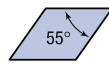


D

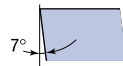
C

M

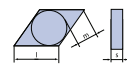
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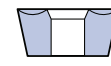
Shape
55° Diamond



Clearance Angle
7° Positive rake



Tolerance
d ± 0.05 m ± 0.08
s ± 0.13



Insert Type
Screw down clamping
Single sided

DCMT

Insert designation	Grade	l	s	r	Catalog Nr.	Page
DCMT 070204 NN	LT 10	7	2,38	0,4	T0000064	36
DCMT 11T304 NN	LT 10	11	3,97	0,4	T0000065	37
DCMT 11T308 NN	LT 10	11	3,97	0,8	T0000721	38

NN All Purpose Chipbreaker

Application Guide	Super Finishing	Finishing	Semi Finishing	Roughing	Interrupted Cut
DCMT 070204 NN					
DCMT 11T304 NN					
DCMT 11T308 NN					

55° Diamond shape inserts, suitable for Internal turning due to a unique chip removal geometry. Generates low cutting forces, most suitable for small work-pieces.

- 1** Not Recommended
- 2** Acceptable
- 3** Recommended
- 4** Excellent



Machining Recommendation Guide - Please see Pg. 8

Material Group	Group No	Material Examples*	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm ²]	V _c [m/min]		Optimal cutting conditions					
				min	max	min	max		min	max	d.o.c	feed				
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.10	2.0	0.08	0.20	0.36	180	350	1.0	0.18				
			180		2.0		0.18			280						
			210		2.0		0.16			250						
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.10	2.0	0.08	0.18	0.29	120	280	1.0	0.15				
			230		2.0		0.18			250						
			280		1.5	0.09	0.16	0.24		210						
			320		1.5		0.14	0.19		180						
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.10	2.0	0.08	0.16	0.24	70	190	1.0	0.12				
			280		1.5		0.14			0.24			150			
			320		1.5		0.13			0.17			130			
			350	1.5	0.13	0.14	100									
			400	0.10	1.3	0.05	0.11	0.12	50	90	0.9	0.10				
			480		1.2		0.09	0.10	40	80	0.7	0.08				
			550		1.0		0.08	0.08	30	70	0.6	0.07				
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.10	2.0	0.08	0.16	0.22	170	270	1.0	0.15				
			230 to 270		1.8		0.08		0.14	0.17			160	210	1.0	0.12
					1.5		0.08		0.13	0.14			70	150		
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.10	2.0	0.08	0.16	0.20	170	250	1.0	0.15				
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed Treated	0.10	2.0	0.08	0.16	0.20	170 120	250 190	1.0	0.15				
Grey Cast Iron	9	GG 20	140 to 230	0.10	2.0	0.06	0.18	0.38	170	250	1.0	0.18				
		GG 25						0.36		230						
		GG 30						0.36		210						
Nodular Cast Iron	10	GGG 40	210	0.10	2.0	0.06	0.16	0.29	120	230	1.0	0.15				
		GGG 50	260					0.24		190						
		GGG 70	310					0.24		150						
		G-X260NiCr42	450	0.10	1.0	0.06	0.10	0.08	30	70	0.6	0.07				
Nickel Based Alloys	11	Inconel 625	-----	0.10	1.5	0.08	0.14	0.14	25	35	1.0	0.12				
		Inconel 718						0.14		28			40			
		Hastelloy C						0.17		40			65			
Titanium Based Alloys	12	TiAl 6 V4	-----	0.10	1.5	0.08	0.14	35	60	1.0	0.14					
		T40					0.13		0.14	28	40	1.0	0.12			

Insert designation Super Finishing Finishing Semi Finishing Roughing Interrupted Cut

