

## **COST ACCOUNTING STANDARD ON COST OF PRODUCTION FOR CAPTIVE CONSUMPTION**

The following is the text of the COST ACCOUNTING STANDARD 4 (CAS-4) issued by the Council of the Institute of Cost and Works Accountants of India on “Cost of Production for Captive Consumption”. The standard deals with determination of cost of production for captive consumption. In this Standard, the standard portions have been set in bold italic type. These should be read in the context of the background material which has been set in normal type.

### **1. Introduction**

The Cost Accounting principle for determination of cost of production is well established. Similarly, rules for levy of excise duty on goods used for captive consumption are also well defined. Captive Consumption means the consumption of goods manufactured by one division and consumed by another division(s) of the same organization or related undertaking for manufacturing another product(s). Liability of excise duty arises as soon as the goods covered under excise duty are manufactured but excise duty is collected at the time of removal or clearance from the place of manufacture even if such removal does not amount to sale. Assessable value of goods used for captive consumption is based on cost of production. According to the Central Excise Valuation (Determination of Price of Excisable Goods) Rules 2000, the assessable value of goods used for captive consumption is 115% of cost of production of such goods, and as may be prescribed by the Government from time to time.

### **2. Objective**

- 2.1 The purpose of this standard is to bring uniformity in the principles and methods used for determining the cost of production of excisable goods used for captive consumption.
- 2.2 The cost statement prepared based on standard will be used for determination of assessable value of excisable goods used for captive consumption.
- 2.3 The standard and its disclosure requirement will provide better transparency in the valuation of excisable goods used for captive consumption.

### **3. Scope**

- 3.1 The standard is to be followed for determining the cost of production to arrive at an assessable value of excisable goods used for captive consumption.
- 3.2 Cost of production will include various cost components. They are already defined in Cost Accounting Standard-1 (‘ Classification of Cost’ – CAS-1). Thus, this standard has to be read in conjunction with CAS-1.

#### **4. Definitions**

- 4.1 Cost of Production :** *Cost of production shall consist of Material Consumed, Direct Wages and Salaries, Direct Expenses, Works Overheads, Quality Control cost, Research and Development Cost , Packing cost, Administrative Overheads relating to production. To arrive at cost of production of goods dispatched for captive consumption, adjustment for Stock of work-in-Process, finished goods, recoveries for sales of scrap, wastage etc shall be made.*
- 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** *is the production achieved or achievable on an average over a period or season under normal circumstances taking into account the loss of capacity resulting from planned maintenance. (CAS-2)*

#### **5. Determination of Cost of Production for Captive Consumption**

To determine the cost of production for captive consumption, calculations of different cost components and adjustments are explained below :

##### **5.1 Material Consumed**

*Material Consumed shall include materials directly identified for production of goods such as :*

- (a) indigenous materials*
- (b) imported materials*
- (c) bought out items*
- (d) self manufactured items*
- (e) process materials and other items*

*Cost of material consumed shall consist of cost of material, duties and taxes, freight inwards, insurance, and other expenditure directly attributable to procurement. Trade discount, rebates and other similar items will be deducted for determining the cost of materials. Cenvat credit, credit for countervailing customs duty, Sales Tax set off, VAT, duty draw back and other similar duties subsequently recovered/ recoverable by the enterprise shall also be deducted.*

##### **5.2 Direct wages and salaries**

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

Direct wages and salaries include fringe benefits such as :

- (i) Contribution to provident fund and ESIS
- (ii) Bonus/ ex-gratia payment to employees
- (iii) Provision for retirement benefits such as gratuity and superannuation
- (iv) Medical benefits
- (v) Subsidised food
- (vi) Leave with pay and holiday payment

- (vii) Leave encashment
- (viii) Other allowances such as children's education allowance, conveyance allowance which are payable to employees in the normal course of business etc.

### **5.3 Direct Expenses**

*Direct expenses are the expenses other than direct material cost and direct employees costs which can be identified with the product.*

Direct expenses include :

- (i) Cost of utilities such as fuel, power, water, steam etc
- (i) Royalty based on production
- (ii) Technical Assistance / know-how fees
- (iii) Amortized cost of moulds, patterns, patents etc
- (iv) Job charges
- (v) Hire charges for tools and equipment
- (vi) Charges for a particular product designing etc.

