

旋转刀具

铣削
圆柄刀具
钻削
深孔加工
旋转刀柄



旋转刀具 ROTATION TOOLING

铣削 General milling B

圆柄刀具 Round tools C

钻削 Drilling D

深孔加工 Deep hole machining E

旋转刀柄 Rotation toolholder F

铣削 GENERAL MILLING

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面铣刀具 Face Mill	
FM45-SN	B07
FM75-SN	B09
FM88-SN	B09
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FM45-ON	B14
FM45-SE	B17
快进给铣刀具 High feed mill	
HF15-LN	B20
HF15-SD	B25
方肩铣刀具 Square shoulder mill	
SM90-AO	B31
SM90-AN	B37
SM90-ZN	B41
仿形铣刀具 Profile mill	
PM00-RP	B44
三面刃刀具 Full side and face mill	
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铣刀命名规则

Code key for milling cutters

FM45	-125	B	40	S
1	2	3	4	5
Face milling 45°	刀具直径	接口型式	接口尺寸	刀片形状

1 铣刀类型和主偏角

Mill type and cutting edge angle

FMxx Face milling (xx:45°/60°/75°/88°)

HFxx High feed milling (xx:10°/12°/13°/15°/20°)

SM90 Shoulder milling 90°

SF90 Slot & Face milling 90°

PM00 Profile milling

PG10 Plunge milling 10°

CMxx Chamfer milling (xx:30°/45°/60°/75°)

LE90 Long edge milling 90 玉米铣刀

FF90 Fine face mill 90°

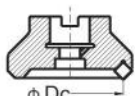
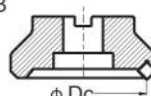
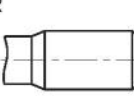
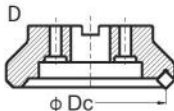
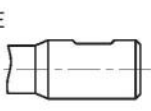
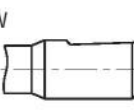
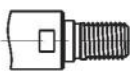
2 铣刀盘的直径 Mill diameter

4 接口尺寸 Mounting size

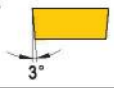
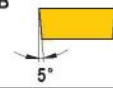
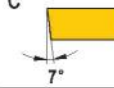
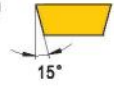
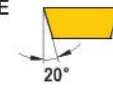
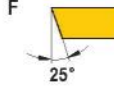
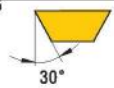
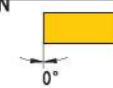
5 刀片形状 Insert shape

A 	B 	C 	D 
E 	H 	K 	L 
M 	O 	P 	R 
S 	T 	V 	W 

3 接口形式 Mounting type

A  Arbora A (40 ≤ Dc < 100)	B  Arbora B (80 < Dc < 160)	R  Round
D  Arbora C (160 ≤ Dc < 500)	E  Weldon-E	W  Weldon
M  Metric Thread	H  Hub	

N	12			0	
6	7	8	9	10	11
刀片后角	切削刃长度	螺钉空白 C: 刀卡式 W: 楔块式	标准空白 特质标明长度	刀具齿数	R空白 左手标注L

6刀片后角 Insert relief angle		
A  3°	B  5°	C  7°
D  15°	E  20°	F  25°
G  30°	N  0°	P  11°
	0=特殊	

7切削刃长度 Insert length		
A,B,K  I	C,D,E,M,V  I	H,O,P  I
L  I	R  I	S  I
T  I	W  I	

8可选编号Optional number

空白(blank)螺钉压紧型式 Screw clamping
C (Cartridge)带刀夹的设计 Cartridge design
W(Wedge)楔块式设计 Wedge design

9可选编号Optional number

空白(blank)标准长度 Standard length
L(length) 特殊长度 Special length

10 齿数 Tooth number

槽铣刀则为切槽的宽度 Slot width only for slotting mill

11可选编号Optional number

空白(blank)标准长度
L(left)左手设计

铣刀选择指南 Milling cutter selection guides

铣削

C

圆柄刀具

D

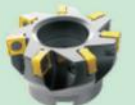
钻削

E

深孔加工

F

旋转刀柄

系列Serie	FM45-SN	FM75-SN	FM88-SN	FM45-HN	FM45-ON	FM45-SE
						
页数 Pages	B07	B09	B09	B11	B14	B17
主偏角 Cutting edge angle	45°	75°	88°	45°	45°	45°
最大切深 Max.depth of cut(mm)	6.5	6.5	6.5	5	3.8	6
直径范围 Diameter range(mm)	50-250	50-250	50-250	50-250	50-250	50-250
刀片刃口数 Insert edges	8	12	14	12	16	4
刀片类型 Insert	SN12	SN12	SN12	HN09	ON08	
面铣 Face milling 	●	●	●	●	●	●
快进给铣削 High feed milling 						
方肩铣 Shoulder milling 						
槽铣 Slotting 						
坡走铣 Straight ramping 						
螺旋插补铣 Helical ramping 						
倒角铣 Chamfer milling 	●	●	●	●	●	●
插铣 Plunging 						
仿形铣 Profiling 						
螺旋镗孔铣 Counter boring 						
镜面铣 Mirror milling 	●					
长悬伸铣削 Long overhang 						
背铣 Back face milling 						

HF15-LN	HF15-SD	SM90-AO	SM90-AN	SM90-ZN	PM00-RP	SF90-MN	FF90-AN&LN
							
B20	B25	B31	B37	B41	B44	B48	B54
15°	15°	90°	90°	90°	/	/	90°
0.7-1.0	1.3 1.7 3.2	10.1 15.7	8 11	7	4 5 6	7.9-26.5 (槽宽)	0.5
16-63	22-125	16-125	20-160	40-160	20-160	80-315	100-250
4	4	2	4	6	/	2	/
LN06	SD09 SD13 SD15	A007 A011 A017 A018	AN08 AN11	ZN08	RP08 RP10 RP12	05 08 11 14	AN11&LN15
●	●	●	●	●	●	●	●
●	●						
		●	●	●			
		●	●	●		●	
●	●	●	●		●		
●	●	●	●		●		
		○	○				
		○					
●	●				●		
						●	
							●
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						●	

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

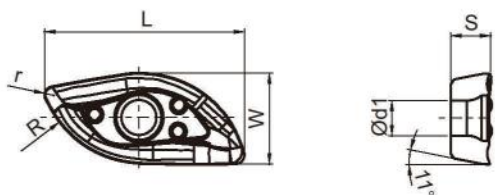
旋转刀柄

高性能铣削刀片

High performance milling inserts

仿形铣刀PM00刀片

Profile mill PM00-X0 insert

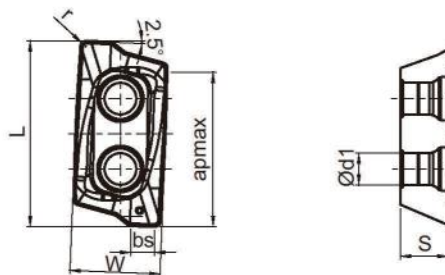


刀片外形	型号 Type	尺寸(mm) Dimensions						P	M	K	S	N
		L	W	d1	s	R	r	PM9115 PM9240	PM9115 PM9240	PM9115 PM9240	PM9115 PM9240	PM5010 PM9115
	XOMT1202R6-MM	11.47	5.18	2	2.38	6	0.5	☆	★	★	☆	☆
	XOMT1503R8-MM	15.1	6.83	2.8	3.18	8	0.8	☆	★	★	☆	☆
	XOMT19T3R10-MM	19.04	8.59	3.5	3.97	10	1	☆	★	★	☆	☆

首选★ 备选☆

大切深方肩铣刀SM90-A0刀片

Shoulder mill SM90-A0 insert

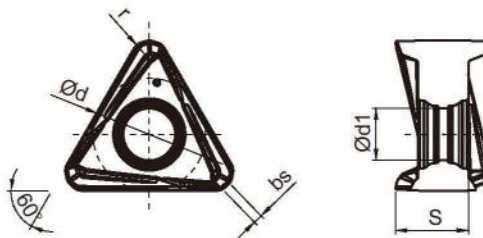


刀片外形	型号 Type	尺寸(mm) Dimensions							P	M	K	S	N
		L	W	S	d1	r	bs	apmax	PM9115 PM9345	PM9115 PM9345	PM9115 PM9345	PM9115 PM9345	PM9115 PM9345
	AOMT190608PDER-HP	21.95	10.82	6.85	3.81	0.8	2.6	18.1	★	☆	★	☆	☆
	AOMT190610PDER-HP	21.95	10.82	6.85	3.81	1.0	2.6	18.1	★	☆	★	☆	☆
	AOMT190616PDER-HP	21.95	10.82	6.85	3.81	1.6	2.6	18.1	★	☆	★	☆	☆
	AOMT2207PDER-HP	25.91	12.8	7.57	4.5	0.8	3.43	22.6	★	☆	★	☆	☆

首选★ 备选☆

大切深方肩铣刀SM90-TN刀片

Shoulder mill SM90-TN insert



刀片外形	型号 Type	尺寸(mm) Dimensions						P	M	K	S	N
		d	s	d1	r	bs	apmax	PM9115 PM9345	PM9115 PM9345	PM9115 PM9345	PM9115 PM9345	PM9115 PM9345
	TNGU160610PNTR-42	11.9	7.67	5.5	1	0.7		★	☆	★	☆	☆

首选★ 备选☆

面铣刀FM45-SN Face mill FM45-SN

45°通用面铣刀

生产率、经济性及安全性

刀片8个切削刃,最大切深6.5mm

适合钢件、铸铁粗到精加工

修光刃刀片无需预调

D100直径以下刀盘带内冷 (含D100)

可定制左手刀盘

General purpose 45° face mill

Productivity ,economy and safety

8 edges insert, A_pmax. 6.5mm

Suitable for steel,cast iron parts, rough to finish machining

Wiper insert without pre-adjusting

Mill with internal coolant under D100(including D100)

Left-hand mill can be made

刀片槽型

FM 槽型: 精磨刀片, 低至中等进给, 精加工首选

MM 槽型: 通用槽型,用于半精加工

ANTR-XH 右手刀片粗加工槽型: 高进给, 恶劣工况首选

ANTN-W 槽型: 修光刃槽型, 可搭配所有SNMX12刀片槽型使用

FM geometry: fine grinding insert, low to medium feed rates, first choice for finish machining

MM geometry: general purpose face milling, for semi-finish machining

ANTR-XH geometry: high feed rates,first choice for difficult machining condition

ANTN-W geometry: wiper insert, can be used with all SNMX12 inserts

直径范围: 50-250mm

Diameter range:50-250mm

铣削

C

圆柄刀具

D

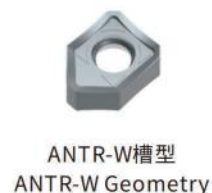
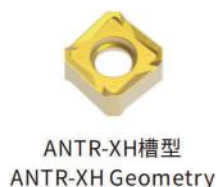
钻削

E

深孔加工

F

旋转刀柄

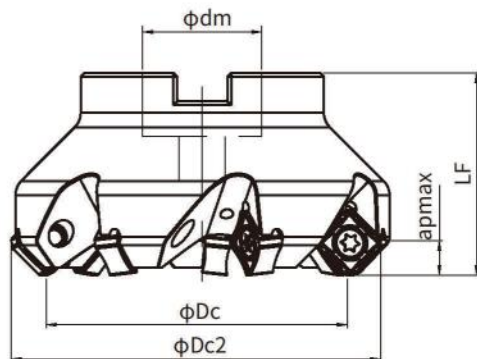


刀片进给切削参数推荐 Feed recommendations

刀片尺寸 Insert size	刀片槽形 Geometry	推荐每齿进给(mm) Rec. Fz	最小每齿进给(mm) Min. Fz	最大每齿进给(mm) Max. Fz
12	FM	0.15	0.10	0.25
12	MM (r=0.8)	0.18	0.10	0.25
12	MM (r=1.8)	0.25	0.10	0.40
12	ANTR-XH	0.30	0.20	0.50

面铣刀FM45-S

NFace mill FM45-SN

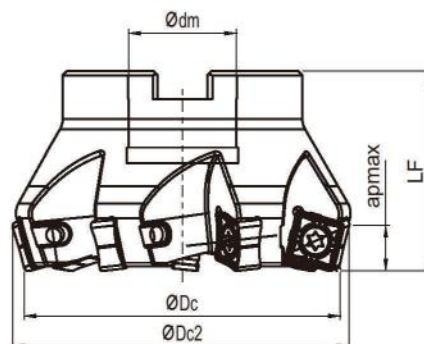


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions				接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF				
40	FM45-040A16SN12-Z04	●	53	16	6.5	40	A	4	+	0.40
50	FM45-050A22SN12-Z04	○	63	22	6.5	40	A	4	+	0.40
50	FM45-050A22SN12-Z05	●	63	22	6.5	40	A	5	+	0.40
50	FM45-050A22SN12-Z06	○	63	22	6.5	40	A	6	+	0.40
63	FM45-063A22SN12-Z05	●	76	22	6.5	40	A	5	+	0.60
63	FM45-063A22SN12-Z06	●	76	22	6.5	40	A	6	+	0.60
63	FM45-063A22SN12-Z08	○	76	22	6.5	40	A	8	+	0.60
80	FM45-080A27SN12-Z05	○	93	27	6.5	50	A	5	+	1.40
80	FM45-080A27SN12-Z06	●	93	27	6.5	50	A	6	+	1.40
80	FM45-080A27SN12-Z07	●	93	27	6.5	50	A	7	+	1.40
100	FM45-100A32SN12-Z07	●	113	32	6.5	50	A	7	+	1.90
100	FM45-100A32SN12-Z08	●	113	32	6.5	50	A	8	+	1.90
100	FM45-100A32SN12-Z10	○	113	32	6.5	50	A	10	+	1.90
125	FM45-125B40SN12-Z08	○	138	40	6.5	63	B	8		3.20
125	FM45-125B40SN12-Z10	●	138	40	6.5	63	B	10		3.20
125	FM45-125B40SN12-Z14	○	138	40	6.5	63	B	14		3.20
160	FM45-160C40SN12-Z10	○	173	40	6.5	63	C	10		5.90
160	FM45-160C40SN12-Z12	●	173	40	6.5	63	C	12		5.90
160	FM45-160C40SN12-Z16	○	173	40	6.5	63	C	12		5.90
200	FM45-200C60SN12-Z12	○	213	60	6.5	63	C	14		9.10
200	FM45-200C60SN12-Z14	○	213	60	6.5	63	C	14		9.10
200	FM45-200C60SN12-Z16	○	213	60	6.5	63	C	18		9.10
250	FM45-250C60SN12-Z16	○	263	60	6.5	63	C	16		9.10
250	FM45-250C60SN12-Z20	○	263	60	6.5	63	C	20		9.10

● 常备库存 ○ 按订单生产

面铣刀FM75-SN

Face mill FM75-SN



直径 Dc	型 号	库存 状态	尺寸(mm) Dimensions						接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF						
63	FM75-063A27SN12-Z05	●	68.52	27	8	40			A	5	+	0.60
63	FM75-063A27SN12-Z06	○	68.52	27	8	40			A	6	+	0.60
80	FM75-080A27SN12-Z06	●	85.52	27	8	50			A	6	+	1.40
100	FM75-100A32SN12-Z07	●	105.52	32	8	50			A	7	+	1.90
125	FM75-125B40SN12-Z09	●	130.52	40	8	63			B	10		3.20
160	FM75-160C40SN12-Z10	●	165.52	40	8	63			C	10		5.90

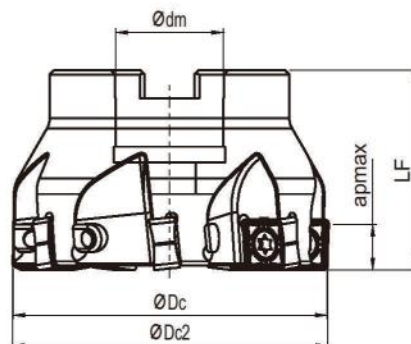
● 常备库存 ○ 按订单生产

面铣刀FM88-SN

Face mill FM88-SN



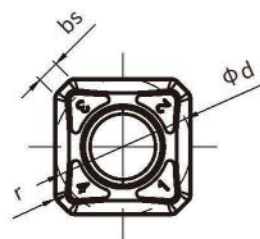
粗加工方肩铣可用
Rough shoulder milling can be used



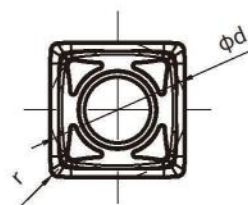
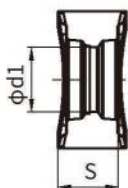
直径 Dc	型 号	库存 状态	尺寸(mm) Dimensions						接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF						
63	FM88-063A27SN12-Z05	●	-	27	8	40			A	5	+	0.60
63	FM88-063A27SN12-Z06	○	-	27	8	40			A	6	+	0.60
80	FM88-080A27SN12-Z06	●	-	27	8	50			A	6	+	1.40
100	FM88-100A32SN12-Z07	●	-	32	8	50			A	7	+	1.90
125	FM88-125B40SN12-Z09	●	-	40	8	63			B	10		3.20
160	FM88-160C40SN12-Z10	●	-	40	8	63			C	10		5.90

● 常备库存 ○ 按订单生产

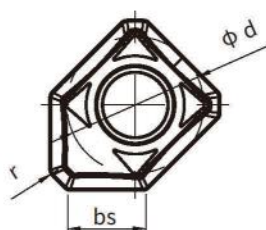
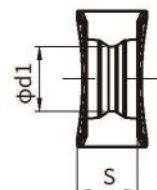
面铣刀FM45-SN刀片 Face mill FM45-SN insert



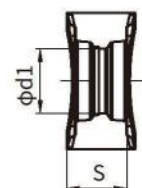
SNMX1205ANTN



SNMX120508-MM



SNMX1205ANTN-W



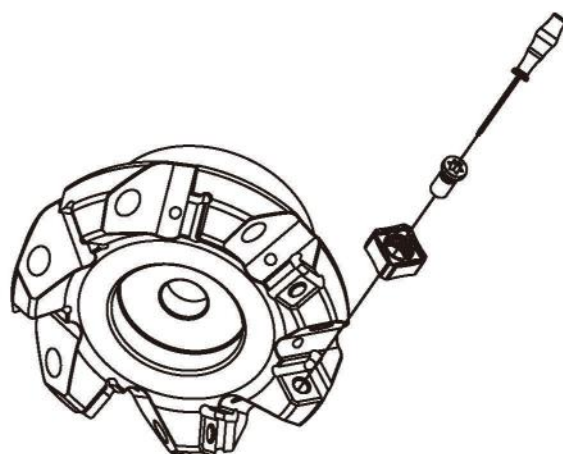
刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade											
		d	s	d1	r	bs	PM9115	PM9035	PM3020B	PM9115	PM9035	PM3020B	PM9115	PM9035	PM3020B	PM9115	PM4020	PM5010
	SNMX1205ANEN-FM(*)	12.7	5.56	6	0.8	1.5	★	☆	☆	★	☆	☆	☆	☆	★	☆	★	☆
	SNMX1205ANTN	12.7	5.56	6	0.8			★	★		☆			☆	★			
	SNMX120508-MM	12.7	5.56	6	0.8		★			★			★					
	SNMX120512-MM	12.7	5.56	6	1.2		★			★			☆	★				
	SNMX1205ANTR-XH(*)	12.7	5.56	6	0.8			★					☆	★				
	SNMX1205ANTN-W(*)	12.7	5.56	6	0.8	6.7	★	☆					☆	★				

*SNMX1205ANEN-FM为磨制刀片，用于精面铣

*SNMX1205ANTR仅可用于右手刀盘

*SNMX1205ANTN-W为修光刃刀片

首选 ★ 备选 ☆



配件/SPARE PARTS

刀具直径 Diameter	刀片夹紧螺钉 Clamping Screw	刀片螺钉扳手 Screw Wrench
50-250	S01-050120	D01-120

面铣刀FM45-HN Face mill FM45-HN

45°经济型面铣刀

高每齿进给与密齿结合以取得最大的金属去除率。

刀片12个切削刃,最大切深5mm

适合钢件、铸铁粗到半精加工

广泛应用于通用机械、工程机械和汽车零部件等加工领域。

D100直径以下刀盘带内冷 (含D100)

Economical 45° face mill

High feed rate and close pitch to get maximum metal removal rate.

12 edges insert, A_{max}. 5mm

Suitable for steel, cast iron parts, rough to semi-finish machining

Mill with internal coolant under D100(including D100)

刀片槽型

F槽型: 低至中等进给, 软材料, 良好工况首选

M槽型: 通用槽型, 中等进给

R槽型: 高进给, 恶劣工况首选

F geometry: low to medium feed rates, first choice for soft materials and good machining condition

M geometry: general purpose face milling, medium feed rates

R geometry: high feed rates, first choice for difficult machining condition



直径范围: 50-250mm
Diameter range: 50-250mm



F槽型
F Geometry



M槽型
M Geometry



R槽型
R Geometry



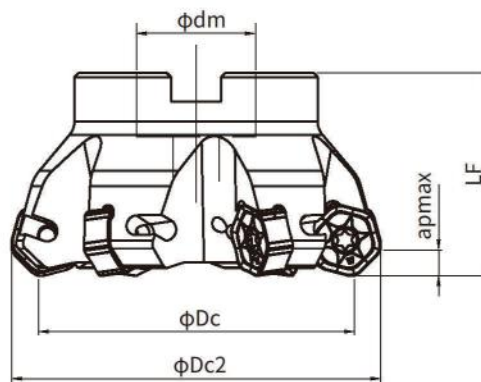
面铣
Face milling

刀片进给切削参数推荐 Feed recommendations

刀片尺寸 Insert size	刀片槽形 Geometry	推荐每齿进给(mm) Rec. Fz	最小每齿进给(mm) Min. Fz	最大每齿进给(mm) Max. Fz
09	F	0.15	0.10	0.25
09	M	0.20	0.10	0.30
09	R	0.25	0.12	0.40

面铣刀FM45-HN

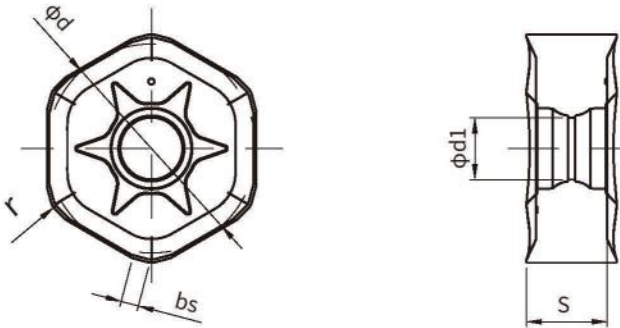
Face mill FM45-HN



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions				接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF				
50	FM45-050A22HN09-Z04	●	62.4	22	5	40	A	04	+	0.35
63	FM45-063A22HN09-Z05	●	75.4	22	5	40	A	05	+	0.49
80	FM45-080A27HN09-Z06	●	92.4	27	5	50	A	06	+	1.06
100	FM45-100A32HN09-Z07	○	112.4	32	5	50	A	07	+	1.74
100	FM45-100A32HN09-Z08	●	112.4	32	5	50	A	08	+	1.74
125	FM45-125B40HN09-Z08	○	137.4	40	5	63	B	08		3.24
125	FM45-125B40HN09-Z10	●	137.4	40	5	63	B	10		3.24
160	FM45-160C40HN09-Z09	○	172.4	40	5	63	C	09		5.70
160	FM45-160C40HN09-Z12	●	172.4	40	5	63	C	12		5.70
200	FM45-200C60HN09-Z12	○	212.4	60	5	63	C	12		9.00
250	FM45-250C60HN09-Z14	○	262.4	60	5	63	C	14		12.80
80	FM45-080A27HN09W-Z09	○	92.4	27	5	50	A	Z0	+	1.06
100	FM45-100A32HN09W-Z12	○	112.4	32	5	50	A	Z1	+	1.74
125	FM45-125B40HN09W-Z16	○	137.4	40	5	63	B	Z1		3.24
160	FM45-160C40HN09W-Z20	○	172.4	40	5	63	C	Z2		5.70
160	FM45-160C40HN09W-Z20-L	○	172.4	40	5	63	C	Z2		5.70
200	FM45-200C60HN09W-Z26	○	212.4	60	5	63	C	Z2		9.00
200	FM45-200C60HN09W-Z26-L	○	212.4	60	5	63	C	Z2		12.80

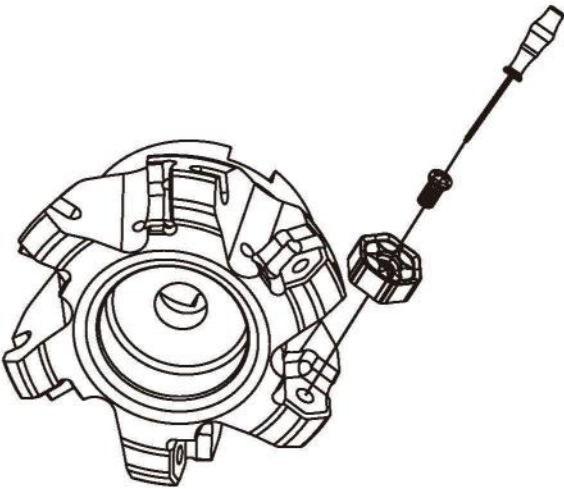
● 常备库存 ○ 按订单生产

面铣刀FM45-HN刀片
Face mill FM45-HN insert



刀片外形	型号 Type	基本尺寸 Dimension (mm)						牌号 Grade											
		d	s	d1	r	bs		PM9115	PM4020	PM9035	PM9115	PM4020	PM9035	PM9115	PM4020	PM9035	PM9115	PM4020	PM9035
	HNGX0906-F	16.5	6.35	4.9			★	★	☆	★	☆		☆	★	★	★	★	★	☆
	HNGX0906-M	16.5	6.35	4.9			★	★	☆	★	☆		☆	★	★	★	★	★	☆
	HNMX0906-M	16.5	6.35	4.9				★	☆			☆		★					
	HNMX0906-R	16.5	6.35	4.9			☆	★	★	★	☆			★	☆	★			★

首选 ★ 备选 ☆



配件/SPARE PARTS

安装形式	刀具直径 Diameter	刀片夹紧螺钉 Clamping Screw	刀片螺钉扳手 Screw Wrench
A	50-250	S01-045120	D01-115

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄



面铣刀FM45-ON

Face mill FM45-ON

45°经济型面铣刀
刀片16个切削刃,最大切深3.5mm
适合钢件、铸铁中等切削量加工
D100直径以下刀盘带内冷 (含D100)

Economical 45° face mill
16 edges insert, A_pmax. 3.5mm
Suitable for steel, cast iron parts, medium machining
Mill with internal coolant under D100(including D100)

刀片槽型
F槽型：低至中等进给，软材料，良好工况首选
MM槽型：通用槽型，中等进给
PM槽型：高进给，恶劣工况首选

F geometry: low to medium feed rates, first choice for soft materials and good machining condition
MM geometry: general purpose face milling, medium feed rates
PM geometry: high feed rates, first choice for difficult machining condition



直径范围：50-250mm
Diameter range: 50-250mm



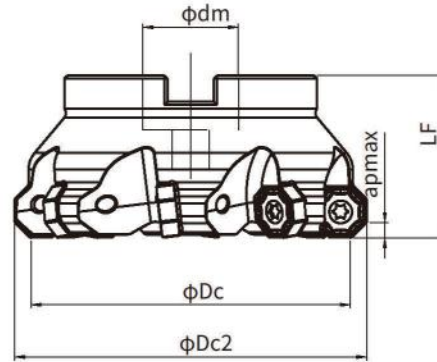
刀片进给切削参数推荐

Feed recommendations

刀片尺寸 Insert size	刀片槽形 Geometry	推荐每齿进给(mm) Rec. Fz	最小每齿进给(mm) Min. Fz	最大每齿进给(mm) Max. Fz
08	F	0.15	0.10	0.25
06	MM	0.20	0.10	0.30
08	PM	0.25	0.12	0.40

面铣刀FM45-ON

Face mill FM45-ON

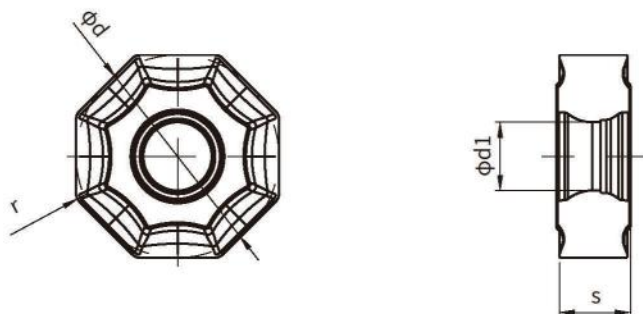


直径 Dc	型 号	库存 状态	尺寸(mm) Dimensions				接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF				
50	FM45-050A22ON08-Z04	●	59.5	22	3.8	40	A	04	+	
50	FM45-050A22ON08-Z06	○	59.5	22	3.8	40	A	06	+	
63	FM45-063A22ON08-Z05	●	72.5	22	3.8	40	A	05	+	
63	FM45-063A22ON08-Z06	○	72.5	22	3.8	40	A	06	+	
63	FM45-063A22ON08-Z08	○	72.5	22	3.8	40	A	08	+	
80	FM45-080A22ON08-Z06	●	89.5	22	3.8	50	A	06	+	
80	FM45-080A27ON08-Z08	○	89.5	27	3.8	50	A	08	+	
80	FM45-080A27ON08-Z09	○	89.5	27	3.8	50	A	09	+	
100	FM45-100A27ON08-Z07	●	109.5	27	3.8	50	A	07	+	
100	FM45-100A32ON08-Z09	○	109.5	32	3.8	50	A	09	+	
100	FM45-100A32ON08-Z11	○	109.5	32	3.8	50	A	11	+	
125	FM45-125B32ON08-Z07	○	134.5	32	3.8	63	B	07		
125	FM45-125B40ON08-Z09	●	134.5	40	3.8	63	B	09		
125	FM45-125B40ON08-Z14	○	134.5	40	3.8	63	B	14		
160	FM45-160C40ON08-Z10	●	169.5	40	3.8	63	C	10		

● 常备库存 ○ 按订单生产

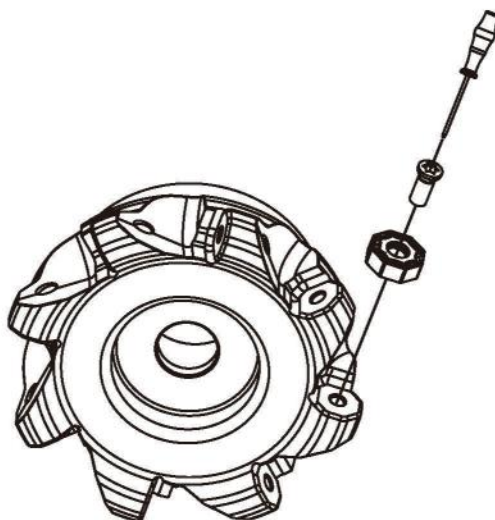


面铣刀FM45-ON刀片 Face mill FM45-ON insert



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade							
		d	s	d1	r	bs	WG2020	PM9115	WG2020	PM9115	WG2020	PM9115	WG2020	PM9115
	ONMU080608-F	20.2	6	5.4	0.8		★	☆	☆	☆	★		☆	
	ONMU080608-MM	20.2	6	5.3	0.8			☆	★	☆	☆		☆	
	ONMU080608-PM	20.2	6	5.3	0.8			☆			★	☆		

首选 ★ 备选 ☆



配件/SPARE PARTS

安装形式	刀具直径 Diameter	刀片夹紧螺钉 Clamping Screw	刀片螺钉扳手 Screw Wrench
A	50-160	S01-045120	D01-115

面铣刀FM45-SE

Face mill FM45-SE

轻型切削45°面铣刀

Light cutting 45° face mill

4个切削刃,最大切深可达6mm

刀体双前角设计,切削轻快

可提供修光刃刀片用于精面铣到镜面精铣

适用于钢件、不锈钢、耐热合金、铸铁和铝合金等各种材料的加工
广泛应用于通用机械、工程机械和汽车零部件等加工领域

4 edges insert, A_pmax. 6mm

Dual-positive rake angle designing to make sure light cutting

Wiper insert can be used in face milling to mirror finish face milling

Suitable for machining steel, stainless steel, heat resistant alloy, cast iron and aluminium alloy materials

Widely used in general engineering, construction and automotive components machining

刀片槽型

PM 槽型: 钢件通用面铣

KM 槽型: 钢件通用面铣

E-W 修光刃槽形: 镜面铣削

PM geometry: general purpose for steel face milling

KM geometry: general purpose for cast iron face milling

E-W wiper geometry: mirror finish face milling



直径范围: 50-250mm
Diameter range: 50-250mm



PM 槽型
PM Geometry



E-W修光刃槽型
E-W wiper Geometry



KM 槽型
KM Geometry



大悬伸面铣
Long overhang face milling



镜面铣
Mirror finish face milling



面铣
Face milling

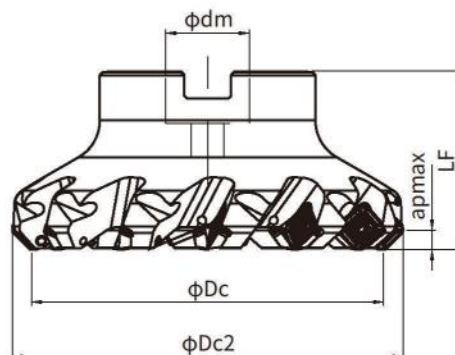
刀片进给切削参数推荐

Feed recommendations

刀片尺寸 Insert size	刀片槽形 Geometry	推荐每齿进给(mm) Rec. Fz	最小每齿进给(mm) Min. Fz	最大每齿进给(mm) Max. Fz
13	PM	0.34	0.14	0.40
13	KM	0.34	0.14	0.40

面铣刀FM45-SE

Face mill FM45-SE

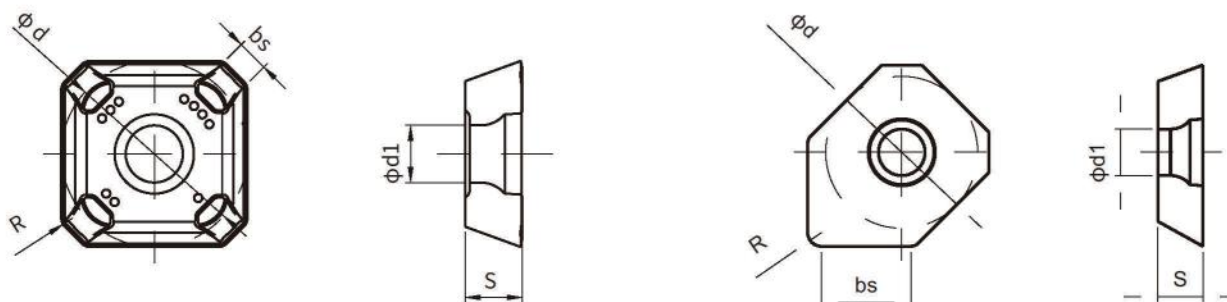


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions				接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF				
50	FM45-050A22SE13-Z03	○	62.5	22	6	40	A	3	+	0.40
50	FM45-050A22SE13-Z04	●	62.5	22	6	40	A	4	+	0.40
50	FM45-050A22SE13-Z05	○	62.5	22	6	40	A	5	+	0.40
63	FM45-063A22SE13-Z04	○	75.5	22	6	40	A	4	+	0.50
63	FM45-063A22SE13-Z05	●	75.5	22	6	40	A	5	+	0.50
63	FM45-063A22SE13-Z06	○	75.5	22	6	40	A	6	+	0.50
80	FM45-080A27SE13-Z04	○	92.5	27	6	50	A	4	+	0.90
80	FM45-080A27SE13-Z06	●	92.5	27	6	50	A	6	+	0.90
80	FM45-080A27SE13-Z08	○	92.5	27	6	50	A	8	+	0.90
100	FM45-100A32SE13-Z05	○	112.5	32	6	50	A	5	+	1.40
100	FM45-100A32SE13-Z07	●	112.5	32	6	50	A	7	+	1.40
100	FM45-100A32SE13-Z10	○	112.5	32	6	50	A	10	+	1.40
125	FM45-125B40SE13-Z06	○	137.5	40	6	63	B	6		2.50
125	FM45-125B40SE13-Z08	●	137.5	40	6	63	B	8		2.50
125	FM45-125B40SE13-Z12	○	137.5	40	6	63	B	12		2.50
160	FM45-160C40SE13-Z07	○	172.5	40	6	63	C	7		5.00
160	FM45-160C40SE13-Z10	●	172.5	40	6	63	C	10		5.00
160	FM45-160C40SE13-Z16	○	172.5	40	6	63	C	16		5.00
200	FM45-200C60SE13-Z08	○	212.5	60	6	63	C	8		6.70
200	FM45-200C60SE13-Z12	○	212.5	60	6	63	C	12		6.70
200	FM45-200C60SE13-Z20	○	212.5	60	6	63	C	20		6.70
250	FM45-250C60SE13-Z10	○	262.5	60	6	63	C	10		8.50
250	FM45-250C60SE13-Z14	○	262.5	60	6	63	C	14		8.50
250	FM45-250C60SE13-Z24	○	262.5	60	6	63	C	24		8.50

● 常备库存 ○ 按订单生产

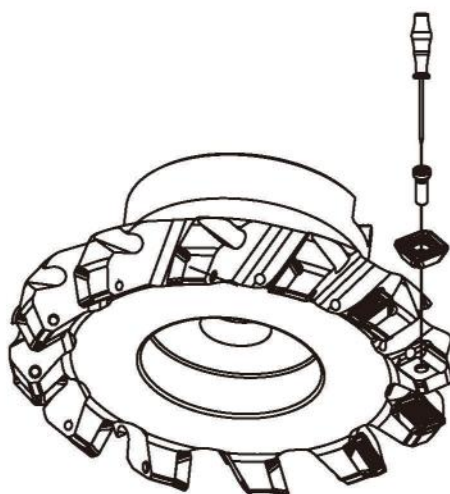
面铣刀FM45-SE 刀片

Face mill FM45-SE insert



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade							
		d	s	d1	r	bs	PM9115	PM9035	PM9115	PM9035	PM9115	PM9035	PM5010	PM9115
	SEMT13T3AGSN-PM	13.4	3.97	5.5	1.5	2	★	☆	★	☆	★	★	★	☆
	SEMT13T3AGSN-KM	13.4	3.97	5.5	1.5	2	☆	★	★	☆	★	★	★	☆
	SEGT13T3-W	13.4	3.97	5.5	1.5	8.2	★		★	★		★		

首选 ★ 备选 ☆



配件/SPARE PARTS

安装形式	刀具直径 Diameter	刀片夹紧螺钉 Clamping screw	刀片螺钉扳手 Screw Wrench
A	50-250	S01-050120	D01-120

快进给铣刀HF15-LN

High feed mill HF15-LN

小直径快进给铣刀首选

极小的切深和极高的每齿进给量进行切削

卓越的刀片几何槽型设计，配合优异的刀片材质，确保了安全及优异的切削性能

四个刃口

适用于钢件、不锈钢、耐热合金、铸铁等各种材料的加工

适用于高进给面铣,斜面加工 螺旋插补铣

广泛应用于大多数种加工领域

First choice for small dia. mill cutter

Extremely high feed rate with low depth of cut

Outstanding design of insert geometry combining unique insert grades, secures safe and excellent cutting performance 4 edges insert

Suitable for machining steel, stainless steel, heat resistant alloy, cast iron materials

Suitable for high feed milling, inclined plane machining, helix interpolation milling

Widely used in most industries

L槽型：软材料加工首选

M槽型：通用槽型

L geometry: first choice for sticky materials

M geometry: general purpose geometry

直径16-35mm
Dia.16-35mm直径16-40mm
Dia.16-40mm直径40-63mm
Dia.40-63mm面铣
Face milling插铣
Plunge milling坡走铣
Ranping螺旋差补铣
Helical interpolation仿形铣
Profile millingL槽型
L GeometryM槽型
M Geometry

刀片进给切削参数推荐 Feed recommendations

推荐的切深 Cutting depth recommendations

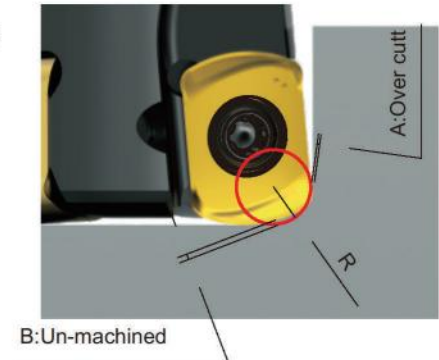
刀片尺寸 Insert size	刀片槽形 Geometry	最小切深(mm) Min. ap	推荐切深ap(mm) Rec. ap	最大切深(mm) Max. ap
06	L	0.1	0.3-0.6	1.0
06	M	0.1	0.3-0.6	1.0

推荐的进给 Cutting feed rates recommendations

刀片尺寸 Insert size	刀片槽形 Geometry	最小进给(mm/r) Min. fz	推荐进给f/z(mm/tooth) Rec. fz	最大进给(mm/r) Max. fz
06	L	0.3	0.6-1.5	2.5
06	M	0.3	0.8-2.0	2.5

编程圆角，过切量及欠切量

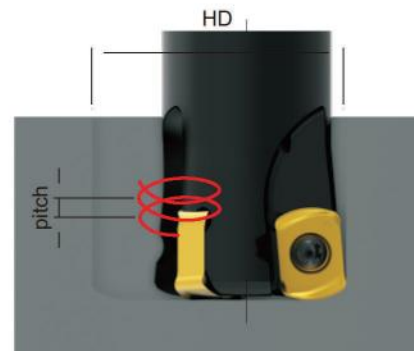
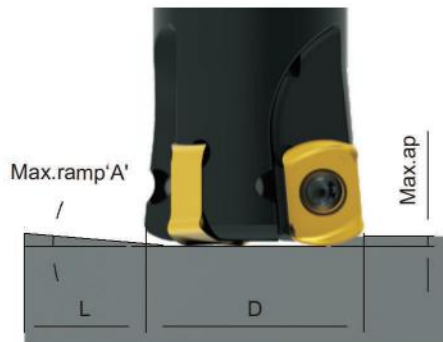
Programming R, over cut and un-machined thickness



铣刀直径 Cutter dia.	编程圆角R Programming radius R	A 过切量 Over cut A	B 欠切量 Un-machined B
16, 17, 18	1.5	0	0.35
	2	0.1	0.22
	2.5	0.27	0.1
>20	2	0	0.42
	2.5	0.12	0.26
	3	0.29	0.17

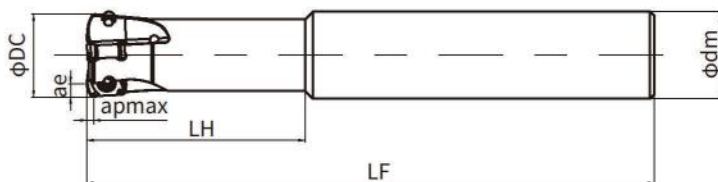
坡走铣及螺旋插补铣参数推荐

Ramping rate recommendation



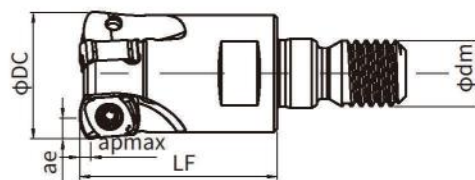
铣刀直径 Cutter dia.	最大坡铣角度(A°) Max. ramp(A°)	最大切深(mm) Max. ap	最小长度(L) Min. length(L)	最小直径 Min. dia.	最大直径 Max. Dia.	最大螺距/转 Max. pitch/rev.
16.0	2.0	0.7	13.0	23.0	32.0	0.7
17.0	2.0	0.7	15.0	25.0	34.0	0.7
18.0	2.3	0.7	16.0	27.0	36.0	0.7
20.0	1.5	1.0	38.0	31.0		0.8
20.0	1.5	1.0	38.0		40.0	1.0
21.0	1.5	1.0	38.0	33.0		0.8
21.0	1.5	1.0	38.0		42.0	1.0
25.0	1.3	1.0	41.0	41.0	50.0	1.0
26.0	1.2	1.0	44.0	43.0	52.0	1.0
32.0	0.9	1.0	57.0	55.0	64.0	1.0
33.0	0.9	1.0	57.0	57.0	66.0	1.0
35.0	0.8	1.0	57.0	61.0	70.0	1.0
40.0	0.7	1.0	64.0	71.0	80.0	1.0
50.0	0.6	1.0	96.0	91.0	100.0	1.0
52.0	0.6	1.0	96.0	95.0	104.0	1.0
63.0	0.5	1.0	115.0	117.0	126.0	1.0

快进给铣刀HF15-LN High feed mill HF15-LN



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions						接口类型	齿数(Z)	内冷状态	重量(kg)
			DC2	dm	apmax	ae	LF	LH				
16	HF15-016R16LN06-Z02	●	/	16	0.7	3.3	30	100	R	2	+	0.12
17	HF15-017R16LN06-Z02	○	/	16	0.7	3.45	40	150	R	2	+	0.15
20	HF15-020R20LN06-Z03	●	/	20	0.7	3.8	50	130	R	3	+	0.32
21	HF15-021R20LN06-Z03	○	/	20	1.0	3.8	20	160	R	3	+	0.39
25	HF15-025R25LN06-Z03	●	/	25	1.0	3.85	60	140	R	3	+	0.57
26	HF15-026R25LN06-Z03	○	/	25	1.0	3.85	30	180	R	3	+	0.68
32	HF15-032R32LN06-Z04	○	/	32	1.0	3.85	70	150	R	4	+	0.97
33	HF15-033R32LN06-Z04	○	/	32	1.0	3.85	40	200	R	4	+	0.99
35	HF15-035R32LN06-Z05	○	/	32	1.0	3.85	50	200	R	5	+	0.99

● 常备库存 ○ 按订单生产

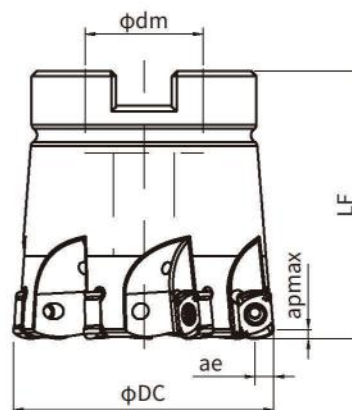


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions						接口类型	齿数(Z)	内冷状态	重量(kg)
			DC2	dm	apmax	ae	LF	LH				
16	HF15-016M08LN06-Z02	●	/	08	0.7	3.3	25	42.5	M	2	+	0.10
17	HF15-017M08LN06-Z02	○	/	08	0.7	3.45	25	42.5	M	2	+	0.11
20	HF15-020M10LN06-Z03	●	/	10	1.0	4.3	30	50	M	3	+	0.12
21	HF15-021M10LN06-Z03	○	/	10	1.0	3.8	30	50	M	3	+	0.12
25	HF15-025M12LN06-Z04	●	/	12	1.0	3.85	35	57	M	4	+	0.22
26	HF15-026M12LN06-Z03	○	/	12	1.0	3.85	35	57	M	3	+	0.22
26	HF15-026M12LN06-Z04	○	/	12	1.0	3.85	35	57	M	4	+	0.22
32	HF15-032M16LN06-Z04	○	/	16	1.0	3.85	43	65	M	4	+	0.25
32	HF15-032M16LN06-Z05	○	/	16	1.0	3.85	43	65	M	5	+	0.27
33	HF15-033M16LN06-Z05	○	/	16	1.0	3.85	43	65	M	5	+	0.27
35	HF15-035M16LN06-Z05	○	/	16	1.0	3.85	43	68	M	5	+	0.27
40	HF15-040M16LN06-Z06	○	/	16	1.0	3.9	43	68	M	6	+	0.29

● 常备库存 ○ 按订单生产

快进给铣刀HF15-LN

High feed mill HF15-LN

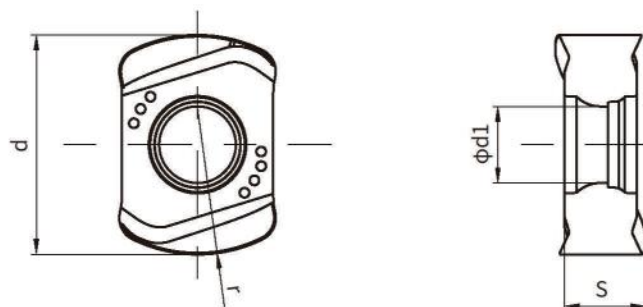


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			DC2	dm	apmax	ae	LF				
40	HF15-040A16LN06-Z06	○	/	16	1.0	3.9	40	A	6	+	0.25
50	HF15-050A22LN06-Z07	○	/	22	1.0	3.9	40	A	7	+	0.35
52	HF15-052A22LN06-Z07	●	/	22	1.0	3.9	40	A	7	+	0.40
63	HF15-063A22LN06-Z08	○	/	22	1.0	3.9	40	A	8	+	0.60

● 常备库存 ○ 按订单生产

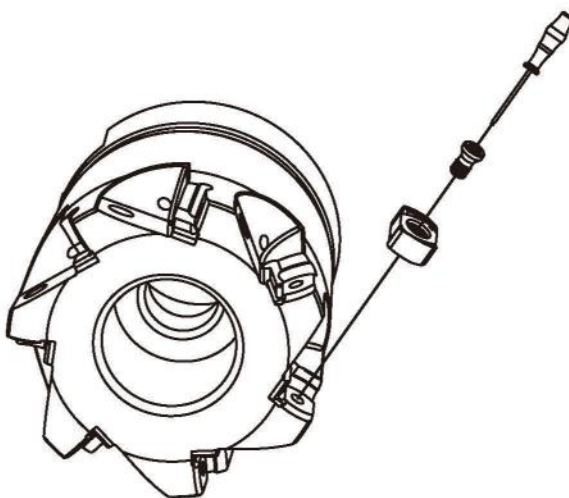
快进给铣刀HF15-LN刀片

High feed mill HF15-LN insert



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade							
		d	s	d1	r	bs	PM9125	PM9035	PM9125	PM9035	PM9125	PM9035	PM5010	PM9125
	LNMU0603R-L	9	3.73	3.2	6		★	☆	★		☆	★	★	☆
	LNMU0603R-M	9	3.73	3.2	6		★	☆	★		☆	★	★	☆

首选 ★ 备选 ☆



配件/SPARE PARTS

安装形式	刀具直径 Diameter	刀片夹紧螺钉 Clamping screw	刀片螺钉扳手 Screw Wrench
C	20-63	S01-025073	D01-108

快进给铣刀HF15-SD

High feed mill HF15-SD

生产率，安全性和多用途性

高每齿进给与密齿结合以取得最大的金属去除率

卓越的刀片几何槽型设计，配合优异的刀片材质，确保了安全及优异的切削性能

精于各种铣削方式：面铣、插铣、坡走铣、螺旋差补铣、仿形加工、大悬伸加工

适用于钢件、不锈钢、耐热合金、铸铁等各种材料的加工
广泛应用于航空航天、石油天然气、模具等领域

SF槽型：不锈钢、耐热合金材料加工首选

SM槽型：通用槽型

SH槽形：耐冲击重载加工首选

Productivity, safety and versatility

High feed rate and close pitch to get maximum metal removal rate

Outstanding design of insert geometry combining unique insert grades, secures safe and excellent cutting performance

Proficient in wide variety of milling applications: face milling, plunge milling, ramping, helical interpolation, profile milling, long overhang machining

Suitable for machining steel, stainless steel, heat resistant alloy, cast iron materials

Widely used in Aerospace, Oil and Gas, Die and Mould industries

SF geometry: first choice for stainless steel, heat resistant alloy materials

SM geometry: general purpose geometry

SH geometry: first choice for impact-resistant and heavy-duty machining



直径40-125mm
Dia.40-125mm



直径20-40mm
Dia.20-40mm



直径22-40mm
Dia.22-40mm



SF槽型
SF Geometry



SM槽型
SM Geometry



SH槽型
SH Geometry

*09刀片型腔铣削编程圆角R为2.0

Programming R of insert 09 is 2.0 for cavity or pocketing machining.

*13刀片型腔铣削编程圆角R为3.5

Programming R of insert 13 is 3.5 for cavity or pocketing machining.



