Valuation of Materials using FIFO Method

Applies to:

4.7EE, ECC 6.0 For more information, visit the [Enterprise Resource Planning homepage](.).

Summary

This article explains the Configuration and Process steps involved in valuating inventory at the period end.

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Author Bio

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Introduction

In Majority of the cases business entities consumes or issues Materials randomly to production (except in cases where expiry dates are monitored strictly) and at the period end the inventory is valuated by taking the physical stock in hand and arriving at the purchase cost of these inventories.

This is applicable for cases where business follows Moving average price for their materials.

If you don't use FIFO method at the period end then the moving average price of the inventory may not be reflecting a correct value which can effect the "True and Fair" concept when preparing the balance sheet.

Objective

The objective of this article is to explain the configuration related activities to be maintained, Master data activities and the business process.

Business Requirement

To value inventory on a FIFO method when using moving average price as the price control in the material master.

Solution/Approach

This is broadly divided and discussed as

- Configuration Related Activity
- Master Data Related Activity
- Business Process

Configuration Related activities

Activate/Deactivate LIFO/FIFO Valuation

Use

In this step, you define whether you want to use LIFO valuation or FIFO valuation in your company.

You can use a combination of both procedures.

Activities

Activate LIFO or FIFO valuation.

Recommendation

It is recommended to activate LIFO and FIFO valuation, irrespective of which procedure you want to use while doing valuation at period end.

Procedure

Access the activity using one of the following navigation options:

IMG Menu	SPRO→ *Materials Management*→ *Valuation and Account Assignment*→ *Balance Sheet Valuation Procedures* Configure LIFO/FIFO Methods→ *General Information*→ *Activate/Deactivate LIFO/FIFO Valuation*
Transaction Code	**OMWE**
User Action And Values	Activate the required Area. This will not generate any request as it impacts other functions. Maintain the Customizing function manually in each of the target systems.
Result	LIFO/FIFO Valuation activated.

Define LIFO/FIFO Valuation Levels

Use

In this step, you define whether you perform LIFO/FIFO valuation at **company code** level or at **valuation area** level.

You can set this separately for LIFO valuation and FIFO valuation.

Activities

Define the valuation level for LIFO and FIFO valuation.

Note: After you have defined the valuation level, you can no longer change it via the setting in Customizing. Changing the valuation level requires changing the database. If you want to change the valuation level, you have to call up a program that changes the data.

Procedure

Access the activity using one of the following navigation options:

IMG Menu	SPRO→ Materials Management→ Valuation and Account Assignment→ Balance Sheet Valuation Procedures Configure LIFO/FIFO Methods→ General Information→ Define LIFO/FIFO Valuation Levels
Transaction Code	**OMWL**
User Action And Values	Select the Setting that is appropriate to you. Valuation area is at Plant or company code level which you set in transaction code OX14. ⊙ Mean receipt price at valuation area level
Result	*LIFO/FIFO Valuation Levels defined*

Define LIFO/FIFO Relevant Movement Types

Use

Here you define the relevant movement types which are to be considered by the system while doing the LIFO/FIFO valuation. All movement types selected by you as relevant are taken into account when the system determines the values.
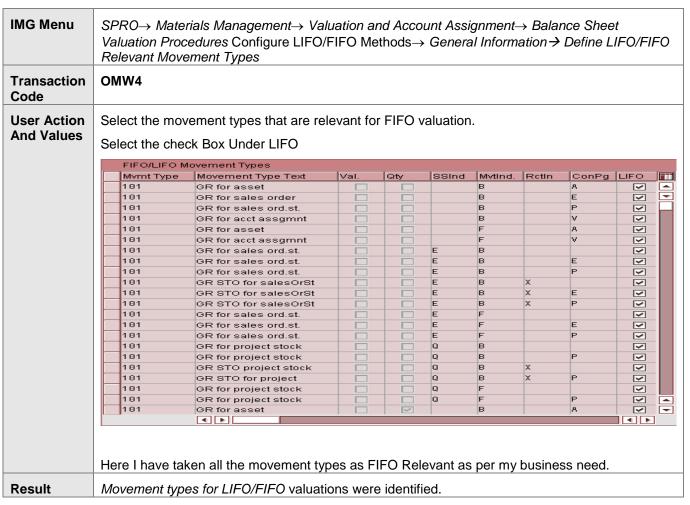
Activities
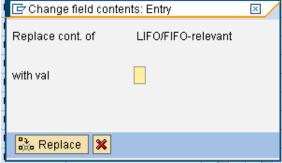
All the movement types are listed here by default with their properties. Select relevant movement types as per your business need and update with the value.

