Balance Sheet Valuation (MM-IM-VP)

Release 4.6C

SAP
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Icons

<table>
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<td>Example</td>
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Balance Sheet Valuation (MM-IM-VP)

Purpose

The objective of balance sheet valuation is the calculation of material prices for subsequent use in external or internal balance sheets, typically for valuation of the stocks of current assets. Generally, the conditions include meeting legal requirements, complying with corporate group guidelines, and implementing internal company objectives regarding accounting policy. In this context, the company code is regarded as an independent accounting unit.

The SAP System provides the following techniques for balance sheet valuation:

- Lowest Value Determination [Page 7]
- LIFO Valuation [Page 31]
- FIFO Valuation [Page 81]

The procedure used depends first on country-specific tax and commercial laws. Use of procedures that are legally permitted but not stipulated can be varied according to internal company experiences and preferences. Objectives concerning company policy can lead to different decisions on the use of individual procedures depending on the industry sector, national inflation rate, or other criteria.

Generally, the Results of Balance Sheet Valuation [Page 100] are calculated in compliance with the Lowest Value Principle [Page 8]. Alongside the prices from lowest value determination, LIFO procedures, and FIFO procedures, the following prices are, in principle, possible as the maximum value for the balance sheet price.

- Standard price
- Moving average price
- Period moving average price from the material ledger [Ext.]
- Average Receipt Price [Ext.]

See also:

Material Price Change (MM-IV-MP) [Ext.]
Lowest Value Determination

Use

To valuate a material for balance sheet purposes according to the lowest value principle [Page 8], you require various physical inventory prices [Ext.]. These prices are used to calculate the value for balance sheet valuation. The R/3 System provides various procedures for lowest value determination:

- Lowest Value Determination Based On Market Prices [Page 12]
- Lowest Value Determination Based On Range of Coverage [Page 17]
- Lowest Value Determination Based On Movement Rate [Page 23]
- Lowest Value Determination: Loss-Free Valuation [Page 28]

You can use any combination of these procedures. For example, you can first determine the lowest value based on market prices and then devaluate the result of this procedure based on lowest value determination based on the movement rate.

Before you valuate materials according to the lowest value principle, you must consider the following:

- How do you use the physical inventory price fields in the material master record?
- Do you want to carry out lowest value determination based on market prices?
- Do you want to carry out lowest value determination based on movement rate?
- Do you want to carry out lowest value determination based on range of coverage?
- Do you want to combine the individual procedures, and if so, how?
- Which period do you want the documents for analysis to be taken from?
- How do you want to compare the various prices determined?
- Do you want the materials to be revaluated in accounting based on the lowest value determination?

See also:

Devaluation [Ext.]
Valuation Level [Page 9]
Lowest Value Determination: Price Comparisons [Page 102]
Balance Sheet Values [Page 104]
Balance Sheet Valuation (MM-IM-VP)
SAP AG

Lowest Value Principle

Lowest Value Principle

Definition

The lowest value principle is a method of valuating material stocks for balance sheet purposes. The aim of this method is to valuate stocks as accurately as possible according to the recognition-of-loss principle. It is based on the following:

- Profits that exist solely on the books as a result of changes in market prices are to be avoided. For example, if a material is procured at a price of $10 and the current market price is $15, a profit of $5 would therefore be expected for each unit of measure. However, this profit should not be included in the balance sheet until it has actually been made. Thus the material continues to be valuated at a price of $10.

- Expected losses are included in the balance sheet. For example, if a material is procured at a price of $10 and the current price is $7, the material is only valuated at $7.

- Material stocks that are no longer required lose their value. Therefore, you should check a material's movement rate or range of coverage. A slow movement rate or large range of coverage usually means that a material may no longer be required in the future. Instead of waiting to post the loss when you eventually scrap the material, you devaluate the material price when the material displays slow movement or a large range of coverage.
Valuation Level of Lowest Value Determination

Each time you determine the lowest value, you can decide which valuation level it should be carried out at:

- **Lowest Value Determination at Valuation Area Level**
  
  In this case, the system only accesses data from the valuation area. Lowest market prices, ranges of coverage, and movement rates for the material in other valuation areas are not included in the calculation.

- **Lowest Value Determination at Company Code Level**
  
  In this case, the system accesses information from the entire company code. The lowest market price is formed using the prices in all valuation areas in this company code. The movement rate is calculated based on accumulated receipts and issues and stocks in all the valuation areas.

To be able to carry out lowest value determination at company code level using current market prices, all materials in the valuation areas in this company code must be valued in the same way. For example, if a material is subject to split valuation according to valuation category H in one valuation area and the same material is not subject to split valuation in another valuation area, the system cannot determine the lowest market price.

Lowest value determination at company code level usually produces different results to those produced by lowest value determination at valuation area level.

Valuation Levels
Valuation Level of Lowest Value Determination

If you set the dividing line between movement and non-movement at 10% and determine the lowest value on multiple levels, this leads to the results shown in the following table (with 20% devaluation and provided that the market price determined is lower than the current valuation price).

Results of Lowest Value Determination on Multiple Levels

<table>
<thead>
<tr>
<th></th>
<th>Company code</th>
<th>Valuation area 1</th>
<th>Valuation area 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax price 1</td>
<td>13.50</td>
<td>14.00</td>
<td>13.50</td>
</tr>
<tr>
<td>Tax price 2</td>
<td>13.50</td>
<td>14.00</td>
<td>10.80</td>
</tr>
<tr>
<td>Stock</td>
<td>500</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>Balance sheet value</td>
<td>6750</td>
<td>4200</td>
<td>2160</td>
</tr>
</tbody>
</table>

The total balance sheet value for the individual valuation areas is not necessarily smaller than the balance sheet value at company code level. For example, if the dividing line between fast-moving and slow-moving is 13%, material A would be classified as slow/non-moving at the company code level. The tax price 2 is then reduced and the balance sheet value would also decrease.
Lowest Value Determination Based On Market Prices

Use

When determining the lowest value based on market prices, the system searches for the lowest price (or alternatively the most recent price) among the various prices stored for each material. We recommend that you limit the period that the system retrieves data from to the last three months, so the prices are as up-to-date as possible.

Features

Price Sources

The system can retrieve the following data when determining market prices:

- **Receipts for Purchase Orders or Scheduling Agreements**
  
  All order transactions that meet the following criteria are included in the calculation for each material:
  
  - There are goods receipts or invoices with posting dates within the specified period.
  
  - There are goods receipts or invoices, for which the document type and movement type has been defined in Customizing as relevant for valuation.
  
  - The ratio of invoiced quantity to delivered quantity is within a specified range.

  The system takes into account all costs incurred when calculating the receipt price, including delivery costs and subsequent debits/credits. If the order transactions concerned are in a foreign currency, you can configure via a parameter if the system is to compare this with the exchange rate on the balance sheet key date and how it is to do this.

  You use another parameter to determine the strategy that is used to include the prices determined for a material in the procedure. Usually, the lowest price or the most recent of all the prices is included.

- **Purchase Orders**

  For each material, the system compares the order prices in all purchase orders whose order date is in the specified period. This is irrespective of whether:

  - Goods have been received for the purchase order
  
  - An invoice that varies from the order price has been posted

  You use a parameter to determine the strategy that is used to include the prices determined for a material in the procedure. Currently, two strategies are implemented: Either the lowest of all the prices or the latest price is adopted. For purchase orders in a foreign currency, you can choose from various types of exchange rate comparison.

- **Contracts/Scheduling Agreements**

  For each material, the system compares the prices in all contracts or scheduling agreements whose validity period ends after the starting date of the period under review or begins before the end of the period. This is irrespective of whether there are purchase orders for the contract or schedule lines for the scheduling agreement. For contracts or
scheduling agreements in a foreign currency, you can choose from various types of exchange rate comparison.

- **Purchasing Info Records**
  
  For each material, the system compares the prices in all the purchasing info records in which the price has last changed in the specified period. For purchasing info records in a foreign currency, you can choose from various types of exchange rate comparison.

  If info records are used as a source for determining the lowest value, you must make sure that they are properly maintained.

In addition to the price sources listed, you can include the standard price in the determination of the market price. You should only use this option if you can justify interpreting the standard price as the market price.

When materials are subject to split valuation, the system determines the lowest value for each individual valuation type. The system calculates an average price for the valuation header record based on these prices and the material stocks.

When determining the market price, the system compares the prices from the selected sources in a pre-defined sequence.

You can use the appropriate identification numbers to configure if results from one price source are to be given preference over the results of other sources completely or if the system compiles the results in such a way that a lower price is given preference.

The overall result is a ranking list of the individual prices determined. The market price included in lowest value determination comes from the average of the individual prices with the highest ranking. You can configure a parameter with the maximum number of individual prices that can be included in this calculation.

**Comparison Price**

In lowest value determination based on market prices, the comparison price has the following functions:

- If the system cannot determine a lowest market price, it uses the comparison price as the lowest price.
- If the system determines a lowest price, it compares this with the comparison price. If the price is to be updated with the lowest value, the system updates the lower of the lowest price determined and the comparison price.

Alternatively, you can determine the lowest market price independent of the comparison price and update it by indicating during processing that you do not want the system to take the comparison price into account.

The following prices can be used as the comparison price:

- Current material price
- Material price from the previous month or year
- Current standard price
- Standard price from the previous month or year
- Current moving average price
- Moving average price from the previous month or year
Lowest Value Determination Based On Market Prices

- Tax price 1, 2, or 3
- Commercial price 1, 2, or 3

**Result**

The system generates a list of materials with their lowest price. If the system cannot determine a current market price, it enters the comparison price in the list.

You can also have the system update the results of lowest value determination in the material master record. This can be:

- In a physical inventory price field in the material master record
- As a planned price used for lowest value determination in standard cost estimates

You can also generate a batch input session, which changes the material valuation prices to the lowest prices determined when it runs, or you can change the material valuation prices directly.

**See also:**

Determining the Lowest Value Based On Market Prices [Page 15]
Determining the Lowest Value Based On Market Prices

Because of the volume of data involved, you should only determine the lowest value using background processing.

Procedure

2. Enter data as required: the company code in question, the key date, and the materials for which you want to determine the lowest value. Narrow down your selection using material numbers, valuation areas, valuation types, material types, valuation classes, and material groups.
3. In the screen box Price comparison, specify the prices that the lowest value comparison is to be performed for.
4. Choose Market price. A dialog box appears in which the system displays the possible price sources.
5. Select the price sources to be used for lowest value determination.
6. For each price source that you select, check the period under review, the priority, and the exchange rate comparison indicator (which controls how the price sources are translated from foreign currency) and make any necessary changes. If you use Receipt prices or Order prices as sources, the strategy you select determines whether the system should determine the lowest or the last prices. Choose ✔️ to confirm your entries.
7. Choose Comparison price. A dialog box appears in which you specify the comparison price.
   - The current material price is proposed as the comparison price in the standard configuration. You can choose another comparison or No comparison price. Choose ✔️ to confirm your entries.
8. You can update the material master with the results of lowest value determination. To do this, select the field Database update in the screen box Update material master. You can change the material prices or the physical inventory prices in the material master.
   - If you want to change the material prices, select Change material prices. A window appears in which you select if:
     - A batch input session should be generated for the price changes
     - The prices should be changed directly when valuation is carried out
     - You do not want the material prices to be changed, in which case you must select No update.
     Choose ✔️ to confirm your entries.
   - Choose Update phys. inv. prices.
     - A window appears in which you select the price field in which the lowest value price is updated. If you want to delete prices in other price fields when carrying out the update, select the Reset field.
Determining the Lowest Value Based On Market Prices

Choose ✔️ to confirm your entries.

You should only trigger the automatic price change function if you do not want to carry out further lowest value determinations with price changes.

9. Choose List format [Ext.] and specify the type of print list that you require.

10. In the header on the initial screen, choose Valuation level. You can select whether lowest value determination is to take place at Valuation area level or Company code level.

If you carry out lowest value determination based on market prices at company code level, you can set individual valuation prices for a material in relation to one another on the Comparison price screen. For example, you can use the lowest price in all valuation areas as the comparison price for the entire company code.

11. Choose Execute.

Result

A list of materials with the lowest market prices determined is generated.

A certain number of individual prices for each material and the document from which the system retrieved the price information are specified. The lowest market price is also displayed for each material. If this is larger than or equal to the comparison price or the lowest market price could not be determined, the system enters the comparison price in the New price column.

