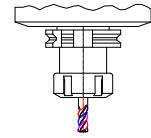
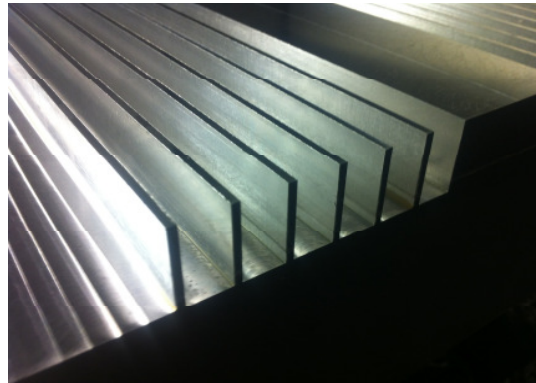


Test report no: 038-11

Machine	Mikron VCP 600		
Spindle type	Step-Tec		
Max RPM	20.000		
Power Kw	18 Kw		
Cutter holder	Collet Chuck		
Workpiece material	AlMgSi0,5		
Hardness	3.3206		
Application			
Side milling	<input type="checkbox"/>	Up-milling	<input type="checkbox"/>
Slotting	<input checked="" type="checkbox"/>	Down-milling	<input 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
VHAD 3 100 072 10 10	
10	10
3	3

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	H _m 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

500	500
15.915	15.915
0,100	0,070
4.775	3.342
20	20
10	10
500	500
955,00	668,40
0,10001	0,07000
dry / air / minimum lub / emulsion	dry / air / minimum lub / emulsion
Internal External	Internal External
	Breakage
45%	55%

Remarks

Test 1: No problem at all. Nice chipflow and straight curly chips
 Test 2: Tool runs completely full. In the middle of the product the tool is broken.