

Galtona[®]



GROOVING METRIC
Catalogue

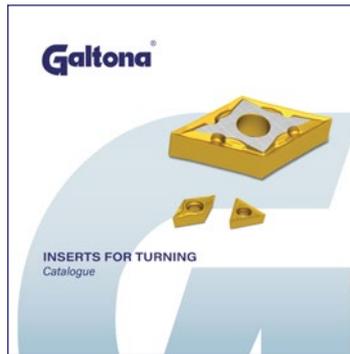
Galtona[®]

GROOVING METRIC
Catalogue

Our Product Portfolio



MILLING



TURNING



GROOVING



DRILLING



MULTICUT

The Origin of Galtona O.K.

We are proud to present Galtona UK as one of the pioneers in Metalworking Excellence.

Explore the realm of exceptional metalworking prowess with Galtona UK, which has been a trailblazer in the industry for decades.

As an esteemed manufacturer, specializing in precision machining solutions, Galtona UK presents an extreme array of cutting-edge tools especially designed and built to suit diverse turning, milling, threading, and drilling needs.

Our collaborative approach is unique. We closely work with our clients to embark on a journey of 'co-creation' by fashioning bespoke solutions for addressing the intricate demands of aviation, aerospace, automotive, energy, and general engineering sectors.

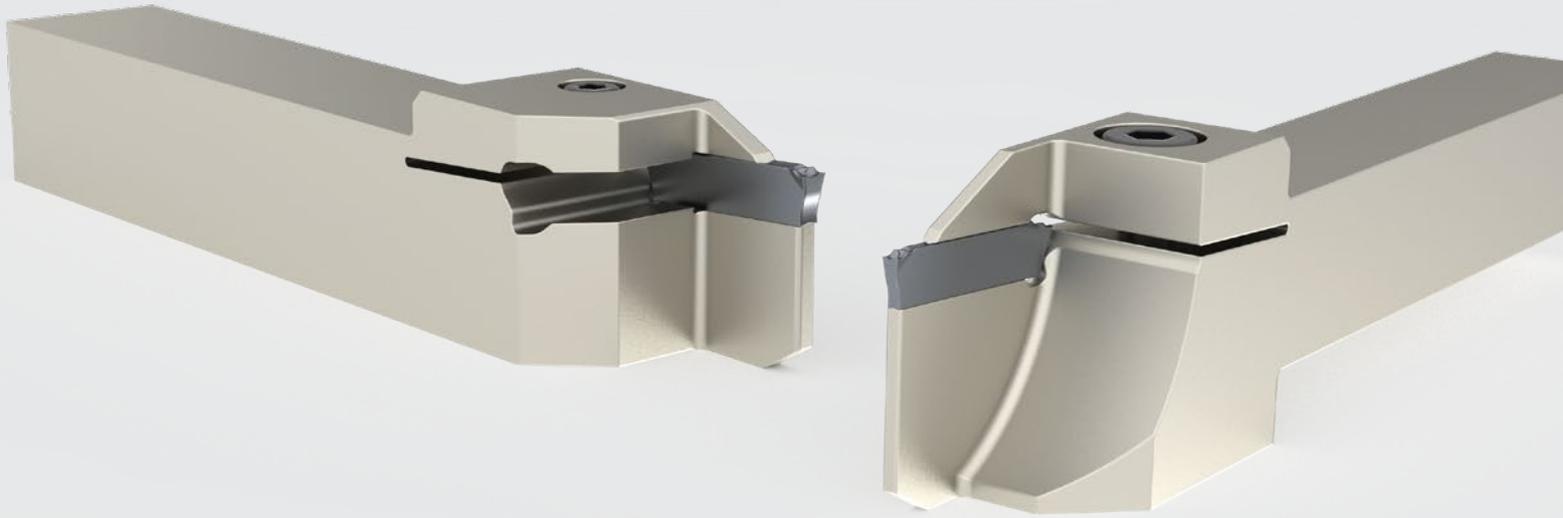
In the vanguard of innovation, we're not just engineers; we're digital architects. Our expertise extends to sculpting digital process solutions that redefine efficiency standards.

Embodying a profound commitment, Galtona UK promotes a sustainable and visionary energy landscape. Join us in our mission to illuminate the path towards tomorrow.

Your vision, our innovation

GALTONA stands for innovative products and solutions, unique expertise in powder metal-lurgy, state of the art technology and absolute reliability – making it the ideal partner for your successful private label. Couldn't find what you were looking for? In closely collaborating with you, we will find the optimal solution for the demands of your customers which perfectly reflects your position on the market. If our presentation of standard tools in this catalogue does not fit your needs, please contact us to discuss your customised solution – whether it may be blanks, semi-finished products or finished products.





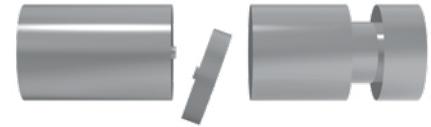
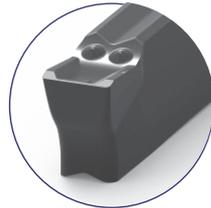
Cutting geometries



GD/GO

■ ■ M1 – Medium cutting

- ▲ Insert with narrow negative chamfer
- ▲ Suitable for all steel materials with high strength
- ▲ Suitable for all applications
- ▲ For steel and grey cast iron

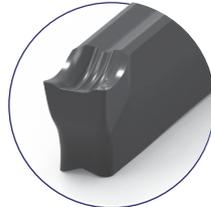


Parting

Grooving

■ ■ F1 – Very soft cutting

- ▲ Excellent cutting chipbreaker with low cutting forces
- ▲ For low or medium strength materials
- ▲ Particularly suitable for parting off tubes and thin-walled work pieces
- ▲ High cutting edge stability
- ▲ Excellent chip control also with low feed
- ▲ Low built up edge

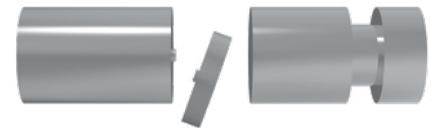


Parting

Grooving

■ ■ ST1 – Stainless und super alloys

- ▲ Especially for stainless steel
- ▲ Problem solver for steel machining



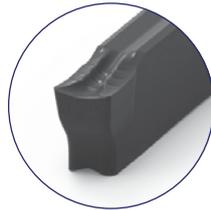
Parting

Grooving

GD/GO

■ ■ T – Grooving and Turning

- ▲ For grooving and turning
- ▲ Suitable for all steel and stainless steel materials
- ▲ Very good chip control



Parting

Grooving

Turning

■ ■ M – Radius grooves

- ▲ Insert for radius grooves
- ▲ For copy turning
- ▲ Suitable for all steel and cast iron materials



Grooving

Turning



■ MM – General application and Turning

- ▲ Especially for stainless steel materials



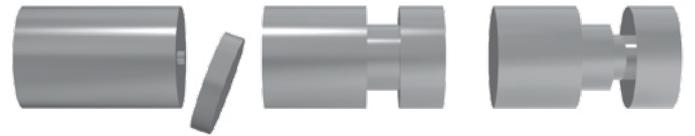
Grooving

Turning

GD/GO

■ LM – Non ferrous metals

- ▲ Insert with highly positive cutting chipbreaker and sharp cutting edge
- ▲ Extra-smooth rake face through "microfinish"
- ▲ Reduced built-up edge



Parting

Grooving

Turning

GS

■ ■ M1 – Medium cutting

- ▲ Insert with narrow negative chamfer
- ▲ Suitable for all steel materials with high strength
- ▲ Suitable for all applications
- ▲ For steel and grey cast iron



Parting

Grooving

■ ■ ST1 – Stainless and super alloys

- ▲ Especially for stainless steel
- ▲ Problem solver for steel machining



Parting

Grooving

■ ■ M2 – Grooving and Turning

- ▲ For grooving and turning
- ▲ Suitable for all steel and cast iron materials
- ▲ Very good chip control



Parting

Grooving

Turning

GS



LM – Non ferrous metals

- ▲ Insert with highly positive cutting chipbreaker and sharp cutting edge
- ▲ Extra-smooth rake face through "microfinish"
- ▲ Reduced built-up edge



Parting

Grooving



M – General application and Turning

- ▲ Insert for radius grooves
- ▲ For copy turning
- ▲ Suitable for all steel and cast iron materials



Grooving

Turning



MM – General application and Turning

- ▲ Especially for stainless steel materials



Grooving

Turning

GA


T – Grooving and Turning

- ▲ For grooving and turning
- ▲ Suitable for all steel and stainless steel materials
- ▲ Very good chip control



Grooving

Turning


M – General application and Turning

- ▲
- ▲ Insert for radius grooves
- ▲ For copy turning
- Suitable for all steel and cast iron materi



Grooving

Turning

Application

GD/GO/GA

Material Group	Choice chipbreaker		Grades	
	First choice	First choice	Higher wear	Higher toughness
Steel	M1 – F1	GTP1340	GTCP320ST	GTPP345
	T – M	GTP1340		
Stainless steel	ST1 – F1 – T – M – MM	GTP1340		GTPP345
Cast iron	M1	GTP1340	GTCP320ST	GTPP345
	M	GTP1340		
Exotic	ST1	GTPP345		
Non-ferrous metals	LM	GTWN715		

GS

Material Group	Choice chipbreaker		Grades	
	First choice	First choice	Higher wear	Higher toughness
Steel	M1 – M2 – M	GTP1340	GTCP320ST	GTPP345
Stainless steel	ST1 – MM	GTP1340		GTPP345
Cast iron	M1 – M2	GTP1340		GTPP345
Non-ferrous metals	LM	GTWN715		

Inserts



GD

Double-sided



M1

1.5 – 8

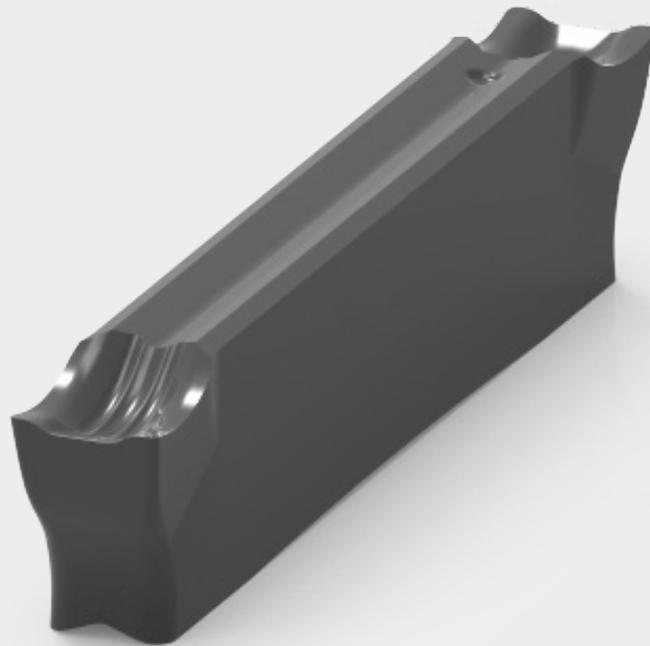




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1.5	 GD24NT-15.015-00-M1 GTCP320ST	MM12599663
	GD24NT-15.015-00-M1 GTP1340	MM12599660
	GD24NT-15.015-00-M1 GTPP345	MM12599666
2.0	 GD24LT-20.015-06-M1 GTCP320ST	MM12248387
	GD24LT-20.015-06-M1 GTP1340	MM12248382
	GD24LT-20.015-06-M1 GTPP345	MM12248392
	 GD24NT-20.02-00-M1 GTCP320ST	MM12158331
	GD24NT-20.02-00-M1 GTP1340	MM12158330
	GD24NT-20.02-00-M1 GTPP345	MM12158332
2.0	 GD24RT-20.015-06-M1 GTCP320ST	MM12248400
	GD24RT-20.015-06-M1 GTP1340	MM12248396
	GD24RT-20.015-06-M1 GTPP345	MM12248401
3.0	 GD24LT-30.02-06-M1 GTCP320ST	MM12235866
	GD24LT-30.02-06-M1 GTP1340	MM12235863
	GD24LT-30.02-06-M1 GTPP345	MM12235868
	 GD24NT-30.02-00-M1 GTCP320ST	MM12149223
	GD24NT-30.02-00-M1 GTP1340	MM12141178
	GD24NT-30.02-00-M1 GTPP345	MM12149224
	 GD24RT-30.02-06-M1 GTCP320ST	MM12235873
	GD24RT-30.02-06-M1 GTP1340	MM12235871
	GD24RT-30.02-06-M1 GTPP345	MM12235877

Insert	Designation	Material number
	GD24LT-40.03-04-M1 GTCP320ST	MM12416667
	GD24LT-40.03-04-M1 GTP1340	MM12416662
	GD24LT-40.03-04-M1 GTPP345	MM12416668
4.0 	GD24NT-40.03-00-M1 GTCP320ST	MM12149566
	GD24NT-40.03-00-M1 GTP1340	MM12149565
	GD24NT-40.03-00-M1 GTPP345	MM12149567
	GD24RT-40.03-04-M1 GTCP320ST	MM12416653
	GD24RT-40.03-04-M1 GTP1340	MM12416651
	GD24RT-40.03-04-M1 GTPP345	MM12416656
5.0 	GD24NT-50.04-00-M1 GTCP320ST	MM12336861
	GD24NT-50.04-00-M1 GTP1340	MM12336856
	GD24NT-50.04-00-M1 GTPP345	MM12336862
6.0 	GD24NT-60.04-00-M1 GTCP320ST	MM12536051
	GD24NT-60.04-00-M1 GTP1340	MM12536043
	GD24NT-60.04-00-M1 GTPP345	MM12536052
8.0 	GD35NT-80.08-00-M1 GTP1340	MM57004597

F1
2 – 5



GD – F1

	Insert	Designation	Material number
2.0		GD24LT-20.015-06-F1 GTCP320ST	MM12245958
		GD24LT-20.015-06-F1 GTP1340	MM12245957
		GD24LT-20.015-06-F1 GTPP345	MM12245959
		GD24NT-20.02-00-F1 GTCP320ST	MM12218962
		GD24NT-20.02-00-F1 GTP1340	MM12218959
		GD24NT-20.02-00-F1 GTPP345	MM12218963
		GD24RT-20.015-06-F1 GTCP320ST	MM12245961
		GD24RT-20.015-06-F1 GTP1340	MM12245960
		GD24RT-20.015-06-F1 GTPP345	MM12245962
3.0		GD24LT-30.02-06-F1 GTCP320ST	MM12236951
		GD24LT-30.02-06-F1 GTP1340	MM12236949
		GD24LT-30.02-06-F1 GTPP345	MM12236952
		GD24NT-30.02-00-F1 GTCP320ST	MM12149218
		GD24NT-30.02-00-F1 GTP1340	MM12141176
		GD24NT-30.02-00-F1 GTPP345	MM12149221
		GD24RT-30.02-06-F1 GTCP320ST	MM12236947
		GD24RT-30.02-06-F1 GTP1340	MM12236946
		GD24RT-30.02-06-F1 GTPP345	MM12236948
4.0		GD24LT-40.03-05-F1 GTCP320ST	MM12416716
		GD24LT-40.03-05-F1 GTP1340	MM12416713
		GD24LT-40.03-05-F1 GTPP345	MM12416718
		GD24NT-40.03-00-F1 GTCP320ST	MM12218967
		GD24NT-40.03-00-F1 GTP1340	MM12218965
		GD24NT-40.03-00-F1 GTPP345	MM12218969
		GD24RT-40.03-05-F1 GTCP320ST	MM12416699
		GD24RT-40.03-05-F1 GTP1340	MM12416695
		GD24RT-40.03-05-F1 GTPP345	MM12416703
5.0		GD24NT-50.04-00-F1 GTCP320ST	MM12395254
		GD24NT-50.04-00-F1 GTP1340	MM12395243
		GD24NT-50.04-00-F1 GTPP345	MM12395259

ST1

1,5 – 6

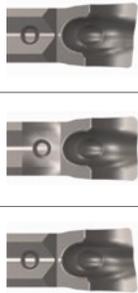
M

S



GD – ST1

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1.5		GD24NT-15.015-00-ST1 GTCP320ST	MM12269418
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		GD24NT-15.015-00-ST1 GTPP345	MM12269420
2.0		GD24LT-20.015-06-ST1 GTCP320ST	MM12248411
		GD24LT-20.015-06-ST1 GTP1340	MM12248409
		GD24LT-20.015-06-ST1 GTPP345	MM12248413
		GD24NT-20.02-00-ST1 GTCP320ST	MM12158334
		GD24NT-20.02-00-ST1 GTP1340	MM12158333
		GD24NT-20.02-00-ST1 GTPP345	MM12158335
		GD24RT-20.015-06-ST1 GTCP320ST	MM12248416
		GD24RT-20.015-06-ST1 GTP1340	MM12248415
		GD24RT-20.015-06-ST1 GTPP345	MM12248418
3.0		GD24LT-30.02-06-ST1 GTCP320ST	MM12236942
		GD24LT-30.02-06-ST1 GTP1340	MM12236941
		GD24LT-30.02-06-ST1 GTPP345	MM12236943
		GD24NT-30.02-00-ST1 GTCP320ST	MM12149214
		GD24NT-30.02-00-ST1 GTP1340	MM12141184
		GD24NT-30.02-00-ST1 GTPP345	MM12149216
		GD24RT-30.02-06-ST1 GTCP320ST	MM12236937
		GD24RT-30.02-06-ST1 GTP1340	MM12236932
		GD24RT-30.02-06-ST1 GTPP345	MM12236939

