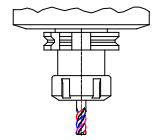


Test report no: 013-08

Machine	Hermle	
Spindle type		
Max RPM	16.000	
Power Kw		
Cutter holder	Collet Chuck	
Workpiece material	Stainless 303	
Hardness	1.4305	
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"/>

Sketch



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

Test 1	Test 2
van Hoorn Carbide	van Hoorn Carbide
HABM 2 040 078 06 03	HABM 2 040 078 06 03
4	4
2	2
03	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
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

63	88
5.000	7.000
0,030	0,030
300	425
0,3	0,25
0,3	0,25
0,027	0,027
0,0082	0,0076
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External
15 min	75 min

Remarks

Test 1. Cutting conditions on Stainless 303 Semi-finishing. After 15 minutes there was some wear on the tool. Changing the parameters to Test 2.
 Test 2. After 1,5 hour no wear visible.