

# **COST ACCOUNTING STANDARDS**

INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

### Foreword

It has always been the utmost desire of our Institute to present helpful professional advice and guidance for the benefit of the Country, Industry, Professionals and other stakeholders of the economy.

Cost Efficiency has always been a major element in achieving competitiveness, profitability and global penetration. It was a dire need to introduce Cost Standards for uniformity and standardization. To address this important aspect, the Institute developed "Cost Accounting Standards (CAS)" Booklet, which is a step towards the betterment of best Cost Accounting Practices in the Industry.



The Institute is committed to promote fraternity of Cost and Managements Accountants with the country and abroad as part of this commitment the National Council took various measures. The updation of Cost Accounting Standards (CAS) has maintained the same legacy.

Consequent upon the adoption of different practices with a lack of uniformity in preparation and presentation of Cost Statements, was a great hindrance in the progress of Cost Accounting.

Facilitating and promoting uniformity and consistency not helps in better understanding of all the relating issues by companies but it also helps various user organizations, government bodies, regulators, research agencies and academic institutions.

I am indebted to the members of Cost Accounting Standards Board of ICMA Pakistan for their valuable support and input, which led to updation and development of new standards.

**Zia ul Mustafa Awan** President

## Table of Contents

CAS - 01- PRESENTATION OF COST ACCOUNTING RECORD	3
CAS - 02- COST OF MANUFACTURING	15
CAS - 03- COST OF MATERIAL	25
CAS - 04- LABOUR COST	29
CAS - 05- COST OF PRODUCTION OVERHEADS	
CAS - 06- PRODUCTION EXPENSES	42
CAS - 07- UTILITIES EXPENSES	46
CAS - 08- TRANSPORTATION EXPENSES	50
CAS - 09- REPAIRS AND MAINTENANCE	58
CAS - 10: COST OF PACKAGING MATERIAL	63
CAS - 11- RESEARCH AND DEVELOPMENT COST	66
CAS - 12- ROYALTY AND FRANCHISE FEE	71
CAS - 13- COST OF QUALITY CONTROL	75
CAS - 14- DEPRECIATION AND AMORTISATION EXPENSE	79
CAS - 15- COST OF PRODUCTION FOR CAPTIVE CONSUMPTION	84
CAS - 16- ASSIGNMENT OF JOINT COSTS	91
CAS - 17- COST OF SERVICES' ALLOCATION	94
CAS - 18- ADMINISTRATIVE EXPENSES	98
CAS - 19- SELLING AND DISTRIBUTION EXPENSES	
CAS - 20- FINANCIAL EXPENSES	105
CAS - 21- COST OF ENVIRONMENT SAFEGUARDING	108
CAS - 22- COSTS' CLASSIFICATION	114
CAS - 23- DETERMINANTS OF VARIOUS CAPACITY LEVELS	126

## CAS – 01- PRESENTATION OF COST ACCOUNTING RECORD

### 1. Introduction

1.1 This standard deals with the suggestive adoption of a uniform template for reporting of Cost related information of the manufacturing organizations. The standard aims at providing a better understanding for reporting of production costs which is meant for compliance and effective reporting related to cost drivers.

### 2. Objective

2.1 The objective of this standard is to prescribe a uniform template for reporting the cost driven activities for the purpose of compliance and analysis for the organization and other stakeholders.

### 3. Scope

3.1 The standard shall be applicable to industries to which specific Cost Accounting Record Orders have been promulgated. In addition, it is also useful for the industries for their reporting purpose.

### 4. Definitions

### 4.1 **Cost of goods sold**

The cost of goods sold (COGS), also referred to as the cost of sales or cost of services, is how much it costs to produce your products or services.

#### Cost of goods sold formula

To find the cost of goods sold during an accounting period, use the COGS formula:-COGS = Finished Goods Beginning Inventory + Production Costs – Finished Goods Ending Inventory

### 4.2 Direct materials

Direct Materials are all materials that form an integral part of the finished product and that are included directly in calculating the cost of the product. It is the cost which can be attributed to a cost object in an economically feasible way.

Direct material cost includes cost of procurement, freight inward, taxes & duties, insurance etc. directly attributable to the acquisition. Trade discounts, rebates, duty draw backs, refunds on account of sale tax and other similar items are deducted in determining the cost of material.

#### 4.3 Direct labour

Direct labour cost is the labour applied directly to the material comprising the finished product. The cost of wages paid to skilled or un-skilled workers and assignable to a particular unit produced or service rendered, is termed as direct labour cost. Direct labour cost comprises wages of those workers who are conveniently and economically identified with a cost object or cost center.

#### 4.4 Indirect materials

Indirect materials are materials used in the production process, but which cannot be linked to a specific product or job. Alternatively, they may be used in such insubstantial quantities on a per-product basis that it is not worthwhile to track them as direct materials (which involves including them in the bill of materials). Thus, they are consumed as part of the production process, but are not integrated in substantial amounts into a product or job. Items that may form indirect materials are as under (given for understanding and may be different for various industries):-

- Cleaning supplies
- Disposable safety equipment
- Disposable tools
- Fittings and fasteners
- Glue
- Oil
- Tape

#### 4.5 Indirect labour

Indirect labour is the cost of any labour that supports the production process, but which is not directly involved in the active conversion of materials into finished products. Examples of indirect labour under (given for understanding and may be different for various industries) are:-

- Production supervisor
- Purchasing staff
- Materials handling staff
- Materials management staff
- Quality control staff

The cost of these types of indirect labour are charged to factory overhead, and from there to the units of production manufactured during the reporting period. This means that the cost of indirect labour related to the production process ends up in either ending inventory or the cost of goods sold.

#### 4.6 **Production Overhead**

The production cost is inclusive of all direct material, direct labour, Production Expenses and manufacturing expenses. The manufacturing expenses is inclusive of all indirect materials, indirect labour and Indirect Expenses concerned with manufacturing activity which starts with

supply of materials and ends with primary packing of the product. Production cost is also called 'Cost of Manufacturing, works cost, factory cost'.

Type of overhead:

- Supplies,
- Repairs to plant and machinery,
- Rent, rates and taxes, maintenance, heating, repairs and depreciation of factory buildings,
- Lighting,
- Power,
- Depreciation, insurance, repairs and maintenance of plant and vehicles,
- Personnel, staff welfare, canteen wages, cost office,
- Stores,
- Carriage inwards,
- Maintenance,
- Inspection,
- Remuneration of works director,
- Indirect wages,
- Fire insurance, and
- Purchase department expenses.

#### 4.7 Work-in-process

Work-in-process (WIP) refers to a component of a company's inventory that is partially completed. The value of that partially completed inventory is sometimes also called goods in process on the balance sheet (particularly if the company is manufacturing tangible items rather than providing services).

### XYZ COMPANY COST OF GOODS SOLD STATEMENT FOR THE YEAR ENDED JUNE 30, 20XX

Description	Rupees
Direct Material Consumed	
Direct Labour	
Production Overhead	
Total Cost of Manufacturing	
Add: Work in Process- Opening	
Total Cost put into manufacturing	
Less: Work in Process -Closing	
Cost of Goods Manufactured	
Add: Finished Goods Inventory - Opening	
Cost of Goods Available for Sale	
Less: Finished Goods Inventory -Closing	
Cost of Goods Sold	

### XYZ COMPANY COMPUTATION OF UNIT COST FOR THE YEAR ENDED JUNE 30, 20XX

	Current Year	Previous Year
A-Total Number of Units Manufactured		
B-Total Cost of Manufactured		
Unit Cost of Goods Manufactured (A/B)		

A1-Number of Units Sold	
B1-Cost of Goods Sold	
Unit Cost of Goods Sold (A1/B1)	

### XYZ COMPANY DIRECT MATERIAL CONSUMED REPORT (FOR EACH MATERIAL ITEM) FOR THE YEAR ENDED JUNE 30, 20XX

	Ope Invei	-	Purch during t	nased he year		ble for use	Clos Invei	•	Direct N Const	
Description of Direct Material:	Qty.	Rs.	Qty.	Rs.	Qty.	Rs.	Qty.	Rs.	Qty.	Rs.
1										
2										
3										
4										
5										

A. Total Direct Material Consumed	
B. Number of Units Manufactured	
Per Unit Value (A/B)	

### XYZ COMPANY INDIRECT MATERIAL CONSUMED (FOH) (FOR EACH MATERIAL ITEM) FOR THE YEAR ENDED JUNE 30, 20XX

	Ope Inver	-		nased he year		ble for use		sing ntory		Material umed
Description of Indirect Material:	Qty.	Rs.	Qty.	Rs.	Qty.	Rs.	Qty.	Rs.	Qty.	Rs.
1										
2										
3										
4										
5										

A. Total Indirect Material Consumed	
B. Number of Units Manufactured	
Per Unit Value (A/B)	

#### XYZ COMPANY DIRECT LABOUR COST FOR THE YEAR ENDED JUNE 30, 20XX

A-Direct Labour Cost	
B-Number of Units Manufactured	
Per Unit Direct Labour Cost (A/B)	

#### INDIRECT LABOUR COST

Supervisory Cost	
Any other Labour*	
C-Total Indirect Labour Cost	
Per Unit Indirect Labour Cost (C/B)	

D-Total Labour Cost	
Per Unit Labour Cost (D/B)	

### \* Cost that is not directly associated with the production

#### DETAILS OF LABOUR/SUPERVISORY STAFF

	Previous Year	Current Year
No. of Supervisory Staff		
No. of Skilled Workers		
No. of Semi-Skilled Workers		
No. of Unskilled Workers		
No. of any other supporting staff		
Total No. of Workers & other staff		

### XYZ COMPANY PRODUCTION OVERHEAD FOR THE YEAR ENDED JUNE 30, 20XX

### 1. CASH ITEMS

	Rs.
Indirect Material	
Indirect Labour	
Utilities	
Repair & Maintenance	
Factory Rental	
Insurance	
Licenses etc.	
Any other	
Overhead	

2. NON-CASH ITEMS (OVERHEAD)	
	Rs.
Depreciation-Machinery	
Depreciation-Equipment	
Amortization	
Any other	
Total	
A. Total Overhead (1+2)	
B. Number of Units Manufactured	
Per Unit Value (A/B)	

### XYZ COMPANY SELLING & ADMIN EXPENDITURE FOR THE YEAR ENDED JUNE 30, 20XX

#### 1. CASH ITEMS

	Rs.
Salaries allowances & benefits	
Rent	
Utilities	
Communication Charges	
Repair & Maintenance	
Insurance	
Advertising	
Commission	
Travel Expense	
Audit Fees	
Legal Fees	
Professional Charges	
Vehicle Running charges	
Printing & Stationery	
Taxes/ Cess/ Penalties	
Entertainment	
Any other	
Total	

2. NON-CASH ITEMS	
	Rs.
Depreciation	
Amortization	
Any other	
Total	
A. Total Selling & Admin Expenditure (1+2)	
B. Number of Units Manufactured	
Per Unit Value (A/B)	

### XYZ COMPANY NON-FINANCIAL DATA FOR THE YEAR ENDED JUNE 30, 20XX

Units\*

Maximum Capacity	
Normal Capacity	
Utilized Capacity	
%age of Capacity Utilization for the Current year	
%age of Capacity Utilization of Previous Year	

\*Define measuring unit as per prevailing measuring scale of the Industry

### XYZ Company COST CLASSIFICATION REPORT FOR THE YEAR ENDED JUNE 30, 20XX

Cost Item	Fixed*	Variable	Semi- Fixed/Variable	Total
<u>Materials</u>				
Α.				
В.				
С.				
D.				
<u>Labour</u>				
Α.				
В.				
С.				
D.				
Overhead				
Α.				
В.				
С.				
D.				
1. Cost of Goods Sold				
2. Number of Units Sold				
Per Unit C.G.S. (1/2)				

\*Units produced at normal capacity, respective fixed cost will be allocated per normal capacity.

## CAS - 02- COST OF MANUFACTURING

### 1. Introduction

- 1.1 This standard deals with the principles and methods of determining the Manufacturing Cost of products.
- 1.2 This standard deals with the principles and methods of classification, measurement and assignment for determination of the Manufacturing Cost of products and the presentation and disclosure in cost statements.

### 2. Objective

2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Manufacturing Cost of products.

### 3. Scope

3.1 This standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of Manufacturing Cost of products.

### 4. Definitions

The following terms are being used in this standard with the meaning specified.

### 4.1 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

### 4.2 Administrative Expenses

Administrative Expenses are expenses incurred for general management of an organization which cannot be directly related to the production, marketing, research or development functions of the enterprise. These are in the nature of indirect costs and are also termed as administrative cost.

### 4.3 **Captive Consumption**

Captive Consumption means the consumption of goods manufactured by one division or unit and consumed by another division or unit of the same organization or related undertaking for manufacturing another product(s).

### 4.4 **Defectives**

End Product and/or intermediate product units that do not meet quality standards. This may include reworks or rejects.

- 4.4.1 An intermediate product is a product that might require further processing before it is saleable to the ultimate consumer.
- 4.4.2 Reworks: Defectives which can be brought up to the standards by putting in additional resources.

Rework includes repairs, reconditioning, retro-fitment and refurbishing.

*4.4.3* Rejects: Defectives which cannot meet the quality standards even after putting in additional resources.

Rejects may be disposed-off as waste or sold for salvage value or recycled in the production process.

### 4.5 **Depreciation**

Depreciation is a measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use, efflux of time or obsolescence through technology and market changes. Depreciation is allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the estimated useful life of the asset.

Depreciable amount: Depreciable amount of a depreciable asset is its historical cost, or other amount substituted for historical cost in the financial statements, less the estimated residual value.

Useful life of asset is either:

- (i) the period over which a depreciable asset is expected to be used by the enterprise; or
- (ii) the number of production or similar units expected to be obtained from the use of the asset by the entity.

Depreciation that is charged in audited financial statement should be considered.

### 4.6 **Production Expenses**

Expenses relating to manufacture of a product or rendering a service, which can be identified or linked with the cost object other than Cost of Material CAS-3 and Cost of Labour CAS-4.

Examples of Production Expenses are royalties charged on production, job charges, hire charges for use of specific equipment for a specific job, cost of special designs or drawings for a job, software services specifically required for a job, travelling Expenses for a specific job.

### 4.7 Employee Cost

The aggregate of all kinds of consideration paid, payable and provisions made for future payments for the services rendered by employees of an enterprise (including temporary, part time and contract employees). Consideration includes wages, salary, contractual payments and benefits, as applicable or any amount paid or payable on behalf of employee. This is also known as Labour Cost.

- 4.7.1 Direct Employee Cost: The cost of employees which can be attributed to a product in an economically feasible way.
- 4.7.2 Indirect Employee Cost: The cost of employees which cannot be directly attributed to a particular product.

### 4.8 Interest and Finance Costs

Finance cost is a cost incurred by an enterprise in connection with the borrowing of funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related to borrowings, amortization of ancillary cost incurred in connection with the

arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms finance costs and borrowing costs are used interchangeably.

#### 4.9 **Cost of Manufacturing**

Cost of Manufacturing of a product is the aggregate of costs of all resources used in the process of its manufacturing.

Cost of Manufacturing includes cost of Materials (including process materials), Employee Cost, Cost of Utilities, Packing Cost, Production Expenses, Repairs & Maintenance Cost, Environment Protection Cost, Cost of Quality Control, Research & Development Cost, Cost of Inputs received free of cost or received at concessional value from the buyer of the products, Depreciation and Amortisation Expense (including amortisation cost of free tools, patterns, dies, drawings, blue prints, technical maps, charts, engineering, development, art work, design work, plans, sketches, packaging material and the like necessary for production of products), Cost of Rework, reconditioning, retro-fitment, Manufacturing Overheads, other costs allocable to such activity, adjustment for stock of work-in-process and recoveries for sales of scrap and wastages and the like but does not include expenses of the above nature incurred for post manufacturing purposes.

The terms Cost of Manufacturing and Production Cost have the same meaning and are used interchangeably.

#### 4.10 Manufacturing Overheads

These are indirect costs involved in the manufacturing process.

Manufacturing Overheads shall be classified on the basis of behaviour as Variable Manufacturing Overheads and Fixed Manufacturing Overheads.

Variable Manufacturing Overheads comprise of expenses which vary in proportion to the change in volume of production. For example, cost of utilities etc.

Fixed Manufacturing overheads comprise of expenses which does not change with the change in volume of production. For example, salaries, rent, repairs & maintenance, etc.

The terms Manufacturing Overheads, Factory Overheads, Works Overheads and Production Overheads have the same meaning and are used interchangeably. Manufacturing overheads shall include administration cost relating to production, factory, works or manufacturing and depot.

#### 4.11 Material Consumed

Material Consumed includes materials directly identified for production of products such as:

- (a) Indigenous materials
- (b) Imported materials
- (c) Bought out items
- (d) Self-manufactured items
- (e) Process materials and other items
- (f) Materials received free of cost or at concessional value from the buyer
- (g) Accessories
- (h) goods used for providing free warranty for products

Cost of material consumed consists of cost of material, duties and taxes, freight inwards, insurance and other expenditure directly attributable to procurement. Trade discount, rebates and other similar items are deducted for determining the cost of materials.

#### 4.12 Normal Capacity

Normal capacity is the production achieved or achievable on an average over a longer period of time to level out seasonal or cyclical variations. In determining normal capacity, physical plant capacity and sales potential must be considered together.

Normal Capacity = Installed Capacity – Capacity loss (Internal & External factors); or Normal Capacity = Practical Capacity – Capacity loss by External factors

#### 4.13 Cost of Packaging Material

Cost of Packaging Material is the cost of material of any nature used for the purpose of packing a product.

#### 4.14 **Product**

The term goods and products have the same meaning and are used interchangeably.

### 4.15 Cost of Quality Control

The Cost of Quality Control is the expenses incurred relating to quality control activities for adhering to quality standard. These expenses include salaries & wages relating to employees engaged in quality control activity and other related expenses.

#### 4.16 Repairs & Maintenance Cost

Cost of all activities which have the objective of maintaining or restoring an asset in or to a state in which it can perform its required function at intended capacity and efficiency.

Repairs and Maintenance activities for the purpose of this standard include routine or preventive maintenance, planned (predictive or corrective} maintenance and breakdown maintenance.

The repair or overhaul of an asset which results in restoration of the asset to intended condition would also be a part of Repairs and Maintenance activity.

Major overhaul is a periodic (generally more than one year) repair work carried out to substantially restore the asset to intended working condition.

### 4.17 **Research and Development Cost**

Research & development cost is the cost for undertaking research to improve quality of a present product or improve manufacturing process, develop a new product, market research etc. and commercialization thereof. While research cost comprises of cost incurred on development of new product /process and improvement of existing product/ process, development cost includes the cost incurred for commercialization / implementation of research findings.

### 4.18 Royalty

Royalty is a compensation/ periodic payment for the use of asset (tangible and/or intangible) to the owner for use of his asset in the production/manufacture, selling and distribution by an entity.

Royalty is often expressed as a percentage of the revenues obtained by use of the owner's asset (tangible and/or intangible); per unit of production or sales value. It may relate to use of: Non-renewable resource (petroleum and mineral resources); Patents; Trademarks; Franchise rights; Copy rights; art-work, software and the like.

The terms Assets, tangible assets and intangible assets will have the same meaning as in the Accounting Standards notified by the Securities & Exchange Commission of Pakistan.

### 4.19 **Scrap**

Scrap means discarded material having some value in few cases and which is usually either disposed off without further treatment (other than reclamation and handling) or reintroduced into the production process.

### 4.20 **Technical Know-how Fee**

Technical Know-how Fee is a lump sum or periodical amount payable to provider of technical Know-how in the form of design, drawings, training of personnel, or practical knowledge, skills or experience.

### 4.21 Waste and Spoilage

4.21.1 Waste: Waste is a material loss during production or storage due to various factors such as evaporation, chemical reaction, contamination, unrecoverable residue, shrinkage etc. and discarded material which may or may not have value.

The terms Waste and Wastage have the same meaning and are used interchangeably.

4.21.2 Spoilage: Production that does not meet with dimensional or quality standards in such a way that it cannot be rectified economically and is sold for a disposal value. Net Spoilage is the difference between costs accumulated up to the point of rejection and the salvage value.

### 5. **Principles of Measurement**

- 5.1 Cost of Manufacturing for each product shall be measured separately.
- 5.2 Cost of Manufacturing of each product shall be the aggregate of direct and indirect cost

relating to manufacturing activity.

- 5.3 Material cost for each product shall be measured separately as per CAS-3 Cost of Material.
- 5.4 Direct labour for each product shall be measured separately as per CAS-4 Cost of Labour.
- 5.5 The Production Expenses for manufacturing of products shall be measured for each product separately as per CAS-06 Production Expenses.
- 5.6 Depreciation and Amortisation Expense cost for manufacturing of products shall be measured for each product separately as per CAS-14 Depreciation and Amortisation Expense Expenses.
- 5.7 The cost of utilities consumed for manufacturing of products shall be measured for each product as per CAS-07 Utilities Expenses. The cost shall be measured and presented for each type of utility separately.
- 5.8 Repairs and maintenance cost for manufacturing of products shall be measured for each product separately as per CAS-09 Repairs & Maintenance.
- 5.9 Manufacturing Overheads Fee shall be measured for each product separately as per CAS-6 Production Expenses.
- 5.10 Cost incurred for manufacturing of products after split-off point shall be measured for each Joint/By-Product as per CAS-16 Assignment of Joint Costs.
- 5.11 Research & Development cost for manufacturing of products shall be measured for each product separately as per CAS-11 Research and Development Cost.
- 5.12 Royalty and Technical Know-how Fee shall be measured for each product separately as per CAS-12 Royalty and Franchise Fee.
- 5.13 Cost of Quality Control Fee shall be measured for each product separately as per CAS-13 Cost of Quality Control.
- 5.14 Cost of Packaging Material used for each type of products shall be measured separately as per CAS-10 Cost of Packaging Material.

If products are transferred/dispatched duly packed, the cost of such packing shall include cost of all types of packing in which the products are removed from the place of removal.

- 5.15 Interest and other Finance costs are not part of manufacturing cost of products.
- 5.16 Cost of Manufacturing of products shall include cost of inputs received free of cost or at concessional value from the buyer of products and amortisation cost of free tools, pattern, dies, drawings, blue prints, technical maps, charts, engineering, development, art work, design work, plans, sketches, and the like necessary for production of products. It shall also include cost of rework, reconditioning, retro-fitment, Manufacturing Overheads and other costs allocable to such activity, adjustment for stock of work-in- process and recoveries from sales of scrap and wastages and the like necessary for products.

In case any input material, whether of direct or indirect nature, including packing material, is supplied free of cost or at concessional value by the buyer of the products, the cost of such material shall be included in the Cost of Manufacturing.

For example: Amortisation Cost of Moulds, Tools, Dies & Patterns and Cost of Packing Material etc. received free of cost or at concessional value from the buyer of products shall be included in Cost of Manufacturing.

5.17 Any Subsidy/Grant/Incentive or any such payment received/receivable, from other

entity, other than the buyer with respect to any manufacturing cost of products shall be deducted for ascertainment of the manufacturing cost of products to which such amounts are related.

- 5.18 The manufacturing cost of products shall be determined based on the normal capacity or actual capacity utilization whichever is higher, and unabsorbed cost, if any, shall be treated as abnormal cost.
- 5.19 Fines, penalties, damages, demurrage and similar levies paid to statutory authorities or other third parties shall not form part of the manufacturing cost of products.
- 5.20 The forex component of imported material or other element of cost shall be converted at the rate on the date of the transaction. Any subsequent change in the exchange rate till payment or otherwise shall not form part of Cost of Manufacturing of products.
- 5.21 Credits/recoveries relating to the Cost of Manufacturing, which are material and quantifiable, shall be deducted from the total Cost of Manufacturing to arrive at the net Cost of Manufacturing of products.
- 5.22 Work in process/progress stock shall be measured at cost computed for different stages of completion.

