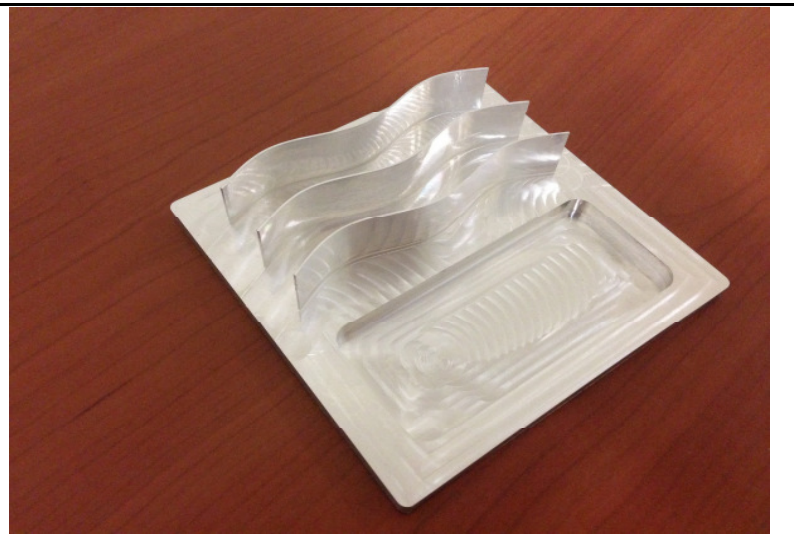


# Test report no: 009-15

Machine	Mikron VCP 600		
Spindle type	Step-Tec		
Max RPM	20.000		
Power Kw	18 KW		
Cutter holder	Collet HSK 63		
Workpiece material	Alu 51ST		
Hardness			
Application			
Side milling	<input checked="" type="checkbox"/>	Up-milling	<input type="checkbox"/>
Slotting	<input type="checkbox"/>	Down-milling	<input checked="" 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		van Hoorn Carbide	
VHAD 3 080 063 08 10		VHLA 3 080 064 08 15	
8		8	
3		3	

Cutting conditions	
Cutting speed	V <sub>c</sub> m/min
Revolution	n rpm
Feed per tooth	f <sub>z</sub> mm
Table feed	V <sub>f</sub> mm/min
Depth of cut	a <sub>p</sub> mm
Width of cut	a <sub>e</sub> mm
Length of cut	L mm
Chip removal rate	Q cm <sup>3</sup> /min
Chip thickness	Hm mm
Coolant type	
Coolant pressure	Bar
Cutting time / comp	T <sub>comp</sub> min
Toollife	T <sub>total</sub> min
Power consumption	P Kw
Edge wear	V <sub>b</sub> mm
Successful	

500	500
19.849	19.849
0,100	0,060
5.968	3.581
16	16 - 16 - 3
3,6	0,5 - 0,045 - 0,05
343,76	28,65
0,06723	0,01503
dry / air / minimum lub. / emulsion	
Internal	External
Yes / Average / No	Yes / Average / No

Remarks

Very succesful roughing with the VHAD high Q

Very succesful finishing with the VHLA walles are 0,5mm, no vibrations!