

Machine	Ingersoll OPS 600
Spindle type	
Max RPM	40.000
Power Kw	
Cutter holder	Shrink Holder
Workpiece material	Poco Graphite
Hardness	G1700
Application	
Side milling	<input checked="" type="checkbox"/>
Slotting	<input type="checkbox"/>
Profiling	<input checked="" type="checkbox"/>
Plunging	<input checked="" type="checkbox"/>
Up-milling	<input type="checkbox"/>
Down-milling	<input type="checkbox"/>
Circular	<input type="checkbox"/>

Sketch

Workpiece; 62 x 62 x 40mm

Cutter supplier	
Cutter description	
Cutter diameter eff.	Ød mm
Number of teeth	z
Carbide grade	
<b>Cutting conditions</b>	
Cutting speed	V <sub>c</sub> m/min
Revolution	n rpm
Feed per tooth	f <sub>z</sub> mm
Table feed	V <sub>f</sub> mm/min
Depth of cut	a <sub>p</sub> mm
Width of cut	a <sub>e</sub> mm
Length of cut	L mm
Chip removal rate	Q cm <sup>3</sup> /min
Coolant type	
Coolant pressure	Bar
Cutting time / comp	T <sub>comp</sub> min
Toollife	T <sub>total</sub> min
Power consumption	P Kw
Edge wear	V <sub>b</sub> mm

Test 1	Test 2
<b>van Hoorn Carbide</b>	<b>Competitor</b>
VHGTF 3 060 064 06 02	
6	8
3	2
02	Diamond Coated

396	377
21.000	15.000
0,079	0,167
5.000	5.000
0,5 - 7,0	0,2
1,0 - 6,0	3
7,5 - 35,0	3,0
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External
10 Min	27 Min

Remarks

Test 1; First application is finishing of upper part of electrode. Second application is finishing (side-milling) Last application is roughing of inner part of electrode.

Two times faster due to changing of strategy and cutting parameters.