If you set the automatic price change function, the name of the batch input session or the numbers of the price change documents posted appear at the end of the list.

You can analyze the results using the Schedule Manager [Ext.] and the messages [Ext.] using the application log.
Lowest Value Determination Based On Range Of Coverage

Use
When determining the lowest value by range of coverage, the system checks if the price for a material should be devaluated because it has a high range of coverage.

Features

Calculation
A material's range of coverage is calculated as follows:

Range of coverage = average stock / average consumption

Average stock and average consumption are calculated as follows:

- The average stock is a weighted average of several period stocks, minus reservations, plus stock on order, depending on the entries you make. You can specify the relevant periods and weighting factors [Ext.] on the initial screen.

- You can calculate average consumption in two ways:
  - Weighted average based on past consumption
  - Weighted average of forecast values determined in the last forecast

- You can set all restrictions and weighting factors from the initial screen.

When calculating average stock and average consumption, note the following:

- When determining the stock level, you can specify a period under review. The system only includes the posting periods within this period in the calculation.

- When determining consumption using historical values, you can specify a period under review. The system only includes the past months within this period in the calculation.

- When determining consumption using forecast values, you can specify a period under review. The system only includes the months within this period in the calculation.

- If there is no recorded consumption, the range of coverage is set to:
  - Maximum, if there is stock
  - Zero, if there is no stock

- If no forecast data is available for a material when determining consumption based on forecast values, the system sets the range of coverage to zero. The devaluation percentage is also zero.

- If the options for consumption determination using historical values and forecast values do not meet your requirements, you can use customer exit EXIT_SAPLNIWE_004 to add your own consumption determination procedure.

In the case of materials subject to split valuation, the system calculates the range of coverage at valuation header record level, rather than separately for each valuation type.
Lowest Value Determination Based On Range Of Coverage

Devaluation

You can specify a percentage discount for devaluing materials depending on the company code or valuation area and the material type. Depending on the range of coverage, you do this in Customizing for Valuation and Account Assignment or from the initial screen.

Possible Settings for Devaluation

<table>
<thead>
<tr>
<th>Company code</th>
<th>Material type</th>
<th>Range of coverage in months</th>
<th>Percentage devaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td></td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>0001</td>
<td></td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>0001</td>
<td></td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td>0001</td>
<td></td>
<td>10</td>
<td>20%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>4</td>
<td>7%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>8</td>
<td>15%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>12</td>
<td>25%</td>
</tr>
</tbody>
</table>

For example, if a range of coverage of four months is determined for a material of type ROH, the percentage discount is 7%. If the range of coverage is not specified, the system looks for the next range of coverage smaller than that required, thus for a material of type ROH with a range of coverage of 11 months, the devaluation percentage for the eight month range of coverage is used (15%). Entries without a material type apply to materials for which no specific devaluation percentages are defined.

It can be that a material must not be devaluated, despite having a large range of coverage. For example, if the stock of a material was received for the most part during the settled period or if the material master record was created only recently. You can configure the system so that devaluation cannot happen in such instances.

Base Price

When determining the lowest value based on the range of coverage, the base price is the price from which the devaluation calculated is to be deducted. The following prices can be used as the base price:

- Current material price
- Material price from the previous month or year
- Current standard price
- Standard price from the previous month or year
- Current moving average price
- Moving average price from the previous month or year
When you determine the lowest value based on the range of coverage, you specify the base price.

The lowest price is calculated as follows:

\[
\text{Lowest price} = \text{base price} - \text{devaluation}
\]

The system generates a list of materials with their devaluation percentages and lowest prices.

You can have the system update the results of lowest value determination in one (or more) of the physical inventory price fields in the material master record.

You can generate a batch input session, which changes the material valuation prices to the lowest prices determined when it runs, or you can change the material valuation prices directly.

See also:

Determining the Lowest Value Based On Range of Coverage [Page 20]
Determining the Lowest Value Based On Range of Coverage

Because of the volume of data involved, you should only determine the lowest value using background processing.

Procedure


2. Enter data as required: the company code in question, the key date, and the materials for which you want to determine the lowest value. You can narrow down your selection using material numbers, valuation areas, valuation types, valuation classes, material types and material groups.

3. Specify how the system should determine the range of coverage.
   - The system can determine the stock used to calculate the range of coverage from the closing stock of various periods.
     - Select Material stocks.
     - Specify the period from which the system should determine the material stocks.
     - Choose Weighting factors. You can weight the determination of the closing stock levels.
     - Specify whether the system should include reservations and open order stock in determining the stock level.
   
   Choose ✔ to confirm your entries.
   - The system can determine the average material consumption used to calculate the range of coverage from various types of individual consumption.
     - Select Material consumption.
     - Select whether the consumption is to be determined From cons. statistics, From cons. forecast, or via the customer exit.
     - Enter the period for which consumption is to be determined.
     - Choose Weighting factors. You can weight the determination of consumption.
     - In the weighting factors table, entry number one is always used for the month or period in which the running date lies. All other entries are used for the corresponding periods in the past or the future, according to the data used as the basis for the determination.

   Choose ✔ to confirm your entries.

4. Select Base price.

   A dialog box appears in which you specify the base price. The base price results from the lowest of the prices selected. The material price is proposed as the base price in the
standard system. You can change the proposal or extend it by more fields. Choose ✔️ to confirm your entries.

5. Select Deval. percentages to check or change the devaluation percentages.

A dialog box appears in which you can set whether the devaluation rates are to be defined at Company code level or Valuation area level. This dialog box takes you straight to Customizing.

If you make changes, save them. Choose Back. The dialog box appears. Choose ✔️ to confirm your entries.

6. You can update the material master with the results of lowest value determination. If you want to do this, select the field Database update in the screen box Update material master. You can change the material prices or the physical inventory prices in the material master.

   – If you want to change the material prices, select Change material prices. A window appears in which you select if:
     • A batch input session should be generated for the price changes
     • The prices should be changed directly when valuation is carried out
     • You do not want the material prices to be changed, in which case you must select No update.

     Choose ✔️ to confirm your entries.

   – Choose Update phys. inv. prices.

     • A window appears in which you select the price field in which the range of coverage price is updated. If you want to delete prices in other price fields when carrying out the update, select the Reset field.

     Choose ✔️ to confirm your entries.

   You should only trigger the automatic price change function if you do not want to carry out further lowest value determinations with price changes.

7. Choose List format [Ext.] and specify the type of print list that you require.

8. Choose Exception rules. Here, you can define when there must be no devaluation.

9. Choose Valuation level. Here, you can select whether the procedure is to be performed at valuation area level or company code level.

10. Choose Execute.

**Result**

The system generates a list of the materials with their percentage devaluation and lowest prices determined.

If you set the automatic price change function, the name of the batch input session or the numbers of the price change documents posted appear at the end of the list.

You can analyze the results using the Schedule Manager [Ext.] and the messages [Ext.] using the application log.
Determining the Lowest Value Based On Range of Coverage
Lowest Value Determination Based On Movement Rate

Use

When determining the lowest value based on movement rate, the system checks if a material’s price should be devaluated because the material is slow-moving or non-moving.

Features

Calculation

A material's movement rate is determined on the basis of receipts and issues for the material and the average stock of the material:

\[
\text{Movement rate} = \text{total quantity of receipts or issues / material stock} \times 100
\]

The movement rate for a material is identified by the percentage rate that specifies how many units of measure have been received or issued in relation to the material stock.

This percentage is compared to a preset threshold value: If the percentage rate for receipts or issues is smaller than this percentage rate, the material is considered to be slow-moving or non-moving; if it is larger, the material is considered to be fast-moving.

Movement rates can be determined in two ways:

- **Using material documents**
  
  In this case, you can monitor the movement rate for receipts and issues. If you take both receipts and issues into account, you obtain a movement rate for receipts and a movement rate for issues. A material is classified as slow-moving or non-moving if both values are smaller than the set percentage rate.

- **Using material master records**
  
  In this case, the system only considers the issues. This procedure takes considerably less time than determining the movement rate using material documents.

The material stock that is used in calculations of the movement rate can be defined as an average of the closing stock over previous posting periods. Weighting factors must be entered for material stocks and movements. These are maintained in Customizing, or from the initial screen.

When the system determines movement rates, it only uses material movements from the period under review. To make sure that slow/non-movements from previous years are not included in the devaluation, a devaluation indicator is used:

- If a material is classified as slow-moving or non-moving in the period currently under review, its devaluation indicator is increased by 1.
- If a material is classified as fast-moving in the period currently under review, its devaluation indicator is set to zero.

Therefore, if you carry out lowest value determination annually, the devaluation indicator is the equivalent of the number of years that the material has been slow-moving.

In the case of materials subject to split valuation, lowest value determination based on movement rate differs as follows:
Lowest Value Determination Based On Movement Rate

- The system determines a separate movement rate for each valuation type when you determine rates from material documents. For the valuation header record, the system calculates an average price from the devalued prices and the stocks for the individual valuation types.

- When you use material master data to determine the movement rate, the system determines the movement rate at valuation record header level.

Devaluation

In Customizing for Valuation and Account Assignment, or from the initial screen, you assign a devaluation percentage to each devaluation indicator depending on the company code or valuation area and the material type.

For example, if a material of type ROH has a devaluation indicator of 2, the devaluation is 30%. Entries without a material type apply to materials for which no specific devaluation percentages are defined. If a devaluation indicator is calculated that is not specified in the table, the system adopts the entry for the next lowest number in the table.

Assigning the Percentage Devaluation to the Devaluation Indicator

<table>
<thead>
<tr>
<th>Company code</th>
<th>Material type</th>
<th>Devaluation ID</th>
<th>Devaluation percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td></td>
<td>1</td>
<td>15%</td>
</tr>
<tr>
<td>0001</td>
<td></td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>0001</td>
<td></td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>0001</td>
<td></td>
<td>4</td>
<td>40%</td>
</tr>
<tr>
<td>0001</td>
<td></td>
<td>5</td>
<td>60%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>1</td>
<td>20%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>2</td>
<td>30%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>3</td>
<td>40%</td>
</tr>
<tr>
<td>0001</td>
<td>ROH</td>
<td>4</td>
<td>50%</td>
</tr>
</tbody>
</table>

Base Price

When determining the lowest value based on the movement rate, the base price is the price from which the devaluation calculated is to be deducted. The following prices can be used as the base price:

- Current material price
- Material price from the previous month or year
- Current standard price
- Standard price from the previous month or year
- Current moving average price
- Moving average price from the previous month or year
- Tax price 1, 2, or 3
Lowest Value Determination Based On Movement Rate

- Commercial price 1, 2, or 3

**Result**

When you determine the lowest value based on the movement rate, you specify the base price. The lowest price is calculated as follows:

\[
\text{Lowest price} = \text{base price} - \text{devaluation}
\]

The system generates a list of materials with their devaluation percentages and lowest prices.

You can also have the system update the results of lowest value determination based on the movement rate in the physical inventory price fields in the material master record.

You can also generate a batch input session, which changes the material valuation prices to the lowest prices determined when it runs, or you can change the material valuation prices directly.

**See also:**

Determining the Lowest Value Based On Movement Rate [Page 26]
Determining the Lowest Value Based On Movement Rate

Because of the volume of data involved, you should only determine the lowest value using background processing.

Procedure


2. Enter data as required: the company code in question, the key date, and the materials for which you want to determine the lowest value. You can narrow down your selection using material numbers, valuation areas, valuation types, valuation classes, material types, material groups, and creation date.

3. Define the criteria for the movement rate. Choose Material movements and select how you want the movement rate to be determined. You have the following options:
   - From material documents
     In this case, you must select at least one of the fields Receipts and Cnsmptn.
     Note that determination using material documents can be very time-consuming.
   - From material master data
     In this case, the issues recorded in the material master record are automatically used.
   - In the fields Threshold values, you enter the percentage rate up to which the materials are regarded as non-moving for receipts and consumption. If the movement rate is smaller than this percentage, the devaluation indicator is increased.
   - You can weight receipts and issues across the period under review. This allows you to give greater significance to more recent movements than to older movements when determining the movement rate.

4. The system can determine the stock used to calculate the movement rate from the closing stock of various periods. Select Material stocks. Specify the period from which the system should determine the material stocks. You can use Weighting factors to weight the determination of the closing stocks. Choose ✔ to confirm your entries.

5. Select Base price.
   A dialog box appears in which you specify the base price. The base price results from the lowest of the prices selected. The material price is proposed as the base price in the standard system. You can change the proposal or extend it by more fields. Choose ✔ to confirm your entries.