### **5.4 Works Overheads**

*Works overheads are the indirect costs incurred in the production process.*

Works overheads include the following expenses:

- (i) Consumable stores and spares
- (ii) Depreciation of plant and machinery, factory building etc
- (iii) Lease rent of production assets
- (iv) Repair and maintenance of plant and machinery, factory building etc
- (v) Indirect employees cost connected with production activities
- (vi) Drawing and Designing department cost.
- (vii) Insurance of plant and machinery, factory building, stock of raw material & WIP etc
- (viii) Amortized cost of jigs, fixtures, tooling etc
- (ix) Service department cost such as Tool Room, Engineering & Maintenance, Pollution Control etc

### **5.5 Quality Control Cost**

*The quality control cost is the expenses incurred relating to quality control activities for adhering to quality standard. These expenses shall include salaries & wages relating to employees engaged in quality control activity and other related expenses.*

## 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 Overheads

*Administrative overheads needs to be analysed in relation to production activities and other activities. Administrative overheads in relation to production activities shall be included in the cost of production. Administrative overheads in relation to activities other than manufacturing activities e.g. marketing, projects management, corporate office expenses etc. shall be excluded from the cost of production.*

## 5.8 Packing Cost

*If product is transferred/dispached duly packed for captive consumption, cost of such packing shall be included.*

*Packing cost includes both cost of primary and secondary packing required for transfer/dispach of the goods used for captive consumption.*

## 5.9 Absorption of overheads

*Overheads shall be analysed into variable overheads and fixed overheads.*

Variable Overheads are the items which change with the change in volume of production, such as cost of utilities etc.

Fixed overheads are the items whose value do not change with the change in volume of production such as salaries, rent etc.

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

*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-progress and finished goods

**Stock of work-in-progress 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 despatched.**

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 figures 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. In case 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 realisable 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 basis may be adopted. For example, in case of petroleum products, each product is assigned certain value based on its certain properties, may be 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.

#### **Illustration**

A production process has three stages.

<u>Stage</u>	<u>Input material cost</u> ( Rs/ MT)	<u>Processing cost</u> ( Rs/MT)	<u>Total</u> ( Rs/MT)
1	2000	500	2500
2	2500	1000	3500
3	3500	1000	4500

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 @ Rs ( 2500 – 200 ) i.e Rs 2300. 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.

### 5.13 Miscellaneous Income

**Miscellaneous income relating to production shall be adjusted in the calculation of cost of production, for example, income from sale of empty containers used for despatch of the captively consumed goods produced under reference.**

### 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, Dies & Patterns etc received free of cost**

*The amortization cost of such items shall be included in the cost of production.*

**5.16 Interest and financial charges**

*Interest and financial charges being a financial charge 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 of events, such as heavy break down of plants, accident, market condition restricting sales below normal level, abnormal idle capacity, abnormal process loss, abnormal scrap and wastage, payments like VRS, retrenchment compensation, lay-off wages etc. The abnormal cost shall not form the part of cost of production.*

**6. Cost Sheet**

The cost sheet should be prepared in the format as per Appendix – 1 or as near thereto as possible. The manufacturer will 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. For manufacturers covered under the ambit of Section 209(1)(d) of the Companies Act, 1956, i.e., where Cost Accounting Records are statutorily required to be maintained, the Cost Accountant certifying the cost of production for captive consumption shall verify the correctness of the cost from these records. However, for manufacturers not covered under Section 209(1)(d) of the Companies Act, 1956, it is desirable that they also maintain cost accounting records in line with the records so prescribed as to facilitate determination and certification of cost of production.

**7. Disclosure**

- (i) 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.*
- (ii) If opening stock and closing stock of work -in-progress and finished goods are not readily available for certification purpose, the same should be disclosed.*

Name of the Manufacturer :  
 Address of the Manufacturer :  
 Registration No of Manufacturer :  
 Description of product captively consumed:  
 Excise Tariff Heading :

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

		Qty	
Q1	Quantity Produced (Unit of Measure)		
Q2	Quantity Despatched (Unit of Measure)		
	Particulars	Total Cost (Rs)	Cost/unit (Rs)
1.	Material Consumed		
2.	Direct Wages and Salaries		
3.	Direct Expenses		
4.	Works Overheads		
5.	Quality Control Cost		
6.	Research & Development Cost		
7.	Administrative Overheads (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: Amortised 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 despatched ( 17 + 18 - 19)		

Seal & Signature of Company's Authorised Representative

*I/We, have verified above data on test check basis with reference to the books of account, cost accounting records and other records. Based on the information and explanations given to me/us, and on the basis of generally accepted cost accounting principles and practices followed by the industry, I/We certify that the above cost data reflect true and fair view of the cost of production.*

Date :  
Place :

Seal & Signature of Cost Accountant  
Membership No.

