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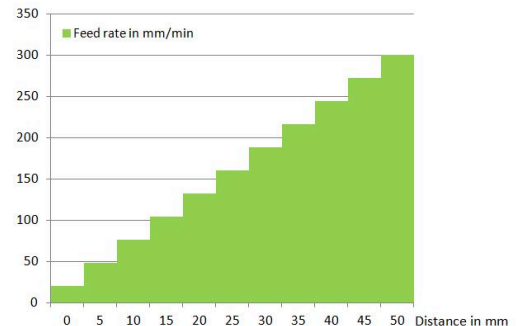
NC Solutions

Description of NC Program 8025

English (en)
02/2020

1 Description of NC program 8025_en.h

NC program for changing the feed rate step by step over a defined distance.



NC program 8025_en.h

At the beginning of the NC program, define the parameters for the feed-rate change. Then the blank form and the tool call are programmed. Subsequently, the control positions the tool to a safe position.

In the next program section, the control calculates the step values for the feed rate and distance from your input values. Additionally, the control sets the defined starting feed rate as the current feed rate. Furthermore, it sets a counter in parameter Q24 to zero.

Then the control pre-positions the tool at the starting point and then at the set-up clearance in the Z axis. In the following step, the control moves the tool to milling depth in the Z axis.

Then a program section repeat is programmed. In this repetition, the control first increases the current feed-rate speed by one step value for the feed rate. Additionally, it increments the counter by one. Subsequently, the control incrementally moves the tool by one distance step with the newly calculated feed rate speed.

In the next step, the control checks whether the number of defined cuts for the feed-rate change has been reached.

- If the value of the counter is smaller than the defined number of cuts, the control repeats the program section repeat.
- If the value of the counter matches the defined number of cuts, the control continues with the NC program.

Subsequently, the tool moves with constant feed rate along the programmed path. Before the end of the NC program, the control retracts the tool in the Z axis.



In the example program, the change distance is programmed in the X axis.

Parameter	Name	Meaning
Q1	STARTING FEED RATE IN MM/MIN	Contouring feed rate at the beginning of the change distance
Q2	END FEED RATE IN MM/MIN	Contouring feed rate at the end of the change distance
Q3	LENGTH OF THE ACCELERATION PATH (INCREMENTAL)	Length of the path along which the control changes the feed rate step by step.
Q4	SUBDIVISION	Number of steps into which the control divides the path and the feed-rate change.
Q5	STARTING POINT IN THE X AXIS	X coordinate as starting point of the change distance