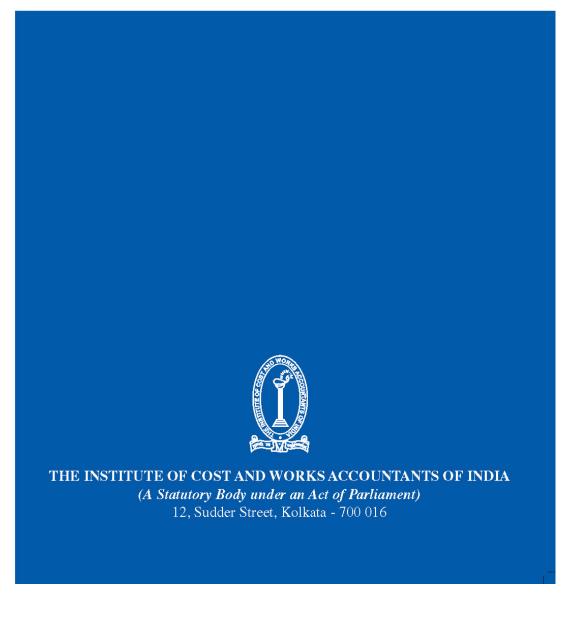
GUIDANCE NOTE

1_

ON

COST OF PRODUCTION FOR CAPTIVE CONSUMPTION (UNDER RULE 8 OF THE CENTRAL EXCISE VALUATION (DETERMINATION OF PRICE OF EXCISABLE GOODS) RULES, 2000)





GUIDANCE NOTE

ON

COST OF PRODUCTION FOR CAPTIVECONSUMPTION (UNDER RULE 8 OF THE CENTRAL EXCISE VALUATION (DETERMINATION OF PRICE OF EXCISABLE GOODS) RULES, 2000)



ISSUED BY

THE INSTITUTE OF COST AND WORKSACCOUNTANTS OF INDIA

(A Statutory Body under an Act of Parliament) 12, Sudder Street, Kolkata - 700 016 Delhi Office: ICWAI Bhawan, 3, Institutional Area, Lodi Road, New Delhi-110003



First Edition: January, 2009

© The Institute of Cost and Works Accountants of India

Price: Rs. 200/-

Published by:

The President ICWAI 12, Sudder Street Kolkata-700 016 Telephone : 91-33-22521031/34/35 Fax : 91-33-22527993



FOREWORD

The Valuation of Captive Consumption under Rule 8 of the Central Excise Valuation (Determination of Price of Excisable Goods) Rules 2000 for discharge of excise duty liability is an area where Cost Accountants have been rendering their services to the industry. The present guidance note brought out by the Institute should address the need of the practitioners in the field to have an authoritative guidance on the various issues involved in the valuation process. The guidance note covers various aspects of captive consumption, viz. cases where goods produced are consumed entirely for captive consumption, goods produced are partly sold and partly used for captive consumption, and if sale is to a related person. The guidance note takes into consideration the methodology as prescribed by the Cost Accounting Standard -4 issued by the Institute and is supplemented with relevant circulars and a decided case.

I am sure that this publication can be used as 'authoritative guidance note' from the Institute to be followed by the Cost Accounting professionals and the Industry while discharging their duties effectively.

I would like to place on record the valuable guidance and support of the members of the Professional Development Committee of the Institute and in particular Shri Rakesh Singh and Shri V.R. Kedia (Both ex-CCMs of the Institute) for their contribution in getting this Guidance Note. I would also place on record my sincere thanks to Shri B. M. Sharma, Chairman PD Committee and all my council colleagues for their valuable suggestions.

I sincerely hope that this Guidance Note will serve its objective of guiding the members in practice as well as in service.

Kunal Banerjee President

January, 2009 Kolkata



PREFACE

The Guidance Note brought out by Professional Development Committee of ICWAI on Cost of Production for Captive Consumption under Rule 8 of the Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000 is the first one in this series of Guidance Notes on the subject.

This book provides a blueprint of the Cost of Production for Captive Consumption to be used by leading practitioners, describes concrete tools and techniques, prescribes a framework for effective implementation, and discusses the issues and challenges involved in the Valuation of Goods under the categories of Captively consumed, partly consumed captively and partly sold and in case of if sold to related person. The concepts, approaches and examples presented can be applied to different organizations based on their uniue requirements.

I would like to place on record efforts put in by Mr. Rakesh Singh and Shri V.R. Kedia (Both ex-CCMs of the Institute) in bringing out this Guidance Note by the Institute.

We are grateful to Shri Kunal Banerjee, President of ICWAI, Shri A.S. Durgaprasad, Vice-President of ICWAI, the members of Central Council and the members of the Professional Development Committee in particular who have given their valuable guidance and support in bringing out this publication.

Brijmohan Sharma Chairman (Professional Development Committee)

Junuary, 2009 Pune

iv



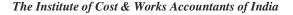
CONTENTS

Page No.

FOREWORD iii				
PREFACE iv				
1.	MEANING OF CAPTIVE CONSUMPTION	1		
2.	VALUATION IN THE CASE OF GOODS NOT SOLD BUT CAPTIVELY CONSUMED	3		
3.	VALUATION OF GOODS PARTLY CAPTIVELY CONSUMED AND PARTLY SOLD	7		
4.	VALUATION OF GOODS IF SALE TO RELATED PERSON	9		
5.	COST ACCOUNTING STANDARDS	10		
6.	GENERAL GUIDELINES	11		
7.	NOTES ON VARIOUS PARAS OF CAS-4	14		

ANNEXURES

А.	Annexure - A	44
B.	Annexure - B	57
C.	Annexure - C	59





CHAPTER – 1

MEANING OF CAPTIVE CONSUMPTION

The word 'Captive Consumption" refers to goods produced or manufactured in a factory and used within the factory in the manufacture of other goods. When goods manufactured by one division/plant are transferred to and consumed by another division/ plant of the same organization or related undertaking for manufacturing another product(s), such goods are also said to be captively consumed.

Excise duty is on manufacture of goods though it is payable at the time of removal of the goods from the factory. Liability of excise duty arises as soon as goods covered under excise duty are manufactured. However 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.

In many cases during the manufacture, certain intermediate goods also emerge. These intermediate goods are further used in manufacture of other goods and are covered in the meaning of "Captive Consumption". Sometimes the goods are not removed from the factory but are used in the further manufacture of goods in such cases also duty is payable as soon as the goods are manufactured within the factory, if not exempted. However, the goods captively used in the same factory of the manufacturer are exempted from duty as per Notification No. 67/95-CE dt.16.03.1995 viz., the manufacturer of Motor Vehicles also manufacture various parts of the Motor Vehicles like brakes, panels etc. These parts are also excisable goods and have separate entry in the schedule to Central Excise Tariff Act, 1985. If these parts are removed from the factory, duty is payable but if these parts are further used in the same factory of the manufacturer in the assembly/further manufacture of Motor Vehicles, then the use of parts and components is called as captive consumption.



Similarly, during the manufacturing process, certain by-products, waste and scrap also get generated. These may be either sold or recycled or transferred for captive consumption in other products.

By-products, Waste and scrap are incidentally automatically generated during the manufacturing process. Generation of by-products, waste and scrap is incidental to the achievement of the basic objective of producing satisfactory / acceptable products. It arises as an inevitable consequence of operation.