Procedure

Access the activity using one of the following navigation options:

Tip: Updating the LIFO check box for several selected items is tedious if you do one by one. After selecting the movement types, access Edit→Change field contents and the following popup will come.

IMG Menu	*SPRO→ Materials Management→ Valuation and Account Assignment→ Balance Sheet Valuation Procedures* Configure LIFO/FIFO Methods→ *General Information→ Define LIFO/FIFO Relevant Movement Types*
Transaction Code	**OMW4**
User Action And Values	Select the movement types that are relevant for FIFO valuation. Select the check Box Under LIFO Here I have taken all the movement types as FIFO Relevant as per my business need.
Result	*Movement types for LIFO/FIFO* valuations were identified.

Put X for all those which are relevant for LIFO/FIFO and select

Define LIFO/FIFO Methods

Use

Model 01 is currently the only one defined for FIFO valuation.

The part of a FIFO method that you can freely define consists of the following aspects:

- Is the value to be determined based on receipts aggregated on a monthly basis or based on single receipts?

The differences are explained in an example. If you are determining values on the basis of single receipts, you must generate a document extract prior to FIFO valuation.

- Which stock do you want to valuate using the FIFO method? You have the following options:

  ❖ GJE – End of the last fiscal year
  ❖ VVM – End of the posting period before last
  ❖ VOM – End of the last posting period
  ❖ CUR – Present

You can update the results of FIFO valuation in the database with reference to the FIFO method used as the basis. Once the results are updated, it is no longer possible to change the entry for the FIFO method affected in Customizing.

Procedure

Access the activity using one of the following navigation options:

IMG Menu	SPRO→ Materials Management→ Valuation and Account Assignment→ Balance Sheet Valuation Procedures Configure LIFO/FIFO Methods→ General Information→ Define LIFO/FIFO Methods
Transaction Code	**OMWP**
User Action And Values	The following were defined | ZFIF00	01	☑	GJE
ZFIF01	01	☐	GJE
ZFIF02	01	☑	CUR
ZFIF03	01	☐	CUR	 Procedure Model for Balance Sheet Valuation (LIFO/FIFO) You can choose '01' - FIFO valuation of individual materials **GJE** LIFO: Compare layer total w/ prev. year; FIFO: prev. year **CUR** LIFO: Compare layer total w/ curr. stock; FIFO: curr. stock
Result	*Movement types for LIFO/FIFO* valuations were identified.

Periodic Receipts – Single Receipts and FIFO Valuation Based on Period Receipts

Please refer to the following help link for a detailed understanding.

http://help.sap.com/saphelp_erp60_sp/helpdata/en/3f/ce913879c8cf29e10000009b38f889/frameset.htm

Configure FIFO Valuation Areas

Depending on the setting for the FIFO valuation level, the FIFO valuation area is either the **company code** or the **valuation area**.

The base year is the fiscal year during which FIFO valuation is run for the first time.

Activities

Enter all FIFO valuation areas that FIFO valuation is to be performed in. Specify a suitable base year for each one.

After this, it is no longer possible to change the entry for the FIFO method affected in Customizing.

Procedure

Access the activity using one of the following navigation options:
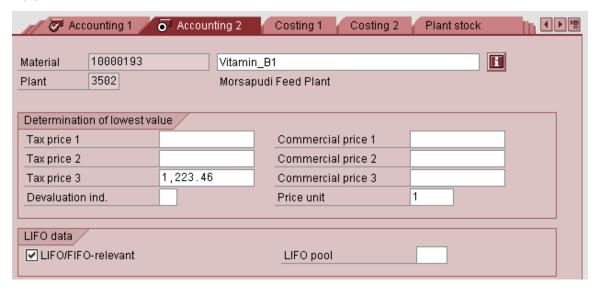
IMG Menu	*SPRO→ Materials Management→ Valuation and Account Assignment→ Balance Sheet Valuation Procedures* Configure LIFO/FIFO Methods→ *Configure FIFO Valuation Areas*
Transaction Code	**OMWT**
User Action And Values	Assign All the company codes/plants as per your business needs here. | FIFO Valuation Level	Base Year
0001	1994
3001	2006
3021	2006
3022	2006
3451	2006
3456	2006
3501	2006
3502	2006
3503	2006
3504	2006
3601	2006
3901	2006
4001	2006
4101	2006
4451	2006
4455	2006
4509	2006
4901	2006
4902	2006
4903	2006
4904	2006	
Result	FIFO Valuation areas were maintained

