

Technical Terms

In this chapter, important technical terms connected with the subject 'Estimating and Costing' are discussed.

1. Administration. It is that function of an enterprise which determines overall policies and objectives. It decides the general purpose of the enterprise and makes the major policies.

2. Management. It is concerned with the direction and control over the various activities and work for the attainment of the objectives laid by the administration.

3. Organisation. It is the mechanism which helps the management in bringing the policies into effect laid by the administration. Thus more clearly it is the function by which administration groups their men in order to get the work done.

4. Bonus. It is the amount paid to the worker in addition to his pay from the profit earned by the concern as per Bonus Act.

5. Capital. Capital is defined as that part of wealth other than land, which is used for further production of wealth. It generally consists of hard cash, raw material, tools, machinery and buildings etc., which are used for producing more wealth. That part of wealth which is not used for further production of wealth, is not capital.

6. Direct Labour. The workers, who are actually processing the materials either manually or with the help of some machinery form the 'Direct or Productive Labour'.

7. Direct Labour Cost. It is the amount paid to the direct labour.

8. Indirect Labour. There are some other workers in the factory such as foremen, supervisors, crane drivers, store keepers, etc., who help the direct labour by maintaining and supervising various services. They form the "Non-Productive or Indirect Labour".

9. Indirect Labour Cost. It is the amount paid to the indirect labour.

10. Direct Material Cost. It is the cost of those materials which are processed in the plant through various stages and finally form the shape of the component or part of the product itself.

11. Indirect Material Cost. It is the cost of those materials which are consumed in the plant in order to process the direct materials to their final shape. It is also known as 'non-productive material cost'.

12. Overhead Charges. Excluding direct materials and direct labour costs, all other expenses, that are made in converting raw materials into finished shape fall under this heading. These are also known as 'expenses, on-cost, burden or indirect cost'.

13. Factory Overheads. These are composed of items wholly chargeable to the actual operation of the factory such as indirect labour, indirect material etc. It is also known as 'works-on-cost'.

14. Administrative Overheads. These include salaries of general office staff and high rank officers; telephone charges; depreciation of office equipment etc. This is also known as 'establishment on-cost'.

15. Selling Overheads. These include salaries of persons working in sales department, advertising expenses and agency expenses etc.

16. Distributing Overheads. These include expenses made on holding finished stock, despatching them to the customer, packing cost etc.

17. Fixed Overheads. These are those indirect expenses which remain constant regardless the volume of production such as salaries of higher officers, rent of building and insurance charges etc. These are also known as 'constant expenses'.

18. Floating Overheads. These are those indirect expenses which vary with the volume of production such as power, fuel, stores, supplies etc. These are also known as 'variable or fluctuating expenses'.

19. Prime Cost. It is the sum of direct labour, direct material and direct expenses, if any. It is also known as 'direct cost'.

20. Factory Cost or Works Cost. It includes prime cost and factory on-cost.

21. Manufacturing Cost. It includes factory cost and administrative expenses.

22. Total Cost. It is the sum of manufacturing cost, selling and distributing expenses. Thus it is the total expenditure incurred by the firm.

23. Selling Price. Customers get the product by paying the price which is termed as selling price. It is the sum of total cost and profit of the firm.

24. Day Rate. It is the amount paid to a worker per day for a definite number of hours irrespective of his volume of production.

25. Piece Rate. It is the amount paid to the worker per piece of production irrespective of time taken by him.

26. Man-Hour Rate. It is the method of distributing factory overheads over each job. It is calculated by dividing total factory overheads by number of total working hours (sum of working hours of all the workers, during a particular period).

$$\text{Man-hour rate} = \frac{\text{Total factory overheads}}{\text{Total no. of working hours}}$$

27. Machine-Hour Rate. It is another method of distributing factory overheads over each job by taking into account the sum of hours for which the machine runs. Thus,

$$\begin{aligned} \text{Machine-hour rate} \\ = \frac{\text{Total factory overheads}}{\text{Total no. of hours for which machine runs}} \end{aligned}$$

28. Job Cost or Order Cost. It is the cost of each job or work order considering from the beginning of work till its completion.

29. Estimating. It is an art of finding the cost which is likely to be incurred for the manufacture of an article, before it is actually manufactured.

30. Costing. It is determination of actual cost of an article after adding different expenses incurred by different departments.

31. Bill of Material. It gives detailed information regarding quantity and description of materials of different kinds required for a definite job.

