

### Case VELMET COMPANY

VELMET company, a Setúbal – based company, produces valves (mass production) and adopts the standard costs system.

The products that the company produces provided the following data related to the standard cost sheet of the standard cost sheet of two references:

| Description      | MU  | Unit Cost (€) | Standard quantity Ref.10 | Standard quantity Ref. 15 |
|------------------|-----|---------------|--------------------------|---------------------------|
| Direct Materials |     |               |                          |                           |
| M1               | ton | 4.50          | 0.4                      | 0.3                       |
| M2               | ton | 3.00          | 0.4                      | 1.7                       |
| Conversion Costs |     |               |                          |                           |
| A1               | Lh  | 10.50         | 0.1                      | 0.2                       |
| A2               | Mh  | 9.50          | 0.1                      | 0.2                       |

A. The Budget of the year N provided the following data related to May

a) Purchases and consumptions:

| Materials | MU  | Unit Cost (€) | Purchases | Consumptions |
|-----------|-----|---------------|-----------|--------------|
| M1        | ton | 4.50          | 250       | 240          |
| M2        | ton | 2.50          | 510       | 500          |

b) Finished production:

| Products | MU | Quantity |
|----------|----|----------|
| Ref. 10  | un | 320      |
| Ref. 15  | un | 180      |

B. The actual data related to May, year N, are the following:

a) Purchases and consumptions:

| Materials | MU  | Unit Cost (€) | Purchases | Consumptions |
|-----------|-----|---------------|-----------|--------------|
| M1        | ton | 5.00          | 250       | 200          |
| M2        | ton | 2.75          | 510       | 500          |

b) Finished production:

| Products | MU | Quantity |
|----------|----|----------|
| Ref. 10  | un | 300      |
| Ref. 15  | un | 200      |

c) Sections activities and costs:

| Sections | Mu | Activity | Costs (€) |
|----------|----|----------|-----------|
| A1       | Lh | 50       | 500       |
| A1       | Mh | 60       | 600       |

d) Sales:

| Products | Quantity | Selling price (€) |
|----------|----------|-------------------|
| Ref. 10  | 260 un   | 6                 |
| REF. 15  | 200un    | 12                |

Based on the data provided, it is required:

1. Ascertain the standard cost of each reference;
2. Value the stocks of finished products of each reference;
3. Assuming that the company uses the actual costing system:
  - a) Ascertain the manufacturing variance;
  - b) Analyze the manufacturing variance;
  - c) Ascertain the gross profit of May.
4. Assuming that the company uses the standard costing system:
  - a) Ascertain the variances of purchases, sections and manufacturing;
  - b) Analyze the manufacturing variance;
  - c) Ascertain the gross profit of May.