

Mill/Lathe/Drill Press Cutting Speeds

All values are listed in RPM

Note:

- The Tool type is stamped on the side of the tool
- Edge finder tool at 1000 RPM
- Counterbore and Chamfer at 100 - 200 RPM
- Ream at $\frac{1}{2}$ Drill RPM

HIGH SPEED STEEL- (HSS)					
Stainless Steel	Tool Steel	Medium Carbon Steel	Low Carbon Steel	Aluminum	Brass

CARBIDE (CARB)					
Stainless Steel	Tool Steel	Medium Carbon Steel	Low Carbon Steel	Aluminum	Brass

Diameter

(in)	(in)	(mm)
1/16	0.0625	1.5875
1/8	0.125	3.175
1/4	0.25	6.35
5/16	0.3125	7.9375
3/8	0.375	9.525
7/16	0.4375	11.113
1/2	0.5	12.7
9/16	0.5625	14.288
5/8	0.625	15.875
11/16	0.6875	17.463
3/4	0.75	19.05
13/16	0.8125	20.638
7/8	0.875	22.225
15/16	0.9375	23.813
1	1	25.4
1 1/8	1.125	28.575
1 1/4	1.25	31.75
1 5/16	1.3125	33.338
1 3/8	1.375	34.925
1 7/16	1.4375	36.513
1 1/2	1.5	38.1
1 9/16	1.5625	39.688
1 5/8	1.625	41.275
1 11/16	1.6875	42.863
1 3/4	1.75	44.45
1 13/16	1.8125	46.038
1 7/8	1.875	47.625
1 15/16	1.9375	49.213
2	2	50.8
2 1/4	2.25	57.15
2 1/2	2.5	63.5
2 3/4	2.75	69.85
3	3	76.2
3 1/2	3.5	88.9
4	4	101.6
4 1/2	4.5	114.3
5	5	127
5 1/2	5.5	139.7
6	6	152.4

1468	2446	3669	4892	9783	12229
734	1223	1834	2446	4892	6115
367	611	917	1223	2446	3057
294	489	734	978	1957	2446
245	408	611	815	1631	2038
210	349	524	699	1398	1747
183	306	459	611	1223	1529
163	272	408	544	1087	1359
147	245	367	489	978	1223
133	222	334	445	889	1112
122	204	306	408	815	1019
113	188	282	376	753	941
105	175	262	349	699	874
98	163	245	326	652	815
92	153	229	306	611	764
82	136	204	272	544	679
73	122	183	245	489	611
70	116	175	233	466	582
67	111	167	222	445	556
64	106	160	213	425	532
61	102	153	204	408	510
59	98	147	196	391	489
56	94	141	188	376	470
54	91	136	181	362	453
52	87	131	175	349	437
51	84	127	169	337	422
49	82	122	163	326	408
47	79	118	158	316	394
46	76	115	153	306	382
41	68	102	136	272	340
37	61	92	122	245	306
33	56	83	111	222	278
31	51	76	102	204	255
26	44	66	87	175	218
23	38	57	76	153	191
20	34	51	68	136	170
18	31	46	61	122	153
17	28	42	56	111	139
15	25	38	51	102	127

8561	9783	9783	14675	29350	29350
4280	4892	4892	7338	14675	14675
2140	2446	2446	3669	7338	7338
1712	1957	1957	2935	5870	5870
1427	1631	1631	2446	4892	4892
1223	1398	1398	2096	4193	4193
1070	1223	1223	1834	3669	3669
951	1087	1087	1631	3261	3261
856	978	978	1468	2935	2935
778	889	889	1334	2668	2668
713	815	815	1223	2446	2446
659	753	753	1129	2258	2258
611	699	699	1048	2096	2096
571	652	652	978	1957	1957
535	611	611	917	1834	1834
476	544	544	815	1631	1631
428	489	489	734	1468	1468
408	466	466	699	1398	1398
389	445	445	667	1334	1334
372	425	425	638	1276	1276
357	408	408	611	1223	1223
342	391	391	587	1174	1174
329	376	376	564	1129	1129
317	362	362	544	1087	1087
306	349	349	524	1048	1048
295	337	337	506	1012	1012
285	326	326	489	978	978
276	316	316	473	947	947
268	306	306	459	917	917
238	272	272	408	815	815
214	245	245	367	734	734
195	222	222	334	667	667
178	204	204	306	611	611
153	175	175	262	524	524
134	153	153	229	459	459
119	136	136	204	408	408
107	122	122	183	367	367
97	111	111	167	334	334
89	102	102	153	306	306

Note: These are suggested starting speeds, not necessarily the correct speeds