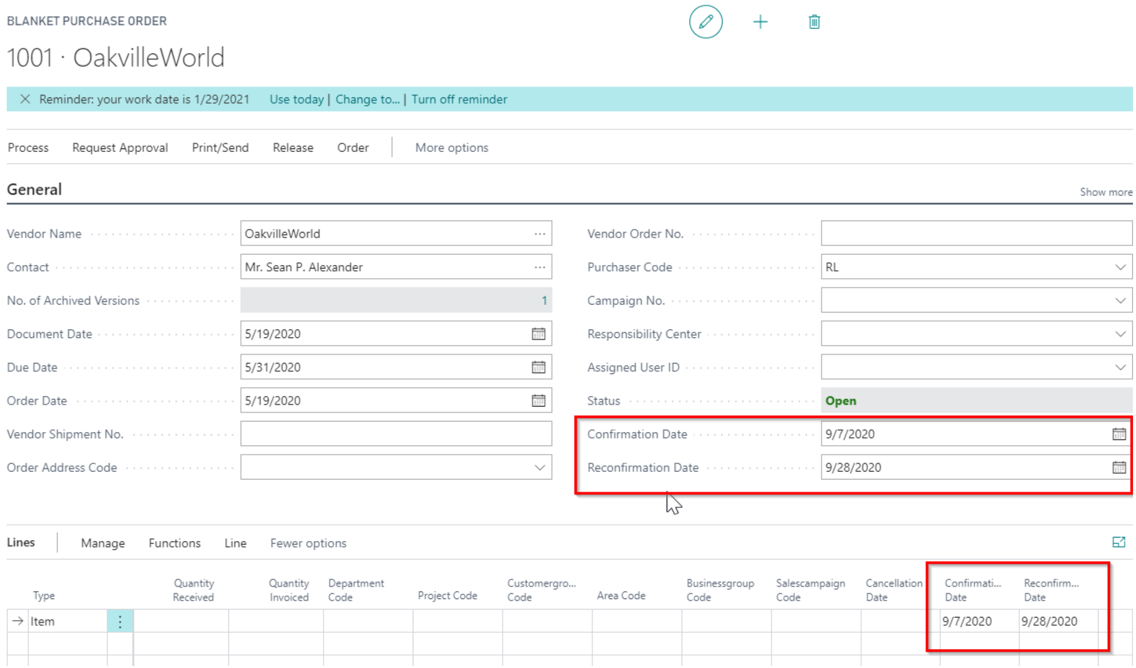
1.6.9 Dates for Confirmation and Reconfirmation (CORE modification)

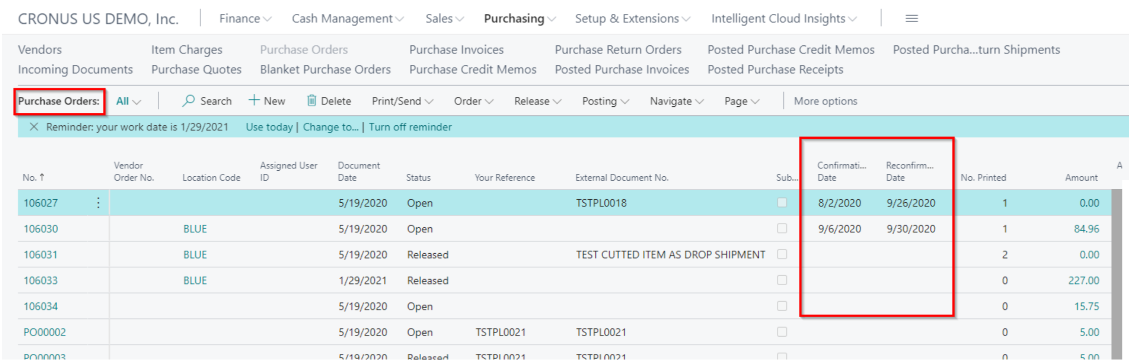
The fields "Confirmation Date" and "Reconfirmation Date" have been added to the purchase order and blanket order pages and lists.

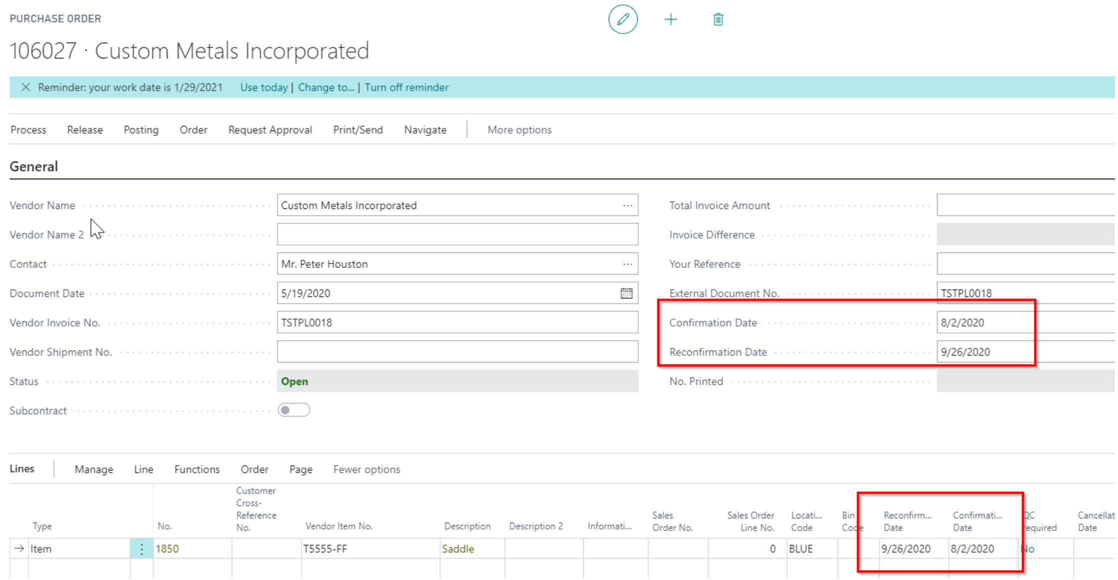
Both fields were developed for the confirmation performance of the vendor. If the vendor sent his confirmation, the date of the confirmation sent, should be entered in the field confirmation date. If the vendor sent a second or a next reconfirmation then this date should be entered in the field "Reconfirmation" date.

If a date is entered on the header the user will be asked if all lines shall be updated.




BLANKET PURCHASE ORDER
1001 · OakvilleWorld
Reminder: your work date is 1/29/2021 Use today | Change to... | Turn off reminder
Process Request Approval Print/Send Release Order More options
General
Show more
Vendor Name OakvilleWorld
Contact Mr. Sean P. Alexander
No. of Archived Versions 1
Document Date 5/19/2020
Due Date 5/31/2020
Order Date 5/19/2020
Vendor Shipment No.
Order Address Code
Vendor Order No.
Purchaser Code RL
Campaign No.
Responsibility Center
Assigned User ID
Status Open
Confirmation Date 9/7/2020
Reconfirmation Date 9/28/2020
Lines Manage Functions Line Fewer options
Type Quantity Received Quantity Invoiced Department Code Project Code Customergro... Code Area Code Businessgroup Code Salescampaign Code Cancellation Date Confirmati... Date Reconfirm... Date
Item 9/7/2020 9/28/2020


CRONUS US DEMO, Inc. Finance Cash Management Sales Purchasing Setup & Extensions Intelligent Cloud Insights
Vendors Item Charges Purchase Orders Purchase Invoices Purchase Return Orders Posted Purchase Credit Memos Posted Purcha...turn Shipments
Incoming Documents Purchase Quotes Blanket Purchase Orders Purchase Credit Memos Posted Purchase Invoices Posted Purchase Receipts
Purchase Orders: All Search New Delete Print/Send Order Release Posting Navigate Page More options
Reminder: your work date is 1/29/2021 Use today | Change to... | Turn off reminder
No. Vendor Order No. Location Code Assigned User ID Document Date Status Your Reference External Document No. Sub... Confirmati... Date Reconfirm... Date No. Printed Amount
106027 5/19/2020 Open TSTPL0018 8/2/2020 9/26/2020 1 0.00
106030 BLUE 5/19/2020 Open 9/6/2020 9/30/2020 1 84.96
106031 BLUE 5/19/2020 Released TEST CUTTED ITEM AS DROP SHIPMENT 2 0.00
106033 BLUE 1/29/2021 Released 0 227.00
106034 5/19/2020 Open 0 15.75
PO00002 5/19/2020 Open TSTPL0021 TSTPL0021 0 5.00


PURCHASE ORDER
106027 · Custom Metals Incorporated
Reminder: your work date is 1/29/2021 Use today | Change to... | Turn off reminder
Process Release Posting Order Request Approval Print/Send Navigate More options
General
Vendor Name Custom Metals Incorporated
Vendor Name 2
Contact Mr. Peter Houston
Document Date 5/19/2020
Vendor Invoice No. TSTPL0018
Vendor Shipment No.
Status Open
Subcontract
Total Invoice Amount
Invoice Difference
Your Reference
External Document No. TSTPL0018
Confirmation Date 8/2/2020
Reconfirmation Date 9/26/2020
No. Printed
Lines Manage Line Functions Order Page Fewer options
Type No. Customer Cross-Reference No. Vendor Item No. Description Description 2 Informati... Sales Order No. Sales Order Line No. Locati... Code Bin Code Reconfirm... Date Confirmati... Date QC Required Cancellat Date
Item 1850 T5555-FF Saddle 0 BLUE 9/26/2020 8/2/2020 No

Refere to testscript: TSTPL0136

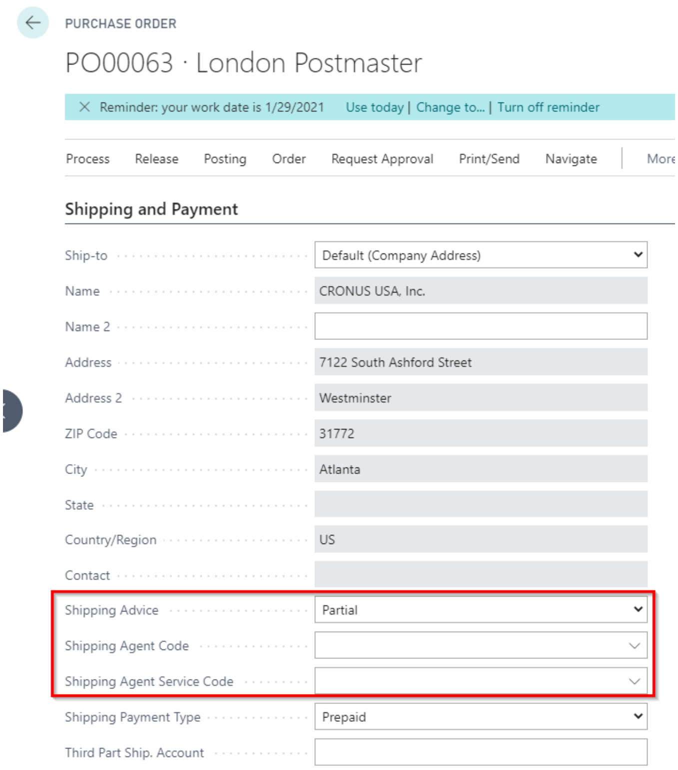
1.6.10 Shipping instructions for the supplier (CORE modification)

PM needs fields to define how the supplier should ship the goods. The purchase header was extended with the following fields.

- Shipping Advice
- Shipping Agent code
- Shipping Agent Service Code
- Shipping Payment Type
- Shipping Account Number

Field Name	Type	Description
Shipping Advice	Option: Partial, Complete	
Shipping Agent Code	Code 10	TableRelation to Shipping Agent
Shipping Agent Service Code	Code 10	TableRelation to Shipping Agent Services with Shipping Agent code as above
Shipping Payment Type	Option: Prepaid, Third Party, Freight Collect, Consignee	
Third Party Ship. Account	Code 20	Table Relation to Vendor

The fields "Shipping Advice", "Shipping Agent Code" and "Shipping Agent Service Code" should be the same type as the corresponding fields in the BC sales order. They are added in Fasttab "Shipping and Payment". The fields are needed only to inform the supplier, no functionality is linked.



Test case

Create an order. Check if the new fields exist in the tab Shipping. Check if the "Shipping Advice" displays the correct options and the "Shipping Agent Code" and "Shipping Agent Service Code" have the correct table relations.

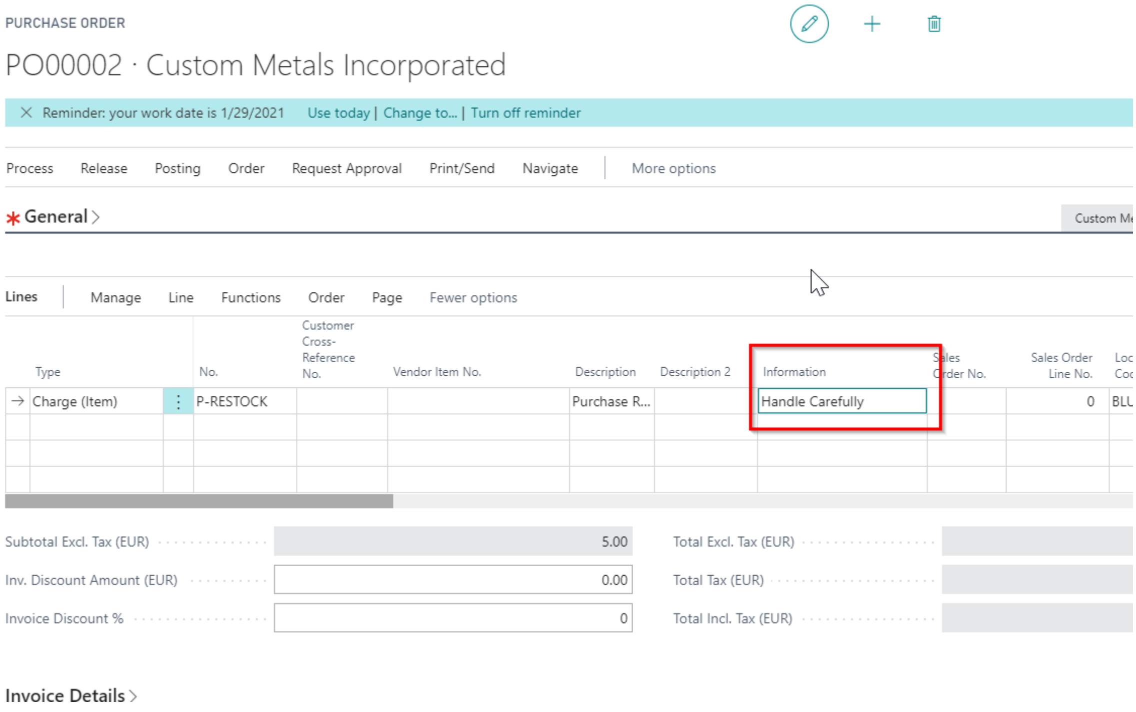
There will be a table behind the field Shipping Payment Type to define the options; Shipping Account Number is a manual entry text field

Refer to testscript: TSTPL0137

1.6.11 Information Field on Purchase Line (CORE modification)

Phoenix Mecano needs the field "Information" (Text 50) in the purchase line where internal information can be entered. The field is only implemented in the purchase line. There is no need to copy the content to warehouse – or posted documents.

The field is visible in the pages "Purchase Lines" and "Purchase Order Subform".



Test case:

Create a new order. Create a new line and check if the new field "Information" exists. Is it editable and allows the maximum length of 50 characters?

Refere to testscript: TSTPL0029

1.7 Approval Process

Phoenix Mecano works with an approval workflow process for purchase orders. The BC approval workflow process meets the requirements of Phoenix Mecano.

1.7.1 Approval of the Purchase Order

Approvals can be used for purchase orders. The sales and purchase document approval workflow enables users to submit a document, typically a sales order or purchase order. The approval workflow follows a predefined hierarchy of approval managers with specified approval amount limits.

1.7.2 Templates

The user can use templates to select which types of sales or purchase documents to include in the approval process. A standard set of templates, for both sales and purchase documents, has been provided for this purpose.

If a particular document requires two different reviewers, the user can set up additional approvers. For example, in a small company where the manager or the owner has to approve everything, the user can be set as an additional approver.

1.7.3 Notification

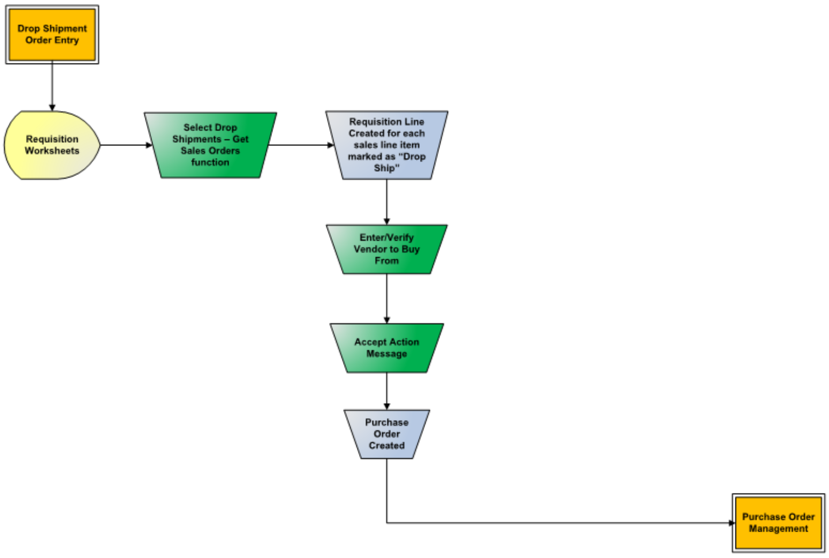
The notification system sends e-mail notifications between users and their approvers about documents that need approval. In addition, overdue notifications can be sent by the administrator to be sure all approvers remember to approve their documents.

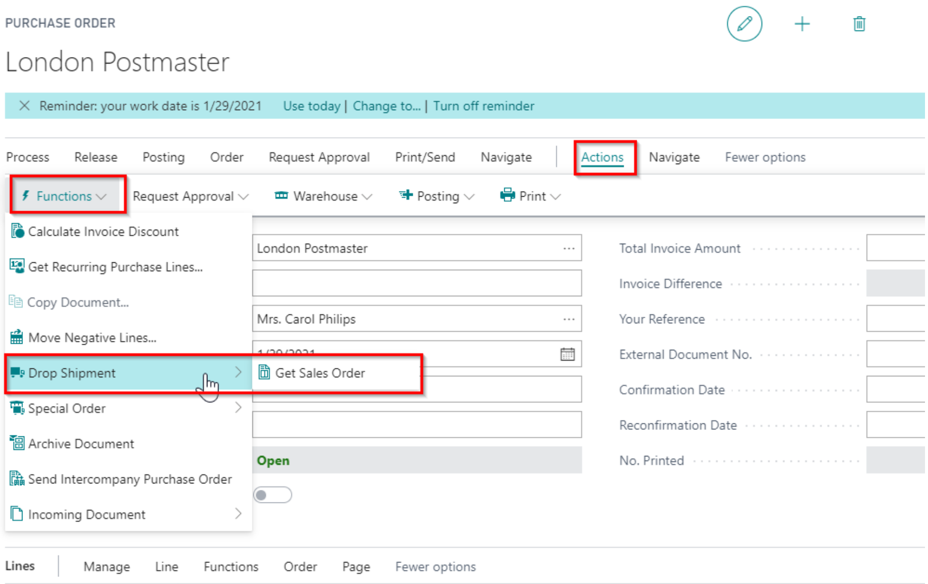
1.7.4 Delegating Approval

The users can assign a substitute approver for periods when a primary approver is out of office, so that a process does not get delayed. Since the administrator is responsible for maintaining the document approval system, it is his task to add substitute approvers and ensure that pending notifications are delegated to the substitutes.
With a few exceptions, the overall principles and workflow are the same for both sales and purchase documents.

1.8 Drop Shipment

PM uses also the Drop Shipment functionality to create a purchase order. The purchase order for the drop shipment can either be created via the requisition-worksheet-process, or directly in a new purchase order. Both processes use the function Drop Shipment / Get Sales Order.





After the purchase order is created, there is a one-to-one link to the sales order. Tthe sales order cannot be changed anymore.

Test case:
It should be tested, if the only way for changes is that the purchaser removes the connection and connects the documents after changes are finished again.

Refere to testscript: TSTPL0140

1.9 Transfer content from SO to PO in case of drop shipment (CORE modification)

The content of some fields from the Sales Order should be transferred to the Purchase Order when using drop shipment. When creating a Drop Shipment, either from the Purchase Order or from the Req. Worksheet, the listed fields from the Sales Order must be copied to the Purchase Order.

Listed fields are also visible on the PO page and list.

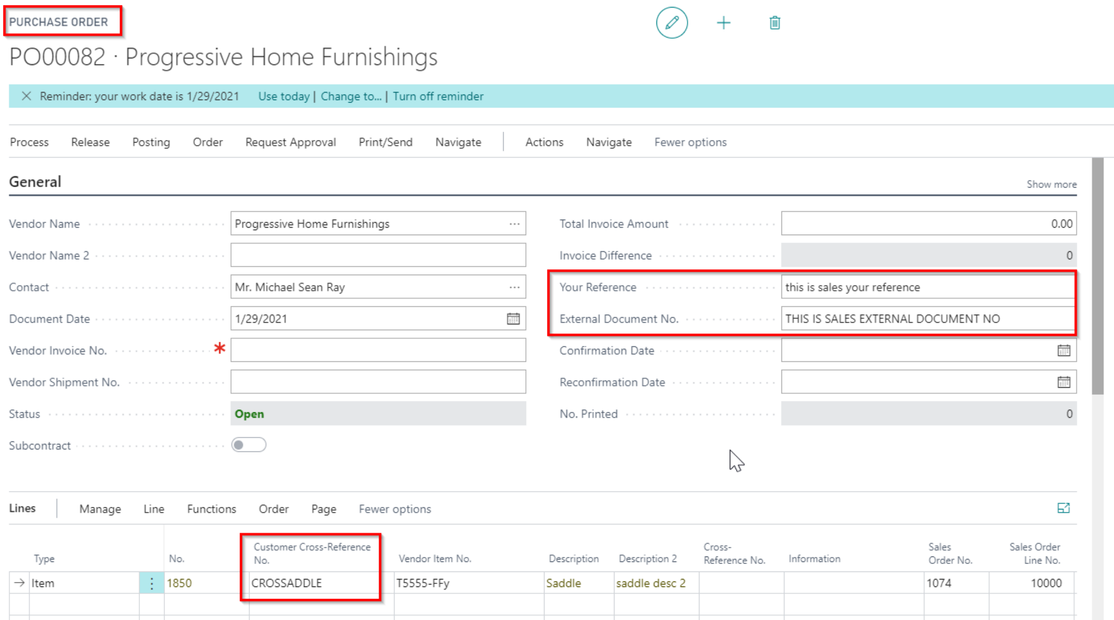
Purchase order header:

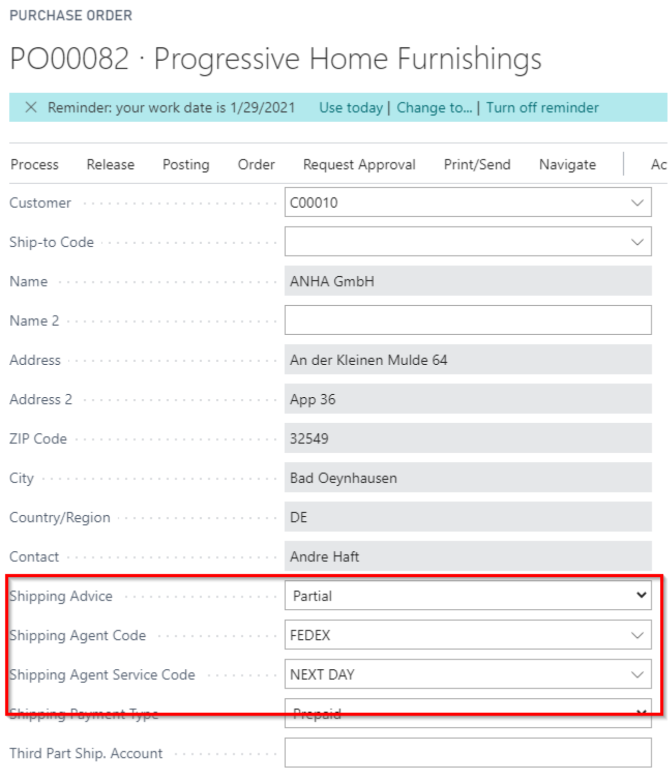
- General tab
  Field: "Your Reference" – Existing field will be used in the PO
  Field: "External Document No." – Requires an additional field in PO
- Shipping tab
  Field: "Shipping Advice" – Existing field will be used in the PO
  Field: "Shipment Method Code" – Existing field will be used in the PO
  Field: "Shipping Agent Code" – Existing field will be used in the PO
  Field: "Shipping Agent Service Code" – Existing field will be used in the PO

Purchase order line:
Field on the PO line called "Customer Cross-Reference No." that is populated by the Field "Cross-Reference No." from the SO line is added. The field will be used only for information, no lookup or other functionality is needed.

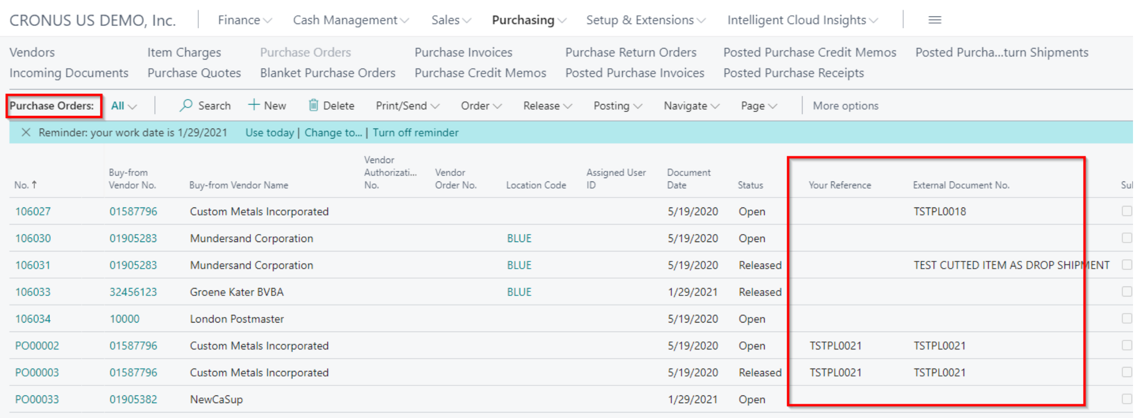
The fields will be filled once, when the PO is automatically created. A permanent synchronization between SO and PO is not needed.

In BC it is also possible to paste multiple Sales Orders in one Purchase Order for drop shipment. However the field "Ship-to Code" is checked, that means that it is checked that the goods are delivered to the same place. This error has to be extended, so that the above fields from the sales order header are also checked to be equal in all Sales Orders.

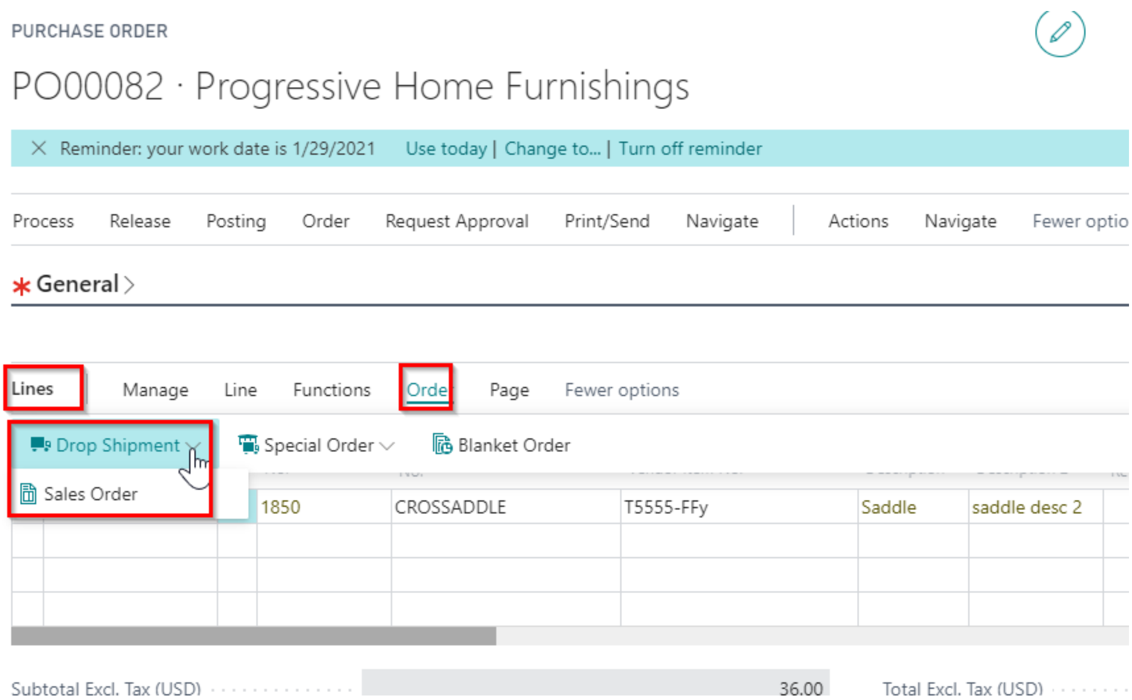




The field "Your Reference" and "External Document No." have been added to the Purchase Order List.