6. Select Deval. percentages to check or change the devaluation percentages.
   A dialog box appears in which you can set whether the devaluation rates are to be defined at Valuation area level or Company code level. This dialog box takes you straight to Customizing. If you make changes, save them. Choose Back. The dialog box appears. Choose ✔ to confirm your entries.
Determining the Lowest Value Based On Movement Rate

7. You can update the material master with the results of lowest value determination. If you want to do this, select the field Database update in the screen box Update material master. You can change the material prices or the physical inventory prices in the material master.

   - If you want to change the material prices, select Change material prices. A window appears in which you select if:
     - A batch input session should be generated for the price changes
     - The prices should be changed directly when valuation is carried out
     - You do not want the material prices to be changed, in which case you must select No update.

     Choose ✔️ to confirm your entries.

   - Choose Update phys. inv. prices.

     A window appears in which you select the price field in which the movement rate price is updated. If you want to delete prices in other price fields when carrying out the update, select the Reset field.

     Choose ✔️ to confirm your entries.

   You should only trigger the automatic price change function if you do not want to carry out further lowest value determinations with price changes.

8. Choose List format [Ext.] and specify the type of print list that you require.

9. Choose Valuation level. Select whether the procedure is to be performed at valuation area level or company code level.

10. Choose Execute.

Result

The system generates a list of the materials with their percentage devaluation and lowest prices determined.

If you set the automatic price change function, the name of the batch input session or the number of the price change documents posted appears at the end of the list.

You can analyze the results using the Schedule Manager [Ext.] and the messages [Ext.] using the application log.
Lowest Value Determination: Loss-Free Valuation

Use
You may need to devaluate materials sold by your company if they will probably not fetch the material price when they are sold. For example, if the demand for a material diminishes because it is no longer the latest technology, you can only sell this material at a loss compared to the material price.

Prerequisites
In the R/3 System, there is currently no procedure within this function for automatically determining a realistic selling price for a material. Enhancement NIWE0003 is provided for this purpose. In the customer exits in this enhancement, you can define how the system is to determine the sales prices.

Features
When the system carries out lowest value determination for loss-free valuation, it compares a selling price according to its own rules with one of the inventory prices in the material master record.
The lowest of these can be updated in the material master as the material price or as one of the inventory prices.
Carrying Out Loss-Free Valuation

Because of the volume of data involved, you should only determine the lowest value using background processing.

Prerequisites
You must have defined in enhancement NIWE0003 how the system is to determine the sales prices of individual materials.

Procedure
2. Enter data as required: the company code in question, the key date, and the materials for which you want to determine the lowest value. You can narrow down your selection using material numbers, valuation areas, valuation types, valuation classes, material types, and material groups.
3. Select Comparis. price. A dialog box appears in which you select the price that the system is to compare the sales price with. Choose ✉️ to confirm your entries.
4. To do this, select the field Database update in the screen box Update material master. You can change the material prices or the physical inventory prices in the material master.
   - If you want to change the material prices, select Change material prices. A window appears in which you select if:
     • A batch input session should be generated for the price changes
     • The prices should be changed directly when valuation is carried out
     • You do not want the material prices to be changed, in which case you must select No update.
       Choose ✉️ to confirm your entries.
   - Choose Update phys. inv. prices.
     • A window appears in which you select the price field in which the lower price is updated. If you want to delete prices in other price fields when carrying out the update, select the Reset field.
       Choose ✉️ to confirm your entries.
5. Choose List format [Ext.] and configure the type of print list that you require.
6. Choose Valuation level. Select whether the procedure is to be performed at valuation area level or company code level.
7. Choose ✉️ Execute.

Result
The system generates a list of the materials with their percentage devaluation and lowest prices determined.
Carrying Out Loss-Free Valuation

You can analyze the results using the Schedule Manager [Ext.] and the messages [Ext.] using the application log.
LIFO Valuation

Use

LIFO valuation allows you to separately valuate the increase in stock of a material for various settlement periods (fiscal year or month). You can use various procedures to valuate the increase for each settlement period, for example, the average delivered prices.

Prerequisites

Before you carry out LIFO valuation, you have to make certain settings in the system. These are:

- Determination of the Valuation Level [Ext.]
- Material Master Record Maintenance [Page 53]
- Creation of Base Layers [Page 58]
- Determination of Basis for Comparison [Page 36]

Features

LIFO (last in first out) is based on the assumption that the last stocks of a material to be received are the first to be consumed. Thus, no value change occurs for older stock when new stock is received or consumed. This ensures that increasing prices do not lead to an overvaluation of older stocks, thus preventing the buildup of fictitious profits.

- If an increase in stock is recorded for a material in a settlement period, a layer is created for the material for this settlement period, recording the value of the stock increase.

- If a reduction in stock is recorded for a material, the layer for the previous settlement period is reduced. If that layer is not sufficient, layers from preceding settlement periods are reduced (see example [Page 32]).

See also:

LIFO Methods [Page 34]
Quantity LIFO Procedure [Page 41]
Index LIFO Procedure [Page 44]
Pool LIFO Valuation [Page 47]
Lowest Value Comparison [Page 66]
LIFO Valuation: Example

The graphic shows an example of annual LIFO valuation.

(*) You can calculate the value of a layer in various ways: For more information, see Determining the Layer Value: Example [Page 42]. In the example, the values for the 1998 layer are calculated using the moving average price of the goods receipts:

Layer quantity x total value of goods received / total quantity of goods received

Material with an Increase in Stock

For the year 1998, the year-end stock balance exceeds the year’s initial stock balance by 50 pieces. Thus, when LIFO valuation is carried out at the end of 1998, a layer is created for 1998 with a quantity of 50 pieces. In this example, the value of the layer is calculated using the average price of the goods receipts:

<table>
<thead>
<tr>
<th>Total receipt quantities for 1998</th>
<th>100 pieces + 30 pieces = 130 pieces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total receipt values for 1998</td>
<td>100 pieces x $1.10/piece +30 pieces x $1.20/piece = $146</td>
</tr>
<tr>
<td>Process</td>
<td>50 pieces x $146/130 pieces = $56.15</td>
</tr>
</tbody>
</table>
Material with a Reduction in Stock

No new layer is created when LIFO valuation is carried out at the end of 1999, since there were more goods issues than receipts. Instead, the 1998 layer is reduced by 30 pieces to 20 pieces, and the value is reduced proportionally:

$$\frac{20 \text{ pieces}}{50 \text{ pieces}} \times 56.15 = 22.46$$

The above graphic shows that if you carry out LIFO valuation when prices are increasing, this leads to a lower value than if you valuate stocks using the moving average price.
LIFO Methods

Use

In the R/3 System, LIFO valuation is based on a set of parameters, which are described as the LIFO method in all relevant transactions. The LIFO method is a six-character alphanumeric field that you can define in Customizing or from any initial screen during processing in the application. Some attributes of a LIFO method can be freely combined, while others may only be used in certain combinations. These combinations are referred to as models.

Features

A model answers the following questions:

- Which consumption tracking method is being implemented?
- Which period does an individual layer refer to?
- Are the valuated materials grouped together (see Pool LIFO Valuation [Page 47])?
- Are you carrying out valuation with reference to stock quantities (Quantity LIFO Procedure [Page 41]) or price indexes (Index LIFO Procedure [Page 44])?

The following models are allowed:

- 02 – LIFO, annual layers, individual materials
- 03 – LIFO, monthly layers, individual materials
- 04 – LIFO, annual layers, pools on quantity basis
- 05 – LIFO, monthly layers, pools on quantity basis
- 06 – LIFO, annual layers, pools with value indexes

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

- Is the value to be determined on the basis of receipts aggregated on a monthly basis or on the basis of single receipts?
  
  The differences are explained in an example [Page 64]. If you are determining values on the basis of single receipts, you must generate a document extract [Page 62] prior to LIFO valuation.

- When you carry out LIFO valuation, you define two timepoints between which the stock situation or the layer value (Index LIFO procedure) is compared. Which timepoints are to be used?
  
  The first timepoint is indicated by the last LIFO valuation performed. The total of the existing layer quantities or values (Index LIFO) represents the corresponding stock.
  
  The second point depends on the LIFO method used in this instance. 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

If the last LIFO valuation was performed for the fiscal year before last and you have chosen the setting GJE, the system compares the stock or value situation between the end of the fiscal year before last and the end of the last fiscal year.

See also:

Determination of Basis for Comparison [Page 36]
Determination of Basis for Comparison

Use

When you use the LIFO valuation method, you compare the stocks at a particular point in time with the total of the layer quantities. In the R/3 System, you can define the following periods under review.

Features

- The stock at the end of the previous fiscal year is compared with the total quantities in the existing layers (GJE). This is the usual option chosen for LIFO valuation based on annual layers.

- The stock at the end of the previous period is compared with the total quantities in the existing layers (VOM). This is the usual option chosen for LIFO valuation based on monthly layers, but you can use in combination with annual layers, for example for internal stocktaking purposes (see Layer Versions [Page 37]).

- The stock at the end of the period before last is compared with the total quantities in the existing layers (VVM). This option can be used for LIFO valuation based on monthly layers, if you can only run valuation with some delay after the end of a posting period for certain reasons. For annual layers, the same applies as for the VOM option.

- The current stock is compared with the total quantities in the existing layers (CUR). You can use this option if LIFO valuation is not linked to specific posting periods or if you run it shortly before the end of a posting period.

Once you have selected a suitable basis for comparison for your application, you can assign this to one of the LIFO methods (see LIFO Methods [Page 34]) in Customizing or from the selection screen before running one of the LIFO valuation programs. All you need to do in the following steps involving LIFO is enter the LIFO method.
Layer Versions

Use
In Material Valuation, it often makes sense to run LIFO valuation for test purposes or for internal stocktaking purposes without reducing existing layers or creating new layers for balance sheet valuation. For this reason, the R/3 System allows you to set up layer versions for LIFO valuation.

Prerequisites
If layers already exist in the system, you should first copy each layer version from an existing version. For more information, see Copying Layer Versions [Page 40].
After that, you can run valuation for this layer version.

Examples
Layer Versions: Example of Value Comparison [Page 38]
Layer Versions: Example of Interim Results [Page 39]
Layer Versions: Example of Value Comparison

You run LIFO valuation using layer version E once a year for balance sheet valuation purposes. To compare the different approaches you can take in LIFO valuation, you create the following layer versions by copying the existing version:

<table>
<thead>
<tr>
<th>Layer version</th>
<th>Valuation base</th>
</tr>
</thead>
<tbody>
<tr>
<td>g</td>
<td>Price for total year</td>
</tr>
<tr>
<td>m</td>
<td>Material master price</td>
</tr>
<tr>
<td>a</td>
<td>Price on a progressive fill-up basis</td>
</tr>
<tr>
<td>1</td>
<td>Partial year upper limit 1st period</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>9</td>
<td>Partial year upper limit 9th period</td>
</tr>
<tr>
<td>x</td>
<td>Partial year upper limit 10th period</td>
</tr>
<tr>
<td>y</td>
<td>Partial year upper limit 11th period</td>
</tr>
</tbody>
</table>

You then run LIFO valuation for the individual layer versions.
Layer Versions: Example of Interim Results

You run LIFO valuation using layer version E once a year for balance sheet valuation purposes. To create quarterly results, you can create the following layer versions by copying version E:

<table>
<thead>
<tr>
<th>Layer version</th>
<th>Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1st quarter</td>
</tr>
<tr>
<td>2</td>
<td>2nd quarter</td>
</tr>
<tr>
<td>3</td>
<td>3rd quarter</td>
</tr>
</tbody>
</table>

You then run LIFO valuation for the individual layer versions at the end of each quarter.
Creating Copies of Layer Versions

When large volumes of data are involved, you should only update LIFO data using background processing.

Procedure

To copy an existing version, proceed as follows:


2. Enter the materials and pools for which the system is to create a new layer version.

   Enter the ID of the reference and the ID of the new version.

3. Select the data to be copied. Depending on the reference used, the following options are available:
   a. Material annual layer
   b. Pool annual layer
   c. Material monthly layer
   d. Pool monthly layer

   You can also copy annual layer versions or material layer versions for individual materials or pools. In this case, the system takes the final posting period for fiscal years that are already closed. In the current fiscal year, the current posting period is used.

