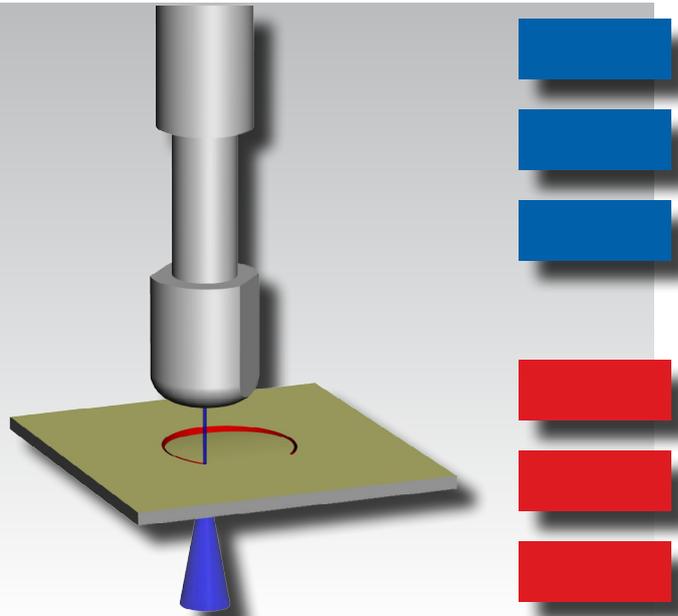


Product Brief GEOMETRIX

Application Process:

- Robot Waterjet Cutting
- Robot Abrasive Waterjet Cutting



Item No:
X5604

Item:
Geometrix (CutWCircle)

D	20	10	5
C	1:9	1:18	1:36
V	3.18°	1.17°	0.85°

Description:

To cut small circles with good accuracy and with tolerances around ± 0.1 mm has historical always been a problem for the robot. This limitation in the robot has affected the market share for processes like Robotized water jet and Robotized Abrasive water jet cutting etc.

With this new-patented software option, Geometrix, we will cut small round circles with a very good accuracy, to comply with the requirements and tolerances in Instrument panels and head liners, e.g. assembling part with clips etc.

Software/Hardware:

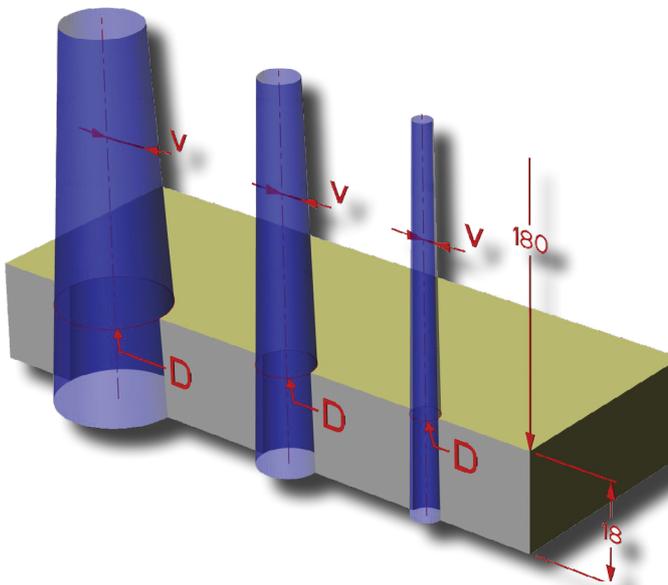
Geometrix is a software-based option. The Instruction CutWCircle will be added to the IPL (Instruction Pick List) in the robot controller and selected to the most Common list.

The user will use this instruction in the same way as other instructions, including parameters.

Technical Specification:

Geometrix will cut holes from 3 mm to 20 mm with a tolerance of ± 0.1 mm within the robot working area and in any axis configuration. The cycle time for a 10mm hole is 1,5 to 2.0 seconds, depending on the parameter settings.

Additional fine tuning of the path can be made by included parameters as follows: Parameter Lead Radius will handle the tool entering and leaving the circle path in a smooth way. Parameter PathRes will affect the accuracy of the path and cycle time to cut a hole. Cutting a hole with Geometrix will result in a Conic hole, were the conicity will be $C = 1:36$ for a hole diameter of 5 mm (that is: diameter will increase 1 mm on a length of 36 mm) and $C = 1:9$ for a hole with diameter of 20 mm, see chart to the left.



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