It is now possible for a sales order with drop shipment to call up the designated purchase order in editable mode. The same functionality is also available on the purchase order to call up the designated sales order in edit mode. Functionality can be called via the "Order" functionality on the lines.



Purch.-Get Drop Shpt. Codeunit

Added functionality to copy the named fields from Sales Order to Purchase Order.

Req. Wksh.-Make Order Codeunit
Added functionality to copy the named fields from Sales Order to Purchase Order.

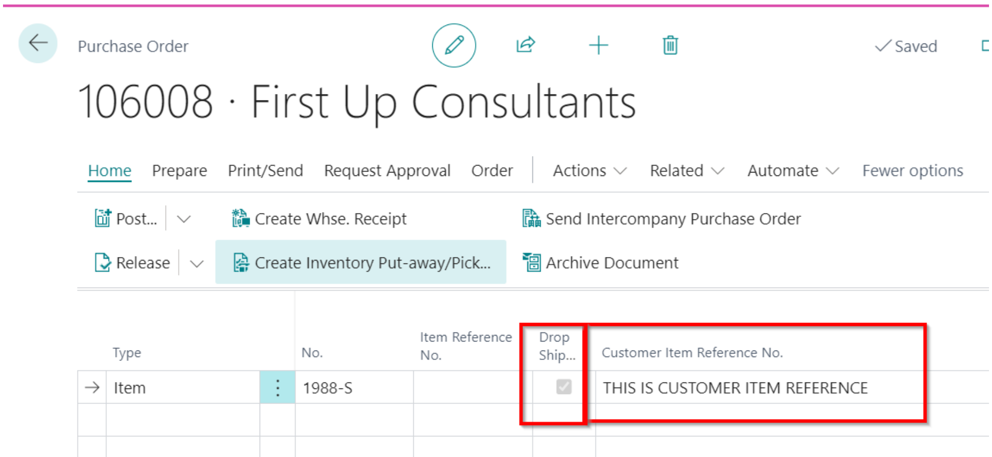
Test case:
Create a Sales Order and mark it as drop shipment. Make sure that all fields you want to populate to the Purchase Order are entered. Create a Purchase Order and select the right Sales Order for drop shipment. Check that all fields are transferred. Next create the Purchase Order via the Requisition System. Also via the Requisition System the fields should be transferred.

Refere to testscripts: TSTPL0012, TSTPL0050

1.9.1 Change Caption of field 65006 at Purchase Line (Core Modification)

At Purchase Lines exist Core field “Customer Reference No”. This fields displays the “Customer item reference no.” in case this purchase order line is linked to a sales order line for drop shipment or special order.

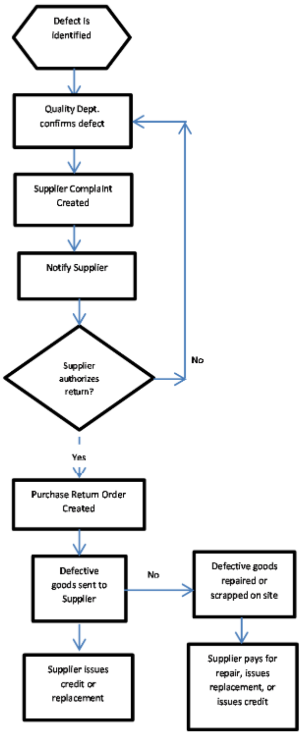
The caption “Customer reference no.” causes trouble for naming issues. It should be renamed into “Customer Item Reference No.” for better understanding.



1.10 Purchase Return Management

1.10.1 Master Process for Purchase Returns

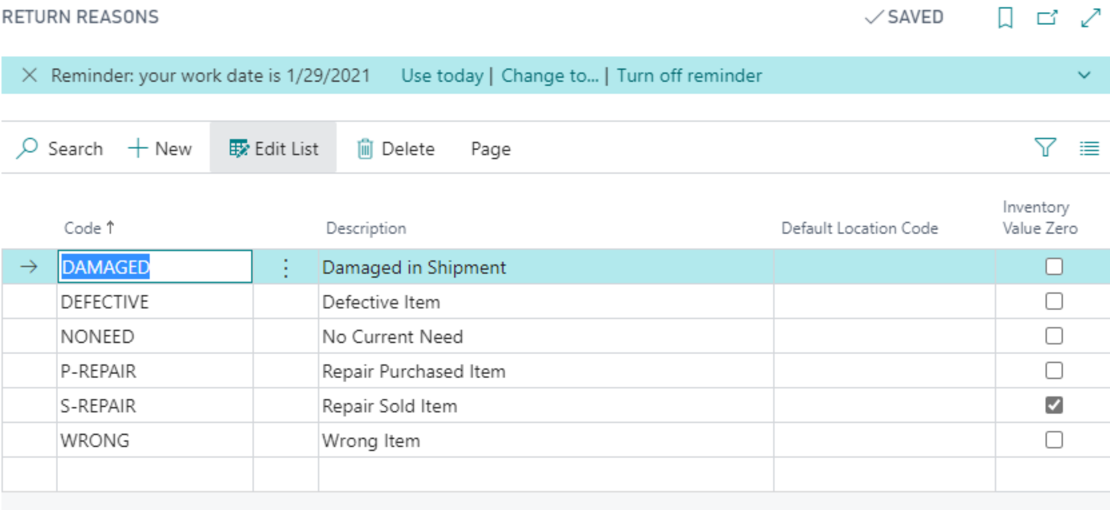
When a defective good is detected a complaint is created in BC (see next paragraph). Then the supplier is notified, and it has to be decided how to proceed. If it is decided that the good is scraped PM will send a debit note to the supplier (in BC a debit note is a purchase credit memo). If PM and the supplier decide that the good is sent back a purchase return order is created and the item is sent back together with the debit note.
If PM needs a replacement a purchase order is created for the receipt of the new good.



1.10.2 Returns Management Setup

The setup of returns management consists of two elements:

- **General setup**: Several fields on the **Sales & Receivables Setup** and **Purchases & Payables Setup** pages define the setup of Sales Return Order Management and Purchase Return Order Management.
- **Return Reasons setup**: A company can set up codes that specify the reasons to return items. These apply to both, customer and vendor returns. A return reason code can be selected, when a return agreement in most sales and / or purchase documents is registered.



In addition to setting up return reason codes and descriptions, a default location can be assigned to a return reason. Items that are returned are then received and / or shipped from the assigned location.

1.10.3 Manage Returns to Vendors

Managing returns to vendors involve a series of tasks. Vendor-oriented tasks include the following:

- Register compensation agreement with the vendor
- Ship return items to the vendor, if applicable
- Debit the vendor, either by receiving a credit for physically returned items, or with a purchase allowance if the company is not required to physically return the items
- Create a replacement purchase order(s) if a replacement is specified by the compensation agreement

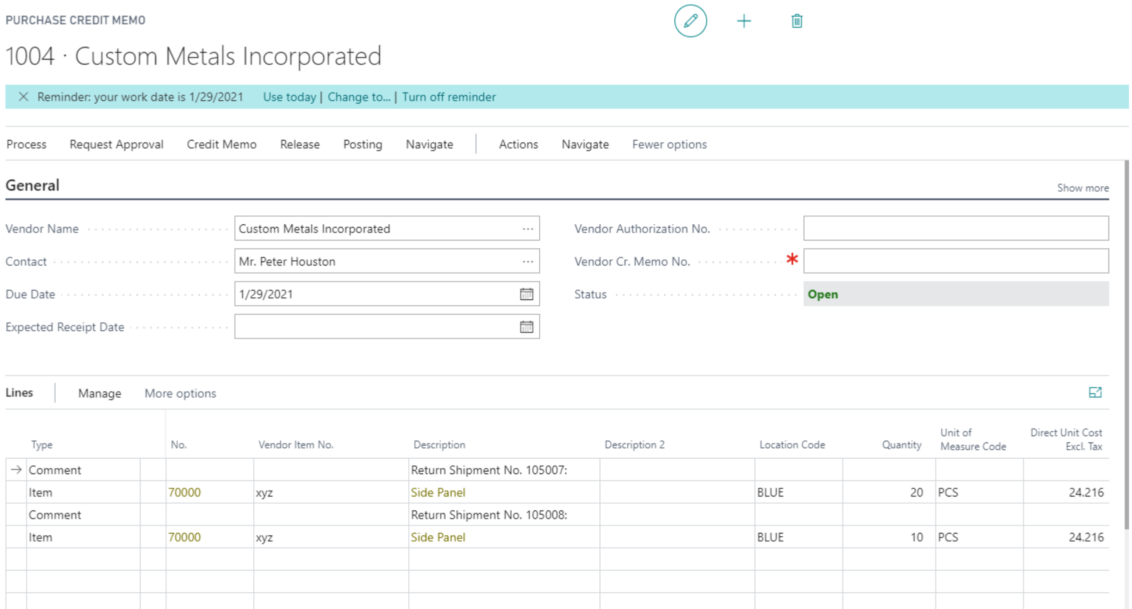
Additionally, the following internal tasks might have to be completed:

- Receive replaced / repaired items
- Make sure that the inventory value assigned to the returned items is accurate
- Combine several return shipments to the same vendor into one credit memo document

In BC, a purchase return order can be used to register a compensation agreement with a vendor. From this document, other purchase-related documents can be accessed to enter and maintain the return-related information, the method of compensation. These include the following:

Item: This is used for transactions where an item is physically returned to the vendor.

Charge (Item) or G / L Account: These are used for financial transactions where the company receives a credit (in the form of a purchase allowance) for an item without physically returning it to the vendor. The same line types are used for registering fees associated with a return. The Charge (Item) line type supports the correct tracking of item values, and is used any time that a charge is directly related to the item (such as a manufacturing flaw). The G / L Account is used when the charge is not directly related to the item, such as when a shipping carrier damages an item that is manufactured without defect.



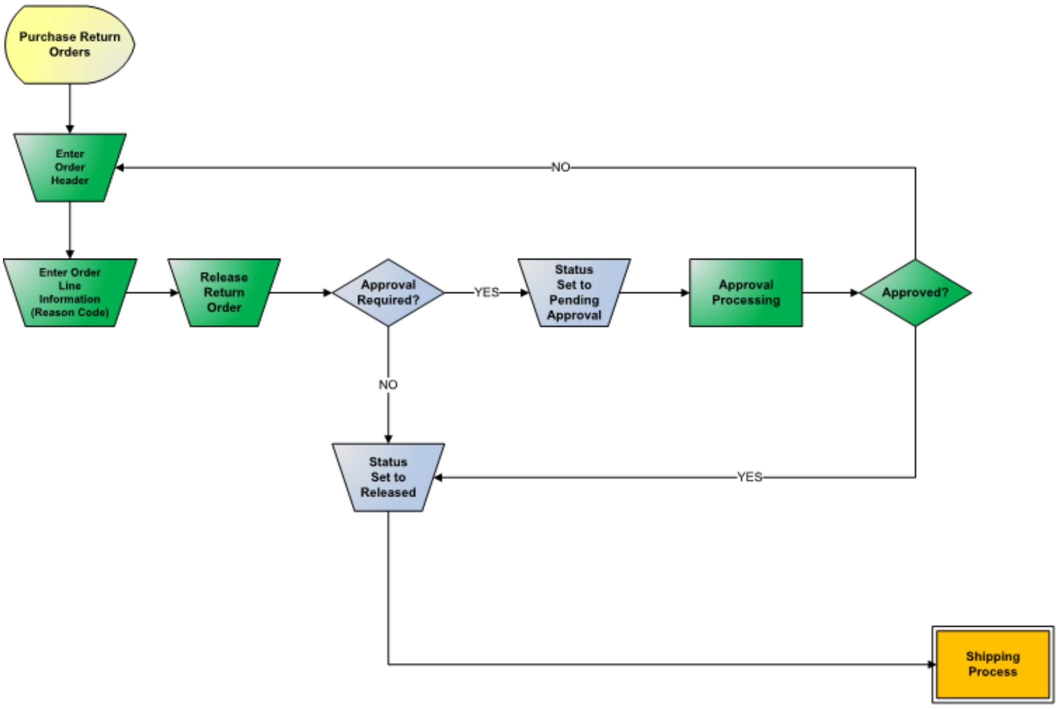
1.10.4 Complaint Management

Complaint Management is described in Key User Documentation for Complaint Mgmt. Complaints are the starting point when goods are defect and cover both, the purchase and sales complaint process.

The Complaint consists of header information, such as who created the complaint, for which customer / vendor, how high is the priority, what is the corrective action and so on. The line information show the related comments.

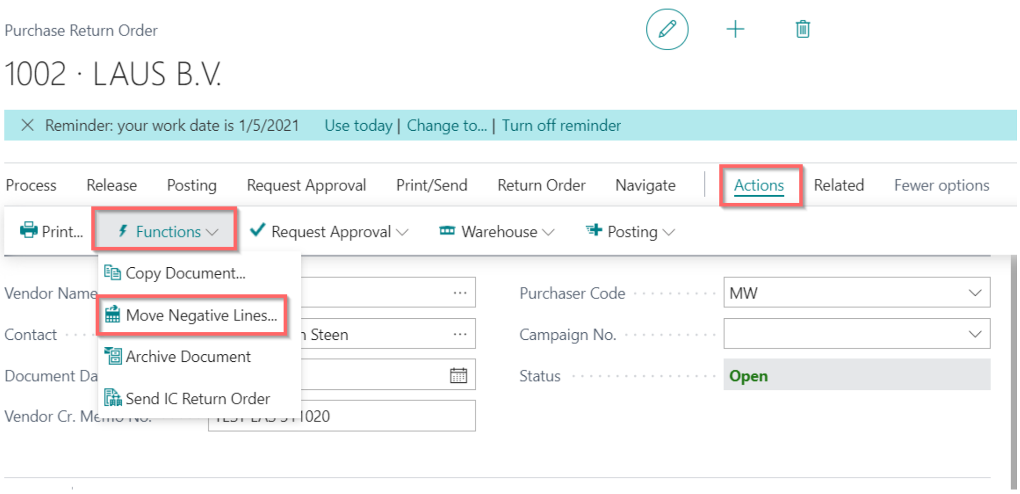
The complaint is linked to all associated documents like return purchase orders, replacement purchase order and so on (the same for sales). There are functions to create such documents out of the complaint. The subsequent return management is done in BC standard as described below.

1.11 Return Management



For the return management the purchase credit memos or the purchase return orders are used. PM will create these documents out of the new complaint module. Nevertheless, it is also possible to create the return documents manually.

If the vendor agrees to ship a compensation for the damaged good, this is done by inserting a negative line in the return document and using the function "Move negative Lines ..." This will create a new purchase order that will be sent to the customer for the compensation.



1.12 Item Status Management (CORE modification)

PM implemented with NAV2013 and NAV2016 the Item Status Management. This modification is completely taken over into BC. For the set up some addittional steps have to be done.

1.12.1 Basic Setup

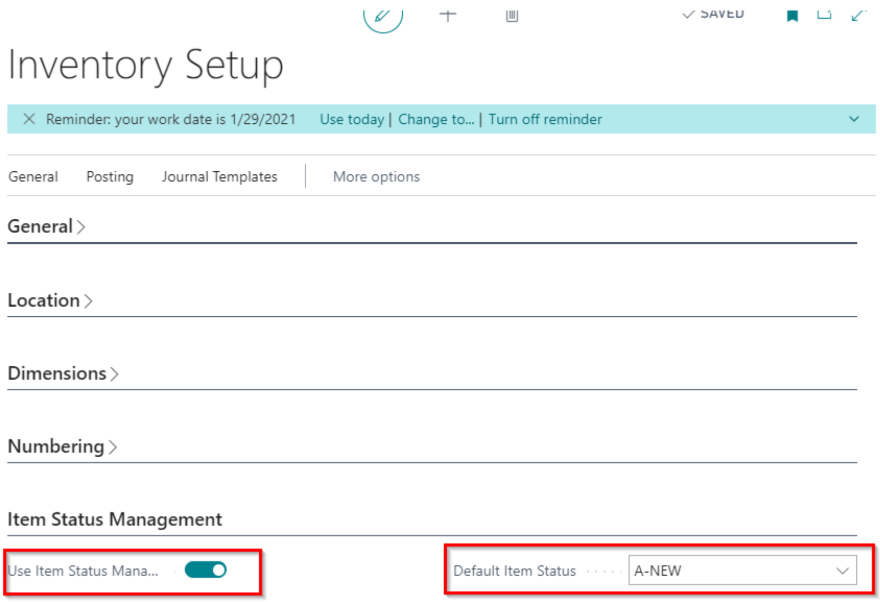
The functionality of the Item Status Management will be activated or deactivated in a general setup. To activate the Status Management Functionality a tab will be provided in the Inventory Setup. The tab is called "Item Status Management".

In this tab there are two new fields:

- Use Item Status Management (Boolean)
- Default Item Status (Table Relation to Table "Item Status")

Two fields in the new tab "Item Status Management" in "Inventory Setup":

Field Name	Type	Description
Use Item Status Management	Boolean	Filled manually To activate or deactivate Item Status Management
Default Item Status	Code (10)	Filled manually Table Relation to table "Status Management"



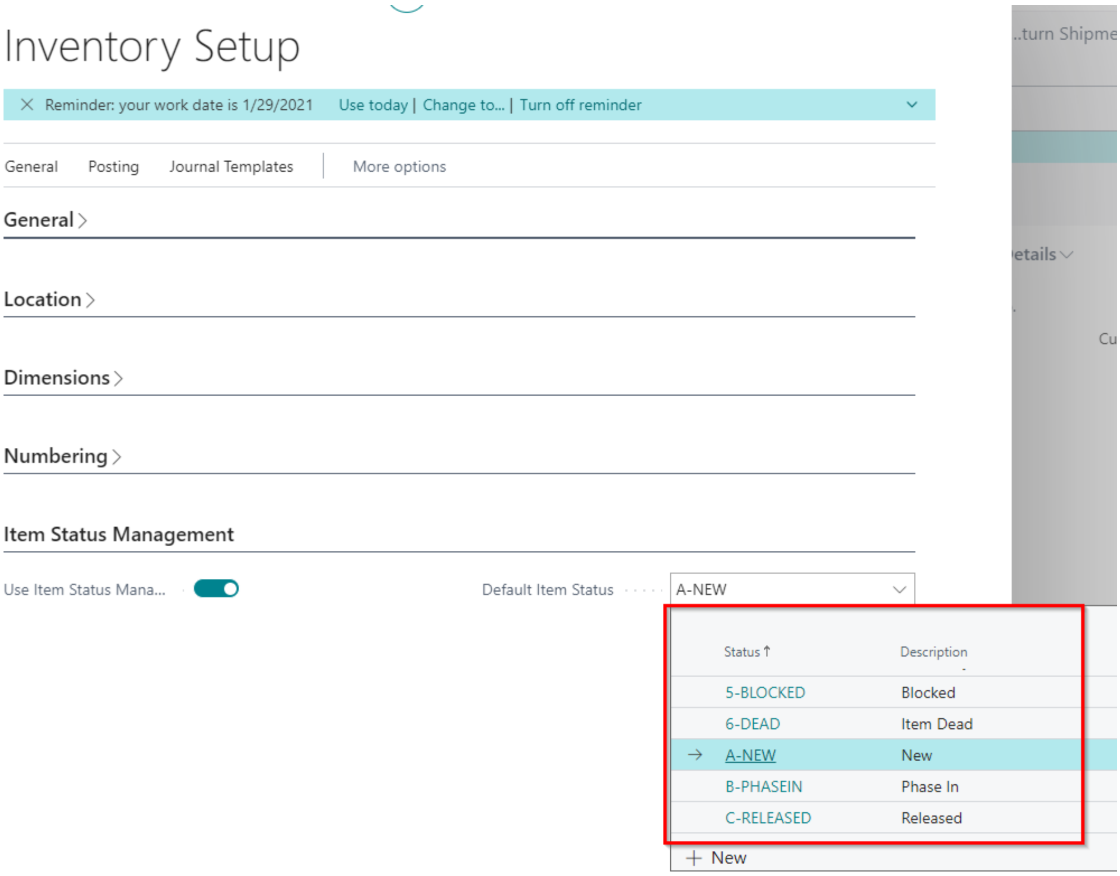
Use Item Status Management:

To activate the Item Status Management the boolean field "Use Item Status Management" needs to be activated.

Default Item Status:

The status an item will get – as default value – when a new item is generated. This default value can be selected in the field "Default Item Status".

Note: The Item Status Management needs to be activated.



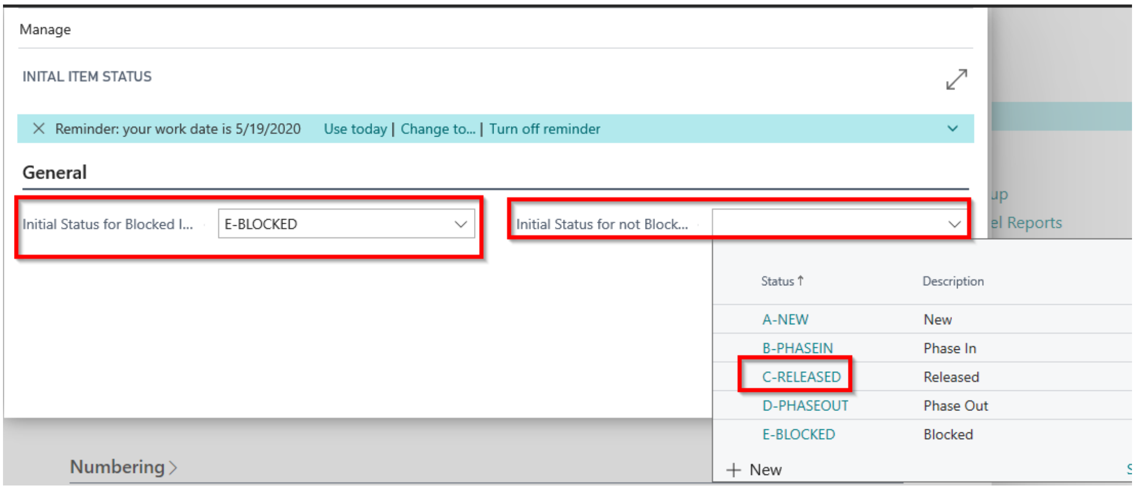
A field "Status" will be provided in the item card. Please see "Item Status Setup".

As soon as the field "Item Status Management" is activated in the setup a new page "Initial Setup" will appear in order to define initial setups for the field "status" in the item card for existing items:

- Initial Status for Blocked Items (Table Relation to table "Status Management")
- Initial Status for not Blocked Items (Table Relation to table "Status Management")

Two fields in the new page "Initial Setup":

Field Name	Type	Description
Initial Status for Blocked Items	Code (10)	Filled manually Table Relation to table "Status Management"
Initial Status for not Blocked Items	Code (10)	Filled manually Table Relation to table "Status Management"



Default Status for Blocked Items:

An existing item in BC will get this "status" on the item card when the item is blocked and without having a status – field "blocked" in the item card is set with true and the field "status" has no value in the item card.

Default Status for not Blocked Items:

An existing item in BC will get this "status" on the item card when the item is NOT blocked and without having a status – field "blocked" in the item card is set with false and the field "status" has no value in the item card.

The field "blocked" in the item card will switch to "not editable" when the field "Item Status Management" is activated in the setup. Then the user can not set the field manually anymore.

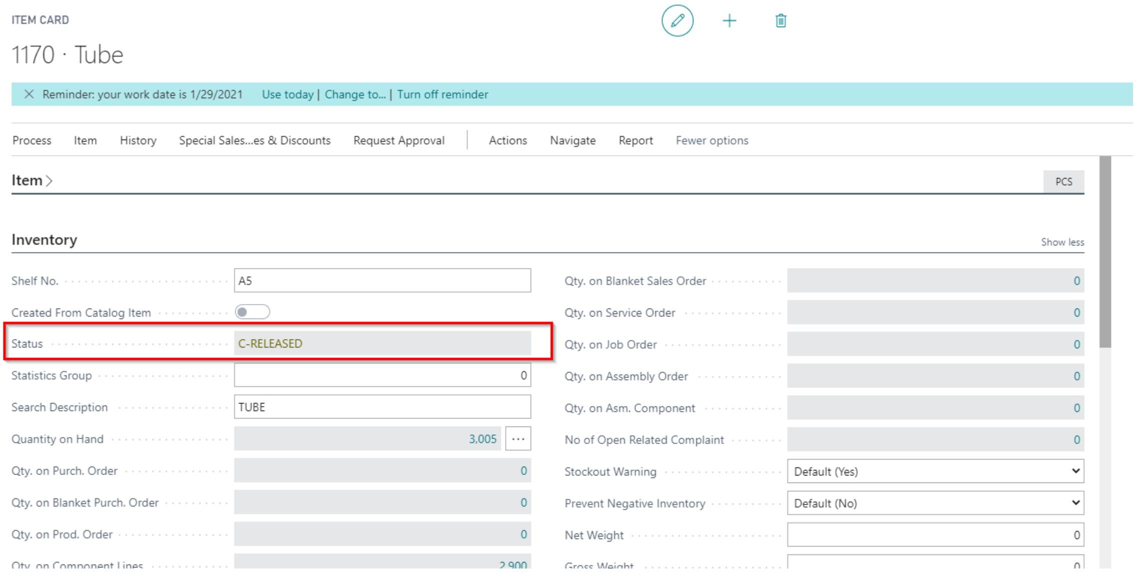
The field "Use Item Status Management" can only be deactivated as long as there are no entries in the field "Status" in table "Item.

In order to accomplish the requirements new functions will be provided as described below.

1.12.2 Item Status Setup

In BC it is possible to set an item as blocked or unblocked. With BC it is also possible to block or unblock items for sales or purchase separate from "all". But PM needs more options in order to indicate the current status of an item.

Therefore a field "Status" is provided in the item card. The field is provided in fast tab "Inventory" below field "Created from Catalog Item".

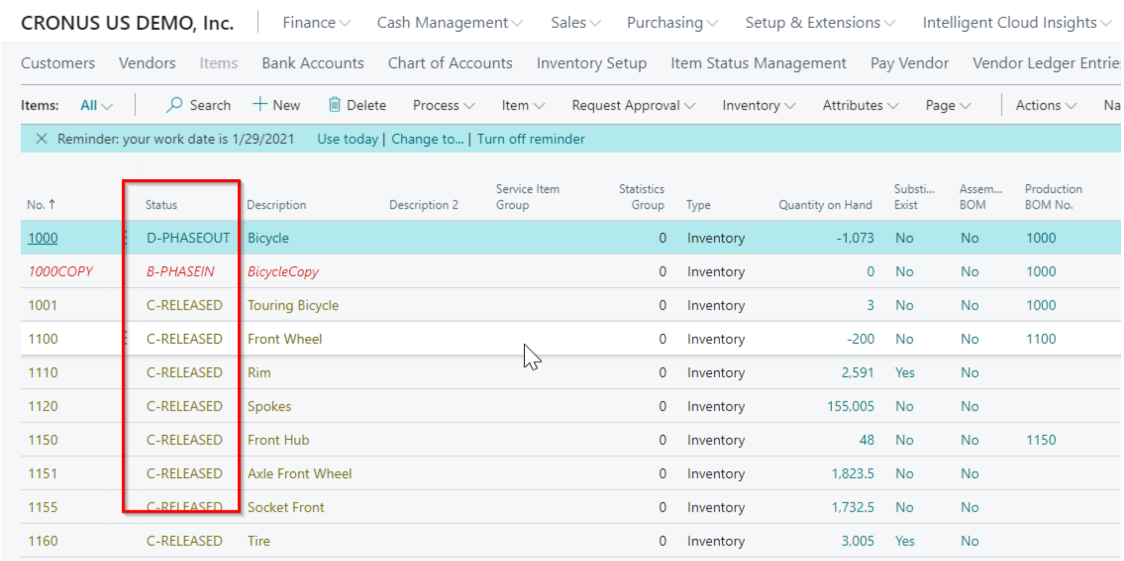


In the "Status Management" page the user can define the different status.

