

MODULE 2 ADVANCED COST ACCOUNTING

COST ACCOUNTING - Meaning and Definition

Cost accounting is the **recording of the expenses** incurred in manufacturing a product or rendering a service. It is done in such a manner that the expenses are accumulated, recorded, classified and allocated so that the actual cost of any particular process or unit of production or service rendered can be determined with a desired level of accuracy. It is the process of accounting for cost which begins with recording of expenses and ends with the preparation of periodical statements and reports for ascertaining costs.

J.M. Fregman defines cost accounting as "*the process of recording, classifying, allocating and reporting various costs incurred in the operations of an enterprise*".

COST ACCOUNTANCY - Meaning and Definition

Cost accountancy is the accounting of cost and revenue by applying the cost accounting principles and methods for controlling the cost and ascertaining the profitability. The term cost accountancy is wider and broader in coverage than cost accounting. It includes cost control, cost reduction, cost audit and presentation of information to managerial personnel for the purpose of *decision making*.

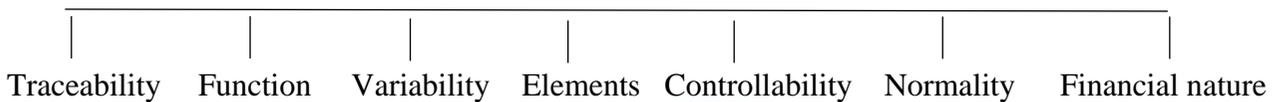
The Institute of Cost and Management Accountants (ICMA) London defines Cost accountancy as "*the application of cost accounting principles, methods and techniques to the science, art and practice of cost control and ascertainment of profitability as well as presentation of information for the purpose of managerial decision making.*"

COST CLASSIFICATION

Cost Classification is the process of grouping the items of cost under different categories based on common characteristics. Under cost classification, cost items are divided into different groups with each group containing similar items.

The costs are classified on the basis of:

Cost (basis of classification cost)



Classification according to traceability of cost

Here the costs are classified on the basis of traceability or identifiability of costs to cost centres, cost units, jobs, processes, etc. On the basis of identifiability, cost can be divided into direct cost and indirect cost.

1. Direct cost

Direct cost refers to those costs which can be clearly and *easily traced or identified with a job, product, cost centre, cost unit, etc.* It can be traced in full to the cost objective i.e., something for which a separate cost collection is being attempted. Direct costs are also referred to as "prime cost" or "traceable cost". In the manufacture of a wooden table, cost of timber used and the wages paid to carpenter are direct costs. In the manufacture of gold ornaments, cost of gold and wages of goldsmiths who are directly involved in the work are direct costs. The aggregate of all direct cost i.e., direct material, direct labour and direct expenses is referred as direct cost or prime cost. Direct material, direct labour and direct expenses are briefly discussed below:

- a. Direct material: Direct material cost is the cost of material which can be clearly traced and identified in the product, job, cost centre or cost unit. It is the cost of materials used for a specific product or service or department.

According to Chartered Institute of Management Accountants (CIMA), London, direct material cost is *"the cost of materials entering into and becoming constituent elements of a product or saleable service and which can be identified separately in product cost"* ■

- b. Direct labour: Direct labour is the labour which can be distinctly and clearly identified to a job, product, cost centre or cost unit. It refers to the specific costs of Workers used to make a particular product or to provide a particular service.

According to CIMA, London, direct labour cost is *"the cost of remuneration for employees ' efforts and skills applied directly to product or saleable service and which can be identified separately in product costs"* .

- c. Direct expenses: The direct expenses are those expenses which can be clearly identified or traced to a job, product, cost centre or cost unit. These are the expenses which have been incurred in full in making a particular product or providing a service or running a department.

According to CIMA, London, direct expenses are *"costs other than material or labour which can be identified in a specific product or saleable service"* .

Indirect cost

Indirect costs are those costs which are of a general nature and are ***neither identifiable nor traceable*** to a particular job, product, cost centre or cost unit. It

is not directly charged to the product or job or cost centre. Indirect cost consists of *indirect material cost, indirect labour cost and indirect expense*.

