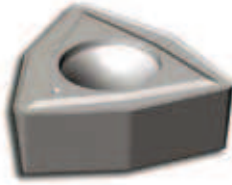
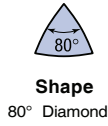


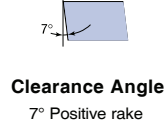
Drilling



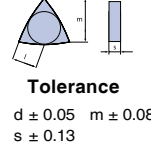
**W**



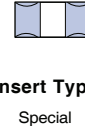
**C**



**M**



**X**



Insert designation	Grade	l	s	r	Direction	Catalog Nr.	Page
WCMX 040208 NN	LT 30	4	2,38	0,8	Neutral	M3001122	231
WCMX 050308 NN	LT 30	5	3,18	0,8	Neutral	M3001121	232
WCMX 06T308 NN	LT 30	6	3,97	0,8	Neutral	M3000953	233
WCMX 080412 NN	LT 30	8	4,76	1,2	Neutral	M3000954	234

Trigon inserts for Drilling. Strong cutting edges for high feeds.

Material Group	Group No	Material Examples*	Brinell hardness	feed [mm/rev]		V <sub>c</sub> [m/min]	
				min	max	min	max
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.05	0.10	180	270
			180				230
			210				200
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.05	0.12	120	240
			230				190
			280	0.05	0.13	120	170
			320				150
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.07	0.13	70	170
			280				150
			320	0.07	0.11	70	130
			350				100
			400	0.07	0.14	70	120
			480				100
550	0.10	80					
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.05	0.11	170	230
	5	X2 CrNiMo 17 2 2 316	230 to 270	0.07	0.12	120	210
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----	0.08	0.12	70	120
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.07	0.11	150	210
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed	0.07	0.11	150	210
			Treated	0.07	0.11	120	170
Grey Cast Iron	9	GG 20	140 to 230	0.10	0.14	150	230
		GG 25					210
		GG 30					170
Nodular Cast Iron	10	GGG 40	210	0.10	0.14	120	200
		GGG 50	260				170
		GGG 70	310	0.10	0.16	120	150
		G-X260NiCr42	450				150
Nickel Based Alloys	11	Inconel 625	-----	0.05	0.10	25	35
		Inconel 718					
		Hastelloy C					
Titanium Based Alloys	12	TiAl 6 V4	-----	0.05	0.10	35	60
		T40					28

Material Group	Group No	Material Examples*	Brinell hardness	feed [mm/rev]		V <sub>c</sub> [m/min]	
				min	max	min	max
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.05	0.10	180	270
			180				230
			210				200
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.05	0.14	120	239
			230				190
			280	0.05	0.16	120	170
			320				150
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.07	0.16	70	170
			280				150
			320	0.07	0.13	70	130
			350				100
			400	0.07	0.16	70	120
			480				100
			550				80
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.05	0.11	170	230
	5	X2 CrNiMo 17 2 2 316	230 to 270	0.07	0.12	120	210
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----	0.08	0.14	70	120
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.07	0.12	150	210
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed	0.07	0.12	150	210
			Treated	0.07	0.12	120	170
Grey Cast Iron	9	GG 20	140 to 230	0.10	0.18	150	230
		GG 25					210
		GG 30					170
Nodular Cast Iron	10	GGG 40	210	0.10	0.16	120	200
		GGG 50	260				170
		GGG 70	310				150
		G-X260NiCr42	450				120
Nickel Based Alloys	11	Inconel 625	-----	0.05	0.11	25	35
		Inconel 718					
		Hastelloy C					
Titanium Based Alloys	12	TiAl 6 V4	-----	0.05			60
		T40					40

Material Group	Group No	Material Examples*	Brinell hardness	feed [mm/rev]		V <sub>c</sub> [m/min]	
				min	max	min	max
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.06	0.12	180	270
			180				230
			210				200
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.06	0.16	120	239
			230				190
			280	0.06	0.18	120	170
			320				150
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.08	0.18	70	170
			280				150
			320	0.08	0.15	70	130
			350				100
			400	0.07	0.16	70	120
			480				100
550	80						
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.06	0.12	170	230
	5	X2 CrNiMo 17 2 2 316	230 to 270	0.08	0.14	120	210
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----	0.10	0.16	70	120
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.08	0.14	150	210
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed	0.07	0.12	150	210
			Treated	0.07	0.12	120	170
Grey Cast Iron	9	GG 20	140 to 230	0.10	0.22	150	230
		GG 25					210
		GG 30					170
Nodular Cast Iron	10	GGG 40	210	0.10	0.18	120	200
		GGG 50	260				170
		GGG 70	310	0.10	0.16	120	150
		G-X260NiCr42	450				150
Nickel Based Alloys	11	Inconel 625	-----	0.06	0.12	25	35
		Inconel 718					
		Hastelloy C					
Titanium Based Alloys	12	TiAl 6 V4	-----	0.06	0.12	35	60
		T40	-----				0.10

Material Group	Group No	Material Examples*	Brinell hardness	feed [mm/rev]		V <sub>c</sub> [m/min]	
				min	max	min	max
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.10	0.18	180	270
			180				230
			210				200
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.12	0.22	120	239
			230				190
			280	0.12	0.25	120	170
			320				150
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.14	0.25	70	170
			280				150
			320	0.14	0.22	70	130
			350				100
			400	0.10	0.18	70	120
			480		0.16		100
			550		0.14		80
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.10	0.18	170	230
	5	X2 CrNiMo 17 2 2 316	230 to 270	0.11	0.23	120	210
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----	0.12	0.28	70	120
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.12	0.25	150	210
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed	0.12	0.25	150	210
			Treated	0.12	0.25	120	170
Grey Cast Iron	9	GG 20	140 to 230	0.15	0.28	150	230
		GG 25					210
		GG 30					170
Nodular Cast Iron	10	GGG 40	210	0.12	0.23	120	200
		GGG 50	260				170
		GGG 70	310	0.10	0.18	120	150
		G-X260NiCr42	450				150
Nickel Based Alloys	11	Inconel 625	-----	0.12	0.18	25	35
		Inconel 718					
		Hastelloy C					
Titanium Based Alloys	12	TiAl 6 V4	-----	0.12	0.18	35	60
		T40			0.16	28	40