

Test report no: 009-04

Made by:

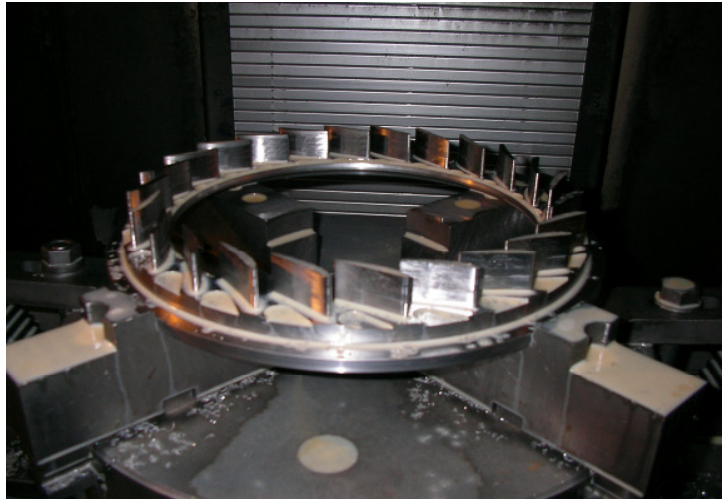


Customer name

Date : 2-6-2004

Machine	ZPS
Spindle type	ISO 40
Max RPM	
Power Kw	20Kw
Cutter holder	Weldon
Workpiece material	1,4006 X12Cr13A
Hardness	
Application	Up-milling <input type="checkbox"/>
Side milling <input checked="" type="checkbox"/>	Down-milling <input checked="" type="checkbox"/>
Slotting <input checked="" type="checkbox"/>	Circular <input type="checkbox"/>
Profiling <input type="checkbox"/>	Pulling <input type="checkbox"/>
Plunging <input type="checkbox"/>	Pushing <input type="checkbox"/>

Sketch



Cutter supplier	
Cutter description	
Cutter diameter eff.	Ød mm
Number of teeth	z
Carbide grade	
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
Coolant type	
Coolant pressure	Bar
Cutting time / comp	T _{comp} min
Toollife	T _{total} min
Power consumption	P Kw
Edge wear	V _b mm

Test 1	Test 2
Van Hoorn Carbide	Competitor
VHRFF31000781003	
10	10
3	3
TiAlN	coated

119	60
3.800	1.900
0,053	0,024
600	138
9	4
10	10
54	5,5
dry / air / minimum lub. emulsion	dry / air / minimum lub. emulsion
Internal External	Internal External
15	145

Remarks

Rough milling, productiontime for roughing can be reduced from 145 min with 2 endmills (round 16 and 10) to 15 min with only 1 endmill. Productiontime reduced with 60% in Total