**JOB ORDER COSTING AND PROCESS COSTING**

**COST ACCOUNTING**

Is the subfield of accounting records, measures, and reports information about costs.

When costs are used inside the organization by MANAGERS to evaluate the performance of the operations or personnel, or as a basis for decision making.

When costs are used by OUTSIDERS, such as shareholders or creditors

When costs are used for ***accounting purposes*** to evaluate the performance of top management and make investment decisions about the organization.

**FLOW OF COST IN A MERCHANDISING COMPANY**

**MERCHANDISING COMPANIES example:** Computer Stores, Department Stores, Drugstores and retail outlets, purchase the merchandise they sell to customers.

**MERCHANDISE INVENTORY**

When products are purchased, the cost of assets are recorded in Balance Sheet or Financial Position. This account includes all the good purchased for resale that were not sold.

**SELLING AND ADMINISTRATIVE COSTS**

Charged as operating expenses for the period in the income statement.

**FLOW OF COST IN A MANUFACTURING COMPANY**

**DIRECT MATERIALS /RAW MATERIALS –** cost of materials and reported as an asset.

**DIRECT LABOR –**  cost is placed in the Work in Process account and Salaries and Wages Payable.

**MANUFACTURING OVERHEAD –**

* Is placed in the work in process account from depreciation charges, use of indirect labor, expiration of insurance premiums and use or expiration of other factors necessary for manufacturing operations.
* Example: Accumulated Depreciation, Prepaid Insurance or Accounts Payable under statement of financial position.

Some of the costs that would typically be included in manufacturing overhead include:

* Material handlers (forklift operators who move materials and units).
* People who set up the manufacturing equipment to the required specifications.
* People who inspect products as they are being produced.
* People who perform maintenance on the equipment.
* People who clean the manufacturing area.
* People who perform record keeping for the manufacturing processes.
* Factory management team.

**WORK IN PROCESS**

* As the product are completed and moved from the factory to storeroom, the accountant moves direct materials, direct labor and manufacturing overhead**.**

**FINISHED GOODS**

* When the products are sold, the total cost is transferred to FINISH GOODS ACCOUNT.

**JOB ORDER COSTING SYSTEM**

* costs are assigned to each job. A job may be an order, a contract, a unit of production or a batch performed to meet customers’ specifications.

**EXAMPLE:**

* When repairing a television set, an electrician collects the cost of repair parts and the direct labor – hours spent in repairing the TV set. Overhead costs are applied using the overhead rate.
* A printing company

**SUMMARY OF JOB ORDER COSTING TO A MANUFACTURING COMPANY**

1. **RECORD THE PURCHASE AND ISSUE OF MATERIALS WITH JOURNAL ENTRIES**

* **JOURNAL ENTRY OF PURCHASE OF MATERIALS**

|  |  |  |
| --- | --- | --- |
| **PARTICULARS** | **DEBIT** | **CREDIT** |
| **MATERIALS** | **XX** |  |
| **ACCOUNTS PAYABLE** |  | **XX** |

* **JOURNAL ENTRY - ISSUE OF DIRECT MATERIALS**

|  |  |  |
| --- | --- | --- |
| **PARTICULARS** | **DEBIT** | **CREDIT** |
| **WORK IN PROCESS** | **XX** |  |
| **MATERIALS** |  | **XX** |

* **JOURNAL ENTRY OF ISSUE OF INDIRECT MATERIALS**

|  |  |  |
| --- | --- | --- |
| **PARTICULARS** | **DEBIT** | **CREDIT** |
| **ACTUAL MANUFACTURING OVERHEAD** | **XX** |  |
| **MATERIALS** |  | **XX** |

EXAMPLE OF INDIRECT MATERIALS

**Cleaning supplies,Disposable safety equipment,Disposable tools,Fittings and fasteners,Glue,Oil,Tape**

1. **RECORD LABOR COSTS WITH JOURNAL ENTRIES**

* **JOURNAL ENTRY OF DIRECT LABOR COST**

|  |  |  |
| --- | --- | --- |
| **PARTICULARS** | **DEBIT** | **CREDIT** |
| **WORK IN PROCESS** | **XX** |  |
| **WAGES PAYABLE** |  | **XX** |

Total Direct labor cost on a job. The is calculated from workers timecards or no. of hours.

* **JOURNAL ENTRY OF ISSUE OF INDIRECT LABOR**

|  |  |  |
| --- | --- | --- |
| **PARTICULARS** | **DEBIT** | **CREDIT** |
| **ACTUAL MANUFACTURING OVERHEAD** | **XX** |  |
| **WAGES PAYABLES** |  | **XX** |

Indirect labor is the cost of any labor that supports the production process, but which is not directly involved in the active conversion of materials into finished products. Examples of indirect labor positions are:

Production supervisor, Purchasing staff, Materials handling staff, Materials management staff, Quality control staff

The cost of these types of indirect labor are charged to factory overhead, and from there to the units of production manufactured during the reporting period. This means that the cost of indirect labor related to the production process ends up in either ending inventory or the cost of goods sold.

1. **CALCULATE A PREDETERMINED OVERHEAD RATE AND USE IT TO ASSIGN OVERHEAD COSTS TO A JOB.**

* The **manufacturing overhead costs** incurred on a specific job.

Manufacturing overhead includes such things as the **electricity** used to operate the factory equipment, **depreciation** on the factory equipment and building, factory **supplies** and factory **personnel** (other than direct labor). How these costs are assigned to products has an impact on the measurement of an individual product's profitability.

