

Materials group	Material	Material number	DIN	AISI/ASTM/UNS	v _c [m/min]	Q ₁	Q _x	Ød ₁ 2.00	Ød ₁ 2.50	Ød ₁ 3.00	Ød ₁ 4.00	Ød ₁ 5.00	Ød ₁ 6.00
								f [mm/rev]	f [mm/rev]	f [mm/rev]	f [mm/rev]	f [mm/rev]	f [mm/rev]
P	Unalloyed carbon steel R _m < 800 N/mm ²	1.0301	C10	AISI 1010	50 - 100	40xd ₁	-	0.080	0.080	0.100	0.120	0.140	0.160
		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 _m > 900 N/mm ²	1.5752	15NiCr13	ASTM 3415 / AISI 3310	50 - 100	40xd ₁	-	0.080	0.100	0.120	0.140	0.160	0.180
		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 _m < 1200 N/mm ²	1.2379	X153CrMoV12	AISI D2	40 - 80	40xd ₁	-	0.080	0.100	0.110	0.140	0.160	0.170	
	1.2436	X210CrW12	AISI D4/D6										
	1.3343	HS6-5-2C	AISI M2 / UNS T11302										
	1.3355	HS18-0-1	AISI T1 / UNS T12001										
	1.4016	X6Cr17	AISI 430 / UNS S43000										
M	Stainless steel ferritic	1.4105	X6CrMoS17	AISI 430F	30 - 60	40xd ₁	-	0.060	0.070	0.100	0.120	0.150	0.180
		1.4034	X46Cr13	AISI 420C									
	Stainless steel martensitic	1.4112	X90CrMoV18	AISI 440B	40 - 80	40xd ₁	-	0.100	0.120	0.150	0.180	0.200	0.220
		1.4542	X5CrNiCuNb 16-4	AISI 630 / ASTM 17-4 PH									
	Stainless steel martensitic - PH	1.4545	X5CrNiCuNb 15-5	ASTM 15-5 PH									
		1.4301	X5CrNi 18-10	AISI 304	30 - 60	5xd ₁	2xd ₁	0.060	0.070	0.100	0.120	0.150	0.180
	Stainless steel austenitic	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	40xd ₁	-	0.100	0.120	0.150	0.180	0.200	0.250
		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	40xd ₁	-	0.070	0.100	0.120	0.200	0.200	0.200
		3.4365	AlZnMgCu1.5	ASTM 7075									
	Aluminium alloy cast	3.2163	GD-AlSi9Cu3	ASTM A380	80 - 150	40xd ₁	-	0.060	0.080	0.100	0.120	0.150	0.200
		3.2381	GD-AlSi10Mg	UNS A03590									
	Copper	2.004	Cu-OF / CW008A	UNS C10100	40 - 80	2xd ₁	2xd ₁	0.065	0.080	0.110	0.130	0.160	0.190
		2.0065	Cu-ETP / CW004A	UNS C11000									
	Brass lead free	2.0321	CuZn37 CW508L	UNS C27400	40 - 80	2xd ₁	2xd ₁	0.065	0.080	0.110	0.130	0.160	0.190
		2.036	CuZn40 CW509L	UNS C28000									
	Brass, Bronze R _m < 400 N/mm ²	2.0401	CuZn39Pb3 / CW614N	UNS C38500	50 - 120	40xd ₁	-	0.100	0.130	0.160	0.180	0.230	0.250
		2.102	CuSn6	UNS C51900									
Bronze R _m < 600 N/mm ²	2.0966	CuAl10Ni5Fe4	UNS C63000	40 - 80	40xd ₁	-	0.065	0.080	0.110	0.130	0.160	0.190	
	2.096	CuAl9Mn2	UNS C63200										
S ₁	Super alloys	2.4856		Inconel 625									
		2.4668		Inconel 718									
		2.4617	NiMo28	Hastelloy B-2									
		2.4665	NiCr22Fe18Mo	Hastelloy X									
S ₂	Titanium pure	3.7035	Gr.2	ASTM B348 / F67	25 - 50	3xd ₁	1xd ₁	0.030	0.040	0.055	0.070	0.080	0.100
		3.7065	Gr.4	ASTM B348 / F68									
	Titanium alloys	3.7165	TiAl6V4	ASTM B348 / F136	20 - 40	5xd ₁	1xd ₁	0.030	0.040	0.055	0.070	0.080	0.100
9.9367		TiAl6Nb7	ASTM F1295										
S ₃	Cr-Co alloys	2.4964	CoCr20W15Ni CrCoMo28	Haynes 25 ASTM F1537	20 - 40	5xd ₁	2xd ₁	0.030	0.040	0.055	0.070	0.080	0.100
H ₁	Hardened steel < 55 HRC	1.2510	100MnCrMoW4	AISI O1	30 - 60	5xd ₁	1xd ₁	0.080	0.100	0.120	0.140	0.160	0.180
H ₂	Hardened steel ≥ 55 HRC	1.2379	X153CrMoV12	AISI D2									

Your contacts

Mikron Tool SA Agno
P.O. Box 340
6934 Bioggio
Switzerland
Phone +41 91 610 40 00
Fax +41 91 610 40 10
mto@mikron.com

Mikron GmbH Rottweil
Abteilung Werkzeuge
Berner Feld 71
78628 Rottweil
Germany
Phone +49 741 5380 450
Fax +49 741 5380 480
info.mtr@mikron.com

Mikron Corp. Monroe
P.O. Box 268
200 Main Street
Monroe, CT 06468
USA
Phone +1 203 261 3100
Fax +1 203 268 4752
mmo@mikron.com