Field "Status" in the Page "Item Card":

Field Name	Type	Description
Status	Code (10)	Filled manually Table Relation to table "Status Management"

The field "Status" is available in the item list next to the Column "No. ".



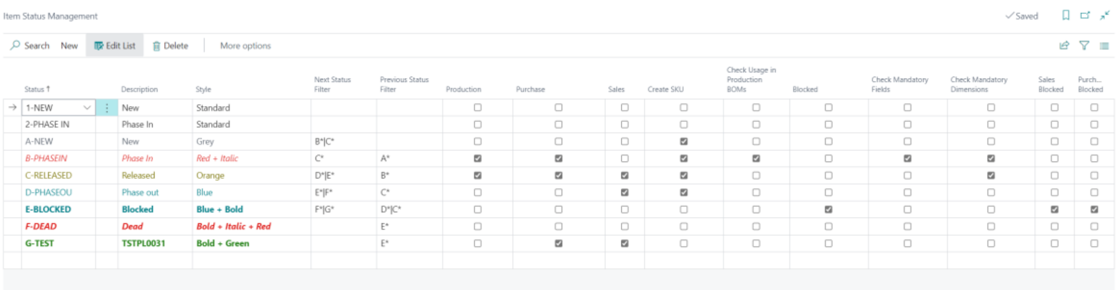
The table and page "Status Management" have the following fields:

Field Name	**Type**	**Description**
Table ID	Integer	Holds the ID of the related table
Code	Code (10)	Filled manually This code is shown on the item card
Description	Text (50)	Filled manually Here you can enter a more detailed description of the status
Text Color / Style	Option	Options for different colors available in BC
Next Status Filter	Code (80)	Item Status Filter – In this field a filter can be entered to determine the workflow from one item status to the next one. When no filter is filled, all status are allowed to be next
Previous Status Filter	Code (80)	Item Status Filter – In this field a filter can be entered to determine the workflow from one item status to the previous one. When no filter is filled, all status are allowed to be previous
Production	Boolean	A checkmark indicates that an item with this status can be used on production orders and BOM Lines

Purchase	Boolean	A checkmark indicates that an item with this status can be used on purchase documents like quotes, orders etc.
Sales	Boolean	A checkmark indicates that an item with this status can be used on sales documents like quotes, orders etc.
Create SKU	Boolean	A checkmark means that it is allowed to create stock keeping units for an item with this status
Check Usage in Production BOMs	Boolean	A checkmark means that the system checks, if the item is used in an active BOM when the item gets this status.
Blocked	Boolean	A checkmark means that the standard BC field "blocked" is set to TRUE when an item gets this status.
Check Mandatory Fields	Boolean	When this field is check marked, the system will check if all mandatory fields are set in the item
Check Mandatory Dimensions	Boolean	When this field is check marked, the system will check if all mandatory dimensions are set in the item

Addittional columns added in BC to new standard fields for Purchase and Sales blocked

Field Name	**Type**	**Description**
Sales Blocked	Boolean	It can be defined per each status, if Sales is blocked or not
Purchase Blocked	Boolean	It can be defined per each status, if Purchase is blocked


Item Status Management

Search New Edit List Delete More options ✓Saved

Status ↑	Description	Style	Next Status Filter	Previous Status Filter	Production	Purchase	Sales	Create SKU	Check Usage in Production BOMs	Blocked	Check Mandatory Fields	Check Mandatory Dimensions	Sales Blocked	Purch... Blocked
1-NEW	New	Standard			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2-PHASE IN	Phase In	Standard			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
A-NEW	New	Grey	B*|C*		☐	☐	☐	☑	☐	☐	☐	☐	☐	☐
B-PHASEIN	Phase In	Red + Italic	C*	A*	☑	☑	☐	☑	☑	☐	☑	☑	☐	☐
C-RELEASED	Released	Orange	D*|E*	B*	☑	☑	☑	☑	☐	☐	☐	☑	☐	☐
D-PHASEOU	Phase out	Blue	E*|F*	C*	☐	☐	☑	☑	☐	☐	☐	☐	☐	☐
E-BLOCKED	Blocked	Blue + Bold	F*|G*	D*|C*	☐	☐	☐	☐	☐	☑	☐	☐	☑	☑
F-DEAD	Dead	Bold + Italic + Red		E*	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
G-TEST	TSTPL0031	Bold + Green		E*	☐	☑	☑	☐	☐	☐	☐	☐	☐	☐

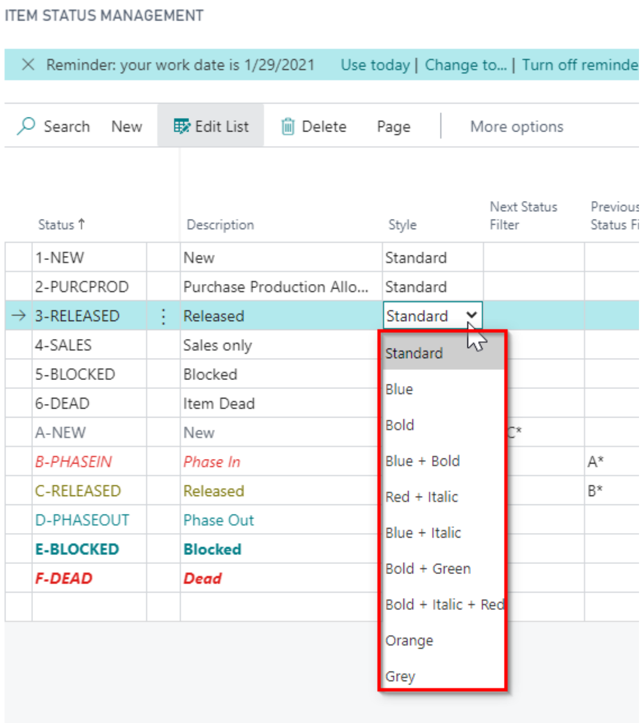
1.12.2.1 Status – color marking

It is possible to define a color for each status.

BC has only a certain pre-defined amount of colors and styles (e.g. Blue + Bold). BC also uses different names for each style (e.g. Blue + Bold is named StrongAccent).

In the table "Status Management" an option field is available with the different styles. See table below for the available options.

Style	BC Style Expression
Standard	Standard
Blue	StandardAccent
Bold	Strong
Blue + Bold	StrongAccent
Red + Italic	Attention
Blue + Italic	AttentionAccent
Bold + Green	Favorable
Bold + Italic + Red	Unfavorable
Yellow	Ambiguous
Grey	Subordinate



If a color for a status is chosen then the following fields in the page "Status Management" are changed into the selected color for the corresponding line.

- Code
- Description

In the pages "Item Page" and "Item List" the following fields will appear in color – according to the defined color for the item status:

- No.
- Description
- Description 2
- Status

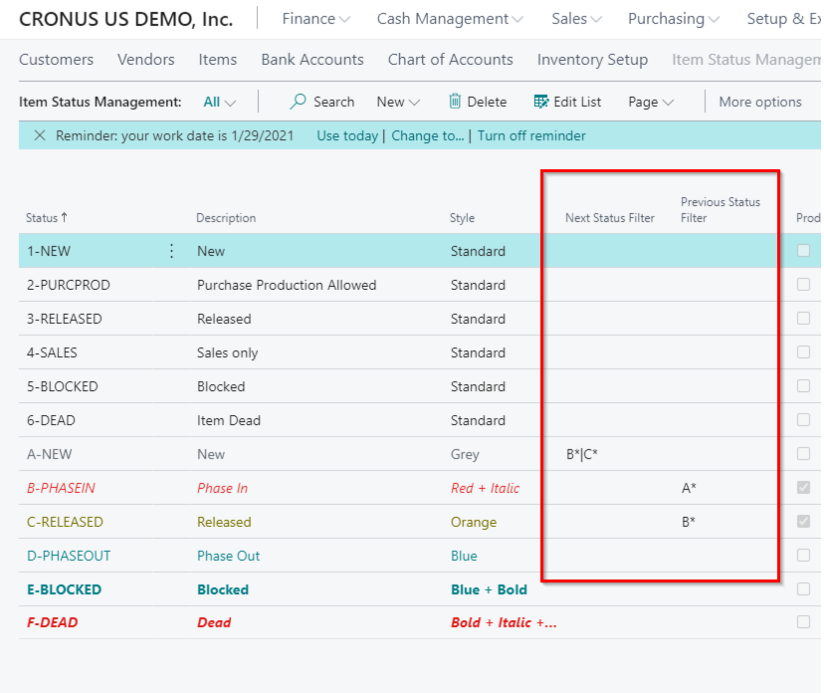
When using an item in sales and purchase lines the following fields will appear in color in the pages "Sales Line" and "Purchase Line"- according to the defined color for the item status:

- No.
- Description
- Description 2

In order to accomplish the requirements new functions are provided.

1.12.2.2 Status Change – Filter to determine the workflow when changing an item status

It is possible to define in which next status or previous status an item status can be changed. Therefore a setup is implemented where the user can define into which next or previous status an item status can be changed.


CRONUS US DEMO, Inc. | Finance | Cash Management | Sales | Purchasing | Setup & E

Customers | Vendors | Items | Bank Accounts | Chart of Accounts | Inventory Setup | Item Status Managem

Item Status Management: All | Search | New | Delete | Edit List | Page | More options

Reminder: your work date is 1/29/2021 Use today | Change to... | Turn off reminder

Status ↑	Description	Style	Next Status Filter	Previous Status Filter	Prod
1-NEW	New	Standard			☐
2-PURCPROD	Purchase Production Allowed	Standard			☐
3-RELEASED	Released	Standard			☐
4-SALES	Sales only	Standard			☐
5-BLOCKED	Blocked	Standard			☐
6-DEAD	Item Dead	Standard			☐
A-NEW	New	Grey	B*|C*		☐
B-PHASEIN	*Phase In*	*Red + Italic*		A*	☑
C-RELEASED	Released	Orange		B*	☑
D-PHASEOUT	Phase Out	Blue			☐
E-BLOCKED	**Blocked**	**Blue + Bold**			☐
F-DEAD	***Dead***	***Bold + Italic +...***			☐

The setup of the filters can be done in table / page "Status Management" in the fields "Next Status Filter" and "Previous Status Filter".

The change into a defined status will be ensured by this two fields in which the user determines the respective dependencies per status. So for each status the user can define into which next or previous status an item status can be changed.

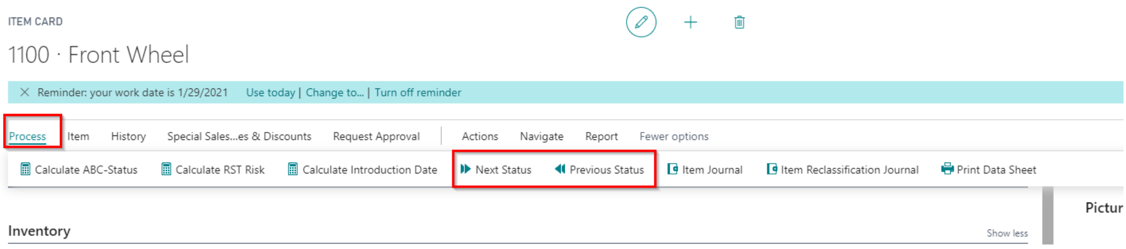
Example:

<table>
<tr><th>Next Status Filter</th><th>Previous Status Filter</th></tr>
<tr><td>2*</td><td></td></tr>
<tr><td>3*</td><td></td></tr>
<tr><td>4*</td><td>2*</td></tr>
<tr><td>5*</td><td>3*</td></tr>
<tr><td>6*</td><td>3*|4*</td></tr>
<tr><td></td><td></td></tr>
<tr><td>B*|C*</td><td></td></tr>
<tr><td>C*</td><td>A*</td></tr>
<tr><td>D*</td><td>B*</td></tr>
<tr><td>E*|F*</td><td>C*</td></tr>
<tr><td>F*</td><td>C*</td></tr>
<tr><td></td><td></td></tr>
<tr><td></td><td></td></tr>
</table>

In order to change an item status there will be two functions on the Item Card:

- Next Status
- Previous Status

These two functions will be available as action buttons on the item card.



These two functions can also be opened through keyboard shortcuts.

Next Status: Strg+CTRL+6

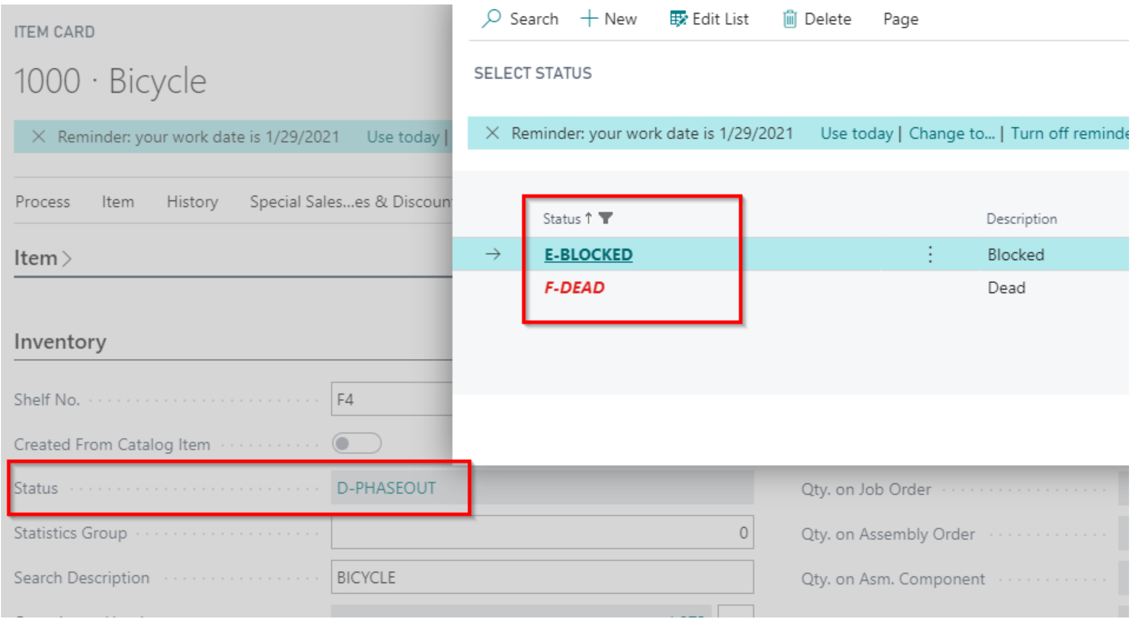
Previous Status: Strg+CTRL+4

Next Status:

When using this function the system will check the current item status – value of the field "Item Status" on the Item Card. Then the system will look for the current Item Status Line in table "Status Management" and will check the defined status filters of the field "Next Status Filter".

The status will change to the next status immediately when there is only one status defined as next.

The status will NOT change immediately when there are multiple status defined as next to choose from. In this case the page "Select Item Status" will appear. In the page only those status are shown that correspond with the "Next Status Filter" of the current status. The User can decide to which status the item should change.

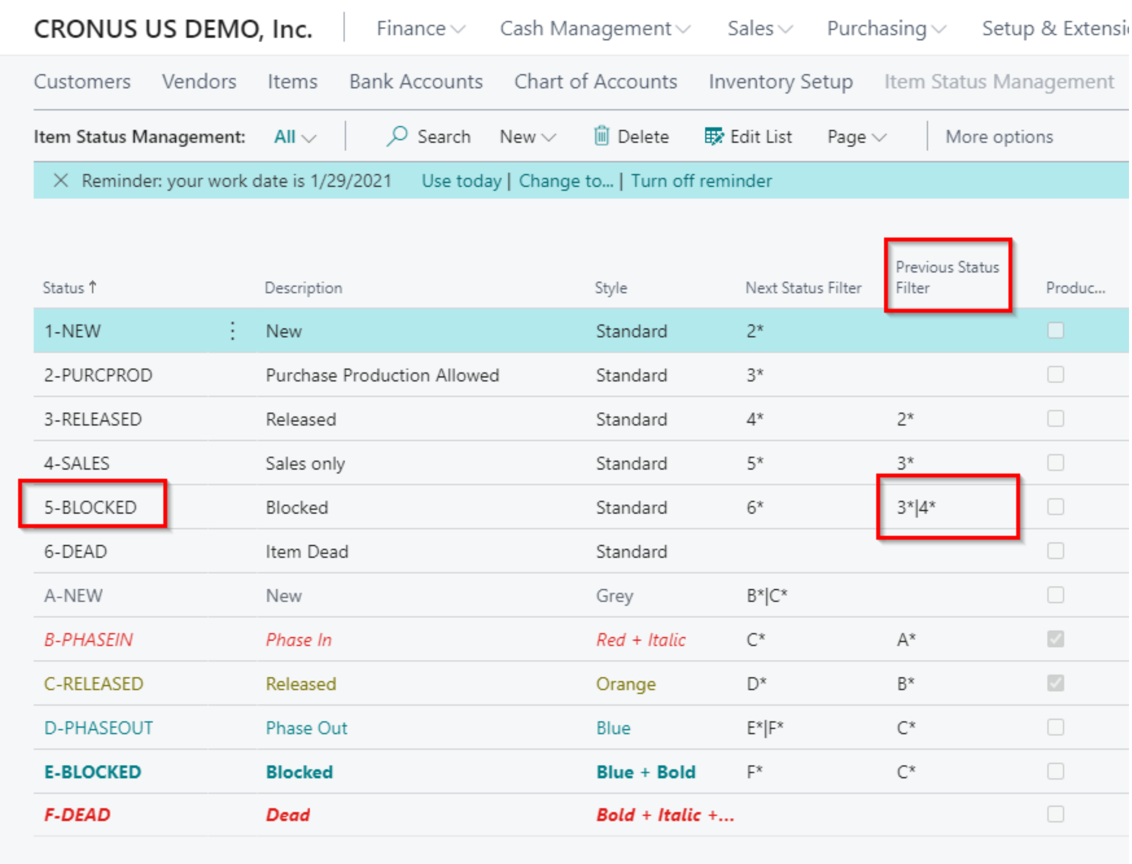


Previous Status:

When using this function the system will check the current item status – value of the field "Status Management" on the Item Card. Then the system will look for the current Item Status Line in table "Status Management " and will check the defined status filters of the field "Previous Status Filter".

The status will change to the previous status immediately when there is only one status defined as previous.

The status will NOT change immediately when there are multiple status defined as previous to choose from. In this case a page "Select Item Status" will appear. In the page only those status are shown that correspond with the "Previous Status Filter" of the current status. The User can decide to which status the item should change.



The new page, which is not editable, "Select Item Status" has the following fields:

Field Name	Type	Description
Item Status	Code (10)	Filled automatically – only those status are shown that correspond with the "Next or previous Status Filter" of the current status
Description	Text (50)	Description of the Status

In order to accomplish the requirements functions are provided.

1.12.2.3 Item Usage Restrictions

It should be possible to restrict the usage of an item in documents (Production, Purchase, Sales, Service) depending on the item status.
In standard BC Users can define if an item is blocked or not. However PM needs more options to control items.

For example:
An item can be released for production, but not for sales. Or an item can be released for sales, but not for purchase.
To ensure this, a setup for each status is provided where the user is able to define in which document an item can be used.
The setup of the Item Usage Restriction of each status is provided in the new table / page "Status Management".

Item Status Management

Search New Edit List Delete More options

Status ↑	Description	Style	Next Status Filter	Previous Status Filter	Production	Purchase	Sales	Create SKU
1-NEW	New	Standard			☐	☐	☐	☐
2-PHASE IN	Phase In	Standard			☐	☐	☐	☐
A-NEW	New	Grey	B*|C*		☐	☐	☐	☑
B-PHASEIN	*Phase In*	*Red + Italic*	C*	A*	☑	☑	☐	☑
C-RELEASED	Released	Orange	D*|E*	B*	☑	☑	☑	☑
D-PHASEOU	Phase out	Blue	E*|F*	C*	☐	☐	☑	☑
E-BLOCKED	**Blocked**	**Blue + Bold**	F*|G*	D*|C*	☐	☐	☐	☐
F-DEAD	***Dead***	***Bold + Italic + Red***		E*	☐	☐	☐	☐
G-TEST	**TSTPL0031**	**Bold + Green**		E*	☐	☑	☑	☐

In this setup the user is able to decide about the following documents individually – by setting a checkmark:

- Production
- Purchase
- Sales
- Create SKU

A checkmark indicates that the usage of an item with this status is permitted for the particular documents.

<u>Production:</u>

A checkmark indicates that an item with this status can be used in production orders and BOM Lines.

Purchase:
A checkmark indicates that an item with this status can be used in purchase documents like quotes, orders etc.

Sales:
A checkmark indicates that an item with this status can be used in sales documents like quotes, orders etc.

Create SKUs:
A checkmark indicates that stock keeping units can be created for an item with this status.

If an user tries to generate SKUs for an item and the setup does not permit the creation of SKUs for items with this status then the system will create an error message. Example: "For Item XY it is not allowed to create SKUs."
Assumption: If an item changes into an status where the creation of SKUs is not allowed – however the item has already SKUs – the following will happen:
The item status will not change – error message

Example: "SKUs exist. Item Status cannot be changed"
In order to accomplish the requirements new functions are provided. A combination of several "checkmarks" is guaranteed.

1.12.2.4 Function – Copy Document

It should be possible to restrict the usage of an item in documents (Production, Purchase, Sales, Service) depending on the item status – see above. This restriction should be checked when using the function "Copy Document".

When using the function "Copy Document" the system is checking the status of the items which are used in the document lines. When an item in the document line is used where the setup does not permit the usage of it with the status in this document type, then the system will create an error message.

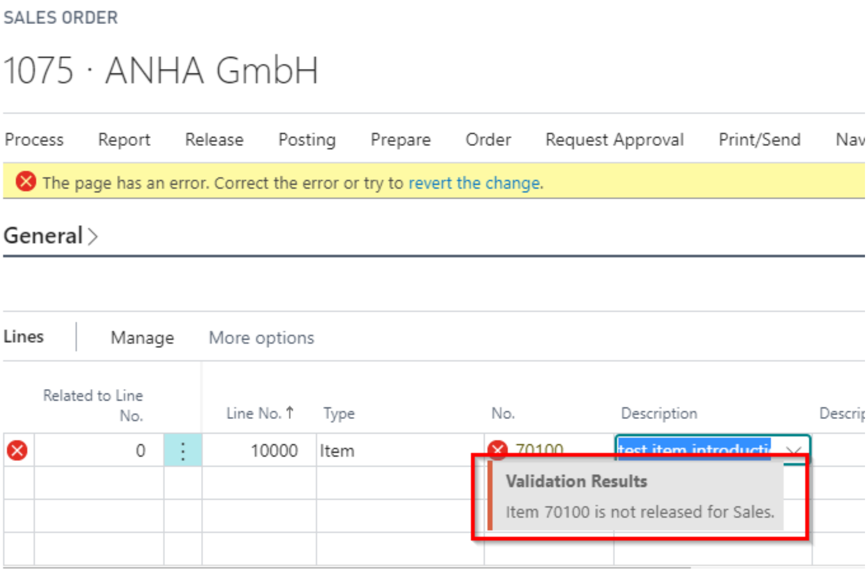
Example: "Item XY is not released for Purchase".
In order to accomplish the requirements this functions are provided.

1.12.2.5 Process of already created documents and generation of text messages – when changing item status

When an item status is changed into a status where it is no longer permitted to use the item in defined documents, then the following will happen:
The usage of the item in new document lines will not be permitted by the system. A corresponding error message will appear.
However it will be possible to process documents which have been already created with this item.

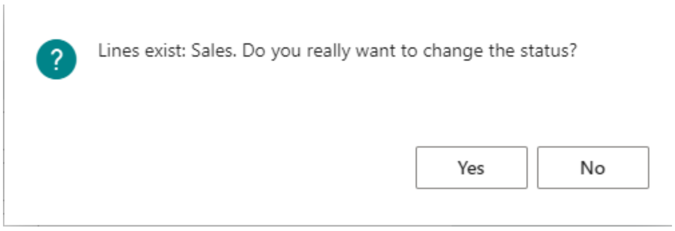
When changing an item status the system will check in the setup which item usage restrictions are defined in the new status. Depending on what is no longer allowed in the next / previous status, the system will generate an appropriate option message to inform the user of existing document lines in the system. The system will check in the documents lines the field "remaining quantity".

The user will be asked if the item status should really be changed.
Example:
"Lines exist: Purchase. Do you really want to change the item status" yes – no.
In order to accomplish the requirements the functions are provided.



However it is possible to process documents which have been already created with this item.

Posting a document which was created before the status was changed will be possible. When changing an item status, the system will check in the setup which item usage restrictions are defined in the status. Depending on what is no longer allowed in the next / previous status, the system will generate an appropriate option message to inform the user of existing document lines in the system.



1.12.2.6 Check of BOM Usage

It is possible to define which status should be checked, if the item is used in a Bill Of Material (BOM) before changing into the next / previous status.

Therefore a setup is provided where the user can define for each status whether the system should look if the item is used in an active BOMs or not.

The setup for checking if the item is used in a BOM of each status is provided in the table / page "Status Management ". The field to set the checkmark for each status line is called "Check Usage in Production BOMs".

When changing an item status the system will check if the "check usage in production BOM" is set in the new status. If the checkmark is set, then the system has to check if the item is used in an "active" BOM.
"Active" BOM means the following:

- field "Status" of a BOM has the value "certified" – Production BOM Header
- field "Ending Date" of the component line has the value ">= working date" – Production BOM Line

The following should happen:

- Item is used in an active BOM → the item status will not change – error message Example: "Active BOMs exists. Item Status can not be changed"
- Item is not used in an active BOM → the item status will change

In order to accomplish the requirements new functions are provided.
If an user changes the status of a BOM into the value "certified" then the system will check the following for each BOM Line:

Do all item components which are used in the BOM Lines have an item status where the field "Production" has the value "true" inside the "Status Management"?

The following will happen:
If all components from the BOM Lines have the checkmark in the field "Production" → BOM status will change to "certified".
If NOT all components from the BOM Lines have the checkmark in the field "Production" → BOM status will not change to "certified". The system will create an error message: Example: "Item XY is not released for bill of material."

In order to accomplish the requirements the functions are provided.

