

J.S (P.G) COLLEGE SIKANDRABAD

B.COM- 2nd year

SUBJECT- COST ACCOUNTING

TOPIC :

Methods of Pricing Material Issues: Methods | Costing

The important methods followed in pricing of issue of materials are:- 1. Actual Cost Method 2. First-In First-Out (FIFO) Method 3. Last-In First-Out (LIFO) Method 4. Highest-in First-Out (HIFO) Method 5. Simple Average Cost Method 6. Weighted Average Cost Method 7. Periodic Average Cost Method 8. Standard Cost Method 9. Replacement Cost Method 10. Next in First Out (NIFO) Method 11. Base Stock Method.

1. Actual Cost Method:

Where materials are purchased specially for a specific job, actual cost of materials is charged to that job. Such materials will normally be stored separately and issued only to that particular job.

2. First-In First-Out (FIFO) Method:

3.

CIMA defines FIFO as “**a method of pricing the issue of material using, the purchase price of the oldest unit in the stock**”. Under this method materials are

issued out of stock in the order in which they were first received into stock. It is assumed that the first material to come into stores will be the first material to be used.

Advantages:

- (a) It is easy to understand and simple to price the issues.
- (b) It is a good store keeping practice which ensures that raw material leave the stores in a chronological order based on their age.
- (c) It is a straight forward method which involves less clerical cost than other methods of pricing.
- (d) This method of inventory valuation is acceptable under standard accounting practice.
- (e) It is a consistent and realistic practice in valuation of inventory and finished stock.
- (f) The inventory is valued at the most recent market prices and it is near to the valuation based on replacement cost.

Disadvantages:

- (a) There is no certainty that materials which have been in stock longest will be used, if they are mixed up with other materials purchased at a later date at different price.

(b) If the price of the materials purchased fluctuates considerably, it involves more clerical work and there is possibility of errors.

(c) In a situation of rising prices, production cost is understated.

(d) In inflationary market, there is a tendency to under-price material issues. In deflationary market, there is a tendency to overprice such issues.

(e) Usually more than one price has to be adopted for a single issue of materials.

(f) The method makes cost comparison difficult of different jobs when they are charged with varying prices for the same materials.

This method is more suitable where the size of the raw materials is large and bulky and its price is high and can be easily identified in the stores separately. This method is useful when the frequency of material receipts is less and the market price of the material are stable and steady.

4. Last-In First-Out (LIFO) Method:

Under this method most recent purchase will be the first to be issued. The issues are priced out at the most recent batch received and continue to be charged until a new batch received is arrived into stock. It is a method of pricing the issue of material using the purchase price of the latest unit in the stock.

Advantages:

- (a) Stocks issued at more recent price represent the current market value based on the replacement cost.
- (b) It is simple to understand and easy to apply.
- (c) Product cost will tend to be more realistic since material cost is charged at more recent price.
- (d) In times of rising prices, the pricing of issues will be at a more recent current market price.
- (e) It minimizes unrealized inventory gains and tends to show the conservative profit figure by valuation of inventory at value before price rise and provides a hedge against inflation.

Disadvantages:

- (a) Valuation of inventory under this method is not acceptable in preparation of financial accounts.
- (b) It is an assumption of a cash flow pattern and is not intended to represent the true physical flow of materials from the stores.
- (c) More than one price may have to be adopted for an issue.
- (d) It renders cost comparison between jobs difficult.
- (e) It involves more clerical work and sometimes valuation may go wrong.

(f) In times of inflation, valuation of inventory under this method will not represent the current market prices.

4. Highest-in First-Out (HIFO) Method:

Under this method, the materials with highest prices are issued first, irrespective of the date upon which they were purchased. The basic assumption is that in fluctuating and inflationary market, the cost of material are quickly absorbed into product cost to hedge against risk of inflation. This method is used when the material is in short supply and in execution of cost plus contracts. This method is not popular and not acceptable under standard accounting practices.

5. Simple Average Cost Method:

Under this method all the materials received are merged into existing stock of materials, their identity being lost. The simple average price is calculated without any regard to the quantities involved. The simple average cost is arrived at by adding the different prices paid during the period for the batches purchased by dividing the number of batches. For example, three batches of materials received at Rs. 10, Rs. 12 and Rs. 14 per unit respectively.

