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Caution: General safety regulations and directions of machine manufacturers must be observed at any time!

	Material description	W-Nr. German	AISI/SAE	Tensile strength	Hardness	VCGT 13..	VCGT 13..-25	VCGT 13.. FR-01W	VCGT 13.. FR/L-10	VCGT 13.. FR-15W	VCGT 13.. FN-18M	VCGT 13.. FN-25M	VCGT 13.. FN-250	VCGW 13..	VCMT 13..-17	Carbide uncoated DX2	Carbide coated DX20 DX32	Carbide coated DX30 DX50 DX52	Carbide coated DC15	Cermet uncoated DT10	Cermet uncoated DT55	Cermet coated DT210 DT310	Cermet coated DT255 DT355
				Rm (N/mm²)	HB	f (ipr) *)										Vc (sfm)							
1	Low Carbon Steel	1.0035 1.0038 1.0401 1.0050	1010 1045 1015 1050	- 500	- 160	.0031 .0039 .0118		.0016 .0039 .0079	.0020 .0039 .0098	.0012 .0024 .0047	.0016 .0031 .0059				.0031 .0059 .0118	495 429 297	1122 957 792	1353 1221 1089	1188 1122 1023	1980 1650 1155	1914 1551 1056	1980 1650 1155	1914 1551 1056
2	Alloy Steel	1.0501 1.1141 1.5732 1.7225	1035 1115 3415 4140	500 - 700	140 - 200	.0031 .0039 .0118		.0016 .0039 .0079	.0020 .0039 .0098	.0012 .0024 .0047	.0016 .0031 .0059				.0031 .0059 .0118	396 297 198	1056 891 726	1155 1089 957	1089 990 825	1881 1551 1056	1947 1452 924		
3	Tool Steel	1.1221 1.3505 1.7225 1.5141	1060 52100 4140 -	900 - 1'100	170 - 275	.0031 .0039 .0118		.0012 .0024 .0039	.0020 .0039 .0059	.0012 .0024 .0047	.0012 .0024 .0047				.0031 .0059 .0098	297 231 165	858 693 561	925 858 759	858 726 660	1750 1450 1020	1680 1380 950		
4	Alloy Tool Steel	1.1191 1.7225 1.2080 1.7220	4140 4142 D3 4135	700 - 900	250 - 325	.0031 .0039 .0118		.0012 .0024 .0039	.0020 .0039 .0059	.0012 .0024 .0047	.0012 .0024 .0047				.0031 .0059 .0098	200 165 130	790 725 625	850 790 690	790 725 660	950 850 590	890 790 560		
5	Alloy Cast Steel	1.6582 1.8159 1.2367 1.7361	4340 6150 A2 4145	1'100 - 1'500 800 - 1'000	325 - 450 250 - 300 330 - 390	.0031 .0039 .0118		.0012 .0020 .0039	.0020 .0039 .0039	.0012 .0020 .0039					.0031 .0059 .0059		460 390 300	525 430 360	460 400 330	790 690 560	725 625 500		
6	Stainless Steel	1.4006 1.4057 1.4034 1.4005	403 431 420 416	- 800	- 250	.0031 .0039 .0118	.0020 .0039 .0059	.0016 .0031 .0059	.0020 .0039 .0059	.0016 .0024 .0047	.0016 .0031 .0059		.0020 .0039 .0059		.0031 .0059 .0079	400 300 230	790 725 560	850 790 625				1050 990 890	1050 990 890
7	Stainless Steel - Austenitic, Martensitic	1.4300 1.4301 1.4435 1.4542	302 304 (304H) 316 17-4 ph	500 - 1100	200 - 325	.0031 .0039 .0118	.0020 .0039 .0059	.0012 .0024 .0039	.0020 .0039 .0059	.0012 .0024 .0047	.0012 .0024 .0047		.0020 .0039 .0059		.0031 .0059 .0079	330 230 165	560 396 330	625 525 425				825 690 590	825 690 590
8	Grey Cast Iron	0.6010 0.6015 0.6020	A48-20B A48-25B A48-30B	- 250	- 200	.0020 .0059 .0098								.0020 .0059 .0098	.0039 .0079 .0118	525 425 330	750 675 560	825 750 660	750 690 625	890 825 725	825 725 660		
9	Cast Iron Malleable	0.6025 0.8135 0.8140 0.7050	A48-35B A48-40B A48-45B 80-55-06	250 - 350	200 - 250	.0020 .0059 .0098								.0020 .0059 .0098	.0031 .0059 .0098	396 300 230	460 360 300	496 396 330	425 396 300	600 525 460	560 500 425		
10	Copper Alloys	2.0331 2.0401 2.1030 2.0920	B121 B121 B103 CuAl 8	450 - 650	120 - 180	.0020 .0059 .0118	.0020 .0059 .0098	.0020 .0039 .0079	.0020 .0059 .0118	.0020 .0059 .0118	.0020 .0059 .0118	.0020 .0059 .0118	.0020 .0059 .0098	.0011 .0059 .0157	.0020 .0059 .0118	1800 1650 1300	2300 1980 1650	2650 2300 1980	2650 2300 1980			2650 2300 1980	2650 2300 1980
11	Aluminium Alloys	3.2582.05 3.3541.01 3.2315 3.0205	383.2 (ALSi-12) 514.0 (AlMg 3) 413.0 (ALMgSi 1) 1200 (AL 99)	250 - 350	200 - 300	.0031 .0078 .0118	.0039 .0078 .0157		.0020 .0059 .0098	.0039 .0079 .0157	.0039 .0079 .0157	.0039 .0079 .0157	.0039 .0078 .0157			2650 1650 990	>3300	>3300					

*) in function of stability of tool & workpiece

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