Item Status Management

Search New Edit List Delete More options

Status ↑	Description	Style	Next Status Filter	Previous Status Filter	Production	Purchase	Sales	Create SKU	Check Usage in Production BOMs
1-NEW	New	Standard			☐	☐	☐	☐	☐
2-PHASE IN	Phase In	Standard			☐	☐	☐	☐	☐
A-NEW	New	Grey	B*|C*		☐	☐	☐	☑	☐
B-PHASEIN	*Phase In*	*Red + Italic*	C*	A*	☑	☑	☐	☑	☑
C-RELEASED	Released	Orange	D*|E*	B*	☑	☑	☑	☑	☐
D-PHASEOU	Phase out	Blue	E*|F*	C*	☐	☐	☑	☑	☐
E-BLOCKED	**Blocked**	**Blue + Bold**	F*|G*	D*|C*	☐	☐	☐	☐	☐
F-DEAD	***Dead***	***Bold + Italic + Red***		E*	☐	☐	☐	☐	☐
G-TEST	**TSTPL0031**	**Bold + Green**		E*	☐	☑	☑	☐	☐

When changing an item status the system will check if the "check usage in production BOM" is set in the new status. If the checkmark is set then the system has to check if the item is used in an "active" BOM. The following should happen:

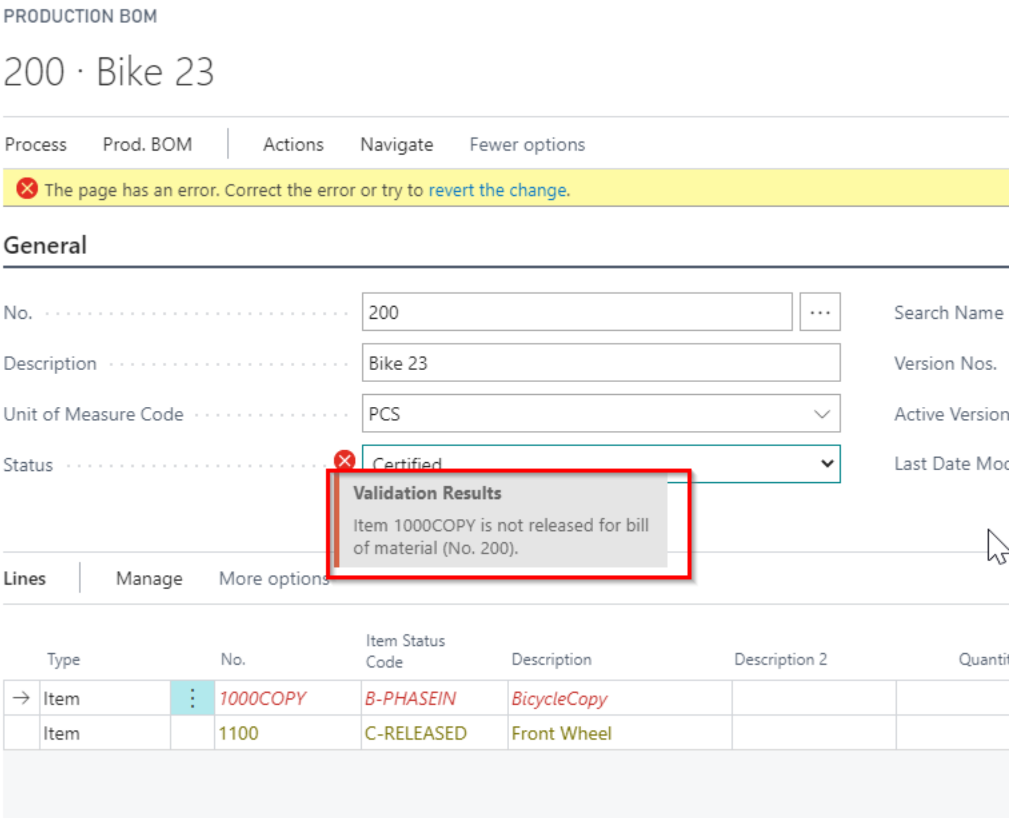
- Item is used in an active BOM
  →the item status will not change – error message
- Item is not used in an active BOM
  → the item status will change

If an user changes the status of a BOM into the value "certified" then the system will check the following for each BOM Line:

- Do all item components which are used in the BOM lines have an item status where the field "Production" has the value "true" inside the "Status Management".

The following will happen:

- If all components from the BOM lines have the checkmark in the field "Production" → BOM status will change to "certified".
- If NOT all components from the BOM lines have the checkmark in the field "Production" → BOM status will not change to "certified". The system will create an error message:



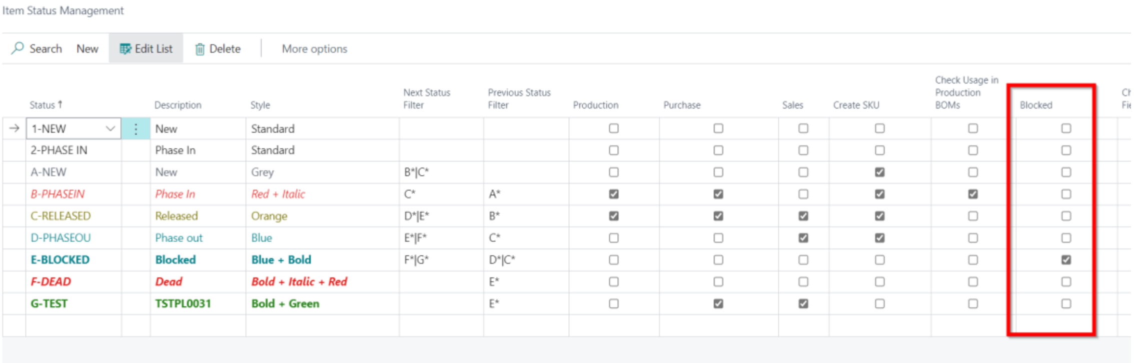
1.12.2.7 Block Item

It is possible to define for each status that an item will be set as blocked when changing to this status.

Therefore a setup is provided where the user is able to define for each item status that the item will be set as blocked when changing to this status.

The setup for blocking an item for each status is provided in the table / page "Status Management". The field to set the checkmark for each status line is called "Blocked". When changing an item into a status – where the field "blocked" is set in the setup – then the standard BC field "blocked" on the item page will be set "true" automatically by the system.

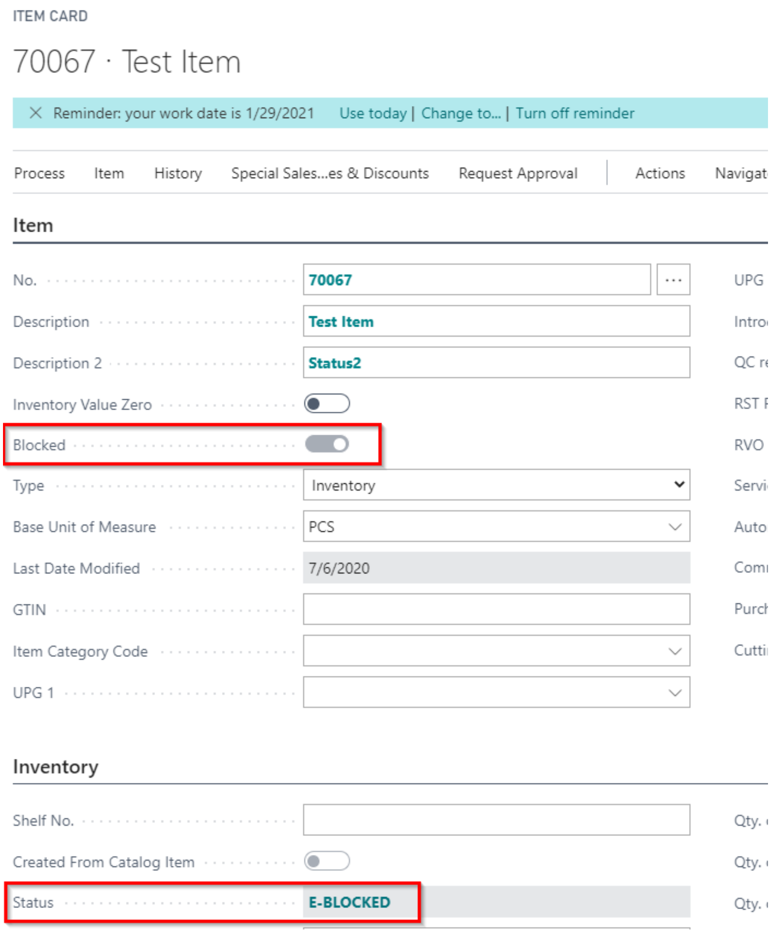
This will work the other way around as well. When changing an item into a status – where the field "blocked" is not set in the setup then the standard BC field "blocked" on the item page will be set "False" automatically by the system.
In order to accomplish the requirements this functions are provided.


Item Status Management

Search New Edit List Delete More options

Status	Description	Style	Next Status Filter	Previous Status Filter	Production	Purchase	Sales	Create SKU	Check Usage in Production BOMs	Blocked
1-NEW	New	Standard			☐	☐	☐	☐	☐	☐
2-PHASE IN	Phase In	Standard			☐	☐	☐	☐	☐	☐
A-NEW	New	Grey	B*|C*		☐	☐	☐	☑	☐	☐
B-PHASEIN	Phase In	Red + Italic	C*	A*	☑	☑	☐	☑	☑	☐
C-RELEASED	Released	Orange	D*|E*	B*	☑	☑	☑	☑	☐	☐
D-PHASEOU	Phase out	Blue	E*|F*	C*	☐	☐	☑	☑	☐	☐
E-BLOCKED	Blocked	Blue + Bold	F*|G*	D*|C*	☐	☐	☐	☐	☐	☑
F-DEAD	Dead	Bold + Italic + Red		E*	☐	☐	☐	☐	☐	☐
G-TEST	TSTPL0031	Bold + Green		E*	☐	☑	☑	☐	☐	☐

When changing an item into a status – where the field "blocked" is set in the setup – then the standard BC field "blocked" on the item page will be set "true" automatically by the system.



1.12.2.8 Mandatory Fields

It is possible to define mandatory fields from the item card for each status and to define that the system should check the defined mandatory fields. Therefore a setup for each item status is provided.

With this setup the user are able to define that the system has to check mandatory fields. When changing an item status the system will check – in the setup – if mandatory fields should be checked.
The setup for checking if mandatory fields exist should be checked for each status by the system is provided in the new table / page "Status Management ". The field to set the checkmark for each status line is called "Check Mandatory Fields".

Furthermore a setup is needed where the user is able to define critical item fields – mandatory fields – for each item status.

The field "Check Mandatory Fields" on the page "Status Management" is a Boolean field. To define mandatory fields an action button is added to the "Status Management" page. This will open the listpage of the table "Mandatory Fields – Status".

The table "Mandatory Fields – Status" will have the following fields:

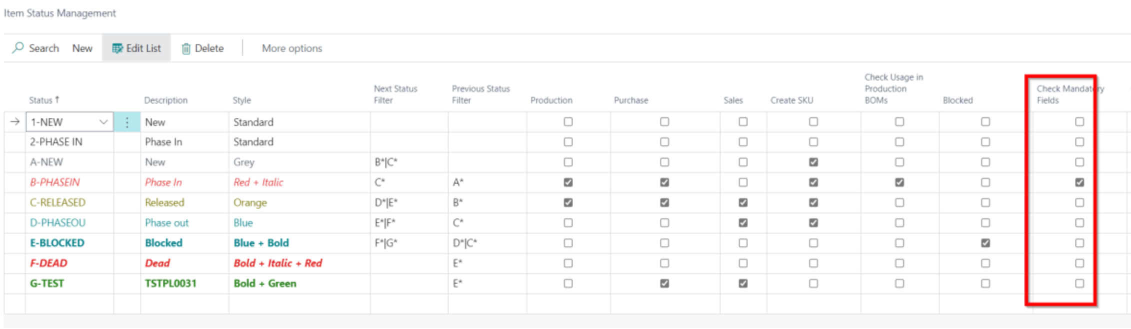
Field Name	Type	Description
Table ID	Integer	Holds the ID of the relevant table.
Status	Code (10)	Filled manually Table Relation to table "Item Status"
Field	Integer	Filled manually Table Relation to the fields of table "Item"
Field Name		Filled automatically by the system depending on the chosen "field". Shows the caption of the field.

When changing an item status the system will check if all mandatory fields – which are defined for the new status – are filled inside the item card.

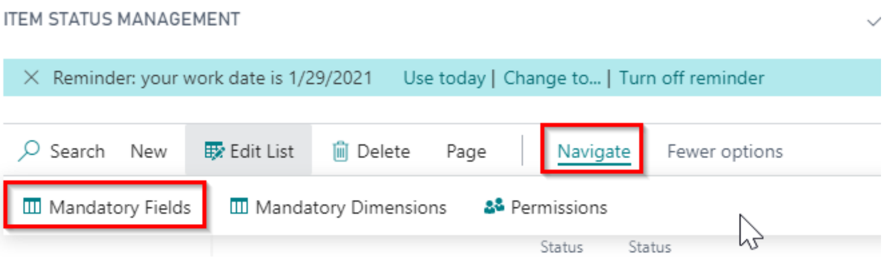
The following will happen:

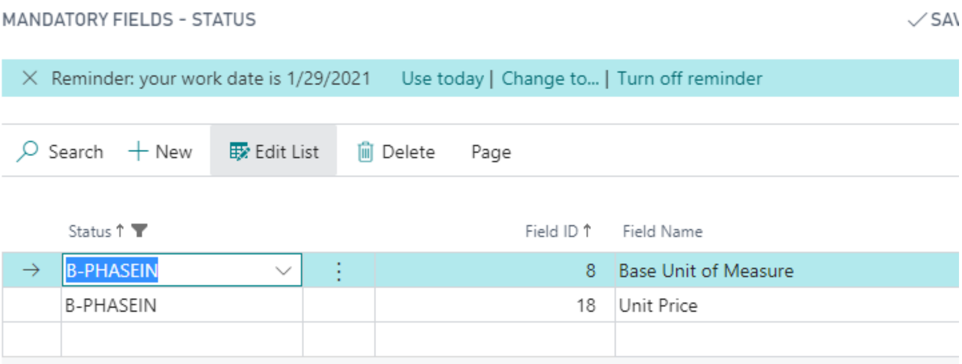
- All mandatory fields are filled → the item status will change
- Not all mandatory fields are filled → the item status will not change – error message.
  Example:
  "Not all mandatory fields for the item are filled. Following fields are mandatory fields for the new status:
- Item Status cannot be changed."

The system will check the required fields when the user changes the item status on the item card – using the new functions "Next Status" and "Previous Status".
In order to accomplish the requirements the functions are provided.

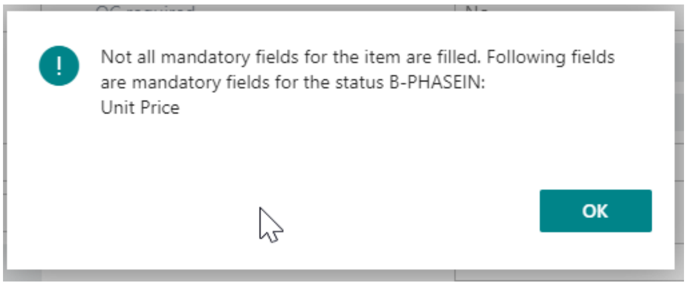


Define "Status" and "Mandatory Field ID"





When changing an item status the system will check if all mandatory fields – which are defined for the new status – are filled inside the item card.



The mandatory fields have to be filled before the status can be changed.

1.12.2.9 Dimension

It is possible to define mandatory dimensions for each status. Therefore a setup for each item status is provided. With this setup the user is able to define that the system should check mandatory dimensions. When changing an item status the system will check – in the setup – if dimensions should be checked.

The field to set the checkmark for each status line is called "Check Mandatory Dimensions". Furthermore a setup is needed where the user is able to define mandatory dimensions for each item status.

The field "Check Mandatory Dimensions" on the page "Status Management" is a Boolean field. To define mandatory dimensions an action button will be added to the "Status Management" page. This will open the listpage of the table "Mandatory Dimensions – Status".

The new table "Mandatory Dimensions – Status" includes the following fields:

Field Name	**Type**	**Description**
Table ID	Integer	Hold the ID of the relevant Table
Status	Code (10)	Filled manually Table Relation to table "Item Status"
Dimension	Code (20)	Filled manually Table Relation to table "Dimension" (348)

When changing an item status the system will check if all mandatory dimensions – which are defined for the new status – are set for the item.

The following will happen:

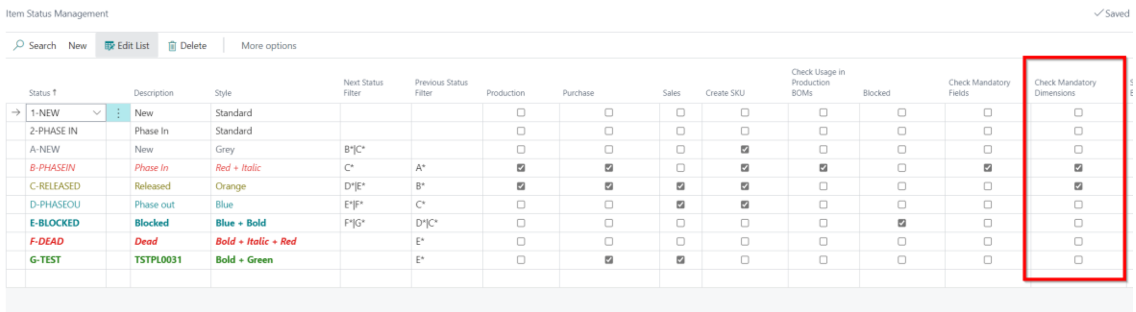
- All mandatory dimensions are filled → the item status will change
- Not all mandatory dimensions are filled → the item status will not change – error message.

  Example:

  "Not all mandatory dimensions for the item are filled. Following dimensions are mandatory dimensions for the new status:

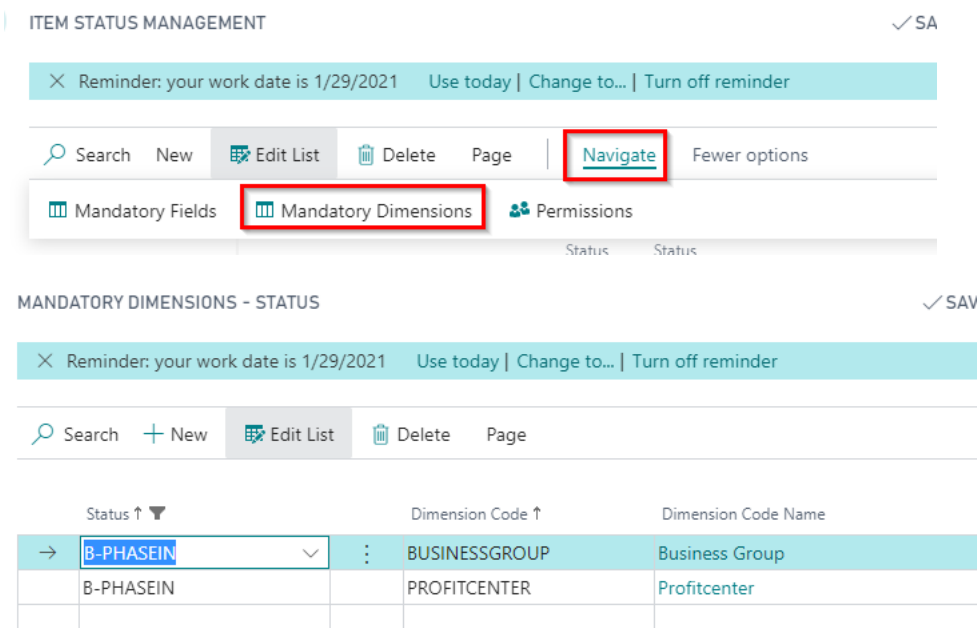
  "Item Status cannot be changed."

In order to accomplish the requirements the functions are provided.



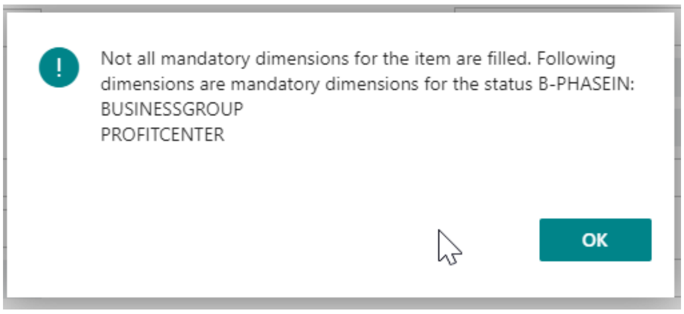
To define mandatory dimensions an action button was added to the "Status Management" page. Item List or Item Card – Item Status Management – Mandatory Dimensions

This will open the listpage of the new table "Mandatory Dimensions – Status".



Define "Status" and "Dimension Code"

When changing an item status the system will check if all mandatory dimensions – which are defined for the new status – are set for the item.

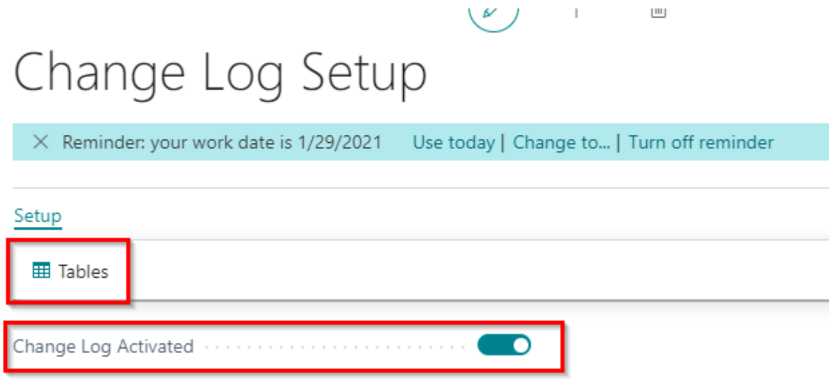


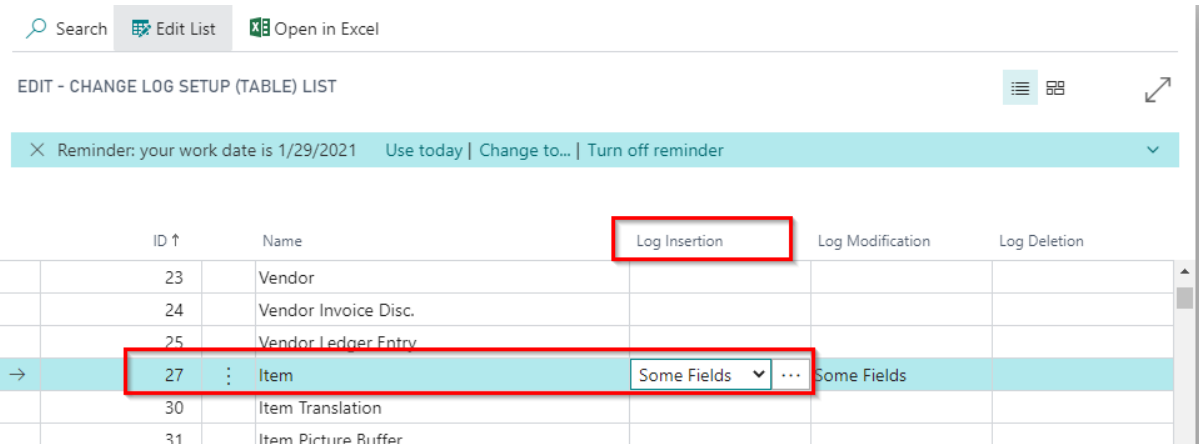
The mandatory dimensions have to be added before the status can be changed.

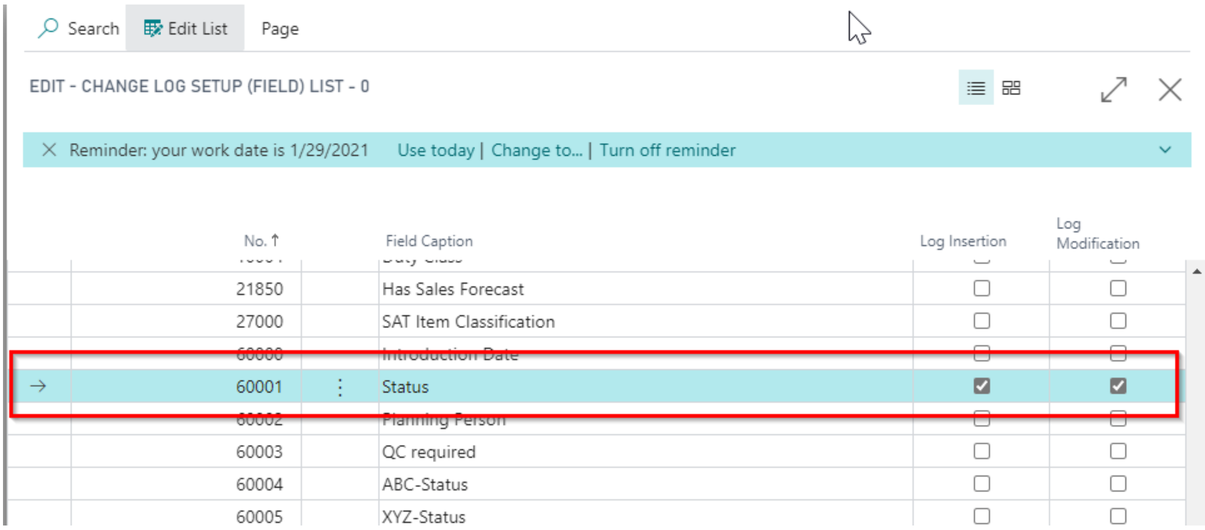
1.12.2.10 Change Log of the field "Status" from table "Item"

Changes in the field "Status" of table "Item" should be logged.

Therefore the new field "Status" of table "Item" needs to be available in the Change Log Setup.







Corrections have been made to the Live Cycle Management.

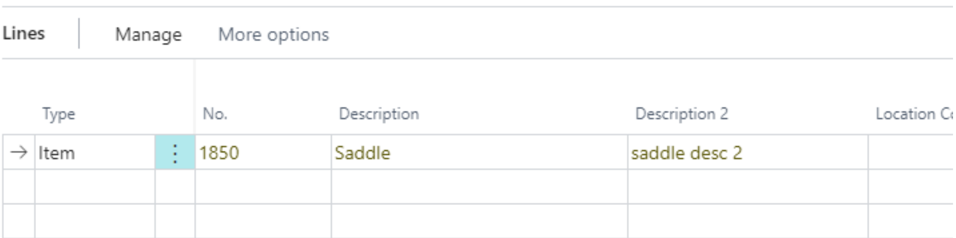
- When certifiying a BOM, it is also checked if item on lower levels all have a status which allows production
- The error message has been corrected from "**Stauts** change aborted" to "**Status** change aborted"
- The error message has been corrected from "The User XY has no permission to modify in the **stauts** 2-Purchase" to " „The User XY has no permission to modify in the **status** 2-Purchase"
- Colour-coding for "Blue + Bold" has been corrected.
- The action button for the Item Status Management has been removed from the Item Card and Item List and added to the menu "Departments / Warehouse / Setup / Inventory"
- When activating the Item Status Management in the Inventory Setup, and after giving the initial status for blocked and not blocked items, a window opens to

show BC is setting the initial status and another short message, when the setting is finished.

- When the user cannot be found in the permissions for the status then the status with the user [empty] will be called upon to decide, what the user can and cannot do
- Mandatory fields and dimension will not be checked when a user closes the item card
- Error when selecting a resource in the sales or purchase lines has been corrected

In the following pages the functionality displaying the colouring for the item in sales or purchase line has been added:

- Purchase Order Subform
- Blanket Sales Order Subform
- Blanket Purchase Order Subform
- Sales Return Order Subform
- Purchase Return Order Subform



1.12.3 *Item Copy Rules*

With the BC standard function "copy item" it is possible to copy items. When copying an item, all item fields from the item will be copied into the new item. However there will be an exception:

The item field "Status" – above mentioned – will not be copied into the new item. The Status an item will get – when copying an item – will be the default value which is selected in the Basic Setup as default value.

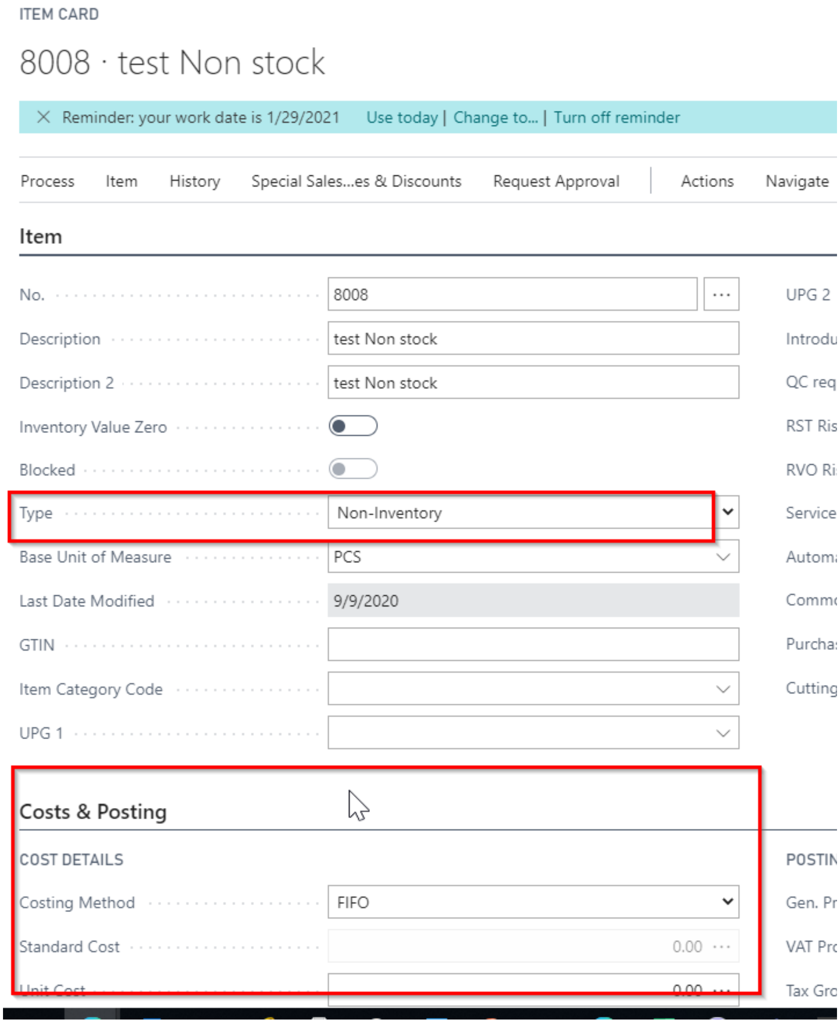
In order to accomplish the requirements new functions are provided.

