

SNMG 120412 NN LT 10 & LT 1000

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/rev]		Amax [mm ²]	V _c [m/min]		Optimal cutting conditions			
					min	max	min	max		min	max	D.O.C.	Feed	V _c	
Steel	Non-alloyed	1	1	C35, Ck45, 1020,	125 HB	0.7	6.0	0.37	0.95	3.96	180	280	4.0	0.65	240
			2	1045, 1060,	190 HB										220
			3	28Mn6	250 HB										200
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.7	6.0	0.37	0.86	2.64	120	280	4.0	0.60	200
			4,6		230 HB										180
			5,7		280 HB										150
			8		350 HB										130
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.7	4.8	0.32	0.76	2.64	70	190	3.4	0.56	140
			10		280 HB										120
			11		320 HB										100
			11		350 HB										90
Stainless Steel	Austenitic	4	14	304, 316,	180 HB	0.7	6.0	0.35	0.76	2.64	170	270	4.0	0.58	190
			14	X5CrNi18-9	240 HB										170
	Duplex	5	14	X2CrNiN23-4, S31500	290 HB	0.7	4.8	0.32	0.67	1.76	80	150	3.4	0.46	100
			14		310 HB										90
	Ferritic & Martensitic	6	12	410, X6Cr17, 17-4 PH, 430	200 HB	0.7	6.0	0.39	0.76	2.20	170	250	4.0	0.55	190
			13		42 HRC										120
Cast Iron	Grey	7	15	GG20, GG40,	150 HB	0.7	6.0	0.30	1.14	4.40	170	250	4.0	0.65	200
			15	EN-GJL-250, No30B	200 HB										160
			16	250 HB	150										
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.7	6.0	0.30	0.95	3.30	120	230	4.0	0.56	160
			17,19 18,20		200 HB										190
High Temp. Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	240 HB	0.7	3.6	0.35	0.67	1.54	25	45	2.7	0.52	32
			33	Inconel 700	250 HB										30
			34	Stellite 21	350 HB										28
	Ti based	10	36	TiAl6V4	-	0.7	4.8	0.35	0.76	1.76	45	65	2.7	0.58	55
			37	T40	-										35
Hardened Mat.	Steel	11	38	X100CrMo13,	45 HRC	0.7	3.0	0.19	0.57	1.32	50	100	2.7	0.47	80
			38	440C,	50 HRC										70
			38	G-X260NiCr42	55 HRC										60
	Chilled Cast Iron	40	Ni-Hard 2	400 HB	0.7	2.4	0.19	0.48	0.88	40	60	2.0	0.33	50	
White Cast Iron	41	G-X300CrMo15	55 HRC	0.7	1.8	0.19	0.38	0.66	30	50	1.3	0.28	40		
NF	Al (>8%Si)	12	25	AISI12	130 HB	0.7	7.0	0.35	1.14	4.30	200	400	4.0	0.80	280

Values for lead angle (Kr)=45°; For lead angle (Kr)=75°, please limit feed to 75% of the recommended