

Application values High-performance reamer, solid carbide, TiAlN (Art. no. 1013522 101-161)



Material groups for cutting values	Strength Class [N/mm ²]	Description regarding DIN	Vc [m/min]	1-5	5-8	8-12	12-16	16-20
1. Steels								
1.1 Free machining steel	< 900	9 S 20	150-200	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
1.2 Structural steel	<500	ST 37-2	150-200	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
1.3 Structural steel	> 500	ST 60-2	150-200	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
1.4 Heat-treated steel	<1000	42 CrMo 4	150-200	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
1.5 Cast iron	<1000	GS-45	150-200	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
1.6 Case-hardened steel	<1200	16 MnCr 5	150-200	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
1.7 Ferritic/martensitic stainless steel	<1100	X 10 Cr 13						
1.8 Heat-treated steel	>1000	43 CrMo 4	120-180	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
1.9 Nitriding steel	<1300	31 CrMoV 9	120-180	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
1.10 Tool steel	<1300	X 38 CrMoV 5 1	120-160	0.2-0.35	0.35-0.6	0.6-0.9	0.9-1.3	1.3-1.6
4. Cast metal								
4.1 Grey cast iron	<260 HB	GG10	100-150	0.2-0.4	0.4-0.7	0.7-1.1	1.1-1.5	1.5-1.9
4.2 Spheroidal graphite iron	<310 HB	GGG 40	100-160	0.2-0.4	0.4-0.7	0.7-1.1	1.1-1.5	1.5-1.9
4.3 Ductile iron	<280 HB	GTW-55	90-110	0.2-0.4	0.4-0.7	0.7-1.1	1.1-1.5	1.5-1.9