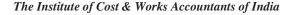
As per normally accepted cost accounting principle, the total cost of production i.e. raw material cost and conversion cost is charged to good saleable products. Therefore, no part of the cost remains to be absorbed/charged to by-product, scrap/waste.

Also, as per the existing Cost Accounting Records Rules prescribed under section 209 (1)(d) of the Companies Act, 1956 for various industries, there is no provision for calculation of cost of production for by-products, scrap and waste even if they are captively consumed.

Keeping this in view, CAS 4 has also provided for reducing the realisable value of by-product, scrap/waste while computing cost of production for captive consumption in the product cost sheet.

Therefore, cost of production for by-product, scrap and waste generated and captively consumed in the manufacture can not be meaningfully calculated as per normally accepted cost accounting principles and practices.

Excise Duty is payable if goods are dispatched for captive consumption from one factory to another factory of the same manufacturer or another registered premises of the same manufacturer.





CHAPTER - 2

VALUATION IN THE CASE OF GOODS NOT SOLD BUT CAPTIVELY CONSUMED

The provisions regarding valuation of goods captively consumed are given in Rule 8 of the Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000. The Rule specifies that 'where the goods are not sold by the assessee but are used for consumption by him or on his behalf in the production or manufacture of other articles, the value shall be 115% (110% w.e.f. 5-8-2003) of the cost of production or manufacture of such goods'. This formula provides a thumb rule for goods used for captive consumption.

On the introduction of Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000, w.e.f. 1st of July 2000, it was clarified by the Board vide Circular No.354/81/2000-TRU dated 30th June 2000, that in order to value goods which are captively consumed, the general principles of costing would be adopted for the application of Rule 8.

The Central Board of Excise and Customs thereafter interacted with the Institute of Cost and Works Accountants of India to develop costing standards for the costing of the cost of goods used for captive consumption.

The Institute of Cost and Works Accountants of India (ICWAI), since then has developed six cost accounting standards out of which three namely, CAS-2 on Capacity Determination, CAS-3 on Overheads and CAS-4 on Cost of Production for Captive Consumption, were released on 13th February, 2003 by CBEC jointly with ICWAI.

By circular No. 692/8/2003-CX, dt.13.2.2003 the Board has clarified that cost of production of captively consumed goods will henceforth



be done strictly in accordance with (Cost Accounting Standard – 4). This standard has been formulated by the Institute of Cost and Works Accountants of India and prescribes elaborate components of cost and adding of overheads also. It may therefore be appropriate for the assessee to obtain a certificate by a Cost Accountant in practice indicating the cost of production of the captively consumed goods.

Application of CAS-4 :

The relevance of CAS-4 is in cases where a manufacturer is manufacturing a product which is otherwise exempt from duty but in process of manufacture an intermediate product mentioned in the tariff, comes into existence which is dutiable. In all such cases the liability to pay duty becomes applicable. The intermediate goods which come into existence must discharge applicable duty before it gets cleared for in place in the factory / unit for the manufacture of the duty exempted final product. The value of duty in all such cases shall be on 'Cost + 10%' w.e.f 5th August, 2003. However, in cases where final product is dutiable then exemption Notification No. 67/95, dt. 16.3.1995 shall apply.

In a landmark judgment Hon'ble Supreme Court of India, observed that 'the Institute of Cost and Works Accountants of India (ICWAI) has laid down the principles of determining cost of production for captive consumption and formulated the standards for costing:CAS-4. According to CAS-4 the definition of "cost of production" is as under:

"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."

The cost accounting principles laid down by ICWAI have been recognized by the Central Board of Excise and Customs vide Circular



No.692/8/2003 CX dated 13.2.2003. The circular requires the department to determine the cost of production of captively consumed goods strictly in accordance with CAS-4.

The Tribunal in the case of BMF BELTINGS LTD. vs. CCE: 2005 (184) E.L.T. 158 (Tri. Bang.) for the period 1995 to 2000 has directed the department to apply CAS-4 for the determination of the cost of production of the captively consumed goods. In ITC vs. CCE (190) ELT 119 the Tribunal held that the department has to calculate the cost of production in terms of CAS-4. Other decisions of the Tribunal, wherein it has directed that CAS-4 be applied for determination of the cost of production, are Teja Engineering v/s CCE 2006 (193) ELT 100 (Tri-Chennai), Ashima Denims v/s CCE 2005 (191) ELT 318 (Tri-Mumbai), and Arti Industries vs. CCE 2005 (186) ELT 208 (Tri-Chennai). It is therefore a consistent view taken by the Tribunal. The department has not filed any appeal in these cases and accepted the legal position. Apart from this, in the light of several decisions of this Court, the Department is also bound by the said circular No.692/8/ 2003 CX dated 13.2.2003 issued by the CBEC. As such it cannot now take a contrary stand.

The observations made by the Supreme court is consistent with the views expressed by the tribunals that though CAS-4 was issued on 13.2.2003, cases pending finalization for the period earlier to this, may be considered in line with costing principles laid down in CAS-4, issued by the Institute of Cost and Works Accountants of India.

Assessments finalized prior to 13[#]February, 2003 not to be opened:

A clarification was issued by the Chief Commissioner, Chennai, Zone stating that cases which have been finalized prior to 13.2.2003 should not be opened for application of CAS-4. The extracts of the letter is being reproduced below :

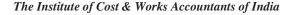


'Copy of letter C.No. IV/16/92/2003-Cx.Pol dated 05.09.2003 of this office.

Please refer to the Board's circular No. 692/8/2003-CX-I (F.No. 6/29/2002-CX-I) dated 13.02.2003 communicating acceptance of cost Accounting Standard-4 (CAS-4) for the purpose of valuation of the excisable goods which are captively consumed under Rule 8 of Central Excise Valuation (Determination of price of Excisable goods) Rules, 2000.

The field formations have raised certain doubts as to whether the above said CAS-4 could be applied to all pending assessments. It is observed from the above cited circular of the Board that the principles of CAS costing are to be adopted w.e.f, 13.2.2003 and therefore the assessments pending finalization on 13.02.2003 will also be covered under CAS 4. Assessments already finalized prior to 13.02.2003 on the basis of Board's Circular 258/92/96 CX dated 30.10.96 are not required to be reopened. The field officers in this Commissionerates have been advised accordingly. Kindly confirm.'

Therefore it shall be fair to say that in view of the above circular and decision of the Hon'ble Supreme Court of India, application of Cost Accounting Standard-4 or CAS-4, is on all cases whether before or after 13^aFebruary,2003 except where cases have been finalized prior to 13.2.2003.





CHAPTER – 3

VALUATION OF GOODS PARTLY CAPTIVELY CONSUMED AND PARTLY SOLD

Where the goods to be valued are captively consumed in one's own factory, valuation will be done on the basis of 110% of the cost of production of goods. If the goods are partially sold by the assessee and partly captively consumed, the goods sold would be assessed on the basis of transaction value under section 4A and the goods captively consumed would be valued under rule 8 i.e.110% of the cost production of goods, states the board circular no.643/32/2002-CE dt. 1-7-2002. This valuation is for the purpose of duty clearance and should not be construed as the cost of production. The percentage mentioned can be changed by notification by the authorities.

Where the goods are transferred to a sister unit or another unit of the same company, valuation would be done as per the proviso to Rule 9. This is confirmed by the Board's circular dt. 1-7-2002 (supra).

