

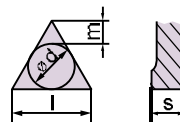
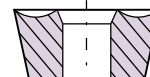
TCMT



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 110204 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	0.2	2.1	0.08	0.20	0.37	180	330	1.0	0.18	300
		2	1045, 1060,	190 HB		1.8		0.19	0.32		280			260
		3	28Mn6	250 HB		1.8		0.17	0.30		250			240
	Low alloyed	2	6 42CrMo4, St50,	180 HB	0.2	1.8	0.08	0.17	0.31	120	280	1.0	0.15	260
		4,6	Ck60, 4140, 4340,	230 HB		1.8		0.17	0.30		250			240
		5,7	100Cr6	280 HB		1.4		0.15	0.25		210			200
		8		350 HB		1.4		0.15	0.22		180			180
	High alloyed	3	10 X40CrMoV5,	220 HB	0.2	1.8	0.07	0.15	0.25	70	190	1.0	0.12	180
		10	H13, M42, D3,	280 HB		1.8		0.14	0.25		150			140
		11	S6-5-2, 12Ni19	320 HB		1.4		0.12	0.20		130			120
		11		350 HB		1.4		0.12	0.16		110			110
Stainless Steel	Austenitic	4	14 304, 316,	180 HB	0.2	1.8	0.08	0.15	0.20	170	270	1.0	0.12	260
		14	X5CrNi18-9	240 HB		1.8		0.15	0.16	160	220			210
	Duplex	5	14 X2CrNiN23-4,	290 HB	0.2	1.4	0.07	0.12	0.12	80	150	1.0	0.12	140
		14	S31500	310 HB		1.4		0.12	0.12	70	140			140
	Ferritic & Martensitic	6	12 410, X6Cr17,	200 HB	0.2	1.8	0.08	0.15	0.20	170	250	1.0	0.15	240
		13	17-4 PH, 430	42 HRc		1.4		0.14	0.16	120	190			180
Cast Iron	Grey	7	15 GG20, GG40,	150 HB	0.2	2.1	0.06	0.17	0.40	170	250	1.0	0.18	240
		15	EN-GJL-250,	200 HB		2.1		0.17	0.37	160	230			220
		16	No30B	250 HB		2.1		0.17	0.37	150	210			200
	Malleable & Nodular	8	17,19 GGG40, GGG70,	150 HB	0.2	1.8	0.06	0.15	0.30	120	250	1.0	0.15	240
		17,19	50005	200 HB		1.8		0.15	0.25		230			220
		18,20		250 HB		1.8		0.15	0.25		190			180
High Temp. Alloys	Fe, Ni & Co based	9	31,32 Incoloy 800	240 HB	0.2	1.4	0.08	0.13	0.16	25	50	1.0	0.12	40
		33	Inconel 700	250 HB		1.4		0.13	0.16	25	50			40
		34	Stellite 21	350 HB		1.4		0.13	0.16	23	45			35
	Ti based	10	36 TiAl6V4	-	0.2	1.4	0.08	0.14	0.20	45	65	1.0	0.14	60
		37	T40	-		1.4		0.12	0.16	35	60			50
Hardened Mat.	Steel	11	38 X100CrMo13,	45 HRc	0.2	1.3	0.04	0.10	0.12	50	100	0.8	0.11	90
		38	440C,	50 HRc		1.1		0.09	0.11	40	90	0.6	0.09	80
		38	G-X260NiCr42	55 HRc		1.0		0.08	0.08	40	80	0.5	0.07	70
	Chilled Cast Iron		40 Ni-Hard 2	400 HB	0.2	1.1	0.04	0.10	0.11	40	60	0.6	0.11	50
	White Cast Iron		41 G-X300CrMo15	55 HRc	0.2	1.0	0.04	0.08	0.08	30	50	0.5	0.07	40
NF	Al (>8%Si)	12	25 AISi12	130 HB	0.2	2.8	0.08	0.26	0.43	200	400	1.0	0.20	350