

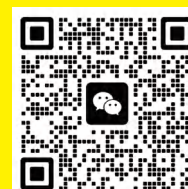


上海方瀚精密工具有限公司
上海市金山工业区亭朱公路69号
201506
Info@fonhae.com
www.fonhae.com

Shanghai Fonhae Precision Tools Co., Ltd.
No.69 Tingzhu Rd.Jinshan, Shanghai P.R.China
201506
Info@fonhae.com
www.fonhae.com



2024-2025样本



方瀚工具源头生产厂家

自动车床刀片 Automatic lathe insert



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精密机械加工刀具制造商，成立于2016年，专业提供硬质合金、金属陶瓷刀具研发、生产、销售和服务的企业。

为客户提供高性能的车削刀具方案是我们方瀚工程师每天的工作。从2016年成立公司到现在，近七年来服务过的企业涵盖汽车配件、轴承零件、医疗器械、电动工具、光纤接头、航空航天、手机配件、电脑配件等等。

Manufacture of precision metal cutting tools, was established in 2016. The company specializes in providing tungsten carbide, cermet tools research and development, production, sales and service.

To provide customers with high-performance turning tool solutions is the daily work of our Fonhae engineers. From the establishment of the company in 2016 to the present, the company served in the past seven years cover automotive, bearing parts, medical equipment, electrical tools, optical fiber splice, aerospace, mobile phone accessories, computer accessories and so on.

被加工材料涵盖 The materials to be machining include:

奥氏体不锈钢 Austenitic stainless steel: 304/316L/316F/316LF

马氏体不锈钢 Martensitic stainless steel: 410/416/420J1/420J2

钛合金 Titanium alloy: TC4/TC6

可伐合金 Kovar: 4J29

软磁合金 Soft magnetic alloys: 1J117

哈氏合金 Hastelloy: C22/C267

易切削钢，碳钢，有色金属等零件材料

Easy cut steel, carbon steel, non-ferrous metals and other parts materials

主营业务 Main business:

自动车床刀片 Automatic lathe insert:

外圆刀、后扫刀、切槽刀、切刀、非标定制刀片

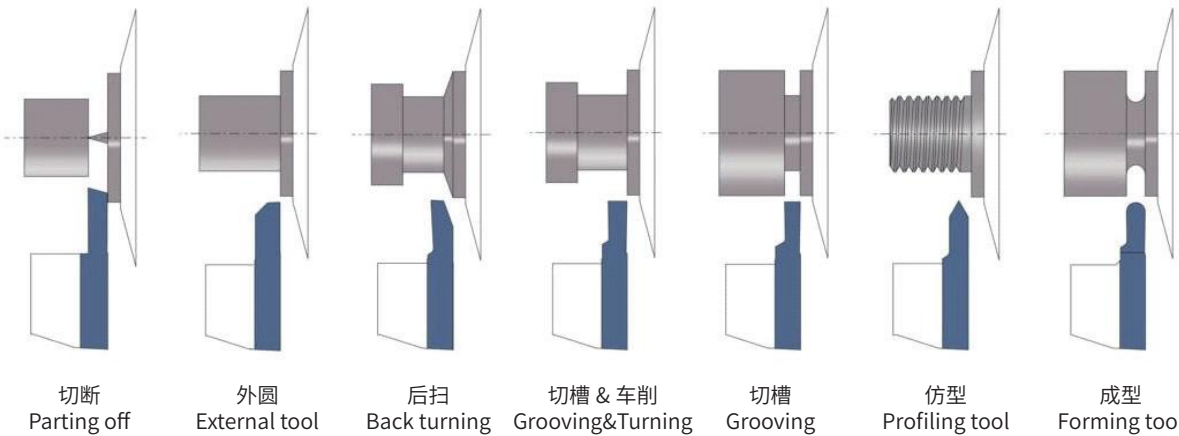
External tool, back turning, grooving, parting off, Non-standard customized insert

走芯机刀片 Swiss type lathe insert:

前扫刀、后扫刀、切槽、切断、螺纹、非标定制刀片

Front turning, back turning, grooving, parting off, threading, Non-standard customized insert

