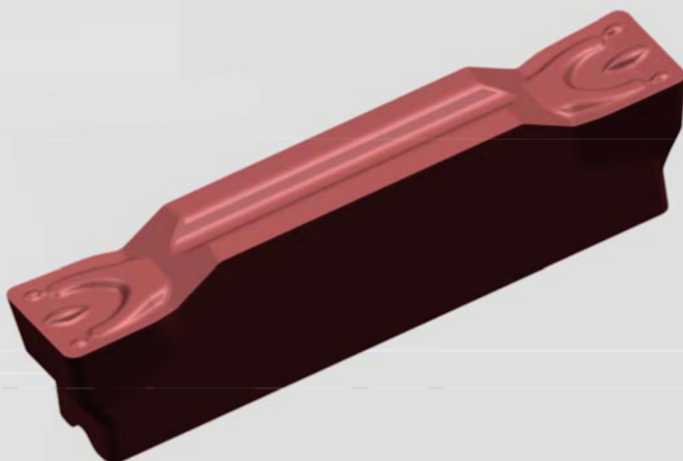
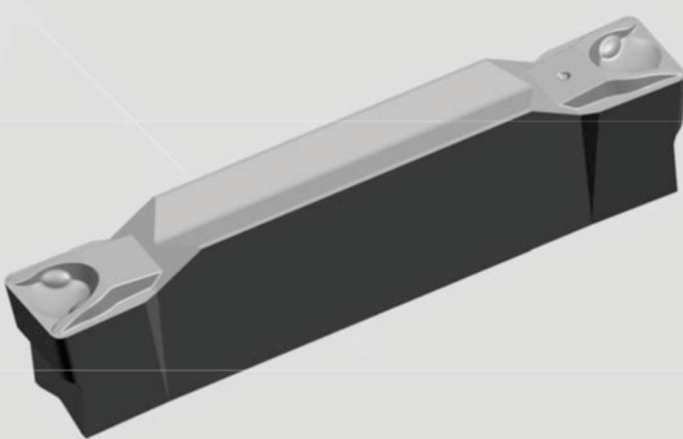


Parting and grooving