面铣
Face milling



插铣
Plunge milling



坡走铣
Ramping



螺旋差补铣
Helical interpolation



仿形铣
Profile milling

刀片进给切削参数推荐

Feed recommendations

刀片进给切削参数推荐 Feed recommendations

推荐的切深 Cutting depth recommendations

刀片尺寸 Insert size	刀片槽形 Geometry	最小切深(mm) Min. ap	推荐切深ap(mm) Rec. ap	最大切深(mm) Max. ap
09	SF	0.1	0.5-1.2	1.3
13	SF	0.1	0.5-1.6	1.7
09	SM	0.2	0.5-1.2	1.3
13	SM	0.2	0.5-1.6	1.7
13	SH	0.2	0.5-1.6	1.7
15	SH	0.2	0.5-3.0	3.2

*09刀片型腔铣削编程圆角R为2.0

Programming R of insert 09 is 2.0 for cavity or pocketing machining

*13刀片型腔铣削编程圆角R为3.5

Programming R of insert 13 is 3.5 for cavity or pocketing machining

不同切宽(ae)百分比情况下的推荐每齿进给fz fz recommendations for different ae %

ap=0.5mm

刀片尺寸 Insert size	刀片槽形 Geometry	5% ae	10% ae	20% ae	30% ae	40%-100% ae
09	SF	1.58(0.50-2.00)	1.10(0.38-1.64)	0.81(0.28-1.22)	0.70(0.25-1.05)	0.7(0.23-0.92)
09	SM	1.58(0.52-2.00)	1.10(0.40-1.64)	0.81(0.30-1.22)	0.70(0.30-1.05)	0.7(0.25-0.92)

ap=0.8mm

刀片尺寸 Insert size	刀片槽形 Geometry	5% ae	10% ae	20% ae	30% ae	40%-100% ae
09	SF	1.42(0.48-2.00)	1.00(0.35-1.52)	0.74(0.26-1.11)	0.64(0.23-0.96)	0.6(0.21-0.88)
09	SM	1.42(0.52-2.00)	1.00(0.40-1.52)	0.74(0.30-1.11)	0.64(0.30-0.96)	0.6(0.25-0.88)
13	SF	1.79(0.55-2.80)	1.26(0.38-2.10)	0.94(0.30-1.45)	0.80(0.26-1.22)	0.72(0.23-1.14)
13	SM	1.79(0.60-2.80)	1.26(0.42-2.10)	0.94(0.33-1.45)	0.80(0.29-1.22)	0.72(0.25-1.14)
13	SH	2.00(0.78-3.00)	1.44(0.57-2.18)	1.06(0.43-1.55)	0.93(0.37-1.32)	0.84(0.33-1.23)

ap=1.0mm

刀片尺寸 Insert size	刀片槽形 Geometry	5% ae	10% ae	20% ae	30% ae	40%-100% ae
09	SF	1.28(0.44-2.00)	0.90(0.32-1.37)	0.67(0.24-1.00)	0.58(0.21-0.87)	0.45(0.19-0.80)
09	SM	1.28(0.50-2.00)	0.90(0.36-1.37)	0.67(0.30-1.00)	0.58(0.26-0.87)	0.45(0.22-0.80)
13	SF	1.59(0.49-2.50)	1.13(0.35-1.78)	0.84(0.26-1.31)	0.73(0.23-1.14)	0.67(0.21-1.04)
13	SM	1.59(0.53-2.50)	1.13(0.40-1.78)	0.84(0.30-1.31)	0.73(0.26-1.14)	0.67(0.25-1.04)
13	SH	1.80(0.70-2.70)	1.28(0.51-1.94)	0.95(0.38-1.41)	0.83(0.33-1.22)	0.76(0.30-1.12)

ap=1.2mm

刀片尺寸 Insert size	刀片槽形 Geometry	5% ae	10% ae	20% ae	30% ae	40%-100% ae
09	SF	1.10(0.38-1.70)	0.80(0.27-1.10)	0.58(0.20-0.87)	0.50(0.18-0.75)	0.46(0.16-0.69)
09	SM	1.10(0.40-1.70)	0.80(0.30-1.20)	0.58(0.23-0.87)	0.50(0.20-0.75)	0.46(0.20-0.70)
13	SF	1.39(0.43-2.20)	1.00(0.31-1.56)	0.74(0.23-1.15)	0.64(0.20-1.00)	0.59(0.19-0.92)
13	SM	1.39(0.50-2.20)	1.00(0.36-1.29)	0.74(0.26-1.15)	0.64(0.25-1.00)	0.59(0.24-0.92)
13	SH	1.57(0.62-2.41)	1.12(0.45-1.70)	0.84(0.33-1.26)	0.73(0.29-1.10)	0.67(0.27-1.00)

刀片进给切削参数推荐

Feed recommendations

不同切宽(ae)百分比情况下的推荐每齿进给fz fz recommendations for different ae %

ap=1.6mm

刀片尺寸 Insert size	刀片槽形 Geometry	5% ae	10% ae	20% ae	30% ae	40%-100% ae
13	SF	1.15(0.36-1.81)	0.83(0.26-1.29)	0.62(0.20-0.96)	0.54(0.17-0.83)	0.45(0.15-0.76)
13	SM	1.15(0.40-1.81)	0.83(0.30-1.29)	0.62(0.23-0.96)	0.54(0.20-0.83)	0.45(0.20-0.76)
13	SH	1.30(0.51-1.99)	0.93(0.37-1.41)	0.70(0.28-1.05)	0.61(0.24-0.91)	0.55(0.22-0.83)
15	SH	1.45(0.57-2.30)	1.04(0.41-1.67)	0.77(0.31-1.24)	0.67(0.27-1.08)	0.62(0.25-0.99)

ap=2.0mm

刀片尺寸 Insert size	刀片槽形 Geometry	5% ae	10% ae	20% ae	30% ae	40%-100% ae
15	SH	1.30(0.51-2.12)	0.93(0.37-1.50)	0.70(0.28-1.11)	0.61(0.24-0.97)	0.55(0.22-0.89)

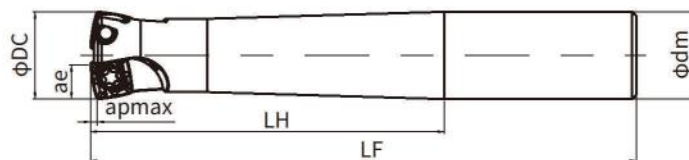
ap=2.5mm

刀片尺寸 Insert size	刀片槽形 Geometry	5% ae	10% ae	20% ae	30% ae	40%-100% ae
15	SH	1.20(0.48-1.96)	0.87(0.35-1.38)	0.68(0.26-1.02)	0.66(0.23-0.90)	0.50(0.20-0.80)

ap=3.0mm

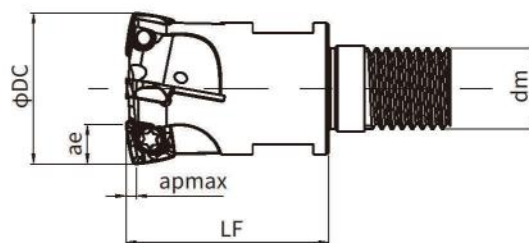
刀片尺寸 Insert size	刀片槽形 Geometry	5% ae	10% ae	20% ae	30% ae	40%-100% ae
15	SH	1.11(0.44-1.80)	0.80(0.32-1.28)	0.59(0.24-0.95)	0.52(0.21-0.83)	0.47(0.19-0.76)

快进给铣刀HF15-SD High feed mill HF15-SD



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions						接口类型	齿数(Z)	内冷状态	重量(kg)
			DC2	dm	apmax	ae	LF	LH				
22	HF15-022R20SD09-Z02	●	/	20	1.3	7	140	65	R	2	+	0.35
25	HF15-025R25SD09-Z03	●	/	25	1.3	7	145	80	R	3	+	0.50
30	HF15-030R25SD09-Z04	○	/	25	1.3	7	145	80	R	4	+	0.75
32	HF15-032R32SD09-Z04	●	/	32	1.3	7	145	80	R	4	+	0.80
40	HF15-040R32SD09-Z05	○	/	32	1.3	7	145	80	R	5	+	1.30

● 常备库存 ○ 按订单生产

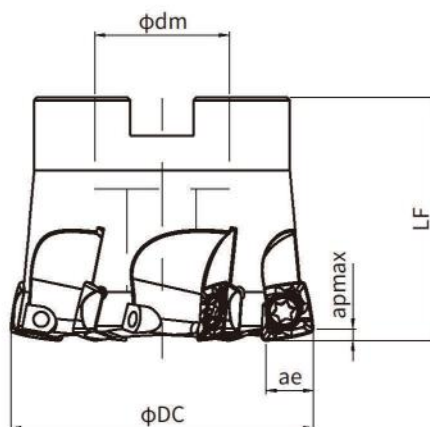


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			DC2	dm	apmax	ae	LF				
20	HF15-020M08SD09-Z02	○	/	M08	1.3	7	30	M	2	+	0.10
22	HF15-022M10SD09-Z02	○	/	M10	1.3	7	30	M	2	+	0.11
25	HF15-025M12SD09-Z02	○	/	M12	1.3	7	35	M	2	+	0.12
25	HF15-025M12SD09-Z03	●	/	M12	1.3	7	35	M	3	+	0.12
32	HF15-032M16SD09-Z03	●	/	M16	1.3	7	43	M	3	+	0.22
32	HF15-032M16SD09-Z04	○	/	M16	1.3	7	43	M	4	+	0.25
40	HF15-040M16SD09-Z05	○	/	M16	1.3	7	43	M	2	+	0.27

● 常备库存 ○ 按订单生产

快进给铣刀HF15-SD

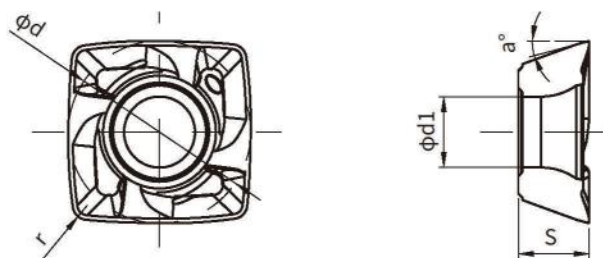
High feed mill HF15-SD



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			DC2	dm	apmax	ae	LF				
40	HF15-040A16SD09-Z04	○	/	16	1.3	7	35	A	4	+	0.30
40	HF15-040A16SD09-Z05	●	/	16	1.3	7	35	A	5	+	0.30
50	HF15-050A22SD09-Z04	○	/	22	1.3	7	40	A	4	+	0.40
50	HF15-050A22SD09-Z06	●	/	22	1.3	7	40	A	6	+	0.40
63	HF15-063A22SD09-Z05	○	/	22	1.3	7	40	A	5	+	0.70
63	HF15-063A22SD09-Z07	○	/	22	1.3	7	40	A	7	+	0.60
63	HF15-063A22SD09-Z08	○	/	22	1.3	7	40	A	8	+	0.60
80	HF15-080B27SD09-Z07	○	/	27	1.3	7	50	B	7	+	1.20
80	HF15-080B27SD09-Z09	○	/	27	1.3	7	50	B	9	+	1.10
80	HF15-080B27SD09-Z10	○	/	27	1.3	7	50	B	0	+	1.10
50	HF15-050A22SD13-Z04	○	/	22	1.7	10	40	A	4	+	0.50
50	HF15-050A22SD13-Z05	●	/	22	1.7	10	40	A	5	+	0.40
52	HF15-052A22SD13-Z05	●	/	22	1.7	10	40	A	5	+	0.40
50	HF15-050A22SD13-Z06	○	/	22	1.7	10	40	A	6	+	0.40
63	HF15-063A22SD13-Z05	●	/	22	1.7	10	40	A	5	+	0.70
63	HF15-063A22SD13-Z06	○	/	22	1.7	10	40	A	6	+	0.60
63	HF15-063A22SD13-Z07	●	/	22	1.7	10	40	A	7	+	0.60
80	HF15-080A27SD13-Z05	○	/	27	1.7	10	50	A	5	+	1.20
80	HF15-080A27SD13-Z06	●	/	27	1.7	10	50	A	6	+	1.20
80	HF15-080A27SD13-Z08	●	/	27	1.7	10	50	A	8	+	1.20
80	HF15-080A27SD13-Z09	○	/	27	1.7	10	50	A	9	+	1.10
100	HF15-100A32SD13-Z07	●	/	32	1.7	10	50	A	7	+	1.60
100	HF15-100A32SD13-Z09	●	/	32	1.7	10	50	A	9	+	1.60
100	HF15-100A32SD13-Z11	○	/	32	1.7	10	50	A	1	+	1.60
125	HF15-125B40SD13-Z8	○	/	40	1.7	10	63	B	8	+	3.30
125	HF15-125B40SD13-Z10	●	/	40	1.7	10	63	B	10		3.30
125	HF15-125B40SD13-Z12	○	/	40	1.7	10	63	B	12		3.30
80	HF15-080A27SD15-Z06	○	/	27	3.2	12	50	A	6	+	1.20
80	HF15-080A27SD15-Z07	○	/	27	3.2	12	50	A	7	+	1.10
100	HF15-100A32SD15-Z08	○	/	32	3.2	12	50	A	8	+	1.50
100	HF15-100A32SD15-Z09	○	/	32	3.2	12	50	A	9	+	1.50
125	HF15-125B40SD15-Z10	○	/	40	3.2	12	63	B	10		3.30
125	HF15-125B40SD15-Z11	○	/	40	3.2	12	63	B	11		3.30
160	HF15-160C40SD15-Z12	○	/	40	3.2	12	63	C	12		4.30
160	HF15-160C40SD15-Z13	○	/	40	3.2	12	63	C	13		4.30

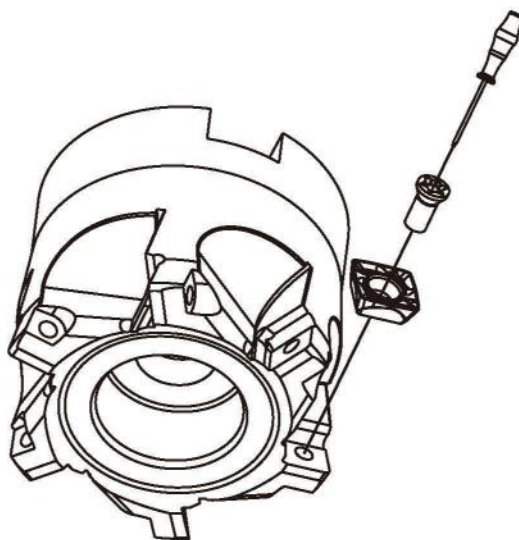
● 常备库存 ○ 按订单生产

快进给铣刀SD-123.1



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade									
		d	s	d1	α	r	PM9215	PM9035	PM9215	PM9035	PM9215	PM9035	PM9215	PM9035	PM5010	PM9215
	SDMT090307-SF	9	3.5	3.5	15°	0.7	★	☆	★		☆	★	★	☆	★	☆
	SDMT130512-SF	13.0	5.0	5.5	15°	1.2	★	☆	★		☆	★	★	☆	★	☆
	SDMT090307-SM	9	3.5	3.5	15°	0.7	★	☆	★		☆	★	★	☆	★	☆
	SDMT130512-SM	13.0	5.0	5.5	15°	1.2	★	☆	★		☆	★	★	☆	★	☆
	SDGW150510-SH	15.878	5.7	5.5	15°	1.0		★				★				

首选 ★ 备选 ☆



配件/SPARE PARTS

安装形式	刀具直径 Diameter	刀片夹紧螺钉 Clamping screw	刀片螺钉扳手 Screw Wrench
09	20-80	S01-030072	D01-109
13	40-125	S01-045120	D01-120
15	80-160	S01-050120	D01-120

方肩铣刀SM90-AO

Square shoulder mill SM90-AO

全能的深/浅方肩铣刀

加工精度和多用途性

卓越的切削刃几何形状设计，配合锋利的刀片槽型，确保了优异的加工表面质量和光洁度

精于各种铣削方式：面铣、方肩铣、槽铣、插铣、坡走铣、螺旋差补铣、等高分层铣加工

适用于钢件、不锈钢、耐热合金、铸铁等各种材料的加工。

广泛应用于航空航天、汽车零部件、能源、模具、通用机械等领域

刀片槽型

PL 槽型：轻型加工，高表面质量要求首选

PM 槽型：通用槽型

Comprehensive deep/shallow shoulder milling cutter

Precision and versatility

Outstanding design of insert geometry combining sharp insert edge, secures high precision and surface finish

Proficient in wide variety of milling applications: face milling, square shoulder milling, slot milling, plunge milling, ramping, helical interpolation and contour milling

Suitable for machining steel, stainless steel, heat resistant alloy, cast iron materials

Widely used in aerospace, automotive components, energy, die and mould, general engineering industries

PL geometry: first choice for light cutting, high precision and surface finish request

PM geometry: general purpose geometry



直径范围：16-40mm
Diameter range: 16-40mm



直径范围：40-125mm
Diameter range: 40-125mm



直径范围：32-40mm
Diameter range: 32-40mm



直径范围：40-100mm
Diameter range: 40-100mm



PM PL



面铣
Face milling



插铣
Plunge milling



坡走铣
Ramping



螺旋差补铣
Helical interpolation



槽铣
Slot milling



方肩铣
Square shoulder milling



等高分层铣
Contour milling

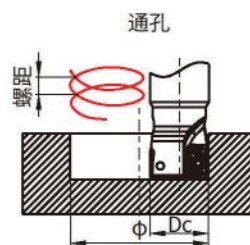
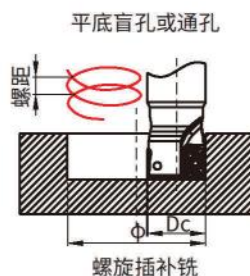
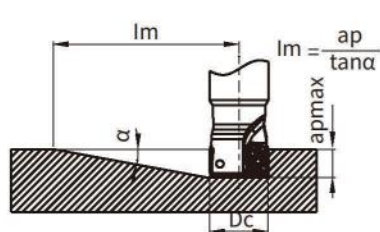
刀片进给切削参数推荐

Feed recommendations

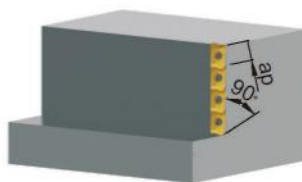
刀片尺寸 Insert size	刀片槽形 Geometry	推荐每齿进给(mm) Rec. Fz	最小每齿进给(mm) Min. Fz	最大每齿进给(mm) Max. Fz
11 (r=0.8)	PL	0.08	0.05	0.12
17 (r=0.8)	PL	0.08	0.05	0.12
11 (r=0.8)	PM	0.10	0.08	0.15
17 (r=0.8)	PM	0.10	0.08	0.15

方肩铣和插铣参数推荐

Square shoulder milling and plunge milling cutting data recommendations



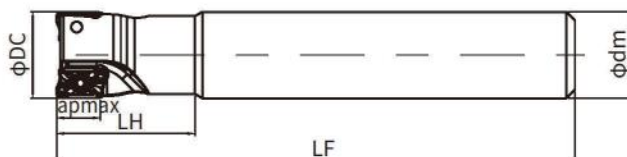
刀片尺寸 Insert size	刀具直径 DC	方肩铣最大切深 Square shoulder milling apmax	插铣最大切宽 Plunge milling aemax
11 (r=0.8)	16	9.5	5.5
	20	9.4	5.5
	25	9.3	5.5
	32	9.2	5.5
	40-80	5.9	5.5
17 (r=0.8)	25	15.2	5.5
	32	15.1	5.5
	40	15.0	5.5
	50	14.9	5.5
	63-125	9.6	5.5



刀片尺寸 Insert size	刀具直径 DC	方肩铣最大切深 Square shoulder milling apmax	插铣最大切宽 Plunge milling aemax
11 (r=0.8)	16	9.5	5.5
	20	9.4	5.5
	25	9.3	5.5
	32	9.2	5.5
	40-80	5.9	5.5
17 (r=0.8)	25	15.2	5.5
	32	15.1	5.5
	40	15.0	5.5
	50	14.9	5.5
	63-125	9.6	5.5

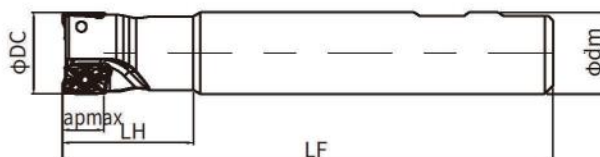
方肩铣刀SM90-AO

Square shoulder mill SM90-AO



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	L	LH				
16	SM90-016R16AO11-Z02	●	/	16	10	145	25	R	2	+	0.38
20	SM90-020R20AO11-Z02	○	/	20	10	170	40	R	2	+	0.50
20	SM90-020R20AO11-Z03	●	/	20	10	110	25	R	3	+	0.38
25	SM90-025R25AO11-Z02	○	/	25	10	210	50	R	2	+	0.54
25	SM90-025R25AO11-Z03	●	/	25	10	120	32	R	3	+	0.54
32	SM90-032R32AO11-Z02	○	/	32	10	250	65	R	2	+	1.45
32	SM90-032R32AO11-Z03	●	/	32	10	130	40	R	3	+	0.82
25	SM90-025R25AO17-Z02	●	/	25	15.7	210	50	R	2	+	0.50
32	SM90-032R32AO17-Z02	○	/	32	15.7	250	65	R	2	+	1.50
32	SM90-032R32AO17-Z03	●	/	32	15.7	130	40	R	3	+	0.80
40	SM90-040R32AO17-Z02	○	/	32	15.7	250	65	R	2	+	1.70
40	SM90-040R32AO17-Z03	○	/	32	15.7	170	50	R	3	+	1.10
40	SM90-040R32AO17-Z04	●	/	32	15.7	170	50	R	4	+	1.10

● 常备库存 ○ 按订单生产

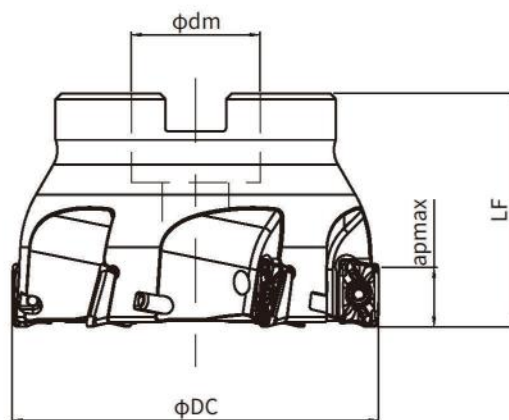


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF	LH				
16	SM90-016E16AO11-Z02	●	/	16	10	73	25	E	2	+	0.22
20	SM90-020E20AO11-Z02	●	/	20	10	81	25	E	2	+	0.29
20	SM90-020E20AO11-Z03	○	/	20	10	81	25	E	3	+	0.29
25	SM90-025E25AO11-Z02	●	/	25	10	88	32	E	2	+	0.40
25	SM90-025E25AO11-Z03	○	/	25	10	88	32	E	3	+	0.38
32	SM90-032E32AO11-Z02	●	/	32	10	100	40	E	2	+	0.65
32	SM90-032E32AO11-Z03	○	/	32	10	100	40	E	3	+	0.68
25	SM90-025E25AO17-Z02	○	/	25	15.7	88	32	E	2	+	0.41
32	SM90-032E32AO17-Z02	●	/	32	15.7	100	40	E	2	+	0.64
32	SM90-032E32AO17-Z03	○	/	32	15.7	100	40	E	3	+	0.62
40	SM90-040E32AO17-Z02	○	/	32	15.7	110	/	E	2	+	0.82
40	SM90-040E32AO17-Z03	●	/	32	15.7	110	/	E	3	+	0.80
40	SM90-040E32AO17-Z04	○	/	32	15.7	110	/	E	4	+	0.80

● 常备库存 ○ 按订单生产

方肩铣刀SM90-AO

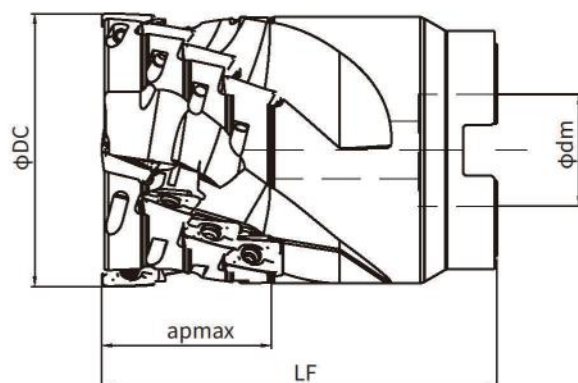
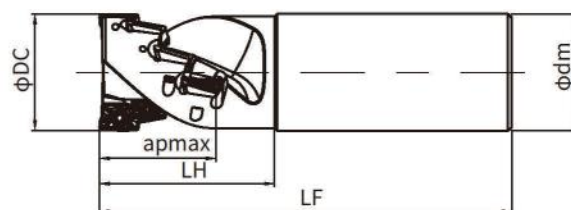
Square shoulder mill SM90-AO



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions				接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF				
40	SM90-040A16AO11-Z04	●	/	16	10	40	A	4	+	0.38
40	SM90-040A16AO11-Z06	●	/	16	10	40	A	6	+	0.38
50	SM90-050A22AO11-Z05	○	/	22	10	40	A	5	+	0.48
50	SM90-050A22AO11-Z07	●	/	22	10	40	A	7	+	0.48
63	SM90-063A22AO11-Z06	○	/	22	10	40	A	6	+	0.58
63	SM90-063A22AO11-Z08	●	/	22	10	40	A	8	+	0.59
80	SM90-080A27AO11-Z07	○	/	27	10	50	A	7	+	0.99
80	SM90-080A27AO11-Z10	●	/	27	10	50	A	10	+	0.86
40	SM90-040A16AO17-Z02	○	/	16	15.7	40	A	2	+	0.38
40	SM90-040A16AO17-Z03	○	/	16	15.7	40	A	3	+	0.46
40	SM90-040A16AO17-Z04	●	/	16	15.7	40	A	4	+	0.44
50	SM90-050A22AO17-Z03	○	/	22	15.7	40	A	3	+	0.54
50	SM90-050A22AO17-Z04	●	/	22	15.7	40	A	4	+	0.59
50	SM90-050A22AO17-Z05	○	/	22	15.7	40	A	5	+	0.54
63	SM90-063A22AO17-Z04	○	/	22	15.7	40	A	4	+	0.72
63	SM90-063A22AO17-Z05	●	/	22	15.7	40	A	5	+	0.72
63	SM90-063A22AO17-Z06	○	/	22	15.7	40	A	6	+	0.68
80	SM90-080A27AO17-Z04	○	/	27	15.7	50	A	4	+	0.96
80	SM90-080A27AO17-Z06	●	/	27	15.7	50	A	6	+	0.96
80	SM90-080A27AO17-Z08	○	/	27	15.7	50	A	8	+	0.94
100	SM90-100A32AO17-Z05	○	/	32	15.7	50	A	5	+	1.77
100	SM90-100A32AO17-Z07	●	/	32	15.7	50	A	7	+	1.73
100	SM90-100A32AO17-Z09	○	/	32	15.7	50	A	9	+	1.57
125	SM90-125B40AO17-Z06	○	/	40	15.7	63	B	6		2.71
125	SM90-125B40AO17-Z08	●	/	40	15.7	63	B	8		2.70
125	SM90-125B40AO17-Z11	○	/	40	15.7	63	B	11		2.74

● 常备库存 ○ 按订单生产

长刃方肩铣刀SM90-AO Square shoulder mill SM90-AO



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF	LH				
32	LE90-032E25AO11-Z02	○	/	25	32	109	/	E	2/8	+	0.60
32	LE90-032E25AO11-Z03	○	/	32	32	113	48	E	2/8	+	0.90
40	LE90-040E25AO11-Z04	○	/	40	39	131	58	E	3/15	+	1.40
40	LE90-040A16AO11-Z03	○	/	16	36	57		A	3/12	+	0.80
40	LE90-040A16AO11-Z04	○	/	16	36	57		A	4/16	+	0.80
44	LE90-044A16AO11-Z03	○	/	16	45	65		A	3/15	+	0.90
50	LE90-050A22AO11-Z03	●	/	22	54	74		A	3/18	+	1.10
50	LE90-050A22AO11-Z04	○	/	22	36	57		A	4/16	+	1.00
50	LE90-050A22AO11-Z05	○	/	22	36	57		A	5/20	+	1.00
54	LE90-054A22AO11-Z04	○	/	22	36	57		A	4/16	+	1.10
44	LE90-044A16AO17-Z02	○	/	16	40	65		A	2/6	+	0.91
50	LE90-050A22AO17-Z02	○	/	22	52	82		A	2/8	+	1.30
63	LE90-063A27AO17-Z03	●	/	27	52	82		A	3/12	+	1.58
80	LE90-080A32AO17-Z03	●	/	32	65	96		A	3/15	+	2.88
00	LE90-100A40AO17-Z04	○	/	40	52	82		A	4/16	+	3.37

● 常备库存 ○ 按订单生产

铣削

C

圆柄刀具

D

钻削

E

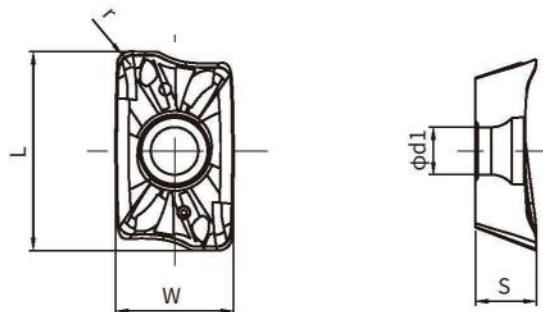
深孔加工

F

旋转刀柄

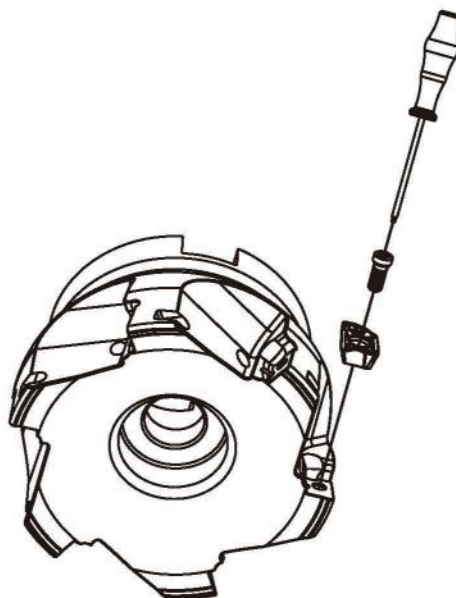
方肩铣刀SM90-AO刀片

Square shoulder mill SM90-AO insert



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade									
		l	w	s	d1	r	PM9215	PM3020B	PM9215	PM3020B	PM9215	PM3020B	PM9215	PM3020B	PM5010	PM9215
	AOMX070216-PM	7	4.1	2.4	2	1.2	★	☆	★		☆	★	★	☆	★	☆
	AOMX11T308-PL	11	6.8	3.59	2.8	0.8	★	☆	★		☆	★	★	☆	★	☆
	AOMX11T308-PM	11	6.8	3.59	2.8	0.8	★	☆	★		☆	★	★	☆	★	☆
	AOMX11T331-PM	11	6.8	3.59	2.8	3.1	★	☆	★		☆	★	★	☆	★	☆
	AOMX170408-PL	17	9.6	4.76	4.1	0.8	★	☆	★		☆	★	★	☆	★	☆
	AOMX170408-PM	17	9.6	4.76	4.1	0.8	★	☆	★		☆	★	★	☆	★	☆
	AOMX170416-PM	17	9.6	4.76	4.1	1.6	★	☆	★		☆	★	★	☆	★	☆
	AOMX170440-PM	17	9.6	4.76	4.1	4	★	☆	★		☆	★	★	☆	★	☆
	AOMX170464-PM	17	9.6	4.76	4.1	6.4	★	☆	★		☆	★	★	☆	★	☆
	AOMX170408-PH	17	9.6	4.76	4.1	0.8	★	☆	★		☆	★	★	☆	★	☆
	AOMX180612-PM	18	11	6	4.6	1.2	★	☆	★		☆	★	★	☆	★	☆
	AOMX180631-PM	18	11	6	4.6	3.1	★	☆	★		☆	★	★	☆	★	☆

首选 ★ 备选 ☆



配件/SPARE PARTS

刀片尺寸 Insert size	刀具直径 Diameter	刀片夹紧螺钉 Clamping srew	刀片螺钉扳手 Screw Wrench
11	16-20	S01-025059	Q01-108
11	20-80	S01-025073	Q01-108
17	25	S01-040070	D01-115
17	32-125	S01-040090	D01-115

方肩铣刀SM90-AN

Square shoulder mill SM90-AN

通用四刃方肩铣刀

切削非常轻快

优异的加工表面质量和光洁度

适用于钢件、不锈钢、耐热合金、铸铁等各种材料的加工

广泛应用于航空航天、汽车零部件、能源、模具、通用机械等领域

刀片槽型

PL 槽型：轻型加工，高表面质量要求首选

PM 槽型：通用槽型

General purpose 4 edges shoulder milling cutter

Extremely light cutting

High precision and surface finish

Suitable for machining steel, stainless steel, heat resistant alloy, cast iron materials

Widely used in aerospace, automotive components, energy, die and mould, general engineering industries

PL geometry: first choice for light cutting, high precision and surface finish request

PM geometry: general purpose geometry



直径范围：20-32mm
Diameter range: 20-32mm



直径范围：25-40mm
Diameter range: 25-40mm



直径范围：40-160mm
Diameter range: 40-160mm



插铣
Plunge milling



槽铣
Slot milling



方肩铣
Square shoulder milling



PL槽型
PL Geometry



PM槽型
PM Geometry

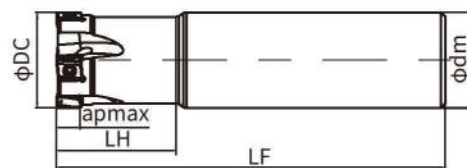
刀片进给切削参数推荐

Feed recommendations

刀片尺寸 Insert size	刀片槽形 Geometry	推荐每齿进给(mm) Rec. Fz	最小每齿进给(mm) Min. Fz	最大每齿进给(mm) Max. Fz
04 (r=0.4)	PL	0.08	0.05	0.12
11 (r=0.8)	PM	0.10	0.08	0.15

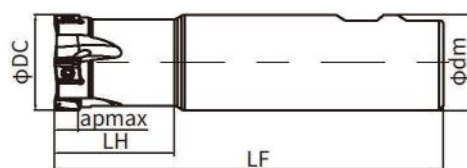
方肩铣刀SM90-AN

Square shoulder mill SM90-AN



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF	LH				
20	SM90-020R20AN08-Z02	○	/	20	8	110	25	R	2	+	0.50
20	SM90-020R20AN08-Z03	●	/	20	8	110	25	R	3	+	0.50
25	SM90-025R25AN08-Z03	○	/	25	8	120	32	R	3	+	0.60
25	SM90-025R25AN08-Z04	●	/	25	8	120	32	R	4	+	0.60
32	SM90-032R32AN08-Z04	○	/	32	8	130	40	R	4	+	0.71
32	SM90-032R32AN08-Z05	●	/	32	8	130	40	R	5	+	0.70

● 常备库存 ○ 按订单生产

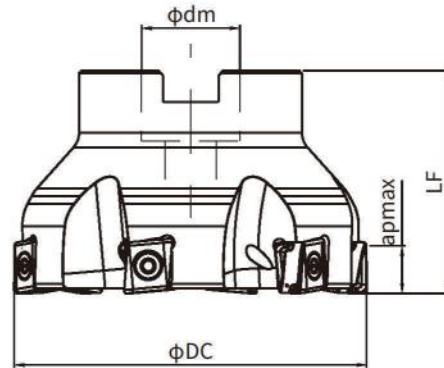


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF	LH				
25	SM90-025E25AN08-Z03	○	/	25	8	100	32	E	3	+	0.60
25	SM90-025E25AN08-Z04	○	/	25	8	100	32	E	4	+	0.60
32	SM90-032E32AN08-Z04	○	/	32	8	110	40	E	4	+	0.70
32	SM90-032E32AN08-Z05	○	/	32	8	110	40	E	5	+	0.70
40	SM90-040E32AN08-Z04	○	/	32	8	120	25	E	4	+	1.20
40	SM90-040E32AN08-Z06	●	/	32	8	120	25	E	6	+	1.25
40	SM90-040E32AN11-Z05	○	/	32	11	120	25	E	5	+	1.25

● 常备库存 ○ 按订单生产

方肩铣刀SM90-AN

Square shoulder mill SM90-AN

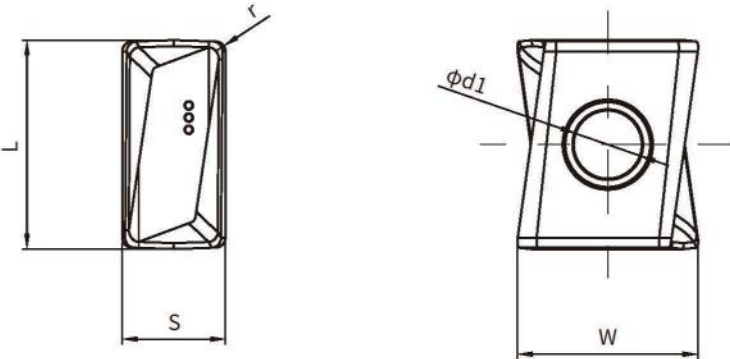


直径 Dc	型 号	库存 状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF	LH				
40	SM90-040A16AN08-Z04	○	/	16	8	40		A	4	+	0.38
40	SM90-040A16AN08-Z06	○	/	16	8	40		A	6	+	0.38
50	SM90-050A22AN08-Z05	●	/	22	8	40		A	5	+	0.48
50	SM90-050A22AN08-Z07	○	/	22	8	40		A	7	+	0.48
63	SM90-063A22AN08-Z07	●	/	22	8	40		A	7	+	0.58
63	SM90-063A22AN08-Z10	○	/	22	8	40		A	10	+	0.59
80	SM90-080B27AN08-Z09	●	/	27	8	50		B	9	+	0.99
80	SM90-080B27AN08-Z13	○	/	27	8	50		B	13	+	0.86
40	SM90-040A16AN11-Z04	○	/	16	11	40		A	4	+	0.38
40	SM90-040A16AN11-Z05	○	/	16	11	40		A	5	+	0.38
50	SM90-050A22AN11-Z05	●	/	22	11	40		A	5	+	0.54
50	SM90-050A22AN11-Z06	○	/	22	11	40		A	6	+	0.59
63	SM90-063A22AN11-Z04	○	/	22	11	40		A	4	+	0.72
63	SM90-063A22AN11-Z06	●	/	22	11	40		A	6	+	0.72
63	SM90-063A22AN11-Z08	○	/	22	11	40		A	8	+	0.68
80	SM90-080A27AN11-Z05	○	/	27	11	50		A	5	+	0.94
80	SM90-080A27AN11-Z07	●	/	27	11	50		A	7	+	0.96
80	SM90-080A27AN11-Z10	○	/	27	11	50		A	10	+	0.99
100	SM90-100A32AN11-Z07	○	/	32	11	50		A	7	+	1.77
100	SM90-100A32AN11-Z09	●	/	32	11	50		A	9	+	1.73
100	SM90-100A32AN11-Z13	○	/	32	11	50		A	3	+	1.57
125	SM90-125B40AN11-Z09	○	/	40	11	63		B	9		2.71
125	SM90-125B40AN11-Z11	●	/	40	11	63		B	11		2.70
125	SM90-125B40AN11-Z16	○	/	40	11	63		B	16		2.74
160	SM90-160C40AN11-Z09	○	/	40	11	63		C	9		5.00
160	SM90-160C40AN11-Z13	○	/	40	11	63		C	13		5.00

● 常备库存 ○ 按订单生产

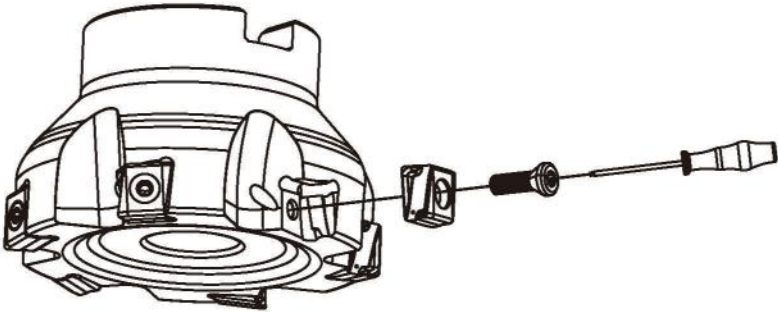


方肩铣刀SM90-AN刀片
Square shoulder mill SM90-AN insert



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade							
		l	w	s	d1	r	PM9215	PM3020B	PM9215	PM3020B	PM9215	PM3020B	PM5010	PM9215
	ANGX080404-PL	8.39	7.73	4.3	3.3	0.4	★	★	★		☆	★	★	☆
	ANGX110708-PM	11.5	11.76	7.11	4.5	0.8	★	★	★		☆	★	★	☆
	ANGX110712-PM	11.5	11.76	7.11	4.5	1.2	★	★	★		☆	★	★	☆

首选 ★ 备选 ☆



配件/SPARE PARTS

刀片尺寸 Insert size	刀具直径 Diameter	刀片夹紧螺钉 Clamping srew	刀片螺钉扳手 Screw Wrench
08	40-250	S01-040120	D01-115

方肩铣刀SM90-ZN

Square shoulder mill SM90-ZN

六刃方肩铣刀

最具经济性的90°铣刀

适用于钢件、不锈钢、耐热合金、铸铁等各种材料的加工
广泛应用于航空航天、汽车零部件、能源、模具、通用机械等领域

刀片槽型

BM槽型：轻型加工，高表面质量要求首选

M槽型：通用槽型

6 edges shoulder milling cutter

Most economical milling cutter

Suitable for machining steel, stainless steel, heat resistant alloy, cast iron materials

Widely used in aerospace, automotive components, energy, die and mould, general engineering industries

BM geometry: first choice for light cutting, high precision and surface finish request

M geometry: general purpose geometry



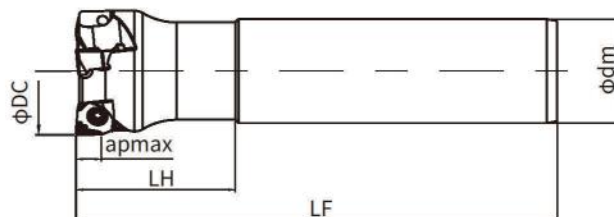
刀片进给切削参数推荐

Feed recommendations

刀片尺寸 Insert size	刀片槽形 Geometry	推荐每齿进给(mm) Rec. Fz	最小每齿进给(mm) Min. Fz	最大每齿进给(mm) Max. Fz
08 (r=0.8)	BM	0.08	0.05	0.12
08 (r=0.8)	M	0.10	0.08	0.15

方肩铣刀SM90-ZN

Square shoulder mill SM90-ZN

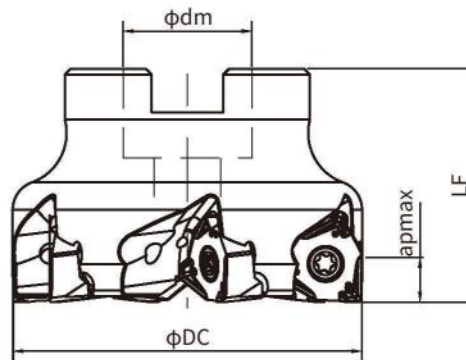


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF	LH				
40	SM90-040E32ZN08-Z03	○	/	32	7	120	45	E	3	+	1.25
40	SM90-040E32ZN08-Z04	○	/	32	7	120	45	E	4	+	1.20

● 常备库存 ○ 按订单生产

方肩铣刀SM90-ZN

Square shoulder mill SM90-ZN

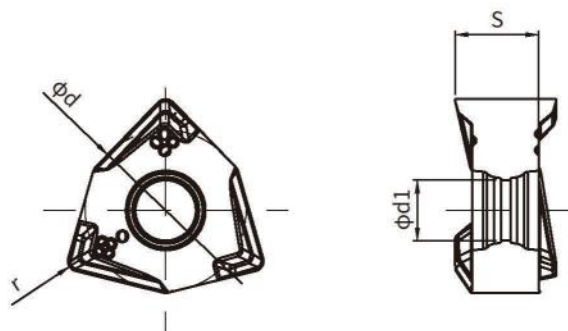


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions				接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF				
50	SM90-050A22ZN08-Z04	○	/	22	7	40	A	4	+	0.48
50	SM90-050A22ZN08-Z05	○	/	22	7	40	A	5	+	0.48
63	SM90-063A22ZN08-Z04	○	/	22	7	40	A	4	+	0.58
63	SM90-063A22ZN08-Z06	○	/	22	7	40	A	6	+	0.58
63	SM90-063A22ZN08-Z07	○	/	22	7	40	A	7	+	0.58
80	SM90-080A27ZN08-Z05	○	/	27	7	50	A	5	+	0.99
80	SM90-080A27ZN08-Z07	○	/	27	7	50	A	7	+	0.90
80	SM90-080A27ZN08-Z09	○	/	27	7	50	A	9	+	0.86
100	SM90-100A32ZN08-Z06	○	/	32	7	50	A	6	+	1.77
100	SM90-100A32ZN08-Z08	○	/	32	7	50	A	8	+	1.73
100	SM90-100A32ZN08-Z11	○	/	32	7	50	A	11	+	1.70
125	SM90-125B40ZN08-Z07	○	/	40	7	63	B	7		2.71
125	SM90-125B40ZN08-Z11	○	/	40	7	63	B	11		2.66
125	SM90-125B40ZN08-Z13	○	/	40	7	63	B	13		2.60
160	SM90-160C40ZN08-Z08	○	/	40	7	63	C	8		5.00
160	SM90-160C40ZN08-Z12	○	/	40	7	63	C	12		5.00
200	SM90-200C60ZN08-Z14	○	/	60	7	63	C	14		6.70
250	SM90-250C60ZN08-Z16	○	/	60	7	63	C	16		8.50

● 常备库存 ○ 按订单生产

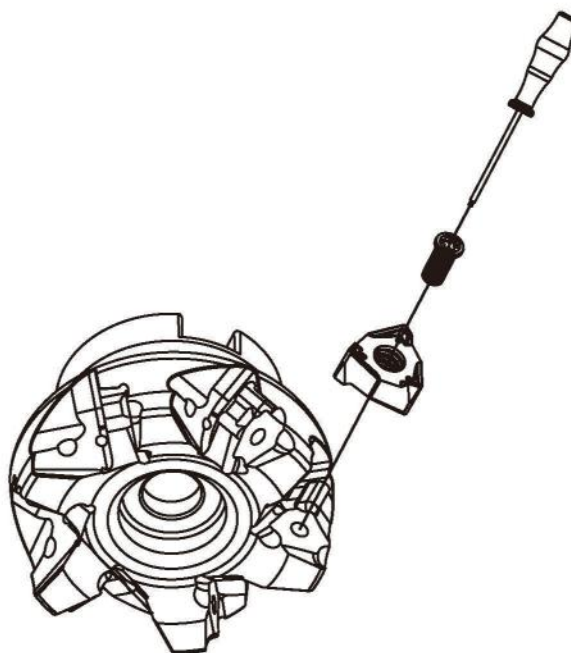
方肩铣刀SM90-ZN刀片

Square shoulder mill SM90-ZN insert



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade									
		IC	s	d1	r	bs	PM9125	PM9035	PM9125	PM9035	PM9125	PM9035	PM9125	PM9035	PM5010	PM9125
	ZNMX080608R-M	14.02	6.65	4.7	0.8	1.3	★	☆	★		☆	★	★	☆	★	☆
	ZNGX080608FR-BM	14.02	6.65	4.7	0.8	1.3	★	☆	★		☆	★	★	☆	★	☆

首选 ★ 备选 ☆



配件/SPARE PARTS

刀片尺寸 Insert size	刀具直径 Diameter	刀片夹紧螺钉 Clamping screw	刀片螺钉扳手 Screw Wrench
08	40-250	S01-040120	D01-115

仿形铣刀PM00-RP

Profile mill PM00-RP

加工精度和多用途性

面铣, 旋插补铣镗孔, 仿形铣

Precision and versatility

face milling, helical interpolation, profiling

刀片槽型

MV 槽型: 精磨刀片, 轻型加工, 高精度高表面质量要求首选

MV geometry: fine grinding insert, first choice for light cutting, high precision and surface finish request



直径范围: 20-50mm
Diameter range: 20-50mm



直径范围: 40-160mm
Diameter range: 40-160mm



面铣
Face milling

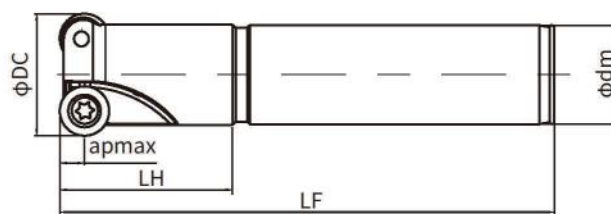


仿形铣
Profile milling



螺旋差补铣
Helical interpolation

仿形铣刀PM00-RP
Profile mill PM00-RP

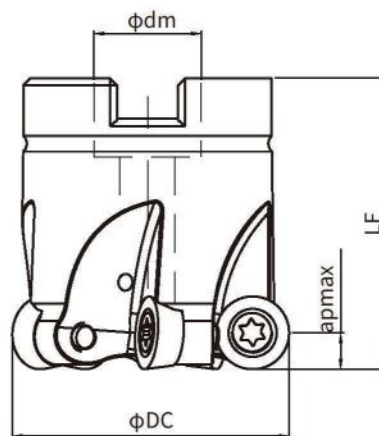


直径 Dc	型 号	库存状态	尺寸(mm) Dimensions					接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF	LH				
20	PM00-020R20RP08-Z02	●	/	20	4	120	35	R	2	+	0.20
25	PM00-025R20RP08-Z03	○	/	20	4	120	35	R	3	+	0.30
32	PM00-032R25RP08-Z04	○	/	25	4	120	35	R	4	+	0.35
25	PM00-025R20RP10-Z02	●	/	20	5	100	35	R	2	+	0.20
32	PM00-032R25RP10-Z02	●	/	25	5	120	40	R	2	+	0.50
40	PM00-040R32RP10-Z03	○	/	32	5	120	40	R	3	+	0.70
50	PM00-050R32RP10-Z03	○	/	32	5	120	40	R	3	+	0.80
32	PM00-032R25RP12-Z02	○	/	25	6	135	40	R	2	+	0.90
40	PM00-040R32RP12-Z02	○	/	32	6	150	40	R	2	+	1.00
50	PM00-050R32RP12-Z03	○	/	32	6	150	40	R	3	+	1.10

● 常备库存 ○ 按订单生产

仿形铣刀PM00-RP

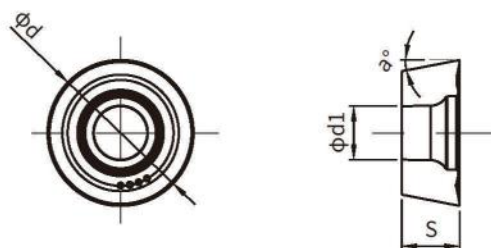
Profile mill PM00-RP



直径 Dc	型 号	库存状态	尺寸(mm) Dimensions				接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF				
40	PM00-040A16RP08-Z05	○	/	16	4	40	A	5	+	0.44
50	PM00-050A22RP08-Z05	○	/	22	4	40	A	5	+	0.87
63	PM00-063A22RP08-Z06	○	/	22	4	40	A	6	+	0.60
80	PM00-080A27RP08-Z07	○	/	27	4	50	B	7	+	1.40
100	PM00-100A32RP08-Z08	○	/	32	4	50	B	8	+	1.90
125	PM00-125B40RP08-Z10	○	/	40	4	63	B	10	+	3.20
160	PM00-160C40RP08-Z12	○	/	40	4	63	C	12	+	5.90
40	PM00-040A16RP10-Z05	○	/	16	5	40	A	5	+	0.44
50	PM00-050A22RP10-Z05	●	/	22	5	40	A	5	+	0.87
63	PM00-063A22RP10-Z06	●	/	22	5	40	A	6	+	0.60
80	PM00-080B27RP10-Z07	●	/	27	5	50	A	7	+	1.40
100	PM00-100B32RP10-Z08	○	/	32	5	50	A	8	+	1.90
125	PM00-125B40RP10-Z10	○	/	40	5	63	B	10		3.20
160	PM00-160C40RP10-Z12	○	/	40	5	63	C	12		5.90
50	PM00-050A22RP12-Z04	○	/	22	6	45	A	4	+	0.40
63	PM00-063A22RP12-Z04	○	/	22	6	45	A	4	+	0.60
80	PM00-080A27RP12-Z05	○	/	27	6	50	A	5	+	1.10
100	PM00-100A32RP12-Z06	○	/	32	6	50	A	6	+	1.80
125	PM00-125B40RP12-Z07	○	/	40	6	63	B	7		3.70
160	PM00-160C40RP12-Z08	○	/	40	6	63	C	8		4.90

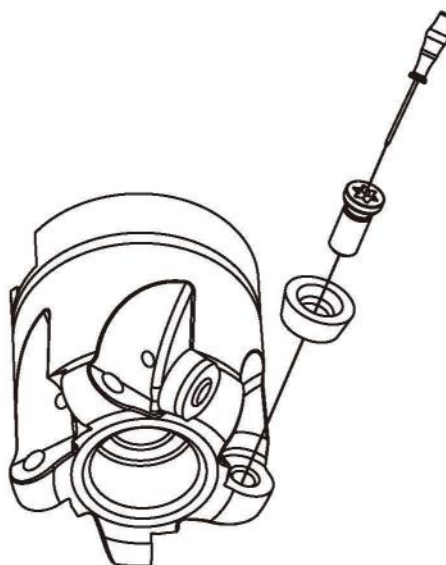
● 常备库存 ○ 按订单生产

仿形铣刀PM00-RP刀片 Profile mill PM00-RP insert



刀片外形	型号 Type	基本尺寸 Dimension (mm)				牌号 Grade							
		l	s	d1	α	PM9115	PM9035	PM9215	PM9035	PM9215	PM9035	PM9215	PM5010
	RPGT0803M0E-MV	8	3.18	3.4	11°	★	☆	★		☆	★	★	☆
	RPGT10T3M0E-MV	10	3.97	4.4	11°	★	☆	★		☆	★	★	☆
	RPGT1204M0E-MV	12	4.76	4.4	11°	★	☆	★		☆	★	★	☆
	RPMT10T3M0E-MV	10	3.97	4.4	11°	★	☆	★		☆	★	★	☆
	RPMT1204M0E-MV	12	4.76	4.4	11°	★	☆	★		☆	★	★	☆

首选 ★ 备选 ☆



配件/SPARE PARTS

安装形式	刀具直径 Diameter	刀片夹紧螺钉 Clamping screw	刀片螺钉扳手 Screw Wrench
8	12-160	S01-030085	D01-109
10	25-160	S01-040110	D01-115
12	32-160	S01-040110	D01-115



三面刃铣刀SF90-MN
Full side and face mill SF90-MN

加工精度和多用途性
多用途槽铣刀
槽铣、背铣、切断、面铣、螺旋插补铣镗孔

刀片槽型
E-WL 槽型：精磨刀片，轻型加工，高表面质量要求首选
E-WM 槽型：精磨刀片，通用槽型

Precision and versatility
Multi-purpose side and face mill
Slot milling, back face milling, parting, face milling, helical interpolation boring

E-WL geometry: fine grinding insert, first choice for light cutting, high precision and surface finish request
E-WM geometry: fine grinding insert, general purpose geometry



直径范围：80-315mm
Diameter range: 80-315mm



直径范围：80-315mm
Diameter range: 80-315mm



直径范围：80-100mm
Diameter range: 80-100mm



E-WL槽型
E-WL Geometry



E-WM槽型
E-WM Geometry



面铣
Face milling



背铣
Back face milling



螺旋差补铣
Helical interpolation



槽铣
Slot milling



切断
Parting

刀片进给切削参数推荐
Feed recommendations

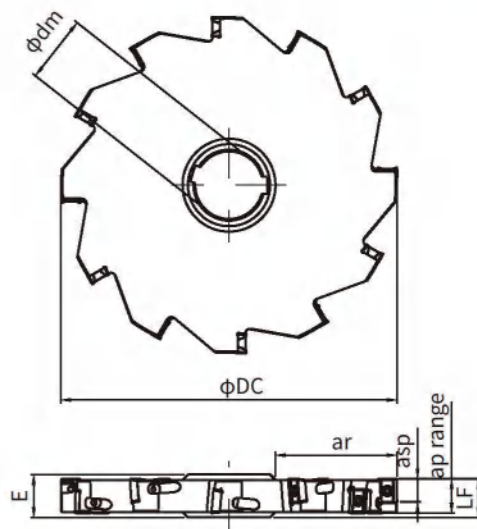
刀片尺寸 Insert size	刀片槽形 Geometry	推荐每齿进给(mm) Rec. Fz	最小每齿进给(mm) Min. Fz	最大每齿进给(mm) Max. Fz
05	WL	0.05	0.02	0.15
08\11\14	WL	0.06	0.03	0.15
05	WM	0.07	0.04	0.18
08\11\14	WM	0.09	0.05	0.20

固定槽式三面刃铣刀SF90

Full side and face mill with fixed pockets SF90



直径范围: 80-315mm
槽宽范围: 7.9-26.5mm
带键槽的孔
Diameter range: 80-315mm
Slot width range: 7.9-26.5mm
Bore with keyway



