## Test report no: 002-16

Machine	MAM72-35v	
Spindle type		
Max RPM	15.000	
Power Kw		
Cutter holder	Shrink	
Workpiece material	Titanium Grade 5	
Hardness		
Applie	cation	a .
Side milling x	Conventional	
Slotting	Climb - Milling x	
Profiling	Ramping	100
Plunging	Circular	e/- (a
Cutter supplier		Competito
Cutter description		
Cutter diameter eff.	Ød [mm]	16
Number of teeth	Z	4
Carbide grade		
Cutting conditions		
Cutting speed	V <sub>c</sub> [m/min]	40
Revolution	n [rpm]	796
Feed per tooth	f <sub>z</sub> [mm]	0,080
Table feed	V <sub>f</sub> [mm/min]	255
Depth of cut	a <sub>p</sub> [mm]	6,4
Width of cut	a <sub>e</sub> [mm]	2,4
Length of cut	L [mm]	
Chip removal rate	Q [cm <sup>3</sup> /min]	3,92
Chip thickness	Hm [mm]	0,03102
Coolant type		dry / air / minimum lub
Coolant pressure	P [Bar]	Internal Extern
Cutting time / comp	T <sub>comp</sub> . [min]	
Toollife	T <sub>total</sub> [mtr]	440
Power consumption	P [Kw]	
Edge wear	V <sub>b</sub> [mm]	
Successful		Yes / Average /

<image>

	Competitor	van Hoorn Carbide	
		VHVTR 5 160 089 16 03 S	
m]	16	16	
	4	5	
min]	40	85	
	796	1.691	
n]			
]	0,080	0,060	
n/min]	255	507	
n]	6,4	6,4	
n]	2,4	2,4	
ן]			
<sup>3</sup> /min]	3,92	7,79	
ım]	0,03102	0,02322	
	dry / air / minimum lub. emulsion dry / air / minimum lub. / emulsion		
]	Internal External	Internal External	
[min]			
ntr]	440	360	
]			
n]			
	Yes / Jverage / No	Yes / verage / No	

Material removal rate is almost doubled!

Costs per product are reduced with 11 €, which is 18%