Insert	Designation	Material number
	GD24LT-40.03-04-ST1 GTCP320ST	MM12416683
	GD24LT-40.03-04-ST1 GTP1340	MM12416682
	GD24LT-40.03-04-ST1 GTPP345	MM12416686
	GD24NT-40.04-00-ST1 GTCP320ST	MM12149563
	GD24NT-40.04-00-ST1 GTP1340	MM12149561
	GD24NT-40.04-00-ST1 GTPP345	MM12149564
	GD24RT-40.03-04-ST1 GTCP320ST	MM12416679
	GD24RT-40.03-04-ST1 GTP1340	MM12416676
	GD24RT-40.03-04-ST1 GTPP345	MM12416681
	GD24NT-50.04-00-ST1 GTCP320ST	MM12382664
	GD24NT-50.04-00-ST1 GTP1340	MM12382661
	GD24NT-50.04-00-ST1 GTPP345	MM12382668
	GD24NT-60.04-00-ST1 GTCP320ST	MM12545248
	GD24NT-60.04-00-ST1 GTP1340	MM12545222
	GD24NT-60.04-00-ST1 GTPP345	MM12545261

T
2 – 6



GD - T

	Insert	Designation	Material number
		GD24LT-20.02-06-T GTCP320ST	MM12312069
		GD24LT-20.02-06-T GTP1340	MM12312068
		GD24LT-20.02-06-T GTPP345	MM12312070
2.0		GD24NT-20.02-00-T GTCP320ST	MM12158328
		GD24NT-20.02-00-T GTP1340	MM12158327
		GD24NT-20.02-00-T GTPP345	MM12158329
		GD24RT-20.02-06-T GTCP320ST	MM12312059
		GD24RT-20.02-06-T GTP1340	MM12312058
		GD24RT-20.02-06-T GTPP345	MM12312060
		GD24LT-30.02-06-T GTCP320ST	MM12312076
		GD24LT-30.02-06-T GTP1340	MM12312075
		GD24LT-30.02-06-T GTPP345	MM12312077
3.0		GD24NT-30.03-00-T GTCP320ST	MM12149211
		GD24NT-30.03-00-T GTP1340	MM12141172
		GD24NT-30.03-00-T GTPP345	MM12149213
		GD24RT-30.02-06-T GTCP320ST	MM12312073
		GD24RT-30.02-06-T GTP1340	MM12312072
		GD24RT-30.02-06-T GTPP345	MM12312074

Insert	Designation	Material number	
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		GD24NT-40.04-00-T GTP1340	MM12149558
		GD24NT-40.04-00-T GTPP345	MM12149560
5.0		GD24NT-50.04-00-T GTCP320ST	MM12391983
		GD24NT-50.04-00-T GTP1340	MM 12391945
		GD24NT-50.04-00-T GTPP345	MM12395234
6.0		GD24NT-60.04-00-T GTCP320ST	MM12545289
		GD24NT-60.04-00-T GTP1340	MM12545272
		GD24NT-60.04-00-T GTPP345	MM12545301

M

2 – 6



GD – M

Insert	Designation	Material number	
2.0		GD24NR-20.00-00-M GTCP320ST	MM12218982
	GD24NR-20.00-00-M GTP1340	MM12218980	
	GD24NR-20.00-00-M GTPP345	MM12218983	
3.0		GD24NR-30.00-00-M GTCP320ST	MM12149207
	GD24NR-30.00-00-M GTP1340	MM12142965	
	GD24NR-30.00-00-M GTPP345	MM12149210	
4.0		GD24NR-40.00-00-M GTCP320ST	MM12218975
	GD24NR-40.00-00-M GTP1340	MM12218974	
	GD24NR-40.00-00-M GTPP345	MM12218977	
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	GD24NR-50.00-00-M GTP1340	MM12391847	
	GD24NR-50.00-00-M GTPP345	MM12391882	
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	GD24NR-60.00-00-M GTP1340	MM12545433	
	GD24NR-60.00-00-M GTPP345	MM12545456	

MM

2 – 6



GD – MM

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2.0		GD24NR-20.00-00-MM GTP1340	MM14689252
3.0		GD24NR-30.00-00-MM GTP1340	MM14689249
4.0		GD24NR-40.00-00-MM GTP1340	MM14689254
5.0		GD24NR-50.00-00-MM GTP1340	MM14689250
6.0		GD24NR-60.00-00-MM GTP1340	MM14689253

LM

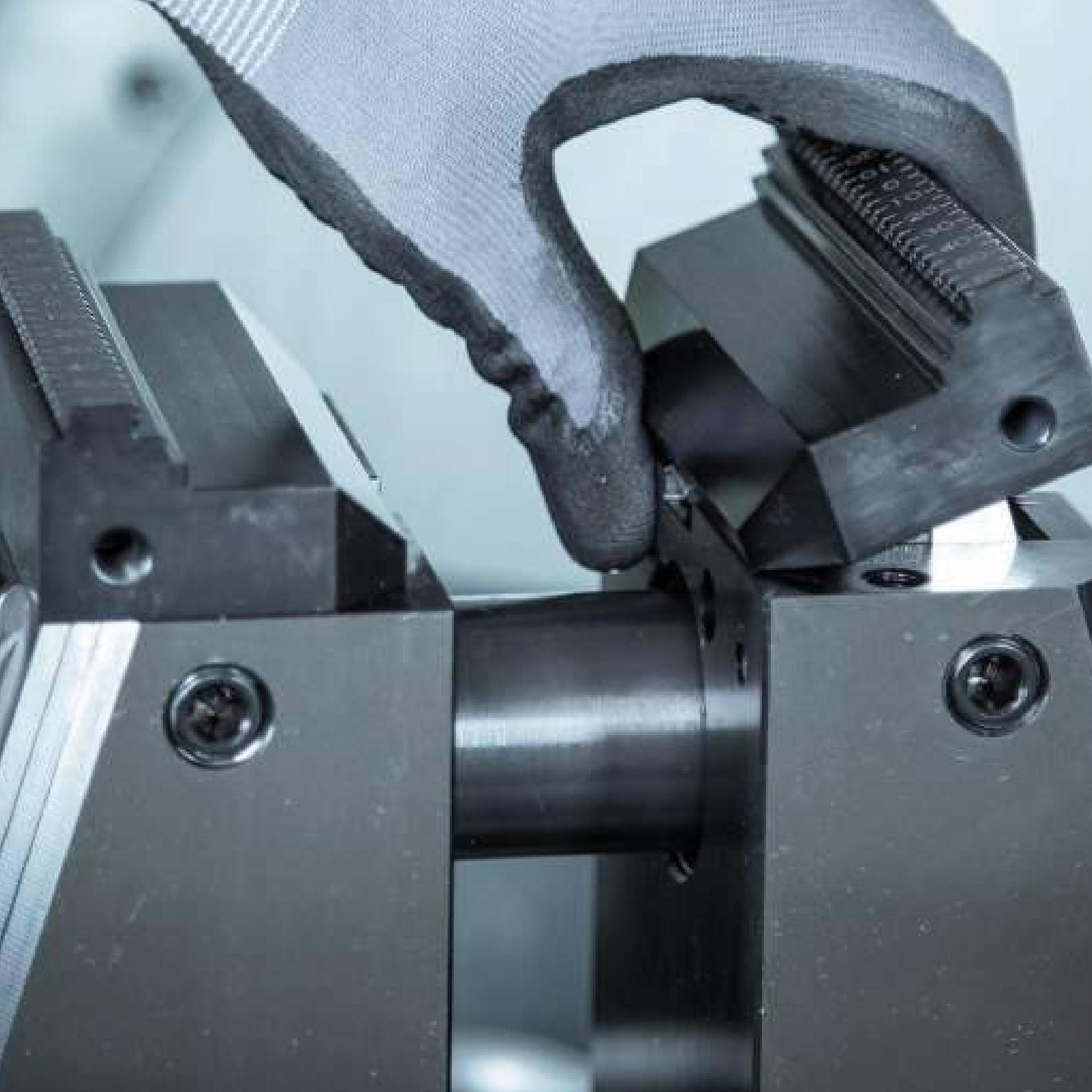
2 – 6

N

GD – LM

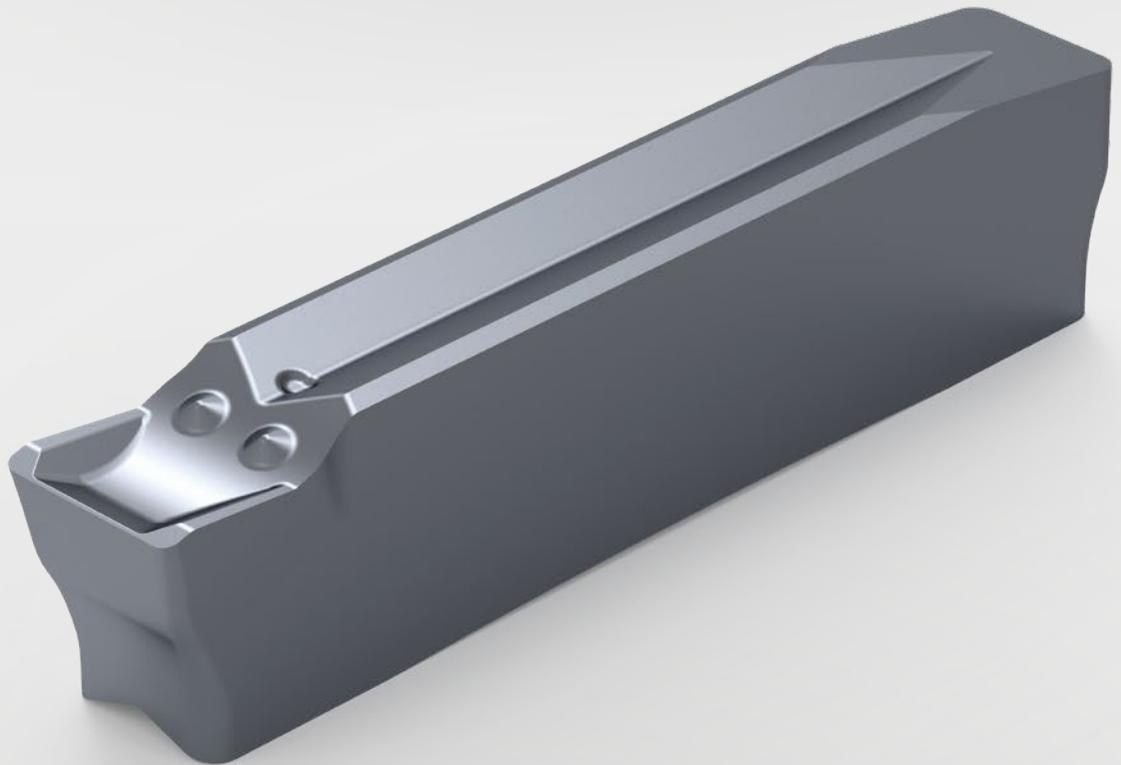
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	GD24NT-40.04-00-LM GTWN715	MM12597002
	GD24NT-50.04-00-LM GTWN715	MM14603779
	GD24NT-60.05-00-LM GTWN715	MM14603782



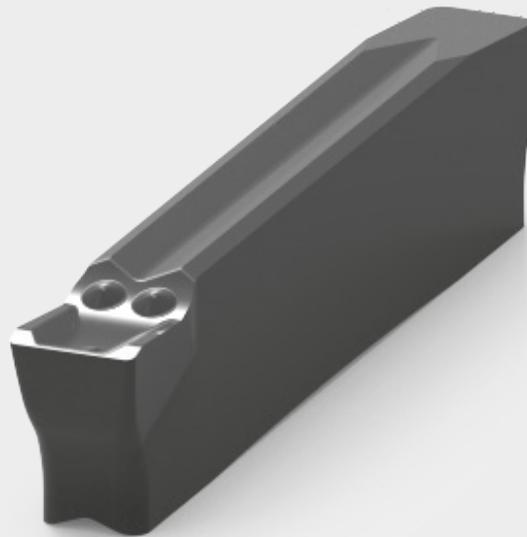


GO

Single-sided

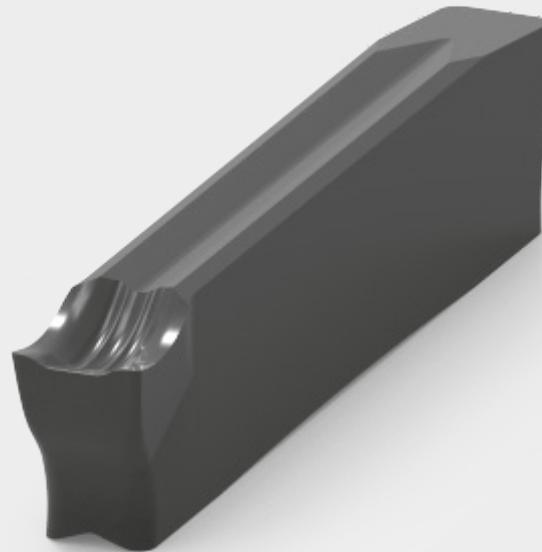


M1
2 – 4



	Insert	Designation	Material number
2.0		GO24LT-20.015-06-M1 GTCP320ST	MM12407615
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		GO24LT-20.015-06-M1 GTPP345	MM12407617
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		GO24NT-20.02-00-M1 GTP1340	MM12193961
		GO24NT-20.02-00-M1 GTPP345	MM12193963
2.0		GO24RT-20.015-06-M1 GTCP320ST	MM12407597
		GO24RT-20.015-06-M1 GTP1340	MM12407590
		GO24RT-20.015-06-M1 GTPP345	MM12407598
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		GO24LT-30.02-06-M1 GTP1340	MM12407642
		GO24LT-30.02-06-M1 GTPP345	MM12407645
3.0		GO24NT-30.02-00-M1 GTCP320ST	MM12193971
		GO24NT-30.02-00-M1 GTP1340	MM12143095
		GO24NT-30.02-00-M1 GTPP345	MM12193973
3.0		GO24RT-30.02-06-M1 GTCP320ST	MM12407602
		GO24RT-30.02-06-M1 GTP1340	MM12407600
		GO24RT-30.02-06-M1 GTPP345	MM12407605
4.0		GO24NT-40.03-00-M1 GTCP320ST	MM12193967
		GO24NT-40.03-00-M1 GTP1340	MM12193966
		GO24NT-40.03-00-M1 GTPP345	MM12193969

F1
2 - 4



GO – F1

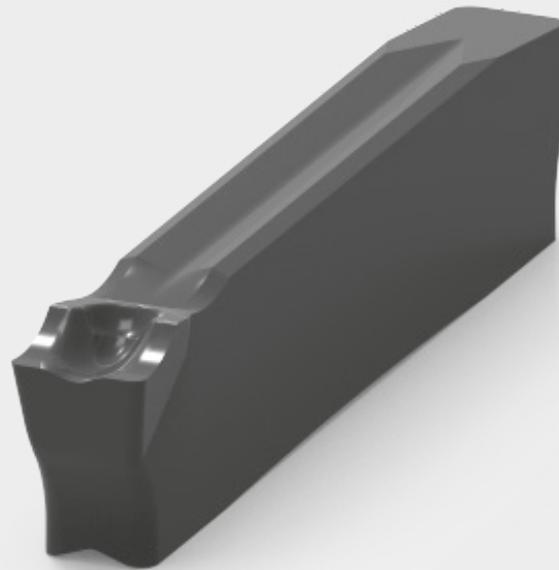
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	GO24LT-20.015-06-F1 CTPP345	MM12407586
2.0 	GO24NT-20.02-00-F1 CTCP320ST	MM12330133
	GO24NT-20.02-00-F1 CTP1340	MM12330130
	GO24NT-20.02-00-F1 CTPP345	MM12330135
2.0 	GO24RT-20.015-06-F1 CTCP320ST	MM12407623
	GO24RT-20.015-06-F1 CTP1340	MM12407621
	GO24RT-20.015-06-F1 CTPP345	MM12407627
3.0 	GO24LT-30.02-06-F1 CTCP320ST	MM12407650
	GO24LT-30.02-06-F1 CTP1340	MM12407648
	GO24LT-30.02-06-F1 CTPP345	MM12407653
3.0 	GO24NT-30.02-00-F1 CTCP320ST	MM12330168
	GO24NT-30.02-00-F1 CTP1340	MM12330167
	GO24NT-30.02-00-F1 CTPP345	MM12330170
3.0 	GO24RT-30.02-06-F1 CTCP320ST	MM12407658
	GO24RT-30.02-06-F1 CTP1340	MM12407656
	GO24RT-30.02-06-F1 CTPP345	MM12407659
4.0 	GO24NT-40.03-00-F1 CTCP320ST	MM12330181
	GO24NT-40.03-00-F1 CTP1340	MM12330180
	GO24NT-40.03-00-F1 CTPP345	MM12330183