直径 Dc	订货号 Ordering code	库存状态	刀片尺寸 Insert size	刀片圆角范围 Insert radius range	尺寸(mm) Dimensions						接口类型	齿数(Z)	重量(kg)
					dm	槽宽范围 Ap range	E	LF(min.-max.)	ar	asp			
80	SF90-080H27-05DMXX.XX	○	05	0.2-1.54	27	7.9-10.0	16	12-13	19.5	5.6	H	6	0.30
100	SF90-100H32-05DMXX.XX	○	05	0.2-1.54	32	7.9-10.0	16	12-13	25.5	5.6	H	8	0.50
125	SF90-125H40-05DMXX.XX	○	05	0.2-1.54	40	7.9-10.0	16	12-13	34.0	5.6	H	10	0.80
160	SF90-160H40-05DMXX.XX	○	05	0.2-1.54	40	7.9-10.0	16	12-13	51.5	5.6	H	12	1.30
200	SF90-200H50-05DMXX.XX	○	05	0.2-1.54	50	7.9-10.0	16	12-13	64.5	5.6	H	16	2.10
080	SF90-080H27-08EMXX.XX	○	08	0.2-1.54	27	10.0-12.0	16	13-14	19.5	6.2	H	6	0.30
100	SF90-100H32-08EMXX.XX	○	08	0.2-1.54	32	10.0-12.0	16	13-14	25.5	6.2	H	8	0.50
125	SF90-125H40-08EMXX.XX	○	08	0.2-1.54	40	10.0-12.0	16	13-14	34.0	6.2	H	10	0.80
160	SF90-160H40-08EMXX.XX	○	08	0.2-1.54	40	10.0-12.0	16	13-14	51.5	6.2	H	12	1.30
200	SF90-200H50-08EMXX.XX	○	08	0.2-1.54	50	10.0-12.0	16	13-14	64.5	6.2	H	16	2.10
80	SF90-080H27-08FMXX.XX	○	08	0.2-1.54	27	12.0-15.0	16	14-15.5	19.5	7.6	H	6	0.40
100	SF90-100H32-08FMXX.XX	○	08	0.2-1.54	32	12.0-15.0	16	14-15.5	25.5	7.6	H	8	0.60
125	SF90-125H40-08FMXX.XX	○	08	0.2-1.54	40	12.0-15.0	16	14-15.5	34.0	7.6	H	10	0.90
160	SF90-160H40-08FMXX.XX	○	08	0.2-1.54	40	12.0-15.0	16	14-15.5	51.5	7.6	H	12	1.60
200	SF90-200H50-08FMXX.XX	○	08	0.2-1.54	50	12.0-15.0	16	14-15.5	64.5	7.6	H	16	2.50
100	SF90-100H32-11KMXX.XX	○	11	0.2-1.54	32	15.0-17.5	18.5	16.8-18	25.5	10.6	H	6	0.80
125	SF90-125H40-11KMXX.XX	○	11	0.2-1.54	40	15.0-17.5	18.5	16.8-18	34.0	10.6	H	8	1.20
160	SF90-160H40-11KMXX.XX	○	11	0.2-1.54	40	15.0-17.5	18.5	16.8-18	51.5	10.6	H	10	2.00
200	SF90-200H50-11KMXX.XX	○	11	0.2-1.54	50	15.0-17.5	18.5	16.8-18	64.5	10.6	H	12	3.20
250	SF90-250H50-11KMXX.XX	○	11	0.2-1.54	50	15.0-17.5	18.5	16.8-18	89.5	10.6	H	16	5.10
315	SF90-315H60-11KMXX.XX	○	11	0.2-1.54	60	15.0-17.5	18.5	16.8-18	114.5	10.6	H	20	8.10
125	SF90-125H40-11LMXX.XX	○	11	0.2-1.54	40	17.5-20.5	21.5	19.5-21	34.0	10.6	H	8	1.40
160	SF90-160H40-11LMXX.XX	○	11	0.2-1.54	40	17.5-20.5	21.5	19.5-21	51.5	10.6	H	10	2.40
200	SF90-200H50-11LMXX.XX	○	11	0.2-1.54	50	17.5-20.5	21.5	19.5-21	64.5	10.6	H	12	3.70
250	SF90-250H50-11LMXX.XX	○	11	0.2-1.54	50	17.5-20.5	21.5	19.5-21	89.5	10.6	H	16	6.00
315	SF90-315H60-11LMXX.XX	○	11	0.2-1.54	60	17.5-20.5	21.5	19.5-21	114.5	10.6	H	20	9.50
160	SF90-160H40-11QMXX.XX	○	14	0.2-1.54	40	20.5-23.5	24.5	22.5-24	51.5	13.6	H	10	2.80
200	SF90-200H50-11QMXX.XX	○	14	0.2-1.54	50	20.5-23.5	24.5	22.5-24	64.5	13.6	H	12	4.40
250	SF90-250H50-11QMXX.XX	○	14	0.2-1.54	50	20.5-23.5	24.5	22.5-24	89.5	13.6	H	16	7.10
315	SF90-315H60-11QMXX.XX	○	14	0.2-1.54	60	20.5-23.5	24.5	22.5-24	114.5	13.6	H	20	11.30
160	SF90-160H40-11RMXX.XX	○	14	0.2-1.54	40	23.5-26.5	27.5	25.5-27	51.5	13.6	H	10	3.30
200	SF90-200H50-11RMXX.XX	○	14	0.2-1.54	50	23.5-26.5	27.5	25.5-27	64.5	13.6	H	12	4.30
250	SF90-250H50-11RMXX.XX	○	14	0.2-1.54	50	23.5-26.5	27.5	25.5-27	89.5	13.6	H	16	8.20
315	SF90-315H60-11RMXX.XX	○	14	0.2-1.54	60	23.5-26.5	27.5	25.5-27	114.5	13.6	H	20	13.10

订购刀盘时, 需注明槽宽 (XX.XX)

When ordering mill, state slot width(XX.XX)in the ordering code

订货示例Ordering example:SF90-125H40-08EM10.00

● 常备库存 ○按订单生产 订购刀片圆角r大于1.54的刀片时, 需注明圆角r要求 (rX.XX)。

When ordering insert radius bigger than 1.54, state radius(rX.XX)in the ordering code

订货示例Ordering example:SF90-125H40-08EM10.00r3.00

固定槽式三面刃铣刀MR1231

Full side and face mill with fixed pockets MR1231

直径范围：80-315mm

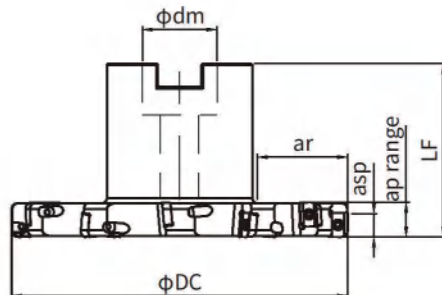
槽宽范围：7.9-26.5mm

心轴式

Diameter range: 80-315mm

Slot width range: 7.9-26.5mm

Arbor



直径 Dc	订货号 Ordering code	库存状态	刀片尺寸 Insert size	刀片圆角范围 Insert radius range	尺寸(mm) Dimensions						接口类型	齿数(Z)	重量(kg)
					dm	槽宽范围 Ap range	E	LF (min-max)	ar	asp			
80	SF90-080A27-05DMXX.XX	○	05	0.2-1.54	27	7.9-10.0	63-64	A	20	5.6	A	6	0.80
100	SF90-100A27-05DMXX.XX	○	05	0.2-1.54	27	7.9-10.0	63-64	A	22	5.6	A	8	1.20
125	SF90-125B32-05DMXX.XX	○	05	0.2-1.54	32	7.9-10.0	63-64	B	29.5	5.6	B	10	1.80
160	SF90-160B40-05DMXX.XX	○	05	0.2-1.54	40	7.9-10.0	63-64	B	41	5.6	B	12	2.60
200	SF90-200C40-05DMXX.XX	○	05	0.2-1.54	40	7.9-10.0	63-64	C	51.0	5.6	C	16	7.00
080	SF90-080A27-08EMXX.XX	○	08	0.2-1.54	27	10.0-12.0	63-64	A	20.0	6.2	A	6	1.10
100	SF90-100A27-08EMXX.XX	○	08	0.2-1.54	27	10.0-12.0	63-64	A	22.0	6.2	A	8	1.70
125	SF90-125B32-08EMXX.XX	○	08	0.2-1.54	32	10.0-12.0	63-64	B	29.5	6.2	B	10	1.80
160	SF90-160B40-08EMXX.XX	○	08	0.2-1.54	40	10.0-12.0	63-64	B	41.0	6.2	B	12	2.60
200	SF90-200C40-08EMXX.XX	○	08	0.2-1.54	40	10.0-12.0	63-64	C	51.0	6.2	C	16	4.30
80	SF90-080A27-08FMXX.XX	○	08	0.2-1.54	27	12.0-15.0	63-64.5	A	20.0	7.6	A	6	1.20
100	SF90-100A27-08FMXX.XX	○	08	0.2-1.54	27	12.0-15.0	63-64.5	A	22.0	7.6	A	8	1.80
125	SF90-125B32-08FMXX.XX	○	08	0.2-1.54	32	12.0-15.0	63-64.5	B	29.5	7.6	B	10	2.00
160	SF90-160B40-08FMXX.XX	○	08	0.2-1.54	40	12.0-15.0	63-64.5	B	41.0	7.6	B	12	3.00
200	SF90-200C40-08FMXX.XX	○	08	0.2-1.54	40	12.0-15.0	63-64.5	C	51.0	7.6	C	16	7.60
100	SF90-100A27-11KMXX.XX	○	11	0.2-1.54	27	15.0-17.5	63-64.25	A	25.7	10.6	A	6	1.70
125	SF90-125B32-11KMXX.XX	○	11	0.2-1.54	32	15.0-17.5	63-64.25	B	29.5	10.6	B	8	2.30
160	SF90-160B40-11KMXX.XX	○	11	0.2-1.54	40	15.0-17.5	63-64.25	B	41.0	10.6	B	10	3.30
200	SF90-200C40-11KMXX.XX	○	11	0.2-1.54	40	15.0-17.5	63-64.25	C	51.0	10.6	C	12	8.00
250	SF90-250C60-11KMXX.XX	○	11	0.2-1.54	60	15.0-17.5	63-64.25	C	56.0	10.6	C	16	9.50
315	SF90-315C60-11KMXX.XX	○	11	0.2-1.54	60	15.0-17.5	63-64.25	C	88.5	10.6	C	20	16.70
125	SF90-125B32-11LMXX.XX	○	11	0.2-1.54	32	17.5-20.5	63-64.5	B	29.5	10.6	B	8	2.50
160	SF90-160B40-11LMXX.XX	○	11	0.2-1.54	40	17.5-20.5	63-64.5	B	41.0	10.6	B	10	3.70
200	SF90-200C40-11LMXX.XX	○	11	0.2-1.54	40	17.5-20.5	63-64.5	C	51.0	10.6	C	12	5.90
250	SF90-250C60-11LMXX.XX	○	11	0.2-1.54	60	17.5-20.5	63-64.5	C	56.0	10.6	C	16	10.00
315	SF90-315C60-11LMXX.XX	○	11	0.2-1.54	60	17.5-20.5	63-64.5	C	88.5	10.6	C	20	13.60
160	SF90-160B40-11QMXX.XX	○	14	0.2-1.54	40	20.5-23.5	63-64.5	B	41.0	13.6	B	10	3.60
200	SF90-200C40-11QMXX.XX	○	14	0.2-1.54	40	20.5-23.5	63-64.5	C	51.0	13.6	C	12	8.80
250	SF90-250C60-11QMXX.XX	○	14	0.2-1.54	60	20.5-23.5	63-64.5	C	56.0	13.6	C	16	13.30
315	SF90-315C60-11QMXX.XX	○	14	0.2-1.54	60	20.5-23.5	63-64.5	C	88.5	13.6	C	20	19.20
160	SF90-160B40-11RMXX.XX	○	14	0.2-1.54	40	23.5-26.5	63-64.5	B	41.0	13.6	B	10	4.50
200	SF90-200C40-11RMXX.XX	○	14	0.2-1.54	40	23.5-26.5	63-64.5	C	51.0	13.6	C	12	9.20
250	SF90-250C60-11RMXX.XX	○	14	0.2-1.54	60	23.5-26.5	63-64.5	C	56.0	13.6	C	16	13.90
315	SF90-315C60-11RMXX.XX	○	14	0.2-1.54	60	23.5-26.5	63-64.5	C	88.5	13.6	C	20	20.40

订购刀盘时，需注明槽宽 (XX.XX)

When ordering mill, state slot width(XX.XX)in the ordering code

订货示例Ordering example:SF90-125B32-08EM10.00

订购刀片圆角r大于1.54的刀片时，需注明圆角r要求 (rX.XX)。

When ordering insert radius bigger than 1.54, state radius(rX.XX)in the ordering code

订货示例Ordering example:SF90-125B32-08EM10.00r3.00

固定槽式三面刃铣刀MR1231

Full side and face mill with fixed pockets MR1231

直径范围: 80-100mm

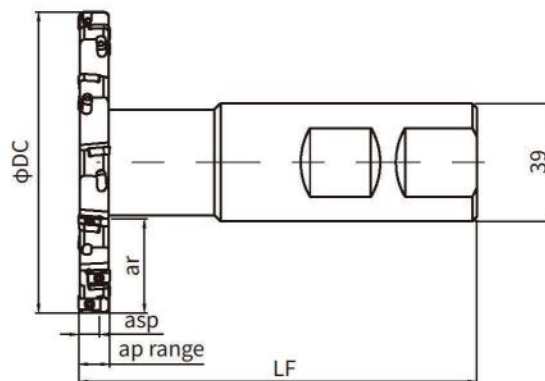
槽宽范围: 7.9-12mm

侧压式

Diameter range: 80-100mm

Slot width range: 7.9-12mm

Weldon



直径 Dc	订货号 Ordering code	库存状态	刀片尺寸 Insert size	刀片圆角范围 Insert radius range	尺寸(mm) Dimensions						接口类型	齿数(Z)	重量(kg)
					dm	槽宽范围 Ap range	E	LF (min-max)	ar	asp			
80	SF90-080E32-05DMXX.XX	○	05	0.2-1.54	32	7.9-10.0	63-64	132	23	6.2	B	6	1.00
100	SF90-100E40-05DMXX.XX	○	05	0.2-1.54	40	7.9-10.0	63-64	152	28	6.2	B	8	1.90
080	SF90-080E32-08EMXX.XX	○	08	0.2-1.54	32	10.0-12.0	63-64	132	23	6.2	B	6	1.00
100	SF90-100E40-08EMXX.XX	○	08	0.2-1.54	40	10.0-12.0	63-64	152	28	6.2	B	8	1.90

订购刀盘时, 需注明槽宽 (XX.XX)

When ordering mill, state slot width(XX.XX)in the ordering code

订货示例Ordering example:MR1231-100E40-08EM10.00

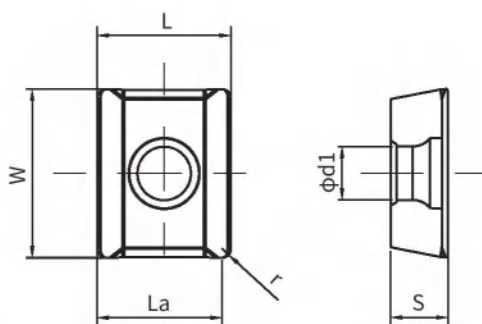
订购刀片圆角r大于1.54的刀片时, 需注明圆角r要求 (rX.XX)。

When ordering insert radius bigger than 1.54, state radius(rX.XX)in the ordering code

订货示例Ordering example:MR1231-100E40-08EM10.00r3.00

三面刃铣刀刀片

Full side and face mill insert



刀片尺寸	型号 Type	基本尺寸 Dimension (mm)						牌号 Grade							
		l	la	W	S	d1	r	PM9215	PM9035	PM9215	PM9035	PM9215	PM9035	PM9215	PM9035
08	MN084504E-L	8.5	8.1	9.5	4.45	2.9	0.4	★	★	★	☆	☆	★	★	☆
	MN084508E-L	8.5	7.7	9.5	4.45	2.9	0.8	★	★	★	☆	☆	★	★	☆
	MR084515E-L	8.5	-	9.5	4.45	2.9	1.52	★	★	★	☆	☆	★	★	☆
	MR084515E-L	8.5	-	9.5	4.45	2.9	1.52	★	★	★	☆	☆	★	★	☆
	MR084523E-L	8.5	-	9.5	4.45	2.9	2.29	★	★	★	☆	☆	★	★	☆
	MR084523E-L	8.5	-	9.5	4.45	2.9	2.29	★	★	★	☆	☆	★	★	☆
	MR084530E-L	8.5	-	9.5	4.45	2.9	3.05	★	★	★	☆	☆	★	★	☆
	MR084530E-L	8.5	-	9.5	4.45	2.9	3.05	★	★	★	☆	☆	★	★	☆

首选 ★ 备选 ☆

刀片尺寸	型号 Type	基本尺寸 Dimension (mm)						牌号 Grade							
		l	la	W	S	d1	r	PM9215	PM9035	PM9215	PM9035	PM9215	PM9035	PM9215	PM9035
05	MN054508E-M	6.5	5.7	9.5	4.45	2.9	0.8	★	★	★	☆	☆	★	★	☆
	MR054515E-M	6.5	-	9.5	4.45	2.9	1.52	★	★	★	☆	☆	★	★	☆
	MR054515E-M	6.5	-	9.5	4.45	2.9	1.52	★	★	★	☆	☆	★	★	☆
	MR054523E-M	6.5	-	9.5	4.45	2.9	2.29	★	★	★	☆	☆	★	★	☆
	MR054523E-M	6.5	-	9.5	4.45	2.9	2.29	★	★	★	☆	☆	★	★	☆
	MR054530E-M	6.5	-	9.5	4.45	2.9	3.05	★	★	★	☆	☆	★	★	☆
	MR054530E-M	6.5	-	9.5	4.45	2.9	3.05	★	★	★	☆	☆	★	★	☆
08	MN084504E-M	8.5	8.1	9.5	4.45	2.9	0.4	★	★	★	☆	☆	★	★	☆
	MN084508E-M	8.5	7.7	9.5	4.45	2.9	0.8	★	★	★	☆	☆	★	★	☆
	MR084515E-M	8.5	-	9.5	4.45	2.9	1.52	★	★	★	☆	☆	★	★	☆
	MR084515E-M	8.5	-	9.5	4.45	2.9	1.52	★	★	★	☆	☆	★	★	☆
	MR084523E-M	8.5	-	9.5	4.45	2.9	2.29	★	★	★	☆	☆	★	★	☆
	MR084523E-M	8.5	-	9.5	4.45	2.9	2.29	★	★	★	☆	☆	★	★	☆
	MR084530E-M	8.5	-	9.5	4.45	2.9	3.05	★	★	★	☆	☆	★	★	☆
11	MR084530E-M	8.5	-	9.5	4.45	2.9	3.05	★	★	★	☆	☆	★	★	☆
	MN115008E-M	11.5	10.7	11.5	4.95	4.6	0.8	★	★	★	☆	☆	★	★	☆
	MR115023E-M	11.5	-	11.5	4.95	4.6	2.29	★	★	★	☆	☆	★	★	☆
	MR115023E-M	11.5	-	11.5	4.95	4.6	2.29	★	★	★	☆	☆	★	★	☆
	MR115030E-M	11.5	-	11.5	4.95	4.6	3.05	★	★	★	☆	☆	★	★	☆
	MR115030E-M	11.5	-	11.5	4.95	4.6	3.05	★	★	★	☆	☆	★	★	☆
	MR115048E-M	11.5	-	11.5	4.95	4.6	4.83	★	★	★	☆	☆	★	★	☆
14	MR115048E-M	11.5	-	11.5	4.95	4.6	4.83	★	★	★	☆	☆	★	★	☆
	MR115063E-M	11.5	-	11.5	4.95	4.6	6.35	★	★	★	☆	☆	★	★	☆
	MR115063E-M	11.5	-	11.5	4.95	4.6	6.35	★	★	★	☆	☆	★	★	☆
	MN145008E-M	14.5	13.7	11.5	4.95	4.6	0.8	★	★	★	☆	☆	★	★	☆
	MR145015E-M	14.5	-	11.5	4.95	4.6	1.52	★	★	★	☆	☆	★	★	☆
	MR145015E-M	14.5	-	11.5	4.95	4.6	1.52	★	★	★	☆	☆	★	★	☆
	MR145023E-M	14.5	-	11.5	4.95	4.6	2.29	★	★	★	☆	☆	★	★	☆
14	MR145023E-M	14.5	-	11.5	4.95	4.6	2.29	★	★	★	☆	☆	★	★	☆
	MR145030E-M	14.5	-	11.5	4.95	4.6	3.05	★	★	★	☆	☆	★	★	☆
	MR145030E-M	14.5	-	11.5	4.95	4.6	3.05	★	★	★	☆	☆	★	★	☆
	MR145048E-M	14.5	-	11.5	4.95	4.6	4.83	★	★	★	☆	☆	★	★	☆
	MR145048E-M	14.5	-	11.5	4.95	4.6	4.83	★	★	★	☆	☆	★	★	☆
	MR145063E-M	14.5	-	11.5	4.95	4.6	6.35	★	★	★	☆	☆	★	★	☆
	MR145063E-M	14.5	-	11.5	4.95	4.6	6.35	★	★	★	☆	☆	★	★	☆

首选 ★ 备选 ☆

B52

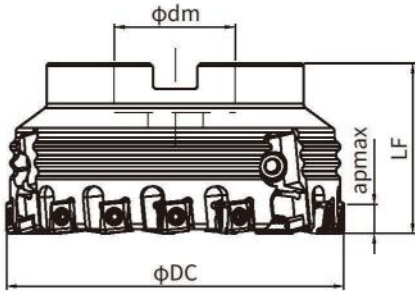
配件/SPARE PARTS



刀片尺寸 Insert size	刀具直径 Diameter DC	刀片夹紧螺钉 Clamping srew	刀片螺钉扳手 Screw wrench
05	80-200	S01-025087	D01-107
08	80-200	S01-030085	D01-108
11	100-315	S01-040110	D01-115
14	160-315	S01-040110	D01-115



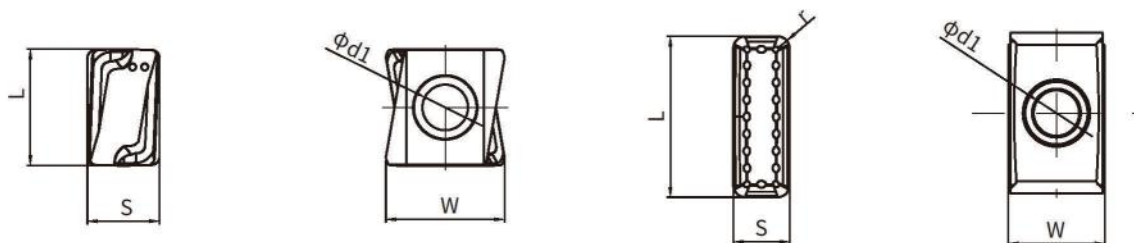
可调式精铣面铣刀
FF90-AN&LNAdjustable finish mill FF90-AN&LN
不等齿距设计
Uneven pitch



直径 Dc	型 号	库存 状态	尺寸(mm) Dimensions				接口类型	齿数(Z)	内冷状态	重量(kg)
			Dc2	dm	apmax	LF				
100	FF90-100A32AN11_LN15-Z09	○	/	32	8	63	A	9+2		3.20
125	FF90-125B40AN11_LN15-Z13	○	/	40	8	63	B	13+3		4.60
160	FF90-160C40AN11_LN15-Z17	○	/	40	8	63	C	17+3		8.40
200	FF90-200C60AN11_LN15-Z23	○	/	60	8	63	C	23+3		9.80
250	FF90-250C60AN11_LN15-Z29	○	/	60	8	63	C	29+3		14.70

● 常备库存 ○ 按订单生产

可调式精铣面铣刀FF90-AN&LN Adjustable finish mill FF90-AN&LN



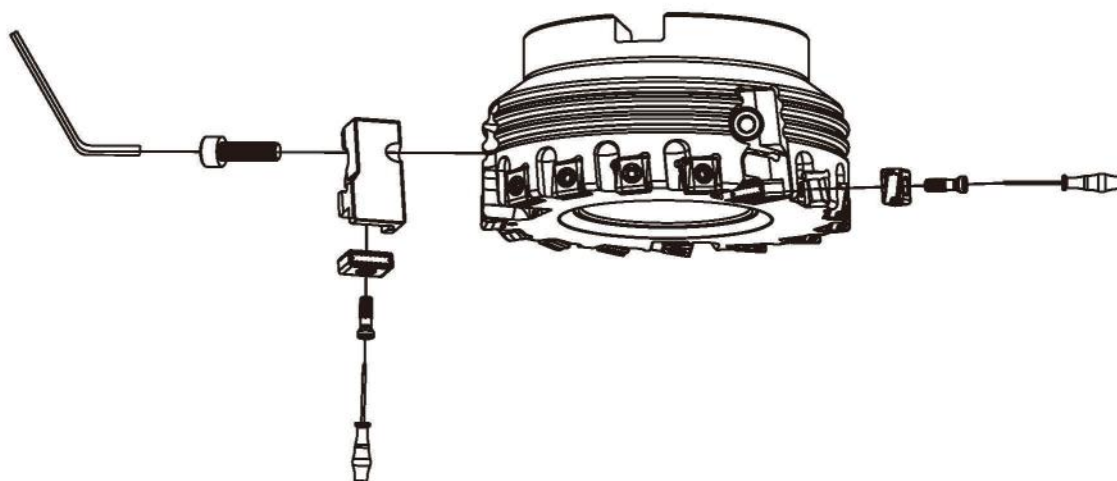
ANGX110708-PM

LNHQ150512AN-W

刀片外形	型号 Type	基本尺寸 Dimension (mm)						牌号 Grade			
		l	w	s	d1	r	α	PP9215	PM9025	PP9215	PM9025
	ANGX110708-PM	11.5	11.76	7.11	4.5	0.8	0	★	☆	☆	★
	LNHQ150512E-W	15.875	9.525	5.56	4.5	1.2	0	★	☆	☆	★

首选 ★ 备选 ☆

配件/SPARE PARTS



安装形式	刀具直径 Diameter	刀片夹紧螺钉 Clamping screw	刀片螺钉扳手 Screw Wrench	修光刀座	修光刀片调整螺钉型号	修光刀座锁紧螺钉型号	调整螺钉扳手型号	锁紧螺钉扳手型号
AN11	100-250	S01-040120	D01-115	FF90-CA2036-LN15	S06-050100F	S03-060250	L02-0025	L02-0005
LN15	100-250	S01-040120	D01-115					

牌号介绍

Grades introduction

材料分类 Material classification	ISO材料分类 ISO Material classification	牌号 Grade	应用推荐 Applicaion recommendations
P钢 Steel	P15(P05-P35)	PM9115	PVD涂层硬质合金牌号。铣削通用牌号。高金属去除率，可获得极佳生产效率和刀具使用寿命。PVD coated milling grade. General purpose milling grade.High metal removal rate, achieves high productivity and tool life.
	P15(P05-P35)	PM9215	PVD涂层硬质合金牌号。最新的铣削牌号。高金属去除率下确保铣削的安全性。PVD coated milling grade. Newest milling grade.High metal removal retes and very safe milling process.
	P25(P15-P40)	PM9125	PVD涂层硬质合金牌号。韧性和耐磨性的最佳平衡选择,多数铣削场合都可使用。PVD coated milling grade. Optimal balance of toughness and abrasion resistance, for most milling conditions.
	P35(P15-P40)	PM9035	CVD涂层硬质合金牌号。铣削通用牌号。高韧性，是不稳定工况的首选。CVD coated milling grade. General purpose milling grade.Strong toughness,first choice for unstable machining conditions.
	P25(P15-P40)	PM3020B	薄CVD涂层硬质合金刀片，中等到高硬度钢件及合金钢高线速度加工，推荐干切。Thin CVD coated milling grade. High cutting speed first choice for medium to high hardness steel and alloy steel, dry milling.
M不锈钢 Stainless steel	M15(M05-M25)	PM9115	PVD涂层硬质合金牌号。铣削通用牌号。高金属去除率，可获得极佳生产效率和刀具使用寿命。PVD coated milling grade. General purpose milling grade.High metal removal rate, achieves high productivity and tool life.
	M15(M05-M25)	PM9215	PVD涂层硬质合金牌号。最新的铣削牌号。高金属去除率下确保铣削的安全性。PVD coated milling grade. Newest milling grade.High metal removal retes and very safe milling process.
	M20(M10-M30)	PM9125	PVD涂层硬质合金牌号。韧性和耐磨性的最佳平衡选择,多数铣削场合都可使用。PVD coated milling grade. Optimal balance of toughness and abrasion resistance, for most milling conditions.
	M30(M10-M40)	PM9035	PVD涂层硬质合金牌号。铣削通用牌号。高韧性，是不稳定工况的首选。PVD coated milling grade. General purpose milling grade.Strong toughness,first choice for unstable machining conditions.
	M20(M10-M40)	PM3020B	薄CVD涂层硬质合金刀片，推荐用于马氏体不锈钢加工，推荐干切。Thin CVD coated milling grade. Recommendation for martensitic stainless steel machining, dry milling.
K铸铁 Cast iron	K20(K10-40)	PM9115	PVD涂层硬质合金牌号。铣削通用牌号。高金属去除率，可获得极佳生产效率和刀具使用寿命。PVD coated milling grade. General purpose milling grade.High metal removal rate, achieves high productivity and tool life.
	K30(K15-K40)	PM9035	PVD涂层硬质合金牌号。铣削通用牌号。高韧性，是不稳定工况的首选。PVD coated milling grade. General purpose milling grade.Strong toughness,first choice for unstable machining conditions.
	K20(K10-K40)	PM3020B	CVD涂层硬质合金牌号，推荐用于铸铁高线速度，高进给加工。CVD coated milling grade. First choice cast iron milling in high cutting speed and high feed rates condition.
S耐热合金 Heat-resistant alloy	S20(S05-S25)	PM9115	PVD涂层硬质合金牌号。铣削通用牌号。高金属去除率，可获得极佳生产效率和刀具使用寿命。PVD coated milling grade. General purpose milling grade.High metal removal rate, achieves high productivity and tool life.
	S25(S10-S30)	PM9125	PVD涂层硬质合金牌号。韧性和耐磨性的最佳平衡选择,多数铣削场合都可使用。PVD coated milling grade. Optimal balance of toughness and abrasion resistance, for most milling conditions.
	S25(S05-S30)	PM4020	CVD涂层硬质合金牌号，专用于耐热合金中等到高线速度加工,寿命良好。CVD coated milling grade. Specific for heat-resistant alloy milling, medium to high cutting speed. Excellent tool life.
N有色金属 Non-ferrous metal	N10(N05-N25)	PM5010	非涂层牌号，表面抛光处理可降低积屑瘤，从而获得高表面质量。适于铝、镁、铜、黄铜、塑料等的精加工到粗加工。Uncoated milling grade.Surface polishing process can reduce BUE, achivevs high surface quality. Suitable for aluminum, magnesium, copper, brass, plastic finishing to roughing processing.
	N20(N15-N30)	PM9115	涂层牌号，中等到高切削速度下加工铸造铝合金，半精加工到粗加工工序。PVD coated milling grade.Suitable for casting aluminium alloy in medium to high speed milling, rough to semi-finish process recommendation.

75%切宽下切削速度推荐

Cutting speed recommendations on 75% ae

材料 Materials			布氏硬度 (HB)	切削速度Vc m/min							
				PM9115	PM9215	PM9125	PM9035	PM3020B	PM4020	PM5010	
P	非合金钢	C=0.10-0.25%	125	275-250	300-275	240-195	240-195	320-265	275-225		
		C=0.25-0.55%	150	245-225	270-245	215-175	215-175	290-240	245-200		
		C=0.55-0.80%	170	235-210	260-235	200-165	200-165	275-225	235-190		
		其它	210	200-185	220-200	180-145	180-145	240-200	200-165		
		其它	300	150-140	165-150	130-105	130-105	180-145	150-125		
	低合金钢		180	225-205	215-195	165-140	165-140	225-185	195-160		
		调质处理	275	125-115	140-125	110-90	110-90	150-120	125-105		
		调质处理	350	125-115	140-125	110-90	110-90	150-120	125-105		
	高合金钢	非淬硬	200	145-135	145-135	125-105	125-105	160-130	135-110		
		淬硬工具钢	325	105-100	105-100	90-75	90-75	115-95	100-80		
M	铸钢	非合金	180	200-180	200-180	170-140	170-140	210-175	180-145		
		低合金（合计元素<5%）	200	160-140	160-140	140-115	140-115	165-140	140-120		
		非淬火/铁素体/马氏体	200	205-180	205-180	195-155	195-155	220-180	170-140		
		奥氏体	200	200-180	200-180	190-155	160-130		150-120		
		奥氏体_沉淀硬化不锈钢	300	130-115	130-115	120-100	120-95		100-80		
S	耐热合金	奥氏体_铁素体，双相不锈钢	230	130-120	130-120	120-100	105-80		100-80		
		铁基-退火	200	48-38	48-38	44-35	48-38			48-38	
		铁基-时效处理	280	36-29	36-29	32-26	36-29			36-29	
		镍基或钴基-退火或固溶	250	48-38	48-38	44-35	44-35			44-35	
		镍基或钴基-时效处理	350	29-23	29-23	27-22	28-22			28-22	
K	钛合金	镍基或钴基-铸造	320	36-29	36-29	32-26	32-26			36-29	
		纯钛	200	20-16	20-16	18-14	18-14			18-14	
		α相合金	375	14-11	14-11	14-11	14-11			14-11	
		α+β相合金	375	13-10	13-10	12-10	12-10			13-10	
		β相合金	410	10-8	10-8	9-7	9-7			10-8	
H	可锻铸铁	铁素体	200	165-140				175-140	160-130	215-180	
		珠光体	260	140-115				140-120	130-105	180-145	
	灰口铸铁	低抗拉强度	180	180-150				185-155	175-140	235-195	
		高抗拉强度	245	145-120				150-125	140-115	190-155	
	球墨铸铁	铁素体	160	115-95				120-100	110-90	145-120	
N	蠕墨铸铁	珠光体	250	105-85				110-90	100-80	140-115	
		GGV (CGI)	230	105-85				110-90	100-80	140-115	
	超硬钢	调质处理	43-47 HRC	32-29	32-29						
	冷硬铸铁		47- 60 HRC	60-56	60-56						
	Z	锻造铝合金	非时效处理	30	795-730	795-730					600-560
			可时效处理，时效处理	100	715-660	715-660					545-505
		铸造铝合金	≤ 12 % 硅，非时效处理	75	795-730	795-730					600-560
			≤ 12 % 硅，时效处理	90	795-740	795-740					545-505
			> 12 % 硅，非时效处理	130	795-740	795-740					610-560
		镁合金		70	320-300	320-300					240-225
铜和铜合金		非合金、电解铜	100	240-220	240-220					180-170	
		黄铜，青铜，红黄铜	90	400-370	400-370					300-280	
(青铜 / 黄铜)	铜合金，短切屑	110	400-370	400-370					300-280		
	高强度的 Ampco 合金	300	240-220	240-220					180-170		

25%切宽下切削速度推荐

Cutting speed recommendations on 25% ae

	材料 Materials		布氏硬度 (HB)	切削速度Vc m/min						
				PM9115	PM9215	PM9125	PM9035	PM3020B	PM4020	PM5010
铣削	P	C=0.10-0.25%	125	295-290	325-320	275-270	275-260	460-450	375-360	
		C=0.25-0.55%	150	265-260	295-285	245-240	245-240	410-400	340-320	
		C=0.55-0.80%	170	250-245	280-270	235-225	235-220	390-380	320-305	
		其它	210	220-215	230-240	205-200	205-200	340-335	280-265	
		其它	300	160-160	170-180	140-150	150-145	250-245	205-200	
	P	低合金钢	180	240-240	230-225	195-190	195-185	320-315	260-255	
		调质处理	275	140-135	150-145	125-125	125-120	210-205	175-165	
		调质处理	350	140-135	150-145	125-125	125-120	210-205	175-165	
	P	高合金钢	200	160-155	160-155	145-140	145-140	280-275	180-175	
		淬硬工具钢	325	105-115	105-115	100-105	100-105	180-175	135-125	
圆柄刀具	M	铸钢	180	215-205	215-205	195-190	195-185	330-320	245-235	
		低合金 (合计元素<5%)	200	170-165	170-165	160-155	160-150	260-260	195-185	
		非淬火/铁素体/马氏体	200	210-220	210-220	195-200	215-220	245-250	190-195	
		奥氏体	200	205-215	205-215	195-200	180-180		165-170	
		奥氏体 沉淀硬化不锈钢	300	130-140	130-140	120-125	130-135		110-115	
		奥氏体 铁素体, 双相不锈钢	230	135-140	135-140	125-130	115-120		115-115	
	S	铁基-退火	200	56-45	56-45	52-42	56-45			52-42
		铁基-时效处理	280	44-35	44-35	40-32	40-32			40-32
		镍基或钴基-退火或固溶	250	56-45	56-45	52-42	52-42			52-42
		镍基或钴基-时效处理	350	36-29	36-29	32-26	32-26			32-26
		镍基或钴基-铸造	320	44-35	44-35	40-32	40-32			40-32
钻削	S	纯钛	200	24-19	24-19	22-18	22-18			22-18
		α相合金	375	17-14	17-14	16-13	16-13			16-13
		α+β相合金	375	16-13	16-13	15-12	15-12			15-12
		β相合金	410	11-12	11-12	10-11	10-11			10-11
		可锻铸铁	200	195-185				190-200	170-180	110-105
	K	珠光体	260	160-155				165-160	150-150	80-90
		低抗拉强度	180	210-200				220-215	200-195	120-115
		高抗拉强度	245	165-160				175-170	150-160	100-95
		球墨铸铁	160	130-125				140-135	115-120	80-75
		珠光体	250	110-120				115-125	120-115	70-70
深孔加工	H	蠕墨铸铁	GGV (CGI)	230	105-120			115-125	120-115	70-70
		超硬钢	调质处理	43-47 HRC	36-36					
		冷硬铸铁		47-60 HRC	72-68	36-36				
		锻造铝合金	非时效处理	30	825-880	825-880				640-665
			可时效处理, 时效处理	100	750-785	750-785				570-600
	N	铸造铝合金	≤ 12 % 硅, 非时效处理	75	825-880	825-880				640-665
			≤ 12 % 硅, 时效处理	90	85-90	825-880				570-600
			> 12 % 硅, 非时效处理	130	825-880	825-880				640-675
		镁合金		70	335-355	335-355				255-270
		铜和铜合金	非合金、电解铜	100	255-265	255-265				195-200
旋转刀柄	F	黄铜, 青铜, 红黄铜	90	420-440	420-440					320-335
		铜合金, 短切屑	110	420-440	420-440					320-335
		高强度的 Ampco 合金	300	255-265	255-265					195-200
	F									

芯轴铣刀接口尺寸

Dimension of milling cutter arbor

Fig. A

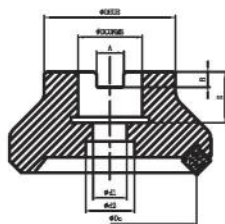


Fig. B

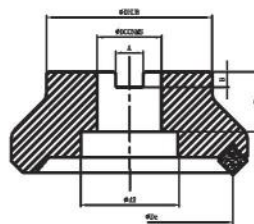
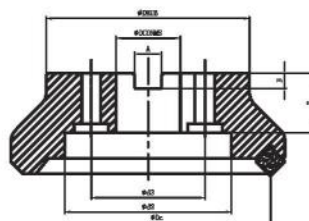


Fig. C



Dimension(mm)										Fig.	Arbor
DC	DCONMS	A	B	E	DHUB		d1	d2	d3		
					For mold&die	For general					
32	16	8.4	5.6	20	30	-	-	-	-	E	
32	16	8.4	5.6	20	30	-	9	13.5	-	A	
40	16	8.4	5.6	20	38	-	9	13.5	-	A	
40	22	10.4	6.3	22	38	-	11	17	-	A	
50	22	10.4	6.3	22	40	45	11	17	-	A	
63	22	10.4	6.3	22	47	-	11	17	-	A	
80	25.4	9.526	6	26	-	70	13	20	-	A	
80	27	12.4	7	28	58	70	13	22	-	A	
100	31.75	12.7	8	32	-	80	18	26	-	A	
100	31.75	12.7	8	32	-	80	-	46	-	B	
100	32	14.4	8	26	66	85	18	26	-	A	
100	32	14.4	8	26	66	85	-	46	-	B	
125	38.1	15.875	10	38	80	-	-	56	-	B	
125	40	16.4	9	32	85	-	22	32	-	A	
125	40	16.4	9	32	85	-	-	56	-	B	
160	40	16.4	9	32	110	-	-	90	66.7	C	
160	50.8	19.05	11	38	100	-	-	72	-	B	
200	47.625	25.4	14	38	130	-	-	132	101.6	C	
200	60	25.7	14	40	130	-	-	132	101.6	C	
250	47.625	25.4	14	38	160	-	-	150	101.6	C	
250	60	25.7	14	40	160	-	-	150	101.6	C	
315	60	25.7	14	40	225	-	-	225	-	C	

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

B



铣削

C

圆柄
刀具

D

钻削

E

深孔
加工

F

旋转
刀柄

B60

圆柄刀具 ROUND TOOLS

硬质合金铣刀 Solid carbide endmills

硬质合金铣刀命名规则 Code key for solid carbide endmills	C02
星耀系列高温合金铣刀 Heat resistance endmills	
圆角铣刀 Standard endmills with various radius	C03
球头铣刀 Ballnose endmills	C04
锥度球头铣刀 Sinking end mills	C05
平头铣刀 Standard endmills	C06
星辉系列钛合金铣刀 Titanium alloy endmills	
平头铣刀 Standard endmills	C07
圆鼻铣刀 Torus end mills	C08
球头铣刀 Ballnose endmills	C09
星光系列钢用铣刀 Steel endmills	
短刃铣刀 Short flute endmills	C10
长刃铣刀 Long flute endmills	C11
圆角铣刀 Standard endmills with various radius	C12
球头铣刀 Ballnose endmills	C13
星彩系列铝合金铣刀 Aluminium endmills	
平头铣刀 Standard endmills	C14
圆角铣刀 Standard endmills with various radius	C15
球头铣刀 Ballnose endmills	C16

硬质合金钻头 Solid carbide drill

硬质合金钻头命名规则 Code key for solid carbide drill	
平底钻 Drills for flat bottom hole	C17
钢用硬质合金钻 Drills for steel	C18
铝用硬质合金钻 Drills for aluminium	C22

其它信息 Other information

铣刀失效分析 Analysis for endmills	C25
钻头失效分析 Analysis for drill failure	C26
非标定制 Specific order	C27
修磨服务介绍 Reconditioning service	C28



硬质合金铣刀命名规则 Code key for solid carbide endmills

整体硬质合金铣刀的型号表示规则用9组代号表示铣刀的尺寸及其它特性。见示例 1。

示例 1：一般表示规则

示例：TE2G-FD6-R1-H8-D6-50

T	R	2	G	FD6	R0.5	H8	D6	50
①	②	③	④	⑤	⑥	⑦	⑧	⑨

型号表示规则中各代号表示如下：

①所对应代号表示——加工用途。

T	P	N	M	H	I	G	W
通用	钢件	有色金属	不锈钢	高硬钢	钛合金	高温合金	非金属材料
						耐热合金	

②所对应代号表示——刀具类型。

B	R	E	W	J
球刀	圆角刀	端刀	波刃粗铣刀	铰刀

③所对应代号表示——刀具刃数。

2	3	4
2	3刃	4刃

④所对应代号表示——刀具特征。

特征

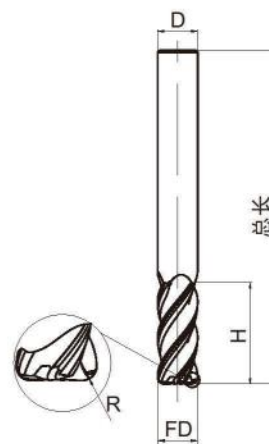
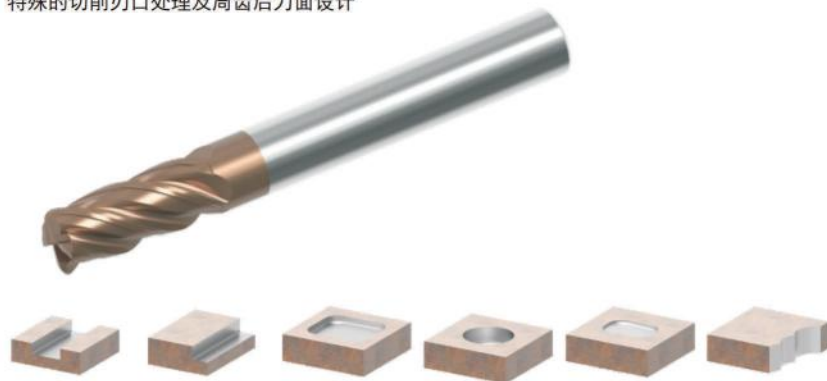
G	R	F
通用	粗加工	精加工

星耀系列高温合金铣刀 Heat resistance endmills

圆角铣刀 Standard endmills with various radius

采用不等分螺旋槽设计，不等齿距，减轻加工时刀具的振动，
有效提高刀具使用寿命及工件表面光洁度

特殊的底刃设计及排屑槽角度，让排屑更通畅，减轻刀尖损伤
特殊的切削刃口处理及周齿后面设计



订货规格	刃数 T	刃径 FD	刀尖 R	刃长 H	总长 L	柄径 D
GR2G-FD2	2	2.0	0.1/0.2	6.0	50.0	4.0
GR4G-FD3	4	3.0	0.2/0.3/0.5	8.0	50.0	4.0
GR4G-FD4	4	4.0	0.2/0.3/0.5	10.0	50.0	4.0
GR4G-FD5	4	5.0	0.5/1.0	13.0	50.0	6.0
GR4G-FD6	4	6.0	0.5/1.0	15.0	60.0	6.0
GR4G-FD8	4	8.0	0.5/1.0/2.0	20.0	60.0	8.0
GR4G-FD10	4	10.0	0.5/1.0/2.0	25.0	75.0	10.0
GR4G-FD12	4	12.0	0.5/1.0/2.0	30.0	75.0	12.0
GR4G-FD14	4	14.0	0.5/1.0/2.0	35.0	100.0	14.0
GR4G-FD16	4	16.0	0.5/1.0/2.0	40.0	100.0	16.0
GR4G-FD18	4	18.0	0.5/1.0/2.0	45.0	100.0	18.0
GR4G-FD20	4	20.0	0.5/1.0/2.0	50.0	100.0	20.0

*接受订货

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

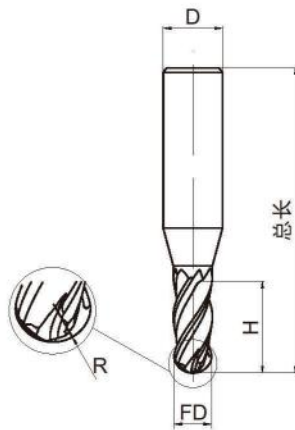
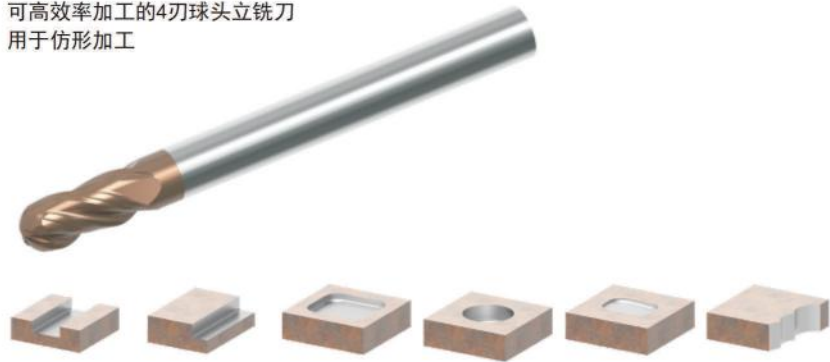
旋转刀柄



星耀系列高温合金铣刀 Heat resistance endmills

球头铣刀 Ballnose endmills

采用不等分螺旋槽设计，不等齿距，减轻加工时刀具的振动，有效提高刀具使用寿命及工件表面光洁度
特殊的切削刃口处理及周齿后刀面设计
适用于高温合金半精加工及精加工的整体硬质合金球刀
可高效率加工的4刃球头立铣刀
用于仿形加工



订货规格	刃数 T	刃径 FD	刀尖 R	刃长 H	总长 L	柄径 D
GB2G-FD1	2	1.0	0.5	2.0	50.0	4.0
GB2G-FD2	2	2.0	1.0	4.0	50.0	4.0
GB4G-FD3	4	3.0	1.5	6.0	50.0	4.0
GB4G-FD4	4	4.0	2.0	8.0	50.0	4.0
GB4G-FD5	4	5.0	2.5	15.0	50.0	6.0
GB4G-FD6	4	6.0	3.0	20.0	50.0	6.0
GB4G-FD7	4	7.0	3.5	20.0	75.0	7.0
GB4G-FD8	4	8.0	4.0	25.0	75.0	8.0
GB4G-FD10	4	10.0	5.0	30.0	75.0	10.0
GB4G-FD12	4	12.0	6.0	35.0	75.0	12.0
GB4G-FD16	4	16.0	8.0	45.0	100.0	16.0
GB4G-FD20	4	20.0	10.0	50.0	100.0	20.0

*接受订货

星耀系列高温合金铣刀 Heat resistance endmills

锥度球头铣刀 Sinking end mills

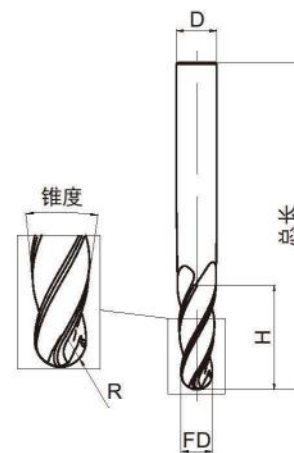
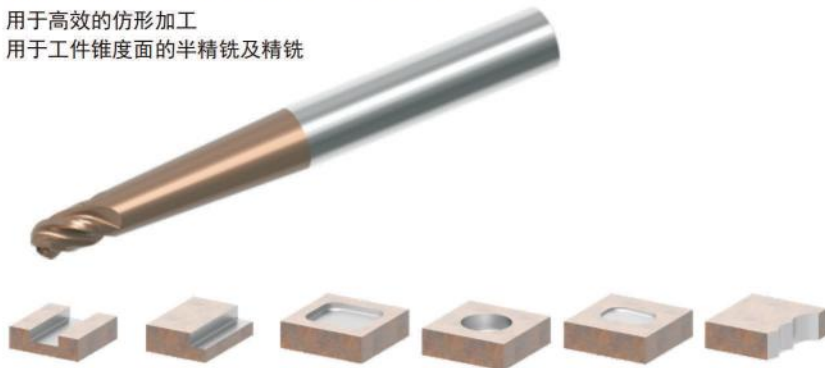
整体硬质合金锥度球头铣刀（高合专用）

采用不等分螺旋槽设计，不等齿距，减轻加工时刀具的振动，有效提高刀具使用寿命及工件表面光洁度

适用于高温合金半精加工及精加工的整体硬质合金球刀

用于高效的仿形加工

用于工件锥度面的半精铣及精铣



型 号	刃数 T	刃径 FD	刀尖 R	锥度 Taper	刃长 H	总长 L	柄径 D
GB2G-FD3	2	3.0	1.5	0.5°/1°	10.0	60.0	4.0
GB2G-FD3	2	3.0	1.5	1.5°/2°	10.0	50.0	6.0
GB4G-FD4	4	4.0	2.0	1.5°/2°	6.0	50.0	6.0
GB4G-FD4	4	4.0	2.0	3°/4°	8.0	50.0	8.0
GB4G-FD5	4	5.0	2.5	1.5°/2°	15.0	50.0	8.0
GB4G-FD5	4	5.0	2.5	3°/4°	20.0	50.0	10.0
GB4G-FD6	4	6.0	3.0	1°/1.5°	20.0	75.0	8.0
GB4G-FD6	4	6.0	3.0	3°/4°	25.0	75.0	8.0
GB4G-FD8	4	8.0	4.0	1°/1.5°	30.0	75.0	10.0
GB4G-FD8	4	8.0	4.0	2°/3°	35.0	75.0	12.0
GB4G-FD10	4	10.0	5.0	0.5°/1°/1.5°	45.0	100.0	12.0
GB4G-FD10	4	10.0	5.0	2°/3°	50.0	100.0	16.0
GB4G-FD10	4	10.0	5.0	4°	50.0	100.0	16.0
GB4G-FD10	4	10.0	5.0	5°	50.0	100.0	20.0

*接受订货

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

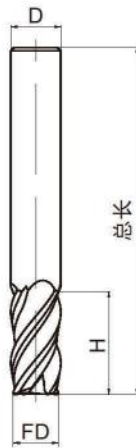
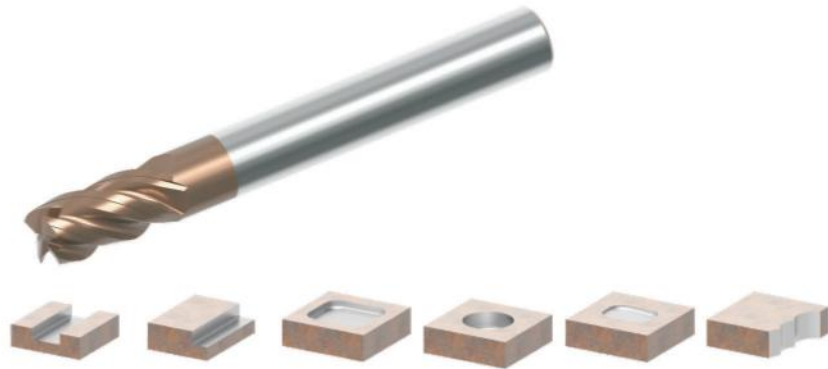
旋转刀柄



星耀系列高温合金铣刀 Heat resistance endmills

平头铣刀 Standard endmills

采用不等分螺旋槽设计，不等齿距，减轻加工时刀具的振动，有效提高刀具使用寿命及工件表面光洁度。
特殊的底刃设计及排屑槽角度，让排屑更通畅，减轻刀尖损伤。
特殊的切削刃口处理及周齿后刀面设计



订货规格	刃数 T	刃径 FD	刃长 H	总长 L	柄径 D
GE2G-FD1	2	1.0	3.0	50.0	4.0
GE2G-FD1.5	2	1.5	4.0	50.0	4.0
GE4G-FD2	4	2.0	5.0	50.0	4.0
GE4G-FD3	4	3.0	8.0	50.0	4.0
GE4G-FD4	4	4.0	10.0	50.0	4.0
GE4G-FD5	4	5.0	12.0	50.0	6.0
GE4G-FD6	4	6.0	15.0	50.0	6.0
GE4G-FD8	4	8.0	20.0	60.0	8.0
GE4G-FD10	4	10.0	25.0	75.0	10.0
GE4G-FD12	4	12.0	30.0	75.0	12.0
GE4G-FD14	4	14.0	35.0	100.0	14.0
GE4G-FD16	4	16.0	45.0	100.0	16.0
GE4G-FD18	4	18.0	45.0	100.0	18.0
GE4G-FD20	4	20.0	45.0	100.0	20.0

*接受订货

星辉系列钛合金铣刀 Titanium alloy endmills

平头铣刀 Standard endmills

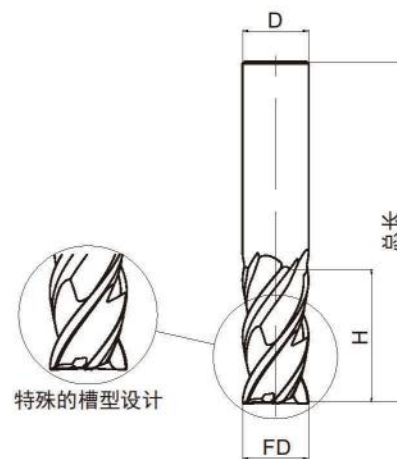
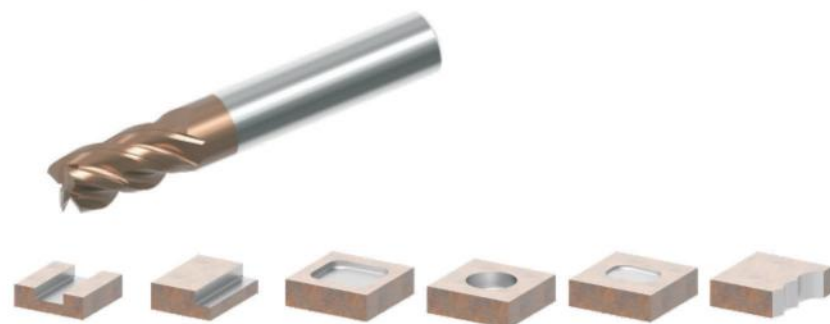
采用不等分螺旋槽设计，不等齿距，减轻加工时刀具的振动