公司简介 Company profile	p1
产品简介 Product introduction	p2
自动车床刀具标准化过程 Automatic lathe tool standardization process	p3
方瀚品牌刀具介绍 Fonhae brand tools introduction	p4
TNK 系列切断刀 TNK Series parting off	p5
TNK 系列前扫刀、后扫刀 TNK Series Front turning、Back turning	p6
TNK 系列多功能切槽 & 车削 TNK Series Grooving&Turning	p7
TNK 系列切槽刀、精磨半成品刀 TNK Series Grooving、Fine grinding of semi-finished inserts	p8
TNK 系列订制成型刀 TNK Series Custom forming tool	p9
钨钢左钻、中心钻 Carbide left flute drill、Centering drill	p10



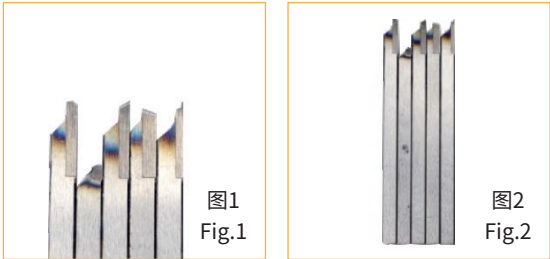
自动车床刀具标准化过程

Automatic lathe tool standardization process



焊接车刀 Welding turning tool

优点：单价便宜，采购成本低
Advantage: low unit tool price and low procurement cost
缺点：磨刀困难，手工磨刀一致性差，不耐用。使用成本高。
Disadvantage: difficult to sharpen, poor consistency of manual sharpening, low tool life. Higher cost per part.



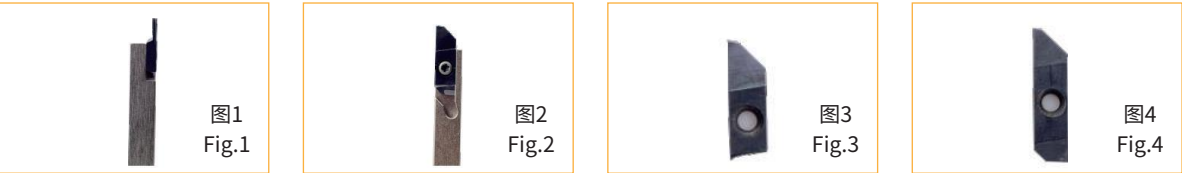
FONHAE TOOLS

方瀚工具拥有更优结构设计。Fonhae tool have a better structural design.
图1：所示定位面与刀杆在一个刀刃使用完换刃后仍然严丝合缝。
Fig.1: The positioning surface and the holder shown are still tightly fitting after a cutting edge is used to change the edge.
图2：所示刀片断刃了也不影响刀具的定位面可以牢牢的和刀杆贴紧。
Fig.2: The broken edge of the insert shown does not affect the positioning surface of the tool and can be firmly attached to the holder.
图3：所示刀片两刃可以完全的使用，和同行业者比较拥有更长的有效刃长，提高刀具经济性。
Fig.3: The two edges of the insert shown can be used completely, and the effective cutting edge length is longer than that of competitors in the same industry, which improves the economy of the tool.



