

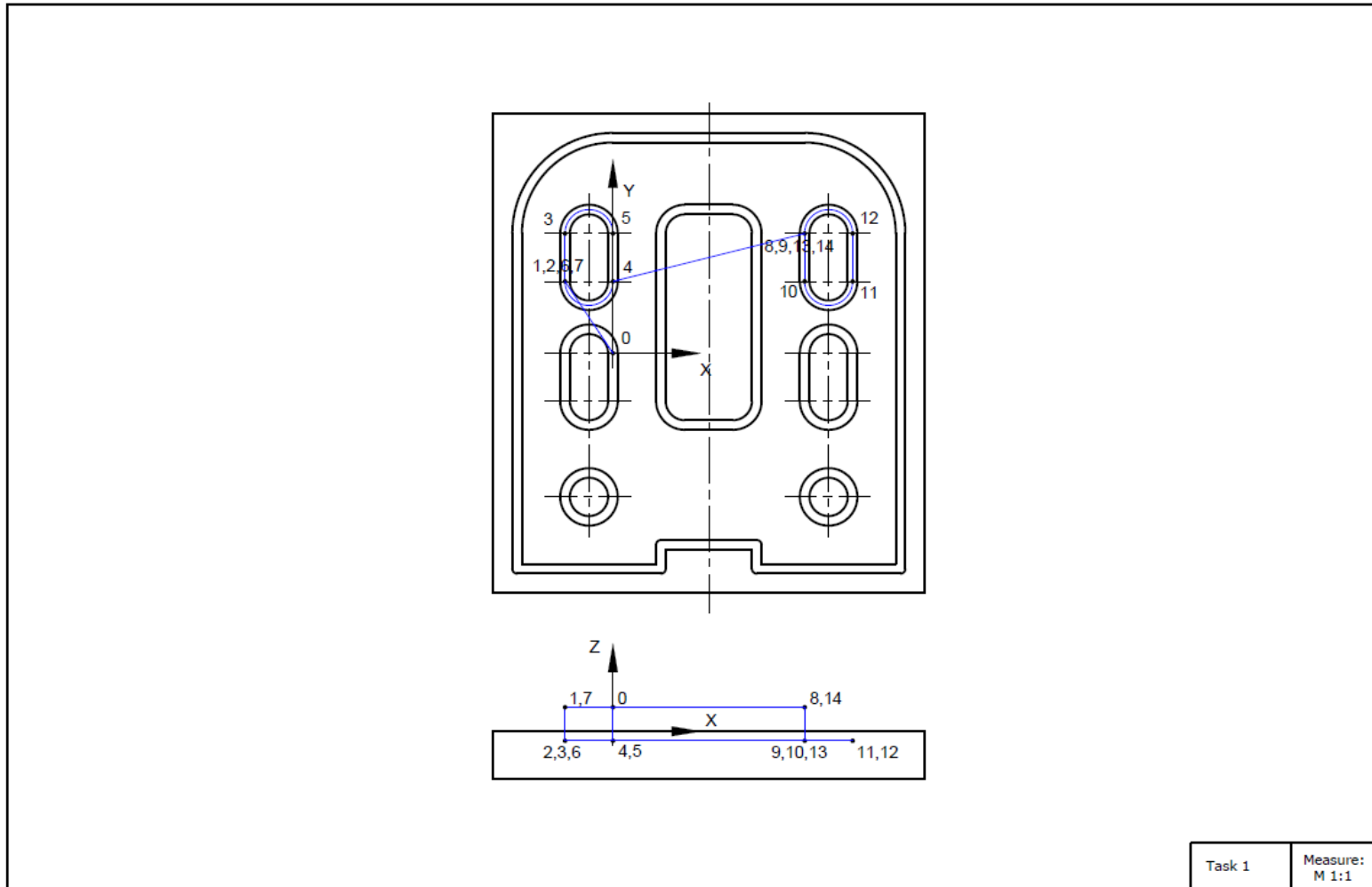
Field of education:
Mechanical engineering

Professional qualification:
CNC operator

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

Variant:
Task 35 – Support plate 5.5.

Solution:

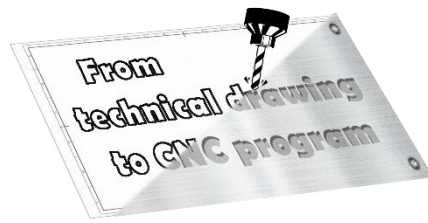


Required written code that should be inserted into the control unit:

G0 X-10 Y15
G1 Z-2
Y25
G2 X0 R5
G1 Y15
G2 X-10 R5
G1 Z5
G0 X40 Y25
G1 Z-2
Y15
G3 X50 R5
G1 Y25
G3 X40 R5
G1 Z5
M30

Explanation of the G-code:

%Setting the coordinate system x=0, y=0, z=5; point 0
G0 X-10 Y15 %Positioning at the starting point; point 1
G1 Z-2 %Tool entry into material; point 2
Y25 %Straight milling; point 3
G2 X0 R5 %Radial milling; point 4
G1 Y15 %Straight milling; point 5
G2 X-10 R5 %Radial milling; point 6
G1 Z5 %Lifting of tool; point 7
G0 X40 Y25 %Positioning; point 8
G1 Z-2 %Tool entry into material; point 9
Y15 %Straight milling; point 10
G3 X50 R5 %Radial milling; point 11



G1 Y25 % Straight milling; point 12

G3 X40 R5 %Radial milling; point 13

G1 Z5 %Lifting of tool; point 14

M30 %End of program