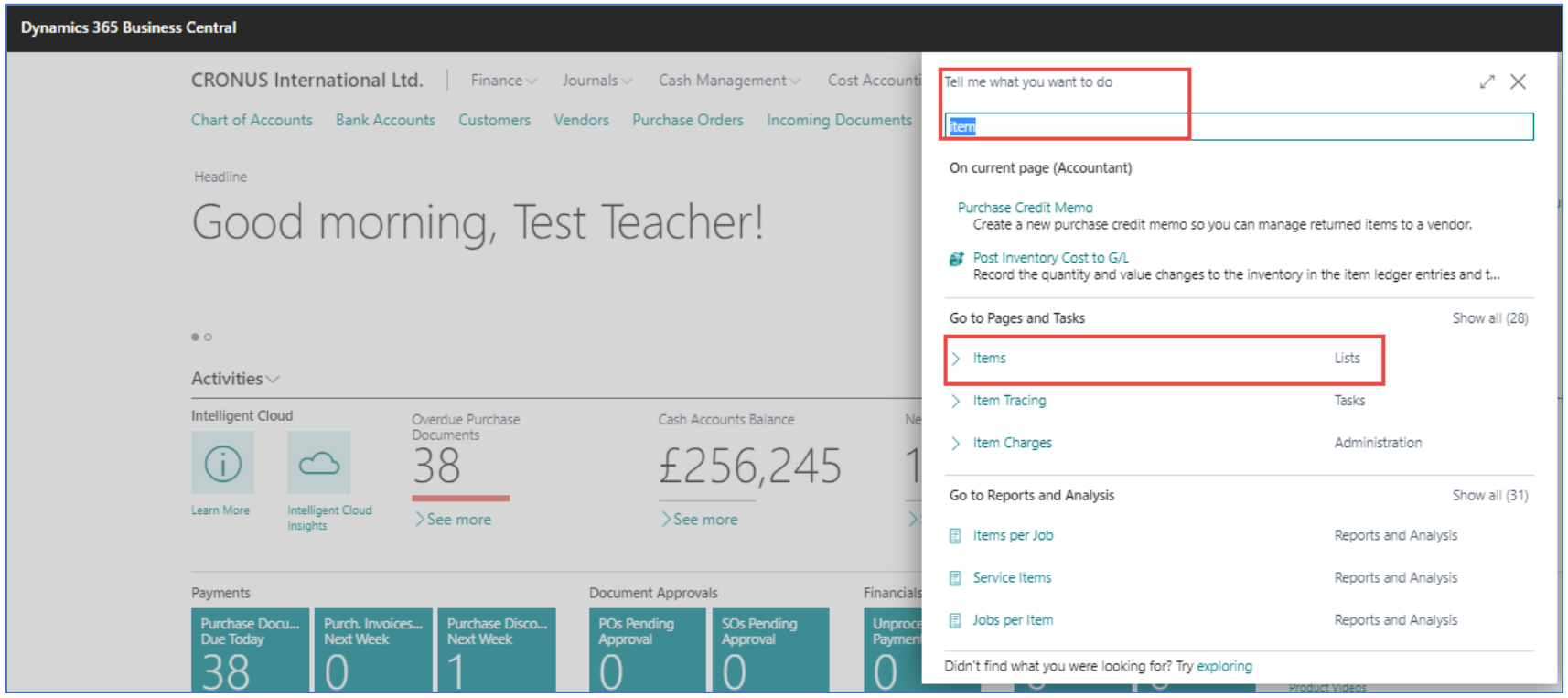
Business Central Introduction III
Applying item entries

Microsoft Dynamics 365 Business Central)

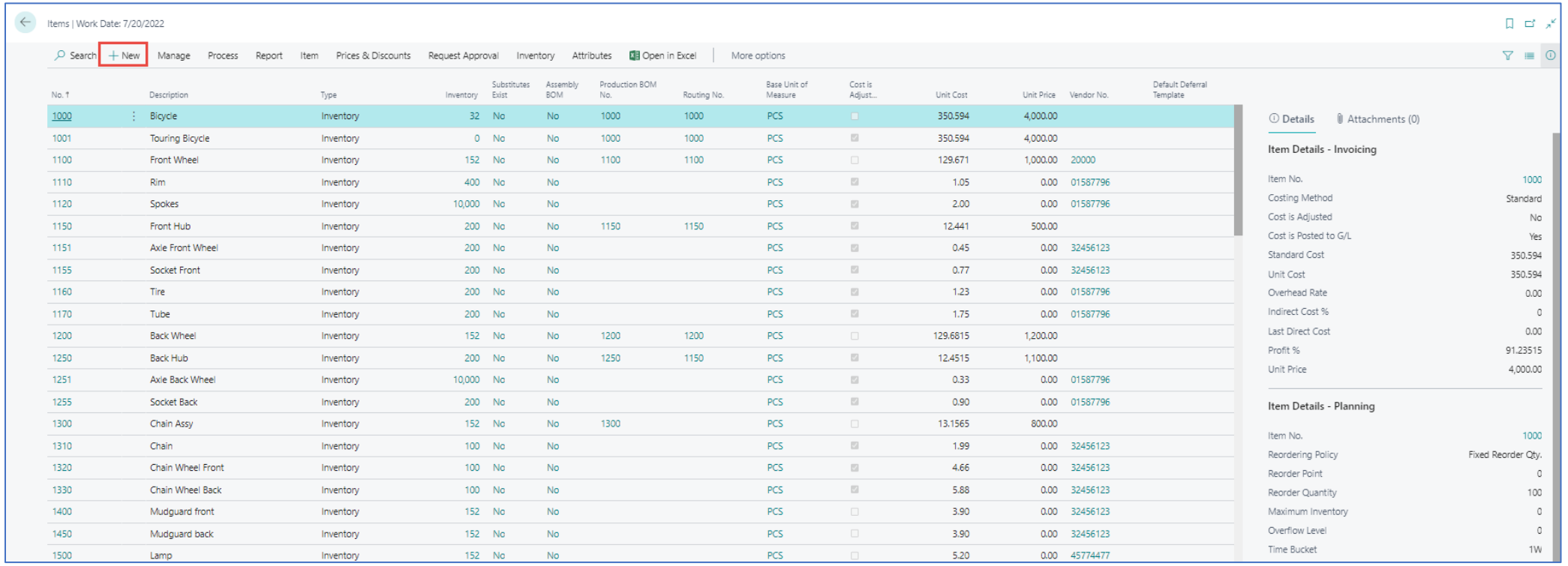
Ing.Jaromír Skorkovský,CSc.
Masaryk University

Creation of the new item using new item template



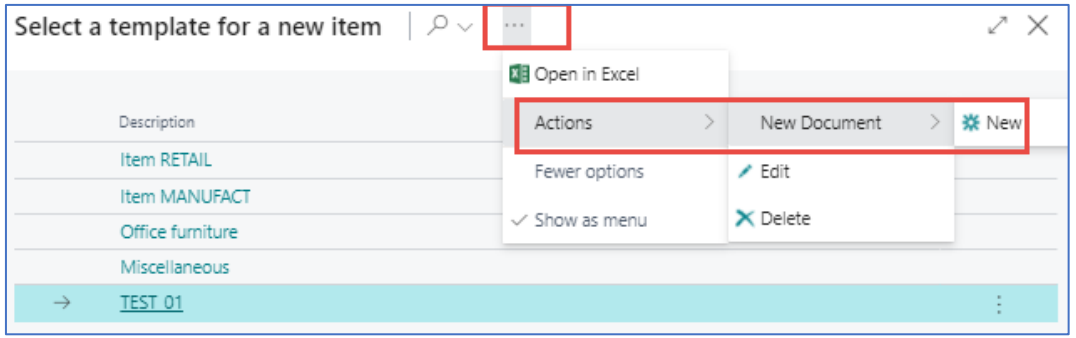
Preparation of data and tables for modeling