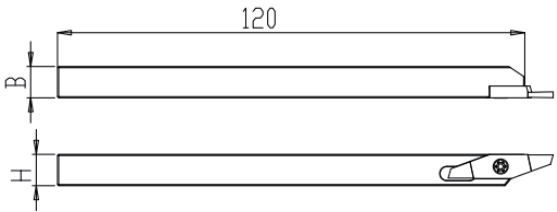
公司刀具 Company tools

优点：刀杆通用，多家公司可提供类似刀片，高低可选。
Advantage: The tool holder is universal, and many companies can provide similar inserts, different center height can be selected.
缺点：结构性问题，刀刃一边用完另一边没有支撑锁不稳。容易造成产品品质不稳定和刀具浪费
Disadvantage: Structural problems, one side of the cutting edge is used up, and the other side is not supported, and the lock is unstable. It is easy to cause unstable product quality and tool waste.
图1：所示刀刃一边使用完后定位面被破坏，刀片和刀杆出现缝隙不能和刀杆贴紧，仅靠螺丝锁不稳。
Fig.1: The positioning surface is destroyed after one side of the cutting edge shown is used, and there is a gap between the insert and holder that cannot be tightened with the holder and cannot be stabilized by the screw lock alone.
图2：所示刀刃一边使用完后定位面被破坏，另一边因为没有定位面支撑锁不稳，继续使用容易造成产品品质不稳定或者刀具受力后断刃，造成不同的浪费。
Fig.2: The positioning surface is destroyed after one side of the cutting edge shown is used, and the other side is unstable because there is no positioning surface to support the lock. Continued use is easy to cause instability of product quality or the cutting edge is broken after the tool is stressed, resulting in different waste.
图3：所示由于断刀没有了定位面，影响了另一个刀刃不能稳定的安装在刀杆上，被浪费的一边完整刀刃。
Fig.3: Due to the lack of a positioning surface for the broken tool, which affects the fact that the other cutting edge cannot be stably mounted on the holder, and one side of the complete edge is wasted.
图4：所示为了保留住刀片的定位面减少刀片修磨次数，造成实际刀片有效刃长变短。
Fig.4: In order to retain the positioning surface of the insert, the number of insert grinding times is reduced, resulting in a shorter effective edge length of the actual insert.



方瀚品牌刀具介绍

Fonhae brand tools introduction



方瀚刀具采用合金工具钢经热处理后精磨刀杆和加工刀片装夹位。解决了刀片和刀杆配合锁紧时强度和定位精度问题。
Fonhae tools is made of alloy tool steel, and after heat treatment, the tool holder is finely ground and the processing insert is clamped. It solves the problem of strength and positioning accuracy when the insert and the tool holder are locked together.
更优的刀具角度解决了加工过程中刀具干涉问题，同时进刀提高效率。
The better tool angle solves the problem of tool interference during machining, while improving the efficiency of tool feeding.
一支刀杆通装所有类型刀片，方便管理节约费用。
One holder can be used for all types of inserts, which is easy to manage and save costs.
提供丰富的刀具类型供客户选择，涵盖了外圆，后扫刀，切槽，切槽&车削，仿型，切断，成型定制。满足客户的用刀需求。
Provide a wide range of tool types for customs to choose, covering external tool, back turning, grooving, Grooving&Turning, profiling tool, parting off, forming tool customization. Meet the needs of customers with tools.
多种刀片材质和涂层匹配，满足不同被加工材料使用需求。
A variety of tool materials and coatings are matched to meet the needs of different processed materials.

刀杆型号编号规则 Tool holder model number rules

TNK	L	08	08	-	120	T03
1	2	3	4	-	5	6
系列号 Series	刀杆方向 Direction	H 高度	B 宽度	-	L 长度	刀片类型 Insert Type
TNK	L- 左手型	8	8		120	03=3.0mm
		10	10		120	
	R- 右手型	12	12		120	

刀具型号编号规则 Tool model number rules

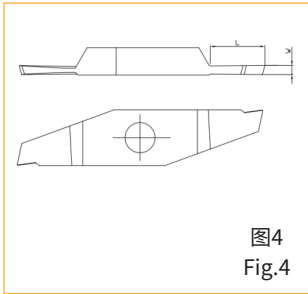
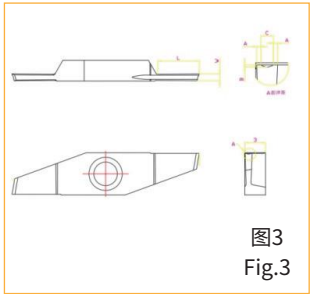
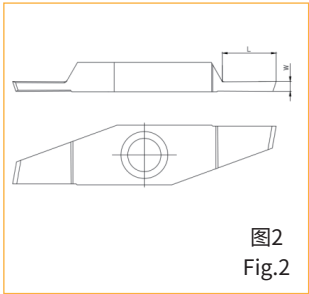
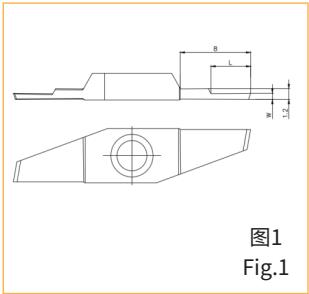
C	TNK	100	F	L	N	-			GP
1	2	3	4	5	6	-	7	8	9
刀具类型 Tool Type	系列号 Series	刃宽 Width	刃口处理 Cutting edge treatment	刀具方向 Direction	刃口类别 Cutting edge Type		刀尖类型 Corner type	数值 Dimension	牌号 Grade
C- 切断刀 Parting off	TNK	100=1.0mm	F- 无钝化 Without edge preparation	L- 左手型	N- 无前角 0° rake angle		C- 刀尖倒角 Chamfering	01=0.1mm	GP
B- 后扫刀 Back turning					V- 有前角 Positive rake angle				
D- 多功能型 Multifunctional									
F- 外圆修面刀 External tool		180=1.8mm	E- 钝化 With edge preparation	R- 右手型	U- 切断槽型 Parting off geometry		R- 刀尖圆弧 Radius	02=0.2mm	JS
G- 切槽 Grooving					S- 复合槽型 Grooving and turning geometry				
W- 非标成型刀 Forming tool customization									

