

Test report no: 010-06

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	

Test 1	Test 2
van Hoorn Carbide	Competitor
VHGTF 3 030 050 03 02	
3	3
3	2
02	Diamond Coated

Cutting conditions	
Cutting speed	V _c m/min
Revolution	n rpm
Feed per tooth	f _z mm
Table feed	V _f mm/min
Depth of cut	a _p mm
Width of cut	a _e mm
Length of cut	L mm
Chip removal rate	Q cm ³ /min
Coolant type	
Coolant pressure	Bar
Cutting time / comp	T _{comp} min
Toollife	T _{total} min
Power consumption	P Kw
Edge wear	V _b mm

377	283
40.000	30.000
0,021	0,030
2.500	1.800
0,1	0,1
1,0 - 3,0	1,0 - 3,0
0,25 - 0,75	0,18 - 0,54
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External
27 Min	37 Min

Remarks

Surface finish is better due to use of a three flute endmill
 Thereby more than 20% faster, chip removal rate is higher