

Machine	Haas TM1		
Spindle type	ATT 650 CAT40		
Max RPM	40.000		
Power Kw	0,67 kW		
Cutter holder	Collet Chuck		
Workpiece material	Extrusion Nylon		
Hardness	-		
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"/>

Sketch



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

Test 1	Test 2
van Hoorn Carbide	van Hoorn Carbide
VHKE10600510610L080	VHKE10400510610L050
6	4
1	1
10	10

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	H _m 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

754	503
40.000	40.000
0,125	0,050
5.000	2.000
1	3
6	4
30,00	24,00
0,12500	0,05000
dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Internal External	Internal External
0,65	0,55

Remarks

Both tests have a good result. No burrs on the product, surface finish is very good.
Maximum power consumption of the spindle. Not possible to enlarge the depth of cut.