



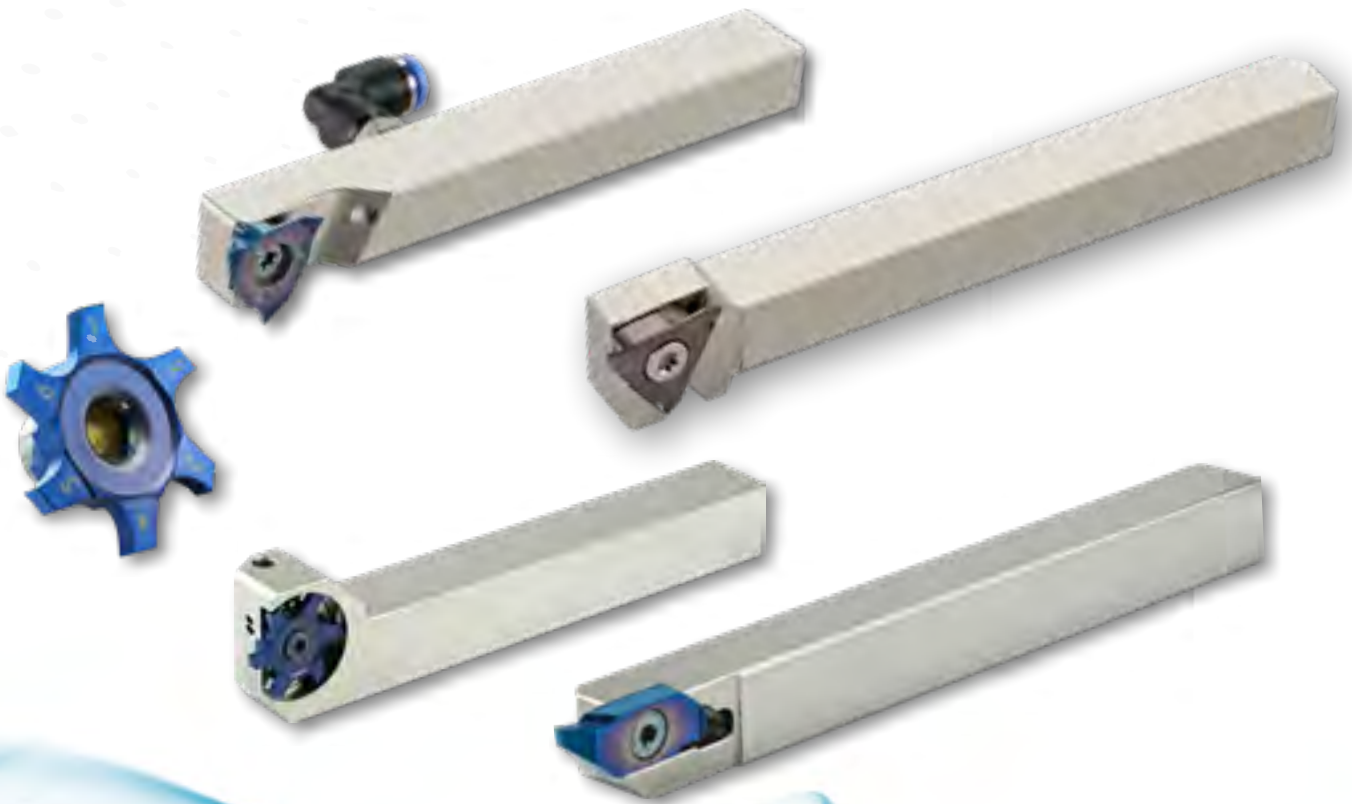
Carmex
Precision Tools Ltd.

The optimal tools for your industry™

车削刀具行业的最佳选择

Swiss-Line

瑞士型自动机床



2020年 公制

Metric 2020

Contents: 目录 Page: 页数

Introduction - Swiss Line 瑞士自动机床/车床刀具介绍	2
Polygon Inserts and Toolholders 多用途刀片和刀杆	2
Product Identification - Inserts 产品标识-刀片	3
Grooving and Turning 槽和车刀片	4
Grooving, Circlip Ring Grooves 槽和开口环槽	5
Grooving and Profiling (full radius) 槽和仿形 (R槽)	6
Parting Off and Grooving 切断和槽	7-8
Back Turning 背车 (反扫)	9
Front Turning 前车 (前扫)	9
Threading - Partial Profile 60° 螺纹-60°-范围牙	10
Threading - Partial Profile 55° 螺纹-55°-范围牙	10
Threading - ISO metric 60° Full Profile 螺纹-60°-ISO-完整牙	11
Threading - UN unified 60° Full Profile 螺纹-60°-UN-完整牙	11
External Toolholders 外车刀杆	12-13
Product Identification - Toolholders 产品标识-车刀杆	12
External Toolholders With Internal Coolant 外车刀杆带内冷	13
Working Method 加工方法	14
Technical Section - Polygon Swiss Line 技术细节截图-多功能瑞士车刀	15
3 Cutting Edges Swiss Line Inserts and Toolholders 瑞士车刀刀片切削刃和刀杆	16
Product Identification - Inserts 产品标识-刀片	17
16 mm Inserts and Toolholders 16mm刀片和刀杆	18
Grooving 槽	18
Grooving, Circlip Ring Grooves 槽/开口环槽	18
External Toolholders 外车刀杆	19
Technical Section - 3 Cutting Edges Swiss Line Inserts (16 mm) 技术细节截图-3切削刃瑞士车刀片 (16mm)	20
19,20 mm Inserts and Toolholders 19/20mm车刀片和刀杆	21
Grooving and Turning 槽和车	21
Grooving and Profiling (full radius) 槽和仿形 (R槽)	22
Parting Off 切断	23
Back Turning 背车 (反扫)	24
Front Turning 前车 (前扫)	24
Threading - Partial Profile 60° 螺纹-60°-范围牙	25
Threading - Partial Profile 55° 螺纹-55°-范围牙	25
Threading - ISO metric 60° - Full Profile 螺纹-60°-ISO-完整牙	26
Threading - UN unified 60° - Full Profile 螺纹-60°-UN-完整牙	26
External Toolholders 外车刀杆	27-28
Product Identification - Toolholders 产品标识-刀杆	27
Slim Holders 细长(窄)刀杆	28
Working Method: Grooving - Parting Off - Turning - Profiling - Threading 槽-切断-车-仿形-螺纹加工方法	29
Technical Section - 3 Cutting Edges Swiss Line Inserts (19,20 mm) 技术细节截图-3切削刃刀片 (19/20mm)	30
6 Cutting edges G6 Turning inserts and Toolholders 6切削刃-G6车刀片和刀杆	31
Product Identification - Inserts 产品标识-刀片	32
Grooving 槽	33
Grooving, Circlip Ring Grooves 槽-开口环槽	34
Grooving and Profiling (full radius) 槽-仿形 (R槽)	34
Parting Off and Grooving 切断和槽	35
Back Turning 背车 (反扫)	36
Front Turning 前车 (前扫)	36
Threading - Partial Profile 60° 螺纹-60°-范围牙	37
Threading - Partial Profile 55° 螺纹-55°-范围牙	37
Threading - ISO metric 60° Full Profile 螺纹-60°-ISO-完整牙	38
Threading - UN unified 60° Full Profile 螺纹-60°-UN-完整牙	38
External Toolholders 外车刀杆	39
Product Identification - Toolholders 产品标识-刀杆	39
Technical Section - G6 Inserts 技术细节截图-G6 刀片	40

Swiss-Line 瑞士自动机床/车床

- Swiss style lathes are becoming a popular alternative to large lathes and machining centers in many companies. 瑞士车床正在成为很多公司的大型车床和加工中心的通用替代机床。
- Carmex is introducing a new line of inserts and toolholders, developed for automatic and Swiss style lathes. Carmex 推荐为瑞士自动机床和车床开发的一系列新的刀片和刀杆。
- Designed for economic production of parting, grooving, profiling threading and chamfering. 为经济效益而设计的，用于切断，切槽，仿形，车螺纹和倒角。

Polygon Inserts and Toolholders

多用途刀片和刀杆

Carmex extends the Swiss Line range by offering a new type of polygon inserts and toolholders for external turning, grooving, parting and threading on Swiss-Type machines. Specially designed for small parts machining.

Carmex扩充了为小零件加工而专门设计的，在瑞士机床范围内进行车削、切槽、切断和螺纹加工的新型的多用途刀片和刀杆，



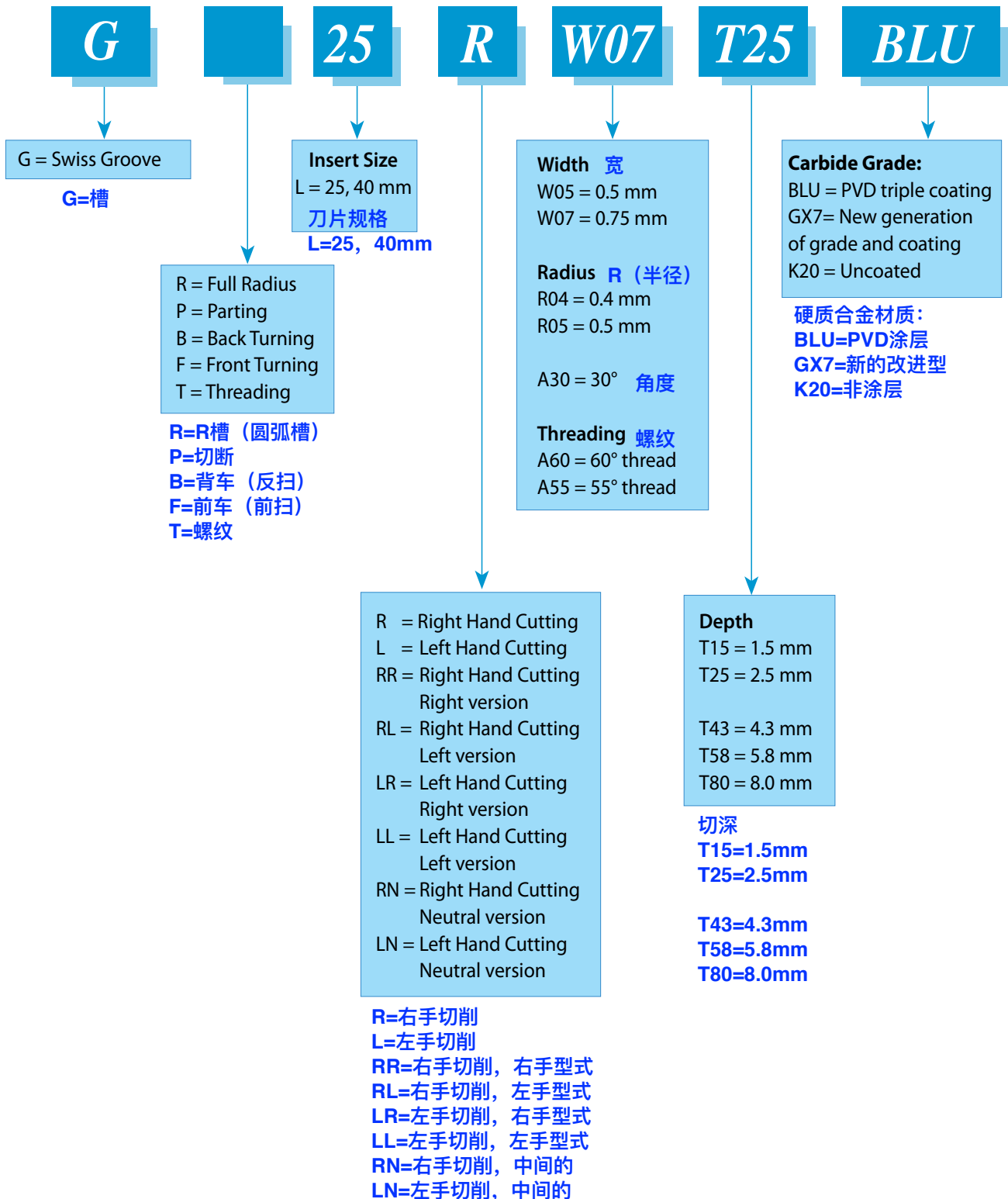
Features 特点

- High precision ground inserts. 高精度磨制刀片。
- All inserts can be used with same toolholders. 全部刀片都可以用在相同的刀杆上。
- A combination of the latest carbide and coating technologies guarantees maximum tool life and improved productivity. 新的硬质合金材质和涂层技术的结合，保证了最大的刀具寿命和生产效率。
- Compatible with a wide range of materials. 适合宽范围的材料加工。
- Coated holders provide abrasive resistance. 涂层刀杆增加耐磨性。

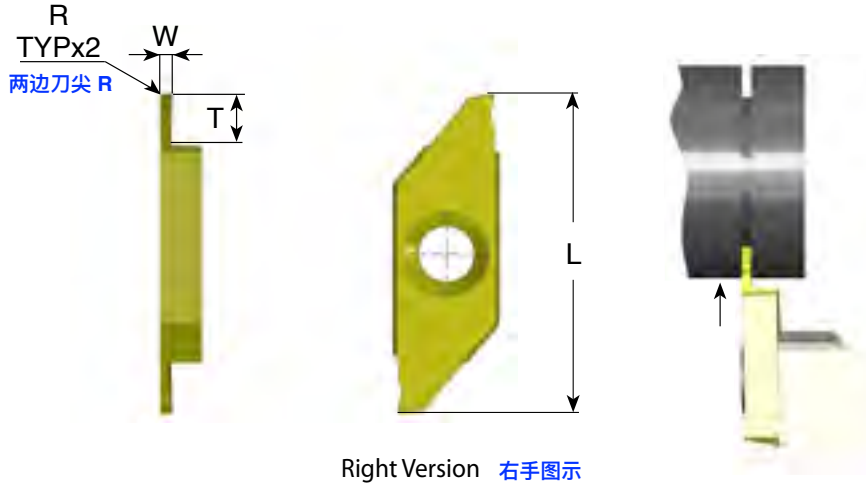
Carbide grades: BLU, GX7, K20 硬质合金材质: BLU, GX7, K20

Product Identification - Ordering Codes 产品标识-订货标识

Polygon Inserts 多用途刀片



Grooving and Turning 槽和车



Right hand cutting 右手切削

Insert Size L	订货号 Ordering Code	刃宽 W ±.002	切深 T max	刀尖R R	进给范围 Feed mm/rev mm/每转
刀片规格 L 25	G25 R W05 T15	0.5	1.5	0	0.01-0.06
	G25 R W07 T25	0.75	2.5	0	0.02-0.07
	G25 R W10 T27	1.0	2.7	0.05	0.02-0.09
	G25 R W12 T30	1.2	3.0	0.05	0.02-0.10
	G25 R W15 T38	1.5	3.8	0.05	0.02-0.12
	G25 R W20 T38	2.0	3.8	0.05	0.02-0.13
	G25 R W25 T38	2.5	3.8	0.05	0.02-0.14
40	G40 R W30 T80	3.0	8.0	0.05	0.02-0.14
	G40 R W40 T80	4.0	8.0	0.05	0.02-0.14

