

Contract Costing

Contract costing, also known as terminal costing.

In this method of costing, each contract is a cost unit and an account is opened for each contract in the books of the contractor to ascertain profit/loss thereon.

Contract costing is used in :-

- Building construction
- Road "
- Bridge "
- Other civil engineering works
- Ship building, etc.

* Notional Profit

N.P. is the difference between the value of work in progress certified and the cost of work in progress certified. It is computed as follows -

Value of work certified	XXX
(+) Cost of work not yet certified	XXX
	XXX
(-) Cost of work to date	XXX
Notional Profit	XXX

* Estimated Profit

E.P. represents the excess of the contract price over the estimated total cost of the contract. It is computed as follows -

Contract Price	XXX
(-) Total cost already incurred	<u>XXX</u>
	XXX
(-) Estimated additional costs to complete the contract	XXX
Estimated profit	<u><u>XXX</u></u>

Portion of National Profit or Estimated Profit to be transferred to Profit and Loss Account

The portion of the national or estimated profit to be transferred to P&L A/c depends upon the stage of completion of the contract. i.e. Ratio of work-in-progress certified to total contract work

- For this purpose, WIP uncertified is not considered.
- Prudence requires that the total national profit should not be transferred to P&L A/c but a portion of it should be withheld

As a reserve to meet any unforeseen future expenses or contingencies.

Rules :-

① When work certified $< \frac{1}{4}$ of the Contract Price

⇒ No profit is transferred to P&L A/c.

② WIP certified is $\frac{1}{4}$ or more

but less than $\frac{1}{2}$ of the contract price.

⇒ $\frac{1}{3}$ of the profit is t/f to P&L A/c.

$$\text{Transfer to P\&L A/c} = \frac{\text{Notional Profit}}{\text{Profit}} \times \frac{1}{3} \times \frac{\text{Cash recd.}}{\text{work cert}}$$

③ work certified is $\frac{1}{2}$ or more but less than $\frac{9}{10}$ of the contract price (50% to 90%)

$$\Rightarrow \text{BT/f to P\&L A/c} = \frac{\text{Notional Profit}}{\text{Profit}} \times \frac{2}{3} \times \frac{\text{Cash recd.}}{\text{work cert}}$$

① When contract is near completion, then the estimated profit should be calculated on the whole contract.

The proportion of estimated profit to be t/f to P & L A/c is computed by any one of the following formulas

(a) $\text{Estimated profit} \times \frac{\text{work certified}}{\text{contract price}}$

(b) $\text{Estimated profit} \times \frac{\text{work certified}}{\text{Contract price}} \times \frac{\text{Cash recd.}}{\text{work certi}}$

(c) $\text{Estimated profit} \times \frac{\text{Cost of work to date}}{\text{Estimated total cost of work}}$

(d) $\text{Estimated Profit} \times \frac{\text{Cost of work to date}}{\text{Estimated total cost of work}} \times \frac{\text{Cash recd.}}{\text{WORK CERTI}}$

Ques

The following are the particulars relating to a contract which has begun on 1 January 2019

Contract Price	5,00,000
Machinery	30,000
materials	1,70,600
wages	1,48,750
Direct Expenses	6,330
Outstanding wages	5,380
Uncertified work	9,000
Overheads	8,240
materials returned	1,600
materials on hand 31. Dec. 2019	3,700
Machinery in hand 31. Dec. 2019	22,000
Value of work certified	3,90,000
Cash received	3,51,000

Prepare the Contract Account for the year 2019 showing the amount of profit that may be taken to the credit of profit and loss A/c of the year. Also show the amount of the WIP as it would appear in the balance sheet of the year.

Solⁿ

Contract Account
for the year ending 31.12.2019

Materials	170,600	Materials returned	1600
Wages 148,750		Materials in hand	3700
(+) O/S 5,380	1,54,130	Work in Progress	
Direct expenses 6,330		Certified	390,000
Overheads 8,240		Uncertified	9000
Dep ⁿ on Machinery 8,000			399000
National Profit (b/f) 57000			
	<u>4,04,300</u>		<u>4,04,300</u>
Profit & loss A/c	34,200	National Profit b/d.	57000
$\left[\frac{57000 \times 2}{3} \times \frac{351000}{390000} \right]$			
Balance c/d (Reserve) 22,800			
	<u>57000</u>		<u>57000</u>

* Work certified is 390000 which is 78% of contract price of 500000.
Thus transfer to P&L A/c is by following formula -

$$N.P \times \frac{2}{3} \times \frac{\text{Cash recd.}}{\text{Work certified}}$$

Balance Sheet

as on 31.12.2019

Liabilities	₹	Assets	₹
Outstanding wages	5,380	Materials in hand	3700
		Mach. in hand	22000
		Work in Progress	
		Work Certi 390,000	
		Work unest 9000	
		399000	
		(- Cash recd. 351000	
		48000	
		(- Profit in reserve	
		22800	
			25200

Ques

Modern Contractors have undertaken the following two contracts on 1st Jan 2019.

