Workpiece Material	Diameter (Inch)	Cutting Speed SFM	Feed Per Tooth APT (Inch)
Unalloyed steel P	0.312	500 - 850	0.015-0.025
	0.375	500 - 850	0.018-0.028
	0.500	500 - 850	0.018-0.028
	0.625	500 - 850	0.020-0.030
	0.750	500 - 850	0.020-0.030
	1.000	500 - 850	0.025-0.035
High Carbon steel P	0.312	450 - 750	0.015-0.025
	0.375	450 - 750	0.018-0.028
	0.500	450 - 750	0.018-0.028
	0.625	450 - 750	0.020-0.030
	0.750	450 - 750	0.020-0.030
	1.000	450 - 750	0.025-0.035
Alloyed / Tool steel P	0.312	400 - 600	0.015-0.025
	0.375	400 - 600	0.018-0.028
	0.500	400 - 600	0.018-0.028
	0.625	400 - 600	0.020-0.030
	0.750	400 - 600	0.020-0.030
	1.000	400 - 600	0.025-0.035
Stainless steel M	0.312	300 - 550	0.015-0.025
	0.375	300 - 550	0.018-0.028
	0.500	300 - 550	0.018-0.028
	0.625	300 - 550	0.020-0.030
	0.750	300 - 550	0.020-0.030
	1.000	300 - 550	0.025-0.035
Gray cast iron K	0.312	500 - 850	0.015-0.025
	0.375	500 - 850	0.018-0.028
	0.500	500 - 850	0.018-0.028
	0.625	500 - 850	0.020-0.030
	0.750	500 - 850	0.020-0.030
	1.000	500 - 850	0.025-0.035
Nodular K	0.312	450 - 650	0.015-0.025
	0.375	450 - 650	0.018-0.028
	0.500	450 - 650	0.018-0.028
	0.625	450 - 650	0.020-0.030
	0.750	450 - 650	0.020-0.030
	1.000	450 - 650	0.025-0.035
Super alloys S	0.312	80 - 200	0.008-0.018
	0.375	80 - 200	0.012-0.022
	0.500	80 - 200	0.012-0.022
	0.625	80 - 200	0.015-0.025
	0.750	80 - 200	0.015-0.025
	1.000	80 - 200	0.018-0.028
Hardened steel < 50 HRC H	0.312	250 - 400	0.012-0.022
	0.375	250 - 400	0.015-0.025
	0.500	250 - 400	0.015-0.025
	0.625	250 - 400	0.020-0.030
	0.750	250 - 400	0.020-0.030
	1.000	250 - 400	0.020-0.030
Hardened steel < 58 HRC H	0.312	150 - 250	0.008-0.018
	0.375	150 - 250	0.012-0.022
	0.500	150 - 250	0.012-0.022
	0.625	150 - 250	0.015-0.025
	0.750	150 - 250	0.015-0.025
	1.000	150 - 250	0.018-0.028