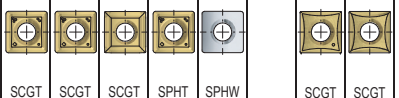
Caution: General safety regulations and directions of machine manufacturers must be observed at any time!

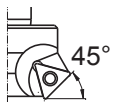
**)



	Material description	W-Nr. German	AISI/SAE	Tensile strength	Hardness	SCGT 0602.. EN	SCGT 0602.. FN	SCGT 0602.. FN-25	SPHT 0602.. EN	SPHW 0602.. FN	SCGT 09T3.. EN	SCGT 09T3.. FN-25	Carbide uncoated DX2	Carbide uncoated P25	Carbide coated DX20 DX32	Carbide coated DX30 DX50	Carbide coated DC15
				Rm (N/mm²)	HB	fz (ipt) *)							Vc (sfm)				
1	Low Carbon Steel	1.0035 1.0038 1.0401 1.0050	1010 1045 1015 1050	- 500	- 160	.0024 ÷ .0079	.0012 ÷ .0059	.0004 ÷ .0039	.0012 ÷ .0059	.0012 ÷ .0079	.0028 ÷ ,0118	.0012 ÷ .0059			660 ÷ 860	790 ÷ 990	790 ÷ 990
2	Alloy Steel	1.0501 1.1141 1.5732 1.7225	1035 1115 3415 4140	500 - 700	140 - 200	.0024 ÷ .0079	.0012 ÷ .0059	.0004 ÷ .0039	.0012 ÷ .0059	.0012 ÷ .0079	.0028 ÷ ,0118	.0012 ÷ .0059			595 ÷ 760	695 ÷ 860	695 ÷ 925
3	Tool Steel	1.1221 1.3505 1.7225 1.5141	1060 52100 4140 -	900 - 1'100	170 - 275	.0024 ÷ .0039	.0012 ÷ .0039	.0004 ÷ .0031		.0012 ÷ .0059	.0028 ÷ ,0079	.0012 ÷ .0039			560 ÷ 630	660 ÷ 725	660 ÷ 925
4	Alloy Tool Steel	1.1191 1.7225 1.2080 1.7220	4140 4142 D3 4135	700 - 900	250 - 325	.0024 ÷ .0039	.0012 ÷ .0039	.0004 ÷ .0031		.0012 ÷ .0059	.0028 ÷ ,0079	.0012 ÷ .0039			595 ÷ 660	660 ÷ 725	660 ÷ 825
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		.0012 ÷ .0031	.0004 ÷ .0020		.0012 ÷ .0039	.0028 ÷ ,0059	.0012 ÷ .0039			430 ÷ 560	430 ÷ 560	395 ÷ 595
6	Stainless Steel	1.4006 1.4057 1.4034 1.4005	403 431 420 416	- 800	- 250		.0012 ÷ .0039	.0004 ÷ .0031	.0012 ÷ .0039	.0012 ÷ .0051	.0028 ÷ ,0079	.0012 ÷ .0039			595 ÷ 725	595 ÷ 725	
7	Stainless Steel - Austenitic, Martensitic	1.4300 1.4301 1.4435 1.4542	302 304 (304H) 316 17-4 ph	500 - 1100	200 - 325		.0012 ÷ .0039	.0004 ÷ .0031	.0012 ÷ .0039	.0012 ÷ .0051	.0028 ÷ ,0079	.0012 ÷ .0039			430 ÷ 595	460 ÷ 660	
8	Grey Cast Iron	0.6010 0.6015 0.6020	A48-20B A48-25B A48-30B	- 250	- 200	.0024 ÷ .0059	.0012 ÷ .0059			.0012 ÷ .0079	.0028 ÷ ,0118				560 ÷ 860	595 ÷ 925	595 ÷ 925
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	.0024 ÷ .0059	.0012 ÷ .0059			.0012 ÷ .0079	.0028 ÷ ,0118				460 ÷ 725	595 ÷ 925	595 ÷ 925
10	Copper Alloys	2.0331 2.0401 2.1030 2.0920	B121 B121 B103 CuAl 8	450 - 650	120 - 180		.0012 ÷ .0059	.0004 ÷ .0039	.0012 ÷ .0059		.0028 ÷ ,0118	.0012 ÷ .0059	660 ÷ 1320		3300 ÷ 2310	3300 ÷ 2310	
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		.0012 ÷ .0059	.0004 ÷ .0039	.0012 ÷ .0059		.0028 ÷ ,0118	.0012 ÷ .0079	1320 ÷ >3300		1320 ÷ >3300	1320 ÷ >3300	

*) **in function of stability of tool & workpiece and engagement portion of the cutter**

) **Above mentioned Cutting Data are valid for angle χ = 90 ° ! For angles mentioned hereafter please multiply the feed rate by the corresponding factor F_χ:



χ = 45° -> $F_{45°}$ = 1,6

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