

Subject: Basics of
Cost Accounting

Course code 204

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Syllabus

- 1. Basic concept in cost**
- 2. Elements of cost and Cost Sheet**
- 3. Overheads**
- 4. Contract and process cost and Methods of costing**



What is Cost?

Cost is something which is incurred to produce a product or rendering of services.

Eg:1. Cost of an ice-cream is the amount incurred for milk, cream ,sugar, labour, packing charges, etc.

2. Cost for a patient for illness is a fee of a doctor.



COST : Total of expenses incurred to manufacture a product or rendering a services is called cost. Example

For the manufacturing of a pen: Material expenses (Plastic + Ink+ Nib)

 Labour expenses (manpower use to prepare pen)

 Any other expenses (selling and distribution, packing, etc)

For rendering of a services: Fee of doctor, salary of a teacher etc

When the margin of profit is included in a cost it is called price, therefore cost is the total of all expenses whereas price is the total of expenses and profit.

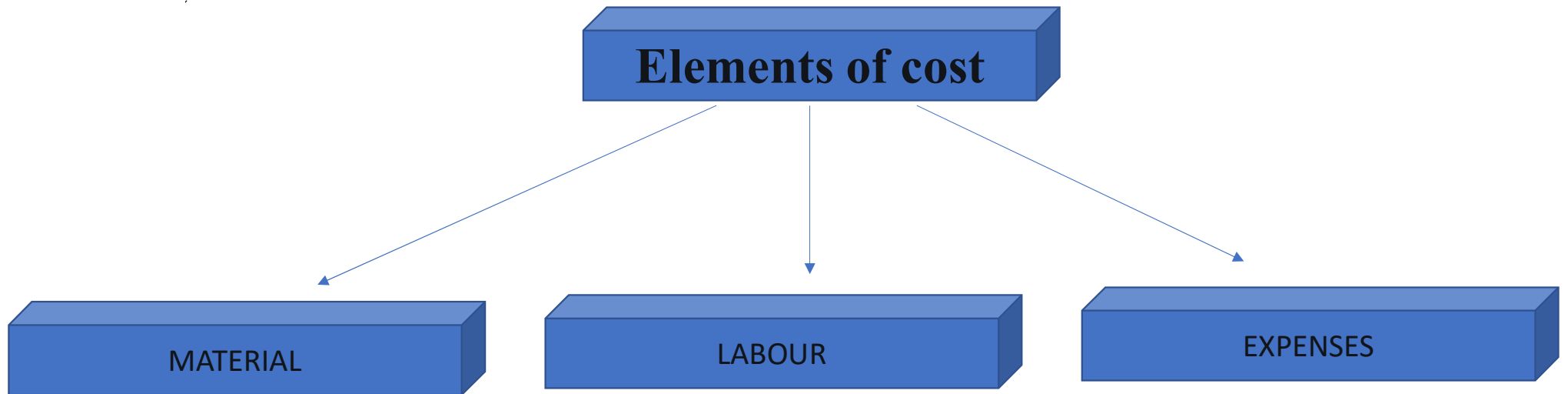


$$\text{PRICE} = \text{COST} + \text{PROFIT}$$

According to ICMA, London, “Cost is the amount of expenditure actual or notional) incurred on, or attributable to, a specified thing or activity or cost unit.”



Elements of cost:





MEANING AND DEFINITION OF costing

Different techniques and process used to determine the cost of a product is called costing. **Example:** Process costing techniques is used in the dairy industries for the manufacturing of different dairy products like, ice- cream, paneer, ghee, curd. etc.

According to ICMA, London, has defined costing as the ascertainment of costs. Costing include, “the techniques and process of ascertaining costs.”. the techniques refers to principles and rules which are applied for ascertainment cost of product manufactured and services rendered.



