

Materials group	Material	Material number	DIN	AISI/ASTM/UNS	v <sub>c</sub> [SFM]	Q <sub>1</sub>	Q <sub>x</sub>	Ød <sub>1</sub> .0394	Ød <sub>1</sub> .0492	Ød <sub>1</sub> .0591	Ød <sub>1</sub> .0787	Ød <sub>1</sub> .0984	Ød <sub>1</sub> .1181	Ød <sub>1</sub> .1575	Ød <sub>1</sub> .1969	Ød <sub>1</sub> .2362	
								f [IPR]	f [IPR]	f [IPR]	f [IPR]	f [IPR]	f [IPR]	f [IPR]	f [IPR]		
P	Unalloyed carbon steel R <sub>m</sub> < 800 N/mm <sup>2</sup>	1.0301	C10	AISI 1010	164 - 328	20xd <sub>1</sub>	-	.0024	.0024	.0031	.0039	.0047	.0059	.0071	.0087	.0098	
		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	164 - 328	20xd <sub>1</sub>	-	.0024	.0024	.0031	.0039	.0047	.0059	.0059	.0071	.0071	.0079
		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	131 - 262	20xd <sub>1</sub>	-	.0016	.0024	.0031	.0039	.0047	.0059	.0071	.0071	.0079	.0087	
	1.2436	X210CrW12	AISI D4/D6														
	1.3343	H56-5-2C	AISI M2 / UNS T11302														
	1.3355	H518-0-1	AISI T1 / UNS T12001														
	1.4016	X6Cr17	AISI 430 / UNS S43000														
M	Stainless steel ferritic	1.4105	X6CrMoS17	AISI 430F	98 - 197	20xd <sub>1</sub>	-	.0008	.0016	.0024	.0031	.0039	.0051	.0059	.0079	.0087	
		1.4034	X46Cr13	AISI 420C													
	Stainless steel martensitic	1.4112	X90CrMoV18	AISI 440B	131 - 262	20xd <sub>1</sub>	-	.0016	.0024	.0031	.0039	.0047	.0059	.0071	.0071	.0079	.0087
		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	98 - 197	5xd <sub>1</sub>	2xd <sub>1</sub>	.0008	.0012	.0016	.0024	.0028	.0039	.0047	.0059	.0071	.0071
	1.4435	X2CrNiMo 18-14-3	AISI 316L														
	Stainless steel austenitic	1.4441	X2CrNiMo 18-14-3	AISI 316LM													
		1.4539	X1NiCrMoCu 25-20-5	AISI 904L													
		0.6020	GG20	ASTM 30	328 - 656	20xd <sub>1</sub>	-	.0024	.0031	.0039	.0047	.0059	.0071	.0079	.0098	.0098	.0118
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	328 - 656	20xd <sub>1</sub>	-	.0016	.0024	.0031	.0047	.0063	.0079	.0098	.0118	.0098	
		3.4365	AlZnMgCu1.5	ASTM 7075													
	Aluminium alloy cast	3.2163	GD-AlSi9Cu3	ASTM A380	262 - 492	20xd <sub>1</sub>	-	.0016	.0024	.0031	.0039	.0047	.0059	.0079	.0098	.0098	.0118
		3.2381	GD-AlSi10Mg	UNS A03590													
	Copper	2.004	Cu-OF / CW008A	UNS C10100	131 - 262	2xd <sub>1</sub>	2xd <sub>1</sub>	.0010	.0018	.0026	.0033	.0043	.0055	.0063	.0071	.0071	.0079
		2.0065	Cu-ETP / CW004A	UNS C11000													
	Brass lead free	2.0321	CuZn37 CW508L	UNS C27400	131 - 262	2xd <sub>1</sub>	2xd <sub>1</sub>	.0010	.0018	.0026	.0033	.0043	.0055	.0063	.0071	.0071	.0079
		2.036	CuZn40 CW509L	UNS C28000													
	Brass, Bronze R <sub>m</sub> < 400 N/mm <sup>2</sup>	2.0401	CuZn39Pb3 / CW614N	UNS C38500	164 - 394	20xd <sub>1</sub>	-	.0012	.0020	.0028	.0035	.0047	.0059	.0067	.0087	.0087	.0094
		2.102	CuSn6	UNS C51900													
Bronze R <sub>m</sub> < 600 N/mm <sup>2</sup>	2.0966	CuAl10Ni5Fe4	UNS C63000	131 - 262	20xd <sub>1</sub>	-	.0010	.0018	.0026	.0033	.0043	.0055	.0063	.0083	.0083	.0091	
	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	82 - 164	3xd <sub>1</sub>	1xd <sub>1</sub>	.0004	.0008	.0012	.0016	.0020	.0026	.0031	.0039	.0047	
		3.7065	Gr.4	ASTM B348 / F68													
	Titanium alloys	3.7165	TiAl6V4	ASTM B348 / F136	66 - 131	5xd <sub>1</sub>	1xd <sub>1</sub>	.0004	.0008	.0012	.0016	.0020	.0026	.0031	.0039	.0047	.0047
9.9367		TiAl6Nb7	ASTM F1295														
S <sub>3</sub>	Cr-Co alloys	2.4964	CoCr20W15Ni	Haynes 25	66 - 131	5xd <sub>1</sub>	2xd <sub>1</sub>	.0004	.0008	.0012	.0016	.0020	.0026	.0031	.0039	.0047	
	CrCoMo28	ASTM F1537															
H <sub>1</sub>	Hardened steel < 55 HRC	1.2510	100MnCrMoW4	AISI O1	98 - 197	5xd <sub>1</sub>	1xd <sub>1</sub>	.0008	.0016	.0024	.0031	.0039	.0047	.0055	.0063	.0071	
H <sub>2</sub>	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

