

Example 1

The production company has the following data on its performance:

1. total fixed costs 15 000, - CZK,
2. variable costs per unit of production 10, - CZK,
3. total production of 500 pcs.

TASK:

- 1) Calculate the total variable costs of production.
- 2) Calculate the fixed cost per unit of production.
- 3) Calculate the total cost of production.
- 4) Calculate the average total cost of production.

Example 2

The manufacturing company has the following production data for its product:

1. total fixed costs CZK 40,000
2. Total variable costs 30 000 CZK
3. price of 1 product 40 CZK
4. quantity produced - capacity 2 000 pcs
5. planned production range 1 700 pcs

Calculate:

- (1) production volume for break-even point;
- 2) contribution margin,
- 3) contribution margin ratio,
- 4) sales in break-even point
- 5) margin of safety.

Example 3

The company records the following data: unit selling price \$25, unit variable cost \$10, total fixed costs \$15,000. The company produces 1,500 products.

Determine:

- a) Contribution margin (CM)
- b) Unit CM
- c) CM ratio
- d) Break-even point
- e) Break-even point in dollars
- f) Break-even point with target profit \$15,000

Example 4

The total amount of fixed costs in a textile company is CZK 5 434 610 in a certain period. The optimum production range that can be ensured by the existing capacity is 9 520 000 meters of fabric. However, only 8 436 614 meters of fabric were produced in the last reporting period.

Managerial Accounting

- 1) How much of the fixed cost remained unused?
- 2) How has the size of unit fixed costs changed?

Example 5

The maximum annual volume of production (production, output) of CZK 125 000 can be assured at the expense of annual fixed costs of CZK 2 400 000. During the period under review, the production capacity was used only at 95 %.

- 1) Identify free (unused) fixed costs
- 2) Find out how unit fixed cost has changed

Example 6

Item	Total for 500 000 pieces	Per 1 piece
material	3 000 000 CZK	6 CZK
wages	1 000 000 CZK	2 CZK
production overheads (depreciation, service and management, energy, repairs and maintenance, overhead material)	4 000 000 CZK	8 CZK
total	8 000 000 CZK	16 CZK

Of the total of 4000,000 crowns of production overhead costs, 3 000 000 crowns are fixed costs and variable overhead costs are 2 crowns per piece.

- Calculate the total cost of producing 300,000 products.

Example 7

Drink, a.s. produces and sells fruit lemonade, which it distributes through a single chain. Although lemonades differ in flavor, they are comparable in terms of selling price, variable costs and capacity requirements. Selling price of one liter is 10 CZK, variable costs 4 CZK. The total amount of fixed costs is CZK 2 400 000 per month. The planned production volume for April 2019 is 1 000 000 liters.

Tasks:

1. Determine contribution margin and contribution margin ratio
2. Find out your planned profit for April 2019
3. Determine the break-even point in pieces and value (CZK)

Example 8

The company evaluates two variants of production for next year. Which option is more favorable for the company? Determine which costs are relevant and irrelevant to the decision. Compare variants by relevant costs and benefits.

Item	Original variant	New variant
Material	5 000 CZK	5 000 CZK
Wages	1 500 CZK	900 CZK
Depreciation of products	0 CZK	300 CZK
Manufacturing overhead	4 000 CZK	4 500 CZK
Revenue	10 000 CZK	10 000 CZK

Example 9

The company wants to invest in modernizing the production process, which will, among other things, increase the number of products produced and reduce the level of direct wages. Calculate the difference cost and describe how modernizing the production process will affect the company's performance.

Item	Original costs	Changes costs
Volume of production	100 CZK	130 CZK
Price per piece	120 CZK	120 CZK
Direct personnel costs	1 500 CZK	1 000 CZK
Direct production consumption	5 000 CZK	6 500 CZK
Manufacturing overhead	4 000 CZK	4 500 CZK

Example 10

The office furniture company reports the following summary information about a specified part of its business - a particular set of furniture:

Sales (1 000 units sold)	18 000 000 CZK
Total cost	16 000 000 CZK
Profit	?

The company offers the opportunity to equip this furniture in the amount of 100 sets of new customer building. However, it requires a maximum set price of 15,000 CZK, which is below the current average cost of the set.

Of the current CZK 16,000,000, a total of CZK 10,000,000 is spent on consumables, unit personnel costs, unit energy consumption and variable production overhead costs.

Another CZK 2,500,000 is depreciation of production equipment intended for the production of these sets. This production facility is currently almost used in capacity.

Another CZK 500,000 is depreciation of costs for development and technical preparation of production.

Managerial Accounting

Another CZK 2,000,000 is the masters' personnel costs and other avoidable fixed costs. A one-off increase in capacity can be expected to increase by 5% (CZK 100,000).

The last CZK 1,000,000 is corporate administrative overhead, which will not affect the increase in production capacity.

- Does the company clearly refuse the contract or does it need additional information to decide?