CUTTING RPMS

Work or Bit Diameter

	Material	SFPM	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
HSS Machining	Free Machining Steel	210	6400	4250	3200	2550	2100	1600	1250	1050	800
	Mild and Alloy Steel	150	4550	3050	2250	1800	1500	1100	900	750	550
	Tool Steel	120	3650	2400	1800	1450	1200	900	700	600	450
	Stainless Steel	35	1050	700	500	400	350	250	200	150	100
	Cast Iron	60	1800	1200	900	700	600	450	350	300	200
	Brass	300	9150	6100	4550	3650	3050	2250	1800	1500	1100
	Bronze	200	6100	4050	3050	2400	2000	1500	1200	1000	750
	Aluminum	300	9150	6100	4550	3650	3050	2250	1800	1500	1100
Carbide Machining	Free Machining Steel	800	24400	16250	12200	9750	8100	6100	4850	4050	3050
	Mild and Alloy Steel	750	22900	15250	11450	9150	7600	5700	4550	3800	2850
	Tool Steel	590	18000	12000	9000	7200	6000	4500	3600	3000	2250
	Stainless Steel	570	17400	11600	8700	6950	5800	4350	3450	2900	2150
	Cast Iron	410	12500	8350	6250	5000	4150	3100	2500	2050	1550
	Brass	1170	35750	23800	17850	14300	11900	8900	7150	5950	4450
	Bronze	715	21800	14550	10900	8700	7250	5450	4350	3600	2700
	Aluminum	2820	86150	57400	43050	34450	28700	21500	17200	14350	10750
Drilling/Reaming	Free Machining Steel	100	3050	2000	1500	1200	1000	750	600	500	350
	Mild and Alloy Steel	80	2400	1600	1200	950	800	600	450	400	300
	Tool Steel	30	900	600	450	350	300	200	150	150	100
	Stainless Steel	30	900	600	450	350	300	200	150	150	100
	Cast Iron	60	1800	1200	900	700	600	450	350	300	200
	Brass	160	4850	3250	2400	1950	1600	1200	950	800	600
	Bronze	110	3350	2200	1650	1300	1100	800	650	550	400
	Aluminum	250	7600	5050	3800	3050	2500	1900	1500	1250	950

Yellow highlighted cells exceed 2000 RPM, near the top end of most machines.

Red highlighted cells exceed 5000 RPM, near the top end of some machines.