Catalog - 2016.1

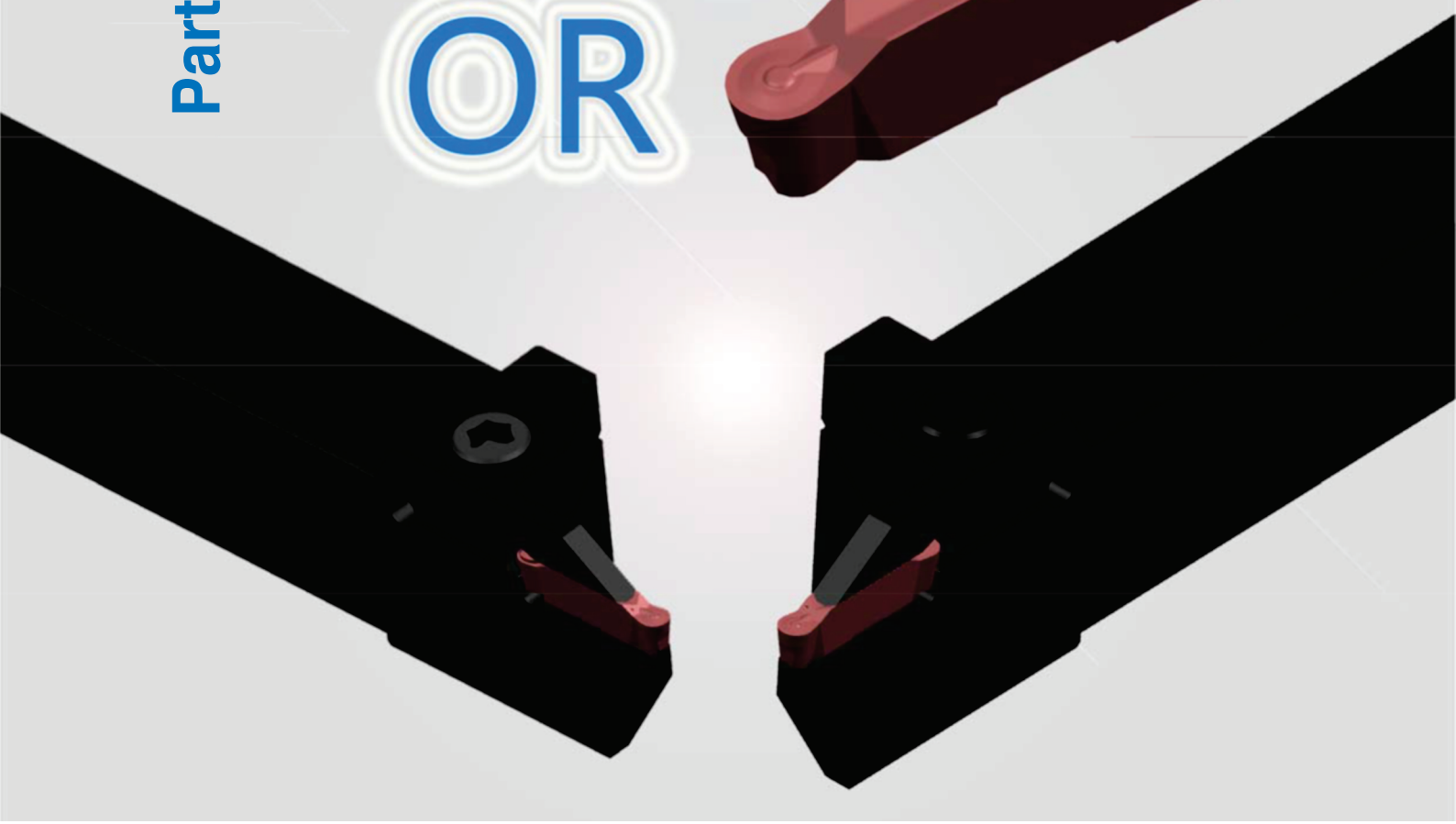
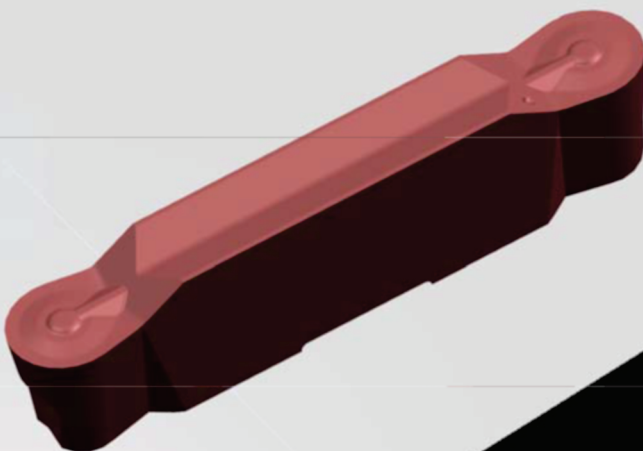
MT