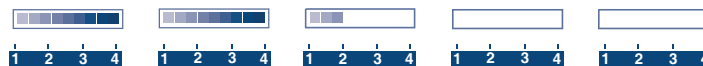


Material Group	Group No	Material Examples*	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm ²]	V _c [m/min]		Optimal cutting conditions	
				min	max	min	max		min	max	d.o.c	feed
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.20	3.0	0.11	0.23	0.60	180	350	2.0	0.18
			180		2.5		0.20	0.48		280		
			210		2.5		0.18	0.48		250		
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.20	2.5	0.11	0.20	0.48	120	280	2.0	0.15
			230		2.5		0.20	0.40		250		
			280		2.0	0.09	0.18	0.40		210		
			320		2.0		0.16	0.32		180		
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.20	2.5	0.09	0.18	0.40	70	190	2.0	0.12
			280		2.5		0.16	0.40		150		
			320		2.0		0.14	0.28		130		
			350	2.0	0.14	0.24	100					
			400	0.20	1.8	0.05	0.12	0.20	50	90	1.7	0.11
			480		1.5		0.10	0.17	40	80	1.4	0.09
550	1.4	0.08	0.13	30	70	1.2	0.07					
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.20	2.5	0.10	0.18	0.32	170	270	2.0	0.15
	5	X2 CrNiMo 17 2 2 316	230 to 270		2.0	0.09	0.16	0.24	160	210	2.0	0.12
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----		2.0	0.09	0.14	0.20	70	150	2.0	0.12
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.20	2.0	0.11	0.18	0.28	170	250	2.0	0.15
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed Treated	0.20	2.0	0.11	0.18	0.28	170	250	2.0	0.12
									120	190		
Grey Cast Iron	9	GG 20	140 to 230	0.20	3.0	0.08	0.20	0.64	170	250	2.0	0.18
		GG 25						0.60	230			
		GG 30						0.60	210			
Nodular Cast Iron	10	GGG 40	210	0.20	2.5	0.08	0.18	0.48	120	230	2.0	0.15
		GGG 50	260					0.40	190			
		GGG 70	310					0.40	150			
		G-X260NiCr42	450					0.20	1.5	0.05		
Nickel Based Alloys	11	Inconel 625	-----	0.20	2.0	0.10	0.16	0.24	25	35	2.0	0.12
		Inconel 718						0.24	28	40		
		Hastelloy C						0.28	40	65		
Titanium Based Alloys	12	TiAl 6 V4	-----	0.20	2.0	0.09	0.16	35	60	2.0	0.14	
		T40					0.14	0.24	28	40	2.0	0.12

DCMT

Insert designation Super Finishing Finishing Semi Finishing Roughing Interrupted Cut

DCMT 11T304 NN



Material Group	Group No	Material Examples*	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm ²]	V _c [m/min]		Optimal cutting conditions		
				min	max	min	max		min	max	d.o.c	feed	
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.50	5.0	0.21	0.45	1.8	180	350	3.0	0.35	
			180		5.0		0.45			1.8			300
			210		4.0		0.40			1.5			250
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.50	5.0	0.21	0.40	1.2	120	280	3.0	0.30	
			230		4.0		0.40			1.2			250
			280		4.0		0.35			1.2			210
			320		3.5	0.35	1.0	180					
			320		4.0	0.18	1.2	190					
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.50	4.0	0.18	0.40	1.2	70	150	2.5	0.28	
			280		4.0		0.40			1.2			130
			320		3.0		0.35			0.8			100
			350	3.0	0.35	0.8	100						
			400	2.5	0.30	0.6	50	90	2.0	0.25			
			480	0.50	2.0	0.11	0.25	0.4	40	80	1.7	0.20	
			550	1.7	0.20	0.3	30	70	1.0	0.18			
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.50	5.0	0.20	0.40	1.0	170	270	3.0	0.35	
	5	X2 CrNiMo 17 2 2 316	230 to 270		4.0	0.18	0.35	0.8	160	210	3.0	0.32	
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----		4.0	0.18	0.35	0.6	70	150	2.5	0.28	
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.50	4.0	0.22	0.35	0.9	170	250	3.0	0.32	
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed Treated	0.50	4.0	0.22	0.35	0.9	170	250	3.0	0.32	
									120	190			
Grey Cast Iron	9	GG 20	140 to 230	0.50	5.0	0.15	0.60	2.0	170	250	3.0	0.35	
		GG 25						1.8		230			
		GG 30						1.8		210			
Nodular Cast Iron	10	GGG 40	210	0.50	5.0	0.15	0.50	1.5	120	230	3.0	0.30	
		GGG 50	260					1.3		190			
		GGG 70	310					1.2		150			
		G-X260NiCr42	450					0.50		1.7			0.11
Nickel Based Alloys	11	Inconel 625	-----	0.50	3.0	0.20	0.35	0.7	25	35	2.0	0.28	
		Inconel 718	-----					0.7	28	40			
		Hastelloy C	-----					0.8	40	65			
Titanium Based Alloys	12	TiAl 6 V4	-----	0.50	3.0	0.18	0.35	35	60	2.0	0.30		
		T40	-----				0.30	0.6	28	40	2.0	0.28	