Different Costing Methods

1.Job Costing

2.Marginal costing

3.Standard costing

4.Operational costing

5.Process Costing



Purpose of Costing

- 1.. To ascertain the exact cost of a product.
2. To determine the cost incurred during each operation and process
3. To decide the selling price of a product.
4. To prevent the excessive loss during manufacturing process.
5. Suggest better and low cost design.

Choice of costing method depends on following factors:

- (i) Nature of Industry,
- (ii) Class of products manufactured,
- (iii) Quantity of goods produced, and
- (iv) Types of labour required for production.



Meaning and Definition of Cost Accounting:

Cost accounting is a process of recording, analysing and reporting a cost of a product. This is a formal system of cost records so that ascertainment of cost became easy and reliable. Cost accounting determines fixed and variable element of cost associated with the product. Example:

Techniques of cost Accounting:

1. Uniform Costing
2. Absorption Costing
3. Historical Costing
4. Batch Costing
5. Unit Costing

According to ICMA, London, “Cost accounting means a specialized application of the general principles of accounting in order to ascertain the cost of producing and marketing any unit of manufacture or of carrying out any particular job or contract”



Meaning and Definition of Cost Accountancy

Cost Accountancy is the process of applying the costing principles, methods, and techniques. It also helps in decision making process of management. Cost accountancy is characterised as arts, science and practice.

Cost accountancy as an art: Arts include special techniques and skill to do a work, here cost accountant need special skills to ascertain a cost of a product, therefore we can conclude that cost accountancy as an art.

Cost accountancy as a science: science involve organised body of knowledge, principles, techniques and procedures, Cost accountancy also need organised body of knowledge, it required special techniques and procedures.

Cost accountancy as a practice: Practice required regularity in a field, Cost accountancy need regular practice in order to achieve effective result and proper cost management



Origin of Cost Accounting

Cost accounting is an incredibly previous conception. It's needed for all businesses and organizations to stay track of their activities and prices. It's a really useful in higher cognitive process activity.

The age of the economic revolution resulted within the beginning of enormous businesses and organizations. Therefore these organizations were a lot of complicated and dynamic.

So the origin and evolution of accounting is copied back to the economic revolution. The thought was to assist the businessmen to record and keep a track of their prices and expenses.

During the early industrial era, cost accountants think about all business value as “variable cost”

However, once manufacture took off, these businesses had a lot of ‘fixed costs’. These are prices that don't seem to be directly associated with the assembly of products or services. Some samples of fastened prices are rent, depreciation, storage prices etc.



Objectives of Cost Accounting

Following are the objectives of cost Accounting:

- To ascertain the cost of a product
- To ascertain the profits.
- To find the selling price of a product
- To regulate the Business policy.
- Help the management in decision making process.
- To help in cost reduction.



Features of cost Accounting

- It is a process of accounting to determine costs and price of a product.
- It records incomes and expenditures, required for manufacturing of product and rendering services.
- It provides statistical data for preparing estimates and budgets
- It is the basis for cost control and cost reduction policies of a company.
- It evaluates efficiency by comparing actual with standard and find the reasons for variance.
- It involves recording, analysis, comparison and reporting of data in order to ascertain cost.



Conceptual analysis of cost unit and cost centre

COST UNIT: Total expenditure incurred to produce, store, and sell one unit of a product or service is called as cost unit. Unit cost of a product include variable cost and fixed cost.

There are various factors which should be considered while selecting cost unit.

Example: milk is quantified as per litres, per gallon, whereas power and electricity is measured as Kilowatt-hours.

