



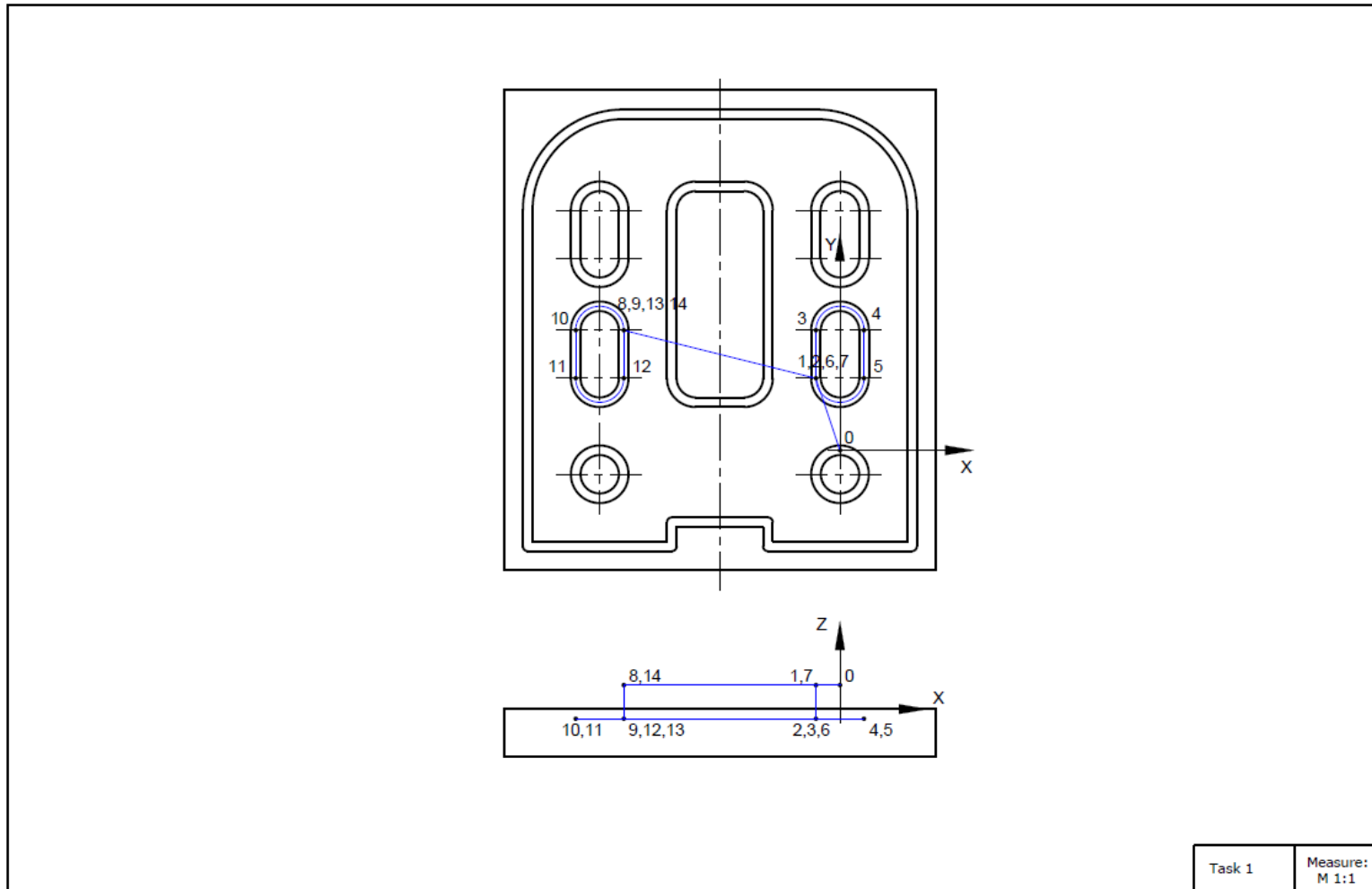
Field of education:
Mechanical engineering

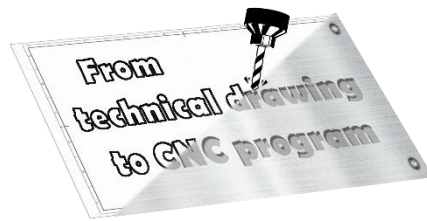
Professional qualification:
CNC operator

Exercise:
**Programming of CNC machine
(solution)**

Variant:
Task 34 – Support plate 5.4.

Solution:





Required written code that should be inserted into the control unit:

G0 X-5 Y15

G1 Z-2

Y25

G2 X5 R5

G1 Y15

G2 X-5 R5

G1 Z5

G0 X-45 Y25

G1 Z-2

G3 X-55 R5

G1 Y15

G3 X-45 R5

G1 Y25

Z5

M30

Explanation of the G-code:

%Setting the coordinate system x=0, y=0, z=5; point 0

G0 X-5 Y15 %Positioning at the starting point; point 1

G1 Z-2 %Tool entry into material; point 2

Y25 %Straight milling; point 3

G2 X5 R5 %Radial milling; point 4

G1 Y15 %Straight milling; point 5

G2 X-5 R5 %Radial milling; point 6

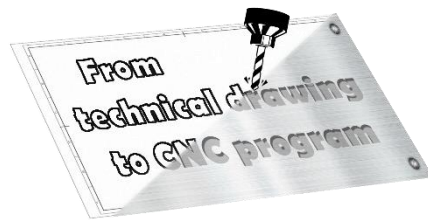
G1 Z5 %Lifting of tool; point 7

G0 X-45 Y25 %Positioning; point 8

G1 Z-2 %Tool entry into material; point 9

G3 X-55 R5 %Radial milling; point 10

G1 Y15 %Straight milling; point 11



G3 X-45 R5 %Radial milling; point 12

G1 Y25 %Straight milling; point 13

Z5 %Lifting of tool; point 14

M30 %End of program