4. If you want to update the changes, select Create layer for new version.

5. Choose Execute.

Result

The system displays a list of the data created for the new version.
Quantity LIFO Procedure

Use

When you use the quantity LIFO procedure, all stock changes of a material or pool in each settlement period (fiscal year or month) are considered separately. The stock quantity of a particular material or pool at the end of the settlement period is compared with the sum of the quantities contained in the existing layers.

If the stock is greater at the end of the settlement period, a new layer is created for that settlement period, illustrating the increase in quantity and value of the material or pool.

If the stock is smaller at the end of the settlement period, the preceding layers are reduced, starting with the most recent layer.

Features

Determining the Layer Value

There are various ways of valuating a layer. In the R/3 System, the following valuation bases have been set up:

- Average delivered prices for the settlement period
- Prices for a partial year (this only makes sense if the settlement period is the fiscal year)
- Process
- Material master price

For more information, see the following example [Page 42].
Determining the Layer Value: Example

Receipt Quantities and Values for the Individual Periods of a Fiscal Year

### 1999 Total of LIFO-relevant quantities and value for each period

<table>
<thead>
<tr>
<th>Period</th>
<th>Receipt quantity</th>
<th>Receipt value</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>100</td>
<td>1000</td>
</tr>
<tr>
<td>02</td>
<td>200</td>
<td>2100</td>
</tr>
<tr>
<td>03</td>
<td>50</td>
<td>600</td>
</tr>
<tr>
<td>04</td>
<td>150</td>
<td>1600</td>
</tr>
<tr>
<td>05</td>
<td>100</td>
<td>1050</td>
</tr>
<tr>
<td>06</td>
<td>250</td>
<td>2600</td>
</tr>
<tr>
<td>07</td>
<td>300</td>
<td>3200</td>
</tr>
<tr>
<td>08</td>
<td>200</td>
<td>2250</td>
</tr>
<tr>
<td>09</td>
<td>150</td>
<td>1650</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
<td>2350</td>
</tr>
<tr>
<td>11</td>
<td>400</td>
<td>4500</td>
</tr>
<tr>
<td>12</td>
<td>300</td>
<td>3500</td>
</tr>
</tbody>
</table>

Total Issues | 2400 | 26400 |

When stock are valued at the end of the fiscal year 1999, a layer containing 1000 pieces is created. Its value depends on the valuation base:

- **Price for Total Year**
  
  An average price is calculated from the LIFO receipts for the fiscal year. This price is used as the basis for valuation. Thus the value of the layer is calculated as:
  
  \[
  \text{Layer quantity} \times \text{total value of goods received} / \text{total quantity of goods received}
  \]
  
  In the above example, the resulting value for the 1999 layer is: \(1000 \times 26400/2400 = 11000\)

- **Price for Partial Year**
  
  An average price is calculated from the goods received during a part of the fiscal year. This price is used as the basis for valuation. The partial year must start at the beginning of the fiscal year. Thus the value of the layer is calculated as:
  
  \[
  \text{Layer quantity} \times \text{total value of goods received in the partial year} / \text{total quantity of goods received in the partial year}
  \]
  
  In the above example, the value of the layer depends on the definition of the partial year. For example, if the partial year consists of the first four periods, the resulting value for the layer 1999 is: \(1000 \times 5300/500 = 10600\)

- **Price on a Progressive Fill-Up Basis**
The values of goods received in individual periods are used, starting at the beginning of the year and added up until the layer stock is reached.

In the above example, the value would be calculated as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>Quantity</th>
<th>Value</th>
<th>Remaining quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>100</td>
<td>1000</td>
<td>900</td>
</tr>
<tr>
<td>02</td>
<td>200</td>
<td>2100</td>
<td>700</td>
</tr>
<tr>
<td>03</td>
<td>50</td>
<td>600</td>
<td>650</td>
</tr>
<tr>
<td>04</td>
<td>150</td>
<td>1600</td>
<td>500</td>
</tr>
<tr>
<td>05</td>
<td>100</td>
<td>1050</td>
<td>400</td>
</tr>
<tr>
<td>06</td>
<td>250</td>
<td>2600</td>
<td>150</td>
</tr>
<tr>
<td>07</td>
<td>150</td>
<td>1600</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>10550</td>
<td></td>
</tr>
</tbody>
</table>

In period 07, only a part of the quantity is used for value formation; the value is calculated in proportion to the quantity.

(Instead of using receipt values for a period, you can calculate the value based on individual receipts. You can configure this in the LIFO Method [Page 34], provided that you created a document extract [Page 62] beforehand).

- **Material Master Price**

  An average price is calculated from the closing stock quantity and the corresponding value. This price is used as the basis for valuation. With individual LIFO valuation, this price corresponds exactly to the moving average price.

  \[
  \text{Layer value} = \frac{\text{layer quantity} \times \text{value of the closing stock}}{\text{closing stock quantity}}
  \]
Index LIFO Procedure

Use
Some countries only allow you to manage layers in pool LIFO valuation on a value basis. This procedure allows you to combine materials in a pool without having to first convert the materials to a single unit of measure. This is particularly advantageous for the formation of very large pools. The index LIFO procedure is used for valuation of layers managed on a value basis only.

Features
With the index LIFO procedure, the value of a pool is considered separately for each settlement period. The value of the pool at the end of the settlement period is converted to the price level of the base year using a price index and compared to the base value of the current layer.

If the converted value is greater than the base value for the current layer, a layer is created for this settlement period.

If the converted value is smaller than the base value, the preceding layers are reduced, starting with the most recent (see the example).

With the index LIFO procedure, you can determine the price index as follows:

- **Manually**
  Before carrying out pool valuation, you must manually enter a price index for each pool in the annual data for the layer.

- **Automatically**
  When carrying out pool valuation, the system calculates the price index automatically. For each material in the pool, the price at the end of the previous settlement period is divided by the price at the end of the previous year. An average price index is formed for each pool from these material-specific price indexes. This is used when valuating the pool.
Index LIFO Procedure: Example

The graphic shows the movements for one pool in three fiscal years and the index LIFO valuation at the end of each fiscal year.

The layer valuations are calculated as follows:

- **Base year is 1996; the base layer has a value of 7000.**

- **Valuation 1997**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value at end</th>
<th>Price index for each year</th>
<th>Accumulated price index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>7000</td>
<td>3%</td>
<td>1.03</td>
</tr>
<tr>
<td>1997</td>
<td>10300</td>
<td>5%</td>
<td>1.0815</td>
</tr>
<tr>
<td>1998</td>
<td>15015</td>
<td>4%</td>
<td>1.1248</td>
</tr>
</tbody>
</table>

- **Valuation 1998**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value at end</th>
<th>Price index for each year</th>
<th>Accumulated price index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>7000</td>
<td>3%</td>
<td>1.03</td>
</tr>
<tr>
<td>1997</td>
<td>3090</td>
<td>4%</td>
<td>1.1248</td>
</tr>
<tr>
<td>1998</td>
<td>4200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Valuation 1999**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value at end</th>
<th>Price index for each year</th>
<th>Accumulated price index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>7000</td>
<td>3%</td>
<td>1.03</td>
</tr>
<tr>
<td>1997</td>
<td>2313.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>2313.47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Index LIFO Procedure: Example

<table>
<thead>
<tr>
<th>Layer for 1998 with price index (1.0815)</th>
<th>4200</th>
</tr>
</thead>
</table>

- **Valuation 1999**

<table>
<thead>
<tr>
<th>Value at the end of the year</th>
<th>10400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversion using price index (1.1248) to 1996 value</td>
<td>9246.09</td>
</tr>
<tr>
<td>Minus base value of layer 1998</td>
<td>3883.50</td>
</tr>
<tr>
<td>Minus base value of layer 1997</td>
<td>3000</td>
</tr>
<tr>
<td>Minus base value of layer 1996</td>
<td>7000</td>
</tr>
<tr>
<td></td>
<td>-4637.41</td>
</tr>
<tr>
<td>Reduction layer 1998 (base value)</td>
<td>3883.50</td>
</tr>
<tr>
<td>Still to be reduced</td>
<td>-753.91</td>
</tr>
<tr>
<td>Reduction layer 1997 (base value)</td>
<td>3000</td>
</tr>
<tr>
<td>Remainder layer 1997 (base value)</td>
<td>2246.09</td>
</tr>
<tr>
<td>Layer for 1997 with price index (1.03)</td>
<td>2313.47</td>
</tr>
</tbody>
</table>

When a layer is calculated, the system always converts the value back to that of the base year, in this example to that of 1996.

In the 1997 valuation, the value at the end of the fiscal year was converted to the 1996 price using the price index:

\[
\frac{10300}{1.03} = 10000.
\]

This value is then reduced by the base value of the existing layers: 10000 - 7000 = 3000. Therefore the value has increased by 3000. This value is projected to the period end for 1997 using the price index: 3000 \times 1.03 = 3090. Thus, a layer with a value of 3090 must be created for 1998.

In the 1998 valuation, the value was converted as follows:

\[
\frac{15015}{1.0815} = 13883.50.
\]

This value is reduced by the base value of the existing layers, the difference amounts to: 13883.50 - 10000 = 3883.50. After taking the price index into account, a layer with a value of 3883.50 \times 1.0815 = 4200 must be created for 1998.

In the 1999 valuation, the value is converted to the 1996 value as follows: 10400 \times \frac{1.1248}{1.1248} = 9246.09. This value is reduced by the base value of the existing layers, the difference amounts to 9246.09 - 13883.50 = -4637.41; therefore there is a reduction in value. The 1998 layer must be reduced due to the reduction in value. Since the base value of this layer only has a value of 3883.50, the value 753.91 remains to be reduced. The 1997 layer is reduced by the remaining amount, leaving it with a base value of 3000 - 753.91 = 2246.09. Using the price index, this results in a value of 2246.09 \times 1.03 = 2313.47 for the 1997 layer.
Pool LIFO Valuation

Use

Similar materials or materials with the same function can be grouped together into pools and valued together.

Pool LIFO valuation has certain advantages over individual LIFO valuation, since stock fluctuations of some materials can be balanced by other materials and therefore longer-term pools can be formed. On the other hand, it can be difficult to set up useful pools that fulfill the requirements of local tax authorities.
Changing the Pool Structure

Use

If you have run LIFO valuation and then discover that the pool allocation could be improved, you can change the allocation (and thus the value of individual pools).

Features

You have the following options:

- **Splitting**
  
  With this option, you remove a material from one pool and allocate it to another pool (or valuate it at individual level). You can choose from various procedures to determine the value:
  
  - **Proportional allocation**
    
    In this case, the current stock quantity of the material removed is allocated proportionally among the layer of the old pool. The layer of the existing pool is reduced by the partial quantities determined (and their values). The layer of the new pool is increased by the same quantity and value.
  
  - **Dissolve according to the LIFO principle**
    
    In this case, the layers of the old pool are reduced, beginning with the most recent, until the stock quantity of the material removed is reached. The layers of the new pool are increased by the quantities and values removed.

  See Changing the Pool Allocation [Page 50].

- **Merging**

  With this option, you group together several pools in a new pool. The quantities and values of the individual layers in the pools are added together.

  See Grouping Together Pools [Page 52].

When you split and merge pools, all existing layer versions are processed in the same way. You can use the appropriate window to link certain layer versions. This allows you to dissolve an individual material from its pool and handle it without specifying a new pool. In this case, the system would create individual material layers with the assigned layer version.
Pool Creation

Purpose
You want to valuate various materials together in pools.

Prerequisites
Maintain the following settings in Customizing:

- You must give every pool an alphanumeric identifier, and, for the quantity LIFO procedure, you must specify the unit of measure in which the pool should be managed.
  You can also define a guide price and tolerances for the possible variances from this guide price. Using these settings, you can list the pools in which the price range of the individual materials is too high.

- To create pools automatically, you have to specify the criteria according to which the pools should be created. You can make the assignments automatically based on the valuation level, material type and unit of measure.

Process Flow
You can change pool allocations after running valuation. The system changes existing pool layers and, if necessary, creates new ones.

See also:
Changing the Pool Structure [Page 48]
Changing the Allocation of Materials to Pools

Procedure


2. Choose Splitting criteria.
   A window appears in which you enter the material and the new pool.
   Enter the new allocations. Save your entries.
   Choose Back to return to the selection screen.