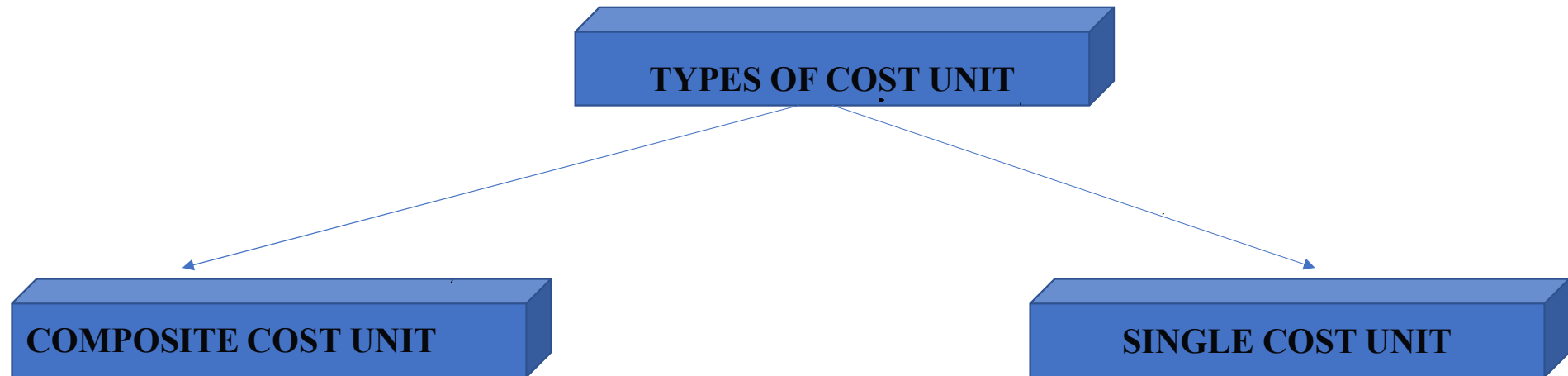


Measurements used as Cost units are depends on industry

Number	Automobile
Metre or Kilometre	Cable, Rope, Road Construction, Wire
Tonne	Iron and steel, Sugar, Cement, Mines and Quarries
Litre, Kilogram, Tonne	Chemicals
Cubic Metre	Gas, Casting
Square Metre	Metal Plating, Fabric Printing
Gross or Bag of Standard Weight	Nuts and Bolts
Kilo-watt hour	Power (Electricity)
Tonne-Kilometre, Passenger Kilometre	Transport
Thousand	Bricks



TYPES OF COST UNIT





Single cost unit:

It involves the use of a single standard or unit of measurement of the goods manufacture e.g. Product per piece, per kilogram, per quintal, per tonne, per gallon, per meter etc.

Composite Unit or Complex Unit: It is a combination of two simple units e.g., per passenger-kilometer, per tonne-kilometre , per kilowatt-hour etc.



COST CENTRE

A cost centre is a division within a company. The manager and employees of different cost centre are responsible for its costs but are not directly responsible for sales or profit decisions. Some of the cost centre are Research and development centre, marketing centre, Customer Care centre.

According to CIMA “a production or service, function, activity or item of equipment whose costs may be attributed to cost units. A cost centre is the smallest organizational sub-unit for which separate cost allocation is attempted.”

Cost Centre is a location, person or item of equipment for which cost may be ascertained and used for the purpose of cost control. From Practical approach a cost centre may be relatively easy to establish, because a cost centre is a unit of the organization to which costs can be separately assigned

A cost centre is an individual activity or group of similar activities for which costs are accumulated.

Example:

- 1) An item of equipment e.g., a machine, forklift, truck or delivery van.
- 2) A person e.g., a sales person, Marketing representative, Financial advisor etc.



Unit-2

Elements of cost and Cost Sheet

Topics

- 1. Material, Labour and other Expenses**
- 2. Classification of Cost &**
- 3. Types of Costs**
- 4. Preparation of Cost Sheet**

COST SHEET

ADMINISTRATION OVERHEADS

- office rent, rates & tax
- office light
- depreciation, insurance of office building
- salaries of administrative staff
- printing & stationary
- audit fee
- directors remuneration

