

SPEED CHART

Materials	U.S. Designation	German Stoff #	Japan JIS	FPM	MPM
Aluminum Alloys	2024, 5052, 6061, 7075	3.1355, 3.3525, 3.3211, 3.4365	2024, 5052, 6061, 7075	275-340*	84-104*
Copper Alloys	CDA 220	2.0230	C2200	210	64
	CDA 360	2.0375	C3601	295	89
	Copper Nickel (30%)	2.0835	-	200	61
	Beryllium Copper	-	C1700, C1720	160	49
Bronze Alloys	AMPCO 18	-	-	180	55
	AMPCO 21	-	-	160	49
	AMPCO 25	-	-	110	34
	Leaded Tin Bronze	2.1177	-	290	88
	Aluminum Bronze 865	2.0976	AlBCIn1	150	46
	Manganese Bronze	2.0602	-	215	65
	932	-	-	280	85
Brass Alloys	937	-	-	250	76
	Cartridge Brass, Red Brass (85%)	-	BC6	220	67
Leaded, Free Machining Low Carbon Steels	Naval Brass	-	YCuZnSn	200	61
	1145	-	-	270	82
Structural Steel	1215	1.0736	SUM 25	325	99
	12L14	1.0718	SUM 24L	350	107
Low Carbon Steels	A36	1.0132	-	250	76
	1008, 1018	1.0310, 1.0453	S9CK	270	82
Medium Carbon Steels	1030	1.1178	S 30 C	250	76
	1035	1.0501	S 35 C	240	73
High Carbon Steels	1045	1.0503, 1.1191	S 45 C	230	70
	1060	1.0601	S 58 C, S 60 CM	200	61
Mn Steels	1080	1.1259	1080	195	59
	1095	1.0618	SUP 4	185	56
Cr-Mo Steels	1541	1.1167	SMn 438 (H)	200	61
	1524	1.0499	SCMn1, SCMn21	170	52
Cr Alloy Steels	4140	1.7225	SCM 440 (H)	225	68
	41L50	-	-	235	71
Ni-Cr-Mo Steels	4150H	-	-	200	61
	6150	1.8159	SUP 10	190	58
Low Alloy Tool Steel	52100	1.3505	SUJ 2	160	49
	5160	1.7176	SUP 9 (A)5	195	59
Water-Hardening Tool Steel	4340	1.6565	SNCM 439, SNCM 8	195	59
	8620	1.6523	SNCM 220H, SNCM 21	215	65
Cold-Work Tool Steel	8640	1.6546	SNCM 240	185	56
	E9310	1.6657	-	160	49
Air-Hardening Tool Steels	L-6	1.2714	SKT 4	145	44
	W-1	1.1673	SK 1	145	44
Hot Work Tool Steels	D-2	1.2379	SKD 11	90	27
	A-2	1.2363	SHD 12	150	46
Oil-Hardening Tool Steels	A-6	-	-	135	41
	A-10	-	-	100	30
High Speed Tool Steels	H-13	1.2344	SKD 61	140	43
	H-25	-	-	90	27
Mold Steels	O-1	1.2510	SKS 3	140	43
	O-2	1.2842	-	135	41
Shock Resistant Tool Steels	M-2, M-10	1.3343	SKH 9	105	32
	M-4, M-42	1.3348, 1.3247	SKH 54, SKH 59	95	29
Stainless Steels	T-1	1.3355	SKH 2	90	27
	T-15	1.3202	SKH 10	60	18
Precipitation Hardening Stainless Steels	P-3	-	-	180	55
	P-20	1.2328	-	165	50
Free Machining Stainless Steels	S-1	1.2542	SKS 41	140	43
	S-5, S-7	1.2823	-	125	38
Iron Based Super Alloys	304	1.4301	SUS 304	115	25
	316	1.4401	SUS 316	90	27
Nickel Based Alloys	410, 420	1.4006, 1.4021	SUS 410, SUS 420 J1	135	41
	440A	1.4109	SUS 440 A	80	24
Cast Irons	440C	1.4125	SUS 440 C	70	21
	17-4 PH	1.4542, 1.4568	SUS 630, SUS 631	70	21
Nickel	15-5 PH	1.4545	-	70	21
	420F	-	-	150	46
Alloys	301	1.431	-	125	38
	Monel® K-500	2.4375	-	70	21
Iron Based Super Alloys	Duranickel® 301	-	-	55	16
	A286, Incoloy® 825	1.4980	SUH 660	80	24
Nickel Based Alloys	Incoloy® 600	-	-	55	16
	Pyromet® X-15	-	-	70	21
Titanium	Inconel® 600, Inconel® 718, Nimonic® 90	2.4816, 2.4668	NCF-600	60	18
	NI-SPAN-C® 902, RENE 41®	2.4973	-	60	18
Alloys	Inconel® 625	2.4831	-	80	24
	Hastalloy B, Waspalloy	2.4800, 2.4654	Ni-Mo28	55	16
Cast Irons	Nimonic® 75, RENE 88	2.4951	-	50	16
	CP Titanium	3.7025	-	85	25
Alloys	Ti-6Al-4V	3.7615	-	65	20
	A536 (60-40-18)	0.7040	FCD 40	225	68
Cast Irons	A536 (120-90-02)	0.7080	-	110	34
	A48 (Class 20)	0.6010	FC 10	160	49
Cast Irons	A48 (Class 40)	0.6025	FC 25	115	25