UNIT V

PRICING OF MATERIAL ISSUES AND LABOUR COSTING

Different Methods of Pricing of Material Issues

1. FIRST IN FIRST OUT METHOD (FIFO)

Under this method, materials are issued in the order in which they are received in the store. It means that the material received first will be issued first. This method is suitable in times of falling prices

Advantages

1. This method is simple to understand and easy to operate.
2. The closing stock is valued at the current market price.
3. Since issues are priced at cost, no profit or loss arises from pricing.
4. This method is more suitable in times of falling prices.
5. Deterioration and obsolescence can be avoided.

Disadvantages

1. When prices fluctuate, calculation becomes complicated. This increases the possibility of clerical errors.
2. During the period of price fluctuations, materials charged to jobs vary. Therefore, comparison between jobs is difficult.
3. During the period of rising prices, product costs are understated and profits are overstated. This may result in payment of higher dividend out of capital.

2. LAST IN FIRST OUT METHOD (LIFO)

This method is opposite to FIFO. Here materials received last are issued first. Issues are made from the latest purchases.

Advantages

1. Issues are based on actual cost.
2. Issue prices reflects current market price.
3. Product cost will be based on current market price and hence will be more realistic.
4. There is no unrealized profit or loss.
5. Simple to operate if purchases are not many and prices are steady or rising
6. When prices are, raising this method is helpful in preparation of quotation or estimates.

Disadvantages

1. This method involves considerable clerical work.
2. Under falling prices, issues are priced at lower prices and stocks are valued at higher rates.
3. Stock of material shown in the balance sheet will not reflect market price.
4. Due to variation in prices, comparison of cost of similar job is difficult.
5. This method is not accepted by the income tax authorities.

3. BASE STOCK METHOD

Each business concern usually maintains a minimum quantity of material in stock. This minimum quantity is known as base stock. This stock will be used only when emergency arises. This base stock is considered a fixed asset valued at cost price irrespective of the price fluctuations. The quantity in excess of this stock may be valued either by using FIFO or LIFO method. Base stock is a dependent method. It operates in conjunction with either FIFO or LIFO.

4. SIMPLE AVERAGE METHOD

The simple average is determined by adding different prices of materials in stock and dividing the total by number of prices. Quantity purchased in each lot is ignored.

Advantages

1. This method is simple to understand and easy to operate.
2. It reduces clerical work.
3. It is suitable when prices are stable.

Disadvantages

1. It does not take into account the quantities purchased.
2. The value of closing stock becomes unrealistic.
3. Material cost does not represent actual cost price.
4. When price fluctuate, this method will give incorrect result.

5. WEIGHTED AVERAGE METHOD

This is an improvement over the simple average method. This method takes into account both quantity and price for arriving at the average price. The weighted average is obtained by dividing the total cost of material in the stock by total quantity of material in the stock.

Advantages

1. It gives more accurate results than simple average price because it considers both quantity as well as price.

2. It evens out the effect of price fluctuations. All jobs are charged at average price. Therefore, comparison between jobs is more easy and realistic.

3. It is acceptable to income tax authorities.

Disadvantages

1. Stock on hand does not represent current market prices.

2. When large number of purchases is made at different rates, the calculation is tedious. Therefore, there are more chances of clerical errors. 3. With some approximation in average price, there will be profit or loss due to over or under charging of material cost to jobs**.**

Halsey Incentive Plan:

In this method a standard time is fixed for the completion of the job. A minimum base-wage is guaranteed to every worker. If a worker completes his job in just the standard time, he will not be given any incentive. If a worker performs his job in less than standard time, he is given incentive. The incentive will be equal to 50% of the time saved by the worker.

W=TR+(S-T)R%

Where

W=Total Wages

S=Standard time

T=Time taken to complete the job

%=Percentage of wages of time saved to be given as incentive

R=Rate;

For example, if rate hour is Rs.3 standard time for completion of job is 10 hours.

A worker completes the job in 8 hours, his total wages will be:

W= 8x 3+ (10-8)3×1/2

= Rs.27

In the above example, worker is given an incentive of 50% (1/2) of time saved.

Advantages:

a. It is simple.

b. Each worker is guaranteed a minimum wage.

c. This is beneficial to efficient worker.

d. Causes no harm to new worker, trainee, or slow worker.

e. Management shares benefits of over-achievement by workers.

Disadvantages:

a. Workers get only a percentage of return on their over-achievement.

b. The quality of production may suffer as workers may do work in hurry,

c. There may be difficulties in setting standard time for different jobs.

II. Rowan Plan:

This plan is quite similar to Halsey plan. It differs only in terms of calculation of incentive for time saved. The worker gets the guaranteed minimum wages. The incentive for completing the job in time lesser than standard time is paid on the basis of a ratio, which is time saved over standard time per unit standard time.

Incentive is calculated as:

Incentive or Bonus=S-1/SX T x R

Total wages=T x R+ incentive

=T x R(S-T)/S x T x R

Where, W=Total wages

S=Standard time

T=Time taken to complete the job

R=Rate;

For example, if rate per hour is Rs.3and standard time for completion of job is 10 hours.

A worker completes the job in 8 hours, his total wages will be:

W=8×3+ (10-8)/10x 8x 3=Rs.28.4

Advantages:

a. This system checks over-speeding and overstrain by worker.

b. Each worker is guaranteed a minimum wage.

c. Efficiency is rewarded.

Disadvantages:

a. The workers find it difficult to understand.

b. Discourages workers to over-achieve.

c. Workers may not like sharing of profit for over-achievement.