ST1

2 - 4

M

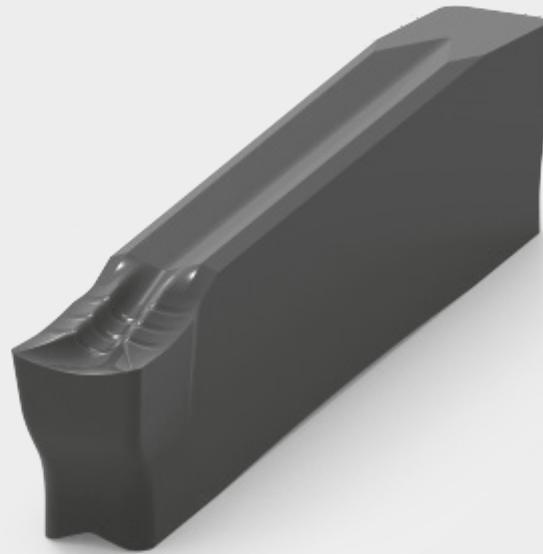
S



GO – ST1

	Insert	Designation	Material number
2.0		GO24NT-20.02-00-ST1 GTCP320ST	MM12330151
		GO24NT-20.02-00-ST1 GTP1340	MM12330143
		GO24NT-20.02-00-ST1 GTPP345	MM12330152
3.0		GO24NT-30.03-00-ST1 GTCP320ST	MM12330173
		GO24NT-30.03-00-ST1 GTP1340	MM12330172
		GO24NT-30.03-00-ST1 GTPP345	MM12330175
4.0		GO24NT-40.04-00-ST1 GTCP320ST	MM12330219
		GO24NT-40.04-00-ST1 GTP1340	MM12330218
		GO24NT-40.04-00-ST1 GTPP345	MM12330220

T
2-4



GO - T

	Insert	Designation	Material number
2.0		GO24NT-20.02-00-T GTCP320ST	MM12330165
		GO24NT-20.02-00-T GTP1340	MM12330163
		GO24NT-20.02-00-T GTPP345	MM12330166
3.0		GO24NT-30.03-00-T GTCP320ST	MM12330178
		GO24NT-30.03-00-T GTP1340	MM12330176
		GO24NT-30.03-00-T GTPP345	MM12330179
4.0		GO24NT-40.04-00-T GTCP320ST	MM12330223
		GO24NT-40.04-00-T GTP1340	MM12330222
		GO24NT-40.04-00-T GTPP345	MM12330224

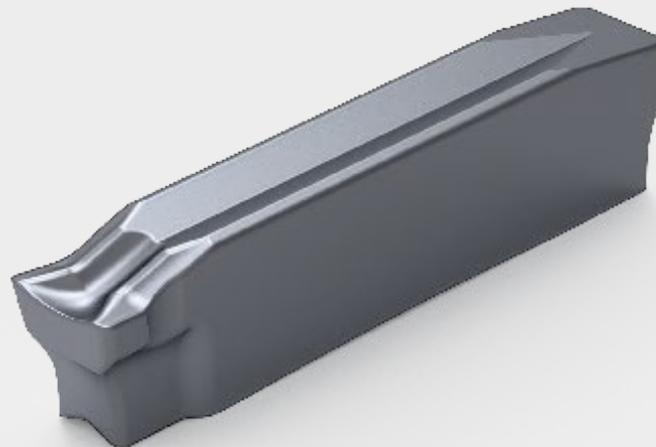
LM

2 – 6



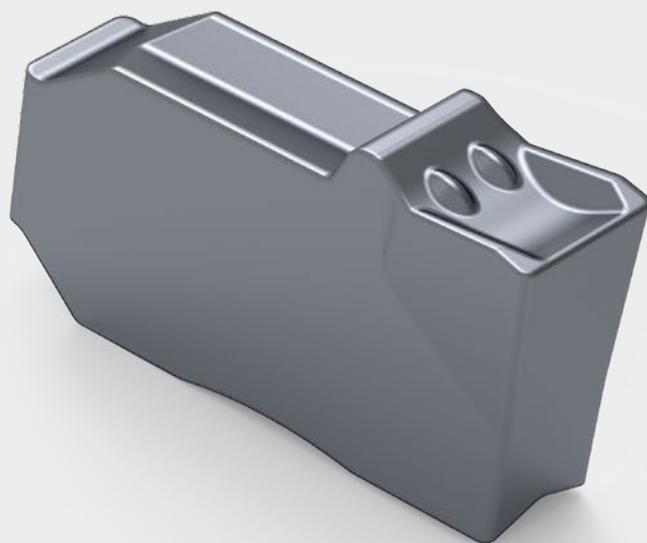
GO – LM

Insert	Designation	Material number
2.0	GO24NT-20.02-00-LM GTWN715	MM12597003
3.0	GO24NT-30.03-00-LM GTWN715	MM12597004
4.0 	GO24NT-40.04-00-LM GTWN715	MM12597008
5.0	GO24NT-50.04-00-LM GTWN715	MM14640017
6.0	GO24NT-60.05-00-LM GTWN715	MM14640013



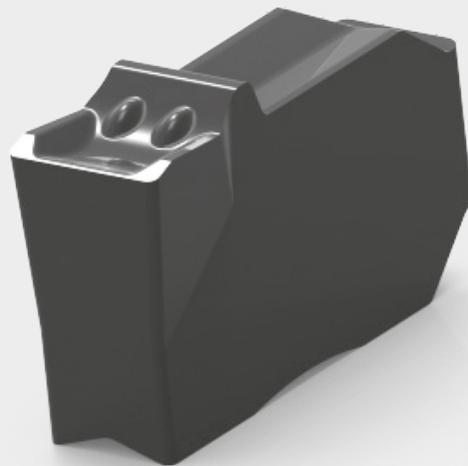
GS

Small size insert



M1

2 – 6



GS – M1

	Insert	Designation	Material number
2.0		GSNT-20.02-00-M1 GTCP320ST	MM12220987
		GSNT-20.02-00-M1 GTP1340	MM12331961
		GSNT-20.02-00-M1 GTPP345	MM12122435
3.0		GSNT-30.02-00-M1 GTCP320ST	MM12220994
		GSNT-30.02-00-M1 GT1340	MM12331985
		GSNT-30.02-00-M1 GTPP345	MM11888187
4.0		GSNT-40.03-00-M1 GTCP320ST	MM12220998
		GSNT-40.03-00-M1 GTP1340	MM12332006
		GSNT-40.03-00-M1 GTPP345	MM11888182
5.0		GSNT-50.03-00-M1 GTCP320ST	MM12169163
		GSNT-50.03-00-M1 GTP1340	MM12332013
		GSNT-50.03-00-M1 GTPP345	MM12169161
6.0		GSNT-60.04-00-M1 GTCP320ST	MM12169145
		GSNT-60.04-00-M1 GTP1340	MM12332029
		GSNT-60.04-00-M1 GTPP345	MM12169142

M2

2 – 6

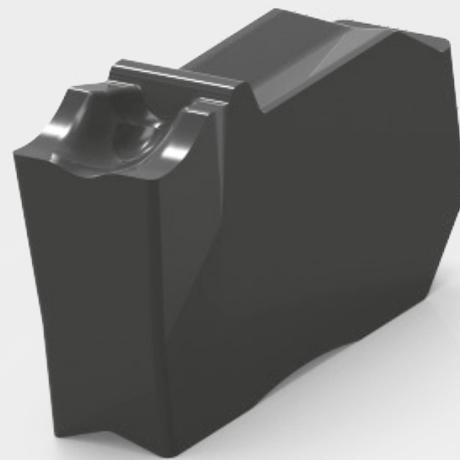


GS – M2

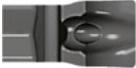
	Insert	Designation	Material number
2.0		GSNT-20.02-00-M2 GTCP320ST	MM12220991
		GSNT-20.02-00-M2 GTP1340	MM12331971
		GSNT-20.02-00-M2 GTPP345	MM12122433
3.0		GSNT-30.03-00-M2 GTCP320ST	MM12220996
		GSNT-30.03-00-M2 GTP1340	MM12331988
		GSNT-30.03-00-M2 GTPP345	MM11888973
4.0		GSNT-40.04-00-M2 GTCP320ST	MM12220999
		GSNT-40.04-00-M2 GTP1340	MM12332008
		GSNT-40.04-00-M2 GTPP345	MM11888968
5.0		GSNT-50.04-00-M2 GTCP320ST	MM12169158
		GSNT-50.04-00-M2 GTP1340	MM12332021
		GSNT-50.04-00-M2 GTPP345	MM12169151
6.0		GSNT-60.05-00-M2 GTCP320ST	MM12169139
		GSNT-60.05-00-M2 GTP1340	MM12332036
		GSNT-60.05-00-M2 GTPP345	MM12169134

ST1

2-6



GS – ST1

	Insert	Designation	Material number
2.0		GSNT-20.02-00-ST1 GTCP320ST	MM12262690
		GSNT-20.02-00-ST1 GTP1340	MM12262689
		GSNT-20.02-00-ST1 GTPP345	MM12262692
3.0		GSNT-30.02-00-ST1 GTCP320ST	MM12262695
		GSNT-30.02-00-ST1 GTP1340	MM12262694
		GSNT-30.02-00-ST1 GTPP345	MM12262696
4.0		GSNT-40.04-00-ST1 GTCP320ST	MM12416760
		GSNT-40.04-00-ST1 GTP1340	MM12416758
		GSNT-40.04-00-ST1 GTPP345	MM12416763
5.0		GSNT-50.04-00-ST1 GTCP320ST	MM12416750
		GSNT-50.04-00-ST1 GTP1340	MM12416747
		GSNT-50.04-00-ST1 GTPP345	MM12416752
6.0		GSNT-60.04-00-ST1 GTCP320ST	MM12416735
		GSNT-60.04-00-ST1 GTP1340	MM12416725
		GSNT-60.04-00-ST1 GTPP345	MM12416742

LM

2 – 6



GS – LM

Insert	Designation	Material number
2.0	GSNT-20.02-00-LM GTWN715	MM12596993
3.0	GSNT-30.03-00-LM GTWN715	MM12596989
4.0	GSNT-40.04-00-LM GTWN715	MM12596991
5.0	GSNT-50.04-00-LM GTWN715	MM14447754
6.0	GSNT-60.04-00-LM GTWN715	MM14447755



M

2 – 6



GS – M

Insert	Designation	Material number
2.0	GSNR-20.00-00-M GTP1340	MM14617248
3.0	GSNR-30.00-00-M GTP1340	MM14617250
4.0	GSNR-40.00-00-M GTP1340	MM14617254
5.0	GSNR-50.00-00-M GTP1340	MM14617259
6.0	GSNR-60.00-00-M GTP1340	MM14617263



MM

2 – 6

M

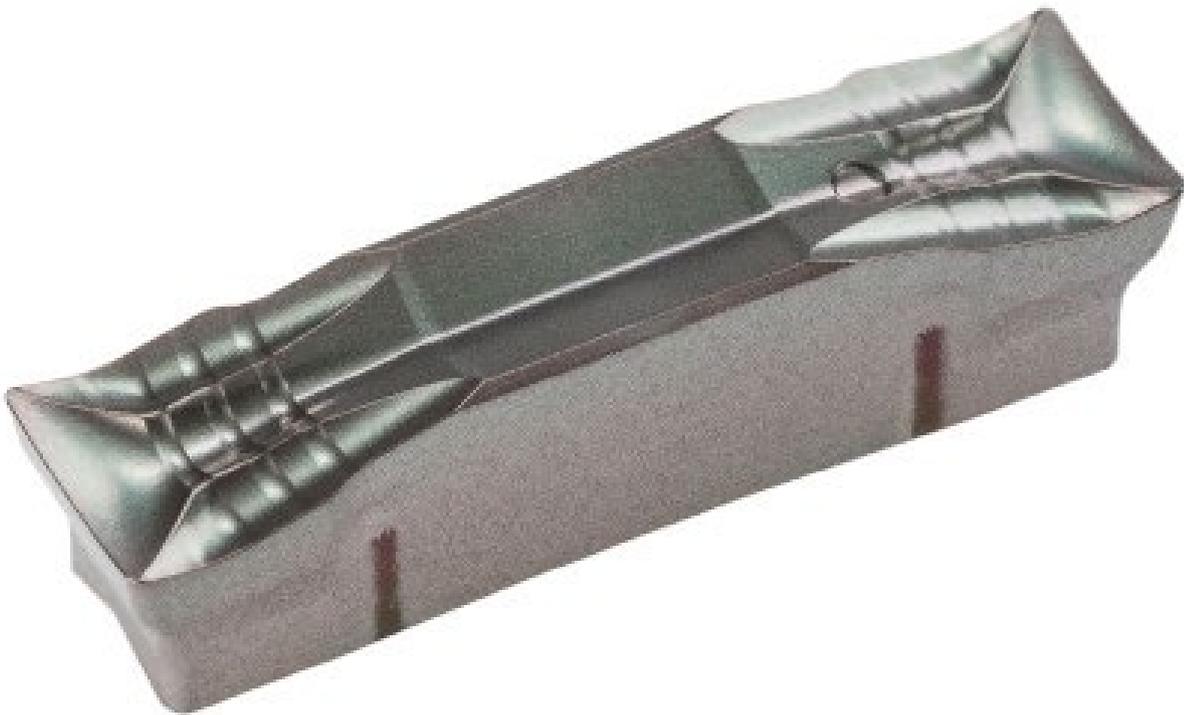
GS – MM

Insert	Designation	Material number
2.0	GSNR-20.00-00-MM GTP1340	MM14617264
3.0	GSNR-30.00-00-MM GTP1340	MM14617265
4.0	GSNR-40.00-00-MM GTP1340	MM14617268
5.0	GSNR-50.00-00-MM GTP1340	MM14617270
6.0	GSNR-60.00-00-MM GTP1340	MM14617272



GA

Axial grooving



T

3 – 5



GA – T

	Insert	Designation	Material number
3.0		GA24NT-30.03-00-T GTCP320ST	MM12358352
		GA24NT-30.03-00-T GTP1340	MM12358346
		GA24NT-30.03-00-T GTPP345	MM12358353
4.0		GA24NT-40.04-00-T GTCP320ST	MM14467538
		GA24NT-40.04-00-T GTP1340	MM14467537
		GA24NT-40.04-00-T GTPP345	MM14467539
5.0		GA24NT-50.04-00-T GTCP320ST	MM14646114
		GA24NT-50.04-00-T GTP1340	MM14646112
		GA24NT-50.04-00-T GTPP345	MM14646115



M

3 – 4

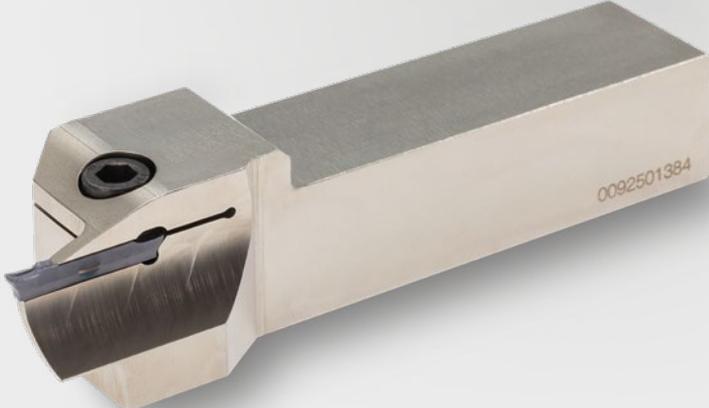
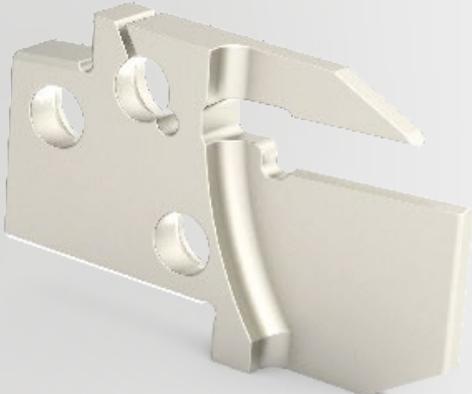


GA – M

Insert	Designation	Material number
3.0 	GA24NR-30.00-00-M GTCP320ST	MM14595669
	GA24NR-30.00-00-M GTP1340	MM14595666
	GA24NR-30.00-00-M GTPP345	MM14595672
4.0 	GA24NR-40.00-00-M GTCP320ST	MM14598108
	GA24NR-40.00-00-M GTP1340	MM14598096
	GA24NR-40.00-00-M GTPP345	MM14598110



