Test report no: 066-05

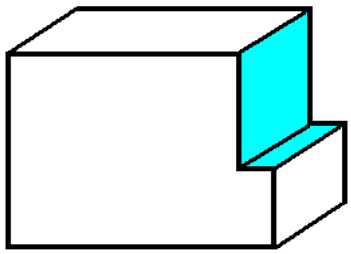
VAN HOORN CARBIDE

Machine	
Spindle type	
Max RPM	30.000
Power Kw	
Cutter holder	Shrink Holder

Workpiece material	Graphite
Hardness	ISO 63

Application			
Side milling	☐		
Slotting	☐	Up-milling	☐
Profiling	☐	Down-milling	☐
Plunging	☐	Circular	☐

Sketch



		Test 1	Test 2
Cutter supplier		**van Hoorn Carbide**	**Competitor**
Cutter description		VHGKF 3 040 060 04 02	
Cutter diameter eff.	Ød mm	4	4
Number of teeth	z	3	3
Carbide grade		02	Diamond Coated
Cutting conditions			
Cutting speed	V_c m/min	276	276
Revolution	n rpm	22.000	22.000
Feed per tooth	f_z mm	0,121	0,121
Table feed	V_f mm/min	8.000	8.000
Depth of cut	a_p mm	5	5
Width of cut	a_e mm	0,1	0,1
Length of cut	L mm		
Chip removal rate	Q cm^3/min	4,0	4,0
Coolant type		dry / air / minimum lub. / emulsion	dry / air / minimum lub. / emulsion
Coolant pressure	Bar	Internal External	Internal External
Cutting time / comp	T_{comp}. min	150	150
Toollife	T_{total} min		
Power consumption	P Kw		
Edge wear	V_b mm		

Remarks

Depth of cut and width of cut can be higher. This test is only made to check the toollife of both endmills.
Duration test; After 150 minutes there was no edge-wear visible on the Van Hoorn endmill.
The competitor already had edge-wear (Vb 0,07). There is a visibility check every 30 min.

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