FG

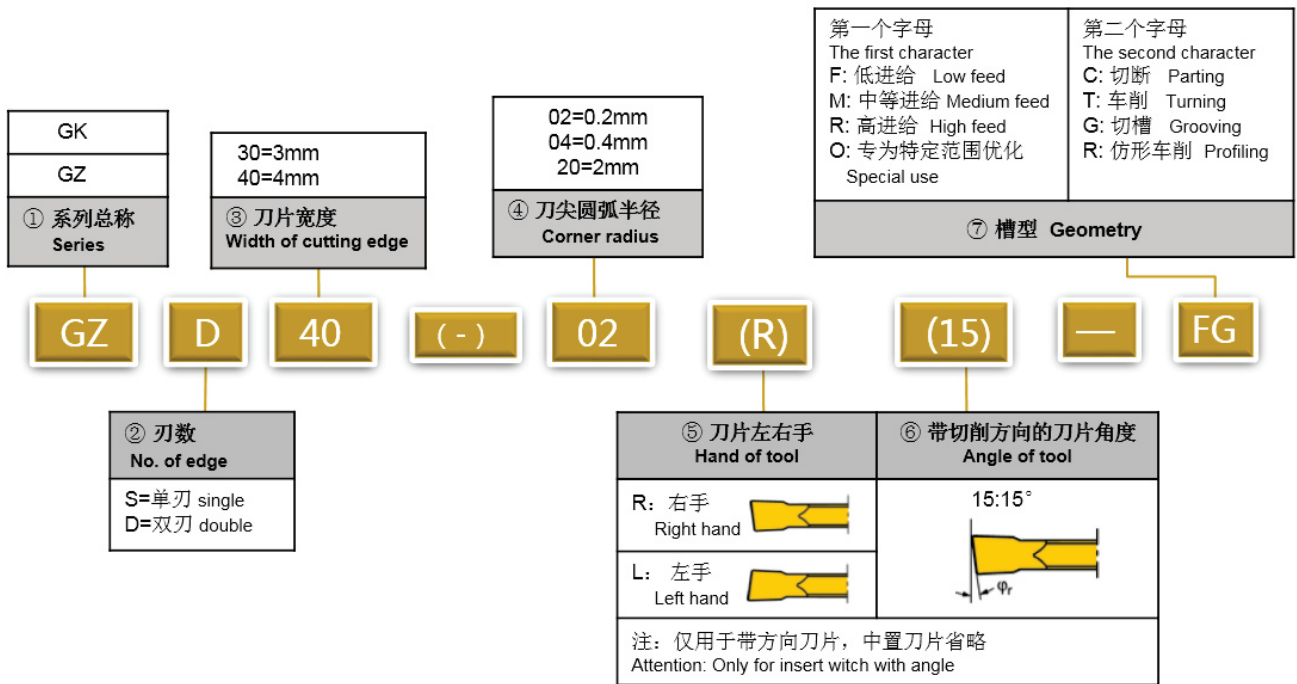


OR



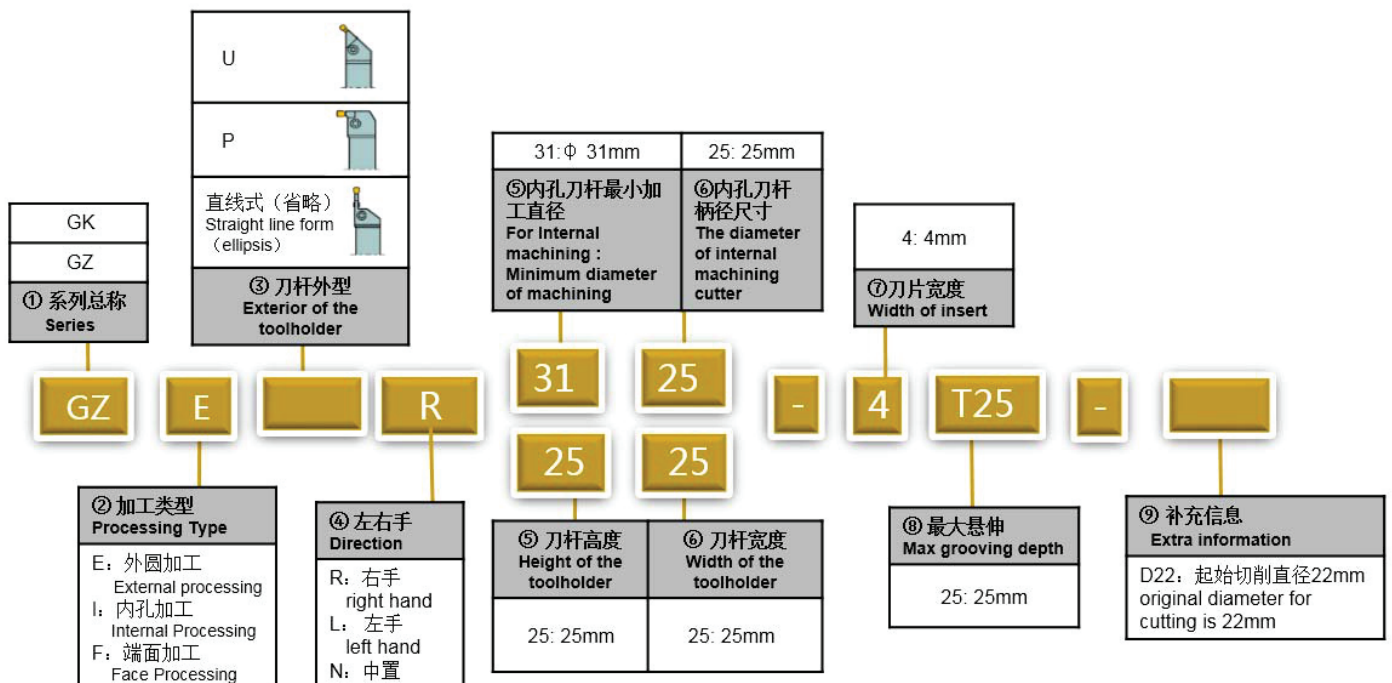
切断切槽刀片型号表示规则

Parting & Grooving Inserts Identification System



切断切槽刀杆型号表示规则

Parting & Grooving Tools Identification System



产品介绍

Introduction

1、丰富的产品系列

Rich product series

目前开发了 3 类槽型，包含多功能免磨型的 MT 槽型、多功能精磨型的 FG 槽型以及仿形精磨型的 OR 槽型，后续将继续开发压制型的仿形产品以及切断产品等，旨在为客户提供全面的切槽加工解决方案。

So far, there are three geometries for grooving inserts, including MT geometry (multi-purpose directly pressed insert without grinding), FG geometry (multi-purpose precisely ground insert), and OR geometry (precisely ground profiling insert). In the future, directly pressed profiling inserts and the parting inserts will be developed. Our purpose is to provide completed grooving processing solutions for customers.

