

## STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grades	Cutting speed $V_c$ (sfm)	Feed: $f$ (ipr)					Depth of cut for profiling (with full radius insert)
				Grooving, parting-off		Parting-off (with hand)	Profiling (with full radius insert)		
				TCS	TCM		TCS	TCM	
<b>P</b>	Steel 1045, etc.	AH725	330 - 660	0.002 - 0.006	0.002 - 0.010	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Alloy steel 4137, etc.	AH725	165 - 590	0.002 - 0.006	0.002 - 0.010	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
<b>M</b>	Stainless steel 304, etc.	AH725	165 - 490	0.002 - 0.006	0.002 - 0.008	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
<b>K</b>	Gray cast iron No.250, etc.	AH725	165 - 590	0.002 - 0.006	0.002 - 0.010	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Ductile cast iron 60-40-18, etc.	AH725	165 - 390	0.002 - 0.006	0.002 - 0.008	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
<b>S</b>	Titanium alloys Ti-6Al-4V, etc.	AH725	100 - 200	0.002 - 0.006	0.002 - 0.006	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.004	0.020
	Superalloys Inconel718, etc.	AH725	65 - 165	0.002 - 0.006	0.002 - 0.006	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.004	0.020