

TPKN 1603 PDTR LT 30

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/tooth]		V _c [m/min]		Optimal cutting conditions			
					min	max	min	max	min	max	D.O.C.	Feed	V _c	
Steel	Non-alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	12.0	0.14	0.27	190	330	3.0	0.20	250	
		190 HB		220										
		250 HB		200										
	Low alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	12.0	0.12	0.21	150	240	3.0	0.17	200	180
		230 HB		180										
		280 HB		150										
		350 HB		140										
	High alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	8.6	0.10	0.19	90	150	2.3	0.15	130	120
		280 HB		100										
		320 HB		80										
		350 HB		80										
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.5	12.0	0.14	0.27	150	240	3.0	0.20	200	
		200 HB		180										
		250 HB		160										
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.5	12.0	0.12	0.24	100	200	3.0	0.17	180	150
		200 HB		130										
		250 HB		130										
Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.5	4.3	0.08	0.15	40	80	1.5	0.12	60	55
		50 HRc		50										
		55 HRc		50										
	Chilled Cast Iron	40	Ni-Hard 2	400 HB	0.5	3.4	0.08	0.15	40	80	1.1	0.12	50	
	White Cast Iron	41	G-X300CrMo15	55 HRc	0.5	2.6	0.08	0.12	30	60	0.8	0.10	40	