槽型 Geometry	产品图片 Insert Picture	应用领域 Application
MT		多功能通用槽型 general geometry for Multi-purpose 适用于通用加工行业 General application
FG		多功能低进给槽型 Geometry of low feed for Multi-purpose 主要应用于航空航天等领域 For Aerospace industry
OR		仿形通用槽型 General geometry for profile processing 主要应用于航空航天等领域 For Aerospace industry

2、独特的设计理念

Unique design theory

切槽和车削刀片 Grooving and turning inserts



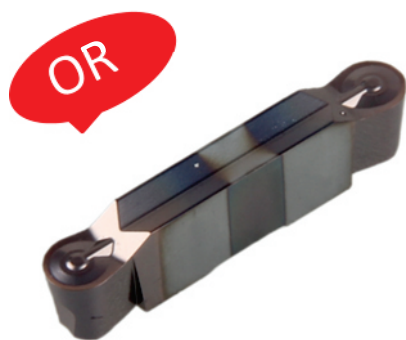
- 独特的三维槽型设计，具有优异的断屑性能
A special design for 3-D molded geometry with an excellent capacity of chip control
- 功能多样，可实现切槽、切断和车削等加工
Achieving much function, such as parting/grooving and turning, etc.
- 应用广泛，适用于钢、不锈钢和铸铁等材料
With a wide range of application, suitable for machining of steel/stainless steel and cast iron, etc.

精密切槽和车削刀片 Precise grooving and turning inserts



- 精磨而成的刀片可满足高精度加工需求
Precisely ground insert can fulfill high precision machining requirement
- 独特的凹槽设计保证了良好的断屑效果
The special geometry design ensures Smooth chip control
- 稳固的夹持系统有效提高加工的稳定性
Stable clamping system effectively improves the stability of machining

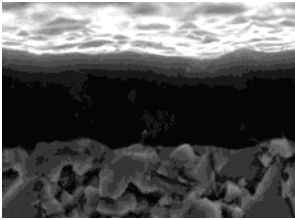
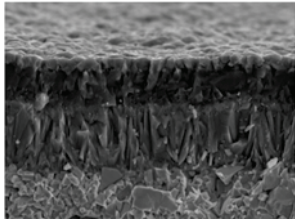
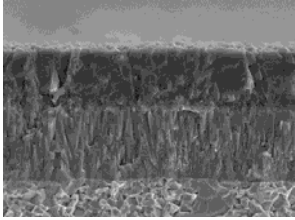
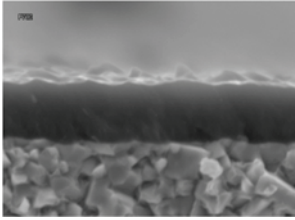
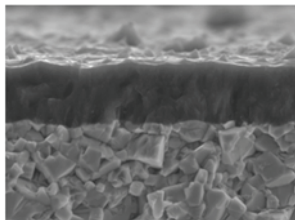
精密仿形车削刀片 Precise profiling and turning inserts

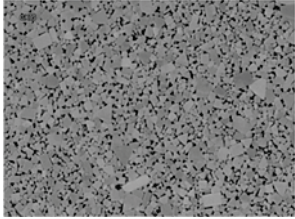


- 精磨而成的刀片可满足高精度加工需求
precisely ground insert fulfills high precision machining requirement
- 大前角设计能确保排屑流畅和切削轻快
Large rake angle ensures chip control and low cutting force
- 稳固的夹持系统有效提高加工的稳定性
Stable clamping system effectively improves the stability of machining

3、多样的牌号选择

Various grade choice

牌 号 Grade	加工类型 Cutting Range	断面结构 Sectional Structure	特 点 Advantages
A4230	中等进给 Medium feed		<ul style="list-style-type: none"> ● 通用牌号 TiAlN 涂层搭配微细晶硬质合金基体，具有良好的耐磨损性与耐破损性 Versatile grade, the upgrade TiAlN coating with Micrograin cemented carbide substrate, with the performance of high wear resistance and fracture resistance ● 适用于钢、不锈钢的加工 Suitable for the processing of steel and stainless steel
A1225	中等进给 Medium feed		<ul style="list-style-type: none"> ● 厚的 MT-TiCN+Al₂O₃+ TiN 涂层结构与良好韧性的表面梯度合金基体相结合，在保证韧性的同时，材质的抗冲击韧性明显提升 CVD-coated carbide grade with a thick wear resistant coating on a gradient substrate, not only ensure the toughness but also improve the performance of shock resisting toughness ● 适用于钢、铸铁等加工 Suitable for the processing of steel and cast iron
C1115	中等进给 Medium feed		<ul style="list-style-type: none"> ● MT-TiCN 和厚的 Al₂O₃ 涂层结构与高耐磨性细晶粒基体相结合，经过特殊的涂层后处理技术，具有良好的耐磨性和抗崩刃性 MT-TiCN and thick Al₂O₃ coated on micro-grain carbide substrate, superior wear resistance. Special post-processing with smooth coating and shows superior wear resistance and fracture resistance ● 适用于灰铸铁、球磨铸铁等加工 Suitable for the processing of gray cast iron and nodular cast iron
S3115	低进给 Low feed		<ul style="list-style-type: none"> ● 通用牌号，PVD TiAlN 涂层与微细晶硬质合金基体附着强度高，耐磨性优异。 Versatile grade, new TiAlN coating with micrograin cemented carbide, and shows superior wear resistance ● 适用不锈钢、高温合金、钛合金 Suitable for the processing of stainless steels, HRSA and titanium alloys.
S3125	低进给 Low feed		<ul style="list-style-type: none"> ● 细晶硬质合金基体搭配全新 PVD TiAlN 涂层，具有良好的红硬性和耐热性。 TiAlN coating with fine grain cemented carbide with high hot hardness and heat resistance ● 适用不锈钢、高温合金加工 Suitable for the processing of stainless steels, HRSA alloys.