TNK系列切断刀

TNK Series Parting off

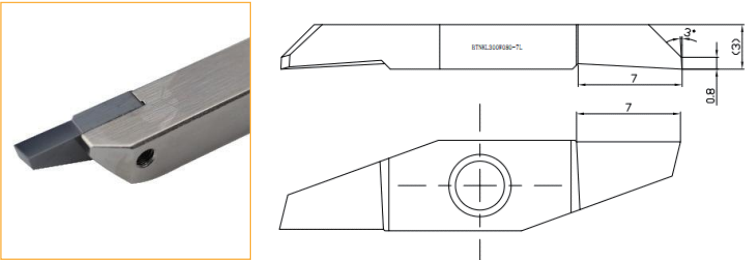


刀具型号 Order number	刀具尺寸 Dimension			牌号 Grade		图示 Fig.
	刃宽 Width W	刃长 L Edge length	C/R 角	GP	JS	
CTNK050FLN	0.5	3.5	0.00	●	○	1
CTNK060FLN	0.6	4.0	0.00	●	○	1
CTNK070FLN	0.7	4.5	0.00	●	○	1
CTNK080FLN	0.8	5.5	0.00	●	○	1
CTNK090FLN	0.9	5.7	0.00	●	○	2
CTNK100FLN	1.0	6.0	0.00	●	○	2
CTNK110FLN	1.1	7.0	0.00	●	○	2
CTNK120FLN	1.2	7.0	0.00	●	○	2
CTNK130FLN	1.3	7.0	0.00	●	○	2
CTNK150FLN	1.5	7.5	0.00	●	○	2
CTNK180FLN	1.8	7.5	0.00	●	○	2
CTNK080FLU	0.8	5.5	0.00	●	○	3
CTNK100FLU	1.0	6.0	0.00	●	○	3
CTNK120FLU	1.2	7.0	0.00	●	○	3
CTNK130FLU	1.3	7.0	0.00	●	○	3
CTNK150FLU	1.5	7.5	0.00	●	○	3
CTNK100FLV	1.0	6.0	0.00	●	○	4
CTNK120FLV	1.2	7.0	0.00	●	○	4
CTNK150FLV	1.5	7.5	0.00	●	○	4



TNK系列前扫刀

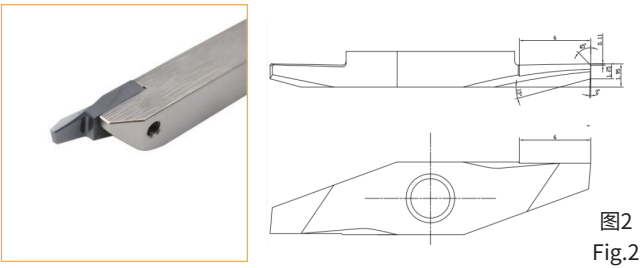
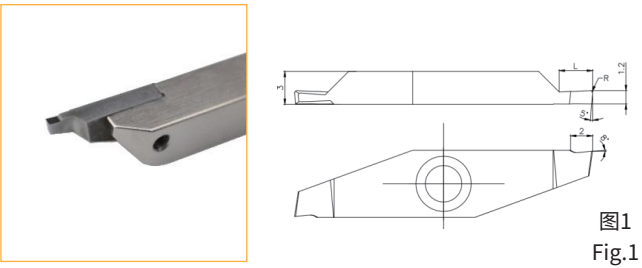
TNK Series Front turning



