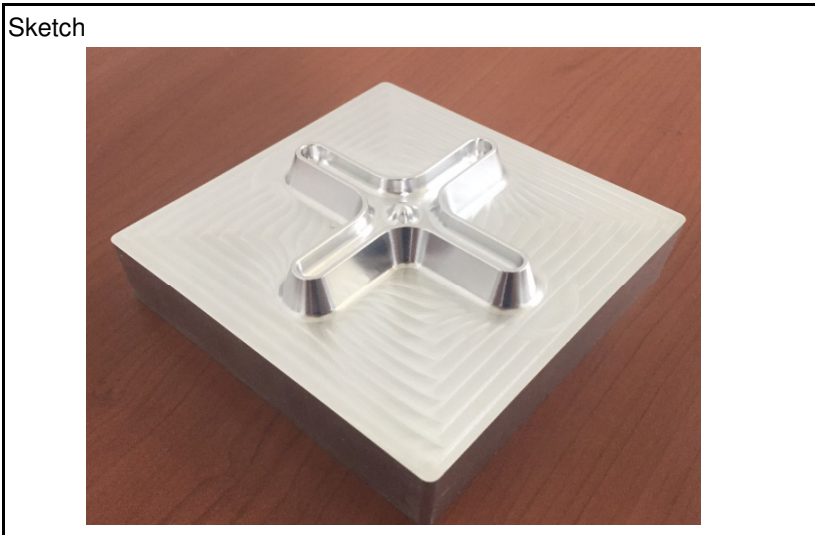


Test report no: 003-16

Machine	Mikron VCP 600
Spindle type	Step-Tec
Max RPM	20.000
Power Kw	18 KW
Cutter holder	Collet
Workpiece material	51ST
Hardness	
Application	
Side milling	<input checked="" type="checkbox"/> Conventional <input type="checkbox"/>
Slotting	<input type="checkbox"/> Climb - Milling <input checked="" 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	van Hoorn Carbide
VHAD 3 080 063 08 10	VHMA 2 030 051 06 10 L120
8	3
3	2

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
Successful	

500	188
19.894	20.000
0,100	0,060
5.968	2.394
10	1,5
3,6	0,45
214,85	17,24
0,06708	0,02318
dry / air / <u>minimum lub</u> / emulsion	dry / air / <u>minimum lub</u> / emulsion
Internal <u>External</u>	Internal <u>External</u>
<u>Yes / Average / No</u>	<u>Yes / Average / No</u>

Remarks

Very succesful roughing and finishing with the Non Ferrous micro line!
Smooth surface finish.