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.

Author: Sarma Subrahmanya Tadikonda
Company: Intelligroup
Created on: 10th August 2010

Author Bio
Sarma Subrahmanya Tadikonda is working as a Principle Consultant with Intelligroup and has been part of FICO competency since February 2005.
# Table of Contents

Introduction ............................................................................................................................................. 3
Objective .................................................................................................................................................. 3
Business Requirement .............................................................................................................................. 3

To value inventory on a FIFO method when using moving average price as the price control in the material master. 3

Solution/Approach .................................................................................................................................. 3

Configuration Related activities .................................................................................................................. 3

Activate/Deactivate LIFO/FIFO Valuation .................................................................................................... 3
Use ............................................................................................................................................................. 3
Activities .................................................................................................................................................... 3
Recommendation ......................................................................................................................................... 3
Procedure .................................................................................................................................................. 4

Define LIFO/FIFO Valuation Levels ........................................................................................................... 4
Use ............................................................................................................................................................. 4
Activities .................................................................................................................................................... 4
Procedure .................................................................................................................................................. 5

Define LIFO/FIFO Relevant Movement Types ............................................................................................. 5
Use ............................................................................................................................................................. 5
Activities .................................................................................................................................................... 5
Procedure .................................................................................................................................................. 5

Define LIFO/FIFO Methods ....................................................................................................................... 7
Use ............................................................................................................................................................. 7
Procedure ................................................................................................................................................ 7

Procedure Model for Balance Sheet Valuation (LIFO/FIFO) .......................................................................... 7

Periodic Receipts – Single Receipts and FIFO Valuation Based on Period Receipts ........................................... 8
Please refer to the following help link for a detailed understanding. ............................................................. 8

Configure FIFO Valuation Areas ............................................................................................................. 8
Activities .................................................................................................................................................. 8

Master Data Related .................................................................................................................................... 9

Settings in material master .......................................................................................................................... 9

Business Process ....................................................................................................................................... 9
Select Materials ......................................................................................................................................... 9

Create Document extract ........................................................................................................................... 11
Perform Check .......................................................................................................................................... 12

Run Batch Input session ............................................................................................................................. 15
Related Content ......................................................................................................................................... 16

For more information, visit the Enterprise Resource Planning homepage ...................................................... 16
Disclaimer and Liability Notice ................................................................................................................ 17
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:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Access the activity using one of the following navigation options:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMG Menu</td>
<td>SPRO → Materials Management → Valuation and Account Assignment → Balance Sheet Valuation Procedures Configure LIFO/FIFO Methods → General Information → Activate/Deactivate LIFO/FIFO Valuation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transaction Code</th>
<th>OMWE</th>
</tr>
</thead>
</table>

| 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:

<table>
<thead>
<tr>
<th>IMG Menu</th>
<th>SPRO → Materials Management → Valuation and Account Assignment → Balance Sheet Valuation Procedures Configure LIFO/FIFO Methods → General Information → Define LIFO/FIFO Valuation Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction Code</td>
<td>OMWL</td>
</tr>
<tr>
<td>User Action And Values</td>
<td>Select the Setting that is appropriate to you. Valuation area is at Plant or company code level which you set in transaction code OX14.</td>
</tr>
<tr>
<td>Result</td>
<td>LIFO/FIFO Valuation Levels defined</td>
</tr>
</tbody>
</table>

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.
Valuation of Materials using FIFO Method

### 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

<table>
<thead>
<tr>
<th>FIFO/LIFO Movement Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mvnt Type</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
<tr>
<td>101</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>IMG Menu</th>
<th>SPRO → Materials Management → Valuation and Account Assignment → Balance Sheet Valuation Procedures → Configure LIFO/FIFO Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction Code</td>
<td>OMWP</td>
</tr>
</tbody>
</table>

**User Action And Values**

The following were defined:

<table>
<thead>
<tr>
<th>Code</th>
<th>Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZFIF00</td>
<td>01</td>
<td>✓</td>
</tr>
<tr>
<td>ZFIF01</td>
<td>01</td>
<td>✓</td>
</tr>
<tr>
<td>ZFIF02</td>
<td>01</td>
<td>✓</td>
</tr>
<tr>
<td>ZFIF03</td>
<td>01</td>
<td>✓</td>
</tr>
</tbody>
</table>

**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.

- 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.

<table>
<thead>
<tr>
<th>Material</th>
<th>10306193</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant</td>
<td>3532</td>
</tr>
</tbody>
</table>

Morsapudi Feed Plant

Determination of lowest value

| Tax price 1 | Commercial price 1 |
| Tax price 2 | Commercial price 2 |
| Tax price 3 | Commercial price 3 |
| Devaluation ind. | Price unit |
| 1,223.46 | 1 |

LIFO data

LIFO/FIFO-relevant

Business Process

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

Select Materials

Access the activity using one of the following navigation options:

<table>
<thead>
<tr>
<th>Logistics</th>
<th>Materials Management</th>
<th>Valuation</th>
<th>Balance Sheet Valuation</th>
<th>FIFO Valuation</th>
<th>Prepare</th>
<th>Select Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRF4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Transaction Code: MRF4

User Action And Values: You can run by selecting a single material or range of materials:

Company code:
Valuation of Materials using FIFO Method

Result

Materials were flagged.