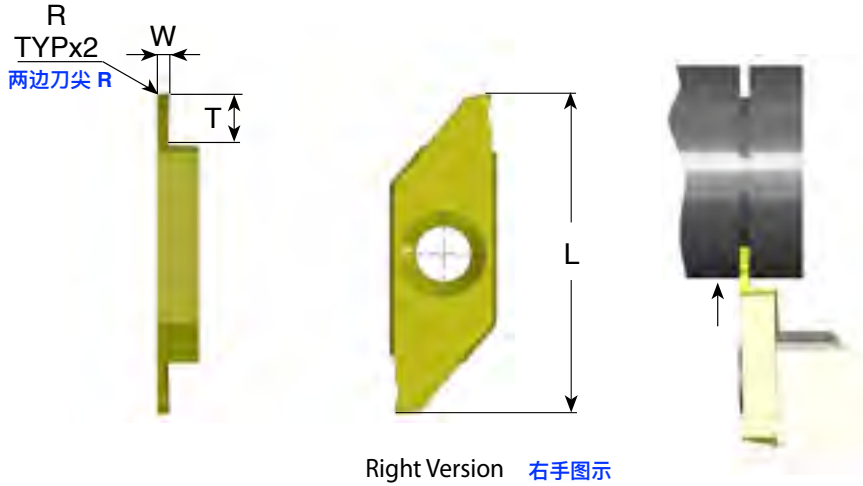
	K20	BLU	GX7*
P		●	●
M	●	●	●
K	●	○	○
N	●		
S	○	○	●
H		≤45 HRc	≤58 HRc

For L.H, specify G25 L instead of G25 R 左手刀杆指定 G25 L 而不是 G25 R

* Available for insert size G25... only GX7材质只有G25刀片

Grooving, Circlip Ring Grooves 槽, 开口环槽

DIN 471/472 DIN 471 / 472



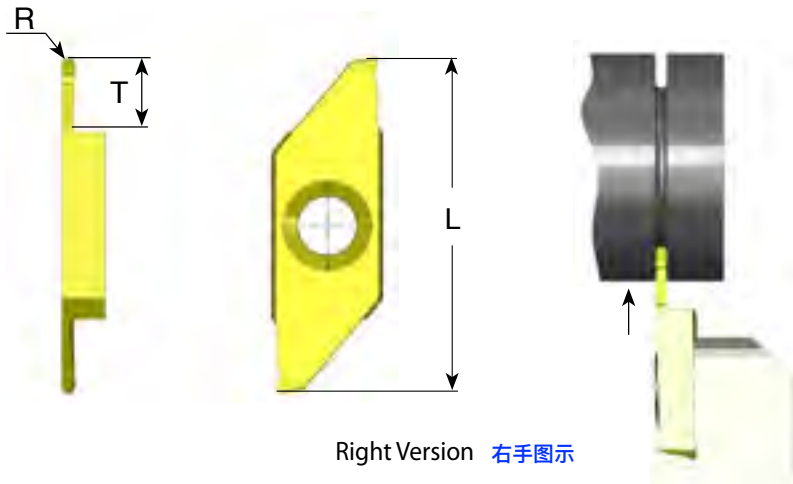
Right hand cutting 右手切削

Insert Size L	订货号 Ordering Code	Nom` groove width	槽宽	切削刃宽 W-0.05	切深 T max	刀尖 R	进给范围 Feed Inch/rev 英寸/每转
刀片规格 L 25	GD25 R W05 T16	0.50	0.57	1.6	0	0.01-0.06	
	GD25 R W06 T17	0.60	0.67	1.7	0	0.01-0.06	
	GD25 R W07 T19	0.70	0.77	1.9	0	0.02-0.07	
	GD25 R W08 T22	0.80	0.87	2.2	0	0.02-0.09	
	GD25 R W09 T24	0.90	0.97	2.4	0	0.02-0.09	
	GD25 R W12 T31	1.10	1.24	3.1	0.05	0.02-0.10	
	GD25 R W14 T33	1.30	1.44	3.3	0.05	0.02-0.12	
	GD25 R W17 T33	1.60	1.74	3.3	0.05	0.02-0.13	
	GD25 R W19 T39	1.85	1.99	3.9	0.05	0.02-0.13	
	GD25 R W22 T45	2.15	2.29	4.5	0.05	0.02-0.14	
	GD25 R W27 T55	2.65	2.79	5.5	0.05	0.02-0.14	

	K20	BLU	GX7
P		●	●
M	●	●	●
K	●	○	○
N	●		
S	○	○	●
H		≤45 HRc	≤58 HRc

For L.H, specify GD25 L instead of GD25 R 左手刀杆指定 GD25 L 而不是GD25 R
 Nom` = nominal Nom` = 标定尺寸 (公称尺寸)

Grooving and Profiling (full radius) 槽和仿形 (R 槽)



Right Version 右手图示

Right hand cutting 右手切削

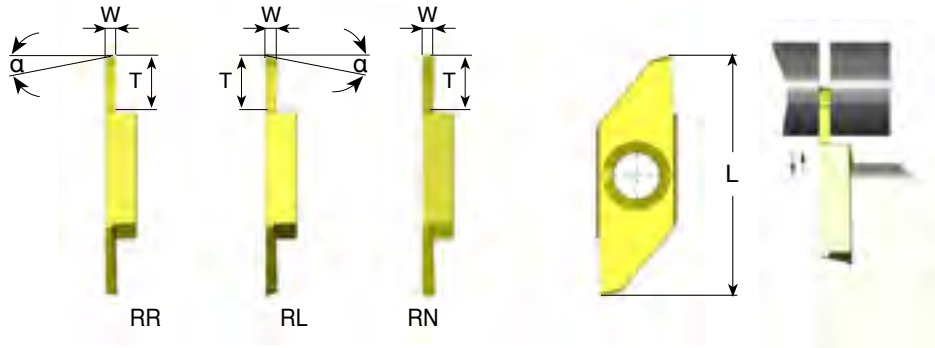
Insert Size L	订货号 Ordering Code	半径 R±0.03	切深 T max	进给范围 Feed mm/rev mm/每转
刀片规格 L 25	GR25 R R02 T15	0.25	1.5	0.01-0.06
	GR25 R R04 T25	0.40	2.5	0.02-0.07
	GR25 R R05 T27	0.50	2.7	0.02-0.09

For L.H, specify GR25 L instead of GR25 R 左手刀杆指定 GR25 L 而不是 GR25 R

	K20	BLU	GX7
P		●	●
M	●	●	●
K	●	○	○
N	●		
S	○	○	●
H		≤45 HRc	≤58 HRc

● First choice 首选 ○ Alternative 替换

Parting Off and Grooving 切断和槽



Right Version 右手图示

Right hand cutting 右手切削

Insert Size L	订货号 Ordering Code	切削刃宽 W	角度 α°	切深 T max	进给范围 Feed mm/rev mm/每转
刀片规格 L	GP25 RR W05 T30	0.5	15	3.0	0.02-0.06
	GP25 RL W05 T30	0.5	15	3.0	0.02-0.06
	GP25 RN W05 T30	0.5	0	3.0	0.02-0.06
	GP25 RR W07 T43	0.7	15	4.3	0.02-0.08
	GP25 RL W07 T43	0.7	15	4.3	0.02-0.08
	GP25 RN W07 T43	0.7	0	4.3	0.02-0.08
	GP25 RR W08 T50	0.8	15	5.0	0.02-0.08
	GP25 RL W08 T50	0.8	15	5.0	0.02-0.08
	GP25 RN W08 T50	0.8	0	5.0	0.02-0.08
	GP25 RR W10 T58	1.0	15	5.8	0.02-0.13
	GP25 RL W10 T58	1.0	15	5.8	0.02-0.13
	GP25 RN W10 T58	1.0	0	5.8	0.02-0.13
	GP25 RR W12 T58	1.2	15	5.8	0.02-0.13
	GP25 RL W12 T58	1.2	15	5.8	0.02-0.13
	GP25 RN W12 T58	1.2	0	5.8	0.02-0.13
	GP25 RR W15 T58	1.5	15	5.8	0.02-0.13
	GP25 RL W15 T58	1.5	15	5.8	0.02-0.13
	GP25 RN W15 T58	1.5	0	5.8	0.02-0.13
	GP25 RR W18 T58	1.8	15	5.8	0.02-0.13
	GP25 RL W18 T58	1.8	15	5.8	0.02-0.13
	GP25 RN W18 T58	1.8	0	5.8	0.02-0.13
	GP25 RR W20 T58	2.0	15	5.8	0.02-0.13
	GP25 RL W20 T58	2.0	15	5.8	0.02-0.13
	GP25 RN W20 T58	2.0	0	5.8	0.02-0.13
GP25 RR W20 T75	2.0	15	7.5	0.02-0.10	
GP25 RL W20 T75	2.0	15	7.5	0.02-0.10	
GP25 RN W20 T75	2.0	0	7.5	0.02-0.10	
GP25 RR W25 T58	2.5	15	5.8	0.04-0.13	
GP25 RL W25 T58	2.5	15	5.8	0.04-0.13	
GP25 RN W25 T58	2.5	0	5.8	0.04-0.13	

	K20	BLU	GX7
P		●	●
M	●	●	●
K	●	○	○
N	●		
S	○	○	●
H		≤45 HRc	≤58 HRc

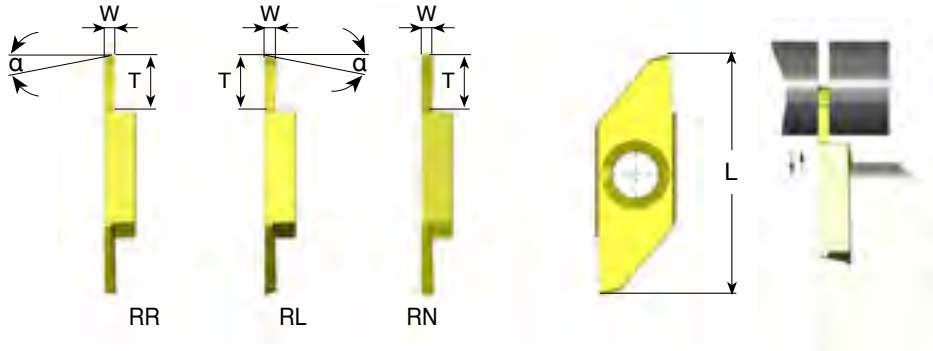
For L.H, specify GP25 LR instead of GP25 RR 左手刀杆指定 GP25 LR 而不是 GP25 RR

GP25 LL instead of GR25 RL 左手刀杆指定 GP25 LL 而不是 GP25 RL

GP25 LN instead of GR25 RN 左手刀杆指定 GP25 LN 而不是 GP25 RN

● First choice ○ Alternative
首选 替换

Parting Off and Grooving 切断和切槽



Right Version 右手图示

Right hand cutting 右手切削

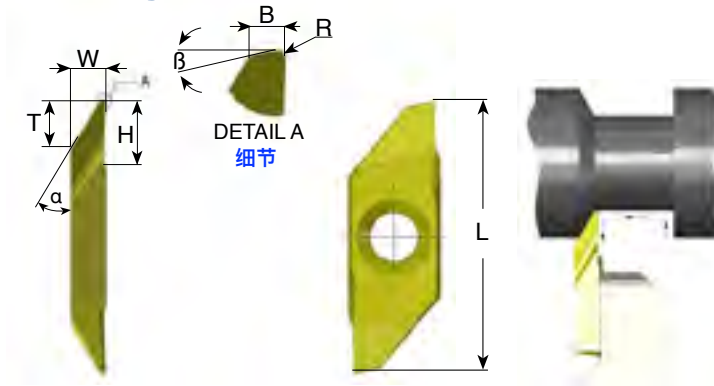
Insert Size L 刀片规格 L	订货号 Ordering Code	切削刃宽 W	角度 α°	切深 T max	进给范围 Feed mm/rev mm/每转
40	GP40 RR W15 T80	1.5	15	8.0	0.03-0.08
	GP40 RL W15 T80	1.5	15	8.0	0.03-0.08
	GP40 RN W15 T80	1.5	0	8.0	0.03-0.08
	GP40 RR W18 T95	1.8	15	9.5	0.03-0.08
	GP40 RL W18 T95	1.8	15	9.5	0.03-0.08
	GP40 RN W18 T95	1.8	0	9.5	0.03-0.08
	GP40 RR W20 T110	2.0	15	11.0	0.03-0.08
	GP40 RL W20 T110	2.0	15	11.0	0.03-0.08
	GP40 RN W20 T110	2.0	0	11.0	0.03-0.08
	GP40 RR W25 T130	2.5	15	13.0	0.03-0.08
	GP40 RL W25 T130	2.5	15	13.0	0.03-0.08
	GP40 RN W25 T130	2.5	0	13.0	0.03-0.08
	GP40 RR W30 T130	3.0	15	13.0	0.03-0.08
	GP40 RL W30 T130	3.0	15	13.0	0.03-0.08
GP40 RN W30 T130	3.0	0	13.0	0.03-0.08	

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GP25 LR instead of GP25 RR 左手刀杆指定 GP25 LR 而不是 GP25 RR
 GP25 LL instead of GR25 RL 左手刀杆指定 GP25 LL 而不是 GP25 RL
 GP25 LN instead of GR25 RN 左手刀杆指定 GP25 LN 而不是 GP25 RN

● First choice ○ Alternative
 首选 替换

Back Turning 背车 (反扫)



