

2

COST SHEET & TENDER

E A Cost Sheet may be defined as a tabulated statement prepared to indicate cost of the output or production for a particular period. It is usually provided with additional columns to enable comparison of the current costs with the corresponding periods of the previous years. A cost sheet is always prepared for a definite period—a week or a month or other convenient period.

A cost sheet, if it is to furnish the maximum information, must include the following :

1. Materials consumed during the period, to be stated in quantity as well as value. The main types of materials should be stated separately.
2. Total wages paid during the period to direct workers distinguishing the main types of labour.
3. Works expenses incurred for the period either in detail or as a lumpsum in the form of a percentage of direct materials or direct labour or other convenient basis.
4. Office and administrative expenses in detail or as a lumpsum.
5. The proportion which each item of expenses bears to the total cost per unit, expressed either as a percentage or in rupees and paise.
6. The corresponding figures for the preceding week, month or other period taken.
7. Details of the corresponding period of the preceding year.
8. Where possible, details of standard costs.

Advantages of Cost Sheet

1. They disclose the exact cost of production during the period.
2. They reveal not only the cost per unit, but also the extent to which each expense contribute to the total cost.

3. The comparison of the current costs with those of previous periods enable the detection and rectification of weakness, wastage and inefficiency in production.
4. Cost sheets help in the fixed of selling price, if they are prepared at short intervals.

Percentage Rate :

1. Percentage of Works overhead to Direct wages
$$= \frac{\text{works overheads} \times 100}{\text{Direct Wages}}$$

2. Percentage of Office overhead to Factory Cost
$$= \frac{\text{Office overheads} \times 100}{\text{Factory Cost}}$$

3. Percentage of Direct wages to Materials
$$= \frac{\text{Direct wages} \times 100}{\text{Material}}$$

4. Percentage of Factory Overheads to Prime Cost
$$= \frac{\text{Factory Overheads} \times 100}{\text{Prime Cost}}$$

5. Percentage of Factory overheads to Material
$$= \frac{\text{Factory overheads} \times 100}{\text{Direct Material}}$$

6. Percentage of Office overheads to Factory overhead
$$= \frac{\text{Office overheads} \times 100}{\text{Factory overhead}}$$

Profit Rate :

1) Profit on Cost
$$= \frac{\text{Cost} \times \text{Profit Rate}}{100}$$

2) Profit on Sales
$$= \frac{\text{Sales} \times \text{Profit Rate}}{100 - \text{Profit Rate}}$$

Cost Sheet and Tender

PROFORMA OF A COST SHEET

Cost Sheet for the Year Ended

Particulars	Amount	Amount
Cost of Materials Consumed :		
Opening stock of Materials	XX	
Add : Purchase of Materials	XX	
	XXX	
Less : Closing Stock of Materials	XX	
Return of Materials	XX	
Loss of Materials by fire	XX	XXXX
Add : Wages/Direct wages/Factory wages/ Productive wages	XX	
Carriage on Materials	XX	
Royalty	XX	
Direct/Chargeable Expenses	XX	
Prime Cost		XXXX
Add : Factory Overheads :		
Power and Fuel	XX	
Indirect wages/Labour	XX	
Rent	XX	
Repairs	XX	
Insurance	XX	
Machin Hour Expenses (Rate x Hours worked)	XX	
Repairs' to Plant & Machine	XX	
Insurance to Plant & Machine	XX	
Depreciation to Plant & M achine	XX	
Op. stock of work-in-progress at		
Factory cost	XX	

Cost and Management Accounting

Op.stock of Factory stores/Consumable Stores	XX	
	XXXX	
Purchases of Factory/Consumable Store	XX	
Less : Cl.Stock of work-in-progress at Factory cost	XX	
CL.Stock of Factory/Consumable Stores	XX	XXX
Work Cost		XXXX
Add : Office & Administrative Overheads :		
Salary	XX	
Establishment expenses	XX	
Depreciation of Furniture	XX	
Administrative Expenses	XX	XXXX
Cost of Production		
Add : Opening stock of Finished Goods		XX
Less : Closing Stock of Finished Goods		XX
Cost of Goods Sold		XXX
Add : Selling Overheads :		
Advertisement	XX	
Selling Expenses	XX	XXXX
Add : Cost of Sales :		XXX
Profit		XX
Sales		XXXXX