有效提高刀具使用寿命及工件表面光洁度

特殊的刀槽设计更有利于排屑

特殊的底刃设计及排屑槽角度，让排屑更通畅，减轻刀尖损伤

特殊的切削刃口处理及周齿后刀面设计



订货规格	刃数 T	刃径 FD	刃长 H	总长 L	柄径 D
IE2G-FD1	2	1.0	3.0	50.0	4.0
IE2G-FD1.5	2	1.5	4.0	50.0	4.0
IE4G-FD2	4	2.0	5.0	50.0	4.0
IE4G-FD3	4	3.0	8.0	50.0	4.0
IE4G-FD4	4	4.0	10.0	50.0	4.0
IE4G-FD5	4	5.0	12.0	50.0	6.0
IE4G-FD6	4	6.0	15.0	50.0	6.0
IE4G-FD8	4	8.0	20.0	60.0	8.0
IE4G-FD10	4	10.0	25.0	75.0	10.0
IE4G-FD12	4	12.0	30.0	75.0	12.0
IE4G-FD14	4	14.0	35.0	100.0	14.0
IE4G-FD16	4	16.0	45.0	100.0	16.0
IE4G-FD18	4	18.0	45.0	100.0	18.0
IE4G-FD20	4	20.0	45.0	100.0	20.0

*接受订货

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

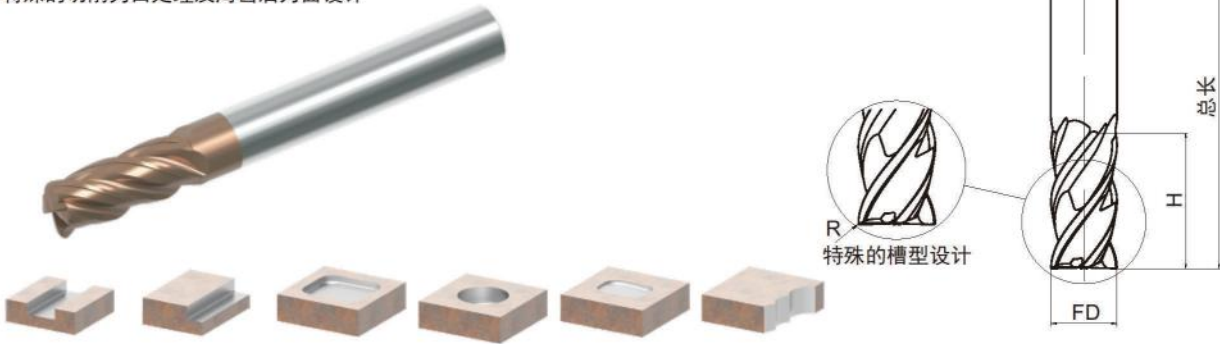
旋转刀柄



星辉系列钛合金铣刀 Titanium alloy endmills

圆鼻铣刀 Torus end mills

采用不等分螺旋槽设计，不等齿距，减轻加工时刀具的振动，有效提高刀具使用寿命及工件表面光洁度
多槽设计，在保证刀具刚性的前提下保证刀具刚性
特殊的底刃设计及排屑槽角度，让排屑更通畅，减轻刀尖损伤
特殊的切削刃口处理及周齿后刀面设计



订货规格	刃数 T	刃径 FD	刀尖 R	刃长 H	总长 L	柄径 D
IR2G-FD2	2	2.0	0.1/0.2	6.0	50.0	4.0
IR4G-FD3	4	3.0	0.2/0.3/0.5	8.0	50.0	4.0
IR4G-FD4	4	4.0	0.2/0.3/0.5	10.0	50.0	4.0
IR4G-FD5	4	5.0	0.5/1.0	13.0	50.0	6.0
IR4G-FD6	4	6.0	0.5/1.0	15.0	60.0	6.0
IR4G-FD8	4	8.0	0.5/1.0/2.0	20.0	60.0	8.0
IR4G-FD10	4	10.0	0.5/1.0/2.0	25.0	75.0	10.0
IR4G-FD12	4	12.0	0.5/1.0/2.0	30.0	75.0	12.0
IR4G-FD14	4	14.0	0.5/1.0/2.0	35.0	100.0	14.0
IR4G-FD16	4	16.0	0.5/1.0/2.0	40.0	100.0	16.0
IR4G-FD18	4	18.0	0.5/1.0/2.0	45.0	100.0	18.0
IR4G-FD20	4	20.0	0.5/1.0/2.0	50.0	100.0	20.0

*接受订货

星辉系列钛合金铣刀 Titanium alloy endmills

球头铣刀 Ballnose endmills

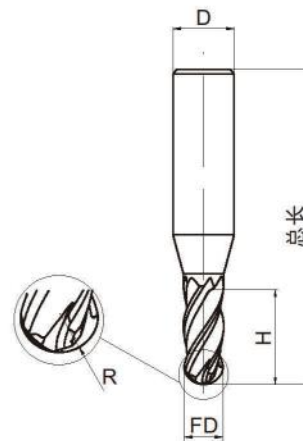
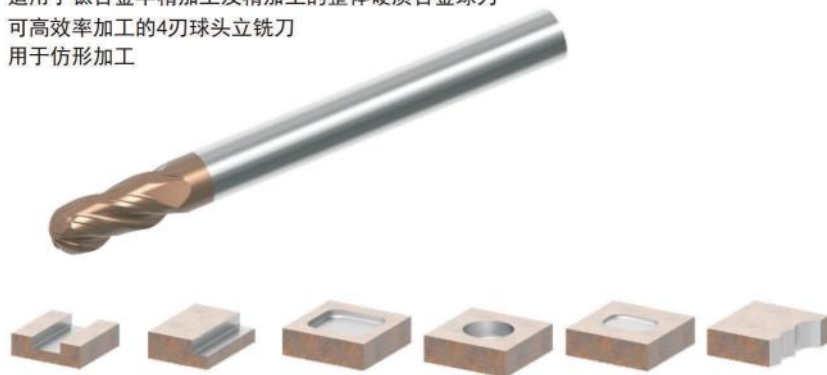
采用不等分螺旋槽设计，不等齿距，减轻加工时刀具的振动，
有效提高刀具使用寿命及工件表面光洁度

特殊的切削刃口处理及周齿后刀面设计

适用于钛合金半精加工及精加工的整体硬质合金球刀

可高效率加工的4刃球头立铣刀

用于仿形加工



订货规格	刃数 T	刃径 FD	刀尖 R	刃长 H	总长 L	柄径 D
IB2G-FD1	2	1.0	0.5	2.0	50.0	4.0
IB2G-FD2	2	2.0	1.0	4.0	50.0	4.0
IB4G-FD3	4	3.0	1.5	6.0	50.0	4.0
IB4G-FD4	4	4.0	2.0	8.0	50.0	4.0
IB4G-FD5	4	5.0	2.5	15.0	50.0	6.0
IB4G-FD6	4	6.0	3.0	20.0	50.0	6.0
IB4G-FD7	4	7.0	3.5	20.0	75.0	7.0
IB4G-FD8	4	8.0	4.0	25.0	75.0	8.0
IB4G-FD10	4	10.0	5.0	30.0	75.0	10.0
IB4G-FD12	4	12.0	6.0	35.0	75.0	12.0
IB4G-FD16	4	16.0	8.0	45.0	100.0	16.0
IB4G-FD20	4	20.0	10.0	50.0	100.0	20.0

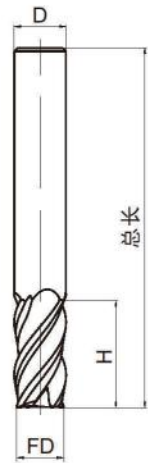
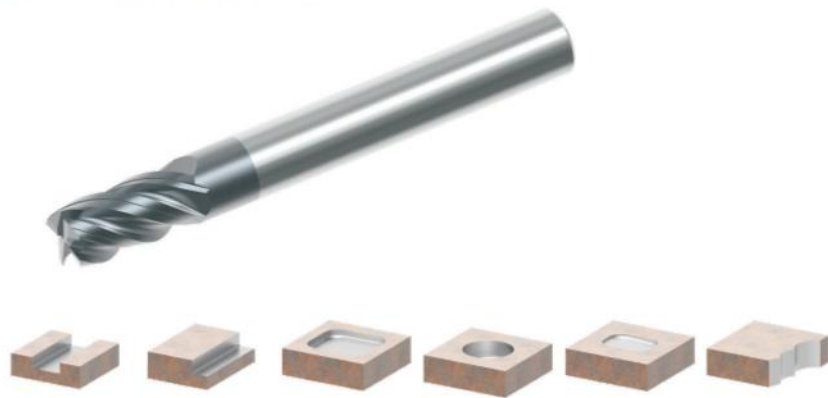
*接受订货



星光系列钢用铣刀 Steel endmills

短刃铣刀 Short flute endmills

用于多个行业的多种工件加工应用
特殊的底刃设计及排屑槽角度，让排屑更通畅，减轻刀尖损伤。
特殊的切削刃口处理及周齿后刀面设计



订货规格	刃数 T	刃径 FD	刃长 H	总长 L	柄径 D
PE2G-FD1	2	1.0	3.0	50.0	4.0
PE2G-FD1.5	2	1.5	4.0	50.0	4.0
PE2G-FD2	4	2.0	6.0	50.0	4.0
PE4G-FD3	4	3.0	9.0	50.0	4.0
PE4G-FD4	4	4.0	12.0	50.0	4.0
PE4G-FD5	4	5.0	15.0	50.0	6.0
PE4G-FD6	4	6.0	18.0	50.0	6.0
PE4G-FD8	4	8.0	24.0	60.0	8.0
PE4G-FD10	4	10.0	30.0	75.0	10.0
PE4G-FD12	4	12.0	35.0	75.0	12.0
PE4G-FD14	4	14.0	45.0	100.0	14.0
PE4G-FD16	4	16.0	45.0	100.0	16.0
PE4G-FD18	4	18.0	50.0	100.0	18.0
PE4G-FD20	4	20.0	50.0	100.0	20.0

*接受订货

星光系列钢用铣刀 Steel endmills

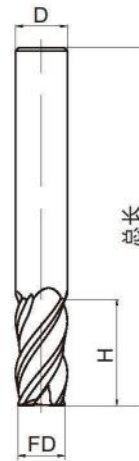
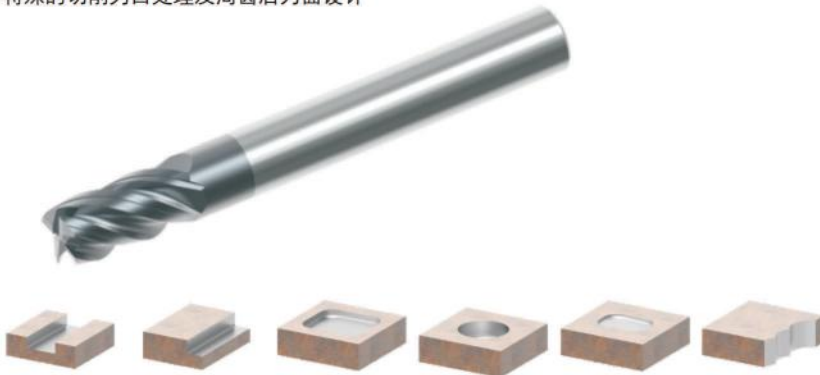
长刃铣刀 Long flute endmills

钢件孔加工通用型设计

用于多个行业的多种工件加工应用

特殊的底刃设计及排屑槽角度，让排屑更通畅，减轻刀尖损伤。

特殊的切削刃口处理及周齿后刀面设计



订货规格	刃数 T	刃径 FD	刃长 H	总长 L	柄径 D
PE4G-FD3	4	3.0	15.0	75.0	6.0
PE4G-FD4	4	4.0	20.0	75.0	6.0
PE4G-FD5	4	5.0	25.0	75.0	6.0
PE4G-FD6	4	6.0	30.0	75.0	6.0
PE4G-FD8	4	8.0	35.0	100.0	8.0
PE4G-FD10	4	10.0	45.0	100.0	10.0
PE4G-FD12	4	12.0	45.0	100.0	12.0
PE4G-FD14	4	14.0	50.0	150.0	14.0
PE4G-FD16	4	16.0	60.0	150.0	16.0
PE4G-FD18	4	18.0	70.0	150.0	18.0
PE4G-FD20	4	20.0	75.0	150.0	20.0

*接受订货

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

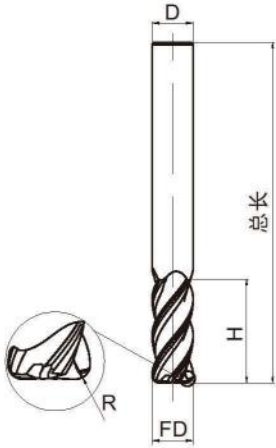
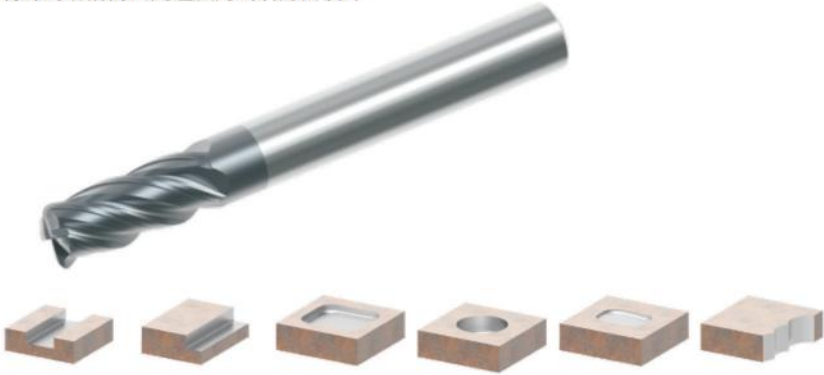
F

旋转刀柄



星光系列钢用铣刀 Steel endmills
圆角铣刀 Standard endmills with various radius

钢件孔加工通用型设计
用于多个行业的多种工件加工应用
特殊的底刃设计及排屑槽角度，让排屑更通畅，减轻刀尖损伤。
特殊的切削刃口处理及周齿后刀面设计



订货规格	刃数 T	刃径 FD	刀尖 R	刃长 H	总长 L	柄径 D
PR2G-FD2	2	2.0	0.1/0.2	6.0	50.0	4.0
PR4G-FD3	4	3.0	0.2/0.3/0.5	8.0	50.0	4.0
PR4G-FD4	4	4.0	0.2/0.3/0.5	10.0	50.0	4.0
PR4G-FD5	4	5.0	0.5/1.0	13.0	50.0	6.0
PR4G-FD6	4	6.0	0.5/1.0	15.0	60.0	6.0
PR4G-FD8	4	8.0	0.5/1.0/2.0	20.0	60.0	8.0
PR4G-FD10	4	10.0	0.5/1.0/2.0	25.0	75.0	10.0
PR4G-FD12	4	12.0	0.5/1.0/2.0	30.0	75.0	12.0
PR4G-FD14	4	14.0	0.5/1.0/2.0	35.0	100.0	14.0
PR4G-FD16	4	16.0	0.5/1.0/2.0	40.0	100.0	16.0
PR4G-FD18	4	18.0	0.5/1.0/2.0	45.0	100.0	18.0
PR4G-FD20	4	20.0	0.5/1.0/2.0	50.0	100.0	20.0

*接受订货

星光系列钢用铣刀 Steel endmills

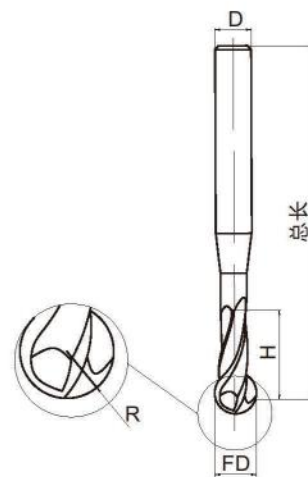
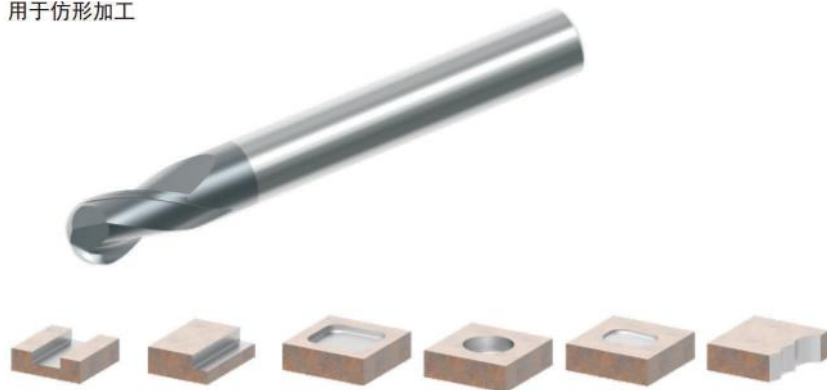
球头铣刀 Ballnose endmills

用于多个行业的多种工件加工应用

特殊的底刃设计及排屑槽角度，让排屑更通畅，减轻刀尖损伤。

特殊的切削刃口处理及周齿后刀面设计

用于仿形加工



订货规格	刃数 T	刃径 FD	刀尖 R	刃长 H	总长 L	柄径 D
PB2G-FD1	2	1.0	0.5	2.0	50.0	4.0
PB2G-FD2	2	2.0	1.0	4.0	50.0	4.0
PB2G-FD3	2	3.0	1.5	6.0	50.0	4.0
PB2G-FD4	2	4.0	2.0	8.0	50.0	4.0
PB2G-FD5	2	5.0	2.5	15.0	50.0	6.0
PB2G-FD6	2	6.0	3.0	20.0	50.0	6.0
PB2G-FD8	2	8.0	4.0	25.0	75.0	8.0
PB2G-FD10	2	10.0	5.0	30.0	75.0	10.0
PB2G-FD12	2	12.0	6.0	35.0	75.0	12.0
PB4G-FD16	4	16.0	8.0	45.0	100.0	16.0
PB4G-FD20	4	20.0	10.0	50.0	100.0	20.0

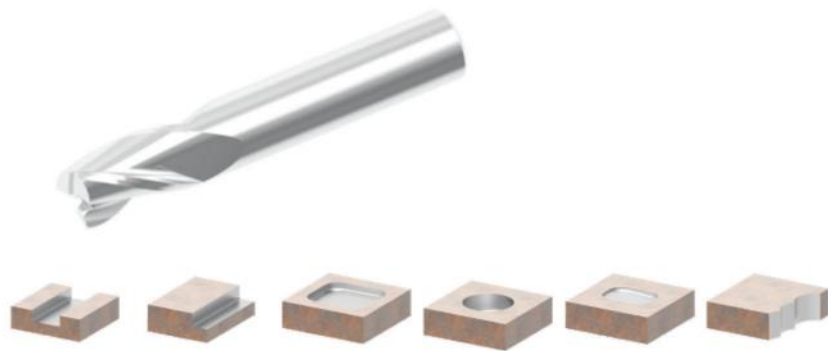
*接受订货



星彩系列铝合金铣刀 Aluminium endmills

平头铣刀 Standard endmills

刀具刃口高光处理，锋利的切削刃及大螺旋角设计
沟槽特殊设计，更好的排屑
刃口抗振设计，提高表面加工质量
应用于有色金属的切削加工



订货规格	刃数 T	刃径 FD	刃长 H	总长 L	柄径 D
NE2G-FD1	2	1.0	3.0	50.0	4.0
NE2G-FD1.5	2	1.5	4.0	50.0	4.0
NE3G-FD2	3	2.0	6.0	50.0	4.0
NE3G-FD3	3	3.0	9.0	50.0	4.0
NE3G-FD4	3	4.0	12.0	50.0	4.0
NE3G-FD5	3	5.0	15.0	50.0	6.0
NE3G-FD6	3	6.0	18.0	50.0	6.0
NE3G-FD8	3	8.0	24.0	60.0	8.0
NE3G-FD10	3	10.0	30.0	75.0	10.0
NE3G-FD12	3	12.0	35.0	75.0	12.0
NE3G-FD14	3	14.0	45.0	100.0	14.0
NE3G-FD16	3	16.0	45.0	100.0	16.0
NE3G-FD18	3	18.0	50.0	100.0	18.0
NE3G-FD20	3	20.0	50.0	100.0	20.0

*接受订货

星彩系列铝合金铣刀 Aluminium endmills

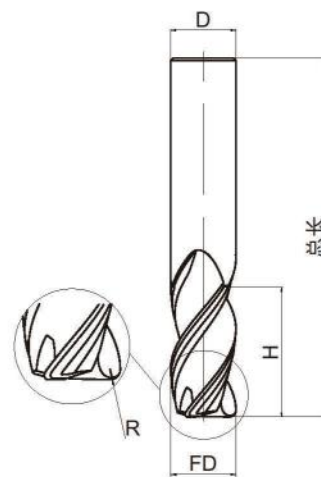
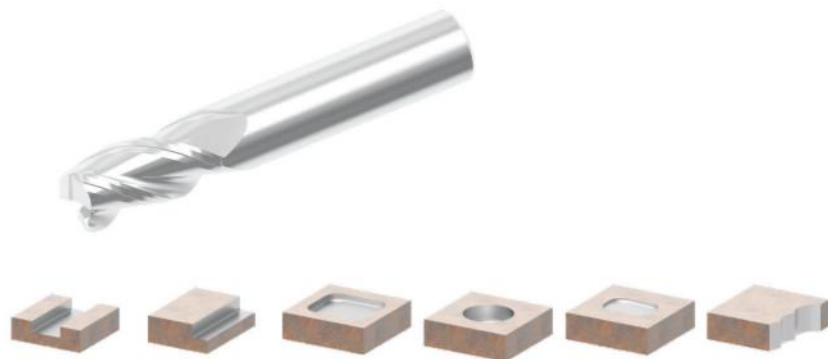
圆角铣刀 Standard endmills with various radius

刀具刃口高光处理，锋利的切削刃及大螺旋角设计

沟槽特殊设计，更好的排屑

刃口抗振设计，提高表面加工质量

应用于有色金属的切削加工



订货规格	刃数 T	刃径 FD	刀尖 R	刃长 H	总长 L	柄径 D
NR2G-FD2	2	2.0	0.1/0.2	6.0	50.0	4.0
NR3G-FD3	2	3.0	0.2/0.3/0.5	8.0	50.0	4.0
NR3G-FD4	3	4.0	0.2/0.3/0.5	10.0	50.0	4.0
NR3G-FD5	3	5.0	0.5/1.0	13.0	50.0	6.0
NR3G-FD6	3	6.0	0.5/1.0	15.0	60.0	6.0
NR3G-FD8	3	8.0	0.5/1.0/2.0	20.0	60.0	8.0
NR3G-FD10	3	10.0	0.5/1.0/2.0	25.0	75.0	10.0
NR3G-FD12	3	12.0	0.5/1.0/2.0	30.0	75.0	12.0
NR3G-FD14	3	14.0	0.5/1.0/2.0	35.0	100.0	14.0
NR3G-FD16	3	16.0	0.5/1.0/2.0	40.0	100.0	16.0
NR3G-FD18	3	18.0	0.5/1.0/2.0	45.0	100.0	18.0
NR3G-FD20	3	20.0	0.5/1.0/2.0	50.0	100.0	20.0

*接受订货



星彩系列铝合金铣刀 Aluminium endmills

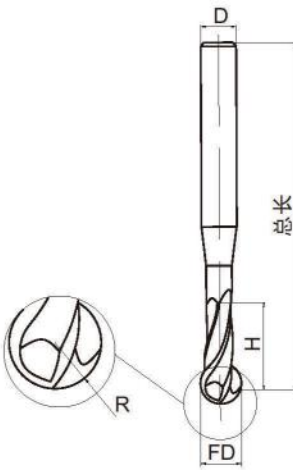
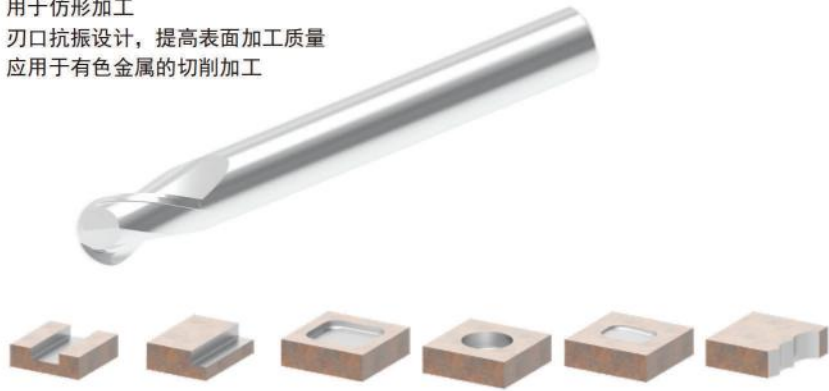
平头铣刀 Standard endmills

圆角铣刀 Standard endmills with various radius

球头铣刀 Ballnose endmills

刀具刃口高光处理，锋利的切削刃及大螺旋角设计
用于仿形加工

刃口抗振设计，提高表面加工质量
应用于有色金属的切削加工



订货规格	刃数 T	刃径 FD	刀尖 R	刃长 H	总长 L	柄径 D
NB2G-FD1	2	1.0	0.5	2.0	50.0	4.0
NB2G-FD2	2	2.0	1.0	4.0	50.0	4.0
NB2G-FD3	2	3.0	1.5	6.0	50.0	4.0
NB2G-FD4	2	4.0	2.0	8.0	50.0	4.0
NB2G-FD5	2	5.0	2.5	15.0	50.0	6.0
NB2G-FD6	2	6.0	3.0	20.0	50.0	6.0
NB2G-FD8	2	8.0	4.0	25.0	75.0	8.0
NB2G-FD10	2	10.0	5.0	30.0	75.0	10.0
NB2G-FD12	2	12.0	6.0	35.0	75.0	12.0
NB2G-FD16	2	16.0	8.0	45.0	100.0	16.0
NB2G-FD20	2	20.0	10.0	50.0	100.0	20.0

*接受订货

硬质合金钻头命名规则 Code key for solid carbide drills

整体硬质合金钻头的型号表示规则用9组代号表示铣刀的尺寸及其它特性。见示例 1。

示例 1：一般表示规则

示例：TD2E-A118-FD4-H8-D6-50

T	D	2	E	A118	FD4	H8	D6	50
①	②	③	④	⑤	⑥	⑦	⑧	⑨

①所对应代号表示——加工用途。

T	P	N	M	H	I	G	W
通用	钢件	有色金属	不锈钢	高硬钢	钛合金	高温合金 耐热合金	非金属材料

②所对应代号表示——钻头类型。

刀具类型

A	D
中心钻	钻头

③所对应代号表示——钻头刃数。

1	2	3
1刃	2刃	3刃

④所对应代号表示——钻头特征。

冷却类型

E	I
外冷	内冷



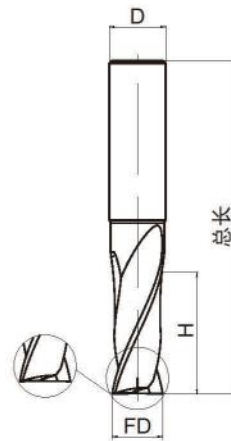
硬质合金钻头 Solid carbide drill

平底钻 Drills for flat bottom hole

钢件平底孔通用型设计

双重刀刃样式设计，加工时减少产品毛刺

特殊的槽型背宽设计，在增强刀具刚性与抗震性的同时让排屑更快
应用于钢，不锈钢，铸铁，淬硬材料浅孔钻削



订货规格	刃数 T	刃径 FD	刀尖 钻尖角	槽长 H	总长 L	柄径 D
TD2E-FD3	2	3.0	0.0	12.0	50.0	4.0
TD2E-FD3.5	2	3.5	0.0	12.0	50.0	4.0
TD2E-FD4	2	4.0	0.0	12.0	50.0	4.0
TD2E-FD4.5	2	4.5	0.0	16.0	65.0	6.0
TD2E-FD5	2	5.0	0.0	16.0	65.0	6.0
TD2E-FD5.5	2	5.5	0.0	22.0	65.0	6.0
TD2E-FD6	2	6.0	0.0	22.0	65.0	8.0
TD2E-FD6.5	2	6.5	0.0	25.0	65.0	8.0
TD2E-FD7	2	7.0	0.0	25.0	65.0	8.0
TD2E-FD7.5	2	7.5	0.0	30.0	75.0	8.0
TD2E-FD8	2	8.0	0.0	30.0	75.0	8.0
TD2E-FD8.5	2	8.5	0.0	35.0	85.0	10.0
TD2E-FD9	2	9.0	0.0	35.0	85.0	10.0
TD2E-FD9.5	2	9.5	0.0	38.0	85.0	10.0
TD2E-FD10	2	10.0	0.0	38.0	85.0	10.0
TD2E-FD10.5	2	10.5	0.0	42.0	95.0	12.0
TD2E-FD11	2	11.0	0.0	42.0	95.0	12.0
TD2E-FD11.5	2	11.5	0.0	46.0	95.0	12.0
TD2E-FD12	2	12.0	0.0	46.0	95.0	12.0

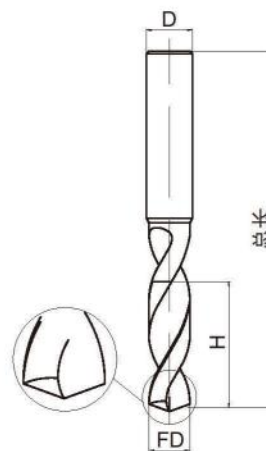
*接受订货

硬质合金钻头 Solid carbide drill

钢用硬质合金钻 Drills for steel

钢件孔加工通用型设计

用于多个行业的多种工件孔加工应用



订货规格	刃数 T	刃径 FD	刀尖 钻尖角	槽长 H	总长 L	柄径 D
TD2E-FD3.0	2	3.0	140.0	20.0	62.0	6.0
TD2E-FD3.1	2	3.1	140.0	20.0	62.0	6.0
TD2E-FD3.2	2	3.2	140.0	20.0	62.0	6.0
TD2E-FD3.3	2	3.3	140.0	20.0	62.0	6.0
TD2E-FD3.4	2	3.4	140.0	20.0	62.0	6.0
TD2E-FD3.5	2	3.5	140.0	20.0	62.0	6.0
TD2E-FD3.6	2	3.6	140.0	20.0	62.0	6.0
TD2E-FD3.7	2	3.7	140.0	20.0	62.0	6.0
TD2E-FD3.8	2	3.8	140.0	24.0	66.0	6.0
TD2E-FD3.9	2	3.9	140.0	24.0	66.0	6.0
TD2E-FD4.0	2	4.0	140.0	24.0	66.0	6.0
TD2E-FD4.1	2	4.1	140.0	24.0	66.0	6.0
TD2E-FD4.2	2	4.2	140.0	24.0	66.0	6.0
TD2E-FD4.3	2	4.3	140.0	24.0	66.0	6.0
TD2E-FD4.4	2	4.4	140.0	24.0	66.0	6.0
TD2E-FD4.5	2	4.5	140.0	24.0	66.0	6.0
TD2E-FD4.6	2	4.6	140.0	24.0	66.0	6.0
TD2E-FD4.7	2	4.7	140.0	28.0	66.0	6.0
TD2E-FD4.8	2	4.8	140.0	28.0	66.0	6.0
TD2E-FD4.9	2	4.9	140.0	28.0	66.0	6.0
TD2E-FD5.0	2	5.0	140.0	28.0	66.0	6.0
TD2E-FD5.1	2	5.1	140.0	28.0	66.0	6.0
TD2E-FD5.2	2	5.2	140.0	28.0	66.0	6.0
TD2E-FD5.3	2	5.3	140.0	28.0	66.0	6.0
TD2E-FD5.4	2	5.4	140.0	28.0	66.0	6.0
TD2E-FD5.5	2	5.5	140.0	28.0	66.0	6.0
TD2E-FD5.6	2	5.6	140.0	28.0	66.0	6.0
TD2E-FD5.7	2	5.7	140.0	28.0	66.0	6.0
TD2E-FD5.8	2	5.8	140.0	28.0	66.0	6.0
TD2E-FD5.9	2	5.9	140.0	28.0	66.0	6.0
TD2E-FD6.0	2	6.0	140.0	28.0	66.0	6.0
TD2E-FD6.1	2	6.1	140.0	34.0	79.0	8.0
TD2E-FD6.2	2	6.2	140.0	34.0	79.0	8.0
TD2E-FD6.3	2	6.3	140.0	34.0	79.0	8.0
TD2E-FD6.4	2	6.4	140.0	34.0	79.0	8.0
TD2E-FD6.5	2	6.5	140.0	34.0	79.0	8.0
TD2E-FD6.6	2	6.6	140.0	34.0	79.0	8.0
TD2E-FD6.7	2	6.7	140.0	34.0	79.0	8.0
TD2E-FD6.8	2	6.8	140.0	34.0	79.0	8.0
TD2E-FD6.9	2	6.9	140.0	34.0	79.0	8.0
TD2E-FD7.0	2	7.0	140.0	34.0	79.0	8.0
TD2E-FD7.1	2	7.1	140.0	41.0	79.0	8.0
TD2E-FD7.2	2	7.2	140.0	41.0	79.0	8.0

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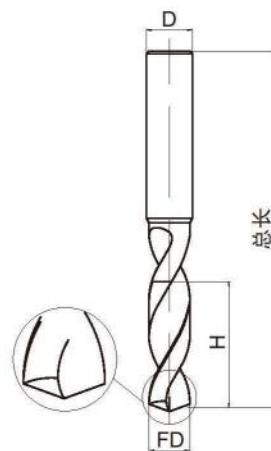


硬质合金钻头 Solid carbide drill

钢用硬质合金钻 Drills for steel

钢件孔加工通用型设计

用于多个行业的多种工件孔加工应用

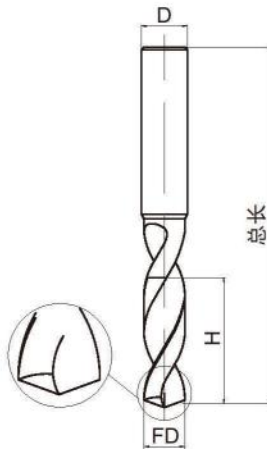


订货规格	刃数 T	刃径 FD	刀尖 钻尖角	槽长 H	总长 L	柄径 D
TD2E-FD7.3	2	7.3	140.0	41.0	79.0	8.0
TD2E-FD7.4	2	7.4	140.0	41.0	79.0	8.0
TD2E-FD7.5	2	7.5	140.0	41.0	79.0	8.0
TD2E-FD7.6	2	7.6	140.0	41.0	79.0	8.0
TD2E-FD7.7	2	7.7	140.0	41.0	79.0	8.0
TD2E-FD7.8	2	7.8	140.0	41.0	79.0	8.0
TD2E-FD7.9	2	7.9	140.0	41.0	79.0	8.0
TD2E-FD8.0	2	8.0	140.0	41.0	79.0	8.0
TD2E-FD8.1	2	8.1	140.0	47.0	89.0	10.0
TD2E-FD8.2	2	8.2	140.0	47.0	89.0	10.0
TD2E-FD8.3	2	8.3	140.0	47.0	89.0	10.0
TD2E-FD8.4	2	8.4	140.0	47.0	89.0	10.0
TD2E-FD8.5	2	8.5	140.0	47.0	89.0	10.0
TD2E-FD8.6	2	8.6	140.0	47.0	89.0	10.0
TD2E-FD8.7	2	8.7	140.0	47.0	89.0	10.0
TD2E-FD8.8	2	8.8	140.0	47.0	89.0	10.0
TD2E-FD8.9	2	8.9	140.0	47.0	89.0	10.0
TD2E-FD9.0	2	9.0	140.0	47.0	89.0	10.0
TD2E-FD9.1	2	9.1	140.0	47.0	89.0	10.0
TD2E-FD9.2	2	9.2	140.0	47.0	89.0	10.0
TD2E-FD9.3	2	9.3	140.0	47.0	89.0	10.0
TD2E-FD9.4	2	9.4	140.0	47.0	89.0	10.0
TD2E-FD9.5	2	9.5	140.0	47.0	89.0	10.0
TD2E-FD9.6	2	9.6	140.0	47.0	89.0	10.0
TD2E-FD9.7	2	9.7	140.0	47.0	89.0	10.0
TD2E-FD9.8	2	9.8	140.0	47.0	89.0	10.0
TD2E-FD9.9	2	9.9	140.0	47.0	89.0	10.0
TD2E-FD10.0	2	10.0	140.0	47.0	89.0	10.0
TD2E-FD10.1	2	10.1	140.0	55.0	102.0	12.0
TD2E-FD10.2	2	10.2	140.0	55.0	102.0	12.0
TD2E-FD10.3	2	10.3	140.0	55.0	102.0	12.0
TD2E-FD10.4	2	10.4	140.0	55.0	102.0	12.0
TD2E-FD10.5	2	10.5	140.0	55.0	102.0	12.0
TD2E-FD10.6	2	10.6	140.0	55.0	102.0	12.0
TD2E-FD10.7	2	10.7	140.0	55.0	102.0	12.0
TD2E-FD10.8	2	10.8	140.0	55.0	102.0	12.0
TD2E-FD10.9	2	10.9	140.0	55.0	102.0	12.0
TD2E-FD11.0	2	11.0	140.0	55.0	102.0	12.0
TD2E-FD11.1	2	11.1	140.0	55.0	102.0	12.0
TD2E-FD11.2	2	11.2	140.0	55.0	102.0	12.0
TD2E-FD11.3	2	11.3	140.0	55.0	102.0	12.0
TD2E-FD11.4	2	11.4	140.0	55.0	102.0	12.0
TD2E-FD11.5	2	11.5	140.0	55.0	102.0	12.0

*接受订货
C20



硬质合金钻头 Solid carbide drill
钢用硬质合金钻 Drills for steel
钢件孔加工通用型设计
用于多个行业的多种工件孔加工应用



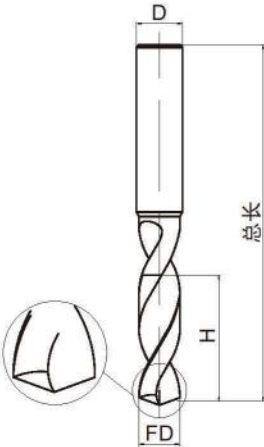
订货规格	刃数 T	刃径 FD	刀尖 钻尖角	槽长 H	总长 L	柄径 D
TD2E-FD11.6	2	11.6	140.0	55.0	102.0	12.0
TD2E-FD11.7	2	11.7	140.0	55.0	102.0	12.0
TD2E-FD11.8	2	11.8	140.0	55.0	102.0	12.0
TD2E-FD11.9	2	11.9	140.0	55.0	102.0	12.0
TD2E-FD12.0	2	12.0	140.0	55.0	102.0	12.0

*接受订货



硬质合金钻头 Solid carbide drill
铝用硬质合金钻 Drills for aluminium

有色金属孔加工通用型设计
用于多个行业的多种工件孔加工应用



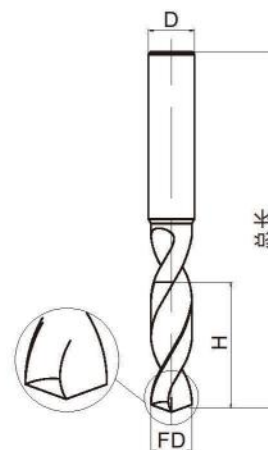
订货规格	刃数 T	刃径 FD	刀尖 钻尖角	槽长 H	总长 L	柄径 D
ND2E-FD3.0	2	3.0	140.0	20.0	62.0	6.0
ND2E-FD3.1	2	3.1	140.0	20.0	62.0	6.0
ND2E-FD3.2	2	3.2	140.0	20.0	62.0	6.0
ND2E-FD3.3	2	3.3	140.0	20.0	62.0	6.0
ND2E-FD3.4	2	3.4	140.0	20.0	62.0	6.0
ND2E-FD3.5	2	3.5	140.0	20.0	62.0	6.0
ND2E-FD3.6	2	3.6	140.0	20.0	62.0	6.0
ND2E-FD3.7	2	3.7	140.0	20.0	62.0	6.0
ND2E-FD3.8	2	3.8	140.0	24.0	66.0	6.0
ND2E-FD3.9	2	3.9	140.0	24.0	66.0	6.0
ND2E-FD4.0	2	4.0	140.0	24.0	66.0	6.0
ND2E-FD4.1	2	4.1	140.0	24.0	66.0	6.0
ND2E-FD4.2	2	4.2	140.0	24.0	66.0	6.0
ND2E-FD4.3	2	4.3	140.0	24.0	66.0	6.0
ND2E-FD4.4	2	4.4	140.0	24.0	66.0	6.0
ND2E-FD4.5	2	4.5	140.0	24.0	66.0	6.0
ND2E-FD4.6	2	4.6	140.0	24.0	66.0	6.0
ND2E-FD4.7	2	4.7	140.0	28.0	66.0	6.0
ND2E-FD4.8	2	4.8	140.0	28.0	66.0	6.0
ND2E-FD4.9	2	4.9	140.0	28.0	66.0	6.0
ND2E-FD5.0	2	5.0	140.0	28.0	66.0	6.0
ND2E-FD5.1	2	5.1	140.0	28.0	66.0	6.0
ND2E-FD5.2	2	5.2	140.0	28.0	66.0	6.0
ND2E-FD5.3	2	5.3	140.0	28.0	66.0	6.0
ND2E-FD5.4	2	5.4	140.0	28.0	66.0	6.0
ND2E-FD5.5	2	5.5	140.0	28.0	66.0	6.0
ND2E-FD5.6	2	5.6	140.0	28.0	66.0	6.0
ND2E-FD5.7	2	5.7	140.0	28.0	66.0	6.0
ND2E-FD5.8	2	5.8	140.0	28.0	66.0	6.0
ND2E-FD5.9	2	5.9	140.0	28.0	66.0	6.0
ND2E-FD6.0	2	6.0	140.0	28.0	66.0	6.0
ND2E-FD6.1	2	6.1	140.0	34.0	79.0	8.0
ND2E-FD6.2	2	6.2	140.0	34.0	79.0	8.0
ND2E-FD6.3	2	6.3	140.0	34.0	79.0	8.0
ND2E-FD6.4	2	6.4	140.0	34.0	79.0	8.0
ND2E-FD6.5	2	6.5	140.0	34.0	79.0	8.0
ND2E-FD6.6	2	6.6	140.0	34.0	79.0	8.0
ND2E-FD6.7	2	6.7	140.0	34.0	79.0	8.0
ND2E-FD6.8	2	6.8	140.0	34.0	79.0	8.0
ND2E-FD6.9	2	6.9	140.0	34.0	79.0	8.0
ND2E-FD7.0	2	7.0	140.0	34.0	79.0	8.0
ND2E-FD7.1	2	7.1	140.0	41.0	79.0	8.0
ND2E-FD7.2	2	7.2	140.0	41.0	79.0	8.0

*接受订货
C22

硬质合金钻头 Solid carbide drill

铝用硬质合金钻 Drills for aluminium

有色金属孔加工通用型设计
用于多个行业的多种工件孔加工应用



订货规格	刃数 T	刃径 FD	刀尖 钻尖角	槽长 H	总长 L	柄径 D
ND2E-FD7.3	2	7.3	140.0	41.0	79.0	8.0
ND2E-FD7.4	2	7.4	140.0	41.0	79.0	8.0
ND2E-FD7.5	2	7.5	140.0	41.0	79.0	8.0
ND2E-FD7.6	2	7.6	140.0	41.0	79.0	8.0
ND2E-FD7.7	2	7.7	140.0	41.0	79.0	8.0
ND2E-FD7.8	2	7.8	140.0	41.0	79.0	8.0
ND2E-FD7.9	2	7.9	140.0	41.0	79.0	8.0
ND2E-FD8.0	2	8.0	140.0	41.0	79.0	8.0
ND2E-FD8.1	2	8.1	140.0	47.0	89.0	10.0
ND2E-FD8.2	2	8.2	140.0	47.0	89.0	10.0
ND2E-FD8.3	2	8.3	140.0	47.0	89.0	10.0
ND2E-FD8.4	2	8.4	140.0	47.0	89.0	10.0
ND2E-FD8.5	2	8.5	140.0	47.0	89.0	10.0
ND2E-FD8.6	2	8.6	140.0	47.0	89.0	10.0
ND2E-FD8.7	2	8.7	140.0	47.0	89.0	10.0
ND2E-FD8.8	2	8.8	140.0	47.0	89.0	10.0
ND2E-FD8.9	2	8.9	140.0	47.0	89.0	10.0
ND2E-FD9.0	2	9.0	140.0	47.0	89.0	10.0
ND2E-FD9.1	2	9.1	140.0	47.0	89.0	10.0
ND2E-FD9.2	2	9.2	140.0	47.0	89.0	10.0
ND2E-FD9.3	2	9.3	140.0	47.0	89.0	10.0
ND2E-FD9.4	2	9.4	140.0	47.0	89.0	10.0
ND2E-FD9.5	2	9.5	140.0	47.0	89.0	10.0
ND2E-FD9.6	2	9.6	140.0	47.0	89.0	10.0
ND2E-FD9.7	2	9.7	140.0	47.0	89.0	10.0
ND2E-FD9.8	2	9.8	140.0	47.0	89.0	10.0
ND2E-FD9.9	2	9.9	140.0	47.0	89.0	10.0
ND2E-FD10.0	2	10.0	140.0	47.0	89.0	10.0
ND2E-FD10.1	2	10.1	140.0	55.0	102.0	12.0
ND2E-FD10.2	2	10.2	140.0	55.0	102.0	12.0
ND2E-FD10.3	2	10.3	140.0	55.0	102.0	12.0
ND2E-FD10.4	2	10.4	140.0	55.0	102.0	12.0
ND2E-FD10.5	2	10.5	140.0	55.0	102.0	12.0
ND2E-FD10.6	2	10.6	140.0	55.0	102.0	12.0
ND2E-FD10.7	2	10.7	140.0	55.0	102.0	12.0
ND2E-FD10.8	2	10.8	140.0	55.0	102.0	12.0
ND2E-FD10.9	2	10.9	140.0	55.0	102.0	12.0
ND2E-FD11.0	2	11.0	140.0	55.0	102.0	12.0
ND2E-FD11.1	2	11.1	140.0	55.0	102.0	12.0
ND2E-FD11.2	2	11.2	140.0	55.0	102.0	12.0
ND2E-FD11.3	2	11.3	140.0	55.0	102.0	12.0
ND2E-FD11.4	2	11.4	140.0	55.0	102.0	12.0
ND2E-FD11.5	2	11.5	140.0	55.0	102.0	12.0

*接受订货

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

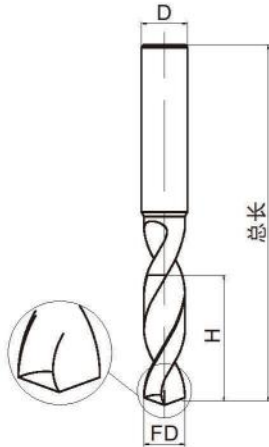
F

旋转刀柄



硬质合金钻头 Solid carbide drill
铝用硬质合金钻 Drills for aluminium

有色金属孔加工通用型设计
用于多个行业的多种工件孔加工应用



订货规格	刃数 T	刃径 FD	刀尖 钻尖角	槽长 H	总长 L	柄径 D
ND2E-FD11.6	2	11.6	140.0	55.0	102.0	12.0
ND2E-FD11.7	2	11.7	140.0	55.0	102.0	12.0
ND2E-FD11.8	2	11.8	140.0	55.0	102.0	12.0
ND2E-FD11.9	2	11.9	140.0	55.0	102.0	12.0
ND2E-FD12.0	2	12.0	140.0	55.0	102.0	12.0

*接受订货

其它信息 Other information

铣刀失效分析 Analysis for endmills

故障现象	原因	对策
切削时发生震动	1.圆周后角、刀槽前角太小。2.工件安装不良。3.机床、刀柄刚性不足。4.切削速度、进给速度太快。	1.修正刀具前角、后角。2.装夹清洁夹头并紧固刀具。3.更换机床、刀夹。4.变更切削参数及条件。
切削时发生折损	1.刀具刚性不够。2.进给速度太快。3.切削深度太大。4.装夹突出量太长。5.刃口磨损，刀具不锋利。6.刃长超过需要。	1.使用经过刚性设计的刀具。2.降低进给速度。3.减小切削深度。4.缩短装夹长度。5.多检查刀具磨损程度，返磨。6.跟换短刃刀具。
切削时发生刃口破损	1.工件固定差。2.进给速度太快。3.刀具刃口太锋利。4.刀具紧固不足。5.切削深度太大。6.机床刚性不足。	1.牢靠地固定工件。2.降低进给速度。3.对刀具刃口进行正确值研磨。4.牢固地夹持刀具。5.减少切削深度。6.变更机床。
磨损、烧伤明显	1.切削速度太快。2.切削阻力过大。3.工件材料硬度太高。	1.降低切削速度。2.更换对应性能的刀具。3.选用适合加工硬材的刀具。
切屑卡住	1.切削深度太大。2.容屑槽太小。3.切削液压力不足。4.容屑槽形状不良。	1.调整进给速度、切削深度。2.增大容屑槽空间。3.供给充足的切削液。4.改变容屑槽形状。
精加工面出现毛刺	1.刀具槽前角圆周后角不合适。2.切削条件选择错误。3.刀具刃口磨损太快。	1.修正刀具前角、后角。2.重新选择切削条件。3.对刀具尽早进行再研磨。
精加工面粗糙度差	1.进给速度太快。2.切削速度太慢。3.刃口磨损太大。4.排屑不通，卡屑。	1.降低进给速度。2.提高转速。3.更换刀具。4.减小切削深度。

立铣刀加工时的故障及其原因，对策



其它信息 Other information

钻头失效分析 Analysis for drill failure

钻头加工时的故障及其原因，对策

现象	可能原因		对策
	客户	刀具	
负载大		刀具刃型选择不当	
		刃口处理不当	
不耐磨，寿命短	切削用量不恰当		降低转数，增大进给
	冷却不充分		改善冷却
		刀具材料选择不当	选择高硬度牌号如K10
			刀具涂层
孔偏大	主轴刀柄连接精度低,刀尖跳动大		改善连接精度，如更换液压或热胀夹头
	主轴刀柄刀具刚性差		改善刚性，减少刀具悬伸长度,采用弹簧夹头,避免使用钻夹头
	工件夹持不稳定		改善工件装夹
		内刃主刃横刃不对称	
		钻头公差选择过高	m7改为h7或h6
孔壁毛刺 孔壁螺旋状划痕	切削速度过高		降低主轴转数
	冷却不充分		检查冷却状态,增大冷却压力
		棱边倒锥过小,甚至正锥	及时修磨
		棱边过宽	
		刀具材料亲和性	选择涂层
出口毛刺	进给过快		减少进给
	材料热处理不稳定，偏软		保证热处理稳定
		顶角小	增大顶角
		刀尖倒棱	不倒棱
崩刃,崩棱边 近刀尖棱边缠绕	主轴刀柄连接精度低,刀尖跳动大		改善连接精度，如更换液压或热胀夹头
		刃形不正确,断屑不好	改善刃形,选择正确钻头
		槽形不正确,排屑不畅	改善槽形,选择正确钻头?
		棱边过宽,倒锥太小	减少棱边,增大倒锥
断刀	撞刀		减少操作失误
	进给过大,切削速度过低		校核切削速度,减少进给
	刀具悬伸过长		减少刀具悬伸
	未及时修磨		及时修磨
	排屑槽堵塞		选择恰当钻头,啄钻
			改善冷却
		刃口强度不够,芯厚不足	改善钻头强度
		长径比过大	

专业刀具修磨服务

普努克将基于刀具修磨方面的丰富技术经验，为客户提供高质量的刀具修磨服务

采用严谨工艺流程和修磨标准，修磨之后的刀具寿命达到新刀的80%以上，实现成本的大量节省

专业的
修磨标准工艺流程

高品质的
涂层

稳定的
产品质量

专业的
产品应用支持

服务流程

- 1.客户提出刀具修磨需要
- 2.我们专业工艺人员全检分类，并和客户沟通修磨细节
- 3.工程人员按分类好的修磨刀具分别定制修磨工艺
- 4.进口五轴磨床对刀具进行修磨处理
- 5.修磨后刀具钝化，刃口强化处理
- 6.根据客户需求如需涂层，进行高效涂层
- 7.入库交付修磨刀具
- 8.回访客户修磨刀具信息

钻削 Drilling

刀具指南和选择

D02

Tooling introduction & Selection

浅孔钻 WC系列

D03

Short hole drill WC series

浅孔钻 SP系列

D06

Short hole drill SP series

浅孔钻 SO系列

D12

Short hole drill SO series

技术指南

D24

Technical guide

牌号说明

D24

Grades introduction

功率和冷却

D25

Power & Coolant

推荐切削参数

D26

Cutting dates recommendation

皇冠钻的基本信息

D41

Modular tip drills information

皇冠钻

D45

Modular tip drills

切削参数推荐

D51

Cutting dates recommendations

复合皇冠钻

D53

Modular drills with exchangeable heads

切削参数推荐

D63

Cutting dates recommendations

小直径复合钻

D64

Small dia. modular drills

大直径复合钻

D69

Big dia. modular drills

刀具指南和选择 Tooling introduction & Selection

WC U-Drill


 16.00 - 58.00
 3 x Dc

 IT13-IT11
 1-5 μ

SP U-Drill


 12.50 - 50.00
 3-5 x Dc

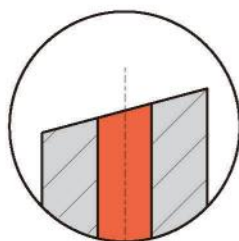
 IT13-IT11
 1-5 μm

SO U-Drill

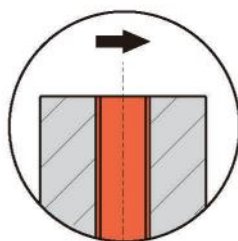

 12.00 - 50.00
 2-5 x Dc

 IT13-IT11
 1-5 μm

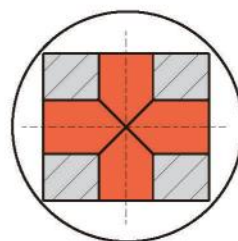
钻削深度Drilling depth	孔公差 Hole tolerance
2XD	+0.20/-0.10
3XD	+0.25/-0.10
4XD	+0.30/-0.10
5XD	+0.40/-0.10