List of items

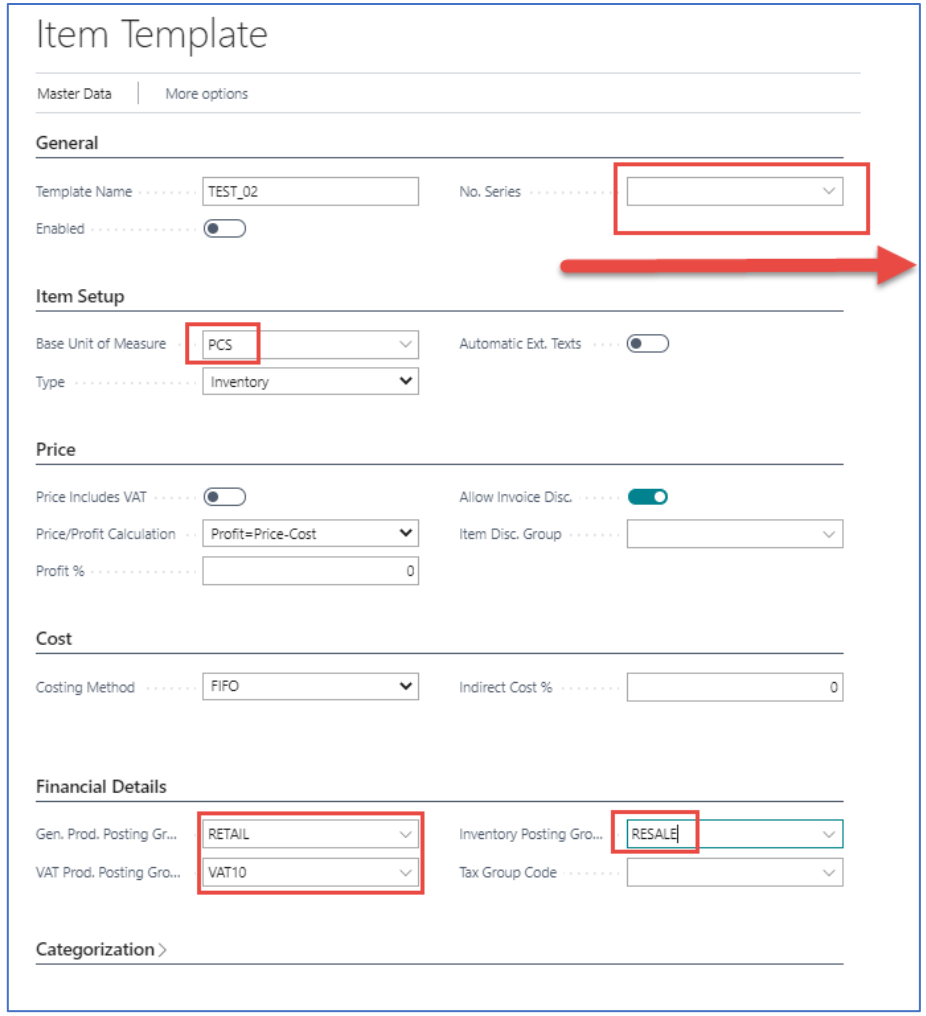


No.	Description	Type	Inventory	Substitutes Exist	Assembly BOM	Production BOM No.	Routing No.	Base Unit of Measure	Cost is Adjust...	Unit Cost	Unit Price	Vendor No.	Default Deferral Template
1000	Bicycle	Inventory	32	No	No	1000	1000	PCS		350.594	4,000.00		
1001	Touring Bicycle	Inventory	0	No	No	1000	1000	PCS		350.594	4,000.00		
1100	Front Wheel	Inventory	152	No	No	1100	1100	PCS		129.671	1,000.00	20000	
1110	Rim	Inventory	400	No	No			PCS		1.05	0.00	01587796	
1120	Spokes	Inventory	10,000	No	No			PCS		2.00	0.00	01587796	
1150	Front Hub	Inventory	200	No	No	1150	1150	PCS		12.441	500.00		
1151	Axle Front Wheel	Inventory	200	No	No			PCS		0.45	0.00	32456123	
1155	Socket Front	Inventory	200	No	No			PCS		0.77	0.00	32456123	
1160	Tire	Inventory	200	No	No			PCS		1.23	0.00	01587796	
1170	Tube	Inventory	200	No	No			PCS		1.75	0.00	01587796	
1200	Back Wheel	Inventory	152	No	No	1200	1200	PCS		129.6815	1,200.00		
1250	Back Hub	Inventory	200	No	No	1250	1150	PCS		12.4515	1,100.00		
1251	Axle Back Wheel	Inventory	10,000	No	No			PCS		0.33	0.00	01587796	
1255	Socket Back	Inventory	200	No	No			PCS		0.90	0.00	01587796	
1300	Chain Assy	Inventory	152	No	No	1300		PCS		13.1565	800.00		
1310	Chain	Inventory	100	No	No			PCS		1.99	0.00	32456123	
1320	Chain Wheel Front	Inventory	100	No	No			PCS		4.66	0.00	32456123	
1330	Chain Wheel Back	Inventory	100	No	No			PCS		5.88	0.00	32456123	
1400	Mudguard front	Inventory	152	No	No			PCS		3.90	0.00	32456123	
1450	Mudguard back	Inventory	152	No	No			PCS		3.90	0.00	32456123	
1500	Lamp	Inventory	152	No	No			PCS		5.20	0.00	45774477	

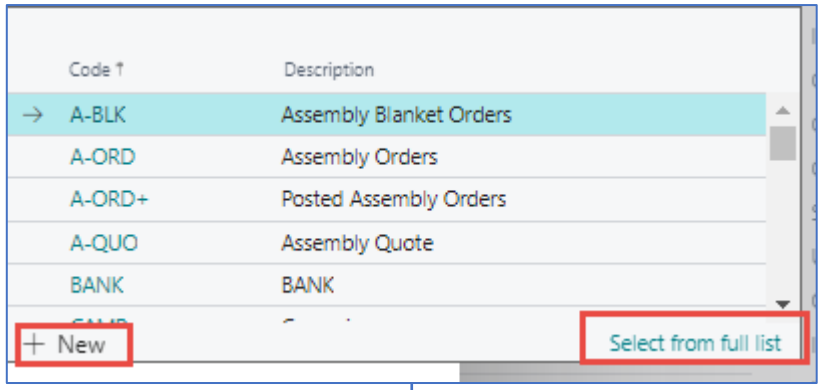
Template creation I.