Profit Statement

Particulars	Rs.
Sales	XXXX
Less: Cost of Goods Sold	XXXX
Gross Profit	XXXX
Less : Selling and Distribution Expenses	XXXX
Net Profit	XXXX

Cost Sheet and Tender

Illustration 1.

The following is a summary of all expenses for the year ending 2002 by a manufacturing company opening a job costing system. Draft a suitable statement showing the sub-divisions of total cost.

	Rs.
Direct Wages	90,500
Direct materials	95,000
Direct expenses	1,400
Wages paid to maintenance workers	24,200
Power	10,100
Rent and rates (factory)	4,600
Light (factory)	1,800
Salesmen's Commission	1,200
Salesmen's Salaries	9,200
Travelling expenses and other allowances to salesman	2,800
Sundry sales office expenses	4,700
Machinery repairs	5,400
Machinery depreciation	12,800
Shafting depreciation	1,400
Shafting repairs	1,700
Storekeepers wages	800
Belting renewal and repairs	700
Advertising	2,500
Works Salaries	5,400
Directors Fees	3,000
Auditors fees	200
Office salaries and expenses	2,900
Postage & stationery	600
Depreciation office equipment	2,000
Drivers wages and other distribution exp.	10,000

Cost and Management Accounting

Solution :

STATEMENT OF TOTAL COST

Particulars	Rs.	Rs.
Direct materials	95,000	
Direct wages	90,500	
Direct expenses	1,400	
Prime cost		1,86,900
Add : Factory Overhead :		
Wages paid to maintenance workers	24,200	
Power	10,100	
Rent and rates (factory)	4,600	
Light (factory)	1,800	
Machinery repairs	5,700	
Machinery depreciation	12,800	
Shafting repairs	1,400	
Shafting depreciation	1,700	
Storekeepers Wages	800	
Belting, renewals and repairs	700	
Works Salaries	5,400	69,200
Works Cost		2,56,100
Add: Office on Cost :		
Directors fees	3,000	
Auditors fees	200	
Office salaries and expenses	2,900	
Postage and stationery	600	
Depreciation office equipment	2,000	8,700
Cost of Production		2,64,800
Add : Selling and distribution overheads :		
Salesmen's commission	1,200	
Salesmen's salaries	9,200	
Travelling expenses, allowances	2,800	
Sundry sales office expenses	4,700	
Advertising	2,500	
Drivers wages and distribution Exp.	10,000	30,400
Total Cost		2,95,200

3

RECONCILIATION STATEMENT

E Financial accounting is generally known as historical accounting and cost accounts are nothing but an extension of financial accounts. Moreover the basic documents for preparation of both these accounts are the same. e.g. Good Received note is the basic documents for stores accounting and the same note is used for admitting supplier's claim in financial books.

When the cost and financial accounts are kept separately, it is imperative that these should be reconciled because profit shown by one account may not tally with that shown by another accounts, due to various reasons like different basis of stock valuation, under or over absorption of overhead and not considering certain items in cost or financial accounts. Therefore reconciliation is necessary to check arithmetical accuracy of both the types of accounts.

Reasons for disagreement in Profit :

I) Items included in the financial accounts but not in cost accounts.

a) Appropriation of profits.

- i) Income tax and Super tax.
- ii) Transfers to general reserve or any other fund e.g. dividend equalisation fund.
- iii) Dividends Paid.
- iv) Amount written for goodwill, preliminary expenses, underwriting commission, debenture discount etc.
- v) Additional provision for depreciation of building, plant etc.,
Additional provision for bad debts.
- vi) Appropriation to sinking Fund.
- vii) Donation to charities.