Tools



Blade

GO/GD



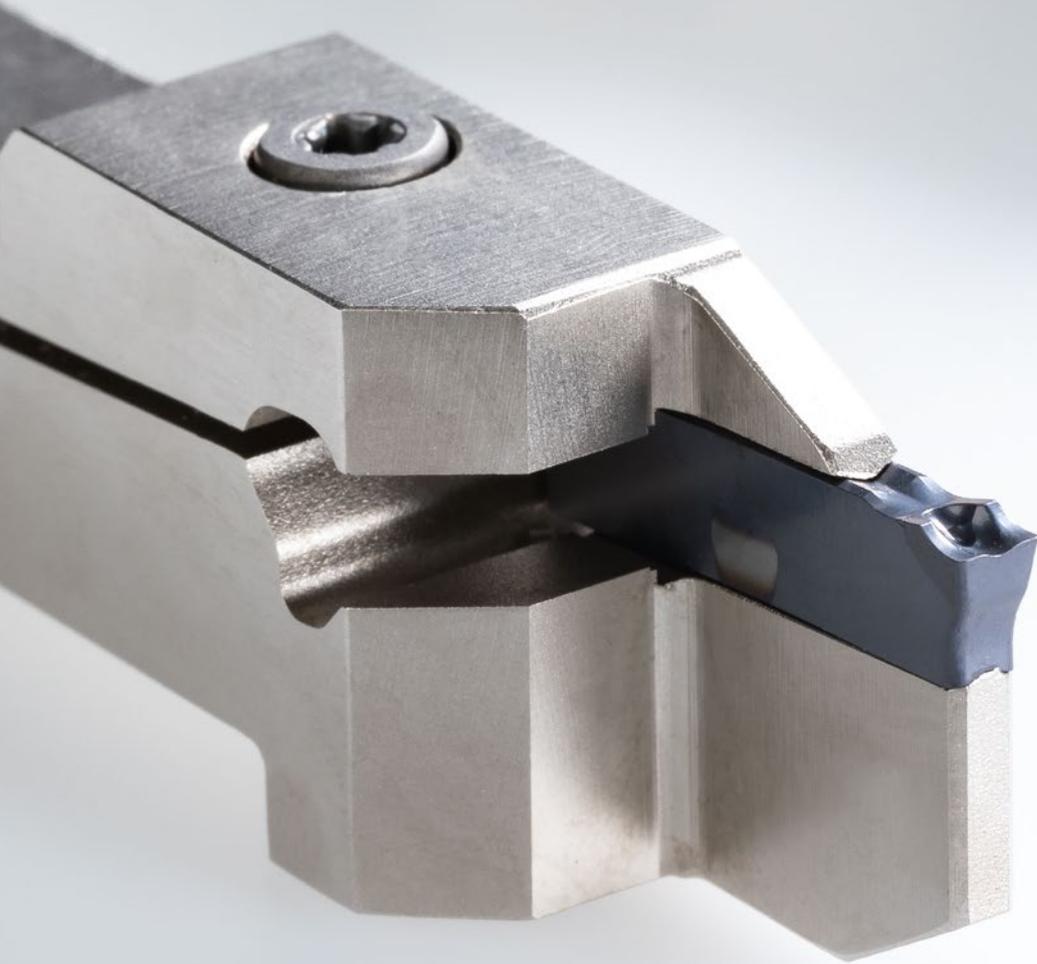
Blades	Designation	T _{max} [mm]	Material number
	GBL-2602-GO2402	25	MM12295514
	GBL-3202-GO2402	25	MM12295534
	GBR-2602-GO2402	25	MM12295505
	GBR-3202-GO2402	25	MM12295510
	GBN-2602-GO2402	25	MM12295540
	GBN-3202-GO2402	25	MM12295546
	GBN-2603-GO2403	35	MM12167262
	GBN-3203-GO2403	50	MM12167255
	GBN-2604-GO2404	35	MM12167260
	GBN-3204-GO2404	50	MM12167253
	GBN-3205-GO2405	60	MM14442164
	GBN-3206-GO2406	60	MM14442166

Spare parts *	Designation	Material number
	GK-3 (2 and 3 mm)	MM12154231
	GK-4 (4, 5 and 6 mm)	MM12154233

For information on how to use the system go to page 98.

Monoblocks

GO/GD





Tool	Designation	T _{max} [mm]	h		Material number
	GMEL-12-GD2402-K-T13	13	12	L	MM12162709
	GMER-12-GD2402-K-T13	13	12	R	MM12162706
	GMEL-16-GD2402-K-T13	13	16	L	MM12162703
	GMER-16-GD2402-K-T13	13	16	R	MM12162693
	GMEL-20-GD2402-K-T13	13	20	L	MM12162691
	GMER-20-GD2402-K-T13	13	20	R	MM12162690
	GMEL-12-GD24015-K-T23	23	12	L	MM12599654
	GMER-12-GD24015-K-T23	23	12	R	MM12599653
	GMEL-16-GD24015-K-T23	23	16	L	MM12269982
	GMER-16-GD24015-K-T23	23	16	R	MM12599646

Spare parts	Designation	Material number
	Key T15	MM12380791
	Key T20	MM12380793
	Key SW4	MM4209
	M3.5X14,0/T15 (for h=12)	MM11081190
	M4.0X16/T20 (for h=16)	MM12003031
	M4.0X18/T20 (for h=20)	MM11007006
	M5.0X20	MM4492



Tool

Designation	T_{max} [mm]	h		Material number
GMEL-12-GD2403-K-T13	13	12	L	MM12148458
GMER-12-GD2403-K-T13	13	12	R	MM12148456
GMEL-16-GD2403-K-T13	13	16	L	MM12148455
GMER-16-GD2403-K-T13	13	16	R	MM12148450
GMEL-20-GD2403-K-T13	13	20	L	MM12148443
GMER-20-GD2403-K-T13	13	20	R	MM12148440
GMEL-25-GD2403-K-T13	13	25	L	M12148436
GMER-25-GD2403-K-T13	13	25	R	MM12148434
GMEL-16-GD2403-K-T25	25	16	L	MM12148452
GMER-16-GD2403-K-T25	25	16	R	MM12148445
GMEL-20-GD2403-K-T25	25	20	L	MM12148441
GMER-20-GD2403-K-T25	25	20	R	MM12148437
GMEL-25-GD2403-K-T25	25	25	L	MM12148435
GMER-25-GD2403-K-T25	25	25	R	MM12148433
GMEL-32-GD2403-P-T25	25	32	L	MM14543475
GMER-32-GD2403-P-T25	25	32	R	MM14543466
GMEL-40-GD2403-S-T25	25	40	L	MM14543525
GMER-40-GD2403-S-T25	25	40	R	MM14543492



Spare parts



Designation

Material number

Key T15

MM12380791

Key T20

MM12380793

M3.5X14.0/T15 (for h=12)

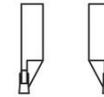
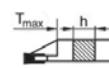
MM11081190

M4.0X16/T20 (for h=16)

MM12003031

M4.0X18/T20 (for h=20/25)

MM11007006



Tool



Designation	T_{max} [mm]	h		Material number
GMEL-16-GD2404-K-T25	25	16	L	MM12162689
GMER-16-GD2404-K-T25	25		R	MM12162737
GMEL-20-GD2404-K-T25	25	20	L	MM12162734
GMER-20-GD2404-K-T25	25		R	MM12162729
GMEL-25-GD2404-K-T25	25	25	L	MM12162726
GMER-25-GD2404-K-T25	25		R	MM12162714
GMEL-32-GD2404-P-T25	25	32	L	MM14543480
GMER-32-GD2404-P-T25	25	32	R	MM14543478
GMEL-40-GD2404-S-T25	25	40	L	MM14543534
GMER-40-GD2404-S-T25	25	40	R	MM14543527
GMEL-20-GD2405-M-T25	25	20	L	MM12545199
GMER-20-GD2405-M-T25	25		R	MM12545190
GMEL-25-GD2405-M-T25	25	25	L	MM12376613
GMER-25-GD2405-M-T25	25		R	MM12376612
GMEL-20-GD2406-M-T25	25	20	L	MM12545152
GMER-20-GD2406-M-T25	25		R	MM12545139
GMEL-25-GD2406-M-T25	25	25	L	MM12545182
GMER-25-GD2406-M-T25	25		R	MM12545172
GMEL-25-GD3508-P-T32	32	25	L	MM14420699
GMER-25-GD3508-P-T32	32	25	R	MM14420698
GMEL-32-GD3508-P-T32	32	32	L	MM14420703
GMER-32-GD3508-P-T32	32	32	R	MM14420702

Spare parts



Key T20

MM12380793



M4.0X16 T20 (for h=16)

MM12003031



M4.0X18/T20 (for h=20/25)

MM11007006

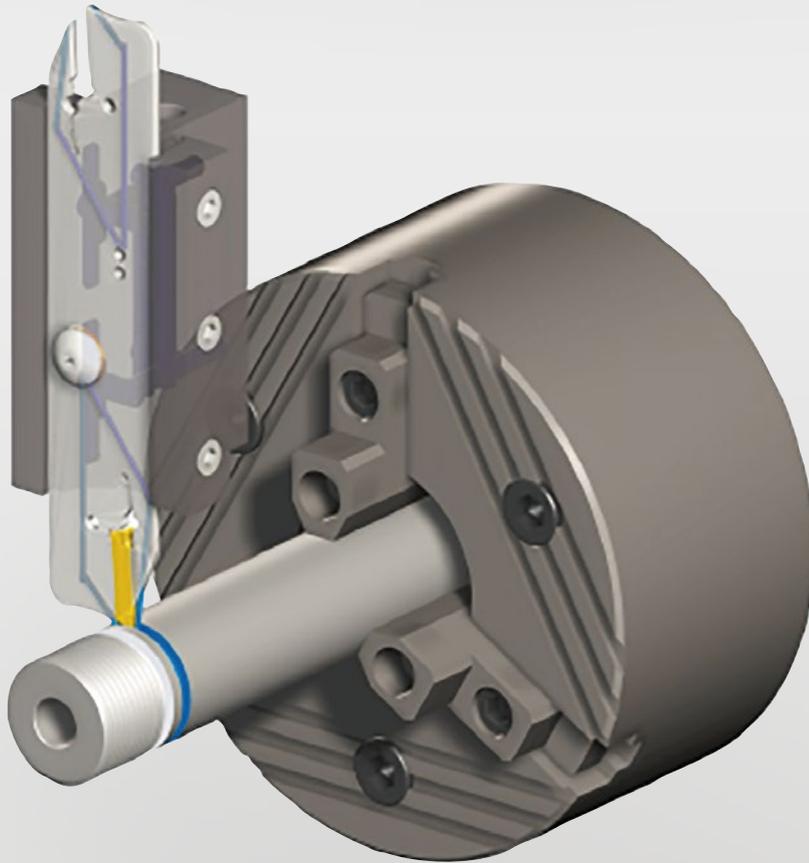


M6.0X20

MM4493

Blades GO/GD

with internal cooling



Blades	Designation	T _{max} [mm]	Material number
	GBL-2602-GO2402-C	25	MM12416853
	GBL-3202-GO2402-C	25	MM12416844
	GBR-2602-GO2402-C	25	MM12416829
	GBR-3202-GO2402-C	25	MM12416818
	GBN-2602-GO2402-C	25	MM12416839
	GBN-3202-GO2402-C	25	MM12295549
	GBN-2603-GO2403-C	35	MM12154026
	GBN-3203-GO2403-C	50	MM12154027
	GBN-2604-GO2404-C	35	MM12528755
	GBN-3204-GO2404-C	50	MM12528758
	GBN-3205-GO2405-C	60	MM14442167
	GBN-3206-GO2406-C	60	MM14442170

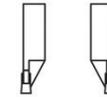
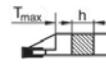
Spare parts	Designation	Material number
	Key T15 58MM	MM8095101500
	Coolant screw plug M4X3	MM11998618

Spare parts *	Designation	Material number
	GK-3 (2 and 3 mm)	MM12154231
	GK-4 (4, 5 and 6 mm)	MM12154233

Monoblocks GO/GD

with internal cooling





Tool	Designation	T_{max} [mm]	h		Material number
	GMEL-12-GD2403-K-T13-C	13	12	L	MM14620950
	GMER-12-GD2403-K-T13-C	13	12	R	MM14620948
	GMEL-16-GD2402-K-T13-C	13	16	L	MM12317045
	GMER-16-GD2402-K-T13-C	13	16	R	MM12317044
	GMEL-20-GD2402-K-T13-C	13	25	L	MM12317048
	GMER-20-GD2402-K-T13-C	13	25	R	MM12317046
	GMEL-16-GD2403-K-T25-C	25	16	L	MM12213519
	GMER-16-GD2403-K-T25-C	25	16	R	MM12213518
	GMEL-20-GD2403-K-T25-C	25	20	L	MM12213516
	GMER-20-GD2403-K-T25-C	25	20	R	MM12213513
	GMEL-25-GD2403-K-T25-C	25	25	L	MM12213509
	GMER-25-GD2403-K-T25-C	25	25	R	MM12213508
	GMEL-16-GD2404-K-T25-C	25	16	L	MM12317036
	GMER-16-GD2404-K-T25-C	25	16	R	MM12317035
	GMEL-20-GD2404-K-T25-C	25	20	L	MM12317041
	GMER-20-GD2404-K-T25-C	25	20	R	MM12317040
	GMEL-25-GD2404-K-T25-C	25	25	L	MM12317034
	GMER-25-GD2404-K-T25-C	25	25	R	MM12317043
	GMEL-32-GD2403-P-T25-C	25	32	L	MM14543537
	GMER-32-GD2403-P-T25-C	25	32	R	MM14543535
	GMEL-32-GD2404-P-T25-C	25	32	L	MM14543543
	GMER-32-GD2404-P-T25-C	25	32	R	MM14543540
	GMEL-40-GD2403-S-T25-C	25	40	L	MM14543558
	GMER-40-GD2403-S-T25-C	25	40	R	MM14543546
	GMEL-40-GD2404-S-T25-C	25	40	L	MM14543566
	GMER-40-GD2404-S-T25-C	25	40	R	MM14543564



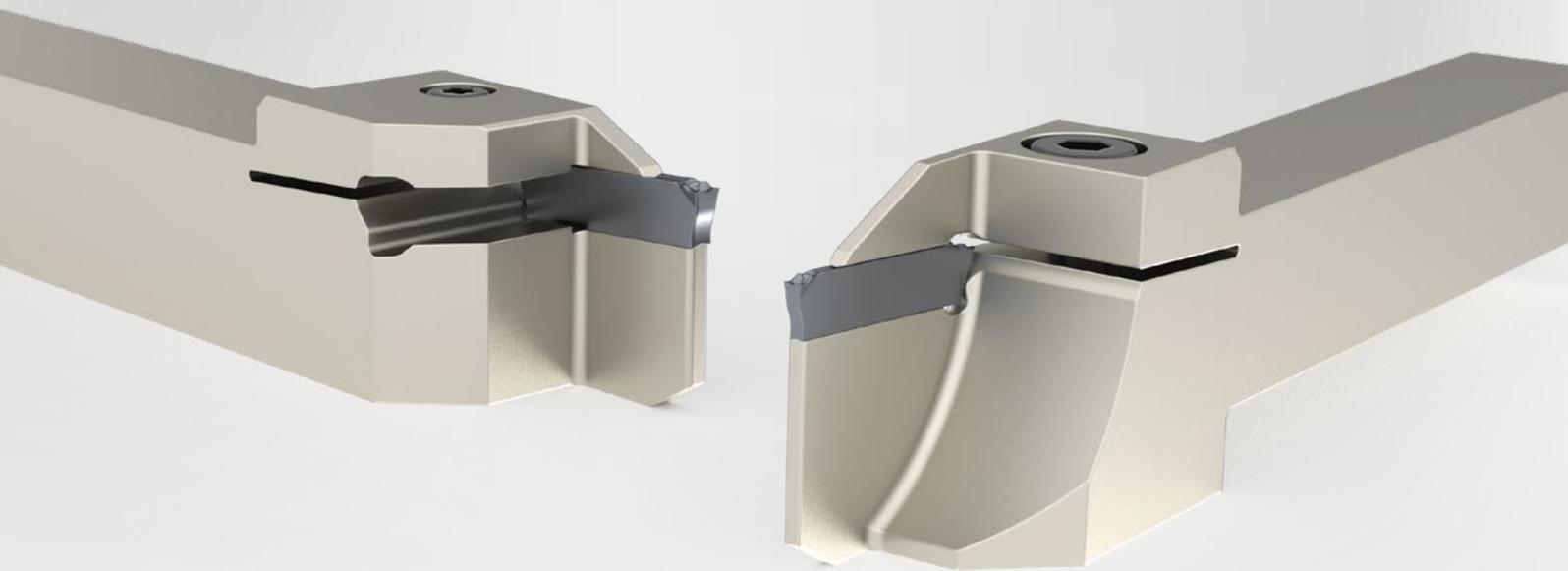
Tool	Designation	T_{max} [mm]	h		Material number	
	GMEL-20-GD2405-M-T25-C	25	20	L	coming 2022	
	GMER-20-GD2405-M-T25-C	25	20	R		
	GMEL-25-GD2405-M-T25-C	25	25	L		
	GMER-25-GD2405-M-T25-C	25	25	R		
	GMEL-20-GD2406-M-T25-C	25	20	L		
	GMER-20-GD2406-M-T25-C	25	20	R		
	GMEL-25-GD2406-M-T25-C	25	25	L		
	GMER-25-GD2406-M-T25-C	25	25	R		
	GMEL-40-GD3508-S-T32-C	32	40	L		MM14543572
	GMER-40-GD3508-S-T32-C	32	40	R		MM14543567

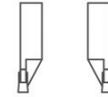
Spare parts	Designation	Material number
	Key SW5	MM4496
	M6.0x20	MM4493
	M6x6 DIN 913	MM11040843
	G1/8 DIN 913	MM12089802



Monoblocks GO/GD

– R (reinforced)





Tool	Designation	T_{max} [mm]	h		Material number
	GMEL-12-GD2402-K-T13-R	13	12	L	MM12562846
	GMER-12-GD2402-K-T13-R	13		R	MM12522212
	GMEL-16-GD2402-K-T13-R	13	16	L	MM12562848
	GMER-16-GD2402-K-T13-R	13		R	MM12522214
	GMEL-12-GD2402-K-T21-R	21	12	L	MM12562851
	GMER-12-GD2402-K-T21-R	21		R	MM12522215
	GMEL-16-GD2402-K-T21-R	21	16	L	MM12562855
	GMER-16-GD2402-K-T21-R	21		R	MM12522216
	GMEL-12-GD2403-K-T13-R	13	12	L	MM12562831
	GMER-12-GD2403-K-T13-R	13		R	MM12522181
	GMEL-16-GD2403-K-T13-R	13	16	L	MM12562835
	GMER-16-GD2403-K-T13-R	13		R	MM12522183
	GMEL-12-GD2403-K-T21-R	21	12	L	MM12562836
	GMER-12-GD2403-K-T21-R	21		R	MM12522210
	GMEL-16-GD2403-K-T21-R	21	16	L	MM12562843
	GMER-16-GD2403-K-T21-R	21		R	MM12522211