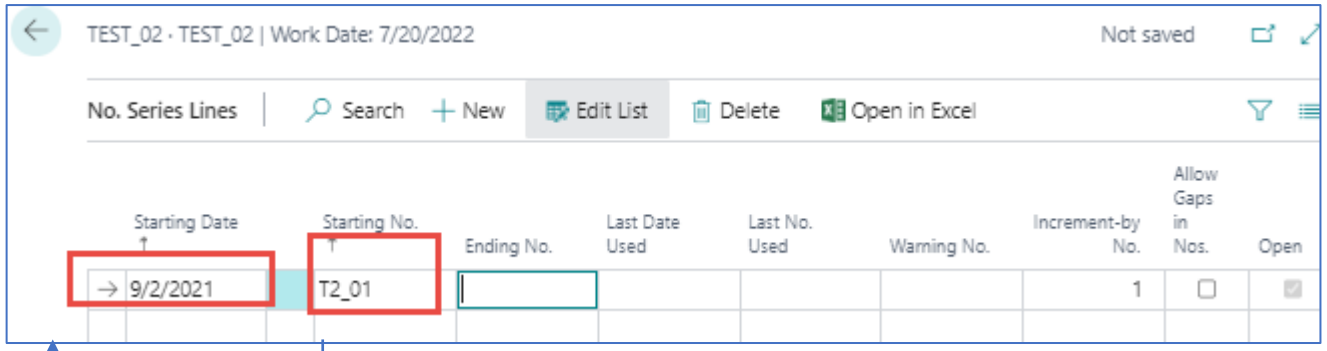


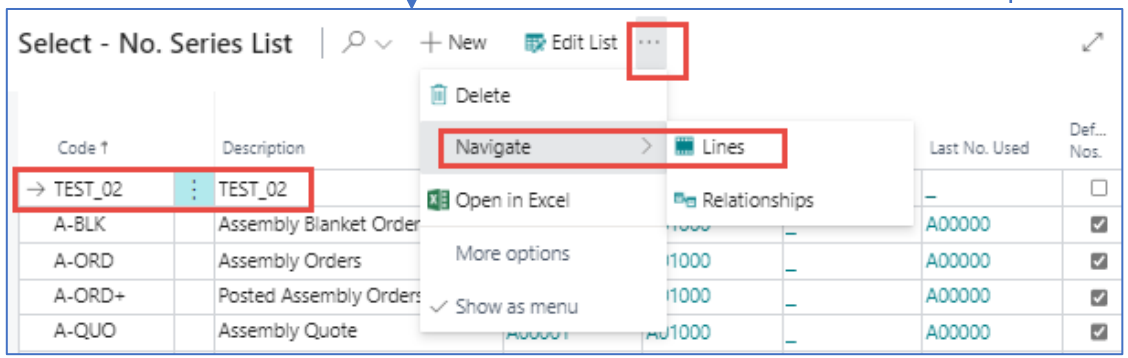
Here you need to create a new number series, that will allow you to number the items created according to this template

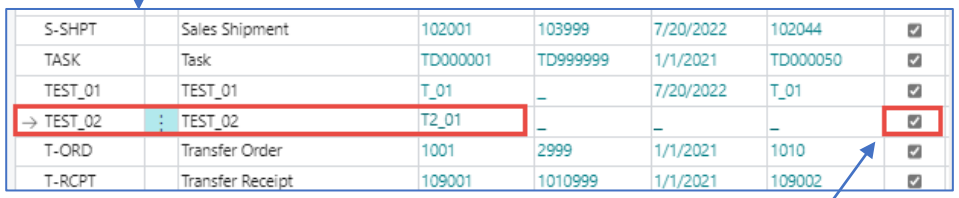


Number of series creation





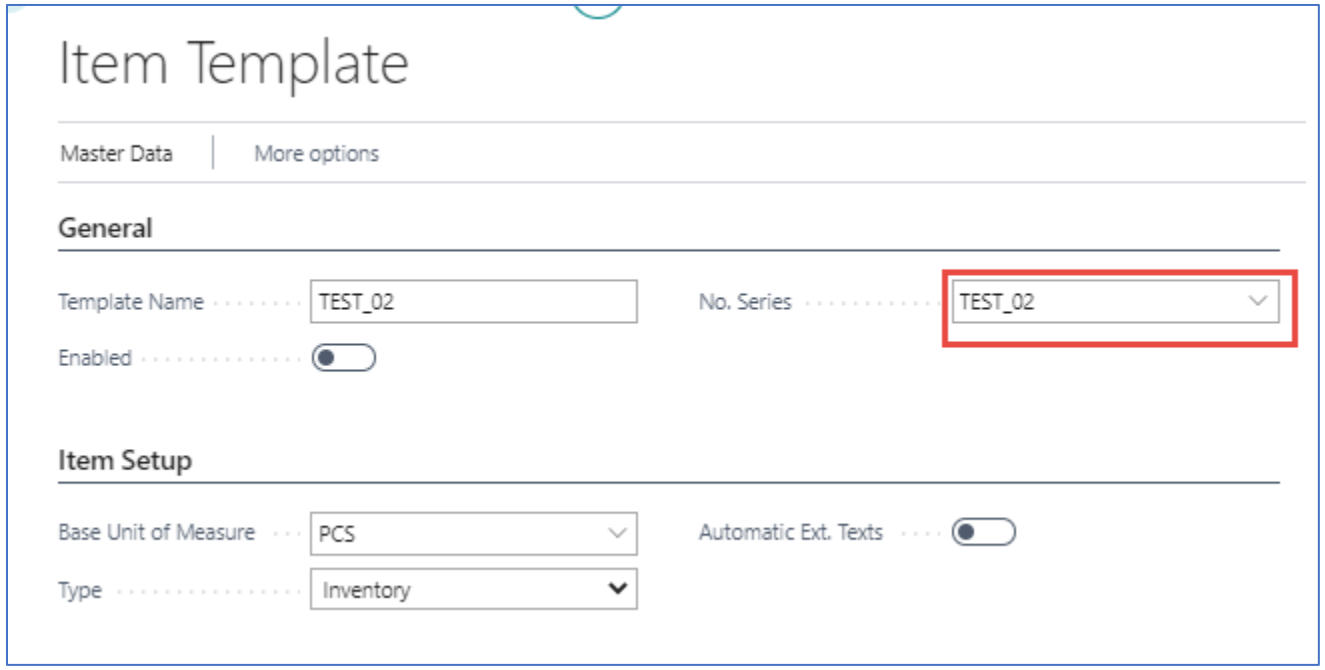




Here you first enter the series number and its name, the date of creation, in our case by selecting the code **T**, which means today, and the initial string, which will be incremented by the selected increment for each newly created item.

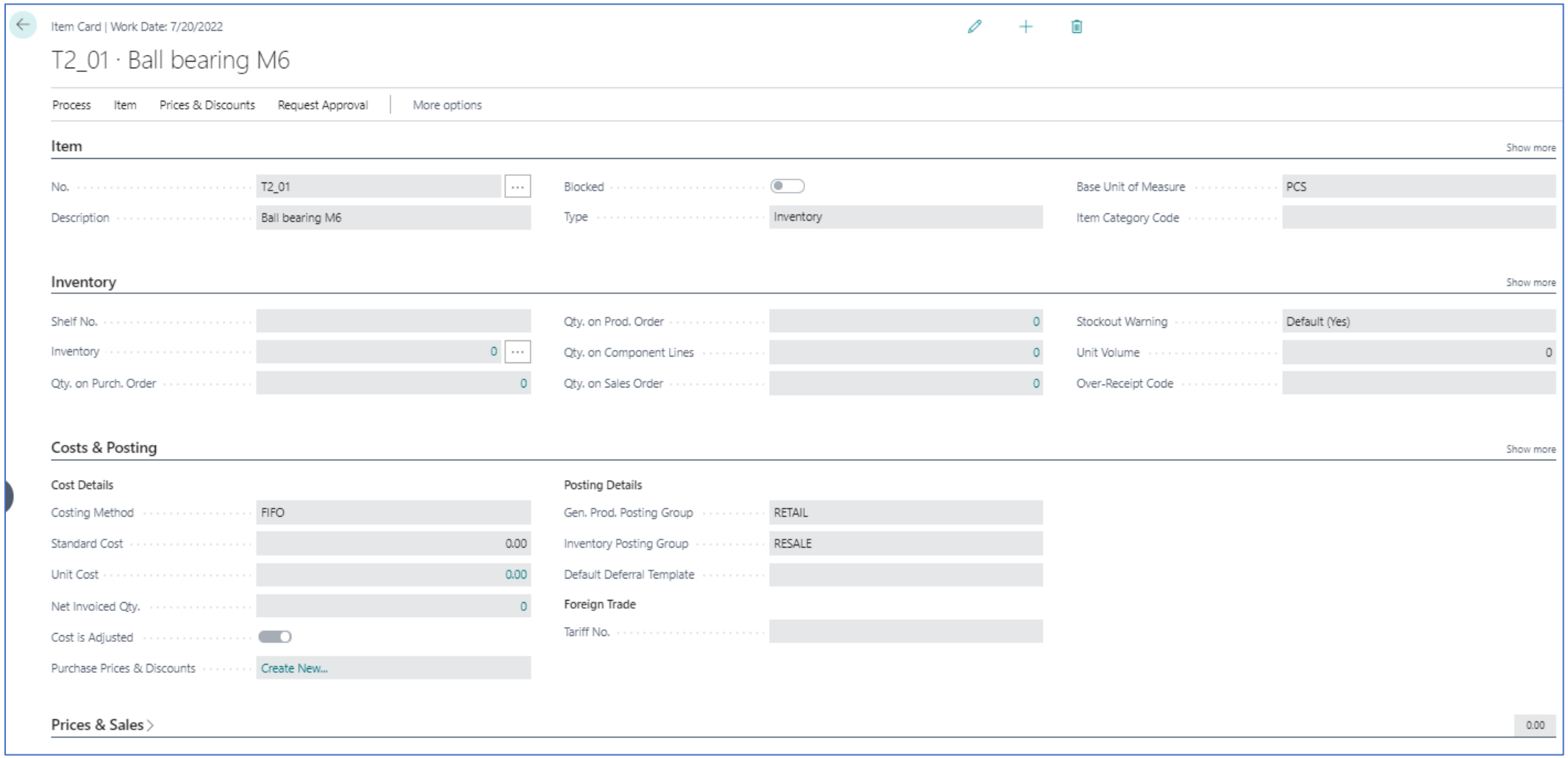
You need to check this box with the name **Default Number**

