

Accounting Notes

Product Costing

Product Costing Approaches:

Process Costing - System for assigning costs to large numbers of identical units that usually proceed in a continuous fashion through a series of uniform production steps or processes. (Producing continuous flow of similar units)

Job Costing - System for assigning costs to a specific unit or to a small batch of products or services that (1) proceeds through production steps as a distinct identifiable job lot and (2) can vary considerably in terms of materials, labor, and overhead costs. (Producing different units for different jobs)

Journal entries to account for the different manufacturing costs:

During this next section it might be helpful to refer back to the flowchart in the notes for chapter 19 showing how the costs flow between the different accounts for a manufacturing company.

Requisition of Materials into Production:

When materials are introduced into production there are both direct and indirect materials used. The direct and indirect costs must be separated since they are accounted for with different accounts. The direct materials are added to the Work in Process Inventory while the indirect materials are added to the Manufacturing Overhead.

Work In Process Inventory	Direct Materials	
Manufacturing Overhead	Indirect Materials	
Materials Inventory		Total materials

Labor costs incurred:

For a manufacturing company, when labor costs are incurred (or paid) the wages are debited to the Manufacturing Wages account instead of Wages Expense, as in a service business.

Manufacturing Wages	Labor costs	
Wages Payable (or Cash)		Labor costs

Assignment of labor to production:

As with the materials used, labor costs used in production must be separated into their direct and indirect cost components. These costs are then transferred out of the Manufacturing Wages and added to the Work in Process Inventory and Manufacturing overhead accounts.

Work in Process Inventory	Direct Labor	
Manufacturing Overhead	Indirect Labor	
Manufacturing Wages		Total Labor costs

Accounting for other Manufacturing Overhead costs incurred:

In addition to indirect materials and labor there are other costs that a manufacturing company incurs during the production process that can not be separated and assigned directly to a specific unit or product in a easy and cost-effective manner. Some of these costs include Depreciation, Utilities, Insurance, and Property taxes on the factory. It is important to remember that these expenses must be on the factory facilities and not on the administrative offices. If the expenses are for the administrative office, then the expense are debited to their normal expense accounts (Depreciation Expense, Utilities Expense, etc...).

Manufacturing Overhead	Depreciation Exp.	
Accumulated Depreciation		Depreciation Exp.

Manufacturing Overhead	Utilities costs	
Accounts Payable (or Cash)		Utilities costs

Manufacturing Overhead	Insurance expired	
Prepaid Insurance		Insurance expired

Manufacturing Overhead	Property Taxes	
Accounts Payable (or Cash)		Property Taxes

Applying Overhead to production:

The overhead costs added to the Manufacturing Overhead account must now be applied to the units in the Work in Process Inventory. These overhead costs are applied by using a predetermined overhead rate. This rate is determined by dividing the total estimated overhead costs for the year by the estimated allocation base.

Predetermined		Total estimated Manufacturing Overhead
Manufacturing	=	_____
Overhead rate		Allocation Base

Allocation Base - a common denominator that links indirect costs to cost objects (products). Examples include Direct Labor hours, Direct Labor costs, or Machine hours

When overhead is applied, it is added (debited) to Work in Process Inventory and credited to the Manufacturing Overhead account.

Work in Process Inventory	Applied Overhead	
Manufacturing Overhead		Applied Overhead

Transferring of completed goods:

When the products are completed, their costs must be transferred from the Work in Process Inventory and into Finished Goods Inventory.

Finished Goods Inventory	Cost of completed units	
Work in Process Inventory		Cost of completed units

Sale of Goods:

Accounting for the sale of goods is the same for a manufacturing business as for a merchandising business. There are two journal entries that must be done. The first entry is to record the price that the products were sold for and the second entry is to record the cost of producing those units.

Accounts Receivable (or Cash)	Sales price	
Sales		Sales price
Cost of Goods Sold	Cost of units	
Finished Goods Inventory		Cost of units

Accounting for Under- and Over-Applied Overhead:

If the amount is considered to be insignificant, it is closed (transferred) to the Cost of Goods Sold account.

Cost of Goods Sold	Under-applied amount	
Manufacturing Overhead		Under-applied amount

If the amount is considered to be significant, then it must be allocated between the Work in Process Inventory, Finished Goods Inventory and Cost of Goods Sold accounts. The amount of under-applied overhead is allocated based on the account balances.

	Ending Balance	Proration		
Work in Process	\$ X	X / Total	"	Under-applied overhead
Finished Goods	Y	Y / Total	"	Under-applied overhead
Cost of Goods Sold	Z	Z / Total	"	Under-applied overhead
	<hr/>			<hr/>
	<u>Total</u>			<u>Under- applied overhead</u>

Work in Process Inventory	Allocated amount	
Finished Goods Inventory	Allocated amount	
Cost of Goods Sold	Allocated amount	
Manufacturing Overhead		Under-applied overhead

The allocation process and accounts used in the journal entries are the same for Over-applied overhead as shown above for Under-applied overhead. The only difference is that the debits and credits are reversed.

Manufacturing Overhead	Over-applied overhead
Cost of Goods Sold	Over-applied overhead

or

Manufacturing Overhead	Over-applied overhead
Work in Process Inventory	Allocated amount
Finished Goods Inventory	Allocated amount
Cost of Goods Sold	Allocated amount