There can be situations where an assessee may manufacture an intermediate product (which is excisable) which requires to be processed or used for further production in another unit of the same manufacturer located at a different place. In such a situation also, the principle of rule 8 has to be followed and accordingly cost of production plus 10% thereof must be adopted as the basis of arriving at the assessable value. This is because the use by the unit of the same manufacturer has to be regarded as use on his behalf as contemplated under rule 8.

There could be situations where a manufacturer may clear an intermediate product which is an excisable good to a job worker who



is an independent contractor for further processing and return. In such cases, if manufacturer follows the job work procedure as prescribed in the Cenvat Credit Rules, 2004 he may not be called upon to pay any duty at the time of clearing the intermediate product to the job worker provided the job worked items are returned to the factory of the manufacturer within 180 days and that the job worked item is either further used in manufacture by the manufacturer or cleared on payment of duty by the manufacturer. In other words, manufacturer of intermediate products clearing the goods on job work under challan procedure in terms of Cenvat Credit Rules, 2004 need not pay any duty at the time of clearance to the job worker.

In a situation where the manufacturer receives input and avails credit on the same. Thereafter he may like to remove the goods as such to another of his units. The relevance of application of rule 8 and charging of 10% in such cases is not relevant since there is no manufacture which has taken place. The Board has by circular No.643/34/2002/ CE dt. 1-7-2002 clarified that reversal of Cenvat Credit taken itself, is sufficient.



CHAPTER - 4 VALUATION OF GOODS IF SALE TO RELATED PERSON

Further, Rule 9 of the Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000 specifies that the goods can be sold to related persons for two purposes, one for onward sale when the related person is dealer distributor of the assessee and secondly the related person buys goods from the assessee for consumption in the production or manufacture of articles. Whenever the related person does not sell the goods but uses or consumes such goods in the production or manufacture of the articles, the value shall be determined in the manner specified in rule 8.



CHAPTER - 5

COST ACCOUNTING STANDARDS

In view of the above and the need to bring in uniformity in the principles and methods used for determining the cost of production of excisable goods used for captive consumption, the Institute of Cost and Works Accountants of India has prescribed the Cost Accounting Standard 4 (CAS-4). The said Standard specifies the method of calculation of cost of production for captive consumption. This standard also aims at bringing in uniformity and transparency in the valuation of excisable goods.

The Central Board of Excise & Customs has recognized the importance of CAS-4 vide circular No. 692/08/2003-CX dt. 13.02.2003 (File No. 6/29/2002-CX.I), which states that calculation of cost of production of captively consumed goods will henceforth be done strictly in accordance with CAS-4 issued by the Institute of Cost and Works Accountants of India.

The CAS-4 refers to Cost Accounting Standard 1, 2 and 3 also. Therefore, CAS-4 has to be read and used in conjunction with CAS 1, CAS 2 and CAS 3.

Following are the Cost Accounting Standards (CAS) published by the Institute of Cost and Works Accountants of India:

- CAS-1 : Classification of Cost.
- CAS-2 : Capacity Determination.
- CAS-3 : Overheads.
- CAS-4 : Cost of Production for Captive Consumption
- CAS-5 : Determination of Average (Equalised) Cost of Transportation.
- CAS-7 : Material Cost

CHAPTER – 6 GENERAL GUIDELINES

In order to calculate the cost of production for captive consumption under Rule 8 of the Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000, it is necessary to understand that the method and accuracy of cost computation will be determined and impacted by the following factors :

- 1. The CAS 4 is applicable to the manufacturers who are registered under Central Excise, irrespective of the constitution of the organization. It does not make any difference whether the manufacturer falls in the category of proprietorship, partnership, co-operative sector, company etc.
- 2. Whether the product is covered under the Cost Accounting Records Rules issued in pursuant to Sec 209(1)(d) of the Companies Act, 1956?

If the product is already covered under Cost Accounting Records Rules, the systems required for cost calculation would be in place and the relevant information will be readily available for such calculations .In case Sec 209(1) (d) of the Companies Act, 1956 is not applicable, it is suggested that the assessee may maintain the costing records as per the generally accepted costing principles.

- 3. The method of valuation of issues followed by the assessee be either lot-wise actual, FIFO or Weighted Average to determine the consumption rates of various input materials and the cost of materials consumed.
- 4. The level of compliance of Cost Accounting Standards: The principles stated in Cost Accounting Standards, are applicable for all Industries and the level of its compliance determines the adequacy of the costing system in the organization which in turn determines the accuracy of product cost calculation for captive consumption.



- 5. The material receipts should 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 or to be credited by the taxing authorities) that can be quantified with reasonable accuracy at the time of acquisition.
- 6. In case raw material is imported through advance license / DEPB or under any other scheme and used for manufacture of goods for captive consumption, adjustment for import duty has to be made to bring the raw material cost to the level of duty paid import. However, Duty Drawback refund/benefit shall not be reduced from the input cost.

Other export benefits such as DEPB, DFRC, and DEEC will not be deducted for calculation of cost of production.

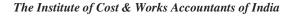
- 7. Finance costs incurred in connection with the acquisition of materials (E.g. LC Charges/ Bank Charges on purchases, cash discount on purchases) shall not form part of material cost.
- 8. Periodicity of Certificates and basis for calculation of cost of production under CAS-4 :

The basic purpose of CAS-4 is to calculate deemed transaction value of the goods captively consumed in the same unit or transferred to the other unit of the same manufacturer. The valuation (assessable value) is required at the time of removal of the goods.

Normally the costing will be for the future dispatches/period. It could be either for the existing product or in respect of a new product yet to be manufactured.

In case of costing for the existing product, it will be worked out based on the actual cost for the previous quarter.

In case of costing for a new product, it will be calculated at projected cost, keeping in view projected normalized production and other cost parameters.





The frequency of revising the certificate of cost of production will depend upon the significance in the changes in the cost due to various factors like input cost fluctuations, changes in the employee cost and other expenses.

Valuation of opening stock and closing stock of WIP and Finished goods need not be considered in the above referred situations.

In cases where goods are cleared based on the cost of production worked out as per the audited accounts of the previous audited period, it is advisable to prepare a fresh certificate of cost of production based on the audited accounts of the period for which the goods are cleared and the differential duty is paid or taken credit of as the case may be.

In the circumstances mentioned in the above para, it is advisable to compute the actual material cost as per the issue valuation adopted by the assessee for material issues.

If the actual cost of production is to be worked out after the close of the year, then due consideration should be given to opening and closing stock of WIP and Finished goods.

- 9. In case of multi-locational units, the cost of production should be worked out separately for each unit taking into consideration material cost and overheads of the respective unit.
- 10. In case the assessee is manufacturing different varieties, sizes, etc. of goods, then cost of production for each of the variety/size should be worked out separately.
- 11. If duty is paid on intermediate products and final product is exempted, then at the year end actual costing should be worked out and differential duty to be recovered / refunded.
- 12. It is advisable for the assessee to obtain certificate from cost accountant before the removal of the goods.
- 13. Companies following standard costing system should adjust the variances to the various products as per normally accepted cost accounting principles for calculation of product wise actual cost.



CHAPTER – 7

NOTES ON VARIOUS PARAS OF COST ACCOUNTING STANDARD-4

(Para numbers given below are as per CAS-4. 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. Guidelines have been given under "**Notes**" in each para.)

2. Objective

- 2.1 The purpose of this standard is to bring uniformity in the principles and methods used in 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.