Item template ready



You can now create new items

New created item card

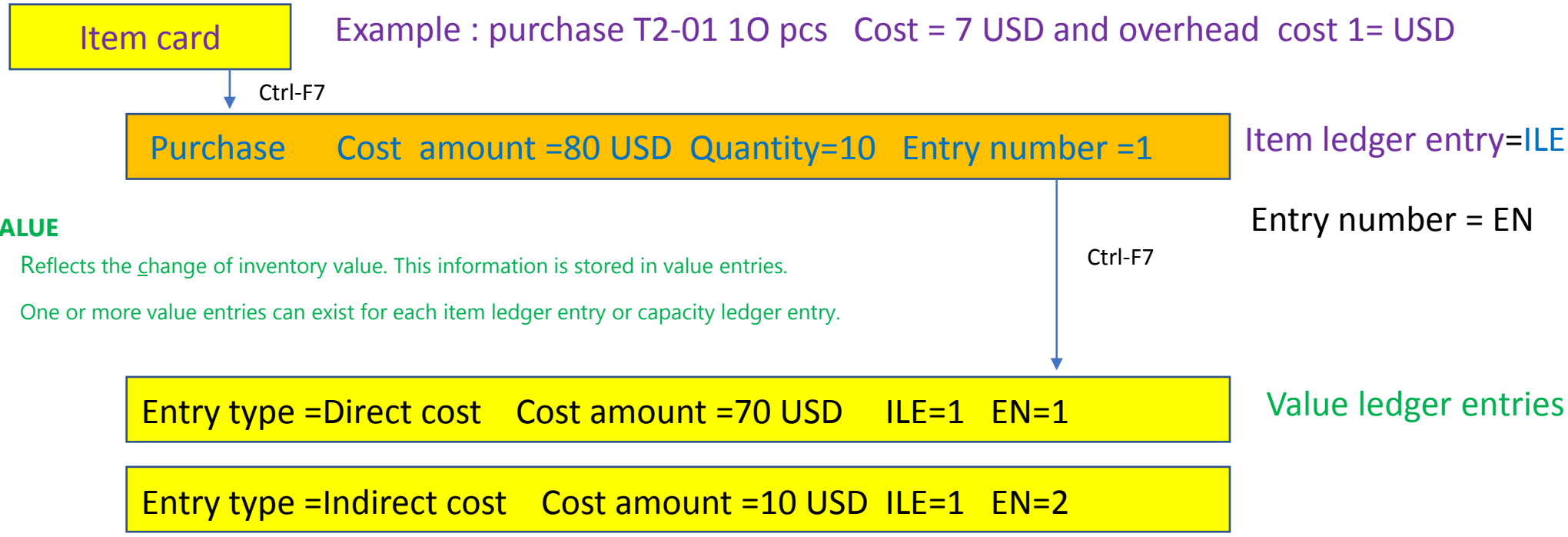


Value entries- explanantion

- Each inventory transaction, such as a **purchase receipt** or a **sales shipment**, posts two entries of different types
  - **QUANTITY**

    Reflects the change of quantity in inventory. This information is stored in item ledger entries.

    Accompanied by item application entries.

