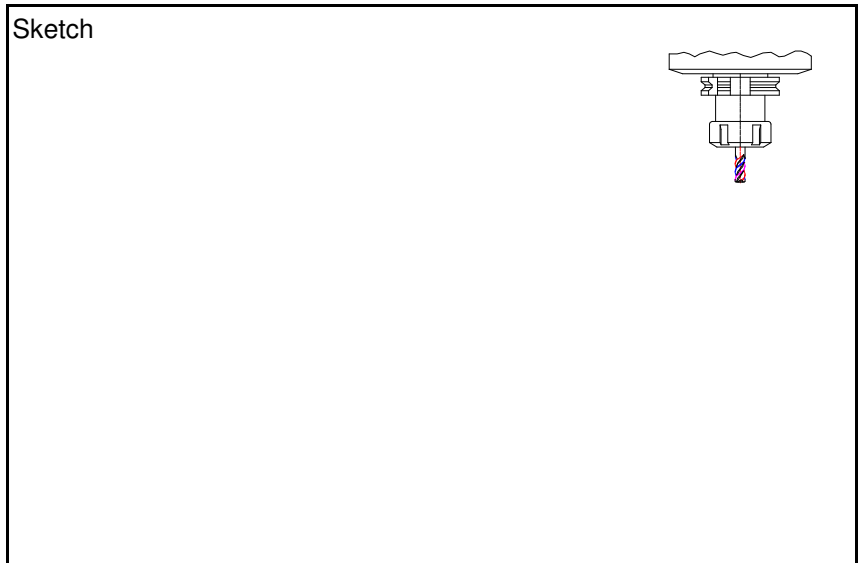


Test report no: 035-06

Machine	Makino V33	
Spindle type		
Max RPM	10.000	
Power Kw		
Cutter holder	Collet Chuck	
Workpiece material	S136 (1.2343)	
Hardness	52 HRc	
Application		
Side milling	<input type="checkbox"/>	Up-milling <input type="checkbox"/>
Slotting	<input type="checkbox"/>	Down-milling <input type="checkbox"/>
Profiling	<input 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
VHMF 6 060 064 06 03	
6	6
6	4
03	

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

132	132
7.000	7.000
0,036	0,029
1.500	800
0,1	0,1
3,0	3,0
0,45	0,24
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External

Remarks

Almost 2 as fast as Hitachi. Same program, same strategy. Only changing of endmill.
A 6-Flute endmill used instead of a 4-Flute endmill.