Notes : The situations in which CAS-4 can be used:



- Cost of production for captive consumption.
- Goods manufactured and transferred to project/sites for further work, e.g.. Erection, construction, etc.
- Job Work/Loan License production
- Principal to Principal manufacture in pharma and other industries
- Free gifts for distribution as sales promotion, if sale price is not available.
- Goods to be transferred to other units for further use in the manufacture of goods for export (even though excise duty is not payable).
- Transfer/sale to related party/undertaking for captive consumption.
- 3.2 Cost of production will include various cost components. They are already defined in Cost Accounting Standard-1 (Classification of Costs 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.

Note: This definition deals with the elements of cost and income to be considered while calculating the cost of production for captively consumed goods.

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).

Note: This definition specifies the scope for application of CAS-4 which has also been explained in para 3.1 above.

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)

Note : This definition deals with the method of determining the normal capacity for absorption of fixed production overheads. (para 5.9)

CAS-2 defines practical or achievable capacity as "the maximum productive capacity of a plant reduced by the predictable and unavoidable factors of interruption pertaining to internal causes".

Thus, practical capacity is installed capacity minus the inevitable interruptions due to time lost for preventive maintenance, repairs, set ups, normal delays, weekly off days and holidays etc. Practical capacity does not consider external factors causing reduction in production e.g. lack of orders.



In other words, normal capacity is the installed capacity less all allowances for known unavoidable interruptions. In practice, practical capacity and normal capacity will be same.

5. Determination of cost of production for captive consumption :

To determine the cost of production for captive consumption, calculation 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.

Notes: Material cost consists of – Raw Material, process material, colours and chemicals and packing materials.





Further, material can be also classified as direct material and indirect material. While direct material is a part of Material cost, Indirect material can be allocated to the cost centres or to the product.

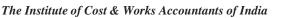
Raw material shall include – indigenous materials, imported materials, bought-out items and self-manufactured items.

With inventory accounting system in place, the material cost is already being arrived at, considering following two factors :

- (a) Quantity of material consumed
- (b) Unit rate of material consumed
- (a) Quantity of Material consumed: The quantity of material consumed is to be worked out from material issued from stores for such product. Such consumption in quantity may be derived by two methods. The selection of method will depend on the systems in vogue in the organization and the type of product manufactured.

Method (i) : Based on actual issues for that batch, unit or job - This method is preferred as it establishes direct relationship of actual material usage for the product.

Method (ii) : Based on any method other than actual e.g. Standard requirement - This method is to be used in case of goods, where the direct link of actual consumption for product is not available. The manufacturer using this method should certify the quantitative requirement considered for





calculation of material consumption. Documents related to Bill of Material etc. may be verified by the cost accountant for this purpose. It may be ensured that usage variance is within reasonable limit and it should be adjusted in calculation of cost of production.

(b) Unit Rate of Material Consumed : The unit rate of material consumed is determined with respect to (i) the source / type of material consumed, and (ii) the method of valuation followed for issue of goods to production.

(i) Source/type of Material Consumed :

- (a) indigenous materials
- (b) imported materials
- (c) bought out items
- (d) self manufactured items
- (e) process materials, colours & chemicals, packing materials, etc.

It is advisable that the source of material consumed is linked to actual issues of material. In case of manufacturers, using the same item of direct material from different source either due to quality difference, supplier, capacity constraints or any other reason, it is essential to have this linking as the cost of the same item may be different, if procured from different sources.



(ii) Method of valuation followed for issue of goods to production :

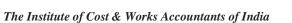
It is advisable to work out cost of material consumed by lot wise cost or First In First Out (FIFO) or weighted average method of valuation of consumption as these methods are widely accepted.

The actual consumption in value reported in the Profit and loss account is generally worked out by the following method:

		Opening stock
Add	:	Purchases
Less	:	Closing stock
		= Consumption

(a) **Indigenous Material :** The Landed Cost of indigenous material shall be calculated in the following manner.

	Basic Material cost (after deducting discounts, if any)
Add :	Excise Duty
	Sales Tax/VAT
	Turnover Tax
	Surcharge etc.
	Octroi /Entry Tax
	Other levies





Other expenses directly attributable to procurement (Freight inwards, transit insurance, etc.)

Less

: Cenvat Credit

Sales Tax/VAT Set Off

Other set offs directly attributable to the material.

(b) **Imported Material :** The landed cost of imported material shall be calculated in the following manner.

CIF value of Material

Add	:	Customs Duty
		Surcharge
		Additional Duty / Countervailing Duty
		Special Additional Duty
		Protective Duty
		Anti Dumping Duty
		Octroi / Entry Tax
		Other levies
		Other Exp. Directly attributable to
		procurement (Freight inwards, Local
		Freight, transit insurance, local insurance)
		Other charges such as Customs clearance
		etc.
Less	:	Cenvat Credit (including CVD)
		Other rebates, benefits recovered /
		recoverable etc.

21



DEPB, DEEC, DFRC and other such export benefits shall not be reduced from the raw material cost as well as from cost of production, since the cost of production is being calculated for captive consumption meant for domestic production.

Similarly, in case of duty free material consumption under import against advance license or under any other scheme (being a kind of export benefit) landed cost shall be notionally adjusted by adding import duty content and the same shall be considered on par with duty paid material.

- (c) Bought out components: Landed cost of indigenous / imported / bought out items shall be calculated on the above basis.
- (d) Self manufactured components: These will include any goods manufactured with raw material, indigenous or imported bought out material etc. by the manufacturer in the same factory for further use in manufacture of final product. For this purpose the cost of production of such self manufactured items shall be considered as material cost for the subsequent product, after considering inward freight, octroi, etc., as applicable. Intermediate products, goods transferred by another unit of the same manufacturer etc. shall be based on cost of production + 10% (i. e. CAS 4)
- (e) **Process material, colour and chemicals, packing materials:** The cost of these shall be calculated on the same lines as above. In some cases, these items may be got



manufactured on job work basis from outside parties. In such cases, cost should consist of the cost of material supplied plus job work charges/processing charges paid to the job worker/processor. The incidental charges like freight, insurance, handling charges etc, if any shall also form cost of material.

In case of certain process materials like catalysts having longer process useful life, the cost of catalyst should be spread over entire production over the process useful life.

Reconciliation :

- 1. Quantitative reconciliation Input-output reconciliation of different types of major direct materials covering at least 80% of the total cost is necessary to ensure that quantity of material considered for calculating cost of production of captively consumed product is correct.
- 2. Reconciliation of cost of material consumed It is advisable that cost of the material consumption considered for working out cost of production is reconciled with financial books.

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.

Notes: Employees cost can also be classified as direct employees cost and indirect employees cost.

As per CAS 1 Direct wages and salaries mean the cost of wages, salaries of those workers / technicians who are readily identified or linked with a production cost centre or cost object.

Indirect employee cost is an employee cost which is not directly identifiable with the product or service as explained above.

As per CAS 1 direct employee cost shall include the fringe benefits like provident fund contribution, gratuity, ESI, overtime, incentives, bonus, ex-gratia, leave encashment, wages for holidays and idle time, etc.

Wages and salaries shall include HRA, Overtime and Incentive payments



Direct wages and salaries shall also include fringe benefits such as :

- (i) Contribution to provident fund and ESIC.
- (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, etc. which are payable to employees in the normal course of business.

While Direct Wages & Salaries is shown separately in the product cost sheet, the Indirect wages and salaries will form part of overheads in the respective cost centres.

VRS payment shall be treated as abnormal cost.

5.3 Direct Expenses

Direct expenses are the expenses other than direct material cost and direct employee's costs which can be identified with the product.