FACTORY COST

WORK COST



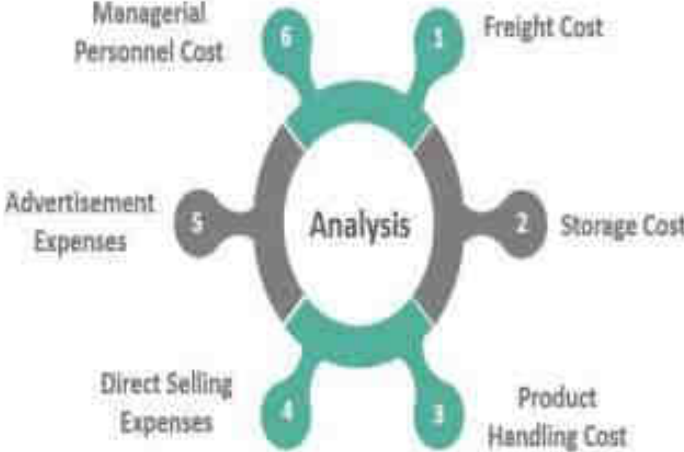
Cost of
production

SELLING AND DISTRIBUTION OVERHEADS

Cost of production



Distribution Cost



COST OF SALES

COST OF SALES



PROFITS %

• ON COST PRICE

• 20%

• 25%

• 33.334%

• 50%

• ON SALES PRICE

• 16.6667%

• 20%

• 25%

• 33.3334%

ITEMS EXCLUDED FROM COST

The following items are of financial nature and thus not included while preparing a cost sheet:

1. Cash discount
2. Transfer to reserves
3. Interest paid
4. Donations
5. Preliminary expenses written off
6. Income-tax paid
7. Goodwill written off
8. Dividend paid
9. Provision for taxation
10. Profit/ loss on sale of fixed assets
11. Provision for bad debts
12. Damages payable at law, etc.



Unit-3 Overheads

Topics

Meaning and Definitions

Classification of Overheads

Collection, allocation, apportionment and reapportionment of overheads

Under and over absorption – Definition and Reasons



Meaning and definition of overheads

Overhead is those costs required to run a business, but which cannot be directly attributed to any specific business activity, product, or service

Overhead includes activities that are not directly related to the products or services that the firm offers, but they support the firm's profit-making activities. For example, paying the rent is not a profit-making activity, but it allows the firm to maintain a building and manufacture its products.

EXAMPLES: Employee salaries, Office equipment and supplies, External legal and audit fees

OVERHEADS= Indirect Material + Indirect wages+ Indirect Expenses



Features of overhead expenses

- ❖ Overheads are indirect costs.
- ❖ They are common costs.
- ❖ Overhead comprises of both cash expenses and non-cash expenses.
- ❖ Overhead consist of both Production and non-production expenses.
- ❖ Overhead are both variable and fixed.
- ❖ They include both escapable and inescapable.

“All overheads are the costs, but all costs are not the overhead”.



Classification of overheads



Functional Classification

- 1. Factory Overheads**
- 2. Administration or Office Overheads**
- 3. Selling and Distribution Overheads**



Behavioral Classification of Overhead

- (a) Indirect Materials**
- (b) Indirect Labour**
- (c) Indirect Expenses**



Control wise classification of overheads

1. Controllable Overheads
2. Uncontrollable Overheads



Normality classification of overheads

Normal Overheads

Abnormal Overheads



Steps involve in overheads Accounting.

1. Collection and Classification of overheads.
2. Allocation of overheads.
3. Apportionment of overheads.
4. Re-apportionment of overheads.
5. Absorption of Overheads.



Collection of Overheads.

The collection of overhead is the process of recording each item of cost in the book of accounts maintained for the purpose of ascertainment of cost of each cost Centre or cost unit.



Allocation of overheads

Overheads are common costs incurred for the benefits of a number of costs centers or cost units. Therefore, they can not be identified and allocated directly to a particular unit of output. As such, they are to be allocated among the units of output of a particular department or a number of departments or cost centers.