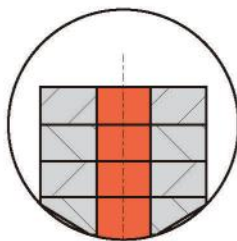
斜面孔



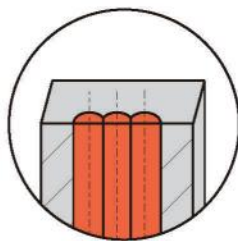
可调整直径钻孔



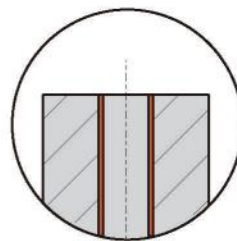
相贯孔



堆叠孔



相连孔



镗孔

浅孔钻 WC系列 Short hole drill WC series 通用浅孔钻 General purpose short hole drill

多用途性和经济性Versatility and economy

- W型刀片有较好的定心性能，出色的切削控制和排屑
- W shape insert has centering function and good chip control and chip flow
- 钻孔效率高，经济型好
- Highly drilling efficient and better economical
- 选择不同刀片槽型和材质搭配使用，以匹配各种加工应用
- Choose different insert geometry and grade combinations, to match various applications
- 刀片3个切削刃
- 3 edges insert
- 适用于钢件、不锈钢、耐热合金、铸铁等各种材料的加工
- Suitable for machining steel, stainless steel, heat resitant alloy, cast iron materials
- 应用于模具、汽车零部件、通用机械等领域
- Used in die and mould, automotive components, general engineering industries

刀片槽形Insert geometry

- ZS槽形：刃口锋利，轻切削，低进给，软材料，不锈钢加工首选
- ZS geometry: light cutting, low feed rate, first choice for soft materials
- ZV槽形：通用槽形，刃口强度高，可用于钢，铸铁的加工，能获得良好的表面质量machining
- ZV geometry: general purpose geometry



B

Pulcut
普努克

铣削

W 型刀片钻头3D
W insert Drill 3XD

ISO 9766

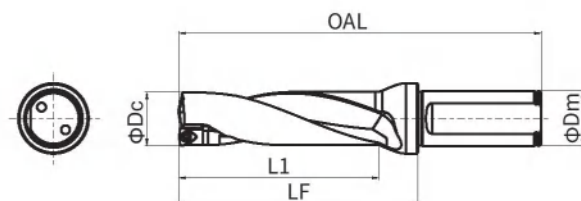
C

直径范围: 16.00-58.00mm

Diameter range: 16.00-58.00mm

孔深: 3倍径

Hole depth: 3XDia



圆柄刀具

直径 Diameter DC	型 号 Type	库存 Stock Item	尺寸(mm) Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
16	D410-1600L25WC03-03	●	25	48	53	73	129	WC..030208
17	D410-1700L25WC03-03	●	25	51	56	77	133	WC..030208
18	D410-1800L25WC03-03	●	25	54	59	81	137	WC..030208
19	D410-1900L25WC03-03	●	25	57	62	84	140	WC..030208
20	D410-2000L25WC03-03	●	25	60	65	87	143	WC..030208
21	D410-2100L25WC04-03	●	25	63	68	97	153	WC..040208
22	D410-2200L25WC04-03	●	25	66	71	100	156	WC..040208
23	D410-2300L25WC04-03	●	25	69	74	103	159	WC..040208
24	D410-2400L25WC04-03	●	25	72	77	106	162	WC..040208
25	D410-2500L25WC04-03	●	25	75	80	109	165	WC..040208
26	D410-2600L32WC04-03	●	32	78	83	116	176	WC..050308
27	D410-2700L32WC04-03	●	32	81	86	120	180	WC..050308
28	D410-2800L32WC05-03	●	32	84	89	124	184	WC..050308
29	D410-2900L32WC05-03	●	32	87	92	128	188	WC..050308
30	D410-3000L32WC05-03	●	32	90	95	132	192	WC..050308
31	D410-3100L40WC06-03	●	40	93	98	143	203	WC..06T308
32	D410-3200L40WC06-03	●	40	96	101	136	206	WC..06T308
33	D410-3300L40WC06-03	●	40	99	104	139	209	WC..06T308
34	D410-3400L40WC06-03	●	40	102	107	142	212	WC..06T308
35	D410-3500L40WC06-03	●	40	105	110	145	215	WC..06T308
36	D410-3600L40WC06-03	●	40	108	113	148	218	WC..06T308
37	D410-3700L40WC06-03	●	40	111	116	151	221	WC..06T308
38	D410-3800L40WC06-03	●	40	114	119	155	225	WC..06T308
39	D410-3900L40WC06-03	●	40	117	122	158	228	WC..06T308
40	D410-4000L40WC06-03	●	40	120	125	161	231	WC..06T308
41	D410-4100L40WC06-03	●	40	123	128	164	234	WC..06T308
42	D410-4200L40WC08-03	●	40	126	131	169	239	WC..080412
43	D410-4300L40WC08-03	●	40	129	134	172	242	WC..080412
44	D410-4400L40WC08-03	●	40	132	137	175	245	WC..080412
45	D410-4500L40WC08-03	●	40	135	140	178	248	WC..080412
46	D410-4600L40WC08-03	●	40	138	143	181	251	WC..080412
47	D410-4700L40WC08-03	●	40	141	146	183	253	WC..080412
48	D410-4800L40WC08-03	●	40	144	149	185	255	WC..080412
49	D410-4900L40WC08-03	●	40	147	152	187	257	WC..080412
50	D410-5000L40WC08-03	●	40	150	155	189	259	WC..080412
51	D410-5100L40WC08-03	●	40	153	158	191	261	WC..080412
52	D410-5200L40WC08-03	●	40	156	161	193	263	WC..080412
53	D410-5300L40WC08-03	●	40	159	164	195	265	WC..080412
54	D410-5400L40WC08-03	●	40	162	167	197	267	WC..080412
55	D410-5500L40WC08-03	●	40	165	170	199	269	WC..080412
56	D410-5600L40WC08-03	●	40	168	173	201	271	WC..080412
57	D410-5700L40WC08-03	●	40	171	176	203	273	WC..080412
58	D410-5800L40WC08-03	●	40	174	179	205	275	WC..080412

钻削

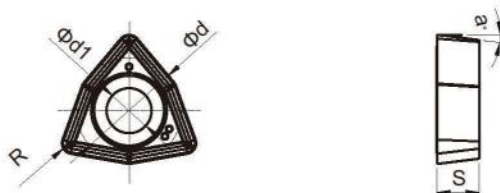
E

深孔加工

F

旋转刀柄

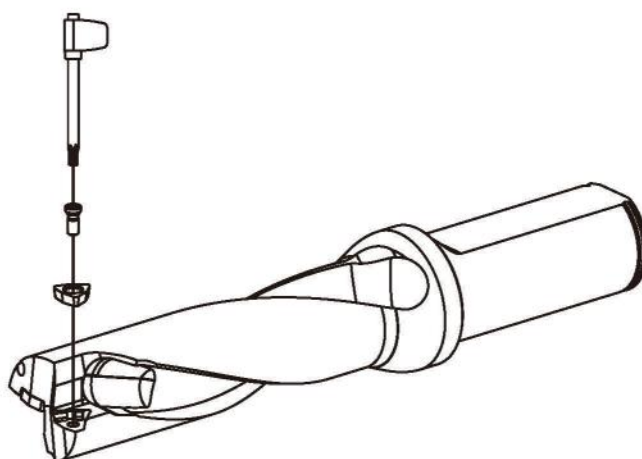
U 钻刀片-WC U drill



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade					
		d	s	d1	a	R	UD25	UD25	UD25	UD25	PU5010	UD25
	WCGX030208-ZV	5.56	2.38	2.8	7	0.8	★	☆	★	☆	★	☆
	WCGX040208-ZV	6.35	2.38	3.0	7	0.8	★	☆	★	☆	★	☆
	WCGX050308-ZV	7.94	3.18	3.4	7	0.8	★	☆	★	☆	★	☆
	WCGX06T308-ZV	9.525	3.97	3.8	7	0.8	★	☆	★	☆	★	☆
	WCGX080412-ZV	12.7	4.76	4.4	7	1.2	★	☆	★	☆	★	☆
	WCGX030208-ZS	5.56	2.38	2.5	7	0.8	☆	★	☆	★	★	☆
	WCGX040208-ZS	6.35	2.38	2.8	7	0.8	☆	★	☆	★	★	☆
	WCGX050308-ZS	7.94	3.18	3.4	7	0.8	☆	★	☆	★	★	☆
	WCGX06T308-ZS	9.525	3.97	4.4	7	0.8	☆	★	☆	★	★	☆
	WCGX080412-ZS	12.7	4.76	5.5	7	1.2	☆	★	☆	★	★	☆

UD25，强度高耐磨性好的PVD涂层牌号

WC浅孔钻-1.2



刀片尺寸 Insert size	刀具直径 Diameter	刀片夹紧螺钉 Clamping srew	刀片螺钉扳手 Screw Wrench
WC..0302	16-20	S01-022065	Q01-107
WC..0402	21-25	S01-025073	Q01-108
WC..0503	26-30	S01-030085	S01-109
WC..06T3	31-41	S01-040110	S01-115
WC..0804	42-58	S01-050120	S01-120

B



铣削

浅孔钻 SP系列 Short hole drill SP series 通用浅孔钻 General purpose short hole drill

C

圆柄刀具

多用途性和经济性Versatility and economy

- 良好的表面成型，刃口强度高
- Good surface quality and strong cutting edge
- 相同规格的中心刀片和周边刀片
- The same size of central and peripheral inserts
- 刀片4个切削刃，孔底相对较平整
- 4 edges insert, better bottom of hole
- 加宽的排屑槽，更利于铁屑排出
- Increased chiproom and easy for chips evacuation
- 适用于钢件、不锈钢、耐热合金、铸铁等各种材料的加工
- Suitable for machining steel, stainless steel, heat resistant alloy, cast iron materials
- 广泛应用于航空航天、汽车零部件、能源、模具、通用机械等领域
- Widely used in aerospace, automotive components, energy, die and mould, general engineering industries

D

刀片槽形Insert geometry

- ZV 槽形：通用槽形，刃口强度高，可用于钢，铸铁的加工，
 - ZV geometry: general purpose geometry, strong cutting edge, suitable for Steel and Cast application etc.
- 能获得良好的表面质量

刀片槽型图片刀杆图片

钻削

E

深孔加工

F

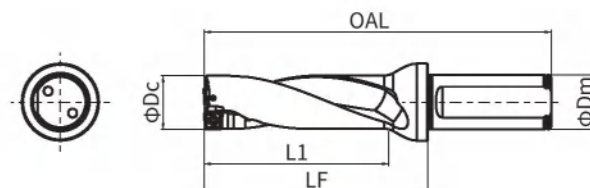
旋转刀柄



D06

S形刀片钻头3D S insert Drill 3XD

ISO 9766
直径范围: 12.50-50.00mm
Diameter range: 12.50-50.00mm
孔深: 3倍径
Hole depth: 3XDia



直径 Diameter DC	型 号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
12.5	D420-1250L20SP05-03	●	20	38	43	57	107	SP..050204
13	D420-1300L20SP05-03	●	20	39	44	57	107	SP..050204
13.5	D420-1350L20SP05-03	●	20	41	46	60	110	SP..050204
14	D420-1400L20SP05-03	●	20	42	47	60	110	SP..050204
14.5	D420-1450L20SP05-03	●	20	44	49	64	114	SP..050204
15	D420-1500L20SP05-03	●	20	45	50	64	114	SP..050204
15.5	D420-1550L25SP06-03	●	25	47	52	68	124	SP..060204
16	D420-1600L25SP06-03	●	25	48	53	68	124	SP..060204
16.5	D420-1650L25SP06-03	●	25	50	55	71	127	SP..060204
17	D420-1700L25SP06-03	●	25	51	56	71	127	SP..060204
17.5	D420-1750L25SP06-03	●	25	53	58	75	131	SP..060204
18	D420-1800L25SP06-03	●	25	54	59	75	131	SP..060204
18.5	D420-1850L25SP06-03	●	25	56	61	78	134	SP..060204
19	D420-1900L25SP06-03	●	25	57	62	78	134	SP..060204
19.5	D420-1950L25SP06-03	●	25	59	64	83	139	SP..060204
20	D420-2000L25SP06-03	●	25	60	65	83	139	SP..060204
20.5	D420-2050L25SP06-03	●	25	62	67	86	142	SP..060204
20.9	D420-2090L25SP06-03	●	25	63	68	86	142	SP..060204
21	D420-2100L25SP06-03	●	25	63	68	86	142	SP..060204
21.5	D420-2150L25SP06-03	●	25	65	70	89	145	SP..060204
22	D420-2200L25SP07-03	●	25	66	71	89	145	SP..07T308
22.5	D420-2250L25SP07-03	●	25	68	73	94	150	SP..07T308
22.5	D420-2250L32SP07-03	●	32	68	73	94	154	SP..07T308
23	D420-2300L25SP07-03	●	25	69	74	94	150	SP..07T308
23	D420-2300L32SP07-03	●	32	69	74	94	154	SP..07T308
23.5	D420-2350L25SP07-03	●	25	71	76	98	154	SP..07T308
23.5	D420-2350L32SP07-03	●	32	71	76	98	158	SP..07T308
23.9	D420-2390L25SP07-03	●	25	72	77	98	154	SP..07T308
23.9	D420-2390L32SP07-03	●	32	72	77	98	158	SP..07T308
24	D420-2400L25SP07-03	●	25	72	77	98	154	SP..07T308
24	D420-2400L32SP07-03	●	32	72	77	98	158	SP..07T308
24.5	D420-2450L25SP07-03	●	25	74	79	102	158	SP..07T308
24.5	D420-2450L32SP07-03	●	32	74	79	102	162	SP..07T308
25	D420-2500L25SP07-03	●	25	75	80	102	158	SP..07T308
25	D420-2500L32SP07-03	●	32	75	80	102	162	SP..07T308
25.5	D420-2550L25SP07-03	●	25	77	82	105	161	SP..07T308
25.5	D420-2550L32SP07-03	●	32	77	82	105	165	SP..07T308
26	D420-2600L25SP07-03	●	25	78	83	105	161	SP..07T308
26	D420-2600L32SP07-03	●	32	78	83	105	165	SP..07T308
26.4	D420-2640L25SP07-03	●	25	79	84	126	184	SP..07T308
26.4	D420-2640L32SP07-03	●	32	79	84	108	168	SP..07T308
26.5	D420-2650L25SP07-03	●	25	80	85	108	164	SP..07T308
26.5	D420-2650L32SP07-03	●	32	80	85	108	168	SP..07T308
27	D420-2700L25SP07-03	●	25	81	86	108	164	SP..07T308
27	D420-2700L32SP07-03	●	32	81	86	128	188	SP..07T308
27.5	D420-2750L25SP07-03	●	25	83	88	132	188	SP..07T308
27.5	D420-2750L32SP07-03	●	32	83	88	112	172	SP..07T308

B



铣削

S形刀片钻头3D S insert Drill 3XD

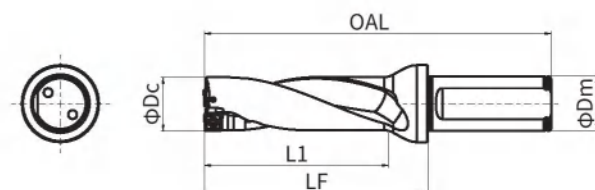
ISO 9766

直径范围: 12.50-50.00mm

Diameter range: 12.50-50.00mm

孔深: 3倍径

Hole depth: 3XDia



圆柄刀具

D

直径 Diameter DC	型 号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
28	D420-2800L25SP09-03	●	25	84	89	112	168	SP..090408
28	D420-2800L32SP09-03	●	32	84	89	112	172	SP..090408
28.5	D420-2850L25SP09-03	●	25	86	91	115	171	SP..090408
28.5	D420-2850L32SP09-03	●	32	86	91	115	171	SP..090408
29	D420-2900L25SP09-03	●	25	87	92	115	171	SP..090408
29	D420-2900L32SP09-03	●	32	87	92	115	175	SP..090408
29.4	D420-2940L32SP09-03	●	32	88	93	121	181	SP..090408
29.4	D420-2940L40SP09-03	●	40	88	93	121	191	SP..090408
29.5	D420-2950L32SP09-03	●	32	89	94	121	181	SP..090408
29.5	D420-2950L40SP09-03	●	40	89	94	121	191	SP..090408
30	D420-3000L32SP09-03	●	32	90	95	121	181	SP..090408
30	D420-3000L40SP09-03	●	40	90	95	121	191	SP..090408
30.5	D420-3050L32SP09-03	●	32	92	97	125	185	SP..090408
30.5	D420-3050L40SP09-03	●	40	92	97	125	195	SP..090408
31	D420-3100L32SP09-03	●	32	93	98	125	185	SP..090408
31	D420-3100L40SP09-03	●	40	93	98	125	195	SP..090408
31.5	D420-3150L32SP09-03	●	32	95	100	128	188	SP..090408
31.5	D420-3150L40SP09-03	●	40	95	100	128	198	SP..090408
32	D420-3200L32SP09-03	●	32	96	101	128	188	SP..090408
32	D420-3200L40SP09-03	●	40	96	101	128	198	SP..090408
32.5	D420-3250L32SP09-03	●	32	98	103	132	192	SP..090408
32.5	D420-3250L40SP09-03	●	40	98	103	132	202	SP..090408
33	D420-3300L32SP09-03	●	32	99	104	132	192	SP..090408
33	D420-3300L40SP09-03	●	40	99	104	132	202	SP..090408
34	D420-3400L32SP11-03	●	32	102	107	135	195	SP..110408
34	D420-3400L40SP11-03	●	40	102	107	135	205	SP..110408
35	D420-3500L32SP11-03	●	32	105	110	139	199	SP..110408
35	D420-3500L40SP11-03	●	40	105	110	139	209	SP..110408
36	D420-3600L32SP11-03	●	32	108	113	143	203	SP..110408
36	D420-3600L40SP11-03	●	40	108	113	143	213	SP..110408
37	D420-3700L32SP11-03	●	32	111	116	147	207	SP..110408
37	D420-3700L40SP11-03	●	40	111	116	147	217	SP..110408
37.5	D420-3750L32SP11-03	●	32	113	118	151	211	SP..110408
37.5	D420-3750L40SP11-03	●	40	113	118	151	221	SP..110408
38	D420-3800L32SP11-03	●	32	114	119	151	211	SP..110408
38	D420-3800L40SP11-03	●	40	114	119	151	221	SP..110408
39	D420-3900L32SP11-03	●	32	117	122	154	214	SP..110408
39	D420-3900L40SP11-03	●	40	117	122	154	224	SP..110408
40	D420-4000L32SP11-03	●	32	120	125	158	218	SP..110408
40	D420-4000L40SP11-03	●	40	120	125	158	228	SP..110408
40.5	D420-4050L40SP11-03	●	40	122	127	162	232	SP..110408
41	D420-4100L40SP11-03	●	40	123	128	162	232	SP..110408
42	D420-4200L40SP14-03	●	40	126	131	165	235	SP..140512
43	D420-4300L40SP14-03	●	40	129	134	169	239	SP..140512
44	D420-4400L40SP14-03	●	40	132	137	172	242	SP..140512
45	D420-4500L40SP14-03	●	40	135	140	177	247	SP..140512
46	D420-4600L40SP14-03	●	40	138	143	181	251	SP..140512
47	D420-4700L40SP14-03	●	40	141	146	184	254	SP..140512
48	D420-4800L40SP14-03	●	40	144	149	188	258	SP..140512
49	D420-4900L40SP14-03	●	40	147	152	191	261	SP..140512
50	D420-5000L40SP14-03	●	40	150	155	195	265	SP..140512

钻削

E

深孔加工

F

旋转刀柄

D08

S形刀片钻头4D S insert Drill 4XD

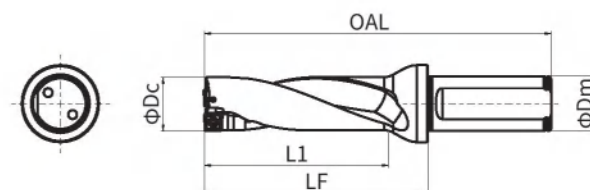
ISO 9766

直径范围: 12.50-50.00mm

Diameter range: 12.50-50.00mm

孔深: 4倍径

Hole depth: 4XDia



直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
12.5	D420-1250L20SP05-04	●	20	50	55	70	120	SP..050204
13	D420-1300L20SP05-04	●	20	52	57	70	120	SP..050204
13.5	D420-1350L20SP05-04	●	20	54	59	74	124	SP..050204
14	D420-1400L20SP05-04	●	20	56	61	74	124	SP..050204
14.5	D420-1450L20SP05-04	●	20	58	63	79	129	SP..050204
15	D420-1500L20SP05-04	●	20	60	65	79	129	SP..050204
15.5	D420-1550L25SP06-04	●	25	62	67	84	140	SP..060204
16	D420-1600L25SP06-04	●	25	64	69	84	140	SP..060204
16.5	D420-1650L25SP06-04	●	25	66	71	88	144	SP..060204
17	D420-1700L25SP06-04	●	25	68	73	88	144	SP..060204
17.5	D420-1750L25SP06-04	●	25	70	75	93	149	SP..060204
18	D420-1800L25SP06-04	●	25	72	77	93	149	SP..060204
18.5	D420-1850L25SP06-04	●	25	74	79	97	153	SP..060204
19	D420-1900L25SP06-04	●	25	76	81	97	153	SP..060204
19.5	D420-1950L25SP06-04	●	25	78	83	103	159	SP..060204
20	D420-2000L25SP06-04	●	25	80	85	103	159	SP..060204
20.5	D420-2050L25SP06-04	●	25	82	87	107	163	SP..060204
21	D420-2100L25SP06-04	●	25	84	89	107	163	SP..060204
21.5	D420-2150L25SP06-04	●	25	86	91	111	167	SP..060204
22	D420-2200L25SP07-04	●	25	88	93	111	167	SP..07T308
22.5	D420-2250L25SP07-04	●	25	90	95	117	173	SP..07T308
22.5	D420-2250L32SP07-04	●	32	90	95	117	177	SP..07T308
23	D420-2300L25SP07-04	●	25	92	97	117	173	SP..07T308
23	D420-2300L32SP07-04	●	32	92	97	117	177	SP..07T308
23.5	D420-2350L25SP07-04	●	25	94	99	122	178	SP..07T308
23.5	D420-2350L32SP07-04	●	32	94	99	122	182	SP..07T308
24	D420-2400L25SP07-04	●	25	96	101	122	178	SP..07T308
24	D420-2400L32SP07-04	●	32	96	101	122	182	SP..07T308
24.5	D420-2450L25SP07-04	●	25	98	103	127	183	SP..07T308
24.5	D420-2450L32SP07-04	●	32	98	103	127	187	SP..07T308
25	D420-2500L25SP07-04	●	25	100	105	127	183	SP..07T308
25	D420-2500L32SP07-04	●	32	100	105	127	187	SP..07T308
25.5	D420-2550L25SP07-04	●	25	102	107	131	187	SP..07T308
25.5	D420-2550L32SP07-04	●	32	102	107	131	191	SP..07T308
26	D420-2600L25SP07-04	●	25	104	109	131	187	SP..07T308
26	D420-2600L32SP07-04	●	32	104	109	131	191	SP..07T308
26.5	D420-2650L25SP07-04	●	25	106	111	135	191	SP..07T308
26.5	D420-2650L32SP07-04	●	32	106	111	135	195	SP..07T308
27	D420-2700L25SP07-04	●	25	108	113	135	191	SP..07T308
27	D420-2700L32SP07-04	●	32	108	113	135	195	SP..07T308
27.5	D420-2750L25SP07-04	●	25	110	115	140	196	SP..07T308
27.5	D420-2750L32SP07-04	●	32	110	115	140	200	SP..07T308
28	D420-2800L25SP09-04	●	25	112	117	140	196	SP..090408
28	D420-2800L32SP09-04	●	32	112	117	140	200	SP..090408

B



铣削

S形刀片钻头4D S insert Drill 4XD

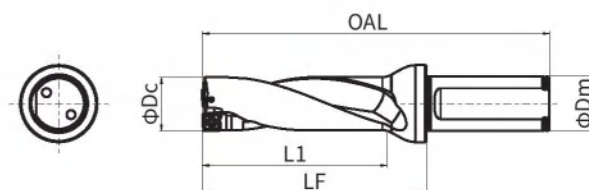
ISO 9766

直径范围: 12.50-50.00mm

Diameter range: 12.50-50.00mm

孔深: 4倍径

Hole depth: 4XDia



圆柄刀具

D

直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
28.5	D420-2850L25SP09-04	●	25	114	119	144	200	SP..090408
28.5	D420-2850L32SP09-04	●	32	114	119	144	204	SP..090408
29	D420-2900L25SP09-04	●	25	116	121	144	200	SP..090408
29	D420-2900L32SP09-04	●	32	116	121	144	204	SP..090408
29.5	D420-2950L32SP09-04	●	32	118	123	151	211	SP..090408
29.5	D420-2950L40SP09-04	●	40	118	123	151	221	SP..090408
30	D420-3000L32SP09-04	●	32	120	125	151	211	SP..090408
30	D420-3000L40SP09-04	●	40	120	125	151	221	SP..090408
30.5	D420-3050L32SP09-04	●	32	122	127	156	216	SP..090408
30.5	D420-3050L40SP09-04	●	40	122	127	156	226	SP..090408
31	D420-3100L32SP09-04	●	32	124	129	156	216	SP..090408
31	D420-3100L40SP09-04	●	40	124	129	156	226	SP..090408
31.5	D420-3150L32SP09-04	●	32	126	131	160	220	SP..090408
31.5	D420-3150L40SP09-04	●	40	126	131	160	230	SP..090408
32	D420-3200L32SP09-04	●	32	128	133	160	220	SP..090408
32	D420-3200L40SP09-04	●	40	128	133	160	230	SP..090408
32.5	D420-3250L32SP09-04	●	32	130	135	165	225	SP..090408
32.5	D420-3250L40SP09-04	●	40	130	135	165	235	SP..090408
33	D420-3300L32SP09-04	●	32	132	137	165	225	SP..090408
33	D420-3300L40SP09-04	●	40	132	137	165	235	SP..090408
34	D420-3400L32SP11-04	●	32	136	141	169	229	SP..110408
34	D420-3400L40SP11-04	●	40	136	141	169	239	SP..110408
35	D420-3500L32SP11-04	●	32	140	145	174	234	SP..110408
35	D420-3500L40SP11-04	●	40	140	145	174	244	SP..110408
36	D420-3600L32SP11-04	●	32	144	149	179	239	SP..110408
36	D420-3600L40SP11-04	●	40	144	149	179	249	SP..110408
37	D420-3700L32SP11-04	●	32	148	153	184	244	SP..110408
37	D420-3700L40SP11-04	●	40	148	153	184	254	SP..110408
38	D420-3800L32SP11-04	●	32	152	157	189	249	SP..110408
38	D420-3800L40SP11-04	●	40	152	157	189	259	SP..110408
39	D420-3900L32SP11-04	●	32	156	161	193	253	SP..110408
39	D420-3900L40SP11-04	●	40	156	161	193	263	SP..110408
40	D420-4000L32SP11-04	●	32	160	165	198	258	SP..110408
40	D420-4000L40SP11-04	●	40	160	165	198	268	SP..110408
41	D420-4100L40SP11-04	●	40	164	169	203	273	SP..110408
42	D420-4200L40SP14-04	●	40	168	173	207	277	SP..140512
43	D420-4300L40SP14-04	●	40	172	177	212	282	SP..140512
44	D420-4400L40SP14-04	●	40	176	181	216	286	SP..140512
45	D420-4500L40SP14-04	●	40	180	185	222	292	SP..140512
46	D420-4600L40SP14-04	●	40	184	189	227	297	SP..140512
47	D420-4700L40SP14-04	●	40	188	193	231	301	SP..140512
48	D420-4800L40SP14-04	●	40	192	197	236	306	SP..140512
49	D420-4900L40SP14-04	●	40	196	201	240	310	SP..140512
50	D420-5000L40SP14-04	●	40	200	205	245	315	SP..140512

钻削

E

深孔加工

F

旋转刀柄

S形刀片钻头5D S insert Drill 5XD

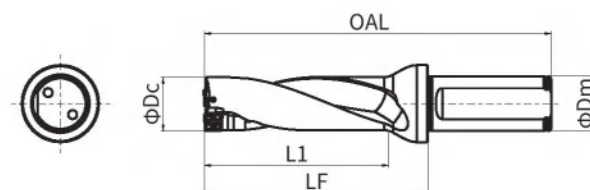
ISO 9766

直径范围: 12.50-50.00mm

Diameter range: 12.50-50.00mm

孔深: 5倍径

Hole depth: 5XDia



直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
12.5	D420-1250L20SP05-05	●	20	63	68	83	133	SP..050204
13	D420-1300L20SP05-05	●	20	65	70	83	133	SP..050204
13.5	D420-1350L20SP05-05	●	20	68	73	88	138	SP..050204
14	D420-1400L20SP05-05	●	20	70	75	88	138	SP..050204
14.5	D420-1450L20SP05-05	●	20	73	78	94	144	SP..050204
15	D420-1500L20SP05-05	●	20	75	80	94	144	SP..050204
15.5	D420-1550L25SP06-05	●	25	78	83	100	156	SP..060204
16	D420-1600L25SP06-05	●	25	80	85	100	156	SP..060204
16.5	D420-1650L25SP06-05	●	25	83	88	105	161	SP..060204
17	D420-1700L25SP06-05	●	25	85	90	105	161	SP..060204
17.5	D420-1750L25SP06-05	●	25	88	93	111	167	SP..060204
18	D420-1800L25SP06-05	●	25	90	95	111	167	SP..060204
18.5	D420-1850L25SP06-05	●	25	93	98	116	172	SP..060204
19	D420-1900L25SP06-05	●	25	95	100	116	172	SP..060204
19.5	D420-1950L25SP06-05	●	25	98	103	123	179	SP..060204
20	D420-2000L25SP06-05	●	25	100	105	123	179	SP..060204
20.5	D420-2050L25SP06-05	●	25	103	108	128	184	SP..060204
21	D420-2100L25SP06-05	●	25	105	110	128	184	SP..060204
21.5	D420-2150L25SP06-05	●	25	108	113	133	189	SP..060204
22	D420-2200L25SP07-05	●	25	110	115	133	189	SP..07T308
22.5	D420-2250L32SP07-05	●	32	113	118	140	200	SP..07T308
23	D420-2300L32SP07-05	●	32	115	120	140	200	SP..07T308
23.5	D420-2350L32SP07-05	●	32	118	123	146	206	SP..07T308
24	D420-2400L32SP07-05	●	32	120	125	146	206	SP..07T308
24.5	D420-2450L32SP07-05	●	32	123	128	152	212	SP..07T308
25	D420-2500L32SP07-05	●	32	125	130	152	212	SP..07T308
25.5	D420-2550L32SP07-05	●	32	128	133	157	217	SP..07T308
26	D420-2600L32SP07-05	●	32	130	135	157	217	SP..07T308
26.5	D420-2650L32SP07-05	●	32	133	138	162	222	SP..07T308
27	D420-2700L32SP07-05	●	32	135	140	162	222	SP..07T308
27.5	D420-2750L32SP07-05	●	32	138	143	168	228	SP..07T308
28	D420-2800L32SP09-05	●	32	140	145	168	228	SP..090408
28.5	D420-2850L32SP09-05	●	32	143	148	173	233	SP..090408
29	D420-2900L32SP09-05	●	32	145	150	173	233	SP..090408
29.5	D420-2950L32SP09-05	●	32	148	153	181	241	SP..090408
30	D420-3000L32SP09-05	●	32	150	155	181	241	SP..090408
30	D420-3000L40SP09-05	●	40	150	155	181	251	SP..090408
31	D420-3100L32SP09-05	●	32	155	160	187	247	SP..090408
31	D420-3100L40SP09-05	●	40	155	160	187	257	SP..090408
32	D420-3200L32SP09-05	●	32	160	165	192	252	SP..090408
32	D420-3200L40SP09-05	●	40	160	165	192	262	SP..090408
33	D420-3300L32SP09-05	●	32	165	170	198	258	SP..090408
33	D420-3300L40SP09-05	●	40	165	170	198	268	SP..090408

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

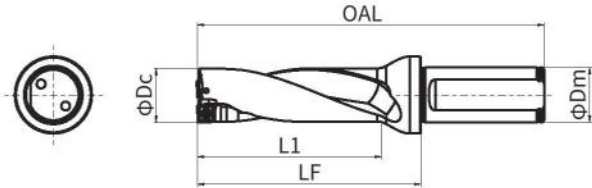
F

旋转刀柄



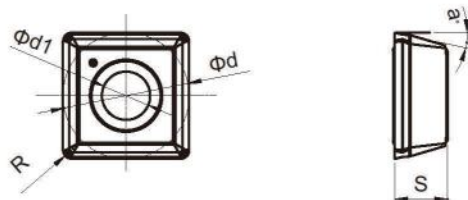
S形刀片钻头5D
S insert Drill 5XD

ISO 9766
直径范围: 12.50-50.00mm
Diameter range: 12.50-50.00mm
孔深: 5倍径
Hole depth: 5XDia



直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
34	D420-3400L32SP11-05	●	32	170	175	203	263	SP..110408
34	D420-3400L40SP11-05	●	40	170	175	203	273	SP..110408
35	D420-3500L32SP11-05	●	32	175	180	209	269	SP..110408
35	D420-3500L40SP11-05	●	40	175	180	209	279	SP..110408
36	D420-3600L32SP11-05	●	32	180	185	215	275	SP..110408
36	D420-3600L40SP11-05	●	40	180	185	215	285	SP..110408
37	D420-3700L32SP11-05	●	32	185	190	221	281	SP..110408
37	D420-3700L40SP11-05	●	40	185	190	221	291	SP..110408
38	D420-3800L32SP11-05	●	32	190	195	227	287	SP..110408
38	D420-3800L40SP11-05	●	40	190	195	227	297	SP..110408
39	D420-3900L32SP11-05	●	32	195	200	232	292	SP..110408
39	D420-3900L40SP11-05	●	40	195	200	232	302	SP..110408
40	D420-4000L32SP11-05	●	32	200	205	238	298	SP..110408
40	D420-4000L40SP11-05	●	40	200	205	238	308	SP..110408
41	D420-4100L40SP11-05	●	40	205	210	244	314	SP..110408
42	D420-4200L40SP14-05	●	40	210	215	249	319	SP..140512
43	D420-4300L40SP14-05	●	40	215	220	255	325	SP..140512
44	D420-4400L40SP14-05	●	40	220	225	260	330	SP..140512
45	D420-4500L40SP14-05	●	40	225	230	267	337	SP..140512
46	D420-4600L40SP14-05	●	40	230	235	273	343	SP..140512
47	D420-4700L40SP14-05	●	40	235	240	278	348	SP..140512
48	D420-4800L40SP14-05	●	40	240	245	284	354	SP..140512
49	D420-4900L40SP14-05	●	40	245	250	289	359	SP..140512
50	D420-5000L40SP14-05	●	40	250	255	295	365	SP..140512

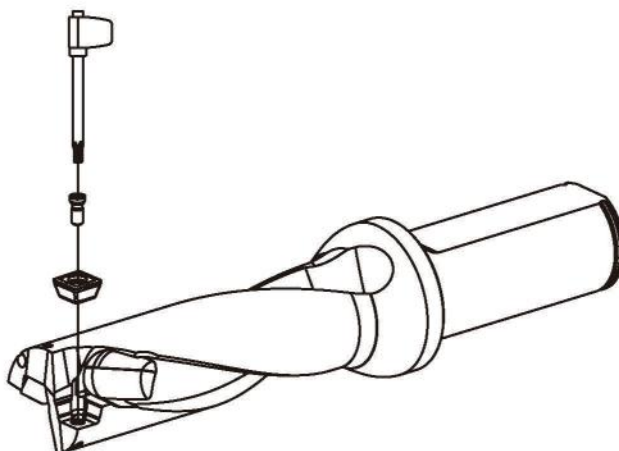
U 钻刀片-SP U drill



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade				
		d	s	d1	a	R	UD25	UD25	UD25	UD25	UD25
	SPMG050204-ZV	5.56	2.38	2.5	11	0.4	★	★	★	★	★
	SPMG060204-ZV	6.35	2.38	2.8	11	0.4	★	★	★	★	★
	SPMG07T308-ZV	7.94	3.97	2.8	11	0.8	★	★	★	★	★
	SPMG090408-ZV	9.8	4.3	4.1	11	0.8	★	★	★	★	★
	SPMG110408-ZV	11.5	4.76	4.4	11	0.8	★	★	★	★	★
	SPMG140512-ZV	14.3	5.56	5.5	11	1.2	★	★	★	★	★

UD25, 强度高耐磨性好的PVD涂层牌号

SP浅孔钻-1.2



刀片尺寸 Insert size	刀具直径 Diameter	刀片夹紧螺钉 Clamping screw	刀片螺钉扳手 Screw Wrench
SP..0502	12.5-15	S01-020050	Q01-106
SP..0602	15.5-21.5	S01-022065	Q01-107
SP..07T3	22-27	S01-025073	Q01-108
SP..0904	28-33	S01-035081	S01-115
SP..1104	34-41	S01-040110	S01-115
SP..1405	42-50	S01-050120	S01-120

B



铣削

浅孔钻 SO系列 Short hole drill SO series
通用浅孔钻 General purpose short hole drill

C

圆柄刀具

多用途性和经济性Versatility and economy

- 采用先进的平衡切入技术，可加工出色的孔质量
- Banlanced cutting force design technology,Perfect quality of hole surface
- 连续加工并铁屑为小碎屑，易于排出
- Continuously machining,make small chip and easy to evacuat
- 相同规格的中心刀片和周边刀片
- The same size of central and peripheral inserts
- 刀片4个切削刃，孔底相对较平整
- 4 edges insert, better bottom of hole
- 适用于钢件、不锈钢、耐热合金、铸铁等各种材料的加工
- Suitable for machining steel,stainless steel,heat resitant alloy,cast iron materials
- 可应用于各行业，如汽车零部件、能源、模具、通用机械等领域
- Be used in all areas, like automotive components, energy, die and mould,general engineering industries

D

钻削

刀片槽形Insert geometry

- ZP 槽形：通用槽型设计，可用于钢，不锈钢，铸铁的加工
 - ZP geometry: General purpose geometry, suitable for Steel ,stanless steel and Cast applicatioin etc.
- 阶梯式刃口设计可减小切削阻力提高加工稳定性提高刀具寿命
Step cutting edge design can reduce cutting force and stability then highly improving tool life

E

深孔加工



F

旋转刀柄

D14

SO形刀片钻头2D SO insert Drill 2XD

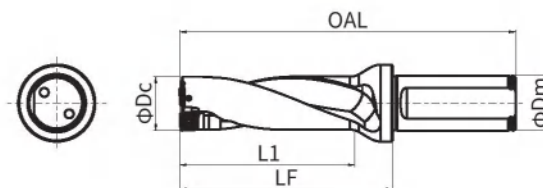
ISO 9766

直径范围: 12.00-50.00mm

Diameter range: 12.00-50.00mm

孔深: 2倍径

Hole depth: 2XDia



直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm) Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
14	D430-1400L20SO05-02	○	20	28	33	46	96	SO..050204
14.5	D430-1450L20SO05-02	○	20	29	34	49	99	SO..050204
15	D430-1500L20SO05-02	○	20	30	35	49	99	SO..050204
15.5	D430-1550L20SO05-02	○	20	31	36	52	102	SO..050204
16	D430-1600L20SO05-02	○	20	32	37	52	102	SO..050204
16.5	D430-1650L25SO06-02	○	25	33	38	54	110	SO..060204
17	D430-1700L25SO06-02	○	25	34	39	54	110	SO..060204
17.5	D430-1750L25SO06-02	○	25	35	40	57	113	SO..060204
18	D430-1800L25SO06-02	○	25	36	41	57	113	SO..060204
18.5	D430-1850L25SO06-02	○	25	37	42	59	115	SO..060204
19	D430-1900L25SO06-02	○	25	38	43	59	115	SO..060204
19.5	D430-1950L25SO07-02	○	25	39	44	63	119	SO..070306
20	D430-2000L25SO07-02	○	25	40	45	63	119	SO..070306
20.5	D430-2050L25SO07-02	○	25	41	46	65	121	SO..070306
21	D430-2100L25SO07-02	○	25	42	47	65	121	SO..070306
21.5	D430-2150L25SO07-02	○	25	43	48	67	123	SO..070306
22	D430-2200L25SO07-02	○	25	44	49	67	123	SO..070306
22.5	D430-2250L25SO08-02	○	25	45	50	68	124	SO..08T306
23	D430-2300L25SO08-02	○	25	46	51	68	124	SO..08T306
23	D430-2300L32SO08-02	○	32	46	51	68	128	SO..08T306
23.5	D430-2350L25SO08-02	○	25	47	52	70	126	SO..08T306
23.5	D430-2350L32SO08-02	○	32	47	52	70	130	SO..08T306
24	D430-2400L25SO08-02	○	25	48	53	70	126	SO..08T306
24	D430-2400L32SO08-02	○	32	48	53	70	130	SO..08T306
24.5	D430-2450L25SO08-02	○	25	49	54	72	128	SO..08T306
24.5	D430-2450L32SO08-02	○	32	49	54	72	132	SO..08T306
25	D430-2500L25SO08-02	○	25	50	55	72	128	SO..08T306
25	D430-2500L32SO08-02	○	32	50	55	72	132	SO..08T306
25.5	D430-2550L25SO08-02	○	25	51	56	73	129	SO..08T306
25.5	D430-2550L32SO08-02	○	32	51	56	73	133	SO..08T306
26	D430-2600L25SO08-02	○	25	52	57	73	129	SO..08T306
26	D430-2600L32SO08-02	○	32	52	57	73	133	SO..08T306
26.5	D430-2650L32SO09-02	○	32	53	58	77	137	SO..09T308
27	D430-2700L25SO09-02	○	25	54	59	77	133	SO..09T308
27	D430-2700L32SO09-02	○	32	54	59	77	137	SO..09T308
27.5	D430-2750L32SO09-02	○	32	55	60	79	139	SO..09T308
28	D430-2800L25SO09-02	○	25	56	61	79	135	SO..09T308
28	D430-2800L32SO09-02	○	32	56	61	79	139	SO..09T308
28.5	D430-2850L32SO09-02	○	32	57	62	81	141	SO..09T308
29	D430-2900L25SO09-02	○	25	58	63	81	137	SO..09T308
29	D430-2900L32SO09-02	○	32	58	63	81	141	SO..09T308
29.5	D430-2950L32SO09-02	○	32	59	64	83	143	SO..09T308
30	D430-3000L32SO09-02	○	32	60	65	83	143	SO..09T308
30.5	D430-3050L32SO09-02	○	32	61	66	85	145	SO..09T308
31	D430-3100L32SO09-02	○	32	62	67	85	145	SO..09T308

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

B

Pulcut
普努克

铣削

SO形刀片钻头2D SO insert Drill 2XD

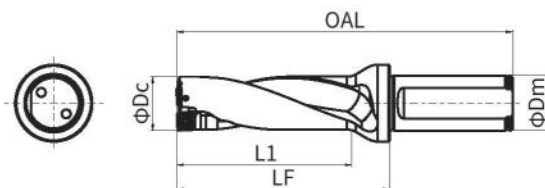
ISO 9766

直径范围: 12.00-50.00mm

Diameter range: 12.00-50.00mm

孔深: 2倍径

Hole depth: 2XDia



圆柄刀具

D

直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm) Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
32	D430-3200L32SO11-02	○	32	64	69	87	147	SO..11T308
32	D430-3200L40SO11-02	○	40	64	69	87	157	SO..11T308
33	D430-3300L32SO11-02	○	32	66	71	89	149	SO..11T308
33	D430-3300L40SO11-02	○	40	66	71	89	159	SO..11T308
34	D430-3400L32SO11-02	○	32	68	73	91	151	SO..11T308
34	D430-3400L40SO11-02	○	40	68	73	91	161	SO..11T308
35	D430-3500L32SO11-02	○	32	70	75	93	153	SO..11T308
35	D430-3500L40SO11-02	○	40	70	75	93	163	SO..11T308
36	D430-3600L32SO11-02	○	32	72	77	95	155	SO..11T308
36	D430-3600L40SO11-02	○	40	72	77	95	165	SO..11T308
37	D430-3700L32SO13-02	○	32	74	79	102	162	SO..130408
37	D430-3700L40SO13-02	○	40	74	79	102	172	SO..130408
38	D430-3800L32SO13-02	○	32	76	81	104	164	SO..130408
38	D430-3800L40SO13-02	○	40	76	81	104	174	SO..130408
39	D430-3900L32SO13-02	○	32	78	83	106	166	SO..130408
39	D430-3900L40SO13-02	○	40	78	83	106	176	SO..130408
40	D430-4000L32SO13-02	○	32	80	85	108	168	SO..130408
40	D430-4000L40SO13-02	○	40	80	85	108	178	SO..130408
41	D430-4100L40SO13-02	○	40	82	87	110	180	SO..130408
42	D430-4200L40SO13-02	○	40	84	89	112	182	SO..130408
43	D430-4300L40SO13-02	○	40	86	91	114	184	SO..130408
44	D430-4400L40SO15-02	○	40	88	93	123	193	SO..150510
45	D430-4500L40SO15-02	○	40	90	95	125	195	SO..150510
46	D430-4600L40SO15-02	○	40	92	97	127	197	SO..150510
47	D430-4700L40SO15-02	○	40	94	99	129	199	SO..150510
48	D430-4800L40SO15-02	○	40	96	101	131	201	SO..150510
49	D430-4900L40SO15-02	○	40	98	103	133	203	SO..150510
50	D430-5000L40SO15-02	○	40	100	105	135	205	SO..150510

钻削

E

深孔加工

F

旋转刀柄

SO形刀片钻头3D SO insert Drill 3XD

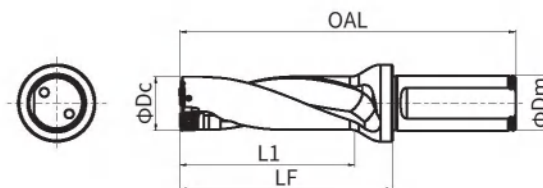
ISO 9766

直径范围: 12.00-50.00mm

Diameter range: 12.00-50.00mm

孔深: 3倍径

Hole depth: 3XDia



直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
14	D430-1400L20SO05-03	○	20	42	47	60	110	SO..050204
14.5	D430-1450L20SO05-03	○	20	44	49	64	114	SO..050204
15	D430-1500L20SO05-03	○	20	45	50	64	114	SO..050204
15.5	D430-1550L20SO05-03	○	20	47	52	68	118	SO..050204
16	D430-1600L20SO05-03	○	20	48	53	68	118	SO..050204
16.5	D430-1650L25SO06-03	○	25	50	55	71	127	SO..060204
16.7	D430-1670L25SO06-03	○	25	50	55	71	127	SO..060204
17	D430-1700L25SO06-03	○	25	51	56	71	127	SO..060204
17.5	D430-1750L25SO06-03	○	25	53	58	75	131	SO..060204
18	D430-1800L25SO06-03	○	25	54	59	75	131	SO..060204
18.5	D430-1850L25SO06-03	○	25	56	61	78	134	SO..060204
19	D430-1900L25SO06-03	○	25	57	62	78	134	SO..060204
19.5	D430-1950L25SO07-03	○	25	59	64	83	139	SO..070306
20	D430-2000L25SO07-03	○	25	60	65	83	139	SO..070306
20.5	D430-2050L25SO07-03	○	25	62	67	86	142	SO..070306
21	D430-2100L25SO07-03	○	25	63	68	86	142	SO..070306
21.5	D430-2150L25SO07-03	○	25	65	70	89	145	SO..070306
22	D430-2200L25SO07-03	○	25	66	71	89	145	SO..070306
22.2	D430-2220L25SO07-03	○	25	67	72	89	145	SO..070306
22.5	D430-2250L25SO08-03	○	25	68	73	91	147	SO..08T306
23	D430-2300L25SO08-03	○	25	69	74	91	147	SO..08T306
23	D430-2300L32SO08-03	○	32	69	74	91	151	SO..08T306
23.5	D430-2350L25SO08-03	○	25	71	76	94	150	SO..08T306
23.5	D430-2350L32SO08-03	○	32	71	76	94	154	SO..08T306
24	D430-2400L25SO08-03	○	25	72	77	94	150	SO..08T306
24	D430-2400L32SO08-03	○	32	72	77	94	154	SO..08T306
24.5	D430-2450L25SO08-03	○	25	74	79	97	153	SO..08T306
24.5	D430-2450L32SO08-03	○	32	74	79	97	157	SO..08T306
25	D430-2500L25SO08-03	○	25	75	80	97	153	SO..08T306
25	D430-2500L32SO08-03	○	32	75	80	97	157	SO..08T306
25.4	D430-2540L25SO08-03	○	25	76	81	97	153	SO..08T306
25.5	D430-2550L25SO08-03	○	25	77	82	99	155	SO..08T306
25.5	D430-2550L32SO08-03	○	32	77	82	99	159	SO..08T306
26	D430-2600L25SO08-03	○	25	78	83	99	155	SO..08T306
26	D430-2600L32SO08-03	○	32	78	83	99	159	SO..08T306
26.5	D430-2650L25SO09-03	○	25	80	85	104	160	SO..09T308
26.5	D430-2650L32SO09-03	○	32	80	85	104	164	SO..09T308
27	D430-2700L25SO09-03	○	25	81	86	104	160	SO..09T308
27	D430-2700L32SO09-03	○	32	81	86	104	164	SO..09T308
27.5	D430-2750L25SO09-03	○	25	83	88	107	163	SO..09T308
27.5	D430-2750L32SO09-03	○	32	83	88	107	167	SO..09T308
28	D430-2800L25SO09-03	○	25	84	89	107	163	SO..09T308
28	D430-2800L32SO09-03	○	32	84	89	107	167	SO..09T308
28.5	D430-2850L25SO09-03	○	25	86	91	110	166	SO..09T308
28.5	D430-2850L32SO09-03	○	32	86	91	110	170	SO..09T308

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

B

铣削

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圆柄刀具

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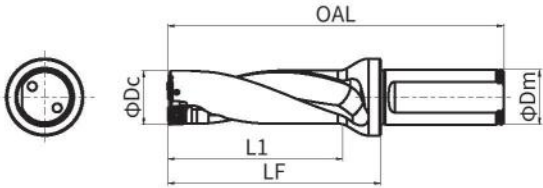
F

旋转刀柄



SO形刀片钻头3D
SO insert Drill 3XD

ISO 9766
直径范围: 12.00-50.00mm
Diameter range: 12.00-50.00mm
孔深: 3倍径
Hole depth: 3XDia



直径 Diameter	型号	库存	尺寸(mm)Dimension					适用刀片
			Dm	LU	L1	LF	OAL	
DC	Type	Stock Item						Available inserts
29	D430-2900L25SO09-03	○	25	87	92	110	166	SO..09T308
29	D430-2900L32SO09-03	○	32	87	92	110	170	SO..09T308
29.5	D430-2950L32SO09-03	○	32	89	94	113	173	SO..09T308
30	D430-3000L32SO09-03	○	32	90	95	113	173	SO..09T308
30.5	D430-3050L32SO09-03	○	32	92	97	116	176	SO..09T308
31	D430-3100L32SO09-03	○	32	93	98	116	176	SO..09T308
32	D430-3200L32SO11-03	○	32	96	101	119	179	SO..11T308
32	D430-3200L40SO11-03	○	40	96	101	119	189	SO..11T308
33	D430-3300L32SO11-03	○	32	99	104	122	182	SO..11T308
33	D430-3300L40SO11-03	○	40	99	104	122	192	SO..11T308
34	D430-3400L32SO11-03	○	32	102	107	125	185	SO..11T308
34	D430-3400L40SO11-03	○	40	102	107	125	195	SO..11T308
35	D430-3500L32SO11-03	○	32	105	110	128	188	SO..11T308
35	D430-3500L40SO11-03	○	40	105	110	128	198	SO..11T308
36	D430-3600L32SO11-03	○	32	108	113	131	191	SO..11T308
36	D430-3600L40SO11-03	○	40	108	113	131	201	SO..11T308
37	D430-3700L32SO13-03	○	32	111	116	139	199	SO..130408
37	D430-3700L40SO13-03	○	40	111	116	139	209	SO..130408
38	D430-3800L32SO13-03	○	32	114	119	142	202	SO..130408
38	D430-3800L40SO13-03	○	40	114	119	142	212	SO..130408
39	D430-3900L32SO13-03	○	32	117	122	145	205	SO..130408
39	D430-3900L40SO13-03	○	40	117	122	145	215	SO..130408
40	D430-4000L32SO13-03	○	32	120	125	148	208	SO..130408
40	D430-4000L40SO13-03	○	40	120	125	148	218	SO..130408
41	D430-4100L40SO13-03	○	40	123	128	151	221	SO..130408
42	D430-4200L40SO13-03	○	40	126	131	154	224	SO..130408
43	D430-4300L40SO13-03	○	40	129	134	157	227	SO..130408
44	D430-4400L40SO15-03	○	40	132	137	167	237	SO..150510
45	D430-4500L40SO15-03	○	40	135	140	170	240	SO..150510
46	D430-4600L40SO15-03	○	40	138	143	173	243	SO..150510
47	D430-4700L40SO15-03	○	40	141	146	176	246	SO..150510
48	D430-4800L40SO15-03	○	40	144	149	179	249	SO..150510
49	D430-4900L40SO15-03	○	40	147	152	182	252	SO..150510
50	D430-5000L40SO15-03	○	40	150	155	185	255	SO..150510

SO形刀片钻头4D SO insert Drill 4XD

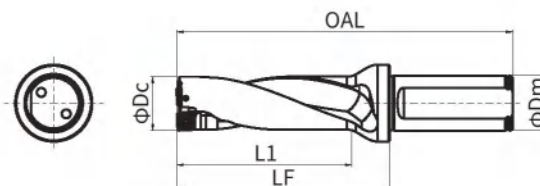
ISO 9766

直径范围: 12.00-50.00mm

Diameter range: 12.00-50.00mm

孔深: 4倍径

Hole depth: 4XDia



直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
14	D430-1400L20SO05-04	○	20	56	61	74	124	SO..050204
14.5	D430-1450L25SO05-04	○	25	58	63	79	129	SO..050204
15	D430-1500L25SO05-04	○	25	60	65	79	129	SO..050204
15.5	D430-1550L25SO05-04	○	25	62	67	84	134	SO..050204
16	D430-1600L25SO05-04	○	25	64	69	84	134	SO..050204
16.5	D430-1650L25SO06-04	○	25	66	71	88	144	SO..060204
17	D430-1700L25SO06-04	○	25	68	73	88	144	SO..060204
17.5	D430-1750L25SO06-04	○	25	70	75	93	149	SO..060204
18	D430-1800L25SO06-04	○	25	72	77	93	149	SO..060204
18.5	D430-1850L25SO06-04	○	25	74	79	97	153	SO..060204
19	D430-1900L25SO06-04	○	25	76	81	97	153	SO..060204
19.5	D430-1950L25SO07-04	○	25	78	83	103	159	SO..070306
20	D430-2000L25SO07-04	○	25	80	85	103	159	SO..070306
20.5	D430-2050L25SO07-04	○	25	82	87	107	163	SO..070306
21	D430-2100L25SO07-04	○	25	84	89	107	163	SO..070306
21.5	D430-2150L32SO07-04	○	32	86	91	111	167	SO..070306
22	D430-2200L25SO07-04	○	25	88	93	111	167	SO..070306
22.5	D430-2250L32SO08-04	○	32	90	95	114	170	SO..08T306
23	D430-2300L25SO08-04	○	25	92	97	114	170	SO..08T306
23	D430-2300L32SO08-04	○	32	92	97	114	174	SO..08T306
23.5	D430-2350L25SO08-04	○	25	94	99	118	174	SO..08T306
23.5	D430-2350L32SO08-04	○	32	94	99	118	178	SO..08T306
24	D430-2400L25SO08-04	○	25	96	101	118	174	SO..08T306
24	D430-2400L32SO08-04	○	32	96	101	118	178	SO..08T306
24.5	D430-2450L25SO08-04	○	25	98	103	122	178	SO..08T306
24.5	D430-2450L32SO08-04	○	25	98	103	122	182	SO..08T306
25	D430-2500L32SO08-04	○	32	100	105	122	178	SO..08T306
25	D430-2500L32SO08-04	○	32	100	105	122	182	SO..08T306
25.4	D430-2540L25SO08-04	○	25	102	107	122	178	SO..08T306
25.5	D430-2550L25SO08-04	○	25	102	107	125	181	SO..08T306
25.5	D430-2550L32SO08-04	○	32	102	107	125	185	SO..08T306
26	D430-2600L25SO08-04	○	25	104	109	125	181	SO..08T306
26	D430-2600L32SO08-04	○	32	104	109	125	185	SO..08T306
26.5	D430-2650L25SO09-04	○	25	106	111	131	187	SO..09T308
26.5	D430-2650L32SO09-04	○	32	106	111	131	191	SO..09T308
27	D430-2700L25SO09-04	○	25	108	113	131	187	SO..09T308
27	D430-2700L32SO09-04	○	32	108	113	131	191	SO..09T308
27.5	D430-2750L25SO09-04	○	25	110	115	135	191	SO..09T308
27.5	D430-2750L32SO09-04	○	32	110	115	135	195	SO..09T308
28	D430-2800L25SO09-04	○	25	112	117	135	191	SO..09T308
28	D430-2800L32SO09-04	○	32	112	117	135	195	SO..09T308
28.5	D430-2850L25SO09-04	○	25	114	119	139	195	SO..09T308
28.5	D430-2850L32SO09-04	○	32	114	119	139	199	SO..09T308
28.6	D430-2860L32SO09-04	○	32	114	119	139	199	SO..09T308
29	D430-2900L25SO09-04	○	25	116	121	139	195	SO..09T308
29	D430-2900L32SO09-04	○	32	116	121	139	199	SO..09T308
29.5	D430-2950L32SO09-04	○	32	118	123	143	203	SO..09T308
30	D430-3000L32SO09-04	○	32	120	125	143	203	SO..09T308
30.5	D430-3050L32SO09-04	○	32	122	127	147	207	SO..09T308
31	D430-3100L32SO09-04	○	32	124	129	147	207	SO..09T308