Stock of work-in-process/progress shall be valued at cost on the basis of stages of completion as per cost accounting principles. Opening and closing stock of work-in-process/progress shall be adjusted for computation of manufacturing cost of a product.

### 6. Assignment of Cost

- 6.1 While assigning various elements of manufacturing cost of products, traceability to a product in an economically feasible manner shall be the guiding principle. The cost which can be traced directly to each product shall be directly assigned.
- 6.2 Assignment of manufacturing cost of products, which are not directly traceable to the products shall be based on either of the following two principles;
- *6.2.1* Cause and Effect Cause is the process or operation or activity and effect is the incurrence of cost.
- *6.2.2* Benefits received to be apportioned to various cost objects in proportion to the benefits received by them.
- 6.3 The variable manufacturing/production overheads shall be absorbed based on actual production.
- 6.4 The fixed manufacturing/production overheads and other similar item of fixed costs such as Cost of Quality Control, research and development costs and Administrative Expenses relating to manufacturing shall be absorbed in the Cost of Manufacturing on the basis of the normal capacity or actual capacity utilization of the plant, whichever is higher.
- 6.5 In case a production process results in more than one product being produced simultaneously, treatment of joint products and by-products shall be as per CAS-16 Assignment of Joint Costs.
- 6.6 Miscellaneous Income relating to production/manufacture shall be adjusted in the determination of Cost of Manufacturing.
   For example, income from sale of empty containers used for procurement of raw

material shall be deducted in determination of Cost of Manufacturing.

### 7. Presentation

- 7.1 Cost statement as per **Appendix-1** to this standard or as near thereto shall present following information:
- 7.1.1 Actual capacity utilization in absolute terms and as a percentage of normal capacity.
- 7.1.2 Cost information relating to various elements of Cost shall be presented separately.

### 8. Disclosures

- 8.1 Disclosure shall be made only where material, significant and quantifiable.
- 8.2 If there is any change in cost accounting principles and practices during the period under review which may materially affect the manufacturing cost of products in terms of comparability with previous period(s), the same shall be disclosed.

### 9. Cross Reference

- 9.1 Cost Accounting Standards (CAS)
  - 1. CAS-03 Cost of Material
  - 2. CAS-04 Cost of Labour
  - 3. CAS-05 Cost of Production Overheads
  - 4. CAS-06 Production Expenses
  - 5. CAS-07 Utilities Expenses
  - 6. CAS-09 Repairs & Maintenance
  - 7. CAS-10 Cost of Packaging Material
  - 8. CAS-11 Research and Development Cost
  - 9. CAS-12 Royalty and Franchise Fee
  - 10. CAS-13 Cost of Quality Control
  - 11. CAS-14 Depreciation and Amortisation Expense
  - 12. CAS-16 Assignment of Joint Costs

#### Appendix-1

### Cost Statement showing Manufacturing Cost of (Name of products) for the period:

	Name of the Manufacturer			
	Address of the Manufacturer			
	Name of the unit			
	Address of the unit			
Α	Quantitative Information		Unit	Quantity
1	Normal/Installed Capacity			
2	Production			
3	Captive Consumption			
4	Production as %age of Normal/Installed Cap	pacity		

В	Cost Information	Unit	Quantity	Rate	Amount	Cost per Unit
	Materials (specify)					
1	Α.					
	В.					
	С.					
	D					
	Total Materials Consumed					
2	Process Materials					
3	Utilities					
4	Direct Employee Cost					
5	Production Expenses					
6	Consumable Stores and Spares					
7	Repairs and Maintenance Cost					
8	Cost of Quality Control					
9	Research & Development Cost					

how Fee/Royalty, if any nortization uring Overheads				
uring Overheads				
in-Progress Adjustments				
eceived Free or at ue from the buyer of the				
Cost (13 to 16)				
	· ·	· · ·	. ,	Cost (13 to 16) e: Separate Cost Statement(s) shall be prepared for each <i>products</i>

## CAS - 03- COST OF MATERIAL

### 1. Introduction

- 1.1. This standard describes the principles and methods to determine the direct material cost, its classification, measurement and assignment to cost object.
- 1.2. Direct Material includes raw materials, in-house manufactured or bought out components, assemblies and sub-assemblies.
- 1.3. This standard does not cover indirect and packing materials.

### 2. Objective

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the direct material cost with reasonable accuracy.

### 3. Scope

This standard shall be applied for classification, measurement, assignment, presentation and disclosure of direct material cost for preparation of cost statements.

### 4. Definitions

### 4.1 Abnormal Cost

Abnormal cost is a typical cost whose occurrence is unusual, irregular, and unexpected or due to some abnormal situation of the production or operation.

### 4.2 Administrative Expenses

Administrative Expenses are expenses incurred for general management of an organization. These are indirect costs in nature.

### 4.3 **Cost Object**

Cost object includes a product, service, cost center, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

### 4.4 **Defectives**

Defectives means end product or intermediate product that does not meet quality standards. This may include reworks or rejects.

### 4.5 **Reworks**

Reworks means defective materials which can be brought up to the standard by putting in additional resources. Rework includes repairs, reconditioning and refurbishing.

### 4.6 **Rejects**

Rejects means defective materials which cannot meet the quality standards prescribed by the management.

### 4.7 **Direct Materials**

Direct Materials are all materials that form an integral part of the finished product and that are included directly in calculating the cost of the product. It is the cost which can be attributed to a cost object in an economically feasible way.

### 4.8 **Scrap**

Scrap means discarded material having some value in few cases and which is usually either disposed off without further treatment (other than reclamation and handling) or reintroduced into the production process.

### 4.9 **Standard Cost**

Standard cost is the predetermined cost of manufacturing a single product or a number of product units during a specific period in the immediate future. It is the planned cost of product under current and/or anticipated conditions.

### 4.10 Wastage

Wastage is a material loss during production or storage due to various factors such as evaporation, chemical reaction, contamination, unrecoverable residue, shrinkage etc. and discarded material which may or may not have value.

The terms Waste and Wastage have the same meaning and are used interchangeably.

### 4.11 **Spoilage**

Spoilage material is that material which does not meet with dimensional or quality standards in such a way that it cannot be rectified economically and is sold for a disposal value. Net spoilage is the difference between costs accumulated up to the point of rejection and the salvage value.

### 5. **Principles of Measurement**

### 5.1 Valuation of Direct Materials

- 5.1.1 The direct material shall be valued at purchase price including duties and taxes, freight inwards, insurance, and other expenditure directly attributable to procurement (net of trade discounts, rebates, taxes and duties refundable) that can be quantified with reasonable accuracy at the time of acquisition.
- 5.1.2 Finance costs incurred in connection with the acquisition of direct materials shall not form part of direct material cost.
- 5.1.3 Normal loss or spoilage of material prior to reaching the factory or at places where the services are provided shall be absorbed in the cost of remaining direct materials, net

of amounts recoverable from suppliers, insurers, carriers or recoveries from disposal.

- 5.1.4 Losses due to shrinkage or evaporation and gain due to elongation or absorption of moisture etc., before the material is received shall be absorbed in material cost to the extent they are normal, with corresponding adjustment in the quantity.
- 5.1.5 The forex component of imported material cost shall be converted at the rate on the date of the transaction. Any subsequent change in the exchange rate till payment or otherwise shall not form part of the material cost. The foreign exchange gain/loss shall not become the part of the material cost.
- 5.1.6 Any demurrage or detention charges, or penalty levied by transport or other authorities shall not form part of the cost of direct materials.
- 5.1.7 Subsidy/ grant/ incentive and any such payment received/ receivable with respect to any material shall be reduced from cost of the cost object to which such amounts are related.

### 5.2 Valuation of Issuance of Material

- **5.2.1** Material issued shall be valued using appropriate assumptions on cost flow, e.g. First In First Out or Weighted Average method. The method of valuation shall be followed on a consistent basis. Only these two valuation methods are applicable in line with the IAS-2.
- **5.2.2** Where direct materials are accounted at standard cost, the price variances related to direct materials shall be adjusted in the material cost.
- **5.2.3** Any abnormal cost shall be excluded from the material cost.

### 5.3 Self-manufactured Components and Sub-assemblies

Self-manufactured components and sub-assemblies shall be valued including direct material cost, direct employee cost, Production Expenses, factory overheads, share of Administrative Expenses relating to production but excluding share of other Administrative Expenses, finance cost and marketing overheads.

### 5.4 Normal Scrap and Defective Items

The material cost of scrap/ defectives, not exceeding the normal limit, shall be adjusted in the material cost of good production. Material cost of abnormal scrap/ defectives should not be included in material cost but treated as loss after giving credit to the realizable value of such scrap/ defectives.

### 6. Assignment of Costs

### 6.1 **Direct Material**

### 6.1.1 Direct Material Cost to Cost Objects

Material cost shall be directly traced to a cost object to the extent it is economically feasible and/ or shall be assigned to the cost object on the basis of material quantity

consumed or similar identifiable measure and valued as per the principles laid under Paragraph 5.

**6.1.2** Where the material costs are not directly traceable to the cost object, these may be assigned on a suitable basis like technical estimates, such material will become the part of the indirect material.

### 6.2 **Production Expenses**

Direct expanses are material is processed or part manufactured by a third party according to specifications provided by the buyer, the processing/ manufacturing charges payable to the third party shall be treated as part of the material cost.

### 7. Presentation

Cost statements governed by this standard, shall present direct material costs as detailed below:-

- 7.1 Direct Materials shall be suitably classified in the cost statement under relevant heads which may include:
  - (a) Raw materials
  - (b) Components
  - (c) Sub components
  - (d) Assemblies
  - (e) Sub-assemblies
  - (f) Any other material which can be directly and conveniently identified with the cost object.

### Note: The above classifications may further be bifurcated into local, imported, selfmanufactured and outsourced components.

### 8. Disclosures

The following information shall be disclosed in the cost statements dealing with determination of material cost:-

- 8.1 The basis of valuation of direct materials.
- 8.2 Any change in the cost accounting principles and methods applied for the determination of the direct material cost during the period covered by the cost statement. Where the effect of such change is not ascertainable wholly or partly, the fact shall be indicated.
- 8.3 Any abnormal cost excluded from the material cost.
- 8.4 Any demurrage or detention charges, penalty levied by any authority excluded from the material cost.
- 8.5 Any subsidy/ grant/ incentive or any such payment reduced from material cost.
- 8.6 Cost of direct materials procured from related parties.
- 8.7 Disclosures shall be made as footnote or separate schedule.

## CAS - 04- LABOUR COST

### 1. Introduction

This standard deals with the principles and methods of classification, measurement and assignment of direct labour cost, for determination of the cost of product or service and the presentation and disclosure in cost statements.

### 2. Objective

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the direct labour cost with reasonable accuracy.

### 3. Scope

This standard shall be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of direct labour cost including those requiring attestation.

### 4. Definitions

### 4.1 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

### 4.2 Abnormal Idle Time

Abnormal idle time means an unusual direct labour idle time, occurrence of which is usually irregular and unexpected or due to some abnormal situations e.g. strike, lockout or an accident etc.

### 4.3 Cost Object

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

### 4.4 **Direct Labour Cost**

Direct labour is the labour applied directly to the material comprising the finished product. The cost of wages paid to skilled or un-skilled workers and assignable to a particular unit produced or service rendered, is termed as direct labour cost. Direct labour cost comprises wages of those workers who are conveniently and economically identified with a cost object or cost center.

Direct labour cost is an aggregate of all kinds of consideration paid, payable and provisions made for the services rendered by direct labourers of an enterprise (including temporary, part time and contract direct labours). Consideration includes

wages, salary, contractual payments and benefits, as applicable or any payment made on behalf of direct labour.

### 4.5 Idle Time

Idle time is the difference between the time for which the direct labours are paid and the direct labours' time booked against the cost object. The time for which the direct labours are paid includes holidays, paid leave and other allowable time offs such as lunch, tea breaks etc.

### 4.6 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

### 4.7 Indirect Labour Cost

Indirect labour cost is a cost which cannot be directly attributable to a particular cost object.

### 4.8 **Overtime Premium**

Overtime premium is the time spent beyond the normal working hours which is usually paid at a higher rate than the normal time rate. The extra amount beyond the normal wages and salaries paid is called overtime premium.

### 5. **Principles of Measurement**

- 5.1 Direct labour cost is ascertained by taking in to account the labour directly involved upon material comprising the finished product. Wages, over time bonuses etc. other benefits including subsidized food, subsidized housing, subsidized conveyance, statutory provisions for insurance against accident or health scheme shall not become part of the direct labour cost.
- 5.2 Bonus whether payable as a statutory, or on a sharing of surplus shall be treated as part of direct labour cost. Ex gratia payable in lieu of or in addition to bonus shall also be treated as part of the direct labour cost.
- 5.3 Remuneration payable to managerial personnel including Executive Directors on the Board and other officers of a corporate body under a statute will not be considered as part of the direct labour cost of the year under reference whether the whole or part of the remuneration is computed as a percentage of profits.
- 5.4 Separation costs related to voluntary retirement, retrenchment, termination etc. shall be amortized over the period benefitting from such costs. It shall not become the part of the direct labour cost.
- 5.5 Cost of idle time (Normal or abnormal) is ascertained by the idle hours multiplied by the hourly rate applicable to the idle direct labour.

- 5.6 Where direct labour cost is accounted at standard cost, variances due to normal reasons related to direct labour cost shall be treated as part of direct labour cost. Variances due to abnormal reasons shall be treated as part of overheads.
- 5.7 Any payment received or receivable by the entity on account of subsidy, grant and incentive etc. for the period with respect to direct labour cost shall be reduced for ascertainment of cost of the cost object to which such amounts are related. Any abnormal cost shall not form part of the direct labour cost.

Penalties, damages paid to statutory authorities or other third parties shall not form part of the direct labour cost.

### 6. Assignment of Costs

- 6.1 Where the labour services are traceable to a cost object, such direct labour cost shall be assigned to the cost object on the basis such as time consumed or number of direct workers engaged etc. or similar identifiable measure.
- 6.2 While determining whether a particular direct labour cost is chargeable to a separate cost object, the principle of materiality shall be adhered to.
- 6.3 Where the direct labour costs are not directly traceable to the cost object, these may be assigned on suitable basis like estimates of time based on time study, such labour cost shall not form the part of the direct labour.
- 6.4 Overtime premium shall be assigned directly to the cost object or treated as overheads depending on the economic feasibility and the specific circumstance requiring such overtime.
- 6.5 Idle time cost shall be assigned directly to the cost object or treated as overheads depending on the economic feasibility and the specific circumstances causing such idle time. Cost of idle time for reasons anticipated like normal lunchtime, holidays etc. is normally included in the direct labour cost while arriving at the cost per hour of a direct labour/ a group of direct labourers whose time is attributed direct to cost objects.

### 7. **Presentations**

- 7.1 Direct labour costs shall be presented as a separate cost head in the cost statement.
- 7.2 The cost statement shall furnish the resources consumed on account of direct labour cost, category wise such as wage to permanent, temporary, part time and contract labourers piece rate payments, overtime payments etc.

### 8. Disclosures

- 8.1 The cost statements shall disclose the following:-
- 8.1.1 Direct labour cost attributable to capital works or jobs in the nature of deferred revenue expenditure indicating the method followed in determining the cost of such capital work.
- 8.1.2 Separation costs payable to labour.
- 8.1.3 Any abnormal cost excluded from direct labour cost.
- 8.1.4 Penalties and damages paid etc. excluded from direct labour cost.
- 8.1.5 Any subsidy, grant, incentive and any such payment reduced from direct labour cost.
- 8.1.6 The direct labour cost paid to related parties.
- 8.1.7 Direct labour cost incurred in foreign exchange.
- 8.2 Any change in the cost accounting methods applied for the measurement and assignment of the direct labour cost during the period covered by the cost statement which has a material effect on the direct labour cost. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.
- 8.3 Disclosures shall be made only where material, significant and quantifiable.
- 8.4 Disclosures shall be made in the body of the cost statement or as a foot note or as a separate schedule.

## CAS - 05- COST OF PRODUCTION OVERHEADS

### 1. Introduction

1.1 Production overheads are indirect costs involved in the production process or in rendering services. Production overheads include administration cost relating to production, factory works or manufacturing. Production related expenses incurred at corporate office e.g. design office expenses, materials management and industrial relations will also be covered under production overheads. A system of better distribution of overheads will ensure greater accuracy in determination of cost of products or services. Therefore, standard practices for allocation, apportionment and absorption of overheads shall be followed for preparation of cost statements.

### 2. Objectives

The objectives of this standard include:

- 2.1. To prescribe the methods of collection, allocation, apportionment of overheads to different cost centers and absorption thereof to cost objects on a consistent and uniform basis in the preparation of cost statements.
- 2.2. To facilitate inter organizational and intra-organizational comparison.
- 2.3. To standardize collection, allocation, apportionment and absorption of overheads, in order to provide a basis for determination of cost of different cost objects.
- 2.4. To facilitate commercial and strategic management decision making to ensure compliance with disclosure requirements and transparency in the cost statement.

### 3. Scope

3.1 This standard shall be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of production overheads.

### 4. Definitions

### 4.1 **Production Overheads**

Production Overhead involves a company's factory operations. It includes the costs incurred in the factory other than the costs of direct materials and direct labour. This is the reason that manufacturing overhead is often classified as an indirect cost.

The terms Manufacturing Overheads, Factory Overheads and Production Overheads have the same meaning and are used interchangeably.

### 4.2 Variable Overheads

Variable production overheads, which vary in proportion to the change of volume of production shall be termed as variable overheads.

### 4.3 **Fixed Overheads**

Fixed production overheads which do not change with the change in volume of production shall be termed as fixed overheads.

### 4.4 Semi-variable Overheads

Semi-variable Overheads contain both the elements, fixed as well as variable; hence such overheads are termed as semi variable overheads. They are partly affected by fluctuation in the level of activity.

### 4.5 Allocation of Overheads

Allocation of overheads is assigning an item of cost to a cost object, which can be directly identified to that cost object.

### 5. Collection of Overheads

- 5.1 Collection of overheads means the pooling of indirect items of expenses from books of accounts and supportive records in logical groups having regards to their nature and purpose.
- 5.2 Overheads are collected on the basis of pre-planned groupings, called cost pools. Homogeneity of the cost components in respect of their behaviour and character is to be considered in developing the cost pool. Variable and fixed overheads should be collected in separate cost pools under a cost centre. A great degree of homogeneity in the cost pools is to be maintained to make the apportionment of overheads more rational and scientific. A cost pool for maintenance expenses will help in apportioning them to different cost centers, which use the maintenance service.

### 6. Allocation of Overheads

Allocation of overheads is assigning an item of cost to a cost object, which can be directly identified to that cost object.

### 7. Apportionment of Overheads

Apportionment of overhead is distribution of overheads to more than one cost objects on an equitable basis. When the indirect costs are common to different cost objects, these shall be apportioned to these cost objects.

### 7.1 **Primary and Secondary Distribution of Overheads**

In multi-product environment, common service cost centers provide services to the various production cost centers and other service cost centers. The costs of such services shall be apportioned to the relevant cost centers in two steps. Firstly, it shall be apportioned to all cost centers and then the costs of service cost centers to production cost centers. The first step is termed as primary distribution and the second step is termed as secondary distribution of overheads.

### 8. Absorption of overheads

Absorption of overheads is charging of overheads from cost centers to products or services by means of absorption rates for each cost center. Overhead rate is calculated as follows:

Overhead absorption rate = <u>Total estimated overhead of the cost centre</u> Normal Capacity

The denominator is selected on the basis of type of the cost centre and its contribution to the products or services, such as, machine hours, labour hours, quantity produced etc.

The numerator and the denominator are based on the normal capacity in arriving at the overhead absorption rate, whereas overheads would be applied or absorbed on the basis of actual capacity utilized as depicted below:

Overhead absorbed = Overhead absorption rate x Actual capacity utilized.

### 9. Basis of Apportionment of Production Overheads

Overheads shall be apportioned to different cost centers based on any of the following two principles:-

### **Cause and Effect**

Cause is the process or operation or activity, whereas effect is the incurrence of cost. Apportionment of overheads based on this criterion ensures better rationality as it is guided by the relationship between cost objects and cost.

### **Benefits Received**

Overheads are to be apportioned to the various cost centers in proportion to the benefits received by them.

### 10. Distribution of Overheads

### **10.1 Primary Distribution of Overheads**

Basis of primary apportionment of items of production overheads is to be selected to distribute them among the cost centers following any of the two principles as given above at para 9. Basis of apportionment must be rational to distribute overheads. Once the base is selected, the same is to be followed consistently and uniformly. However, change in basis for apportionment can be adopted only when it is considered necessary due to change in circumstances.

### 10.2 Secondary Distribution of Overheads

Secondary distribution of overheads may be done by following either reciprocal basis or non-reciprocal basis.

### 10.2.1 Secondary Apportionment of Overheads on Reciprocal Basis.

The services rendered by certain service cost centers are also utilized by other service

cost centers. In reciprocal secondary distribution, the cost of service cost centers are apportioned to production cost centers as well as other service cost centers. In such case, any one of the following two methods may be followed:

- (i) Repeated Distribution Method
- (ii) Simultaneous Equation Method

#### (i). Repeated Distribution Method

Steps to be followed under repeated distribution method are:

- A. The proportion at which the costs of a service cost centers are to be distributed to production cost centers and other service cost centers are determined.
- B. Cost of first service cost center shall be apportioned to production cost centers and service cost centers in the proportion as determined in step (i).
- C. The cost of other service cost centers is to be apportioned, accordingly.

The process stated above shall continue till the figures remaining undistributed in the service cost centers are negligibly small. The negligibly small amount left with service centre may be distributed to production cost centers.

#### (ii). Simultaneous Equation Method

The simultaneous equations method is to be adopted to take care of secondary distribution of cost of service cost centers to production cost centers with the help of mathematical formulation and solution. (Refer Exhibit 1 & 2).

#### 10.2.2 Secondary Apportionment of Overheads on Non-Reciprocal Basis

In non-reciprocal secondary distribution, the cost of service cost centers shall be apportioned to the production cost centers. Steps involved are:

- (a) The cost of first service cost centre shall be apportioned on a suitable basis to production cost centers.
- (b) The second step is to apportion the cost of next service centre to the production cost centers as indicated in step (i).
- (c) The process is to be continued till the costs of all service cost centers are apportioned. (Refer Exhibit 3).

## **10.3** Common bases for absorption of Production overheads

Following are the common basis for absorption of production overheads:

Bases of Denominator	Applicability					
Unit of Production	When single product is produced or various products					
	are similar in specification.					
Direct Labour Cost	When conversion process is labour intensive and					
	wage rates are substantially uniform.					
Direct Labour Hour	When conversion process is labour intensive					
Machine Hour or	When production mainly depends on performance of					
Vessel Occupancy or	the Base.					
Reaction Hour or						
Crushing Hour						

#### 10.4 Absorption of Production Overheads and Production Capacity

*Overheads shall* be categorized into variable overheads and fixed overheads. The production overheads shall be absorbed to products or services based on actual capacity utilization. In case actual production varies from normal production, over or under absorption of overheads shall be adjusted in costing profit & loss account.

