

HEIDENHAIN



NC Solutions

Description of NC program 1015

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1 Description of the NC program 1015_en.h

NC program for defining a point pattern as a spiral with constant point intervals.



Description

With this NC program the control generates a point pattern in the form of a spiral. The control calls a machining cycle at the calculated positions, enabling you to simply select the type of machining.

In the first part of the NC program you define all parameters required for the calculation, the tool, and the machining cycle executed by the control at the calculated positions. The control then calls a subprogram. The control executes all calculations and positioning movements in this subprogram. The control calculates the positions so that the distance of the machining steps to each other remains constant. Define the position of the first machining via the parameters. The control then calculates as many machining positions as required to reach the final radius you defined. After the last machining step the control retracts the tool and terminates the program.

Parameter	Name	Meaning
Q1	FINAL RADIUS	Radius of the spiral at which the control executes the last machining step
Q2	STARTING RADIUS	Radius of the spiral at which the control executes the first machining step
Q3	START STEPPING ANGLE	Angle at which the control executes the first machining step and which it calculates from the first to the second hole
		Consider that for the first machining position the control approaches the START STEPPING ANGLE Q3 relative to the ROTATION Q8.
Q4	RADIUS STEP	Value by which the radius of the spiral is modified between the machining steps
Q5	CENTER IN THE X AXIS	Coordinate of the spiral center in the X axis
Q6	CENTER IN THE Y AXIS	Coordinate of the spiral center in the Y axis
Q7	SAFETY CLEARANCE	Z clearance between the tool and workpiece surface approached by the control in rapid traverse before machining
Q8	ROTATION	Rotation of the coordinate system