Right Version 右手图示

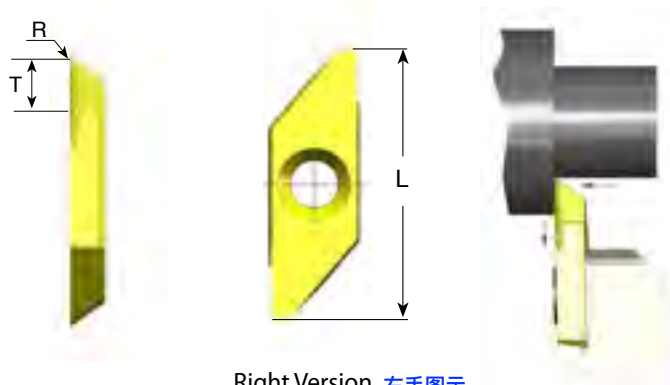
Right hand cutting 右手切削

Insert Size L	订货号 Ordering Code	角度 α°	角度 β°	刀尖 R	刃宽 W	切深 T max	刃尖宽 B	刃长 H	进给范围 Feed mm/rev mm/每转
刀片规格 L	GB25 R A30 R03	30	15	0.03	3.0	4.0	0.5	8.0	0.05-0.12
25	GB25 R A30 R10	30	15	0.10	3.0	4.0	0.5	8.0	0.05-0.12
	GB25 R A30 R20	30	15	0.20	3.0	4.0	0.5	8.0	0.05-0.12

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GB25 L instead of GB25 R 左手刀杆指定 GB25 L 而不是 GB25 R

Front Turning



Right Version 右手图示

Right hand cutting 前车 (前扫)

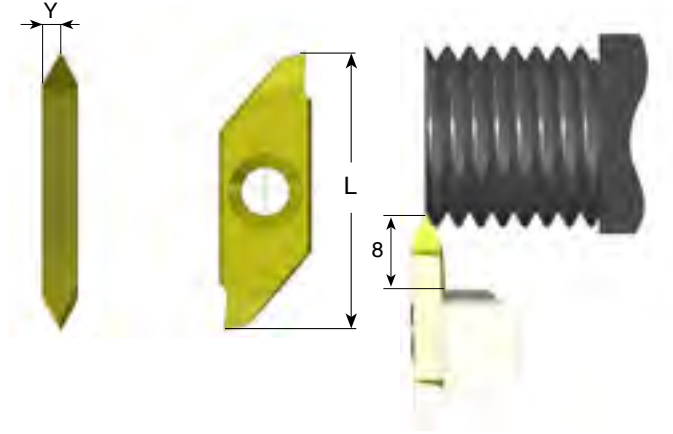
Insert Size L	订货号 Ordering Code	切深 T max	刀尖 R	进给范围 Feed mm/rev mm/每转
刀片规格 L	GF25 R T40	4.0	0.05	0.05-0.12
25	GF25 R T40 R10	4.0	0.10	0.05-0.12
	GF25 R T70	7.0	0.05	0.05-0.08

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GF25 L instead of GF25 R 左手刀杆指定 GF25 L 而不是 GF25 R

● First choice 首选 ○ Alternative 替换

Threading - Partial Profile 60° 螺纹-范围牙 60°



Right Version 右手图示

Right hand cutting 右手切削

Insert Size L 刀片规格 L	订货号 Ordering Code	Pitch Range 螺距范围		刀尖位置 Y
		mm	TPI	
25	GT25 R A60	0.25-0.8	100-32	0.7
	GT25 R G60	1.0-3.0	24-8	1.6

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GT25 L instead of GT25 R 左手刀杆指定 GT25 L 而不是 GT25 R

Threading - Partial Profile 55° 螺纹-范围牙 55°

Right hand cutting 右手切削

Insert Size L 刀片规格 L	订货号 Ordering Code	Pitch Range 螺距范围		刀尖位置 Y
		mm	TPI	
25	GT25 R A55	0.5-1.5	48-16	1.0
	GT25 R G55	1.75-3.0	14-8	1.6

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

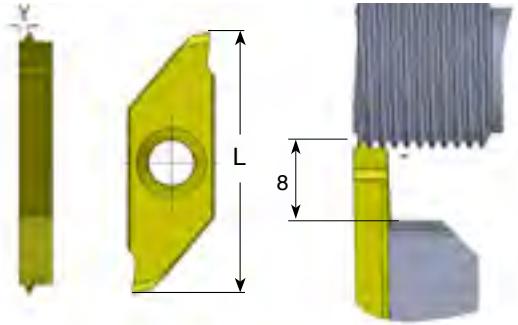
For L.H, specify GT25 L instead of GT25 R 左手刀杆指定 GT25 L 而不是 GT25 R

● First choice 首选 ○ Alternative 替换

Threading - ISO metric 60° Full Profile 螺纹-ISO 60° 完整牙

External thread 外螺纹

外螺纹



Right Version 右手图示

Right hand cutting 右手切削

Insert Size L	订货号 Ordering Code	螺距 Pitch mm	刀尖位置 Y
刀片规格 L 25	GT25 R 0.5ISO	0.5	0.6
	GT25 R 0.6ISO	0.6	0.6
	GT25 R 0.7ISO	0.7	0.7
	GT25 R 0.75ISO	0.75	0.7
	GT25 R 0.8ISO	0.8	0.7
	GT25 R 1.0ISO	1.0	0.8
	GT25 R 1.25ISO	1.25	1.0
	GT25 R 1.5ISO	1.5	1.1

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GT25 L instead of GT25 R 左手刀杆指定 GT25 L 而不是 GT25 R

Threading - UN unified 60° Full Profile 螺纹-UN 60° 完整牙

External thread 外螺纹

Right hand cutting 右手切削

Insert Size L	订货号 Ordering Code	每牙牙数 Pitch TPI	刀尖位置 Y
刀片规格 L 25	GT25 R 56UN	56	0.6
	GT25 R 40UN	40	0.7
	GT25 R 32UN	32	0.7
	GT25 R 24UN	24	0.8

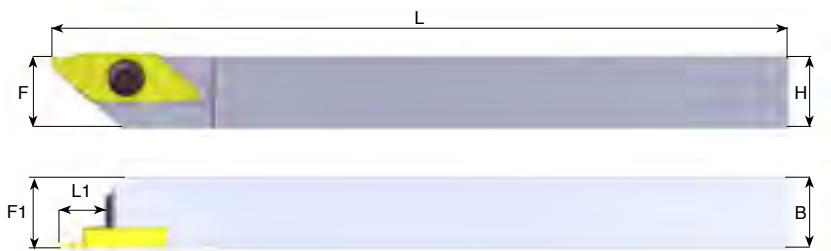
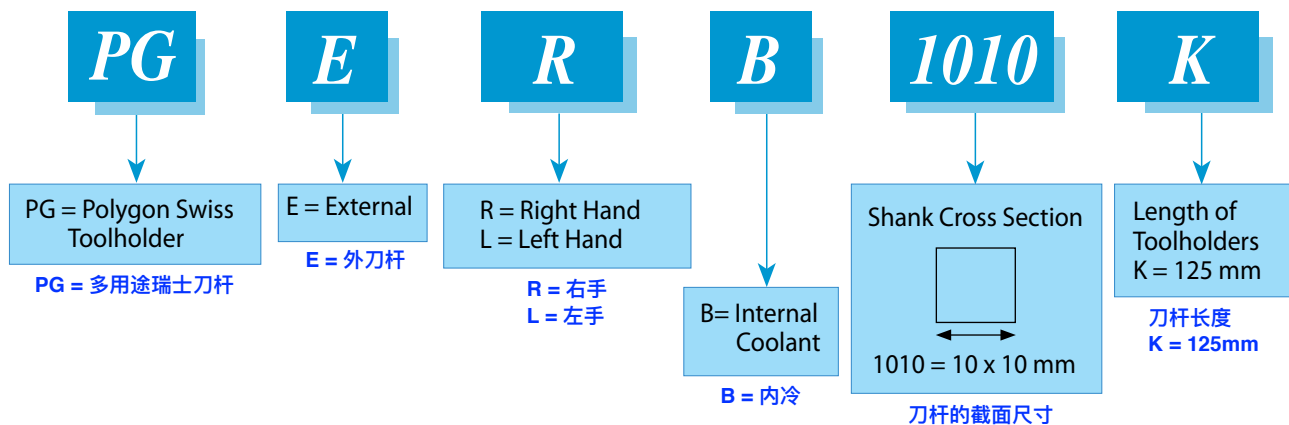
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GT25 L instead of GT25 R 左手刀杆指定 GT25 L 而不是 GT25 R

● First choice 首选 ○ Alternative 替换

External Toolholders 外刀杆

Product Identification - Ordering Codes 产品标识-订货号



Right Version 右手图示

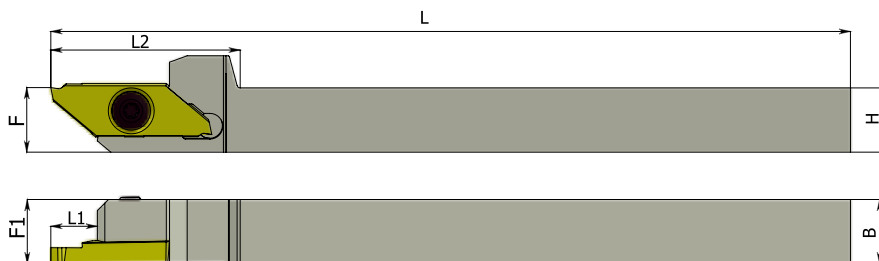


Right hand cutting 右手切削

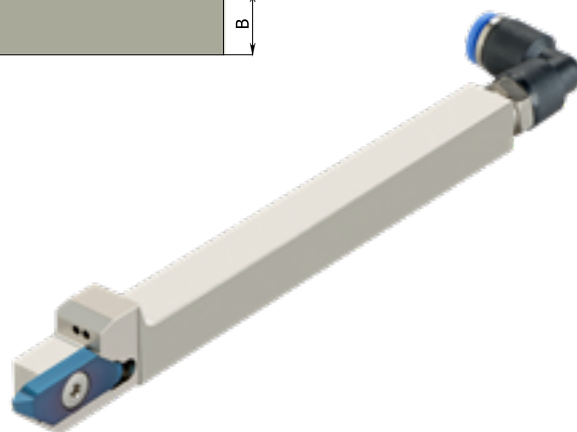
刀片规格 Insert Size	订货号 Ordering Code	刀杆宽 B	刀杆高 H	刀片伸出长 L1	刀杆长 L	中心高 F	含刀片宽 F1	刀片螺丝 Insert Screw Torx+	扳手 Key Torx+
25	PGER 0808 K	8	8	8	125	10	10	S26PD	K11P
	PGER 1010 K	10	10	8	125	10	10	S26PD	K11P
	PGER 1212 K	12	12	8	125	12	12	S26PD	K11P
	PGER 1616 K	16	16	8	125	16	16	S26PD	K11P
	PGER 2020 K	20	20	8	125	20	20	S26PD	K11P
40	PGER 1010 K40	10	10	13	125	10	10	S26PD	K11P
	PGER 1212 K40	12	12	13	125	12	12	S26PD	K11P
	PGER 1616 K40	16	16	13	125	16	16	S26PD	K11P
	PGER 2020 K40	20	20	13	125	20	20	S26PD	K11P
	PGER 2525 M40	25	25	13	150	25	25	S26PD	K11P

For L.H, specify PGE L instead of PGE R 左手刀杆指定 PGE L 而不是 PGE R

External Toolholders 外刀杆 with internal coolant 带内冷



Right Version 右手图示



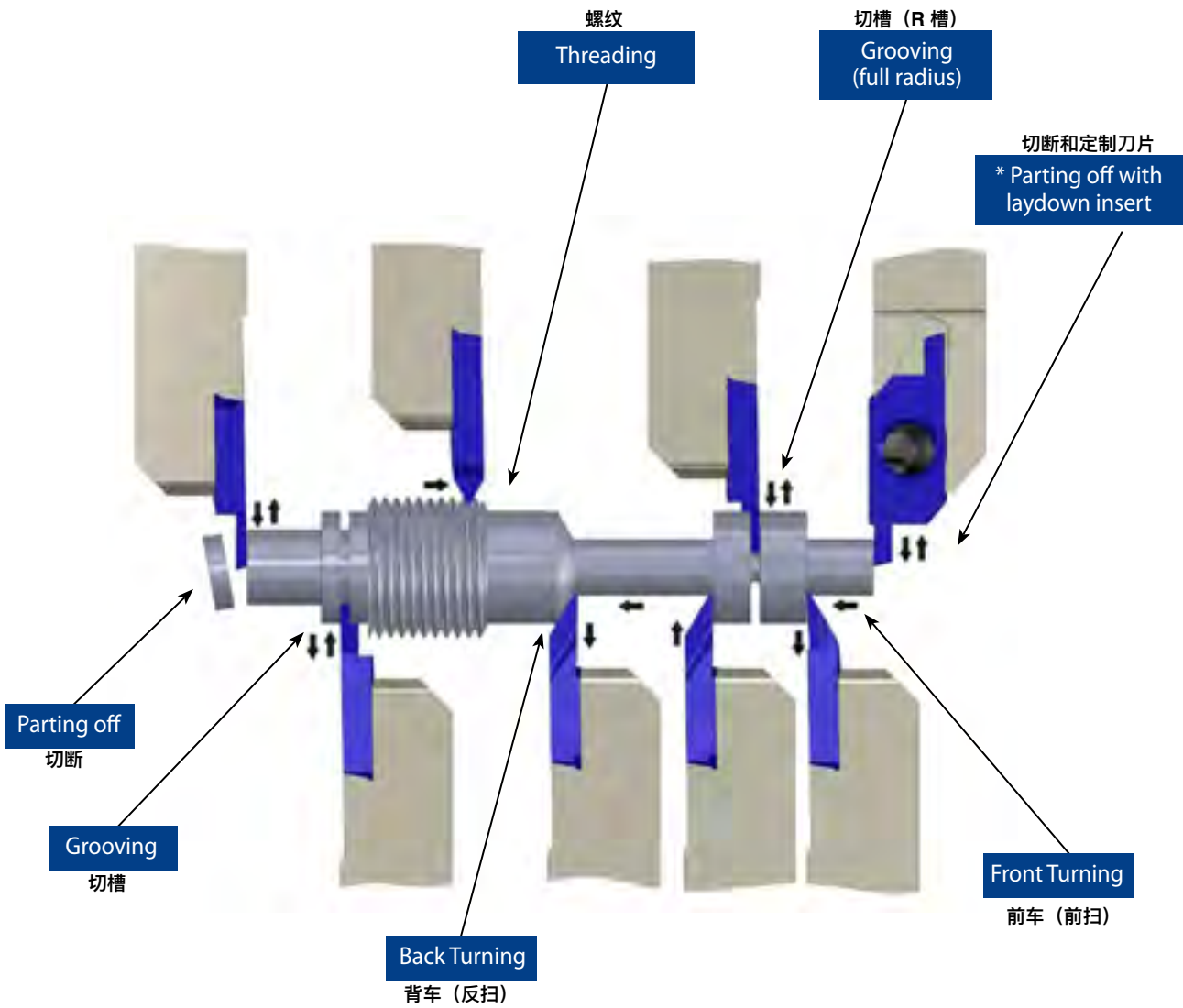
Right hand cutting 右手切削

刀片规格 Insert Size	订货号 Ordering Code	刀杆宽 B	刀杆高 H	刀片伸长 L1	刀杆前部 L2	总长 L	中心高 F	刀宽 F1	刀片螺丝 Insert Screw Torx+	扳手 Key Torx+	冷却管连接 *Coolant connector
25	PGERB 1010 K	10	10	8	30	125	10	10	S26PD	K11P	Ø4 / Ø6
	PGERB 1212 K	12	12	8	30	125	12	12	S26PD	K11P	Ø4 / Ø6
	PGERB 1616 K	16	16	8	30	125	16	16	S26PD	K11P	Ø4 / Ø6

For L.H, specify PGE L B instead of PGE R B 左手刀杆指定 PGE L B 而不是 PGE R B

* Coolant pipe diameter 冷却管直径

Working Method 加工方法



* Available upon request (grooving, parting, threading) 可根据用户要求定制 (切槽, 切断, 螺纹)

Polygon Swiss Line 多用途瑞士车刀

Carbide grades 硬质合金材质

BLU

PVD triple layer coated Sub-Micron grade for Steel, Stainless Steels, Titanium and hard materials.

