DynamicsCon LIVE

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DUG

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Session Notes

- We'll cover a lot of material in 50 minutes.
- Recognition that I stand between you and cocktails.

- Everything you sell has a cost.
- During this session, we'll talk about where that cost comes from.

Agenda

- **Costs for Inbound Transactions**
- **Costs for Outbound Transactions**
- **"Adjust Cost – Item Entries" Function**
- **Average Costing**
- **Changing Costs**

Inbound vs. Outbound Transactions

INBOUND – Transaction which creates inventory

- Purchases
- Production Output
- Assembly Output
- Positive Adjustments

OUTBOUND – Transaction which uses inventory

- Sales
- Production Consumption
- Assembly Consumption
- Negative Adjustments

Costing Methods

- **FIFO (First In First Out)**

- **Standard**

- **Average**

We'll focus on these three during this session.

- **LIFO (Last In First Out)**

- **Specific**

How Inbound Inventory is Initially Costed

Transaction	FIFO	Standard	Average
Purchase	Purchase Cost	Standard	Purchase Cost
Produced	Sum of Consumption and Capacity	Standard	Sum of Consumption and Capacity
Adjusted	Unit Cost	Standard	Unit Cost

Purchase Price Variances are also posted with Standard Costed Items

Components of Costs

Purchases:

- **Purchase Cost from Vendor**
- **+/- Charge(Item)**
- **+/- Revaluations**

Note: Charge(Item) transactions do NOT change cost for Standard costed items.

Components of Costs

Production:

- **Sum of Consumption and Capacity**
- **+/- Revaluations**
- **+/- Adjustments**

Components of Costs

Adjustment:

- **Unit Cost of Journal Line**
- **+/- Revaluations**
- **+/- Adjustments**

Item Ledger Entry vs. Value Entry

Each of the events noted above creates an Item Ledger Entry AND a Value Entry

- Item Ledger Entries create the quantity layer.

- Value Entries carry the various costs which roll up to "Cost Amount (xxx)" fields on the Item Ledger Entry

How Outbound Inventory is Costed

Transaction	FIFO	Standard	Average
Purchase	Layer	Standard Layer	Period Average
Produced	Layer	Standard Layer	Period Average
Adjusted	Layer	Standard Layer	Period Average

For Average Costing, the Period is Defined in the Inventory Setup Page

Layers

- **Each Inbound transaction creates a new Item Ledger Entry transaction (or "Layer").**

- **Each Layer has its own cost value.**

Item Ledger Entries

🔍 Search Entry | More options

Posting Date	Entry Type	Document Type	Document No.	Item No.	Quantity	Remaining Quantity	Cost Amount (Actual)
4/11/2022	Positive Adjmt.		TEST01	1000	1	1	110.00
4/11/2022	Positive Adjmt.		TEST01	1000	1	1	100.00

"Standard" Layers

- **Standard Costed Items can also have layers.**

- **When changing the standard cost for an item, you do NOT have to change the cost of existing inventory.**

- **Changing the standard cost for an item only impacts new inbound transactions.**

- **You can then choose whether to revalue existing inventory to the new standard or leave it alone (thus creating "Standard Layers".**

Outbound Applications

- **Automatic – System will relieve inventory quantity (and the associated cost) based on FIFO, unless…**

- **Fixed – Assigning the outbound entry to a specific inbound entry.**
  - Using "Applied-to Entry No." field
  - Drop Shipments
  - Return / Corrections

Application also impacted by FEFO setting, locations, lots, serialization, etc.

COGS – Sales Line vs. Value Entry

- **At Sales Order entry, system does not know what layer will be used, so Unit Cost/Standard Cost will be entered on the Sales Line and WILL NOT CHANGE.**

- **At shipment, the cost of the actual layer shipped will be posted to the Value Entry and G/L Entry as COGS.**
  - Automatic vs. Fixed Application Rules

For COGS reporting, NEVER use the Unit Cost on the sales line. Use the Value Entry table instead.

