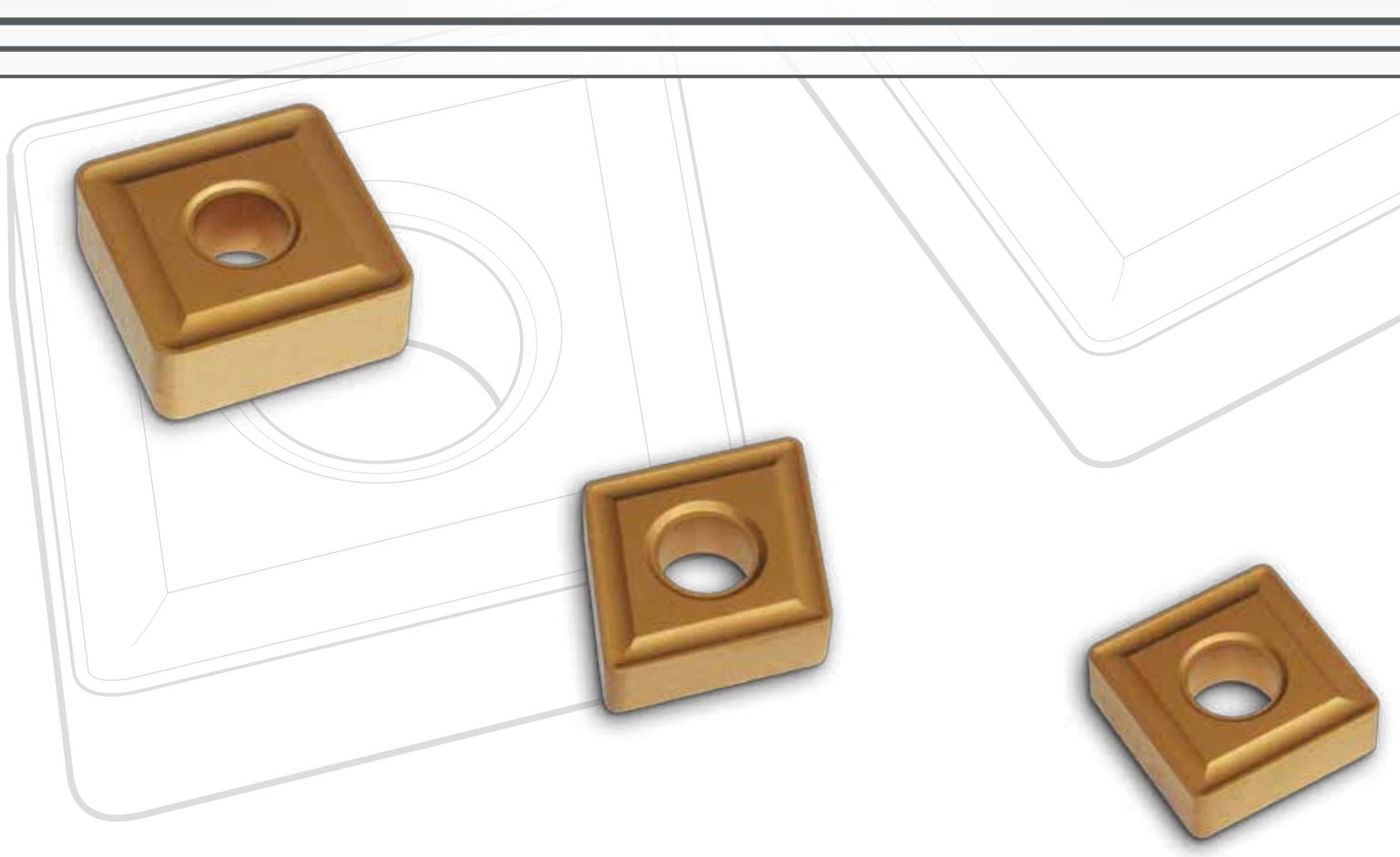
NEW

HEAVY TURNING LINE

LAMINA TECHNOLOGIES



Productivity is everything...