#### 10.5 **Determination of Overheads Absorption Rate**

Production overheads absorption rate for each cost centre is to be determined with the help of normal capacity as indicated below:

Querbando absorbio a rato	Estimated Total Production Overheads					
Overheads absorption rate =	Norm	nal Capacity				
Fixed overheads absorption rat	e =	<u>Fixed Production overheads</u> Normal Capacity				
Variable overheads absorption	rate =	Variable Production overheads				

These rates may also be calculated for each cost centre or each department for a particular period with the following formula:

Departmental overhead Rate = <u>Estimated Departmental Overhead for the Period</u> Normal capacity of the department

The amount of total overheads absorbed by a product, service or activity will be the sum total of the overheads absorbed from individual cost centers on pre-determined basis.

## **11. Presentation and Disclosure**

- 11.1 Once the basis of collection, allocation, apportionment and absorption for different production cost centers is selected, the same shall be followed consistently and uniformly.
- 11.2 Change in the basis for collection, allocation, apportionment and absorption can be adopted only when it is compelled by the change in circumstances such as change in technology, refinement and improvement in the basis etc. In case of such changes, proper disclosure in cost records is essential.
- 11.3 Any change in basis for collection, allocation, apportionment and absorption which has a material effect on the cost of the product, should be disclosed in the cost statements. Where the effect of such change is not ascertainable wholly or partly, the fact should be indicated in the cost statement.

## Exhibit 1

Servicing departments Y & Z whose costs are to be allocated to producing departments A & B, using reciprocal method of distribution on the basis of simultaneous equation:-

	DEPARTMENTAL OVERHEAD	Service Department			
Departments:	Before Distribution of Service department cost (Rs)	Dept. Y	Dept. Z		
Producing –A	6,000	40%	20%		
Producing –B	8,000	40%	50%		
Service-Y	3,630	-	30%		
Service-Z	2,000	20%	0%		
Total departmental overhead	19,630	100%	100%		

Following are the equation to calculate the value of Y &Z.

Y = Rs. 3,630 + 0.30Z (Equation 1) Z = Rs. 2,000 + 0.20Y (Equation 2)

By putting value of (Z) in equation 1

Y = Rs. 3,630 + 0.30 (Rs 2,000 + 0.20Y)

0.94Y = Rs 4,230

Substituting Z:

Z = Rs. 2, 000 + 0.20 (Rs.4,500) Z = Rs.2,000+ Rs.900 Z = Rs. 2,900

Distribution of factory overhead on the basis of equation solved above

## Exhibit2

Reciprocal Overheads Apportionment : Repeated Method

	Produ	uction Departr	Service Department		
	Machine	Assembly	Finishing	Stores	Repair
Ratio of apportionment from Stores	50%	20%	15%		15%
Ratio apportionment from Repair	40%	35%	15%	10%	
Distribution from					
Primary Distribution	35,500.00	31,900.00	14,800.00	5,000.00	6,000.00

## CAS-06: Production Expenses

Stores Dept.	2,500.00	1,000.00	750.00	(5,000.00)	750.00
Total	38,000.00	32,900.00	15,550.00	-	6,750.00
Repairs & Maintenance Dept	2,700.00	2,362.50	1,012.50	675.00	(6,750.00)
Total	40,700.00	35,262.50	16,562.50	675.00	-
Stores Dept.	337.50	135.00	101.25	(675.00)	101.25
Total	41,037.50	35,397.50	16,663.75	-	101.25
Repairs & Maintenance Dept	40.50	35.44	15.19	10.13	(101.25)
Total	41,078.00	35,432.94	16,678.94	10.13	-
Stores Dept.	5.06	2.03	1.52	(10.13)	1.52
Total	41,083.06	35,434.96	16,680.46	-	1.52
Repairs & Maintenance Dept	0.61	0.53	0.23	0.15	(1.52)
Total	41,083.67	35,435.49	16,680.68	0.15	-
Stores Dept.	0.10	0.03	0.02	(0.15)	-
Total	41,083.77	35,435.52	16,680.71	-	-

## Exhibit 3 Primary Distribution

DISTRIBUTION O	DISTRIBUTION OF FACTORY OVERHAED					SE DEPAI	TOTAL		
			А		В	Y		Z	
•	Departmental overhead before distribution of service departments					3,630		2,000	19,630
Distribu	ition of FOH:								
Depa	artment Y		1,800		1,800	(4,500)		900	0
Depa	artment Z		580		1,450	870		(2,900)	0
Total depart	mental overhead	8,380		11,250	0		0	19,630	
			Production Departments Service Depar						artments
Expenses	Basis of allocation / apportionment	Total (Rs.)	Machine Shop	As	ssembly Shop	Finishing Dept		Stores	Repairs & Maint
Consumable stores	Direct Materials	15,400	5,200		6,000	2,0	00	600	1,600
Supervision	Direct Wages	22,800	7,900		5,100	6,1	00	2,200	1,500
Rent & Rates	Area	10,000	3,000		2,000	2,5	00	1,000	1,500

ICMA Pakistan			Cost Accour	rd			
		CAS-06:					
Insurance	Asset Value	2,000	800	900	200	50	50
Depreciation	Asset Value	30,000	12,000	13,500	3,000	750	750
Power	H.PxHoursx L.F	9,000	5,400	3,600	-	-	-
Light & Heat	Area	4,0	1,200	800	1,000	400	600
Total		93,200	35,500	31,900	14,800	5,000	6,000

# Secondary Distribution

			Produc	tion Depar	tments	Service Departments		
Expenses	Basis of allocation / apportionment	Total (Rs.)	Machine Shop	Assembly Shop	Finishing Dept	Stores	Repairs & Maint	
Primary dist. (earlier table)		93,200	35,500	31,900	14,800	5,000	6,000	
Stores	Direct Material (9:6:5)		2,250	1,500	1,250	(5,000)		
Repairs & Maint	Direct labour (2:3:1)		2,000	3,000	1,000		(6,000)	
Total		93,200	39, 750	36.400	17,050	0	0	

## NOTE:

Exhibits do not form part of the standard. These are only for guidelines.

# **CAS - 06- PRODUCTION EXPENSES**

## 1. Introduction

1.1 This standard deals with the principles and methods of classification, measurement and assignment of Production Expenses, for determination of the cost of product or service, and the presentation and disclosure in cost statements.

## 2. Objectives

2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Production Expenses with reasonable accuracy.

## 3. Scope

3.1 This standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of Production Expenses including those requiring attestation.

## 4. Definitions

The following terms are being used in this standard with the meaning specified as below:-

#### 4.1 **Production Expenses**

Expenses relating to manufacture a product or rendering a service, which can be identified or linked with the cost object other than Cost of Material CAS-3 and Cost of Labour CAS-4.

Examples of Production Expenses are royalties charged on production, job charges, hire charges for use of specific equipment for a specific job, cost of special designs or drawings for a job, software services specifically required for a job, travelling Expenses for a specific job.

#### 4.2 Finance Cost

Finance cost is a cost incurred by an enterprise in connection with the borrowing of funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related to borrowings, amortization of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms finance costs and borrowing costs are used interchangeably.

#### 4.3 Standard Cost

Standard cost is the predetermined cost of manufacturing a single product or a number of product units during a specific period in the immediate future. It is the planned cost of product under current and/or anticipated conditions.

## 5. **Principles of Measurement**

- 5.1 Identification of Production Expenses shall be based on traceability in an economically feasible manner.
- 5.2 Production Expenses incurred for the use of bought out resources shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of trade discounts, rebates, taxes and duties refundable or to be credited.
- 5.3 Production Expenses other than those referred to in paragraph 5 2 shall be determined on the basis of amount incurred in connection therewith.

Examples: In case of dies and tools produced internally, the cost of such dies and tools shall include direct material cost, direct labour cost, Production Expenses, and factory overheads including share of Administrative Expenses relating to production comprising factory management and administration.

- 5.4 In the case of research and development cost, the amount traceable to the cost object for development and improvement of the process for the existing product shall be included in Production Expenses.
- 5.5 Production Expenses paid or incurred in lump-sum or which are in the nature of 'one time' payment, shall be amortized on the basis of the estimated output or benefit to be derived from such Production Expenses.

Examples: Royalty or technical know-how fees, or drawing designing fees, are paid for which the benefit is ensued in the future period. In such case, the production/ service volumes shall be estimated for the effective period and based on volume achieved during the cost accounting period, the charge for amortization is determined.

- 5.6 If an item of Production Expenses does not meet the test of materiality, it can be treated as part of overheads.
- 5.7 Finance costs incurred in connection with the self-generated or procured resources shall not form part of Production Expenses.

- 5.8 Where Production Expenses are accounted for at standard cost, variances due to normal reasons shall be treated as part of the Production Expenses. Variances due to abnormal reasons shall not form part of the Production Expenses.
- 5.9 Any Subsidy/ grant/ incentive or any such payment received/ receivable with respect to any Production Expenses shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- 5.10 Any abnormal portion of the Production Expenses where it is material and quantifiable shall not form part of the Production Expenses.
- 5.11 Penalties, damages paid to statutory authorities or other third parties shall not form part of the Production Expenses.
- 5.12 Credits/ recoveries relating to the Production Expenses, material and quantifiable, shall be deducted to arrive at the net Production Expenses.
- 5.13 Any change in the cost accounting principles applied for the measurement of the Production Expenses should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organization.

## 6. Assignment of Costs

Production Expenses that are directly traceable to the cost object shall be assigned to that cost object.

## 7. Presentation

Production Expenses, if material, shall be presented as a separate cost head with suitable classification. e.g. subcontract charges or royalty on production

## 8. Disclosures

The cost statements shall disclose the following:-

- 8.1 The basis of distribution of Production Expenses to the cost objects/ cost units.
- 8.2 Quantity and rates of items of Production Expenses, as applicable.
- 8.3 Where Production Expenses are accounted at standard cost, the price and usage variances.
- 8.4 Production Expenses representing procurement of resources and expenses incurred in connection with resources generated.

- 8.5 Production Expenses paid/ payable to related parties.
- 8.6 Production Expenses incurred in foreign exchange.
- 8.7 Any Subsidy/Grant/Incentive and any such payment reduced from Production Expenses.
- 8.8 Credits/recoveries relating to the Production Expenses.
- 8.9 Any abnormal portion of the Production Expenses.
- 8.10 Penalties and damages excluded from the Production Expenses.
- 8.11 Disclosures shall be made only where material significant and quantifiable.
- 8.12 Disclosures shall be made in the body of the cost statement or as a foot note or as a separate schedule.
- 8.13 Any change in the cost accounting principles and methods applied for the measurement and assignment of the Production Expenses during the period covered by the cost statement which has a material effect on the Production Expenses. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

# **CAS - 07- UTILITIES EXPENSES**

## 1. Introduction

1.1 This standard deals with the principles and methods of classification, measurement and assignment of Utilities Expenses, for determination of the cost of product or service, and the presentation and disclosure in cost statements.

## 2. Objective

2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Utilities Expenses with reasonable accuracy.

## 3. Scope

- 3.1 This standard shall be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of Utilities Expenses.
- 3.2 This standard shall not be applicable to the organizations primarily engaged in generation and sale of power & energy.

## 4. Definitions

#### 4.1 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

#### 4.2 **Committed Cost**

Committed cost is the cost of maintaining stand-by power and energy facility.

#### 4.3 Cost Object

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

#### 4.4 Finance Cost

Finance cost is a cost incurred by an enterprise in connection with the borrowing of funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related to borrowings, amortization of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms finance costs and borrowing costs are used interchangeably.

#### 4.5 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.6 Normal Capacity

Normal capacity is the production achieved or achievable on an average over a longer period of time to level out seasonal or cyclical variations. In determining normal capacity, physical plant capacity and sales potential must be considered together.

Normal Capacity = Installed Capacity – Capacity loss (Internal & External factors); or Normal Capacity = Practical Capacity – Capacity loss by External factors

#### 4.7 Standard Cost

Standard cost is the predetermined cost of manufacturing a single product or a number of product units during a specific period in the immediate future. It is the planned cost of product under current and/or anticipated conditions.

#### 4.8 Power & Energy

Power & energy means significant inputs such as electricity, gas steam, compressed air and the like, which are used for manufacturing process but do not form part of the final product.

#### 4.9 Stand-by Power & Energy

Stand-by power & energy means any power & energy created to safeguard against the failure of the main source of inputs.

## 5. Principles of Measurement

- 5.1. Each type of power & energy shall be treated as a distinct cost object.
- 5.2. Cost of power & energy purchased shall be measured at cost of purchase including duties and taxes, Transportation Expenses, insurance and other expenditure directly attributable to procurement (net of trade discounts, rebates, taxes and duties refundable or to be credited) that can be quantified with reasonable accuracy at the time of acquisition.
- 5.3. Cost of self-generated power & energy for own consumption shall comprise direct material cost, direct labour cost, Production Expenses and factory overheads used for generation.
- 5.4. In case of power & energy generated for the purpose of transfer pricing, the distribution cost incurred for such transfers shall be added to the cost of power & energy.
- 5.5. Cost of power & energy generated for the intercompany transfers shall comprise direct material cost, direct labour cost, Production Expenses, factory overheads, distribution cost and share of Administrative Expenses.

- 5.6. Cost of power & energy generated for the sale to outside parties shall comprise direct material cost, direct labour cost, Production Expenses, factory overheads, distribution cost, share of Administrative Expenses and marketing overheads.
- 5.7. Finance costs incurred in connection with the power & energy shall not form part of cost of power & energy.
- 5.8. The cost of distribution shall form part of power & energy.
- 5.9. The cost of distribution shall consist of the cost of delivery of power & energy up to the point of consumption.
- 5.10. Where cost of power & energy is accounted at standard cost, the price variances related to power & energy shall be treated as part of cost of power & energy and the portion of usage variances due to normal reasons shall also be treated as part of cost of power & energy. Usage variances due to abnormal reasons shall be treated as part of abnormal cost.
- 5.11. Any subsidy, grant, incentive or any such payment received or receivable with respect to cost of power & energy shall be reduced for ascertaining the cost of power & energy.
- 5.12. The cost of production and distribution of power & energy shall be determined based on the normal capacity and shall be absorbed on the basis of actual capacity attained. However unabsorbed cost, if any, shall be treated as abnormal cost. Cost of a standby power & energy shall include the committed costs of maintaining such power & energy.
- 5.13. Any abnormal cost shall not form part of the cost of power & energy.
- 5.14. Penalties and damages paid to statutory authorities or other third parties shall not form part of the cost of power & energy.
- 5.15. Credits or recoveries relating to the power & energy including cost of power & energy provided to outside parties, material and quantifiable, shall be deducted from the total cost of power & energy to arrive at the net cost of power & energy.
- 5.16. Any change in the cost accounting principles applied for the measurement of the cost of power & energy shall be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organization.

# 6. Assignment of Costs

- 6.1. While assigning cost of power & energy, traceability to a cost object in an economically feasible manner, shall be the guiding principle.
- 6.2. Where the cost of power & energy is not directly traceable to cost object, it shall be assigned on the most appropriate basis.
- 6.3. The most appropriate basis of distribution of cost of power & energy to the departments consuming services is to be derived from usage parameters.

# 7. Presentation

- 7.1. Power & energy costs shall be presented as a separate cost head for each type of power & energy in the cost statement, where material.
- 7.2. Where separate cost statements are prepared for power & energy, cost of power & energy shall be classified as purchased or generated. Such statement shall also include cost of power & energy consumed along with quantitative information by individual consuming units, inter-unit transfers, inter-company transfers and sale to outside parties, wherever applicable.

# 8. Disclosures

The cost statements shall disclose the following:

- 8.1. The basis of distribution of cost of power & energy to the consuming centers.
- 8.1.1 The cost of purchase, production, distribution, marketing and sales price in case of sale to outside parties.
- 8.1.2 Where cost of power & energy is computed at standard cost, the price and usage variances.
- 8.1.3 The cost and price of power & energy received from/ supplied to related parties.
- 8.1.4 The cost and price of power & energy received from/ supplied as inter-unit transfers and intercompany transfers.
- 8.1.5 Cost of power & energy incurred in foreign exchange.
- 8.1.6 Any subsidy, grant, incentive and any such payment reduced from cost of power & energy.
- 8.1.7 Credits or recoveries relating to the cost of power & energy.
- 8.1.8 Any abnormal cost excluded from cost of power & energy.
- 8.1.9 Penalties and damages, paid or payable, excluded from cost of power & energy.
- 8.2. Any change in the cost accounting principles and methods.
- 8.3. Measurement and assignment of the cost of power & energy during the period covered by the cost statement, which has a material effect on the cost of power & energy. Where the effect of such change is not ascertainable wholly or partly, the fact shall be disclosed.
- 8.4. Disclosures shall be made only where material, significant and quantifiable.
- 8.5. Disclosures shall be made in the body of the cost statement or as a foot note or as a separate schedule.

# **CAS - 08- TRANSPORTATION EXPENSES**

# **1. Introduction:**

1.1 The cost accounting principles for tracing/identifying an element of cost, its allocation/apportionment to a product or service are well established. Transportation Expenses is an important element of cost for procurement of materials for production and for distribution of product for sale. Therefore, Cost Accounting Records should present Transportation Expenses separately from the other cost of inward materials or cost of sales of finished goods. There is a need to standardize the record keeping of expenses relating to transportation and computation of Transportation Expenses.

# 2. Objective

- 2.1 To bring uniformity in the application of principles and methods used in the determination of averaged/equalized Transportation Expenses.
- 2.2 To prescribe the system to be followed for maintenance of records for collection of cost of transportation, its allocation/apportionment to cost centres, locations or products.

For example, Transportation Expenses needs to be apportioned among dutiable, exempted, non-dutiable and other goods for arriving at the average of Transportation Expenses of each class of goods.

2.3 To provide transparency in the determination of cost of transportation.

# 3. Scope

- 3.1 This standard should be applied for calculation of cost of transportation required under any statute or regulations or for any other purpose. For example, this standard can be used for:
  - (a) determination of average Transportation Expenses
  - (b) Insurance claim valuation
  - (c) Administered price mechanism of freight cost element
  - (d) Determination of inward freight costs included or to be included in the cost of purchases attributable to the acquisition.
  - (e) Computation of freight included in the value of inventory for accounting on inventory or valuation of stock hypothecated with Banks I Financial Institution, etc.

## 4. Definitions

The following terms are used in this standard with the meaning specified:

#### 4.1 **Cost of Transportation**

Cost of Transportation comprises of the cost of freight, cartage, transit insurance and cost of operating fleet and other incidental charges whether incurred internally or paid to an outside agency for transportation of goods but does not include detention and demurrage charges.

Explanation:

Cost of transportation is classified as inward Transportation Expenses and outward Transportation Expenses.

#### 4.2 Inward Transportation Expenses

Inward Transportation Expenses is the transportation expenses incurred in connection with materials /goods received at factory or place of use or sale/removal.

#### 4.3 **Outward Transportation Expenses**

Outward Transportation Expenses is the transportation expenses incurred in connection with the sale or delivery of materials or goods from factory or depot or any other place from where goods are sold /removed

#### 4.4 Freight

Freight is the charges paid or payable to an outside agency for transporting materials/ goods from one place to another place.

#### 4.5 **Cartage**

Cartage is the expenses incurred for movement of goods covering short distance for further transportation for delivery to customer or storage.

#### 4.6 **Transit Insurance Cost**

Transit insurance cost is the amount of premium to be paid to cover the risk of loss /damage to the goods in transit.

#### 4.7 **Depot**

Depot is the bounded premises /place managed internally or by an agent, including consignment agent and C & F agent, franchisee for storing of materials/goods for further dispatch including the premises of Consignment Agent and C&F Agent for the purpose.

Depot includes warehouses, go-downs, storage yards, stock yards etc.

#### 4.8 Equalized Transportation Expenses

Equalized Transportation Expenses means average Transportation Expenses incurred during a specified period.

#### 4.9 **Equalized Freight**

Equalized freight means average freight.

## 5. Maintenance of Records for Ascertaining Transportation Expenses

- 5.1 Proper records shall be maintained for recording the actual cost of transportation showing each element of cost such as freight, cartage, transit insurance and others after adjustment for recovery of Transportation Expenses. Abnormal costs relating to transportation, if any, are to be identified and recorded for exclusion of computation of average Transportation Expenses.
- 5.2 In case of a manufacturer having his own transport fleet, proper records shall be maintained to determine the actual operating cost of vehicles showing details of various elements of cost, such as salaries and wages of driver, cleaners and others, cost of fuel, lubricant grease, amortized cost of tyres and battery, repairs and maintenance, depreciation of the vehicles, distance covered and trips made, goods hauled and transported to the depot.
- 5.3 In case of hired transport charges incurred for despatch of goods, complete details shall be recorded as to date of despatch, type of transport used, description of the goods, destination of buyer, name of consignee, challan number, quantity of goods in terms of weight or volume, distance involved, amount paid, etc.
- 5.4 Records shall be maintained separately for inward and outward Transportation Expenses specifying the details particulars of goods despatched, name of supplier I recipient, amount of freight etc.
- 5.5 Separate records shall be maintained for identification of Transportation Expenses towards inward movement of material (procurement) and Transportation Expenses of outward movement of goods removed / sold for both home consumption and export.
- 5.6 Records for Transportation Expenses from factory to depot and thereafter shall be maintained separately.
- 5.7 Records for Transportation Expenses for carrying any material I product to job-workers place and back should be maintained separately so as include the same in the transaction value of the product.
- 5.8 Records for Transportation Expenses for goods involved exclusively for trading activities shall be maintained separately and the same will not be included for claiming any deduction for calculating assessable value dutiable goods cleared for home consumption.
- 5.9 Records of Transportation Expenses directly allocable to a particular category of products should be maintained separately so that allocation in appendix -3 can be made.
- 5.10 For common Transportation Expenses, both for own fleet or hired ones, proper records for basis of apportionment should be maintained.
- 5.11 Records for Transportation Expenses for exempted goods, dutiable goods cleared for export shall be maintained separately.
- 5.12 Separate records of cost for mode of transportation other than road like ship, air etc. are to be maintained in appendix -2 which will be included in total cost of transportation.

# 6. Treatment of Cost

- 6.1 Inward Transportation Expenses shall form the part of the cost of procurement of materials which are to be identified for proper allocation / apportionment to the materials / products.
- 6.2 Outward Transportation Expenses shall form the part of the cost of sale and shall be allocated I apportioned to the materials and goods on a suitable basis.

Explanation:

Outward Transportation Expenses of a product from factory to depot or any location of sale shall be included in the cost of sale of the goods available for sale.

- 6.3 The following basis may be used, in order of priority, for apportionment of outward Transportation Expenses depending upon the nature of products, unit of measurement followed and type of transport used:
  - i) Weight
  - *ii)* Volume of goods
  - iii) Tonne-Km
  - *iv*) Unit/Equivalentunit
  - v) Valueofgoods
  - vi) Percentage of usage of space

Once a basis of apportionment is adopted, the same should be followed consistently.

- 6.4 For determining the Transportation Expenses per unit, distance shall be factored in to arrive at weighted average cost.
- 6.5 Abnormal and non-recurring cost shall not be a part of Transportation Expenses.

Explanation

Penalty, detention charges, demurrage and cost related to abnormal break down will not be included in Transportation Expenses.

## 7. Cost Sheet

The cost sheets shall be prepared and presented in a form as per Appendices 1,2 and 3 or as near thereto. Appendix 1 and Appendix 2 show the details of information to be maintained for compilation of transport cost for own fleet and hired transportation charges respectively. Appendix-1 is applicable where the organization is having its own fleet.

The directly allocable cost of own fleet (outward) shall be identified against different categories of products as shown in Appendix 3 and same shall be indicated there. Similarly, total common cost of own fleet (outward) shall be apportioned to different categories of products as shown in Appendix 3 on a basis which should be specified. The basis of apportionment may be adopted depending on the nature of product as indicated in para 6.3. Similar approach shall also be applied for hired outward transport

#### charges.

More columns may be required to be shown in Appendix 3 specifying different types of transactions. For example: Sale on specific rate basis, sale of waste, scrap, return from customer, goods sent for job work, goods received after job work etc.

