

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
			Rm (N/mm ²)	HB
1 Low Carbon Steel	1.0035 1.0038 1.0401 1.0050	1010 1045 1015 1050	- 500	- 160
2 Alloy Steel	1.0501 1.1141 1.5732 1.7225	1035 1115 3415 4140	500 - 700	140 - 200
3 Tool Steel	1.1221 1.3505 1.7225 1.5141	1060 52100 4140 -	900 - 1'100	170 - 275
4 Alloy Tool Steel	1.1191 1.7225 1.2080 1.7220	4140 4142 D3 4135	700 - 900	250 - 325
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 - 390
6 Stainless Steel	1.4006 1.4057 1.4034 1.4005	403 431 420 416	- 800	- 250
7 Stainless Steel - Austenitic, Martensitic	1.4300 1.4301 1.4435 1.4542	302 304 (304H) 316 17-4 ph	500 - 1100	200 - 325
8 Grey Cast Iron	0.6010 0.6015 0.6020	A48-20B A48-25B A48-30B	- 250	- 200
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
10 Copper Alloys	2.0331 2.0401 2.1030 2.0920	B121 B121 B103 CuAl 8	450 - 650	120 - 180
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

Carbide									
uncoated		coated							
DX2		DX70							
Vc (sfm)									
0.0004 +	0.0004 +	0.0004 +		0.0004 +	0.0004 +	0.0004 +			990
0.0016	0.0039	0.0039		0.0016	0.0039	0.0039			
0.0004 +	0.0004 +	0.0004 +		0.0004 +	0.0004 +	0.0004 +			825
0.0016	0.0039	0.0039		0.0016	0.0039	0.0039			
0.0004 +	0.0004 +	0.0004 +		0.0004 +	0.0004 +	0.0004 +			726
0.0016	0.0039	0.0028		0.0016	0.0039	0.0028			
0.0004 +	0.0004 +	0.0004 +		0.0004 +	0.0004 +	0.0004 +			594
0.0016	0.0028	0.0028		0.0016	0.0028	0.0028			
0.0004 +	0.0004 +	0.0004 +		0.0004 +	0.0004 +	0.0004 +			462
0.0016	0.0028	0.0019		0.0016	0.0028	0.0019			
0.0004 +	0.0004 +			0.0004 +	0.0004 +				660
0.0016	0.0039			0.0016	0.0039				
0.0004 +	0.0004 +			0.0004 +	0.0004 +				495
0.0016	0.0031			0.0016	0.0031				
0.0004 +	0.0004 +	0.0004 +		0.0004 +	0.0004 +	0.0004 +			297
0.0016	0.0039	0.0059		0.0016	0.0039	0.0059			693
0.0004 +	0.0004 +	0.0004 +		0.0004 +	0.0004 +	0.0004 +			264
0.0016	0.0039	0.0039		0.0016	0.0039	0.0039			528
0.0004 +	0.0004 +	0.0004 +		0.0004 +	0.0004 +	0.0004 +			660
0.0039	0.0079	0.0079		0.0039	0.0079	0.0079			>990
0.0004 +	0.0004 +			0.0004 +	0.0004 +				>3300
0.0016	0.0059			0.0016	0.0059				

*) in function of stability of tool & workpiece