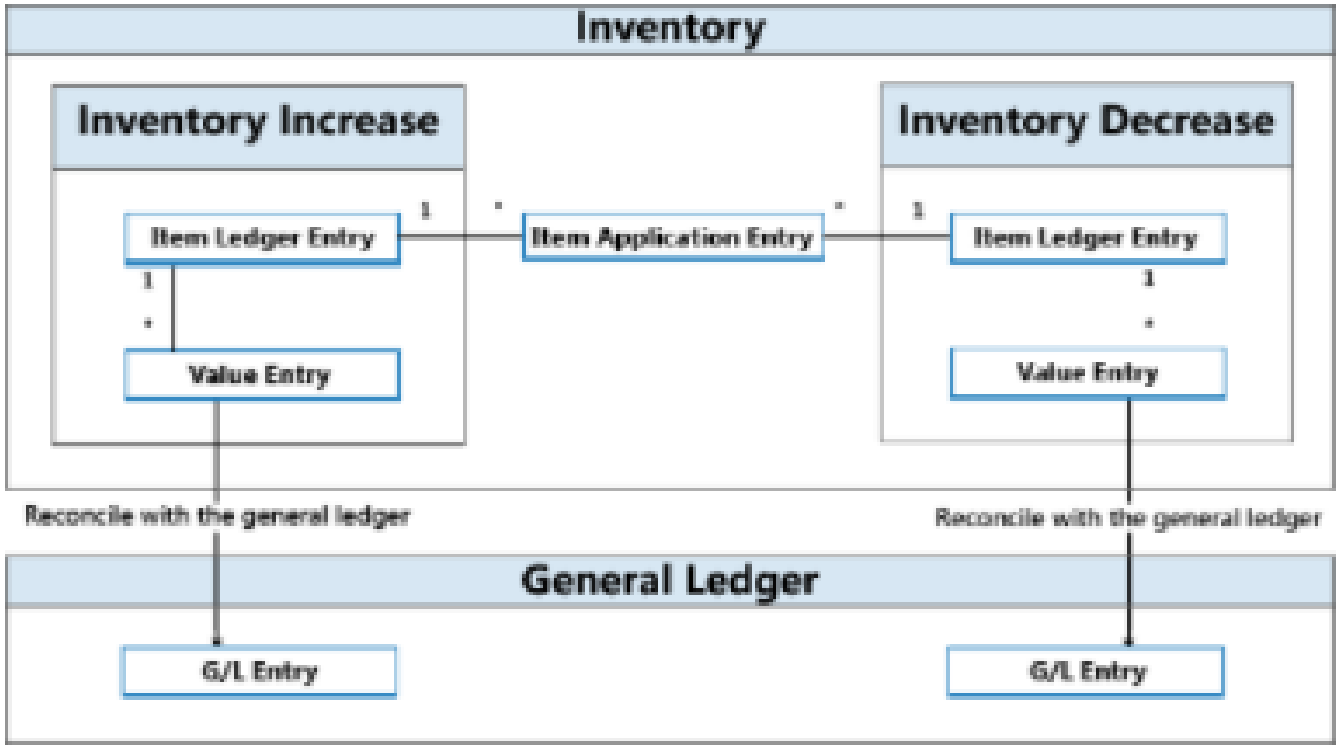


  - **VALUE**

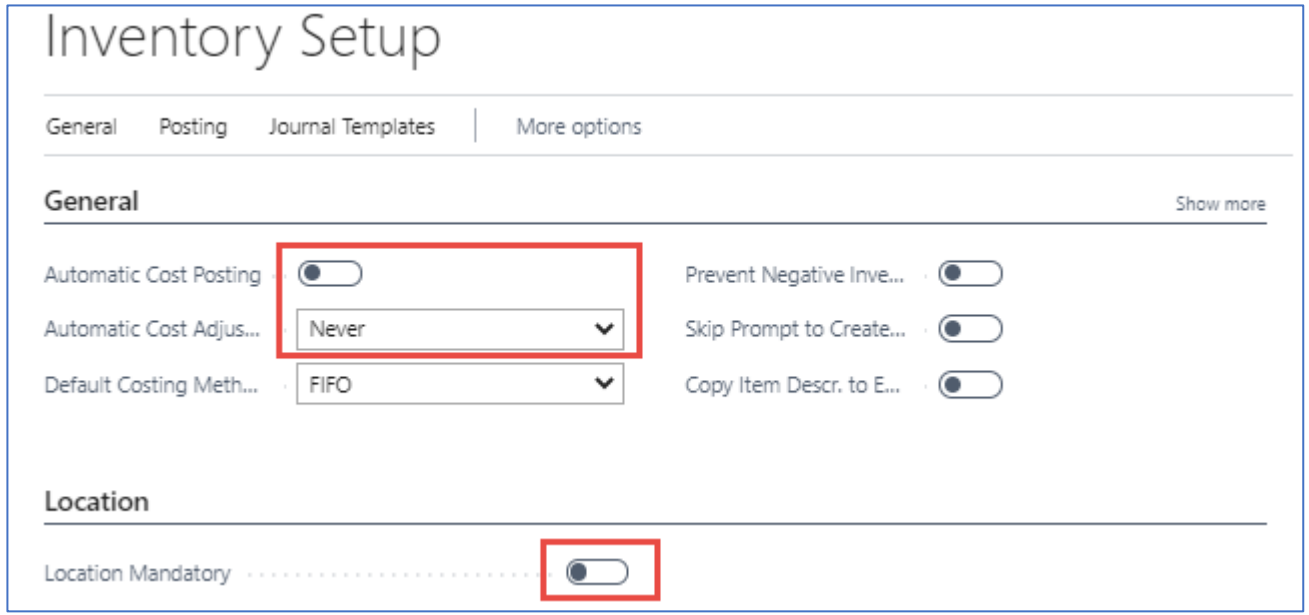
    Reflects the change of inventory value. This information is stored in value entries.

    One or more value entries can exist for each item ledger entry or capacity ledger entry.

Main principle related to value entries



Inventory setup – relation to inventory adjustment

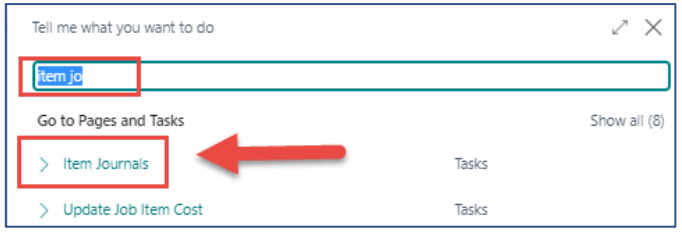


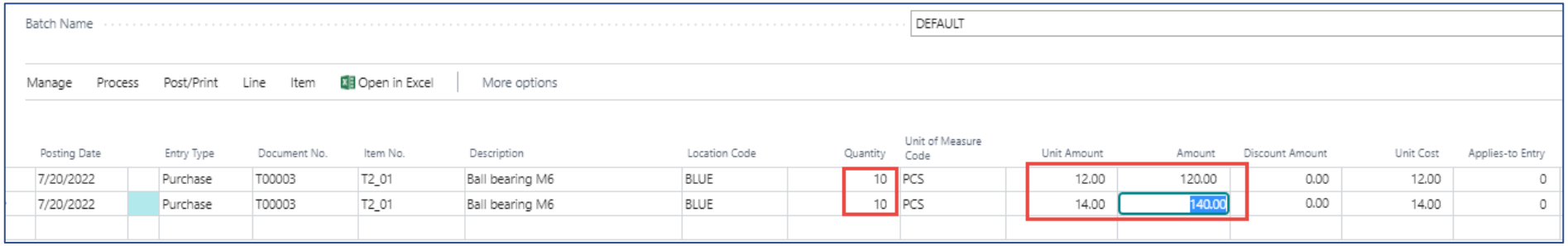
Specifies if value entries are automatically posted to the inventory account, adjustment account, and COGS account in the general ledger when an item transaction is posted. Alternatively, you can manually post the values at regular intervals with the Post Inventory Cost to G/L batch job

COGS = Cost Of Good Sold

Purchasing 2x item T2_01 by use of Inventory journal

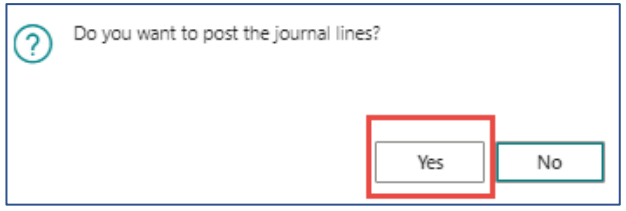
- Same Purchase procedure but without vendor specification





Posting Date	Entry Type	Document No.	Item No.	Description	Location Code	Quantity	Unit of Measure Code	Unit Amount	Amount	Discount Amount	Unit Cost	Applies-to Entry
7/20/2022	Purchase	T00003	T2_01	Ball bearing M6	BLUE	10	PCS	12.00	120.00	0.00	12.00	0
7/20/2022	Purchase	T00003	T2_01	Ball bearing M6	BLUE	10	PCS	14.00	140.00	0.00	14.00	0

F9=Post



See next slide

Created item ledger entries and chosen tabs of item card

Item T2_01 Ball bearing M6

Item Ledger Entries | Search | Entry | Open in Excel | More options

Posting Date	Entry Type	Document Type	Document No.	Item No.	Description	Location Code	Quantity	Invoiced Quantity	Remaining Quantity	Sales Amount (Actual)	Cost Amount (Actual)	Cost Amount (Non-Invtbl.)	Open	Order Type	Entry No.
7/20/2022	Purchase		T00003	T2_01		BLUE	10	10	10	0.00	140.00	0.00	☑		346
7/20/2022	Purchase		T00003	T2_01		BLUE	10	10	10	0.00	120.00	0.00	☑		345

Total cost of purchased item = 10*12 +10*14 = 120+140=260 and average =260/20=13

Inventory

Shelf No.

Inventory 20

Qty. on Purch. Order 0

Costs & Posting

Cost Details

Costing Method FIFO

Standard Cost 0.00

Unit Cost 12.00

Net Invoiced Qty. 20

Cost is Adjusted

Purchase Prices & Discounts Create New...

