HEIDENHAIN
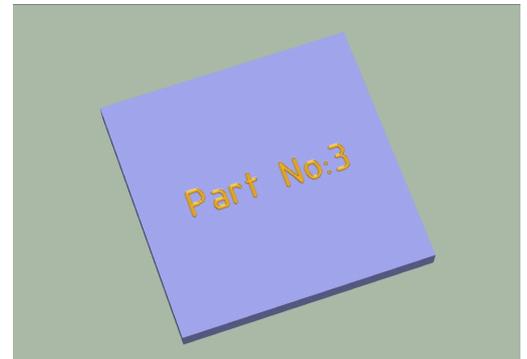
NC Solutions

Description of NC program 9050

1 Description of NC program 9050_en.h

NC program for engraving a text with a consecutive parts count along a workpiece.

> ☑ Supported by the iTNC 530 with NC software 340 49x-07 and 606 42x-02

Requirement

Engrave a text along a workpiece. The text should contain the consecutive parts count. This parts count should be saved when the control is switched off, and continued when it is switched on again. Additionally, a message should appear on the screen and the counter should be reset when a parts count defined by you is reached.

Description of NC program 9050_en.h

In the NC program 9050_en.h define the workpiece blank and then (in Q10 parameter) the number of workpieces to be machined.

The control opens the table 90502_en.tab. If the table is not in the same directory as the NC program, you have to adjust the path information. In the next step, the control reads out the current parts count from the table. The control then saves this parts count in the Q1 parameter.

Then define the engraving tool. The control positions the tool in a linear movement to the start position of the engraving text. Then define the engraving text in the QS2 string parameter. The control then converts the value of the current parts count to a text, and saves it in QS1. The control then combines both QS2 and QS1 text parts in one string and saves the text in QS3.

The next step is defining cycle 225 (Engraving). The QS3 string parameter is defined here as engraving text. Adjust the other parameters in the cycle in accordance with your application.

After the control has executed the cycle, it increments the parts count by one and then checks whether the quantity of workpieces defined in Q10 has been reached.

- If the quantity has not been reached yet, the control writes the current parts count to the table and ends the NC program.
- If the quantity of workpieces to be machined is reached, the control displays a text on the screen. Define the text in the mask file 90501_en.a. Then the control resets the counter in the table to one and ends the NC program.

Input parameters

Parameter	Name	Meaning
Q10	Quantity to be machined	Number of program runs the control performs
QS1	Text part	Text part the control engraves before the parts count

Description of the mask file 90501_en.a

Define the text in the mask file that is displayed by the control when number of program runs defined in parameter Q10 is reached.

Description of table 90502_en.tab

In this table, the control saves the current parts count so that the value is retained even when the machine is switched off. This table is made up of one line and one column into which the control writes the value.

> **i** The workpiece counter also counts program runs in Test Run mode.