Unit of Measurement (UM) may vary depending upon the nature of the product. For example, Number, MT, Meter, litre etc.

Proper records shall be maintained to show separately the Transportation Expenses relating to sending of jobs to job contractors/convertors and receipt back of processed jobs/converted materials.

An enterprise shall be required to maintain cost records and other books of account in a manner which would facilitate preparation and verification of cost of transportation and other related charges and its apportioning to various products.

#### Appendix-1

Name of the Manufacturer: \_\_\_\_\_\_

Address of the Manufacturer: \_\_\_\_\_\_

# Statement of Operating Cost of own Fleet for the period...

S.No		
Α	QUANTITATIVE INFORMATION	
A1	Number of Vehicles	
A2	Number of trips	
A3	Goods Transported - inward (UM)	
A4.	Goodstransported-outward (UM)	
AS.	Goodstransported-inward-Km	
A6.	Goodstransported - outward - Km	
A7.	Total Goods transported inward - basis of apportionment	
A8.	Total Goods transported outward - basis of apportionment	
A9	Total (A7+A8)	
В	COST INFORMATION	(Rs)
	Cost of Operation	
	Variable Cost	
B1.	Salaries & Wages of Drivers, Cleaners and others	
B2.	Fuel&Lubricants	
B3.	Consumables	
B4.	Amortized cost of Tyre, Tube & Battery	
BS.	Spares	
B6.	Repair & Maintenance	
B7.	Other Variable Cost (specify)	
B8.	Total Variable Cost (B1 to B7)	
	Fixed Cost	
B9.	Insurance	
<u>B10.</u>	Licence Fee, Permit Fee and Taxes	
	Depreciation	
	Other Fixed Costs (Specify)	
	Total Fixed Cost (B9 to B12)	
	Total Operating Cost (B8 + B13)	
C	APPORTIONMENT (Basis to be specified) - usage	
<u>C1.</u>	Inward Transport Cost (B14 * A7 / A9)	
<u>C2.</u>	Outward Transport Cost (B14 * A8 / A9)	
<u>C3.</u>	Transit insurance for inward movement	
<u>C4.</u>	Transit insurance for outward movement	
CS.	Total Transportation Expenses for inward movement (C1 + C3)	
C6.	Total Transportation Expenses for outward movement (C2 + C4)	

Note:

- 1. Cost of Battery, and Tyres and Tubes shall to be amortised over its useful life.
- 2. Asset Register shall be maintained for determination of depreciation and amortization cost.
- 3. Separate Cost Sheet shall be prepared for different types of vehicles.

#### Appendix-2

Name of the Manufacturer: \_\_\_\_\_\_Address of the Manufacturer: \_\_\_\_\_\_

## Statement of Hired Outward Transportation Expenses for the period ending...

A	Quantitative Information	
AI	Quantityofgoodstransported-outward (UM)	
В	COST INFORMATION	(Rs)
B1	Hired Transport Charges	
B2	Transit Insurance	
B3	Other (specify)	
	Services tax on transportation charges	
B5	Total Transportation Expenses (B1 to B4)	

#### Appendix -3

Name of the Manufacturer: \_\_\_\_\_\_

Address of the Manufacturer: \_\_\_\_\_\_

Statement of apportionment of Outward Transportation Expenses to different goods and Determination of Averaged Outward Transport Cost for the period ending...

A	Quantitative Information	Total	Dutiable goods		Specific Rated goods	Goods cleared for Export	Exempted goods	Goods Cleared on MRP Basis	Goods cleared from factory to customer	Goods cleared from Depot to Customer	Others (specify)	
			Product group 1	Product group 2	Product group 3							
	Goods transported Outwards (UM*)		8. cop 2	8. c c p =	0.000							
A2	Goods Transported Outward (KM)											
	Outward Transport Cost (Rs)											
	Directly allocated own fleet Transportation Expenses (Rs)											
	Basis of Apportionment of own fleet cost (Specify)											
	Common own fleet transport cost to be apportioned											
	Directly allocated hired transportation charges (Rs) including Services Tax											
	Basis of Apportionment of hired Transportation Expenses (Specify)											
	Common hired transport charges to be apportioned											
B7	Total Transport Cost (B1+ B3+B4+B6)											
	Averaged transport cost per unit (Rs) (B7/A1)											

\*Define measuring unit as per prevailing measuring scale of the Industry

# CAS - 09- REPAIRS AND MAINTENANCE

## 1. Introduction

- 1.1 This standard deals with the principles and methods of determining the repairs and maintenance cost.
- 1.2 This standard deals with the principles and methods of classification, measurement and assignment of repairs and maintenance cost, for determination of the Cost of product or service, and the presentation and disclosure in cost statements.

## 2. Objective

2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the repairs and maintenance cost with reasonable accuracy.

## 3. Scope

3.1 This standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of repairs and maintenance cost including those requiring attestation.

## 4. Definitions

The following terms are being used in this standard with the meaning specified.

## 4.1 **Cost Object**

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

## 4.2 **Production Expenses**

Expenses relating to manufacture of a product or rendering a service, which can be identified or linked with the cost object other than Cost of Material CAS-3 and Cost of Labour CAS-4.

Examples of Production Expenses are royalties charged on production, job charges, hire charges for use of specific equipment for a specific job, cost of special designs or drawings for a job, software services specifically required for a job, travelling Expenses for a specific job.

## 4.3 Finance Cost

Finance cost is a cost incurred by an enterprise in connection with the borrowing of funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related

to borrowings, amortization of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs.

The terms finance costs and borrowing costs are used interchangeably.

#### 4.4 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.5 Normal Capacity

Normal capacity is the production achieved or achievable on an average over a longer period of time to level out seasonal or cyclical variations. In determining normal capacity, physical plant capacity and sales potential must be considered together.

Normal Capacity = Installed Capacity – Capacity loss (Internal & External factors); or

Normal Capacity = Practical Capacity – Capacity loss by External factors

#### 4.6 **Production Overheads**

Manufacturing overhead involves a company's factory operations. It includes the costs incurred in the factory other than the costs of direct materials and direct labour. This is the reason that manufacturing overhead is often classified as an indirect cost.

The terms Manufacturing Overheads, Factory Overheads and Production Overheads have the same meaning and are used interchangeably.

#### 4.7 **Repairs and Maintenance Cost**

Cost of all activities which have the objective of maintaining or restoring an asset in or to a state in which it can perform its required function at intended capacity and efficiency.

Repairs and Maintenance activities for the purpose of this standard include routine or preventive maintenance, planned (predictive or corrective} maintenance and breakdown maintenance.

The repair or overhaul of an asset which results in restoration of the asset to intended condition would also be a part of Repairs and Maintenance activity.

Major overhaul is a periodic (generally more than one year) repair work carried out to substantially restore the asset to intended working condition.

## 4.8 Standard Cost

Standard cost is the predetermined cost of manufacturing a single product or a number of product units during a specific period in the immediate future. It is the planned cost of product under current and/or anticipated conditions.

## 5. **Principles of Measurement:**

5.1 Repairs and maintenance cost shall be the aggregate of direct and indirect cost relating

to repairs and maintenance activity.

Direct cost includes the cost of materials, consumable stores, spares, manpower, equipment usage, utilities and other identifiable resources consumed in such activity. Indirect cost includes the cost of resources common to various repairs and maintenance activities such as manpower, equipment usage and other costs allocable to such activities.

- 5.2 Cost of in-house repairs and maintenance activity shall include cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources used in such activity.
- 5.3 Cost of repairs and maintenance activity carried out by outside contractors inside the entity shall include charges payable to the contractor and cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other costs incurred by the entity for such jobs.
- 5.4 Cost of repairs and maintenance jobs carried out by contractor at its premises shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited. This cost shall also include the cost of other resources provided to the contractors.
- 5.5 Cost of repairs and maintenance jobs carried out by outside contractors shall include charges made by the contractor and cost of own materials, consumable stores, spares, manpower, equipment usage, utilities and other costs used in such jobs.
- 5.5.1 Each type of repairs and maintenance shall be treated as a distinct activity, if material and identifiable.

For example, routine or preventive maintenance, planned (predictive or corrective) maintenance and breakdown maintenance should be identified separately.

- 5.5.2 Cost of repairs and maintenance activity shall be measured for each major asset category separately.
- 5.6 Cost of spares replaced which do not enhance the future economic benefits from the existing asset beyond its previously assessed standard of performance shall be included under repairs and maintenance cost.
- 5.7 High value spare, when replaced by a new spare and is reconditioned, which is expected to result in future economic benefits, the same shall be taken into stock. Such a spare shall be valued at an amount that measures its service potential in relation to a new spare which amount shall not exceed the cost of reconditioning the spare. The difference between the total of the cost of the new spare and the reconditioning cost and the value of the reconditioned spare should be treated as repairs and maintenance cost.

Example: The cost of new spare is Rs. 10 million and the value of the existing spare after reconditioning is estimated at Rs. 2 million, the difference of Rs. 8 million should be treated as repairs and maintenance cost.

- 5.8 The cost of major overhaul shall be amortised on a rational basis.
- 5.9 Finance costs incurred in connection with the repairs and maintenance activities shall

not form part of Repairs and maintenance costs.

- 5.10 Repairs and maintenance costs shall not include imputed costs.
- 5.11 Price variances related to repairs and maintenance, where standard costs are in use, shall be treated as part of repairs and maintenance cost. The portion of usage variances attributable to normal reasons shall be treated as part of repairs and maintenance cost. Usage variances attributable to abnormal reasons shall be excluded from repairs and maintenance cost.
- 5.12 Subsidy I Grant I Incentive or amount of similar nature received I receivable with respect to repairs and maintenance activity, if any, shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- 5.13 Any repairs and maintenance cost resulting from some abnormal circumstances, if material and quantifiable, shall not form part of the repairs and maintenance cost.

Example: Major fire, explosions, flood and similar events are abnormal circumstances referred above.

- 5.14 Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the repairs and maintenance cost.
- 5.15 Example: A penalty imposed by a regulatory authority for wrongful construction or damages paid to third party for the loss caused due to improper working of property, plant & equipment, should not be included in repairs and maintenance cost.
- 5.16 Credits/ recoveries relating to the repairs and maintenance activity, material and quantifiable, shall be deducted to arrive at the net repairs and maintenance cost.
- 5.17 Any change in the cost accounting principles applied for the measurement of the repairs and maintenance cost should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.

## 6. Assignment of Costs

- 6.1 Repairs and maintenance costs shall be traced to a cost object to the extent economically feasible.
- 6.2 Where the repairs and maintenance cost is not directly traceable to cost object, it shall be assigned based on either of the following two principles;
  - *i*) Cause and Effect Cause is the process or operation or activity and effect is the incurrence of cost.
  - *ii)* Benefits received overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.
- 6.3 If the repairs and maintenance cost (including the share of the cost of reciprocal exchange of services) is shared by several cost objects, the related cost shall be measured as an aggregate and distributed among the cost objects as per principles laid down in Cost Accounting Standard-5.

## 7. Presentation

- 7.1 Repairs and maintenance cost, if material, shall be presented in the cost statement as a separate item of cost.
- 7.2 Asset category wise details of repairs and maintenance cost, if material, shall be presented separately.
- 7.3 Activity wise details of repairs and maintenance cost, if material, shall be presented separately.

## 8. Disclosures

- 8.1 The cost statements shall disclose the following:
  - 1. The basis of distribution of repairs and maintenance cost to the cost objects/ cost units.
  - 2. Where standard cost is applied in repairs and maintenance cost, the price and usage variances.
  - 3. Repairs and maintenance cost of Jobs done in-house and outsourced separately.
  - 4. Cost of major overhauls, asset category wise and the basis of amortisation.
  - 5. Repairs and maintenance cost paid/ payable to related parties.
  - 6. Repairs and maintenance cost incurred in foreign exchange.
  - 7. Any Subsidy / Grant / Incentive or any amount of similar nature received / receivable reduced from repairs and maintenance cost.
  - 8. Any credits / recoveries relating to the repairs and maintenance cost.
  - 9. Any abnormal portion of the repairs and maintenance cost.
  - 10. Penalties and damages excluded from the repairs and maintenance cost.
- 8.2 Disclosures shall be made only where material, significant and quantifiable.
- 8.3 Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule.
- 8.4 Any change in the cost accounting principles and methods applied for the measurement and assignment of the repairs and maintenance cost during the period covered by the cost statement which has a material effect on the repairs and maintenance cost shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

# CAS - 10: Cost of Packaging Material

# 1. Introduction

1.1 This standard deals with the principles and methods of classification, measurement and assignment of Cost of Packaging Material for determination of the cost of product and its presentation and disclosure in cost statements.

## 2. Objectives

2.1 The objectives of this standard is to bring uniformity and consistency in the principles and methods of determining the Cost of Packaging Material with reasonable accuracy.

## 3. Scope

3.1 This standard shall be applied to cost statements requiring classification, measurement, assignment, presentation and disclosure of Cost of Packaging Material.

# 4. Definitions

#### 4.1 **Production Expenses**

Expenses relating to manufacture of a product or rendering a service, which can be identified or linked with the cost object other than Cost of Material CAS-3 and Cost of Labour CAS-4.

Examples of Production Expenses are royalties charged on production, job charges, hire charges for use of specific equipment for a specific job, cost of special designs or drawings for a job, software services specifically required for a job, travelling Expenses for a specific job.

#### 4.2 Packing Material

Packing Material means material used to hold, identify, describe, store, protect, display, transport, promote and make the product marketable and communicate with the consumer.

#### 4.3 **Cost of Packaging Material**

Cost of Packaging Material is the cost of material of any nature used for the purpose of packing a product.

#### 4.4 **Primary Packing Material**

Primary packing material means the packing material which is essential to hold the product and bring it to a condition in which it can be used by or sold to a customer.

#### 4.5 Secondary Packing Material

Secondary packing material is the packing material that enables to store, transport, inform the customer, promote and otherwise make the product marketable.

#### 4.6 **Reusable Packing Material**

Reusable packing materials are the packing materials which are used more than once to pack the product.

#### 4.7 Scrap

Scrap means discarded material having some value in few cases and which is usually either disposed off without further treatment (other than reclamation and handling) or reintroduced into the production process.

## 5. Principles of Measurement

- 5.1 Identification of Cost of Packaging Material shall be based on traceability in an economically feasible manner.
- 5.2 Cost of Packaging Material incurred for the use of bought out resources shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of trade discounts, rebates, taxes and duties refundable or to be credited.
- 5.3 Cost of Packaging Material other than those referred to in paragraph 5.2 shall be determined on the basis of cost incurred in connection therewith.
- 5.4 Normal loss or spoilage of packing material prior to receipt in the factory shall be absorbed in the cost of balance materials net of amounts recoverable from suppliers, insurers, carriers or recoveries from disposal.
- 5.5 The forex component of imported Cost of Packaging Material shall be converted at the rate on the date of the transaction. Any subsequent change in the exchange rate till payment or otherwise shall not form part of the Cost of Packaging Material.
- 5.6 Any demurrage, detention charges or penalty levied by any government agency or authority shall not form part of the cost of packing materials.
- 5.7 Any Subsidy/ grant/ incentive or any such payment received/ receivable with respect to packing material shall be reduced for ascertainment of the cost to which such amounts are related.
- 5.8 Issues shall be valued using appropriate method of cost valuation. The method of valuation shall be followed on a consistent basis.
- 5.9 Cost of Packaging Materials shall not include imputed costs. However in case of cost of production of excisable goods for captive consumption. The cost shall be computed as per relevant cost accounting standard.
- 5.10 Where packing materials are accounted at standard cost, the price variances related to such materials shall be treated as part of Cost of Packaging Material and the portion of usage variances due to normal reasons shall be treated as part of Cost of Packaging Material. Usage variances due to abnormal reasons shall be treated as part of abnormal cost.
- 5.11 The normal loss arising from the issue or consumption of packing materials shall be included in the packing materials cost.
- 5.12 Any abnormal cost, which is material and quantifiable, shall be excluded from the Cost of Packaging Material.
- 5.13 To arrive at the net cost of packing material, the credits/ recoveries of normal scrap arising from packing materials if any, should be deducted from the total cost of packing materials.

# 6. Assignment of Cost

Assignment of Cost of Packaging Materials to cost objects:-

- 6.1 Cost of Packaging Materials shall be directly traced to a cost object where it is economically feasible.
- 6.2 Where the Cost of Packaging Materials are not directly traceable to the cost object, these may be assigned on appropriate basis.
- 6.3 Cost of primary packing materials shall form part of the cost of production.
- 6.4 Cost of secondary packing materials shall form part of distribution overheads.

# 7. Presentation

- 7.1 Packing materials shall be classified as primary and secondary and within this classification as purchased, imported and self-manufactured.
- 7.2 Where separate cost statements are prepared for packing costs, the cost of packing materials consumed shall be prepared for each type of packing material used.

# 8. Disclosures

The cost statements shall disclose the following:-

- 8.1 The basis of valuation of packing materials are as under:-
- 8.1.1 Where packing materials cost is disclosed at standard cost, the price and usage variances.
- 8.1.2 The cost and price of packing materials received from/ supplied to related parties.
- 8.1.3 Packing materials cost incurred in foreign exchange.
- 8.1.4 Any subsidy/ Grant/ Incentive and any such payment reduced from packing materials costs.
- 8.1.5 Credits/ recoveries relating to the packing materials costs.
- 8.1.6 Any abnormal cost excluded from packing materials costs.
- 8.1.7 Penalties and damages paid etc. excluded from packing materials costs.
- 8.2 Any change in the cost accounting principles and methods applied for the measurement and assignment of the Packing Materials Costs during the period covered by the cost statement which has a material effect on the packing materials cost shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.
- 8.3 Disclosures shall be made only where it is material, significant and quantifiable.
- 8.4 Disclosures shall be made in the body of the cost statement or as a foot note or as a separate schedule.

# **CAS - 11- RESEARCH AND DEVELOPMENT COST**

## 1. Introduction

1.1 This standard deals with the principles and methods of determining the Research, and Development Costs and their classification, measurement and assignment for determination of the cost of product or service, and the presentation and disclosure in cost statements.

## 2. Objective

2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Research, and Development Costs with reasonable accuracy and presentation of the same.

## 3. Scope

3.1 This standard should be applied to cost statements that require classification, measurement, assignment, presentation and disclosure of Research, and Development Costs including those requiring attestation.

## 4. Definitions

The following terms are being used in this standard with the meaning specified.

#### 4.1 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

#### 4.2 **Cost Object**

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

#### 4.3 **Direct Materials**

Direct Materials are all materials that form an integral part of the finished product and that are included directly in calculating the cost of the product. It is the cost which can be attributed to a cost object in an economically feasible way.

## 4.4 **Direct Employee Cost**

The cost of employees which can be attributed to a Cost Object in an economically feasible way.

#### 4.5 **Production Expenses**

Expenses relating to manufacture of a product or rendering a service, which can be

identified or linked with the cost object other than Cost of Material CAS-3 and Cost of Labour CAS-4.

Examples of Production Expenses are royalties charged on production, job charges, hire charges for use of specific equipment for a specific job, cost of special designs or drawings for a job, software services specifically required for a job, travelling Expenses for a specific job.

## 4.6 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

## 4.7 Indirect Employee Cost

The employee cost which cannot be directly attributed to a particular cost object.

## 4.8 Indirect Material Cost

The cost of materials which cannot be directly attributed to a particular cost object.

#### 4.9 Indirect Expenses

Indirect Expenses are the expenses which are not directly attributable to a particular cost object.

#### 4.10 **Overheads**

An overhead cost is an 'expenditure on labour, materials or services that cannot be economically identified with or allocated to a cost object. Overhead costs are also referred to as indirect costs.

#### 4.11 **Research and Development:**

- 4.11.1 Research: Research is original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding.
- 4.11.2 Development: Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of commercial production or use.

## 5. **Principles of Measurement**

- 5.1 Research, and Development Costs shall include all the costs that are directly traceable to research and/or development activities or that can be assigned to research and development activities strictly on the basis of a) cause and effect or b) benefits received. Such costs shall include the following elements:
  - 1. The cost of materials and services consumed in Research, and Development activities.
  - 2. Cost of bought out materials and hired services as per invoice or agreed price including duties and taxes directly attributable thereto net of trade discounts, rebates, taxes and duties refundable or to be credited.

- 3. The salaries, wages and other related costs of personnel engaged in Research, and Development activities;
- 4. The depreciation of equipment and facilities, and other tangible assets, and amortisation of intangible assets to the extent that they are used for Research, and Development activities;
- 5. Overhead costs, other than general administrative costs, related to Research, and Development activities.
- 6. Costs incurred for carrying out Research, and Development activities by other entities and charged to the entity; and
- 7. Expenditure incurred in securing copyrights or licenses
- 8. Expenditure incurred for developing computer software
- 9. Costs incurred for the design of tools, jigs, moulds and dies
- 10. Other costs that can be directly attributed to Research, and Development activities and can be identified with specific projects.
- 5.2 Subsidy / Grant / Incentive or amount of similar nature received / receivable with respect to Research, and Development Activity, if any, shall be reduced from the cost of such Research, and Development Activity.
- 5.3 Any abnormal cost where it is material and quantifiable shall not form part of the Research, and Development Cost.
- 5.4 Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the Research, and Development Cost.
- 5.5 The amortisation of an intangible asset arising from the development activity shall be treated as set out in the CAS-14 relating to Depreciation and Amortisation Expense.
- 5.6 Research, and Development costs shall not include imputed costs.
- 5.7 Credits/recoveries relating to Research, and Development cost, if material and quantifiable, including from the sale of output produced from the Research and Development activity shall be deducted from the Research and Development cost.

## 6. Assignment of Cost

6.1 Research, and Development costs attributable to a specific cost object shall be assigned to that cost object directly.

Research, development costs that are not attributable to a specific product or process shall not form part of the product cost.

- 6.2 Development cost which results in the creation of an intangible asset shall be amortized over its useful life
- 6.3 Assignment of Development Costs shall be based on the principle of "benefits received".
- 6.4 Research and Development Costs incurred for the development and improvement of an existing process or product shall be included in the cost of production.

In case the Research and Development activity related to the improvement of an existing process or product continues for more than one accounting period, the cost of the same shall be accumulated and amortized over the estimated period of use of the improved process or estimated period over which the improved product will be produced by the entity after the commencement of commercial production, as the case may be, if the improved process or product is distinctly different from the existing process or product and the product is marketed as a new product. The amount allocated to a particular period shall be included in the cost of production of that period. If the expenditure is only to improve the quality of the existing product or minor modifications in attributes, the principle shall not be applied.

6.5 Development costs attributable to a saleable service e.g. providing technical knowhow to outside parties shall be accumulated separately and treated as cost of providing the service.

## 7. Presentation

- 7.1 Research and Development costs relating to improvement of the process or products or services shall be presented as a separate item of cost in the cost statement under cost of production.
- 7.2 Research, and Development costs which are not related to improvement of the process, materials, devices, processes, systems, product or services shall be presented as a part of the reconciliation statement.