32. Standard Cost. It is the predetermined cost of a product. After considering different expenses an estimated cost of a product is forecasted, which is known as standard cost. It is used as a device to check and lower the overhead expenses and improving efficiency.

33. Idle Time. It is the time for which wages are paid without the production. Idle time arises due to machinery breakdown, failure of power or tools and accident etc.

34. Scraps. The incidental residue from certain type of manufacture such as cut pieces of sheets, chips, joists, off cuts, trimmings, short-ends of bar stock etc. usually of small quantity and low recoverable value without further processing are called scraps.

These can be classified as :

- (i) Legitimate scraps
- (ii) Administrative scraps and
- (iii) Defective scraps.

(i) **Legitimate Scraps.** These are those which are already known and their effect is considered during cost estimates.

(ii) **Administrative Scraps.** Sometimes due to obsolescence of design, the materials or machines and tools etc. may become uneconomical for further use and such goods are called 'Administrative scraps'.

(iii) **Defective Scraps.** These are caused due to poor base material or workers negligence and are rejected during inspection.

35. Waste. It is the part of materials lost in processing such as due to evaporation, fumes, leakage or breakage etc. This has no value. An example of waste is a tank of syrup into which broken glass pieces have fallen with the result, the syrup becomes unfit to use and must be thrown.

36. Spoilage. This is a damage or damages to materials during manufacturing or other operation. Spoiled material of one product may be used as raw materials for some other product of separate design.

37. By-product. In addition to the main product any saleable or usable product incidentally manufactured or manufactured during the process of manufacturing of main product, is called "By-product".

38. Allowance. This is the time allowed to the workers during their working hours. These may be :

(a) *Set up time.* This is time required for setting and fixing the job and different tools on the machine.

(b) *Operation time.* This is the time taken for the actual operations on the job.

(c) *Personnel Allowance.* This is the time consumed by the worker to attend his personal needs.

(d) *Fatigue allowance.* This is the time allowed to overcome the tiredness.

(e) *Tool changing and grinding allowance.* This is the time required to remove the tool from its holder and fix another tool, and include the time required to sharpen the tool.

(f) *Measurement and checking allowance.* This is the time taken on measuring and checking the different dimensions of the product.

39. Boring. It is the process of enlarging the hole, which has already been drilled or casted or punched.

40. Brazing. This is a process of joining two metals by heating and applying hard solder.

41. Budget. It is a forecast of programme of operations based on expected operating efficiency and is expressed in monetary or physical units.

42. Cutting speed. It is the distance which tool travels along the material in one minute.

43. Depreciation. This is constant reduction in efficiency of fixed asset like plant, machinery, tool, furniture etc.

From the Cost Accounting point of view, it is the diminution in value of a fixed asset due to use and/or the lapse of time.

44. Drilling. It is the process of producing hole in an object.

45. Depth of cut. It is the amount by which a tool or cutter is inserted into the metal during one cut.

46. Direct Expenses. These are expenses other than the direct labour and direct material, which can be charged directly to a particular job.

47. Feed. It is the distance, through which the tool advances into the workpiece during one revolution of the workpiece or the tool or cutter.

48. Forging. It is the process in which metal is heated at sufficiently high temperature to bring it to the plastic state, and desired shape is given by applying sufficient force either manually or by machine.

(i) *Smith Forging.* In this process metal is heated in suitable forges and then shaping is carried out by power or steam hammers and hand tools.

(ii) *Drop Forging*. It is the process of hammering the metal during plastic state in impression dies.

49. Facing. It is the process of the material removal from the surface at right angles to the axis of rotation of job.

50. Grinding. It is the process of metal removal by abrasion.

(i) *Surface Grinding*. This is a process which removes the small amount of material from flat surfaces.

(ii) *Cylindrical Grinding*. This is a process used for grinding the internal and external surfaces of the cylindrical jobs already turned on lathe, to get accurate size and smooth finish.

51. Gas Cutting. It is the cutting of material with the help of gas flame.

52. Incentive. This is a reward by which a worker is motivated to perform more and more work.

53. Knurling. This is the process used for making diamond shape impressions on the surface of a component to produce a rough surface to facilitate easy grip.

54. Length of Approach. This is the distance by which a tool or cutter has to travel before the full depth of cut is reached.

55. Maintenance. This is a technique to enhance the life and improve the performance of machine and equipment through regular cleaning, lubricating, and checking.

