

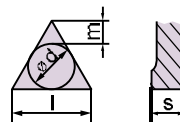
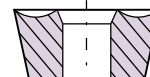
TCMT



Shape



Clearance Angle


Tolerance
 $d \pm 0.05$
 $m \pm 0.08$
 $s \pm 0.13$

Fixing
Chip breaker

Insert Designation	Grade	l	s	r	Catalog Nr.
TCMT 110204 NN	LT 1000	11	2.38	0.4	T0001924
TCMT 110208 NN	LT 1000	11	2.38	0.8	T0001925
TCMT 16T304 NN	LT 1000	16	3.97	0.4	T0001927
TCMT 16T308 NN	LT 1000	16	3.97	0.8	T0001928
TCMT 16T312 NN	LT 1000	16	3.97	0.8	T0001929

NN All purpose Chipbreaker

60° Triangle shape inserts, with positive rake angle. Suitable for Boring and Internal Turning.

Application Guide

	Finishing	Medium	Roughing / Interrupted cut
TCMT 110204 NN	😊	😐	😞
TCMT 110208 NN	😐	😊	😐
TCMT 16T304 NN	😊	😐	😞
TCMT 16T308 NN	😐	😊	😊
TCMT 16T312 NN	😞	😐	😊

😊 = Good
 😐 = Acceptable
 😞 = Not recommended

Finishing:
 d.o.c. = 0.30 - 1.50 mm
 fn = 0.08 - 0.20 mm/rev

Medium:
 d.o.c. = 0.70 - 4.50 mm
 fn = 0.15 - 0.45 mm/rev

Roughing
 d.o.c. = 3.00 - 7.00 mm
 fn = 0.35 - 0.70 mm/rev

Stainless Steel

V_c



Machine Recommendations Guide
 Details on page 10

TCMT 16T308 NN LT 10 & LT 1000

Material Group		Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/rev]		Amax [mm²]	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	0.5	5.0	0.21	0.43	1.62	180	330	3.0	0.30	240
			2	1045, 1060, 28Mn6	190 HB		5.0		0.43	1.62		280			220
			3		250 HB		5.0		0.38	1.35		250			200
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	5.0	0.21	0.38	1.08	120	280	3.0	0.27	200
			4,6		230 HB		4.0	0.21	0.38	1.08		250		0.27	180
			5,7		280 HB		4.0	0.18	0.34	1.08		210		0.26	150
			8		350 HB		3.5	0.18	0.34	0.90		180		0.26	130
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	4.0	0.18	0.34	1.08	70	190	2.5	0.26	140
			10		280 HB		4.0		0.34	1.08		150		0.26	120
			11		320 HB		3.0		0.30	0.72		130		0.24	100
			11		350 HB		3.0		0.30	0.72		110		0.24	90
Stainless Steel	Austenitic	4	14	304, 316, X5CrNi18-9	180 HB	0.5	5.0	0.20	0.34	1.08	170	270	3.0	0.30	200
			14		240 HB		5.0		0.34	0.90		160		0.27	180
	Duplex	5	14	X2CrNiN23-4, S31500	290 HB	0.5	4.0	0.18	0.30	0.72	80	150	2.5	0.24	100
			14		310 HB		4.0		0.30	0.72		70		0.24	90
	Ferritic & Martensitic	6	12	410, X6Cr17, 17-4 PH, 430	200 HB	0.5	5.0	0.22	0.34	0.90	170	250	3.0	0.27	190
			13		42 HRC		4.0		0.34	0.90		120		0.27	130
Cast Iron	Grey	7	15	GG20, GG40, EN-GJL-250, No30B	150 HB	0.5	5.0	0.15	0.51	1.80	170	250	3.0	0.30	200
			15		200 HB		5.0		0.51	1.62		160			180
			16		250 HB		5.0		0.47	1.62		150			160
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.5	5.0	0.15	0.43	1.35	120	250	3.0	0.26	180
			17,19		200 HB		5.0		0.43	1.17		230			160
			18,20		250 HB		5.0		0.43	1.08		190			140
High Temp. Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	240 HB	0.5	3.0	0.20	0.30	0.63	25	45	2.0	0.24	32
			33	Inconel 700	250 HB		3.0		0.30	0.63		25			30
			34	Stellite 21	350 HB		3.0		0.30	0.63		23			28
	Ti based	10	36	TiAl6V4	-	0.5	4.0	0.20	0.34	0.72	45	65	2.0	0.28	55
			37	T40	-		3.0		0.30	0.63		35		0.26	45
Hardened Mat.	Steel	11	38	X100CrMo13, 440C, G-X260NiCr42	45 HRC	0.5	2.5	0.11	0.26	0.54	50	100	2.0	0.21	80
			38		50 HRC		2.0		0.21	0.36		40	1.5	0.17	70
			38		55 HRC	0.5	1.5		0.17	0.27		40	1.0	0.15	60
	Chilled Cast Iron		40	Ni-Hard 2	400 HB	0.5	2.0	0.11	0.21	0.36	40	60	1.5	0.15	50
	White Cast Iron		41	G-X300CrMo15	55 HRC	0.5	1.5	0.11	0.17	0.27	30	50	1.0	0.13	40
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.5	6.0	0.20	0.51	1.60	200	400	3.0	0.34	280