

Costing system

Define a costing system

It is the system that is concerned with knowing the items and types of cost and their value that is borne by the sold unit (whether the unit sold is a good or a service) and this cost is of two types as follows:

- 1- **In the case of purchasing the product ready for sale**, in this case, the cost of the unit that will be sold is known through the following equation:

The unit cost of the ready-to-sale product = its purchase cost (this value is in the purchase invoice) + unit share of transportation costs + unit share of marketing and sales costs

- 2- **In the case of manufacturing the product**, the unit cost is known by three elements for costs as follows:

A- The unit's share of materials, which are divided into- :

- 1- **Direct materials**: they are included in the formation of the commodity, and the share of each unit produced from it can be accurately determined. Example: cloth in the manufacture of clothes, leather in the manufacture of shoes, wood in the manufacture of furniture.

- 2- **Indirect materials**: they are insignificantly included in the manufacturing of the unit, and the share of the produced unit cannot be accurately determined, for example, glue and nails in some industries, fuels, oils, lubricants, and hygiene materials.

B- The unit's share of workers' wages: It is the wages paid to workers who carry out work. The wages are divided into:

- 1- **Direct wages**: These represent the wages of workers who work on unit production machines or undertake tasks related to units so that it is possible to know the time that one of them takes in his production tasks, such as the wages of carpenters in a furniture factory, or tailors in a sewing factory
- 2- **Indirect wages**: those wages paid to workers in support tasks who do not work directly in production (such as the wages of cleaning and supervisory workers).

C- The unit's share of other services are expenses or expenses related to the production, marketing, or administrative activity, and they are divided into:

- 1- **Direct services:** It is cost directly necessary to produce the product, such as the cost of engineering designs for a specific commodity, research and development costs of the commodity
- 2- **Indirect services:** the costs related to the factory (such as the cost of rent and lighting)

The costing system aims to:

- 1- Determining the cost of the good or service in preparation for pricing the product
- 2- Providing information that helps in controlling costs by comparing the actual costs related to the current period with the costs of one or several previous periods. or compare the actual costs with the standard costs, analyze the deviations, and take the necessary measures to avoid waste.
- 3- Evaluating the performance of the sub-units in the facility to determine their efficiency in performing the various tasks.
- 4- Assisting the administration in carrying out its functions of planning, controlling, and making decisions with the information and data it provides

Documentary and accounting cycle for the costing system cycle

First: the documentary cycle of the costing system

The documentary cycle aims to:

- 1- Achieving internal control of operations and control over operating elements.
- 2- Facilitating the procedures for executing operations.
- 3- Flow of documents easily and quickly.
- 4- Providing the necessary data for the operations of registering in the books, analyzing the data, and preparing the books, lists, and financial summaries.

The documentary cycle of costing system

- 1- Exchange documents from material stores (whether direct materials or indirect materials) to the production factory, where the production manager approves the exchange document from the stores and gives the original document to the warehouse manager, and the production manager keeps a copy of it and sends a copy to the cost department
- 2- Workers' wages statements (whether direct labor wages or indirect labor wages) the production manager keeps a copy of it because he

is the one who monitors these wages and sends a copy to the cost department as well as a copy to the accounts department and accordingly a copy of this document is sent to the treasury in preparation for the disbursement of dues These workers

- 3- Documents related to services (whether direct or indirect services). These documents are created in the accounts department, where a copy of them is sent to the costs department.

Items to be included in the document

- 1- The document must contain the name of the department that issued it
- 2- The date the document was released
- 3- Financial value and purpose of editing this document
- 4- Beneficiary of editing this document
- 5- Signatures: Who has the right to sign the document?