GX7 BLU: 亚微颗粒硬质合金材质, PVD三层涂层, 用于钢, 不锈钢, 钛和硬材料

New generation of PVD triple layer coated Sub-Micron grade for wide range of materials as: Steel, Stainless Steels, Titanium and hard materials up to 58 HRc.

With high toughness for optimized performance.

K20 GX7:新的改进型亚微颗粒硬质合金材质, PVD三层涂层, 宽范围加工材料, 钢, 不锈钢, 钛和硬材料至HRC58。

K20

Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium.

K20:亚微颗粒硬质合金材质, 非涂层, 用于铝和非铁金属材料, 不锈钢和钛。

Cutting Data 切削参数:

ISO Standard	Materials 材料	Cutting Speed m/min 切削速度 - m/min		
		K20	BLU	GX7*
P 钢	Low & Medium Carbon Steels <0.55%C 低和中碳钢	-	80-150	70-160
	High Carbon Steels ≥0.55%C 高碳钢	-	70-120	60-130
	Alloy Steels, Treated Steels 合金钢 / 热处理钢	-	40-80	40-100
M 不锈钢	Stainless Steel-Free Cutting 易切不锈钢	30-80	60-120	60-140
	Stainless Steel-Austenitic 奥氏体不锈钢	20-70	30-90	30-120
	Cast Steels 铸钢	30-80	50-120	50-140
K 铸铁	Cast Iron 铸铁	50-120	60-130	60-140
N 非铁金属	Aluminum ≤12%Si, Copper 硅含量小于12%铝合金、铜	120-250	-	-
	Aluminum >12%Si 硅含量大于12%, 高硅铝	90-200	-	-
	Synthetics, Duroplastics, Thermoplastics 合成、硬塑料、热塑料	70-150	-	-
S 高温合金	Nickel Alloys, Titanium Alloys 镍合金, 钛合金	20-50	30-70	30-90
H 硬钢	Hardened Steel, 45-50HRc 硬钢 HRC 45-50	-	20-50	20-70
	Hardened Steel, 50-58HRc 硬钢 HRC50-58	-	-	20-60

* Available for grooving and parting off, with G25 insert size 可接受G25规格的切槽和切断刀片定制

3 Cutting Edges Swiss Line Inserts and Toolholders

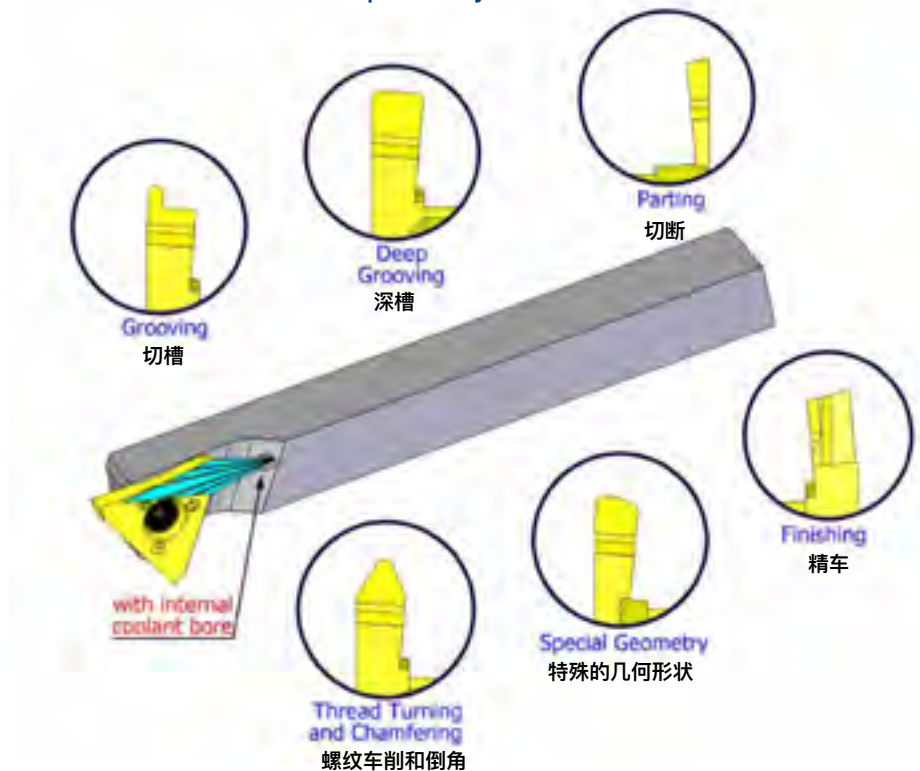
三切削刃瑞士车刀刀片和刀杆

- **Swiss style lathes are becoming a popular alternative to large lathes and machining centers in many companies** 瑞士车床正在成为很多公司的大型车床和加工中心的通用替代机床。
- **Carmex is introducing Swiss line of inserts and toolholders, developed for automatic and Swiss style lathes** Carmex 推荐为瑞士自动机床和车床开发的一系列新的刀片和刀杆。
- **Designed for economic production of parting, grooving, profiling and chamfering** 为经济效益而设计的，用于切断，切槽，仿形，和倒角。

Advantages

Advanced sub-micron grade (K10-K30) - a combination of strength, toughness, wear resistance and edge sharpness 先进的亚微颗粒材质 (K10-K30) 强度、韧性、耐磨性和锐利性切削刃组合。

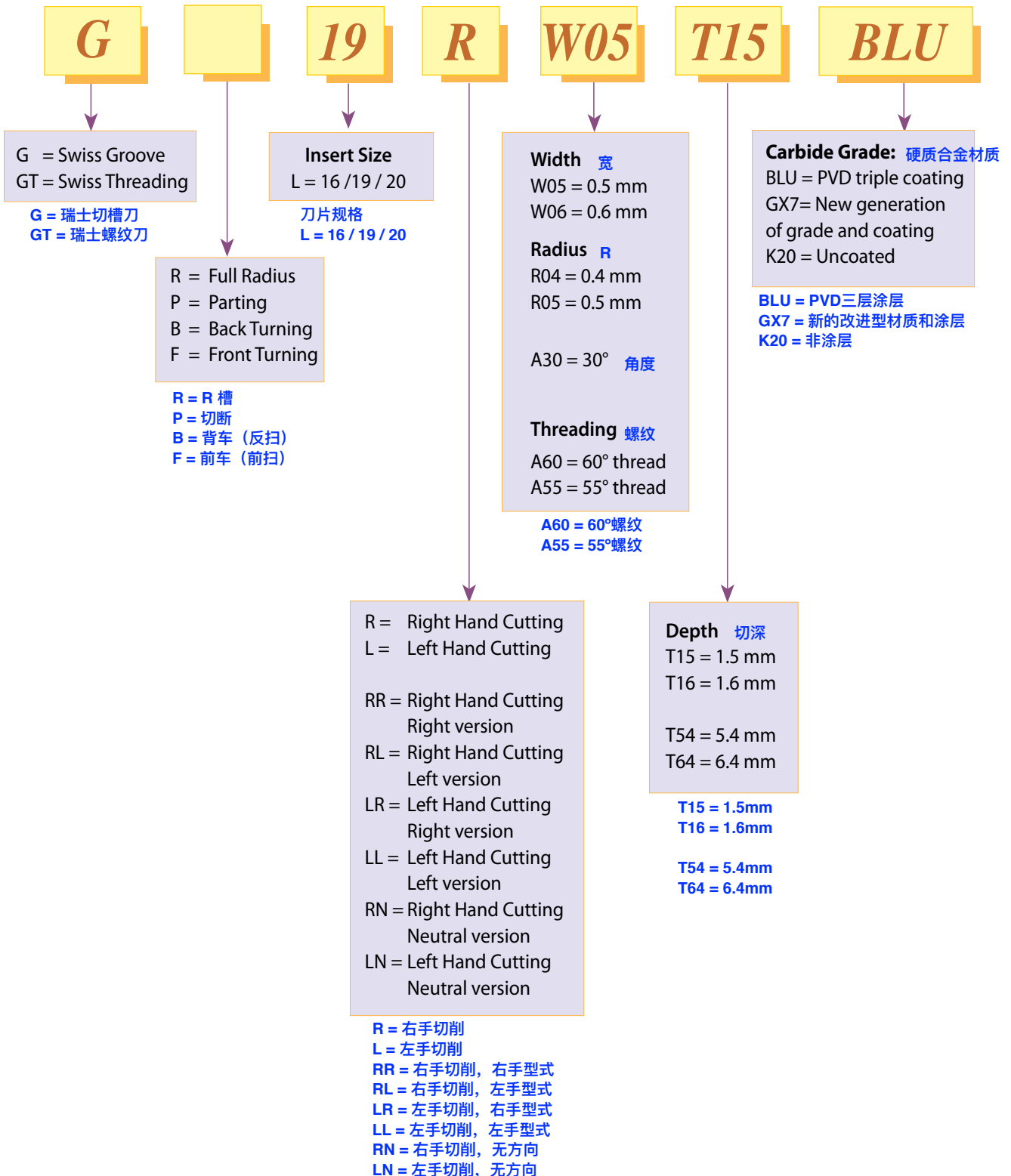
- **Grounded cutting edges** 磨制切削刃
- **Advanced and unique PVD triple coating, for high wear and heat resistance** 先进的和独一无二的PVD三层涂层，高耐磨和耐高温。
- **For most types of material, including Stainless Steels, Titanium and Super Alloys** 适合所有材料，包括不锈钢，钛和超合金。



- **Three cutting edges** 三个切削刃
- **The insert can be indexed directly on the machine** 刀片可以直接在机床上转换位置
- **Internal coolant to the cutting edge** 内冷直达切削刃

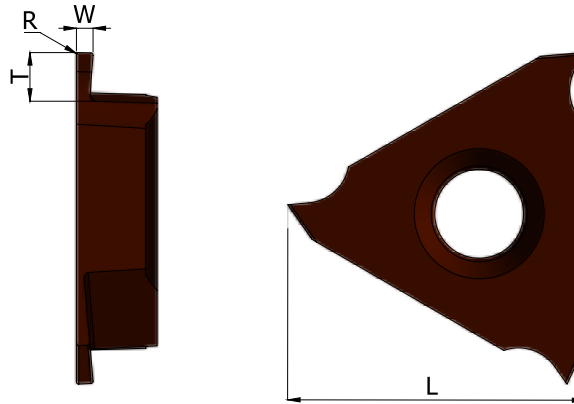
Product Identification - Ordering Codes 订货标识-订货号

Inserts 刀片



16 mm Inserts and Toolholders 16mm刀片和刀杆

Grooving 槽



Right Version 右手图示

Right hand cutting 右手切削

刀片规格 L Insert Size L	订货号 Ordering Code	切削刃宽 W ±0.02	切深 T max	切削刃 R R	Feed mm/rev 进给范围	
					Radial 径向	Axial 轴向
16	G16 R W05 T12	0.5	1.2	0.05	0.01-0.06	0.02-0.08
	G16 R W10 T20	1.0	2.0	0.05	0.02-0.07	0.02-0.10
	G16 R W15 T25	1.5	2.5	0.10	0.03-0.08	0.02-0.10
	G16 R W20 T25	2.0	2.5	0.15	0.05-0.10	0.02-0.15
	G16 R W25 T25	2.5	2.5	0.20	0.05-0.10	0.02-0.15

	K20	GX7
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤58 HRc

Grooving, Circlip Ring Grooves 槽, 开口环槽

DIN 471/472 DIN 471 / 472

Right hand cutting 右手切削

Insert Size L	订货号 Ordering Code	标定槽宽 Nom groove width	刀片宽度 W-0.05	切深 T max	切削刃 R R	Feed mm/rev 进给范围	
						Radial 径向	Axial 轴向
刀片规格 L 16	G16 R W07 T20	0.7	0.77	2.0	0	0.01-0.06	0.02-0.08
	G16 R W08 T20	0.8	0.87	2.0	0	0.01-0.06	0.02-0.08
	G16 R W09 T25	0.9	0.97	2.5	0	0.02-0.07	0.02-0.10
	G16 R W12 T25	1.1	1.24	2.5	0.05	0.02-0.07	0.02-0.10
	G16 R W14 T25	1.3	1.44	2.5	0.05	0.03-0.08	0.02-0.10
	G16 R W17 T25	1.6	1.74	2.5	0.05	0.03-0.08	0.02-0.10

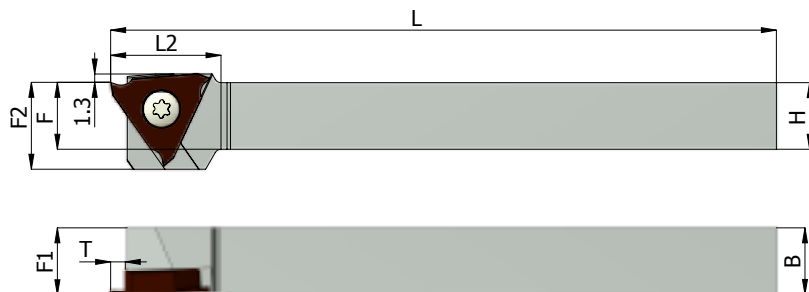
	K20	GX7
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤58 HRc

