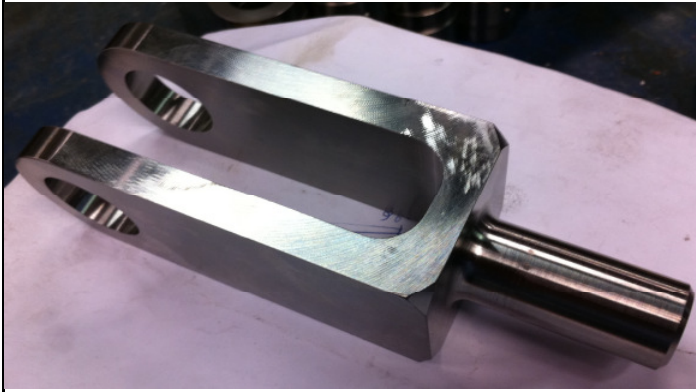
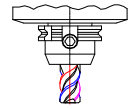


Test report no: 009-11

Machine	Mazak Nexus 410A-II	
Spindle type	SK40	
Max RPM	12.000	
Power Kw		
Cutter holder	Weldon Holder	
Workpiece material	3.7165	
Hardness	Ti6Al4V	
Application		
Side milling	<input checked="" 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	Current
VHVTRW 4 160 089 16 03S	Competitor
16	20
4	5
03	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
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

85	38
1.691	600
0,080	0,027
540	80
8	16
16	16
69,12	20,48
0,07983	0,02385
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External

Remarks

Metal removal Rate is more than 3 times higher!
No need to finish the surface.