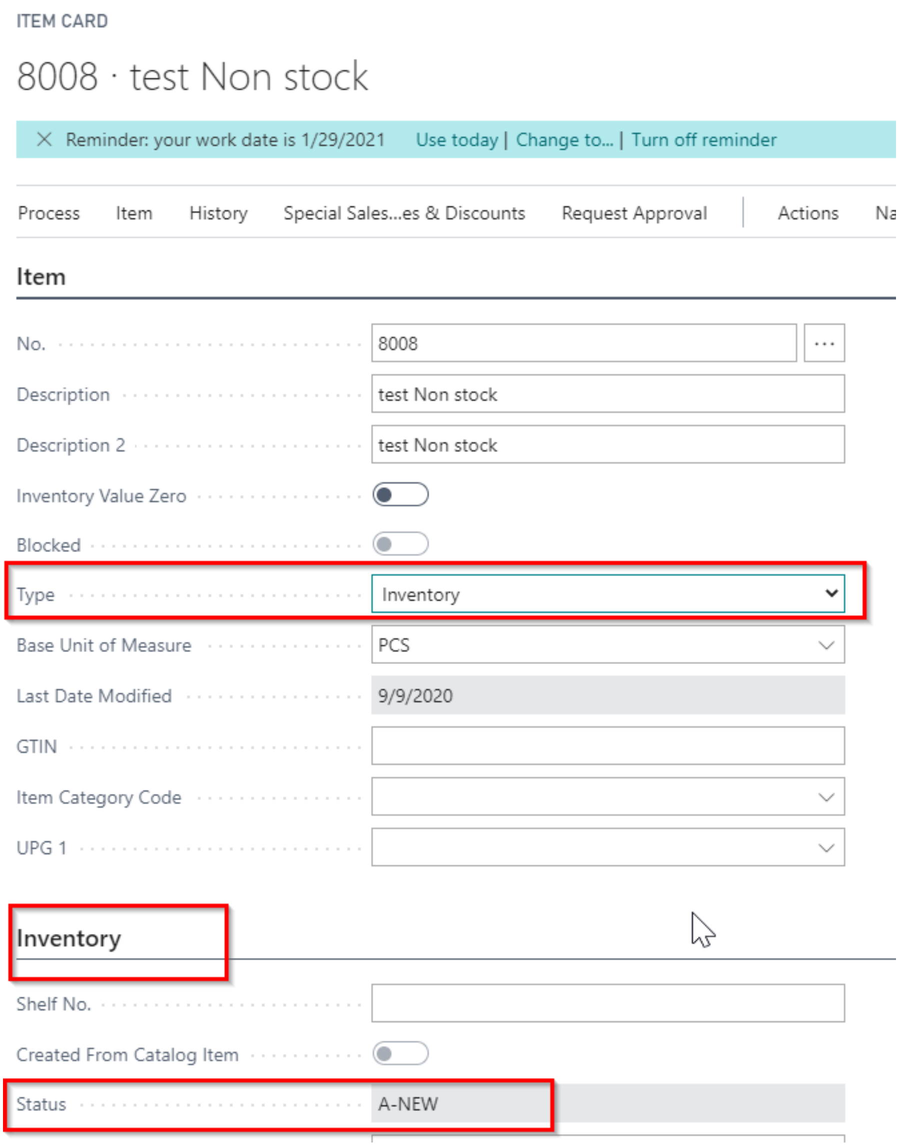
Note: Mandatory fields and dimensions will not be considered when copying an item.

When using the function "copy item" the entries of the fields "GTIN" and "Introduction Date" will not be copied anymore. There will be no values inside the fields in the new created item. Report 60000 "Set Introduction Date on Item" can be ran to fill the date "introduction date". The field "GTIN" can be filled manually

1.12.4 Non-Stock Items usage in Sales Order

A non-stock item turned into a "normal" item is now set with the default status from the inventory setup.
This is done when either creating an item from a non-stock item directly, or when choosing a non-stock item from the sales order.





1.12.5 User Permission

It is possible to define user permissions for every item status. This user permissions will be based on the Standard BC permission process.

With the Role Centers in BC the permissions of every user can be controlled. With this standard BC permission process the users are able to do their daily work.

A new user permission setup will replenish the existing BC permission functions. It will be possible to define user permissions for every item status.

Therefore a setup for each user and item status is provided. With this setup the user will be able to define user permissions for every item status.

In chapter "Item Status setup" a setup "Status Management" is described where the users are able to define the different item status. In this setup page "Status Management" a new function "User Permission" is available as action button.

In the page "Status Management" the user will select a status line for which the user wants to define user permissions. When using the new function "User Status Permission" a new setup page "User Status permission" will appear. There the user can define user permissions for every item status.

The table and page "User Status Permission" has the following fields:

Field Name	**Type**	**Description**
Table ID	Integer	Holds the ID of the relevant table
Status	Code (10)	Filled manually Table Relation to table "Status Management"
User ID	Code (20)	Filled manually Table Relation to table "Users"
Modify	Boolean	a checkmark indicates that an item with this status can be modified by the selected user
Delete	Boolean	a checkmark indicates that an item with this status can be deleted by the selected user
Allowed Status Action	Option	Allowed Status Action defines if the user is allowed to activate / deactivate the next / previous status of the current item status. Possible options: • All • Activate • Deactivate • None

On the page "User Status Permission" the following options are available to set item status for each user:

- Modify Item
- Delete Item
- Allowed Status Actions

<u>Modify Item:</u>
A checkmark indicates that an item with this status can be modified by the selected user – to modify the fields of the item card

<u>Delete Item:</u>
A checkmark indicates that an item with this status can be deleted by the selected user
Note: the BC standard functionalities to delete an item have priority – that means that if the item cannot be deleted in BC standard, it can also not be deleted when this checkmark is set.

<u>Allowed Status Actions:</u>
Allowed Status Actions means which option of action the user is permitted to change an item status.

There the user should be able to select from the following options:

- All
- Activate
- Deactivate
- None

All → The user is able to change to / from this status

Activate: → The user can change into the selected status – however the user is not able to change into another status if the user is not allowed to deactivate the current status

Deactivate: → The user can change from the selected status – however the user is only able to change into another status if the new item status is selected with "activate"

None: → The user is not able to change to / from this status of an item – however if the checkmark is set in "Modify Item" – the user is allowed to change all other fields of the item card

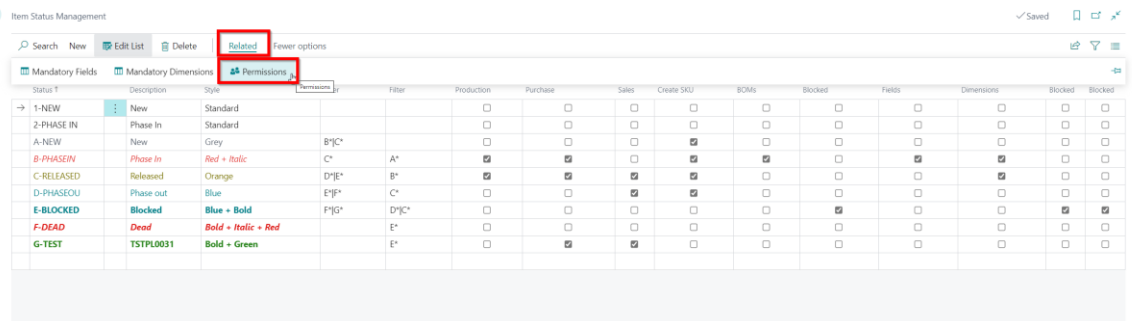
The following will show the logic behind this and how it should work including examples:

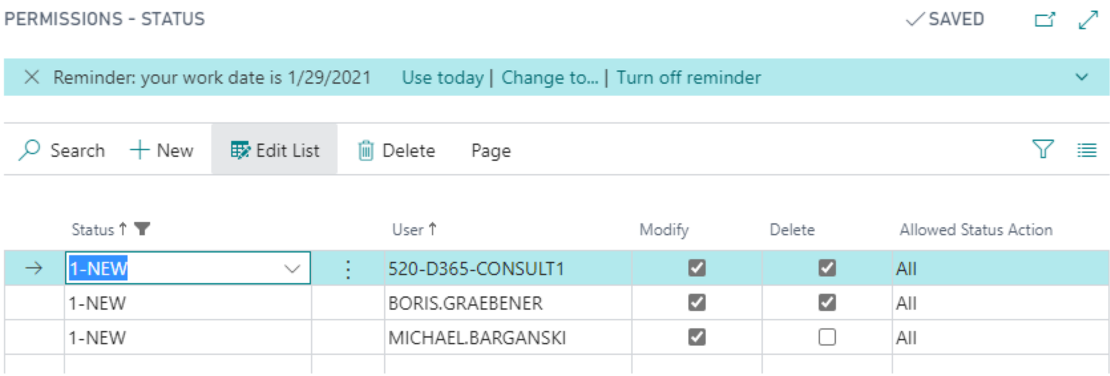
Status	User ID	Allowed Status Actions
2-PURCHASE	PAUL	Deactive
3-PRODUCTION	PAUL	Deactive
5-RELEASED	PAUL	All
6-FADEOUT	PAUL	All
9-BLOCKED	PAUL	Activate
99-DEAD	PAUL	Activate

It means that user Paul is allowed to leave (deactivate) status 2 and 3 and is allowed to set (activate Status 5,6,9,99).
For example:

- Item status is 9 : User Paul can not change to another status (permission is only activate).
- Item status is 5 : User Paul is allowed to leave this and switch to 6, 9 and 99
- User Paul wants to change from Status 2 to 3 → is not allowed because permission on Status 3 is only deactivate not activate

A combination of several "checkmarks" must be guaranteed. The setup "User Setup Permission" needs to be done for every user.
Note: If no specific user authorization is used, at least one authorization line for user <empty> should be defined with the required checkmarks set to "true".





Modify Item: a checkmark indicates that an item with this status can be modified by the selected user – to modify the fields of the item card

Delete Item: a checkmark indicates that an item with this status can be deleted by the selected user

The setup "User Setup Permission" needs to be done for every user.

Note: If no specific user authorization is used, at least one authorization line for user <empty> should be defined with the required checkmarks set to "true".

1.12.6 Move field “Status” on item card page from tab inventory to tab item (former tab General)

On page item field “Status”, which displayed current item status, is moved from tab inventory to tab item.

Test case 1:

Check item Status Setup functionalities: Chose Default value and try to generate a new item to see if the item gets the default item status. Check initial status for blocked / unblocked items which already exist.

Test case 2:

Change items to different item status. Setup different color for each status. Check the status color of the defined fields.

Test case 3:

Check functionalities of setup where the user can define into which next or previous status an item status can be changed.

Test case 4:

Create or modify different items with different item status. For one status the field "Purchase" in the Status Management is checkmarked – for the other status the field "Purchase" is not check marked. Create a purchase order with the items and check if you can use the items. Check error messages. Do the same as for test case 2 however do it for the fields Sales, Production.

Test case 5:

Use one item which has an item status where the field "Create SKUs" is checkmarked in the Status Management – and one item where the field "Create SKUs" is not check marked. Try to create SKUs for both items. Check error messages.

Test case 6:

Change an item status into a status where the checkmark "check usage in production BOM" is checkmarked and the item ist used in an active BOM. Check if the following will happen: the item status will not change – error message.

Change an item status into a status where the checkmark "check usage in production BOM" is checkmarked and the item is not used in an active BOM. Check if the following happens: the item status will change.

Test case 7:
Check that the field "Blocked" on the "Item Card" turns "True" when you change an item to a status which has the field "blocked" checkmarked in the Status Management.

Test case 8:
Change into an item status where mandatory fields are defined for the new status. Check if the following happens: All mandatory fields are filled → the item status will change
Not all mandatory fields are filled → the item status will not change – error message.

Test case 9:
Change into an item status where mandatory dimensions are defined for the new status. Check if the following happens: All mandatory dimensions are filled → the item status will change.
Not all mandatory dimensions are filled → the item status will not change – error message.

Test case 10:
Copy an item with the BC standard function "copy item". Check if the following happens: When copying an item all item fields from the item will be copied into the new item. However there will be an exception:
The item field "Status" will not be copied into the new item. The Status an item will get – when copying an item – will be the default value which is selected in the Basic Setup as default value.

Test case 11:
Define different user permissions for different status and user. (Modify, Delete, Allowed Status Action) and check the functionalities.

Refere to testsscripts: TSTPL0030, TSTPL0031, TSTPL0032, TSTPL0033, TSTPL0034, TSTPL0035, TSTPL0036, TSTPL0037, TSTPL0038, TSTPL0039, TSTPL0040, TSTPL0045, TSTPL0058, TSTPL0059, TSTPL0060, TSTPL0061, TSTPL0062, TSTPL0063, TSTPL0065, TSTPL0066, TSTPL0067, TSTPL0068, TSTPL0069, TSTPL0070, TSTPL0071, TSTPL0072, TSTPL0073, TSTPL0074

1.13 Reporting Fields on the Item / Vendor and Customer Card (CORE modification)

For risk assessment the following fields are needed in the "Vendor –" / "Customer Card" or the "Item Card". The fields are inserted in a "FastTab" "Risk Management". Requirements were defined at risk meeting / workshop.

New fields for the Vendor / Customer:

Field Name	**Type**	**Description**
ABC-Status	Option A,B,C editable	Filled with a Report (see below)
DUNS-No.	Code 10	Filled manually

New fields for the Item:

Field Name	**Type**	**Description**
GTIN	Code 14	Only numeric, the field is filled manually
UPG		No customization, Existing field "Item Category" and "Product Group" is used Filled manually
ABC-Status	Option A,B,C	See 1.2.2
XYZ-Status	Option X,Y,Z	Filled manually, See 1.2.2
RST Risk	Option R,S,T,O	Filled with a report, for details see below
RVO Risk	Options: <3M, 3M..12M, 12M..36M, >36M, No usage	Filled with a Report, described in Key User Document Finance Reporting Out of scope for this Key User Document
Introduction Date	Date	Filled by a report

		For details see Key User Document Sales 2.18

ABC-Status (Vendor)

The calculation is the same as for items. Instead of calculating the usage volume per item, the purchase volume per vendor is calculated. Then a list of purchase volumes per vendors is created temporarilly and the categorization in A,B or C is made as for items.

ABC-Status (Customer)

As ABC-Status (Vendor) instead of the purchase volume the sales volume is used.

RST Risk:

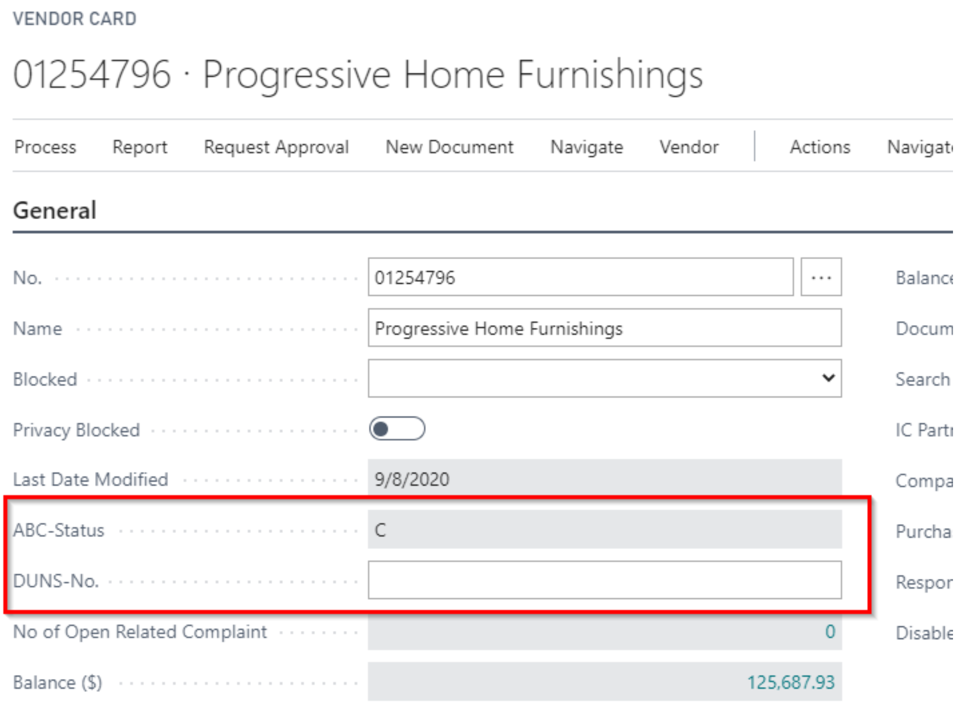
With this value the dependence per item on one customer is measured. All items that are sold are considered. The net sales amount of one item in the last 6 months is defined as 100 %. Then the percentage X per customer is determined. The rating is as follows:

- T (Very Strong Risk) for all items with X ≥ 75 %
- S (Strong Risk) for all items with 75 % > X ≥ 50 %
- R (Risk) for all items with 50 % > X ≥ 25 %
- O (Without Risk) for all items with 25 % > X

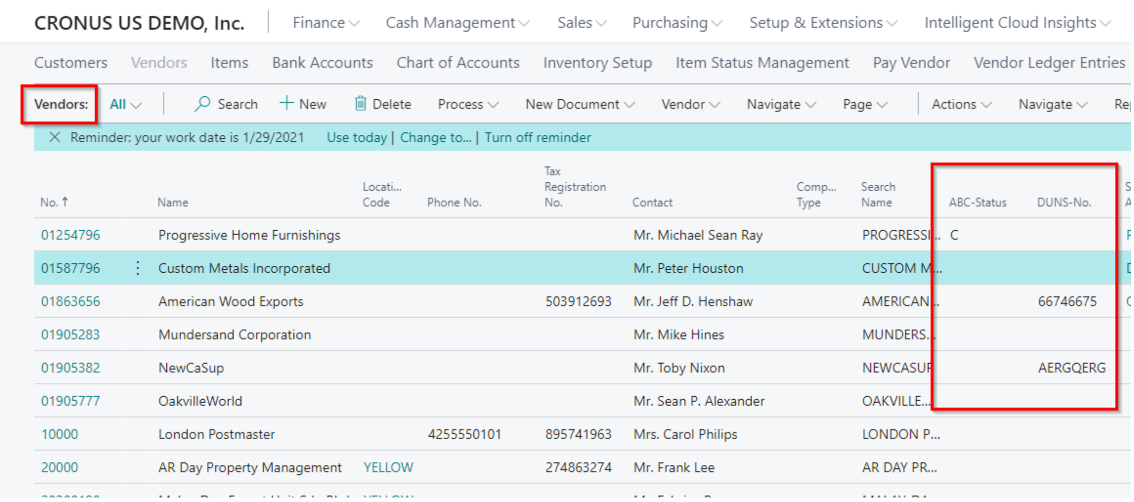
For risk assessment the following fields have been created for either the vendor and customer or the item. The fields will be shown in the lists and cards. In the cards the fields be shown in the FastTab General.

For the vendor and customer the new fields "DUNS-No." and "ABC-Status" have been added.

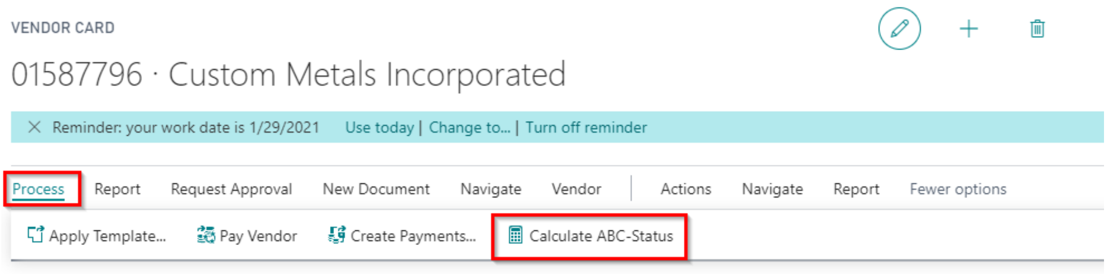
Vendor Card:



Vendor List:

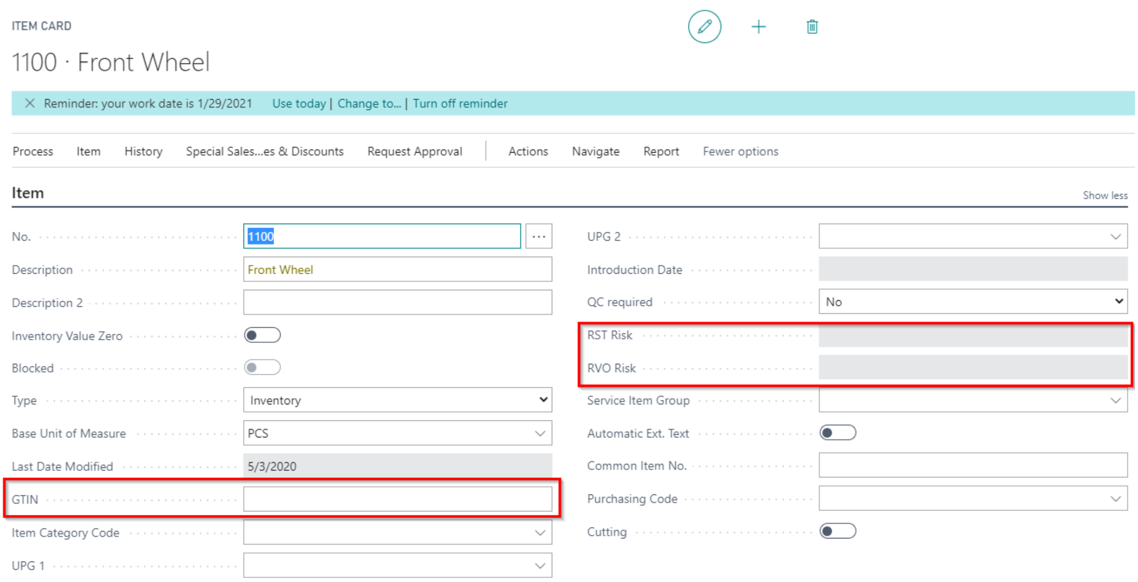


While the first two are filled manually by the user, the "ABC-Status" is filled via calculation.

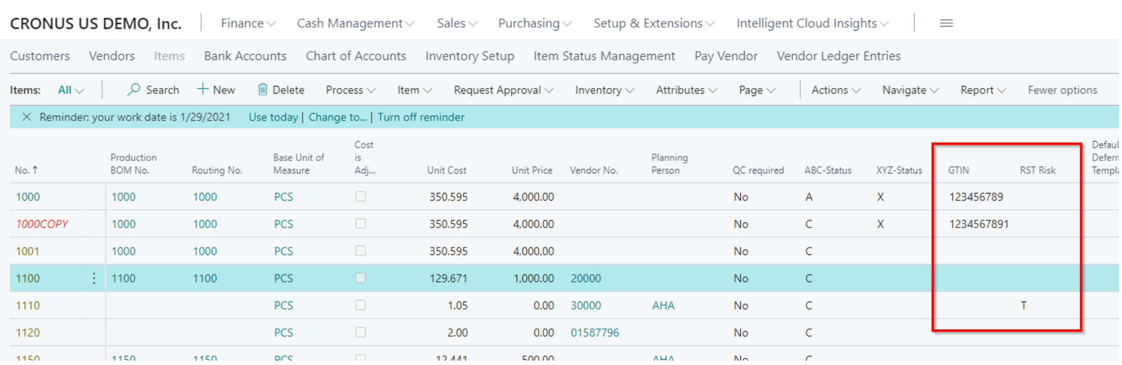


The calculation is the same as for items. Instead of calculating the usage volume per item, the purchase volume per vendor or sales volume per customer is calculated. Then a list is created temporarily and the categorization in A, B or C is made as for items.

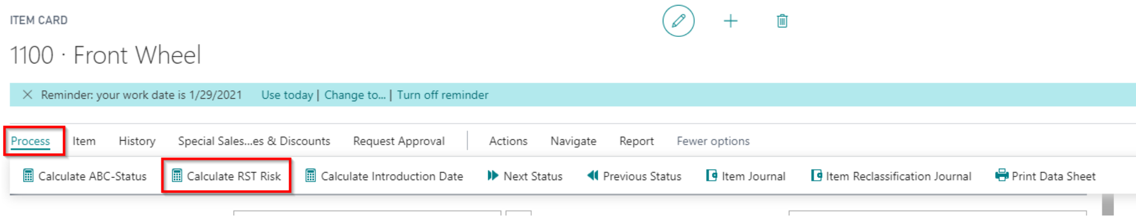
For the item the fields "GTIN", "RVO Risk" and "RST Risk" have been created and added.
Item Card:



Item List:



The field "GTIN" is filled manually by the user and only allows numerical values. "RVO Risk" is a text field with text option "Empty,<3M, 3M..12M, 12M..36M, >36M, No usage". The field RVO Risk in the item card has been made "none editable".
The "RST Risk" is calculated and can therefore not be inserted manually.

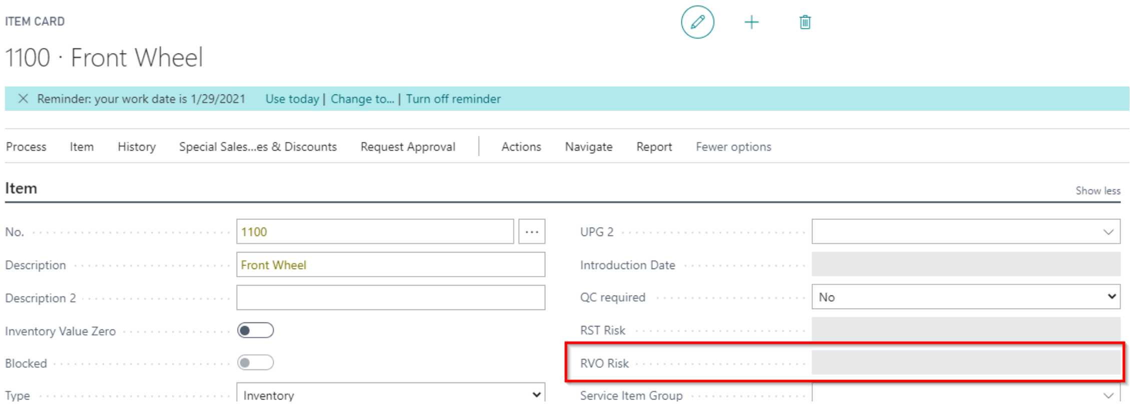


1.13.1 Classification on Item in RVO Fast Tab (CORE modification)

The field classification on the item has been expanded with a new first option for empty (" ").