Indirect materials are those materials which cannot be identified to a specific product. In wooden furniture manufacturing, the cost of nails used, the cost of polish, the cost of gum, etc. are indirect materials.

Indirect labour is that labour which cannot be identified to a specific product. In wooden furniture manufacturing, the payment to supervisor, helper, security staff, etc. are indirect labour.

Indirect expenses are those items of expenses which cannot be identified to a product. Rent of the factory, lighting of the factory, depreciation of machineries, etc. are examples.

MATERIAL COST

Goods or articles used in manufacturing any product is known as material. It is the most important element of cost. In several industries, cost of materials constitutes more than fifty percent of the total cost of the product or job. Therefore, control on cost of material is very essential to meet the objectives of cost control and cost reduction.

Materials include both direct and indirect materials

Direct material

Direct material cost is the cost of material which can be clearly traced and identified to a job, product, process, cost centre or cost unit. It is the cost of materials used for a specific product or service or department.

According to CIMA, London, direct material cost is *"the cost of materials entering into and becoming constituent elements of a product or saleable service and which can be identified separately in product cost"*.

Examples : (i) Timber in wooden furniture, (ii) Gold in gold jewellery, (iii) Sugarcane in sugar, (iv) Leather in shoe, (v) Paper in books, (vi) Cloth in garments, etc.

Indirect material

Indirect materials are those materials which cannot be traced or identified to a job product, process, cost centre or cost unit.

Examples of indirect materials: (i) In wooden furniture manufacturing, the cost of nails used, the cost of polish, the cost of gum, etc., (ii) In books, gum, thread, ink, etc.

Differences between Direct Materials and Indirect Materials

Point of differences	Direct material	Indirect material
1. Meaning	Direct material is the material which can be identified to a job, product', cost centre or cost unit	It is that material which cannot be identified to a specific product, job, process, cost centre or cost unit.
2. Charge	Can be directly charged to a cost centre or cost unit.	Cannot be charged directly to a cost centre or cost unit

3.Part of	It forms the part of prime cost.	It forms the part of overhead.
4.Nature	It directly varies with variation in output.	It is in the nature of fixed cost or semi-variable cost.
5.Proportion	It forms a major proportion of the cost of a product	It forms only a minor proportion of cost of product

Material Cost Control - Meaning and Definition

Material cost control is *control of the cost of materials by eliminating wastages in purchasing, storing and pricing the issue of materials to the departments or cost centres.* The material cost control aims at keeping the material cost within reasonable limits, budgets or standards.

According to Weldon, material control is *"the systematic control over the procurement, storage and usage of materials so as to maintain an even flow of materials"*.

Objectives / Need / Advantages of Material Accounting and Control

Material control aims at achieving saving in material costs. The material accounting and control ensure the following benefits:

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1. **Ensures regular supply of materials:** Proper material accounting and control makes available an assured supply of materials so as to keep the cycle of production going without any interruption.
2. **Availability of quality materials:** Material control helps to make available right type of material of required quality without any interruption.
3. **Purchase of quality materials:** Material control restricts to the purchase of materials of required quality according to the standard fixed.
4. **Prevents overstocking:** Material control helps to reduce overstocking of materials and consequent blocking up of working capital.
5. **Purchase at lowest cost:** Effective accounting and control of materials facilitate purchases of materials at reasonably low cost without affecting quality.
6. **Reduces storage cost:** Purchase of only the required quantity of materials helps to reduce loss of obsolescence of materials.
7. **Provides information to the management:** Proper accounting and control of materials provide the management with information regarding the cost of materials and its availability.

STAGES / STEPS FOR MATERIAL CONTROL

Material control is effected through,

1. **Purchase Control**
2. **Stores Control**
3. **Proper issue of materials**

PURCHASE CONTROL

Purchase control is control of the cost of materials through systematic purchase of materials, so that, *right quality materials are made available at right quantity at right time*. The responsibility for purchasing is that of the purchase manager in the purchasing department.



STORES/INVENTORY CONTROL

Stores control is *the control of the cost of the materials by eliminating all wastages in storing*. For effecting proper stores control, there should be a mechanism for storing or upkeeping the materials during the period of storing.

