

# SLOTWORX®

## COMPANY WONDE FROM HEILIGKREUZSTEINACH/ GERMANY

### PROBLEM DEFINITION:

Producing absolutely 90°-walls on holding blocks of injection moulding dies for plastics has always been the goal of the company Wonde from Heiligkreuzsteinach/Germany. Only a perfectly prepared holding block guarantees highest possible accuracy and durability for following production-processes of all injection moulding dies.

Special attention on this job was required for precision and economic efficiency regarding tool costs. Till now, this customer was using a 25 mm diam. multiple flute Solid Carbide End Mill for this job. He was limited through given dimensions for reach and overall length of this end mill. For this one and for many other applications, our new Slotworx®-range is the ideal complement where a Solid Carbide End Mill reaches its limitation. This is a golden opportunity for our Slotworx®-range. Our new range, with precision-ground inserts, is ready to face this challenge – and has passed its examination in masterly manner and velocity.



Slotworx 6 52 367 Ø 52, 6Z

### MASCHINE:

Deckel Maho  
DMU 100 P

### MATERIAL:

1.2312

### CNC-CONTROL:

Euklid

This holding block, which had to be machined, had a remaining stock of 1 mm all over after roughing. This part had been programmed in a z-constant circle-pocket-cycle with constant depth setting increments in radial and axial direction. We found a rigid set-up on that DMU 100 P milling machine, a high speed and dynamic 5-axis machining centre with vertical HSK-63A taper connection. These conditions are ideal requirements for using Pokolm- Slotworx® Milling cutters.

**EXAMPLE FROM PRACTICE:**

component: holding block  
 material: 1.2312  
 arbour : 60 25 A63 S (HSK 63 A)  
 adaptor: 75 16 603 (DuoPlug®)  
 mill.cutter body: 3 25 267 SG (Ø 25)  
 inserts: 04 67 844 (P40)  
 coating : PVGO  
 overhang: 178 mm

$v_c$  (cutting speed): 314 m/min  
 $v_f$  (feed per min): 2000 mm/min  
 $s$  (revolutions) 4000 1/min  
 $f_z$  (feed per tooth) 0,25 mm  
 $a_p$  (depth of cut): 3,0 mm  
 $a_e$  (width of cut) 0,1 mm

**RESULT:**

Expected and requested accuracy has been reached immediately to customer's satisfaction. Now, this customer is able to produce his holding blocks with that exceptionally required accuracy of > 100µm process-reliable, economical in very short time.

This Slotworx®-range is also available with geometries for non-ferrous materials, this is the right method for cutting this range of material with Pokolm-Voha-Premium-tooling in future.

**Further information:**

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