Second: the accounting cycle of the cost system

Accounting treatment of cost components:

First: **When purchasing materials, they enter these materials into the store with the following entry- :**

xx	from acc / the stores
xx	to acc /suppliers

Second: **When disbursing materials (whether directly materials or indirect materials)**

A- Direct materials are charged to the production in operation, while indirect materials are charged to the indirect industrial costs by the following entry:

	from two mentioned
xx	acc / production in operation (Direct Materials)
xx	acc / Indirect industrial cost (indirect materials)
xx	to acc / warehouse

B- If the materials increased (whether directly materials or indirectly materials) are more than needed, they are returned to the stores with the following reverse entry:

xx from acc / the stores

to two mentioned

xx acc/ production in operation (Direct Materials)

xx acc / Indirect industrial cost (indirect materials)

Third: **wages Accounting:**

Each worker must sign in a timecard, which proves the worker's daily attendance and departure, and from which it is determined the original and overtime working hours and the payable wage. The job card shows the time each worker spent on each production order to determine the share of the production order from direct wages, as the time that a production order did not benefit from certain are considered indirect wages, and both types of wages are written as follows:

A- **When the wages are paid**

xx from acc /wages (direct and indirect wages)

xx to acc /cash

B- **Wages burden**

After wages are analyzed into direct and indirect, direct wages are charged to a control account Production in the process, while indirect wages bear the control of indirect industrial costs with the following entry:

From two mentioned

xx acc / production in operation (direct wages)

xx acc / Indirect industrial cost (indirect wages)

xx to acc /wages (direct and indirect wages)

Fourth, **indirect industrial costs**

It means the costs that do not belong to a specific production order or a specific group of orders: such as lighting costs, factory rent, supervisors and foremen's wages, machinery depreciation, costs of oils and lubricating machines, and the salary of the factory manager. The costs are recorded with the following entry:

xx from acc / indirect industrial costs (indirect industrial costs)

xx to acc /the fund or bank or the creditors

Fifth: **How to charge indirect industrial costs at the expense of production in operation**

Since the share of the production order in the industrial overheads cannot be determined during the year because they do not pertain to a specific matter, but rather pertains to all products, and it is only possible to know its totality after the end of the fiscal year or accounting period. Therefore, production is charged with its share of expenses Indirect industrial based on a loading rate that is calculated at the beginning of the accounting period based on expected expenses and a specific load factor such as direct materials or direct wages. This is called the industrial costing rate.

Example: direct wages amounted to 10,000 pounds, and the loading rate is 50% of direct wages. Calculate the estimated manufacturing overheads for order (101) with a procedure under load.

$$\begin{aligned}\text{Indirect manufacturing costs} &= \text{direct wages} * \text{rate or loading rate} \\ &= 10000 * 50\% = 5000\end{aligned}$$

The entry as follows

5000	from acc / production in operation
5,000	to acc /indirect industrial cost control

Sixth: **Accounting treatment of industrial costing differences:**

If the estimated costs are equal to the actual costs, no restrictions are made, but in practice, it is difficult that the estimated indirect industrial costs be equal to the actual indirect industrial costs rather, there is often a difference between them, an increase or a decrease. Therefore, the differences are handled as follows:

A- **If the estimated costs are greater than the actual costs, the following entry shall be made:**

xx	from acc /indirect industrial cost
xx	to acc/ production in operation

B- **If the estimated costs are less than the actual, the following entry shall be made:**

XX	from acc / production in operation
xx	to acc /indirect industrial cost control

Note: somebody prefer to charge the differences to the profit and loss account

After the production in operation is charged with its share of the cost elements of direct materials and direct wages and its share of indirect industrial costs, it becomes a full production order thus, its cost is transferred to an account called the complete production account, with the following entry:

xx from acc / full production
 xx to acc/ production in operation

The balance of the full production account shows the cost of orders that have not been sold or not yet delivered to their owners. When the production is sold or delivered to its owners, its cost is transferred from the complete production account to sold production account with the following entry:

xx from acc / sold production (this enters in the income statement)
 xx to acc /full production

When the production is sold (in cash or on credit) or delivered to its owners, the following entry shall be made:

xx from acc / fund, bank, or customer
 xx to acc / sold production (this enters in the income statement)

The difference between the sold production account and the cost of sales is the gross profit of production orders.