3. You set the splitting method in the Splitting method screen box. Choose one of the following:
   – Proportional allocation
   – Dissolve as per LIFO

4. If you want to update the changes, select Layer and material master in the Update screen box.

5. Choose Execute.

Result

The system displays a list of the pools in question, along with the old and new values.
Displaying the Allocation of Materials to Pools

Use

If you work with pool LIFO valuation, you may occasionally need to display a list of the allocation of materials to pools. To see which materials belong to which pool, proceed as follows:

Procedure

2. Enter the valuation area and the pool number(s).
   In the screen box Settings, you can specify whether you want to display materials by pool with the values from the previous year, the values from the previous month or the current values.
3. Choose Execute.

Result

The system displays a list of the pools in question, along with the materials they contain.
Statistics are displayed for each pool allowing you to check if you want to change the composition of the pools.
Grouping Together Pools

Procedure


2. Choose Merging criteria.

   A window appears in which you enter the old pools and the new pools.
   Enter the pools that are to be grouped together. Save your entries.
   Choose Back to return to the selection screen.

3. If you want to update the changes, select Layer and material master in the Update screen box.

4. Choose Execute.

Result
The system displays a list of the pools in question, along with the old and new values.
Implementing LIFO Valuation

Purpose

The materials that you want to make subject to LIFO valuation must be flagged as being relevant for LIFO on the accounting screen of the material master record.

There are two ways to select a material for LIFO valuation:

- Individual Maintenance [Page 54] of the material master record
- Collective Maintenance(automatic pool allocation) [Page 55]

The system offers the following monitoring functions:

- Checking Material Master Records [Page 57]
- Displaying the Pool Allocation [Page 51]
LIFO Indicators: Individual Maintenance

When you create a material master record, you can select the *LIFO-relevant* field on the accounting screen. If the material is to be allocated to a pool, you enter the pool number in the field *LIFO pool* and the system checks whether the LIFO pool has been defined.

You can change the material master record for an existing material and maintain the LIFO data on the accounting screen.
Collective Maintenance

You can select a number of materials together for LIFO valuation and assign them to certain pools.

💡 When large volumes of data are involved, you should only update LIFO data using background processing.

Selecting Materials for Individual Valuation

To select materials as being relevant for LIFO or to delete existing indicators, proceed as follows:


   The selection screen appears.

2. Enter the materials. You can narrow down the selection of materials by using the company code, valuation area, material numbers, material types, material groups and creation dates.

   Specify whether you want to set or remove the indicator.

3. Select Material master and LIFO file in the Update screen box, if you want to update the database.

4. Choose Execute.

   The system issues a log listing all the materials involved.

Selecting Materials for Pool Valuation


   The selection screen appears.

2. Enter the materials. You can narrow down the selection of materials by using the company code, valuation area, material numbers, material types, material groups and creation dates.

3. You can select the following fields:

   a. Set indicator, if you want the LIFO indicator to be set for the materials.

   b. Set pool if initial, if you want the pool number for the materials to be set as per the Customizing assignment in the material master record.

   c. Overwrite pool, if you want the existing pool number for the materials to be overwritten, if necessary.

      If you do not select Set pool, but select Overwrite pool, the system resets all pool numbers for the materials.)

4. Select Material master and LIFO file in the Update screen box, if you want to update the database.

5. Choose Execute.

   The system issues a log listing all the materials involved and the pool numbers assigned.
Checking Material Master Records

Use
To check if there are still material master records to be maintained for LIFO valuation, you can generate the following lists:

- Materials not flagged as LIFO-relevant
- Materials without pool allocation

Procedure
2. Enter data as required.
3. Choose Execute.

Result
The system displays a list of the materials concerned.
Preparation of LIFO Valuation

When you implement LIFO valuation in the R/3 System, you generally want to create layers for earlier settlement periods. You have the following options:

- If you have previously carried out LIFO valuation in another system, your system administrators can copy the layers from that system to the R/3 System.
  
  See Adopting External Data [Page 59]

- If you use LIFO valuation for the first time with the R/3 System, you can derive the so-called base layer from old stock data in the material master record.

  See Creating a Base Layer [Page 60]
Adopting External Data

When large volumes of data are involved, you should only update LIFO data using background processing.

Prerequisites
You have created a file for the structure SMLAY on the file server or on a workstation.

Procedure
To adopt existing layers from a third-party system, proceed as follows:

2. Enter the input file name.
3. Define whether the data should be loaded from the dataset or from the workstation.
4. Define whether, in the R/3 System:
   - New layers are to be created and existing ones overwritten if necessary
   - Only new layers are to be created
   - A simulation is to be carried out
5. Choose Execute.

Result
A list of the layers created appears.
Creating a Base Layer

When large volumes of data are involved, you should only update LIFO data using background processing.

Procedure

To create base layers, proceed as follows:


2. Enter the materials and pools for which the system is to create a base layer.
   - Enter the LIFO method that you want to use.
   - If you work with more than one version, enter the version number.

3. Select the values that are to be used to determine the layer value. You can choose from previous month, month before last, previous year, and year before last.

4. Select Create base layer if you want to update the database.

5. Select Archive if you want to have the list of base layers optically archived.

6. Choose Execute.

Result

The system displays a list of materials and pools together with the quantities and values.
Movements Relevant for LIFO

Definition
Movements relevant for LIFO are movements that are taken into account during LIFO valuation.

Use
Layers are created on the basis of goods receipts and goods issues for a particular material.

For calculating values, however, this is not sufficient. If, for example, in the case of a goods receipt for a purchase order, the invoice that follows contains a different price, the difference is debited from the material. Consequently, this price variance must be taken into account during valuation.

However, there is no point in including all the goods receipts for a particular material in LIFO valuation. A goods issue to a cost center, for example, does not lead to a change in value and therefore should not be selected as relevant for LIFO valuation.

This is why your system administrator has to flag all goods movement types that are to be included in LIFO valuation in Customizing for Material Valuation.

Integration
These settings are valid for both FIFO and LIFO valuation.
Document Extract: Adopting Data Already Posted

Use

Usually the receipt data relevant for LIFO valuation, that is, the quantities and values from goods receipts and value differences from invoices, is updated by the applications. In the process, the system creates a data record for each valuation level, material and posting period. This process allows you to subsequently include documents posted in the R/3 System in the receipt data relevant for LIFO valuation. You can create single receipts or receipts in aggregated form for each posting period.

You do not have to create LIFO relevant receipt data if new layers are always valuated at the price in the material master.

You have to adopt data that has already been posted in the following circumstances:

- If you want to implement LIFO valuation in the middle of a settlement period
  In this case, no LIFO receipt data exists yet.
- If you want to run LIFO valuation based on single receipts
  LIFO data records that are automatically created when LIFO valuation is active are aggregated on a posting period basis. If you run valuation based on single receipts, you must create new LIFO data records. The differences between receipts on a posting period basis and single receipts are illustrated in an example [Page 64].

Procedure

After you have created a base layer [Page 60] or imported old layers into the system, you must then copy over the receipts relevant for LIFO valuation that have been posted since the start of the current settlement period. This is the only way that you can ensure that all relevant receipts are included in the next valuation run.

When large volumes of data are involved, you should only update LIFO data using background processing.

To adopt data that has already been posted, proceed as follows:

   The selection screen appears.
2. Specify which materials the LIFO-relevant goods movement should be adopted for.
3. In the screen box Update, select Receipt data if you want the data to be updated.
4. Choose Execute.

Result

The system displays a list of the documents in question.
Periodic Receipts – Single Receipts: Example

### Business Transactions for Material A in a Period

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Price</th>
<th>Stock posting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting stock</td>
<td>0 pieces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase order</td>
<td>100 pieces</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>1st goods receipt for purchase order</td>
<td>20 pieces</td>
<td>100.00</td>
<td></td>
</tr>
<tr>
<td>2nd goods receipt for purchase order</td>
<td>80 pieces</td>
<td>800.00</td>
<td></td>
</tr>
<tr>
<td>Invoice</td>
<td>50 pieces</td>
<td>12.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Goods issue</td>
<td>70 pieces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing stock</td>
<td>30 pieces</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### LIFO Valuation Based on Period Receipts

When you use period receipts as a basis, the value of the receipts for the period is 1100.00 for a receipt quantity of 100 pieces.

A layer is created for 30 pieces. If the value is determined on a progressive quantity fill-up basis, the value of the layer is 30 x 1100.00 / 100 pieces = 330.00.

#### LIFO Valuation Based on Single Receipts

When you use single receipts as a basis, the system splits up the values from the invoice among the goods receipts in chronological order on a progressive quantity fill-up basis.

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Value</th>
<th>LIFO receipt value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st goods receipt</td>
<td>20 pieces</td>
<td>200.00</td>
<td>240.00</td>
</tr>
<tr>
<td>2nd goods receipt</td>
<td>80 pieces</td>
<td>800.00</td>
<td>860.00</td>
</tr>
</tbody>
</table>

The LIFO value of the two goods receipts is calculated as follows:

- 200.00 + (20 pieces x 100.00 / 50 pieces) = 240.00  
- 800.00 + (30 pieces x 100.00 / 50 pieces) = 860.00

A layer is created for 30 pieces. If the value is determined on a progressive quantity fill-up basis, the value of the layer is 240.00 + 10 x 860.00 / 80 pieces = 347.50.
Carrying Out LIFO Valuation

When large volumes of data are involved, you should only update LIFO data using background processing.

Procedure

1. Choose Valuation → Bal. sheet valuation → LIFO valuation → Execute →...
   ... → On individual level, if you want to carry out individual LIFO valuation
   ... → On pool level, if you want to carry out pool LIFO valuation
   The selection screen appears.

2. Enter the Layer version and LIFO method. Specify which materials or pools are to be valued.

3. Choose the method that is to be used to calculate the values.
   a. Total settlement period
   b. Partial year
   c. Fill-up quantity
   d. Material master price

4. In the Update results screen box, select Layer if the LIFO valuation is to be updated. The following updates can occur:
   a. New layers are created.
   b. Current layers are changed (for comparison type CUR, or VOM or VVM in conjunction with annual layers).
   c. Previous years' layers are reduced or dissolved.

5. Choose List format [Ext.] and maintain the output format for the print list.

6. Choose .

Result

A list of the changes made to the layers appears.

You can analyze the results via the Schedule Manager [Ext.] and the messages [Ext.].
LIFO Lowest Value Comparison

Definition

Lowest value comparison links LIFO valuation to lowest value determination. The gross value in the layer is compared to the value that would be the result of the prices generated during lowest value determination. The lowest of these can be stored in the layer as the net value.

Use

You can carry out valuation on individual or pool level. This affects how the system compares the lowest values.

See also:

- Lowest Value Comparison: Individual LIFO Valuation [Page 67]
- Lowest Value Comparison: Pool LIFO Valuation [Page 68]
- Comparing the Lowest Values [Page 71]
LIFO Lowest Value Comparison: Individual Materials

Use
When comparing the lowest values, the system calculates the net value for each existing layer. The system selects the lowest price from various prices. This price is multiplied by the layer quantity to form the net value for the current layer.

Features
To compare the lowest values, you can retrieve the following prices:

- From the material master record
  - Tax prices 1, 2 and 3
  - Commercial prices 1, 2 and 3
- From the layer
  - Prices 1, 2 and 3
- The material price

You can compare the lowest values either layer by layer or for all layers together:

- If you compare the lowest values layer by layer, the system compares the layer value for each layer with the lowest value determined. The lower of these is the net value of the relevant layer.

- If you compare the lowest values for all layers together, the system compares the lowest value determined with the average value of all layers. The system calculates this average layer value from the gross value of the current layer and the net values of the old layers.

  If the lowest value is smaller than the average value, the existing layers are dissolved. A current layer is formed at the same time, which is valuated gross using the average value of all layers and net using the lowest value determined.
LIFO Lowest Value Comparison: Pools

Use
When comparing the lowest values, the system calculates the net value for each existing layer.

Features
In the R/3 System, there are two ways to compare the lowest values in pool LIFO valuation:

- Material devaluation
- Pool devaluation

Material Devaluation
When comparing the lowest values, the system determines an average price from various different prices. The system can use the following price fields for this:

- The tax prices
- The commercial prices
- The layer prices
- The material prices

The average can be formed in two ways:

- Single-item prices
  The system first determines the lowest price for each material in the pool. The weighted average of these lowest values is the lowest price in the pool.

- Material prices on a pool basis
  For each price field used in the lowest value comparison, the system finds the average of the weighted prices of all materials in the layer. The lowest of these average prices is the lowest price.

Pool Devaluation
In the annual data for a pool layer you can enter three deductions. When comparing the lowest values, the system adds these deductions together. The difference between the gross value and total deduction is then the net value.