Direct Expenses Include :

(i) Cost of utilities such as fuel, power, water, steam, etc

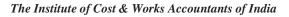
25



- (ii) Royalty based on production
- (iii) Technical Assistance/know-how fees
- (iv) Amortized cost of moulds, patterns, patents etc
- (v) Job charges
- (vi) Hire charges for tools and equipment
- (vii) Charges for a particular product designing etc.

Notes: Direct Expenses Include :

- (i) Cost of utilities such as fuel, power (purchased as well as generated), water, steam etc : The actual cost of such utilities should be charged to various products manufactured, based on its usage for different products when they are directly identifiable with a product or service or production cost centre. In other cases, the same may be treated as indirect expenses forming part of works overheads.
- (ii) Royalty based on production : If royalty payment is in respect of production of the goods captively consumed then the same should be added as the cost element. Royalty for (a) Upgrading Technology (b) Marketing and Distribution of products. For (a) Royalty will be included in cost of production, irrespective of whether paid on production basis or sales basis. For (b) Royalty will be excluded from cost of production.
- (iii) Technical Assistance/Know-how fees : Technical Assistance/know-how fees should be apportioned to products for which it is payable based on the payment/ provision for the relevant period.



- (iv) Amortized cost of moulds, dies, patterns, patents etc : The cost under this head should be apportioned to products for which such moulds, patterns, patents are used which are directly identifiable with the products, based on the useful life of the item.
- (v) **Job/Processing charges :** Job Work Charges/Processing Charges which are directly identified or linked with the products will form part of direct expenses.
- (vi) Hire charges for tools and equipment : Hire charges in respect of tools and equipments which can be readily identified with a particular product will form part of direct expenses. Hire charges for tools and equipment for general use is in the nature of indirect expenses and is to be included in works overheads.
- (vii) Charges for a particular product designing etc. : Product design charges to the extent amortized in respect of tools and equipments which can be directly identified with a particular product will form part of direct expenses.

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

Notes : The word overhead is used for a type of cost that cannot be directly allocated to a cost centre or product, but can only be apportioned to cost units. Overheads comprise of indirect materials, indirect employee costs and indirect expenses which are not directly identifiable or allocable to a cost object in an economically feasible way.

As per CAS-1, materials which are of small value and cannot be identified in or allocated to a product/service are classified as indirect material e.g., consumables, spare parts, lubricants etc.

Indirect employees cost is the cost of employees which are not directly allocable to a particular cost centre/object.

For the purpose of working out cost of production, classification of overheads according to function is necessary in order to ascertain the cost of each function.



The overheads are classified as :

- Works overheads (also known as production overheads, factory overheads or manufacturing overheads)
- (ii) Administration Overheads relating to production activity
- (iii) Administration Overheads relating to post production activity
- (iv) Research and Development overheads
- (v) Selling overheads
- (vi) Distribution overheads.

All the above items of overheads except (iii), (v) and (vi) will be part of cost of production.

Cost Accounting Standard 3, which deals with the methods of collection, allocation, apportionment of overheads to different cost centres and absorption thereof to products or services, should be followed to maintain uniformity in respect of classification and allocation of overheads.

A reconciliation statement showing the amount incurred under different heads of overheads and amount absorbed by different products used for captive consumption and for sale should be prepared by the assessee. The reconciliation will help in ensuring accuracy of cost statements.

Depreciation: The depreciation on the fixed assets shall be as per the method of depreciation followed for the purpose of financial accounts.



Depreciation on idle fixed assets shall be excluded from cost of production.

The depreciation shall not be worked out on the basis of effective life of the asset. Further, depreciation should not be calculated based on the replacement value or notional value on revaluation of the assets.

Insurance premium for various assets and risk connected with production activity should be included in works overheads. However, insurance on loss of profit policy and finished goods in transit policy should not be part of works overhead.

Lease rental on fixed asset shall be also considered under this head.

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.

Notes: Quality control cost shall include various costs related to Quality Control, Quality Assurance Department, Testing, Analysis Charges, Fees/Charges paid to IS/QS/Quality certification agencies.

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.

Notes: Research and Development cost is the cost of undertaking research to improve quality of the existing product or improve process of manufacture. The R & D cost for the existing product/ process shall be included in the cost of production. In case the company has followed a policy to treat a part of the R & D cost of existing product/process as deferred cost, such share applicable for the year/period will be included in cost of production.

R & D cost incurred for developing a new product should be excluded from calculation of cost of production.

5.7 Administrative Overheads :

Administrative overheads need to be analyzed 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.

Notes: Administrative Overheads for production may include share from :-

- Salaries of staff for administrative and other departments relating to production such as Accounts, Purchase, HRD, Production Planning.
- General office expenses like rent, lighting, rates& taxes, telephone, stationery, postage etc.



- Depreciation of office building, office equipment, furniture, vehicles, etc
- Repairs & Maintenance of office building, office equipment, furniture, vehicles, etc.
- Legal expenses in relation to factory.

The role of administration is to facilitate the manufacturing, general policy making and marketing activities. The administrative overheads shall be included in the cost of production only to the extent they are attributable to the factory.

Administrative overheads in relation to activities other than manufacturing activities e.g. marketing, selling, depot/branches etc. shall be excluded from the cost of production.

Treatment of Head Office/Corporate Office Expenses :

Many a time, in a company, expenses of Head Office are booked separately. In a multi-locational multi-product company, there are common activities which are housed in corporate house called Head Office located away from the plants or in separate location in the complex of the plant. But it may so happen that certain activities common to all plants/products like purchase, inventory management, finance, personnel, R & D, Quality Assurance, etc., may be centralized at one place i.e. Head Office and booked as head office expenses along with other exclusive activities like secretarial, project, treasury, investment, trading, etc.

It is not correct that works and administration overheads shall include the cost of such departments only if they are situated in



the factory premises.

To fulfill the requirement that all 'administrative overheads in relation to production activities shall be included in the cost of production', it is necessary to properly segregate expenses of such activities of head office and follow suitable bases for allocating to plants/products on fair and equitable basis. In other words, it is suggested to open up different functional cost centres under head office and adopt suitable bases for apportioning share of expenses of relevant functional cost centres to plants/products for inclusion in the cost of production.

Freight and forwarding charges on dispatch of goods for captive consumption :

In case goods for captive consumption are dispatched from one factory premises to another factory premises, the cost of transportation incurred by sender of the goods is to be treated as cost of transportation under Rule 5 of the Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000, hence excluded from calculation of cost of production for CAS-4.

5.8 Packing cost :

If product is transferred/dispatched 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/dispatch of the goods used for captive consumption.



Notes: Packing Cost includes :

- (i) Cost of Packing Material
- (ii) Job charges paid for manufacture of packing material, if any.
- (iii) Packing charges including salaries & wages of the persons involved in packing activity.
- (iv) Other expenses relating to packing activity.

Landed cost of the packing material should be calculated as per the guidelines given in para related to material cost.

If product for captive consumption is transferred without packing (unpacked), packing cost need not be included in the cost of production. In case captive product is transferred on returnable/ durable packing container, pro-rata cost shall be estimated and charged based on the life of the container.

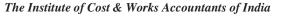
5.9 Absorption of overheads :

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 staff 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 items 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.

Notes: <u>Absorption of overheads and calculation of cost of</u> <u>production</u>: Variable Overheads comprise of expenses which vary in proportion to the change in the volume of production e.g. variable portion of salaries and wages, cost of utilities, royalty, job charges, etc.

