



HEIDENHAIN



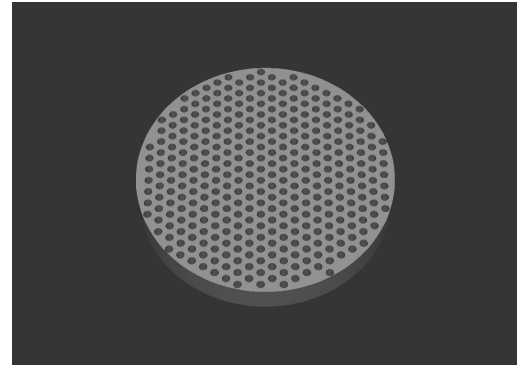
NC Solutions

Description of NC program 1025

English (en)
4/2017

1 Description of the NC program 1025_en.h

NC program for defining a point pattern by which the control machines as many holes as possible in a linear arrangement on a round workpiece.



Description

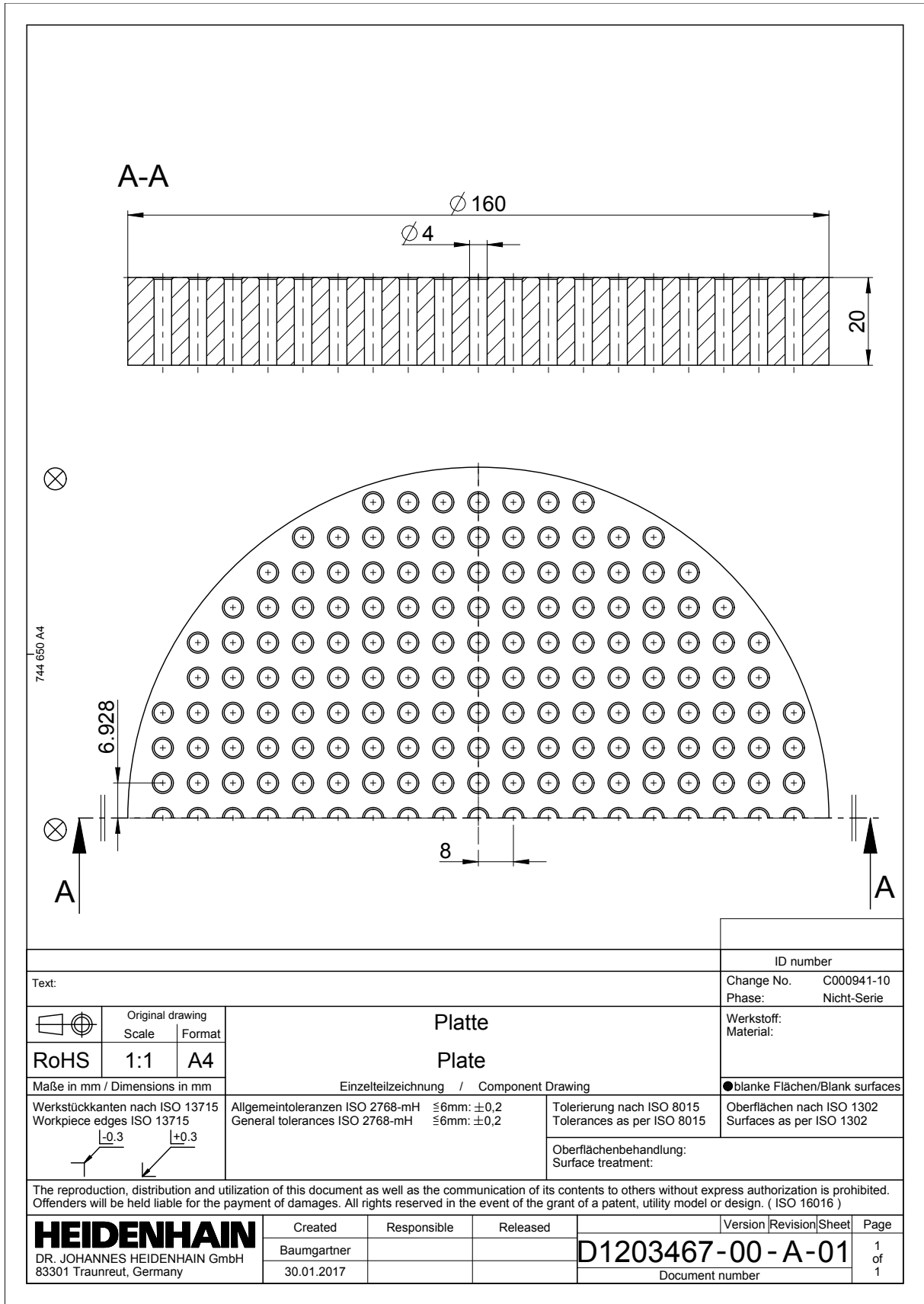
With this NC program the control generates a point pattern in the form of lines on a round workpiece. The control calculates the number of lines and the individual machining positions on the lines to enable as many machining steps as possible. The control calls a drilling cycle at the calculated machining positions.

In the first part of the NC program you define all parameters required for the calculation.

In the example program, the control calls the NC program 10251_en.h. Using this NC program the control generates a round workpiece by traversing a circular path through 360 degrees. You must define the cutter and milling depth in this called NC program. The control adopts the circle center point and radius from the definition in the main program. If milling the workpiece blank is not necessary, you can delete the program call in the main program.

After calling the program you define the drilling tool and drilling cycle in the main program. The control then calls a subprogram. The control executes all calculations and positioning movements in this subprogram. The control calculates the positions line-by-line, traverses to the calculated positions and calls the machining cycle. Define the position of the first machining via the parameters. After the last machining step the control retracts the tool and terminates the program.

Parameter	Name	Meaning
Q1	CIRCLE CENTER IN THE X AXIS	X coordinate of the circle center point
Q2	CIRCLE CENTER IN THE Y AXIS	Y coordinate of the circle center point
Q3	CIRCLE RADIUS	Radius of the workpiece
Q4	MACHINING CLEARANCE IN THE X AXIS	Incremental distance between holes in the X axis
Q5	CLEARANCE FACTOR IN THE Y AXIS	Definition of the factor for calculating the distance of the holes in Y from $Q4 \times Q5$
Q8	SAFETY CLEARANCE	Z clearance between the tool and workpiece surface approached by the control in rapid traverse before machining is executed



Text:		ID number							
Change No. C000941-10		Phase: Nicht-Serie							
Werkstoff: Material:		●blanke Flächen/Blank surfaces							
<table border="1"> <tr> <th>Original drawing</th> <th>Scale</th> <th>Format</th> </tr> <tr> <td>RoHS</td> <td>1:1</td> <td>A4</td> </tr> </table>	Original drawing	Scale	Format	RoHS	1:1	A4	Platte Plate Einzelteilzeichnung / Component Drawing		Tolerierung nach ISO 8015 Tolerances as per ISO 8015
Original drawing	Scale	Format							
RoHS	1:1	A4							
Maße in mm / Dimensions in mm Werkstückkanten nach ISO 13715 Workpiece edges ISO 13715 -0.3 +0.3	Allgemeintoleranzen ISO 2768-mH General tolerances ISO 2768-mH ≤6mm: ±0,2 ≤6mm: ±0,2	Tolerierung nach ISO 8015 Tolerances as per ISO 8015	Oberflächen nach ISO 1302 Surfaces as per ISO 1302						
Oberflächenbehandlung: Surface treatment:									
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