Comparing the lowest values with pool deductions does not affect data in layers from previous years.

Devaluation Rule
You can compare the lowest values either layer by layer or for all layers together:

- If you compare the lowest values layer by layer, the system compares the layer value for each layer with the lowest value determined. The lower of these gives the net value of the relevant layer (see example [Page 70]).

- If you compare the lowest values for all layers together, the system compares the lowest value determined with the average value of all layers. The system calculates this
average layer value from the gross value of the current layer and the net values of the old layers. If the lowest value is smaller than the average value, the existing layers are dissolved. At the same time, the system creates a current layer, which is valued gross using the average value of all layers and net using the lowest value determined.
### LIFO Lowest Value Comparison: Pools (Example)

The following graphic shows how the lowest values are compared for Pool A using material discounts. The tax and commercial prices from price level 2 are used as sources.

#### Material master record

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tax price</td>
</tr>
<tr>
<td>50</td>
<td>6</td>
</tr>
<tr>
<td>150</td>
<td>8</td>
</tr>
</tbody>
</table>

\[ 7.50 \times 6 + 150 \times 8 = 270 + 1200 = 1470 \]

\[ 50 + 150 = 200 \]

\[ 50 \times 5 + 150 \times 9 = 250 + 1350 = 1600 \]

\[ 50 + 150 = 200 \]

#### Pool A

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity</th>
<th>Net value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>80</td>
<td>700</td>
</tr>
<tr>
<td>1998</td>
<td>20</td>
<td>140</td>
</tr>
<tr>
<td>1999</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

#### Net value calculation

- Net value of layer for 1999: \( 750 = 100 \times 7.50 \)
- Net value of layer for 1998: \( 140 \)
- Net value of layer for 1997: \( 600 = 80 \times 7.50 \)
Comparing the LIFO Lowest Values

When large volumes of data are involved, you should only update LIFO data using background processing.

Procedure

1. Choose Valuation → Bal. sheet valuation → LIFO valuation → Execute → Comp. lowest values. The selection screen appears.
2. Enter the Layer version and LIFO method. Specify the materials or pools that you want to compare the lowest values for.
3. Select Adjustmt rule and define whether the adjustment should be done net layer by layer, gross layer by layer, or net for all layers together.
4. Select Price sel. in the screen box Settings.

A window containing the possible price fields appears. Select the fields that should be taken into account in the lowest value comparison. You can choose different settings for current and old layers. Choose to confirm your entries.

If you perform the lowest value comparison for pool LIFO valuation or at company code level, choose Procedure in the screen box Settings. A window containing the possible procedures appears. Select the required procedure. Choose to confirm your entries.
5. In the Update results screen box, select Layer with net values if the net values determined in the layers should be updated.
6. Choose List format [Ext.] and specify the type of print list that you require.
7. Choose Execute.

Result

A list appears containing the results of the lowest value comparison.

You can analyze the results using the Schedule Manager [Ext.] and the messages [Ext.] using the application log.
Displaying LIFO Valuation

When large volumes of data are involved, you should only update LIFO data using background processing.

Procedure

If you want to display the LIFO valuation for certain materials or pools, proceed as follows:

1. Choose Valuation → Bal. sheet valuation → LIFO valuation → Display →...

   ... → On individual level, if you have carried out individual LIFO valuation

   ... → On pool level, if you have carried out pool LIFO valuation

   The selection screen appears.

2. Enter the Layer version and LIFO method. Enter the materials or LIFO pools that you want to display.

3. You can update the material master record with the results of LIFO valuation by selecting the field Database update in the screen box Update results. You can change the material prices or the physical inventory prices in the material master.

4. Specify in the Settings screen box whether you want to display the net or gross values.

   - If you want to change the material prices, choose Change material prices. A window appears in which you select if:
     - A batch input session should be generated for the price changes
     - The prices should be changed directly when valuation is carried out
     - You do not want the material prices to be changed, in which case you must select No update.

     Choose ✔ to confirm your entries.

   - Select Update phys. inv. prices.

     - A window appears in which you select the price field in which the LIFO price should be updated. If you want to delete prices in other price fields when carrying out the update, select the Reset field.

     Choose ✔ to confirm your entries.

5. Choose List format [Ext.] and a dialog box appears in which you specify the type of print list that you require.

6. Enter data as required.

7. Choose ☐ Execute.

Result

The display screen shows the material values according to inventory accounting and those based on the LIFO method.
If you intended to update the database, the system updates the physical inventory prices selected in the material master record. If you specified that the prices should be changed, the system either generates a batch input session to make the price changes, or – in the case of a direct update – makes the price changes immediately.

You can analyze the results using the Schedule Manager [Ext.] and the messages [Ext.] using the application log.
Layer Maintenance

Use
You can process each layer manually. The following functions are available for this:

- Displaying Layers [Page 75]
- Changing Layers [Page 76]
- Deleting Layers [Page 77]
Displaying Layers

To display a layer, proceed as follows:


2. Enter the Layer version and LIFO method.
   
   Specify the valuation area or company code that the layer belongs to.

3. If you want to display a material layer, go to Material number and enter the material number.
   
   If you want to display a pool layer, go to Pool number and enter the pool number.

4. To display the layer data, choose Layer overview.
   
   The layer data screen appears. The layer quantity, net value and gross value are displayed here.

5. To display the receipts, choose Receipts overview.
   
   The list of receipt data appears. The receipt quantities and values are displayed.
Changing Layers

To change a layer, proceed as follows:


2. Enter the Layer version and LIFO method.
   Enter the valuation area that the layer belongs to.

3. If you want to change a material layer, go to Material number and enter the material number.
   If you want to change a pool layer, go to Pool number and enter the pool number.

4. To change the layer data, choose Layer overview.
   The layer data screen appears. You can change the layer quantity, net value and gross value here. Save your changes.

5. To change goods receipts for test purposes, choose Receipts overview.
   The list of receipt data appears. You can change the receipt quantities and values here. Save your changes.

Displaying Change Documents

A document is created for every layer change. By choosing Bal. sheet valuation → LIFO valuation → Layer → Display change docs., you can display all changes made to a layer.
Deleting Layers

When large volumes of data are involved, you should only update LIFO data using background processing.

Use

In a test installation, it is frequently necessary to delete layers created for testing purposes. Or, after a certain period of time, you no longer need the receipt records for LIFO valuation.

It is possible to delete several layers or receipt records in a single step.

Procedure


   The selection screen appears.

2. On the selection screen, specify the criteria for deletion: you can enter intervals for the layer version, company code, valuation area, material, pool, fiscal year and posting period.

3. Select the data to be deleted. You have the following options:
   a. Monthly receipts
   b. Single receipts
   c. Material annual layer
   d. Pool annual layer
   e. Material monthly layer
   f. Pool monthly layer

4. Select Delete data if you want the data to be deleted.

5. Choose 📧. The system first issues the warning:

   CAUTION: Records will be physically deleted

6. Choose 📧.

Result

A list of the deleted data is generated.
Aggregating Layers

**Use**

To reduce the number of layers, you have the option of aggregating older layers of a material or pool to a single layer. The value of the new layer is calculated from the average value of the aggregated layers.

> When large volumes of data are involved, you should only update LIFO data using background processing.

**Procedure**

1. Choose **Valuation** → **Bal. sheet valuation** → **LIFO valuation** → **Tools** → **Aggregate layer**.
   
   The selection screen appears.

2. Enter the **Version** and **Method**.

3. Enter the valuation area that the layers belong to.
   
   If you want to aggregate material layers, enter the material numbers.

   If you want to aggregate pool layers, enter the pool numbers.

4. Enter the fiscal year and, if necessary, the period up to which you want the layers to be aggregated.

5. If you want to update the aggregation, select the field **Aggregate layer** in the screen box **Update**.

**Result**

A list of the aggregated layers appears.
Reassigning Layers

Use
You might have to reassign material layers in the following cases:

- The material is transferred to another material and should no longer exist in its own right.
- The material is transferred to another valuation level.

Procedure
   
   The selection screen appears.

2. Choose Allocation.
   
   A table appears containing the rule type for reassignment of material layers.

3. Select New entries and enter the valuation level and the material for which you want the layer to be reassigned. Then enter the valuation level and the material to which you want the layer to be assigned.

   If you enter only the valuation levels without specifying a material, the system carries out reassignment for the layers of all materials in the valuation level.

4. Save your entries.

5. To return to the selection screen, choose Back.

6. If you want to update the reassignment, select Reassign layer.

Result
A list of the old and new layers is generated.

If the system could not make certain assignments, the list contains an appropriate error entry.
Adjusting Units of Measure

Use
If the unit of measure for a material is changed in the material master record, the units of measure are not automatically changed for existing layers.

If the unit of measure for a pool is changed in Customizing, the units of measure are not automatically changed for existing layers.

In such cases, you can check the units of measure used for the pools and subsequently change them.

Procedure
2. Specify which materials or pools you want to check the units of measure for.
   Select the data to be checked:
   – For material layers, you can check the material annual layers and the material monthly layers.
   – For pools, you can check the pool annual layers and the pool monthly layers.
   – You can check the monthly receipts.
3. If you want to adjust the units of measure, select Change data in the Update screen box.

Result
A list appears of the layers in which differences in the units of measure were found.
FIFO Valuation

Definition

FIFO valuation is a method that enables you to valuate the stocks of a material as realistically as possible. FIFO (first in, first out) stands for the assumption that the first stocks of a material to be received are the first to be consumed. The value of the stock is therefore calculated based on the last stocks received.

Use

FIFO valuation has a number of uses:

- Listing the FIFO values of certain materials.
  - When you run FIFO valuation, the system calculates the FIFO values of the materials concerned. The results are displayed in the form of a list that contains the following information:
    - The closing stock quantity and closing stock value for each material for the period in question as well as the FIFO value and the difference between that and the stock value
    - The net value based on lowest value determination (if you carry out FIFO valuation with lowest value comparison)
    - The totals for each valuation area or company code by material stock account
    - The totals by valuation area or company code
- Lowest value comparison of the FIFO value after determining the lowest price.
  - When you run FIFO valuation, you specify whether the system should also carry out a lowest price comparison.
- Updating the FIFO price (possibly after carrying out lowest value comparison) in the material master record.
  - When you run FIFO valuation, you specify whether the FIFO price should be updated in the material master record. You can use the tax and commercial price fields for this.
- Revaluating the material, that is, replacing the current value of the material with the FIFO value.
  - When you run FIFO valuation, you can change the material price directly or generate a batch input session to effect price changes.

See also:

FIFO Value Determination [Page 83]
Data Update During FIFO Valuation [Page 85]
Introducing FIFO Valuation [Page 86]
Carrying Out FIFO Valuation [Page 94]
FIFO Valuation: List of Results [Page 96]
Displaying FIFO Valuation Data [Page 97]
Changing FIFO Valuation Data [Page 98]
FIFO Valuation

Deleting FIFO Valuation Data [Page 99]
FIFO Value Determination

Use

The FIFO value is determined from all FIFO-relevant goods receipts.

You use the FIFO method to define the stock that is to be valuated again, for example, the closing stock from the previous month or previous year. Beginning with the appropriate period, the system adds up all the quantities of goods received for each period until the closing stock is reached. Then the system adds up the value of the goods received. The last value to be added is determined in relation to the last quantity added.

The sum of the values of the goods received is the FIFO value.