Master Data Related

Settings in material master

You need to select the material as LIFO/FIFO relevant in MM01 transaction in Accounting 2 tab under LIFO Data.
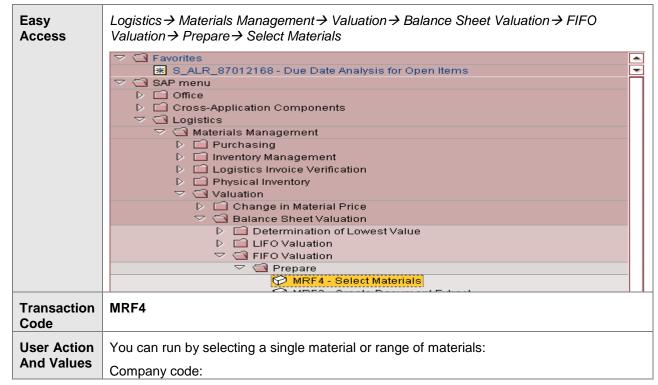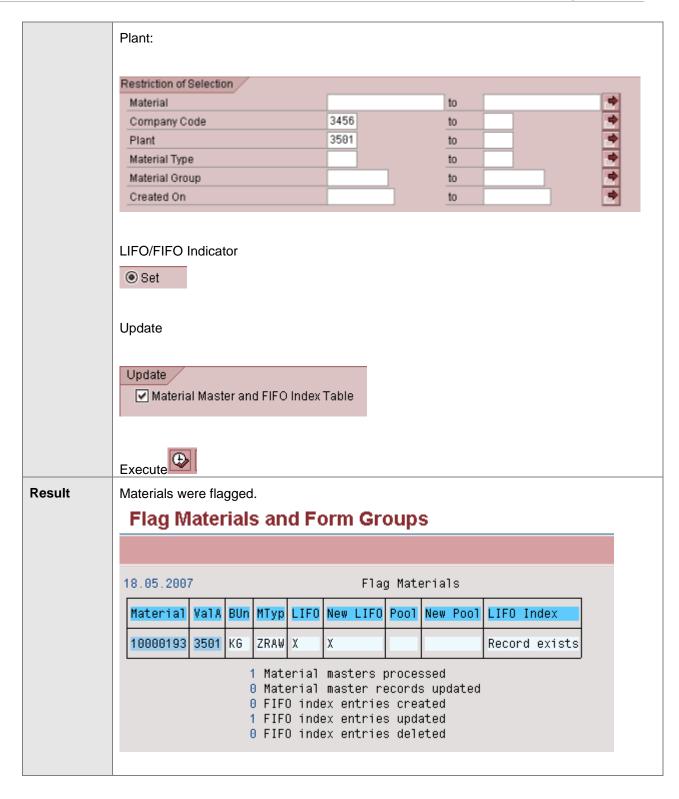
Business Process

At the period end when you want to run the FIFO valuation and update the Material Price, follw the following process.

Select Materials

Access the activity using one of the following navigation options:

Easy Access	*Logistics→ Materials Management→ Valuation→ Balance Sheet Valuation→ FIFO Valuation→ Prepare→ Select Materials*
Transaction Code	**MRF4**
User Action And Values	You can run by selecting a single material or range of materials: Company code:

Plant:

Restriction of Selection				
Material		to		→
Company Code	3456	to		→
Plant	3501	to		→
Material Type		to		→
Material Group		to		→
Created On		to		→

LIFO/FIFO Indicator

◉ Set

Update

Update
☑ Material Master and FIFO Index Table

Execute ⊕|

Result	Materials were flagged.