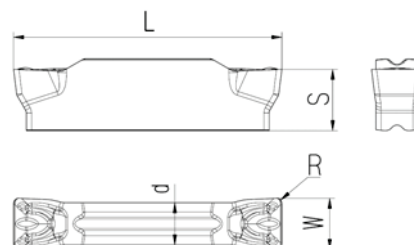
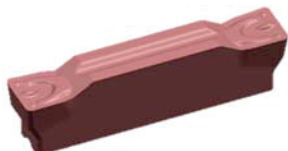
牌 号 Grade	加工类型 Cutting Range	断面结构 Sectional Structure	特 点 Advantages
S9125	低进给 Low feed		<ul style="list-style-type: none"> ● 无涂层细晶粒硬质合金牌号,良好的耐磨性能与韧性兼备 Uncoated carbide grade with good abrasive wear resistance and toughness ● 适用于钛合金加工 Suitable for the processing of Titanium alloys

切断切槽刀片

Parting & Grooving inserts

切槽和车削刀片

Grooving and turning inserts

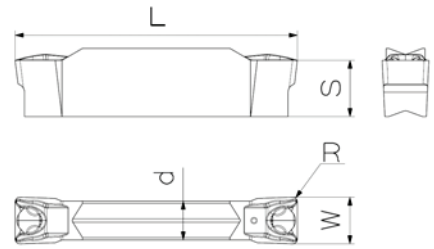
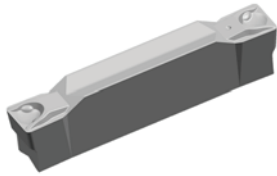


刀片型号 Insert Type	牌号 Grade			尺寸 Dimension				
	A4230	A1225	C1115	W	R	L	d	S
GKD2002-MT	●	●	●	2.0	0.2	16.0	1.2	3.5
GKD2502-MT	●	●	●	2.5	0.2	18.5	2.0	3.85
GKD3004-MT	●	●	●	3.0	0.4	21.2	2.35	4.8
GKD4004-MT	●	●	●	4.0	0.4	21.0	3.3	4.8
GKD5004-MT	●	●	●	5.0	0.4	26.0	4.1	5.8
GKD5008-MT	●	●	●	5.0	0.8	26.0	4.1	5.8
GKD6004-MT	●	●	●	6.0	0.4	26.0	5.0	5.8
GKD6008-MT	●	●	●	6.0	0.8	26.0	5.0	5.8
GKD8008-MT		○	○	8.0	0.8	31.0	6.0	6.5

● 标准库存 Stock ○ 需预定 Available upon order

精密切槽和车削刀片

Precise grooving and turning inserts

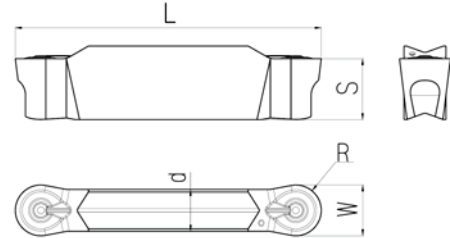
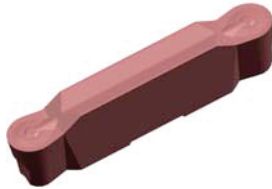