Spare parts

Designation

Material number



Key T15

MM12380791

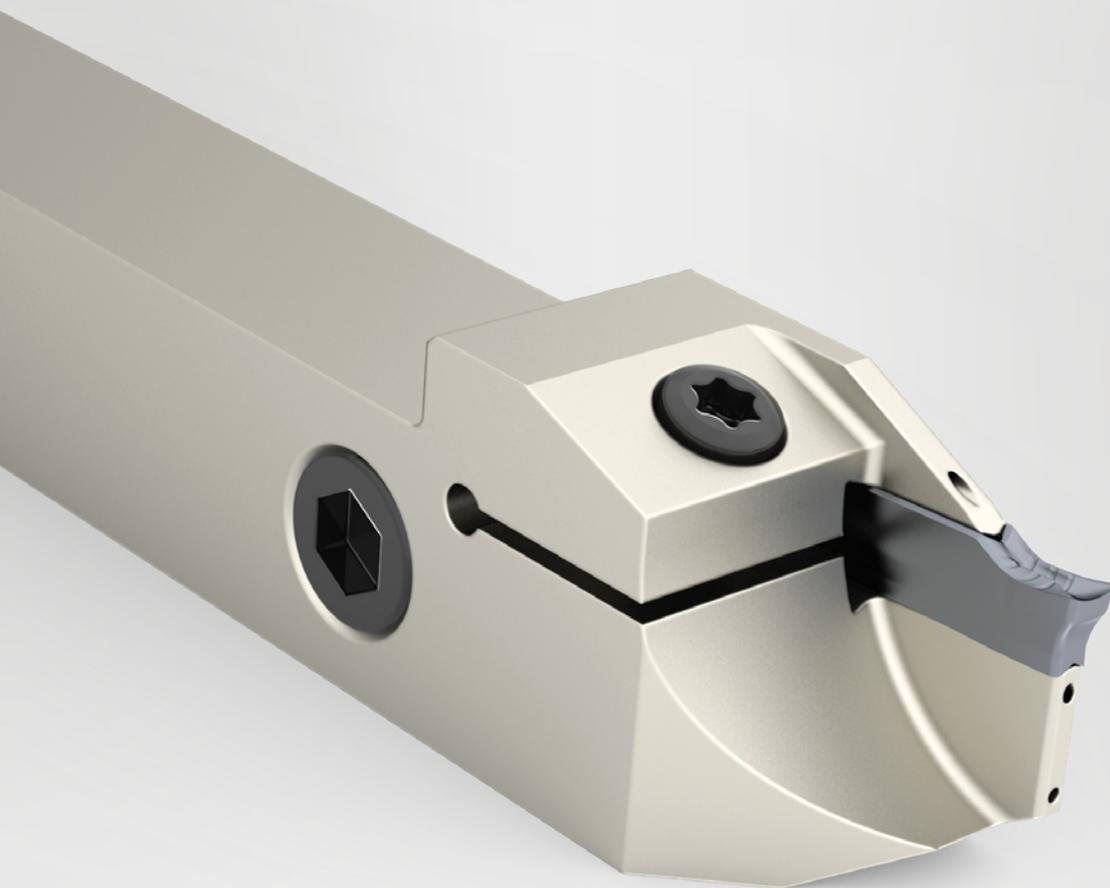


M4.0X14/T15

MM195068

Monoblocks GO/GD

-R (reinforced) with internal cooling





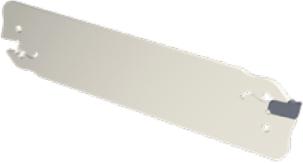
Tool	Designation	T _{max} [mm]	h		Material number
	GMEL-12-GD2402-K-T13-R-C	13	12	L	MM12595600
	GMER-12-GD2402-K-T13-R-C	13	12	R	MM12595599
	GMEL-16-GD2402-K-T13-R-C	13	16	L	MM12562862
	GMER-16-GD2402-K-T13-R-C	13	16	R	MM12522219
	GMEL-16-GD2402-K-T21-R-C	21	16	L	MM12562868
	GMER-16-GD2402-K-T21-R-C	21	16	R	MM12562866
	GMEL-12-GD2403-K-T13-R-C	13	12	L	MM12595597
	GMER-12-GD2403-K-T13-R-C	13	12	R	MM12595596
	GMEL-16-GD2403-K-T13-R-C	13	16	L	MM12562859
	GMER-16-GD2403-K-T13-R-C	13	16	R	MM12562875
	GMEL-16-GD2403-K-T21-R-C	21	16	L	MM12562861
	GMER-16-GD2403-K-T21-R-C	21	16	R	MM12522218

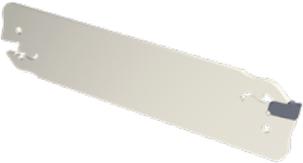
Spare parts

Spare parts	Designation	Material number
	Key T15	MM12380791
	M4.0X14/T15	MM195068
	M6.0X6.0 DIN 913	MM11040843
	G1/8 DIN 913	MM12089802

Blades GS



Blades	Designation	T_{max} [mm]	Material number
	GBR-2602-GS02	25	MM12167546
	GBL-2602-GS02	25	MM12167544
	GBR-3202-GS02	25	MM12167553
	GBL-3202-GS02	25	MM12167550
	GBN-2603-GS03	35	MM11896198
	GBN-3203-GS03	50	MM11896189

Blades	Designation	T_{max} [mm]	Material number
	GBN-2604-GS04	40	MM11896196
	GBN-3204-GS04	50	MM11896181
	GBN-3205-GS05	55	MM12170445
	GBN-3206-GS06	60	MM12170446

Spare parts *	Designation	Material number
	GK-3 (2 and 3 mm)	MM12154231
	GK-4 (4, 5 and 6 mm)	MM12154233

For information on how to use the system go to page 98.

Blades GS

with internal cooling



Blades	Designation	T _{max} [mm]	Material number
	GBL-2602-GS02-C	25	MM12258634
	GBL-3202-GS02-C	25	MM12258689
	GBR-2602-GS02-C	25	MM12258498
	GBR-3202-GS02-C	25	MM12258693
	GBN-2603-GS03-C	35	MM12258695
	GBN-3203-GS03-C	50	MM12258698
	GBN-2604-GS04-C	40	MM12260542
	GBN-3204-GS04-C	50	MM12260546

Spare parts	Designation	Material number
	Key T15 58MM	MM8095101500
	Coolant screw plug M4X3	MM11998618

Spare parts *	Designation	Material number
	GK-3 (2 and 3 mm)	MM12154231
	GK-4 (4, 5 and 6 mm)	MM12154233

Monoblocks GS



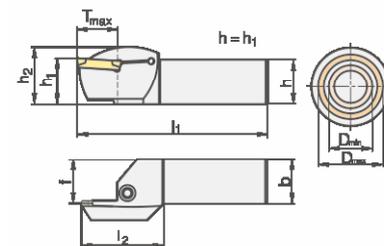


Tool	Designation	T _{max} [mm]	h		Material number
	GMEL-16-GS02-K-T20	20	16	L	MM14640098
	GMER-16-GS02-K-T20	20	16	R	MM14640108
	GMEL-16-GS03-K-T20	20	16	L	MM14418730
	GMER-16-GS03-K-T20	20	16	R	MM12014659
	GMEL-20-GS02-K-T20	20	20	L	MM14640088
	GMER-20-GS02-K-T20	20	20	R	MM14640093
	GMEL-20-GS03-K-T20	20	20	L	MM14418731
	GMER-20-GS03-K-T20	20	20	R	MM12014658
	GMEL-20-GS04-K-T25	25	20	L	MM14640077
	GMER-20-GS04-K-T25	25	20	R	MM14640086
	GMEL-20-GS05-K-T25	25	20	L	MM14640019
	GMER-20-GS05-K-T25	25	20	R	MM14640027
	GMEL-20-GS06-K-T25	25	20	L	MM14640035
	GMER-20-GS06-K-T25	25	20	R	MM14640057
	GMEL-25-GS03-M-T20	20	25	L	MM14418735
	GMER-25-GS03-M-T20	20	25	R	MM12014657
	GMEL-25-GS04-M-T25	25	25	L	MM14640046
	GMER-25-GS04-M-T25	25	25	R	MM14640064
	GMEL-25-GS05-M-T25	25	25	L	MM12172251
	GMER-25-GS05-M-T25	25	25	R	MM12172252
GMEL-25-GS06-M-T32	32	25	L	MM12172246	
GMER-25-GS06-M-T32	32	25	R	MM 12172249	

Spare parts	Designation	Material number
	Key T20	12380793
	M4.0X18/T20	11007006

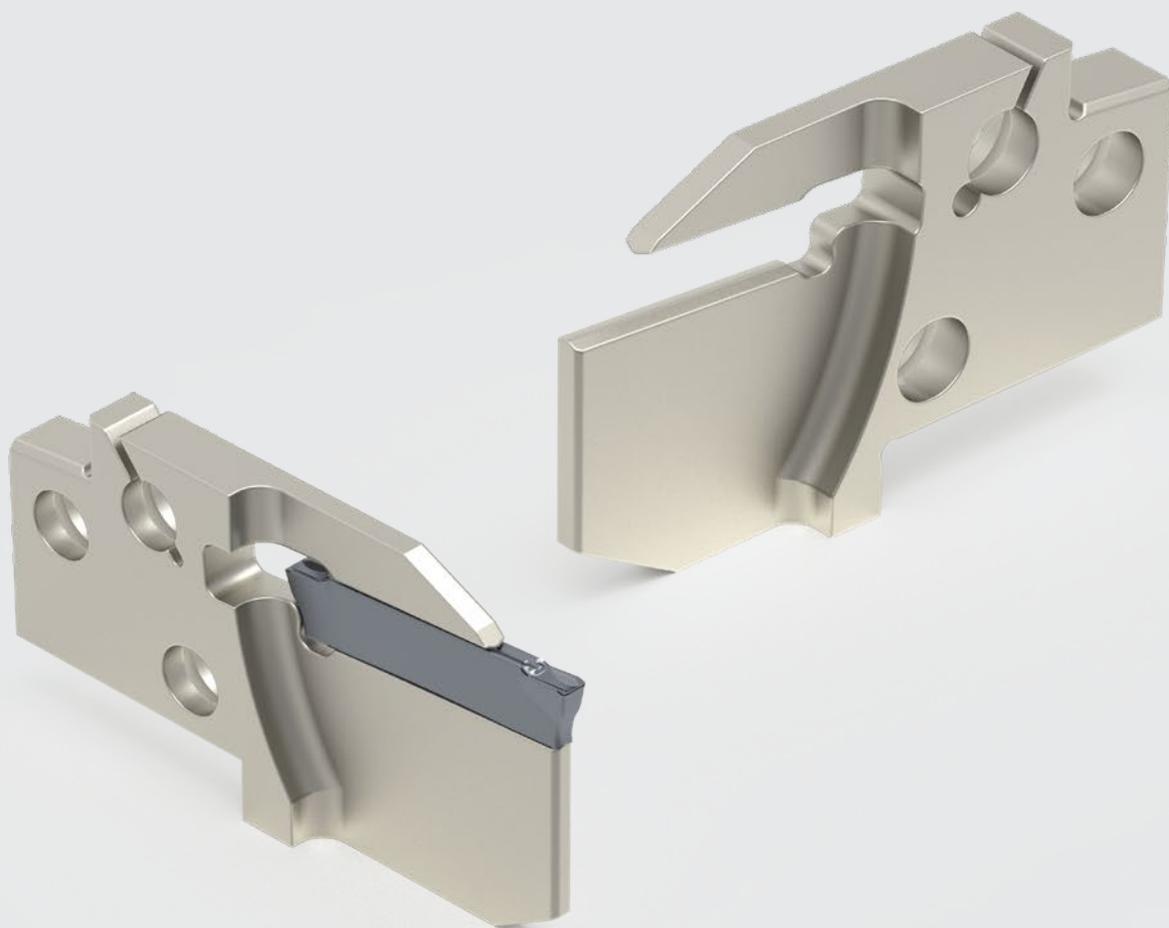
Monoblocks GA





Designation	s [mm]	T _{max} [mm]	D _{min} [mm]	D _{max} [mm]	h = h ₁ [mm]	h ₂ [mm]	b [mm]	l ₁ [mm]	l ₂ [mm]	f [mm]	Material number
GMAR-25-GA03-K-T13-40-50	3	13	40	50	25	33	25	125	39.7	24.3	MM12624781
GMAR-25-GA03-K-T13-50-60	3	13	50	60	25	33	25	125	39.7	24.3	MM12624782
GMAR-25-GA03-K-T13-60-75	3	13	60	75	25	33	25	125	39.7	24.3	MM12624787
GMAR-25-GA03-K-T13-75-100	3	13	75	100	25	33	25	125	39.7	24.3	MM12624789
GMAR-25-GA03-K-T13-100-140	3	13	100	140	25	33	25	125	39.7	24.3	MM12624778
GMAR-25-GA03-K-T13-140-200	3	13	140	200	25	33	25	125	39.7	24.3	MM12624779
GMAL-25-GA03-K-T13-40-50	3	13	40	50	25	33	25	125	39.7	24.3	MM12624771
GMAL-25-GA03-K-T13-50-60	3	13	50	60	25	33	25	125	39.7	24.3	MM12624773
GMAL-25-GA03-K-T13-60-75	3	13	60	75	25	33	25	125	39.7	24.3	MM12624775
GMAL-25-GA03-K-T13-75-100	3	13	75	100	25	33	25	125	39.7	24.3	MM12624776
GMAL-25-GA03-K-T13-100-140	3	13	100	140	25	33	25	125	39.7	24.3	MM12624767
GMAL-25-GA03-K-T13-140-200	3	13	140	200	25	33	25	125	39.7	24.3	MM12624769
GMAR-25-GA04-K-T13-40-50	4	13	40	50	25	33	25	125	39.7	24.3	MM14590378
GMAR-25-GA04-K-T13-50-60	4	13	50	60	25	33	25	125	39.7	24.3	MM14590379
GMAR-25-GA04-K-T13-60-75	4	13	60	75	25	33	25	125	39.7	24.3	MM14590380
GMAR-25-GA04-K-T13-75-100	4	13	75	100	25	33	25	125	39.7	24.3	MM14590384
GMAR-25-GA04-K-T13-100-140	4	13	100	140	25	33	25	125	39.7	24.3	MM14590388
GMAR-25-GA04-K-T13-140-200	4	13	140	200	25	33	25	125	39.7	24.3	MM14590389
GMAL-25-GA04-K-T13-40-50	4	13	40	50	25	33	25	125	39.7	24.3	MM14590390
GMAL-25-GA04-K-T13-50-60	4	13	50	60	25	33	25	125	39.7	24.3	MM14590392
GMAL-25-GA04-K-T13-60-75	4	13	60	75	25	33	25	125	39.7	24.3	MM14590393
GMAL-25-GA04-K-T13-75-100	4	13	75	100	25	33	25	125	39.7	24.3	MM14590394
GMAL-25-GA04-K-T13-100-140	4	13	100	140	25	33	25	125	39.7	24.3	MM14590395
GMAL-25-GA04-K-T13-140-200	4	13	140	200	25	33	25	125	39.7	24.3	MM14590396
GMAR-25-GA05-M-20-45-60	5	20	45	60	25	33	25	150	39	23.3	MM14646118
GMAR-25-GA05-M-20-60-75	5	20	60	75	25	33	25	150	39	23.3	MM14646121
GMAR-25-GA05-M-28-75-100	5	28	75	100	25	33	25	150	47	23.3	MM14646122
GMAR-25-GA05-M-28-100-180	5	28	100	180	25	33	25	150	47	23.3	MM14646123
GMAR-25-GA05-M-32-180-400	5	32	180	400	25	33	25	150	51	23.3	MM14646128
GMAL-25-GA05-M-20-45-60	5	20	45	60	25	33	25	150	39	23.3	MM14646129
GMAL-25-GA05-M-20-60-75	5	20	60	75	25	33	25	150	39	23.3	MM14646130
GMAL-25-GA05-M-28-75-100	5	28	75	100	25	33	25	150	47	23.3	MM14646131
GMAL-25-GA05-M-28-100-180	5	28	100	180	25	33	25	150	47	23.3	MM14646132
GMAL-25-GA05-M-32-180-400	5	32	180	400	25	33	25	150	51	23.3	MM14646133

