



G

C

T

X

Shape
"Dog bone"

Clearance Angle
N = 0° No rake
C = 7° Rake angle

Tolerance
d ± 0.05
m ± 0.16
s ± 0.13

Insert Type
Special

Insert Designation	Grade	W	r	Catalog Nr.
GCTX 2002 NN	LT 1000	2.0	0.18	T0002825
GCTX 3003 NN	LT 1000	3.0	0.25	T0002826
GCTX 3003 PP	LT 1000	3.0	0.25	T0002828

PP
NN All purpose Chipbreaker

Application Guide

Parting Grooving Side Turning

	Parting	Grooving	Side Turning
NN			
PP			

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

= Good
 = Acceptable
 = Not recommended

GCTX 3003 PP LT 1000

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	Feed [mm/rev]		V _c [m/min]		Optimal cutting conditions							
					min	max	min	max	Feed	V _c						
Steel	Non-alloyed	1	1	C35, Ck45, 1020,	125 HB	0.05	0.17	130	220	0.11	175					
		2	2	1045, 1060,	190 HB							0.17	220	0.09	110	
		3	3	28Mn6	250 HB											0.17
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.05	0.15	90	200	0.10	145					
			4,6		230 HB							0.15	200	0.08	100	
			5,7		280 HB											0.15
			8		350 HB							0.15	150	0.08	75	
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.05	0.14	60	170	0.10	115					
			10		280 HB							0.14	150	0.07	75	
			11		320 HB											0.13
			11		350 HB							0.12	100	0.06	50	
	Stainless Steel	Austenitic	4	14	304, 316,	0.05	0.10	90	150	0.07	120					
X5CrNi18-9					240 HB							0.10	70	140	0.05	105
Duplex		5	14	X2CrNiN23-4, S31500	290 HB	0.05	0.09	60	100	0.07	80					
					310 HB							0.09	100	0.04	50	
Ferritic & Martensitic		6	12	410, X6Cr17, 17-4 PH, 430	200 HB	0.05	0.09	60	130	0.07	95					
					42 HRc							0.08	50	90	0.04	70
Cast Iron	Grey	7	15	GG20, GG40,	0.05	0.16	130	190	0.11	160						
				EN-GJL-250, No30B							200 HB	0.16	190	0.08	95	
				250 HB							0.16	190	0.08	95		
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.05	0.14	90	150	0.10	120					
					200 HB							0.14	150	0.07	75	
					250 HB							0.14	150	0.07	75	
High Temp. Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	0.05	0.08	25	35	0.07	30						
			33	Inconel 700							250 HB	0.08	35	0.04	17.5	
			34	Stellite 21							350 HB	0.08	35	0.04	17.5	
	Ti based	10	36	TiAl6V4	0.05	0.08	35	60	0.07	45						
			37	T40							-	0.08	28	40	0.04	34
	Hardened Mat.	Steel	11	38	X100CrMo13,	0.05	0.11	50	90	0.08	70					
38				440C,	45 HRc							0.10	40	70	0.05	55
38				G-X260NiCr42	55 HRc											
Chilled Cast Iron		40	Ni-Hard 2	400 HB	0.05	0.08	40	60	0.07	50						
White Cast Iron		41	G-X300CrMo15	55 HRc	0.05	0.08	30	50	0.07	40						
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.05	0.10	100	300	0.08	200					