

## TPUN 160308 LT 30

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/tooth]		V <sub>c</sub> [m/min]		Optimal cutting conditions		
					min	max	min	max	min	max	D.O.C.	Feed	V <sub>c</sub>
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
		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
		280 HB		120									
		320 HB		100									
		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
		200 HB		150									
		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
		50 HRc		55									
		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