



SYSTEM OF COST ACCOUNTING IN ORDNANCE FACTORIES

30.10.2018



COST ACCOUNTING

estimate – prepared by *Fy. Management*

Review & Pricing by the concerned sec of Br. AO.

WARRANT

Based on estimate every warrant is to be checked by estimate group of costing sec

Opening of cost card & PL card

COST CARD POSTING

Primary document are

Labour abstract, material abstract, component abstract,
TV abstract

Every expenditure incurred on the warrant to be recorded in the corresponding Cost card.

REVIW AND CLOSING OF COST CARD

Variance analysis is the primary duty of costing section and intimate to *Fy. Management*

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Material Abstract

- Expdr. is shown work order and warrant wise listing all demand and return notes.
- Transfer voucher Abstract
- Adjustment voucher Abstract

Material drawn in “01” and “02” work orders – indirect material

OVERHEAD ACCOUNTING

PR/IX/42/Genl/Order/II dated 18th July 2016.

Pre-determination of OHs - SBC & CBC based on 9 months actual OH – to be implementable from 1st April of the next financial year.

Derive the budgeted expenditure Section wise

- Labour Abstract, Material Abstract
- SFC & SVC
- Power Cost statements, Allocation sheets, Pay Bills
- PSA, CCO2, Block register, RDR Compilation
- Principal ledger, Annual Accounts

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Cost Centre/ Section/Shop – allocation based on Service / Production

Step Ladder

- All budgeted expenditure of service sections is allocated to the production sections
- The format for the Step ladder is as below:

S1	S2	S3	S4	P1	P2	P3	P4
25000	23000	36000	36000	84000	103000	112000	119000
	25308	2301	3068	3834	4602	5368	6135
		40993	5466	6832	8198	9565	10932
			47611	6802	10202	13603	17004
			TOTAL	105314	130232	145153	157301
			SMH	20000	30000	40000	50000
			Hrly Rate	5.26	4.34	3.63	3.15

STEP LADDER

Non Production section					Productive section			Total	Basis of distribution
Electric	store	A	B	C	X	Y	Z		
Dr.100	Dr.50	Dr.150	Dr.250	Dr.750	Dr.900	Dr.600	Dr.700	Dr.2500	Actual or estimated fixed charge
Total Cr.100	Dr.5	Dr.25	Dr.15	Dr.5	Dr.10	Dr.15	Dr.25		On the basis of consumption of electricity
	Total Cr.55	Dr. 5	Dr.15	Dr.5	Dr.10	Dr.15	Dr. 5		On the basis of consumption of material
		Total Cr.180	Dr.15	Dr.50	Dr.25	Dr.40	Dr. 50		On the basis of number of worker
			Total Cr.295	Dr.95	Dr.50	Dr.100	Dr. 50		Percentage fixed by Management
				Total Cr.905	Dr.700	Dr.100	Dr. 105		Total direct labour
					Total Dr.1695	Total Dr.870	Total Dr.935	Dr.2500	
		Direct Labour			1000	500	400		
		Percentage			169.5%	174%	233.75%		

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Budgeted SMH (Target + Semi + Contract Lab Hrs) –
Shop/section wise

FOH & VOH so derived per section will be divided by the
budgeted SMH for that section – OH Hrly rate

Actual – SVC & SFC after the first quarter

Variance analysis - $\pm 5\%$ Budgeted OHs will be changed as
per actuals

- PR/II/19B dated 18th July 2016

CLOSING OF COST CARD

Completed/closed copies of 'Manufacture' and 'Material warrants'

Warrants of previous year - value of closing semi and quantity issued should be priced and added to the total expenditure element-wise to determine the CoP.

Rejections – Beyond UAR% - KoP.

OH expenditure

Semi calculation if the warrant remains open through to next FY

- PR/II/1366/CONM/SRB/WIP dated 18th July 2016.

SEMI STATEMENTS - PRICING

- Material - Quantity drawn (against unfinished units) X Rate at which Demand Note was priced.
- Labour - (i) Quantum of PW SMH (shop-wise which pertains to un-finished units) X Labour (PW) Rate per SMH of the shop for the concerned month.

(ii) Quantum of DW MH (shop-wise which pertains to un-finished units) X Labour (DW) Rate per MH of the shop for the concerned month.

(iii) Quantum of SMH discharged by contractors Labour towards unfinished units X Rate adopted for allocation for that month.

SEMI STATEMENTS - PRICING

Direct Expenses –

Electricity & Water - Units consumed against unfinished quantity X Rate adopted for pricing of allocation sheet.

VOH and FOH are to be priced multiplying the Labour Hours booked by rate of VOH/FOH per hour.

Warrants – No issues no detailed semi pricing

Value of the semi manufacture under each work order –
Summary: **WIP cost work order wise**

COSTING USED IN OFS

STANDARD COSTING

- JOB COSTING
- PROCESS COSTING
- FOUNDRY COSTING
- EXCEPT SYSTEM (Also PPL)

JOB COSTING

Orders placed on production shops for convenient batch or quantity

Standard Estimates - labour and drawal of materials

Expenditure incurred under the elements of cost viz. Labour, Materials, Direct Expense, Variable Overheads and Fixed Overheads are ascertained warrant/WO-wise

Actual cost is compared with the estimated cost

Mid-term course correction

Widely followed in OFs

PROCESS COSTING

For each process, separate accounts are maintained known as process accounts.

