

CHAPTER 6

COSTING

Costing

- ❖ **Cost** may be defined as the amount of expenditure incurred, or, attributable to a given thing
- ❖ **Cost estimating** is the process of determining the probable cost of the product **before** the start of its manufacture
- ❖ **Costing** is the process of calculating the **actual cost** of the product **after** it has been manufactured.
 - done on the basis of actual expenses in various departments that have been actually incurred

Method of Costing

1. **Job Costing or Order Costing** each job has to be **planned** and its **cost determined separately** on the basis of **actual costs** incurred or on predetermined costs
 - adopted in job order industries, machinery manufacturing and fabrication industries, building contracts etc.
 - In textile field, this type of costing could have applications in *printing, production of garments* etc

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2. Process Costing applied when a **standard product** is made which involves a number of **distinct processes** performed in a definite sequence.

E.g. yarn and fabric productions in the textile field

3. Department Costing This is the costing method carried out in each department of a factory.

4. Operating Costs This type of costing is used in firms providing utility services like transport

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➤ Examples in textile field would be those involved in marketing of textile products

5. Unit Cost When the **same product** is produced over and again, unit cost is calculated. If a **spinning mill produces only one count of yarn**, then unit cost i.e., cost per kilogram of yarn can be easily calculated.

6. Batch Costing When the order is for a **fixed number of units** (i.e., a batch), costing is carried out for the entire batch. For instance, if there is an order to purchase 1000 pieces of a particular design of a garment, the costing is done for the entire batch

Elements of Cost

Total cost = Cost of material + Cost of labour + Expenses

❖ **Cost of material** = Cost of direct materials + Cost of indirect materials

➤ **Direct materials:** The **starting material** which is transformed into the final product, also includes incidental expenses like *transport costs, taxes etc*

E.g. for the direct materials are *cotton fibre* in the case of spinning mill, *yarn* in the case of weaving mill, *dyes and chemicals*

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➤ **Indirect materials** are those that are essential for the conversion of direct materials to final/intermediate products.

E.g. lubricants (spindle oil, grease etc), spare parts

❖ **Cost of labour**=Cost of direct labour + Cost of indirect labour.

➤ **Cost of direct labour** is the **wages, salaries** and all fringe benefits incurred on the workers who are directly involved in the actual production.

E.g.: *Weavers* engaged in the production of cloth in the loom shed

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➤ **Cost of Indirect Labour** The wages, salaries and fringe benefits incurred on workers who are **not** directly employed in the production process - or those who assist production process constitute the indirect labour cost. E.g. *supervisor, security staff*

❖ **Expenses**

➤ **Direct expenses** are those which can be charged directly to a particular job or product

E.g. *cost of preparing a set of designs for printing & Cost of cutting cards for Jacquards for a given woven design*

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➤ **Indirect expenses** (**OVERHEAD COSTS**) are those which cannot be charged directly to a particular job or product

✓ The indirect expenses can further subdivided into

1. Factory expenses
2. Administrative expenses
3. Sales expenses
4. Distribution expenses

Factory Expenses It includes all indirect expenses which are incurred in connection with the manufacture of the products right from the receipt of the work order till it completed and ready for despatch

E.g. Expense on Lubricants, indirect labour, labour welfare activities, fuel, power, internal transport , repairs and

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maintenance , Rent of factory buildings, Depreciation of plant and machinery

Administrative expenses include those expenses which are incurred on **general administration and management** for efficient and proper functioning of the enterprise.

Examples:

1. Salaries of general manager, managing director, office superintendents, clerks, typists, labour welfare officers, personnel officers, medical officers, canteen employees, security staff etc.
2. Expenses on depreciation of office buildings and office equipments

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3. Expenses on legal charges, audit fees
4. Expenses on telephone, fax, lighting, postage, stationary

Selling expenses are those expenses on creating and enhancing the demand for the products

Examples:

1. Salaries on sales managers, clerks, etc in sales department
2. Salaries, commissions, brokerage, travelling expenses of the sales representatives
3. Cost of advertisement publicity

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Distribution Expenses

All the expenses made on holding the **finished goods stock** and constitute **distribution expenses**.

Examples:

1. Expenses in holding and dispatching for distribution to customers
2. Salaries of distribution warehouse personnel.

Relationship of Various Costs

1. Prime cost = Direct Cost = Direct labour cost + Direct materials cost + Direct expenses.
2. Factory Cost = Prime Cost + Factory expenses.
3. Manufacturing Cost or Production Cost = Factory Cost + Administrative Costs.
4. Total Cost = Manufacturing Cost + Selling Expense + Distribution Expenses.
5. Selling Price = Total Cost + Profit.

Fixed Costs and Variable Costs

❖ Costs can also be classified into fixed costs and variable costs.

➤ **Fixed costs** are those which **are not affected** by the **volume** of production (for a given industrial unit).

E.g. Salaries of higher officials, Interest on capital invested, Taxes on property, Expenses on lighting, insurance, Depreciation of building, plant and equipment

➤ **Variable Costs** are those which **vary** with the **quantity** produced. Variable cost is the same as the Prime Cost

Computation of Actual Cost

❖ The total cost of the product consists of **prime cost and the overhead cost**. **Prime cost** is comparatively **easy** to calculate. But the **distribution of overheads** amongst different products is indeed a **difficult problem**

$$\text{Direct Materials Cost} = \frac{\text{Total cost of direct materials}}{\text{Number of units produced}}$$

$$\text{Direct Labour Cost} = \frac{\text{Total cost of direct labour}}{\text{Number of units produced}}$$

and similarly for direct expenses

Allocation of Overhead Costs

There are different methods of allocating overhead costs

1. Percentage on Prime Cost

$$\% \text{ Overhead cost} = \frac{\text{Total overhead cost}}{\text{Prime cost}} * 100$$

This method is suitable where

- (a) **only one type** of product is being manufactured
- (b) w/r **direct labour** & **direct materials** costs are **nearly** the same

2. Percentage on Direct Labour Cost

$$\% \text{ Overhead cost} = \frac{\text{Total overhead cost}}{\text{Directlabour cost}} * 100$$

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This method is suitable where

- the products are **manually** manufactured
- The method becomes highly efficient w/n there is uniformity in **wage rates, skill of workers, equipment used & work performed.**

E.g. hand loom factory

3. Percentage on Direct Material Cost

This method is used where

1. **Material & method** of manufacture are **common** to all products

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2. The expenses on direct material constitute the main factor in determining the total cost.

E.g. industrial unit engaged in the production of surgical cottons

4. Machine Hour Rate This method is used where the work is done mostly by **machines** and not by labour.

➤ This is the method that is the most frequently used in **spinning and weaving**

➤ the role of the workers is to keep the machines running

$$\text{M.H} = \frac{\text{Total overhead cost}}{\text{total machines hour working}} * 100$$

Standard Cost

- ❖ This is the cost arrived at by assuming a set of standards as regards efficiency, labour allocation, power and fuel etc.
- ❖ The concept of standard cost is helpful in **reducing the costs** by comparing the actual costs as against the standard cost and in **locating the areas where high costs** are incurred
- ❖ The difference between Standard Cost and Actual Cost is called **‘Variance’**