D19

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

B



铣削

SO形刀片钻头4D SO insert Drill 4XD

C

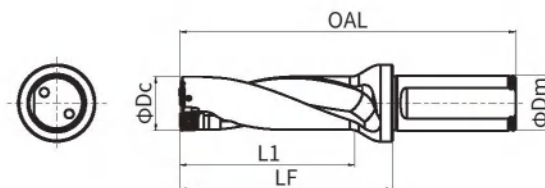
ISO 9766

直径范围: 12.00-50.00mm

Diameter range: 12.00-50.00mm

孔深: 4倍径

Hole depth: 4XDia



圆柄刀具

D

直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
31.8	D430-3180L32SO11-04	○	32	127	132	151	211	SO..11T308
32	D430-3200L32SO11-04	○	32	128	133	151	211	SO..11T308
32	D430-3200L40SO11-04	○	40	128	133	151	221	SO..11T308
33	D430-3300L32SO11-04	○	32	132	137	155	215	SO..11T308
33	D430-3300L40SO11-04	○	40	132	137	155	225	SO..11T308
34	D430-3400L32SO11-04	○	32	136	141	159	219	SO..11T308
34	D430-3400L40SO11-04	○	40	136	141	159	229	SO..11T308
34.9	D430-3490L40SO11-04	○	40	140	145	163	233	SO..11T308
35	D430-3500L32SO11-04	○	32	140	145	163	223	SO..11T308
35	D430-3500L40SO11-04	○	40	140	145	163	233	SO..11T308
36	D430-3600L32SO11-04	○	32	144	149	167	227	SO..11T308
36	D430-3600L40SO11-04	○	40	144	149	167	237	SO..11T308
37	D430-3700L32SO13-04	○	32	148	153	176	236	SO..130408
37	D430-3700L40SO13-04	○	40	148	153	176	246	SO..130408
37.1	D430-3710L40SO13-04	○	40	148	153	176	246	SO..130408
38	D430-3800L32SO13-04	○	32	152	157	180	240	SO..130408
38	D430-3800L40SO13-04	○	40	152	157	180	250	SO..130408
38.1	D430-3810L40SO13-04	○	40	152	157	180	250	SO..130408
39	D430-3900L32SO13-04	○	32	156	161	184	244	SO..130408
39	D430-3900L40SO13-04	○	40	156	161	184	254	SO..130408
40	D430-4000L32SO13-04	○	32	160	165	188	248	SO..130408
40	D430-4000L40SO13-04	○	40	160	165	188	258	SO..130408
41	D430-4100L40SO13-04	○	40	164	169	192	262	SO..130408
41.3	D430-4130L40SO13-04	○	40	165	170	192	262	SO..130408
42	D430-4200L40SO13-04	○	40	168	173	196	266	SO..130408
42.9	D430-4290L40SO13-04	○	40	172	177	200	270	SO..130408
43	D430-4300L40SO13-04	○	40	172	177	200	270	SO..130408
44	D430-4400L40SO15-04	○	40	176	181	211	281	SO..150510
44.5	D430-4450L40SO15-04	○	40	178	183	215	285	SO..150510
45	D431-4500L40SO15-05	○	40	180	185	215	285	SO..150510
46	D432-4600L40SO15-06	○	40	184	189	219	289	SO..150510
47	D433-4700L40SO15-07	○	40	188	193	223	293	SO..150510
47.6	D434-4760L40SO15-08	○	40	190	195	227	297	SO..150510
48	D435-4800L40SO15-09	○	40	192	197	227	297	SO..150510
49	D436-4900L40SO15-10	○	40	196	201	231	301	SO..150510
50	D437-5000L40SO15-11	○	40	200	205	235	305	SO..150510
50.8	D438-5080L40SO15-12	○	40	203	208	239	309	SO..150510

钻削

E

深孔加工

F

旋转刀柄

SO形刀片钻头5D SO insert Drill 5XD

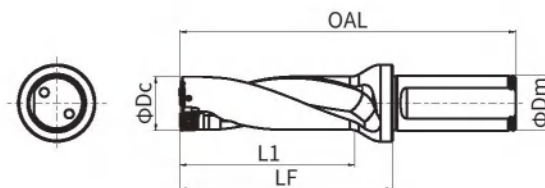
ISO 9766

直径范围: 12.00-50.00mm

Diameter range: 12.00-50.00mm

孔深: 5倍径

Hole depth: 5XDia



直径 Diameter DC	型号 Type	库存 Stock Item	尺寸(mm)Dimension					适用刀片 Available inserts
			Dm	LU	L1	LF	OAL	
14	D430-1400L20SO05-05	○	20	56	61	74	124	SO..050204
14.5	D430-1450L20SO05-05	○	25	58	63	79	129	SO..050204
15	D430-1500L20SO05-05	○	25	60	65	79	129	SO..050204
15.5	D430-1550L20SO05-05	○	25	62	67	84	134	SO..050204
16	D430-1600L20SO05-05	○	25	64	69	84	134	SO..050204
16.5	D430-1650L25SO06-05	○	25	66	71	88	144	SO..060204
17	D430-1700L25SO06-05	○	25	68	73	88	144	SO..060204
17.5	D430-1750L25SO06-05	○	25	70	75	93	149	SO..060204
18	D430-1800L25SO06-05	○	25	72	77	93	149	SO..060204
18.5	D430-1850L25SO06-05	○	25	74	79	97	153	SO..060204
19	D430-1900L25SO06-05	○	25	76	81	97	153	SO..060204
19.5	D430-1950L25SO07-05	○	25	78	83	103	159	SO..070306
20	D430-2000L25SO07-05	○	25	80	85	103	159	SO..070306
20.5	D430-2050L25SO07-05	○	25	82	87	107	163	SO..070306
21	D430-2100L25SO07-05	○	25	84	89	107	163	SO..070306
21.5	D430-2150L25SO07-05	○	32	86	91	111	167	SO..070306
22	D430-2200L25SO07-05	○	25	88	93	111	167	SO..070306
22.2	D430-2220L25SO07-05	○	32	90	95	114	170	SO..070306
22.5	D430-2250L25SO08-05	○	25	92	97	114	170	SO..08T306
23	D430-2300L25SO08-05	○	32	92	97	114	174	SO..08T306
23	D430-2300L32SO08-05	○	25	94	99	118	174	SO..08T306
23.5	D430-2350L25SO08-05	○	32	94	99	118	178	SO..08T306
23.5	D430-2350L32SO08-05	○	25	96	101	118	174	SO..08T306
24	D430-2400L25SO08-05	○	32	96	101	118	178	SO..08T306
24	D430-2400L32SO08-05	○	25	98	103	122	178	SO..08T306
24.5	D430-2450L25SO08-05	○	25	98	103	122	182	SO..08T306
24.5	D430-2450L32SO08-05	○	32	100	105	122	178	SO..08T306
25	D430-2500L25SO08-05	○	32	100	105	122	182	SO..08T306
25	D430-2500L32SO08-05	○	25	102	107	122	178	SO..08T306
25.5	D430-2550L25SO08-05	○	25	102	107	125	181	SO..08T306
25.5	D430-2550L32SO08-05	○	32	102	107	125	185	SO..08T306
26	D430-2600L25SO08-05	○	25	104	109	125	181	SO..08T306
26	D430-2600L32SO08-05	○	32	104	109	125	185	SO..08T306
26.5	D430-2650L32SO09-05	○	25	106	111	131	187	SO..09T308
27	D430-2700L25SO09-05	○	32	106	111	131	191	SO..09T308
27	D430-2700L32SO09-05	○	25	108	113	131	187	SO..09T308
27.5	D430-2750L32SO09-05	○	32	108	113	131	191	SO..09T308
28	D430-2800L25SO09-05	○	25	110	115	135	191	SO..09T308
28	D430-2800L32SO09-05	○	32	110	115	135	195	SO..09T308
28.2	D430-2820L32SO09-05	○	25	112	117	135	191	SO..09T308
28.5	D430-2850L32SO09-05	○	32	112	117	135	195	SO..09T308

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

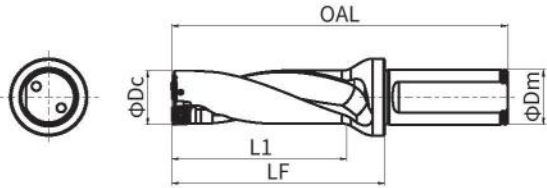
F

旋转刀柄



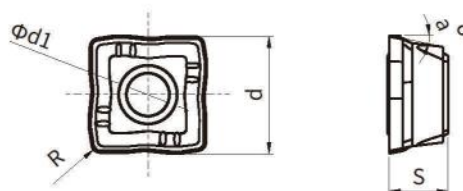
SO形刀片钻头5D
SO insert Drill 5XD

ISO 9766
直径范围: 12.00-50.00mm
Diameter range: 12.00-50.00mm
孔深: 5倍径
Hole depth: 5XDia



直径 Diameter	型号	库存	尺寸(mm)Dimension					适用刀片
			Dm	LU	L1	LF	OAL	
DC	Type	Stock Item						Available inserts
29	D430-2900L25SO09-05	○	25	114	119	139	195	SO..09T308
29	D430-2900L32SO09-05	○	32	114	119	139	199	SO..09T308
29.5	D430-2950L32SO09-05	○	32	114	119	139	199	SO..09T308
30	D430-3000L32SO09-05	○	25	116	121	139	195	SO..09T308
30.5	D430-3050L32SO09-05	○	32	116	121	139	199	SO..09T308
31	D430-3100L32SO09-05	○	32	118	123	143	203	SO..09T308
32	D430-3200L32SO11-05	○	32	120	125	143	203	SO..11T308
32	D430-3200L40SO11-05	○	32	122	127	147	207	SO..11T308
33	D430-3300L32SO11-05	○	32	124	129	147	207	SO..11T308
33	D430-3300L40SO11-05	○	32	127	132	151	211	SO..11T308
34	D430-3400L32SO11-05	○	32	128	133	151	211	SO..11T308
34	D430-3400L40SO11-05	○	40	128	133	151	221	SO..11T308
35	D430-3500L32SO11-05	○	32	132	137	155	215	SO..11T308
35	D430-3500L40SO11-05	○	40	132	137	155	225	SO..11T308
36	D430-3600L32SO11-05	○	32	136	141	159	219	SO..11T308
36	D430-3600L40SO11-05	○	40	136	141	159	229	SO..11T308
37	D430-3700L32SO13-05	○	40	140	145	163	233	SO..130408
37	D430-3700L40SO13-05	○	32	140	145	163	223	SO..130408
38	D430-3800L32SO13-05	○	40	140	145	163	233	SO..130408
38	D430-3800L40SO13-05	○	32	144	149	167	227	SO..130408
39	D430-3900L32SO13-05	○	40	144	149	167	237	SO..130408
39	D430-3900L40SO13-05	○	32	148	153	176	236	SO..130408
40	D430-4000L32SO13-05	○	40	148	153	176	246	SO..130408
40	D430-4000L40SO13-05	○	40	148	153	176	246	SO..130408
41	D430-4100L40SO13-05	○	32	152	157	180	240	SO..130408
42	D430-4200L40SO13-05	○	40	152	157	180	250	SO..130408
43	D430-4300L40SO13-05	○	40	152	157	180	250	SO..130408
44	D430-4400L40SO15-05	○	32	156	161	184	244	SO..150510
45	D430-4500L40SO15-05	○	40	156	161	184	254	SO..150510
46	D430-4600L40SO15-05	○	32	160	165	188	248	SO..150510
47	D430-4700L40SO15-05	○	40	160	165	188	258	SO..150510
48	D430-4800L40SO15-05	○	40	164	169	192	262	SO..150510
49	D430-4900L40SO15-05	○	40	165	170	192	262	SO..150510
50	D430-5000L40SO15-05	○	40	168	173	196	266	SO..150510

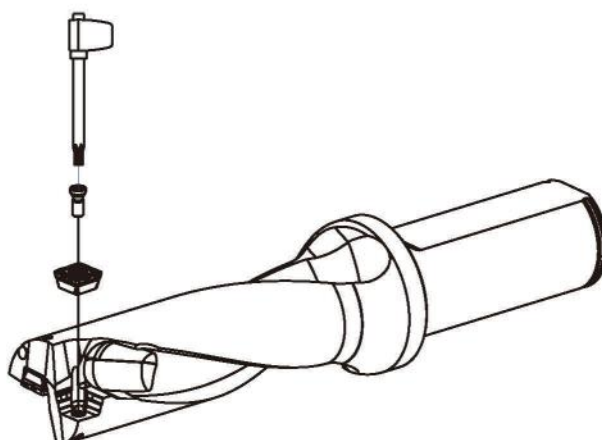
SO浅孔钻



刀片外形	型号 Type	基本尺寸 Dimension (mm)					牌号 Grade				
		d	s	d1	a	R	PU2125A	PU2125A	PU2125A	PU2125A	PU2125A
	SOMT050204 ZP	4.9	2.38	2.2	7.5	0.4	★	★	★	★	☆
	SOMT060204 ZP	5.7	2.38	2.6	7.5	0.4	★	★	★	★	☆
	SOMT070306 ZP	6.8	2.8	2.6	7	0.6	★	★	★	★	☆
	SOMT08T306 ZP	7.9	3.97	2.85	7	0.6	★	★	★	★	☆
	SOMT09T308 ZP	9.25	3.97	3.81	7	0.8	★	★	★	★	☆
	SOMT11T308 ZP	11.05	3.97	3.81	7	0.8	★	★	★	★	☆
	SOMT130408 ZP	12.87	4.4	4.4	7	0.8	★	★	★	★	☆
	SOMT150510 ZP	15.07	4.8	5.4	7	1	★	★	★	★	☆

UD25, 强度高耐磨性好的PVD涂层牌号

SO浅孔钻-1.2



刀片尺寸 Insert size	刀具直径 Diameter	刀片夹紧螺钉 Clamping screw	刀片螺钉扳手 Screw Wrench
SO..0502	14-16	S01-020050	Q01-106
SO..0602	16.5-19	S01-022065	Q01-107
SO..0703	19.5-22.4	S01-022065	Q01-107
SO..08T3	22.5-26	S01-025073	Q01-108
SO..09T3	26.5-31	S01-035081	S01-115
SO..11T3	32-36	S01-035081	S01-115
SO..1304	37-43	S01-040110	S01-115
SO..1505	44-50	S01-050120	S01-120

B

铣削



C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

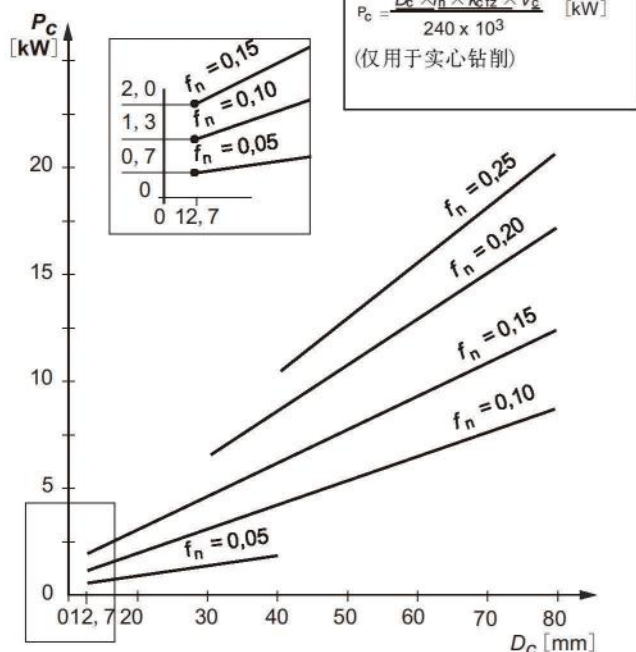
材料分类 Material classification	ISO材料分类 ISO Material classification	牌号 Grade	应用推荐	Applicaion recommendations
P钢 Steel M 不锈钢 Stainless steel K铸铁 Cast iron S耐热合金 heat-resistant alloy N有色金属 Non-ferrous metal	P20(P05-P30) M15(M05-M25) K20(K10-40) S15(S05-S25) N20(N15-N30)	PU2125A	PVD涂层硬质合金牌号。 铣削通用牌号。 高金属去除率，可获得极佳生产效率和刀具使用寿命。	PVD coated milling grade. General purpose milling grade. High metal removal rate, achieves high productivity and tool life.
	P15(P05-P30) M10(M05-M25) K15(K10-30) S10(S05-S25) N20(N15-N30)	UD25	PVD涂层硬质合金牌号。 铣削通用牌号。 高韧性，是不稳定工况的首选。	PVD coated milling grade. General purpose milling grade. Strong toughness, first choice for unstable machining conditions.
	N10(N05-N25)	PU5010	非涂层牌号，表面抛光处理可降低积屑瘤，从而获得高表面质量。适于铝、镁、铜、黄铜、塑料等的精加工到粗加工。	Uncoated milling grade. Surface polishing process can reduce BUE, achieve high surface quality. Suitable for aluminum, magnesium, copper, brass, plastic finishing to roughing processing.



钻头 DRILLING

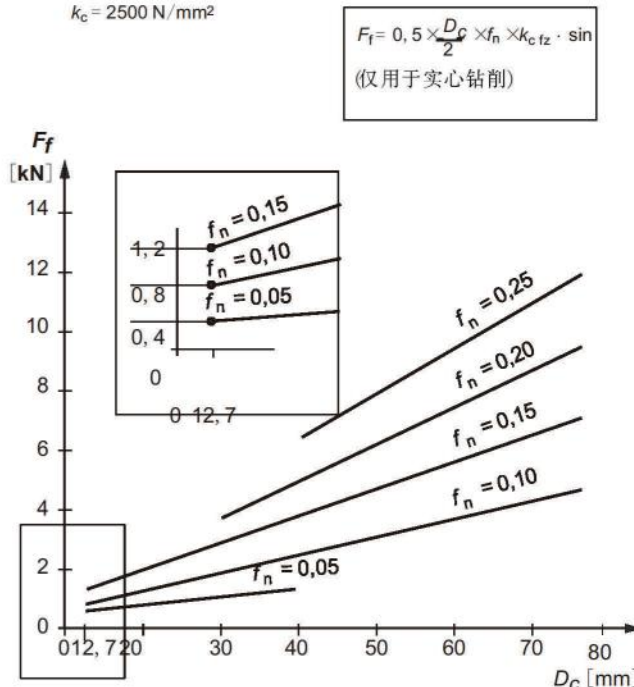
净功率

$k_c = 2500 \text{ N/mm}^2$ $v_c = 100 \text{ m/min}$



进给力

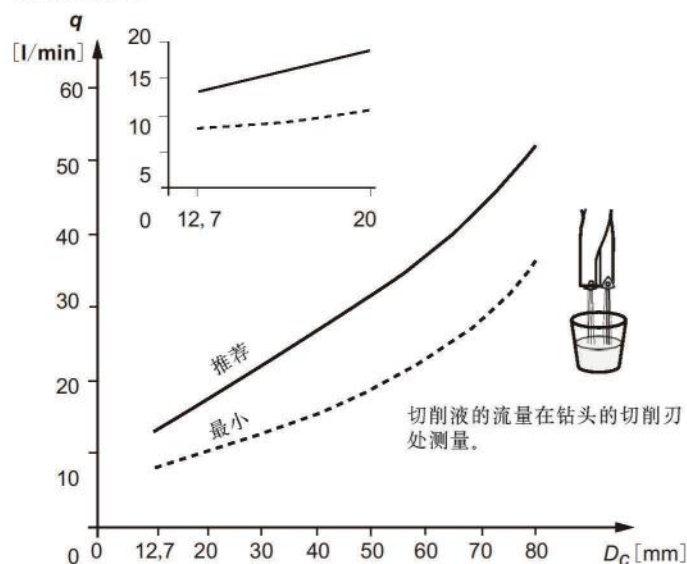
$k_c = 2500 \text{ N/mm}^2$



对于不同切削速度的补偿值

$V_c \text{ m/min}$	78	93	100	123	153	200	250	300
值	0.78	0.93	1.00	1.23	1.53	2.00	2.50	3.00

切削液流量



此表所示名义数据仅为参考，不可作为精确值应用，需要根据实际加工工况（例如：材料种类）进行调整。

注意：这里所给定的仅仅是净功率的额定值，还必须考虑机床的效率和切削刃的磨损所需的预留

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄



推荐切削参数Recommended Cutting Conditions

Machining data for D410 & D420

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
P	非合金钢 非淬硬 0,05-0,10%C	80-170	12.5-15.0	0.05-0.08	220(180-250)	-ZV	-ZS		
			15.5-21.5	0.06-0.12					
			22.0-27.5	0.06-0.12					
			28.0-33.0	0.07-0.13					
			34.0-41.0	0.08-0.15					
			42.0-50.0	0.08-0.16					
			51.0-56.0	0.06-0.12					
			57.0-66.0	0.08-0.12					
	非淬硬 0,05-0,25%C	90-200	12.5-15.0	0.05-0.08	220(180-250)	-ZV	-ZS		
			15.5-21.5	0.06-0.12					
			22.0-27.5	0.06-0.12					
			28.0-33.0	0.07-0.13					
			34.0-41.0	0.08-0.15					
			42.0-50.0	0.08-0.16					
			51.0-56.0	0.06-0.12					
			57.0-66.0	0.08-0.12					
	非淬硬 0,25-0,55%C	125-225	12.5-15.0	0.08-0.12	200(180-220)	-ZV	-ZS		
			15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.18					
			28.0-33.0	0.12-0.22					
			34.0-41.0	0.12-0.24					
			42.0-50.0	0.13-0.25					
			51.0-56.0	0.10-0.15					
			57.0-66.0	0.12-0.18					
	非淬硬 0,55-0,80%C	150-225	12.5-15.0	0.08-0.12	200(180-220)	-ZV	-ZS		
			15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.18					
			28.0-33.0	0.12-0.22					
			34.0-41.0	0.12-0.24					
			42.0-50.0	0.13-0.25					
			51.0-56.0	0.10-0.15					
			57.0-66.0	0.12-0.18					
	高碳钢和 碳素工具钢	180-275	12.5-15.0	0.08-0.12	200(180-220)	-ZV	-ZS		
			15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.18					
			28.0-33.0	0.12-0.22					
			34.0-41.0	0.12-0.24					
			42.0-50.0	0.13-0.25					
			51.0-56.0	0.10-0.15					
			57.0-66.0	0.12-0.18					
	低合金钢 非淬硬	150-260	12.5-15.0	0.05-0.08	180(150-220)	-ZV	-ZS		
			15.5-21.5	0.06-0.10					
			22.0-27.5	0.06-0.12					
			28.0-33.0	0.07-0.13					
			34.0-41.0	0.08-0.15					
			42.0-50.0	0.08-0.16					
			51.0-56.0	0.06-0.12					
			57.0-66.0	0.08-0.12					

推荐切削参数Recommended Cutting Conditions

Machining data for D410 & D420

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
P	淬硬钢	220-450	12.5-15.0	0.05-0.08	180(150-220)	-ZV	-ZS		
			15.5-21.5	0.06-0.10					
			22.0-27.5	0.06-0.12					
			28.0-33.0	0.07-0.13					
			34.0-41.0	0.08-0.15					
			42.0-50.0	0.08-0.16					
			51.0-56.0	0.06-0.12					
			57.0-66.0	0.08-0.12					
	高合金钢 退火	50-250	12.5-15.0	0.06-0.10	150(130-180)	-ZV	-ZS		
			15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.20					
			28.0-33.0	0.12-0.23					
			34.0-41.0	0.12-0.24					
			42.0-50.0	0.13-0.25					
			51.0-56.0	0.08-0.15					
			57.0-66.0	0.10-0.15					
	淬硬钢	250-450	12.5-15.0	0.06-0.10	130(130-180)	-ZV	-ZS		
			15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.20					
			28.0-33.0	0.12-0.23					
			34.0-41.0	0.12-0.24					
			42.0-50.0	0.13-0.25					
			51.0-56.0	0.08-0.15					
			57.0-66.0	0.10-0.15					
	钢铸件 非合金	90-225	12.5-15.0	0.05-0.08	130(130-180)	-ZV	-ZS		
			15.5-21.5	0.05-0.08					
			22.0-27.5	0.05-0.10					
			28.0-33.0	0.05-0.10					
			34.0-41.0	0.06-0.12					
			42.0-50.0	0.07-0.14					
			51.0-56.0	0.07-0.15					
			57.0-66.0	0.07-0.16					
	低合金 合金元素≤5%	150-250	12.5-15.0	0.05-0.08	110(110-250)	-ZV	-ZS		
			15.5-21.5	0.05-0.08					
			22.0-27.5	0.05-0.10					
			28.0-33.0	0.05-0.10					
			34.0-41.0	0.06-0.12					
			42.0-50.0	0.07-0.14					
			51.0-56.0	0.07-0.15					
			57.0-66.0	0.07-0.16					
M	不锈钢 铁素体 马氏体13-25%Cr	150-270	12.5-15.0	0.05-0.10	140(170-240)	-ZV	-ZS		
			15.5-21.5	0.06-0.12					
			22.0-27.5	0.08-0.15					
			28.0-33.0	0.09-0.16					
			34.0-41.0	0.10-0.17					
			42.0-50.0	0.11-0.10					
			51.0-56.0	0.06-0.12					
			57.0-66.0	0.08-0.15					

B



铣削

推荐切削参数Recommended Cutting Conditions

Machining data for D410 & D420

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
M	奥氏体 Ni>8% 13-25%Cr	150-275	12.5-15.0	0.05-0.10	150(170-240)	-ZV	-ZS		
			15.5-21.5	0.06-0.12					
			22.0-27.5	0.08-0.15					
			28.0-33.0	0.09-0.16					
			34.0-41.0	0.10-0.17					
			42.0-50.0	0.11-0.10					
			51.0-56.0	0.06-0.12					
			57.0-66.0	0.08-0.15					
	奥氏体 铁素体(双相)	180-320	12.5-15.0	0.05-0.10	110(90-145)	-ZV	-ZS		
			15.5-21.5	0.06-0.12					
			22.0-27.5	0.08-0.15					
			28.0-33.0	0.09-0.16					
			34.0-41.0	0.10-0.17					
			42.0-50.0	0.11-0.10					
			51.0-56.0	0.06-0.12					
			57.0-66.0	0.08-0.15					
	不锈钢 奥氏体铸件	150-250	12.5-15.0	0.04-0.08	110(80-155)	-ZV	-ZS		
			15.5-21.5	0.04-0.12					
			22.0-27.5	0.05-0.12					
			28.0-33.0	0.06-0.14					
			34.0-41.0	0.06-0.14					
			42.0-50.0	0.06-0.14					
			51.0-56.0	0.06-0.14					
			57.0-66.0	0.06-0.14					
S	耐热合金 镍基	140-425	12.5-15.0	0.03-0.08	40(20-50)				
			15.5-21.5	0.04-0.08					
			22.0-27.5	0.06-0.10					
			28.0-33.0	0.08-0.12					
			34.0-41.0	0.09-0.14					
			42.0-50.0	0.09-0.14					
			51.0-56.0	0.09-0.14					
			57.0-66.0	0.09-0.14					
	钛合金 α , 近 α 与 $\alpha+\beta$ 合金 退火或时效处理	600-1500	12.5-15.0	0.05-0.10	50(30-60)				
			15.5-21.5	0.06-0.14					
			22.0-27.5	0.08-0.18					
			28.0-33.0	0.10-0.22					
			34.0-41.0	0.14-0.23					
			42.0-50.0	0.15-0.24					
			51.0-56.0	0.10-0.15					
			57.0-66.0	0.12-0.16					
K	可锻铸铁 铁素体(短切屑)	110-145	12.5-15.0	0.06-0.12	170(140-230)	-ZV	-ZS		
			15.5-21.5	0.08-0.16					
			22.0-27.5	0.12-0.20					
			28.0-33.0	0.15-0.25					
			34.0-41.0	0.16-0.28					
			42.0-50.0	0.18-0.30					
			51.0-56.0	0.12-0.20					
			57.0-66.0	0.15-0.22					

推荐切削参数Recommended Cutting Conditions

Machining data for D410 & D420

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
K	珠光体 (长切屑)	150-270	12.5-15.0	0.06-0.12	140(105-170)	-ZV	-ZS		
			15.5-21.5	0.08-0.16					
			22.0-27.5	0.12-0.20					
			28.0-33.0	0.15-0.25					
			34.0-41.0	0.16-0.28					
			42.0-50.0	0.18-0.30					
			51.0-56.0	0.12-0.20					
			57.0-66.0	0.15-0.22					
	灰口铸铁 低拉伸强度	150-220	12.5-15.0	0.06-0.12	220(180-250)	-ZV	-ZS		
			15.5-21.5	0.08-0.16					
			22.0-27.5	0.12-0.20					
			28.0-33.0	0.15-0.25					
			34.0-41.0	0.16-0.28					
			42.0-50.0	0.18-0.30					
			51.0-56.0	0.12-0.20					
			57.0-66.0	0.15-0.22					
	高拉伸强度	200-330	12.5-15.0	0.04-0.10	170(125-230)	-ZV	-ZS		
			15.5-21.5	0.08-0.14					
			22.0-27.5	0.12-0.18					
			28.0-33.0	0.14-0.20					
			34.0-41.0	0.16-0.28					
			42.0-50.0	0.18-0.30					
			51.0-56.0	0.12-0.20					
			57.0-66.0	0.15-0.22					
	球墨铸铁 铁素体	125-230	12.5-15.0	0.06-0.10	170(125-215)	-ZV	-ZS		
			15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.18					
			28.0-33.0	0.12-0.20					
			34.0-41.0	0.15-0.23					
			42.0-50.0	0.16-0.25					
			51.0-56.0	0.10-0.15					
			57.0-66.0	0.10-0.20					
	珠光体	200-300	12.5-15.0	0.06-0.10	150(110-200)	-ZV	-ZS		
			15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.18					
			28.0-33.0	0.12-0.20					
			34.0-41.0	0.15-0.23					
			42.0-50.0	0.16-0.25					
			51.0-56.0	0.10-0.15					
			57.0-66.0	0.10-0.20					
H	超硬钢 淬硬与回火	450-	12.5-15.0	0.05-0.08	40(30-80)				
			15.5-21.5	0.07-0.15					
			22.0-27.5	0.07-0.15					
			28.0-33.0	0.10-0.15					
			34.0-41.0	0.10-0.15					
			42.0-50.0	0.10-0.15					
			51.0-56.0	0.10-0.15					
			57.0-66.0	0.10-0.15					

B



铣削

推荐切削参数Recommended Cutting Conditions

Machining data for D410 & D420

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
N	铝合金	30-150	12.5-15.0	0.06-0.14	350(330-380)				
	锻造或		15.5-21.5	0.08-0.15					
	锻造加时效处理		22.0-27.5	0.10-0.20					
			28.0-33.0	0.12-0.22					
			34.0-41.0	0.14-0.23					
			42.0-50.0	0.15-0.26					
			51.0-56.0	0.15-0.22					
			57.0-66.0	0.15-0.25					
	铸造, 非时效	40-100	12.5-15.0	0.06-0.14	300(330-380)				
			15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.20					
			28.0-33.0	0.12-0.22					
			34.0-41.0	0.14-0.23					
			42.0-50.0	0.15-0.26					
			51.0-56.0	0.15-0.22					
			57.0-66.0	0.15-0.25					
	铸造或	70-140	12.5-15.0	0.06-0.14	300(250-385)				
	铸造加时效处理		15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.20					
			28.0-33.0	0.12-0.22					
			34.0-41.0	0.14-0.23					
			42.0-50.0	0.15-0.26					
			51.0-56.0	0.15-0.22					
			57.0-66.0	0.15-0.25					
	铜和铜合金	50-160	12.5-15.0	0.06-0.14	300(250-385)				
	易切合金(Pb≥1%)		15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.20					
			28.0-33.0	0.12-0.22					
			34.0-41.0	0.14-0.23					
			42.0-50.0	0.15-0.26					
			51.0-56.0	0.15-0.22					
			57.0-66.0	0.15-0.25					
	黄铜与铅青铜	50-160	12.5-15.0	0.06-0.14	230(180-265)				
	(pb≤1%)		15.5-21.5	0.08-0.15					
			22.0-27.5	0.10-0.20					
			28.0-33.0	0.12-0.22					
			34.0-41.0	0.14-0.23					
			42.0-50.0	0.15-0.26					
			51.0-56.0	0.15-0.22					
			57.0-66.0	0.15-0.25					

D30

推荐切削参数Recommended Cutting Conditions

Machining data for D430

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
P	非合金钢 非淬硬 0,05-0,10%C	80-170	14.0-16.0	0.04-0.06	270(220-350)	-ZP			
			17.0-19.0	0.04-0.06					
			20.0-22.0	0.04-0.08					
			23.0-26.0	0.04-0.08					
			27.0-21.0	0.06-0.10					
			32.0-36.0	0.06-0.10					
			37.0-43.0	0.08-0.12					
			44.0-50.0	0.08-0.12					
	非淬硬 0,05-0,25%C	90-200	14.0-16.0	0.06-0.10	260(180-280)	-ZP			
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.06-0.12					
			23.0-26.0	0.06-0.12					
			27.0-21.0	0.08-0.14					
			32.0-36.0	0.08-0.14					
			37.0-43.0	0.08-0.16					
			44.0-50.0	0.10-0.16					
	非淬硬 0,25-0,55%C	125-225	14.0-16.0	0.08-0.12	180(140-240)	-ZP			
			17.0-19.0	0.08-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.16					
			32.0-36.0	0.10-0.16					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
	非淬硬 0,55-0,80%C	150-225	14.0-16.0	0.08-0.12	180(140-240)	-ZP			
			17.0-19.0	0.08-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.16					
			32.0-36.0	0.10-0.16					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
	高碳钢和 碳素工具钢	180-275	14.0-16.0	0.08-0.12	180(140-240)	-ZP			
			17.0-19.0	0.08-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.16					
			32.0-36.0	0.10-0.16					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
	低合金钢 非淬硬	150-260	14.0-16.0	0.06-0.16	180(140-240)	-ZP			
			17.0-19.0	0.06-0.16					
			20.0-22.0	0.08-0.20					
			23.0-26.0	0.08-0.20					
			27.0-21.0	0.08-0.20					
			32.0-36.0	0.10-0.22					
			37.0-43.0	0.10-0.22					
			44.0-50.0	0.10-0.24					

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄



推荐切削参数Recommended Cutting Conditions

Machining data for D430

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
P	淬硬钢	220-450	14.0-16.0	0.06-0.16	130(100-180)	-ZP			
			17.0-19.0	0.06-0.16					
			20.0-22.0	0.08-0.20					
			23.0-26.0	0.08-0.20					
			27.0-31.0	0.08-0.20					
			32.0-36.0	0.08-0.22					
			37.0-43.0	0.10-0.22					
	高合金钢 退火	50-250	14.0-16.0	0.06-0.16	130(100-180)	-ZP			
			17.0-19.0	0.06-0.16					
			20.0-22.0	0.08-0.20					
			23.0-26.0	0.08-0.20					
			27.0-31.0	0.08-0.20					
			32.0-36.0	0.08-0.22					
			37.0-43.0	0.10-0.22					
	淬硬钢	250-450	14.0-16.0	0.06-0.16	130(100-180)	-ZP			
			17.0-19.0	0.06-0.16					
			20.0-22.0	0.08-0.20					
			23.0-26.0	0.08-0.20					
			27.0-31.0	0.08-0.20					
			32.0-36.0	0.08-0.22					
			37.0-43.0	0.10-0.22					
	钢铸件 非合金	90-225	14.0-16.0	0.06-0.12	150(140-200)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-31.0	0.08-0.18					
			32.0-36.0	0.08-0.20					
			37.0-43.0	0.10-0.20					
	低合金 合金元素≤5%	150-250	14.0-16.0	0.06-0.12	120(100-160)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-31.0	0.08-0.18					
			32.0-36.0	0.08-0.20					
			37.0-43.0	0.10-0.20					
M	不锈钢 铁素体 马氏体13-25%Cr	150-270	14.0-16.0	0.06-0.12	180(150-250)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.06-0.16					
			23.0-26.0	0.06-0.16					
			27.0-31.0	0.08-0.18					
			32.0-36.0	0.08-0.20					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.20					

推荐切削参数Recommended Cutting Conditions

Machining data for D430

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
M	奥氏体 Ni>8% 13-25%Cr	150-275	14.0-16.0	0.06-0.12	180(150-250)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.06-0.16					
			23.0-26.0	0.06-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.08-0.20					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.20					
	奥氏体 铁素体(双相)	180-320	14.0-16.0	0.06-0.12	180(150-250)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.06-0.16					
			23.0-26.0	0.06-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.08-0.20					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.20					
	不锈钢 奥氏体铸件	150-250	14.0-16.0	0.06-0.12	180(150-250)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.06-0.16					
			23.0-26.0	0.06-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.08-0.20					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.20					
S	耐热合金 镍基	140-425	14.0-16.0	0.05-0.08	40(30-60)	-ZP			
			17.0-19.0	0.05-0.08					
			20.0-22.0	0.05-0.09					
			23.0-26.0	0.05-0.09					
			27.0-21.0	0.06-0.10					
			32.0-36.0	0.06-0.10					
			37.0-43.0	0.06-0.12					
			44.0-50.0	0.06-0.12					
	钛合金 α , 近 α 与 $\alpha+\beta$ 合金 退火或时效处理	600-1500	14.0-16.0	0.06-0.09	60(50-80)	-ZP			
			17.0-19.0	0.06-0.09					
			20.0-22.0	0.06-0.10					
			23.0-26.0	0.06-0.10					
			27.0-21.0	0.06-0.10					
			32.0-36.0	0.06-0.10					
			37.0-43.0	0.06-0.10					
			44.0-50.0	0.06-0.10					
K	可锻铸铁 铁素体(短切屑)	110-145	14.0-16.0	0.08-0.18	220(160-260)	-ZP			
			17.0-19.0	0.08-0.18					
			20.0-22.0	0.10-0.20					
			23.0-26.0	0.10-0.20					
			27.0-21.0	0.10-0.20					
			32.0-36.0	0.10-0.20					
			37.0-43.0	0.10-0.22					
			44.0-50.0	0.10-0.22					

B



铣削

推荐切削参数Recommended Cutting Conditions

Machining data for D430

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
K	珠光体 (长切屑)	150-270	14.0-16.0	0.08-0.18	180(160-260)	-ZP			
			17.0-19.0	0.08-0.18					
			20.0-22.0	0.10-0.20					
			23.0-26.0	0.10-0.20					
			27.0-21.0	0.10-0.20					
			32.0-36.0	0.10-0.20					
			37.0-43.0	0.10-0.22					
	灰口铸铁 低拉伸强度	150-220	44.0-50.0	0.10-0.22	200(160-260)	-ZP			
			14.0-16.0	0.08-0.18					
			17.0-19.0	0.08-0.18					
			20.0-22.0	0.10-0.20					
			23.0-26.0	0.10-0.20					
			27.0-21.0	0.10-0.20					
			32.0-36.0	0.10-0.20					
	高拉伸强度	200-330	37.0-43.0	0.10-0.22	190(160-260)	-ZP			
			44.0-50.0	0.10-0.22					
			14.0-16.0	0.08-0.18					
			17.0-19.0	0.08-0.18					
			20.0-22.0	0.10-0.20					
			23.0-26.0	0.10-0.20					
			27.0-21.0	0.10-0.20					
	球墨铸铁 铁素体	125-230	32.0-36.0	0.10-0.20	160(120-220)	-ZP			
			37.0-43.0	0.10-0.22					
			44.0-50.0	0.10-0.22					
			14.0-16.0	0.08-0.14					
			17.0-19.0	0.08-0.14					
			20.0-22.0	0.10-0.16					
			23.0-26.0	0.10-0.16					
	珠光体	200-300	27.0-21.0	0.10-0.16	150(120-220)	-ZP			
			32.0-36.0	0.10-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
			14.0-16.0	0.08-0.14					
			17.0-19.0	0.08-0.14					
			20.0-22.0	0.10-0.16					
H	超硬钢 淬硬与回火	450-	23.0-26.0	0.10-0.16	40(30-60)				
			27.0-21.0	0.10-0.16					
			32.0-36.0	0.10-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
			14.0-16.0	0.05-0.09					
			17.0-19.0	0.05-0.09					
			20.0-22.0	0.05-0.10					
			23.0-26.0	0.05-0.10					
			27.0-21.0	0.05-0.10					
			32.0-36.0	0.05-0.10					
			37.0-43.0	0.05-0.10					
			44.0-50.0	0.05-0.10					

推荐切削参数Recommended Cutting Conditions

Machining data for D430

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
N	铝合金 锻造或 锻造加时效处理	30-150	14.0-16.0	0.06-0.15	300(200-350)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
	铸造, 非时效	40-100	14.0-16.0	0.06-0.15	300(200-350)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
	铸造或 铸造加时效处理	70-140	14.0-16.0	0.06-0.15	300(200-350)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
	铜和铜合金 易切合金(Pb≥1%)	50-160	14.0-16.0	0.06-0.15	210(150-250)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.17					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					
	黄铜与铅青铜 (pb≤1%)	50-160	14.0-16.0	0.06-0.15	190(150-250)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.17					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.18					

B



铣削

推荐切削参数Recommended Cutting Conditions

Machining data for D430

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
P	非合金钢 非淬硬 0,05-0,10%C	80-170	14.0-16.0	0.04-0.05	270(220-350)	-ZP			
			17.0-19.0	0.04-0.05					
			20.0-22.0	0.04-0.05					
			23.0-26.0	0.04-0.06					
			27.0-21.0	0.06-0.08					
			32.0-36.0	0.06-0.08					
			37.0-43.0	0.08-0.10					
	非淬硬 0,05-0,25%C	90-200	44.0-50.0	0.08-0.10	260(180-280)	-ZP			
			14.0-16.0	0.06-0.08					
			17.0-19.0	0.06-0.08					
			20.0-22.0	0.06-0.10					
			23.0-26.0	0.06-0.10					
			27.0-21.0	0.08-0.12					
			32.0-36.0	0.08-0.12					
	非淬硬 0,25-0,55%C	125-225	37.0-43.0	0.08-0.14	180(140-240)	-ZP			
			44.0-50.0	0.10-0.14					
			14.0-16.0	0.06-0.10					
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.06-0.12					
			23.0-26.0	0.06-0.12					
			27.0-21.0	0.10-0.15					
	非淬硬 0,55-0,80%C	150-225	32.0-36.0	0.10-0.15	180(140-240)	-ZP			
			37.0-43.0	0.10-0.17					
			44.0-50.0	0.10-0.17					
			14.0-16.0	0.06-0.10					
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.06-0.12					
			23.0-26.0	0.06-0.12					
	高碳钢和 碳素工具钢	180-275	27.0-21.0	0.10-0.15	180(140-240)	-ZP			
			32.0-36.0	0.10-0.15					
			37.0-43.0	0.10-0.17					
			44.0-50.0	0.10-0.17					
			14.0-16.0	0.06-0.10					
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.06-0.12					
	低合金钢 非淬硬	150-260	23.0-26.0	0.06-0.12	180(140-240)	-ZP			
			27.0-21.0	0.10-0.15					
			32.0-36.0	0.10-0.17					
			37.0-43.0	0.10-0.17					
			44.0-50.0	0.10-0.17					
			14.0-16.0	0.06-0.12					
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.10-0.20					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.22					

推荐切削参数Recommended Cutting Conditions

Machining data for D430

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
P	淬硬钢	220-450	14.0-16.0	0.06-0.12	130(100-180)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.10-0.20					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.22					
	高合金钢 退火	50-250	14.0-16.0	0.06-0.12	130(100-180)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.10-0.20					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.22					
	淬硬钢	250-450	14.0-16.0	0.06-0.12	130(100-180)	-ZP			
			17.0-19.0	0.06-0.12					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.18					
			32.0-36.0	0.10-0.20					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.22					
	钢铸件 非合金	90-225	14.0-16.0	0.06-0.10	150(140-200)	-ZP			
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.08-0.12					
			23.0-26.0	0.08-0.12					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.20					
	低合金 合金元素≤5%	150-250	14.0-16.0	0.06-0.10	120(100-160)	-ZP			
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.08-0.12					
			23.0-26.0	0.08-0.12					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.20					
M	不锈钢 铁素体 马氏体13-25%Cr	150-270	14.0-16.0	0.06-0.10	180(150-250)	-ZP			
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.06-0.12					
			23.0-26.0	0.06-0.12					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.20					

B



铣削

推荐切削参数Recommended Cutting Conditions

Machining data for D430

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
M	奥氏体 Ni>8% 13-25%Cr	150-275	14.0-16.0	0.06-0.10	180(150-250)	-ZP			
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.06-0.12					
			23.0-26.0	0.06-0.12					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.20					
	奥氏体 铁素体(双相)	180-320	14.0-16.0	0.06-0.10	180(150-250)	-ZP			
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.06-0.12					
			23.0-26.0	0.06-0.12					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.20					
	不锈钢 奥氏体铸件	150-250	14.0-16.0	0.06-0.10	180(150-250)	-ZP			
			17.0-19.0	0.06-0.10					
			20.0-22.0	0.06-0.12					
			23.0-26.0	0.06-0.12					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.18					
			37.0-43.0	0.10-0.18					
			44.0-50.0	0.10-0.20					
S	耐热合金 镍基	140-425	14.0-16.0	0.05-0.07	40(30-60)	-ZP			
			17.0-19.0	0.05-0.08					
			20.0-22.0	0.05-0.08					
			23.0-26.0	0.05-0.08					
			27.0-21.0	0.06-0.09					
			32.0-36.0	0.06-0.09					
			37.0-43.0	0.06-0.10					
			44.0-50.0	0.06-0.10					
	钛合金 α , 近 α 与 $\alpha+\beta$ 合金 退火或时效处理	600-1500	14.0-16.0	0.05-0.08	60(50-80)	-ZP			
			17.0-19.0	0.05-0.08					
			20.0-22.0	0.06-0.09					
			23.0-26.0	0.06-0.09					
			27.0-21.0	0.06-0.10					
K	可锻铸铁 铁素体(短切屑)	110-145	14.0-16.0	0.08-0.14	220(160-260)	-ZP			
			17.0-19.0	0.08-0.14					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.18					
			32.0-36.0	0.10-0.18					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.20					

推荐切削参数Recommended Cutting Conditions

Machining data for D430

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
K	珠光体 (长切屑)	150-270	14.0-16.0	0.08-0.14	180(160-260)	-ZP			
			17.0-19.0	0.08-0.14					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.18					
			32.0-36.0	0.10-0.18					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.20					
	灰口铸铁 低拉伸强度	150-220	14.0-16.0	0.08-0.14	200(160-260)	-ZP			
			17.0-19.0	0.08-0.14					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.18					
			32.0-36.0	0.10-0.18					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.20					
	高拉伸强度	200-330	14.0-16.0	0.08-0.14	190(160-260)	-ZP			
			17.0-19.0	0.08-0.14					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.18					
			32.0-36.0	0.10-0.18					
			37.0-43.0	0.10-0.20					
			44.0-50.0	0.10-0.20					
	球墨铸铁 铁素体	125-230	14.0-16.0	0.08-0.12	160(120-220)	-ZP			
			17.0-19.0	0.08-0.14					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.16					
			32.0-36.0	0.10-0.16					
			37.0-43.0	0.10-0.16					
			44.0-50.0	0.10-0.16					
	珠光体	200-300	14.0-16.0	0.08-0.12	150(120-220)	-ZP			
			17.0-19.0	0.08-0.14					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.10-0.16					
			32.0-36.0	0.10-0.16					
			37.0-43.0	0.10-0.16					
			44.0-50.0	0.10-0.16					
H	超硬钢 淬硬与回火	450-	14.0-16.0	0.05-0.08	40(30-60)				
			17.0-19.0	0.05-0.08					
			20.0-22.0	0.05-0.09					
			23.0-26.0	0.05-0.09					
			27.0-21.0	0.05-0.10					
			32.0-36.0	0.05-0.10					
			37.0-43.0	0.05-0.10					
			44.0-50.0	0.05-0.10					

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄



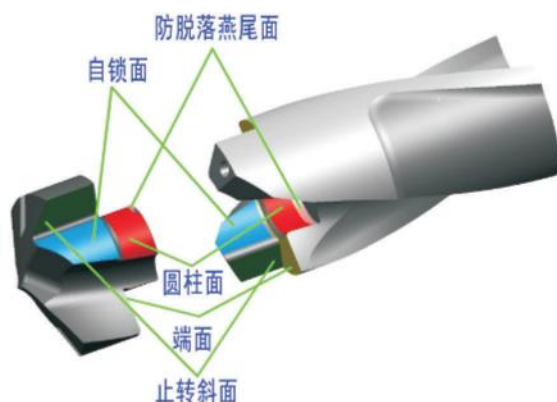
推荐切削参数Recommended Cutting Conditions

Machining data for D430

ISO	材料	硬度HB	Drilllength2,3,4xD			首选最高生产率		补充	
			钻头直径	进给	切削速度				
			Dc mm	fn mm/转	vc m/分				
N	铝合金 锻造或 锻造加时效处理	30-150	14.0-16.0	0.06-0.15	300(200-350)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.16					
	铸造, 非时效	40-100	37.0-43.0	0.10-0.17					
			44.0-50.0	0.10-0.17					
			14.0-16.0	0.06-0.15	300(200-350)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
	铸造或 铸造加时效处理	70-140	27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.16					
			37.0-43.0	0.10-0.17					
			44.0-50.0	0.10-0.17					
			14.0-16.0	0.06-0.15	300(200-350)	-ZP			
			17.0-19.0	0.06-0.15					
	铜和铜合金 易切合金(Pb≥1%)	50-160	20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.16					
			32.0-36.0	0.08-0.16					
			37.0-43.0	0.10-0.17					
			44.0-50.0	0.10-0.17					
	黄铜与铅青铜 (pb≤1%)	50-160	14.0-16.0	0.06-0.15	210(150-250)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
			27.0-21.0	0.08-0.15					
			32.0-36.0	0.08-0.16					
E			37.0-43.0	0.10-0.17					
			44.0-50.0	0.10-0.17					
			14.0-16.0	0.06-0.15	190(150-250)	-ZP			
			17.0-19.0	0.06-0.15					
			20.0-22.0	0.08-0.16					
			23.0-26.0	0.08-0.16					
F			27.0-21.0	0.10-0.16					
			32.0-36.0	0.10-0.16					
			37.0-43.0	0.10-0.17					
			44.0-50.0	0.10-0.17					

皇冠钻的基本信息Modular tip drills information

皇冠钻结构特点Modular tip drills structure:



1. 刀头、刀体圆柱配合保证同心度
2. 刀头放入刀体后，由于刀头的弹性变形使得刀头拧入后不可回转而自动锁住
3. 端面承受钻削轴向力
4. 止转斜面承受钻削扭矩
5. 燕尾槽防止刀头脱落

皇冠钻优点Modular tip drills advantages:

1. 皇冠钻采用特殊槽型设计，中心横刃具有极高强度和定心效果
2. 可以在超高进给下实现较好的孔加工尺寸和孔壁质量。
3. 刀杆采用优质进口合金钢，通过长期的应用经验设计具有特殊的排屑槽和钻杆设计，能实现极高的系统刚性和强度。
4. 同一钻杆型号可以通装一定范围尺寸的钻尖，实现较高的经济性

