

Version 15 x d

Materials group	Material	Material number	DIN	AISI/ASTM/UNS	v <sub>c</sub> [m/min]	Q <sub>1</sub>	Q <sub>x</sub>	Ød <sub>1</sub> 1.00	Ød <sub>1</sub> 1.25	Ød <sub>1</sub> 1.50	Ød <sub>1</sub> 2.00	Ød <sub>1</sub> 2.50	Ød <sub>1</sub> 3.00	Ød <sub>1</sub> 4.00	Ød <sub>1</sub> 5.00	Ød <sub>1</sub> 6.00
								f [mm/rev]	f [mm/rev]	f [mm/rev]	f [mm/rev]	f [mm/rev]	f [mm/rev]	f [mm/rev]	f [mm/rev]	
P	Unalloyed carbon steel R <sub>m</sub> < 800 N/mm <sup>2</sup>	1.0301	C10	AISI 1010	50 - 100	15xd <sub>1</sub>	-	0.060	0.060	0.080	0.100	0.120	0.150	0.180	0.220	0.250
		1.0401	C15	AISI 1015												
		1.1191	C45E/CK45	AISI 1045												
		1.0044	S275JR	AISI 1020												
		1.0715	11SMn30	AISI 1215												
	Low alloyed steel R <sub>m</sub> > 900 N/mm <sup>2</sup>	1.5752	15NiCr13	ASTM 3415 / AISI 3310	50 - 100	15xd <sub>1</sub>	-	0.060	0.060	0.080	0.100	0.120	0.150	0.150	0.180	0.200
		1.7131	16MnCr5	AISI 5115												
		1.3505	100Cr6	AISI 52100												
		1.7225	42CrMo4	AISI 4140												
		1.2842	90MnCrV8	AISI O2												
High alloyed tool steel R <sub>m</sub> < 1200 N/mm <sup>2</sup>	1.2379	X153CrMoV12	AISI D2	40 - 80	15xd <sub>1</sub>	-	0.040	0.060	0.080	0.100	0.120	0.150	0.180	0.200	0.220	
	1.2436	X210CrW12	AISI D4/D6													
	1.3343	HS6-5-2C	AISI M2 / UNS T11302													
	1.3355	HS18-0-1	AISI T1 / UNS T12001													
M	Stainless steel ferritic	1.4016	X6Cr17	AISI 430 / UNS S43000	30 - 60	15xd <sub>1</sub>	-	0.020	0.040	0.060	0.080	0.100	0.130	0.150	0.200	0.220
		1.4105	X6CrMoS17	AISI 430F												
	Stainless steel martensitic	1.4034	X46Cr13	AISI 420C	40 - 80	15xd <sub>1</sub>	-	0.040	0.060	0.080	0.100	0.120	0.150	0.180	0.200	0.220
		1.4112	X90CrMoV18	AISI 440B												
	Stainless steel martensitic - PH	1.4542	X5CrNiCuNb 16-4	AISI 630 / ASTM 17-4 PH												
		1.4545	X5CrNiCuNb 15-5	ASTM 15-5 PH												
	Stainless steel austenitic	1.4301	X5CrNi 18-10	AISI 304	30 - 60	5xd <sub>1</sub>	2xd <sub>1</sub>	0.020	0.030	0.040	0.060	0.070	0.100	0.120	0.150	0.180
1.4435		X2CrNiMo 18-14-3	AISI 316L													
1.4441		X2CrNiMo 18-14-3	AISI 316LM													
1.4539		X1NiCrMoCu 25-20-5	AISI 904L													
K	Cast iron	0.6020	GG20	ASTM 30	100 - 200	15xd <sub>1</sub>	-	0.060	0.080	0.100	0.120	0.150	0.180	0.200	0.250	0.300
		0.6030	GG30	ASTM 40B												
		0.7040	GGG40	ASTM 60-40-18												
		0.7060	GGG60	ASTM 80-60-03												
N	Aluminium alloy wrought	3.2315	AlMgSi1	ASTM 6351	100 - 200	15xd <sub>1</sub>	-	0.040	0.060	0.080	0.120	0.160	0.200	0.250	0.300	0.250
		3.4365	AlZnMgCu1.5	ASTM 7075												
	Aluminium alloy cast	3.2163	GD-AlSi9Cu3	ASTM A380	80 - 150	15xd <sub>1</sub>	-	0.040	0.060	0.080	0.100	0.120	0.150	0.200	0.250	0.300
		3.2381	GD-AlSi10Mg	UNS A03590												
	Copper	2.004	Cu-OF / CW008A	UNS C10100	40 - 80	2xd <sub>1</sub>	2xd <sub>1</sub>	0.025	0.045	0.065	0.085	0.110	0.140	0.160	0.180	0.200
		2.0065	Cu-ETP / CW004A	UNS C11000												
	Brass lead free	2.0321	CuZn37 CW508L	UNS C27400	40 - 80	2xd <sub>1</sub>	2xd <sub>1</sub>	0.025	0.045	0.065	0.085	0.110	0.140	0.160	0.180	0.200
		2.036	CuZn40 CW509L	UNS C28000												
	Brass, Bronze R <sub>m</sub> < 400 N/mm <sup>2</sup>	2.0401	CuZn39Pb3 / CW614N	UNS C38500	50 - 120	15xd <sub>1</sub>	-	0.030	0.050	0.070	0.090	0.120	0.150	0.170	0.220	0.240
		2.102	CuSn6	UNS C51900												
Bronze R <sub>m</sub> < 600 N/mm <sup>2</sup>	2.0966	CuAl10Ni5Fe4	UNS C63000	40 - 80	15xd <sub>1</sub>	-	0.025	0.045	0.065	0.085	0.110	0.140	0.160	0.210	0.230	
	2.096	CuAl9Mn2	UNS C63200													
S <sub>1</sub>	Super alloys	2.4856		Inconel 625												
		2.4668		Inconel 718												
		2.4617	NiMo28	Hastelloy B-2												
		2.4665	NiCr22Fe18Mo	Hastelloy X												
S <sub>2</sub>	Titanium pure	3.7035	Gr.2	ASTM B348 / F67	25 - 50	3xd <sub>1</sub>	1xd <sub>1</sub>	0.010	0.020	0.030	0.040	0.050	0.065	0.080	0.100	0.120
		3.7065	Gr.4	ASTM B348 / F68												
	Titanium alloys	3.7165	TiAl6V4	ASTM B348 / F136	20 - 40	5xd <sub>1</sub>	1xd <sub>1</sub>	0.010	0.020	0.030	0.040	0.050	0.065	0.080	0.100	0.120
9.9367		TiAl6Nb7	ASTM F1295													
S <sub>3</sub>	Cr-Co alloys	2.4964	CoCr20W15Ni CrCoMo28	Haynes 25 ASTM F1537	20 - 40	5xd <sub>1</sub>	2xd <sub>1</sub>	0.010	0.020	0.030	0.040	0.050	0.065	0.080	0.100	0.120
H <sub>1</sub>	Hardened steel < 55 HRC	1.2510	100MnCrMoW4	AISI O1	30 - 60	5xd <sub>1</sub>	1xd <sub>1</sub>	0.020	0.040	0.060	0.080	0.100	0.120	0.140	0.160	0.180
H <sub>2</sub>	Hardened steel ≥ 55 HRC	1.2379	X153CrMoV12	AISI D2												

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