## 8. Disclosures

- 8.1 The cost statements shall disclose the following:
  - 1. The basis of accumulation and assignment of Research and Development costs.
  - 2. The Research, and Development costs paid to related parties.
  - 3. Credit/recoveries from related parties
  - 4. Research, and Development cost incurred in foreign exchange.
  - 5. Any Subsidy/Grant/Incentive and any such payment reduced from Research, and Development cost.
  - 6. Credits/recoveries deducted from the Research, and Development cost.
  - 7. Any abnormal cost excluded from Research, and Development cost including cost of abandoned projects and research activities considered abnormal.
  - 8. Penalties and damages paid etc. excluded from Research, and Development cost.
- 8.2 Any change in the cost accounting principles and methods applied for the measurement and assignment of the Research, and Development cost during the period covered by the cost statement that has a material effect on the Research, and Development cost shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

- 8.3 Disclosures shall be made only where material, significant and quantifiable.
- 8.4 Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule.

# 9. Cross Reference

9.1 IAS-38 – Intangible Assets

# CAS - 12- ROYALTY AND FRANCHISE FEE

## 1. Introduction

- 1.1 This standard deals with the principles and methods of determining the amount of Royalty and Franchise Fee.
- 1.2 This standard deals with the principles and methods of classification, measurement and assignment of the amount of Royalty and Franchise Fee, for determination of the cost of product or service, and their presentation and disclosure in cost statements.

## 2. Objective

2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the amount of Royalty and Technical Know-how Fee with reasonable accuracy.

## 3. Scope

3.1 This standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of the amount of Royalty and Technical Know-how Fee.

## 4. Definitions

The following terms are being used in this standard with the meaning specified.

## 4.1 Cost Object

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

#### 4.2 **Royalty**

Royalty is a compensation/ periodic payment for the use of asset (tangible and/or intangible) to the owner for use of his asset in the production/manufacture, selling and distribution by an entity.

Royalty is often expressed as a percentage of the revenues obtained by use of the owner's asset (tangible and/or intangible); per unit of production or sales value. It may relate to use of: Non-renewable resource (petroleum and mineral resources); Patents; Trademarks; Franchise rights; Copy rights; art-work, software and the like.

The terms Assets, tangible assets and intangible assets will have the same meaning as in the Accounting Standards notified by the Securities & Exchange Commission of Pakistan.

### 4.3 Finance Cost

Finance cost is a cost incurred by an enterprise in connection with the borrowing of funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related to borrowings, amortization of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms finance costs and borrowing costs are used interchangeably.

#### 4.4 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.5 Franchise Fee

Franchise Fee is a lump sum or periodical amount payable to provider of franchise rights.

# 5. Principles of Measurement:

5.1 Royalty and Technical Know-how Fee paid or incurred in lump-sum or which are in the nature of 'one – time' payment, shall be amortized on the basis of the estimated output or benefit to be derived from the related asset.

Examples: Amortization of the amount of Royalty or Technical Know-how fee paid for which the benefit is ensued in the current or future periods shall be determined based on the production / service volumes estimated for the period over which the asset is expected to benefit the entity.

- 5.2 Amount of the Royalty and Technical Know-how Fee shall not include finance costs and imputed costs.
- 5.3 Any Subsidy/Grant/Incentive or any such payment received/receivable with respect to amount of Royalty and Technical Know-how fee shall be reduced to measure the amount of royalty and technical know- how fee.
- 5.4 Penalties, damages paid to statutory authorities or other third parties shall not form part of the amount of Royalty and Technical Know-how fee.
- 5.5 Credits/ recoveries relating to the amount Royalty and Technical Know-how fee, material and quantifiable, shall be deducted to arrive at the net amount of Royalty and Technical Know- how fee.
- 5.6 Any change in the cost accounting principles applied for the measurement of the

amount of Royalty and Technical Know-how Fee should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organization.

# 6. Assignment of costs

- 6.1 Royalty and Technical Know-how fee that is directly traceable to a cost object shall be assigned to that cost object. In case such fee is not directly traceable to a cost object then it shall be assigned on any of the following basis:
  - a. Units produced
  - b. Units sold
  - c. Sales value
- 6.2 The amount of Royalty fee paid for mining rights shall form part of the cost of material.
- 6.3 The amount of Royalty and Technical Know-how fee shall be assigned on the nature/ purpose of such fee.

The amount of royalty and technical know-how fee related to product or process know how shall be treated as cost of production; if it is related to trademarks or brands then it shall be treated as cost of sales.

# 7. Presentation

7.1 The amount Royalty and Technical Know-how fee shall be presented as a separate cost head with suitable classification.

# 8. Disclosures

- 8.1 The cost statements shall disclose the following:
  - 1. The basis of distribution of the amount Royalty and Technical Know-how fee to the cost objects/ cost units.
  - 2. Quantity and the related rate of items of the amount of Royalty and Technical Know-how fee, as applicable.
  - 3. Royalty and Technical Know-how fee paid/ payable to related parties.
  - 4. Royalty and Technical Know-how fee incurred in foreign exchange.
  - 5. Any Subsidy/Grant/Incentive and any such payment reduced from the amount of Royalty and Technical Know-how fee.
  - 6. Credits/recoveries relating to the amount of Royalty and Technical Know-how fee.

- 7. Penalties and damages excluded from the amount of Royalty and Franchise fee.
- 8.2 Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule.
- 8.3 Any change in the cost accounting principles and methods applied for the measurement and assignment of the amount Royalty and Technical Know-how fee during the period covered by the cost statement which has a material effect on the amount Royalty and Technical Know-how fee. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

# CAS - 13- COST OF QUALITY CONTROL

## 1. Introduction

1.1 The standard deals with the principles and methods of measurement and assignment of Cost of Quality Control and the presentation and disclosure in cost statement.

# 2. Objective

2.1 The objective of this standard is to bring uniformity, consistency in the principles, methods of determining and assigning Cost of Quality Control with reasonable accuracy.

#### 3. Scope

3.1 The standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of Cost of Quality Control including those requiring attestation.

# 4. Definitions

The following terms are being used in this standard with the meaning specified.

#### 4.1 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

#### 4.2 Cost Object

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

#### 4.3 **Defectives**

End Product and/or intermediate product units that do not meet quality standards. This may include reworks or rejects.

#### 4.4 Reworks

Defectives which can be brought up to the standards by putting in additional resources. Rework includes repairs, reconditioning and refurbishing.

#### 4.5 **Rejects**

Rejects: Defectives which cannot meet the quality standards even after putting in additional resources.

Rejects may be disposed of as waste or sold for salvage value or recycled in the production process.

#### 4.6 Finance Cost

Finance cost is a cost incurred by an enterprise in connection with the borrowing of funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related to borrowings, amortization of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms finance costs and borrowing costs are used interchangeably.

#### 4.7 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.8 **Overheads**

An overhead cost is an 'expenditure on labour, materials or services that cannot be economically identified with or allocated to a cost object. Overhead costs are also referred to as indirect costs.

#### 4.9 Quality

Quality is the conformance to requirements or specifications. The quality of a product or service is fitness of that product or service for meeting its intended use as required by customer.

#### 4.10 Quality Control

Quality control: A procedure or a set of procedures exclusively designed to ensure that the manufactured products or performed service adhere to a defined set of quality criterion or meets requirement of the client or the customer.

#### 4.11 **Cost of Quality Control**

The Cost of Quality Control is the expenses incurred relating to quality control activities for adhering to quality standard. These expenses include salaries & wages relating to employees engaged in quality control activity and other related expenses.

#### 4.12 Scrap

Scrap means discarded material having some value in few cases and which is usually either disposed off without further treatment (other than reclamation and handling) or reintroduced into the production process.

#### 4.13 Waste and Spoilage

- 4.13.1 Waste: Waste is a material loss during production or storage due to various factors such as evaporation, chemical reaction, contamination, unrecoverable residue, shrinkage etc. and discarded material which may or may not have value. The terms Waste and Wastage have the same meaning and are used interchangeably.
- 4.13.2 Spoilage: Production that does not meet with dimensional or quality standards in such a way that it cannot be rectified economically and is sold for a disposal value. Net

Spoilage is the difference between costs accumulated up to the point of rejection and the salvage value.

# 5. Principles of Measurement:

- 5.1 Cost of Quality Control incurred in-house shall be the aggregate of the cost of resources consumed in the Quality Control activities of the entity. The cost of resources procured from outside shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discounts), taxes and duties refundable or to be credited by the Tax Authorities. Such cost shall include cost of conformance to quality:
  - (a) prevention cost; and

(b) appraisal cost.

- 5.2 Identification of Cost of Quality Controls shall be based on traceability in an economically feasible manner.
- 5.3 Cost of Quality Controls other than those referred to in paragraph 5.2 shall be determined on the basis of amount incurred in connection therewith.
- 5.4 Finance costs incurred in connection with the self-generated or procured resources shall not form part of Cost of Quality Control.
- 5.5 Cost of Quality Controls shall not include imputed costs.
- 5.6 Any Subsidy/Grant/Incentive or any such payment received/receivable with respect to any Cost of Quality Control shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- 5.7 Any abnormal portion of the Cost of Quality Control where it is material and quantifiable shall not form part of the Cost of Quality Control.
- 5.8 Penalties, damages paid to statutory authorities or other third parties shall not form part of the Cost of Quality Control.
- 5.9 Any change in the cost accounting principles applied for the measurement of the Cost of Quality Control shall be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.

# 6. Assignment of Costs

- 6.1 Cost of Quality Control that is directly traceable to the cost object shall be assigned to that cost object.
- 6.2 Assignment of Cost of Quality Control to the cost objects shall be based on benefits received by them.

Benefits received – Cost of Quality Control is to be apportioned to the various cost objects in proportion to the benefits received by them.

For example: On the basis of number of tests performed for a product.

# 7. Presentation

7.1 Cost of Quality Control, if material, shall be presented as a separate cost head with suitable classification.

# 8. Disclosures

8.1 The cost statements shall disclose the following:

- 8.1.1 The basis of distribution of Cost of Quality Control to the cost objects/ cost units.
- *8.1.2* Quantity and Cost of resources used for Quality Control as applicable.
- 8.1.3 Cost of Quality Control paid/ payable to related parties.
- *8.1.4* Cost of Quality Control incurred in foreign exchange.
- *8.1.5* Any abnormal portion of the Cost of Quality Control.
- 8.1.6 Penalties and damages excluded from the Cost of Quality Control
- 8.2 Disclosures shall be made only where material, significant and quantifiable.
- 8.3 Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule.
- 8.4 Any change in the cost accounting principles and methods applied for the measurement and assignment of the Cost of Quality Control during the period covered by the cost statement which has a material effect on the Cost of Quality Control shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

# CAS - 14- DEPRECIATION AND AMORTISATION EXPENSE

# 1. Introduction

1.1 This standard deals with the principles and methods of measurement and assignment of Depreciation and Amortisation Expense for determination of the cost of product or service, and the presentation and disclosure in cost statements.

# 2. Objective

2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Depreciation and Amortisation Expense with reasonable accuracy.

# 3. Scope

3.1 This standard shall be applied to cost statements which require measurement, assignment, presentation and disclosure of Depreciation and Amortisation Expense, including those requiring attestation.

# 4. Definitions

The following terms are being used in this standard with the meaning specified: -

## 4.1 **Amortisation**

Amortisation is the systematic allocation of the depreciable amount of an intangible asset over its useful life.

It refers to expensing the acquisition cost minus the residual value of intangible assets such as Franchise, Patents and Trademarks or Copyrights in a systematic manner over their estimated useful economic life so as to reflect their consumption in the production of goods and services.

## 4.2 **Asset**

An asset is a resource controlled by the enterprise as a result of past events from which future economic benefits are expected to flow to the enterprise. In case of some assets which are acquired for safety or environmental reasons, the acquisition of such assets may not provide future economic benefits directly but may be necessary for an entity to obtain the future economic benefits from other assets. Such items also qualify for recognition as assets.

The terms Asset, Fixed Asset, Tangible Fixed Asset, Intangible Fixed Asset, Qualifying Asset, Current Asset shall have the same meaning as in the Accounting Standards

notified by the Securities & Exchange Commission of Pakistan.

#### 4.3 Cost Object

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

#### 4.4 **Depreciation**

Depreciation is a measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use, efflux of time or obsolescence through technology and market changes. Depreciation is allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the estimated useful life of the asset.

Depreciation that is charged in audited financial statement should be considered.

#### 4.5 **Depreciable Amount**

Depreciable amount of a depreciable asset is its historical cost, or other amount substituted for historical cost in the financial statements, less the estimated residual value.

#### 4.6 **Depreciable Fixed and Intangible Assets**

Depreciable fixed and Intangible assets are assets which:

- (i) are expected to be used during more than one accounting period;
- (ii) have a limited useful life; and
- (iii) are held by an enterprise for use in the production or supply of goods and services, for rental to others, or for administrative purposes and not for the purpose of sale in the ordinary course of business.

Land is not a depreciable asset as it does not have a defined useful life.

#### 4.7 **Residual (salvage) Value**

Residual value is the amount which an enterprise expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

## 4.8 Useful Life of Asset

Useful life of asset is either:

- (i) the period over which a depreciable asset is expected to be used by the enterprise; or
- (*ii*) the number of production or similar units expected to be obtained from the use of the asset by the entity.

# 5. Principles of Measurement

5.1 Depreciation and Amortisation Expense shall be measured based on the depreciable amount and the useful life.

The residual value of an intangible asset shall be assumed to be zero unless:

- (a) there is a commitment by a third party to purchase the asset at the end of its useful life; or
- (b) there is an active market for the asset and:
- I. Residual value can be determined by reference to that market; and
- II. It is probable that such a market will exist at the end of the asset's useful life.
- III. The residual value of a fixed asset shall be considered as zero if the entity is unable to estimate the same with reasonable accuracy.

The minimum amount of depreciation to be provided shall not be less than the amount calculated as per principles and methods as prescribed by any law or regulations applicable to the entity and followed by it.

- 5.2 While estimating the useful life of a depreciable asset, consideration shall be given to the following factors:
  - (a) Expected physical wear and tear;
  - (b) Obsolescence; and
  - (c) Legal or other limits on the use of the asset.
- 5.3 The useful life of an intangible asset that arises from contractual or other legal rights shall not exceed the period of the contractual or other legal rights, but may be shorter depending on the period over which the entity expects to use the asset.

If the contractual or other legal rights are conveyed for a limited term that can be renewed, the useful life of the intangible asset shall include the renewal period(s) only if there is evidence to support renewal by the entity without significant cost. The useful life of a re-acquired right recognized as an intangible asset in a business combination is the remaining contractual period of the contract in which the right was granted and shall not include renewal periods.

5.4 Depreciation shall be considered from the time when a depreciable asset is first put into use.

An asset which is used only when the need arises but is always held ready for use. Example: fire extinguisher, stand by generator, safety equipment shall be considered to be an asset in use. Depreciable assets will be considered to be put into use when commercial production of goods and services commences.

Depreciation on an asset which is temporarily retired from production of goods and services shall be considered as abnormal cost for the period when the asset is not in use.

- 5.5 Depreciation of any addition or extension to an existing depreciable asset which becomes an integral part of that asset shall be based on the remaining useful life of that asset.
- 5.6 Depreciation of any addition or extension to an existing depreciable asset which retains a separate identity and is capable of being used after the expiry of the useful life of that

asset shall be based on the estimated useful life of that addition or extension.

- 5.7 The impact of higher depreciation due to revaluation of assets shall not be assigned to cost object.
- 5.8 Impairment loss on assets shall be excluded from cost of production.
- 5.9 The method of depreciation used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.
- 5.10 An entity can use any of the methods of depreciation to assign depreciable amount of an asset on a systematic basis over its useful life.

For example:

- (a) Straight-line method;
- (b) Diminishing balance method; and
- (c) Units of production method.
- 5.11 The method of amortisation of intangible asset shall reflect the pattern in which the economic benefits accrue to entity.
- 5.12 The methods and rates of depreciation applied shall be reviewed at least annually and, if there has been a change in the expected pattern of consumption or loss of future economic benefits, the method applied shall be changed to reflect the changed pattern.
- 5.13 Spares purchased specifically for a particular asset, or class of assets, and which would become redundant if that asset or class of asset was retired or use of that asset was discontinued, shall form part of that asset. The depreciable amount of such spares shall be allocated over the useful life of the asset.
- 5.14 Cost of small assets shall be written off in the period in which they were purchased as per the accounting policy of the entity.
- 5.15 Where depreciation for an addition of an asset is measured on the basis of the number of days for which the asset was used for the preparation and presentation of financial statements, depreciation of the asset for assigning to cost of object shall be measured in relation to the period, the asset actually utilized.

# 6. Assignment of Costs

- 6.1 Depreciation and Amortisation Expense shall be traced to the cost object to the extent economically feasible.
- 6.2 Where the Depreciation and Amortisation Expense is not directly traceable to cost object, it shall be assigned based on either of the following two principles:
  - *i.* Cause and effect cause is a process or operation or activity and effect is the incurrence of cost.
  - *ii.* Benefits received– Depreciation and Amortisation Expense is to be apportioned to the various cost objects in proportion to the benefits received by them.

# 7. Presentation

Depreciation and Amortisation Expense, if material, shall be presented in the cost statement as a separate item of cost.

# 8. Disclosures

- 8.1 The cost statement shall disclose the following: -
  - 1. The basis of distribution of Depreciation and Amortisation Expense to the cost objects.
  - 2. Any credits / recoveries relating to Depreciation and Amortisation Expense.
  - 3. Additional Depreciation on account of revaluation of asset, which is not included in cost.
  - 4. Amount of depreciation that is not included in cost because of temporary retirement of assets from production of goods and services.
- 8.2 Disclosure shall be made only where material, significant and quantifiable.
- 8.3 Disclosures shall be made in the body of the cost statement or as a foot note or in a separate schedule.
- 8.4 Any change in the cost accounting principles and methods applied for the measurement and assignment of Depreciation and Amortisation Expense during the period covered by the cost statement which has a material effect on Depreciation and Amortisation Expense shall be disclosed. Where the effect of such change is not ascertainable wholly or partly, the fact shall be indicated.

# 9. Cross reference to IAS

1. IAS 16 – Property, Plant and Equipment

# CAS - 15- COST OF PRODUCTION FOR CAPTIVE CONSUMPTION

## 1. Introduction

1.1 This standard deals with the principles and methods of determination of cost for captive consumption.

# 2. Objectives

- 2.1 To bring uniformity in the principles and methods used for determining the cost of production used for captive consumption.
- 2.2 To determine assessable value of excisable goods used for captive consumption.

## 3. Scope

3.1 The standard shall be followed for determining the cost of production to arrive at an assessable value goods used for captive consumption.

# 4. Definitions

#### 4.1 **Cost of Production**

Cost of Production or Manufacturing cost of a product is the aggregate of costs of all resources used in the process of its manufacturing.

Cost of Manufacturing includes cost of Materials (including process materials), Employee Cost, Cost of Utilities, Packing Cost, Production Expenses, Repairs & Maintenance Cost, Cost of Environment Safeguarding, Cost of Quality Control, Research & Development Cost, Cost of Inputs received free of cost or received at concessional value from the buyer of the products, Depreciation and Amortisation Expense (including amortisation cost of free tools, patterns, dies, drawings, blue prints, technical maps, charts, engineering, development, art work, design work, plans, sketches, packaging material and the like necessary for production of products), Cost of Rework, reconditioning, retro-fitment, Manufacturing Overheads, other costs allocable to such activity, adjustment for stock of work-in-process and recoveries for sales of scrap and wastages and the like but does not include expenses of the above nature incurred for post manufacturing purposes.

#### 4.2 Captive Consumption

Captive Consumption means the consumption of goods manufactured by one division or unit and consumed by another division or unit of the same organization or related undertaking for manufacturing another product(s).

#### 4.3 Normal Capacity

Normal capacity is the production achieved or achievable on an average over a longer period of time to level out seasonal or cyclical variations. In determining normal capacity, physical plant capacity and sales potential must be considered together.

Normal Capacity = Installed Capacity – Capacity loss (Internal & External factors); or Normal Capacity = Practical Capacity – Capacity loss by External factors

# 5. Determination of Production Cost for Captive Consumption

## 5.1 Material Consumed

- 5.1.1 Material Consumed shall include materials directly identified for production of goods such as:-
  - (a) Indigenous materials
  - (b) Imported materials
  - (c) Purchased materials
  - (d) Self manufactured items
  - (e) Process materials and other items
- 5.1.2 Cost of material consumed shall include cost of material, duties and taxes, freight inwards, insurance, and other directly attributable expenses net of trade discount, rebates and other similar items. Customs duty, Sales Tax adjustments, VAT, duty drawback and other similar duties subsequently recovered or recoverable by the entity shall also be deducted.

#### 5.2 **Direct Labour**

Direct labour shall include salaries and wages, house rent allowance, overtime and incentive payments made to employees directly engaged in the manufacturing activities.

Direct labour includes fringe benefits such as:

- (a) Contribution to provident fund
- (b) Bonus to employees
- (c) Provision for retirement benefits such as gratuity
- (d) Medical benefits
- (e) Subsidized food
- (f) Paid leave
- (g) Leave encashment
- (h) Other allowances

#### 5.3 **Production Expenses**

Direct expenses are the expenses other than direct material cost and direct labour costs which can be directly identified with the cost object.

Production Expenses include:

- (a) Cost of utilities such as fuel, power, water, steam etc.
- (b) Royalty based on production
- (c) Technical Assistance / know how fees
- (d) Amortized cost of moulds, patterns, patents etc.
- (e) Job charges
- (f) Hire charges for tools and equipment
- (g) Charges for a particular product designing etc.

## 5.4 **Overheads**

Overheads are the indirect costs incurred in the production process such as:

- (a) Consumable stores and spares
- (b) Depreciation of plant and machinery, factory building etc.
- (c) Lease rent of production assets
- (d) Repair and maintenance of plant and machinery, factory building etc.
- (e) Indirect employees cost connected with production activities
- (f) Drawing and Designing department cost.
- (g) Insurance of plant and machinery, factory building, stock of raw material & WIP etc.
- (h) Amortized cost of jigs, fixtures, tooling etc.
- (i) Service department cost such as Tool Room, Engineering & Maintenance, Pollution Control etc.

## 5.5 **Cost of Quality Control**

The quality control cost is the expense incurred in relation to quality control activities for adhering to quality standards.

#### 5.6 **Research and Development Cost**

The research and development cost incurred for development and improvement of the process or the existing product shall be included in the cost of production.

## 5.7 Administrative Expenses

Administrative Expenses shall be analyzed in relation to production and other activities. Administrative Expenses in relation to production activities shall be included in the cost of production. Administrative Expenses in relation to activities other than manufacturing activities such as marketing, corporate office expenses etc. shall be excluded from the cost of production.

## 5.8 Packing Cost

If product is transferred or dispatched duly packed for captive consumption, cost of such packing shall be included in the cost of production. Packing cost includes both cost of primary and secondary packing required for transfer or dispatch of the goods used for captive consumption.

## 5.9 **Absorption of overheads**

Overheads shall be analyzed into variable overheads and fixed overheads. *Variable Overheads* are the costs, which change with the change in volume of production.

*Fixed overheads* are the costs, which do not change with the change in volume of production.

*The variable production overheads* shall be absorbed in production cost based on actual capacity utilization.

The fixed production overheads and other similar item of fixed costs such as quality control cost, research and development costs, administrative overheads relating to manufacturing shall be absorbed in the production cost on the basis of the normal capacity or actual capacity utilization of the plant, whichever is higher.

## 5.10 Valuation of Stock of work-in-process and finished goods

Stock of work-in-process shall be valued at cost on the basis of stages of completion as per the cost accounting principles. Similarly, stock of finished goods shall be valued at cost. Opening and closing stock of work-in-progress shall be adjusted for calculation of cost of goods produced and similarly opening and closing stock of finished goods shall be adjusted for calculation of goods dispatched. In case the cost of a shorter period is to be determined, where the figures of opening and closing stock are not readily available, the adjustment of opening and closing stock may be ignored.

