

SNKX 09T3-45° 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	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	2.0	0.11	0.48	190	330	1.0	0.28	250
			2		190 HB		2.0		0.48		300			220
			3		250 HB		2.0		0.48		250			200
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	2.0	0.11	0.44	150	240	1.0	0.24	200
			4,6		230 HB		2.0		0.44	150	210		0.24	180
			5,7		280 HB		2.0		0.40	130	190		0.20	150
			8		350 HB		2.0		0.40	130	170		0.20	140
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	2.0	0.11	0.38	90	150	1.0	0.20	130
			10		280 HB		2.0		0.38	90	130		0.20	120
			11		320 HB		2.0		0.36	60	110		0.16	100
			11		350 HB		2.0		0.36	60	90		0.16	80
Cast Iron	Grey	7	15	GG20, GG40, EN-GJL-250, No30B	150 HB	0.5	2.0	0.11	0.48	150	240	1.0	0.28	200
			15		200 HB		2.0		0.48		220		0.28	180
			16		250 HB		2.0		0.48		190		0.24	160
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.5	2.0	0.11	0.44	100	200	1.0	0.24	180
			17,19		200 HB		2.0		0.44		180		0.22	150
			18,20		250 HB		2.0		0.44		150		0.20	130
Hardened Mat.	Steel	11	38	X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.5	1.5	0.11	0.30	40	80	0.8	0.16	60
			38		50 HRc		1.5		0.28		70	0.7		55
			38		55 HRc		1.0		0.26		60	0.6		50
	Chilled Cast Iron		40	Ni-Hard 2	400 HB	0.5	1.5	0.11	0.30	40	80	0.8	0.16	50
	White Cast Iron		41	G-X300CrMo15	55 HRc	0.5	1.0	0.11	0.26	30	60	0.6	0.16	40