Module

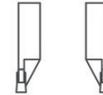




Module GO/GD

Radial



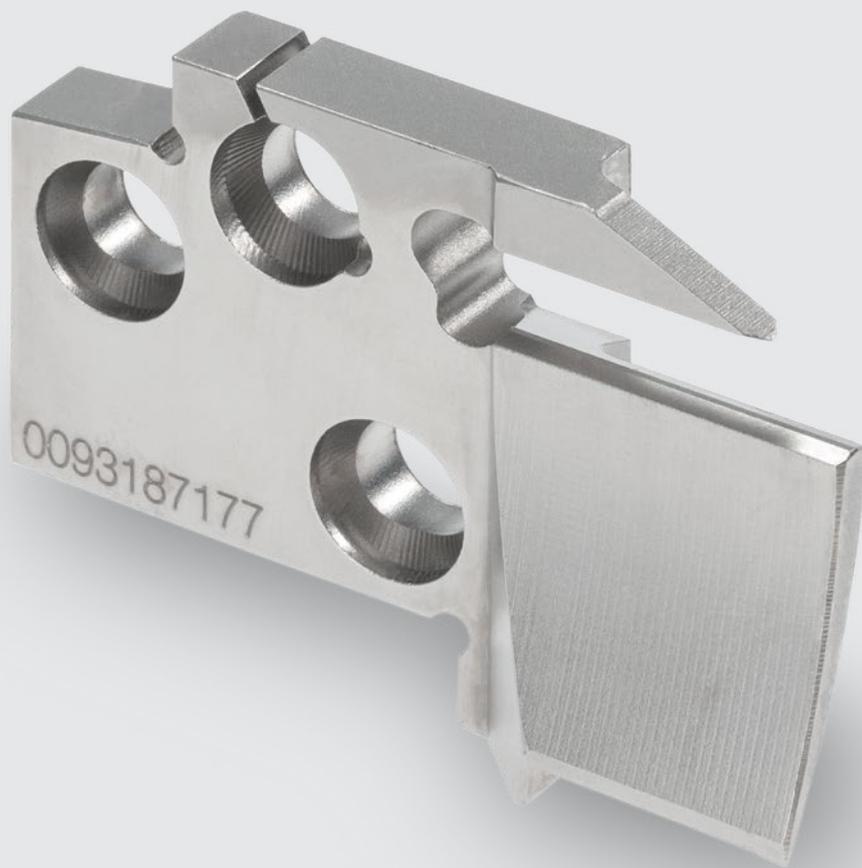


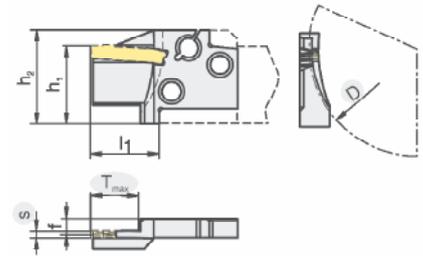
Tool	Designation	T_{max} [mm]	h		Material number
	GEML-2002-GO2402-T25	25	20	L	MM12578880
	GEMR-2002-GO2402-T25	25	20	R	MM12578890
	GEML-2003-GO2403-T25	25	20	L	MM12578885
	GEMR-2003-GO2403-T25	25	20	R	MM12578892
	GEML-2004-GO2404-T25	25	20	L	MM12578889
	GEMR-2004-GO2404-T25	25	20	R	MM12578893
	GEML-2005-GO2405-T25	25	20	L	coming 2022
	GEMR-2005-GO2405-T25	25	20	R	
	GEML-2006-GO2406-T25	25	20	L	coming 2022
	GEMR-2006-GO2406-T25	25	20	R	
	GEML-2502-GO2402-T25	25	25	L	MM12599637
	GEMR-2502-GO2402-T25	25	25	R	MM12599628
	GEML-2503-GO2403-T25	25	25	L	MM12599640
	GEMR-2503-GO2403-T25	25	25	R	MM12599630
	GEML-2504-GO2404-T25	25	25	L	MM12599643
	GEMR-2504-GO2404-T25	25	25	R	MM12599635
	GEML-2505-GO2405-T25	25	25	L	coming 2022
	GEMR-2505-GO2405-T25	25	25	R	
	GEML-2506-GO2406-T25	25	25	L	coming 2022
	GEMR-2506-GO2406-T25	25	25	R	



Module GA

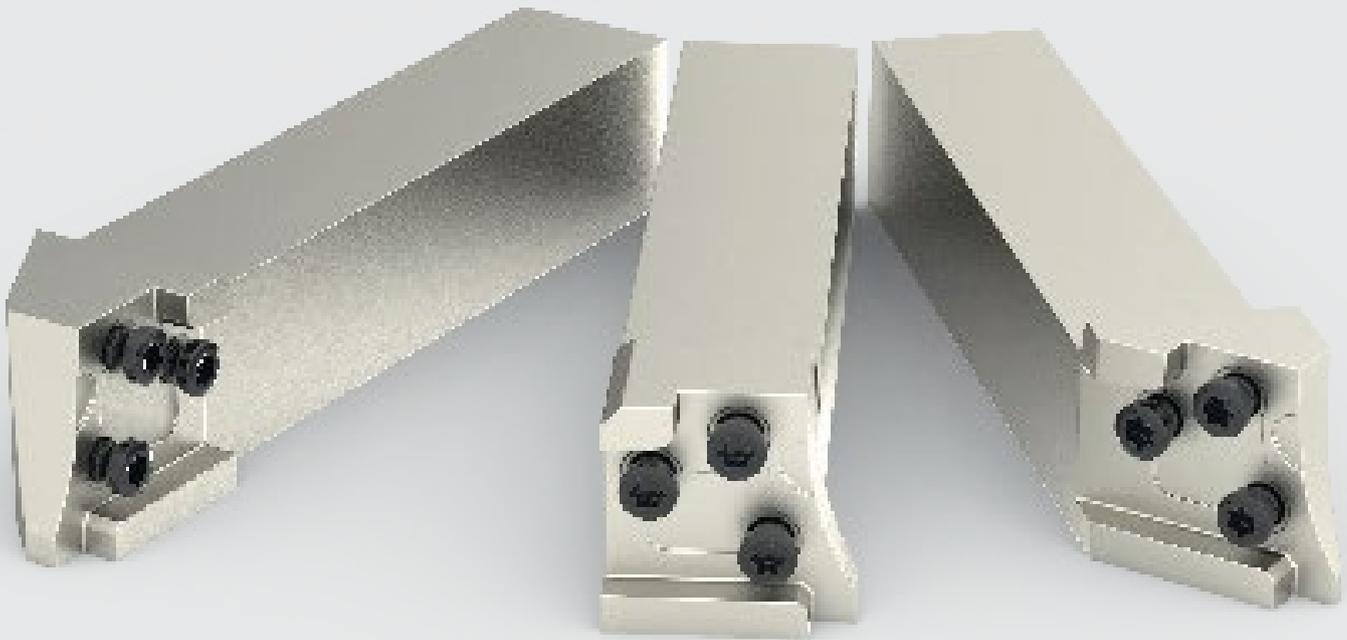
Axial





Designation	s [mm]	T _{max} [mm]	D _{min} [mm]	D _{max} [mm]	h = h ₁ [mm]	h ₂ [mm]	l ₁ [mm]	f [mm]	Material number
GAMR-2503-GA2403-T15-40-50	3	15	40	50	25	30	22	4.9	MM14463975
GAMR-2503-GA2403-T15-50-60	3	15	50	60	25	30	22	4.9	MM14463983
GAMR-2503-GA2403-T15-60-75	3	15	60	75	25	30	22	4.9	MM14464017
GAMR-2503-GA2403-T15-75-100	3	15	75	100	25	30	22	4.9	MM14464019
GAMR-2503-GA2403-T15-100-140	3	15	100	140	25	30	22	4.9	MM14464021
GAMR-2503-GA2403-T15-140-200	3	15	140	200	25	30	22	4.9	MM14464024
GAML-2503-GA2403-T15-40-50	3	15	40	50	25	30	22	4.9	MM14463992
GAML-2503-GA2403-T15-50-60	3	15	50	60	25	30	22	4.9	MM14464003
GAML-2503-GA2403-T15-60-75	3	15	60	75	25	30	22	4.9	MM14464004
GAML-2503-GA2403-T15-75-100	3	15	75	100	25	30	22	4.9	MM14464005
GAML-2503-GA2403-T15-100-140	3	15	100	140	25	30	22	4.9	MM14464007
GAML-2503-GA2403-T15-140-200	3	15	140	200	25	30	22	4.9	MM14464009
GAMR-2504-GA2404-T15-40-50	4	15	40	50	25	30	22	4.4	MM14482809
GAMR-2504-GA2404-T15-50-60	4	15	50	60	25	30	22	4.4	MM14482811
GAMR-2504-GA2404-T15-60-75	4	15	60	75	25	30	22	4.4	MM14482813
GAMR-2504-GA2404-T15-75-100	4	15	75	100	25	30	22	4.4	MM14482815
GAMR-2504-GA2404-T15-100-140	4	15	100	140	25	30	22	4.4	MM14482816
GAMR-2504-GA2404-T15-140-200	4	15	140	200	25	30	22	4.4	MM14482819
GAML-2504-GA2404-T15-40-50	4	15	40	50	25	30	22	4.4	MM14482788
GAML-2504-GA2404-T15-50-60	4	15	50	60	25	30	22	4.4	MM14482790
GAML-2504-GA2404-T15-60-75	4	15	60	75	25	30	22	4.4	MM14482794
GAML-2504-GA2404-T15-75-100	4	15	75	100	25	30	22	4.4	MM14482797
GAML-2504-GA2404-T15-100-140	4	15	100	140	25	30	22	4.4	MM14482800
GAML-2504-GA2404-T15-140-200	4	15	140	200	25	30	22	4.4	MM14482804

Module Holder

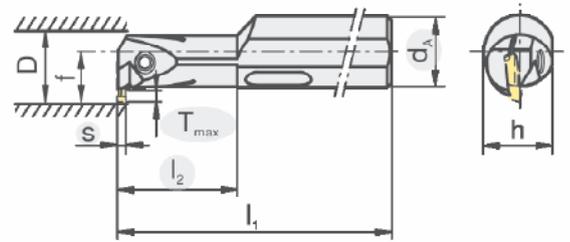


Tool	Designation	s	Module Radial	Module axial	Material number
	GEMHL-M-2020-00-J	0	GEML-20		MM12578894
	GEMHR-M-2020-00-J	0	GEMR-20		MM12578903
	GEMHL-M-2020-45-J	45	GEMR-20		MM12578896
	GEMHR-M-2020-45-J	45	GEML-20		MM12578904
	GEMHL-M-2020-90-J	90	GEML-20		MM12578897
	GEMHR-M-2020-90-J	90	GEMR-20		MM12578905
	GEMHL-M-2525-00-L	0	GEML-25	GAML-25	MM12578898
	GEMHR-M-2525-00-L	0	GEMR-25	GAMR-25	MM12578906
	GEMHL-M-2525-45-L	45	GEMR-25	GAMR-25	MM12578899
	GEMHR-M-2525-45-L	45	GEML-25	GAML-25	MM12578908
	GEMHL-M-2525-90-L	90	GEMR-25	GAMR-25	MM12578900
	GEMHR-M-2525-90-L	90	GEML-25	GAML-25	MM12578918

Spare parts	Designation	Material number
	Key T15	MM220983
	Key T20	MM220985
	M4.0X11/T15	MM219981
	M4.0X14/T15	MM195068
	M5.0X13.5/T20	MM219982
	M5.0X18/T20	MM195069

Boring Bars





Designation	d_A [mm]	T_{max} [mm]	s [mm]	h [mm]	f [mm]	l_1 [mm]	l_2 [mm]	D_{min} [mm]	Material number
GMIR-25-GD2402-T08-C	25	8	2	24.4	21	200	52	32	MM14579550
GMIR-25-GD2403-T09-C	25	9	3	24.5	22	200	52	32	MM14579559
GMIR-32-GD2403-T11-C	32	11	3	31	27.5	250	64	42	MM14531572
GMIR-32-GD2404-T11-C	32	11	4	31	27.5	250	64	42	MM14579577
GMIR-40-GD2404-T12-C	40	12	4	38.5	32.5	300	80	53	MM14579584
GMIR-40-GD2405-T12-C	40	12	5	38.5	32.5	300	80	53	MM14579589
GMIL-25-GD2402-T08-C	25	8	2	24.4	21	200	52	32	MM14579552
GMIL-25-GD2403-T09-C	25	9	3	24.5	22	200	52	32	MM14579575
GMIL-32-GD2403-T11-C	32	11	3	31	27.5	250	64	42	MM14579548
GMIL-32-GD2404-T11-C	32	11	4	31	27.5	250	64	42	MM14579582
GMIL-40-GD2404-T12-C	40	12	4	38.5	32.5	300	80	53	MM14579587
GMIL-40-GD2405-T12-C	40	12	5	38.5	32.5	300	80	53	MM14579592

Spare parts

Designation

Material number



Key T20

MM220985



M5.0X18/T20

MM195069

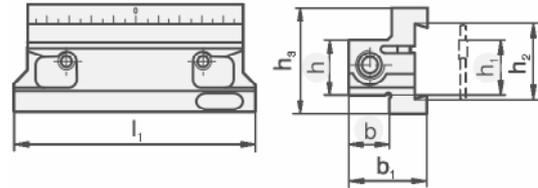


M4.0X4.0 DIN 913

MM1404021

Clamping block





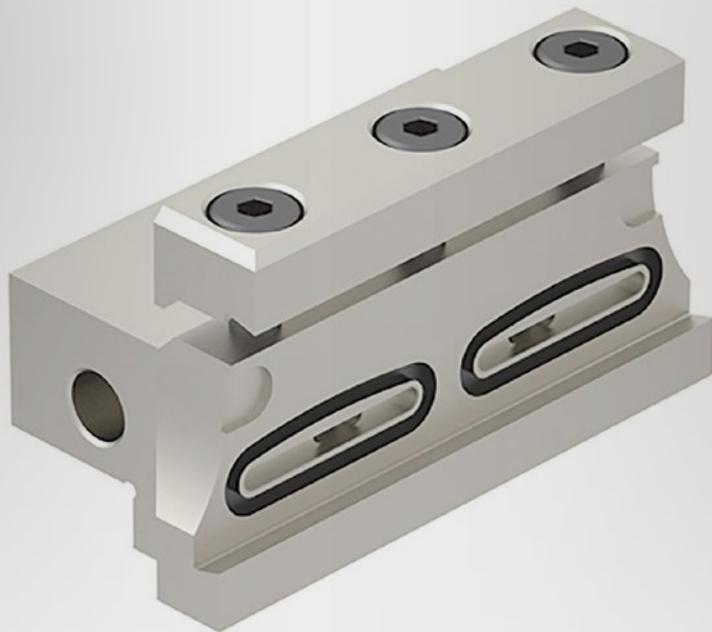
Designation	Material	h_2 [mm]	h [mm]	h_1 [mm]	h_3 [mm]	l_1 [mm]	b [mm]	b_1 [mm]	For blade
SCB-GB26-2020	MM12279141	26	20	20	43	90	20	37	GBN...26...
SCB-GB32-2520	MM12279142	32	25	25	49	110	20	38	GBN...32...

Spare part for clamping block without cooling

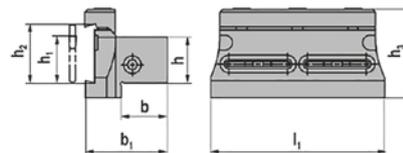
Spare parts	Designation	Material number
	Clamping screw M6.0x25	MM22485

Clamping block

with internal cooling



Range



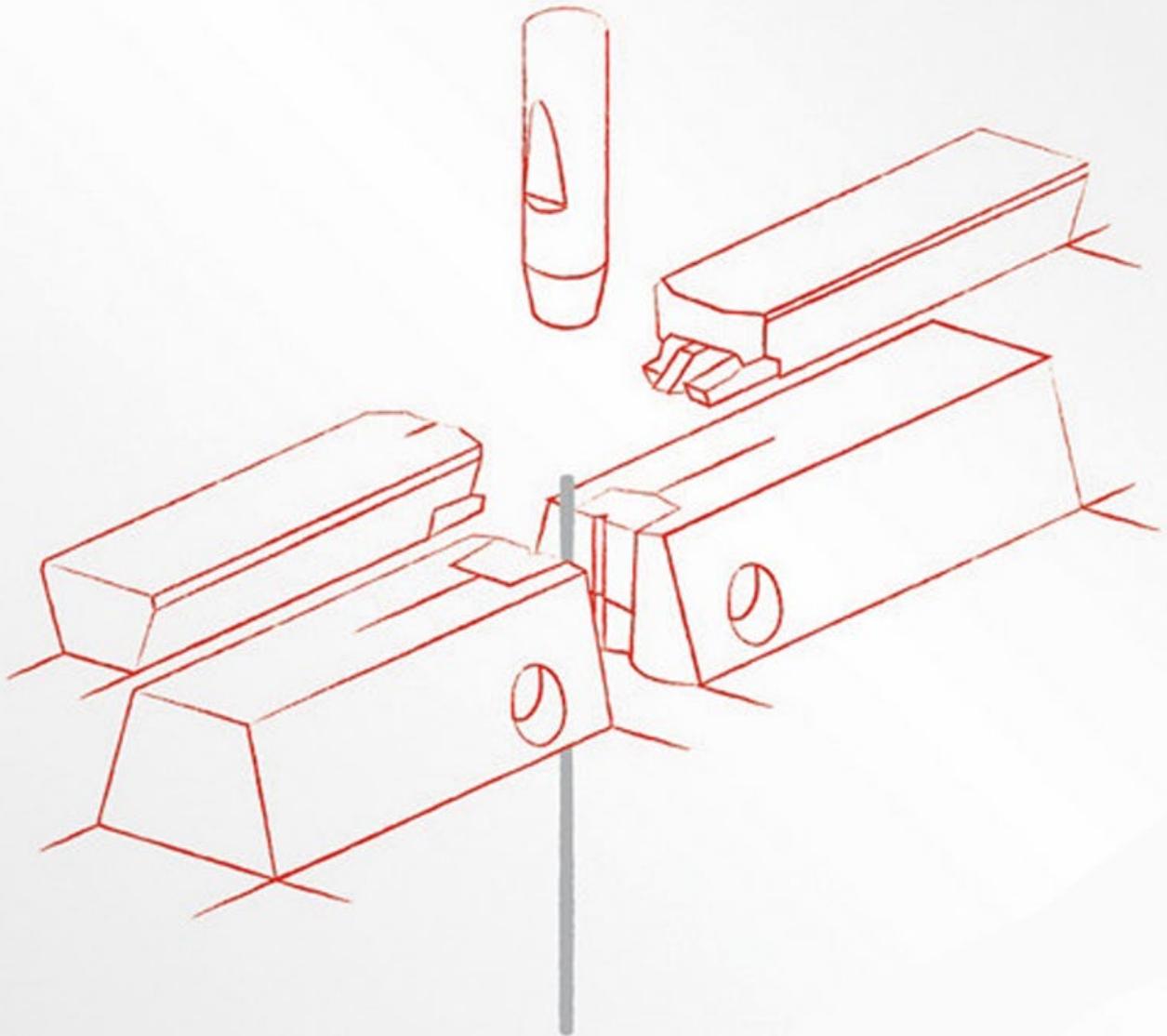
Designation	Material	h_2 [mm]	h [mm]	h_1 [mm]	h_3 [mm]	l_1 [mm]	b [mm]	b_1 [mm]	For blade
SCB-GB26-2020-C	MM12279139	26	20	20	43	82	20	40	GBN...26...
SCB-GB32-2525-C	MM12279137	32	25	25	49	95	25	44.5	GBN...32...