The simple average price is calculated as follows:

$$\text{Rs. } 10 + \text{Rs. } 12 + \text{Rs. } 14 / 3 \text{ batches} = \text{Rs. } 36 / 3 \text{ batches} = \text{Rs. } 12 \text{ per unit}$$

This method is not popular because it takes into consideration the prices of different batches but not the quantities purchased in different batches. This method is used when prices do not fluctuate very much and the stock values are small in value.

6. Weighted Average Cost Method:

It is a perpetual weighted average system where the issue price is recalculated every time after each receipt taking into consideration both the total quantities and total cost while calculating weighted average price. For example, three batches of material received in quantities of 1,000 units @ Rs. 15, 1,300 units @ Rs. 16 and 800 units @ Rs. 14.

The weighted average price is calculated as follows:

$$(1,000 \text{ units} \times \text{Rs. } 15) + (1,300 \text{ units} \times \text{Rs. } 16) + (800 \text{ units} \times \text{Rs. } 14) / 1,000 \text{ units} + 1,300 \text{ units} + 800 \text{ units}$$
$$= \text{Rs. } 15,000 + \text{Rs. } 20,800 + \text{Rs. } 11,200 / 3,100 \text{ units} = \text{Rs. } 47,000 / 3,100 \text{ units} = \text{Rs. } 15.16 \text{ per unit}$$

This method tends to smooth out the fluctuations in price and reduces the number of calculations to be made, as each issue is charged at the same price until a fresh batch of material is received.

This method is easier as compared to FIFO and LIFO, as there is no necessity to identify each batch separately. But this method increases the clerical work in calculation of new average price every time a new batch is received. The

issue price calculated rarely represents the actual purchase price.

7. Periodic Average Cost Method:

Under this method, instead of recalculating the simple or weighted average cost every time there is a receipt, an average for the accounting period as a whole is computed.

The average price for all the materials issued during the period is computed as follows:

$$\frac{\begin{array}{l} \text{Cost of} \\ \text{opening stock} \end{array} + \begin{array}{l} \text{Total cost of all receipts} \\ \text{during the period} \end{array}}{\begin{array}{l} \text{Units in} \\ \text{opening stock} \end{array} + \begin{array}{l} \text{Total units received} \\ \text{during the period} \end{array}}$$

8. Standard Cost Method:

Under this method, material issues are priced at a predetermined standard issue price. Any variance between the actual purchase price and standard issue price is written off to the Profit and Loss Account. Standard cost is a predetermined cost set by the management prior to the actual material costs being known and the standard issue price is used for all issues to production and for valuation of closing stock.

If initially the standard price is set carefully then it reduces all the clerical work and errors tremendously and the stock recording procedure is simplified. The realistic production cost comparisons can be made easier by eliminating fluctuations in cost due to material price variance. In a situation of fluctuating prices, this method is not suitable.

9. Replacement Cost Method:

This method is also called as 'market price method'. The replacement cost is a cost at which material identical to that can be replaced by purchasing at the date of pricing material issues; as distinct from the actual cost price at the date of purchase. The replacement price is the price of replacing the material at the time of issue of materials or on the date of valuation of closing stock.

This method is not acceptable for standard accounting practice, since it reflects a cost which has not really been paid. If stocks are held at replacement cost, for balance sheet purposes when they have been bought at a lower price, an element of profit which has not yet been realized will be built into the Profit and Loss Account.

This method is advocated by charging the market price of material to the job or process, make it easier to determine the profitability of the job or process. This method is suitable particularly in the inflationary tendency of market prices of materials. Where there is no precise market for particular materials, it would be difficult in ascertaining replacement prices for the material issues.

10. Next in First Out (NIFO) Method:

This method is a variant of replacement cost method. Under this method the price quoted on the latest purchase order or contract is used for all issues until a new order is placed.

11. *Base Stock Method:*

Under this method, a specified quantity of material is always held in stock and is priced at its original cost as buffer or base stock; and any issue of materials above the base stock quantity is priced under any one of the methods discussed above.

This method indicates how prices are moving over a longer period of time. But this method is not popular and also not accepted under standard accounting practice since it would result in stock valuation totally unrealistic.