STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Hardness (HB)	Priority	Grades	Cutting speed *Vc* (sfm)	Feed per edge line: *fz* (ipt) ASV ae / ø*Dc* (in) 10%	20%
P	Low carbon steels (1015, etc.)	- 200	First choice	AH725	300 - 600	0.003 - 0.010	0.002 - 0.007
		- 200	For impact resistance	AH130, AH140	300 - 600	0.003 - 0.010	0.002 - 0.007
	High carbon steels (1045, etc.)	200 - 300	First choice	AH725	300 - 600	0.003 - 0.009	0.002 - 0.006
		200 - 300	For impact resistance	AH130, AH140	300 - 600	0.003 - 0.009	0.002 - 0.006
	Alloy steels (4140, etc.)	150 - 300	First choice	AH725	300 - 600	0.003 - 0.009	0.002 - 0.006
		150 - 300	For impact resistance	AH130, AH140	300 - 600	0.003 - 0.009	0.002 - 0.006
	Tool steels (D2, etc.)	- 300	First choice	AH725	300 - 600	0.003 - 0.009	0.002 - 0.006
		- 300	For impact resistance	AH130, AH140	300 - 600	0.003 - 0.009	0.002 - 0.006
M	Stainless steel (304, etc.)	-	-	AH130, AH140	300 - 660	0.003 - 0.009	0.002 - 0.006
K	Gray cast irons (No250B, etc.)	150 - 250	-	AH120	400 - 760	0.003 - 0.010	0.002 - 0.007
	Ductile cast irons (65-45-12, etc.)	150 - 250	-	AH120	300 - 500	0.003 - 0.010	0.002 - 0.007
S	Titanium alloys (Ti-6Al-4V, etc.)	-	First choice	AH725	100 - 130	0.003 - 0.005	0.002 - 0.003
		-	For impact resistance	AH130	70 - 120	0.003 - 0.005	0.002 - 0.003
	Nickel-based alloys (Inconel718 etc.)	-	First choice	AH725	100 - 130	0.003 - 0.005	0.002 - 0.003
		-	For impact resistance	AH130	70 - 120	0.003 - 0.005	0.002 - 0.003