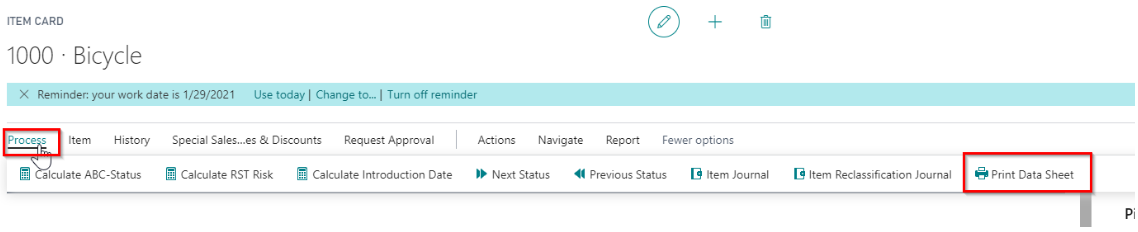
1.13.2 Devitation between BC and Management Handbook (CORE modification)

In table 27 "Item", the field "RVO Risk" was an option field. This is now changed. The field "RVO Risk" inside table / page "item" is now a text field (length20) – not editable

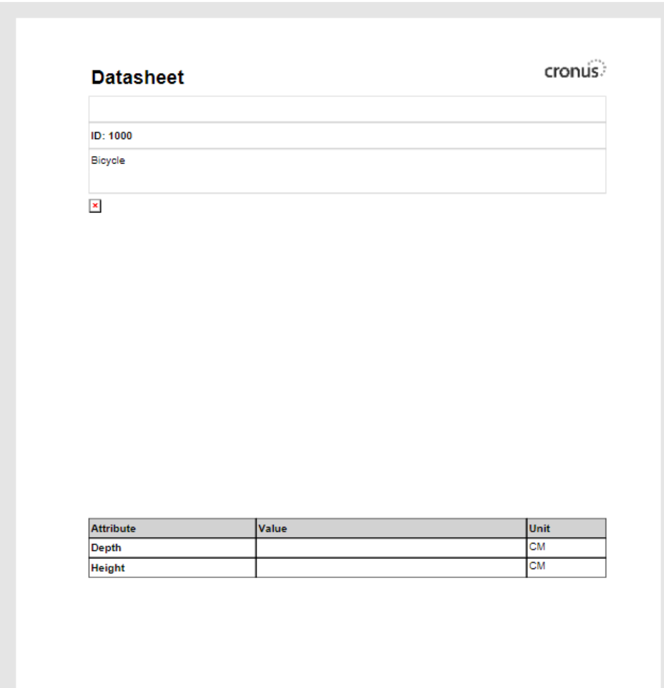


1.13.3 Core DataSheet (CORE modification)

Added new action to the item pages to print item data sheet. The action button opens the report with ID 63017, which is not part of the CORE programming. The report has to be designed on customer side.



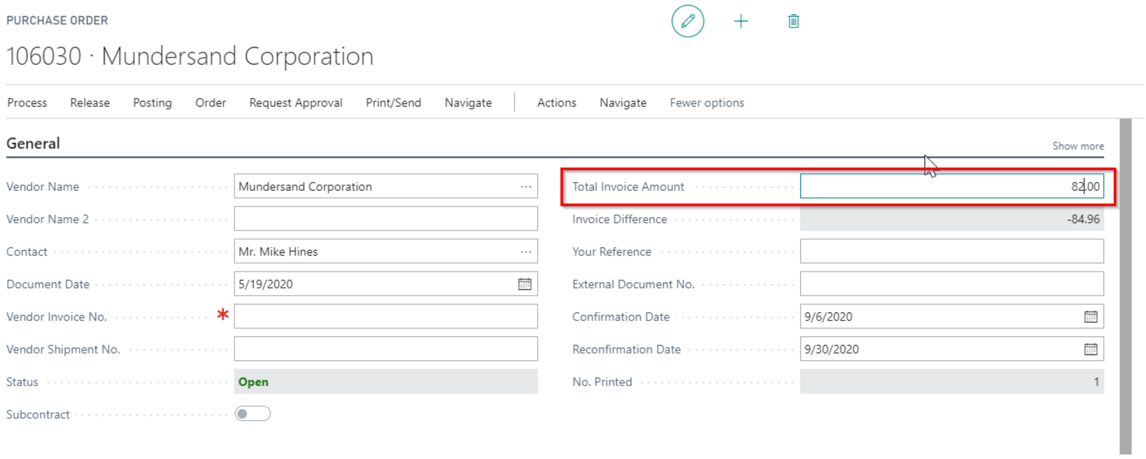
With CORE Release 4.05 this new report was added to the item page. The report was not designed for CORE Release 4.05. The design for Report ID 63017 "Print Data Sheet" is now finished.



1.14 Total Invoice Amount (CORE modification)

Purchase Invoice Page Changes

A field "Total Invoice Amount". This Field contains the amount with VAT of the paper invoice.



The field "Total Invoice Amount" has been added to the Purchase Header table and the Purchase Order Page in the FastTab General. The "Total Invoice Amount" must have the same value as the Flowfield "Amount Including VAT" in the Purchase Header before the purchase order can be posted.

1.14.1 CodeUnit 90 – Purch.-Post

Added functionality when posting an invoice, validate that the invoice total amount with VAT is equal to "Total Invoice Amount" on Purchase Header. This will only apply to the document type Invoice.

Test case:

Create a Purchase Order and deliver its lines. Then create an invoice with the same amount as the full order amount and fill the field "Total Invoice Amount" on the Invoice and post the invoice.

Create a Purchase Order and receive the lines. Now create an invoice with "Total Invoice Amount" greater or less than the total order amount and post it. This should generate an error message in BC.

Refere to testscript TSTPL0047, TSTPL0048

1.14.2 Exception handling and error messages

The actual code that handles exceptions is in CodeUnit 90 – Purch.-Post. There is one exception to look for:
If "Total Invoice Amount" is not equal to the total value of the invoice then an error message will be sent and the posting will be interrupted.

1.15 Default Posting Value (CORE modification)

1.15.1 Proposed Changes to BC

The field "Default Posting Value" has removed Purchase & Payables Setup table and page. Microsoft had delivered with Wave 1 2023 an similar function called “Define an invoice posting policy for various users”. This function does the same as the Core modification. Additionally this function allowes Administrators or responsible users to define per each single user posting values.

1.15.2 Purch.-Post (Yes / No) CodeUnit

Changes in CodeUnit 91 – Purch.-Post (Yes / No). Instead of using the static value (Receive and Invoice) for posting we use "Default posting Value" from the Purchases & Payables Setup.

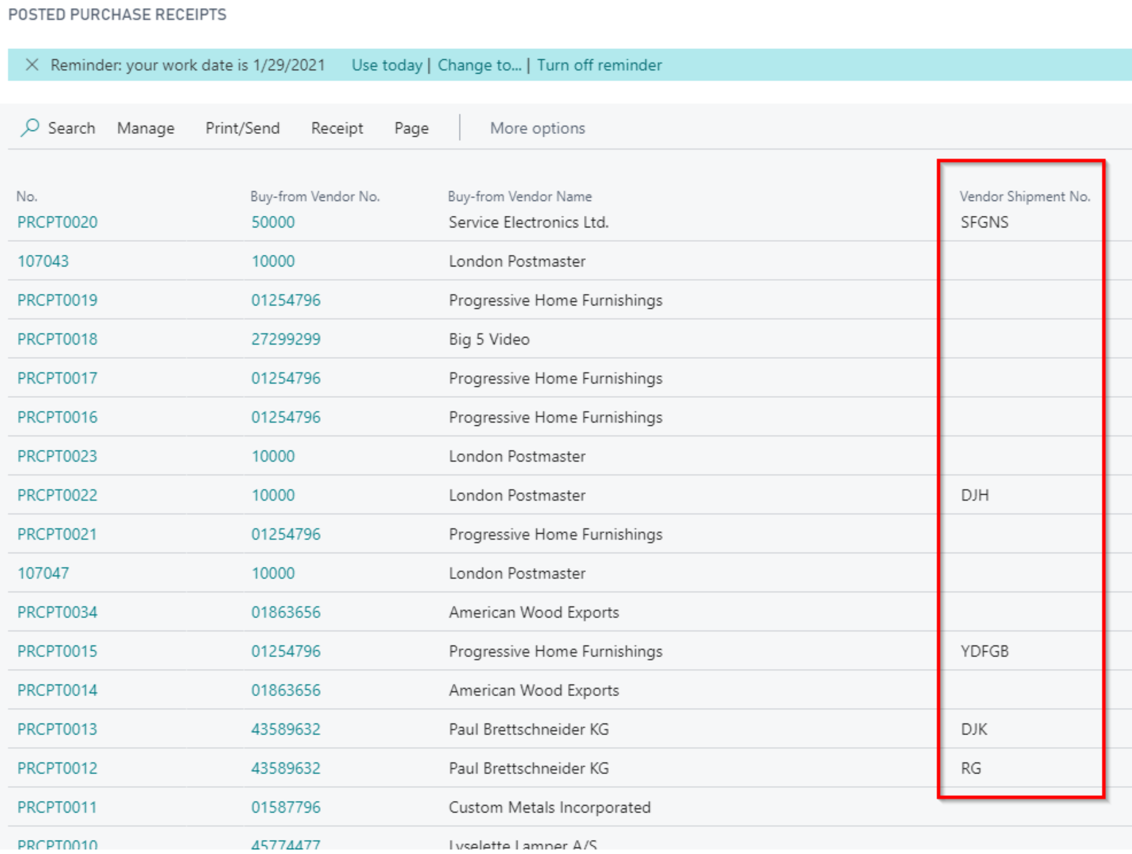
1.16 "Vendor Shipment No" in "Posted Purchase Receipts" and "Get Receipt Lines" (CORE modification)

The field "Vendor Shipment No." from the receipt header is shown in:

- Page "Posted Purchase Receipts"
- Page "Get Receipt Lines"

Because the field doesn’t exist in the lines, a flowfield is inserted in table "Purch. Rcpt. Line".

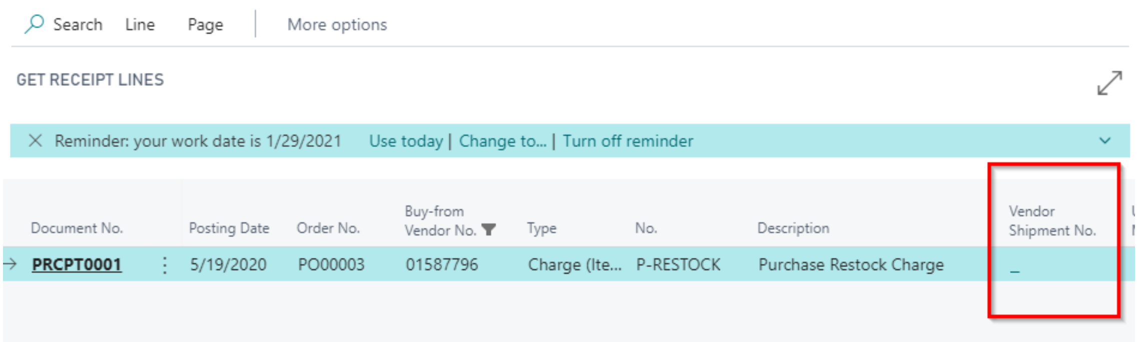
The field "Vendor Shipment No." is inserted in the pages "Posted Purchase Receipts" and in the page "Get receipt Lines".


POSTED PURCHASE RECEIPTS

Reminder: your work date is 1/29/2021 Use today | Change to... | Turn off reminder

Search Manage Print/Send Receipt Page More options

No.	Buy-from Vendor No.	Buy-from Vendor Name	Vendor Shipment No.
PRCPT0020	50000	Service Electronics Ltd.	SFGNS
107043	10000	London Postmaster	
PRCPT0019	01254796	Progressive Home Furnishings	
PRCPT0018	27299299	Big 5 Video	
PRCPT0017	01254796	Progressive Home Furnishings	
PRCPT0016	01254796	Progressive Home Furnishings	
PRCPT0023	10000	London Postmaster	
PRCPT0022	10000	London Postmaster	DJH
PRCPT0021	01254796	Progressive Home Furnishings	
107047	10000	London Postmaster	
PRCPT0034	01863656	American Wood Exports	
PRCPT0015	01254796	Progressive Home Furnishings	YDFGB
PRCPT0014	01863656	American Wood Exports	
PRCPT0013	43589632	Paul Brettschneider KG	DJK
PRCPT0012	43589632	Paul Brettschneider KG	RG
PRCPT0011	01587796	Custom Metals Incorporated	
PRCPT0010	45774477	Lyselette Lamper A/S	


Search Line Page More options

GET RECEIPT LINES

Reminder: your work date is 1/29/2021 Use today | Change to... | Turn off reminder

Document No.	Posting Date	Order No.	Buy-from Vendor No.	Type	No.	Description	Vendor Shipment No.
PRCPT0001	5/19/2020	PO00003	01587796	Charge (Ite...	P-RESTOCK	Purchase Restock Charge	_

1.17 Move field status on item card page

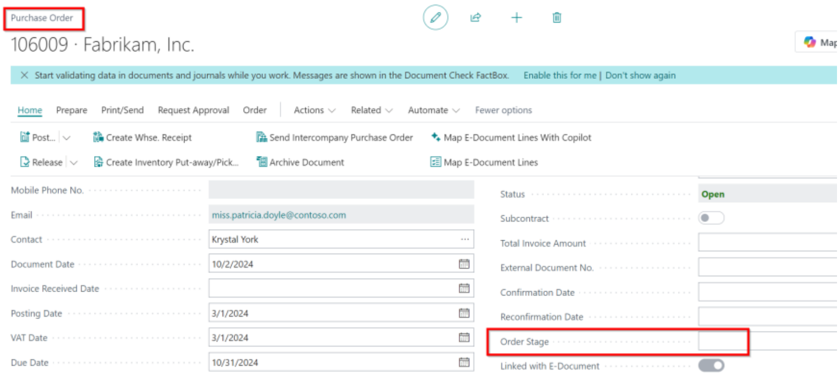
At Business Central different item types are avail. If you select item type “Non-Inventory” or “Service” and item status management is active, no status change on item card is possible.

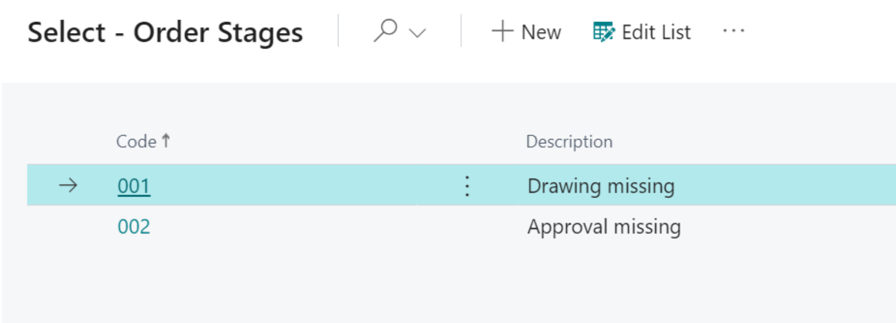
Furthermore no usage in sales or purchase documents is allowed for this item.

The field “Status” (ID65001) is moved from tab inventory to tab item (former General) at item page card.

1.18 New table at Purchase Header to store addittional status (PM Base 11.24.0.6)

Standard Status at Purchase Documents are “ Open, Released, Pending Prepayment, Pending Approval”
To get an bette overview of the status an addittional field im implemented at Purchase Documents called “Order Stages”.
Behind these feld a table exists where PM Companies can insert – depending on there own needs – a Code field and a description.





1.19 Correction Drop Shipment for item related ressources (PM Base 11.24.0.4)

Sales Order and Purchase Order are connected via Drop Shipment. Sales Order contains 4 item lines. 2 of them has a item related resource line. In case you do the receiptment first from purchase order you will get an error message. If you do the shipment first from sales order everything is fine. This is also now possible in cas you do the receipment first.

1.20 Modification for Drop Shipment to open in editable mode (PM Base 12.25.0.2 + PM Base 11.24.0.8)

Sales Order and Pruchase Order are linked as a Drop Shipment. To insert changes like Qty or Dates users open the related document from source document. The related document opens now in an editable mode. Please take in account that the document status has to changes into “Open” manually.

1.21 Correction Item Card field “Qty in Blanket Purchase Order” (PM Base 11.24.0.5)

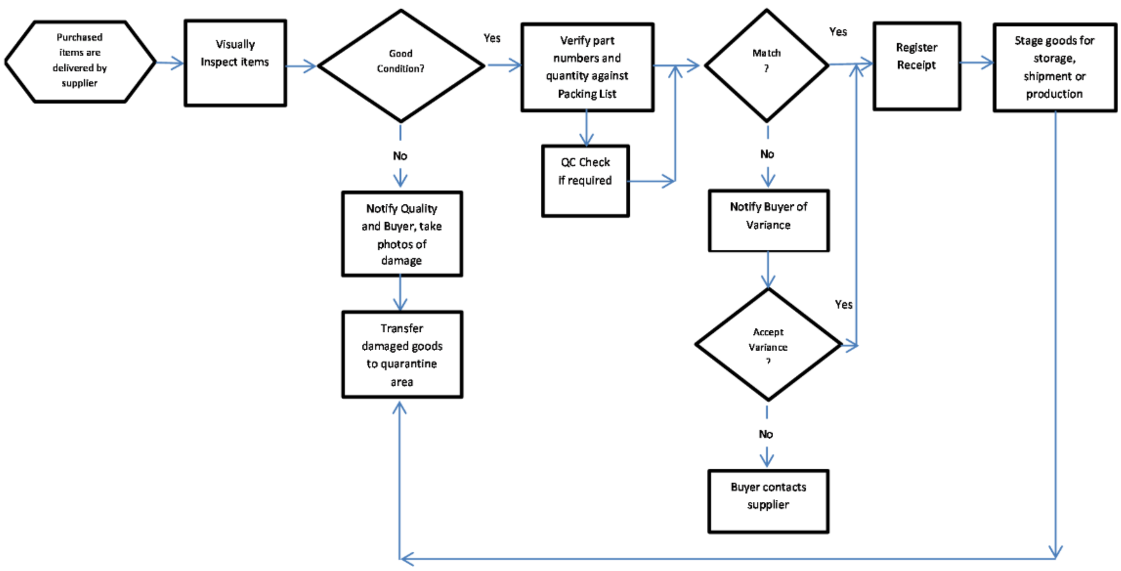
At item card page a new Core field exits - called “Qty in Blanket Purchase Orders”. This field is not calculated correct.

2 Logistics

2.1 Receive and Put-away (using Warehouse)

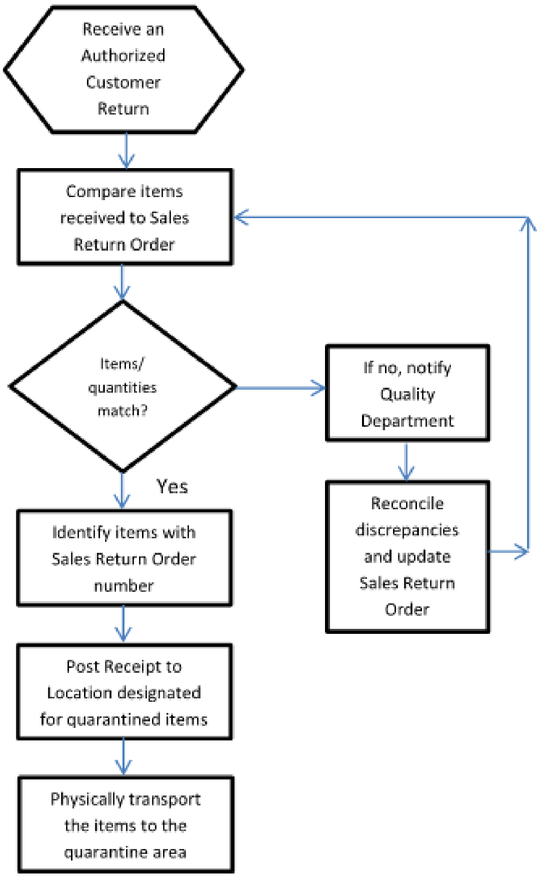
2.1.1 *Process Receipt of Purchased Items*

When the items arrive, the employee checkes, if they are in good condition, the quantity is verified and if the quantity matches the purchase order. If it is an item that needs quality control (field "QC required as defined above") the item is posted to a QC inventory first.



2.1.2 *Process of Receipt of Customer returns*

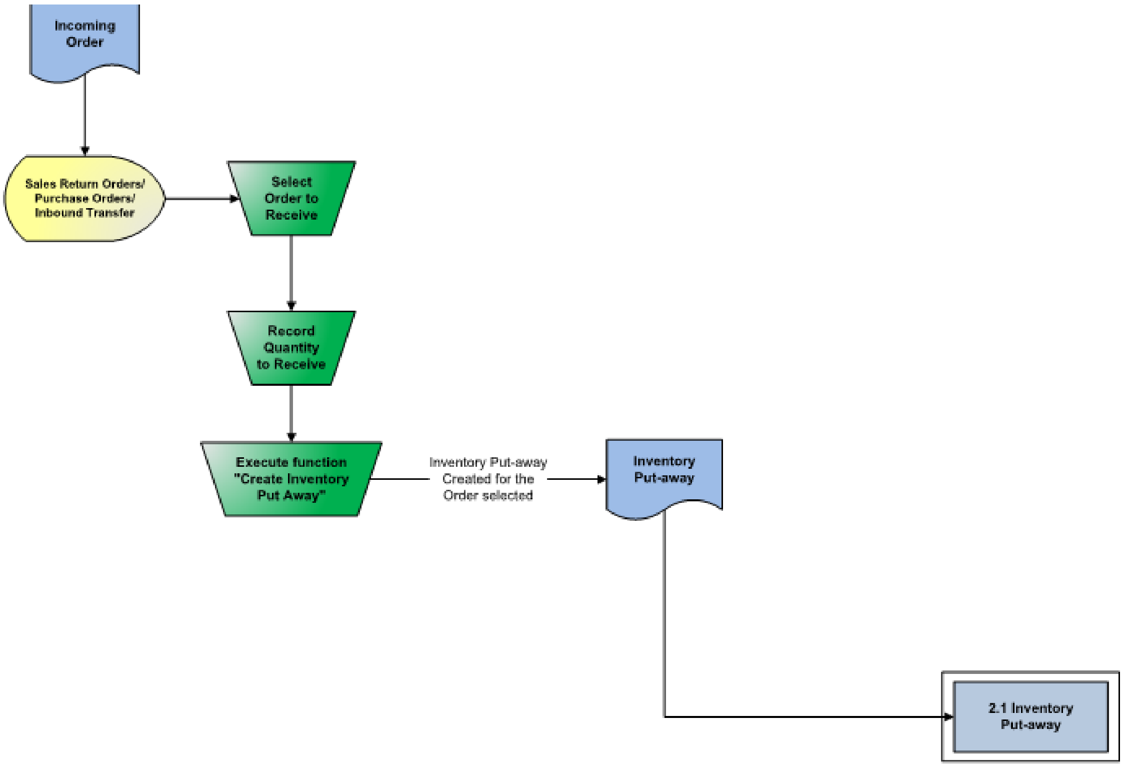
When the items arrive the employee chooses the right return sales order and creates the warehouse receipt. The employee looks whether the item matches the sales return order and if so they are posted to a quarantine area.



2.2 Receiving Goods

2.2.1 Receiving Goods with Warehouse Receipts

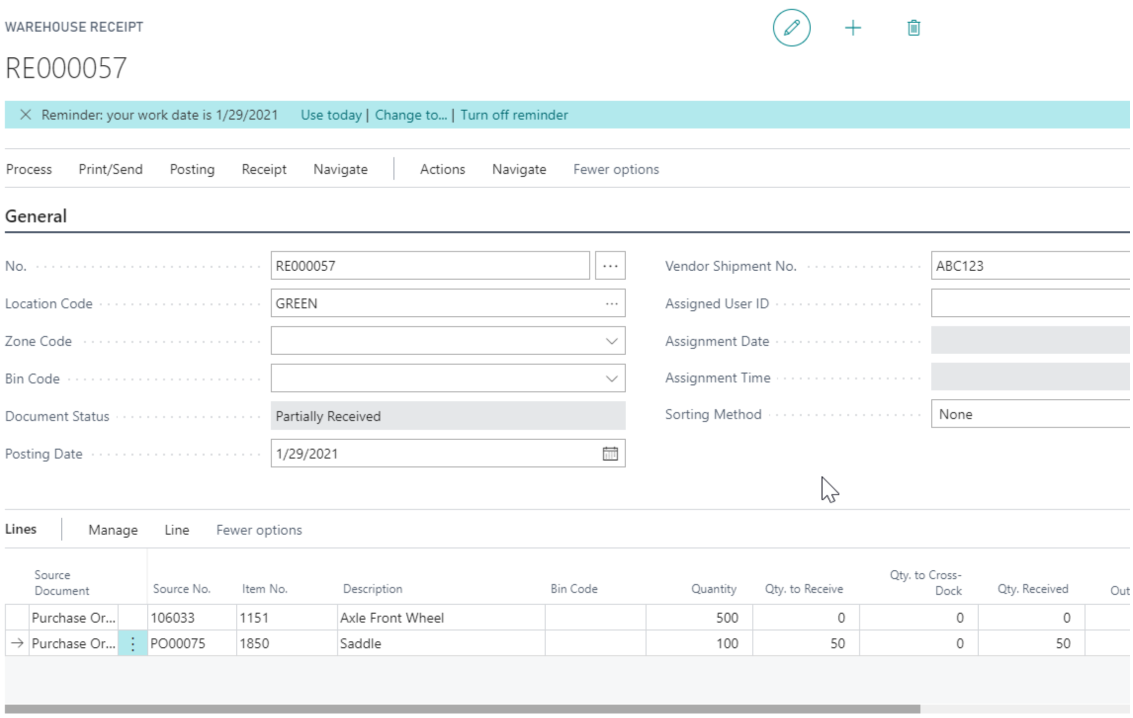
The receipt of goods can be posted in the warehouse and / or also directly in purchase orders. It is also possible to use the warehouse only partly, for example one can use only the warehouse receipts, without put-aways.



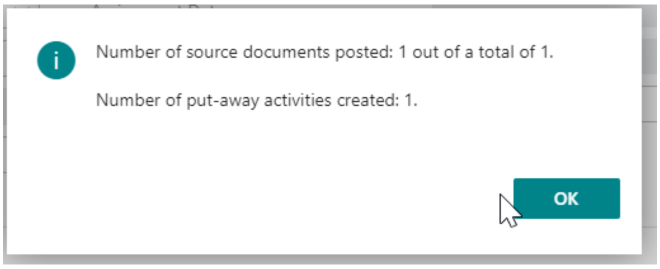
Receiving orders with Warehouse Management provides new options to define where and how items are received and expedited further in the warehouse process. Prior to receiving, an inbound document must be created and released before the warehouse staff is able to view the order lines. Besides of being a work document, the receipt can also serve as an indication of what is to expect for the warehouse, and thereby allow more efficiency for planning workloads.

The receipt can either be created from an inbound order (i.e. Purchase order, Inbound transfer order) or Sales return order. When a receipt is created, more than one inbound source document can be retrieved. Using the function "Get Source Document…" the employees can register many items arriving from different inbound orders with one receipt.

When items arrive to the warehouse, an employee must handle and register the arrival and insert the exact received amount into the related document. When the warehouse employee posts the receipt, the items become part of inventory available for sale (but not yet ready for picking).



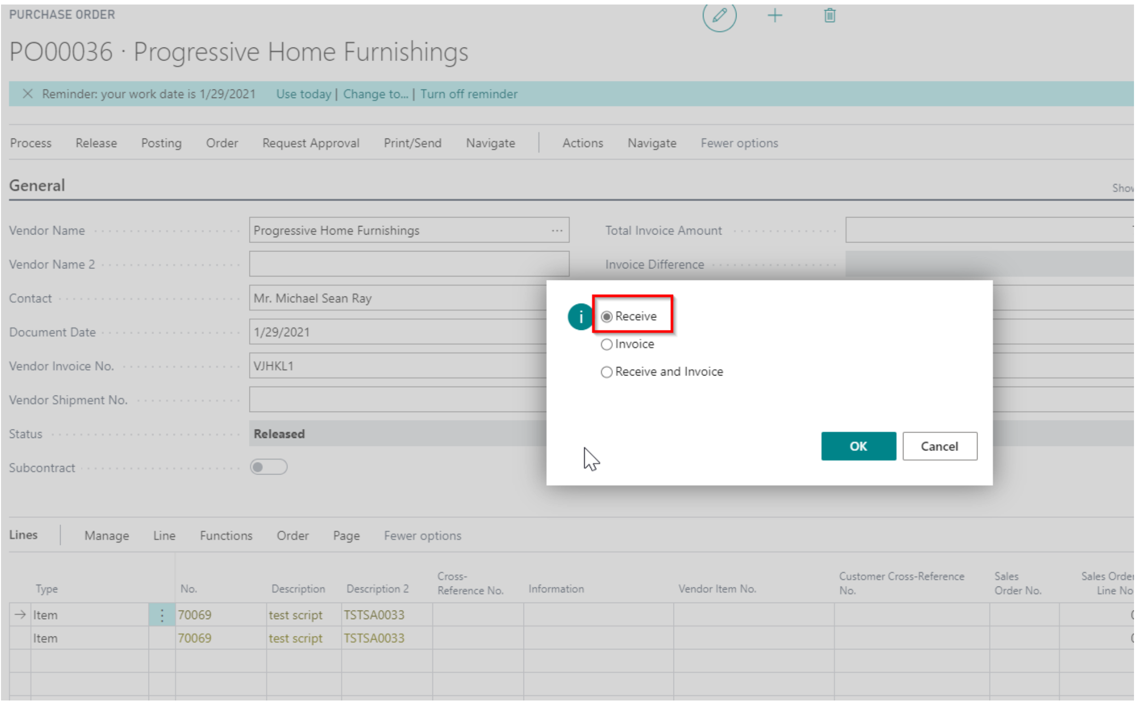
When the receipt document is posted, a put-away document is created. This document is an instruction to the warehouse staff to take the received item and place it in a designated storage place suggested by the program.