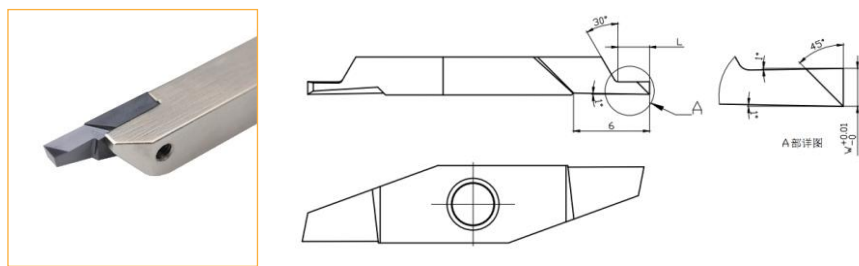
刀具型号 Order number	刀具尺寸 Dimension			牌号 Grade		图示 Fig.
	刃宽 Width W	刃长 L Edge length	C/R 角	GP	JS	
FTNK300FLN	3	7	0.00	●	○	1
FTNK300FLV	3	7	0.05	○	○	
FTNK300FLU	3	7	0.05	○	○	
FTNK300FLS	3	7	0.05	○	○	

TNK系列后扫刀

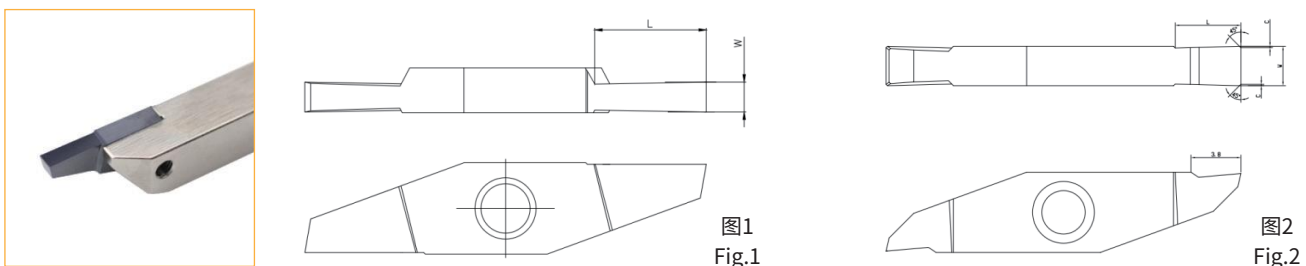
TNK Series Back turning



刀具型号 Order number	刀具尺寸 Dimension			牌号 Grade		图示 Fig.
	刃宽 Width W	刃长 L Edge length	C/R 角	GP	JS	
BTNK120FLV-R0.11	1.2	3	0.11	●	○	1
BTNK120FLV-R0.12	1.2	3	0.12	●	○	1
BTNK120FLV-R0.13	1.2	3	0.13	●	○	1
BTNK120FLV-R0.22	1.2	3	0.22	●	○	1
BTNK120FLV-R0.23	1.2	3	0.23	●	○	1
BTNK195FLV-C0.11	1.95	6	0.11	●	○	2



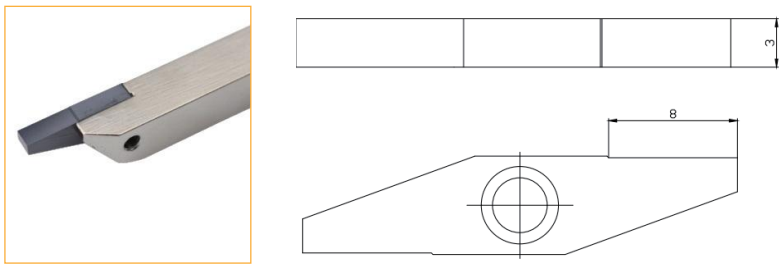
刀具型号 Order number	刀具尺寸 Dimension			牌号 Grade		图示 Fig.
	刃宽 Width W	刃长 L Edge length	C/R 角	GP	JS	
DTNK050FLS	0.5	1.5	0.00	●	○	1
DTNK060FLS	0.6	1.8	0.00	●	○	1
DTNK070FLS	0.7	2.0	0.00	●	○	1
DTNK080FLS	0.8	2.0	0.00	●	○	1
DTNK090FLS	0.9	2.5	0.00	●	○	1
DTNK100FLS	1.0	2.5	0.00	●	○	1
DTNK120FLS	1.2	3.0	0.00	●	○	1
DTNK150FLS	1.5	3.0	0.00	●	○	1
DTNK200FLS	2.0	4.0	0.00	●	○	1
DTNK250FLS	2.5	6.0	0.00	●	○	1
DTNK300FLS	3.0	6.0	0.00	●	○	1