At the end of the fiscal year, there are 1,500 pieces of a material in stock. The following FIFO-relevant goods receipts were posted in the individual periods of the fiscal year:

<table>
<thead>
<tr>
<th>Period</th>
<th>Quantity of goods received</th>
<th>Value of goods received</th>
<th>Price of goods received</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>100</td>
<td>1000</td>
<td>10.00</td>
</tr>
<tr>
<td>02</td>
<td>200</td>
<td>2050</td>
<td>10.25</td>
</tr>
<tr>
<td>03</td>
<td>50</td>
<td>525</td>
<td>10.50</td>
</tr>
<tr>
<td>04</td>
<td>150</td>
<td>1525</td>
<td>10.17</td>
</tr>
<tr>
<td>05</td>
<td>100</td>
<td>1050</td>
<td>10.50</td>
</tr>
<tr>
<td>06</td>
<td>250</td>
<td>2600</td>
<td>10.40</td>
</tr>
<tr>
<td>07</td>
<td>300</td>
<td>3300</td>
<td>11.00</td>
</tr>
<tr>
<td>08</td>
<td>200</td>
<td>2250</td>
<td>11.25</td>
</tr>
<tr>
<td>09</td>
<td>150</td>
<td>1650</td>
<td>11.00</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
<td>2350</td>
<td>11.75</td>
</tr>
<tr>
<td>11</td>
<td>400</td>
<td>4600</td>
<td>11.50</td>
</tr>
<tr>
<td>12</td>
<td>300</td>
<td>3500</td>
<td>11.67</td>
</tr>
<tr>
<td>Total</td>
<td>2400</td>
<td>26400</td>
<td></td>
</tr>
</tbody>
</table>

The following table shows how the FIFO value is calculated:

<table>
<thead>
<tr>
<th>Period</th>
<th>Quantity</th>
<th>Value</th>
<th>Totaled quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>300</td>
<td>3500</td>
<td>300</td>
</tr>
<tr>
<td>11</td>
<td>400</td>
<td>4600</td>
<td>700</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
<td>2350</td>
<td>900</td>
</tr>
</tbody>
</table>
FIFO Value Determination

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>150</td>
<td>1650</td>
</tr>
<tr>
<td>8</td>
<td>200</td>
<td>2250</td>
</tr>
<tr>
<td>7</td>
<td>250</td>
<td>2750</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1500</strong></td>
<td><strong>17100</strong></td>
</tr>
</tbody>
</table>

Thus the price of the material according to the FIFO valuation is $17100 / 1500 = $11.40.

As a comparison: If the closing stock of the previous year was zero and no goods issues were posted for the material in the current fiscal year, the moving average price of the material at the end of the year would be $26400 / 2400 = $11.00.

Alternatively, the system can determine the FIFO value based on single receipts. You configure this using the FIFO method as well.

**Tolerances**

In exceptional circumstances, it can be that the stock to be valuated for a material is greater than the total of the receipt quantities. Reasons for this can be that not all goods receipts were relevant for FIFO or that part of the material was received a long time ago.

You can configure how the system is to react to this type of exceptional situation:

- The FIFO price calculated is applied to the entire stock to be valuated.
- The system searches for an alternative value. You have the following options:
  - Material price
  - Price of last FIFO valuation
  - Recalculation of the FIFO price with the assumption that the difference between the stock level and the total of the receipt quantities is valuated at the price of the oldest available receipts (base value).
  - The system does not carry out valuation. An error message is created for the material concerned.

Define the tolerance interval by entering the appropriate percentage rates.
Data Update During FIFO Valuation

Use

When carrying out FIFO valuation, you determine whether the results are to be saved to the database.

The results of FIFO valuation can be saved in two objects:

- In the **FIFO results table**, which contains the following information:
  - Material
  - FIFO methods
  - Valuation date
  - Valuated stock
  - Gross FIFO value
  - Net FIFO value, if you carry out FIFO valuation with lowest value comparison.
  - Stock values

- In the **material master record**
  
  In the material master record, you can have the system update the results in the price fields *Tax price 1, 2 or 3*, or *Commercial price 1, 2 or 3*.
  
  - If you carry out FIFO valuation with lowest value comparison, the system enters the net FIFO price in the field you select.
  
  - If you carry out FIFO valuation without lowest value comparison, the system enters the gross FIFO price in the field you select.
  
  - In the case of materials subject to split valuation, the system splits the FIFO price proportionally among the valuation types.
Introducing FIFO Valuation

Before you run FIFO valuation, you must make the following settings in the system:

- Determination of the FIFO Valuation Level [Page 87]
- Determination of FIFO Valuation Areas [Page 88]
- Definition of a FIFO Method [Page 89]
- Selection of Movements Relevant to FIFO [Page 90] (x)
- Selection of Materials Relevant to FIFO [Page 91] (x)
- Adopting Data Posted in a Posting Period [Page 92] (x)

The settings for the steps marked with (x) are identical to those carried out for LIFO valuation. If you already work with LIFO valuation, you do not have to change any settings. The only thing you may need to do is define other materials as being subject to FIFO valuation.
Determination of the FIFO Valuation Level

Use

<table>
<thead>
<tr>
<th>Function</th>
<th>Settings in Customizing for Valuation and Account Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define the level at which FIFO valuation is to be carried out.</td>
<td>Balance Sheet Valuation Procedures → Configure LIFO/FIFO Methods → General Information → Define LIFO/FIFO Valuation Levels</td>
</tr>
</tbody>
</table>

If you carry out Material Valuation in your company at plant level (valuation area = plant), you have two options:

- **FIFO valuation at company code level**
  
  You valuate all the stocks of a particular material in all of the valuation areas of the company code together (joint valuation). This means that there is only one FIFO price for a material in all of the valuation areas.

- **FIFO valuation at valuation area level**
  
  You valuate all the stocks of a particular material separately in the individual valuation areas of the same company code. This means that there can be different FIFO prices for a material in the individual valuation areas of the same company code.

If you carry out Material Valuation in your company at company code level (valuation area = company code), FIFO valuation is also carried out at company code level.

If you have flagged materials as relevant for FIFO, you can no longer change the settings for the FIFO valuation level.
Determination of FIFO Valuation Areas

Use

<table>
<thead>
<tr>
<th>Function</th>
<th>Settings in Customizing for Valuation and Account Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define the FIFO valuation areas.</td>
<td>Balance Sheet Valuation Procedures → Configure LIFO/FIFO Methods → FIFO → Configure FIFO Valuation Areas</td>
</tr>
</tbody>
</table>

The system only runs FIFO valuation for valuation areas that have been maintained. Assign the year of the first FIFO valuation in the R/3 System to each FIFO valuation area as the base year for that valuation area.
Definition of a FIFO Method

Use

In the R/3 System, FIFO valuation is based on a set of parameters, which are described as the FIFO method in all relevant transactions. The method is a six-character alphanumeric field that you can define in Customizing or from any initial screen during processing in the application. Some attributes of a FIFO method can be freely combined, while others may only be used in certain combinations. These combinations are referred to as models. 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 on the basis of receipts aggregated on a monthly basis or on the basis of single receipts?

  The differences are explained in an example [Page 93]. If you are determining values on the basis of single receipts, you must generate a document extract [Page 92] 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
**Selection of Movements Relevant to FIFO**

**Definition**
Movements relevant to FIFO are movements that are taken into account during FIFO valuation.

**Use**
The system calculates the FIFO value based on the quantities and values of goods receipts. However, there is no point in including all goods receipts for a particular material in FIFO valuation, as a stock transfer from one material to another, for example, is not necessarily valuated at market prices and therefore should not be relevant for FIFO valuation.

This is why your system administrator has to flag all goods movement types that should be included in FIFO valuation in Customizing for Material Valuation.

**Integration**
These settings are valid for both FIFO and LIFO valuation.
Selection of Materials Relevant to FIFO

Use

In the case of all materials relevant for FIFO valuation, you must select the field \textit{LIFO/FIFO relevant} on the accounting screen of the material master.

Activities

Individual Maintenance

When you create a material master record, you can select the field \textit{LIFO/FIFO relevant} on the accounting screen.

You can change the material master record for an existing material and select the indicator on the accounting screen.

Collective Maintenance

You can select a number of materials together for FIFO valuation or delete existing selections.

When large volumes of data are involved, you should only update FIFO data using background processing.

To carry out collective maintenance, proceed as follows:

1. Choose \textit{Logistics} \rightarrow \textit{Materials management} \rightarrow \textit{Valuation} \rightarrow \textit{Valuation} \rightarrow \textit{Bal. sheet valuation} \rightarrow \textit{FIFO valuation} \rightarrow \textit{Prepare} \rightarrow \textit{Select materials}.

   The \textit{Select Materials} screen appears.

2. Enter data as required. You can narrow down the selection of materials by using the company code, valuation area, material numbers, material types, material groups and creation dates.

3. Select whether you want to \textit{Set} or \textit{Remove} the LIFO/FIFO indicator.

4. Select \textit{Material master and FIFO file} if you want the data to be updated.

5. Choose \textit{Execute}.

   The system issues a log listing all the materials involved.
Adopting Data Posted in a Posting Period

Use

Usually the receipt data relevant for FIFO valuation, that is, the quantities and values from goods receipts and value differences from invoices, is updated by the applications. In the process, the system creates a data record for each valuation level, material and posting period. You can use a document extract to subsequently include documents posted in the R/3 System in the receipt data relevant for FIFO valuation. You can aggregate receipts for each posting period or store them in the form of single receipts.

You have to adopt data that has already been posted in the following circumstances:

- If you want to implement FIFO valuation in the middle of a settlement period
  In this situation, no FIFO receipt data exists yet.
- If you want to run FIFO valuation based on single receipts
  FIFO data records that are automatically created when FIFO valuation is active are aggregated on a posting period basis. If you run valuation based on single receipts, you must create new FIFO data records.

For more information about receipts by posting period and single receipts, see the following example [Page 93].

Activities

When large volumes of data are involved, you should only update FIFO data using background processing.

To subsequently create FIFO data, proceed as follows:

   The selection screen appears.
2. Enter the FIFO method and specify the materials for which the system should adopt the FIFO-relevant movements.
3. Specify whether the data is to be retrieved from a particular posting period or as required for each material. In the last case, the system only retrieves those receipts in the past that together result in the stock to be valuated.
4. In the screen box Update, select Receipt data if you want the data to be updated.
5. Choose Execute.
   The system displays a list of the documents in question.
Periodic Receipts – Single Receipts: Example

Business Transactions for Material A in a Period

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase order</td>
<td>100</td>
<td>$10.00</td>
</tr>
<tr>
<td>1st goods receipt</td>
<td>20</td>
<td>$100.00</td>
</tr>
<tr>
<td>2nd goods receipt</td>
<td>80</td>
<td>$800.00</td>
</tr>
<tr>
<td>Invoice</td>
<td>50</td>
<td>$12.00</td>
</tr>
<tr>
<td>Goods issue</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Closing stock</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

FIFO Valuation Based on Period Receipts

When you use period receipts as a basis, the value of the receipts for the period is $1100.00 for a receipt quantity of 100 pieces.

The FIFO value of the closing stock is thus 30 pieces x $1100.00 / 100 pieces = $330.00.

FIFO Valuation Based on Single Receipts

When you use single receipts as a basis, the system splits up the values from invoices among the goods receipts in chronological order on a progressive quantity fill-up basis.

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Value</th>
<th>FIFO receipt value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st goods receipt</td>
<td>20</td>
<td>200.00</td>
<td>$240.00</td>
</tr>
<tr>
<td>2nd goods receipt</td>
<td>80</td>
<td>800.00</td>
<td>$860.00</td>
</tr>
</tbody>
</table>

The FIFO value of the two goods receipts is calculated as follows:

$200.00 + (20 pieces x $100.00 / 50 pieces) = $240.00 or

$800.00 + (30 pieces x $100.00 / 50 pieces) = $860.00

The FIFO value of the closing stock is thus 30 pieces x $860.00 / 80 pieces = $322.50.
Carrying Out FIFO Valuation

When large volumes of data are involved, you should only update FIFO data using background processing.

Procedure

   The selection screen appears.

2. Enter the FIFO method and specify the materials for which you want to carry out FIFO valuation.

3. If you want the FIFO values to be compared with the lowest value, select the field Execute in the screen box Comp. lowest values.


5. The screen appears in which you select the price fields to be taken into account in the lowest value comparison.

6. If you run FIFO valuation at company code level, you can define how the lowest prices for the individual valuation areas are to be set in relation to one another. Choose Procedure.
   A dialog box appears in which you can enter possible options.

7. The results of the FIFO valuation can be updated.
   - If you want to update the FIFO results table, select the field FIFO price table in the screen box Update results.
   - If you want to update the material master with the results of the FIFO valuation, select the field Material master in the screen box Update results. You can change the material prices or the physical inventory prices in the material master.
     - If you want to change the material prices, select Change material prices. A window appears in which you select if:
       - A batch input session should be generated for the price changes
       - The prices should be changed directly when valuation is carried out
       - You do not want the material prices to be changed, in which case you must select No update.
     - Choose Update phys. inv. prices. A window appears in which you select the price field in which the FIFO price should be updated.
       - If you want to delete prices in other price fields when carrying out the update, select the Reset field.
       - Choose 🌿.
       - The selection screen reappears.

8. Choose List format [Ext.] and specify the information that the print list is to contain.
9. Choose EXECUTE.
   
The list of results appears.

