Field of education:
Mechanical engineering

Professional qualification:
CNC operator

Exercise:

Programming of CNC machine (solution)

Variant:
Task 55 – Sprocket 4.2.

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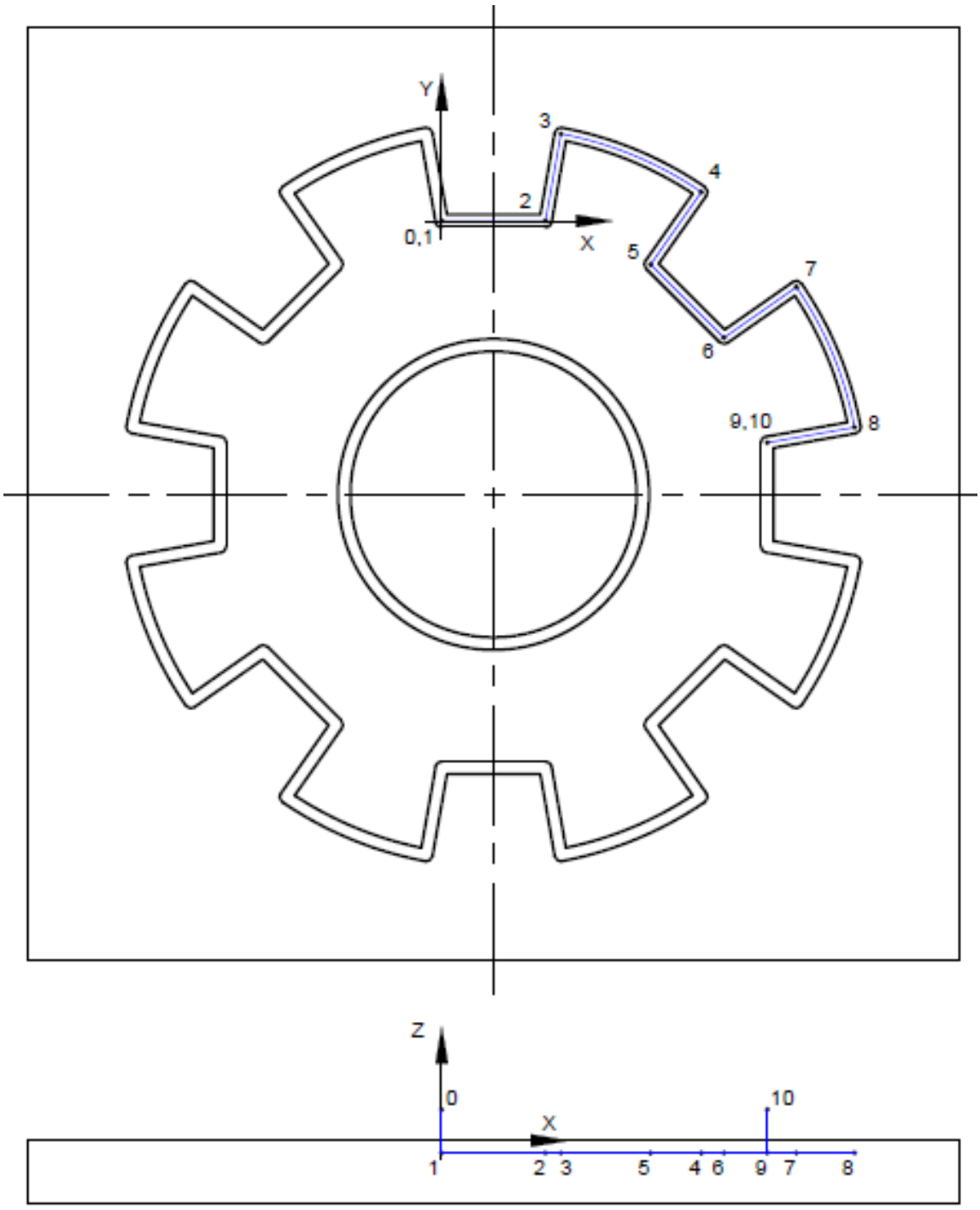
Solution:



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

G1 Z-2
X16,678
X19,147 Y14,002
G2 X41,71 Y4,656 R59
G1 X33,555 Y-6,991
X45,348 Y-18,784
X56,995 Y-10,629
G2 X66,341 Y-33,192 R59
G1 X52,339 Y-35,661
Z5
M30

Explanation of the G-code:

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

G1 Z-2 %Tool entry into material; point 1

X16,678 %Straight milling; point 2

X19,147 Y14,002 %Straight milling; point 3

G2 X41,71 Y4,656 R59 %Radial milling; point 4

G1 X33,555 Y-6,991 %Straight milling; point 5

X45,348 Y-18,784 %Straight milling; point 6

X56,995 Y-10,629 %Straight milling; point 7

G2 X66,341 Y-33,192 R59 %Radial milling; point 8

G1 X52,339 Y-35,661 %Straight milling; point 9

Z5 %Lifting of tool; point 10

M30 %End of program