

Business Central Introduction

Applying Item Ledger Entries

(ERP=Microsoft Dynamics 365 Business Central)

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Basic principles of Applying

1. Purchase of 10 items xxx at cost 10 at time t
2. Purchase of 10 items of items xxx at cost 20 at time t+1D (later)
3. Selling 12 items of items xxx at time t+2D
4. Cost of Good Sold = $10 \times 10 + 2 \times 20 = 140$ - applied (balanced)
according to FIFO principle
5. FIFO applying of item ledger entries is carried out as in Costing
Method =FIFO and in Costing Method =Average

The settings that allow the example to run smoothly

Inventory Setup

General | Posting | Journal Templates | More options

General

Automatic Cost Posting ·

Expected Cost Posting... ·

Automatic Cost Adjustments · Never

Default Costing Method · FIFO

Average Cost Calc. Type · Item & Location & Variant

Average Cost Period · Day

Cost adjustment will be processed manually

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.

Note that costs must be adjusted before posting to the general ledger.


New item template to create new item

Tell me what you want to do

item template

Go to Pages and Tasks

> Item Templates



Item Templates | Work Date: 2023/02/28

Search + New Manage

Code ↑	Description
CAT ITEMS	⋮ Catalog items

Item template (Creation would be part of the course)

Item Template

Dimensions Copy Template More options

General

Code MIKI_007 No. Series JB

Description James Bond items

Item

Blocked Type Inventory

Sales Blocked Base Unit of Measure .. PCS

Purchasing Blocked Item Category Code ...

Inventory >

Costs & Posting

Cost Details Posting Details

Costing Method FIFO Gen. Prod. Posting Gr... RETAIL

Indirect Cost % 0 Inventory Posting Gr... RESALE

Costs & Posting

Cost Details Posting Details

Costing Method FIFO Gen. Prod. Posting Gr... RETAIL

Indirect Cost % 0 VAT Prod. Posting Gr... VAT10

Inventory Posting Gr... RESALE

Foreign Trade

Tariff No.

Prices & Sales

Profit % 0

Replenishment

Replenishment System .. Purchase

Lead Time Calculation .. 1D

Production

Manufacturing Policy ... Make-to-Stock

Purchase

Vendor No. 10000

Assembly

Assembly Policy Assemble-to-Stock

New item created

Item -list->New->selected template-> OK-> Unit Price = 40

Item		Show more	
No.	<input type="text" value="JB_001"/> ...	Type	<input type="text" value="Inventory"/> ▾
Description	<input type="text" value="Hydraulic unit"/>	Base Unit of Measure	<input type="text" value="PCS"/> ▾
Blocked	<input type="checkbox"/>	Item Category Code	<input type="text"/>
Inventory >		<input type="text" value="0"/>	
Costs & Posting		Show less	
Cost Details		Posting Details	
Costing Method	<input type="text" value="FIFO"/> ▾	Gen. Prod. Posting Group	<input type="text" value="RETAIL"/> ▾
Standard Cost	<input type="text" value="0,00"/> ...	Inventory Posting Group	<input type="text" value="RESALE"/> ▾
Unit Cost	<input type="text" value="0,00"/> ...	VAT Prod. Posting Group	<input type="text" value="VAT10"/> ▾
Indirect Cost %	<input type="text" value="0"/>	Default Deferral Template	<input type="text"/>
Last Direct Cost	<input type="text" value="0,00"/>	Foreign Trade	
Net Invoiced Qty.	<input type="text" value="0"/>	Tariff No.	<input type="text"/>
Cost is Adjusted	<input type="checkbox"/>	Country/Region of Origin Code	<input type="text"/>

Two purchase orders (only purchase line shown before posting by F9)

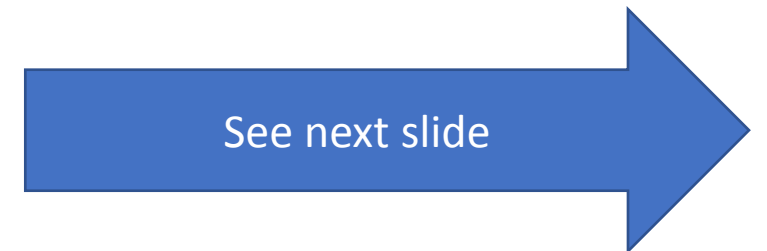
Lines Manage More options											
Type	No.	Item Reference No.	Description	Location Code ↑	Bin Code	Quantity	Reserved Quantity	Unit of Measure Code	Direct Unit Cost Excl. VAT	Line Amount Excl. VAT	
→ Item	JB_001		Hydraulic unit	BLUE		10	-	PCS	10,00	100,00	