刀片型号 Insert Type	牌号 Grade		尺寸 Dimension				
	S3125	S9125	W	R	L	d	S
GZD3002-FG	●	●	3.0	0.2	20.4	2.3	4.6
GZD3004-FG	●	●	3.0	0.4	20.4	2.3	4.6
GZD4002-FG	●	●	4.0	0.2	24.0	3.3	4.8
GZD4004-FG	●	●	4.0	0.4	24.0	3.3	4.8
GZD5002-FG	●	●	5.0	0.2	24.0	3.3	4.8
GZD5004-FG	●	●	5.0	0.4	24.0	3.3	4.8
GZD6002-FG	●	●	6.0	0.2	26.0	4.2	4.8
GZD6004-FG	●	●	6.0	0.4	26.0	4.2	4.8

● 标准库存 Stock ○ 需预定 Available upon order

精密仿形车削刀片

Precise profiling and turning insert



刀片型号 Insert Type	牌号 Grade	尺寸 Dimension				
	S3115	W	R	L	d	S
GZD3015-OR	●	3.0	1.5	21.0	2.3	4.6
GZD4020-OR	●	4.0	2.0	24.0	3.3	4.8
GZD5025-OR	●	5.0	2.5	24.0	3.3	4.8
GZD6030-OR	●	6.0	3.0	21.0	4.2	4.8

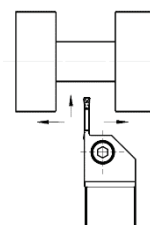
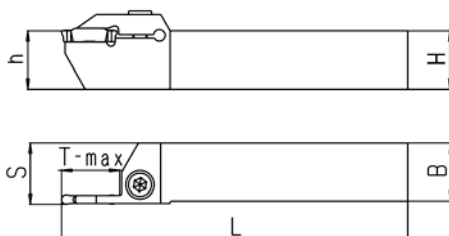
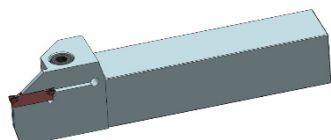
● 标准库存 Stock ○ 需预定 Available upon order



切断切槽刀杆

Toolholder for parting & grooving

外圆切断切槽及车削刀具

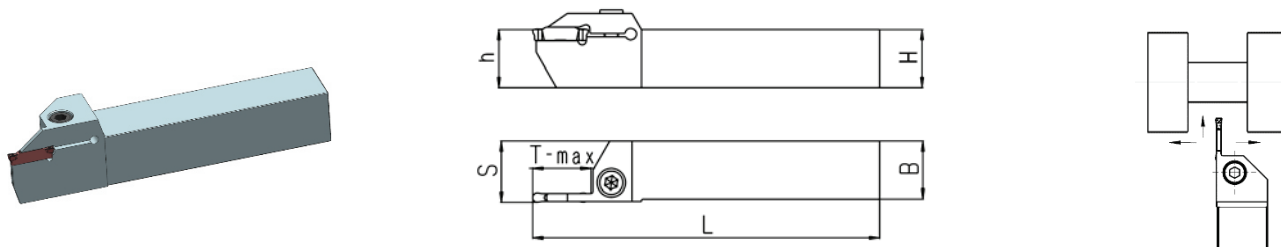
External parting, grooving and turning tools




型号 Type	尺寸(mm) Dimension					标准刀片 Inserts	螺钉 Screw	扳手 Wrench
	H=(h)	B	L	S	T-max			
GZER/L2020-3T20	20	20	125	21	20	GZD3015-OR	SCAM5X20	TH40L
GZER/L2525-3T20	25	25	150	26	20	GZD3015-OR	SCAM6X20	TH50L
GZER/L3225-3T20	32	25	170	26	20	GZD3015-OR	SCAM6X20	TH50L
GZER/L2020-4T25	20	20	125	21	25	GZD4020-OR	SCAM5X20	TH40L
GZER/L2525-4T25	25	25	150	26	25	GZD4020-OR	SCAM6X20	TH50L
GZER/L3225-4T25	32	25	170	26	25	GZD4020-OR	SCAM6X20	TH50L
GZER/L2525-6T32	25	25	150	26	32	GZD6030-OR	SCAM6X30	TH50L
GZER/L3225-6T32	32	25	170	26	32	GZD6030-OR	SCAM6X30	TH50L

外圆切断切槽及车削刀具

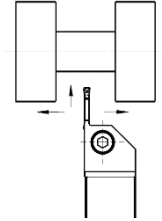
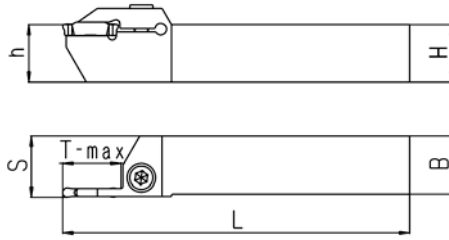
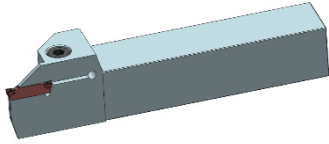
External parting, grooving and turning tools