Without warehouse there is another possibility (see next paragraph).

2.2.2 Receiving Goods directly in the Purchase Order

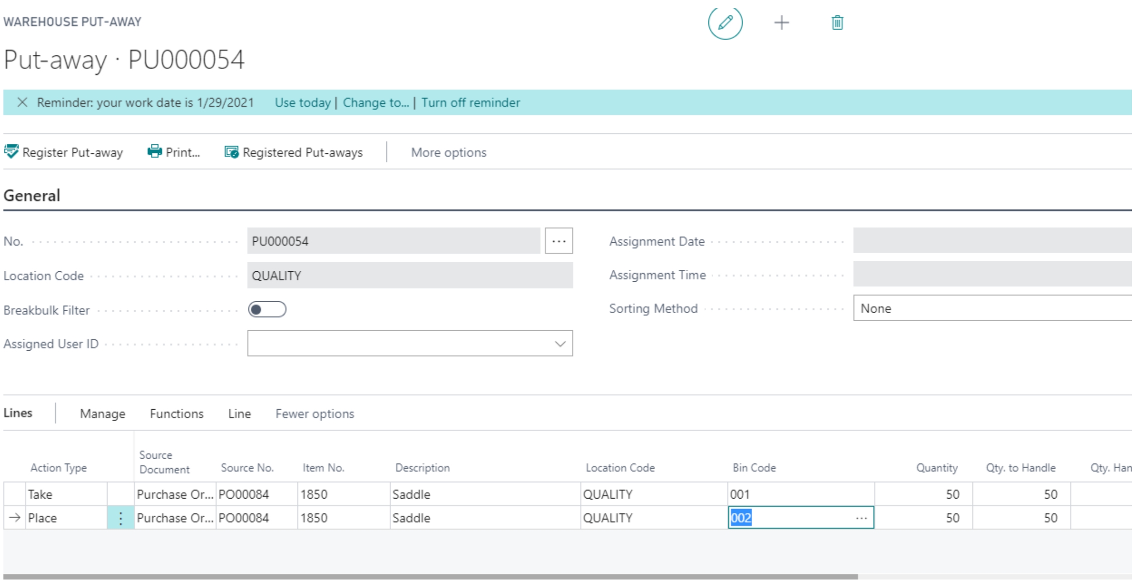
For small companies it is also possible to post the receipt directly in the purchase order (or sales return order). In order to post directly from the purchase order the Vendor Shipment No. has to be entered in the header and the Qty. to Receive has to be entered in the lines. Afterwards the receipt can be posted.



A disadvantage of this approach is that the warehouse employee has access to the purchase order. It could happen that the order is accidentally changed.

2.2.3 Put away Activity

At this point, the suggested zone and bin can be altered if the placement suggested by the program is not convenient.



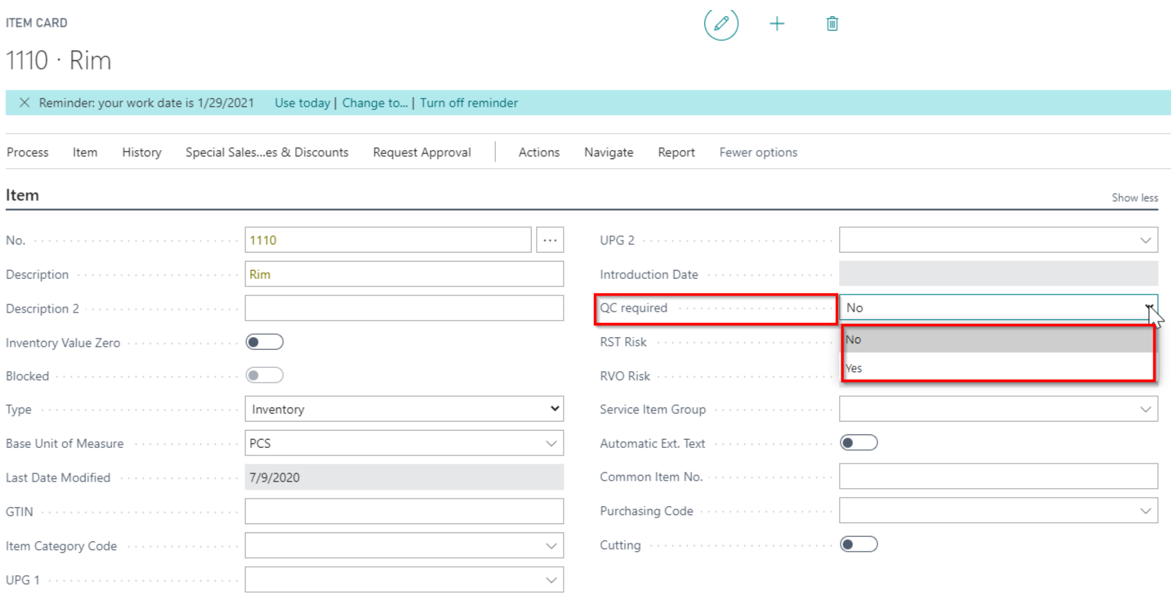
The put-away document can be registered, and both the receiving and the put-away can be viewed under Posted Receipts and Registered Put-aways. After registering the put-away document, the items are available for picking. When the warehouse has completed these tasks, the source document can be invoiced.

Receipt and Put away in BC fits the processes at the Phoenix Mecano Group.

2.2.4 Quality Control for received items (CORE modification)

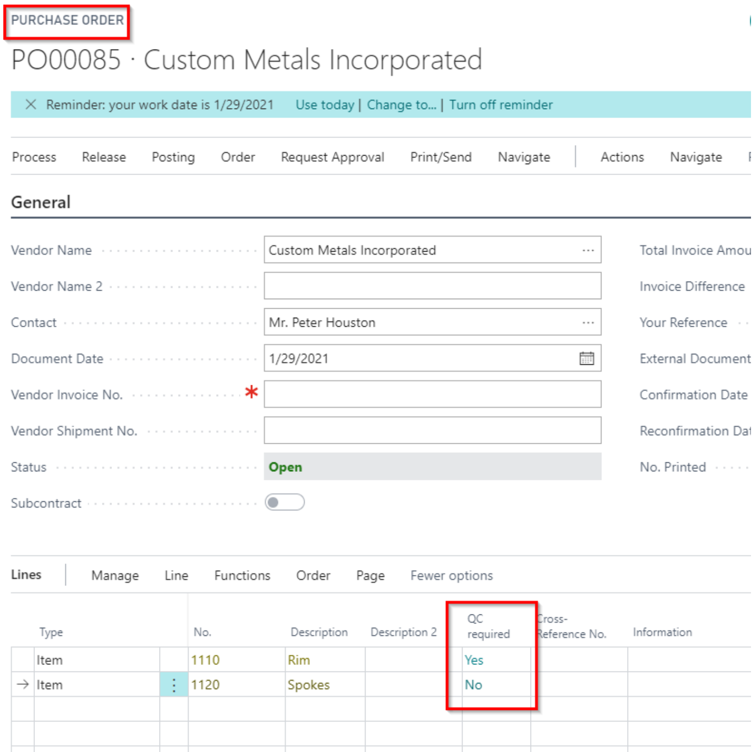
In order to see whether the item must be quality controlled when receiving the item from a vendor or customer (return sales order) there should be a field in the item card. If the item must be quality controlled the item is posted manually to a quality control inventory before it is posted to the stock.

Item card FastTab General**:**
The field "QC required" is inserted for the CORE. The field is from type "bool"
No (No quality control needed)
Yes (Quality control is required)
If the option is yes, then the quality control is done manually.



Warehouse Receipt Line / Purchase Line and Warehouse Shipping Line / Sales Line

The field "QC required" is shown in the relevant lines of purchase orders, the warehouse receipts, sales line and warehouse shipping line.



Since some companies work only with locations, others with locations and bin, automatic posting is not customized for the CORE. It is customized locally if needed.

Test case:

Open the item card and check if field "QC required" exists in the General Tab. Check also if the field has the appropriate options. Open a sales order and check in the item lines, if the field exists and the correct status (sames as in the item card) is shown.

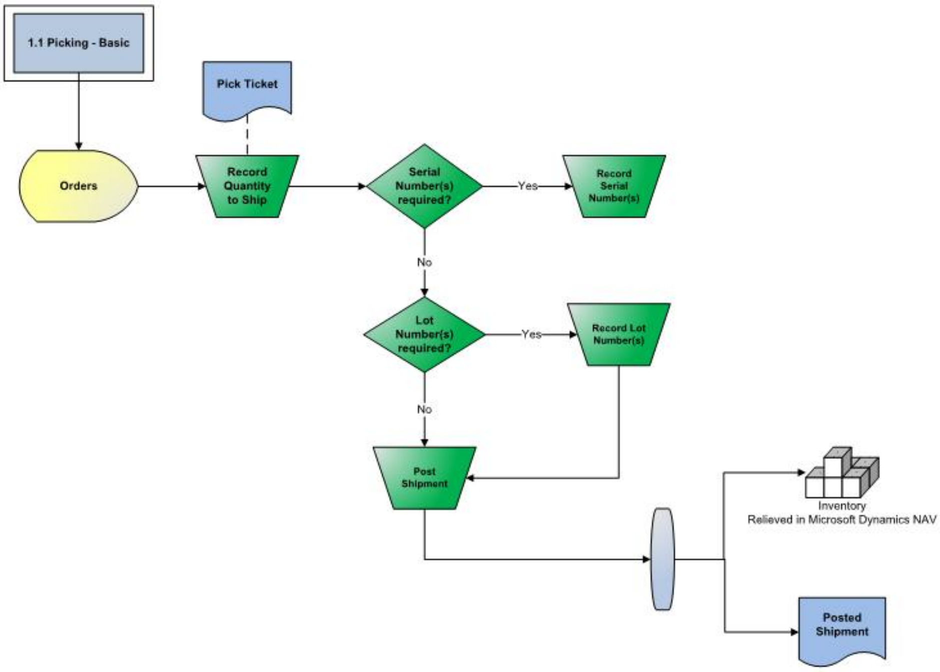
Do the same as with the sales order line with the purchase order line, the warehouse receipt line and the warehouse shipment line.

Refere to testscript: TSTPL0043

2.3 Shipping Goods

2.3.1 Shipping Goods with Warehouse Shipments

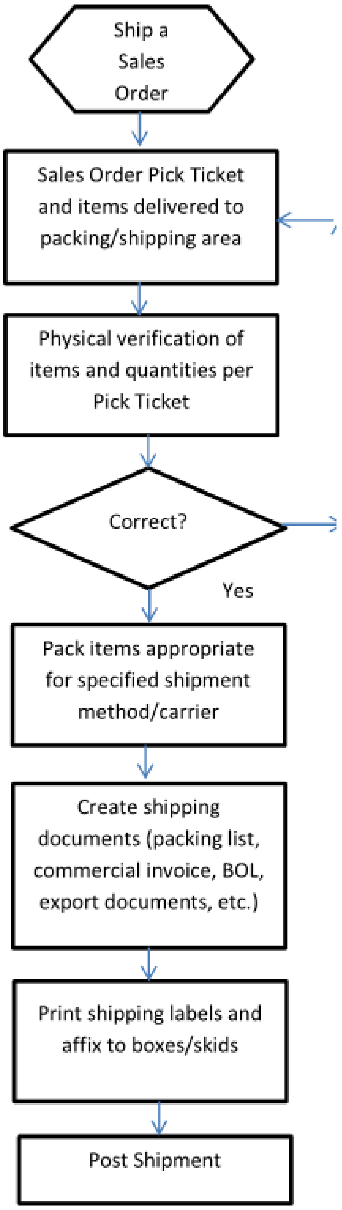
As stated above for incoming goods, the same holds for outgoing goods. Shipments can be posted in the warehouse with or without picking.



However small companies often post the shipping out of the sales order (or purchase return order).

2.3.2 Process Ship a Sales Order

From the warehouse requests (GAP see below) the picking action and the warehouse shipment is created. The good is packed, the documents are created and the shipment is posted.



2.3.3 *Process Ship a Purchase Return Order*

For purchase return orders the process is the same. Starting point is, as described, the warehouse request. Afterwards the standard BC is used for picking and shipping,
The quality control before shipping is done manually and outside of BC.

2.3.4 *Warehouse Requests (CORE modification)*

Phoenix Mecano needs a list named "Warehouse Requests", where the warehouse can see all shipments that have to be processed during a certain period and whether the items are available. This list shows only the sales lines. Shipments for purchase return orders and outbound transfers will not be processed out of this list.

With the information in the list the user can go either to the sales order, or to the warehouse shipment in order to proceed. The procedure depends whether the company works with warehouse or not. Because of different procedures in different companies, it was decided that no buttons for creating warehouse shipment and – pick are provided.

A customization was made to provide a page list with the following fields:

- Sales Order No.
- Sell-to Customer No.
- Sell-to Customer Name
- Item No.
- Description
- Location Code
- Quantity
- Outstanding Quantity
- Whs. Outstanding Quantity
- Unit of Measure Code
- Inventory (filtered on the location code of the line)
- Shipment date (of the line)
- Shipping Advice (of the header)
- Shipping Advice (of the line)
- Status (options: ‘’, Ready for Shipment)

With CORE Version 5.00 some additional columns will appear in Warehouse Request Page

- Shipping Agent code
- Shipping Agent Service Code

Furthermore, the users can now use the filter function.
The page shows all released sales order lines together with a status of the related line. When the page is opened, the list is filled and the status is calculated. With a button "Refresh" the list can be recalculated.

To get the lines for a certain period the list can be filtered on the fields "Shipment Date" and "Status".
The status is either empty or "Ready for Shipment" and depends on the field "Shipping Advice" of the sales header in combination with the shipping advice of the sales line.

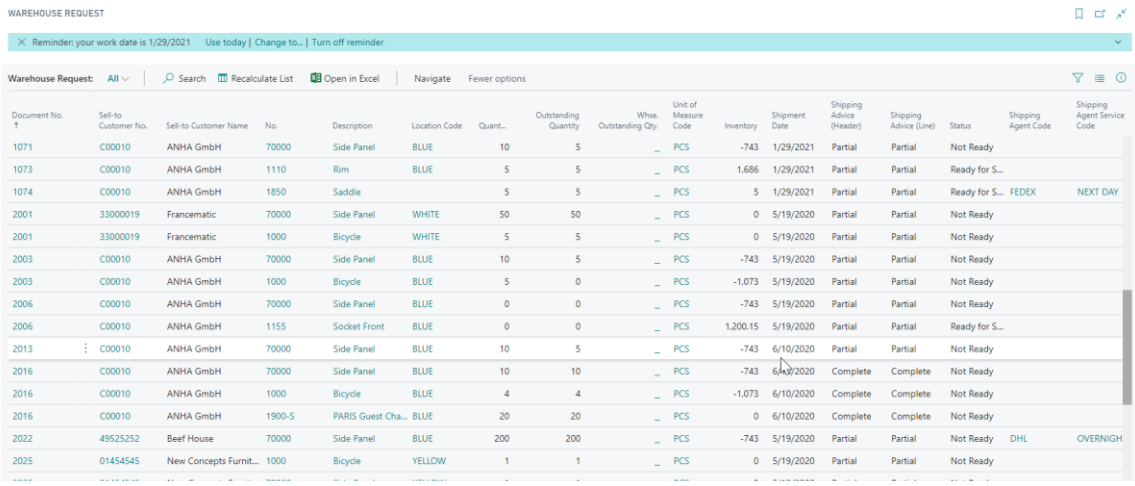
- If the shipping advice of the header is "Partial", the SO lines are ok to ship independent of one another, based on the shipping advice of the lines. Status shows "Ready for Shipment", if the shipping advice on the line is "Complete" and the inventory is enough to satisfy the demand for the line
- If the shipping advice of the header is "Partial", the SO lines are ok to ship independent of one another based on the shipping advice of the lines. Status shows "Ready for Shipment" if the shipping advice on the line is "Partial" and there is any quantity available against the demand for the line.
- If the shipping advice of the header is "Complete", the status shows "Ready for Shipment" only, if all sales order lines can be satisfied by the inventory. In this case the SO line shipping advice must be "Complete".

Questions:

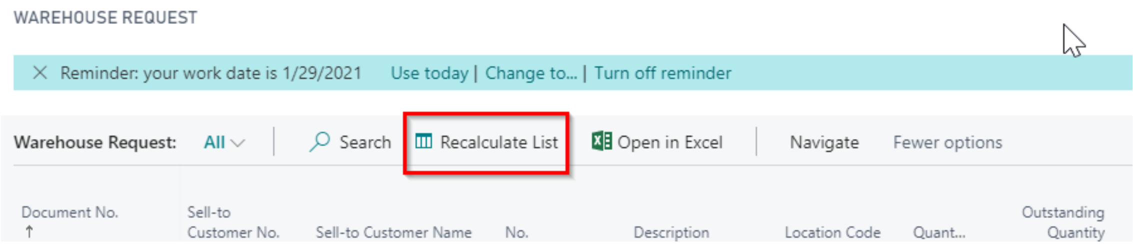
- How do PM handle a SO if the header advice is "Complete" and the lines are "Partial"?
- Can the programming logic create an error message to indicate this combination is not acceptable?

The page "Warehouse Requests" has been created, where all shipments that have to be processed during a certain period can be seen, whether the items are available. This list shows only the sales lines. Shipments for purchase return orders and outbound transfers will not be processed out of this list.

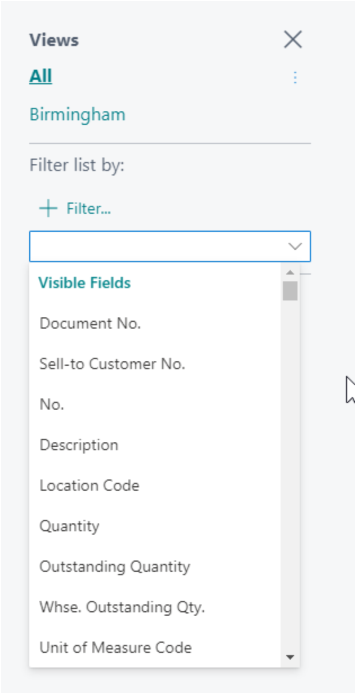
With the information in the list the user can either go to the sales order, or to the warehouse shipment in order to proceed. The procedure depends whether the company works with warehouse or not. Because of different procedures in different companies, it was decided that no buttons for creating warehouse shipment and – pick are provided.



The page shows all released sales order lines together with a status of the related line. When the page is opened, the list is filled and the status will be calculated. With a button "Recalculate List" the list can be recalculated.



To get the lines for a certain period the list can be filtered on the fields "Shipment Date" and "Status".



The status is either empty or "Ready for Shipment" and depends on the field "Shipping Advice" of the sales header in combination with the shipping advice of the sales line.

The calculation goes as follows:
If the shipping advice of the header is "Partial", the SO lines are ok to ship independent of one another based on the shipping advice of the lines. Status shows "Ready for Shipment", if the shipping advice on the line is "Complete" and the inventory is enough to satisfy the demand for the line

If the shipping advice of the header is "Partial", the SO lines are ok to ship independent of one another based on the shipping advice of the lines. Status shows "Ready for Shipment" if the shipping advice on the line is "Partial" and there is any quantity available against the demand for the line.

If the shipping advice of the header is "Complete", the status shows "Ready for Shipment" only, if all sales order lines can be satisfied by the inventory. In this case the SO line shipping advice must be "Complete". It cannot be partial. Trying to change it to partial will result in an error upon trying to release the SO.

The warehouse shipment was not created because the Shipping Advice field is set to Complete, and item no. 1000 is not available in location code BLUE.

You can create the warehouse shipment by either changing the Shipping Advice field to Partial in Sales Order no. 2016 or by manually filling in the warehouse shipment document.

OK

The first option in the field Status of the Sales Line has been changed from " " to "Not Ready".

2045	70000	Side Panel	BLUE	10	0	_	PCS	-743	8/18/2020	Partial	Partial	Not Ready
2059	1850	Saddle	BLUE	15	15	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...
2061	1850	Saddle	BLUE	50	50	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...
2062	70062	cutted item	BLUE	12	12	_	M	-275,080	1/29/2021	Partial	Partial	Not Ready
2063	70062	cutted item	BLUE	7.28	7.28	_	M	-275,080	1/29/2021	Partial	Partial	Not Ready
2065	70062	cutted item	BLUE	2	2	_	M	-275,080	7/6/2020	Partial	Partial	Not Ready

The calculation of the field Status for the Sales Lines has been amended, so that filtering on the page "Warehouse Request" is possible:

Before filter:

Warehouse Request: All | Search | Recalculate List | Open in Excel | Navigate | Fewer options

Views: All, Birmingham

Filter list by: + Filter...

Document No. ↑	No.	Description	Location Code	Quant...	Outstanding Quantity	Whse. Outstanding Qty.	Unit of Measure Code	Inventory	Shipment Date	Shipping Advice (Header)	Shipping Advice (Line)	Status	Shipping Agent Cod
2041	1000	Bicycle	GREEN	0	0	_	PCS	0	8/18/2020	Partial	Partial	Not Ready	
2041	70000	Side Panel	GREEN	0	0	_	PCS	2,019	8/18/2020	Partial	Partial	Ready for S...	
2045	1000	Bicycle	BLUE	10	0	_	PCS	-1,073	8/18/2020	Partial	Partial	Not Ready	
2045	70000	Side Panel	BLUE	10	0	_	PCS	-743	8/18/2020	Partial	Partial	Not Ready	
2059	1850	Saddle	BLUE	15	15	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...	
2061	1850	Saddle	BLUE	50	50	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...	

After filter:

Warehouse Request: *Custom filtered* | Search | Recalculate List | Open in Excel | Navigate | Fewer options

Views: *All, Birmingham

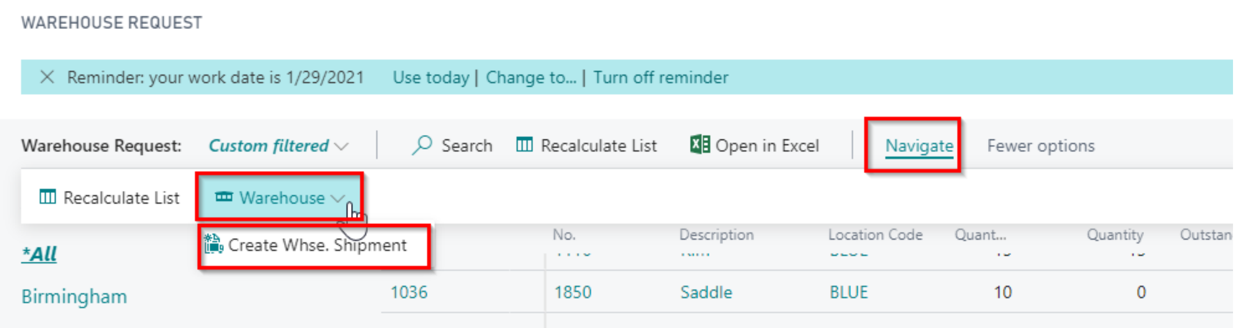
Filter list by: × Status: Ready for Shipment

+ Filter...

Reset filters

Document No. ↑	No.	Description	Location Code	Quant...	Outstanding Quantity	Whse. Outstanding Qty.	Unit of Measure Code	Inventory	Shipment Date	Shipping Advice (Header)	Shipping Advice (Line)	Status	Shipping Agent Code
1036	1850	Saddle	BLUE	10	0	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...	
1046	1850	Saddle	BLUE	8	8	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...	
1052	1850	Saddle	BLUE	100	0	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...	
1053	1110	Rim	BLUE	500	0	_	PCS	1,686	1/29/2021	Partial	Partial	Ready for S...	
1054	1110	Rim	BLUE	100	0	_	PCS	1,686	1/29/2021	Partial	Partial	Ready for S...	
1056	1850	Saddle	BLUE	200	0	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...	
1057	1850	Saddle	BLUE	111	0	_	PCS	723	1/29/2021	Partial	Partial	Ready for S...	
1058	70000	Side Panel	CUTTED	100	100	_	PCS	105	1/29/2021	Partial	Partial	Ready for S...	
1058	1850	Saddle	GREEN	100	100	_	PCS	50	1/29/2021	Partial	Partial	Ready for S...	

It is now possible to create a warehouse shipment directly from the warehouse request page.

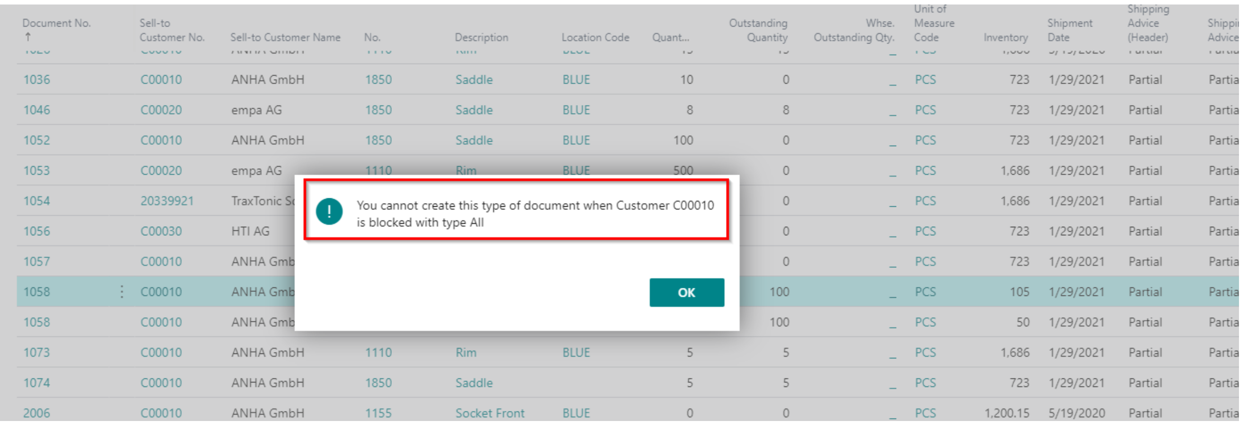


If multiple lines are selected the system will create one warehouse shipment per order and location relation. This means:

One order with 2 locations → 2 warehouse shipments
One order with only one location → 1 warehouse shipment

If multiple lines are selected and for one of the lines a warehouse shipment cannot be created, an error message will occur and no warehouse shipment will be created. Warehouse Request is not getting filtered anymore after error „Customer is blocked" and the list gets now recalculated.

Behaviour: If Customer is blocked you will receive an error message like this:



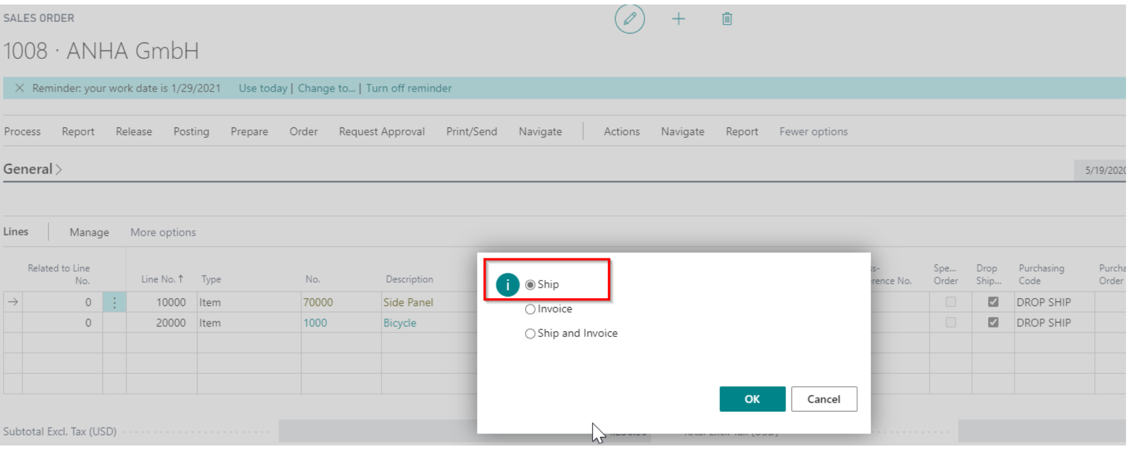
Now: After pushing the OK button the Warehouse Request is still reduced / filtered to the selected lines. However after pushing function "Recalculate List" the list will appear in total.

