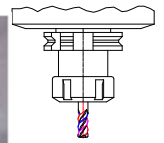


Machine	Picomax Fehlman 60M		
Spindle type	SK30		
Max RPM	19.000		
Power Kw			
Cutter holder	Collet Chuck		
Workpiece material	1.2379 Sverker 21		
Hardness	62 HRc		
Application			
Side milling	<input type="checkbox"/>	Up-milling	<input type="checkbox"/>
Slotting	<input type="checkbox"/>	Down-milling	<input type="checkbox"/>
Profiling	<input checked="" type="checkbox"/>	Circular	<input type="checkbox"/>
Plunging	<input type="checkbox"/>		

Sketch



Workpiece; 200 x 25 x 30mm

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

Test 1	Test 2
van Hoorn Carbide	Competitor
VHPK 2 060 078 08 40	
6	6
2	2
40	TiAlN 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

207	123
11.000	6.500
0,080	0,038
1.750	500
0,15 - 0,2	0,15 - 0,2
0,1	0,1
0,2625 - 0,035	0,0075 - 0,01
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External
21M10S	1H10M

Remarks

With the Van Hoorn endmill two products are made, endmill was still useable.
 Production time is more than half when looking at cutting speeds and feeds from the competitor.
 Ra value from product of Van Hoorn is first time 0,625
 Ra value from product of competitor is first time 0,810