型号 Type	尺寸(mm) Dimension					标准刀片 Inserts	螺钉 Screw	扳手 Wrench
	H=(h)	B	L	S	T-max			
GKER/L1616-2T14	16	16	100	17	14	GKD2002-MT	SCAM5X12	TH40L
GKER/L2020-2T14	20	20	125	21	14	GKD2002-MT	SCAM5X20	TH40L
GKER/L2525-2T14	25	25	150	26	14	GKD2002-MT	SCAM6X20	TH50L
GKER/L1616-2.5T16	16	16	100	17	16	GKD2502-MT	SCAM5X12	TH40L
GKER/L2020-2.5T16	20	20	125	21	16	GKD2502-MT	SCAM5X20	TH40L
GKER/L2525-2.5T16	25	25	150	26	16	GKD2502-MT	SCAM6X20	TH50L
GKER/L1616-3T18	16	16	100	17	18	GKD3004-MT	SCAM5X12	TH40L
GKER/L2020-3T18	20	20	125	21	18	GKD3004-MT	SCAM5X20	TH40L
GKER/L2525-3T18	25	25	150	26	18	GKD3004-MT	SCAM6X20	TH50L
GKER/L3225-3T18	32	25	170	26	18	GKD3004-MT	SCAM6X20	TH50L
GKER/L3232-3T18	32	32	170	33	18	GKD3004-MT	SCAM6X20	TH50L
GKER/L2020-4T18	20	20	125	21	18	GKD4004-MT	SCAM5X20	TH40L
GKER/L2525-4T18	25	25	150	26	18	GKD4004-MT	SCAM6X20	TH50L
GKER/L3225-4T18	32	25	170	26	18	GKD4004-MT	SCAM6X20	TH50L
GKER/L3232-4T18	32	32	170	33	18	GKD4004-MT	SCAM6X20	TH50L
GKER/L2020-5T23	20	20	125	21	23	GKD5004-MT	SCAM5X20	TH40L
GKER/L2525-5T23	25	25	150	26	23	GKD5004-MT	SCAM6X20	TH50L
GKER/L3225-5T23	32	25	170	26	23	GKD5004-MT	SCAM6X20	TH50L
GKER/L3232-5T23	32	32	170	33	23	GKD5004-MT	SCAM6X20	TH50L

外圆切断切槽及车削刀具

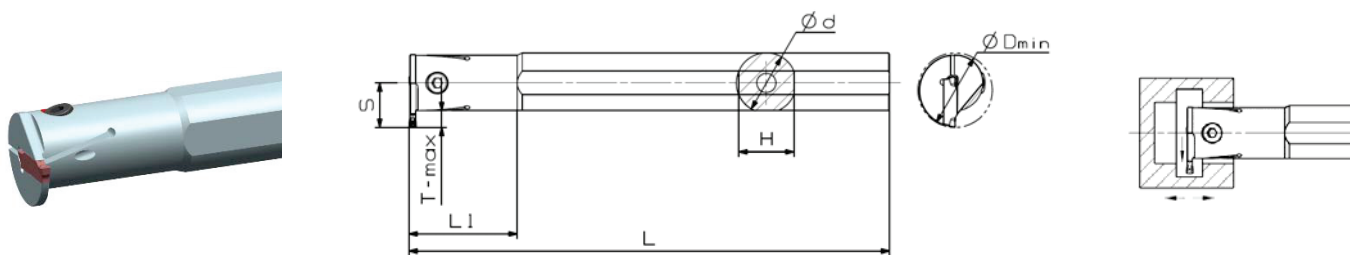
External parting, grooving and turning tools




型号 Type	尺寸(mm) Dimension					标准刀片 Inserts	螺钉 Screw	扳手 Wrench
	H=(h)	B	L	S	T-max			
GKER/L2020-6T23	20	20	125	21	23	GKD6004-MT	SCAM5X20	TH40L
GKER/L2525-6T23	25	25	150	26	23	GKD6004-MT	SCAM6X20	TH50L
GKER/L3225-6T23	32	25	170	26	23	GKD6004-MT	SCAM6X20	TH50L
GKER/L3232-6T23	32	32	170	33	23	GKD6004-MT	SCAM6X20	TH50L