刀具型号 Order number	刀具尺寸 Dimension			牌号 Grade		图示 Fig.
	刃宽 Width W	刃长 L Edge length	C/R 角	GP	JS	
GTNK150FLN	1.5	7.5	0.00	●	○	1
GTNK200FLN	2.0	7.5	0.00	●	○	1
GTNK250FLN	2.5	7.5	0.00	●	○	1
GTNK300FLN	3.0	7.5	0.00	●	○	1
GTNK280FLV-C01	2.8	5.0	0.11	●	○	2
GTNK300FLV-C01	3.0	5.0	0.11	●	○	2
GTNK305FLV-C01	3.05	5.0	0.11	●	○	2

TNK系列精磨半成品刀

TNK Series Fine grinding of semi-finished inserts



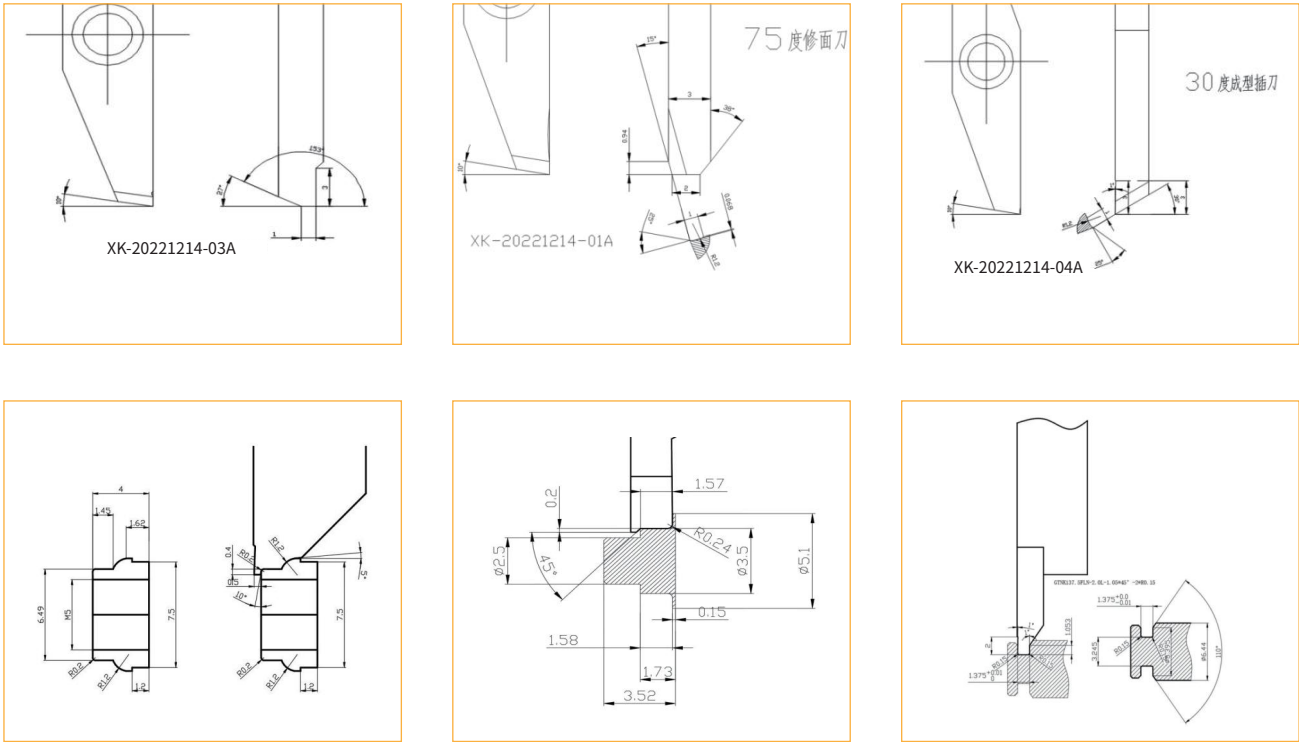
刀具型号编号规则 Tool model number rules

TNK	300	F	L	N	-			GP
1	2	3	4	5		6	7	8
系列号 Series	刃宽 Width	刃口处理 Cutting edge treatment	刀具方向 Direction	刃口类别 Cutting edge Type		刀尖类型 Corner type	数值 Dimension	牌号 Grade
TNK	300=3.0mm	F- 无钝化 Without edge preparation	L- 左手型	N- 无前角 0° rake angle V- 有前角 Positive rake angle	-	C- 刀尖倒角 Chamfering	01=0.1mm	GP
	600=6.0mm	E- 钝化 With edge preparation	R- 右手型	S- 复合槽型 Grooving and turning geometry U- 切断槽型 Parting off geometry		R- 刀尖圆弧 Radius	02=0.2mm	JS

订制型号编号规则 Custom model number rules

W	TNK	300	L	◇◇◇◇	GP	
1	2	3	4	5	6	
刀具类型 Tool Type	系列号 Series	刀片类型 Insert Type	刀具方向 Direction		牌号 Grade	
W- 非标成型刀 Forming tool customization	TNK	300=3.0mm	L- 左手型	刀具信息代号 Tool information code	GP	
B- 后扫刀 Back turning						
C- 切断刀 Parting off						
D- 多功能型 Multifunctional		600=6.0mm	R- 右手型		JS	