For L.H, specify G16 L instead of G16 R 左手刀杆指定 G 16 L 而不是 G 16 R

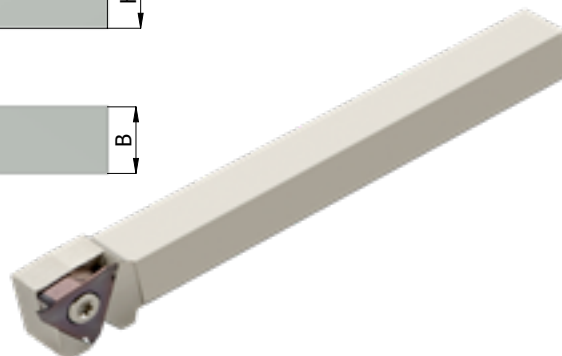
Nom` = nominal 标定尺寸 (公称尺寸)

● First choice 首选 ○ Alternative 替换

External Toolholders 外刀杆



Right Version 右手图示



Right hand cutting 右手切削

订货号 Ordering Code	刀杆宽度 B	刀杆高度 H	切深 T	刀杆前部 L2	总长 L	中心高 F	含刀片宽 F1	刀杆前部高 F2	刀杆螺丝 Insert Screw Torx+	扳手 Key Torx+
VGER 0810 K	10	8	2.6	17	125	8	10	13	S16PS	K16P
VGER 1010 K	10	10	2.6	17	125	10	10	13	S16PS	K16P
VGER 1212 K	12	12	2.6	17	125	12	12	13	S16P	K16P
VGER 1616 K	16	16	2.6	17	125	16	16	16	S16P	K16P

For L.H, specify VGE L instead of VGE R 左手刀杆指定 VGE L 而不是 VGE R

3 Cutting Edges Swiss Line Inserts (16 mm)

三切削刃瑞士车刀片 (16mm)

Carbide grades 硬质合金材质

GX7

New generation of PVD triple layer coated Sub-Micron grade for wide range of materials as: **GX7:新的改进型亚微颗粒**
Steel, Stainless Steels, Titanium and hard materials up to 58 HRC. **硬质合金材质, PVD三层涂层, 宽范围加工材料, 钢, 不锈钢,**
With high toughness for optimized performance. **钛和硬材料至HRC58。**
最佳的高性能, 高强度。

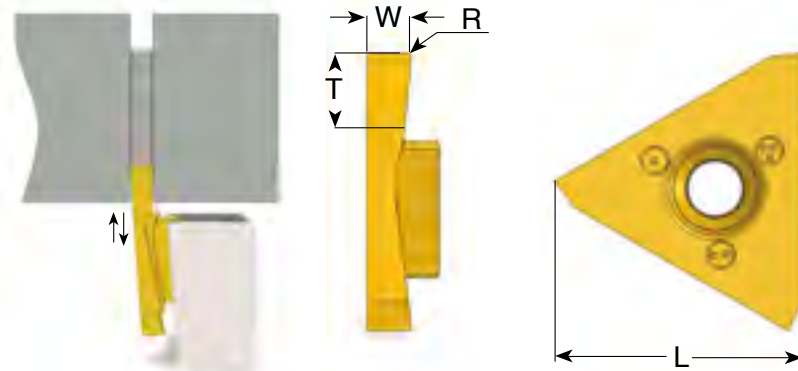
K20

Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium. **K20:非涂层亚微颗粒硬质合金材质, 用于铝和非铁金属材料, 不锈钢和钛。**

Cutting Data 切削参数

ISO Standard	Materials 材料	Cutting Speed m/min 切削速度 m/min	
		K20	GX7
P 钢	Low & Medium Carbon Steels <0.55%C 低碳钢和中碳钢	-	80-150
	High Carbon Steels ≥0.55%C 高碳钢	-	70-120
	Alloy Steels, Treated Steels 合金钢, 热处理钢	-	40-80
M 不锈钢	Stainless Steel-Free Cutting 易切不锈钢	30-80	60-120
	Stainless Steel-Austenitic 奥氏体不锈钢	20-70	30-90
	Cast Steels 铸钢	30-80	50-120
K 铸铁	Cast Iron 铸铁	50-120	50-120
N 非铁金属	Aluminum ≤12%Si, Copper 硅含量小于12%的铝, 铜	120-250	-
	Aluminum >12%Si 硅含量大于12%的高硅铝	90-200	-
	Synthetics, Duroplastics, Thermoplastics 合成, 硬塑料, 热塑料	70-150	-
S 高温合金	Nickel Alloys, Titanium Alloys 镍基合金, 钛合金	20-50	30-70
H 硬钢	Hardened Steel, 45-58HRC 硬钢, HRC45-58	-	20-50

19,20 mm Inserts and Toolholders 19 / 20 刀片和刀杆



Right Version 右手图示

Grooving and Turning 槽和外圆车削

Right hand cutting 右手切削

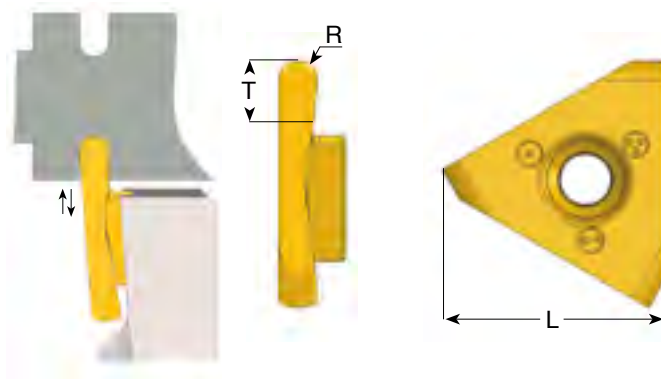
Insert Size L	订货号 Ordering Code	切削刃宽 W ±0.02	切深 T max	刀尖 R R	Feed mm/rev 进给范围	
					Radial 径向	Axial 轴向
19	G19 R W05 T15	0.5	1.5	0	0.01-0.06	0.02-0.10
	G19 R W06 T16	0.6	1.6	0	0.01-0.06	0.02-0.10
	G19 R W07 T17	0.75	1.7	0	0.01-0.06	0.02-0.10
	G19 R W08 T18	0.8	2.0	0.05	0.01-0.06	0.02-0.10
	G19 R W10 T22	1.0	2.5	0.05	0.02-0.07	0.02-0.10
	G19 R W12 T24	1.2	3.0	0.05	0.02-0.07	0.02-0.10
	G19 R W14 T28	1.4	3.0	0.05	0.03-0.08	0.02-0.10
	G19 R W15 T30	1.5	3.0	0.05	0.03-0.08	0.02-0.10
	G19 R W17 T34	1.7	4.0	0.05	0.04-0.09	0.02-0.20
20	G20 R W20 T40	2.0	4.0	0.1	0.05-0.10	0.02-0.20
	G20 R W22 T45	2.25	5.0	0.1	0.05-0.10	0.02-0.20
	G20 R W25 T50	2.5	6.0	0.1	0.05-0.10	0.02-0.20
	G20 R W30 T60	3.0	6.0	0.1	0.05-0.10	0.02-0.20

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G19 L instead of G19 R 左手刀杆指定 G 19 L 而不是 G 19 R

● First choice 首选 ○ Alternative 替换

Grooving and Profiling (full radius) 槽和仿形 (R 槽)



Right Version 右手图示

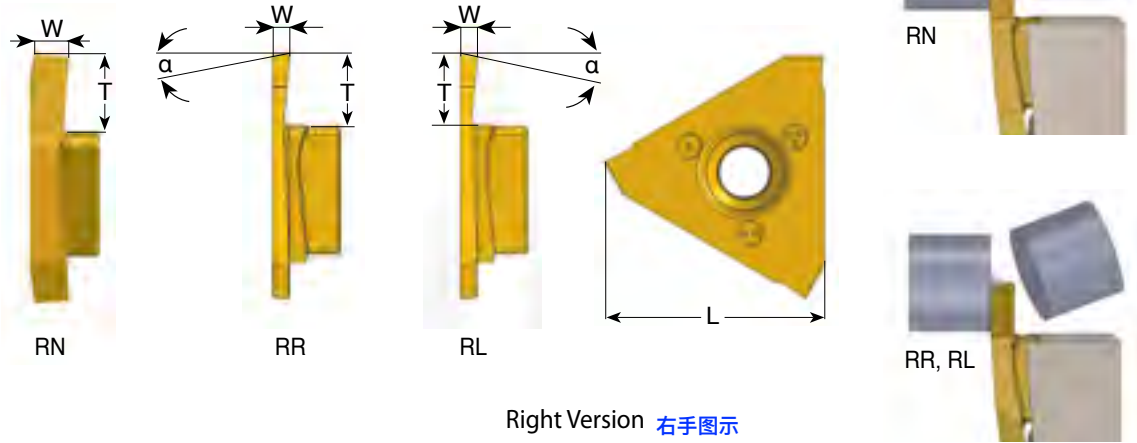
Right hand cutting 右手切削

Insert Size L	订货号 Ordering Code	刀尖 R R ±0.03	切深 T max	进给范围 Feed mm/rev mm/转	
				Radial 径向	Axial 文本
刀片规格 L 19	GR19 R R02 T15	0.25	1.5	0.01-0.06	0.02-0.10
	GR19 R R04 T18	0.40	2.0	0.01-0.06	0.02-0.10
	GR19 R R05 T22	0.50	2.5	0.02-0.07	0.02-0.10
	GR19 R R06 T26	0.60	3.0	0.02-0.07	0.02-0.10
	GR19 R R08 T33	0.80	3.5	0.04-0.09	0.02-0.20
	GR19 R R10 T40	1.00	4.0	0.05-0.10	0.02-0.20
20	GR20 R R12 T50	1.25	6.0	0.05-0.10	0.02-0.20
	GR20 R R15 T60	1.50	6.0	0.05-0.10	0.02-0.20

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G19 L instead of G19 R 左手刀杆指定 G19 L 而不是 G19 R

Parting Off 切断



Right Version 右手图示

Right hand cutting 右手切削

进给范围
径向

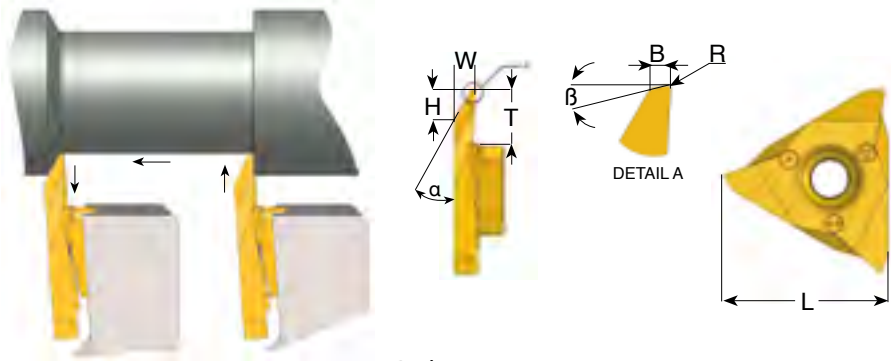
Insert Size L	订货号 Ordering Code	切削刃宽 W	角度 α°	切深 T max	Feed mm/rev Radial
刀片规格 L 19	GP19 RR W10 T54	1.0	15	5.4	0.02-0.09
	GP19 RL W10 T54	1.0	15	5.4	
	GP19 RN W10 T54	1.0	0	5.4	
	GP19 RR W12 T54	1.2	15	5.4	0.02-0.09
	GP19 RL W12 T54	1.2	15	5.4	
	GP19 RN W12 T54	1.2	0	5.4	
20	GP20 RR W15 T64	1.5	15	6.4	0.04-0.10
	GP20 RL W15 T64	1.5	15	6.4	
	GP20 RN W15 T64	1.5	0	6.4	
	GP20 RR W18 T64	1.8	15	6.4	0.04-0.10
	GP20 RL W18 T64	1.8	15	6.4	
	GP20 RN W18 T64	1.8	0	6.4	
	GP20 RR W20 T64	2.0	15	6.4	0.05-0.12
	GP20 RL W20 T64	2.0	15	6.4	
	GP20 RN W20 T64	2.0	0	6.4	
	GP20 RR W25 T64	2.5	15	6.4	0.05-0.12
	GP20 RL W25 T64	2.5	15	6.4	
	GP20 RN W25 T64	2.5	0	6.4	
GP20 RR W30 T64	3.0	15	6.4	0.05-0.12	
GP20 RL W30 T64	3.0	15	6.4		
GP20 RN W30 T64	3.0	0	6.4		

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GP19 LR instead of GP19 RR 左手刀杆指定 GP 19 LR 而不是 GP 19 RR
 GP19 LL instead of GP19 RL 左手刀杆指定 GP 19 LL 而不是 GP 19 RL
 GP19 LN instead of GP19 RN 左手刀杆指定 GP 19 LN 而不是 GP 19 RN

● First choice ○ Alternative
 首选 替换

Back Turning 背车 (反扫)



Right Version 右手图示

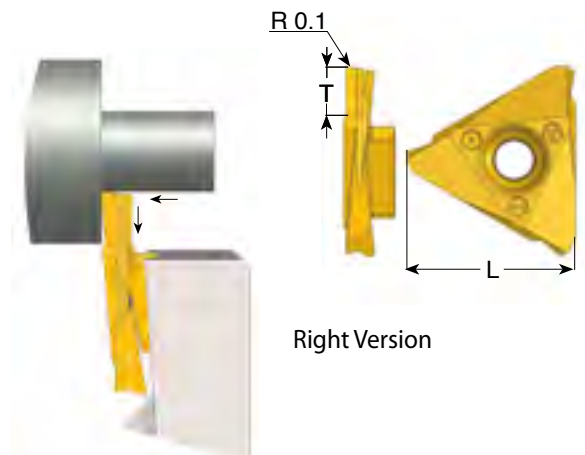
Right hand cutting 右手切削

刀片规格 L Insert Size L	订货号 Ordering Code	角度 α°	刃尖角度 β°	刀尖 R	刃厚 W	角度长 H	刀尖 R	切深 T max	进给范围 Feed mm/rev
19	GB19 R A30	30	12	0.1	3.4	4.3	0.5	5.4	0.05-0.15
20	GB20 R A30	30	12	0.1	3.4	4.3	0.5	6.4	0.05-0.15

For L.H, specify GB19 L instead of GB19 R 左手刀杆指定 GB 19 L 而不是 GB 19 R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

Front Turning 前车 (前扫)



Right Version

Right hand cutting 右手切削

刀片规格 L Insert Size L	订货号 Ordering Code	切深 T max	进给范围 mm/转 Feed mm/rev
19	GF19 R T54	5.4	0.05-0.15
20	GF20 R T64	6.4	0.05-0.15

For L.H, specify GF19 L instead of GF19 R 左手刀杆指定 GF 19 L 而不是 GF 19 R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

