

Test report no: 015-16



Machine	Mazak	
Spindle type		
Max RPM	20.000	
Power Kw		
Cutter holder	Weldon HSK-63	
Workpiece material	RVS 316L	
Hardness		
Application		
Side milling	<input checked="" type="checkbox"/>	Up-milling <input type="checkbox"/>
Slotting	<input type="checkbox"/>	Down-milling <input checked="" type="checkbox"/>
Profiling	<input type="checkbox"/>	Ramping <input type="checkbox"/>
Plunging	<input type="checkbox"/>	Circular <input type="checkbox"/>

Sketch

Cutter supplier	
Cutter description	
Cutter diameter eff.	Ød mm
Number of teeth	z
Carbide grade	

Test 1	Test 2
van Hoorn Carbide	Competitor
VHVTR 5 120 078 12 03 030	
12	12
5	5

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
Chip thickness	Hm mm
Coolant type	
Coolant pressure	Bar
Cutting time / comp	T _{comp} min
Toollife	T _{total} min
Power consumption	P Kw
Edge wear	V _b mm
Successful	

180	180
4.775	4.775
0,100	0,100
2.399	2.399
18	18
0,96	0,96
41,45	41,45
0,02842	0,02842
dry / air / minimum lub / emulsion	dry / air / minimum lub / emulsion
Internal External	Internal External
24 Products	15 Products
Yes / Average / No	Yes / Average / No

Remarks

Very succesful test of trochoidal milling with our VHVTR against Competitor!