Store is a place where the various items of materials are kept safely till they are issued to production. Every manufacturing concern maintains a store under the control of a person called storekeeper. The store department acts as a link between the purchasing department and production department. The materials required for the production department will be issued from the store as and when it is needed.

PRICING OF ISSUE OF MATERIAL

By pricing the material issues, *we mean fixing the price at which materials are issued from the stores to the production centres*. Pricing is required for ascertaining the cost of materials issued to production, for costing purposes. The stock of materials in the stores may consist of many lots of materials purchased at different rates. In such cases, there arises the problem as to pricing the issue of materials. A number of methods have been evolved for pricing issues. The most important methods of pricing of materials issued are:

- (1) First in First Out (FIFO)
- (2) Last in First Out (LIFO),
- (3) Simple average,
- (4) Weighted average.

LABOUR COST

Labour is one of the most important elements of cost. The human effort required to perform an activity or a job or produce a product or render a service is

termed as labour. It is any exertion of mind or body undergone with a view to derive benefit other than the pleasure derived from it.

The remuneration payable to the labour is called wages. Wages generally include: (a) the monetary benefits like wages, dearness allowance, house rent allowance, city compensatory allowance, travelling allowance, etc., (b) deferred monetary benefits like Employer's Contribution to Provident Fund, Employer's contribution to Employees' State Insurance (ESI), Employer's Contribution to Retirement Benefits, etc. and (c) fringe benefits or non-monetary benefits like subsidised food, medical, educational, recreational facilities, free transportation, etc. also form part of labour cost.

The labour cost of a product or service must be ascertained and identified to control the same. For cost accounting and control purposes, labour cost can be broadly divided into direct labour and indirect labour.

Direct Labour - Meaning and Definition

Direct labour is the labour which can be distinctly and clearly identified to a job, product, cost centre or cost unit. It refers to the specific costs of workers used to make a particular product or to provide a particular service.

According to CIMA, London, direct labour cost is "the cost of remuneration for employees' efforts and skills applied directly to product or saleable service and which can be identified separately in product costs".

Examples: (i) Wages paid to carpenter for manufacturing furniture, (ii) Wages paid to goldsmith for manufacturing gold jewellery, (iii) Wages paid to cobbler manufacturing footwear, (iv) Payment to tailor in readymade wears unit, etc.

Features

1. It cannot be easily identified with a specific job, contract or work order.
2. It may or may not vary direct with volume of output.

Differences between Direct Labour and Indirect Labour

Point of differences	Direct labour	Indirect labour
1. MEANING	Direct labour is the labour which can be identified to a job, product, cost centre or cost unit	It is that labour which cannot be identified to a specific product, job, process, cost centre or cost unit.
2. CHARGE	Can be directly charged to a cost centre or cost unit.	Cannot be directly charged to a cost centre or cost unit.
3. PART OF	It forms part of prime cost.	It forms part of overhead
4. NATURE	It directly varies with variation in output	It is in the nature of fixed cost or semi-variable cost.

5. PROPORTION	It forms a major proportion of the cost of a product	It forms only a minor proportion Of cost of product. .
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Labour Cost Control

Labour Cost Control is the control of labour cost by effective utilisation of manpower through proper recruitment, placement, training, wage administration, labour welfare, labour safety, etc. of the work force. All these functions have a bearing on the efficiency and performance of labour force. In a properly functioning large sized organisation, labour control is effected through (i) personnel department, (ii) time keeping department, (iii) Pay-roll department, (iv) engineering department and (v) cost accounting department.

Importance / Objectives of Labour Cost Control

1. Control of cost of production: Labour cost control leads to significant control and reduction in cost of production. It leads to minimisation of labour cost per unit. .
2. Control of idle time: Idle Time is the time spent by the worker within the organisation during which he produces nothing, but payment is made by the employer at usual rate. Such time should be controlled, otherwise cost per unit will increase.

