Accounting Notes

Process Costing

Steps in Process Cost Accounting:

Step 1 - Summarize the flow of production in physical units

Step 2 - Compute output in terms of equivalent units

Equivalent units - a measure of the amount of work done during a period expressed in terms of fully complete units of output

Number of Equivalent Units	=	Number of partially Completed Units	*	Percentage of the Process completed

Flow of Production	Physical Units	Direct Materials	Conversion Costs	
Units to account for:				
Beginning Work in Process	1250			
Started in production	1500			
Total physical units to account for	2750			
Units accounted for:				
Completed & transferred out	1750	1750	1750	
Ending Work in Process (35%)	1000	1000	350	(1000*35%)
Total physical units accounted for	2750			
Equivalent Units		2750	2100	

Note: Since the units that were transferred out of Work in Process are 100% complete, the equivalents units for both Direct Material and Conversion costs will be the same as the number of physical units.

Step 3 - Summarize the total costs to account for

	Direct Materials	Conversion Costs	Total
Beginning Work in Process	25,000	17,500	42,500
Costs added during the month	10,000	20,500	30,500
Total costs to account for			73,000

Step 4 - Compute the cost per equivalent unit

	Direct Materials	Conversion Costs
Beginning Work in Process	25,000	17,500
Costs added during the month	10,000	20,500
Total costs	35,000	38,000
Divide by Equivalent Units	2,750	2,100
Cost per Equivalent Unit	12.7273	18.0952

Note: Do not round off the per unit costs to two decimal places yet. Maintaining four decimal places will help reduce any rounding errors that could occur in the next step.

Step 5 - Assign costs to units completed and to units in ending Work in Process

	Direct Materials	Conversion Costs	Total
Units Completed and transferred out	22,273[1]	31,667[2]	53,940
Units in ending Work in Process			
Direct Materials	12,727[3]		12,727
Conversion Costs		6,333[4]	6,333
Total cost of ending Work in Process			19,060
Total cost accounted for			73,000

[1] 1750 equivalent units * $12.7273 cost per equivalent unit
[2] 1750 equivalent units * $18.0952 cost per equivalent unit
[3] 1000 equivalent units * $12.7273 cost per equivalent unit
[4] 350 equivalent units * $18.0952 cost per equivalent unit

Process Costing for a second department - FIFO method

Steps 1 & 2 - Summarize the flow of production in physical units and compute output in terms of equivalent units

		Equivalent units		
	Physical Units	Transferred In	Direct Materials	Conversion Costs
Units to account for:				
Beginning Work in Process	1000			
Transferred in during the month	1500			
Total Physical units to account for	2500			
Units accounted for:				
Completed & transferred out				
From Beginning Work in Process (40%)	500	-----	-----	300[1]
Started & Completed	1500	1500	1500	1500
Ending Work in Process (30%)	500	500	500	150[2]
Total physical units accounted for	2500			
Equivalent Units		2000	2000	1950

[1] 500 physical units * 60% (percentage of work completed this month)
[2] 500 physical units * 30% (percentage of work completed this month)

Steps 3 & 4 - Summarize total costs to account for & compute cost per equivalent unit

	Transferred In	Direct Materials	Conversion Costs	Total
Beginning Work in Process				23,000
Costs added during the month	17,500	18,000	20,000	55,500
Divide by equivalent units	2000	2000	1950	
Cost per equivalent unit	8.75	9.000	10.2564	
Total costs to account for				78,500

Step 5 - Assign costs to units completed and to units in Ending Work in Process Inventory

	Transferred In	Direct Materials	Conversion Costs	Total
Units completed & transferred out to				
Finished Goods Inventory				
From beginning Work in Process				23,000
Costs added during the month				
Direct Materials		--------		
Conversion costs (300*10.2564)			3,077	3,077
Total completed from beginning inventory				26,077
Units started & completed during the month (1500 * (8.75 + 9.0 + 10.2564))				42,010
Total costs transferred out				68,087
Ending Work in Process				
Transferred in costs (500 * 8.75)	4,375			4,375
Direct Materials (500 * 9.00)		4,500		4,500
Conversion Costs (150 * 10.2564)			1,538	1,538
Total ending Work in Process				10,413
Total costs accounted for				78,500