Lines Manage More options											
Type	No.	Item Reference No.	Description	Location Code ↑	Bin Code	Quantity	Reserved Quantity	Unit of Measure Code	Direct Unit Cost Excl. VAT	Line Amount Excl. VAT	
→ Item	JB_001		Hydraulic unit	BLUE		10	-	PCS	20	100,00	

2 x F9

See next slide

It could be replaced by item journal as well



Item ledger entries

Document Type	Document No.	Item No. ▼	Descrip...	Departm... Code	Proj... Code	Location Code	Serial No.	Lot No.	Expiration Date	Quantity	Invoiced Quantity	Remaining Quantity	Sales Amount (Actual)	Cost Amount (Actual)
Purchase Receipt	107188	JB_001				BLUE	-	-		10	10	10	0,00	200,00
Purchase Receipt	107187	JB_001				BLUE	-	-		10	10	10	0,00	100,00

Item card JB_001



Inventory

Shelf No.

Created From Catalog Item

Search Description HYDRAULIC UNIT

Inventory 20 ...

Qty. on Purch. Order 0

Costs and Posting

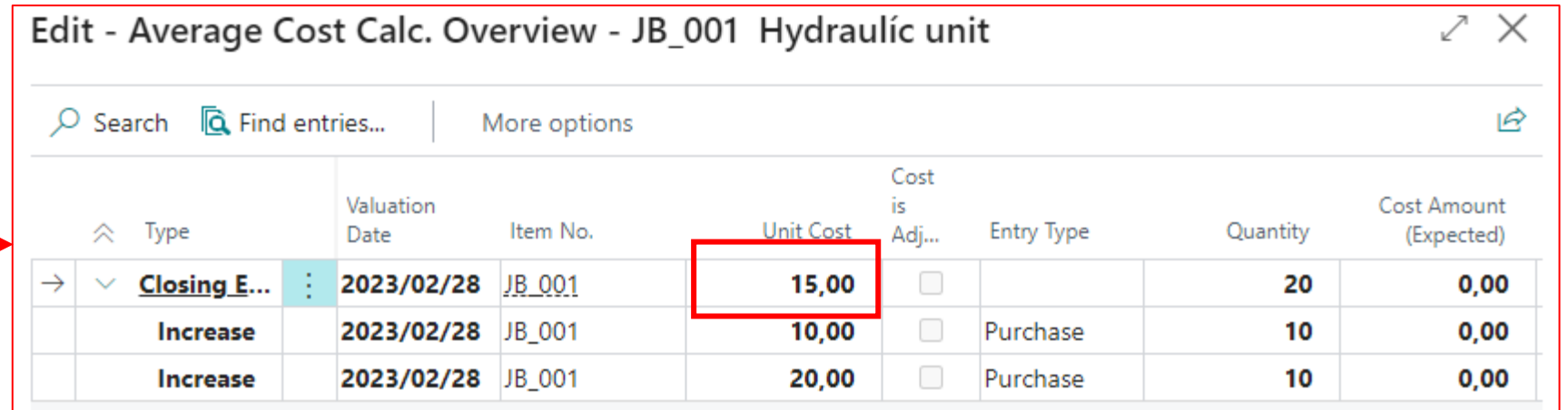
Costs & Posting	
Cost Details	
Costing Method	FIFO
Standard Cost	0,00
Unit Cost	10,00
Indirect Cost %	0
Last Direct Cost	20,00
Net Invoiced Qty.	20
Cost is Adjusted	<input type="checkbox"/>
Cost is Posted to G/L	<input type="checkbox"/>
Purchase Prices & Discounts	Create New...