Cost and Management Accounting

viii) Capital expenditure specially charged to revenue.

b) Purely financial charges :

- i) Loss on sale of capital assets.
- ii) Fees of Assessors or surveyors on the destruction of fire losses.
- iii) Stamp duty and expenses on issues and transfer of shares.
- iv) Losses of Investment.
- v) Discount on bonds, debentures etc.
- vi) fines and penalties payable as per law.
- vii) Losses due to scrapping of machineries.
- viii) Interest on bank loans, mortgages etc.
- ix) Damages payable as per law.

c) Purely Financial Income :

- i) Rent receivable.
- ii) Interest received on bank deposit, loan etc.
- iii) Profit on sale of fixed Assets.
- iv) Dividend received.
- v) Transfer fee received.
- vi) Remuneration paid to proprietor in excess of a fair reward for services rendered.

II) Items included in the cost accounts only. There are very few items which will appear in cost accounts and not appear in the financial accounts. These are only national charges.

- i) Interest on capital employed in production, but upon which no interest is actually paid, if the firm has decided to treat interest as part of cost.
- ii) Salary for the proprietor where he works but does not charge a salary.
- iii) Charges in lieu of rent where premises are owned by a company.

III) Adoption of different bases for stock valuation :

In costing books, stock are valued at cost by using FIFO, LIFO or

other methods of pricing the issues. But in financial books, Valuation of Stock is based on cost or market value which ever is lower. Work in progress also causes such variation. Thus the stock figures in both set of accounts will be different and as such reconciliation is necessary.

IV) Overheads :

In cost accounting the recovery of overhead is generally based on estimate that e.g. Percentage of sales or Prime cost etc. In financial account overheads incurred actually.

V) Depreciation :

Bases of depreciation adopted may differ between the two set of books. It may happen that in cost accounts the straight line method is used but in financial accounts the written down method may be used.

M एखाद्या विशिष्ट व्यवसायामध्ये परिव्यय लेखा पद्धतीचा अवलंब केला तरी अर्थिक लेखे तयार करावेच लागतात. आर्थिक लेखा पद्धती व परिव्यय लेखा पद्धती या दोन्ही पद्धती मध्ये लेखे एकाच तत्वावर म्हणजे द्विप्रविष्टी तत्वावर लिहिले जातात. या दोन्ही पद्धती एकाच व्यवसायाचे हिशोब वेगवेगळ्या पद्धतीने परंतु एकाच तत्वानुसार लिहील्या जात असल्यामुळे दोन्ही पद्धतीनुसार काढण्यात आलेला नफातोटा सारखाच असावयास पाहिजे, परंतु प्रत्यक्षात असे होत नाही. त्यात फरक आढळून येते. हा फरक का पडला हा फरक पडण्याची कारणे कोणती हे शोधुन काढण्यासाठी लाभाचे समाधान विवरण तयार केले जाते.

परिव्यय लेखे आणि वित्तिय लेखे यांच्या नफातोट्यात फरक पडण्याची प्रमुख कारणे.

१. परिव्यय लेख्यात विचारात न घेतली जाणारी व्ययाची पदे :-

- (अ) भांडवलावरील व्याज (ब) आयकर व अधिकर (क) स्थायी संपत्ति किंवा विनियोगाच्या विक्रीवरील हानी (ड) ख्यातीचे आणि प्रारंभीक व्ययाचे अपलेखन (इ) अंश निर्गमनावरील अपहार (फ) अभिगोपिकाचे वर्तन (ग) ऋणपत्र निर्गमना



CONTRACT COSTING

E Contract Costs are used by contractors, builders and engineers who undertake definite contracts. A contract is usually undertaken for a fixed price which is payable either on the completion of the contract or by instalments according to the progress of the work done. When the contract price is payable by instalments, the amount of each instalment will depend on the amount of work done and approved by certified engineers. But in such cases the full contract price is usually not paid. A certain percentage is retained by way of security for the due performance of the whole contract. For example, if a contract is given for the construction of a building for a sum of Rs.1,00,000 it may be agreed between the contractor and the contractee that on the completion of one-fourth of the work 80% of the proportionate contract price will be payable by the contractee. The amount thus payable after the completion and approval of one-fourth of the construction will be Rs.20,000, Rs. 5,000 being the retained amount as 20% of the total approved work.