Edit - Average Cost Calc. Overview - T2_01 Ball bearing M6

Search | Find entries... | Open in Excel | More options

Type	Valuation Date	Item No.	Unit Cost	Cost is Adj...	Entry Type	Quantity	Cost Amount (Expected)
Closing E...	7/20/2022	T2_01	13.00	☐		20	0.00
Increase	7/20/2022	T2_01	12.00	☐	Purchase	10	0.00
Increase	7/20/2022	T2_01	14.00	☐	Purchase	10	0.00

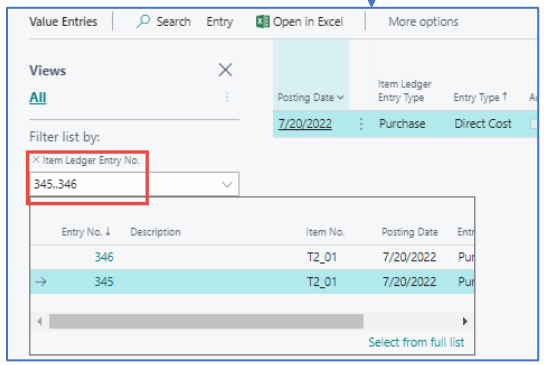
Item ledger entries and related value entries

Item T2_01 Ball bearing M6

Item Ledger Entries | Search | Entry | Open in Excel | More options

Posting Date	Entry Type	Document Type	Document No.	Item No.	Description	Location Code	Quantity	Invoiced Quantity	Remaining Quantity	Sales Amount (Actual)	Cost Amount (Actual)	Cost Amount (Non-Invtbl.)	Open	Order Type	Entry No.
7/20/2022	Purchase		T00003	T2_01		BLUE	10	10	10	0.00	140.00	0.00	☑		346
7/20/2022	Purchase		T00003	T2_01		BLUE	10	10	10	0.00	120.00	0.00	☑		345

Ctrl-F7



Setting the filter to Item ledger entry numbers to see all automatically created value entries

Posting Date	Item Ledger Entry Type	Entry Type	Adj...	Document Type	Document No.	Item Charge No.	Description	Sales Amount (Actual)	Cost Amount (Expected)	Cost Amount (Actual)	Cost Amount (Non-Invtbl.)	Cost Posted to G/L	Item Ledger Entry Quantity	Valued Quantity	Invoiced Quantity	Cost per Unit	Cost per Unit (ACY)	Item No.
7/20/2022	Purchase	Direct Cost	☐		T00003			0.00	0.00	120.00	0.00	0.00	10	10	10	12.00	0.00	T2_01
7/20/2022	Purchase	Direct Cost	☐		T00003			0.00	0.00	140.00	0.00	0.00	10	10	10	14.00	0.00	T2_01

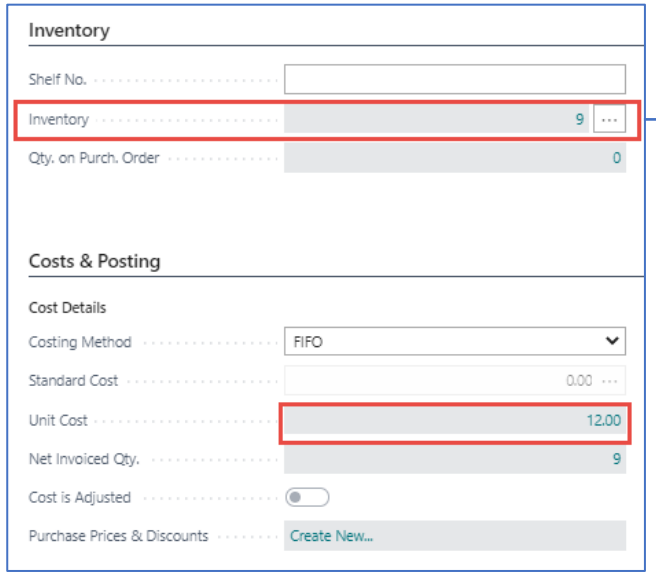
Selling 11 pcs of our item T2_01 by use of item journal

Manage Process Post/Print Line Item Open in Excel More options

Posting Date	Entry Type	Document No.	Item No.	Description	Location Code	Quantity	Unit of Measure Code	Unit Amount	Amount	Discount Amount	Unit Cost	Applies-to Entry	Department Code
7/20/2022	Sale	T00004	T2_01	Ball bearing M6	BLUE	11	PCS	20.00	220.00	0.00	12.00	0	

The selling price is set at 20 USD / pc, and as can be seen, the cost is 12 USD / pc, although one piece of the purchased item should have a cost of 14 USD/pc from the FIFO point view.

COGS should be 10*12+1*14=120+14=134 and cost of remaining 9 pcs should be 260-134=126 and average cost per one item-> 126/9= 14



Edit - Average Cost Calc. Overview - T2_01 Ball bearing M6

Search Find entries... Open in Excel More options

Type	Valuation Date	Item No.	Unit Cost	Cost is Adj...	Entry Type	Quantity	Cost Amount (Expected)
Closing E...	7/20/2022	T2_01	14.22			9	0.00
Increase	7/20/2022	T2_01	12.00		Purchase	10	0.00
Increase	7/20/2022	T2_01	14.00		Purchase	10	0.00
Decrease	7/20/2022	T2_01	12.00		Sale	-11	0.00

BC calculated closing cost as 260-11*12=260-132= 128 and 128/9=14,22

Item ledger entries and Value entries

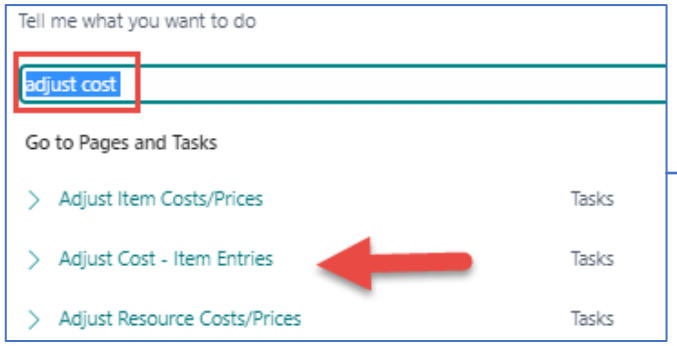
Item Ledger Entries | Search | Entry | Open in Excel | More options

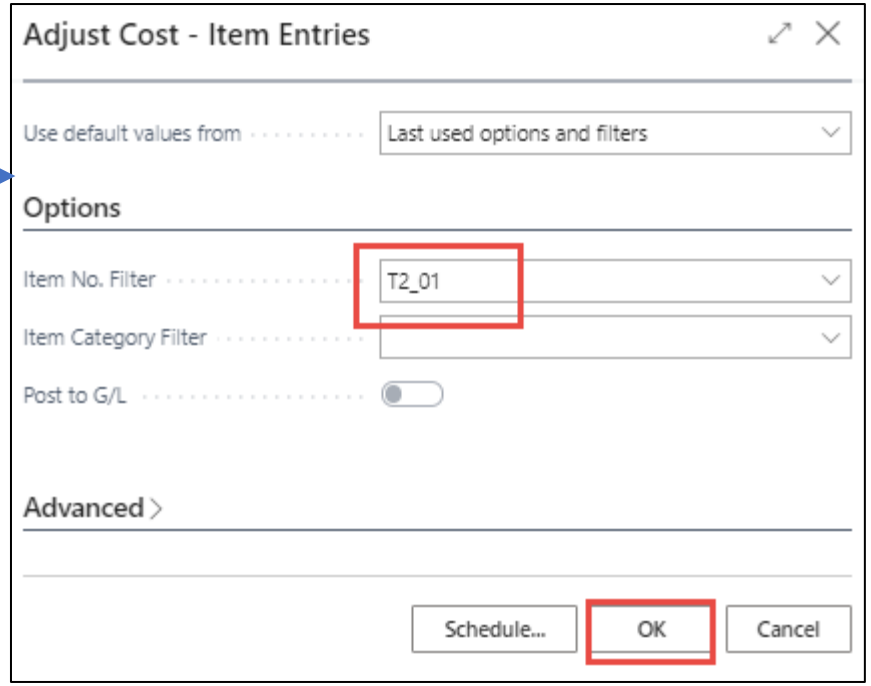
Posting Date	Entry Type	Document Type	Document No.	Item No.	Description	Location Code	Quantity	Invoiced Quantity	Remaining Quantity	Sales Amount (Actual)	Cost Amount (Actual)	Cost Amount (Non-Invtbl.)	Open	Order Type	Entry No.
7/20/2022	Sale		T00004	T2_01		BLUE	-11	-11	0	220.00	-132.00	0.00			347
7/20/2022	Purchase		T00003	T2_01		BLUE	10	10	9	0.00	140.00	0.00	☑		346
7/20/2022	Purchase		T00003	T2_01		BLUE	10	10	0	0.00	120.00	0.00			345

