

LO2: MANAGERIAL ACCOUNTING

AS 2: Prepare, present, analyse and report on cost information for a manufacturing Enterprise by compiling a production cost statement.

1. The financial statements of manufacturing enterprises

The financial statements of the manufacturing enterprise differs very little from those of the merchandising enterprise. Account titles on the balance sheet of the manufacturer are similar to those used by the merchandiser. The main difference between the balance sheets is the use of three inventory (stock) accounts by the manufacturing enterprise while merchandising enterprise use only one. Even the income statements are similar. However, the manufacturer's key focus is on the **cost of goods manufactured** instead of the purchases account. In addition, the merchandise inventory is replaced by the finished goods inventory account.

All manufacturing cost incurred are generally considered to be part of production costs. Hundreds of transactions occur during an accounting period and each transaction affects part of the cost flow process. At the end of the financial year the flow of all manufacturing costs is summarized in the **production cost statement**. The cost of goods manufactured should be the same as the amount transferred from the work-in progress stock account to the finished goods stock account.

□ The stocks of raw materials are included as prime cost as they affect the amount of **raw materials used**. Opening stock is added to purchases of raw materials and closing stock is deducted to arrive at the cost of raw materials used. In addition, **direct labour** forms a part of **prime cost**.

□ The total cost of production that emerges from adding prime costs to factory overheads is the cost of producing everything, including goods that have not yet been finished and **are in a partly completed state**. Since these goods are not ready to be sold yet, they cannot be transferred to cost of sales in the trading account. We therefore add the opening stock and deduct the closing stock of **work-in-progress** to arrive at the **total factory cost of finished goods**.

□ The stocks of finished goods are included in the trading account in the usual way, i.e. we add the opening stock to and deduct the closing stock from the cost of production of finished goods plus any purchase of finished goods that the firm may have made.

2. The changing face of production costs

Technology and the new manufacturing processes of the 1990s and 2000s have produced entirely new patterns of production costs. The three elements of production cost are still materials, labour and factory overhead. However, the percentage of each element in the total cost of a product has changed.

During the 1950s, 1960s, and 1960s and 1970s labour was the dominant cost element making up over 40% of total production cost. Direct material contributed 35% and factory overhead around 25% of total cost. 75% of total cost of production was a direct cost, traceable to the product. Improved production technology caused a dramatic shift in the relative contribution of the three production cost elements. People were replaced by machines and direct labour was reduced significantly. Today, only 50% of production cost is directly traceable to the product; the other 50% is factory overhead, an indirect cost.

3. Preparing production cost statements - (Activity)

The financial year for Java Manufacturing Enterprises ends 28 February. The following information was extracted from their accounting records.

Required:

- The production cost statement.
- Cost of finished goods per unit (50 000 units were produced during the Year).

Information:

Operating cost information and inventory account balances	R
Stocks at 1 March 20.7	
Raw materials	80 000
Work-in-progress	13 000
Consumable stores	3 250
Finished goods	20 000
Raw materials purchased	284 000
Transport (carriage) of raw materials	74 000
Factory wages: Direct labour	124 300
Indirect labour	34 000
Insurance	56 000
Factory rent	150 000
Electricity	87 300
Consumable stores	6 000
Plant and machinery	110 000
Accumulated depreciation on plant and machinery	30 000

Additional information:

- Stocks on hand at 28 February 20.8:
 - Raw materials R38 000
 - Work-in-progress R 5 900
 - Consumable stores R 250
 - Finished goods R100 000
- Included in insurance is an annual premium of R6 000 for fire insurance paid on 1 September 20.7. Insurance must be divided between the factory and the office in the ratio of 3.2 respectively.
- Rent for the factory has been paid for the period 1 March 20.8.
- The plant and machinery are depreciated at 20% per annum on cost. Additional machinery was bought on 1 December 20.7 at a cost price of R30 000. An entry recording the purchase was made in the books.
- Consumable stores to the value of R1 000 was issued to the administrative Department.

SUGGESTED SOLUTION TO ACTIVITY

JAVA MANUFACTURING ENTERPRISES		
PRODUCTION COST STATEMENT FOR THE YEAR ENDED 28 FEBRUARY 20.8		
	R	R
Raw materials used		400 000
Opening stock	80 000	
Purchases	284 000	
Transport of raw materials purchased	74 000	
Cost of materials available for use	438 000	
Closing stock	38 000	
Direct factory wages		124 300
Prime cost		524 300
Factory overheads		298 600
Indirect labour	34 000	
Insurance [56 000 - (6 000 x 6/12 x 3/5)]	31 000	
Rent expense [150 000 - 30 000*]	120 000	
Electricity	87 300	
Consumable stores [3 250 + 6 000 - 1 000 - 250]	8 000	
Depreciation [16 000 + 1 500]	17 500	
Total cost of production		822 900
Work in progress (1 Mar. 20.7)		13 000
Cost of work -in-progress during the year		835 900
Work in progress (28 Feb 20.8.)		(5 900)
Cost of production of finished goods		830 000

Calculations Workings



* Rent expense prepaid:
 150 000
 = 15 months
 = 10 000 per month x 3 months
 = R30 000

Depreciation on plant and machinery:

March 1:
 R110 000 - 30 000 = R80 000
 R80 000 x 20 / 100 = R16 000



Bought :
 R30 000 on 01.12.20.7

$\frac{20}{100} \times \frac{3}{12} \times R30\,000 = R1\,500$

b) Cost of production per unit :
 = $\frac{\text{cost of production}}{\text{\# units produced}}$

= $\frac{R830\,000}{50\,000} = R16,60 \text{ per unit}$