As regards the accounting procedure in contract costs, a separate account is opened for each contract and all the expenses incurred are debited and on completion the account is credited with the contract price. In complete contracts or in contracts-in-progress, each contract account is charged with the expenditure incurred thereon and a reasonable amount of profit is debited to the Contract Account.

Profit in Incomplete Contracts :

Usually profit is credited to the Profit and Loss Account. But difficulty arises when we have to deal with profits arising on contracts which are not complete at the end of the year. The entire profits cannot be taken in

Contract Costing

these cases to the credit of Profit and Loss Account. Out of the profits, a reserve has to be provided for emergency purposes. The method of computing profit which can reasonably be taken credit for in respect of incomplete contracts is as follows :-

1. Where only a small portion of the contract, say less than $\frac{1}{4}$ th is completed, it is not prudent to take credit of any profits.
2. If the work completed and credited is more than $\frac{1}{4}$ th of the total contract price, usually $\frac{2}{3}$ rd of the profits are taken credit for. This should again be reduced to the percentage of each paid by the contractee. The balance of profits should be treated as reserve..

$$= \text{National Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Certificate work}}$$

3. The whole of loss, if any, are taken to the Profit and Loss Account.

Illustration 3.

Raziya Sutan Co. Ltd. under took a Contract on 1st January 2003 of Rs.5,00,000 for the construction of a bridge on a river. The following details were shown in the books of Raziya Sutan Co. Ltd. for the year 2003.

	Rs.
Material Sent to site	28,000
Labour engaged	42,000
General expenses	6,000
Plant installed	50,000
Wages accrued on December 31,2003	9,000
Material in hand on December 31,2003	5,000
Value of work certified	1,00,000
Work done but not certified	15,000
Cash received on account	80,000

Prepare (a) Contract account charging 15% depreciation on plant, (b) work-in-progress account (c) Also shown how it would appear in the Balance sheet.

Solution :

(a) Contract Account

Particulars	Amount Rs.	Particulars	Amount Rs.
To Material Sent to site	28,000	By Material in hand	5,000
“ Labour engaged	42,000	“ Plant at site	42,500
“ General expenses	6,000	“ Work certified	1,00,000
“ Plant installed	50,000	“ Work uncertified	15,000
“ Wages occurred	9,000		
“ Work in progress (Profit Reserved)	27,500		
	1,62,500		1,62,500

Cost and Management Accounting

Working Notes :

No amount of profit is transferred to profit and Loss account as whole amount is less than $\frac{1}{4}$, the whole amount is charged to work-in-progress A/c.

(b) Work-in-progress Account

Particulars	Amount Rs.	Particulars	Amount Rs.
To Contract A/c :		By Contract A/c :	
Value of work Certified 100,000		Profit in reserve	27,500
Cost of work Uncertified 15,000	1,15,000	Balance c/d	87,500
			1,15,000

Balance Sheet

As on 31st December, 2003

Liabilities	Amount Rs.	Assets	Amount Rs.
Wages accrued	9,000	Material at site	5,000
		Plant at site	42,500
		Work-in-progress :	
		workcertified 1,00,000	
		+ work certified 15,000	
		<u>1,15,000</u>	
		- Portion of profit reserved	<u>27,500</u>
			87,500
		- Cash received in advance from Contractee	<u>80,000</u>
			7,500

5

PROCESS COSTING

E The I.C.M.A. London, defined process accounting as "that form of operation costing which applies where standardised goods are produced, Under this method the products pass through two or more process before completion.