F- 外圆修面刀 External tool						
G- 切槽 Grooving						

WTNK300L订制案例展示 WTNK300L Custom made Case presentation



整体钨钢涂层定柄左钻Carbide coated fixed shank left flute drill

刀具规格 Specification	刀具尺寸 Dimension		涂层 Coated	无涂层 Uncoated
	刃长 L1 Edge length	总刃长 L Total length	JS	-
(φ1.5-φ2.0) *3.0 柄 Shank	12	40	●	●
(φ2.01-φ2.5) *3.0 柄 Shank	12&14	40	●	●
(φ2.51-φ3.0) *3.0 柄 Shank	18	40	●	●
(φ3.01-φ3.5) *4.0 柄 Shank	22	50	●	●
(φ3.51-φ4.0) *4.0 柄 Shank	25	50	●	●
(φ4.01-φ4.5) *5.0 柄 Shank	25	50	●	●
(φ4.51-φ5.0) *5.0 柄 Shank	25	50	●	●
(φ5.01-φ5.5) *6.0 柄 Shank	25	50	●	●
(φ5.51-φ6.0) *6.0 柄 Shank	25	50	●	●
(φ6.01-φ7.0) *7.0 柄 Shank	25	50	●	●

●现货Stock

1/8英制柄焊接钨钢涂层左钻1/8 inch shank welded carbide coated left flute drill

刀具规格 Specification	刀具尺寸 Dimension		涂层 Coated	无涂层 Uncoated
	刃长 L1 Edge length	总刃长 L Total length	TIN	-
(φ0.6-φ1.5) *1/8 柄 Shank	6	38	●	○
(φ1.51-φ3.0) *1/8 柄 Shank	12	38	●	○
(φ0.6-φ1.5) *1/8 柄 Shank	6	38	●	○
(φ1.51-φ3.0) *1/8 柄 Shank	12	38	●	○

●现货Stock ○订货Order

整体钨钢涂层中心钻Coated carbide centering drill

刀具规格 Specification	刀具尺寸 Dimension		涂层 Coated	无涂层 Uncoated
	刃长 L1 Edge length	总刃长 L Total length	TIN	-
D6.0*60 度°	8	25	○	○
D6.0*90 度°	8	25	●	○
D6.0*120 度°	8	25	○	○

●现货Stock ○订货Order