Fixed overheads comprise of expenses which do not vary with the change in volume of production such as fixed portion of salaries and wages, rent, insurance, technical assistance/know-how fees, amortized cost of moulds, patterns, patents, hire charges for tools and equipments, charges for a particular design, various items of works overheads listed in para 5.4, quality control and R & D, etc.

The principles laid down in CAS-3, which deals with the methods of collection, allocation, apportionment of overheads to different cost centers and absorption thereof to products or services on a consistent and uniform basis in the preparation of cost statements should be followed for the purpose of allocation and absorption of overheads.

The variable production overheads shall be absorbed in cost of product, based on actual capacity utilisation.



When the plant is producing or utilizing capacity below normal capacity, the absorption of fixed production overheads should be done on normal capacity irrespective of actual capacity utilised.

It is advisable that a reconciliation statement showing the amount incurred under different heads of overheads and amount absorbed by different products should be prepared for this purpose. The reconciliation will help in ensuring accuracy of cost of production in cost statements.

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 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 figures of opening and closing stock may be ignored.

Notes : The Excise Duty is payable at the time of removal of goods, therefore, cost of production is to be calculated for quantity dispatched. This will necessitate adjustment of cost of opening and closing stock of finished goods from cost of production of quantity produced.



In case of companies registered under the Companies Act, 1956, the valuation of inventory, (Raw Material, WIP and Finished Goods) is based on AS-2 of ICAI. However, for calculation of cost of production for CAS-4 certificate, the valuation of inventory shall be as per the method of costing as explained above, which may not be same as per AS-2.

In case the product costing is required to be worked out for a new product i.e. for the future period, it will be done based on projected production, projected capacity utilisation and other parameters. In such cases valuation of opening stock and closing stock of WIP and Finished goods need not be considered.

In another situation, when the cost of production is to be worked out for the previous period then due consideration should be given for opening and closing stock of WIP and Finished goods.

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.

Notes: The cost of production of Joint Products can be worked out as per the generally accepted cost accounting principles. However, it is not possible to calculate the cost of production of by-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 shall be 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

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

A production process has three stages:.



If during the production process at stage3, the scrap is produced and the same is recycled at stage 2 after making an expenditure of Rs 200 per MT to make it suitable for re-processing at stage 2, 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.

Notes: The above illustration refers to recycled waste or inferior/ sub-standard production.

Normal process loss is ignored for the sake of simplicity.

If the cost calculation is done for the past period and if the actual sales realization of scrap is available, then the same shall be deducted after adjustment for opening and closing stock of scrap (to arrive at the realisable value of scrap generated) from the cost of production for the relevant period.

In case the scrap is not disposed off/sold during the period and lying in the stock, the realizable value of scrap can be calculated from the quotations/market rate.

It is not possible to calculate cost of production of scrap and waste.

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 dispatch of the captively



consumed goods produced under reference.

Notes: The miscellaneous income needs to be analysed carefully for its nature and only if the same is not related to production activities, the same may be ignored.

The phrase "used for dispatch of the captively consumed goods produced under reference" shall be ignored. The income arising out of sale of used empty containers of the input materials shall be adjusted in the cost of production.

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.

Notes : Landed cost of inputs received free of cost should be calculated as per the guidelines given in para related to material cost.

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.

Notes: It may be relevant to point out that this comes under the category of imputed costs. The definition of Imputed Costs as per CAS-1 para 6.5.13 is hypothetical or notional costs, not involving cash outlay, computed only for the purpose of the decision making.

Amortisation should be done on the basis of estimated production



that can be achieved during the life of the Mould, Tool, Die or Pattern. After the estimated life, if the moulds, dies are still in use and if the full cost has already been amortised, then amortisation cost need not be considered for the purpose of cost of production. However, for this purpose, proper record needs to be maintained. The estimated life / estimated production may be certified by technical person. Where the dies, moulds etc are supplied by the customer, the necessary details may be obtained from the customer.

In case of dies, moulds etc purchased / manufactured in-house same principles shall be adopted.

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.

Notes: Interest and financial charges are finance cost, hence shall not be considered as a part of cost of production. This will include interest on bank borrowings, amortisation of discounts or premium related to borrowings, amortisation of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs.

5.17 Abnormal and Non-recurring Cost

Abnormal and non-recurring cost arises 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.

Notes: In addition to the above events, cost of trial run for production and loss due to fire and natural calamities shall also be treated as abnormal and non-recurring cost, hence omitted from cost of production. Further, expenses which are not related to manufacturing activity and which do not form part of the cost as per the generally accepted cost accounting principles may be ignored for this purpose e.g. - donations, loss on sale of fixed assets, etc.

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, Le., 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 so as to facilitate determination and certification of cost of production.



Notes: Separate cost sheet shall be prepared for each type/variety/ description of product used for captive consumption.

The cost sheet may be suitably modified to cover the special features, if any, of the industry.

The Cost Accountant certifying the cost of production statement shall verify and reconcile the product cost arrived at for the certification with that worked out to comply with provisions of Section 209(1)(d) of the Companies Act, 1956.

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.
- (i) 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.

Notes: Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule or below the certificate.



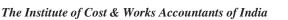
ANNEXURE-A

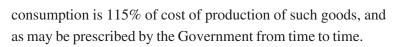
<u>COST ACCOUNTING STANDARD ON COST OF</u> <u>PRODUCTION FOR CAPTIVE CONSUMPTION (CAS-4)</u>

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





2. Objective

- 2.1 The purpose of this standard is to bring uniformity in the principles and methods used in 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 Costs 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, calculation 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 employee's costs which can be identified with the product.

Direct Expenses Include :

- (i) Cost of utilities such as fuel, power, water, steam, etc
- (ii) Royalty based on production
- (iii) Technical Assistance/know-how fees
- (iv) Amortized cost of moulds, patterns, patents etc
- (v) Job charges
- (vi) Hire charges for tools and equipment
- (vii) 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 need to be analyzed 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/dispatched 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/dispatch of the goods used for captive consumption.

5.9 Absorption of overheads :

Overheads shall be analysed into variable overheads and fixed overheads.

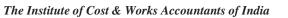
Variable Overheads are the items which change with the change in volume of production, such as cost of utilities etc.

Fixed overheads are the items whose value do not change with the change in volume of production such as staff 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 items 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.

50



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 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 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 shall be 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

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

A production process has three stages:.

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 dispatch 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 arises 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, Le., 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 so 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.
- (i) 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.



APPENDIX – 1

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-Process		
10.	Less : Closing stock of Work-in-Progress		
11.	Total (8+9–10)		
12.	Less : Credit for Recoveries/Scrap/ By-Products/misc income		

55



	Particulars	Total Cost Rs.	Cost/ Unit Rs.
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 despatches (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.



ANNEXURE-B

Circular No. 692/08/2003-CX 13th February, 2003

F.No.6/29/2002-CX.I Government of India Ministry of Finance and Company Affairs Department of Revenue

Subject:- Valuation of goods captively consumed.

I am directed to say that on introduction of Central Excise Valuation (Determination of Price of Excisable goods) Rules, 2000, w.e.f. 1.7.2000, it was clarified by the Board vide Circular No.354/81/2000-TRU dated 30.6.2000 (para 21) that for valuing goods which are captively consumed, the general principles of costing would be adopted for applying Rule 8. The Board has interacted with the Institute of Cost & Works Accountants of India (ICWAI) for developing costing standards for costing of captively consumed goods.