## 5.11 **Treatment of Joint Products and By-Products**

A production process may result in more than one product being produced simultaneously. Where joint products are produced, joint costs are allocated between the products on a rational and consistent basis.

In case by-products are produced, the net realizable value of by products is credited to the cost of production of the main product.

For allocation of joint cost to joint products, the sales values of products at the split off point i.e. when the products become separately identifiable may become the basis. Some other appropriate basis may also be adopted. For example, in case of petroleum products, each product is assigned certain value based on its certain properties, such as calorific value and these values become the basis of apportionment of joint cost among petroleum products.

## 5.12 Treatment of Scrap and Waste:

The production process may generate scrap or waste. Realized or realizable value of scrap or waste shall be credited to the cost of production.

In case, scrap or waste does not have ready market and it is used for reprocessing, the scrap or waste value is taken at a rate of input cost depending upon the stage at which such scrap or waste is recycled. The expenses incurred for making the scrap suitable for reprocessing shall be deducted from value of scrap or waste.

### 5.13 Miscellaneous Income

Miscellaneous income relating to production shall be adjusted in the calculation of cost of production. Income from sale of empty containers used for dispatch of the captive goods is example of such income.

#### 5.14 Inputs received free of cost

In case any input material, whether of direct or indirect nature, including packing material is supplied free of cost by the user of the captive product, the landed cost of such material shall be included in the cost of production.

### 5.15 Moulds, Tools, Dyes and Patterns etc. received free of cost

The amortization cost of moulds, tools, dyes and patterns shall be included in the cost of production.

#### 5.16 Interest and financial charges

Interest and financial charges shall not be considered to be a part of cost of production.

#### 5.17 Abnormal and non-recurring cost

Abnormal and non-recurring cost arising due to unusual or unexpected occurrence, such as heavy breakdown of plants, accident, market condition restricting sales below normal level, abnormal idle capacity, abnormal process loss, abnormal scrap and wastage, payments for voluntary retirement schemes, lay-off wages etc., shall not form the part of cost of production.

## 6. Cost Sheet

The cost sheet shall be prepared in the format as par Appendix – 1 or as near thereto as possible. The manufacturer shall be required to maintain cost records and other books of account in a manner, which would facilitate preparation and verification of the cost of production.

## 7. Disclosure

- 7.1. If there is any change in cost accounting principles and practices during the concerned period, which may materially affect the cost of production in terms of comparability with previous periods, the same should be disclosed.
- 7.2. If opening stock and closing stock of work -in-process and finished goods are not readily available, it should be disclosed.

A production process has three stages.

Stage	Input Material Cost	Processing Cost	Total	
	(Rs./ MT)	(Rs./ MT)	(Rs./ MT)	
1	2,000	500	2,500	
2	2,500	1,000	3,500	
3	3,500	1,000	4,500	

If during the production process at stage3, the scrap is produced and the same is recycled at stage2 after making an expenditure of Rs. 200 per MT to make it suitable for re-processing at stage2, then scrap will be valued at Rs. 2,300 (2500 - 200). If no expenditure is involved to make scrap re-usable, the scrap value will be @ Rs. 2500. The scrap value for the scrap produced during a period calculated at the rate as explained above may be deducted to find out the cost of production for the period.

Note: (MT stands for metric ton)

Appendix "A"

# COST SHEET

Organization	:			
Address	:			
Registration No. :				
Description of Pr	roduct captively consumed:			

Statement of Cost of Production of \_\_\_\_\_\_ manufactured / to be manufactured during the period\_\_\_\_\_\_

Sr. No	Description	Qty		
1	Quantity Produced (Unit of Measure)			
2	Quantity Dispatched (Unit of Measure)			
		Amount (Rs.)		
		Unit	Total	
1	Material Consumed			
2	Direct Wages and Salaries			
3	Production Expenses			
4	Production Overheads			
5	Cost of Quality Control			
6	Research & Development Cost			
7	Administrative Expenses (relating to production activity)			
8	Total (1 to 7)			
9	Add : Opening stock of Work - in –Progress			
10	Less : Closing stock of Work -in- Progress			
11	Total (8+9-10)			
12	Less : Credit for Recoveries/Scrap/By-Products / misc income			
13	Packing cost			
14	Cost of production ( 11 - 12 + 13)			
15	Add: Inputs received free of cost			
16	Add: Amortized cost of Moulds, Tools, Dies & Patterns etc			
	received free of cost			
17	Cost of Production for goods produced for captive consumption			
	(14+15+16)			
18	Add : Opening stock of finished goods			
19	Less : Closing stock of finished goods			
20	Cost of production for goods dispatched (17 + 18 - 19)			

# CAS - 16- ASSIGNMENT OF JOINT COSTS

# 1. Introduction

1.1 The standard deals with the principles and methods of measurement and assignment of Joint Costs and the presentation and disclosure in cost statement.

# 2. Objective

2.1 The objective of this standard is to bring uniformity, consistency in the principles, methods of determining and assigning Joint Costs with reasonable accuracy.

## 3. Scope

3.1 The standard shall be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of Joint Costs.

# 4. Definitions

The following terms are being used in this standard within the meaning specified.

#### 4.1 **By-Product**

output of some value produced incidentally while manufacturing the main product.

#### 4.2 **Cost Object**

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

#### 4.3 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.4 Joint Costs

Joint costs are the cost of common resources used to produce two or more products or services simultaneously.

#### 4.5 Joint Product

Two or more products produced by the same process and separated in processing, each having a sufficiently high saleable value to merit recognition as a main product.

#### 4.6 Scrap

Scrap means discarded material having some value in few cases and which is usually

either disposed off without further treatment (other than reclamation and handling) or reintroduced into the production process.

#### 4.7 **Split-off Point**

The point in the production process at which joint products become separately identifiable. The terms split off point and separation point are used interchangeably.

#### 4.8 **Waste**

Waste is a material loss during production or storage due to various factors such as evaporation, chemical reaction, contamination, unrecoverable residue, shrinkage etc. and discarded material which may or may not have value.

The terms Waste and Wastage have the same meaning and are used interchangeably.

# 5. Principles of Measurement

- 5.1 The principles and methods for measuring Joint costs upto the split off point will be the same as stipulated in other cost accounting standards.
- 5.2 Cost incurred after split-off point on product separately identifiable shall be measured for the resources consumed for each Joint/By-Product.
- 5.3 Cost incurred after split-off point for further processing of joint product/By-Product shall be the aggregate of direct and indirect costs.
- 5.4 Cost of further processing of joint product/By-Product carried out by outside parties shall be determined at invoice or agreed price including duties and taxes, net of discounts (other than cash discount) taxes and duties refundable or to be credited and other expenditure directly attributable to such processing. This cost shall also include the cost of resources provided to outside parties.
- 5.5 In case the production process generates scrap or waste, realized or realizable value, net of disposal cost, of scrap and waste shall be deducted from the cost of Joint Product.
- 5.6 Any Subsidy / Grant / Incentive or any such payment received / receivable with respect to any joint product /By-Product shall be reduced for ascertainment of the cost to which such amounts are related.
- 5.7 Penalties, damages paid to statutory authorities or other third parties shall not form part of the cost of the joint product /By-Product.

# 6. Assignment

- 6.1 Joint cost incurred shall be assigned to joint products based on benefits received, which is measured using any of the following methods:
  - a) Physical Units Method.
  - b) Net Realizable Value at split-off point.

Net realizable value for this purpose means the net selling price per unit multiplied

by quantity (Quantity sold). Net realizable value is to be adjusted for the postsplit off costs.

- c) Technical estimates
- 6.2 The value of By-Product shall be estimated using any of the following methods for adjusting joint costs:
  - a) Net realizable value

Net realizable value for this purpose means the net selling price per unit multiplied by quantity (Quantity sold). Net realizable value is to be adjusted for the postsplit off costs.

b) Technical Estimates

This method may be adopted where the By-Product is not saleable in the condition in which it emerges or comparative prices of similar products are not available.

# 7. Presentation

The Cost Statement shall present the element wise cost of individual products produced jointly and the value assigned to By-Products.

# 8. Disclosures

- 8.1 The Cost statement shall disclose the basis of allocation of Joint costs to individual products and the value assigned to the By-Products
- 8.2 The disclosure should be made only where material, significant & quantifiable.
- 8.3 Disclosures shall be made in the body of Cost Statements or as a foot note or as a separate schedule.
- 8.4 Any change in the cost accounting principles and methods applied for the measurement and assignment of the Joint costs and the value assigned to by-product during the period covered by the cost statement which has a material effect on the Joint/ By-Products shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

#### **CAS - 17- COST OF SERVICES' ALLOCATION**

## 1. Introduction

1.1 This standard deals with the principles and methods of classification, measurement and assignment of Cost of Services' Allocation, for determination of the Cost of cost object, and the presentation and disclosure in cost statements.

# 2. Objective

2.1 To bring uniformity and consistency in the principles and methods of determining the Cost of Services' Allocation with reasonable accuracy.

# 3. Scope

3.1 This standard shall be applied to the preparation and presentation of cost statements, which require classification, measurement and assignment of Cost of Services' Allocation.

# 4. Definitions

## 4.1 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

## 4.2 Administrative Expenses

Administrative Expenses/Costs are expenses incurred for general management of an organization which cannot be directly related to the production, marketing, research or development functions of the enterprise. These are in the nature of indirect costs and are also termed as administrative overhead.

## 4.3 **Cost Object**

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

## 4.4 **Distribution Overheads**

Distribution cost also known as distribution overheads are the costs incurred in handling a product or service from the time it is ready for delivery until it reaches the ultimate consumer.

The cost such as packing, repacking, labelling, transportation and warehousing etc. at an intermediate storage location will be part of distribution cost.

It can be divided in two parts:-

- (a) Primary Distribution Cost
- (b) Secondary Distribution Cost

The terms Distribution Cost and Distribution Overheads have the same meaning and are used interchangeably.

#### 4.5 **Finance Cost**

Finance cost is a cost incurred by an enterprise in connection with the borrowing of funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related to borrowings, amortization of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms finance costs and borrowing costs are used interchangeably.

#### 4.6 **Imputed Costs**

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.7 Marketing Overheads

Marketing overheads comprise promotional, Selling and Distribution Expenses.

#### 4.8 Normal Capacity

Normal capacity is the production achieved or achievable on an average over a longer period of time to level out seasonal or cyclical variations. In determining normal capacity, physical plant capacity and sales potential must be considered together.

Normal Capacity = Installed Capacity – Capacity loss (Internal & External factors); or Normal Capacity = Practical Capacity – Capacity loss by External factors

#### 4.9 **Production Overheads**

Production Overhead involves a company's factory operations. It includes the costs incurred in the factory other than the costs of direct materials and direct labour. This is the reason that manufacturing overhead is often classified as an indirect cost.

The terms Manufacturing Overheads, Factory Overheads and Production Overheads have the same meaning and are used interchangeably.

#### 4.10 Selling Overheads

Selling overheads, also known as selling costs, are the expenses related to sale of products including all Indirect Expenses in sales management for the organization.

#### 4.11 Service Cost Centre

The cost centre which provides services to production, operation or other service cost centre but not directly engaged in manufacturing process or operation is termed as a service cost centre.

Explanation: A service cost centre renders services to other cost centers / other units and in some cases to outside parties.

## 4.12 Standard Cost

Standard cost is the predetermined cost of manufacturing a single product or a number of product units during a specific period in the immediate future. It is the planned cost of product under current and/or anticipated conditions.

## 4.13 Stand-by Service

It is a facility created to safeguard against the failure of the main source of service.

# 5. Principles of Measurement

- 5.1 Each identifiable service cost centre shall be treated as a distinct cost object for measurement of the cost of services subject to the principle of materiality.
- 5.2 Cost of Services' Allocation shall be the aggregate of direct and indirect cost attributable to services being rendered by such cost centre.
- 5.3 Cost of in-house services shall include cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources used in such service.
- 5.4 Cost of services rendered by contractors within the facilities of the entity shall include charges payable to the contractor and cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources provided to the contractors for such services.
- 5.5 Cost of services rendered by contractors at their premises shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto, net of discounts (other than cash discount), taxes and duties refundable or to be credited. This cost shall also include the cost of resources provided to the contractors.
- 5.6 Cost of services for the purpose of inter-unit transfers shall also include distribution costs incurred for such transfers.
- 5.7 Cost of services for the purpose of inter-company transfers shall also include distribution cost incurred for such transfers and Administrative Expenses.
- 5.8 Cost of services rendered to outside parties shall also include distribution cost incurred for such transfers, Administrative Expenses and marketing overheads.
- 5.9 Finance costs incurred in connection with the service cost centre shall not form part of the Cost of Services' Allocation.
- 5.10 The Cost of Services' Allocation shall not include imputed costs.
- 5.11 Where the Cost of Services' Allocation is accounted at standard cost, the price and usage variances related to the services cost centre shall be treated as part of cost of services. Usage variances due to abnormal reasons shall be treated as part of abnormal cost.
- 5.12 Any subsidy, grant, incentive or any such payment received or receivable with respect to any service cost centre shall be reduced for ascertainment of the cost to which such amounts are related.
- 5.13 The cost of production and distribution of the service shall be determined based on the normal capacity or actual capacity utilization whichever is higher; and unabsorbed cost, if any, shall be treated as abnormal cost. Cost of a stand-by service shall include the committed costs of maintaining such a facility for rendering the service.
- 5.14 Any abnormal cost, where it is material and quantifiable, shall not form part of the cost of the service cost centre.

- 5.15 Penalties, damages paid to statutory authorities or other third parties shall not form part of the cost of the service cost centre.
- 5.16 Credits or recoveries relating to the service cost centre, including charges for services rendered to outside parties, material and quantifiable, shall be reduced from the total cost of that service cost centre.
- 5.17 Any change in the cost accounting principles applied for the measurement of the Cost of Services' Allocation shall be made only if it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an entity.

# 6. Assignment of Cost

- 6.1 While assigning cost of services, traceability to a cost object in an economically feasible manner shall be the guiding principle.
- 6.2 Where the cost of services rendered by a service cost centre is not directly traceable to a cost object, it shall be assigned on the most appropriate basis. Such basis should be equitable, reasonable and consistent.

# 7. Presentation

**7.1** Cost of Services' Allocation, if material, shall be presented as a separate cost head for each type of service in the cost statement.

# 8. Disclosures

- 8.1 The cost statements shall disclose the following:
- 8.1.1 The basis of distribution of cost of each service cost centre to the consuming centers.
- 8.1.2 The cost of purchase, production, distribution, marketing and price of services with reference to sales to outside parties
- 8.1.3 The price and usage variances, where the Cost of Services' Allocation is disclosed at standard cost,
- 8.1.4 The cost of services received from or rendered to related parties.
- 8.1.5 Cost of Services' Allocation incurred in foreign exchange.
- 8.1.6 Any subsidy, grant or incentive and any such cost reduced from Cost of Services' Allocation.
- 8.1.7 Credits or recoveries relating to the Cost of Services' Allocation
- 8.1.8 Any abnormal cost excluded from Cost of Services' Allocation
- 8.1.9 Penalties and damages excluded from Cost of Services' Allocation.
- 8.2 Any change in the cost accounting principles and methods applied for the measurement and assignment of the Cost of Services' Allocation during the period covered by the cost statement, which has a material effect on the Cost of Services' Allocation, shall be disclosed. Where the effect of such change is not ascertainable wholly or partly, the fact shall be disclosed.
- 8.3 Disclosures shall be made only where material and significant.
- 8.4 Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule prominently.

# CAS - 18- ADMINISTRATIVE EXPENSES

# 1. Introduction

1.1 This standard deals with the principles and methods of classification, measurement and assignment of Administrative Expenses, for determination of the cost of cost objects, and the presentation and disclosure in cost statements.

# 2. Objectives

- 2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Administrative Expenses with reasonable accuracy.
- 2.2 This standard helps management in analysing the impact of administrative expenses incurred on each cost object and relative benefit received against such expenses incurred.

# 3. Scope

This standard shall apply to cost statements which require classification, measurement, assignment, presentation and disclosure of Administrative Expenses.

# 4. Definitions

The following terms are being used in this standard with the meaning specified.

## 4.1 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

## 4.2 **Absorption of Overheads**

Absorption of overheads is charging of overheads to cost objects using appropriate absorption rate.

## 4.3 **Administrative Expenses**

Administrative cost is expense incurred for general management of an organization which cannot be directly related to the production, marketing, research or development functions of the enterprise. These are in the nature of indirect costs and are also termed as administrative overhead.

## 4.4 **Cost Object**

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

## 4.5 Finance Cost

Finance cost is a cost incurred by an enterprise in connection with the borrowing of

funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related to borrowings, amortization of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms finance costs and borrowing costs are used interchangeably.

#### 4.6 **Imputed Costs**

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.7 Normal Capacity

Normal capacity is the production achieved or achievable on an average over a longer period of time to level out seasonal or cyclical variations. In determining normal capacity, physical plant capacity and sales potential must be considered together.

Normal Capacity = Installed Capacity – Capacity loss (Internal & External factors); or

Normal Capacity = Practical Capacity – Capacity loss by External factors

#### 4.8 **Overheads**

An overhead cost is an 'expenditure on labour, materials or services that cannot be economically identified with or allocated to a cost object. Overhead costs are also referred to as indirect costs.

#### 4.9 Absorption of Administrative Expenses

Absorption of overheads:

Absorption of overheads is charging of overheads to cost objects by means of appropriate absorption rate.

```
        Estimated total admin overheads

        Overhead Absorption Rate =
        Estimated Activity
```

(Estimated total admin overheads and activity shall be based on the normal capacity)

# 5. Principles of Measurement

Administrative Expenses shall be the aggregate of cost of resources consumed in activities relating to general management and administration of an organization.

In case of leased assets, if the lease is an operating lease, the entire rentals shall be included in the Administrative Expenses. If the lease is a finance lease, the finance cost portion shall be segregated and treated as part of finance costs.

The cost of software (developed in house, purchased, licensed or customized), including up-gradation cost shall be amortized over its estimated useful life. It shall

become part of Administrative Expenses.

The cost of administrative services procured from outside shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited.

Any subsidy, grant, incentive or any amount of similar nature received/ receivable with respect to Administrative Expenses shall be reduced for ascertainment of the cost of object to which such amounts are related.

Administrative Expenses shall not include any abnormal administrative cost.

Any change in the cost accounting principles applied for the measurement of the Administrative Expenses shall be made only if it is required by law or for compliance with the requirements of a cost accounting standard or a change would rest in a more appropriate preparation or presentation of cost statements of an entity.

# 6. Assignment of Cost

While assigning Administrative Expenses, traceability to a cost object in an economically feasible manner shall be the guidance principle.

Assignment or Administrative Expenses to the cost objects shall be based on either of the following two principles:

#### **Cause and Effect**

Cause is the process or operation or activity and effect is the incurrence of cost.

#### **Benefits received**

Overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

The costs of shared services should be assigned to user activities on the basis of actual usage.

## 7. Presentation

- 7.1 Administrative Expenses shall be presented as a separate cost head in the cost statement.
- 7.2 Element wise details of the Administrative Expenses based on materiality shall be presented.

## 8. Disclosures

Cost statement shall disclose the following:-

- 8.1 The basis of assignment of Administrative Expenses to the cost objects.
- 8.2 Foreign exchange component of Administrative Expenses.
- 8.3 Cost of activities, credits and recoveries relating to the Administrative Expenses received from or supplied to related parties.
- 8.4 Any abnormal portion of the Administrative Expenses.
- 8.5 Penalties and damages excluded from the Administrative Expenses.
- 8.6 Change in basis for collection, allocation, apportionment and absorption can be adopted only when it is compelled by the change in circumstances like change in technology, refinement and improvement in the basis etc. and the change would provide more scientific approach.
- 8.7 Any change in basis for collection, allocation, apportionment and absorption which has a material effect on the cost of the product should be disclosed in the cost statements. Where the effect of such change is not ascertainable wholly or partly, the fact should be indicated in the cost statement.

# **CAS - 19- SELLING AND DISTRIBUTION EXPENSES**

# 1. Introduction

1.1 This standard deals with the principles and methods of classification, measurement and assignment of Selling and Distribution Expenses, for determination of the cost of cost object and for the presentation and disclosure in cost statements.

# 2. Objectives

2.1 The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Selling and Distribution Expenses with reasonable accuracy.

## 3. Scope

- 3.1 This standard shall be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of Selling and Distribution Expenses.
- 3.2 This standard helps management analyse the impact of marketing expenses incurred on each cost object and relative benefit received against such expenses incurred.

# 4. Definitions

The following terms are being used in this standard with the meaning specified.

## 4.1 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

## 4.2 Absorption of Overheads

Absorption of overheads is charging of overheads to cost objects using appropriate absorption rate.

## 4.3 **Cost object**

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

## 4.4 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.5 Indirect Expenses

Indirect Expenses are the expenses which are not directly attributable to a particular cost object.

## 4.6 **Overheads**

An overhead cost is an 'expenditure on labour, materials or services that cannot be economically identified with or allocated to a cost object. Overhead costs are also referred to as indirect costs.

## 4.7 **Distribution Overheads**

Distribution cost also known as distribution overheads are the costs incurred in handling a product or service from the time it is ready for delivery until it reaches the ultimate consumer.

The cost such as packing, repacking, labelling, transportation and warehousing etc. at an intermediate storage location will be part of distribution cost.

It can be divided in two parts:-(a) Primary Distribution Cost (b) Secondary Distribution Cost

## 4.8 Selling Overheads

Selling overheads are the expenses related to sale of products or services and include all Indirect Expenses related to sales management.

## 4.9 Marketing Overheads

Marketing overheads comprise promotional, Selling and Distribution Expenses.

# 5. Principles of Measurement

- 5.1 Selling and Distribution Expenses shall be the costs consumed in the selling and distribution activities of the entity. The cost of resources procured from outside shall be determined at invoice value or agreed price including duties and taxes, and other expenditure directly attributable thereto, net of discounts (other than cash discounts), taxes and duties refundable or to be credited by the Tax Authorities.
- 5.2 Post sales costs such as warranty cost, product liability cost, after sales service shall be estimated on a reasonable basis.
- 5.3 Selling and Distribution Expenses, the benefits of which are expected to be derived over a long period, shall be amortized on a rational basis.
- 5.4 Imputed costs shall not be included in Selling and Distribution Expenses.
- 5.5 The costs under after sales service contracts shall be determined on appropriate basis, net of any recovery on the service.
- 5.6 A subsidy, grant, incentive or any other such payment received or receivable with respect to Selling and Distribution Expenses shall be reduced from the cost of the relevant overhead.
- 5.7 Any abnormal cost relating to selling and distribution activity shall be excluded from the Selling and Distribution Expenses.
- 5.8 Any demurrage or detention charges or penalty levied by transportation or other authorities in respect of distribution activity shall not form part of the selling and distribution overhead.

- 5.9 Penalties and damages paid to statutory authorities or other third parties shall not form part of the Selling and Distribution Expenses.
- 5.10 Credits or recoveries relating to the Selling and Distribution Expenses including those rendered without any consideration, material and quantifiable, shall be deducted from Selling and Distribution Expenses.
- 5.11 Any change in the cost accounting principles applied for the measurement of the Selling and Distribution Expenses shall be made only if it is required by law or for compliance with the requirements of a cost accounting standard or a change would result in a more appropriate preparation or presentation of cost statements of an entity.