Flag Materials and Form Groups

<table>
<thead>
<tr>
<th>Material</th>
<th>ValU</th>
<th>DUnd</th>
<th>MTyp</th>
<th>LIFO</th>
<th>New LIFO</th>
<th>Pool</th>
<th>New Pool</th>
<th>LIFO Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>10000193</td>
<td>3501</td>
<td>KG</td>
<td>RAW</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td></td>
<td>Record exists</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Easy Access</th>
<th>Logistics → Materials Management → Valuation → Balance Sheet Valuation → FIFO Valuation → Prepare → Create Document Extract</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S_ALR_87012168 - Due Date Analysis for Open Items</td>
</tr>
<tr>
<td></td>
<td>SAP menu</td>
</tr>
<tr>
<td></td>
<td>Logistics</td>
</tr>
<tr>
<td></td>
<td>Materials Management</td>
</tr>
<tr>
<td></td>
<td>- Purchasing</td>
</tr>
<tr>
<td></td>
<td>- Inventory Management</td>
</tr>
<tr>
<td></td>
<td>- Logistics Invoice Verification</td>
</tr>
<tr>
<td></td>
<td>- Physical Inventory</td>
</tr>
<tr>
<td></td>
<td>- Valuation</td>
</tr>
<tr>
<td></td>
<td>- Change in Material Price</td>
</tr>
<tr>
<td></td>
<td>- Balance Sheet Valuation</td>
</tr>
<tr>
<td></td>
<td>- Determination of Lowest Value</td>
</tr>
<tr>
<td></td>
<td>- LIFO Valuation</td>
</tr>
<tr>
<td></td>
<td>- FIFO Valuation</td>
</tr>
<tr>
<td></td>
<td>Prepare</td>
</tr>
<tr>
<td></td>
<td>MRF4 - Select Materials</td>
</tr>
<tr>
<td></td>
<td>MRF3 - Create Document Extract</td>
</tr>
</tbody>
</table>

Transaction code | MRF3

User Actions and Values

Give FIFO Method

Company code, Valuation area, Material etc that are relevant

<table>
<thead>
<tr>
<th>Restriction of Selection</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Code</td>
<td>3456</td>
</tr>
<tr>
<td>Valuation Area</td>
<td>3561 to</td>
</tr>
<tr>
<td>Material</td>
<td>10000193 to</td>
</tr>
<tr>
<td>Material Type</td>
<td></td>
</tr>
</tbody>
</table>

Give Time restrictions

<table>
<thead>
<tr>
<th>Time Restrictions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>As Required per Material</td>
<td></td>
</tr>
<tr>
<td>From Specified Period</td>
<td>28.02.2007 to 31.03.2007</td>
</tr>
</tbody>
</table>

As I am doing the FIFO Valuation for the last year after Go live, the dates spanned two periods.
If you want to update the receipt data check the box.

Perform Check
Access the activity using one of the following navigation options:

**Easy Access**

**Transaction code**  
* MRF1
Valuation of Materials using FIFO Method

User Actions and Values

Give FIFO Method

Company code, Valuation area, Material etc that are relevant

Restriction of Selection

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Code</td>
<td>3456</td>
</tr>
<tr>
<td>Valuation Area</td>
<td>3501</td>
</tr>
<tr>
<td>Material</td>
<td>10000193</td>
</tr>
<tr>
<td>Material Type</td>
<td></td>
</tr>
</tbody>
</table>

Update Results

Update Results

- FIFO Price Table
- Material Master Price
  - Distribute Price Proportionally
  - Accept Price at Flat-Rate

Change Material Prices

Automatic Price Change

- Generate Batch Input
- Direct update
- No Update

Posting date: 31.03.2007

Doc Header Text: FIFO Price Updation

Reference: 3581 & 3582
Valuation of Materials using FIFO Method

Update Prices - Select:

- TaxPrice 1
- TaxPrice 2
- TaxPrice 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

Execute FIFO Valuation

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Total Stock</th>
<th>Comp Total Val</th>
<th>Currency</th>
<th>Gross Val</th>
<th>Total Val</th>
<th>% Deviation</th>
<th>Price</th>
<th>Fr. Year</th>
<th>To Fr. Year</th>
<th>Currency</th>
<th>Net Value</th>
<th>Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3502 18080203 Ferrous Sulphate</td>
<td>62,399.31</td>
<td>82,389.33</td>
<td>2.89%</td>
<td>2.98%</td>
<td>0.68</td>
<td>92,389.33</td>
<td>2.98%</td>
<td>0.68</td>
<td>0.68</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Transaction code</th>
<th>SM35</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Actions and Values</td>
<td>Process the session that was created.</td>
</tr>
<tr>
<td>Result</td>
<td>System posts the data. Check the documents via MR22 display document. The FIFO price is updated in Selected tax price3 field after updation for future reference.</td>
</tr>
</tbody>
</table>

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 running 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 Assigned with account key UMB in OB2C)
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 passes 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/ce913879c8cf29e10000009b38f889/frameset.html

For more information, visit the Enterprise Resource Planning homepage
Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.