- (2) The Institute of Cost & Works Accountants of India [ICWAI] has since developed the Cost Accounting Standards, CAS 2, 3 and 4, on capacity determination, overheads & cost of production for captive consumption, respectively, which were released by the Chairman, CBEC on 23.1.2003.
- (3) It is, therefore, clarified that cost of production of captively consumed goods will henceforth be done strictly in accordance with CAS-4. Copies of CAS-4 may be obtained from the local Chapter of ICWAI.



- (4) Board's Circular No.258/92/96-CX dated 30.10.96, may be deemed to be modified accordingly so far as it relates to determination of cost of production for captively consumed goods.
- (5) This Circular may be brought to the notice of the field formations.
- (6) Suitable Trade Notices may be issued for the benefit of the Trade.
- (7) Hindi version will follow.
- (8) Receipt of these instructions may be acknowledged.



ANNEXURE-C

CASE NO. : Appeal (civil) 2947-2948 of 2001

PETITIONER : Commissioner of Central Excise, Pune

RESPONDENT : M/s. Cadbury India Ltd.

DATE OF JUDGEMENT: 01/08/2006

BENCH : Ashok Bhan & Markandey Katju

JUDGEMENT :

(with Civil Appeal Nos.1856-1857/2002, 5232-5233/2003,1425/2005 and 2878-2879/2005)

MARKANDEY KATJU, J.

Civil Appeals Nos. 2947-2948/2001 have been filed against the impugned final order dated 28.9.2000 passed by the Customs Excise and Gold (Control) Appellate Tribunal, West Regional Bench at





Mumbai in Appeal No.E/1021, 1022/2000-MUN.

Heard learned counsel for the parties.

The question involved in these appeals is about the valuation of milk crumbs, refined milk chocolate and four other products manufactured by the respondent - M/s. Cadbury India Limited, in its factory at Induri, Pune and captively consumed in that factory and other factories of the respondent in the manufacture of chocolate. No part of these products are sold by the respondent.

The respondent had sought valuation of these goods under Rule 6(b)(ii) of the Central Excise (Valuation) Rules, which provides for basing the valuation on such goods on the "cost of production on manufacture including profits, if any, the assessee would have earned in the sale of such goods."

The assessee had showed the price of these goods supported by a statement verified by a chartered accountant. The statement indicated the cost of edible and packing material used in the manufacture including its overheads. A separate statement in support of the profit added was formulated and these assessments were provisionally approved.

At the time of the finalization of the assessment, the department took the view that the value of the goods should include the labour cost, direct expenses, total factory expense, administration expenses, travelling expense, insurance premium, advertising expense and interest. The Assistant Commissioner added these elements to the declared value. He added the total expenses of the company as shown in the balance sheet and deducted the cost material. A percentage of this cost of the



remaining figure was treated as the factor by which the assessable value should be increased.

In appeal the Commissioner (Appeals) upheld the order of the Assistant Commissioner. He held that since Rule 6(b)(ii) itself specified including the profit on the goods captively consumed hence this indicated the intention in the rule that the valuation should be brought to the level of the sale value of the goods and hence this includes all expenses referred to above. The Commissioner (Appeals) also relied on the circular dated 30.10.1996 issued by the Board relating to captively consumed goods. He has also relied upon paragraph 49 of the Supreme Court's judgment in Union of India vs. Bombay Tyres International AIR 1984 SC 420.

In further appeal the Tribunal set aside the orders of the Commissioner and the Assistant Commissioner. The Tribunal held that sub-rule (ii) of Rule 6(b) can be invoked only in a situation where the goods are not sold and there are no comparable goods. The Tribunal held that the expenses other than the cost of manufacture, cost of raw materials and the profit would not be includible in the assessable value.

The issue in the present case is about the value of the goods captively consumed by the respondent. The assessee has contended that there is no dispute that these intermediate goods are not marketable and are not bought and sold in the market. Hence the valuation of these intermediate goods has to be done according to Rule 6(b)(ii) of the Central Excise (Valuation) Rules, 1975.



Rule 6(b)(ii) reads as follows :

"Rule 6 If the value of the excisable goods under assessment cannot be determined under Rule 4 or Rule 5, and

(a)

- (b) (i)
 - (ii) if the value cannot be determined under sub-clause (i), on the cost of production or

manufacture including profits, if any, which the assessee would have normally earned on the sale of such goods; "

According to settled principles of accountancy only the elements that have actually gone into the manufacture/production of these intermediates i.e. sum total of the direct labor cost, direct material cost, direct cost of manufacture and the factory overheads of the factory producing such intermediate products are included in the cost of production. The Appellant produced alongwith the reply to the Show Cause Notice the following authoritative texts: Wheldon's Cost Accounting and Costing Methods, Cost Accounting methods by B K Bhar, Principles of Cost Accounting by N.K. Prasad, Glossary of Management Accounting Terms by ICWAI.

In CCE v. Dai Ichi Karkaria Ltd., (1999) 7 SCC 448, at page 459 it has been held that the normal principles of accountancy shall be applied to determine the cost. In this decision this Court observed :

"Learned Counsel for the respondents drew our attention to the judgment of this Court in Challapalli Sugar Ltd. v. CIT. The Court was concerned with "written-down value". The "written-down value"



had to be taken into consideration while considering the question of deduction on account of depreciation and development rebate under the Income Tax Act. "Written-down value" depended upon the "actual cost" of the assets to the assessee.

The expression "actual cost" had not been defined in the Income Tax Act, 1922 and the question was whether the interest paid before the commencement of production on the amount borrowed for the acquisition and installation of the plant and machinery could be considered to be a part of the "actual cost" of the assets to the assessee. As the expression "actual cost" had not been defined, this Court was of the view that it should be construed "in the sense which no commercial man would misunderstand. For this purpose, it could be necessary to ascertain the connotation of the above expression in accordance with the normal rules of accountancy prevailing in commerce and industry". Having considered authoritative books in this regard, this Court said that the accepted accountancy rule for determining the cost of fixed assets was to include all expenditure necessary to bring such assets into existence and to put them in a working condition. That rule of accountancy had to be adopted for determining the "actual cost" of the assets in the absence of any statutory definition or other indication to the contrary."

Subsequent to the filing of these appeals, the Institute of Cost and Works Accountants of India (ICWAI) has laid down the principles of determining cost of production for captive consumption and formulated the standards for costing : CAS-4. According to CAS-4 the definition of "cost of production" is as under :



"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."

The cost accounting principles laid down by ICWAI have been recognized by the Central Board of Excise and Customs vide Circular No.692/8/2003 CX dated 13.2.2003. The circular requires the department to determine the cost of production of captively consumed goods strictly in accordance with CAS-4.

The Tribunal in the case of BMF BELTINGS LTD. vs. CCE : 2005 (184) E.L.T. 158 (Tri. Bang.) for the period 1995 to 2000 has directed the department to apply CAS-4 for the determination of the cost of production of the captively consumed goods. In ITC vs. CCE (190) ELT 119 the Tribunal held that the department has to calculate the cost of production in terms of CAS-4. Other decisions of the Tribunal, wherein it has directed that CAS-4 be applied for determination of the cost of production, are Teja Engineering v/s CCE 2006 (193) ELT 100 (Tri-Chennai), Ashima Denims v/s CCE 2005 (191) ELT 318 (Tri-Mumbai), and Arti Industries vs. CCE 2005 (186) ELT 208 (Tri-Chennai). This is therefore a consistent view taken by the Tribunal. The department has not filed any appeal in these cases and accepted the legal position. Apart from this, in the light of several decisions of this Court, the Department is also bound by the said circular No.692/ 8/2003 CX dated 13.2.2003 issued by the CBEC.