Flag Materials and Form Groups

18.05.2007   Flag Materials

Material	ValA	BUn	MTyp	LIFO	New LIFO	Pool	New Pool	LIFO Index
10000193	3501	KG	ZRAW	X	X			Record exists

```
1 Material masters processed
0 Material master records updated
0 FIFO index entries created
1 FIFO index entries updated
0 FIFO index entries deleted
```

Create Document extract

Access the activity using one of the following navigation options:

Easy Access	*Logistics→ Materials Management→ Valuation→ Balance Sheet Valuation→ FIFO Valuation→ Prepare→ Create Document Extract*
Transaction code	*MRF3*
User Actions and Values	 Give FIFO Method Company code, Valuation area, Material etc that are relevant Give Time restrictions As I am doing the FIFO Valuation for the last year after Go live, the dates spanned two periods.

	Options Options ☑ Set Locks ☑ Delete receipt data before recompilation ☑ List Movement Types Relevant Movements If you want to update the receipt data check the box.
Result	Document was extracted FIFO Valuation: Create Document Extract 	Description	Sh. Text	Type	MvT	DocumentNo	Itm	Order	Item	Pstng Date	Material	LVaL	Receipt value	Crcy
---	---	---	---	---	---	---	---	---	---	---	---	---
Indiv. Trans.	MatD	WA	561	4900000248	1			28.02.2007	10000203	3502	57,266.96	INR
Monthly Receipt Reco								.11.2006	10000203	3502	57,266.96	INR
Indiv. Trans.	MatD	WA	261	4900001513	3	10000015		08.03.2007	10000203	3502	4,260.97-	INR
Indiv. Trans.	MatD	WA	261	4900001514	3	10000016		08.03.2007	10000203	3502	2,840.64-	INR
Indiv. Trans.	MatD	WA	261	4900001515	3	10000017		08.03.2007	10000203	3502	4,260.97-	INR
Indiv. Trans.	MatD	WA	261	4900002226	3	10000117		17.03.2007	10000203	3502	2,130.48-	INR
Indiv. Trans.	MatD	WA	261	4900002236	3	10000119		17.03.2007	10000203	3502	9,587.17-	INR
Indiv. Trans.	MatD	WA	261	4900002237	3	10000120		17.03.2007	10000203	3502	2,840.64-	INR
Indiv. Trans.	MatD	WA	261	4900002763	3	10000131		18.03.2007	10000203	3502	2,518.50-	INR
Indiv. Trans.	MatD	WA	261	4900002771	3	10000133		18.03.2007	10000203	3502	7,555.49-	INR
Indiv. Trans.	WE	WE	101	5000000647	1	4500000077	20	30.03.2007	10000203	3502	72,000.00	INR
Indiv. Trans.	MatD	WA	261	4900003037	3	10000263		30.03.2007	10000203	3502	8,499.92-	INR
Monthly Receipt Reco								.12.2006	10000203	3502	27,505.22	INR | FIFO Valuation: Create Document Extract List of All Movement Types Found | MvT	Val.Update	Qty update	S	Mvt	Rec	Cns	Selected
---	---	---	---	---	---	---	---
101	X	X		B			****
261	X	X					****
561	X	X					****	

Perform Check

Access the activity using one of the following navigation options:

Easy Access	*Logistics→ Materials Management→ Valuation→ Balance Sheet Valuation→ FIFO Valuation→ Prepare→ Perform Check*
	
	▽ 🗁 Favorites
	    ✳ S_ALR_87012168 - Due Date Analysis for Open Items
	▽ 🗁 SAP menu
	   ▷ 🗀 Office
	   ▷ 🗀 Cross-Application Components
	   ▽ 🗁 Logistics
	     ▽ 🗁 Materials Management
	      ▷ 🗀 Purchasing
	      ▷ 🗀 Inventory Management
	      ▷ 🗀 Logistics Invoice Verification
	      ▷ 🗀 Physical Inventory
	      ▽ 🗁 Valuation
	       ▷ 🗀 Change in Material Price
	       ▽ 🗁 Balance Sheet Valuation
	        ▷ 🗀 Determination of Lowest Value
	        ▷ 🗀 LIFO Valuation
	        ▽ 🗁 FIFO Valuation
	         ▽ 🗁 Prepare
	          ⬡ MRF4 - Select Materials
	          ⬡ MRF3 - Create Document Extract