Adjust Cost – Item Entry

The main purpose of cost adjustment is to forward cost changes from cost sources to cost recipients, according to an item's costing method, to provide correct inventory valuation.

An item can be sales invoiced before it has been purchase invoiced, so that the recorded inventory value of the sale does not match the actual purchase cost. Cost adjustment updates COGS for historic sales entries to ensure that they match the costs of the inbound transactions to which they are applied.

Adjust Cost – Item Entry Functions

- **Forward cost changes for inbound entries to applied outbound entries.**

- **Production Orders:**
  - Clears WIP account
  - Posts variances for standard-costed items.

Costing Flow

Items Purchased

Adjusting costs here...

Items Consumed
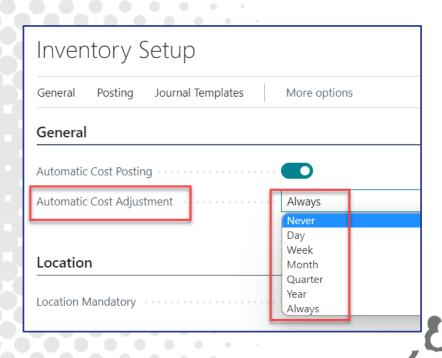
Items Output

Items Sold

... impacts costs here.

When Does Adjust Cost – Item Entry Run

- **Manually**

- **Through the Job Queue**

- **Automatically upon posting**
  - Frequency triggered based on settings in the Inventory Setup

Adjust Cost – Item Entry Notes

- **Running Adjust Cost – Item Entries impacts other users ability to post. Select appropriate setting to:**
    1. Minimize user disruption, and,
    2. Keep costs up-to-date

- **Frequency relates to period between current work date of adjusting transaction and the posting date of the original transaction.**

But…

Adjust Cost – Item Entry Notes

- **Running Adjust Cost – Item Entries either manually or through the job queue will always catch up costs even if the new transaction is outside the frequency window.**

- **The Inventory Setup setting only impacts whether the Adjust Cost – Item Entry program runs automatically upon posting.**

Adjust Cost – Item Entry Dates

- **Adjustment will always "try" and post using the posting date of the original Value Entry posting date.**

- **If that date is unavailable, the routine will use the first available posting date.**

- **Unavailability of the date could be due to:**
  - Inventory Period is closed, or,
  - "Allowed" posting date on G/L Setup page is closed.

Function will also use the "Allowed" dates on the User Setup page to determine whether user is allowed to post using the calculated posting date.

Posting Date Error Example

- **User is attempting to post a Charge(Item) line against a purchase receipts using a posting date of 9/10/22.**

- **Automatic Cost Adjustment is set to "Always"**

- **Posting Date of original transaction was 7/15/22.**

- **G/L "Allowed" posting date range is 8/1/22 to 9/30/22.**

- **User Setup "Allowed" posting date range is 9/1/22-9/30/22.**

Posting Date Error Example

- **Posting date of new transaction is 9/10/22**

- **Posting date of original Value Entry is 7/15/22**

- **Since July is closed, first available posting date is 8/1/22**
  - Based on General Ledger Setup

- **User will receive a posting date error since the user's allowed posting date range will not allow posting on 8/1/22 even though the transaction the user is attempting to post has a posting date of 9/10/22.**

Average Costing

- **Basic Concept: Average Costing calculates the average cost of inbound entries for the time period selected in the Inventory Setup page and applies that cost to outbound entries posted for that time period.**

- **Time Period Options Include:**
  - Day
  - Week
  - Month
  - Accounting Period

Average Cost Example

- **Each receipt during the period changes the average cost.**

- **Prior period average becomes cost for beginning inventory for following period.**

- **Unit Cost on the Sales Line will depend on when the Sales Order was entered.**

Before Adjustment:

