	Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/tooth]		V_c [m/min]		Suggested Starting Parameters		
						min	max	min	max	min	max	D.O.C.	Feed	V_c
Steel	Non-alloyed	1	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	9.0	0.13	0.46	190	330	**1.0**	**0.35**	**250**
			2		190 HB	0.5	9.0	0.13	0.46	190	300	**1.0**	**0.35**	**220**
			3		250 HB	0.5	9.0	0.13	0.46	190	250	**1.0**	**0.35**	**200**
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	9.0	0.11	0.36	150	240	**1.0**	**0.30**	**200**
			4,6		230 HB	0.5	9.0	0.11	0.36	150	210	**1.0**	**0.30**	**180**
			5,7		280 HB	0.5	9.0	0.11	0.32	130	190	**1.0**	**0.27**	**150**
			8		350 HB	0.5	9.0	0.11	0.32	130	170	**1.0**	**0.27**	**140**
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	6.4	0.08	0.32	90	150	**1.0**	**0.27**	**130**
			10		280 HB	0.5	6.4	0.08	0.32	90	130	**1.0**	**0.27**	**120**
			11		320 HB	0.5	6.4	0.08	0.26	60	110	**1.0**	**0.24**	**100**
			11		350 HB	0.5	6.4	0.08	0.26	60	90	**1.0**	**0.24**	**80**
Stainless Steel	Austenitic	4	14	304, 316, X5CrNi18-9	180 HB	0.5	9.0	0.11	0.36	190	250	**1.0**	**0.30**	**220**
			14		240 HB	0.5	9.0	0.08	0.32	160	210	**1.0**	**0.30**	**190**
	Duplex	5	14	X2CrNiN23-4, S31500	290 HB	0.5	6.4	0.08	0.26	70	130	**1.0**	**0.24**	**100**
			14		310 HB	0.5	6.4	0.08	0.26	70	120	**1.0**	**0.24**	**90**
	Ferritic & Martensitic	6	12	410, X6Cr17, 17-4 PH, 430	200 HB	0.5	9.0	0.11	0.36	150	210	**1.0**	**0.30**	**190**
			13		42 HRc	0.5	6.4	0.11	0.29	90	150	**1.0**	**0.24**	**130**
Cast Iron	Grey	7	15	GG20, GG40, EN-GJL-250, No30B	150 HB	0.5	9.0	0.13	0.46	150	240	**1.0**	**0.35**	**200**
			15		200 HB	0.5	9.0	0.13	0.46	150	220	**1.0**	**0.35**	**180**
			16		250 HB	0.5	9.0	0.13	0.46	150	190	**1.0**	**0.35**	**160**
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.5	9.0	0.11	0.41	100	200	**1.0**	**0.30**	**180**
			17,19		200 HB	0.5	9.0	0.11	0.41	100	180	**1.0**	**0.30**	**150**
			18,20		250 HB	0.5	9.0	0.11	0.41	100	150	**1.0**	**0.30**	**130**
High Temp.Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	240 HB	0.5	6.4	0.08	0.26	25	45	**1.0**	**0.24**	**32**
			33	Inconel 700	250 HB	0.5	6.4	0.08	0.26	25	45	**1.0**	**0.24**	**30**
			34	Stellite 21	350 HB	0.5	6.4	0.08	0.26	25	45	**1.0**	**0.24**	**30**
	Ti based	10	36	TiAl6V4	-	0.5	6.4	0.08	0.29	40	65	**1.0**	**0.27**	**55**
			37	T40	-	0.5	6.4	0.08	0.26	30	55	**1.0**	**0.24**	**40**
Hardened Mat.	Steel	11	38	X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.4	3.2	0.07	0.26	40	80	**0.7**	**0.21**	**60**
			38		50 HRc	0.4	1.9	0.07	0.23	40	70	**0.7**	**0.20**	**55**
			38		55 HRc	0.4	1.0	0.07	0.20	40	60	**0.7**	**0.18**	**50**
	Chilled Cast Iron		40	Ni-Hard 2	400 HB	0.4	2.6	0.07	0.26	40	80	**0.7**	**0.21**	**50**
	White Cast Iron		41	G-X300CrMo15	55 HRc	0.4	1.0	0.07	0.20	30	60	**0.7**	**0.18**	**40**
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.5	9.0	0.13	0.46	200	400	**1.0**	**0.38**	**280**