3. **Control of overtime:** Overtime is the time that a worker works over and above the normal working time, for which he is paid double the amount of usual wages. If the overtime is not under control, the cost of the product will abnormally increase.
4. **Labour turn-over:** Labour turnover is the rate of change in the composition of labour force of an organisation during a specific period. High rate of labour turnover is of disadvantageous to any organisation. It should be brought under control through effective labour management.
5. **Ascertainment of labour cost:** Application of techniques of labour cost control are required to ascertain the correct labour cost. Correct labour cost helps in absorption of overhead.
6. **Availability of labour force:** Required type of labour force such as skilled labour, trained labour, etc. should be made available as per the requirements of each job.
7. **Increased labour productivity:** Labour productivity can be increased through proper training, motivation and control of labour.

Thus, labour cost control is essential for improving the productivity, profitability and prosperity of a firm.

OVERHEADS

Every form of production involves two types of costs Direct costs and Indirect costs. Direct costs are those costs which can be identified and allocated to a particular job, product, cost centre or cost unit. Cost of direct materials, cost of direct labour and direct expenses come under direct costs. The total of these

expenses is known as prime cost. All expenses other than prime cost are brought under overheads.

Meaning and Definitions

Overhead is the total of indirect material cost, indirect wages and indirect expenses. These are those expenses which are incurred not exclusively for the manufacture of a single commodity or for the completion of a single job, but for the activities of the organisation as a whole. Other terms which are conveniently used for overheads are 'supplementary costs', 'on costs', 'indirect expenses', 'burden', etc.

Whelden defines overheads, "as the cost of indirect material, indirect labour and such other expenses including services as cannot conveniently be charged to a specific unit."

ICMA defines overheads as the "total of indirect materials, indirect wages and indirect expenses."

Steps for charging / absorbing / linking overheads to cost units

Any item of overhead should become a part of cost of the product. For the purpose, overhead costs are to be linked to the cost unit. The following is the procedure for linking overheads to cost units.

- A. Collection of Overheads
- B. Classification of Overheads
- C. Allocation and Apportionment of Overheads
- D. Re-apportionment of Overheads
- E. Absorption of Overheads to products or cost units

A. Collection of Overheads

Collection of overheads involve the processing of various documents from which the data on indirect materials, indirect labour and indirect expenses are extracted. The source documents for various items of overheads are invoices, stores requisitions, wage analysis sheets, cash book, journal entries, subsidiary records etc.

B. Classification of Overheads

There are different methods of classifying or grouping of overheads. There are no rigid rules or principles regarding the classification of overheads. For costing purpose, overhead expenses are classified as to:

- 1. Function-wise classification*
- 2. Element-wise*
- 3. Behaviour-wise classification*
- 4. Controllability-wise classification*
- 5. Normalcy-wise classification*
- 6. Financial-wise classification*

1. Function-wise classification

Based on the major functions of the business, overheads are classified into production or works overheads, administrative or office overheads and selling and distribution overheads

Production overhead consists of all indirect costs associated with manufacturing activities. The following are some of the indirect expenses incurred in the manufacturing division:

Factory rent, rates, lighting and heating; Depreciation, repairs, insurance, etc.; Consumable stores, small tools, etc.; Salary of foremen, time keeper, works manager etc.; Wages of indirect workers, watchmen etc.

b. Administrative or Office Overheads

Administrative expenses are incurred for the overall management of the concern. So, this head includes expenses connected with managerial functions of planning, organising, directing, co-ordinating and controlling the operations of the business.

Examples of administrative overheads are: Office rent and rates; Office lighting, heating and cleaning; Depreciation, repair and maintenance of office items; Salaries of office staff, director's remuneration; Telephone charges, postage; Audit fee, bank charges, legal expenses etc.

c. Selling and Distribution Overheads:

Selling costs are those indirect costs associated with marketing and selling of products and services. Selling cost is defined as "*that portion of marketing cost which is incurred in securing orders*".

Some examples of selling costs are: Salaries, travelling expenses and commissions of sales staff; Sales office expenses; Brokerage and third party commissions; Advertisement and show room expenses; Market research expenses etc.