内圆切槽及车削刀具

Internal grooving and turning tools



型号 Type	尺寸(mm) Dimension							标准刀片 Inserts	螺钉 Screw	扳手 Wrench
	T-max	ϕ Dmin	ϕ d	S	L	L1	H			
GKIR/L2016-2T04	4	20	16	12	125	35	15	GKD2002-MT	SCAM4X10	TH30L
GKIR/L2520-2T05	5	25	20	14.5	150	45	18	GKD2002-MT	SCAM4X12	TH30L
GKIR/L2925-2T05	5	29	25	17	200	45	23	GKD2002-MT	SCAM5X12	TH40L
GKIR/L2520-2.5T05	5	25	20	14.5	150	45	18	GKD2502-MT	SCAM4X12	TH30L
GKIR/L2925-2.5T05	5	29	25	17	200	45	23	GKD2502-MT	SCAM5X12	TH40L
GKIR/L2520-3T06	6	25	20	15.5	150	45	18	GKD3004-MT	SCAM4X12	TH30L
GKIR/L3125-3T06	6	31	25	18.5	200	45	23	GKD3004-MT	SCAM5X12	TH40L
GKIR/L3732-3T06	6	37	32	21.5	250	65	30	GKD3004-MT	SCAM5X20	TH40L
GKIR/L2520-4T06	6	25	20	15.5	150	45	18	GKD4004-MT	SCAM4X12	TH30L
GKIR/L3125-4T06	6	31	25	18.5	200	45	23	GKD4004-MT	SCAM5X12	TH40L
GKIR/L3732-4T06	6	37	32	21.5	250	65	30	GKD4004-MT	SCAM5X20	TH40L
GKIR/L3125-5T08	8	31	25	19.5	200	45	23	GKD5004-MT	SCAM5X12	TH40L
GKIR/L3732-5T08	8	37	32	21.5	250	65	30	GKD5004-MT	SCAM5X20	TH40L
GKIR/L3125-6T08	8	31	25	19.5	200	45	23	GKD6004-MT	SCAM5X12	TH40L
GKIR/L3732-6T08	8	37	32	21.5	250	65	30	GKD6004-MT	SCAM5X20	TH40L

推荐切削参数

Recommended Cutting Data

刀片宽度 Inserts size (mm)	进给(f=mm/r) Feed					
	切断 Parting	切槽 (MT) Grooving	车削(MT) Turning	切槽 (FG、OR) Grooving	车削(FG) Turning	仿形 (OR) Profiling
	2	0.08 (0.05-0.15)	0.08 (0.05-0.15)	0.1 (0.05-0.2)		
2.5	0.08 (0.05-0.15)	0.08 (0.05-0.18)	0.1 (0.05-0.2)			
3	0.08 (0.05-0.18)	0.08 (0.05-0.18)	0.12 (0.05-0.25)	0.08 (0.05-0.15)	0.08 (0.05-0.15)	0.1 (0.05-0.25)
4	0.1 (0.05-0.2)	0.1 (0.05-0.2)	0.12 (0.05-0.25)	0.08 (0.05-0.15)	0.08 (0.05-0.15)	0.12 (0.08-0.25)
5	0.12 (0.08-0.2)	0.12 (0.08-0.2)	0.15 (0.05-0.3)	0.12 (0.05-0.2)	0.12 (0.05-0.2)	0.15 (0.08-0.3)
6		0.15 (0.08-0.25)	0.15 (0.05-0.3)	0.12 (0.05-0.2)	0.12 (0.05-0.2)	0.15 (0.08-0.3)
8		0.15 (0.08-0.25)	0.15 (0.05-0.3)			

ISO	材质 Workpiece material	硬度 Hardness (HB)	切削速度 (Vc=m/min) Speed					
			A4230	A 1225	C1115	S3115	S3125	S9125
P	低碳钢 Low carbon steel	80 – 170	110 (70-180)	120 (80-220)		70 (50-100)	70 (50-100)	
	高碳钢 High Carbon steel	170 – 250	110 (70-150)	120 (80-220)				
	低合金钢 Low alloy steel	140– 260	110 (40-150)	110 (60-180)		70 (50-100)	70 (50-100)	
	高合金钢 High alloy steel	180– 300	110 (40-150)	110 (60-180)				
	铸钢 Cast steel	180– 300	110 (40-150)	110 (60-180)				
M	铁素体/马氏体 Ferritic/ Martensitic	150– 270	110 (40-180)			90 (50-150)	90 (30-180)	
	奥氏体 Austenitic	150– 270	110 (40-180)			90 (50-150)	90 (30-180)	
K	可锻铸铁 Malleable Cast Iron	150– 230	110 (50-180)		130 (50-200)			
	灰口铸铁 Gray Cast Iron	150– 230	110 (50-180)		130 (50-200)			
	球墨铸铁 Nodular Cast Iron	160– 260	100 (50-150)		100 (50-150)			
S	高温合金 Heat-resiatant alloy	130– 400				35 (15-60)	35 (15-70)	
	钛合金 Titanium Alloys	130– 400				35 (15-60)	35 (15-70)	35 (15-60)