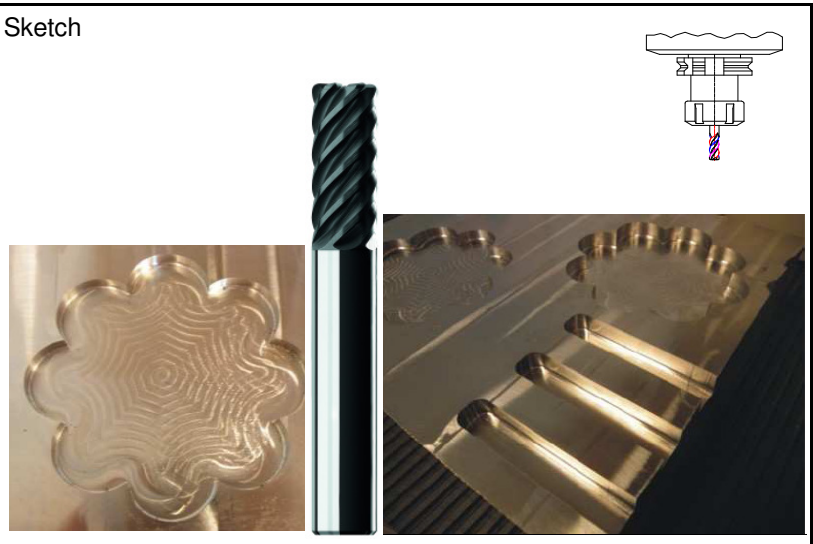


# Test report no: 011-11

Machine	Haas VF1	
Spindle type	SK40	
Max RPM	10.000	
Power Kw		
Cutter holder	Collet Chuck	
Workpiece material	1.2344	
Hardness	56 HRc	
<b>Application</b>		
Side milling	<input checked="" type="checkbox"/>	Up-milling <input type="checkbox"/>
Slotting	<input 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
	<b>van Hoorn Carbide</b>	<b>van Hoorn Carbide</b>
	VHMFR61000701003100	VHMFR61000701003100
	10	10
	6	6
	03	03

<b>Cutting conditions</b>	
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 <sup>3</sup> /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

	100	140
	3.183	4.456
	0,071	0,067
	1.350	1.800
	10	10
	0,1	0,1
	1,35	1,80
	0,00707	0,00673
	dry / air / <u>minimum lub.</u> / emulsion	dry / air / <u>minimum lub.</u> / emulsion
	Internal / <u>External</u>	Internal / <u>External</u>

Remarks

Test 1. Side milling of hardened steel

Test 2. Slot milling of hardened steel, using trochiodal milling