MEANING OF MATERIAL

The first and the most important element of the product cost is material. Material is a substance, an integral part, from which the product is made. And constitutes a significant component of total cost. Depending upon the type of product manufactured, the material cost may go up to 70-80% of the total cost.

CATEGORIES OF MATERIAL

- 1. RAW MATERIAL: Materialsentering the production process at the very beginning in their natural or raw form.The materials might be appearing in the final product, for example raw cotton (KAPAS) in the Production of Cotton textile or disappearing in the production process without forming a tangible part of the output, for example, Coal. 2.
- SEMI FINISHED MATERIAL: Partly finished materials purchased from outside or produced within the organization for assembling into a final product, e.g., unpolished furniture purchased from outside andpolished in-house before sale.
- 3. FINISHED MATERIAL:Finished Material are products that are used in the form they are manufactured without any further value addition, e.g., an automobile is a finished product used directly by the consumer. However, finished components can also be used as raw materials or semi-finished materials for manufacturing of the final product e.g.Tyres, batteries, engine, and other components are finished material used by automobile manufacturers.

DIRECT MATERIAL

- Direct Materials are those that can be conveniently and wholly identified with specific units of output/ product/Job/ contract/ processor operations. These become the part of finished product itself. Example: Leather in leather products, Wood in Furniture production etc. At times, certain materials of small value though traceable to specific cost unit are treated as indirect material because the time, energy and cost involved in record keeping of such small value is not worth achieving a slightly higher accuracy in ascertaining the coste.g. Glue, nails, nut bolt etc.in furniture production. However, material, of whatever value, used in contracts performed as special sales outside the factory are ascertained as direct materials as they are for specific contract only.

INDIRECT MATERIAL

- All those materials that cannot be classified as direct material are called indirect materials. Indirect materials, generally, do not physically constitute a part of the product as direct material do. Indirect materials include: 1. Materials, though used in production, which have so small or complex consumption that it is not feasible to try to trace them to specific products. 2. Production supplies & materials which cannot be identified with specific cost units e.g. Grease, Lubricating oil, scrap, small tools etc. used in a factory.

MATERIAL CONTROL

- Material Control is a system which ensures the provision of the right quantity of materialof the right quality, at the right time with a minimum amount of investment. It is a systematic control over the procurement, storage, and usage of materials so as to maintain an even flow of materials andat the same time avoiding excessive investment in inventories. The essentials of a good system of material control include scheduling the requirements of purchasing, receiving, inspecting, maintaining stock records and material accounting and recording. In fact, Material control is a matter of coordination among the purchase department, receiving andinspection department, store keeping department, product control department and stock Control department. The success of abusiness concern largely depends upon the efficiencyof its Material Control System.

OBJECTIVES OF MATERIAL CONTROL

- 1. Continuous supply of materials for uninterrupted flow of production: Situation of production stoppage due to materials running out of stock should be avoided. Such production stoppage is very costly in terms of overheads, denial of sales or panic purchases.
- 2. Optimum investment in materials:Excessive investments due to over stocking of materials reduce profitability of the business as it locks large capital without any returns as well as increased storage cost.
- 3. Economy in purchasing: Material should be purchased at the lowest possible cost without sacrificing the quality,regularity, and dependability of supplies.
- 4. Strict quality control: There should be a strict system of quality control. The order of supplies of right quality of raw materials should be authorized. Material should be tested at the time of their receipt and a report should be generated initialed by the person who has tested them for fixing responsibility

OBJECTIVES CONTINUED

- 5. Minimum handling cost and time: Material should be stored at such a place and in such manner,that: Material can be located at ease Made available to the user departments with least efforts Time consumed in tracing material and making them reach the user department should be the least.
- 6. Control on payment formaterials: Ensure that no payment is made for materials not ordered though received, or for material not received or for materials of defective quality
- . 7. Authorized issues: Ensure that no issue from the store takes place without a proper authorization. The store keeper has to be made accountable for all issues.

OBJECTIVES CONTINUED..