# 6. Assignment of Cost

- 6.1 Selling and Distribution Expenses directly traceable shall be assigned to the relevant product sold or services rendered.
- 6.2 Transportation Expenses relating to distribution shall be assigned, where relevant and applicable.
- 6.3 Assignment of Selling and Distribution Expenses to the cost objects shall be based on either of the following two principles;

**Cause and Effect** - Cause is the process or operation or activity and effect is the incurrence of cost.

**Benefits received** - overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

# 7. Presentation

- 7.1 Selling & distribution overheads shall be presented as a separate cost head in the cost statement.
- 7.2 A cost benefit analysis of marketing expenses incurred for each product or service may be carried out for evaluating the impact of such expenses and measuring the efficiency of resources consumed by each cost object.
- 7.3 A reporting entity may use the term marketing overheads in place of Selling and Distribution Expenses.

# 8. Disclosures

Cost statement shall disclose the following:-

- 8.1 The basis of assignment of Selling and Distribution Expenses to the cost objects.
- 8.2 Foreign exchange component of selling or distribution overheads
- 8.3 Cost of selling and distribution activities received from or supplied to related parties.
- 8.4 Credits or recoveries relating to the selling or distribution overheads.
- 8.5 Any abnormal portion of the selling or distribution overheads.
- 8.6 Penalties and damages excluded from the selling or distribution overheads.
- 8.7 Any change in basis for collection, allocation, apportionment and absorption which has a material effect on the cost of the product. Where the effect of such change is not ascertainable wholly or partly, the fact should be indicated in the cost statement.

# **CAS - 20- FINANCIAL EXPENSES**

# 1. Introduction

1.1 This standard deals with the principles and methods of classification, measurement and assignment of Interest and Financing Charges.

## 2. Objective

2.1 The objective of this standard is to bring uniformity and consistency in the principles, methods of determining and assigning the Interest and Financing Charges with reasonable accuracy.

## 3. Scope

- 3.1 This standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of Interest and Financing Charges including those requiring attestation.
- 3.2 This standard does not deal with costs relating to risk management through derivatives.

# 4. Definitions

The following terms are being used in this standard with the meaning specified.

#### 4.1 **Asset**

An asset is a resource controlled by the enterprise as a result of past events from which future economic benefits are expected to flow to the enterprise. In case of some assets which are acquired for safety or environmental reasons, the acquisition of such assets may not provide future economic benefits directly but may be necessary for an entity to obtain the future economic benefits from other assets. Such items also qualify for recognition as assets.

The terms Asset, Fixed Asset, Tangible Fixed Asset, Intangible Fixed Asset, Qualifying Asset, Current Asset shall have the same meaning as in the Accounting Standards notified by the Securities & Exchange Commission of Pakistan.

## 4.2 **Cost Object**

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

## 4.3 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

## 4.4 Interest and Financing Charges

Interest and Financing charges: Costs incurred by an enterprise in connection with the borrowing of fund or other costs which in effect represent payment for the use of non-equity fund.

Examples are:

- 1. interest and commitment charges on bank borrowings, other short term and long term borrowings:
- 2. amortisation of discounts or premium related to borrowings:
- 3. amortisation of ancillary cost incurred in connection with the arrangements of borrowings:
- 4. Financing Charges in respect of finance leases and other similar arrangements: and
- 5. exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs.
- 6. Cash discount allowed to customers.

The terms Interest and financing charges, finance costs, and borrowing costs are used interchangeably.

## 4.5 **Net Current Asset**

Net current asset is the excess of current assets over current liabilities Current Liabilities shall include short term borrowings and that part of long term borrowings which are classified as current liabilities.

Short term borrowing is the borrowing which is repayable within one year from the date of disbursal as per Loan Agreement.

Long term borrowing is the borrowing which is repayable after one year from the date of disbursal as per Loan Agreement.

# 5. Principles of Measurement:

- 5.1 Interest and Financing Charges incurred shall be identified for:
  - (a) acquisition / construction/ production of qualifying assets including fixed assets; and
  - (b) Other finance costs for production of goods/ operations or services rendered which cannot be classified as qualifying assets.
- 5.2 Interest and Financing Charges directly attributable to the acquisition/ construction/production of a qualifying asset shall be included in the cost of the asset.
- 5.3 Interest and Financing Charges shall not include imputed costs.
- 5.4 Subsidy / Grant / Incentive or amount of similar nature received / receivable with respect to Interest and Financing Charges if any, shall be reduced to ascertain the net interest and financing charges.

- 5.5 Penal Interest for delayed payment, Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the Interest and Financing Charges. In case the company delays the payment of Statutory dues beyond the stipulated date, interest paid for delayed payment shall not be treated as penal interest.
- 5.6 Interest paid for or received on investment shall not form part of the other financing charges for production of goods / operations or services rendered;

# 6. Assignment of costs

- 6.1 Assignment of Interest and Financing Charges to the cost objects shall be based on either of the following principles;
  - I. Cause and effect- cause is the process or operation or activity and effect is the incurrence of cost.
  - II. Benefits received- Interest and Financing Charges are to be apportioned to the various cost objects in proportion to the benefits received by them.

# 7. Presentation

7.1 Interest and Financing Charges shall be presented in the cost statement as a separate item of cost of sales.

# 8. Disclosures

- 8.1 The cost statements shall disclose the following:
  - 1. The basis of distribution of Interest and Financing Charges to the cost objects/ cost units.
  - 2. Where predetermined cost is applied in Interest and Financing Charges, the rate and usage variances.
  - 3. Interest and Financing Charges paid/ payable to related parties.
  - 4. Interest and Financing Charges incurred in foreign exchange.
  - 5. Any Subsidy / Grant / Incentive or any amount of similar nature received /receivable reduced Interest and Financing Charges.
- 8.2 Disclosures shall be made only where material, significant and quantifiable.
- 8.3 Interest and Financing Charges incurred relating to prior periods and taken to reconciliation directly shall be disclosed separately.
- 8.4 Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule.
- 8.5 Any change in the cost accounting principles and methods applied for the measurement and assignment of the Interest and Financing Charges during the period covered by the cost statement which has a material effect on the Interest and Financing Charges shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

# 9. Cross Reference

9.1 IAS-23 – Borrowing Costs

# CAS - 21- COST OF ENVIRONMENT SAFEGUARDING

## 1. Introduction

This standard deals with principles and methods of determining the Cost of Environment Safeguarding. This standard deals with the principles and methods of classification, measurement and assignment of pollution control costs, for determination of Cost of product or service, and the presentation and disclosure in cost statements.

## 2. Objective

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Cost of Environment Safeguarding with reasonable accuracy.

## 3. Scope

This standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of Environment Protection Costs including those requiring attestation.

## 4. Definitions

The following terms are being used in this standard with the meaning specified:

## 4.1 Air Pollutant

Air pollutant means any substance that causes pollution of air and includes soot, smoke, dust particles, odour, light, electro-magnetic, radiation, heat, fumes, combustion exhaust, exhaust gases, noxious gases, hazardous substances and radioactive substances.

## 4.2 Air Pollution

Air Pollution means the presence in the atmosphere of any air pollutant.

## 4.3 Cost Object

Cost object is a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.

## 4.4 **Production Expenses**

Expenses relating to manufacture of a product or rendering a service, which can be identified or linked with the cost object other than Cost of Material CAS-3 and Cost of Labour CAS-4. Examples of Production Expenses are royalties charged on production, job charges, hire charges for use of specific equipment for a specific job, cost of special designs or drawings for a job, software services specifically required for a job, travelling Expenses for a specific job.

#### 4.5 Environment

Environment: includes

- (a) air, water and land;
- (b) all layers of the atmosphere;

(c) all organic and inorganic matter and living organisms;

(d) the ecosystem and ecological relationships;

(e) buildings, structures, roads, facilities and works;

(f) all social and economic conditions affecting community life; and

(g) the inter-relationships between any of the factors specified in sub-clauses (a) to (f);

## 4.6 **Environmental Pollutant**

Environmental Pollutant means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment.

## 4.7 Environment Pollution

Environmental Pollution means the presence in the environment of any environmental pollutant.

#### 4.8 Finance Cost

Finance cost is a cost incurred by an enterprise in connection with the borrowing of funds. This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortization of discounts or premium related to borrowings, amortization of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms finance costs and borrowing costs are used interchangeably.

#### 4.9 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 4.10 Normal Capacity

Normal capacity is the production achieved or achievable on an average over a longer period of time to level out seasonal or cyclical variations. In determining normal capacity, physical plant capacity and sales potential must be considered together.

Normal Capacity = Installed Capacity – Capacity loss (Internal & External factors); or Normal Capacity = Practical Capacity – Capacity loss by External factors

#### 4.11 Environment Protection

Environment Protection means the control of emissions and effluents into environment. It constitutes the use of materials, processes, or practices to reduce, minimize, or eliminate the creation of pollutants or wastes. It includes practices that reduce the use of toxic or hazardous materials, energy, water, and / or other resources.

## 4.12 **Production Overheads**

Production Overhead involves a company's factory operations. It includes the costs incurred in the factory other than the costs of direct materials and direct labour. This is the reason that manufacturing overhead is often classified as an indirect cost.

The terms Manufacturing Overheads, Factory Overheads and Production Overheads have the same meaning and are used interchangeably.

## 4.13 Soil Pollutant

Soil Pollutant is a substance such as cadmium, copper, arsenic, mercury, oil and organic solvent, which is the source of soil contamination.

## 4.14 Soil Pollution

Soil pollution means the presence of any soil pollutant(s) in the soil which is harmful to the living beings when it crosses its threshold concentration level.

## 4.15 Standard Cost

Standard cost is the predetermined cost of manufacturing a single product or a number of product units during a specific period in the immediate future. It is the planned cost of product under current and/or anticipated conditions.

## 4.16 Water Pollution

Water Pollution means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

# 5. Principles of Measurement:

5.1 Cost of Environment Safeguarding shall be the aggregate of direct and indirect cost relating to Environment Protection activity.

Direct cost includes the cost of materials, consumable stores, spares, manpower, equipment usage, utilities, resources for testing & certification and other identifiable resources consumed in activities such as waste processing, disposal, remediation and others.

Indirect cost includes the cost of resources common to various Environment Protection activities such as Environment Protection Registration and such like expenses.

- 5.2 Costs of Environment Protection which are internal to the entity should be accounted for when incurred. They should be measured at the historical cost of resources consumed.
- 5.3 Future remediation or disposal costs which are expected to be incurred with reasonable certainty as part of Onerous Contract or Constructive Obligation, legally enforceable shall be estimated and accounted based on the quantum of pollution generated in each period and the associated cost of remediation or disposal in future.

For example, future disposal costs of solid waste generated during the current period should be estimated on, say, a per tonne basis.

5.4 Contingent future remediation or disposal costs e.g. those likely to arise on account of future legislative changes on pollution control shall not be treated as cost until the incidence of such costs become reasonably certain and can be measured.

External costs of pollution which are generally the costs imposed on external parties including social costs are difficult to estimate with reasonable accuracy and are excluded from general purpose cost statements.

Social costs of pollution are measured by economic models of cost measurement. The cost by way of compensation by the polluting entity either under future legislation or under social pressure

cannot be quantified by traditional models of cost measurement. They are best kept out of general purpose cost statements.

- 5.5 Cost of in-house Environment Protection activity shall include cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources used in such activity.
- 5.6 Cost of Environment Protection activity carried out by outside contractors inside the entity shall include charges payable to the contractor and cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other costs incurred by the entity for such jobs.
- 5.7 Cost of Environment Protection jobs carried out by contractor at its premises shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited. This cost shall also include the cost of other resources provided to the contractors.
- 5.8 Cost of Environment Protection jobs carried out by outside contractors shall include charges made by the contractor and cost of own materials, consumable stores, spares, manpower, equipment usage, utilities and other costs used in such jobs.
- 5.9 Each type of Environment Protection e.g. water, air, soil pollution shall be treated as a distinct activity, if material and identifiable.
- 5.10 Finance costs incurred in connection with the Environment Protection activities shall not form part of Cost of Environment Safeguarding.
- 5.11 Cost of Environment Safeguarding shall not include imputed costs.
- 5.12 Price variances related to Environment Protection, where standard costs are in use, shall be treated as part of Environment Protection cost. The portion of usage variances attributable to normal reasons shall be treated as part of Environment Protection cost. Usage variances attributable to abnormal reasons shall be excluded from Environment Protection cost.
- 5.13 Subsidy / Grant / Incentive or amount of similar nature received / receivable with respect to Environment Protection activity, if any, shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- 5.14 Any Environment Protection cost resulting from abnormal circumstances, if material and quantifiable, shall not form part of the Environment Protection cost.
- 5.15 Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the Environment Protection cost.
- 5.16 Credits / recoveries relating to the Environment Protection activity, material and quantifiable, shall be deducted to arrive at the net Environment Protection cost.
- 5.17 Research and development cost to develop new process, new products or use of new materials to avoid or mitigate pollution shall be treated as research and development costs and not included under pollution control costs. Development costs incurred for commercial development of such product, process or material shall be included in pollution control costs.
- 5.18 Any change in the cost accounting principles applied for the measurement of the Environment Protection cost should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.

# 6. Assignment of Costs

6.1 Cost of Environment Safeguarding shall be traced to a cost object to the extent economically feasible.

Direct costs of pollution control such as treatment and disposal of waste shall be assigned directly to the product, where traceable economically.

Where these costs are not directly traceable to the product but are traceable to a process which

causes pollution, the costs shall be assigned to the products passing through the process based on the quantity of the pollutant generated by the product.

- 6.2 Where the Environment Protection cost is not directly traceable to cost object, it shall be treated as overhead and assigned based on either of the following two principles;
  - i) Cause and Effect Cause is the process or operation or activity and effect is the incurrence of cost.
  - ii) Benefits received overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

Typical of such costs are costs such as administration costs relating to pollution control activities, costs of certification such as ISO 14000 and registration fees payable to pollution control authorities.

6.3 If the Environment Protection cost (including the share of the cost of reciprocal exchange of services) is shared by several cost objects, the related cost shall be measured as an aggregate and distributed among the cost objects as per principles laid down in earlier Cost Accounting Standard.

## 7. Presentation

- 7.1 Environment Protection cost, if material, shall be presented in the cost statement as a separate item of cost.
- 7.2 Cost of Environment Safeguarding shall be presented duly classified as follows:
  - a) Direct and Indirect cost
  - **b)** Internal and External costs
  - c) Current and future costs
  - d) Domain area e.g. water, air and soil.
- 7.3 Activity wise details of Environment Protection cost, if material, shall be presented separately.

## 8. Disclosures

- 8.1 The cost statements shall disclose the following:
  - 1. The basis of distribution of Environment Protection cost to the cost objects/ cost units.
  - 2. Where standard cost is applied in Environment Protection cost, the price and usage variances.
  - 3. Environment Protection cost of Jobs done in-house and outsourced separately.
  - 4. Environment Protection cost paid/ payable to related parties.
  - 5. Environment Protection cost incurred in foreign exchange.
  - **6.** Any Subsidy / Grant / Incentive or any amount of similar nature received/receivable reduced from Environment Protection cost.
  - **7.** Any credits / recoveries relating to the Environment Protection cost.
  - 8. Any abnormal portion of the Environment Protection cost.
  - 9. Penalties and damages excluded from the Environment Protection cost.
- 8.2 Disclosures shall be made only where material, significant and quantifiable.
- 8.3 Cost incurred on pollution control relating to prior periods and taken to reconciliation directly shall be disclosed separately.
- 8.4 Where estimates are made of future costs to be incurred on pollution control, the basis of estimate shall be disclosed separately.
- 8.5 If a descriptive note dealing with the social cost of pollution caused by the entity and the control of such pollution is contained in the same document as the cost statement, the cost Statement shall carry a reference to such descriptive note.

- 8.6 Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule.
- 8.7 Any change in the cost accounting principles and methods applied for the measurement and assignment of the Environment Protection cost during the period covered by the cost statement which has a material effect on the Environment Protection cost shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

## 9. Cross Reference

- 9.1 CAS-03 Cost of Material
- 9.2 CAS-04 Cost of Labour
- 9.3 CAS-05 Cost of Production Overheads
- 9.4 CAS-11 Research and Development Cost
- 9.5 IAS-37 Provisions, Contingent Liabilities and Contingent Assets
- 9.6 IAS-38 Intangible Assets

# CAS - 22- COSTS' CLASSIFICATION

# 1. Introduction

1.1 This standard deals with the basis of classification of costs and the practices to be adopted for classification of cost elements with regard to their nature and management objectives. The standard aims at providing better understanding on classification of cost for preparation of various cost statements required for statutory obligations as well as cost control measures.

## 2. Objective

- 2.1 The objective of this standard is to prescribe the application of classification of costs for ascertainment of cost of a product or service and preparation of cost statements on a consistent and uniform basis with a view to effect the comparability of such statements among various reporting units with that of previous periods.
- 2.2 The classification of costs and their disclosures are aimed at providing better transparency in the cost statements.
- 2.3 The standard is also for better adoption of uniform costing and inter-firm comparison.

## 3. Scope

- 3.1 The standard on classification of cost shall be applied in assessment of cost of a product or service, application of costing technique and for management decision making by the reporting entity.
- 3.2 The cost statement (See Annexure "A") prepared, based on this standard shall be used for assessment of cost of production or valuation of product/ service or the valuation of stock to be certified for calculation of duties and taxes, tariffs, anti-dumping measures, transfer pricing and carbon credit etc. and other purposes, as the case may be. However, "Annexure A" shall not be applicable to industries to which specific Cost Accounting Record Orders have been promulgated.

# 4. Definitions

## 4.1 **Absorption Costing**

Absorption costing is a method of inventory costing in which all variable manufacturing costs and all fixed manufacturing costs are included as inventoriable costs.

## 4.2 **Activity**

Activity is the actual work, task or steps performed in producing and delivering products and services. It includes an aggregation of actions performed within an organization that is useful for the purpose of activity-based costing.

## 4.3 **Activity Analysis**

Activity analysis is the identification and description of activities in an organization. Activity analysis involves determining what activities are done within a department, how many people perform the activities, how much time they spend in performing the activities, what resources are required to perform the activities and what customer value the activity has for the organization. Activity analysis is accomplished with interviews, questionnaires, observations and reviews of physical records of work.

## 4.4 Activity Based Costing

Activity based costing is the cost accounting method that measures the cost and performance of process related activities and cost objects. It assigns costs to cost objects, such as products or customers, based on their use of activities. It recognizes the casual relationship of cost drivers to activities.

#### 4.5 **Cost**

Cost is a forgoing, measured in monetary terms, incurred or potentially to be incurred to achieve a specific objective.

## 4.6 **Cost Center**

Cost Center means any unit of cost accounting selected with a view to accumulating all cost under that unit. The unit may be a product, service, division, department, section, group of plant and machinery, group of employees or combination of several units. This may also be a budget center.

Cost Centers may be divided into broad types i.e. Production Cost Centers and Service Cost Centers. Production Cost Centers are those which are engaged in production like machine Shop, Welding Shop, and Assembly Shop etc. Service Cost Centers are for rendering service to production Cost Center like Power House, Maintenance, Stores and Purchase Office etc.

#### 4.7 Cost Accounting System

Cost accounting system is a process and procedures that accumulates and reports, consistent and reliable cost information and performance data from various Cost Centers. The accumulated and reported data enable management and other stake holders to measure and make decisions about the organization's/ segment's ability to improve operations, safeguard assets, control its resources, comply with relevant reporting requirements and determine if objectives are being met.

#### 4.8 Cost Driver

Cost drivers are the structural determinants of the cost of an activity, reflecting any linkages or inter relationships that affect it. Therefore, we could assume that the cost drivers determine the cost behavior within the activities, reflecting the links that these have with other activities and relationships that affect them.

#### 4.9 Variable Costing

Variable costing is a method of inventory costing in which only variable manufacturing costs are included in inventoriable costs. It is also called direct costing.

## 4.10 Full Cost

Full cost is the sum of all variable and fixed costs in all business functions in the value chain including manufacturing, administrative, research and development, design, quality assurance, marketing, distribution and customer services.

## 4.11 Statement of Cost

Statement of cost is a statement which is made for calculating total cost, per unit cost and budget cost of product. All elements of cost in statement of cost are taken from financial accounting's historical records. This statement is also known as cost sheet.

# 5. Classification of Cost

Classification of cost is grouping of the components of cost under a common designation on the basis of similarities of nature, attributes or relations. Classification of cost is the arrangement of items of costs in logical groups having regard to their nature (subjective classification) or purpose (objective classification). Items grouped together under common heads may be further classified according to their fundamental differences. Furthermore, the same costs may appear in several different classifications depending on the purpose of classification. Therefore, costs are classified as under:-

- (a) By the nature of item (Natural classification).
- (b) By their tendency to vary with volume or activity.
- (c) By relation to accounting period to which they apply.
- (d) By their relation to departments.
- (e) By their relation to the product.
- (f) By their relation to function or activity.
- (g) By their nature as common and or joint costs.
- (h) By relationship to management decision making.
- (i) By nature of production process.
- (j) By relation to time.

# 6. Basis of Classification of Cost

## 6.1 By the Nature of Item (Natural Classification)

The process of classifying costs and expenses can begin with total cost, which may be considered as all costs or deductions from sales revenue before income tax. The sum of all costs is termed as cost to make and sell. Typically, total operating cost is divided into following categories:-

- (a) Cost of Manufacturing
- (b) Commercial expenses

## 6.1.1 Cost of Manufacturing

Manufacturing cost of a product is the aggregate of costs of all resources used in the process of its manufacturing.

Manufacturing cost includes cost of Materials (including process materials), Employee Cost, Cost of Utilities, Packing Cost, Production Expenses, Repairs & Maintenance Cost, Environment Protection Cost, Cost of Quality Control, Research & Development Cost, Cost of Inputs received free of cost or received at concessional value from the buyer of the products, Depreciation and Amortisation Expense (including amortisation cost of free tools, patterns, dies, drawings, blue prints, technical maps, charts, engineering, development, art work, design work, plans, sketches, packaging material and the like necessary for production of products), Cost of Rework, reconditioning, retro-fitment, Manufacturing Overheads, other costs allocable to such activity, adjustment for stock of work-in-process and recoveries for sales of scrap and wastages and the like but does not include expenses of the above nature incurred for post manufacturing purposes.

The terms Cost of Manufacturing and Production Cost have the same meaning and are used interchangeably.

#### 6.1.1.1 Direct Material Cost

Direct material cost includes cost of procurement, freight inward, taxes & duties, insurance etc. directly attributable to the acquisition. Trade discounts, rebates, duty draw backs, refunds on account of sale tax and other similar items are deducted in determining the cost of material.

#### 6.1.1.2 Direct Labour Cost

Direct labour is the labour applied directly to the material comprising the finished product. The cost of wages paid to skilled or un-skilled workers which are conveniently and economically identified with a cost object or Cost Center (including temporary, part time and contract direct labours). Consideration includes wages, salary, contractual payments and benefits, as applicable or any payment made on behalf of direct labour.

#### 6.1.1.3 Other Direct Cost

Other direct cost is the cost of resources directly consumed by an activity. Direct costs are assigned to activities by direct tracing of unit of resources consumed by individual products, services or activities. Any cost that is specifically identified with a single cost object.

#### 6.1.1.4 Factory Overhead

Factory incurred in the factory other than the costs of direct materials and direct labour. This is the reason that manufacturing overhead is often classified as an indirect cost.

The terms Manufacturing Overheads, Factory Overheads and Production Overheads have the same meaning and are used interchangeably.

#### 6.1.2 Commercial Expenses

Commercial expenses fall in two broad classifications:-

- (a) Marketing Cost (Distribution and Selling)
- (b) Administrative Cost (General and Admin)

#### 6.1.2.1 Marketing Cost

Marketing cost is the cost incurred in promoting and selling products or services to customers and prospective customers. It includes advertising, selling, distribution, sales promotion and other selling costs etc.