For more information about the list of results, see:

- Schedule Manager [Ext.]
- Messages [Ext.]
- FIFO Valuation: List of Results [Page 96]
FIFO Valuation: List of Results

List Format: Output Details

If you select *Output details* on the *List Format* screen, a list of results containing the following information for each material appears:

- Closing stock
- Value of the closing stock
  - Gross FIFO value (without lowest value comparison)
  - The difference between the values – both absolute difference and percentage difference
  - Gross FIFO price (without lowest value comparison)
- How far back or to which material document the system had to go to determine the FIFO value

If you have carried out FIFO valuation with a lowest value comparison, the following information is also displayed:

- The net FIFO value based on the lowest value comparison
- The difference between the values – both absolute difference and percentage difference
- The net FIFO price

List Format: Output Totals

If you select *Output totals* on the *List Format* screen, the system displays the FIFO results for each FIFO valuation area and G/L account.

The gross and net FIFO values are each displayed alongside the book value on this totals display.
Displaying FIFO Valuation Data

To display FIFO valuation data on a material, proceed as follows:

1. Choose *Bal. sheet valuation* → *FIFO valuation* → *Valuation data* → *Display*.
   
The initial screen appears.

2. Enter data as required.

3. To display the FIFO data for the material, choose *Overview of results*.
   
The FIFO data screen appears. The valuated quantity, net value and gross value are displayed here.

4. To display the receipts, choose *Receipts overview*.
   
The list of receipt data appears. The receipt quantities and values are displayed.
Changing FIFO Valuation Data

You may want to change the FIFO valuation data of a material for test purposes. Proceed as follows:

   The initial screen appears.
2. Enter data as required.
3. To change the FIFO results for the material, choose Overview of results.
   The FIFO data screen appears.
4. Enter your changes and save them.
5. To change the receipts, choose Receipts overview.
   The list of receipt data appears.
6. Enter your changes and save them.

Displaying Change Documents

For every change made to the FIFO valuation data, the system creates a change document. To obtain a list of the changes, proceed as follows:

   The initial screen appears.
2. Enter the FIFO method, the material, and the period of time for which you want to list the changes. Select whether you want to see the changes to the FIFO results or the changes to the receipt data.
3. Assign the relevant valuation levels.
4. Choose Execute.
   A list of the change documents appears. The system displays when each change was made and by whom.
5. To see which fields were changed, position the cursor on the desired line and choose Edit → Display details.
   A window appears with the changed fields. The system displays the entry in each changed field before and after the change was made.
Deleting FIFO Valuation Data

When large volumes of data are involved, you should only update FIFO data using background processing.

Procedure

To delete FIFO valuation data, proceed as follows:

2. Enter the valuation level, the materials, the fiscal year and the periods for which you want to delete the FIFO valuation data.
3. Specify which data is to be deleted. You can select from the following:
   a) Monthly receipts
   b) Single receipts (if you have compiled them)
   c) FIFO results
4. Select Delete data if you want the data to be deleted.
5. Choose Execute.

   The system first issues the warning:
   CAUTION: Records will be physically deleted
   Choose .

   A list of the materials for which the FIFO data was deleted appears.
Results of Balance Sheet Valuation

Use

In Balance Sheet Valuation [Ext.], material prices are calculated. These material prices are updated in various ways and can be displayed. In each procedure, there are two fundamentally different options for saving the resulting prices:

- Changing material prices
  
  The prices can be adopted as the new valuation prices for the materials using the price change transaction. Accounting documents containing postings to the stock account and an expense account are created when this happens. The prices can be changed using a batch input session or by means of a direct update.

- Updating physical inventory prices
  
  The prices can be written to the physical inventory fields in the material master. The physical inventory prices have a temporary nature only, this means that the system cannot determine their validity as of a certain point in time. Once their contents have been analyzed, you can reset the physical inventory prices using various programs in balance sheet valuation. No documents are posted when the physical inventory prices are updated.

Features

You can use the physical inventory prices in various ways:

Generally, each balance sheet valuation procedure writes the results in a certain physical inventory field. The logical assignment of the fields to the respective procedure must currently be made outside the SAP System.

In principle, you can combine the procedures in any way you wish, by providing the interim results in each case via the physical inventory prices. The existing dependencies between the procedures and their sequence can be different according to the installation. The organization of balance sheet valuation should be carried out outside the SAP System before you start to use it.

💡

If you link balance sheet valuation procedures together, it does not generally make sense to adopt interim results as the material price at the same time.

Before the final analysis of the results, you can compare physical inventory prices. Conspicuously high price variances may lead to the conclusion that individual physical inventory prices have not been calculated correctly and must be corrected manually.

The results of the individual procedures can be compared with one another using the analysis Balance Sheet Values by Account [Page 106]. The same program calculated the final balance sheet price to be set, which can in turn be adopted as the new material price or as another physical inventory price.

In addition, you can take balances displays with reference to the stock accounts from the list. On the basis of these balances, you can make manual postings to the balance sheet account and the expense account.
Basically, you need to decide whether the results of balance sheet valuation are adopted as the material price or whether manual postings are to be made according to the analysis of balance sheet values by account. You should weigh up the advantages and disadvantage of both procedures carefully.

In addition, there is the option of storing individual physical inventory prices as valuation alternatives in the SAP System, for example, to create a history of the balance sheet valuation results.
Results of Balance Sheet Valuation: Price Variances

Use

After executing different procedures in balance sheet valuation, you often have to compare the resulting prices.

Usually the aim of such an investigation is to determine those prices for which the variance from the book price is noticeably high.

For example, this is how you can uncover unrealistic purchase order prices that are collected by the lowest value determination for market prices.

Features

The system always determines the difference between a physical inventory price \([\text{Ext.}]\) and a comparison price and generates a list. You can narrow down the list using material numbers, valuation areas, valuation types, valuation classes, material types and material groups.

The physical inventory price can be one of the following prices:

- One of the price fields updated in the material master record
- The lowest of several of the price fields updated in the material master record

The comparison price can be one of the following prices:

- Current material price
- Material price from the previous month or year
- Current standard price
- Standard price from the previous month or year
- Current moving average price
- Moving average price from the previous month or year
- Tax price 1, 2, or 3
- Commercial price 1, 2, or 3

See also:

Balance Sheet Valuation: Listing Price Variances [Page 103]
Balance Sheet Valuation: Listing Price Variances


2. Specify the materials that are to be included in the list. You can narrow down your selection using material numbers, valuation areas, valuation types, valuation classes, material types, and material groups.

   
   The dialog box appears in which you specify the physical inventory price. Select one or more of the tax and commercial price options. If you select more than one price, the system compares the base price with the lowest of these prices. You can define the title of the column heading in a text field. Choose 🍀 to confirm your entries.

4. Choose Comparison price.
   
   The dialog box appears in which you specify the comparison price. The current material price is used as the comparison price in the standard system. You can change this price. Choose 🍀 to confirm your entries.

5. Choose whether the list is to check devaluations or revaluations.

6. Enter a minimum variance, so that only variances larger than the percentage entered are listed.

7. Choose Valuation level. Select whether the price comparison is to be performed at valuation area level or company code level.

8. Choose 🍀 Execute.

Result

A list of the price variances appears. You can use the ABAP List Viewer functions to process the list.

This list shows the physical inventory price and the comparison price for each material and the percentage variance.
Displaying Results of Balance Sheet Valuation

Use
To transfer the results of balance sheet valuation to Financial Accounting, you can proceed as follows:

- You first list the results of lowest value determination and then decide which stock accounts are to be taken into account for devaluation. You carry out the corresponding balance sheet posting manually.
- You change the price directly when you determine the balance sheet values.

Features
To establish the balance sheet value of the stock, you can list side by side the values resulting from the previous update to the physical inventory prices in the material master record. You have the option of grouping several prices together as a price level. The system automatically calculates the value of a price level from the lowest of the prices assigned (see Example [Page 105]).

You generate a list in which the values resulting from the price levels defined and the actual stock value (current, from the previous month, from the month before last, or from the previous year) are shown for each material. The total stock values by stock account are also displayed.

This list allows you to decide on the stock accounts that are to be taken into account during devaluation. The list specifies the values that are to be transferred.

At the same time as you generate this list, you can have the system change the prices. Changing the balance sheet price determined causes the system to devalue the stock accounts.

If you use the price change function to transfer the balance sheet values to the stock accounts, it can lead to problems if you are later required to reinstate the original values.

See also:
Balance Sheet Values by Account: Generating a List [Page 106]
**Price Levels: Example**

You determined the lowest price based on market prices, range of coverage and rate of movement. For some materials, you also entered physical inventory prices derived from data not available in the R/3 System.

You also carried out LIFO valuation and inventory costing in the R/3 System and updated the results in the material master record.

**Material Master Record**

<table>
<thead>
<tr>
<th>Price Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax price 1</td>
<td>Lowest value determination based on market prices</td>
</tr>
<tr>
<td>Tax price 2</td>
<td>Lowest value determination based on range of coverage</td>
</tr>
<tr>
<td>Tax price 3</td>
<td>Lowest value determination based on movement rate</td>
</tr>
<tr>
<td>Commercial price 1</td>
<td>Externally determined market prices</td>
</tr>
<tr>
<td>Commercial price 2</td>
<td>LIFO valuation</td>
</tr>
<tr>
<td>Commercial price 3</td>
<td>Inventory costing</td>
</tr>
</tbody>
</table>

To display the values of lowest value determination based on market price in the list of results, you assign tax price 1, commercial price 1 and commercial price 3 to price level 1.

You assign the results of lowest value determination based on range of coverage and movement rate to price level 2.

Level 3 is based on the results of LIFO valuation.
Balance Sheet Values by Account: Generating a List

Procedure


2. Enter data as required: the company code in question, the key date, and the materials that you want the system to create the list for. You can narrow down your selection using material numbers, valuation areas, valuation types, valuation classes, material types, and material groups.

3. Select whether the current stock value, that of the previous month, or that of the previous year should be displayed in the list.

4. Choose Prices/levels. A window appears in which you define the following:
   - The physical inventory price fields in the material master that are to be taken into account
   - The level to which the price fields are to be grouped together (see Price Levels: Example [Page 105])
   - What the levels in the list are called
   - If a revaluation between two levels is to be excluded
   - The level that a possible replacement value is to be taken from
   - The levels that the balance sheet value is to be calculated from

   Choose ✔️ to confirm your entries.

5. The balance sheet prices determined can be updated in the material master record. If you want to do this, select the field Database update in the screen box Update bal. sheet price. You can change the material prices or the physical inventory prices in the material master.
   - If you want to change the material prices, select Change material prices. A window appears in which you select if:
     - A batch input session should be generated for the price changes
     - The prices should be changed directly when valuation is carried out
     - You do not want the material prices to be changed, in which case you must select No update.

   Choose ✔️ to confirm your entries.

   Choose Update phys. inv. prices.
   - A window appears in which you select the price field in which the balance sheet price is updated. If you want to delete prices in other price fields when carrying out the update, select the Reset field.

   Choose ✔️ to confirm your entries.

6. Choose List format [Ext.] and specify the type of print list that you require.
7. Choose Valuation level. You can configure whether the balance sheet values are to be displayed at Valuation area level or Company code level.

8. Choose Execute.

Result

A list is displayed with the stock values for the materials entered. The individual columns show the stock value and the values on the individual levels for each material.

The values in the columns are added together for each valuation level and for each stock account. The difference between the sum of the values and the individual price levels is displayed in the Difference line. The respective Difference at lower level and Devaluation are listed underneath for each level.

If you intended to update the database, the system updates the physical inventory prices selected in the material master record. If you specified that the prices should be changed, the system either generates a batch input session to make the price changes, or – in the case of direct updating – makes the price changes immediately.

You can analyze the results using the Schedule Manager [Ext.] and the messages [Ext.] using the application log.
Transferring Physical Inventory Prices to Valuation Alternatives

1. Choose Valuation -> Balance Sheet Valuation -> Results -> Transfer Physical Inventory Prices.

   The selection screen appears.

2. Maintain or check the indicators stored in the system for valuation alternatives. Go to the header row of the selection screen and choose Valuation alternatives.

3. Enter the company code and specify the materials for which the physical inventory prices are to be transferred.

4. In the screen area Physical inventory price assignment, specify the fiscal year and the posting period that the physical inventory prices refer to. Select the physical inventory prices that are to be transferred to valuation alternatives and assign the appropriate indicators.

5. If you want to have the valuation alternatives affected updated in the database, select the indicator Database update in the area Options. Choose whether you want to have Only new records created or also Existing records overwritten.

Result

A list containing the physical inventory prices transferred appears.