皇冠钻尖的安装和更换 Mounting and change

1. 把钻杆装在钻柄上，钻柄装在机床或钻具预调仪上，以便安装钻尖；



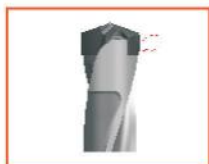
2. 用压缩空气清刀尖槽；



3. 把钻尖放进钻尖槽（戴上手套以防划伤），钻尖底面、圆柱面与钻尖槽贴紧；



4. 轻轻顺时针方向转动（戴上手套以防划伤）；



5. 选用合适的扳手；



6. 确认扳手卡入钻尖的扳手槽中；



7. 继续顺时针方向转动，用力转过自锁位直到锁紧为止；



8. 完成；



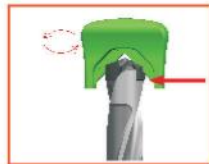
1. 用压缩空气清洁刀头；



2. 选择合适的扳手；
3. 确认扳手卡入扳手槽中；



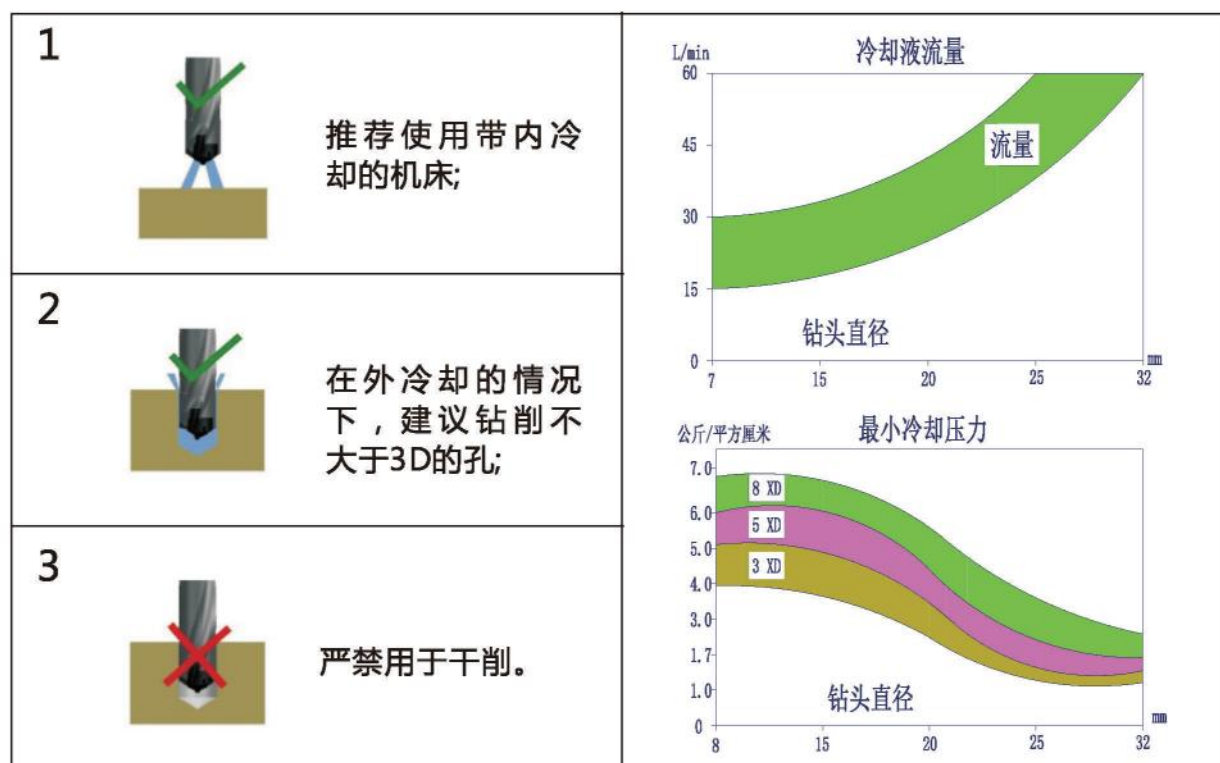
4. 逆时针方向转动扳手；



5. 一旦失去自锁，用手转动刀头，并取下刀头（戴上手套以防划伤）；



使用说明-冷却要求Introductions-coolant requirements



使用说明-跳动要求 Introduction-run out requirements in lathe

1.车床上钻孔



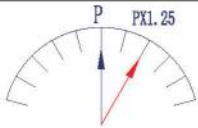
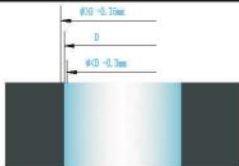
2.铣床或钻床钻孔



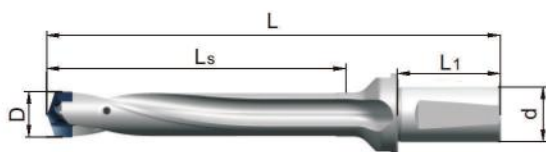
使用说明-工况要求Introductions- machining conditions

平面孔	推荐		重叠孔	禁用	
叠板孔	需加固		斜面孔	禁用	
曲面孔	进给50%		半边孔	禁用	
管壁孔	过中心		型芯孔	禁用	

钻头更换标准Tips change standards

 (1) 功率比正常增加超过25%	(1)功率比正常增加超过25%
	(2)震动噪音异常
	(3)刃口后角磨损过大(磨损不超过0.3mm)
	(4)孔径超差(不超过 $\pm 0.2mm$) (5)孔壁粗糙度变差超过Ra6.3

皇冠钻6D Modular tip drills 6XD



序号	型号 Order NO.	刃口直径 D		有效钻深 Ls	柄径 d	柄长 L1	总长 L	配用钻尖 Fitting inserts	扳手 Spanner
		标准尺寸	规格范围						
1	MGSE1400R6-XP20-ZX	14	14-14.9	84	20	50	185	MGSE1400-ZX	BS10-20
2	MGSE1500R6-XP20-ZX	15	15-15.9	90	20	50	190	MGSE1500-ZX	BS10-20
3	MGSE1600R6-XP20-ZX	16	16-16.9	96	20	50	195	MGSE1600-ZX	BS10-20
4	MGSE1700R6-XP20-ZX	17	17-17.9	102	20	50	200	MGSE1700-ZX	BS10-20
5	MGSE1800R6-XP25-ZX	18	18-18.9	108	25	56	215	MGSE1800-ZX	BS10-20
6	MGSE1900R6-XP25-ZX	19	19-19.9	114	25	56	220	MGSE1900-ZX	BS10-20
7	MGSE2000R6-XP25-ZX	20	20-20.9	120	25	56	225	MGSE2000-ZX	BS20-30
8	MGSE2100R6-XP25-ZX	21	21-21.9	126	25	56	230	MGSE2100-ZX	BS20-30
9	MGSE2200R6-XP25-ZX	22	22-22.9	132	25	56	240	MGSE2200-ZX	BS20-30
10	MGSE2300R6-XP25-ZX	23	23-23.9	138	25	56	245	MGSE2300-ZX	BS20-30
11	MGSE2400R6-XP25-ZX	24	24-24.9	144	25	56	250	MGSE2400-ZX	BS20-30
12	MGSE2500R6-XP32-ZX	25	25-25.9	150	32	60	260	MGSE2500-ZX	BS20-30
13	MGSE2600R6-XP32-ZX	26	26-26.9	156	32	60	265	MGSE2600-ZX	BS20-30
14	MGSE2700R6-XP32-ZX	27	27-27.9	162	32	60	270	MGSE2700-ZX	BS20-30
15	MGSE2800R6-XP32-ZX	28	28-28.9	168	32	60	280	MGSE2800-ZX	BS20-30
16	MGSE2900R6-XP32-ZX	29	29-29.9	174	32	60	285	MGSE2900-ZX	BS20-30
17	MGSE3000R6-XP32-ZX	30	30-30.9	180	32	60	290	MGSE3000-ZX	BS30-40
18	MGSE3100R6-XP32-ZX	31	31-31.9	186	32	60	295	MGSE3100-ZX	BS30-40
19	MGSE3200R6-XP32-ZX	32	32-32.9	192	32	60	300	MGSE3200-ZX	BS30-40
20	MGSE3300R6-XP32-ZX	33	33-33.9	198	32	60	310	MGSE3300-ZX	BS30-40
21	MGSE3400R6-XP32-ZX	34	34-34.9	204	32	60	315	MGSE3400-ZX	BS30-40
22	MGSE3500R6-XP32-ZX	35	35-35.9	210	32	60	320	MGSE3500-ZX	BS30-40
23	MGSE3600R6-XP32-ZX	36	36-36.9	216	32	60	325	MGSE3600-ZX	BS30-40
24	MGSE3700R6-XP32-ZX	37	37-37.9	222	32	60	330	MGSE3700-ZX	BS30-40
25	MGSE3800R6-XP32-ZX	38	38-38.9	228	32	60	340	MGSE3800-ZX	BS30-40
26	MGSE3900R6-XP32-ZX	39	39-39.9	234	32	60	345	MGSE3900-ZX	BS30-40

说明：1.此钻头需内冷支持。
2.刀片需单独订购。

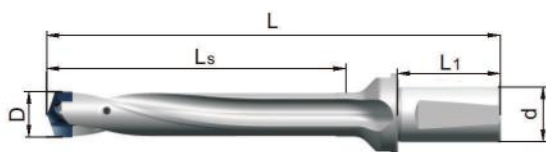
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皇冠钻7D Modular tip drills 7XD

C



圆柄刀具

序号	型号 Order NO.	刃口直径 D		有效钻深 Ls	柄径 d	柄长 L1	总长 L	配用钻尖 Fitting inserts	扳手 Spanner
		标准尺寸	规格范围						
1	MGSE1400R7-XP20-ZX	14	14-14.9	98	20	50	197	MGSE1400-ZX	BS10-20
2	MGSE1500R7-XP20-ZX	15	15-15.9	105	20	50	205	MGSE1500-ZX	BS10-20
3	MGSE1600R7-XP20-ZX	16	16-16.9	112	20	50	213	MGSE1600-ZX	BS10-20
4	MGSE1700R7-XP20-ZX	17	17-17.9	119	20	50	221	MGSE1700-ZX	BS10-20
5	MGSE1800R7-XP25-ZX	18	18-18.9	126	25	56	229	MGSE1800-ZX	BS10-20
6	MGSE1900R7-XP25-ZX	19	19-19.9	133	25	56	237	MGSE1900-ZX	BS10-20
7	MGSE2000R7-XP25-ZX	20	20-21.9	140	25	56	245	MGSE2000-ZX	BS20-30
8	MGSE2100R7-XP25-ZX	21	21-21.9	147	25	56	253	MGSE2100-ZX	BS20-30
9	MGSE2200R7-XP25-ZX	22	22-22.9	154	25	56	261	MGSE2200-ZX	BS20-30
10	MGSE2300R7-XP25-ZX	23	23-23.9	161	25	56	269	MGSE2300-ZX	BS20-30
11	MGSE2400R7-XP25-ZX	24	24-24.9	168	25	56	272	MGSE2400-ZX	BS20-30
12	MGSE2500R7-XP32-ZX	25	25-25.9	175	32	60	285	MGSE2500-ZX	BS20-30
13	MGSE2600R7-XP32-ZX	26	26-26.9	182	32	60	293	MGSE2600-ZX	BS20-30
14	MGSE2700R7-XP32-ZX	27	27-27.9	189	32	60	301	MGSE2700-ZX	BS20-30
15	MGSE2800R7-XP32-ZX	28	28-28.9	196	32	60	304	MGSE2800-ZX	BS20-30
16	MGSE2900R7-XP32-ZX	29	29-29.9	203	32	60	312	MGSE2900-ZX	BS20-30
17	MGSE3000R7-XP32-ZX	30	30-30.9	210	32	60	320	MGSE3000-ZX	BS30-40
18	MGSE3100R7-XP32-ZX	31	31-31.9	217	32	60	328	MGSE3100-ZX	BS30-40
19	MGSE3200R7-XP32-ZX	32	32-32.9	224	32	60	336	MGSE3200-ZX	BS30-40
20	MGSE3300R7-XP32-ZX	33	33-33.9	231	32	60	344	MGSE3300-ZX	BS30-40
21	MGSE3400R7-XP32-ZX	34	34-34.9	238	32	60	347	MGSE3400-ZX	BS30-40
22	MGSE3500R9-XP32-ZX	35	35-35.9	245	32	60	355	MGSE3500-ZX	BS30-40
23	MGSE3600R7-XP32-ZX	36	36-36.9	252	32	60	363	MGSE3600-ZX	BS30-40
24	MGSE3700R7-XP32-ZX	37	37-37.9	259	32	60	371	MGSE3700-ZX	BS30-40
25	MGSE3800R7-XP32-ZX	38	38-38.9	266	32	60	374	MGSE3800-ZX	BS30-40
26	MGSE3900R7-XP32-ZX	39	39-39.9	273	32	60	382	MGSE3900-ZX	BS30-40

说明：1.此钻头需内冷支持。
2.刀片需单独订购。

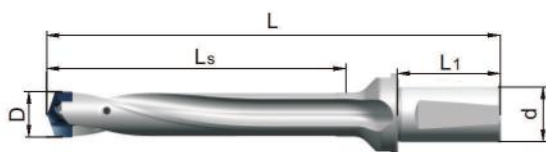
E

深孔加工

F

旋转刀柄

皇冠钻8D Modular tip drills 8XD



序号	型号 Order NO.	刃口直径 D		有效钻深 Ls	柄径 d	柄长 L1	总长 L	配用钻尖 Fitting inserts	扳手 Spanner
		标准尺寸	规格范围						
1	MGSE1400R8-XP20-ZX	14	14-14.9	112	20	50	211	MGSE1400-ZX	BS10-20
2	MGSE1500R8-XP20-ZX	15	15-15.9	120	20	50	220	MGSE1500-ZX	BS10-20
3	MGSE1600R8-XP20-ZX	16	16-16.9	128	20	50	229	MGSE1600-ZX	BS10-20
4	MGSE1700R8-XP20-ZX	17	17-17.9	136	20	50	238	MGSE1700-ZX	BS10-20
5	MGSE1800R8-XP25-ZX	18	18-18.9	144	25	56	247	MGSE1800-ZX	BS10-20
6	MGSE1900R8-XP25-ZX	19	19-19.9	152	25	56	256	MGSE1900-ZX	BS10-20
7	MGSE2000R8-XP25-ZX	20	20-21.9	160	25	56	265	MGSE2000-ZX	BS20-30
8	MGSE2100R8-XP25-ZX	21	21-21.9	168	25	56	274	MGSE2100-ZX	BS20-30
9	MGSE2200R8-XP25-ZX	22	22-22.9	176	25	56	283	MGSE2200-ZX	BS20-30
10	MGSE2300R8-XP25-ZX	23	23-23.9	184	25	56	292	MGSE2300-ZX	BS20-30
11	MGSE2400R8-XP25-ZX	24	24-24.9	192	25	56	296	MGSE2400-ZX	BS20-30
12	MGSE2500R8-XP32-ZX	25	25-25.9	200	32	60	310	MGSE2500-ZX	BS20-30
13	MGSE2600R8-XP32-ZX	26	26-26.9	208	32	60	319	MGSE2600-ZX	BS20-30
14	MGSE2700R8-XP32-ZX	27	27-27.9	216	32	60	328	MGSE2700-ZX	BS20-30
15	MGSE2800R8-XP32-ZX	28	28-28.9	224	32	60	332	MGSE2800-ZX	BS20-30
16	MGSE2900R8-XP32-ZX	29	29-29.9	232	32	60	341	MGSE2900-ZX	BS20-30
17	MGSE3000R8-XP32-ZX	30	30-30.9	240	32	60	350	MGSE3000-ZX	BS30-40
18	MGSE3100R8-XP32-ZX	31	31-31.9	248	32	60	359	MGSE3100-ZX	BS30-40
19	MGSE3200R8-XP32-ZX	32	32-32.9	256	32	60	368	MGSE3200-ZX	BS30-40
20	MGSE3300R8-XP32-ZX	33	33-33.9	264	32	60	377	MGSE3300-ZX	BS30-40
21	MGSE3400R8-XP32-ZX	34	34-34.9	272	32	60	381	MGSE3400-ZX	BS30-40
22	MGSE3500R8-XP32-ZX	35	35-35.9	280	32	60	390	MGSE3500-ZX	BS30-40
23	MGSE3600R8-XP32-ZX	36	36-36.9	288	32	60	399	MGSE3600-ZX	BS30-40
24	MGSE3700R8-XP32-ZX	37	37-37.9	296	32	60	408	MGSE3700-ZX	BS30-40
25	MGSE3800R8-XP32-ZX	38	38-38.9	304	32	60	412	MGSE3800-ZX	BS30-40
26	MGSE3900R8-XP32-ZX	39	39-39.9	312	32	60	421	MGSE3900-ZX	BS30-40

说明：1.此钻头需内冷支持。
2.刀片需单独订购。

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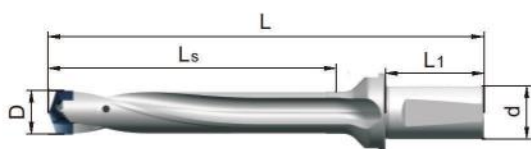
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C

圆柄刀具

皇冠钻9D Modular tip drills 9XD



序号	型号 Order NO.	刃口直径 D		有效钻深 Ls	柄径 d	柄长 L1	总长 L	配用钻尖 Fitting inserts	扳手 Spanner
		标准尺寸	规格范围						
1	MGSE1400R9-XP20-ZX	14	14-14.9	126	20	50	225	MGSE1400-ZX	BS10-20
2	MGSE1500R9-XP20-ZX	15	15-15.9	135	20	50	235	MGSE1500-ZX	BS10-20
3	MGSE1600R9-XP20-ZX	16	16-16.9	144	20	50	245	MGSE1600-ZX	BS10-20
4	MGSE1700R9-XP20-ZX	17	17-17.9	153	20	50	255	MGSE1700-ZX	BS10-20
5	MGSE1800R9-XP25-ZX	18	18-18.9	162	25	56	265	MGSE1800-ZX	BS10-20
6	MGSE1900R9-XP25-ZX	19	19-19.9	171	25	56	275	MGSE1900-ZX	BS10-20
7	MGSE2000R9-XP25-ZX	20	20-21.9	180	25	56	285	MGSE2000-ZX	BS20-30
8	MGSE2100R9-XP25-ZX	21	21-21.9	189	25	56	295	MGSE2100-ZX	BS20-30
9	MGSE2200R9-XP25-ZX	22	22-22.9	198	25	56	305	MGSE2200-ZX	BS20-30
10	MGSE2300R9-XP25-ZX	23	23-23.9	207	25	56	315	MGSE2300-ZX	BS20-30
11	MGSE2400R9-XP25-ZX	24	24-24.9	216	25	56	320	MGSE2400-ZX	BS20-30
12	MGSE2500R9-XP32-ZX	25	25-25.9	225	32	60	335	MGSE2500-ZX	BS20-30
13	MGSE2600R9-XP32-ZX	26	26-26.9	234	32	60	345	MGSE2600-ZX	BS20-30
14	MGSE2700R9-XP32-ZX	27	27-27.9	243	32	60	355	MGSE2700-ZX	BS20-30
15	MGSE2800R9-XP32-ZX	28	28-28.9	252	32	60	360	MGSE2800-ZX	BS20-30
16	MGSE2900R9-XP32-ZX	29	29-29.9	261	32	60	370	MGSE2900-ZX	BS20-30
17	MGSE3000R9-XP32-ZX	30	30-30.9	270	32	60	380	MGSE3000-ZX	BS30-40
18	MGSE3100R9-XP32-ZX	31	31-31.9	279	32	60	390	MGSE3100-ZX	BS30-40
19	MGSE3200R9-XP32-ZX	32	32-32.9	288	32	60	400	MGSE3200-ZX	BS30-40
20	MGSE3300R9-XP32-ZX	33	33-33.9	297	32	60	410	MGSE3300-ZX	BS30-40
21	MGSE3400R9-XP32-ZX	34	34-34.9	306	32	60	415	MGSE3400-ZX	BS30-40
22	MGSE3500R9-XP32-ZX	35	35-35.9	315	32	60	425	MGSE3500-ZX	BS30-40
23	MGSE3600R9-XP32-ZX	36	36-36.9	324	32	60	435	MGSE3600-ZX	BS30-40
24	MGSE3700R9-XP32-ZX	37	37-37.9	333	32	60	445	MGSE3700-ZX	BS30-40
25	MGSE3800R9-XP32-ZX	38	38-38.9	342	32	60	450	MGSE3800-ZX	BS30-40
26	MGSE3900R9-XP32-ZX	39	39-39.9	351	32	60	460	MGSE3900-ZX	BS30-40

说明：1.此钻头需内冷支持。
2.刀片需单独订购。

D

钻削

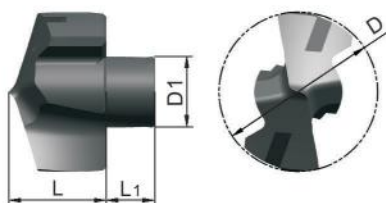
E

深孔加工

F

旋转刀柄

皇冠钻头Tips



序号	订货型号 Order NO.	刃口直径 D	钻尖高 L	定位直径 D1	配用刀杆 Holding Body
1	MGSE1400-ZX	14	10.5	φ6	MGSE1400R...-XP20-ZX
2	MGSE1430-ZX	14.3			
3	MGSE1450-ZX	14.5			
4	MGSE1500-ZX	15			
5	MGSE1530-ZX	15.3			MGSE1500R...-XP20-ZX
6	MGSE1550-ZX	15.5			
7	MGSE1600-ZX	16			
8	MGSE1650-ZX	16.5			
9	MGSE1700-ZX	17	11.5	φ8	MGSE1700R...-XP20-ZX
10	MGSE1725-ZX	17.25			
11	MGSE1750-ZX	17.5			
12	MGSE1800-ZX	18			
13	MGSE1850-ZX	18.5			MGSE1800R...-XP25-ZX
14	MGSE1900-ZX	19			
15	MGSE1930-ZX	19.3			
16	MGSE1950-ZX	19.5			
17	MGSE2000-ZX	20	13	φ9	MGSE2000R...-XP25-ZX
18	MGSE2050-ZX	20.5			
19	MGSE2100-ZX	21			MGSE2100R...-XP25-ZX
20	MGSE2150-ZX	21.5			
21	MGSE2200-ZX	22			MGSE2200R...-XP25-ZX
22	MGSE2250-ZX	22.5			
23	MGSE2300-ZX	23			MGSE2300R...-XP25-ZX
24	MGSE2350-ZX	23.5			
25	MGSE2400-ZX	24			MGSE2400R...-XP25-ZX
26	MGSE2450-ZX	24.5			

说明：非标钻尖直径可以定制。

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄



序号	订货型号 Order NO.	刃口直径 D	钻尖高 L	定位直径 D1	配用刀杆 Holding Body
27	MGSE2500-ZX	25	15	φ12	MGSE2500R..-XP32-ZX
28	MGSE2530-ZX	25.3			
29	MGSE2550-ZX	25.5			
30	MGSE2600-ZX	26			MGSE2600R..-XP32-ZX
31	MGSE2650-ZX	26.5			
32	MGSE2700-ZX	27			MGSE2700R..-XP32-ZX
33	MGSE2750-ZX	27.5			
34	MGSE2800-ZX	28			MGSE2800R..-XP32-ZX
35	MGSE2850-ZX	28.5			
36	MGSE2900-ZX	29			MGSE2900R..-XP32-ZX
37	MGSE2950-ZX	29.5			
38	MGSE3000-ZX	30	20	φ15	MGSE3000R..-XP32-ZX
39	MGSE3050-ZX	30.5			
40	MGSE3100-ZX	31			MGSE3100R..-XP32-ZX
41	MGSE3150-ZX	31.5			
42	MGSE3200-ZX	32			MGSE3200R..-XP32-ZX
43	MGSE3250-ZX	32.5			
44	MGSE3300-ZX	33			MGSE3300R..-XP32-ZX
45	MGSE3350-ZX	33.5			
46	MGSE3400-ZX	34			MGSE3400R..-XP32-ZX
47	MGSE3450-ZX	34.5			
48	MGSE3500-ZX	35	21.5	φ18	MGSE3500R..-XP32-ZX
49	MGSE3550-ZX	35.5			
50	MGSE3600-ZX	36			MGSE3600R..-XP32-ZX
51	MGSE3650-ZX	36.5			
52	MGSE3700-ZX	37			MGSE3700R..-XP32-ZX
53	MGSE3750-ZX	37.5			
54	MGSE3800-ZX	38			MGSE3800R..-XP32-ZX
55	MGSE3850-ZX	38.5			
56	MGSE3900-ZX	39			MGSE3900R..-XP32-ZX

说明：非标钻尖直径可以定制。

皇冠钻切削参数Cutting dates recommendations

基于6倍径皇冠钻的切削参数推荐

ISO	被加工材料	材料硬度 HB	切削速度 Vc(m/min)	推荐进给速度fz(mm/r)			
				D14-18	D18-21	D21-27	D28-30
P	低碳钢	140-200	110-140	0.20-0.24	0.24-0.26	0.24-0.26	0.26-0.32
	低合金钢	190-280	100-130	0.20-0.22	0.22-0.24	0.22-0.24	0.24-0.3
	合金钢	250-330	90-120	0.18-0.2	0.2-0.6	0.2-0.26	0.24-0.3
M	铁素体	200	50-78	0.24-0.28	0.24-0.3	0.24-0.3	0.24-0.3
	奥氏体	180	40-70	0.2-0.25	0.2-0.28	0.2-0.28	0.2-0.28
	马氏体	240	50-80	0.16-0.2	0.16-0.24	0.16-0.24	0.16-0.24
K	灰铸铁	240	90-120	0.24-0.28	0.28-0.34	0.28-0.34	0.28-0.34
	球墨铸铁	180	90-120	0.2-0.25	0.28-0.34	0.28-0.34	0.3-0.4
	可锻铸铁	230	90-120	0.16-0.2	0.28-0.34	0.3-0.4	0.34-0.5
N	硅铝合金	130	150-200	0.4-0.5	0.5-0.6	0.5-0.6	0.6-0.7
S	铁基高温合金	210	30-50	0.14-0.16	0.14-0.16	0.14-0.18	0.14-0.18
	镍基高温合金	250	30-50	0.12-0.15	0.12-0.15	0.12-0.16	0.12-0.18
	钴基高温合金	350	30-50	0.14-0.16	0.14-0.16	0.14-0.18	0.14-0.18
H	淬火钢	50-55HRC	30-50	0.14-0.16	0.14-0.16	0.14-0.2	0.14-0.2

说明：超过8倍径的钻头，转速和进给都应当根据实际工况进行不同幅度的下调。

B



铣削

皇冠钻特点Key features for modular tip drills

C

圆柄刀具



D

采用对称设计的复合皇冠钻具有如下优点

- 1、对称设计，可以在最高的进给速度下，实现最佳的加工平稳性。在10倍径的深孔加工中，直接钻孔，无需打中心孔，依然能保证平稳性
- 2、经过三维模拟设计的特殊钻杆设计，达到最佳的容屑和排屑效果
- 3、中心钻采用特殊槽型设计，具有最佳的定心效果和极高的寿命
- 4、周边刀片采用特殊修光刃设计，在极高的进给速度下，实现最佳的孔壁质量

钻削

E

深孔加工

F

旋转刀柄

可换头模块的安装与更换Modular head mounting

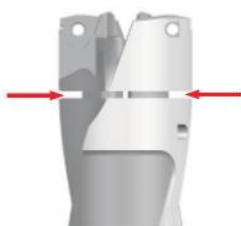
1.用压缩空气清洁定位面；



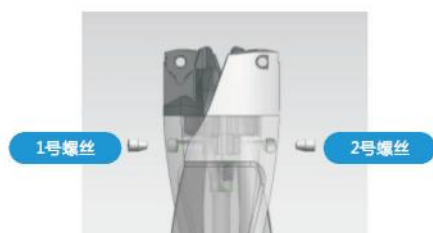
2.将钻头底部的定位柱与钻杆的定位孔对准贴紧；



3.用0.01mm塞尺，检查头部模块与杆部模块接合部位，以保证接合部位无任何间隙；



4.用2颗紧定螺钉旋入杆部模块螺钉孔；



5.用适当的力拧紧螺钉，防止钻削时螺钉松动，先锁1号螺钉，然后锁2号螺钉，最后加紧一下；

6.安装完成。

1.用适当的力逆时针松开紧固螺钉，先松1号螺钉，然后松2号螺钉，最后完全松开两个螺钉；



2.竖直方向取出可换头模块。

注：刀体使用一段时间后，请注意检查螺丝钉是否松动，如有松动情况，需再次拧紧螺丝钉后使用。

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普努克

铣削

C

圆柄刀具

D

钻削

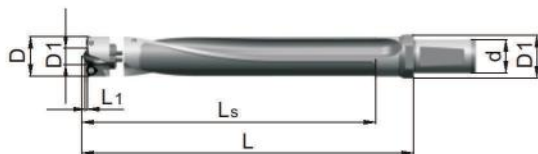
E

深孔加工

F

旋转刀柄

复合皇冠钻6D Modulardrills 6XD with exchangeable heads



孔径	长径比	可换头模块	钻杆型号 Order NO.	钻深 L _s	钻杆有效长度	柄径 d	锥端紧定螺钉	扳手	钻杆接口
32	6D	FHT3200-ZX-KN	FHG3200R6-XP32-KN	204	184	32	M4×9-30°-S2	S2	32
32.5	6D	FHT3250-ZX-KN		204	184	32		S2	
33	6D	FHT3300-ZX-KN		204	184	32		S2	
33.5	6D	FHT3350-ZX-KN		204	184	32		S2	
34	6D	FHT3400-ZX-KN	FHG3400R6-XP32-KN	216	196	32	M4×9-30°-S2	S2	32
34.5	6D	FHT3450-ZX-KN		216	196	32		S2	
35	6D	FHT3500-ZX-KN		216	196	32		S2	
35.5	6D	FHT3550-ZX-KN		216	196	32		S2	
36	6D	FHT3600-ZX-KN	FHG3600R6-XP32-KN	228	208	32	M5×9.5-S2.5	S2.5	36
36.5	6D	FHT3650-ZX-KN		228	208	32		S2.5	
37	6D	FHT3700-ZX-KN		228	208	32		S2.5	
37.5	6D	FHT3750-ZX-KN		228	208	32		S2.5	
38	6D	FHT3800-ZX-KN	FHG3800R6-XP32-KN	240	220	32	M4×9-30°-S2	S2	38
38.5	6D	FHT3850-ZX-KN		240	220	32		S2	
39	6D	FHT3900-ZX-KN		240	220	32		S2	
39.5	6D	FHT3950-ZX-KN		240	220	32		S2	
40	6D	FHT4000-ZX-KN	FHG4000R6-XP50-KN	252	227	50		S2.5	
40.5	6D	FHT4050-ZX-KN		252	227	50		S2.5	
41	6D	FHT4100-ZX-KN		252	227	50		S2.5	
41.5	6D	FHT4150-ZX-KN		252	227	50		S2.5	
42	6D	FHT4200-ZX-KN	FHG4200R6-XP50-KN	270	245	50	M5×9.5-S2.5	S2.5	40
42.5	6D	FHT4250-ZX-KN		270	245	50		S2.5	
43	6D	FHT4300-ZX-KN		270	245	50		S2.5	
43.5	6D	FHT4350-ZX-KN		270	245	50		S2.5	
44	6D	FHT4400-ZX-KN		270	245	50		S2.5	
44.5	6D	FHT4450-ZX-KN		270	245	50		S2.5	
	6D			270	245	50		S2.5	

说明：1.此钻头需内冷支持。
2.刀片需单独订购。

孔径	长径比	可换头模块	钻杆型号 Order NO.	钻深 L _s	钻杆有效长度	柄径 d	锥端紧定螺钉	扳手	钻杆接口
45	6D	FHT4500-ZX-KN	FHG4500R6-XP50-KN	282	257	50	M6×12-30°-S3	S3	45
45.5	6D	FHT4550-ZX-KN		282	257	50		S3	
46	6D	FHT4600-ZX-KN		282	257	50		S3	
46.5	6D	FHT4650-ZX-KN		282	257	50		S3	
47	6D	FHT4700-ZX-KN	FHG4700R6-XP50-KN	300	275	50		S3	
47.5	6D	FHT4750-ZX-KN		300	275	50		S3	
48	6D	FHT4800-ZX-KN		300	275	50		S3	
48.5	6D	FHT4850-ZX-KN		300	275	50		S3	
49	6D	FHT4900-ZX-KN		300	275	50		S3	
49.5	6D	FHT4950-ZX-KN		300	275	50		S3	
50	6D	FHT5000-ZX-KN	FHG5000R6-XP50-KN	312	282	50		S3	50
50.5	6D	FHT5050-ZX-KN		312	282	50		S3	
51	6D	FHT5100-ZX-KN		312	282	50		S3	
51.5	6D	FHT5150-ZX-KN		312	282	50		S3	
52	6D	FHT5200-ZX-KN		330	300	50		S3	

说明：1.此钻头需内冷支持。
2.刀片需单独订购。

B

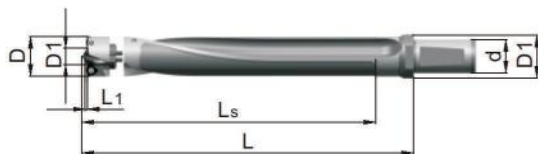


铣削

C

圆柄刀具

复合皇冠钻7D Modulardrills 7XD with exchangeable heads



D

钻削

E

深孔加工

F

旋转刀柄

孔径	长径比	可换头模块	钻杆型号 Order NO.	钻深 L _s	钻杆有效长度	柄径 d	锥端紧定螺钉	扳手
32	7D	FHT3200-ZX-KN	FHG3200R7-XP32-KN	238	218	32	M4×9-30°-S2	S2
32.5	7D	FHT3250-ZX-KN		238	218	32		S2
33	7D	FHT3300-ZX-KN		238	218	32		S2
33.5	7D	FHT3350-ZX-KN		238	218	32		S2
34	7D	FHT3400-ZX-KN	FHG3400R7-XP32-KN	252	232	32	M4×9-30°-S2	S2
34.5	7D	FHT3450-ZX-KN		252	232	32		S2
35	7D	FHT3500-ZX-KN		252	232	32		S2
35.5	7D	FHT3550-ZX-KN		252	232	32		S2
36	7D	FHT3600-ZX-KN	FHG3600R7-XP32-KN	266	246	32	M5×9.5-S2.5	S2.5
36.5	7D	FHT3650-ZX-KN		266	246	32		S2.5
37	7D	FHT3700-ZX-KN		266	246	32		S2.5
37.5	7D	FHT3750-ZX-KN		266	246	32		S2.5
38	7D	FHT3800-ZX-KN	FHG3800R7-XP32-KN	280	260	32	M4×9-30°-S2	S2
38.5	7D	FHT3850-ZX-KN		280	260	32		S2
39	7D	FHT3900-ZX-KN		280	260	32		S2
39.5	7D	FHT3950-ZX-KN		280	260	32		S2
40	7D	FHT4000-ZX-KN	FHG4000R7-XP50-KN	294	269	50	M5×9.5-S2.5	S2.5
40.5	7D	FHT4050-ZX-KN		294	269	50		S2.5
41	7D	FHT4100-ZX-KN		294	269	50		S2.5
41.5	7D	FHT4150-ZX-KN		294	269	50		S2.5

说明：1.此钻头需内冷支持。

2.刀片需单独订购。

孔径	长径比	可换头模块	钻杆型号 Order NO.	钻深 L _s	钻杆有效长度	柄径 d	锥端紧定螺钉	扳手
42	7D	FHT4200-ZX-KN	FHG4200R7-XP50-KN	315	290	50	M5×9.5-S2.5	S2.5
42.5	7D	FHT4250-ZX-KN		315	290	50		S2.5
43	7D	FHT4300-ZX-KN		315	290	50		S2.5
43.5	7D	FHT4350-ZX-KN		315	290	50		S2.5
44	7D	FHT4400-ZX-KN		315	290	50		S2.5
44.5	7D	FHT4450-ZX-KN		315	290	50		S2.5
45	7D	FHT4500-ZX-KN	FHG4500R7-XP50-KN	329	304	50	M6×12-30°-S3	S3
45.5	7D	FHT4550-ZX-KN		329	304	50		S3
46	7D	FHT4600-ZX-KN		329	304	50		S3
46.5	7D	FHT4650-ZX-KN		329	304	50		S3
47	7D	FHT4700-ZX-KN	FHG4700R7-XP50-KN	350	325	50		S3
47.5	7D	FHT4750-ZX-KN		350	325	50		S3
48	7D	FHT4800-ZX-KN		350	325	50		S3
48.5	7D	FHT4850-ZX-KN		350	325	50		S3
49	7D	FHT4900-ZX-KN		350	325	50		S3
49.5	7D	FHT4950-ZX-KN		350	325	50		S3
50	7D	FHT5000-ZX-KN	FHG5000R7-XP50-KN	364	339	50		S3
50.5	7D	FHT5050-ZX-KN		364	339	50		S3
51	7D	FHT5100-ZX-KN		364	339	50		S3
51.5	7D	FHT5150-ZX-KN		364	339	50		S3
52	7D	FHT5200-ZX-KN		385	360	50		S3

说明：1.此钻头需内冷支持。
2.刀片需单独订购。

B

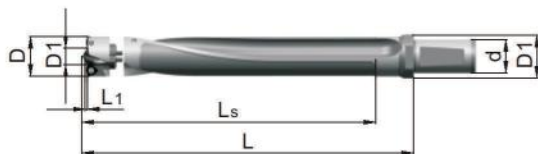
Pulcut
普努克

铣削

C

圆柄刀具

复合皇冠钻8D Modular drills 8XD with exchangeable heads



孔径D	长径比 H/D	钻杆型号 Body Order NO.	可换头模块 Removed Head	钻深L _s	钻杆有效长度	柄径d	锥端紧定螺钉	扳手T
32	8D	FHG3200R8-XP32-KN	FHT3200-ZX-KN	272	252	32	M4×9-30°-S2	S2
32.5	8D		FHT3250-ZX-KN	272	252	32		S2
33	8D		FHT3300-ZX-KN	272	252	32		S2
33.5	8D		FHT3350-ZX-KN	272	252	32		S2
34	8D	FHG3400R8-XP32-KN	FHT3400-ZX-KN	288	268	32	M4×9-30°-S2	S2
34.5	8D		FHT3450-ZX-KN	288	268	32		S2
35	8D		FHT3500-ZX-KN	288	268	32		S2
35.5	8D		FHT3550-ZX-KN	288	268	32		S2
36	8D	FHG3600R8-XP32-KN	FHT3600-ZX-KN	304	284	32	M5×9.5-S2.5	S2.5
36.5	8D		FHT3650-ZX-KN	304	284	32		S2.5
37	8D		FHT3700-ZX-KN	304	284	32		S2.5
37.5	8D		FHT3750-ZX-KN	304	284	32		S2.5
38	8D	FHG3800R8-XP32-KN	FHT3800-ZX-KN	320	300	32	M4×9-30°-S2	S2
38.5	8D		FHT3850-ZX-KN	320	300	32		S2
39	8D		FHT3900-ZX-KN	320	300	32		S2
39.5	8D		FHT3950-ZX-KN	320	300	32		S2
40	8D	FHG4000R8-XP50-KN	FHT4000-ZX-KN	336	311	50	M5×9.5-S2.5	S2.5
40.5	8D		FHT4050-ZX-KN	336	311	50		S2.5
41	8D		FHT4100-ZX-KN	336	311	50		S2.5
41.5	8D		FHT4150-ZX-KN	336	311	50		S2.5

说明：1.此钻头需内冷支持。
2.刀片需单独订购。

钻削

E

深孔加工

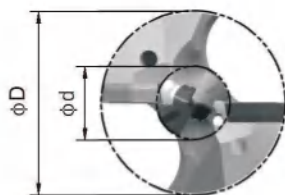
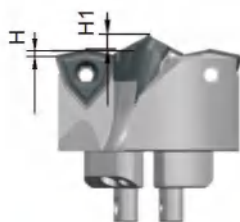
F

旋转刀柄

孔径D	长径比 H/D	钻杆型号 Body Order NO.	可换头模块 Removed Head	钻深Ls	钻杆有效长度	柄径d	锥端紧定螺钉	扳手T
42	8D	FHG4200R8-XP50-KN	FHT4200-ZX-KN	360	335	50	M5×9.5-S2.5	S2.5
42.5	8D		FHT4250-ZX-KN	360	335	50		S2.5
43	8D		FHT4300-ZX-KN	360	335	50		S2.5
43.5	8D		FHT4350-ZX-KN	360	335	50		S2.5
44	8D		FHT4400-ZX-KN	360	335	50		S2.5
44.5	8D		FHT4450-ZX-KN	360	335	50		S2.5
45	8D	FHG4500R8-XP50-KN	FHT4500-ZX-KN	376	351	50	M6×12-30°-S3	S3
45.5	8D		FHT4550-ZX-KN	376	351	50		S3
46	8D		FHT4600-ZX-KN	376	351	50		S3
46.5	8D		FHT4650-ZX-KN	376	351	50		S3
47	8D	FHG4700R8-XP50-KN	FHT4700-ZX-KN	400	375	50		S3
47.5	8D		FHT4750-ZX-KN	400	375	50		S3
48	8D		FHT4800-ZX-KN	400	375	50		S3
48.5	8D		FHT4850-ZX-KN	400	375	50		S3
49	8D		FHT4900-ZX-KN	400	375	50		S3
49.5	8D		FHT4950-ZX-KN	400	375	50		S3
50	8D	FHG5000R8-XP50-KN	FHT5000-ZX-KN	416	391	50		S3
50.5	8D		FHT5050-ZX-KN	416	391	50		S3
51	8D		FHT5100-ZX-KN	416	391	50		S3
51.5	8D		FHT5150-ZX-KN	416	391	50		S3
52	8D		FHT5200-ZX-KN	440	415	50		S3

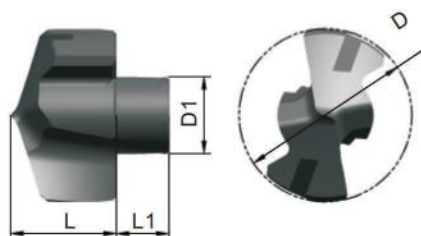
说明：1.此钻头需内冷支持。
2.刀片需单独订购。

可换头模块Modular heads



孔径	可换头模块 Modular	中心刀片 Insert	周边刀片 Insert	螺钉 Screw	扳手 Spanner		配用钻杆 Holding body
					中心	周边	
32	FHT3200-ZX-KN	MGSE1500-ZX-C08	PD02381208ZBR	M3×8-60°	BS10-20	T8	FHG3200R6-XP32-KN FHG3200R7-XP32-KN FHG3200R8-XP32-KN FHG3200R10-XP32-KN
32.5	FHT3250-ZX-KN	MGSE1600-ZX-C08	PD02381208ZBR	M3×8-60°	BS10-20	T8	
33	FHT3300-ZX-KN	MGSE1600-ZX-C08	PD02381208ZBR	M3×8-60°	BS10-20	T8	
33.5	FHT3350-ZX-KN	MGSE1700-ZX-C08	PD02381208ZBR	M3×8-60°	BS10-20	T8	
34	FHT3400-ZX-KN	MGSE1700-ZX-C08	PD02381208ZBR	M3×8-60°	BS10-20	T8	FHG3400R6-XP32-KN FHG3400R7-XP32-KN FHG3400R8-XP32-KN FHG3400R10-XP32-KN
34.5	FHT3450-ZX-KN	MGSE1800-ZX-C08	PD02381208ZBR	M3×8-60°	BS10-20	T8	
35	FHT3500-ZX-KN	MGSE1800-ZX-C08	PD02381208ZBR	M3×8-60°	BS10-20	T8	
35.5	FHT3550-ZX-KN	MGSE1900-ZX-C08	PD02381208ZBR	M3×8-60°	BS10-20	T8	
36	FHT3600-ZX-KN	MGSE1400-ZX-C08	PD1381208ZBR	M3×8-60°	BS10-20	T8	FHG3600R6-XP32-KN FHG3600R7-XP32-KN FHG3600R8-XP32-KN FHG3600R10-XP32-KN
36.5	FHT3650-ZX-KN	MGSE1500-ZX-C08	PD1381208ZBR	M3×8-60°	BS10-20	T8	
37	FHT3700-ZX-KN	MGSE1500-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	
37.5	FHT3750-ZX-KN	MGSE1600-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	
38	FHT3800-ZX-KN	MGSE1600-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	FHG3800R6-XP32-KN FHG3800R7-XP32-KN FHG3800R8-XP32-KN FHG3800R10-XP32-KN
38.5	FHT3850-ZX-KN	MGSE1700-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	
39	FHT3900-ZX-KN	MGSE1700-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	
39.5	FHT3950-ZX-KN	MGSE1800-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	
40	FHT4000-ZX-KN	MGSE1800-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	FHG4000R6-XP50-KN FHG4000R7-XP50-KN FHG4000R8-XP50-KN FHG4000R10-XP50-KN
40.5	FHT4050-ZX-KN	MGSE1900-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	
41	FHT4100-ZX-KN	MGSE1900-ZX-C08	PD1381208ZBR	M4×8-43°	BS10-20	T15	
41.5	FHT4150-ZX-KN	MGSE2000-ZX-C08	PD1381208ZBR	M4×8-43°	BS20-30	T15	
42	FHT4200-ZX-KN	MGSE2000-ZX-C08	PD1381208ZBR	M4×8-43°	BS20-30	T15	FHG4200R6-XP50-KN FHG4200R7-XP50-KN FHG4200R8-XP50-KN FHG4200R10-XP50-KN
42.5	FHT4250-ZX-KN	MGSE2100-ZX-C08	PD1381208ZBR	M4×8-43°	BS20-30	T15	
43	FHT4300-ZX-KN	MGSE2100-ZX-C08	PD1381208ZBR	M4×8-43°	BS20-30	T15	
43.5	FHT4350-ZX-KN	MGSE2200-ZX-C08	PD1381208ZBR	M4×8-43°	BS20-30	T15	
44	FHT4400-ZX-KN	MGSE2200-ZX-C08	PD1381208ZBR	M4×8-43°	BS20-30	T15	FHG4500R6-XP50-KN FHG4500R7-XP50-KN FHG4500R8-XP50-KN FHG4500R10-XP50-KN
44.5	FHT4450-ZX-KN	MGSE2300-ZX-C08	PD1381208ZBR	M4×8-43°	BS20-30	T15	
45	FHT4500-ZX-KN	MGSE1800-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS10-20	T15	
45.5	FHT4550-ZX-KN	MGSE1800-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS10-20	T15	
46	FHT4600-ZX-KN	MGSE1900-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS10-20	T15	FHG4700R6-XP50-KN FHG4700R7-XP50-KN FHG4700R8-XP50-KN FHG4700R10-XP50-KN
46.5	FHT4650-ZX-KN	MGSE1900-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS10-20	T15	
47	FHT4700-ZX-KN	MGSE2000-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	
47.5	FHT4750-ZX-KN	MGSE2000-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	
48	FHT4800-ZX-KN	MGSE2100-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	FHG5000R6-XP50-KN FHG5000R7-XP50-KN FHG5000R8-XP50-KN FHG5000R10-XP50-KN
48.5	FHT4850-ZX-KN	MGSE2100-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	
49	FHT4900-ZX-KN	MGSE2200-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	
49.5	FHT4950-ZX-KN	MGSE2200-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	
50	FHT5000-ZX-KN	MGSE2300-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	FHG5000R6-XP50-KN FHG5000R7-XP50-KN FHG5000R8-XP50-KN FHG5000R10-XP50-KN
50.5	FHT5050-ZX-KN	MGSE2300-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	
51	FHT5100-ZX-KN	MGSE2400-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	
51.5	FHT5150-ZX-KN	MGSE2400-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	
52	FHT5200-ZX-KN	MGSE2500-ZX-C08	PD1481208ZBR-DS	M4×10.5-60°	BS20-30	T15	

中心钻尖Tips



序号	订货型号 Order NO.	刃口直径D	定位直径D1
1	MGSE1400-ZX-C08	14	φ6
2	MGSE1500-ZX-C08	15	
3	MGSE1600-ZX-C08	16	
4	MGSE1700-ZX-C08	17	φ8
5	MGSE1800-ZX-C08	18	
6	MGSE1900-ZX-C08	19	
7	MGSE2000-ZX-C08	20	φ9
8	MGSE2100-ZX-C08	21	
9	MGSE2200-ZX-C08	22	
10	MGSE2300-ZX-C08	23	
11	MGSE2400-ZX-C08	24	
12	MGSE2500-ZX-C08	25	φ12

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

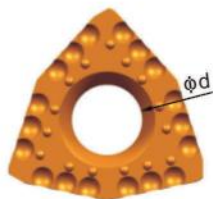
旋转刀柄

Pulcut
普努克

周边刀片Periphery insert



序号	订货型号 Order NO.	内切圆IC	螺孔d
1	PD02381208ZBR	8	3.3
2	PD1381208ZBR	10	4.3
3	PD1481208ZBR	12	4.5



序号	订货型号 Order NO.	内切圆IC	螺孔d
1	PD02381208ZBR-DS	8	3.3
2	PD1381208ZBR-DS	10	4.3
3	PD1481208ZBR-DS	12	4.5

D62

复合皇冠钻切削推荐Cutting dates recommendations

基于7倍径复合皇冠钻的切削参数推荐

类别	被加工材料	材料硬度 HB	切削速度范围 - Vc (m/min)			进给速度 fz (mm/r)		
			最小值 min	初始值 init	最大值 max	钻头直径 D		
P	低碳钢	140-200	90	190	230	0.160-0.280	0.200-0.320	0.200-0.400
	低合金钢	190-280	70	130	170	0.160-0.280	0.200-0.320	0.200-0.400
	合金钢	250-330	50	80	110	0.160-0.280	0.200-0.320	0.200-0.400
M	铁素体	200	110	110	135	0.130-0.250	0.160-0.280	0.160-0.320
	奥氏体	180	70	70	90	0.130-0.250	0.160-0.280	0.160-0.320
	马氏体	240	50	50	65	0.130-0.250	0.160-0.280	0.160-0.320
K	灰铸铁	240	170	170	230	0.180-0.300	0.216-0.360	0.240-0.420
	球墨铸铁	180	120	120	160	0.180-0.300	0.216-0.360	0.240-0.420
	可锻铸铁	230	70	70	90	0.180-0.300	0.216-0.360	0.240-0.420
N	硅铝合金	130	240	240	360	0.180-0.300	0.144-0.280	0.160-0.320
S	铁基高温合金	210	140	140	240	0.120-0.200	0.144-0.280	0.160-0.320
	镍基高温合金	250	90	90	160	0.120-0.200	0.144-0.280	0.160-0.320
	钴基高温合金	350	90	90	110	0.120-0.200	0.144-0.280	0.160-0.320
H	淬火钢	50-55HRC	90	90	110	0.120-0.200	0.144-0.280	0.160-0.320

说明：超过9倍径的钻头，转速和进给都应当根据实际工况进行不同幅度的下调。

B



铣削

C

圆柄刀具

小直径复合钻Small dia. modular drills



规格型号

直径 D	头部型号 Order NO.	中心钻 Insert	周边刀片 Insert	钻杆型号 Order NO.	倍径 LBD	钻深 Ls	总长 L	颈径 D1	柄径 d	配用刀柄 N.
40	FHT40-XK	8K	PD0238..	FHG385×4D-M63	4×D	185	235	38.5	63	BT50-G63-YH /BT50-G63-WH
41	FHT41-XK									
42	FHT42-XK			FHG385×6D-M63	6×D	260	310	38.5		
43	FHT43-XK									
44	FHT44-XK			FHG385×8D-M63	8×D	340	390	38.5		
45	FHT45-XK	10K	PD138..						80	BT50-G80-YH /BT50-G80-WH
46	FHT46-XK									
47	FHT47-XK			FHG445×4D-M80	4×D	215	280	44.5		
48	FHT48-XK									
49	FHT49-XK									
50	FHT50-XK	10K	PD148..	FHG445×6D-M80	6×D	310	375	44.5	80	BT50-G80-YH /BT50-G80-WH
51	FHT51-XK									
52	FHT52-XK									
53	FHT53-XK			FHG445×8D-M80	8×D	415	480	44.5		
54	FHT54-XK									
55	FHT55-XK	10K	PD148..						80	BT50-G80-YH /BT50-G80-WH
56	FHT56-XK			FHG535×4D-M80	4×D	260	325	53.5		
57	FHT57-XK									
58	FHT58-XK									
59	FHT59-XK			FHG535×6D-M80	6×D	370	435	53.5		
60	FHT60-XK	10K	PD148..						80	BT50-G80-YH /BT50-G80-WH
61	FHT61-XK									
62	FHT62-XK									
63	FHT63-XK			FHG535×8D-M80	8×D	495	560	53.5		
64	FHT64-XK									

钻削

E

深孔加工

F

旋转刀柄

规格型号Specification and mode

直径 D	头部型号 Order NO.	中心钻 Insert	周边刀片 Insert	钻杆型号 Order NO.	倍径 LBD	钻深 Ls	总长 L	颈径 D ₁	柄径 d	配用刀柄 N.
65	FHT68-XK	12K	PD0238..	FHG635×4D-M80	4×D	295	375	63.5	80	BT50-G80-YH /BT50-G80-WH
66				FHG635×6D-M80	6×D	420	500			
67										
68				FHT71-XK	FHG635×9D-M80	9×D	560			
69										
70										
71	FHT74-XK	12K	PD0238..	FHG700×4D-M80	4×D	325	405	70	80	BT50-G80-YH /BT50-G80-WH
72				FHG700×6D-M80	6×D	460	540			
73										
74				FHT77-XK	FHG700×9D-M80	9×D	610			
75										
76										
77	FHT80-XK	12K	PD0238..	FHG700×4D-M80	4×D	325	405	70	80	BT50-G80-YH /BT50-G80-WH
78				FHG700×6D-M80	6×D	460	540			
79										
80										

说明：1.-YH为带进水器，WH为不带进水器。

2.直径D时按周边刀片圆角为R0.8时设计，安装其他刀片直径会变化。

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

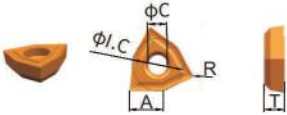
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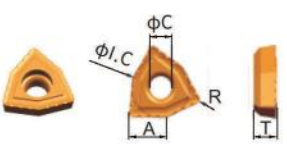
旋转刀柄



小直径复合钻Inserts

刀片 Inserts

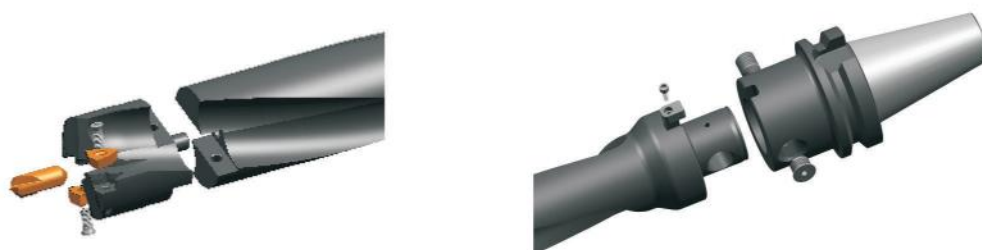
	型号 Order NO.	I.C	A	T	C	R
	PD1381208-N	10	6.6	3.8	4.3	0.8

	型号 Order NO.	I.C	A	T	C	R
	PD02381208-M	8	5.5	3.8	2.7	0.8
	PD1381208-M	10	6.6	4.4	3.8	0.8
	PD1481208-M	12	7.9	4.8	4.4	0.8

刀片牌号Insert grades

	加工材料
MG7175 ●	碳钢、合金钢
MG7275 ●	不锈钢
MG7375 ●	铸铁

小直径复合钻Small dia. modular drills with exchangeable heads



配件Accessories

直径 D	头部型号 Order NO.	中心钻螺钉 Screw		刀片螺钉 Screw	内刀座 Apron	外刀座 Apron	刀垫螺钉 Screw
		压紧	调节				
40	FHT40-XK	YJM0615	TJM0622	M2.5×8-60°	--	--	--
41	FHT41-XK				--	--	--
42	FHT42-XK				--	--	--
43	FHT43-XK	YJM0617			--	--	--
44	FHT44-XK				--	--	--
45	FHT45-XK				--	--	--
46	FHT46-XK	YJM0817	TJM0815	M3.5×10-50°	--	--	--
47	FHT47-XK				--	--	--
48	FHT48-XK				--	--	--
49	FHT49-XK				--	--	--
50	FHT50-XK				--	--	--
51	FHT51-XK	YJM0820			--	--	--
52	FHT52-XK				--	--	--
53	FHT53-XK				--	--	--
54	FHT54-XK				--	--	--
55	FHT55-XK			--	--	--	
56	FHT56-XK	YJM0823		--	--	--	
57	FHT57-XK			--	--	--	
58	FHT58-XK			--	--	--	
59	FHT59-XK			--	--	--	
60	FHT60-XK			--	--	--	
61	FHT61-XK			--	--	--	
62	FHT62-XK			--	--	--	
63	FHT63-XK			--	--	--	
64	FHT64-XK			--	--	--	