Click

Adjustment did not take place so far

Average cost calculation overview after Purchases only

Click



Edit - Average Cost Calc. Overview - JB_001 Hydraulic unit									
Type		Valuation Date	Item No.	Unit Cost	Cost is Adj...	Entry Type	Quantity	Cost Amount (Expected)	
→	▼ Closing E...	2023/02/28	JB_001	15,00	<input type="checkbox"/>		20	0,00	
	Increase	2023/02/28	JB_001	10,00	<input type="checkbox"/>	Purchase	10	0,00	
	Increase	2023/02/28	JB_001	20,00	<input type="checkbox"/>	Purchase	10	0,00	

10 x 10 a 10 x 20 =300 and 300/20=15

Selling 12 pcs of our model item (only sales lines shown partly)

Manage	Line	Order	NVR CBL Service			Fewer options								
	Drop Ship...	Assembly Order No.	Purchasing Code	Special Order	Location Code	Quantity	Appl.-to Item Entry	Qty. to Assemble to Order	Reserved Quantity	Appl.-from Item Entry	Unit of Measure Code	Unit Price Excl. VAT	Line Discount %	Line Amount Excl. VAT
:	<input type="checkbox"/>			<input type="checkbox"/>	BLUE	12	0	-	-	0	PCS	40,00		480,00

Push F9 to post Sales order

Item ledger entries (ILE) after selling 12 pcs

Views

*All

Filter list by:

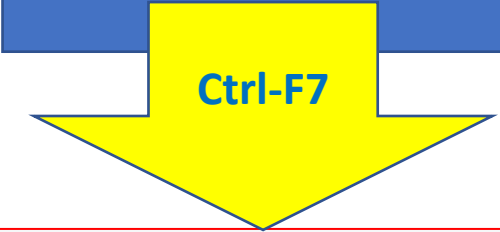
× No.

JB_001

No. ↑	Description	Type	Inventory	Costing Method
JB_001	Hydraulic unit	Inventory	8	FIFO

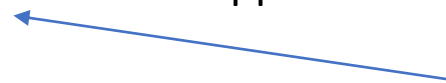


Item card JB_001



Item No. ▼	Descrip...	Departm... Code	Proj... Code	Location Code	Serial No.	Lot No.	Expiration Date	Quantity	Invoiced Quantity	Remaining Quantity	Sales Amount (Actual)	Cost Amount (Actual)
JB_001		SALES		BLUE	-	-		-12	-12	0	480,00	-120,00
JB_001				BLUE	-	-		10	10	8	0,00	200,00
JB_001				BLUE	-	-		10	10	0	0,00	100,00

Cost actual = 120 = 10 x 10 + 2x 10 and it's supposed to be 140 = 10 x 10 + 2x 20



1st ILE 2nd ILE

Unit cost and the Cost & Posting tab are still valued at 10

Average cost calculation overview after subsequent selling of 12 pcs


Type	Valuation Date	Item No.	Unit Cost	Cost is Adjusted	Entry Type	Quantity	Cost Amount (Expected)	Cost Amount (Actual)
Closing Entry	⋮ 2023/02/28	JB_001	22,50	<input type="checkbox"/>		8	0,00	180,00
Increase	⋮ 2023/02/28	JB_001	10,00	<input type="checkbox"/>	Purchase	10	0,00	100,00
Increase	2023/02/28	JB_001	20,00	<input type="checkbox"/>	Purchase	10	0,00	200,00
Decrease	2023/02/28	JB_001	10,00	<input type="checkbox"/>	Sale	-12	0,00	-120,00

100+200=300 = original cost after two purchases

300-12x10=180 = new cost after selling 12 pcs (used average cost)