Test case:
Check if the new page can be found in the Department Menu. Run the page. Check if all fields exist and are shown correctly, especially the new field "Status".

Refere to testscripts: TSTPL0044, TSTPL0135, TSTPL0138.

2.3.5 Shipping Goods directly in the Sales Order

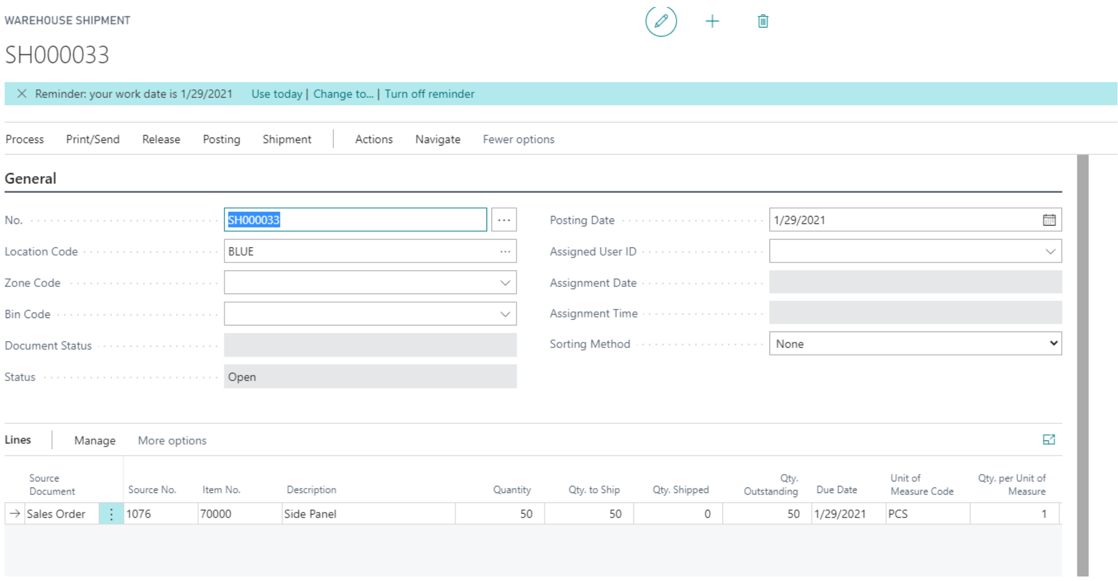
In order to post the shipping in the sales order the field Qty. to Ship has to be specified in the lines. Afterwards the shipment can be posted.



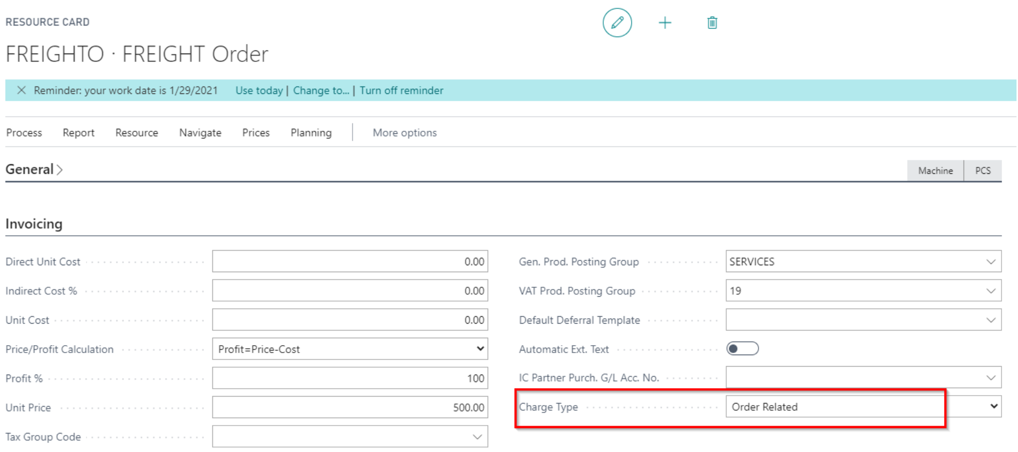
Also for shipment the disadvantage of this approach is that the warehouse employee has access to the purchase order and can accidentally change the order.

2.3.6 Shipping the Items in BC

To initiate the shipping process, the source document (sales order, purchase return order and outbound transfer order) must be released, and the request becomes visible to the warehouse staff. The Warehouse Shipment can be created from the source document (i.e. Sales order, Return purchase order or Outbound transfer order) or from the Warehouse shipments with the function "Get Source Documents…).

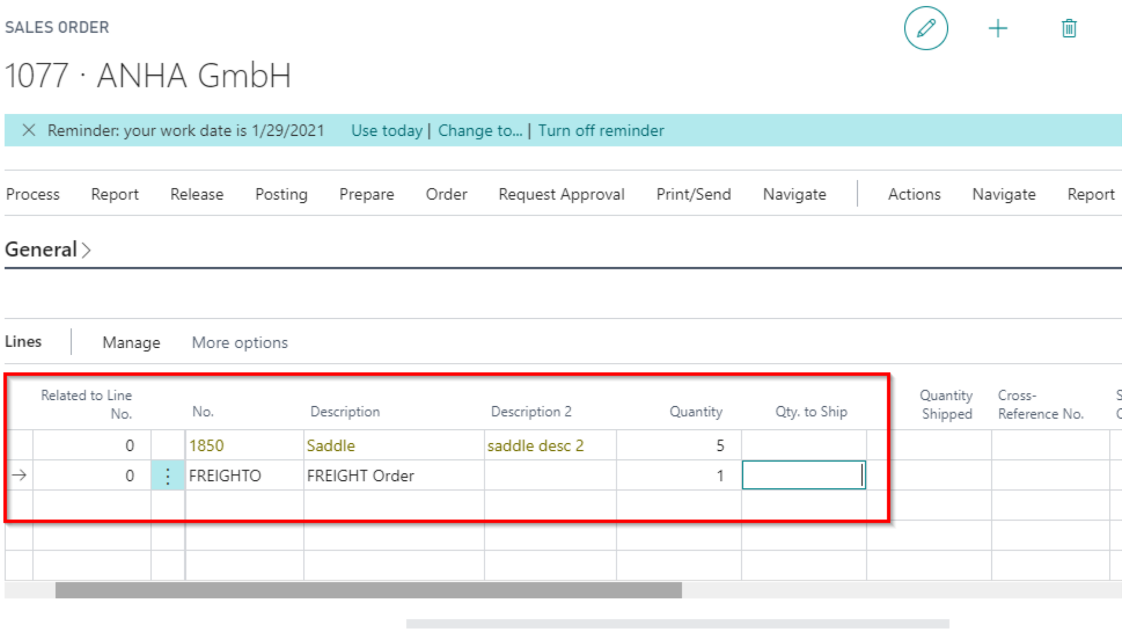


It is possible to post item or order related resources via the warehouse shipment.

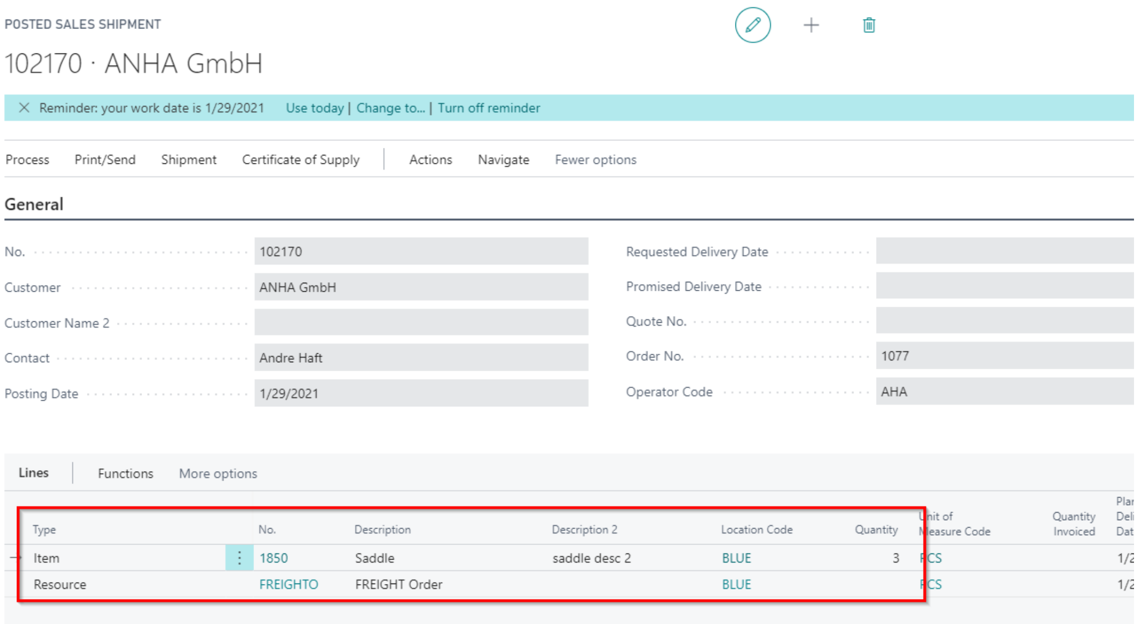


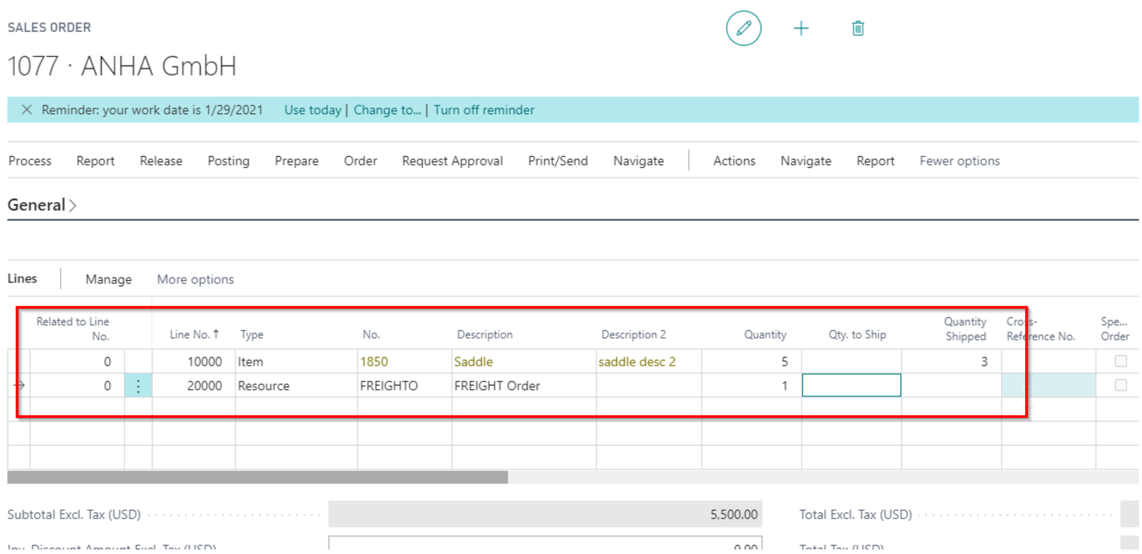
When a warehouse shipment is posted and the source of the line is a sales order, BC checks if lines of the type resource are item or order related. If conditions are met (item related: item is fully shipped; order related: order is fully shipped) the specified resource lines are automatically posted as well.

Before post:

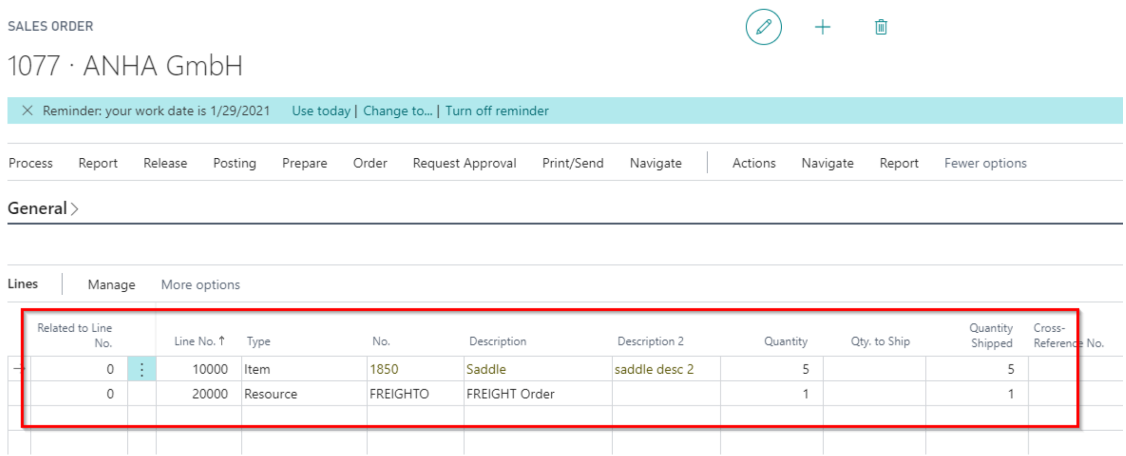


After partial post:





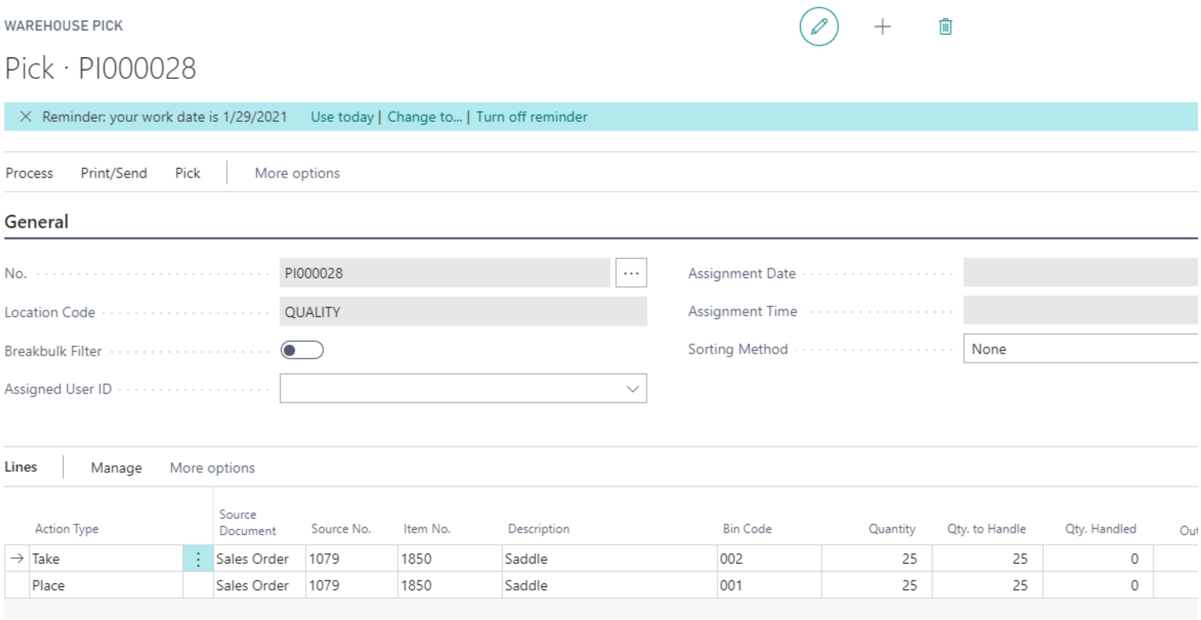
After fully posting:

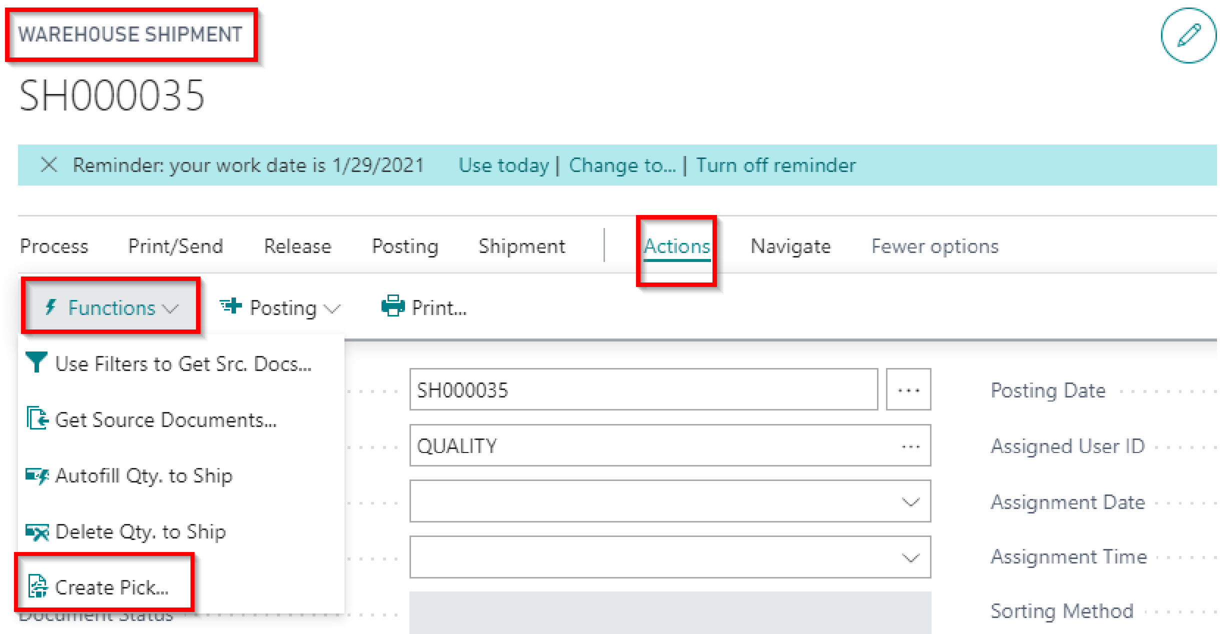


2.3.7 Warehouse Pick Activity

The Warehouse pick activity can be created from the Warehouse shipment using the function "Create Pick…". The pick can be registered and afterwards the shipment can be posted.

As a result of posting, the program deleted the lines from the Warehouse Shipment window and creates both a posted warehouse shipment and a posted sales shipment to register the process.





2.3.8 *Cross Docking Items*

When items are cross-docked, the items are handled through receiving and shipping without ever placing them in storage, thereby expediting the item through the put-away and pick processes and limiting the physical handling of items. Items can be cross-docked for both shipments and for production orders.

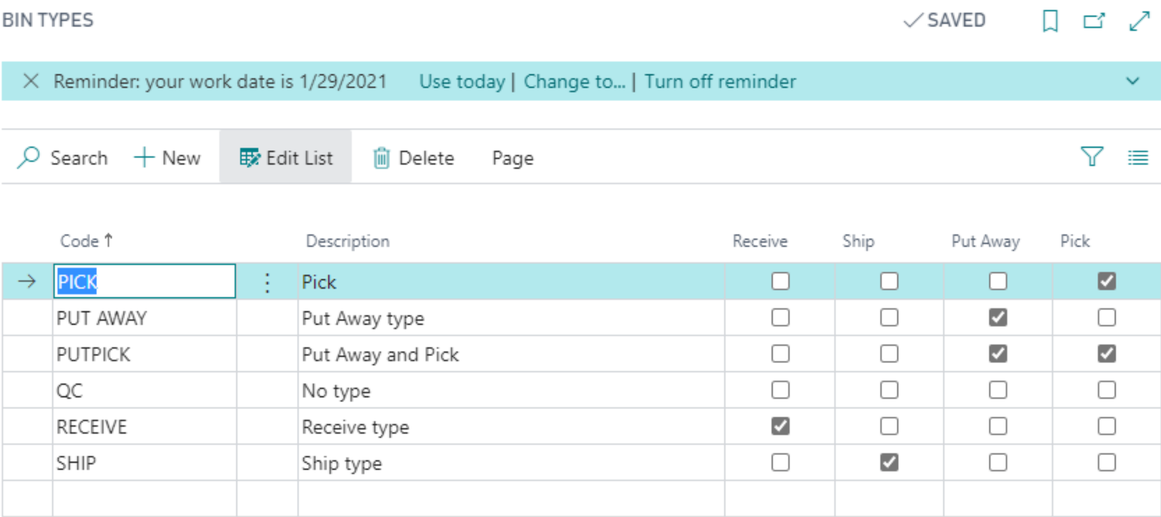
When preparing a shipment or pick items for production and using bins, the program will automatically pick the item from a cross-dock bin before considering picking from any other bin.

Comment for testing

When cross docking is tested, it should be tested whether there is a parameterization of BC so that items in stock are consumed first.

2.3.9 Consuming oldest items first

The items can be setup so that "Lot No." is obligatory. When the items are received the lot no. must be inserted. The lot no. can be, for example, the date of receive. In the put away the lot no. and the right bin can be chosen. In the bin table is displayed where the chosen lot is.



Code ↑	Description	Receive	Ship	Put Away	Pick
PICK	Pick				✓
PUT AWAY	Put Away type			✓	
PUTPICK	Put Away and Pick			✓	✓
QC	No type				
RECEIVE	Receive type	✓			
SHIP	Ship type		✓		

When posting a shipment a pick is created. In the pick the oldest lot (date = lot no.) and the appropriate bin can be chosen and registered. Doing so the shipment with the oldest item is shipped.

2.3.10 Hide standard fields in standard pages and rename CORE fields

Microsoft delivers with Business Central possibilities to add needed standard fields in a very easiest way. For this reason all additionally added standard fields are hide from pages and lists. If needed local partners has to made visible these fields with page extensions.

Furthermore all CORE fields are renamed with prefix “PM”. Users will see the field name without the prefix in pages and lists.

3 Add Code to Comment line (CORE modification)

3.1 Add Code to Comment Line

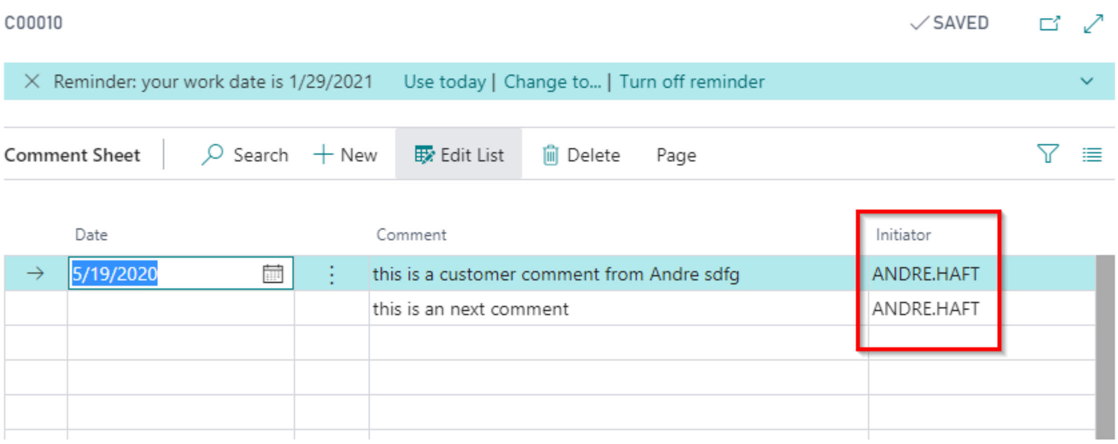
PM needs information which user has add a comment into the comment sheet for different table. For that a CORE field = Initiator lenght 30 in table comment line is created

This field will be filled OnInsert and OnModify triggers with the user name – without domain.

This field and function can be found in the comment lines (see examples):

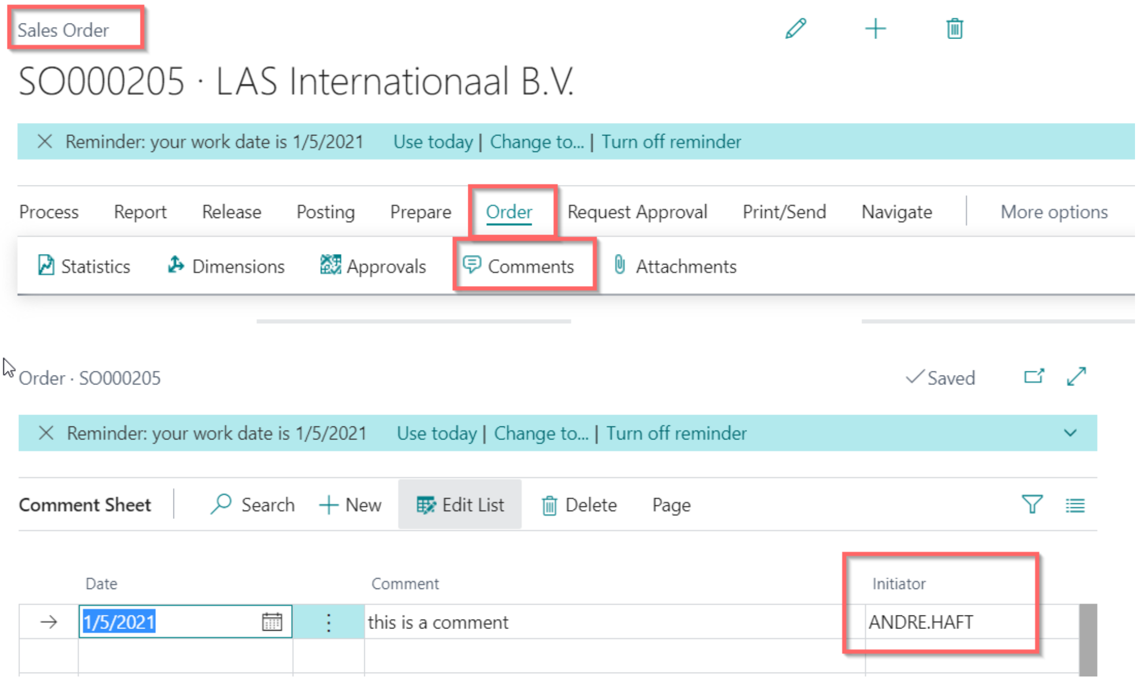
G / L-Account, Customer, Vendor, Item, Resource , Job ,Resource-Group, Bank-Account, Campaign, Fixed Asset, Insurance, Nonstock Item, IC Partner

Example:
Customer Card

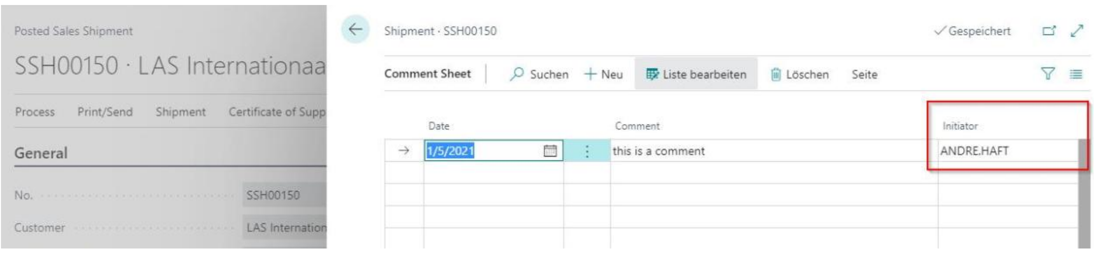


3.2 Forwarding Initiators within comments

Create a new sales order and add a comment to the sales order.



Post the sales order (posting shall be done from a different user – not the one who created the comments inside the order). Check on the posted document the comments – especially the field initiator:



The value of the initiator shall remain the same as inside the order – as this person was the one who created the comment.