Weighted Average Method

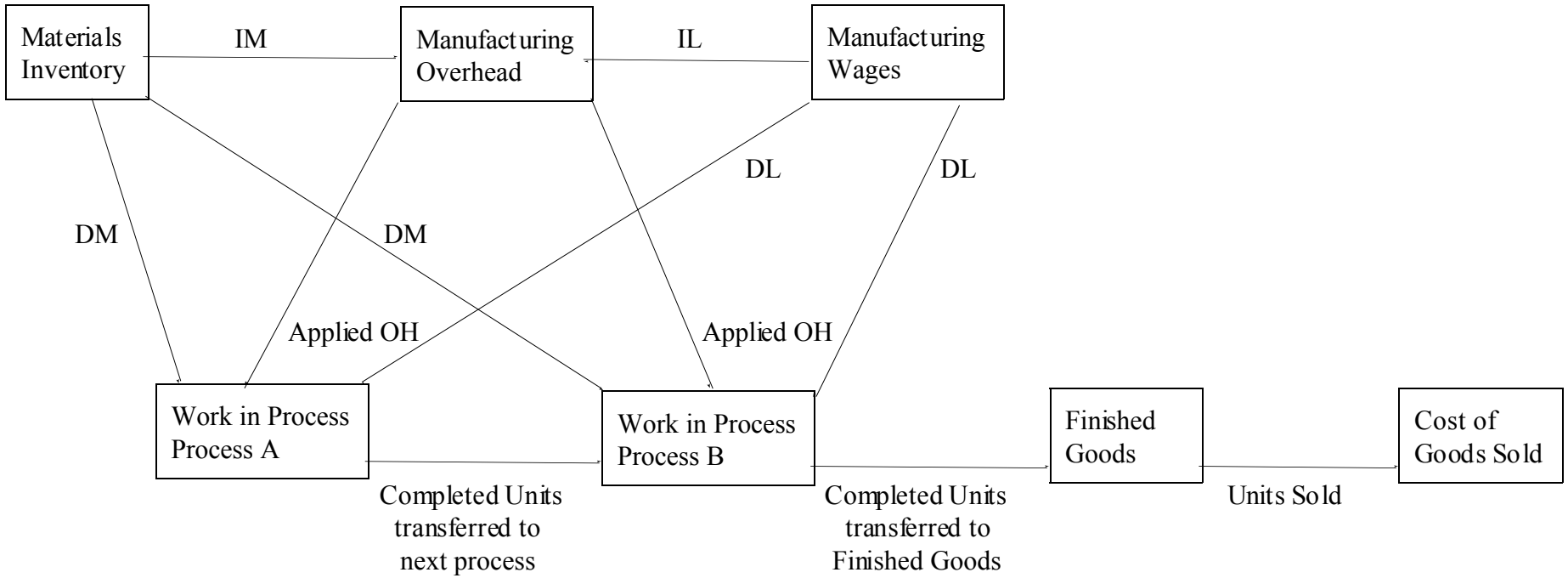
Same as under FIFO method except as noted below

Step 1 & 2 - all units complete and transferred out are treated identically (Beginning inventory and units started and completed are combined together under the units accounted for section)

Step 3 & 4 - all costs incurred (this period and prior period) for the physical units are added together to find total costs for equivalent units produced. (FIFO only uses current period costs to find cost per equivalent unit)

Step 5 - Basically the same as FIFO

Flow of costs in a Process Cost System:



DL = Direct Labor
IL = Indirect Labor
DM = Direct Materials
IM = Indirect Materials
OH = Overhead