56. Mensuration. This is a branch of mathematics, which deals with determination of surface areas and volumes of various shapes and sections.

57. Obsolescence. This is the depreciation of existing machinery or asset due to new and better invention or design or processes.

It can also be defined as, the loss in the value of an asset due to its supersession at an earlier date than was foreseen.

58. Operation Time. This is the time taken for actual operation on the job.

59. Operating Cost. These are the expenses incurred on operating a machine or process.

60. Over-travel of Tool. This is the distance by which a tool moves further to clear the job.

61. Pattern. It is a model of the product to be casted.

62. Quotation. This is a written document mentioning the rates and other terms and conditions at which the materials of required specifications are supplied or jobs are performed.

63. Reaming. It is the process of removing very small amount of material, to make the drilled holes in very accurate size.

64. Set-up time. This is the time required for setting and fixing the job and tools on the machine.

65. Standard Costing. This is the preparation and use of standard costs, their comparison with actual costs and the analysis of variances to find their causes and points of incidence.

66. Turning. It is the operation of metal removal in which job is rotated against a tool.

67. Threading. It is the removal of material to produce helix on external or internal circular surfaces for fastening purposes.

68. Tapping. It is the process of making internal thread with the help of a tool known as tap.

69. Welding. It is the process of joining two or more metal pieces by heating them upto the desired temperature with or without application of pressure and with or without the use of filler metal.

70. Inventory. A schedule of items held at a particular point of time.

71. Forecast. An assessment of probable future events.

72. Cost Audit. The verification of cost accounts and a check on the adherence to the cost accounting plan.

73. Cost Allocation. The allotment of whole items of cost to cost centres or cost units.

74. Cost Apportionment. The allotment of proportion of items of cost to cost centres or cost units.

75. Fixed Cost. A cost which tends to be unaffected by variations in volume of output. These depend mainly on the time spend and do not vary directly with volume or rate of output.

76. Variable Cost. A cost which tends to vary directly with volume of output.

77. Depreciation. The diminution in the value of a fixed asset due to use and/or the lapse of time.

78. Production Cost. The cost of the sequence of operations which begins with supplying materials, labour and services and ends with primary packing of the product.

79. Selling Cost. The cost of seeking to create and stimulate demand and securing orders.

80. Distribution Cost. The cost of the sequence of operations which begins with making the packed product available for despatch and ends with making the reconditioned returned empty package, if any, available for re-use.

81. Administrative Cost. The cost of formulating the policy, directing the organisation and controlling the operations of an undertaking, which is not related directly to a production, selling, distribution, research or development activity or function.

82. Development Cost. The cost of the process which begins with the implementation of the decision to produce a new or improved product or to employ a new or improved method and ends with the commencement of formal production of that product or by that method.

83. Marginal Cost. The amount at any given volume of output by which aggregate costs are changed if the volume of output is increased or decreased by one unit. In practice this is measured by the total variable cost attributable to one unit.

84. Cost Centre. A location, process or item of equipment (or group of these) for which cost may be ascertained and used for the purposes of cost control.

85. Cost Unit. A unit or quantity or product, service or time (or a combination of these) in relation to which costs may be ascertained or expressed.

86. Cost Accounting. The process of accounting for costing from the point at which expenditure is incurred or committed to the establishment of its ultimate relationship with cost centres and cost units. It embraces the preparation of statistical data, the application of cost control methods and the ascertainment of the profitability of activities carried out or planned.

87. Cost Variance. The difference between a standard cost and the comparable actual cost incurred during a period.

88. Price. The cost to a purchaser of any article or services expressed in money terms.

89. Cost Control. The regulation by executive action of the costs of operating an undertaking particularly where such action is guided by cost accounting.

90. Cash Flow. The funds generated during an accounting period and their application.

91. Opportunity Cost. The net selling price, rental value or transfer value which could be obtained at a point in time if a particular asset or group of assets were to be sold, hired or put to some alternative use available to the owner at that time.

92. Cost Accountancy. The application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability.

93. Standard Costing. The preparation and use of standard costs, their comparison with actual costs and the analysis of variances to their causes and points of incidence.

94. Marginal Costing. The ascertainment of marginal costs and of the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable costs.

95. Production Cost. The cost of the sequence of operations which begins with supplying materials, labour and services and ends with primary packing of the product.

96. Selling Cost. The cost seeking to create and stimulate demand (sometimes termed “marketing”) and of securing orders.