Posting Date	Item Ledger Entry Type	Entry Type	Adj...	Document Type	Document No.	Item Charge No.	Description	Sales Amount (Actual)	Cost Amount (Expected)	Cost Amount (Actual)	Cost Amount (Non-Invtbl.)	Cost Posted to G/L	Item Ledger Entry Quantity	Valued Quantity	Invoiced Quantity	Cost per Unit	Cost per Unit (ACY)	Item No.
7/20/2022	Purchase	Direct Cost			T00003			0.00	0.00	120.00	0.00	0.00	10	10	10	12.00	0.00	T2_01
7/20/2022	Purchase	Direct Cost			T00003			0.00	0.00	140.00	0.00	0.00	10	10	10	14.00	0.00	T2_01
7/20/2022	Sale	Direct Cost			T00004			220.00	0.00	-132.00	0.00	0.00	-11	-11	-11	12.00	0.00	T2_01

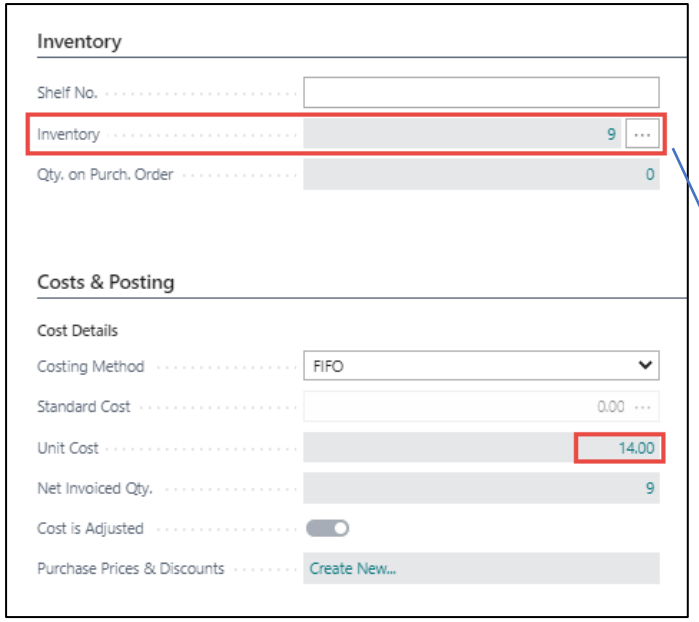
Start inventory adjustment batch

Adjust cost - item entries –manual procedure





Result of inventory cost adjustment



Type	Valuation Date	Item No.	Unit Cost	Cost is Adjusted	Entry Type	Quantity	Cost Amount (Expected)	Cost Amount (Actual)
Closing Entry	7/20/2022	T2_01	14.00	☑		9	0.00	126.00
Increase	7/20/2022	T2_01	12.00	☐	Purchase	10	0.00	120.00
Increase	7/20/2022	T2_01	14.00	☐	Purchase	10	0.00	140.00
Decrease	7/20/2022	T2_01	12.18	☐	Sale	-11	0.00	-134.00

12,18=134/11

Item ledger entries and related value entries

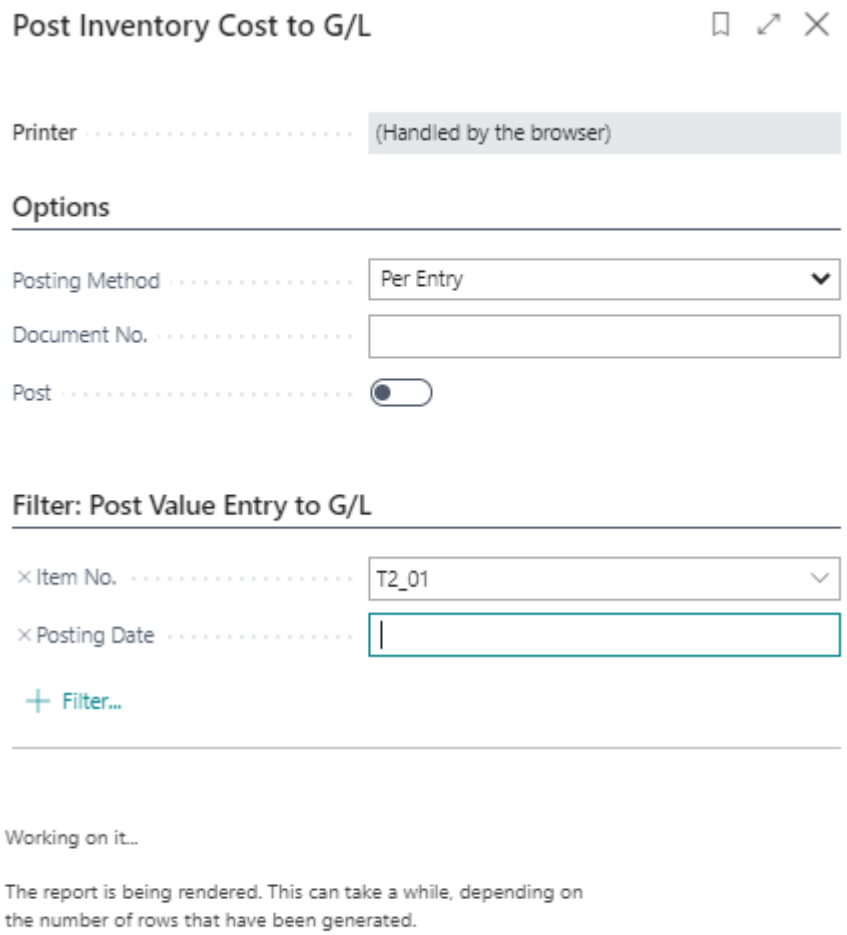
Item Ledger Entries | Search | Entry | Open in Excel | More options

Posting Date	Entry Type	Document Type	Document No.	Item No.	Description	Location Code	Quantity	Invoiced Quantity	Remaining Quantity	Sales Amount (Actual)	Cost Amount (Actual)	Cost Amount (Non-Invtbl.)	Open	Order Type
7/20/2022	Sale		T00004	T2_01		BLUE	-11	-11	0	220.00	-134.00	0.00	☐	
7/20/2022	Purchase		T00003	T2_01		BLUE	10	10	9	0.00	140.00	0.00	☑	
7/20/2022	Purchase		T00003	T2_01		BLUE	10	10	0	0.00	120.00	0.00	☐	

Posting Date	Item Ledger Entry Type	Entry Type	Adj...	Document Type	Document No.	Item Charge No.	Description	Sales Amount (Actual)	Cost Amount (Expected)	Cost Amount (Actual)	Cost Amount (Non-Invtbl.)	Cost Posted to G/L	Item Ledger Entry Quantity	Valued Quantity	Invoiced Quantity	Cost per Unit
7/20/2022	Purchase	Direct Cost	☐		T00003			0.00	0.00	120.00	0.00	0.00	10	10	10	12.00
7/20/2022	Purchase	Direct Cost	☐		T00003			0.00	0.00	140.00	0.00	0.00	10	10	10	14.00
7/20/2022	Sale	Direct Cost	☐		T00004			220.00	0.00	-132.00	0.00	0.00	-11	-11	-11	12.00
7/20/2022	Sale	Direct Cost	☑		T00004			0.00	0.00	-2.00	0.00	0.00	0	-11	0	0.18182