“Allocation of Overheads is always direct”



Apportionment of Overheads

Distribution of an overhead cost to several departments or cost centers is known as apportionment of overheads. It is the process of charging or apportioning costs to a number of cost centers or cost units. If a given cost is common to two or more departments or cost centers, such cost should be apportioned or divided among these departments on an equitable basis. For example, the amount of factory rent should be apportioned to all the departments.



Principles of Apportionment of Overhead Costs

1. Service or Use or Benefit Derived
2. Ability to Pay Method
3. Efficiency Method
4. Survey Method



Methods for re-apportionment of overhead

- ❖ **Direct Redistribution Method**
- ❖ **Non-Reciprocal or Step Ladder Method**
- ❖ **Simultaneous Equation (Reciprocal) Method**
- ❖ **Repeated Distribution (Reciprocal) Method**



Absorption : Meaning

Overhead absorption is the amount of indirect costs assigned to cost objects. Indirect costs are costs that are not directly traceable to an activity or product. Cost objects are items for which costs are compiled, such as products, product lines, customers, retail stores, and distribution channels.



Over and Under absorption of overheads

If the absorbed overheads at predetermined rates are greater than actual overheads, this is known as OVER-ABSORPTION. Conversely, if absorbed overheads are less than the actual overheads, this is known as UNDER-ABSORPTION



Unit-4 Contract and Process Cost and Methods of Costing

Topics

Contract Costing – Meaning and features of contract costing, works certified and uncertified, escalation clause, cost plus contract, work in progress, profit on incomplete contract , Process Costing - Meaning, Features of process costing, preparation of process costing including Normal and Abnormal Loss/Gains,



Contract costing

In this method costing is done for jobs that involve heavy expenditure and stretches over long period and across different sites. It is also called as terminal costing.

Example: Construction of roads and bridges, buildings etc.



Contract costing

Contract costing is a specialized system of Job costing applies to long-term contracts as distinct from short-term jobs. Contract costing is mainly applied in civil construction and engineering projects, ship building, road and railway line contracts, construction of bridges etc.



Applicability of contract costing

The contract costing method is used mostly by builders, civil contractors, ship builders, and construction and mechanical engineering firms. Generally, the contract is undertaken at the site of contract i.e. customer and according to the specifications of customer. Moreover, the period inquired to complete a contract is fairly long time or usually more than one year.

The main purpose of preparing contract account is the ascertainment of cost of each contract separately and profit on each contract.



Features of contract costing

1. A contract is undertaken according to the specific requirements of customers.
2. Generally, the duration of a contract is long period.
3. The contract is undertaken only at the site of the customer.
4. Contract work mainly consists of construction activities.
5. The specific order costing principles are applied in contract costing. The size of a contract is usually large or bigger than jobs.
6. It requires a long time to complete a contract.
7. Each contract is an independent one, quite distinct from another.
8. A distinctive number is assigned to each contract to differentiate the contract from one another.
9. A separate account is maintained and prepared for each contract to find out the profit earned from each contract separately.



IMPORTANT TERMS

1. Work certified: It is that part of the contract work which is being completed by the contractor for which a completion certificate has been issued by the contractee's architect. The amount of work certified is debited to contractee's Account and credited to contract account.

Value of work certified: Contract price X work certified as %of contract price

OR

Cash Received / Cash received as %of work certified



IMPORTANT TERMS

2. Work uncertified: It is the cost of that part of the contract work which is being completed by the contractor but not certified by the architects because of the faulty work or the work not according to the specifications. In respect of such work there will be no payment from the contractee. The cost price of each work is Debited to work -in -progress account and credited to contract account.

Cost of work uncertified = Total cost incurred till date - cost of work certified.

OR

Total Cost incurred till date X %of work Uncertified / %of total work done till date.



Profit on incomplete contracts

Case 1

When work-certified is less than 25% of contract price- No profit should be transferred to P & L A/c. The entire notional profit is kept in reserve for contingencies.



Case 2

When work certified is 25% or more but less than 50% of the contract- 1/3rd of the notional profit, subject to the ratio of cash received to work certified, and is transferred to P & L A/c.