- 8. Minimize wastages: Minimizing wastages in handling at the time of receipt of materials in stores,during their issues and during use in the user department. Norms should be fixed for wastages at each stage and wastages above the norms should be investigated.
- 9. Control on the pilferages and leakages and other losses:A system should be put in place to ensure that pilferages of material do not take place. Special control is required to be put in place for material prone to pilferage.
- 10. Detect the slow moving and fast moving materials:The system should detect, on a regular basis, the items of material which are slow moving and items which are not moving at all. This will help in regulating further purchases of such materials and prevent losses. Many times, disposal of non-moving items is better than keeping them in sores and incurring storage cost.

OBJECTIVES CONTINUED..

- 11. Control on misappropriations: Ensure that no misappropriation of materials take place as once leakages develop in the system, they tend to become recurring in nature.
- 12. Regular and dependable information about materials: There should be regular and dependable record of information of each type of material- the stock position, minimum level, maximum level, special problems with respect of certain materials and the list of dependable suppliers. This will help in placing order of the right quantity at the right time and to the right supplier.

METHODS OF PRICING THE ISSUES

- The problem of pricing the issues arises only when large quantities of materials purchased at different prices remain in the stock for a period of time making it difficult to identify which unit of material was purchased at what price and hence which price is to be charged for which issue. The pricing of issues only deals with the assigning of pricing to the issues. It has nothing to do with the actual physical movement of materials.The objective of material pricing are:
- 1. To provide satisfactory basis for the evaluation of closing stock to prepare the final accounts.
- 2. To charge the cost of material used for measuring the cost of production and cost of sales.When materials are issued from the stores to the various production departments, the pricing of the issued materials can be done according to different methods. Each method has 37 its own area of suitability depending on the nature of materials, price trends and the management policy

FIFO

- FIRST IN FIRST OUT (FIFO): Under this method, issues are priced on the assumption that materials purchased first are issued first. The actual physical movement may or may not follow this pattern. Materials issued are priced at the oldest price recorded in stores lodger for materials in stock. So the closing stock of material is valued at the price of the latest purchases. The method is particularly suitable in case of perishable materials and in the period of falling prices. The issues are priced at oldest prices which are higher and hence facilitate the recovery of higher costs. The closing stock is valued at the latest prices which are lower. These results in lower value of closing stock and hence lower book profits thereby lower tax liability. In case of rising prices, the effect is the reverse.

ADVANTAGES FIFO

- 1. Most suitable in Perishable product as pricing method more on less corresponds with actual movement of Materials.
- 2. Simple to understand.
- 3. All issues are priced at cost price, hence entire cost of materials are recovered.
- 4. The method results in lower book profits and hence lower tax liability during the period of falling prices. 5. The value of closing stock is realistic as it is valued at the price of latest purchases

DISADVANTAGES

- 1. The issue price differs for different issues of the same quality of raw material at the same time. Therefore cost comparisons get distorted.
- 2. During the period of rising prices, it results in higher book profits and therefore high tax liability. This is because closing stock appearing on the credit side is valued at higher prices and the cost of production appearing on the debit side is valued lower prices.
- 3. For pricing one material requisition more than one price may be involved and hence leads tohigher probability of clerical errors

LIFO: LAST IN FIRST OUT

- Under this method, issues are priced on the assumption that material purchased last are issued first, though the actual physical movement of materials may not follow this pattern. Issues are priced at the price of latest purchases of materials remaining unissued at per records. As a result the closing stock gets priced at the price of the earliest purchases of materials lying unutilized as per records. The method is particularly useful in the case of rising prices. The production is charged at the price of latest purchases while the closing stock at the earliest prices which are lower. This leads to lower book profit and hence less tax liability. In case of falling prices the effect is reverse.