Distribution overhead is "*that portion of marketing cost which is incurred in warehousing saleable products and in delivering products to consumers.*" It includes all expenses incurred from the time the product is completed in the

factory until it reaches its consumers. In gas, electricity and water supply companies "distribution" means pipes, mains and other related services rendered to consumers.

Examples of distribution expenses are: Carriage and freight outwards; Depreciation, maintenance, operating charges etc. of distribution vehicles; Warehousing, packing, insurance of finished goods etc.

2. Element-wise or incidence-wise Classification

Classification of overheads in accordance with the elements of cost such as indirect material, indirect labour and indirect expenses is called element-wise classification.

Indirect materials are those materials which cannot be identified to a specific Product, in wooden furniture manufacturing, the cost of nails used, the cost of polish, the cost of gum, etc. are indirect materials.

Indirect labour is that labour which cannot be identified to a specific product. In wooden furniture manufacturing, the payment to supervisor, helper, security staff, etc. are indirect labour.

Indirect expenses are those items of expenses which cannot be identified to a product. Rent of the factory, lighting of the factory, depreciation of machineries, etc. are examples.

3. Behaviour-wise Classification

Overheads show the tendency to vary with production, sales volume or activity level. Classification of overheads according to variability or behaviour is done for the purpose of cost control and decision making.

Based on behaviour, overheads can be classified into: (a) Fixed overheads, (b) Variable overheads and (c) Semi variable overheads

a. Fixed overheads

Fixed overheads are those costs which remain fixed or constant at any level of activity or up to a given range of activity. These cost can also be called as static or rigid cost because, these costs in total remain to be the same at any level of activity. Factory rent, factory insurance, etc. form fixed overheads.

b. Variable overheads

Variable overhead is that part of the total cost which tends to vary directly with variation in the volume of output. It varies in direct proportion to the volume of production. Indirect materials, indirect labour, etc. form indirect variable overheads.

c. Semi-variable overheads

A cost which is partly fixed and partly variable is called semi-variable cost. It varies at certain levels and remains fixed at other levels of activity. It is the cost which changes with volume of output but not in the same rate. It is also known as semi fixed cost or step cost. Cost of supervision, cost of advertising, etc. are examples of semi-variable overheads.

4. Controllability-wise classification

On the basis of controllability overhead costs can be divided into controllable costs and uncontrollable costs.

Controllable costs are those which can be influenced by the action of the management of the undertaking. Uncontrollable costs are those which cannot be influenced by the action of the management.

5. Normalcy-wise classification

Here the overhead costs are classified into normal and abnormal. Normal overhead is usual and expected one. Abnormal overhead is one which is unexpected and accidental. The cost should be classified into normal and abnormal for the purpose of cost control and cost reduction.

6 Financial-wise classification

Costs may be classified in to the following based on the financial nature.

a. **Financial cost:** Financial cost is one which involves financial expense or financial loss. It may be cash cost, which involves flow of cash or non-cash cost which does

Not involve flow of cash. Depreciation is a non-cash cost.

b. **Non-financial costs:** Non-financial costs are those costs that are not directly traceable through a company's cash flow. Such costs lead to reduced cash inflow in the future. For example, low morale of employees, loss of goodwill, competition, etc.

C. Departmentalisation or Primary distribution of overheads

The allocation or apportionment of expenses to different departments or cost centres is known as primary distribution or departmentalisation of overheads. On the basis of the activity or the functions, a factory is divided into a number of departments. Departmentalisation enables efficient administration and control of the organisation. The various departments in the factory can be grouped into three broad categories:

Production department

Service department

Partly producing department

A production department is one which is actually involved in the process of production, i.e. , converting raw materials into finished products. The number and names of production department will depend upon the nature of the industry, type of work and size of the factory. For example, a cotton textile mill has spinning department, weaving department and finishing department.

A service department is an auxiliary department helping the production department by providing services. It is not directly involved in production. Purchase department, stores department, time keeping department, personnel department etc. are few of the service departments generally found in an organisation.

Sometimes, a service department becomes a partly producing department. For example, in most concerns the tool room is a service department. But, if the tool room is making special tools required for a particular job, it becomes a production



department. Similarly, if the electrical maintenance department is making a special motor for a particular job, it becomes a production department.