Innovation is beyond

New Product Release

Lamina Heavy Turning Line

NEW

We are delighted to introduce to you our line of heavy turning inserts. This refreshed line of inserts is an addition to the Lamina turning line, with the latest and most modern chip breakers in heavy turning, including:

- Thick coating providing long tool life and thermal insulation
- Excellent toughness
- Reinforced cutting edges to improve stability and consistency

Application Area

The inserts can be mounted on standard ISO tool holders and are suitable for:

- Steel and Cast Iron machining
- Conventional & CNC machining
- Dry & Wet machining
- Continuous and interrupted cut

Ordering information

Available from stock:

- CNMG 160612 NR Catalog Number T0001095
- CNMG 190612 NR Catalog Number T0001096
- CNMG 190616 NR Catalog Number T0001097
- CNMM 190616 NR Catalog Number T0001098
- SNMG 190612 NR Catalog Number T0001099
- SNMG 190616 NR Catalog Number T0001100
- SNMM 250724 NR Catalog Number T0001101

CNMM 190616 NR*

Material Group	Group N°	Material	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm²/rev]	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	1.5	7.6	0.66	0.94	6.48	150	330	5 to 7	0.80
			180							300		
			210							260		
Alloy Steel	2	42 CrMo 4 50-2 Ck60 4140	180	1.5	7.6	0.66	0.88	6.05	80	220	5 to 7	0.75
			230							180		
			280			0.64	0.79	5.40		150		0.67
			320				0.76	5.18		140		0.64
High Alloy Steel	3	X40 CrMoV 5 1 40 NiCrMo 6 2-10-1-8	220	1.5	7.6	0.53	0.88	6.05	55	130	5 to 7	0.75
			280				0.76	5.18		120		0.64
			320		6.4		0.69	3.96		115		0.59
			350				0.63	3.60		90		0.54
Grey Cast Iron	9	GG 20 GG 25 GG 30	140 to 230	1.5	7.6	0.66	0.88	6.05	95	180 150 110	5 to 7	0.75
Nodular Cast Iron	10	GGG 40 GGG 50 GGG 70	210 260 310	1.5	7.6	0.66	0.88	6.05	70	150 140 130	5 to 7	0.75

* These inserts are not recommended for Hardened Steel, Stainless Steel and Exotic materials

CNMG 160612 NR*

Material Group	Group N°	Material	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm²/rev]	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	150 180 210	1.0	7.6	0.43	0.76	5.23	150	330 300 260	3 to 5	0.53
Alloy Steel	2	42 CrMo 4 50-2 Ck60 4140	180 230 280 320	1.0	7.6	0.43 0.43	0.71 0.64 0.61	4.88 4.35 4.18	80	220 180 150 140	3 to 5	0.50 0.44 0.43
High Alloy Steel	3	X40 CrMoV 5 1 40 NiCrMo 6 2-10-1-8	220 280 320 350	1.0	7.6 6.4	0.36	0.71 0.61 0.56 0.51	4.88 4.18 3.19 2.90	55	130 120 115 90	3 to 5	0.50 0.43 0.39 0.36
Grey Cast Iron	9	GG 20 GG 25 GG 30	140 to 230	1.0	7.6	0.43	0.71	4.88	95	180 150 110	3 to 5	0.50
Nodular Cast Iron	10	GGG 40 GGG 50 GGG 70	210 260 310	1.0	7.6	0.43	0.71	4.88	70	150 140 130	3 to 5	0.50

CNMG 190612 NR*

Material Group	Group N°	Material	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm²/rev]	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	150 180 210	1.0	7.6	0.43	0.76	5.23	150	330 300 260	5 to 7	0.53
Alloy Steel	2	42 CrMo 4 50-2 Ck60 4140	180 230 280 320	1.0	7.6	0.43 0.43	0.71 0.64 0.61	4.88 4.35 4.18	80	220 180 150 140	5 to 7	0.50 0.44 0.43
High Alloy Steel	3	X40 CrMoV 5 1 40 NiCrMo 6 2-10-1-8	220 280 320 350	1.0	7.6 6.4	0.36	0.71 0.61 0.56 0.51	4.88 4.18 3.19 2.90	55	130 120 115 90	5 to 7	0.50 0.43 0.39 0.36
Grey Cast Iron	9	GG 20 GG 25 GG 30	140 to 230	1.0	7.6	0.43	0.71	4.88	95	180 150 110	5 to 7	0.50
Nodular Cast Iron	10	GGG 40 GGG 50 GGG 70	210 260 310	1.0	7.6	0.43	0.71	4.88	70	150 140 130	5 to 7	0.50

CNMG 190616 NR*

Material Group	Group N°	Material	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm²/rev]	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	150 180 210	1.5	7.6	0.43	0.76	5.23	150	330 300 260	5 to 7	0.65
Alloy Steel	2	42 CrMo 4 50-2 Ck60 4140	180 230 280 320	1.5	7.6	0.43 0.43	0.71 0.64 0.61	4.88 4.35 4.18	80	220 180 150 140	5 to 7	0.60 0.54 0.52
High Alloy Steel	3	X40 CrMoV 5 1 40 NiCrMo 6 2-10-1-8	220 280 320 350	1.5	7.6 6.4	0.43	0.71 0.61 0.56 0.51	4.88 4.18 3.19 2.90	55	130 120 115 90	5 to 7	0.60 0.52 0.47 0.43
Grey Cast Iron	9	GG 20 GG 25 GG 30	140 to 230	1.5	7.6	0.43	0.71	4.88	95	180 150 110	5 to 7	0.60
Nodular Cast Iron	10	GGG 40 GGG 50 GGG 70	210 260 310	1.5	7.6	0.43	0.71	4.88	70	150 140 130	5 to 7	0.60