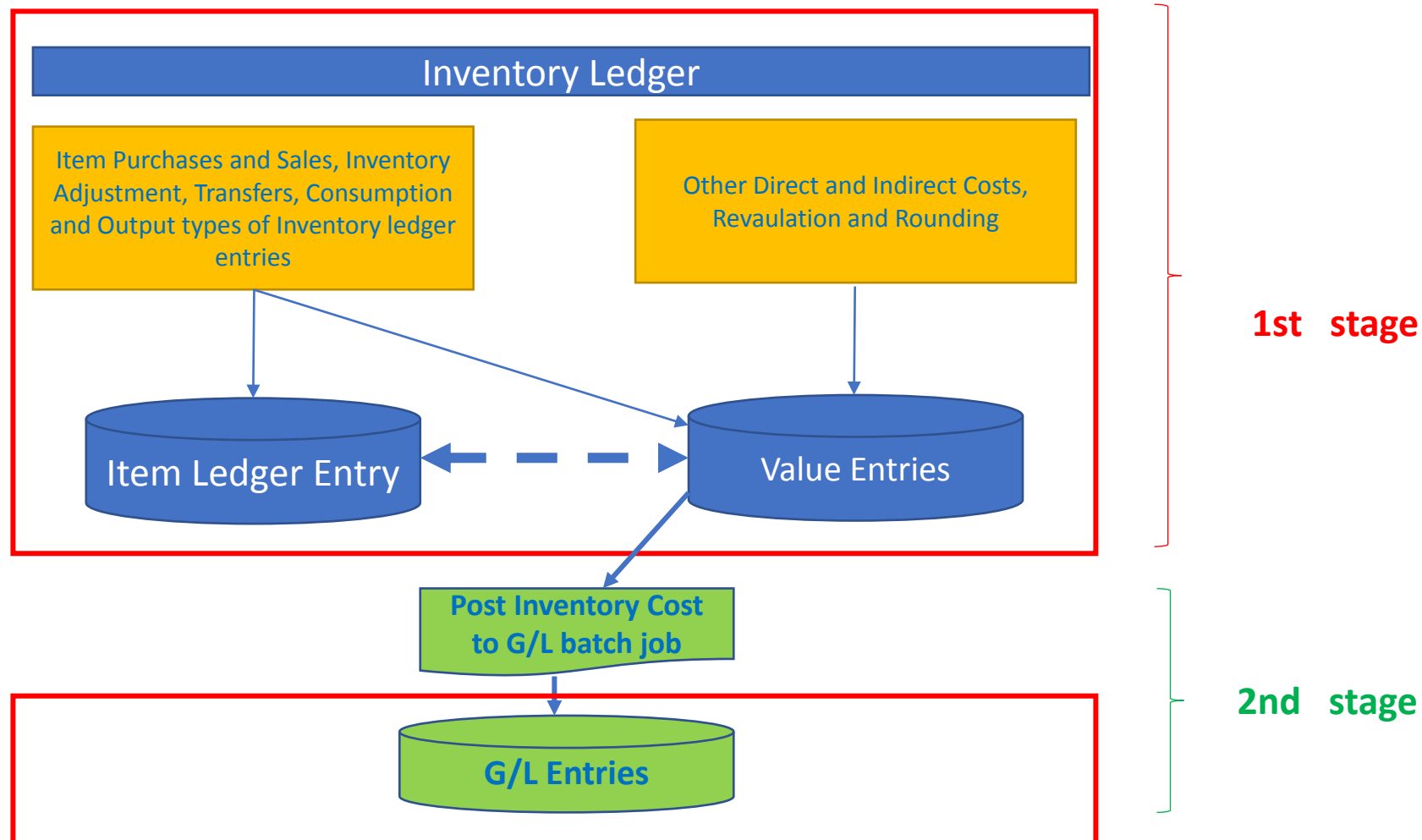
180/8=22,50 = average cost after selling 12 pcs

10+10-12 = 8



Inventory Cost Adjustment principles

The posting process takes two stages



Manual cost adjustment 1st stage

Tell me what you want to do

coast adj

Go to Pages and Tasks

> Adjust Cost - Item Entries

Adjust Cost - Item Entries

Use default values from Last used options and filters

Options

Item No. Filter JB_001

Item Category Filter

Post to G/L

Item card after cost adjustment

Costs & Posting	
Cost Details	
Costing Method	FIFO ▾
Standard Cost	0,00 ...
Unit Cost	20,00
Indirect Cost %	0
Last Direct Cost	20,00
Net Invoiced Qty.	8
Cost is Adjusted	<input type="checkbox"/>
Cost is Posted to G/L	<input type="checkbox"/>

Click



The second item (same number) was purchased for 20 and has not yet been balanced by other sales

Item card after cost adjustment

Edit - Average Cost Calc. Overview - JB_001 Hydraulic unit												
Search Find entries... More options												
Type	Valuation Date	Item No.	Unit Cost	Cost is Adjusted	Entry Type	Quantity	Cost Amount (Expected)	Cost Amount (Actual)				
→	↕	Closing Entry	2023/02/28	JB_001	20,00	<input checked="" type="checkbox"/>		8	0,00	160,00		
		Increase	2023/02/28	JB_001	10,00	<input type="checkbox"/>	Purchase	10	0,00	100,00		
		Increase	2023/02/28	JB_001	20,00	<input type="checkbox"/>	Purchase	10	0,00	200,00		
		Decrease	2023/02/28	JB_001	11,67	<input type="checkbox"/>	Sale	-12	0,00	-140,00		

$100+200=300$ =original cost after two purchases

$300-(10 \times 10 + 2 \times 20)= 300-140 =160$ = after new cost adjustment

$160/8=20$ = new cost

Cost of Good Sold = $140/12=11,67$ per one pc of JB_001




The sale was carried out for this amount

Posting inventory cost to General Ledger

Tell me what you want to do

G/L Po

On current page (Sales Order Processor)

 **Sales Journal**
Open a sales journal where you can batch post sales tra

Go to Pages and Tasks

[> Job Post WIP to G/L](#)

Go to Reports and Analysis

[Post Inventory Cost to G/L](#)



Post Inventory Cost to G/L

Printer (Handled by the browser)

Options

Posting Method **Per Entry**

Document No.

