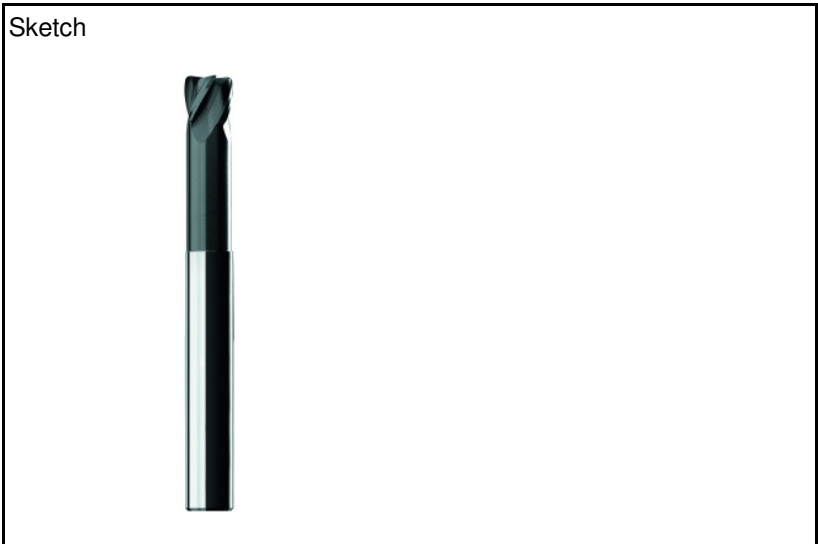


Machine	Mikron VCP800		
Spindle type	HSK 63		
Max RPM	18.000		
Power Kw	20		
Cutter holder	Shrink Holder		
Workpiece material	1.2312		
Hardness	Not hardened		
Application			
Side milling	<input checked="" type="checkbox"/>	Up-milling	<input type="checkbox"/>
Slotting	<input type="checkbox"/>	Down-milling	<input type="checkbox"/>
Profiling	<input checked="" type="checkbox"/>	Ramping	<input type="checkbox"/>
Plunging	<input type="checkbox"/>	Circular	<input type="checkbox"/>



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

Test 1	Test 2
van Hoorn Carbide	Competitor
VHTF41201001203100	
12	12
4	2
03	TiAlN

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

188	207
5.000	5.500
0,090	0,086
1.800	950
0,2	0,2
0,2	0,2
0,072	0,038
0,01162	0,01115
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External
1200	240

Remarks

Products runs for 2,5h. After 20hours customer is changing the tool, but still can be used.
Toollife and cutting conditions show a very big difference.