Transaction code	***MRF1***

User Actions and Values	
	Procedures FIFO Method ZFIF01 Give FIFO Method Company code, Valuation area, Material etc that are relevant **Restriction of Selection** Company Code 3456 Valuation Area 3501 to Material 10000193 to Material Type to Update Results **Update Results** ☑ FIFO Price Table ☑ Material Master Price Change Material Prices Update Prices ◉ Distribute Price Proportionally ○ Adopt Price at Flat-Rate Change Material Prices **Automatic Price Change** ◉ Generate Batch Input Name of session FIF000151522 ○ Direct update ○ No Update Posting date 31.03.2007 Doc.Header Text FIFO Price Updation Reference 3501 & 3502 ✔ ✖

Update Prices - Select:

Phys. Inventory Prices | Valuation Alternatives

Update	Reset
☐ Tax Price 1	☐
☐ Tax Price 2	☐
☑ Tax Price 3	☐
☐ Commercial Price 1	☐
☐ Commercial Price 2	☐
☐ Commercial Price 3	☐

☐ PI. Price 1 for
☐ PI. Price 2 for
☐ PI. Price 3 for

☐ Create Change Documents

Result

Execute FIFO Valuation

Execute FIFO Valuation

Execute FIFO Valuation

FVaL Material Description	TotalStock Comp	Total Val.	Crcy	Gross val.	Total Val. = Deval. %	Price / Pr.	Year To Ma
			Crcy	Net Value	Total V:		
3502 10000203 Ferrous_Sulphate 6,731.970 KG		82,399.31	INR	82,396.33	2.98- = 0.00 %	12.24 / 1	2006 11

Execute FIFO Valuation

VaIA	G/L Acct	Book Value	Crcy	Net	Difference	Diff %	LIFO Gross	Difference	Diff %	Total	Difference	Diff %
3502	211100	82,399.31	INR	82,396.33	2.98-	0.00	82,396.33	2.98-	0.00	0.00	0.00	0.00
* 3502	211100	82,399.31	INR	82,396.33	2.98-		82,396.33	2.98-		0.00	0.00	
** 3502		82,399.31	INR	82,396.33	2.98-		82,396.33	2.98-		0.00	0.00	
***		82,399.31	INR	82,396.33	2.98-		82,396.33	2.98-		0.00	0.00	

Results are displayed here and a batch input session was created.

Run Batch Input session

Access the activity using one of the following navigation options:

Transaction code	*SM35*
User Actions and Values	Process the session that was created.
Result	System posts the data. Check the documents via MR22 display document. The FIFO price is updated in Selected tax price3 feild after updation for future reference.

This will trigger MR22 transaction code and the MAP of the previous period is adjusted by a corresponding effect in Change in Inventory account.

For Example:
In case the MAP of Material as on 31.03.2010 is 250.00.
After running FIFO valuation the material Price is determined as 275.00
The quantity available as on 31.03.2010 is 100 nos.
Date of running the FIFO is 18.05.2010 effective 31.03.2010
After rumning the FIFO valuation the system passed an entry as followed on 31.03.2010
Inventory account   Dr   2500   (100 X 25 Rs.)
Revaluation account   Cr   2500   (100 X 25 Rs.)
(Account Assigend with account key **UMB** in OBYC)
The MAP is changed in Material Master with Rs. 275.00
The system also passes the following entry on 01.04.2007

The quantity available as on 18.05.2007 is 50 nos only.

As the 50 nos were consumed, the system passses the following entry.

Inventory account	Cr	1250	{50 X 25 Rs.}
Change in inventory	Dr	1250	{50 X 25 Rs.}

For the remaining 50 qty the system need not pass any entry, as the MAP is revised and the consumption hits with the changed MAP.

Note: This document assumes that other related configuration is in place to do this activity.

Related Content

http://help.sap.com/saphelp_erp60_sp/helpdata/en/3f/ce913879c8cf29e1000009b38f889/frameset.

http://help.sap.com/saphelp_47x200/helpdata/en/3f/ce913879c8cf29e10000009b38f889/frameset.htm

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