

RPM'S FOR COMMON ALLOYS BASED ON THE FORMULA: 4 X CUTTING SPEED / DIAMETER

MATERIAL	ALLOY	CUTTING SPEED (SFPM)	DIAMETER OF WORK OR CUTTING TOOL												
			.063	.125	.250	.375	.500	.625	.750	.875	1.00	1.25	1.50	1.75	2.00
			REVOLUTIONS PER MINUTE (MULTIPLY BY FOUR FOR CARBIDE)												
Free Machining Plain Carbon Steel	1215	150	9600	4800	2400	1600	1200	960	800	685	600	480	400	342	300
	1117	130	8320	4160	2080	1386	1040	832	693	594	520	416	346	297	260
	1144	120	7680	3200	1920	1280	960	768	640	548	480	384	320	274	240
	12L14 (LEADED)	140	8889	4480	2240	1493	1200	896	746	640	560	448	373	320	280
Plain Carbon Steel	1018	120	7680	3840	1920	1280	960	768	640	548	480	384	320	274	240
	1045	100	6400	3200	1600	1066	800	640	533	457	400	320	266	228	200
Free Machining Alloy Steel	4440,4450	110	7040	3520	1760	1173	880	704	586	502	440	352	293	251	220
Tool Steel	O1, A2	70	4480	2240	1120	746	520	448	373	320	280	224	186	160	140
	W1	100	6400	3200	1600	1066	800	640	533	457	400	320	266	228	200
	D2	45	2880	1440	720	480	360	288	240	205	180	144	120	102	90
Stainless Steel	303, 416	100	6400	3200	1600	1066	800	640	533	457	400	320	266	228	200
	304	75	4800	2400	1200	800	600	480	400	343	300	240	200	171	150
Cast Iron	Gray	80	5120	2560	1280	853	640	512	426	365	320	256	213	182	160
	Ductile	100	6400	3200	1600	1066	800	640	533	457	400	320	266	228	200
Aluminum	All Wrought Alloys	500	32000	16000	8000	5333	4000	3200	2666	2285	2000	1600	1333	1142	1000
Brass, Bronze, Copper	314-360 (Leaded)	300	19200	9600	4800	3200	2400	1920	1600	1371	1200	960	800	685	600
	260 (Cartridge)	200	12800	6400	3200	2133	1600	1280	1066	914	800	640	533	457	400
	Copper	100	6400	3200	1600	1066	800	640	533	457	400	320	266	228	200