LIFO

- Advantage:
- 1. Method gives good matching of sales and cost of sales.
- 2. Method is simple to understand.
- 3. Issues are priced at cost and hence entire cost of material used is recovered from production.
- 4. It results in lower book profits and hence lower tax.
  Disadvantages:
- 1. The issue price differs in different issues and hence distorts cost comparison.
- 2. During the period of falling prices this method gives high profits and higher tax liability.
- 3. For pricing are material requisition more than one prices may be involved and hence higher probability of clerical errors in calculation

AVERAGE COST METHOD

- Average costs methods are based on the assumptions that the material purchased in different lots are stored together and their identity gets lost. Therefore these materials should be charged to production at an average price. This issue price can be calculated either on the basis of simple average method or on the basis of weighted average method.

AVERAGE COST METHOD

- Advantages: The method is systematic and not subject to manipulations. The method recovers full cost of materials from the production. It smoothensthe fluctuations in the issue prices. So different material requisitions will be charged almost the same price. The issue price is generally close to market price.
  Disadvantages: Fresh rate needs to be calculated after every fresh receipt of materials, which generally comes in fraction. Issue price is different from the actual cost of materials for the individual‟s issues and so some nominal profit or loss will appear simply because of the use of average method.

DIRECT AND INDIRECT LABOR

- Labour is the work force which contributes towards the completion of the manufacturing process of any organisation. Without manual horse power only machines cannot complete the process. Labour can be bifurcated in two parts; direct labour and indirect labour. Labour which is directly associated with a manufacturing process or his contribution is directly identifiable with a particular process will be called as direct labour while when the contribution of the labour cannot be associated with a particular manufacturing process or specifically not identifiable with a particular product or process is called as indirect labour. For example in a factory of readymade garments, wages paid to a tailor are direct wages.

TIME KEEPING DEPARTMENT

- The time-keeping department plays important role in the accounting and controlling of labour cost. The main function of this department is to accurately record the time spent by each worker on the work place and it will be forwarded to the pay-master department then this department will process it further to prepare the compensations of the employees. There are various methods of time keeping. Some most prevalent methods are as follows: 1. Attendance register 2. Token or disc method 3. Time-recording clocks 4. Biometric time clock

LABOR REMUNERATION

- Remuneration refers to the compensation for the efforts made by the employees in the completion of a job. Various methods of wage payment are prevalent as per the requirement of the industry. In some industries time rate system is suitable while in others piece rate system is more suitable .
- THE TIME WAGE PAYMENT SYSTEM Worker‟s remuneration is based on the hours spent by the workers on the job under time wage payment system. A major drawback of this system is that the workers are more concerned about completing their time on the job rather than the output on the job therefore, close supervision is REQUIRED.

Advantages of Time Wage Payment System

- Workers are self motivated to stay on the work there is no need to force them.
- This system is easy to understand by the labour and easy to implement by the employer.
- Generally, under this system workers get fixed monthly, daily, hourly wage rates for smooth functioning of their life.
- This method is comparatively cheaper than the other methods

- Disadvantages of Time Wage Payment System
- It is difficult to make distinction between efficient and inefficient workers.
- Workers concentrate more on hour‟s completion rather than work which hampers the productivity of the organisation.
- This system of wage payment restricts the flexibility of labour also even in case of no work is assigned to them but they are liable to complete the time.
- There is discontentment among the efficient workers for their efforts are not properly rewarded. It affects the efficiency of the employees. They become laggards over a period of time.

PIECE WAGE PAYMENT SYSTEM

- Under piece wage payment system, compensation is paid on the basis of units produced by the workers rather time spent by the workers on the workplace. Generally, workers are given a target for production if their performance is less than the target they are not paid, if performance is more than the target they will get the higher wages, if performance is upto the mark than they will get the standard rate. Wages = Number of units X per piece wage rate

- Advantages of Piece Rate Wage System Labours are self motivated to work and complete the targets.
- Labours get flexible work environment as employers are concerned with the output than the time consumed by the workers at work place.
- This method of wage payment increases the efficiency and productivity of the workers.

Disadvantages of Piece Rate Wage System

- Sometimes, under this method, labours compromise with the quality of product in the hurry of completing the targets.
- Maintaining the record of production by each worker is difficult on the daily basis.
- Maintaining discipline in working regarding entry and exit time is also difficult under this system.