It is the method in which costs are collected according to departments or process and the cost of each department or process is divided by the quantity of production to arrive at the cost of the product at each process, operatin or stage of manufacture. A seprate account for each process is opened & all expenditure is chareged there on. Thus, the cost of the product at each stage of manufacture is found out. In process costing the finished goods of a preceding process becomes the raw material of the next process.

This method is suitable for industries involving continuous production of the same product or products through the same process or processes e.g. rubber products, bread, medicine, chemicals, textiles, tannery, sugar, oil etc.

Each process is debite with the amount of direct material and labour and with a proportionate part of overhead expenses.

Physical quantiteis are processed in respective process account.

When products are processed in more than one department, costs of one department are transferred to the next departement as initial cost.

Feature of Process Costing :

1. The production is continuous.
2. The products are processed. The output of earlier process forms the raw material i.g. input of the next process. The output of the last process, being the finished goods, is transferred to finished stock.
3. The products are homogeneous and standardised.
4. The incidence of process losses and the occurence of joint

products and byproducts are the important features.

5. Problem of valuation of work-in-progress arises.

6. Average cost per unit is determined for a given period for each process. The unit cost is obtained by accumulating all manufacturing costs and dividing it by units produced.

Normal Process Loss : Such loss is unavoidable because of nature of the material or the process. It also includes units withdrawn from the process for test or sampling. The loss due to normal wastage is charged to the good units arising out of the process. Only units or number of normal loss are credited to Process Account. However, if any value is realised from normal waste or scrap, it is credited to Process Account.

Abnormal Process Loss : Loss in excess of normal loss. This is due to carelessness, bad plant design, sabotage etc. Abnormal loss should not be allowed to affect the cost of good units. Therefore, it is debited to 'Abnormal A/c' and credited to process A/c.

1. Find out the cost of production per unit of the relevant process (considering normal loss) assuming that there is no abnormal loss.
2. The lost abnormal units are to be multiplied by the cost of per unit arrived at as above. This gives total value of abnormal loss.

The balance then shown by the Process A/c is the cost of good units. Abnormal loss A/c is closed by transfer to the Costing Profit and Loss A/c.

Abnormal Effectiveness : If the good units produced by any process are more than the normal expectation, the excess number of good unit is termed as 'Abnormal Effectiveness' i.e.

Abnormal Effectiveness = (Good units + Normal wastage) - Units put in

The actual effectiveness or good units be valued at the rate at which the good units would have been valued had there been wastage only at the normal rate. The abnormal effectiveness shall also be valued at this rate and debited to that Process A/c and credited to Abnormal Effectiveness A/c.

By-products :

By-product is defined as any saleable or usable value incidentally produced in addition to the main product.

Process Account

Particulars	Units	Amount	Particulars	Units	Amount
To Transfer from process	xxx	xxxx	By loss in weight	xxx	—
To Materials	xxx	xxxx	By by product	xxx	xxxx
To Wages		xxxx	By Abnormal loss	xxx	xxxx
To Direct Expenses		xxxx	Transfer to ware house	xxx	xxxx
To Indirect exp.		xxxx	By Process a/c (Transferd to next process)	xxx	xxxx
To Abnormal Gain	xxx	xxxx			
	xxx	xxxx		xxx	xxxx

Hints :-

1. If not any information given indirect expenses approrioned on the basis of wages.
2. The Stock which consists of raw materials is to be valued a cost per unit of the preceding process.

Illustration 1.

The Finished Goods of a factory pass through three processes viz. A, B and C, From the following information, show the cost of each process.

Patriculars	Process - A	Process - B	Process - C
	Rs.	Rs.	Rs.
Materials consumed	4,000	6,000	8,000
Wages	2,000	4,000	2,800
Direct Expenses	1,200	1,600	3,200

Illustration 3.