Another value entry has been created, showing the difference of USD 2 between the original cost of 132 and the new adjusted cost of 134. For the unit, it is then 2/11 = 0.18

Post inventory costs to general ledger



Post inventory costs to general ledger

Post Inventory Cost to G/L

Thursday, September 2, 2021
Page 1
TEACHER

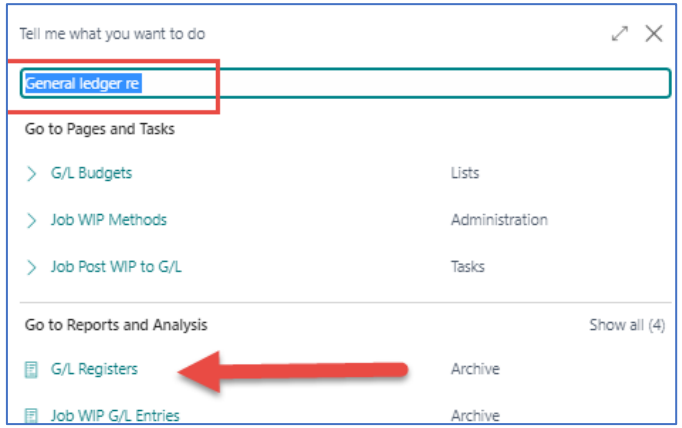
Posted per Entry
CRONUS International Ltd.

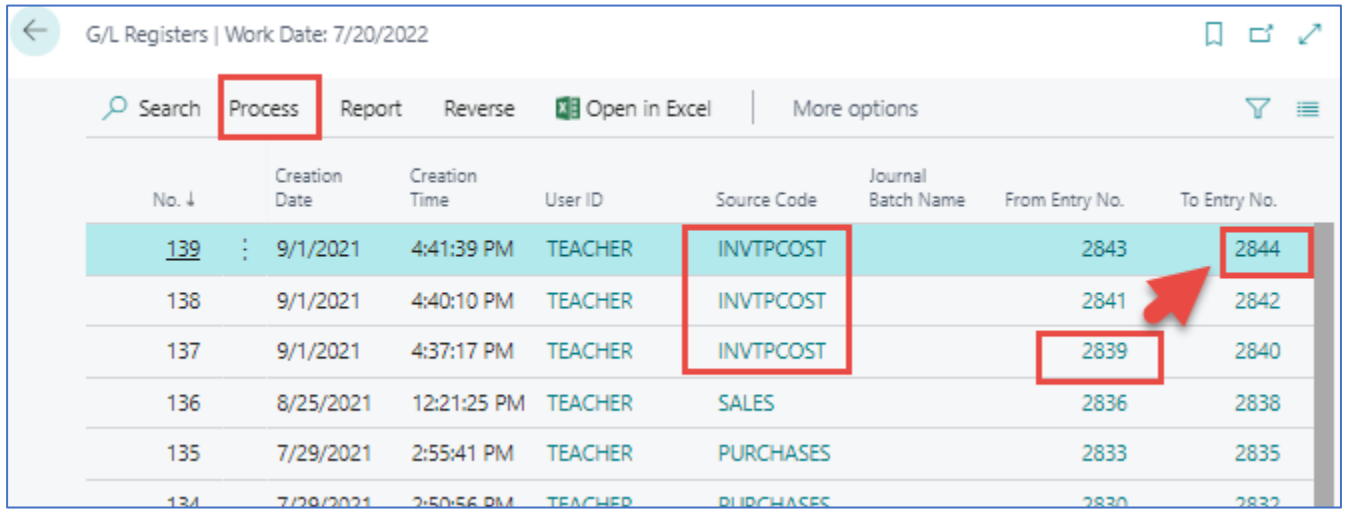
Test Report (Not Posted)

Value Entry: Item No.: T2_01

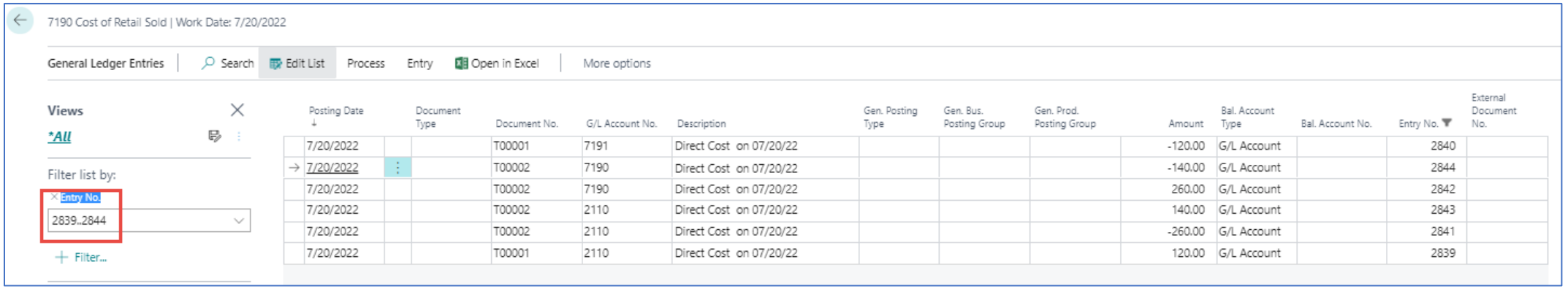
Entry No.	Item Ledger Entry Type	Document No.	Source No.	Inventory Posting Group	Posting Date	COGS	Inventory Adjustment	Direct Cost Applied	Overhead Applied	Purchase Variance	Mfg. Direct Cost Variance	Manufacturing Ovhd Variance	WIP Inventory	Inventory	Expected Cost
Item															
	T2_01	Ball bearing M6													
405	Purchase	T00003		RESALE	07/20/22			-120.00						120.00	No
406	Purchase	T00003		RESALE	07/20/22			-140.00						140.00	No
407	Sale	T00004		RESALE	07/20/22	132.00								-132.00	No
408	Sale	T00004		RESALE	07/20/22	2.00								-2.00	No
			Inventory Cost Posted to G/L			134.00		-260.00						126.00	

Post inventory costs to general ledger





No.	Creation Date	Creation Time	User ID	Source Code	Journal Batch Name	From Entry No.	To Entry No.
139	9/1/2021	4:41:39 PM	TEACHER	INVTPCOST		2843	2844
138	9/1/2021	4:40:10 PM	TEACHER	INVTPCOST		2841	2842
137	9/1/2021	4:37:17 PM	TEACHER	INVTPCOST		2839	2840
136	8/25/2021	12:21:25 PM	TEACHER	SALES		2836	2838
135	7/29/2021	2:55:41 PM	TEACHER	PURCHASES		2833	2835



Posting Date	Document Type	Document No.	G/L Account No.	Description	Gen. Posting Type	Gen. Bus. Posting Group	Gen. Prod. Posting Group	Amount	Bal. Account Type	Bal. Account No.	Entry No.	External Document No.
7/20/2022		T00001	7191	Direct Cost on 07/20/22				-120.00	G/L Account		2840	
7/20/2022		T00002	7190	Direct Cost on 07/20/22				-140.00	G/L Account		2844	
7/20/2022		T00002	7190	Direct Cost on 07/20/22				260.00	G/L Account		2842	
7/20/2022		T00002	2110	Direct Cost on 07/20/22				140.00	G/L Account		2843	
7/20/2022		T00002	2110	Direct Cost on 07/20/22				-260.00	G/L Account		2841	
7/20/2022		T00001	2110	Direct Cost on 07/20/22				120.00	G/L Account		2839	

THE END