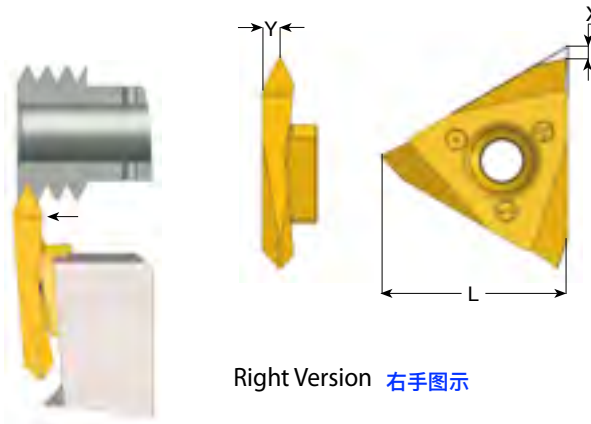
● First choice ○ Alternative
首选 替换

Threading - Partial Profile 60° 螺纹 - 范围牙 60°

External Thread 外螺纹

右手切削

Right hand cutting 右手图示



刀片规格 L Insert Size L	公制螺距/mm mm	英制牙数 TPI	订货号 Ordering Code	牙尖距离 X	牙尖位置 Y
19	0.5-1.5	48-16	GT19 R A60	2.8	1.1
	1.75-3.0	14-8	GT19 R G60	2.8	1.7
	0.5-3.0	48-8	GT19 R AG60	2.8	1.7

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GT19 L instead of GT19 R 左手刀杆指定 GT19 L 而不是 GT 19 R

Threading - Partial Profile 55° 螺纹 - 范围牙 55°

External Thread 外螺纹

右手切削

Right hand cutting 右手图示



刀片规格 L Insert Size L	公制螺距/mm mm	英制牙数 TPI	订货号 Ordering Code	牙尖距离 X	牙尖位置 Y
19	0.5-1.5	48-16	GT19 R A55	2.8	1.0
	1.75-3.0	14-8	GT19 R G55	2.8	1.7
	0.5-3.0	48-8	GT19 R AG55	2.8	1.7

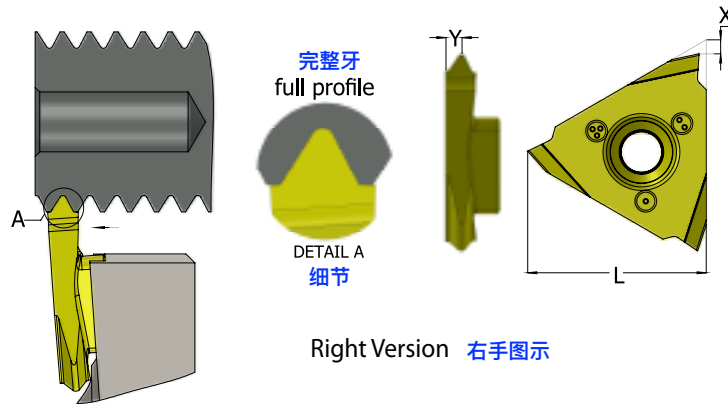
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GT19 L instead of GT19 R 左手刀杆指定 GT 19 L 而不是 GT 19 R

● First choice ○ Alternative
首选 替换

Threading - ISO metric 60° Full Profile 螺纹 - ISO 完整牙 60° External Thread 外螺纹

外螺纹



Right Version 右手图示

Right hand cutting 右手切削

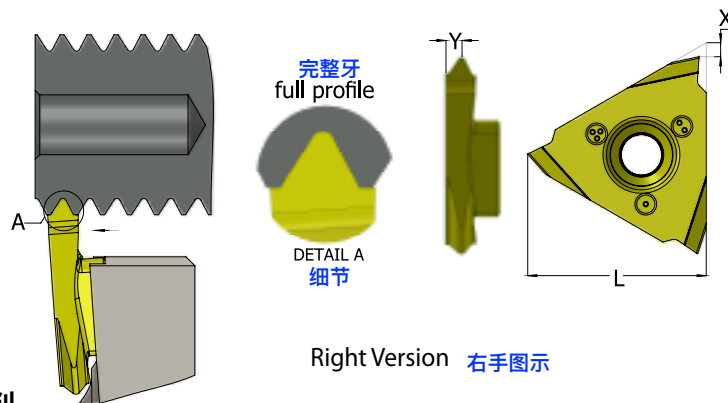
刀片规格 L Insert Size L	公制螺距/mm	订货号 Ordering Code	刀尖距离 X	刀尖位置 Y
19	0.5	GT19 R 0.5 ISO	2.8	0.6
	0.7	GT19 R 0.7 ISO	2.8	0.7
	0.75	GT19 R 0.75 ISO	2.8	0.7
	0.8	GT19 R 0.8 ISO	2.8	0.7
	1.0	GT19 R 1.0 ISO	2.8	0.8
	1.25	GT19 R 1.25 ISO	2.8	1.0
	1.5	GT19 R 1.5 ISO	2.8	1.1
	1.75	GT19 R 1.75 ISO	2.8	1.3

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GT19 L instead of GT19 R 左手刀杆指定 GT 19 L 而不是 GT 19 R

Threading - UN unified 60° Full Profile 螺纹 - UN 完整牙 60° External Thread 外刀杆

外刀杆



Right Version 右手图示

Right hand cutting 右手切削

刀片规格 L Insert Size L	每吋牙数 TPI	订货号 Ordering Code	刀尖距离 X	刀尖位置 Y
19	72	GT19 R 72UN	2.8	0.4
	56	GT19 R 56UN	2.8	0.6
	40	GT19 R 40UN	2.8	0.7
	32	GT19 R 32UN	2.8	0.7
	24	GT19 R 24UN	2.8	0.8
	20	GT19 R 20UN	2.8	1.0

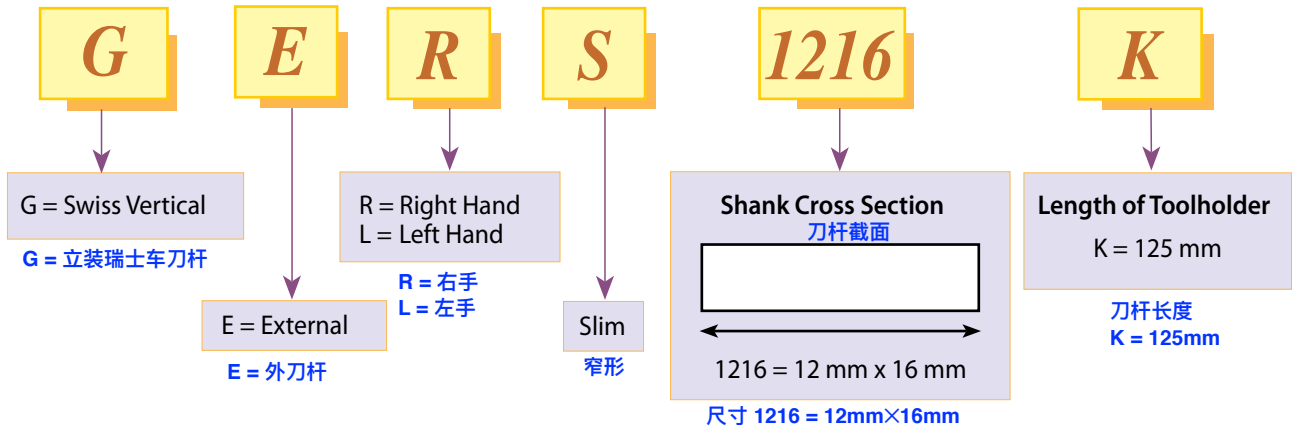
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GT19 L instead of GT19 R 左手刀杆指定 GT 19 L 而不是 GT 19 R

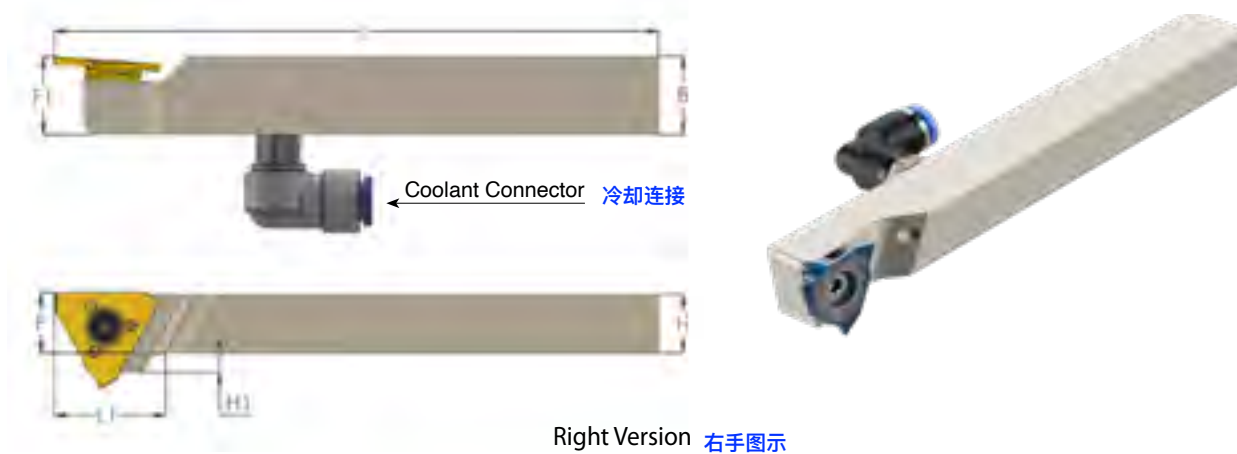
● First choice 首选 ○ Alternative 替换

External Toolholders 外刀杆

Product Identification - Ordering Codes 订货标识-订货号



- Coolant through toolholders, for external turning in Swiss type lathes machines. 用于瑞士型车床的外圆车削，内冷通过刀杆
- The high pressure coolant is directed towards the insert cutting edge, in order to evacuate the chips created and avoid build up edge. 高压冷却液射向刀片切削刃，排除切屑并避免积屑瘤。
- Including a coolant connector for fast attachment on the machine. 附属一个冷却连接装置用于连接机床



Right hand cutting 右手切削

订货号 Ordering Code	刀杆宽 B	刀杆高 H	前部长 L1	总长 L	中心高 F	宽度 F1	刀头下沿 H1	刀片螺丝 Insert Screw	扳手 Torx Key	冷却连接管尺寸 *Coolant connector
**GER 0816 K	16	8	17	125	8	16	8	S21	K21	-
GER 1016 K	16	10	17	125	10	16	6	S21	K21	Ø4 / Ø6
GER 1216 K	16	12	17	125	12	16	4	S21	K21	Ø4 / Ø6
GER 1616 K	16	16	-	125	16	16	0	S21	K21	Ø4 / Ø6
GER 2020 K	20	20	-	125	20	20	0	S21	K21	Ø4 / Ø6
GER 2525 M	25	25	-	150	25	25	0	S21	K21	Ø4 / Ø6

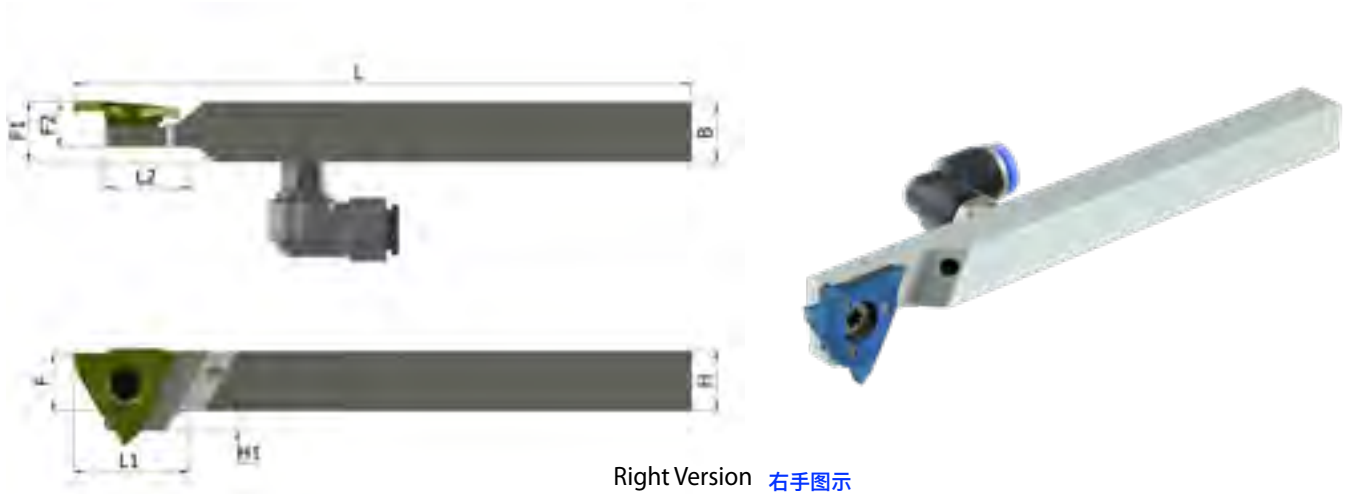
For L.H, specify GE L instead of GE R 左手刀杆指定 GE L 而不是 GE R

* Coolant pipe diameter 冷却管连接直径

** Without coolant 不带冷却

Slim Holders 西窄型刀杆

For cut off, when using sub-spindle 使用副主轴时，用于切断



Right Version 右手图示

Right hand cutting 右手切削

订货号 Ordering Code	宽与高 B=H	刀片伸长 L1	前部长 L2	总长 L	中心高 F	含刀片宽度		下延高度 H1	刀片螺丝 Insert Screw	扳手 Torx Key	冷却管直径 *Coolant connector
						宽度 F1	F2				
GERS 1010 K	10	17	11	125	10	10	10.0	6	S21XS	K21	Ø4 / Ø6
GERS 1212 K	12	17	11	125	12	12	9.5	4	S21XS	K21	Ø4 / Ø6
GERS 1616 K	16	-	11	125	16	16	9.5	0	S21XS	K21	Ø4 / Ø6
GERS 2020 K	20	-	11	125	20	20	9.5	0	S21XS	K21	Ø4 / Ø6