From the following information, show cost of each of the three process of manufacture. The production of each process is passed on the next process immediately on completion.

Particulars	Process - 1	Process - 2	Process - 3
	Rs.	Rs.	Rs.
Materials	4,800	2,400	1,800
Labour	3,600	6,000	2,400
Direct exp.	1,000	500	750

The indirect expenses for the period amount to Rs. 15,000 in the factory out of which Rs. 5,000 is attributable to this product. The indirect expenses should be allocated to each process on the basis of direct labour. There were no stock at the end in any process. The units produced were 200.

$$\frac{3600}{12} : \frac{6000}{12} : \frac{2400}{12}$$

$$3 : 5 : 2 = 10$$

Solution :

Process No.1. Account
(Output 200 Units)

Particulars	Per	Amount	Particulars	Per	Amount
To materials	24.00	4,800	By transfer	54.50	10,900
To Labour	18.00	3,600	to process		
To Direct	5.00	1,000	No.2 a/c		
expenses					
To indirect ex	7.50	1,500			
(in the ratio of					
labour 3/10)					
	54.50	10,900		54.50	10,900

Cost and Management Accounting

Process No.2. Account

Particulars	Per Unit	Amount Rs.	Particulars	Per Unit	Amount Rs.
To Transfer From process No.1	54.50	10,900	By transfer to process No.3	111.50	22,300
To material	12.0	6,000			
To Labour	30.00				
To direct exp.	2.50	500			
To indirect ex (5/10 of Rs. 5000)	12.50	2,500			
	111.50	22,300			

Process No.3. Account

Particulars	Per Unit	Amount Rs.	Particulars	Per Unit	Amount Rs.
To transfer From process No.2	111.50	22,300	By finished goods a/c	141.25	28,250
To material	9.00	1,800			
To Labour	12.00	2,400			
To direct exp.	3.75	750			
To indirect ex (2/10th of Rs. 5000)	5.00	1,000			
	141.25	28,250			

Illustration 4.

The product of a company passes through three processes. The following information is obtained for the year ending on 31st March 2000.

Particulars	Process - 1	Process - 2	Process - 3
	Rs.	Rs.	Rs.
Materials (tons)	1,000	—	—
cost of material (per ton)	200	—	—
Wages (Rs.)	72,500	40,800	10,710
Loss in weight	5%	10%	20%
By product (tons)	50	30	51

The by product of each process is sold at Rs. 50 per ton $\frac{2}{3}$ output of process -1 and $\frac{1}{2}$ output of process - 2 are passed to next process and balance output are transferred to warehouse. prepare process accounts.

Solution :

Process No.1. A/c

Particulars	Tons	Amount	Particulars	Tons	Amount
		Rs.			Rs.
To material (@Rs.200)	1,000	2,00,000	By loss in weight 5%	50	—
Per tons			By product (@Rs.50per ton)	50	2,500
To wages		72,500	By transfer to warehouse $\frac{1}{3}$	300	90,000
			By process-2 A/c (cost per ton Rs.300)	600	1,80,000
	1,000	2,72,500		1,000	2,72,500

Process No.2. A/c

Particulars	Tons	Amount Rs.	Particulars	Tons	Amount Rs.
To process-2 a/c	600	1,80,000	By loss in weight 10%	60	—
To wages		40,800	By by-product (@Rs.50per ton)	30	1,500
			By transfer to warehouse (½)	255	1,09,650
			By process-3 A/c (½) Cost Per ton Rs.430)	255	1,09,650
	600	2,20,800		600	2,20,800

Process No.3. A/c

Particulars	Tons	Amount Rs.	Particulars	Tons	Amount Rs.
To process-2 a/c	255	1,09,650	By loss in weight 20%	51	—
To wages		10,710	By by-product (@Rs.50per ton)	51	2,550
			By transfer to finished goods A/c (cost per ton Rs.770)	153	1,17,810
	255	1,20,360		255	1,20,360