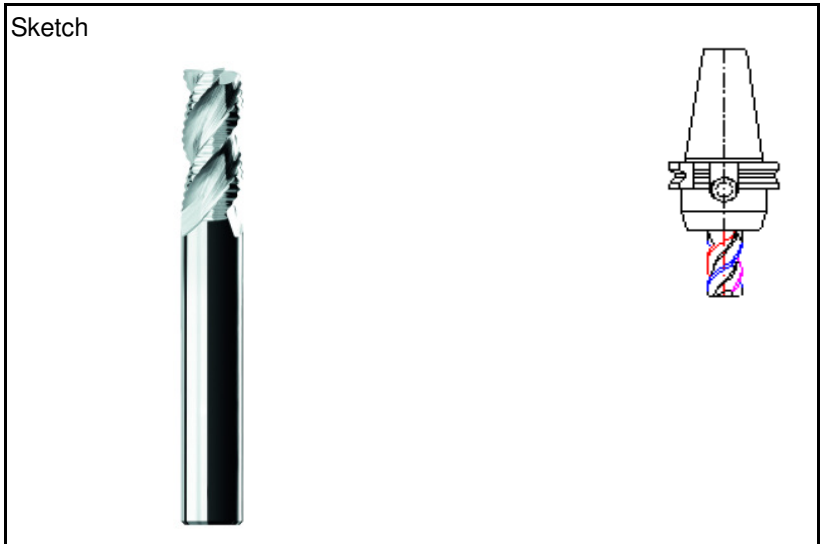


Machine	Bridgeport	
Spindle type		
Max RPM	12.000	
Power Kw		
Cutter holder	Weldon	
Workpiece material	Aluminium	
Hardness	< 5% Silicium	
Application		
Side milling	<input type="checkbox"/>	Up-milling <input type="checkbox"/>
Slotting	<input checked="" type="checkbox"/>	Down-milling <input type="checkbox"/>
Profiling	<input type="checkbox"/>	Ramping <input type="checkbox"/>
Plunging	<input type="checkbox"/>	Circular <input type="checkbox"/>



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

Test 1	Test 2
van Hoorn Carbide	Competitor
VHRAW 3 160 089 16 15	
16	16
3	3
Uncoated	Uncoated

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

603	603
12.000	12.000
0,125	0,092
4.500	3.300
19	9
16	16
1368,0	475,2
0,125	0,092
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External

Remarks

Test 1: Improvement of cutting conditions of the VHRW endmill.
 Chip removal rate almost 3 times higher.