As such it cannot now take a contrary stand.



It may be noted that in the present case the intermediate products (milk crumbs, refined milk chocolate and four other intermediate products) are captively consumed in the Respondent's own factory. These intermediate products are not sold nor are marketable.

Hence there can be no question of including the expenses of the factory which produces the final product namely the chocolate e.g. advertising, insurance and another expenses in their valuation as was sought to be added by the Commissioner (Appeals) and the Assistant Commissioner.

For the reasons given above, we find no merit in these appeals and they are dismissed. No costs.

Civil Appeal Nos. 1856-1957/2002, 5232-5233/2003,

1425/2005 & 2878-2879/2005)

In view of the decision in Civil Appeal Nos. 2947-2948/2001, these appeals are accordingly dismissed. No costs.



Professional Development Committee 2008-09

Shri Brijmohan Sharma

CCM – Chairman

- 1. Shri M. Gopalakrishnan, CCM
- 2. Shri A.N. Raman, CCM
- 3. Shri V.C. Kothari, CCM
- 4. Shri Somnath Mukherjee, CCM
- 5. Shri Balwinder Singh, CCM
- 6. Dr. Sanjiban Bandyopadhyaya, CCM
- 7. Shri T.S. Rangan, CCM (Govt. Nominee)
- 8. Shri B.B. Goyal (Advisor Cost, GOI)

CENTRAL COUNCIL Shri Kunal Banerjee

President

Shri A.S. Durgaprasad Vice-President

CENTRAL COUNCIL MEMBERS

Shri Chandra Wadhwa Dr. Sanjiban Bandyopadhyaya Shri A.G. Dalwadi Shri B.M. Sharma Shri S.R. Bhargave Shri H.K. Goel Shri Balwinder Singh Shri Somnath Mukherjee Shri G.N. Venkataraman Shri M. Gopalakrishnan Shri V.C.Kothari Shri S.C. Mohanty

Shri A.N. Raman

GOVERNMENT NOMINEES

Shri Jaikant Singh Shri R.K. Jain Shri S.C. Vasudeva Shri P.K. Sharma

Shri T.S. Rangan

INSTITUTE PUBLICATIONS

Α.	GUIDELINES/GUIDANCE NOTES ON	Rs		Farm Management Accounting	
	A Source Book for Tax Audit	100		and Control	70
	Anti-dumping, Countervailing and			Financial Asset Replacement	10
	Safeguard Duties under WTO			Glossary of Management	
	Relevance for Cost & Management			Accounting Terms	100
	Accountants	200		Human Resource Accounting	
	Basics of Foreign Exchange for			Inflation Accounting as a Tool to	
	Management Accountants	200		FightInflation	35
	Compendium - Fields for Practising			Management Accountant and	
	Cost Accountants			The Computer	
	Cost Audit Social Objectives	5		Management and Accounting for	
	Costing in Leather Goods (Shoes/Garments)	80		Research And Development-	106
	Costing in Leather Processing Industry	80		The Indian Praxis	125
	Developing Cost Records - A Practical	10		Management Information Report	150
	Approach	60		for Operating Managers Mutual Funds in India	150 200
	Environmental Audit Fields for Practising Cost Accountants	60		Profit Planning	60
	(Abridged)	20		Research Bulletin (Biannual each issue)	100
	Financial Services and WTO	100		Rescaren Dantern (Diannaar caen issue)	100
	Guidance Note to Cost Audit	500	C	INDUSTRY-WISE PUBLICATIONS	
	Guidelines on Capacity Determination	500	C.	Cost Accounting Records Rules And	
	(Revised Edition, 97)	20		Cost Audit (Report) Rules:	
	Guidelines on Certification of Cash	~~~		CycleIndustry (Revised, 1999)	100
	Compensatory Support	20		Cement Industry (Revised, 2004)	150
	Guidelines on Inventory Valuation	10		AutomobileBatteryIndustry	50
	Guidelines on Transfer Pricing	150		Tyre and Tube Industry	50
	Handbook on Activity Based Costing	150		Tractor Industry	50
	Handbook on Total Cost Management in			Motor Vehicles Industry(Revised,1999)	100
	the Manufacturing Industries	150		Room Air-Conditioners Industry	50
	Intellectual Property Rights			Refrigerator Industry	50
	Relevance to the Accounting			Electric Fan Industry	50
	Profession	100		Aluminium Industry	50
	Introduction and Implementation of Cost			Vanaspati Industry	50
	& Management Accounting System	80		Industrial Alcohol (Revised, 1999)	100
	Managing the Bottom Line-	120		Sugar Industry(Revised, 1999)	100
	A Guide to Management Accounting			Paper Industry	50
	for Small Business	120		Textile Industry(Revised Ed.2001)	150
	Service Tax and Cost Accountants	125		Soda Ash Industry	50
	Guidance Note on Valuation Audit under			Jute Industry	50
	Central Excise Law	100		Rayon Industry(Revised Ed.2001)	150
	(Revised Edition 2006)			Dry Cell Battery Industry	50
	Guidance Note on Cenvat Audit under	100		Power Driven Pump Industry	50
	Central Excise Law	100		Electric cables and conductors Industry	50
	(Revised Edition 2006)	100		Sulphuric Acid Industry	50
	Guidelines on desk review in Excise Audit	100		Steel Tubes & Pipes Industry	50
	Guidance Note on Value Added Tax	100		Formulation Industry	50
	Its Accounting & Auditing	300		Mini Steel Plant Industry	50
	Cost Audit- A way ahead	500		Fertiliser Industry	50
	Management Accounting Guidelines MAG - I : Implementing Benchmarking	200		Electric Lamp Industry	50 50
	MAG - II : Valuations Management	200		Electric Motor Industry	50
	A Tool of Management Accountant	200		Insecticides (Tech. Grade) Industry Nylon industry(Revised Ed.2001)	150
	MAG - III : Implementing Corporate	200		Infant Milk Food Industry	50
	Environmental Strategies	200		Caustic Soda (Revised,2004)	150
	MAG - IV : Tools and Techniques of			Dyes (Revised,2004)	150
	Environmental Accounting for			Bulk Drugs Industry (Revised, 1998)	125
	Businrdd	200		Cosmetics & Toiletries Industry(Ed.2001)	150
	Guidance Notes			Shaving Systems Industry (Ed.2001)	150
	Cost of Production for Captive Consumption	200		Polyster Industry(Ed.2001)	150
	Internal Audit	200		Footwear (Ed.2002)	150
Β.	RESEARCH PUBLICATIONS		D.	COST ACCOUNTING STANDARDS(CAS)	
	An Analysis of the Cost Behaviour with			Classification of Cost (CAS-1)	30
	respect to Indian Industry	150		Capacity Determination (CAS-2)	30
	Corporate Capital Structure and			Overheads (CAS-3)	30
	Cost of Capital	50		Cost of Production (CAS-4)	30
	Corporate Governance and	250		Determination of average of	20
	Management Audit Economic Value Added: A tool for	250		Transportation (CAS-5) Cost Accounting Standards	30
	Business Planning	400		(CAS-1, 2,3,4 & 5)	100
	Transmoon Limming	400		(vin-1, 2,0,4 @ 0)	100