Spare part for clamping block with cooling

Spare parts	Designation	Material number
	Grub screw M6.0x8	MM11960993
	Clamping screw M6.0x12	MM11776816



Technical information



How to use the system?



1

Insert mounting key with handle towards the front into the 2 tool location points



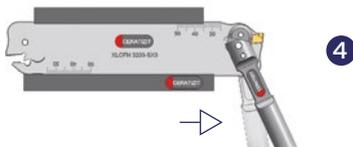
2

When moving the mounting key in the direction of the arrows the insert seat is opened



3

Position the insert pressing it against the location face



4

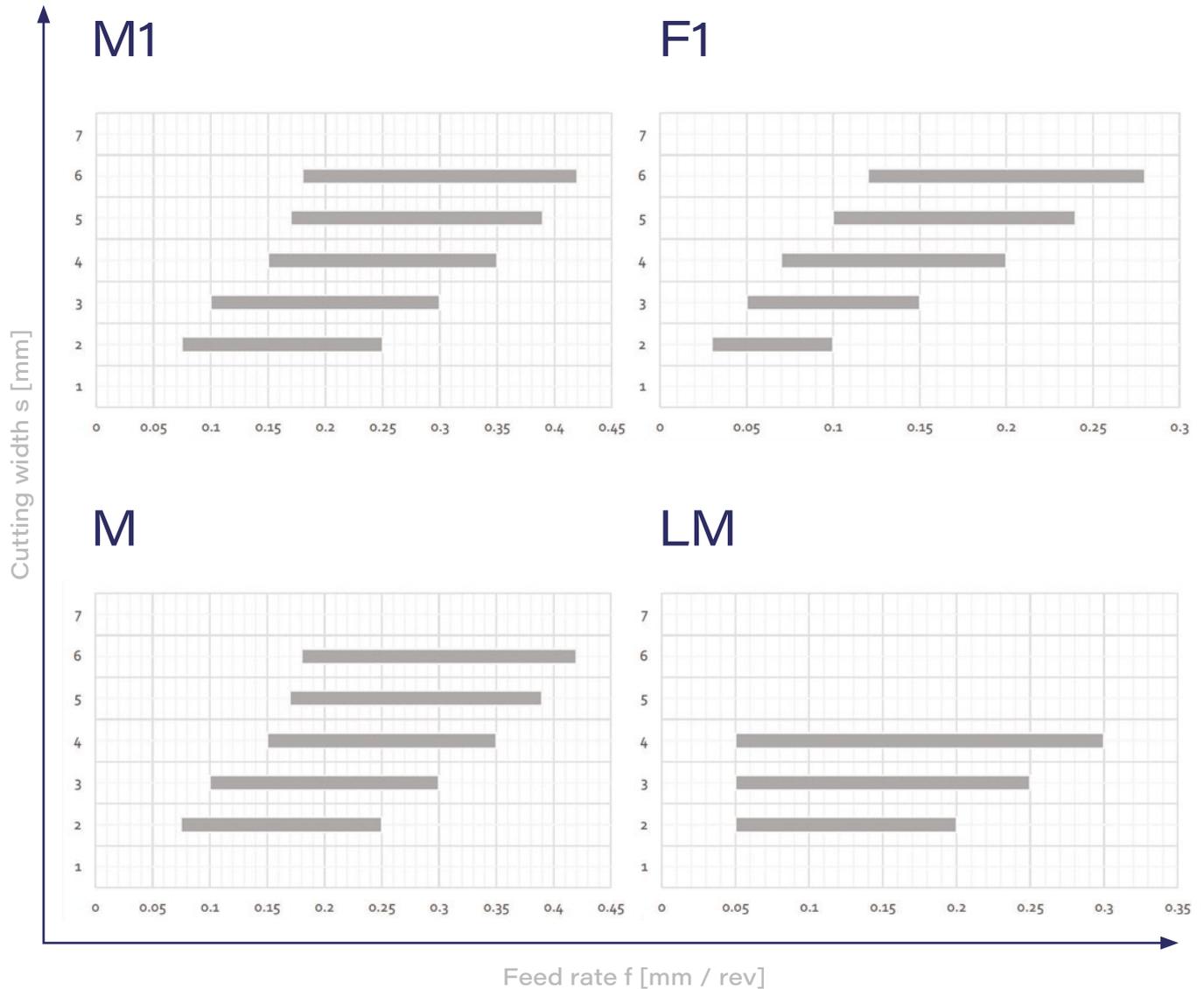
Moving the mounting key forward the insert seat locks and insert is clamped securely

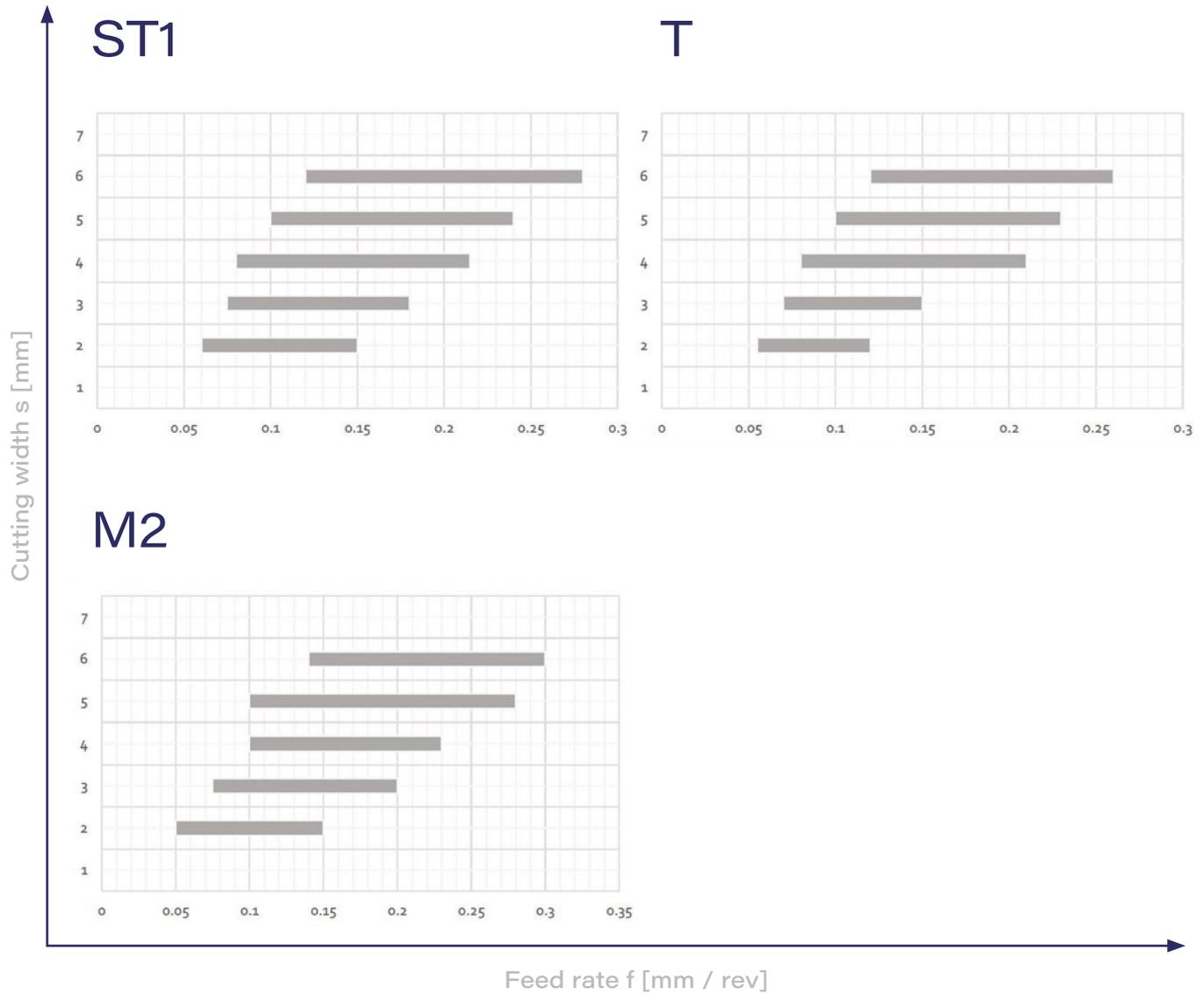


When changing the inserts, always maintain tension on the key!



Feed rate recommendation





Feed rate recommendation

T

Geometry T	0.5 a_p (mm)	1 a_p (mm)	1.5 a_p (mm)	2 a_p (mm)	2.5 a_p (mm)	3 a_p (mm)	3.5 a_p (mm)
Cutting width	avance f mm/tr						
2	0.10 – 0.15	0.05 – 0.15	0.05 – 0.12	0.05 – 0.10			
3	0.10 – 0.17	0.05 – 0.17	0.05 – 0.17	0.05 – 0.15	0.05 – 0.12		
4	0.10 – 0.20	0.07 – 0.20	0.07 – 0.20	0.07 – 0.20	0.07 – 0.17	0.07 – 0.15	
5	0.10 – 0.25	0.10 – 0.25	0.07 – 0.25	0.07 – 0.25	0.07 – 0.22	0.07 – 0.20	
6	0.15 – 0.30	0.15 – 0.30	0.15 – 0.30	0.15 – 0.30	0.15 – 0.30	0.15 – 0.25	0.15 – 0.22

M2

Geometry T	0.5 a_p (mm)	1 a_p (mm)	1.5 a_p (mm)	2 a_p (mm)	2.5 a_p (mm)	3 a_p (mm)
Cutting width	avance f mm/tr					
2	0.05 – 0.17	0.05 – 0.13	0.05 – 0.10			
3	0.07 – 0.20	0.07 – 0.20	0.07 – 0.18	0.07 – 0.15		
4	0.10 – 0.25	0.10 – 0.25	0.10 – 0.25	0.10 – 0.22	0.10 – 0.18	
5	0.12 – 0.27	0.12 – 0.27	0.12 – 0.27	0.12 – 0.25	0.12 – 0.22	
6	0.15 – 0.30	0.15 – 0.30	0.15 – 0.30	0.15 – 0.30	0.15 – 0.25	0.15 – 0.20

M / MM

Geometry T	0.5 a_p (mm)	1 a_p (mm)	1.5 a_p (mm)	2 a_p (mm)	2.5 a_p (mm)	3 a_p (mm)
Cutting width	avance f mm/tr					
2	0.15 – 0.30	0.15 – 0.27				
3	0.15 – 0.35	0.15 – 0.35	0.15 – 0.30			
4	0.15 – 0.40	0.15 – 0.40	0.15 – 0.40	0.15 – 0.30		
5	0.15 – 0.50	0.15 – 0.50	0.15 – 0.50	0.15 – 0.40	0.15 – 0.35	
6	0.20 – 0.70	0.20 – 0.70	0.20 – 0.70	0.20 – 0.60	0.20 – 0.50	0.20 – 0.40

Cutting speed recommendation

M1, F1, T, M, M2

Work piece material	Type of treatment/alloy	Hardness HB	Coated carbide		
			GTP1340 v_c [m/min]	GTCP320ST v_c [m/min]	GTPP345 v_c [m/min]
P Steel	non alloyed steel 0.15% – 0.45% C	150 – 250	80 – 180	110 – 190	80 – 150
	low alloyed steel tempered	250 – 300	60 – 150	110 – 180	70 – 120
	high alloyed steel tempered	350	50 – 120	70 – 160	60 – 100
	corrosion resistant steel annealed	200	50 – 200	120 – 200	90 – 160
M Stainless steel	annealed pearlitic	200	50 – 200	120 – 200	100 – 180
	quenched austenitic	180	50 – 180	100 – 170	80 – 150
	quenched duplex	230 – 260	50 – 100	70 – 110	70 – 110
	hardened martensitic	330	50 – 80	60 – 90	60 – 90
K Cast iron	grey cast iron	180	100 – 200	90 – 180	-
	spheroidal	160	100 – 180	100 – 160	-
	malleable pearlitic	130	80 – 160	80 – 150	-

ST1, MM

Work piece material	Type of treatment/alloy	Hardness HB	Coated carbide		
			GTP1340 v_c [m/min]	GTCP320ST v_c [m/min]	GTPP345 v_c [m/min]
M Stainless steel	annealed pearlitic	200	50 – 200	120 – 200	100 – 180
	quenched austenitic	180	50 – 180	100 – 170	80 – 150
	quenched duplex	230 – 260	50 – 100	70 – 110	70 – 110
	hardened martensitic	330	50 – 80	60 – 90	60 – 90
S Exotic	Fe base	200	-	-	20 – 45
	Nickel or cobalt base	250	-	-	15 – 25
	Titanium	Rm 440	-	-	50 – 120

LM

Work piece material	Type of treatment/alloy	Hardness HB	Uncoated carbide GTWN315 v_c [m/min]
N	Non-ferrous	Aluminium wrought alloys	200 – 2000
		Aluminium cast alloys < 12% Si	400 – 1500
		Copper alloys (bronze)	200 – 600

Maximal torque for screws

Designation	max. torque/Nm	Material
7812115/M6X20 DIN 912	7	MM4493
7802115/M6X25 DIN 912-12.9	7	MM22485
7897218/M4.0X18/T20	4	MM11007006
M6X6 DIN 913	0	MM11040843
7897221/M3.5X14.0/T15	3.2	MM11081190
10010029/M6X12 DIN 912-12.9	7	MM11776816
M0102554/M4.0X16/T20 SCREW	4	MM12003031
7897203/M4.0X14/T15	4	MM195068
7897209/M4.0X11/T15	4	MM219981
7897205/M5.0X18/T20	5	MM195069
7897210/M5.0X13.5/T20	5	MM219982

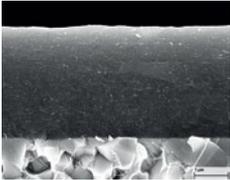
Grade overview



Grade description

GTP1340

HC-P30 | HC-M25 | HC-K30 | HC-S30



Specification:

Composition: Co 9.0 %; mixed carbides 2.0 %; WC balance | Grain size: 0.7-1 μm |
Hardness: HV₃₀ 1590 | Coating specification: PVD TiAlN

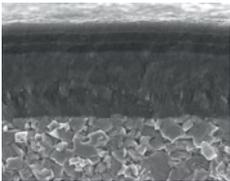
Recommended application:

The universal high-performance grade for steel, austenitic steel, cast iron and heat-resistant alloys.

- ▲ Excellent suitability for universal application
- ▲ High cutting edge stability

GTCP320ST

HC-P35 | HC-K35 | HC-M30



Specification:

Composition: Co 10.5 %; mixed carbides 2.0 %; WC balance | Grain size: 1 μm |
Hardness: HV₃₀ 1400 | Coating specification: CVD TiCN-Al₂O₃ multi-layer

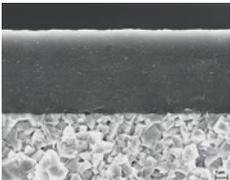
Recommended application:

The reliable choice for the machining of steel and cast iron.

- ▲ Excellent wear resistance
- ▲ Good resistance to oxidation
- ▲ High toughness
- ▲ Good heat resistance

GTPP345

HC-P45 | HC-M40 | HC-S40



Specification:

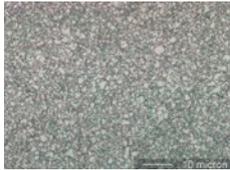
Composition: Co 12.5 %; mixed carbides 2.0 %; WC balance | Grain size: 1-1.5 μm |
Hardness: HV₃₀ 1380 | Coating specification: PVD TiAlTaN

Recommended application:

The reliable solution for steel and austenitic steels under unstable conditions.