Period	Activity	Qty	Cost	Ext. Cost
1	Receipt 1	10.00	10.00	100.00
	Receipt 2	10.00	9.00	90.00
	Adjustment			0.00
		20.00	9.50	190.00
	Sale 1	-5.00	9.50	-47.50
		15.00	9.50	142.50
2	On Hand	15.00	9.50	142.50
	Receipt 3	10.00	10.00	100.00
		25.00	9.70	242.50
	Sale 2	-5.00	9.70	-48.50
		20.00	9.70	194.00

Average Cost Example

- **When changes to the cost of an inbound entry are introduced, the average cost for the period changes which has a cascading impact on all subsequent period and posted entries.**

Average Cost Example

Period	Activity	Before Adjustment: Qty	Cost	Ext. Cost	After Adjustment: Qty	Cost	Ext. Cost	Ext. Cost Difference	
1	Receipt 1	10.00	10.00	100.00	10.00	10.00	100.00	0.00	
	Receipt 2	10.00	9.00	90.00	10.00	9.00	90.00	0.00	
	Adjustment			0.00		5.00	5.00	5.00	Adjustment
		20.00	**9.50**	**190.00**	**20.00**	**9.75**	**195.00**	**5.00**	
	Sale 1	-5.00	9.50	-47.50	-5.00	9.75	-48.75	-1.25	Increase in COGS
		15.00	**9.50**	**142.50**	**15.00**	**9.75**	**146.25**	**3.75**	Increase in Inventory Value
2	On Hand	15.00	9.50	142.50	15.00	9.75	146.25	3.75	Rollforward value increase
	Receipt 3	10.00	10.00	100.00	10.00	10.00	100.00	0.00	
		25.00	**9.70**	**242.50**	**25.00**	**9.85**	**246.25**	**3.75**	
	Sale 2	-5.00	9.70	-48.50	-5.00	9.85	-49.25	-0.75	Increase in COGS
		20.00	**9.70**	**194.00**	**20.00**	**9.85**	**197.00**	**3.00**	Increase in Inventory Value

Average Cost Example

- **Adjustment when using Average Cost can result in NUMEROUS adjusting entries affecting COGS and Inventory Value.**

- **This is why fixing a valuation issue when using average costing is EXTREMELY difficult.**

- **With Average Costing, the "layer" is the period layer specified in Inventory Setup**

Changing Inventory Costs - FIFO

Item Card:

- **Can't change Unit Cost or Standard Cost. Last Direct Cost Only.**

- **Can use Calc. Production Std. Cost, but system does not use this.**

- **Standard Cost Worksheet**

Inventory Value:

- **Charge(Item) – Receipts only.**

- **Revaluation Journal**

Changing Inventory Costs - Standard

Item Card:

- **Manually change Standard Cost and Last Direct Cost.**

- **Use Calc. Production Std. Cost.**

- **Standard Cost Worksheet**

Inventory Value:

- **Revaluation Journal**

Changing Inventory Costs - Average

Item Card:

- **Can't change Unit Cost or Standard Cost. Last Direct Cost Only.**

- **Can use Calc. Production Std. Cost, but system does not use this.**

- **Standard Cost Worksheet**

Inventory Value:

- **Charge(Item) – Receipts only.**

- **Revaluation Journal**

Good Luck ☺

Revaluation Journal

- **Used to revalue "Invoiced" inventory.**

- **Allows revaluation of remaining quantity OR revaluation of original inbound quantity (using Applied-to functionality).**

- **Works across all costing methods.**

Standard Cost Worksheet

- **Use worksheet to set new costs for items.**

- **Produced items can include updated cost of BOM items and capacity work/machine centers to calculate new cost.**

- **Use "Suggest Item (or Capacity) Standard Costs" to make suggested changes which can be manually adjusted.**

- **Implement changes when ready:**
    - Makes changes to Item cards, and,
    - Prepares Revaluation Journal (posting is optional)

Summary

- **Costs for Inbound Transactions**
- **Costs for Outbound Transactions**
- **"Adjust Cost – Item Entries" Function**
- **Average Costing**
- **Changing Costs**

Thanks for Attending

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