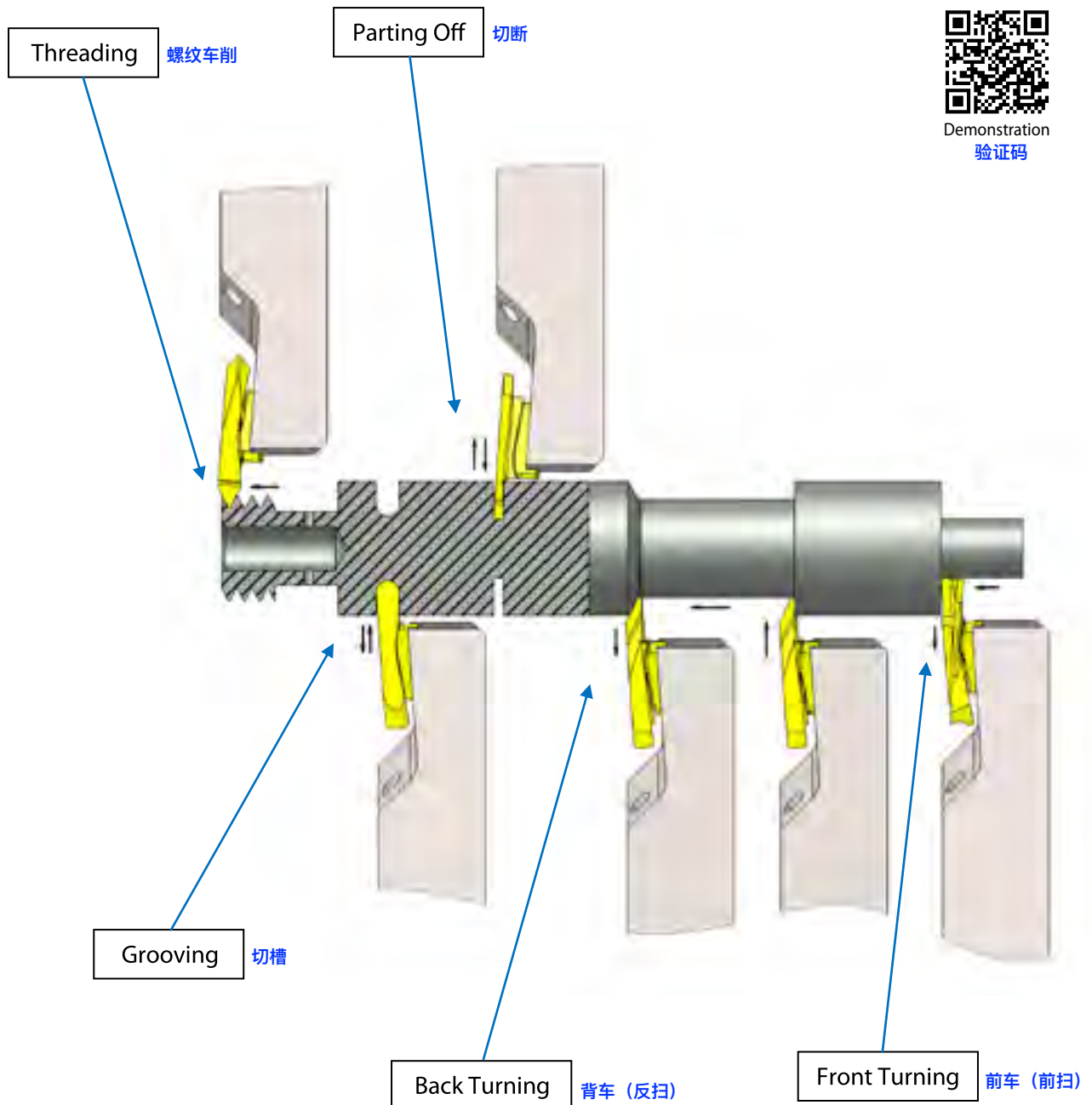
For L.H, specify GELS instead of GERS 左手刀杆指定 GELS 而不是 GERS

* Coolant pipe diameter 冷却管连接直径

Working Method 加工方法

Grooving - Parting Off - Turning - Profiling - Threading

切槽=切断-车削-仿形； 螺纹



3 Cutting Edges Swiss Line Inserts (19,20 mm)

三切削刃瑞士车刀片 (19, 20mm)

Carbide grades

硬质合金材质

BLU

PVD triple layer coated Sub-Micron grade for Steel, Stainless Steels, Titanium and hard materials.

BLU: 亚微颗粒硬质合金材质, PVD三层涂层, 用于钢, 不锈钢, 钛和硬材料。

K20

Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium.

K20:非涂层亚微颗粒硬质合金材质, 用于铝和非铁金属材料, 不锈钢和钛。

Cutting Data 切削参数

ISO Standard	Materials 材料	Cutting Speed m/min 线速度 m/min	
		K20	BLU
P 钢	Low & Medium Carbon Steels <0.55%C 低和中碳钢	-	80-150
	High Carbon Steels ≥0.55%C 高碳钢	-	70-120
	Alloy Steels, Treated Steels 合金钢, 热处理钢	-	40-80
M 不锈钢	Stainless Steel-Free Cutting 易切不锈钢	30-80	60-120
	Stainless Steel-Austenitic 奥氏体不锈钢	20-70	30-90
	Cast Steels 铸钢	30-80	50-120
K 铸铁	Cast Iron 铸铁	50-120	-
N 非铁金属	Aluminum ≤12%Si, Copper 含硅量小于12%的铝, 铜	120-250	-
	Aluminum >12%Si 含硅量大于12%的高硅铝	90-200	-
	Synthetics, Duroplastics, Thermoplastics 合成, 硬塑料, 热塑料	70-150	-
S 高温合金	Nickel Alloys, Titanium Alloys 镍基合金, 钛合金	20-50	30-70
H 硬钢	Hardened Steel, 45-50HRc 硬钢 HRC 45-50	-	20-50

6 Cutting Edges G6 Turning Inserts and Toolholders 6 切削刃 G6 车刀片和刀杆

For grooving, parting-off and threading 用于切槽，切断和螺纹

Benefits 有利于

- High productivity and cost efficiency due to six cutting edges
六个切削刃，高生产率和低成本效益
- One holder for all insert types - Maximum versatility
最大的通用性，一把刀杆可用于全部刀片
- High precision thanks to the fully ground profile
高精度，全磨制外形



Features 优点

- Strong and stable clamping due to the unique insert shape
独特的刀片形状，强大的夹紧力，夹持稳固
- Can be used with high machining parameters, and provides high surface finish 用于高加工参数，能获得高的表面光洁度
- Internal coolant provides the coolant liquid towards the cutting edge 内冷冷却液直接射向切削刃

Application 应用

- Multi-function inserts for grooving, parting, turning and threading 多用途刀片，用于切槽、切断、车削和螺纹
- Fits a large range of diameters from very small applications with a thin wall up to 60 mm diameter 适用于各种直径，从非常小的到直径达60mm的薄壁工件

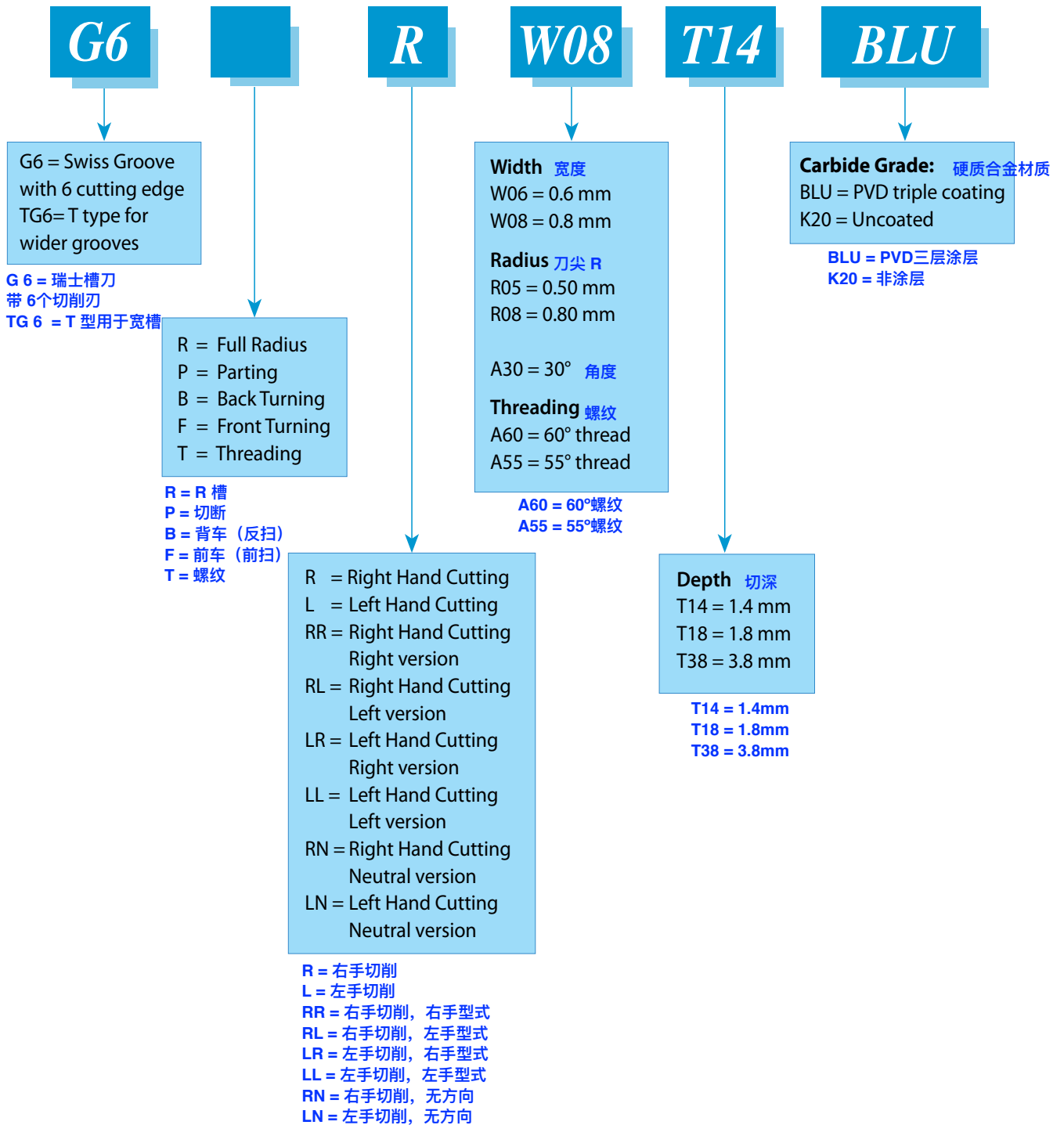
Carbide grades: BLU, K20 硬质合金材质: BLU, K20



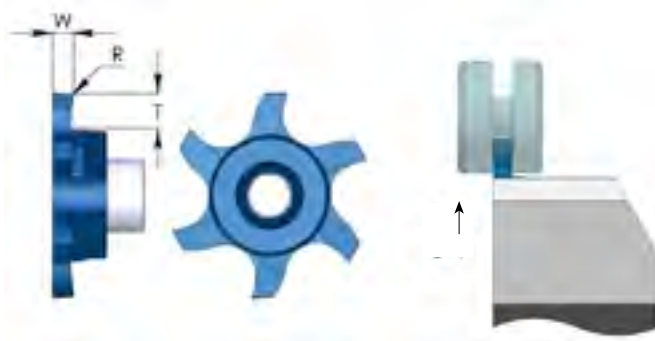
Demonstration
验证码

Product Identification - Ordering Codes 产品标识-订货号

G6 Inserts G 6 刀片



Grooving 切槽



Right Version 右手图示

Right hand cutting 右手切削

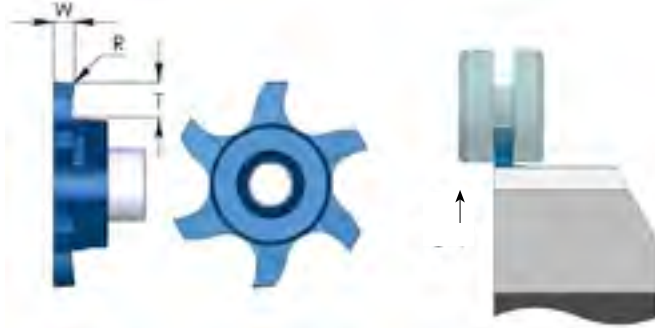
刀片型号 Insert Type	订货号 Ordering Code	切削刃宽 W±0.02	切深 T max	刀尖 R	进给范围 mm/转 Feed mm/rev
G6	G6 R W06 T11	0.6	1.1	0	0.01-0.06
	G6 R W08 T14	0.8	1.4	0	0.02-0.07
	G6 R W10 T18	1.0	1.8	0.05	0.02-0.09
	G6 R W15 T33	1.5	3.3	0.05	0.02-0.12
	G6 R W20 T38	2.0	3.8	0.10	0.02-0.13
	G6 R W25 T38	2.5	3.8	0.10	0.02-0.14
TG6	TG6 R W30 T38	3.0	3.8	0.10	0.02-0.12
	TG6 R W40 T38	4.0	3.8	0.10	0.02-0.12

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6 L instead of G6 R 左手刀杆指定 G6 L 而不是 G6 R

Grooving, Circlip Ring Grooves 槽, 开口环槽

DIN 471/472 DIN 471 / 472



Right Version 右手图示

Right hand cutting 右手切削

刀片型号 Insert Type	订货号 Ordering Code	标 定 槽 宽 Nom` groove width	切削刃宽 W-0.05	切深 T max	刀尖 R	进给范围 mm/转 Feed mm/rev
G6	G6D R W12 T31	1.10	1.24	3.1	0.05	0.02-0.09
	G6D R W14 T33	1.30	1.44	3.3	0.05	0.02-0.12
	G6D R W17 T33	1.60	1.74	3.3	0.05	0.02-0.12

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6D L instead of G6D R 左手刀杆指定 G6D L 日表示 G6D R

Nom` = nominal 标定尺寸 (公称尺寸)

Grooving and Profiling (full radius) 槽和仿形 (R 槽)