* These inserts are not recommended for Hardened Steel, Stainless Steel and Exotic materials

SNMM 250724 NR*

Material Group	Group N°	Material	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm²/rev]	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	1.4	6.9	0.62	1.35	8.42	150	330	4 to 6	1.15
			180							300		
			210							260		
Alloy Steel	2	42 CrMo 4 50-2 Ck60 4140	180	1.3	6.7	0.61	1.26	7.56	80	220	4 to 6	1.07
			230							180		
			280			0.61	1.12	6.75		150		0.96
			320				1.08	6.48		140		0.92
High Alloy Steel	3	X40 CrMoV 5 1 40 NiCrMo 6 2-10-1-8	220	1.3	6.9	0.61	1.26	7.86	55	130	4 to 6	1.07
			280				1.08	6.74		120		0.92
			320		5.8		0.99	5.15		115		0.84
			350				0.90	4.68		90		0.76
Grey Cast Iron	9	GG 20 GG 25 GG 30	140 to 230	1.4	6.9	0.61	1.26	7.86	95	180 150 110	4 to 6	1.07
Nodular Cast Iron	10	GGG 40 GGG 50 GGG 70	210 260 310	1.4	6.9	0.61	1.26	7.86	70	150 140 130	4 to 6	1.07

Values for Lead Angle(K)=45°(PSSNR/L Toolholders); For Lead Angle(K)=75°(PSBNR/L Toolholders), please limit feed to 75% of the recommended

SNMG 190612 NR*

Material Group	Group N°	Material	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm²/rev]	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	0.7	5.3	0.62	1.09	5.23	150	330	3 to 5	0.76
			180							300		
			210							260		
Alloy Steel	2	42 CrMo 4 50-2 Ck60 4140	180	0.7	5.3	0.61	1.02	4.88	80	220	3 to 5	0.71
			230							180		
			280			0.61	0.91	4.35		150		0.64
			320				0.87	4.18		140		0.61
High Alloy Steel	3	X40 CrMoV 5 1 40 NiCrMo 6 2-10-1-8	220	0.7	5.3	0.51	1.02	4.88	55	130	3 to 5	0.71
			280				0.87	4.18		120		0.61
			320		4.4		0.80	3.19		115		0.56
			350				0.73	2.90		90		0.51
Grey Cast Iron	9	GG 20 GG 25 GG 30	140 to 230	0.7	5.3	0.61	1.02	4.88	95	180 150 110	3 to 5	0.71
Nodular Cast Iron	10	GGG 40 GGG 50 GGG 70	210 260 310	0.7	5.3	0.61	1.02	4.88	70	150 140 130	3 to 5	0.71

Values for Lead Angle(K)= 45°(PSSNR/L Toolholders); For Lead Angle(K) = 75°(PSBNR/L Toolholders), please see CNMG 190612 NR conditions

SNMG 190616 NR*

Material Group	Group N°	Material	Brinell hardness	d.o.c [mm]		feed [mm/rev]		A max [mm²/rev]	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	1.1	5.3	0.62	1.09	5.23	150	330	3 to 5	0.96
			180							300		
			210							260		
Alloy Steel	2	42 CrMo 4 50-2 Ck60 4140	180	1.1	5.3	0.61	1.02	4.88	80	220	3 to 5	0.86
			230							180		
			280			0.61	0.91	4.35		150		0.77
			320				0.87	4.18		140		0.74
High Alloy Steel	3	X40 CrMoV 5 1 40 NiCrMo 6 2-10-1-8	220	1.1	5.3	0.61	1.02	4.88	55	130	3 to 5	0.86
			280				0.87	4.18		120		0.74
			320		4.4		0.80	3.19		115		0.68
			350				0.73	2.90		90		0.62
Grey Cast Iron	9	GG 20 GG 25 GG 30	140 to 230	1.1	5.3	0.61	1.02	4.88	95	180 150 110	3 to 5	0.86
Nodular Cast Iron	10	GGG 40 GGG 50 GGG 70	210 260 310	1.1	5.3	0.61	1.02	4.88	70	150 140 130	3 to 5	0.86

Values for Lead Angle(K)=45°(PSSNR/L Toolholders); For Lead Angle(K)=75°(PSBNR/L Toolholders), please see CNMG 190616 NR conditions
* These inserts are not recommended for Hardened Steel, Stainless Steel and Exotic materials

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