	Contract A ₹	Contract B ₹
Materials sent to sites	85,349	73,267
labour engaged on sites	74,375	68,523
Plants installed at sites at cost	15,000	12,500
Direct expenditures	3,167	2,859
Establishment charges	4,126	3,852
materials returned to stores	549	632
work certified	1,95,000	1,45,000
cost of work not certified	4,500	3,000
materials in hand (31.12.2019)	1,883	1,736
wages accrued (31.12.2019)	2,400	2,100
Direct expenditures accrued on 31.12.19	240	180
Value of plant on 31.12.2019.	11,000	9,500

The contract prices have been agreed at ₹ 2,50,000 for Contract A and ₹ 2,00,000 for Contract B. Cash has been received from the contractees as follows -

Contract A → ₹ 1,80,000 Contract B → ₹ 1,40,000

Prepare Contract Accounts Contractor's Accounts and show how the work in progress shall appear in the Balance sheet of the contractor.

Solⁿ

Contract A Account
for the year ending 31.12.2019

Materials	85,349	Material Return	549
labour	74,375	Materials in hand	1883
Plant	15,000	Plant in hand	11000
Direct expenditure	3,167	Work in Progress	
Establishment charges	4,126	work certi 195000	
Wages accrued	2,400	work uncerti 4500	199500
Direct expenses accrued	240		
National profit c/d	28,275		
	<u>212932</u>		<u>212932</u>
Profit & loss A/c	17,400	National Profit c/d	28,275
Balance c/d (reserve)	10,875		
	<u>28,275</u>		<u>28,275</u>

* Profit t/f to P & L A/c. 78%

National Profit $\times \frac{2}{3} \times \frac{\text{Cash recd.}}{\text{work certified}}$

$$\Rightarrow 28275 \times \frac{2}{3} \times \frac{180000}{195000}$$

$$\Rightarrow \underline{\underline{17,400}}$$

work cert
Total contract

Contractor's Account

31.12.2011 Bal. b/d.	180000	Cash	180000
	180000		180000
1.1.2012		Balance b/d.	180000

Contract B Account

Materials	73,267	Materials returned	632
labour	68,523	Materials in hand	1736
Plant	12,500	Plant	9,500
Direct Expenditure	2,859	work in Progress	
Establishment charges	3,852	work left 145,000	
wages accrued	2,100	work unlet 30,000	148,000
Direct expenditure accrued	180	Notional loss t/f to P & L A/c	3,413
	163,281		163,281

Contractee's Account

31.12.2011			
Bal. fd.	140000	Cash	140000
	140000		140000
1.1.2012		Balance b/d	140000

Balance Sheet as on 31.12.19

Wages accrued (2400 + 2100)	4500	Plant (27500 - 7000)	20,500
Direct expenses accrued (240 + 180)	420	Materials	3619
Profit on Cont A 17400		WIP Cont A	
(-) Loss on Cont B 3413	13987	Work Certi 195000	
		Work uncerti 4500	
		199500	
		(-) Profit in Res. 10875	
		188625	
		(-) Cash recd. 180000	8625
		Cont B	
		Work Cert. 145000	
		Work uncert. 3000	
		148000	
		(-) Cash recd 140000	8000

Ques

Engineers Ltd. undertook several contract during the year 2010. The following information relates to Contract No. 107.

Direct materials		20,250
Direct wages		15,500
Stores issued		10,500
Loose tools		2,400
Tractor expenses		
Running material	2300	
Wages of driver	3000	5,300
Other direct charges		2,650

The contract took 13 weeks to complete. The value of loose tools and stores returned at the end of the period were ₹200 and ₹3000 respectively. The plant was also returned at a value of ₹16000 after charging depreciation at 20%. The value of tractor was ₹20,000 and the depreciation to be charged to the tractor was at 15% per annum. The administration and office expenses are to be provided at 10% on works cost. Profit is to be charged at 20% of the total cost.

Prepare the aforesaid Contract A/c assuming the balance of the contract was duly received.

Contract Account for the year ending 2010

Particulars	₹	Particulars	₹
Direct Materials	20,250	Contractee's A/c	76,758
Direct wages	15,500		
Stones (10500 - 3000)	7,500		
Loose Tools (2400 - 200)	2200		
Tractor expenses (2300 + 3000)	5300		
Dep ⁿ on tractor*	750		
Depreciation on Plant (20000 - 16000)	4000		
Other direct charges	2650		
Works Cost	58,150		
Adm ^{ve} & Office Expenses (10% of works cost)	5815		
Total Cost	63,965		
P&L A/c (20% of Total Cost)	12,793		
	76,758		76,758

Depⁿ of tractor for 13 weeks
 $20000 \times \frac{15}{100} \times \frac{13}{52} = 750$