#### 6.1.2.2 Administrative Cost

Administrative cost is expense incurred for general management of an organization. These are in the nature of indirect costs and are also termed as administrative overhead.

## 6.2 **Cost in their tendency to vary with Volume or Activity**

Some costs vary directly in relation to changes in the volume of output, while others remain fixed in amount. Direct material and direct labour are generally listed among the variable costs. Factory overhead and non-manufacturing costs, however, must be examined with regard to items of a variable and fixed nature. The division is a necessary prerequisite to successful budgeting and intelligent cost planning and analysis. Under this classification cost may be classified as variable cost, fixed cost, semi variable cost and step fixed cost.

## 6.2.1 Variable Cost

Variable costs show the following four characteristics:-

- (a) Variability of total amount in direct proportion to volume.
- (b) Comparatively constant cost per unit within a relevant range.
- (c) Easy and reasonably accurate assignment to operating departments or Cost Centers.
- (d) Control of their incurrence and consumption by the responsible departmental / Cost Center head.

## 6.2.2 Fixed Cost

The characteristics of fixed cost are:-

- (a) Remain unchanged in total over the relevant range.
- (b) Change per unit with change in volume of output.
- (c) Assignment to departments / Cost Centers is often made on arbitrary managerial decisions or cost allocation methods.
- (d) Control of incurrence mostly rests with executive management rather than operating supervisors.

#### 6.2.3 Semi Variable Cost

Semi variable cost is a cost contain both the elements, fixed as well as variable; hence such costs are termed as semi variable cost. They are partly affected by fluctuation in the level of activity.

The terms Semi Variable Costs and Semi Variable Overheads have the same meaning and are used interchangeably.

#### 6.2.4 Step Fixed Cost

Step fixed cost is a cost function in which the cost remains the same over various ranges of the level of activity, but the cost increases by discrete amounts (that increases in steps) as the level of activity changes from one range to the next.

#### 6.3 **Cost with respect to accounting period to which they apply**

Expenditure can be divided into two broad classes:-(a) Capital Expenditure (b) Revenue Expenditure

## 6.3.1 Capital Expenditure

Capital expenditure is intended to benefit future periods and is classified as an asset.

## 6.3.2 **Revenue Expenditure**

Revenue expenditure benefits current periods and is classified as an expense.

## 6.4 **By their Relation to Departments**

A business may be organized along departmental lines or Cost Centers for management and control purposes. This departmentalization is the basis for the important classification and subsequent accumulation of costs by departments/ Cost Centers to achieve, (1) Cost budgeting by Cost Centers with responsibility accounting and control and (2) A greater degree of reliable costing. Following classification is used in this connection:-

- (a) Production Department Cost.
- (b) Service Department Cost.

## 6.4.1 **Production Department Cost**

Production department cost relates to the cost associated with producing departments in which manual and machine operations are performed directly upon any part of the product manufactured. More specifically, producing departments are those, whose costs may be charged to the product because they have contributed to its production. Such as, machining, forming, upholstering, cutting, assembling etc. In many cases, producing departments are further sub-divided into cost pools. Where two or more different types of machines perform operations on a product within the same department. Such breakdown into Cost Center's or cost pools increases the accuracy of the product cost. For example in the manufacturing of cotton yarn and cloth, the producing department, carding may be broken down into Cost Centers or cost pools such as, opening cotton bales, picking, carding and drawing.

## 6.4.2 Service Department Cost

Service department cost is a cost incurred in the operation of service departments, represents a part of total factory overhead and must be absorbed in the cost of the product by means of the factory overhead rate. Service department is one that is not directly engaged in production, but renders a particular type of service for the benefit of other departments. In some industries, service departments benefit other service departments as well as the producing departments. Common service departments are administration, HR, Internal audit, receiving, inspection, storeroom, maintenance, timekeeping, cost accounting, budgeting, MIS & data processing, general office, cafeteria and plant protection. Service department cost is prorated to producing departments and/ or service departments. These prorated costs are also termed as indirect departmental charges.

#### 6.5 **By their relation to the Product**

The elements of manufacturing costs are direct material, direct labour, other direct costs and factory overhead. Cost may be classified as follows:

- (a) Prime Cost
- (b) Conversion cost

## 6.5.1 Prime Cost

Prime cost is combination of direct material, direct labour and other direct costs associated with the product or service.

## 6.5.2 Conversion Cost

Conversion cost is the combination of direct labour cost and factory overhead.

## 6.6 **By their relationship to Function/Activity**

Cost shall be classified according to the following major functions:-

- (a) Production
- (b) Administration
- (c) Marketing
- (d) Distribution
- (e) Research & Development

## 6.6.1 **Production Cost**

Manufacturing cost of a product is the aggregate of costs of all resources used in the process of its manufacturing.

Cost of Manufacturing includes cost of Materials (including process materials), Employee Cost, Cost of Utilities, Packing Cost, Production Expenses, Repairs & Maintenance Cost, Environment Protection Cost, Cost of Quality Control, Research & Development Cost, Cost of Inputs received free of cost or received at concessional value from the buyer of the products, Depreciation and Amortisation Expense (including amortisation cost of free tools, patterns, dies, drawings, blue prints, technical maps, charts, engineering, development, art work, design work, plans, sketches, packaging material and the like necessary for production of products), Cost of Rework, reconditioning, retro-fitment, Manufacturing Overheads, other costs allocable to such activity, adjustment for stock of work-in-process and recoveries for sales of scrap and wastages and the like but does not include expenses of the above nature incurred for post manufacturing purposes.

The terms Cost of Manufacturing and Production Cost have the same meaning and are used interchangeably.

#### 6.6.2 Administration Cost

Administrative cost is expense incurred for general management of an organization. These are in the nature of indirect costs and are also termed as administrative overhead.

## 6.6.3 Marketing Cost

Marketing cost is the cost incurred in promoting and selling products or services to customers and prospective customers. It includes advertising, selling, distribution, sales promotion and other selling costs etc.

## 6.6.4 **Distribution Cost**

Distribution cost is the cost incurred in handling a product from the time it is completed in the work premises until it reaches the ultimate consumer. It can be divided in two parts:-

- (a) Primary Distribution Cost
- (b) Secondary Distribution Cost

#### 6.6.4.1 **Primary distribution Cost**

Primary distribution cost is the cost incurred on basic material that contains the product and is included in the cost of direct material. For example, in pharmaceutical industry, cost incurred on the strip which contains the tablets is primary distribution cost. The cost incurred on the strip is to be included in product cost.

#### 6.6.4.2 Secondary Distribution Cost

Secondary distribution cost incurred in handling of product from the time it is completed in the work premises until it reaches the ultimate consumer.

## 6.6.5 Research & Development Cost

Research & development cost is the cost for undertaking research to improve quality of a present product or improve manufacturing process, develop a new product, market research etc. and commercialization thereof. While research cost comprises of cost incurred on development of new product /process and improvement of existing product/ process, development cost includes the cost incurred for commercialization / implementation of research findings.

#### 6.7 **By their Nature as Common and/or Joint Cost**

Joint costs are the common cost of facilities or services employed in the output of two or more simultaneously produced or otherwise closely related operations, products or services.

When a production process is such that from a set of same input, two or more distinguishably different products are produced together, products of greater importance are termed as joint products and products of minor importance are termed as by-products. The costs incurred prior to the point of separation of the products are termed as joint costs. For example, in a petroleum refinery industry, petrol, diesel oil, kerosene oil, tar coal etc. are produced jointly in the refinery process. The joint or Common Costs are allocated to main or by- products on appropriate basis.

## 6.8 By relationship to Management Decision Making

For the purpose of management decision making, costs are classified as under:

- (a) Marginal Cost
- (b) Differential Cost
- (c) Opportunity Cost
- (d) Replacement Cost
- (e) Relevant Cost
- (f) Imputed Cost
- (g) Sunk Cost
- (h) Normal Cost
- (i) Abnormal Cost
- (j) Avoidable Cost
- (k) Unavoidable Cost

#### 6.8.1 Marginal Cost

Marginal cost is the aggregate of variable costs, i.e. prime cost plus variable overhead. Marginal cost per unit is the change in the amount at any given volume of output by which the aggregate cost changes if the volume of output is increased or decreased by one unit. The part of the cost of one unit of product or service that would be avoided if that unit was not produced, or that would increase if one extra unit were produced.

## 6.8.2 **Differential Cost**

Differential cost is the change in cost due to change in activity from one level to another. Differential Cost is found by using the principle which highlights the points of differences in costs by adoption of different alternatives. When the level of activity is increased, the differential cost is known as incremental cost and when the level of activity is decreased, the decrease in cost is known as decremental cost.

## 6.8.3 **Opportunity Cost**

Opportunity cost is the value of the alternatives foregone by adopting a particular strategy or employing resources in specific manner.

#### 6.8.4 **Replacement Cost**

Replacement Cost is the cost of replacing an asset in the current market. Replacement cost is generally used for determining the optimum time for replacement of an equipment or machine in consideration of maintenance cost of the existing one and its productive capacity.

#### 6.8.5 Relevant Cost

Relevant cost is expected future cost that differs among the alternative courses of action, being considered. They must occur in future decision deals with selecting a course of action based on its expected future results and differ among the alternative course of action. Cost that does not differ will not matter and hence will have no bearing on the decision being made.

#### 6.8.6 Imputed Costs

Imputed costs are hypothetical or notional costs, not involving cash outlay, computed for any purpose.

#### 6.8.7 **Sunk Cost**

Sunk cost is cost which has been irreversibly incurred or committed prior to a decision point, and cannot therefore be considered relevant to subsequent decisions.

#### 6.8.8 Normal Cost

Normal cost includes those items of cost which occur in the normal situation of production process or in the normal environment of the business. The normal idle time is to be included in the ascertainment of normal cost.

#### 6.8.9 Abnormal Cost

Abnormal cost an unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.

## 6.8.10 Avoidable Costs

Avoidable costs are those cost which, under given conditions of performance efficiency, shall not have been incurred. Avoidable costs are logically associated with some activity or situation and are ascertained by the difference of actual cost with the happening of the situation and the normal cost.

#### 6.8.11 Unavoidable Costs

Unavoidable costs are inescapable costs which are essentially to be incurred, within the limits or norms provided for.

## 6.9 **By nature of production Process**

Costs under this classification are categorized as follows:

- (a) Batch Cost.
- (b) Process Cost.
- (c) Operation Cost.
- (d) Contract Cost

#### 6.9.1 Batch Cost

Batch cost is the cost associated with a batch of similar articles which maintain their identity throughout the production but is not traceable to an individual item within the batch. The unit cost of the batch of goods can be calculated by dividing batch cost by the number of units produced in that batch.

## 6.9.2 Process Cost

Process cost is a method of costing something that is manufactured from a series of continuous processes, where the total costs of those processes are divided by the number of units produced.

#### 6.9.3 **Operation Cost**

Operation cost is the cost of a specific operation involved in a production process or business activity. When there are distinctly separate operations involved in a process, cost for each operation is found out for effective control mechanism.

#### 6.9.4 **Contract Cost**

Contract cost is a form of specific order costing in which costs are attributed to individual contracts.

#### 6.10 **Classification by Time**

A cost item related to a specific period of time and cost can be classified as follows:-

- (a) Historical
- (b) Pre-determined
- (c) Standard
- (d) Estimated

#### 6.10.1 Historical Cost

Historical cost are the actual costs of acquiring assets or producing goods or services. These are costs ascertained after they have been incurred and they represent the cost of actual operational performance.

#### 6.10.2 Pre-determined Cost

The pre-determined cost for a product is computed in advance of production on the basis of a specification of all the factors affecting cost and cost data. Pre-determined costs may be either standard or estimated.

## 6.10.3 Standard Cost

Standard cost is a predetermined norm applied as a scale of reference for assessing actual cost, whether these are more or less. The standard cost serves as a basis of cost control and as a measure of productive efficiency when ultimately posed with an actual cost. It provides management with a medium by which the effectiveness of current results is measured and responsibility of deviation placed. Standard costs are used to compare the actual costs with the standard cost with a view to determine the variances, if any, and analyse the causes of variances and take proper measure to control them.

## 6.10.4 Estimated Cost

Estimated cost of a product is prepared in advance prior to the performance of operations or even before the acceptance of sale orders. Estimated cost is found with specific reference to product in question, and activity level. It has no link with actual and hence it is assumed to be less accurate than the standard cost.

## 7 Presentation and Disclosure

- **7.1** The classification of cost item shall be done on the "Basis of classification" chosen with predetermined objective.
- **7.2** The classification of cost item shall be followed consistently from one period to next and preparation of cost statements shall be made with reference to a period of time.
- **7.3** A change in classification shall be made only if it is required by law or for compliance with a cost accounting standard or if the change would result in a more appropriate preparation or presentation of cost statements.
- **7.4** Any change in classification of cost which has a material effect on the cost of the product shall be disclosed in the notes to the cost statements. Where the effect of such change is not ascertainable, the fact shall be indicated in the cost statement.

#### Annexure-1

Analysis of Total Operating Cost

Direct Material Cost	+	Direct Labour Cost	+	Other Direct Costs	=	Prime Cost
					1	+
Indirect Material		Indirect Labour		Other Indirect Costs		
Factory Supplies		Supervision		Rent		Factory Overhead
Lubricants		Superintendence		Insurance		
		Inspection		Property Tax		
		Factory Clerks Salaries		Depreciation		
	+	Defective Work	+	Maintenance & Repair	=	
		Experimental Work		Power Light		
				Heat	-	
				Employer Payroll Taxes		
				Misc Overhead		
				Small Tools		
					_	= Cost of Manufacturing +
Marketing		Administrative		Distribution	7	Cost of Manufacturing
Cost		Cost		Cost		Cost of Manufacturing
Cost Sales Salaries		Cost Admin Staff Salaries		<b>Cost</b> Distribution Staff Salaries		Cost of Manufacturing
Cost Sales Salaries Sales Staff Commission		Cost Admin Staff Salaries Employer Payroll Taxes		Cost Distribution Staff Salaries Secondary Packaging	_	Cost of Manufacturing
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes		Cost Admin Staff Salaries Employer Payroll Taxes Rent		<b>Cost</b> Distribution Staff Salaries	-	Cost of Manufacturing
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising		Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation		Cost Distribution Staff Salaries Secondary Packaging	-	Cost of Manufacturing
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples		Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation Property Tax		Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples Entertainment		Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation Property Tax Auditing Expenses		Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples Entertainment Travel Expenses		Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation Property Tax Auditing Expenses Legal Expenses		Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing +
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples Entertainment Travel Expenses Rent	+	Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation Property Tax Auditing Expenses Legal Expenses Uncollectable Accounts	 	Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing + Commercial
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples Entertainment Travel Expenses Rent Depreciation	+	CostAdmin Staff SalariesEmployer Payroll TaxesRentDepreciationProperty TaxAuditing ExpensesLegal ExpensesUncollectable AccountsTelephone & Telegraph	 	Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing + Commercial
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples Entertainment Travel Expenses Rent Depreciation Property Tax	+	Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation Property Tax Auditing Expenses Legal Expenses Uncollectable Accounts Telephone & Telegraph Stationery & Printing		Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing + Commercial
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples Entertainment Travel Expenses Rent Depreciation Property Tax Telephone & Telegraph	+	Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation Property Tax Auditing Expenses Legal Expenses Uncollectable Accounts Telephone & Telegraph Stationery & Printing Postage	+	Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing + Commercial
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples Entertainment Travel Expenses Rent Depreciation Property Tax Telephone & Telegraph Stationery & Printing	+	Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation Property Tax Auditing Expenses Legal Expenses Uncollectable Accounts Telephone & Telegraph Stationery & Printing		Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing + Commercial
Cost Sales Salaries Sales Staff Commission Employer Payroll Taxes Advertising Samples Entertainment Travel Expenses Rent Depreciation Property Tax Telephone & Telegraph	+	Cost Admin Staff Salaries Employer Payroll Taxes Rent Depreciation Property Tax Auditing Expenses Legal Expenses Uncollectable Accounts Telephone & Telegraph Stationery & Printing Postage	+	Cost Distribution Staff Salaries Secondary Packaging		Cost of Manufacturing + Commercial

Total Cost to make and sell

# CAS - 23- DETERMINANTS OF VARIOUS CAPACITY LEVELS

# 1. Introduction

1.1 Capacity is that fixed amount of plant & machinery along with the number of personnel combined with critical factors of production like power etc. with which management has committed itself to carry out the business. Thus, capacity of a reporting unit is its limiting capability to produce an output over a period of time. Most of the fixed overheads are associated with the level of capacity installed by an organization. The concept of capacity is utilized for setting sales price, controlling cost, preparation of budgets, overhead application rates, determining the standard cost of each product, production planning, inventory valuation and measurement of effects of changes in volume of production. Better utilization of capacity means better utilization of resources. It is an important consideration for cost determination and cost reduction. Therefore, it is essential to establish, understand and manage capacity of the reporting unit effectively.

# 2. Objectives

- 2.1. The standard prescribes the methods of determination of various types of capacities, their uniform and consistent application by the reporting units.
- 2.2. It shall help the management to identify the bottlenecks, imbalances and idle capacity for effective use of various resources.
- 2.3. The standard shall help in proper allocation, apportionment and absorption of cost.

# 3. Scope

- 3.1. The standard shall be followed for capacity determination required to be carried out for any purpose or under provisions of any act, rule or regulation except where prescribed otherwise by law.
- 3.2. The standard shall be followed for maintaining cost records under the Companies (Audit of the Cost Accounts) Rules, 1998 or the Special /General Orders/SROs on Cost Account Orders issued by Securities and Exchange Commission of Pakistan from time to time for furnishing information on capacity utilization to the regulator.
- 3.3. The standard is to help in proper allocation, apportionment and absorption of cost.

# 4. Definitions

## 4.1 **Abnormal Idle Capacity**

Abnormal idle capacity is the difference between practical capacity and the normal capacity or actual capacity, whichever is higher.

Abnormal Idle Capacity = Practical Capacity – {(Normal Capacity or Actual Capacity) whichever is higher} Example is illustrated at Annexure "A".

## 4.2 Actual Capacity Utilization

Actual capacity utilization is the volume of production achieved in relation to installed capacity.

## 4.3 **Excess Capacity**

Excess capacity is the results either from greater productive capacity than organization could ever hope to use, or form an imbalance in equipment or machinery. This imbalance involves the excess capacity of one machine in contrast with the output of other machines. Any expense arising from excess capacity shall be excluded from the factory overhead rate and from the product cost. The expense shall be treated as a deduction in the income statement.

## 4.4 Idle Capacity

Idle capacity is a results from the temporary idleness of production facilities due to internal and external factors. As these factors are removed, the production capacity restores to normal capacity. Its cost is usually part of the total expense used in setting up the overhead rate and is a part of the product cost.

#### 4.5 Licensed Capacity

Licenced capacity is the production capacity of the plant for which license has been issued by Government /concerned authority.

## 4.6 **Normal Capacity**

Normal capacity is the production achieved or achievable on an average over a longer period of time to level out seasonal or cyclical variations. This is the most widely used concept of capacity. In determining normal capacity, physical plant capacity and sales potential must be considered together.

Normal Capacity = Installed Capacity – Capacity loss (Internal & External factors); or Normal Capacity = Practical Capacity – Capacity loss by External factors

## 4.7 **Practical Capacity**

Practical capacity is the theoretical capacity adjusted for allowances for unavoidable interruptions such as time lost for repairs, inefficiencies, breakdowns, setups, failures, unsatisfactory materials, delays in material supplies, holidays, vacations, stock taking

and pattern and model changes. In short, reduction in capacity is only due to internal influences results in practical capacity.

## 4.8 **Theoretical or Installed Capacity**

Theoretical or installed capacity is the maximum productive capacity according to the manufacturer's specification of machines / equipment. It is the capacity to produce at 100 percent of its rated capacity without any interruption.

# 5. Determination of Installed Capacity

- 5.1. Installed capacity of a reporting unit is determined on the following factors:
  - (a) Manufacturer's technical specifications.
  - (b) Capacities of individual or interrelated production centers.
  - (c) Operational constraints / capacity of critical machines.
  - (d) Number of shifts.
  - (e) Any other factor.
- 5.2. In case, manufacturer's technical specifications are not available, the estimates by technical experts on capacity under ideal conditions may be considered for determination of installed capacity.
- 5.3. In case a product passes through different production processes and each process is having different capacity then the process which brings control or core process shall be considered for deciding installed capacity.

# 6. Determination of Normal Capacity

- 6.1. Normal capacity is determined based on the average productive capacity achieved over a period of three normal years out of preceding five years.
- 6.2. This capacity is determined after adjustment of external factors with practical capacity.
- 6.3. Normal capacity of production process involved in the production of a product or the normal capacity of the plant as a whole shall be taken into account to arrive at normal capacity for a product or plant, as the case may be.
- 6.4. The periods influenced by abnormalities shall be excluded for this purpose.

#### **Explanation:**

- (a) In case the same products with different specifications and of different ranges in terms of size, type, variety etc. are manufactured, then there is a need to determine equivalence among them in order to determine the capacity.
- (b) In case some intermediate products / components etc. are also produced, they shall be taken into consideration for determining equivalent capacity.

(c) In case some machines are leased out/let out or some machines are taken on lease, resulting decrease / increase in capacity shall also be considered.

# 7. Disclosure

- 7.1. The details of basis for arriving at the capacity, variables used and assumptions made shall be disclosed.
- 7.2. Any change in the installed capacity due to modifications in the machines/equipment or addition of balancing equipment or disposal or impairment of machines/ equipment shall be disclosed.
- 7.3. The licensed capacity and installed capacity shall be disclosed in absolute term of production.
- 7.4. The normal capacity and actual capacity utilized shall also be disclosed in absolute term as well as in percentage of installed capacity.
- 7.5. In case the same products are manufactured with different specifications and of different ranges in terms of size, type, variety etc., there is a need to disclose capacity in terms of equivalent units.
- 7.6. Idle capacity during the period shall be disclosed along with the reasons.
- 7.7. Any excess capacity shall also be disclosed in absolute terms and in percentage with reasons.
- 7.8. In case of any deviation from normal capacity, the reasons for the same shall be disclosed specifying controllable and uncontrollable in short term or in long term.
- 7.9. Comparison of actual capacity utilized and the installed capacity shall be disclose along with such comparison with last year.

# Annexure "A"

CASE 1							
Statement	Units	Remarks					
Theoretical / Installed Capacity	100,000						
Practical Capacity	80,000	(Theoretical – Internal Factors)					
Normal Capacity	75,000	(Practical – External Factors)					
Actual Capacity	60,000						
Idle Capacity	40,000	(Theoretical – Actual)					
Abnormal Idle Capacity	5,000	(Practical – Actual or Normal,					
		Whichever is high)					
In this case the normal capacity is higher than the actual capacity.							

CASE 2						
Statement	Units	Remarks				
Theoretical / Installed Capacity	100,000					
Practical Capacity	80,000	(Theoretical – Internal Factors)				
Normal Capacity	75 <i>,</i> 000	(Practical – External Factors)				
Actual Capacity	78,000					
Idle Capacity	40,000	(Theoretical – Actual)				
Abnormal Idle Capacity	2,000	(Practical – Actual or Normal,				
		Whichever is high)				
In this case the normal capacity is more than the normal capacity.						

# DISCLAIMER

Cost Accounting Standards have been prepared in order to bring uniformity in preparation and presentation of cost statements. The objective and scope of this book is to provide guidance to the Cost and Management Accountants. The compilation of the book has been done with extreme care and due diligence.

ICMA Pakistan shall not be responsible for any loss or damage caused to any person on account of errors and omission, which might have crept in. The content of the book does not bind ICMA Pakistan in any legal or other form.