

Quadrant II – Glossary

Paper Code: DSE 7 COD 126

Module Name: Calculation of equivalent production by using FIFO method ii) When there is only closing WIP with process losses

Glossary

1. Work in Progress:

WIP is a concept used to describe the flow of manufacturing costs from one area of production to the next and the balance in WIP represents all production costs incurred for partially completed goods.

2. Equivalent units/Effective units

Equivalent units are the product of the number of partially completed units and the percentage completion of those units.

3. Methods for determination of cost of WIP

- a. FIFO Method
- b. Weighted Average cost
- c. LIFO Method

Possible misconceptions/clarification

Calculation of Equivalent production is not for recording in process account but used to determine the value of partially completed units at the end of the period.

Additional Examples/Illustrations

STS Ltd. Furnishes you the following information relating to Process X for the month of March 2020:

- i) Opening work in progress : Nil
- ii) Units introduced : 10,000 units at Rs.5 per unit
- iii) Expenses debited to process account: Material Rs. 33000
Labour Rs. 34240
Expenses Rs. 17120
- iv) 8000 units of finished output were transferred to the next process during the month.
- v) Normal loss in process: 10% of input
- vi) Closing work in progress: 800 units
- vii) Completion stage:

	Closing work in progress	Abnormal Loss
Material:	100%	100%
Labour and overheads:	50%	80%

- viii) Scrap realization : Normal Loss : @ Rs 2 per unit
Abnormal Loss: @ Rs. 4 per unit

Prepare:

- a) Statement of Equivalent production
- b) Statement of cost of each element
- c) Statement of Evaluation
- d) Process "X" Account
- e) Abnormal Loss Account

Additional Notes for calculations

1) Calculation of Abnormal Loss

	Units
Opening Work in Progress	Nil
Units introduced	10000
	10000
Less: Normal Loss	1000
Expected output	9000
Finished output transferred to next process	8000
	1000
Less: Closing Work in Progress	800
Abnormal Loss	200

2. Preparation of Statement of Equivalent Production

Input Units	Particulars	Output				
		Units	Material		Labour & Overheads	
			%	Units	%	Units
0	Opening WIP	0				
10000	Units introduced					
	Finished outputs	8000	100	8000	100	8000
	Normal Loss	1000	-	-	-	-
	Abnormal Loss	200	100	200	80	160
	Closing WIP	800	100	800	50	400
10000		10000		9000		8560

4. Statement of Cost of Each Element

Elements	Cost	Equivalent units	Cost per unit
Input cost	50000		
Process Material	33000		
	83000		
Less: Normal Scrap realised	2000		
Net material cost	81000	9000	9
Labour	34240	8560	4
Overheads	17120	8560	2
Total process cost per unit			15

5. Statement of Evaluation

Item	Element of cost	Equivalent production	Cost per unit	cost	Total cost
Finished output	Material	8000	9	72,000	
	Labour	8000	4	32,000	
	Overhead	8000	2	<u>16,000</u>	1,20,000
Abnormal Loss	Material	200	9	1800	
	Labour	160	4	640	
	Overhead	160	2	<u>320</u>	2760
Closing WIP	Material	800	9	7200	
	Labour	400	4	1600	
	Overhead	400	2	<u>800</u>	9600

6. Process "X" Account

Particulars	Units	Rs	Particulars	Units	Rs.
To Units Introduced	10000	50000	By Normal Loss	1000	2000
To Material		33000	By Abnormal Loss	200	2760
To Labour		34240	By FG Transfer	8000	1,20,000
To Overheads		17120	By Closing WIP	800	9600
	10000	134360		10000	134360

7. Abnormal Loss Account

Particulars	Units	Rs	Particulars	Units	Rs.
To Process X A/C	200	2760	By Cash	200	800
			(Sale as scrap)		
			By Costing P&L A/C		1960
	200	2760		200	2760