**PREDETERMINED OVERHEAD RATE –** the ratio of the total estimated manufacturing overhead cost for the year expected manufacturing activity for the year, measured according to some cost of driver, such as labor costs.

1. **RECORD APPLIED MANUFACTURING OVERHEAD COSTS WITH JOURNAL ENTRIES**

**TO RECORD APPLIED OVERHEAD**

|  |  |  |
| --- | --- | --- |
| **PARTICULARS** | **DEBIT** | **CREDIT** |
| **WORK IN PROCESS** | **XX** |  |
| **APPLIED MANUFACTURING OVERHEAD** |  | **XX** |

1. **COMPUTE OVER AND UNDERAPPLIED OVERHEAD**

**APPLIED OVERHEAD**  - IS GREATER THAN ACTUAL MANUFACTURING OVERHEAD. **OVERAPPLIED**

**APPLIED OVERHEAD**  - IS LESS THAN ACTUAL MANUFACTURING OVERHEAD. **UNDERAPPLIED**

EXAMPLE OF OVERAPPLIED:

Pinnacle Tiles, a roofing tile manufacturer, allocates overheads on the basis of the number of machine hours used in production. At the beginning of the quarter, it estimates that its machines will run for a total of 7,000 hours.

It allocates its **total projected overhead cost of P140,000** on this basis. Accordingly, P20 (P140,000 divided by 7,000 hours) is the overhead cost of each machine-hour.

**However, at the end of the quarter,** the total machine-hours that have been utilized are 7,400. Consequently, a total of P148,000 (7,400 hours X P20) has been absorbed. Pinnacle Tiles has **overapplied overhead because the number of actual machine-hours in the quarter exceeded the estimate.**

**EXAMPLE OF UNDERAPPLIED:**

A business **estimates it will pay P8 an hour of overhead**. The business works 1,000 hours during the period. Therefore, budgeted overhead for the period equals P8,000 = P8 x 1,000 hours. The **actual overhead rate for a company is P10 an hour**, Therefore, actual overhead is P10,000 by the equation P10 x 1,000 hours.

**Journal Entry Example of Overhead:**



1. **CALCULATE COST OF GOODS MANUFACTURED AND COST OF GOODS SOLD.**

**FORMULA:**

Direct Materials Used XXX

Add: Direct Labor XXX

Applied Manufacturing Overhead XXX

=Total manufacturing Costs XXX

Add: Beginning Bal. Work in Process XXX

Less: Ending Bal. Work in Process XXX

=Cost of Goods Manufactured XXX

Add: Beginning Finished Goods Inventory XXX

Less: Ending Finished Goods Inventory XXX

=Cost of Goods Sold XXX

Cost of Goods Sold – can be calculated by multiplying the number of units sold X per unit shown on the job cost sheet.

**EXAMPLE OF JOB ORDER COSTING IN A MANUFACTURING COMPANY**

**PALMERA COMPANY** is a manufacturing firm that uses job – order costing. On January 1, the beginning of its fiscal year, the company’s inventory balances were as follows:

Raw materials -------------------------------------P 200,000.00

Work in Process -----------------------------------P 150,000.00

Finished Goods ------------------------------------P 300,000.00

The company applies overhead cost to jobs on the basis of machine – hours worked. For the current year, the company estimated that it would work 750,000.00 machine – hours and incur P 4,500,000.00 in manufacturing overhead cost. The following transactions were recorded for the year:

1. Raw materials were purchased on account P 4,100,000.00
2. Raw materials were requisitioned for use in production, P 3, 800,000.00. (P3,600,000.00 direct materials and P200,000.00 indirect materials).
3. The following costs were incurred for employee services: direct labor, P750,000.00; indirect labor P1,100,000.00; sales commissions, P900,000; and administrative salaries, P2,000,000.00.
4. Sales travel costs were P170,000.00.
5. Utility costs in the factory were P170,000.00
6. Advertising costs were P1,800,000.00.
7. Depreciation was recorded for the year, P3,500,000.00 (80% relates to factory operations, and 20% relates to selling and administrative activities).
8. Insurance expired during the year P100,000.00 (70% relates to factory operations, and relates to factory operations, and the remaining 30% relates to selling and administrative activities.
9. Manufacturing overhead was applied to production. Due to greater than expected demand its products, the company worked 800,000.00 machine – hours during the year.
10. Good costing P9,000,000.00 to manufacture according to their job cost sheets were completed during the year.
11. Goods were sold on account to customers during the year at a total selling price of P15,000,000.00 The good cost P8,700,000.00 to manufacture according to their job cost sheets.

Required:

1. Prepared journal entries to record the preceding transactions.
2. Post the entries to T - Accounts.
3. Is Manufacturing Overhead underapplied or overapplied for the year? Prepare a journal entry to close any balance in the Manufacturing Overhead account to Cost of Goods Sold. Do not allocate the balance between ending inventories and Cost of Goods Sold.
4. Prepare an income statement for the year.

<https://www.accountingcoach.com/manufacturing-overhead/explanation>

<https://crushthecpaexam.com/accounting-glossary/overapplied-overhead/>

<https://www.accountingformanagement.org/over-or-under-applied-manufacturing-overhead/>

<https://www.principlesofaccounting.com/chapter-19/accounting-overhead/>