- **Labour:** Section wise for each process is obtained from Labour Abstract.
- **Materials:** Every Process Section furnishes the quantity of material demanded and material expended. It includes the departmental material also. Materials common to two or more work orders at the first instance demanded by the Section under one Work Order and then transferred to other Work Orders by a Transfer Voucher.
- **Direct expenses:** Directly allocated to the work.
- OH to be charged shop-wise on the basis of DL

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Departmental materials are also used in the manufacture of certain process material. They are valued at the previous month's rate and are compiled under charges incurred in manufacture.

Waste acids recovered are again utilized after necessary purification. At the beginning of FY – rates are pre-determined

Monthly process issue statements - process materials produced & quantities issued.

Determination of monthly rate – value of the opening balance is determined on previous month's rate + Value of production of the month and then averaged out to determine the rate

TV - Debiting the process work order and crediting the next process material work order.

Used in Chemical OFs

FOUNDRY COSTING

Form II (Foundry Work record)

- Labour employed for the Foundry job – SMH x Hrly Rate
- SMH utilized will be verified against the total weights of castings issued

Foundry Form III

- metal statement and process statement
- Details of issue to outturn Work order and value of material consumed

Foundry Cost Statement Form I

- Posted from Form II and Form III
- Variable and Fixed Charges are calculated on the basis of rate per SMH.
(detailed instructions for different processes are available)

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From Form I – Cost Derivation - Unit rate/Kg of castings produced.

- The total expenditure divided by net total weight of castings produced gives the rate per unit weight.
- The moulding rates of the casting vary according to the type of casting produced.

Percentage of loss to the total quantity manufactured. An abstract is prepared by debiting the out-turn order by giving credit to the relevant Foundry work Order.

Final Outturn work order takes the unit cost from Form I (Foundry Statement) as Material at the derived rate

Used in Metallurgical Factories

EXCEPT SYSTEM

In case of items comprising many components, - Each kind of component is produced independently and finally assembled.

The orders for manufacture of components are called 'Except orders' and the components are known as 'except components.'

Instead of taking the finished component to stock as complete and subsequent drawal to assembly work order, the components are kept on production charge.

The work orders for components are in 40 series

Element wise Cost is taken to the Final Outturn Work Order

EXCEPT SYSTEM

The finished components - to a component stores but not to the main store

A separate production card is maintained for each of the component – receipts posted from the Inspection Notes

Drawal and return of components to and from the assembly work orders - **RED DEMAND/RETURN NOTES**

'Component Abstract' is prepared

Component semi statement generated

Components not used - semi manufacture at the end of the year are to be charged against the assembly work order on which they were supposed to be drawn.

LINKING of components with the final outturn is important

PPL SYSTEM

It is a kind of except system for Material and component manufacturing

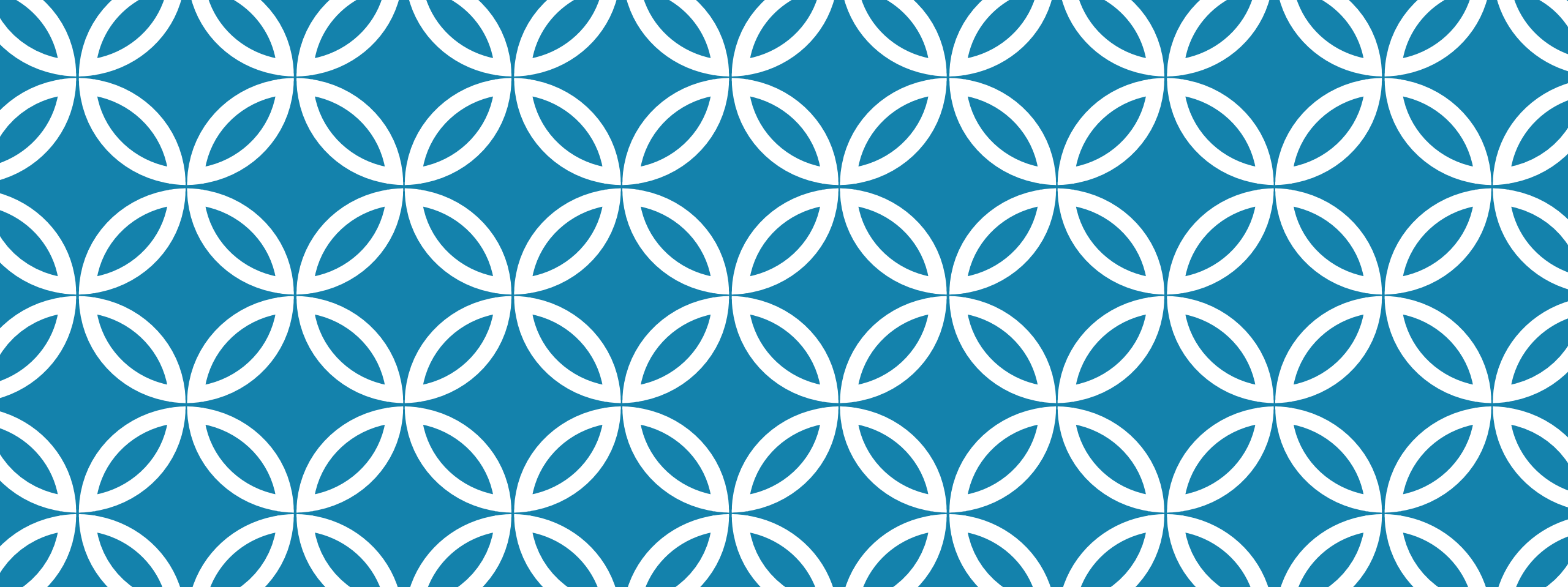
These are retained under production charge on priced production ledger – considered as a departmental store

Work order series 41 is operated

Material is Drawn on coloured DN/RN

No element-wise cost is depicted unlike the except system

No linkage with final outturn workorder can be established



THANK YOU |