Post

Filter: Post Value Entry to G/L

× Item No. **JB_001**

× Posting Date

Results

Post Inventory Cost to G/L

Thursday, 09 February 2023

Posted per Entry
CRONUS International

Page 1
NAVERTICA

Value Entry: Item No.: JB_001

Entry No. Item	Item Ledger Entry Type	Document No.	Source No.	Inventory Posting Group	Posting Date	GOGS	Inventory Adjustment	Direct Cost Applied	Overhead Applied	Purchase Variance	Mfg. Direct Cost Variance	Manufacturing Ovhd Variance	WIP Inventory	Inventory	Expected Cost
	JB_001	Hydraulic unit													
1178	Purchase	108158	10000	RESALE	23/02/28			-100,00						100,00	No
1179	Purchase	108159	10000	RESALE	23/02/28			-200,00						200,00	No
1180	Sale	103211	10000	RESALE	23/02/28	120,00								-120,00	No
1181	Sale	103211	10000	RESALE	23/02/28	20,00								-20,00	No
						Inventory Cost Posted to G/L								140,00	
								-300,00						160,00	

G/L Registers->Archive

G/L Registers | Work Date: 2023/02/28

Search Process Report Reverse More options

No. ↓	Cre Da	G/L Account No. ↓	Description	Department Code	Project Code	Additional- Currency Amount	Gen. Posting Type	Gen. Bus. Posting Group	Gen. Prod. Post... Gro...	Amount
603	20	7191	Direct Cost 10000 on 23/02/28			0,00				-200,00
602	20	7191	Direct Cost 10000 on 23/02/28			0,00				-100,00
		7190	Direct Cost 10000 on 23/02/28	SALES		0,00				20,00
		7190	Direct Cost 10000 on 23/02/28	SALES		0,00				120,00
		2110	Direct Cost 10000 on 23/02/28	SALES		0,00				-20,00
		2110	Direct Cost 10000 on 23/02/28	SALES		0,00				-120,00
		2110	Direct Cost 10000 on 23/02/28			0,00				200,00
		2110	Direct Cost 10000 on 23/02/28			0,00				100,00

Item card

Costs & Posting

Cost Details

Costing Method	FIFO	▼
Standard Cost		0,00 ...
Unit Cost		20,00
Indirect Cost %		0
Last Direct Cost		20,00
Net Invoiced Qty.		8

Cost is Adjusted

Cost is Posted to G/L

Purchase Prices & Discounts [Create New...](#)

**Another example
(use of item journals)**

Access to Item Journal

Tell me what you want to do

Item jou

Go to Pages and Tasks

> **Item Journals**



Item Journals 🔖 📄 ↶

Batch Name DEFAULT ...

Manage Process Post/Print Line Item | Actions Related Fewer 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
2023/02/01 📅	Purchase	*				0		0,00	0,00	0,00	0,00	0

Applying Item Ledger Entries

- Purchase of the brand new item by use of item journal with different Cost Amounts

Posting Date	Entry Type	Document No.	Item No.	Description	Location Code	Quantity	Unit of Measure Code	Unit Amount	Amount	Discount Amount	Unit Cost
2/1/2022	Purchase	T00006	80101	15" 1501 FP Flat Panel	BLUE	10	PCS	12.00	120.00	0.00	12.00
2/1/2022	Purchase	T00006	80101	15" 1501 FP Flat Panel	BLUE	10	PCS	14.00	140.00	0.00	14.00

Preparation of data for modelling
the applying of item ledger entries with different acquisition costs



Posting Date	Entry Type	Docu... Type	Document No.	Item No.	Descri...	Lot No.	Depa... Code	Proj... Code	Locati... Code	Quantity	Invoiced Quantity	Remaining Quantity	Sales Amount (Actual)	Cost Amount (Expected)	Cost Amount (Actual)
2/1/2022	Purchase	T00006	80101			-			BLUE	10	10	10	0.00	0.00	140.00
2/1/2022	Purchase	T00006	80101			-			BLUE	10	10	10	0.00	0.00	120.00

Item card and average cost calculation overview

Costs & Posting

Cost Details

Costing Method FIFO

Standard Cost 11.70

Unit Cost

Net Invoiced Qty.