Right Version 右手图示

Right hand cutting 右手切削

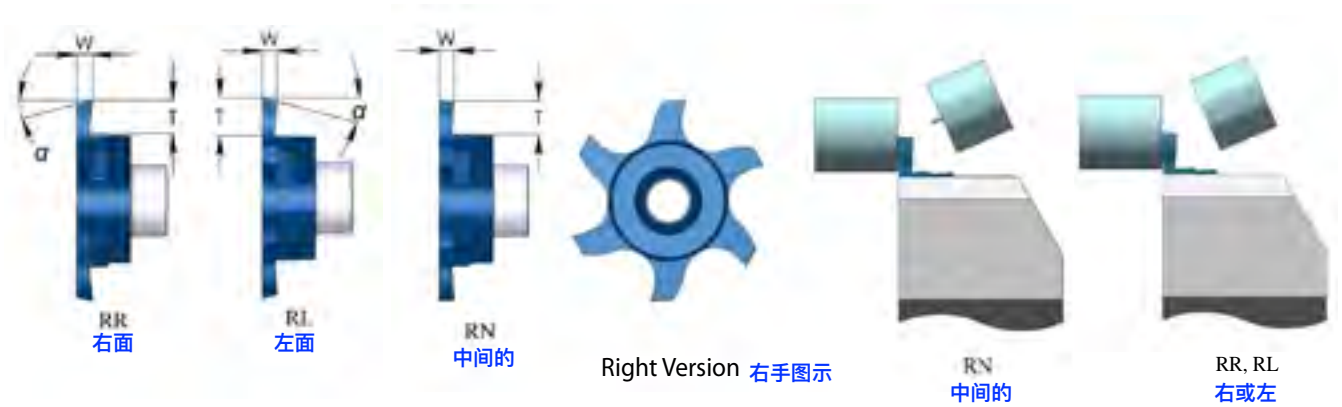
刀片型号 Insert Type	订货号 Ordering Code	刀尖 R R±0.03	切削刃宽 W	切深 T max	进给范围 mm/转 Feed mm/rev
G6	G6R R R05 T25	0.50	1.0	2.5	0.02-0.09
	G6R R R08 T30	0.80	1.6	3.0	0.02-0.09
	G6R R R10 T38	1.00	2.0	3.8	0.02-0.13
	G6R R R12 T38	1.25	2.5	3.8	0.02-0.14
TG6	TG6R R R15 T38	1.5	3.0	3.8	0.02-0.12
	TG6R R R20 T38	2.0	4.0	3.8	0.02-0.12

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6R L instead of G6R R 左手刀杆指定 G6R L 而不是 G6R R

● First choice 首选 ○ Alternative 替换

Parting Off and Grooving 切断和切槽



Right hand cutting 右手切削

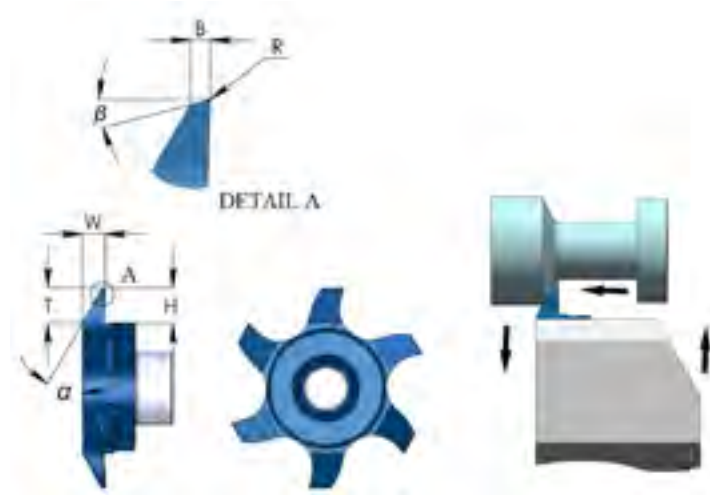
刀片型号 Insert Type	订货号 Ordering Code	切削刃宽 W	角度 α°	切深 T max	进给范围 mm/转 Feed mm/rev
G6	G6P RR W08 T38	0.8	15	3.8	0.02-0.09
	G6P RL W08 T38	0.8	15	3.8	0.02-0.09
	G6P RN W08 T38	0.8	0	3.8	0.02-0.09
	G6P RR W10 T38	1.0	15	3.8	0.02-0.09
	G6P RL W10 T38	1.0	15	3.8	0.02-0.09
	G6P RN W10 T38	1.0	0	3.8	0.02-0.09
	G6P RR W15 T38	1.5	15	3.8	0.02-0.13
	G6P RL W15 T38	1.5	15	3.8	0.02-0.13
	G6P RN W15 T38	1.5	0	3.8	0.02-0.13
	G6P RR W20 T38	2.0	15	3.8	0.02-0.13
	G6P RL W20 T38	2.0	15	3.8	0.02-0.13
	G6P RN W20 T38	2.0	0	3.8	0.02-0.13

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6P LR instead of G6P RR 左手刀杆指定 G6P LR 而不是 G6P RR
 G6P LL instead of G6P RL 左手刀杆指定 G6P LL 而不是 G6P RL
 G6P LN instead of G6P RN 左手刀杆指定 G6P LN 而不是 G6P RN

Back Turning

背车 (反扫)



Right Version 右手图示

Right hand cutting 右手切削

刀片型号 Insert Type	订货号 Ordering Code	订货号 α°	角度 β°	刃尖角度 R	刃宽 W	刃长 H	刀尖宽 B	切深 T max	进给范围 mm/转 Feed mm/rev
G6	G6B R A30	30	12	0.1	2.6	3.8	0.5	3.8	0.05-0.12

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6B L instead of G6B R 左手刀杆指定 G6B L 而不是 G6B R

Front Turning

前车 (前扫)



Right Version 右手图示

Right hand cutting 右手切削

刀片型号 Insert Type	订货号 Ordering Code	切深 T max	刀尖 R	进给范围 mm/转 Feed mm/rev
G6	G6F R T38	3.8	0.1	0.05-0.12

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6F L instead of G6F R 左手刀杆指定 G6F L 而不是 G6F R

● First choice 首选 ○ Alternative 替换

Threading - Partial Profile 60° 螺纹-范围牙 60°



Right hand cutting 右手切削

刀片型号 Insert Type	订货号 Ordering Code	Pitch Range 螺距范围		牙尖位置 Y
		mm 毫米	TPI 牙数	
G6	G6T R A60	0.5-1.5	48-16	0.8
	G6T R G60	1.75-3.0	14-8	1.5
	G6T R AG60	0.5-3.0	48-8	1.5

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6T L instead of G6T R 左手刀杆指定 G6T L 而不是 G6T R

Threading - Partial Profile 55° 螺纹-范围牙 55°



Right hand cutting 右手切削

刀片型号 Insert Type	订货号 Ordering Code	Pitch Range 螺距范围		刀尖位置 Y
		mm 毫米	TPI 牙数	
G6	G6T R A55	0.5-1.5	48-16	0.8
	G6T R G55	1.75-3.0	14-8	1.5
	G6T R AG55	0.5-3.0	48-8	1.5

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

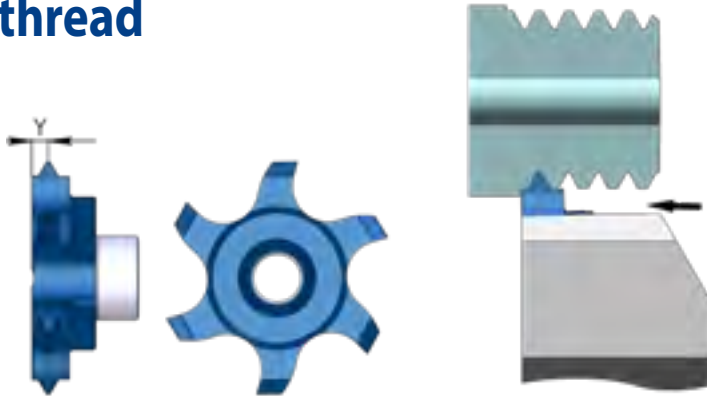
For L.H, specify G6T L instead of G6T R 左手刀杆指定 G6T L 而不是 G6T R

● First choice 首选 ○ Alternative 替换

Threading - ISO metric 60° Full Profile 螺纹-ISO完整牙 60°

External thread 外螺纹

外螺纹



Right Version 右手图示

Right hand cutting 右手切削

刀片型号 Insert Type	订货号 Ordering Code	Pitch 螺距 mm	刀尖位置 Y
G6	G6T R 1.0ISO	1.0	0.7
	G6T R 1.5ISO	1.5	1.0
	G6T R 2.0ISO	2.0	1.3

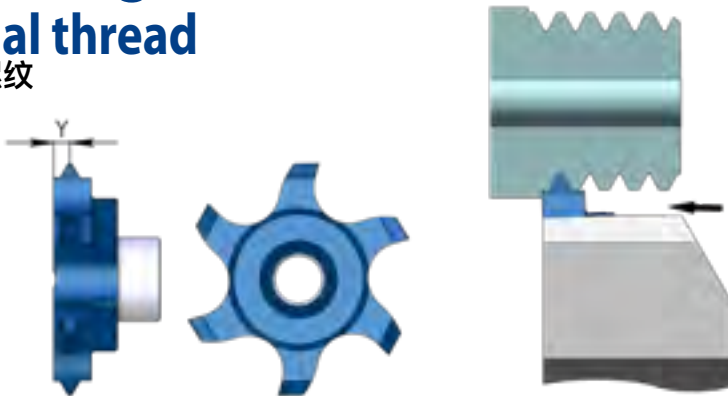
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6T L instead of G6T R 左手刀杆指定 G6T L 而不是 G6T R

Threading - UN unified 60° Full Profile 螺纹-UN 完整牙 60°

External thread 外螺纹

外螺纹



Right Version 右手图示

Right hand cutting 右手切削

刀片型号 Insert Type	订货号 Ordering Code	螺距每吋牙数 Pitch TPI	刀尖位置 Y
G6	G6T R 56UN	56	0.6
	G6T R 40UN	40	0.7
	G6T R 32UN	32	0.7
	G6T R 24UN	24	0.7

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6T L instead of G6T R 左手刀杆指定 G6T L 而不是 G6T R

● First choice 首选 ○ Alternative 替换

External Toolholders - For G6 Inserts 外刀杆-用于 G6 刀片

Coolant through toolholders, for external turning in Swiss type lathes machines. The high pressure coolant is directed towards the insert cutting edge in order to evacuate the chips created and avoid build up edge.

Includes a coolant connector for fast attachment on the machine.

- 1、冷却液通过刀杆，用于瑞士型车床的外圆车削。高压冷却液射向刀片切削刃，用以排屑并避免形成积屑瘤。
- 2、附属内冷连接管用以连接机床。

Product Identification - Ordering Codes 订货标识-订货号

G6

G6 = Swiss toolholder
G6 = 瑞士型刀杆

T

T = Type
T = 型号

E

E = External
E = 外刀杆

R

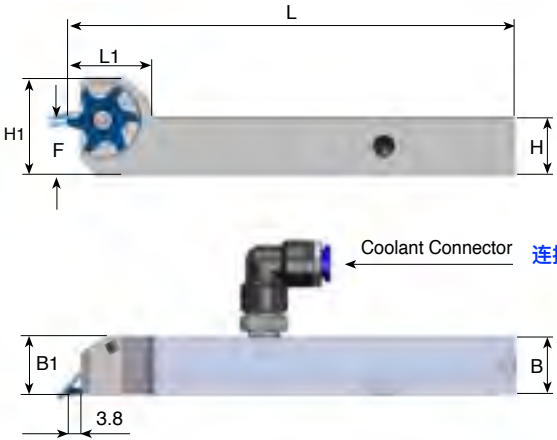
R = Right Hand
L = Left Hand
R = 右手
L = 左手

1212

Shank Cross Section
刀杆截面面积
1212 = 12x12 mm
1212 = 12x12mm

K

Length of Toolholders
K = 125 mm
M = 150 mm
刀杆长度
K = 125mm
M = 150mm



Right Version 右手图示

Right hand cutting 右手切削

刀片型号 Insert Type	订货号 Ordering Code	刀杆宽 B	刀杆高 H	头部长 L1	总长 L	头部高 H1	中心高 F	刀宽 B1	刀片螺丝 Insert Screw Torx +	扳手 Torx + Key	冷却管连接尺寸 **Coolant connector (mm)
G6	*G6ER 1212 K	12	12	20	125	23	12	16	S16LP	K16P	---
	G6ER 1616 K	16	16	20	125	27	16	16	S16LP	K16P	Ø4 / Ø6
	G6ER 2020 K	20	20	20	125	31	20	20	S16LP	K16P	Ø4 / Ø6
	G6ER 2525 M	25	25	20	150	36	25	25	S16LP	K16P	Ø4 / Ø6
TG6	*TG6ER 1212 K	12	12	20	125	12	12	18	S16LP	K16P	---
	TG6ER 1616 K	16	16	20	125	27	16	18	S16LP	K16P	Ø4 / Ø6
	TG6ER 2020 K	20	20	20	125	31	20	20	S16LP	K16P	Ø4 / Ø6
	TG6ER 2525 M	25	25	20	150	36	25	25	S16LP	K16P	Ø4 / Ø6

* Without internal coolant 不带内冷

** Coolant pipe diameter 冷却管直径

For L.H, specify G6EL instead of G6ER 左手刀杆指定 G6EL 而不是 G6ER

Coated holders provide high abrasion resistance 涂层刀杆，耐磨。

G6 Inserts G 6刀片

Carbide grades 硬质合金材质

BLU PVD triple layer coated Sub-Micron grade for Steel, Stainless Steels, Titanium and hard materials. **BLU:** 亚微颗粒硬质合金材质, **PVD三层涂层**, 用于钢, 不锈钢, 钛和硬材料。

K20 Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium. **K20:**非涂层亚微颗粒硬质合金材质, 用于铝和非铁金属材料, 不锈钢和钛。

Cutting Data 切削参数

ISO Standard	Material 材料	Cutting Speed 切削速度 m/min	
		K20	BLU
P 钢	Low and Medium Carbon Steels <0.55%C 低和中碳钢	-	80-150
	High Carbon Steels ≥0.55%C 高碳钢	-	70-120
	Alloy Steels, Treated Steels 合金钢, 热处理钢	-	40-80
M 不锈钢	Stainless Steel-Free Cutting 易切不锈钢	30-80	60-120
	Stainless Steel-Austenitic 奥氏体不锈钢	20-70	30-90
	Cast Steels 铸钢	30-80	50-120
铸 K 铁	Cast Iron 铸铁	50-120	60-130
N 非铁金属	Aluminum ≤12%Si, Copper 硅含量低于12%的铝, 铜	120-250	-
	Aluminum >12%Si 硅含量高于12%的高硅铝	90-200	-
	Synthetics, Duroplastics, Thermoplastics 合成, 硬塑料, 热塑料	70-150	-
高温 S 合金	Nickel Alloys, Titanium Alloys. 镍基合金, 钛合金	20-50	30-70
硬 H 钢	Hardened Steel, ≤45 HRC 硬钢 HRC小于等于45	-	20-50



1 Hacharoshet St., Maalot Industrial Zone 2101805, Israel
Tel: (972) 4-9077400, Fax: (972) 4-9077440
E-mail: info@carmex.com Website: carmex.com
Postal address: P.O. Box 404, Maalot 2101302, Israel