- ▲ Ideal for stainless steel
- ▲ Excellent toughness
- ▲ Good wear resistance
- ▲ High application security

GTWN715



HW-K15

Specification:

Composition: Co 6.0% | WC balance; other: 0.20% | Grain size: 0.8-1.3 μm | Hardness: HV₃₀ 1650

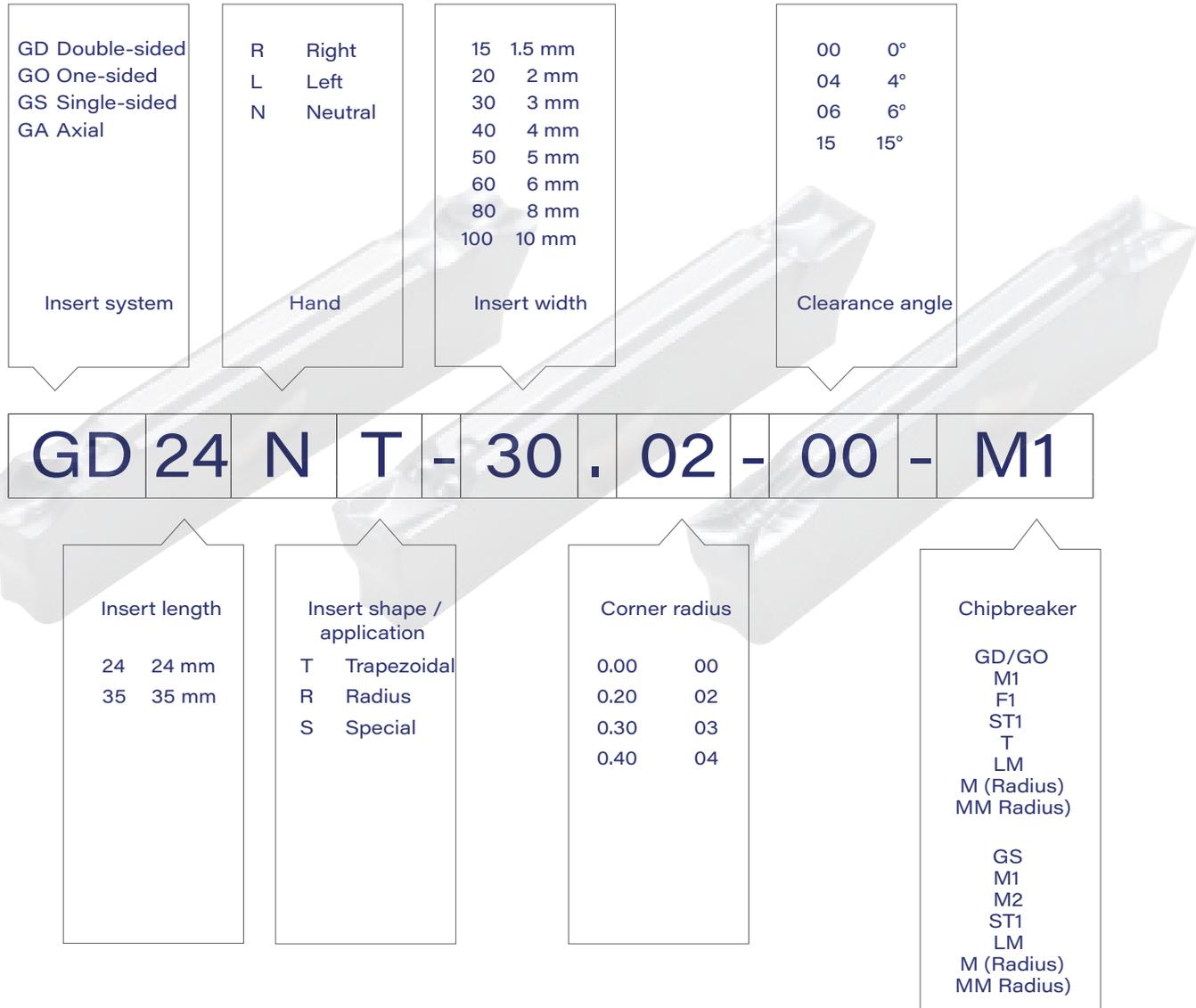
Recommended application:

The uncoated carbide grade for the machining of aluminium and other non-ferrous metals.

- ▲ Optimal suitable for aluminium
 - ▲ High wear resistance
 - ▲ High heat resistance
 - ▲ Low tendency to adhesion
-

GALTONA designation system

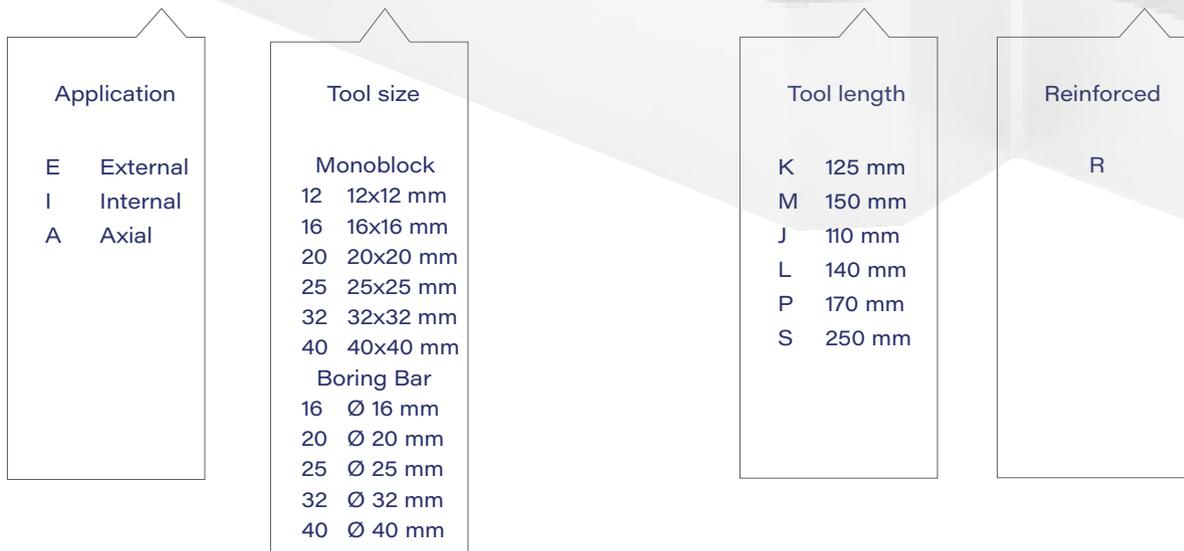
Designation system for inserts



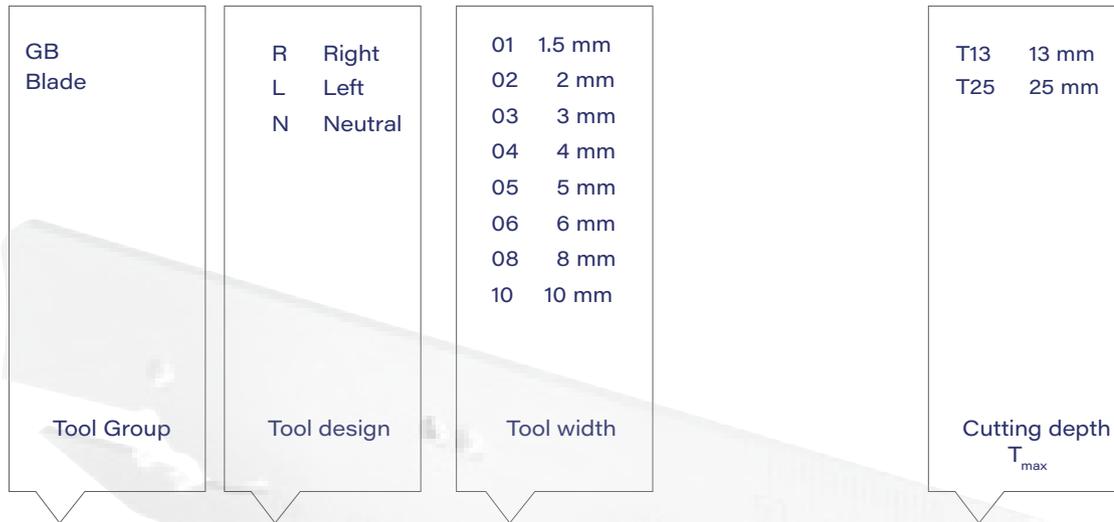
Designation system for Monoblocks tools



GM E R - 16 - GD24 02 - K - T13 - R - C



Designation system for blades



GB E R - 26 03 - GO24 02 T13 - C



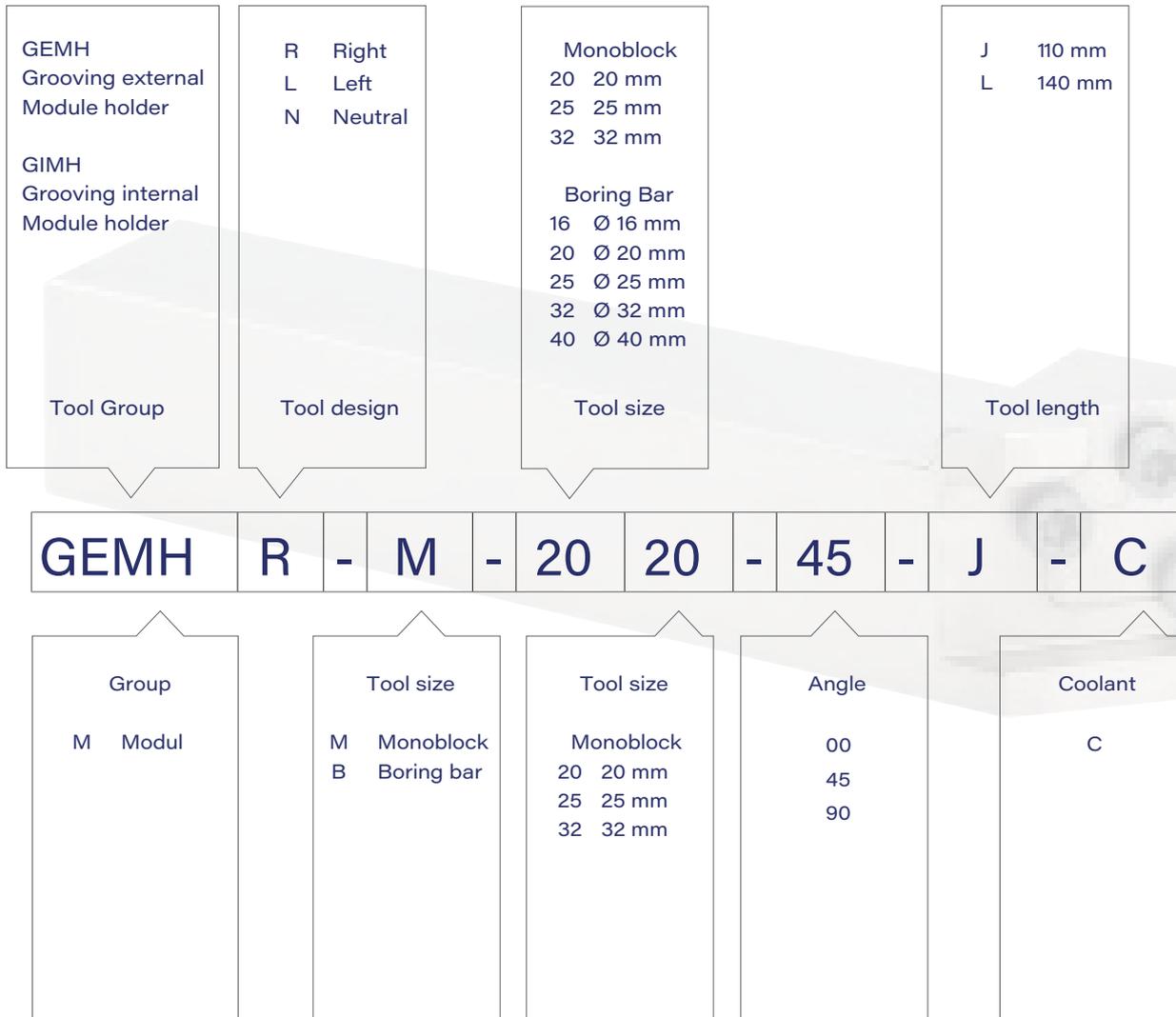
Designation system for moduls

<p>GE External Grooving</p> <p>GA Axial Grooving</p> <p>GI Internal Grooving</p> <p>Tool Group</p>	<p>R Right</p> <p>L Left</p> <p>N Neutral</p> <p>Tool design</p>	<p>01 1.5 mm</p> <p>02 2 mm</p> <p>03 3 mm</p> <p>04 4 mm</p> <p>05 5 mm</p> <p>06 6 mm</p> <p>08 8 mm</p> <p>10 10 mm</p> <p>Tool width</p>	<p>24</p> <p>35</p> <p>Insert type</p>	<p>T13 13 mm</p> <p>T25 25 mm</p> <p>Cutting depth T_{max}</p>	<p>40-50 $D_{min} = \varnothing 40 \text{ mm}$</p> <p>$D_{max} = \varnothing 50 \text{ mm}$</p> <p>Diameter range $D_{min} - D_{max}$</p>
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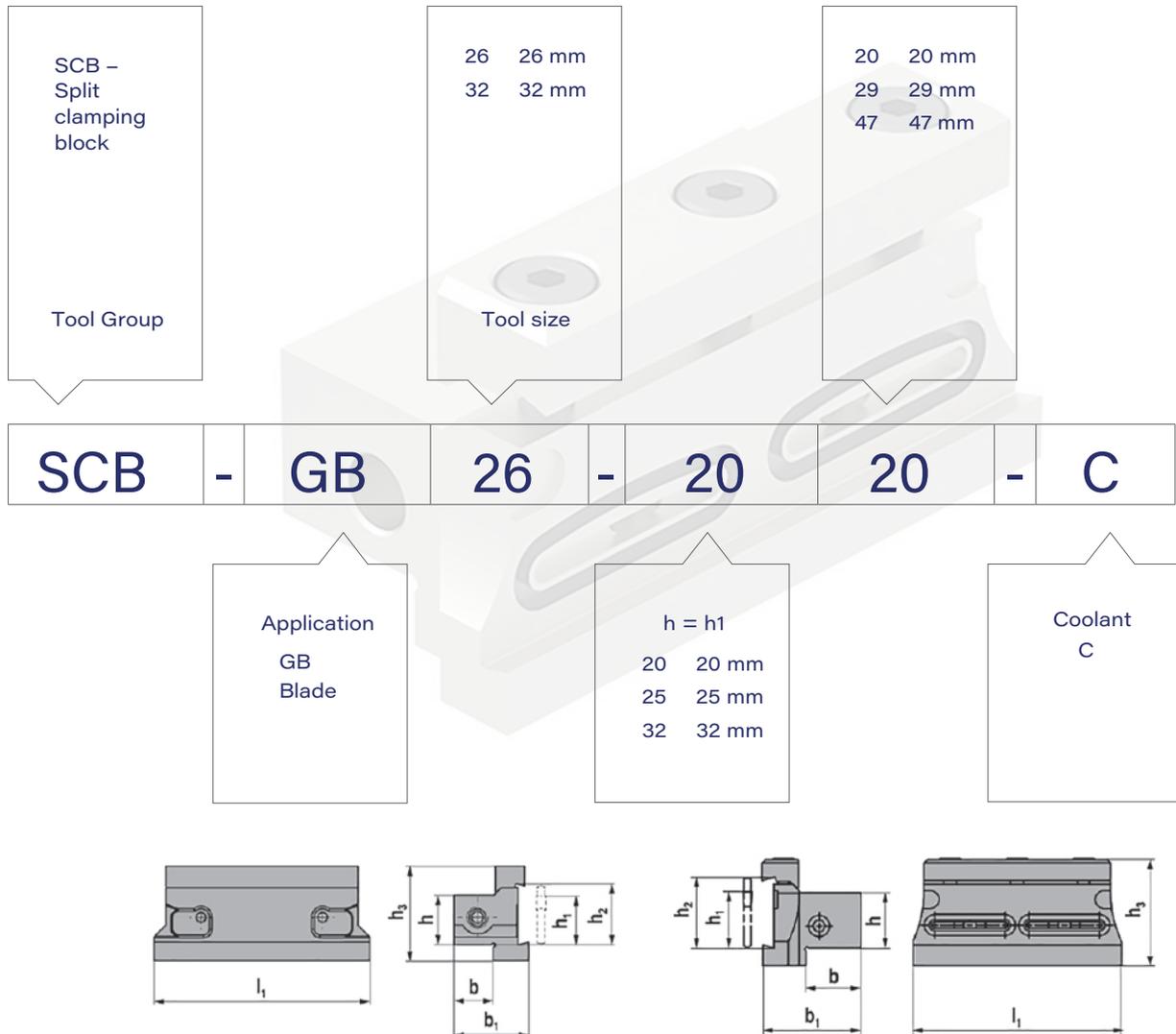
GE M R - 20 03 - GO 24 02 T13 - 40-50 - C

<p>Group</p> <p>M Module</p>	<p>Tool size</p> <p>20 20 mm</p> <p>25 25 mm</p>	<p>Insert type</p> <p>GO</p> <p>GD</p> <p>GS</p> <p>GA</p>	<p>Insert width</p> <p>01 1.5 mm</p> <p>02 2 mm</p> <p>03 3 mm</p> <p>04 4 mm</p> <p>05 5 mm</p> <p>06 6 mm</p> <p>08 8 mm</p> <p>10 10 mm</p>	<p>Coolant</p> <p>C</p>
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Designation system for module holders



Designation system for clamping blocks





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