Profit credited to P/L= Notional profit X 1/3 X Cash received
work certified



CASE 3

When work certified is 50% or more of the contract price- 2/3rd of the notional profit is transferred to P & L A/c, after reducing it further in the ratio of cash received to work certified.

Profit credited to P/L= Notional profit X 2/3 X Cash received
work certified



CASE 4

When work certified is 90% or more of the contract price than entire notional profit is transferred to P & L A/c.



Meaning of Process Costing

Process Costing is defined as a branch of **operation costing**, that determines the cost of a product at each stage, i.e. process of production. It is an accounting method which is adopted by the factories or industries where the standardized identical product is produced, as well as it passes through multiple processes for being transformed into the final product.



In simple words, process costing is a cost accounting technique, in which the costs incurred during production are charged to processes and averaged over the total units manufactured. For this purpose, process accounts are opened in the books of accounts, for each process and all the expenses relating to the process for the period is charged to the respective process account.



Features of Process Costing

- ❖ The plant has various divisions, and each division is a stage of production.
- ❖ The production is carried out continuously, by way of the simultaneous, standardized and sequential process.
- ❖ The output of a process is the input of another.
- ❖ The production from the last process is transferred to finished stock.
- ❖ The final product is homogeneous.
- ❖ Both direct and indirect costs are charged to the processes.
- ❖ The production may result in joint and by-products.
- ❖ Losses like normal and abnormal loss occur at different stages of production which are also taken into consideration while calculating the unit cost.
- ❖ The output of one process is transferred to another one at a price that includes the profit of the previous process and not at the cost.
- ❖ At the end of the period, if there remains the stock of finished goods, then it is also expressed in equivalent completed units. It can be calculated as:
Equivalent units of semi-finished goods or WIP = Actual number of units in process × Percentage of work completed



Preparation of process accounts including normal and abnormal loss/gain

Process Losses and Gains

It is usual that a certain amount of material introduced into the processes are lost, scrapped or wasted. There are many ways in which losses may arise e.g., evaporation, shrinkage, breakages, spoilage for various reasons.



The process loss can be categorized into

- (1) Normal process loss.**
- (2) Abnormal process loss.**



NORMAL LOSS

The loss expected during the normal course of operations, for unavoidable reasons is called 'normal loss' and this is due to inherent result of the particular process and thus uncontrollable in the short-run. Management usually able to identify an average percentage of normal losses expected to arise from the production process.



ABNORMAL LOSS

Abnormal losses are those losses above the level deemed to be the normal loss rate for the process. The abnormal loss is the amount by which the actual loss exceeds the normal loss and it is expected to arise under inefficient operating conditions.

The abnormal losses are not included in the process costs but are removed from the appropriate Process Account and reported separately as an abnormal loss. The abnormal loss is treated as a period cost and written off to the Profit and Loss Account at the end of the period.



ABNORMAL GAIN

If the loss is less than the normal expected loss, the difference is considered as abnormal gain. Abnormal gain is accounted similar to that abnormal loss.

Abnormal gains will be debited to the Process Account and credited to Abnormal Gain Account. The Abnormal Gain Account is debited with the figure of reduced normal loss in quantity and value. At the end of the accounting year the balance in the Abnormal Gain Account will be carried to Profit and Loss Account



Value of Scrap

The value of scrap, treated as normal loss, received from its sale is credited to the Process A/c. But the value of scrap received from its sale under abnormal conditions should be credited to Abnormal Loss A/c.



Joint Products

There are some industries where two or more products come out of a single raw material which is equally important. These are referred to as joint products.

C.I.M.A. defines joint product as ‘Two or more products separated in the course of processing, each having a sufficiently high saleable value to merit recognition as a main product’.



By-Products

“A product which is recovered incidentally from the material used in the manufacture of recognised main products, such a by product having either a net realisable value or a usable value which is relatively low in comparison with the saleable value of the main products. By-product may be further processed to increase their realisable value.”