Cost is Adjusted

Purchase Prices & Discounts ...

Edit - Average Cost Calc. Overview - 80101 15" 1501 FP Flat Panel

Search Find entries... Open in Excel More options

Type	Valuation Date	Item No.	Location Code	Unit Cost	Cost is Adj...	Entry Type
→ Closing Entry	2/1/2022	80101	BLUE	13.00	<input type="checkbox"/>	
Increase	2/1/2022	80101	BLUE	12.00	<input type="checkbox"/>	Purchase
Increase	2/1/2022	80101	BLUE	14.00	<input type="checkbox"/>	Purchase

Selling 11 pcs of our item 80101 by Item journal

Posting Date	Entry Type	Document No.	Item No.	Description	Location Code	Quantity	Unit of Measure Code	Unit Amount	Amount	Discount Amount	Unit Cost
2/1/2022	Sale	T00007	80101	15" 1501 FP Flat Panel	BLUE	11	PCS	25.10	276.10	0.00	12.00



Posting Date	Entry Type	Docu... Type	Document No.	Item No.	Descri...	Lot No.	Depa... Code	Proj... Code	Locati... Code	Quantity	Invoiced Quantity	Remaining Quantity	Sales Amount (Actual)	Cost Amount (Expected)	Cost Amount (Actual)
2/1/2022	Sale		T00007	80101		-			BLUE	-11	-11	0	276.10	0.00	-132.00
2/1/2022	Purchase		T00006	80101		-			BLUE	10	10	9	0.00	0.00	140.00
2/1/2022	Purchase		T00006	80101		-			BLUE	10	10	0	0.00	0.00	120.00

Cost of 20 pcs = (10 x 14) + (10 x 12) = 120 = 260

FIFO principle od applying : 260 - 10x12 - 1x14 = 126 -> Average cost should be = **126/9=14** but see next slide

BC calculated cost as 11*12=132.



Item card and average cost calculation overview

Costs & Posting	
Cost Details	
Costing Method	FIFO
Standard Cost	11.70
Unit Cost	12.00
Net Invoiced Qty.	9
Cost is Adjusted	<input type="checkbox"/>
Purchase Prices & Discounts	Create New...

It must be adjusted by use of adjust cost-item entries batch job !

Unit Cost	Cost is Adjusted	Entry Type	Quantity	Cost Amount (Expected)	Cost Amount (Actual)
14.22	<input type="checkbox"/>		9	0.00	128.00
12.00	<input type="checkbox"/>	Purchase	10	0.00	120.00
14.00	<input type="checkbox"/>	Purchase	10	0.00	140.00
12.00	<input type="checkbox"/>	Sale	-11	0.00	-132.00

$$260 - 132 = 128$$

$$128 / 9 = 14,22 \text{ !!!}$$

Cost of 20 pcs = 140 + 120 = **260** (see previous slide)

FIFO principle : $260 - 10 \times 12 - 1 \times 14 = 126$ -> Average cost should be = $126 / 9 = 14$

BC calculated cost as $11 \times 12 = 132$.

discrepancy

Adjust cost - item entries (manually)

Adjust Cost - Item Entries ↗ ✕

Use default values from Last used options and filters ▼

Options

Item No. Filter 80101 ▼

Item Category Filter ▼

Post to G/L

Advanced >

Costs & Posting

Cost Details

Costing Method FIFO

Standard Cost 11.70

Unit Cost 14.00

Net Invoiced Qty. 9

Cost is Adjusted

Purchase Prices & Discounts [Create New...](#)

Unit Cost	Cost is Adjusted	Entry Type	Quantity	Cost Amount (Expected)	Cost Amount (Actual)
14.00	<input checked="" type="checkbox"/>		9	0.00	126.00
12.00	<input type="checkbox"/>	Purchase	10	0.00	120.00
14.00	<input type="checkbox"/>	Purchase	10	0.00	140.00
12.18	<input type="checkbox"/>	Sale	-11	0.00	-134.00

Nulla dies sine gaudium !!!

I SEE A TOY! CAN YOU GO GET THAT TOY?



SCOTT McBRIDE/UNIVERSAL UTAH

AT THE HUGGIES DIAPER TESTING FACILITY

8/28
C. ...

End of Business Central introduction IV