B



铣削

小直径复合钻Small dia. modular drills with exchangeable heads

C

圆柄刀具



配件Accessories

D

直径 D	头部型号 Order NO.	中心钻螺钉 Screw		刀片螺钉 Screw	内刀座 Apron	外刀座 Apron	刀垫螺钉 Screw				
		压紧	调节								
65	FHT68-XK	YJM1025	TJM0822	M3×8-60°	FZ68N-PD05	FZ65W-PD05	LDJ-M6×12				
66						FZ66W-PD05					
67						FZ67W-PD05					
68						FZ68W-PD05					
69	FHT71-XK		TJM0822		FZ71N-PD05	FZ69W-PD05					
70						FZ70W-PD05					
71						FZ71W-PD05					
72	FHT74-XK				FZ74N-PD05	FZ72W-PD05	LDJ-M6×14				
73						FZ73W-PD05					
74						FZ74W-PD05					
75	FHT77-XK				FZ77N-PD05	FZ75W-PD05					
76						FZ76W-PD05					
77						FZ77W-PD05					
78	FHT80-XK				FZ80N-PD05	FZ78W-PD05					
79						FZ79W-PD05					
80						FZ80W-PD05					

钻削

E

深孔加工

F

旋转刀柄

D68

大直径复合钻Big dia.modular drills with exchangeable heads



规格型号

直径 D	头部型号 Order NO.	中心钻 Insert	周边刀片 Insert	长度 L	颈径 d	接杆 Order NO.	刀柄型号 N.				
79-82	FHT82-M50	16K	PD138..	85	50	21MG.50.50-100 /21MG.50.50-200 /21MG.50.50-300	BT50-G50-YH /BT50-G50-WH				
82-85	FHT85-M50										
85-88	FHT88-M50										
88-91	FHT91-M50										
91-94	FHT94-M50										
94-97	FHT97-M50										
97-100	FHT100-M50										
100-105	FHT105-M63	20K	PD148..	95	63	21MG.63.63-100 /21MG.63.63-200 /21MG.63.63-300	BT50-G63-YH /BT50-G63-WH				
105-110	FHT110-M63										
110-115	FHT115-M63										
115-120	FHT120-M63										
120-125	FHT125-M63		PD138..	100	80	21MG.80.80-100 /21MG.80.80-200 /21MG.80.80-300	BT50-G80-YH /BT50-G80-WH				
125-130	FHT130-M63										
130-135	FHT135-M80										
135-140	FHT140-M80										
140-145	FHT145-M80		PD148..								
145-150	FHT150-M80										
150-155	FHT155-M80										
155-160	FHT160-M80										

说明：1.-YH为带进水器，WH为不带进水器。

2.直径D时按周边刀片圆角为R0.8时设计，安装其他刀片直径会变化。

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

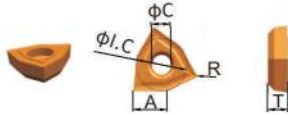
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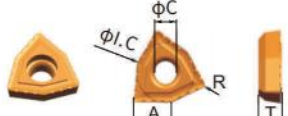
旋转刀柄



大直径复合钻Big dia.modular drills with exchangeable heads

刀片 Inserts

	型号 Order NO.	I.C	A	T	C	R
	PD1381208-N	10	6.6	3.8	3.8	0.8

	型号 Order NO.	I.C	A	T	C	R
	PD1381208-M	10	6.6	3.8	3.8	0.8
	PD1481208-M	12	7.9	4.8	4.4	0.8

刀片牌号Insert grades

	加工材料
MG7175 ●	碳钢、合金钢
MG7275 ●	不锈钢
MG7375 ●	铸铁

大直径复合钻Big dia.modular drills with exchangeable heads



配件Accessories

直径 D	头部型号 Order NO.	中心钻螺钉 Screw		刀片螺钉 Screw	内刀座 Apron	外刀座 Apron	导向块 Guide	螺钉 Screw
		压紧	调节					
79-82	FHT82	YJM1220	TJM1222	M3.5×10-50°	FZ82N-PD06	FZ80W-PD06	FHK02	M5×11
						FZ81W-PD06		
						FZ82W-PD06		
82-85	FHT85				FZ85N-PD06	FZ83W-PD06		
						FZ84W-PD06		
						FZ85W-PD06		
85-88	FHT88				FZ88N-PD06	FZ86W-PD06		
						FZ87W-PD06		
						FZ88W-PD06		
88-91	FHT91				FZ91N-PD06	FZ89W-PD06		
						FZ90W-PD06		
						FZ91W-PD06		
91-94	FHT94				FZ94N-PD06	FZ92W-PD06		
						FZ93W-PD06		
						FZ94W-PD06		
94-97	FHT97				FZ97N-PD06	FZ95W-PD06		
						FZ96W-PD06		
						FZ97W-PD06		
97-100	FHT100				FZ100N-PD06	FZ98W-PD06		
						FZ99W-PD06		
						FZ100W-PD06		
100-105	FHT105			M4 5×10-43°	FZ105N-PD08	FZ101W-PD08		
						FZ102W-PD08		
						FZ103W-PD08		
						FZ104W-PD08		
						FZ105W-PD08		
105-110	FHT110				FZ110N-PD08	FZ106W-PD08		
						FZ107W-PD08		
						FZ108W-PD08		
						FZ109W-PD08		
						FZ110W-PD08		

B



铣削

大直径复合钻Big dia.modular drills with exchangeable heads

配件Accessories

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

直径 D	头部型号 Order NO.	中心钻螺钉 Screw		刀片螺钉 Screw	内刀座 Apron	外刀座 Apron	导向块 Guide	螺钉 Screw
		压紧	调节					
110-115	FHT115	YJM1620	TJM1422	M4 5×10-43°	FZ115N-PD08	FZ111W-PD08	FHK02	M5×11
						FZ112W-PD08		
						FZ113W-PD08		
						FZ114W-PD08		
						FZ115W-PD08		
115-120	FHT120				FZ120N-PD08	FZ116W-PD08		
						FZ117W-PD08		
						FZ118W-PD08		
				FZ119W-PD08				
				FZ120W-PD08				
120-125	FHT125			FZ125N-PD06	FZ121W-PD06			
					FZ122W-PD06			
					FZ123W-PD06			
					FZ124W-PD06			
					FZ125W-PD06			
125-130	FHT130			FZ130N-PD06	FZ126W-PD06			
					FZ127W-PD06			
					FZ128W-PD06			
					FZ129W-PD06			
				FZ130W-PD06				
130-135	FHT135			FZ135N-PD06	FZ131W-PD06			
					FZ132W-PD06			
					FZ133W-PD06			
					FZ134W-PD06			
				FZ135W-PD06				
135-140	FHT140			FZ140N-PD06	FZ136W-PD06			
					FZ137W-PD06			
					FZ138W-PD06			
					FZ139W-PD06			
				FZ140W-PD06				
140-145	FHT145			FZ145N-PD06	FZ141W-PD06			
					FZ142W-PD06			
					FZ143W-PD06			
					FZ144W-PD06			
				FZ145W-PD06				
145-150	FHT150			FZ150N-PD08	FZ146W-PD08			
					FZ147W-PD08			
					FZ148W-PD08			
					FZ149W-PD08			
					FZ150W-PD08			
150-155	FHT155			FZ155N-PD08	FZ151W-PD08			
					FZ152W-PD08			

D72

大直径复合钻Big dia.modular drills with exchangeable heads



配件Accessories

直径 D	头部型号 Order NO.	中心钻螺钉 Screw		刀片螺钉 Screw	内刀座 Apron	外刀座 Apron	导向块 Guide	螺钉 Screw
		压紧	调节					
150-155	FHT155	YJM1620	TJM1422	M4.5×12-43°	FZ155N-PD08	FZ153W-PD08	FHK02	M5×11
					FZ154W-PD08			
					FZ155W-PD08			
155-160	FHT160				FZ160N-PD08	FZ156W-PD08		
						FZ157W-PD08		
						FZ158W-PD08		
						FZ159W-PD08		
						FZ160W-PD08		

大直径复合钻Big dia.modular drills with exchangeable heads

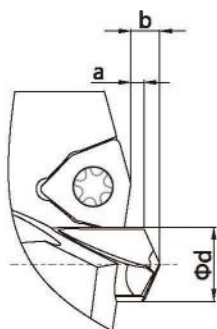
设定通孔的导向块Setting pilot pads

钻头应使用R0.8圆角的刀片。供货时，导向块设置为盲孔使用状态，并且小于孔径0.25mm。对于通孔，建议使用我公司的垫片调节导向块。

步骤：

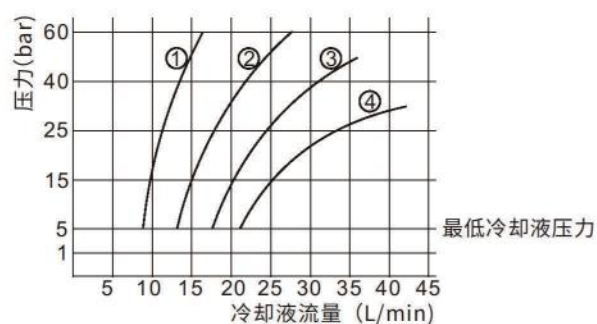
- 1.松开锁紧螺钉
- 2.拆卸导向块，并用垫片重新设置
- 3.导向块设定尺寸小于孔径0.15-0.2mm
- 4.用锁紧螺钉固定导向块

中心钻初始设置Setting center dills



Ød	a	b
5	1	2.25
6	1.1	2.65
8	1.25	3.38
10	1.25	3.86
12	1.45	4.67
16	1.8	5.78
20	2.5	7.91

冷却液流量/冷却液压力Coolant



冷却液

推荐压力：

- ①为达到Φ 22.9mm
- ②为达到Φ37mm
- ③为达到Φ 69.9mm
- ④为从Φ 70mm开始

刀片直锁反刮刀Back boring tools



规格型号

型号 Order NO.	杆径 d ₁	刃径 D	探长 L ₂	长度 L	有效深 L ₁	柄长 L ₃	柄径 d	刀片 Insert	锁紧螺钉 Screw	扳手 Spanner	库存 Stock
MGFGG13×65-XP25	13	18	29	125	65	56	25	MG..160418R..	M6×20	S5	N
MGFGG14×100-XP20	14	30	100	155	100	50	20	MG..160430R..	M6×20	S5	N
MGFGG17.5×90-XP32	17.5	33	36	155	90	60	32	MG..160533R..	M6×30	S5	N
MGFGG17×160-XP25	17	34	29	217	160	56	25	MG..160534R..	M6×20	S5	N
		38						MG..160538R..		S5	N
MGFGG21×200-XP25	21	40	38	260	200	56	25	MG..200640R..	M8×25	S6	N
		48						MG..200648R..			N
MGFGG25×160-XP32	25	60	46	220	160	60	32	MG..240860R..	M12×1×15	S10	N
MGFGG34.4×200-XP40	34.4	66.9	50	290	210	70	40	MG..2408-66.9R..	M12×30		N

说明：1.Y为常备库存，N为不备库存。

2.刀片需单独订购。

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄



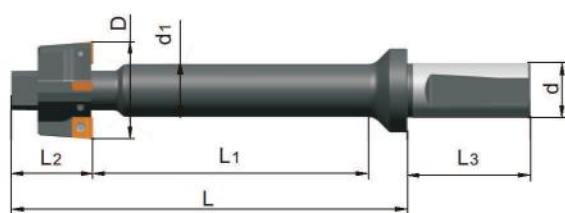
刀片 Inserts

	型号 Order NO.	I.C	A	B	T	C	R
	MGFGP160418R-HSS	18	16	11	4	3	0.3
	MGFGP160430R-HSS	30	16	11	4	3	0.3
	MGFGP160533R-HSS	33	16	15	5	3	0.3
	MGFGP160534R-HSS	34	16	15	5	3	0.3
	MGFGP160538R-HSS	38	16	15	5	3	0.3
	MGFGP200640R-HSS	40	20	18	6	3	0.3
	MGFGP200648R-HSS	48	20	18	6	3	0.3
	MGFGP240860R-HSS	60	24	21	8	5	0.3
	MGFGP2408-66.9R-HSS	66.9	24	26	8	5	0.3

刀片牌号Insert grades

	加工材料
MG1915 ●	碳钢、合金钢
MG1925 ●	不锈钢

快换式反刮刀Quick change back boring tools



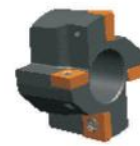
A型



B型



C型



规格型号

刀头型号 Order NO.	类型 Form	刀杆型号 Order NO.	杆径 d ₁	刃径 D	探长 L ₂	长度 L	有效深 L ₁	柄长 L ₃	柄径 d	刀片 Insert	刀片螺钉 Screw	扳手 Spanner
FGT3518R-C	A	FG1218-120-XP25	18	35	32	170	120	56	25	AB..100405R-C	M3×8-60°	T8
FGT3522R-C	A	FG1722-110-XP25	22	35	32	160	110	56	25	AB..070405R-C	M3×8-60°	T8
FGT4324R-C	B	FG1824-130-XP25	24	43	37	180	130	56	25	AB..070405R-C	M3×8-60°	T8
FGT4524R-C	B		24	45						AB..100405R-C	M3×8-60°	T8
FGT6133R-C	C	FG2233-165-XP32	33	61	50	230	165	60	32	AB..150705BR	M5×16-60°	T20
FGT6335R-C	C	FG2235-150-XP40	35	63	50	215	150	70	40	AB..150705BR	M5×16-60°	T20
FGT6735R-C			35	67						AB..180705R	M5×16-60°	T20
FGT7542R-C	C	FG3042-150-XP40	42	75	50	215	150	70	40	AB..180705R	M5×16-60°	T20
FGT8547R-C	C	FG3447-150-XP40	47	85	50	215	150	70	40	AB..200705R	M5×16-60°	T20

说明：1.Y为常备库存，N为不备库存。

2.刀片需单独订购。

B

铣削

C

圆柄刀具

D

钻削

E

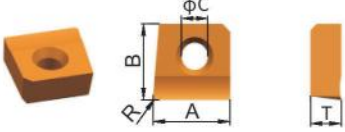
深孔加工

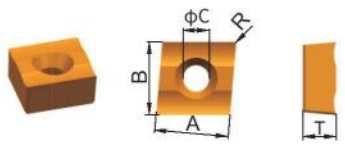
F

旋转刀柄



刀片 Inserts

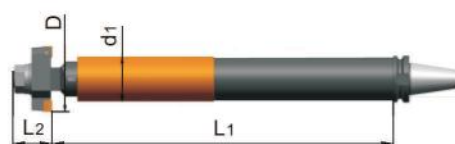
	型号 Order NO.	A	B	T	C	R
	ABCT070405R-C	7.5	9.5	4	3.4	0.5
	ABCT100405R-C	10	9.5	4	3.4	0.5

	型号 Order NO.	A	B	T	C	R
	ABCT150705R	15.5	15	7	5.5	0.5
	ABCT180705R	18	15	7	5.5	0.5
	ABCT200705R	20	15	7	5.5	0.5

刀片牌号Insert grades

	加工材料
MG1915 ●	碳钢、合金钢
MG1925 ●	不锈钢

快换式反刮刀Quick change back boring tools



A型



B型



规格型号

反刮刀头 Order NO.	类型 Form	反刮刀杆 Order NO.	杆径 d1	刃径 D	探长 L2	有效深 L1	刀片 Insert	刀片螺钉 Screw	扳手 Spanner	库存 Stock
FGT69R-SQ02	A	FG39×300-BT50-GX	39.5	69	83.5	300	FJ16WR-R1.6	M5×15	S4	N
FGT71R-SQ02	A	FG35×350-BT50-GX	35	71	73.5	350	FJ21WR-R1.6	M6×17	S5	N
FGT85R-SQ02	A	FG55×300-BT50-GX	56	85	83.5	300	FJ16WR-R5	M5×15	S4	N
FGT90R-SQ02	A	FG59×600-BT50-GX	59.5	90	85.5	600	FJ21WR-R1.6	M6×18	S5	N
FGT115R-SQ02	A	FG77×600-BT50-GX	78	115	95.5	600	FJ21WR-R5	M6×18	S5	N
FGT124R-SQ02	A	FG77×750-BT50-GX	77.5	124	95.5	750	FJ24.5WR-R1.6	M6×20	S5	N
FGT136R-SQ02	B	FG77×600-BT50-GX	85.5	136	95.5	600	FJ21WR-R5	M6×20	S5	N
FGT141R-SQ02	A	FG95×750-BT50-GX	95.5	141	95.5	750	FJ24.5WR-R1.6	M6×20	S5	N
FGT162R-SQ02	B		106.5	162			FJ21WR-R5	M6×20	S5	N
FGT188R-SQ02	A	FG90×300-BT50-GX	130	188	102.5	300	FJ21WR-R1.6	M6×20	S5	N

说明：1.Y为常备库存，N为不备库存。

2.刀片需单独订购。

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄



配件Accessories

反刮刀杆 Order NO.	锁紧螺母 Stud	导向套 Guide
FG39×300-BT50-GX	M20×1.5×30	--
FG35×350-BT50-GX	M16×1.5-28	--
FG55×300-BT50-GX	M24×1.5	--
FG59×600-BT50-GX	M30×1.5×32	--
FG77×600-BT50-GX	M36×1.5×32	TT78-58-300
FG77×750-BT50-GX	M36×1.5×32	TT77.5-57.5-300
FG77×600-BT50-GX	M36×1.5×32	TT85.5-58-300
FG95×750-BT50-GX	M36×1.5×32	TT95.5-75-300
		TT106.5-75-300
FG90×300-BT50-GX	M45×3×40	TT130-90-200

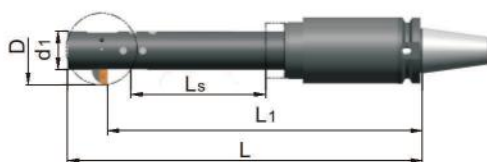
刀片 Inserts

	型号 Order NO.	A	B	T	C	R
	FJ16WR-R1.6	16	20	8	M5	1.6
	FJ21WR-R1.6	21	20	9	M6	1.6
	FJ24.5WR-R1.6	24.5	20	10.5	M6	1.6
	FJ16WR-R5	16	20	8	M5	5
	FJ21WR-R5	21	20	9	M6	5

刀片牌号Insert grades

	加工材料
MG1915 ●	碳钢、合金钢
MG1925 ●	不锈钢

自动开启式反刮刀Auto. back back boring tools



规格型号

反刮杆型号 Order NO.	刃径 D	杆径 d1	孔深 Hd	有效深 Ls	编程长度 L1	长度 L	刀座 Apron	刀片 Insert	螺钉 Screw	库存 Stock
ZKFG623580-BT50	62	35	80	95	362.9	419	ZKTZ623515	AC..15..	M4×10-60°	N
ZKFG7139110-BT50	57	39	110	123	387.9	444	ZKTZ573912	AC..12..	M4×10-60°	N
	71			115			ZKTZ713917	AC..17..	M4×10-60°	N
ZKFG8045120-BT50	69	45	120	135	407.9	464	ZKTZ694515	AC..15..	M4×10-60°	N
	80			130			ZKTZ804519	AC..19..	M4×10-60°	N
ZKFG9048140-BT50	75	48	140	153	425.4	484	ZKTZ754815	AC..15..	M4×10-60°	N
	89			145			ZKTZ894822	AC..22..	M4×10-60°	N
	90			144			ZKTZ904822	AC..22..	M4×10-60°	N
ZKFG10550100-BT50	105	50	100	118	407.4	469	ZKTZ1055029	AC..29..	M4×10-60°	N
ZKFG9852140-BT50	90	52	140	150	430.4	492	ZKTZ905222	AC..22..	M4×10-60°	N
	98			146			ZKTZ985226	AC..26..	M4×10-60°	N
ZKFG10556140-BT50	92	56	140	158	436.9	499	ZKTZ925622	AC..22..	M4×10-60°	N
	105			150			ZKTZ1055629	AC..29..	M4×10-60°	N
ZKFG1055980-BT50	105	59	80	66	353.4	414	ZKT1056026Z	AC..26..	M4×10-60°	N
ZKFG6260180-BT50	62	60	180	198.6	453.4	514	ZKT626009Z	AC..09..	M4×10-60°	N
ZKFG10460180-BT50	104	60	180	181	468.4	529	ZKT1046026Z	AC..26..	M4×10-60°	N
ZKFG11070210-BT50	100	70	210	225	507.4	568	ZKTZ1007017	AC..17..	M4×10-60°	N
	110			220			ZKTZ1107022	AC..22..	M4×10-60°	N
ZKFG12475240-BT50	124	75	240	245	568.4	639	ZKTZ1247526	AC..26..	M4×10-60°	N
ZKFG13584270-BT50	125	84	270	278	598.4	669	ZKTZ1258426	AC..26..	M4×10-60°	N
	135			271			ZKTZ1358429	AC..29..	M4×10-60°	N
ZKFG15096270-BT50	136	96	270	275	598.4	669	ZKTZ1369622	AC..22..	M4×10-60°	N

说明：1.Y为常备库存，N为不备库存。

2.刀片需单独订购。



刀片 Inserts

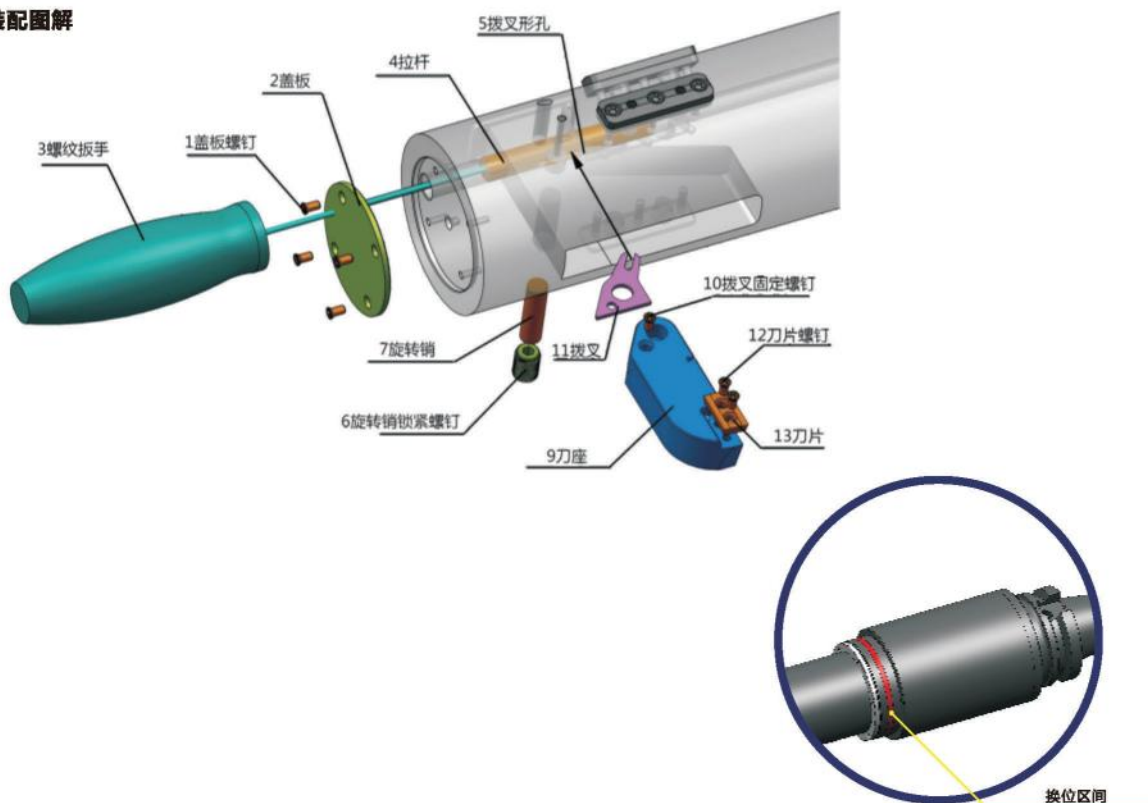
	型号 Order NO.	A	B	T	C	R	孔
	ACHW09T305SM4R-FR	10	12	3.97	4.4	0.4	单孔
	ACHW120305SM4R	12.8	10	3.8	4.4	0.4	单孔
	ACHW150305SM4R	15.8	10	3.8	4.4	0.4	单孔
	ACHW170405SM4R	20	10	4	4.4	0.4	单孔
	ACHW190405SM4R	19.6	12	4.5	4.4	0.4	单孔
	ACHW220405SM4R	22.5	12	4.5	4.4	0.4	双孔
	ACHW260405SM4R	29	12	4.5	4.4	0.4	双孔
	ACHW260420SM4R					2	双孔
	ACHW260405SM4R-FR	29	12	4.5	4.4	0.4	双孔
	ACHW290405SM4R	31	12	4.5	4.4	0.4	双孔

刀片牌号Insert grades

	加工材料
MG1915 ●	碳钢、合金钢
MG1925 ●	不锈钢

自动开启式反刮刀Auto. back boring tools

装配图解



自动开启式反刮刀是我公司自主开发的发明专利产品，专利授权号：ZL 2016 1 0465008.4。

该产品主要应用于框架结构件、工程机械零部件、汽车零部件等产品的孔口背部端面反刮加工。采用触发式控制开合，可以实现程序控制。降低人员安全隐患，自动化程度高，提高加工生产效率；反刮表面光洁度、平面度、孔轴线的垂直度好。

刀座更换操作步骤

1、取刀座

- (1) 取1盖板螺钉
- (2) 取出2盖板
- (3) 用绵工所配3螺纹扳手对准拉杆孔，将3螺纹扳手拧进4拉杆孔里，轻轻拉动4拉杆，使刀座处于半闭合状态
- (4) 松开6旋转销锁紧螺钉
- (5) 取出7旋转销。如果7旋转销取的时候有卡紧不容易取出的时候，可以用小棒从刀体上面的小孔将其轻轻敲出来
- (6) 取出9刀座
- (7) 松开10拨叉固定螺钉，取出11拨叉
- (8) 松开12刀片螺钉，取出13刀片
- (9) 更换9刀座

2、装刀座

- (1) 将11拨叉装进9刀座（11拨叉上的螺纹过孔和旋转销孔与9刀座上相应的孔对齐，避免装7旋转销的时候装不进去）
- (2) 锁紧10拨叉固定螺钉
- (3) 将9刀座和11拨叉装进刀座槽。注意用3螺纹扳手将5拨叉条形孔微调摆放至与刀座槽平行，11拨叉上的开口条形槽对准拉杆上的小圆柱销插入到5拉杆的条形孔中
- (4) 安装7旋转销。注意7旋转销安装时对准9刀座的旋转销孔，可通过微调9刀座位置，使7旋转销安装到位。请勿使用大力敲打
- (5) 锁紧6旋转销锁紧螺钉

- (6) 取出3螺纹扳手
- (7) 装入2盖板，用1盖板螺钉将2盖板锁紧
- (8) 装入13刀片，用12刀片螺钉锁紧
- (9) 完成

使用与操作说明

自动开启式反刮刀设计理念是数控自动控制，以实现便捷化、人性化，提高生产效率；刀座可以更换，以实现一定范围内的反刮面覆盖，降低使用成本。

其使用过程由程序代码表示如下：

```

;;("反刮刀程序模板")
;;("开始使用时，反刮刀座必须处于关闭状态")
G17G90G40
G00 Z(0)      ;;("移动至安全位置")
G00 X(0) Y(0)  ;;("移动到孔坐标位置")
M05           ;;("主轴停转")
G00 Z(1)      ;;("Z轴进刀至刀杆端面距离工件正面10mm")
G01 Z(2) F500  ;;("Z轴进刀至刀座过孔至合理的位置")
G01 Z(3) F100  ;;("压迫触发机构。必须保证Z轴坐标不超过安全红线")
G01 Z(4) F200  ;;("回退以松开触发机构，打开刀座。注意回退位置不能过大，避免弹开刀座时，刀片碰到工件背面")
;;("此时刀座处于打开状态")
G01 Z(5) F100  ;;("以安全的较快速度回退至开始反刮加工的位置，需要留够安全余量")
M03 S80       ;;("主轴开始旋转")
M8           ;;("开始喷水")
G01 Z(6) F20   ;;("开始反刮平面")
G04 F2        ;;("反刮到位后，位置不变，旋转2秒，在反刮平面固定反刮2秒钟")
M05           ;;("主轴停转")
G01 Z(2) F500  ;;("Z轴进刀至刀座过孔至合理的位置")
G01 Z(3) F100  ;;("压迫触发机构。必须保证Z轴坐标不超过安全红线")
G01 Z(4) F200  ;;("回退松开触发机构，关闭刀座。回退位置不能过大，避免关闭刀座时，刀座碰到工件背面")
;;("此时刀座处于关闭状态")
G01 Z(1) F500  ;;("Z轴回退至刀杆端面距离工件正面10mm")
G00 Z(0)      ;;("移动至安全位置")

```

;;("开始下一个孔位置的反刮加工，过程和程序与以上重复，只是X,Y坐标不同")

加工注意事项

一般而言，大坡度孔反刮，会降低刀片使用寿命；高强度高硬度材料切削，会降低刀片使用寿命。使用时应当注意检查，当刀片涂层有脱落或者刃口有崩缺时就要提前更换刀片或者刃口换位。不可过度使用，不可因使用自动开合程序而操作者离岗，以防止刀片突然失效，造成加工异常、刀具损坏或安全事故。

根据反刮的加工特性，对刚性的要求非常关键。所以，反刮不适合高速度切削；相反，只适合低速度切削。切削深度可以适当大一些。以下是根据常规加工的经验数值。

高速钢反刮刀片的线速度 $V_c=15-30\text{m/min}$ ，进给 $0.05-0.15\text{mm/n/z}$ 。

硬质合金反刮刀的线速度 $V_c=40-60\text{m/min}$ ，进给 $0.05-0.15\text{mm/n/z}$ 。

反刮刀的维护和保养

避免生锈。可以通过注油口加少量的润滑油（注意不能加粘稠的油类），可以避免生锈同时有利于活动机构的正常工作。

反刮刀不使用时，应当使刀座闭合，并安全放置于刀架上。不可随意平躺摆放，以免出现安全或其他问题。

深孔加工Deep hole machining

钻削刀片牌号	E02
Grades for drilling inserts	
深孔加工刀具	E03
Deep hole machining tools	
喷吸钻与单管钻的安装方式	E05
Machine equipment for ejector and STS system	
喷吸钻800.11 与单管钻800.21	E06
Ejector drill 800.11 and STS drill D800.21	
喷吸钻424.11 与单管钻424.21	E12
Ejector drill D424.11 and STS drill D424.21	
单管钻425.21	E20
STS drill 425.21	
深孔钻800 备件、深孔钻424 备件	E23
Spare parts for drill 800, spare parts for drill 424	
深孔喷吸系统	E26
DHM ejector system	
旋转连接器	E28
Rotation connectors	
深孔喷吸系统部件	E29
Assembling parts for ejector system	
喷吸钻引导孔/导向套加工指导	E30
Instruction of pilot hole/guiding bush hole making for ejector drilling	
喷吸钻系统冷却液流量压力要求	E31
Ejector system cutting fluid flow and pressure	
定制单管钻系统部件、单管钻钻管转接器	E32
Customized assembling parts for STS system and adaptor for converting joint size of tube	
单管钻冷却液流量压力要求	E33
STS cutting fluid flow and pressure	

B



铣削

钻削刀片牌号 Grades for drilling inserts

通用材质

PD25A (P M K S N H)

PVD 涂层硬质合金牌号。钻削通用牌号。高金属去除率，可获得极佳生产效率和刀具使用寿命。

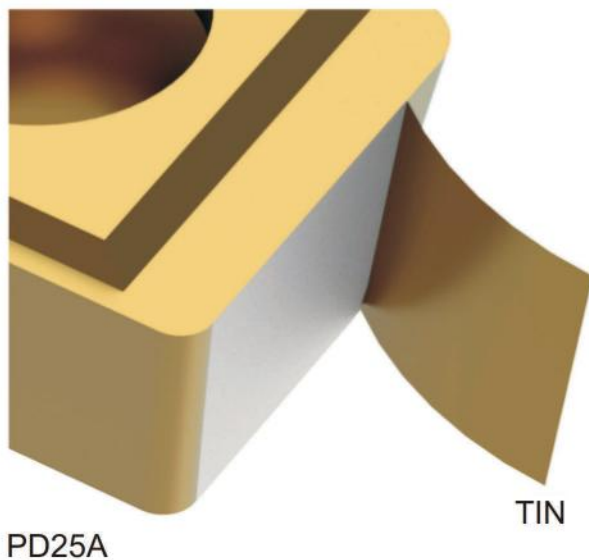
PVD coated grade. General purpose drilling grade. High metal removal rate, achieves high productivity and tool life.

C

圆柄刀具

D

钻削



E

深孔加工

F

旋转刀柄

E02

深孔加工刀具 Deep Hole Machining tools

800.11 喷吸钻

Ø 25.00mm-Ø 65.00mm

可转位刀片及支撑板

最大加工深度100倍径

经济型深孔钻削

密封性佳

适用于易断续材料

适用于各类卧式加工机床

800.11 Ejector Drill

Ø 25.00mm-Ø 65.00mm

Indexable inserts & Support pads

Max. drilling depth: 100XD

Economical deep hole drilling

Good sealing system

Suitable for easy chipbreaking materials

For horizontal machine tool



800.21 单管钻

Ø 25.00mm-Ø 65.00mm

可转位刀片及支撑板

最大加工深度150倍径

适用于长屑材料

800.21 STS drill

Ø 25.00mm-Ø 65.00mm

Indexable inserts & Support pads

Max. drilling depth: 150XD

Suitable for long chip materials



424.11 喷吸钻

Ø 63.50mm-Ø 200.00mm

可转位刀片及支撑板

最大加工深度100倍径

经济型深孔钻削

密封性佳

适用于易断续材料

适用于各类卧式加工机床

424.11 Ejector Drill

Ø 63.50mm-Ø 200.00mm

Indexable inserts & Support pads

Max. drilling depth: 100XD

Economical deep hole drilling

Good sealing system

Suitable for easy chipbreaking materials

For horizontal machine tool



424.21 单管钻

Ø 63.50mm-Ø 200.00mm

可转位刀片及支撑板

最大加工深度150倍径

适用于长屑材料

适用于大孔径钻削

424.21 STS drill

Ø 63.50mm-Ø 200.00mm

Indexable inserts & Support pads

Max. drilling depth: 150XD

Suitable for long chip materials

For hole size bigger than 63.5mm



425.21 单管钻

Ø 48.00mm-Ø 135.99mm

可转位刀片及支撑板

最少化刀片规格

最大加工深度150倍径

适用于长屑材料

425.21 STS drill

Ø 48.00mm-Ø 135.99mm

Indexable inserts & Support pads

4 Inserts cover very wide range

Max. drilling depth: 150XD

Suitable for long chip materials





深孔加工刀具 Deep Hole Machining tools

推镗刀

Ø 35.00mm-Ø 450.00mm
可转位刀片及支撑板
带辅助支撑板
最大加工深度150倍径
低堵屑风险
适用推镗工艺中扩孔加工

Push Boring Tool

Ø 35.00mm-Ø 450.00mm
Indexable inserts & Support pads
With additional support pads
Max. drilling depth: 150XD
Low chip jamming risk
Suitable for counter boring in push boring process



拉镗刀

Ø 65.00mm-Ø 200.00mm
可转位刀片及支撑板
带辅助支撑板
最大加工深度150倍径
低堵屑风险
适用拉镗工艺中扩孔加工
直线度好

Pull Boring Tool

Ø 65.00mm-Ø 200.00mm
Indexable inserts & Support pads
With additional support pads
Max. drilling depth: 150XD
Low chip jamming risk
Suitable for counter boring in pull boring process
Good hole straightness



带前导向的推镗刀

Ø 35.00mm-Ø 200.00mm
可转位刀片及支撑板
带辅助支撑板
最大加工深度150倍径
适用于各种材料加工
适用深孔内部阶梯孔
同轴度要求高的工艺

Push Boring Tool with Front Pilot

Ø 35.00mm-Ø 200.00mm
Indexable inserts & Support pads
With additional support pads
Max. drilling depth: 150XD
For both short & long chip materials
Suitable for composite deep hole machining
Suitable for high axiality request



铰削刀

Ø 38.00mm-Ø 305.00mm
可转位刀片及软支撑板
最大加工深度150倍径
低堵屑风险
可加工公差正负0.02mm的深孔
孔壁粗糙度Ra0.4-1.6
机械式/液压式

High Feed Reamer

Ø 38.00mm-Ø 305.00mm
Indexable inserts & Support pads
Max. drilling depth: 150XD
Low chip jamming risk
Achieve +/-0.02mm hole tolerance
Surface finish Ra0.4-1.6
Mechanical / Hydraulic design.



喷吸钻和单管钻的安装方式 Machine equipment for Ejector and STS system

喷吸钻系统Ejector system



喷吸钻：又名双管钻。其原理为2/3的液体通过内外管间隙流向钻头方向，1/3的液体从内管上的特殊缝隙中漏出，从而产生负压吸取液体，并使铁屑从内管中排出。

Ejector drill: alternative name double tube drill. Cutting fluid supply is fed through a connector between the inner tube and the drill tube. Approx. 2/3 of the cutting fluid is forced to the drill head, the remainder is diverted back through the inner tube via the venturi inner tube (ejector effect) which creates a vacuum to draw the cutting fluid and chips towards the outlet.

单管钻系统STS system



单管钻：油压头/授油器中接入的冷却液直接从钻管及孔壁间隙流向钻头方向，然后冷却液携带铁屑从钻管中排出。

STS drill: Single tube system. Cutting fluid supply is fed through an oil pressure head between the outside of the drill tube and the hole wall. Chips and oil exits internally through the drill head and ID of the tube.

应用信息 Application information	喷吸钻 Ejector drill	单管钻 STS drill
系统复杂性 Complexity	复杂 High	简单 Low
冷却液压力及流量要求 Coolant pressure and quantity	一般 Normal	高 High
最大加工深度 Max.drilling depth	100倍径 100XDia.	150倍径 150XDia.
加工导向 Drilling guiding	预孔/钻套 Pilot hole/bush	预孔/钻套 Pilot hole/bush
孔公差 Hole tolerance	取决于系统精度 Depending on system accuracy	取决于系统精度 Depending on system accuracy
孔直线度 Hole straightness	取决于旋转方式 Depending on rotating way	取决于旋转方式 Depending on rotating way
机床 Machine tool	卧式机床 Horizontal	专机 Special drilling machine
长屑材料 Long chip materials	次选 Second choice	首选 First choice
典型应用零件 Typical component	主阀、模具 Valve, Die & mould	钻挺、船用连杆、管板 Drill collar, Marine connecting rod, Heat exchange plate

旋转方式与加工直线度 Rotating way affects hole straightness accuracy



喷吸钻800. 11 Ejector drill 800. 11

直径范围：25.00-65.00mm

孔公差：IT10

表面光洁度：Ra 3um

孔深：100倍径

切削液：纯油或有EP添加剂的乳化液

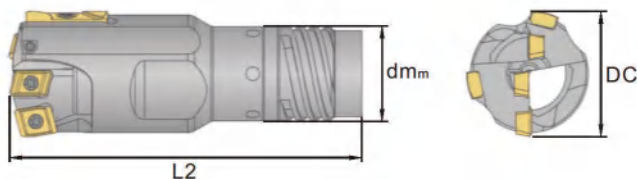
Diameter range: 25.00-65.00mm

Hole tolerance: IT10

Surface finish: Ra 3um

Hole depth: 100XDia

Cutting fluid: Net oil or EP additive



钻头直径范围 Drill dia.range Dc(mm)	钻杆尺寸 Tube size	订货号 Ordering code	尺寸(mm) Dimensions		刀片 Insert			支撑板	数量
			dm	≤L2	中心刀片	中间刀片	周边刀片		
25.00-26.40	03	800.11-03DXX.XX	21.0	75.0	800-050308M-C-G	800-050308M-I-G	800-060308H-P-G	800-06A	2
26.41-28.70	04	800.11-04DXX.XX	23.5	78.0	800-050308M-C-G	800-050308M-I-G	800-060308H-P-G	800-06A	2
28.71-31.00	05	800.11-05DXX.XX	25.5	80.0	800-06T308M-C-G	800-050308M-I-G	800-060308H-P-G	800-06A	2
31.01-33.30	06	800.11-06DXX.XX	28.0	80.0	800-06T308M-C-G	800-06T308M-I-G	800-08T308H-P-G	800-07A	2
33.31-36.20	07	800.11-07DXX.XX	30.0	90.0	800-06T308M-C-G	800-06T308M-I-G	800-08T308H-P-G	800-07A	2
33.31-36.20	07	800.11-07DXX.XX	30.0	90.0	800-08T308M-C-G	800-08T308M-I-G	800-08T308H-P-G	800-07A	2
36.21-39.60	08	800.11-08DXX.XX	33.0	90.0	800-08T308M-C-G	800-08T308M-I-G	800-08T308H-P-G	800-07A	2
36.21-39.60	08	800.11-08DXX.XX	33.0	90.0	800-08T308M-C-G	800-08T308M-I-G	800-09T308H-P-G	800-07A	2
39.61-43.00	09	800.11-09DXX.XX	36.0	95.0	800-08T308M-C-G	800-08T308M-I-G	800-09T308H-P-G	800-08A	2
43.01-47.00	10	800.11-10DXX.XX	39.0	100.0	800-10T308M-C-G	800-08T308M-I-G	800-09T308H-P-G	800-08A	2
47.01-51.70	11	800.11-11DXX.XX	43.0	110.0	800-12T308M-C-G	800-08T308M-I-G	800-09T308H-P-G	800-10A	2
47.01-51.70	11	800.11-11DXX.XX	43.0	110.0	800-10T308M-C-G	800-08T308M-I-G	800-11T308H-P-G	800-10A	2
51.71-56.20	12	800.11-12DXX.XX	47.0	115.0	800-10T308M-C-G	800-08T308M-I-G	800-11T308H-P-G	800-10A	2
51.71-56.20	12	800.11-12DXX.XX	47.0	115.0	800-10T308M-C-G	800-12T308M-I-G	800-11T308H-P-G	800-12A	2
56.21-65.00	13	800.11-13DXX.XX	51.0	125.0	800-10T308M-C-G	800-12T308M-I-G	800-11T308H-P-G	800-12A	2
56.21-65.00	13	800.11-13DXX.XX	51.0	125.0	800-12T308M-C-G	800-12T308M-I-G	800-11T308H-P-G	800-12A	2

订购钻头时，需注明钻头直径 (XX.XX)

When ordering drill, state drill diameter (XXX.XX) in the ordering code

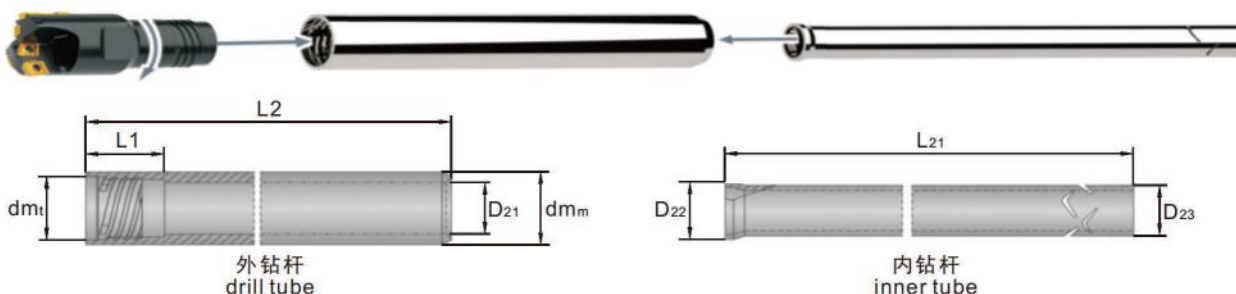
订货示例Ordering example: 800.11-03D25.50

直径范围 Diameter range Dc(mm)	中心刀片 Central insert	直径范围 Diameter range Dc(mm)	中间刀片 Intermediate insert	直径范围 Diameter range Dc(mm)	周边刀片 Peripheral insert	直径范围 Diameter range Dc(mm)	支撑板 Support pad
25.00-28.70	800-050308M-C-G	25.00-31.00	800-050308M-I-G	25.00-31.00	800-060308H-P-G	25.00-31.00	800-06A
28.71-33.99	800-06T308M-C-G	31.01-34.99	800-06T308M-I-G	31.01-38.99	800-08T308H-P-G	31.01-39.60	800-07A
34.00-43.00	800-08T308M-C-G	35.00-54.99	800-08T308M-I-G	39.00-49.99	800-09T308H-P-G	39.61-47.00	800-08A
43.01-47.00	800-10T308M-C-G	55.00-65.00	800-12T308M-I-G	50.00-65.00	800-11T308H-P-G	47.01-54.99	800-10A
47.01-49.99	800-12T308M-C-G					55.00-65.00	800-12A
50.00-57.99	800-10T308M-C-G						
58.00-65.00	800-12T308M-C-G						

喷吸钻800.11钻杆Tubes for 800.11 ejector drills

直径范围: 25.00-65.00mm

Diameter range: 25.00-65.00mm



钻头直径范围 Drill dia.range Dc(mm)	钻杆尺寸 Tube size	订货号 (外钻杆) Ordering code(drill tube)	尺寸(mm) Dimensions				订货号 (内钻杆) Ordering code(inner tube)	尺寸(mm) Dimensions	
			dmm	dmt	D21	l1		D22	D23
25.00-26.40	03	800.11-003-XXXX	23.5	21.0	16.0	30.0	800.11-103-XXXX	16.0	14.0
26.41-28.70	04	800.11-004-XXXX	26.0	23.5	18.0	33.0	800.11-104-XXXX	18.0	16.0
28.71-31.00	05	800.11-005-XXXX	28.0	25.5	20.0	33.0	800.11-105-XXXX	20.0	18.0
31.01-33.30	06	800.11-006-XXXX	30.5	28.0	22.0	33.0	800.11-106-XXXX	22.0	20.0
33.31-36.20	07	800.11-007-XXXX	33.0	30.0	24.0	40.0	800.11-107-XXXX	24.0	22.0
36.21-39.60	08	800.11-008-XXXX	35.5	33.0	26.0	40.0	800.11-108-XXXX	26.0	24.0
39.61-43.00	09	800.11-009-XXXX	39.0	36.0	29.0	40.0	800.11-109-XXXX	29.0	27.0
43.01-47.00	10	800.11-010-XXXX	42.5	39.0	32.0	40.0	800.11-110-XXXX	32.0	30.0
47.01-51.70	11	800.11-011-XXXX	46.5	43.0	35.0	44.0	800.11-111-XXXX	35.0	32.0
51.71-56.20	12	800.11-012-XXXX	51.0	47.0	39.0	44.0	800.11-112-XXXX	39.0	36.0
56.21-65.00	13	800.11-013-XXXX	55.5	51.0	43.0	44.0	800.11-113-XXXX	43.0	40.0

订购钻杆时, 需注明钻杆长度L2 (XXXX)

When ordering drill tube, state code length L2(XXXX) in the ordering code

钻头直径Dc=35.00mm, 外钻杆长度为1070mm, 内钻杆长度为1100mm的订货示例:

Ordering example for drill tube length 1070mm, inner tube length 1100mm for drill diameter 35.00mm:

外钻杆Drill tube:800.11-007-1070 内钻杆Inner tube:800.11-107-1100

内钻杆必须比外钻杆长30mm

Inner tube must be 30mm longer than drill tube.

外钻杆均不带扳手槽, 如需要可定制。

Drill tube without spanner slot, please state if needed.

单管钻800. 21 STS drill 800. 21

直径范围: 5.00-65.00mm

孔公差: IT10

表面光洁度: Ra 3um

孔深: 150倍径

切削液: 纯油或有EP添加剂的乳化液

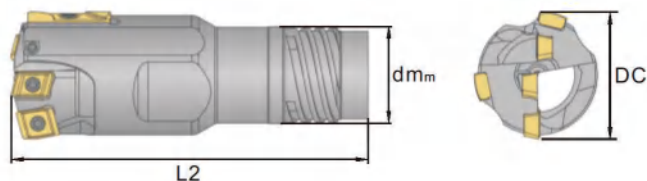
Diameter range: 5.00-65.00mm

Hole tolerance: IT10

Surface finish: Ra 3um

Hole depth: 150XDia

Cutting fluid: Net oil or EP additive



钻头直径范围 Drill dia.range Dc(mm)	钻杆尺寸 Tube size	订货号 Ordering code	尺寸(mm) Dimensions		刀片 Insert			支撑板	数量
			dm	≤L2	中心刀片	中间刀片	周边刀片		
25.00-26.40	03	800.21-03DXX.XX	19.5	75.0	800-050308M-C-G	800-050308M-I-G	800-060308H-P-G	800-06A	2
26.41-28.70	04	800.21-04DXX.XX	21.0	78.0	800-050308M-C-G	800-050308M-I-G	800-060308H-P-G	800-06A	2
28.71-31.00	05	800.21-05DXX.XX	23.5	80.0	800-06T308M-C-G	800-050308M-I-G	800-060308H-P-G	800-06A	2
31.01-33.30	06	800.21-06DXX.XX	25.5	80.0	800-06T308M-C-G	800-06T308M-I-G	800-08T308H-P-G	800-07A	2
33.31-36.20	07	800.21-07DXX.XX	28.0	80.0	800-06T308M-C-G	800-06T308M-I-G	800-08T308H-P-G	800-07A	2
33.31-36.20	07	800.21-07DXX.XX	28.0	80.0	800-08T308M-C-G	800-08T308M-I-G	800-08T308H-P-G	800-07A	2
36.21-39.60	08	800.21-08DXX.XX	30.0	95.0	800-08T308M-C-G	800-08T308M-I-G	800-08T308H-P-G	800-07A	2
36.21-39.60	08	800.21-08DXX.XX	30.0	95.0	800-08T308M-C-G	800-08T308M-I-G	800-09T308H-P-G	800-07A	2
39.61-43.00	09	800.21-09DXX.XX	33.0	100.0	800-08T308M-C-G	800-08T308M-I-G	800-09T308H-P-G	800-08A	2
43.01-47.00	10	800.21-10DXX.XX	36.0	100.0	800-10T308M-C-G	800-08T308M-I-G	800-09T308H-P-G	800-08A	2
47.01-51.70	11	800.21-11DXX.XX	39.0	110.0	800-12T308M-C-G	800-08T308M-I-G	800-09T308H-P-G	800-10A	2
47.01-51.70	11	800.21-11DXX.XX	39.0	110.0	800-10T308M-C-G	800-08T308M-I-G	800-11T308H-P-G	800-10A	2
51.71-56.20	12	800.21-12DXX.XX	43.0	120.0	800-10T308M-C-G	800-08T308M-I-G	800-11T308H-P-G	800-10A	2
51.71-56.20	12	800.21-12DXX.XX	43.0	120.0	800-10T308M-C-G	800-12T308M-I-G	800-11T308H-P-G	800-12A	2
56.21-65.00	13	800.21-13DXX.XX	47.0	125.0	800-10T308M-C-G	800-12T308M-I-G	800-11T308H-P-G	800-12A	2
56.21-65.00	13	800.21-13DXX.XX	47.0	125.0	800-12T308M-C-G	800-12T308M-I-G	800-11T308H-P-G	800-12A	2

订购钻头时,需注明钻头直径 (XX.XX)

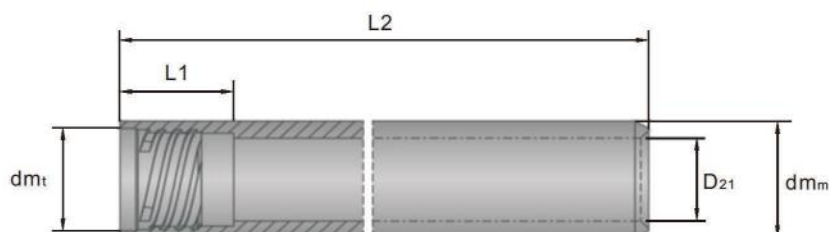
When ordering drill,state drill diameter (XXX.XX) in the ordering code

订货示例Ordering example: 800.21-03D25.50

直径范围 Diameter range Dc(mm)	中心刀片 Central insert	直径范围 Diameter range Dc(mm)	中间刀片 Intermediate insert	直径范围 Diameter range Dc(mm)	周边刀片 Peripheral insert	直径范围 Diameter range Dc(mm)	支撑板 Support pad
25.00-28.70	800-050308M-C-G	25.00-31.00	800-050308M-I-G	25.00-31.00	800-060308H-P-G	25.00-31.00	800-06A
28.71-33.99	800-06T308M-C-G	31.01-34.99	800-06T308M-I-G	31.01-38.99	800-08T308H-P-G	31.01-39.60	800-07A
34.00-43.00	800-08T308M-C-G	35.00-54.99	800-08T308M-I-G	39.00-49.99	800-09T308H-P-G	39.61-47.00	800-08A
43.01-47.00	800-10T308M-C-G	55.00-65.00	800-12T308M-I-G	50.00-65.00	800-11T308H-P-G	47.01-54.99	800-10A
47.01-49.99	800-12T308M-C-G					55.00-65.00	800-12A
50.00-57.99	800-10T308M-C-G						
58.00-65.00	800-12T308M-C-G						

单管钻800.21钻杆 Tubes for 800.21 STS drills

直径范围: 25.00-65.00mm Dia. range: 25.00-65.00mm



钻头直径范围 Drill dia.range Dc(mm)	钻杆尺寸 Tube size	订货号 Ordering code	尺寸(mm) Dimensions			
			dmm	dmt	l1	D21
25.00-26.40	03	800.21-003-XXXX	22	19.5	26	15
26.41-28.70	04	800.21-004-XXXX	24	21	26	16
28.71-31.00	05	800.21-005-XXXX	26	23.5	29	18
31.01-33.30	06	800.21-006-XXXX	28	25.5	29	20
33.31-36.20	07	800.21-007-XXXX	30	28	29	22
36.21-39.60	08	800.21-008-XXXX	33	30	36	24
39.61-43.00	09	800.21-009-XXXX	36	33	36	26
43.01-47.00	10	800.21-010-XXXX	39	36	36	29
47.01-51.70	11	800.21-011-XXXX	43	39	36	32
51.71-56.20	12	800.21-012-XXXX	47	43	40	35
56.21-65.00	13	800.21-013-XXXX	51	47	40	39

订购钻杆时, 需注明钻杆长度L2 (XXXX)

When ordering drill tube, state code length L2(XXXX) in the ordering code

钻头直径Dc=35.00mm, 钻杆长度为2600mm的订货示例:

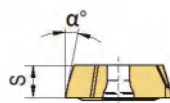
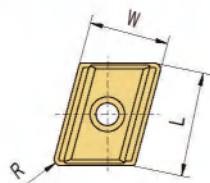
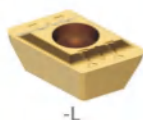
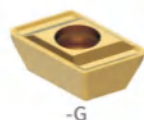
Ordering example for drill tube length 2600mm for drill diameter 35.00mm:

800.21-007-2600

钻杆均不带扳手槽, 如需要可定制。

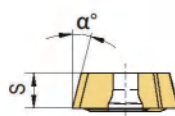
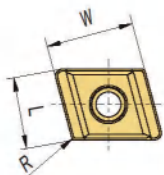
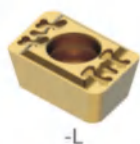
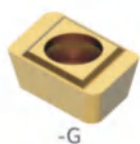
Drill tube without spanner slot, please state if needed.

用于800. 11和800. 21的钻削刀片Inserts for 800. 11 and 800. 21 drills
中心刀片E Central insert



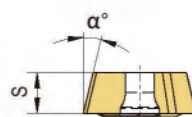
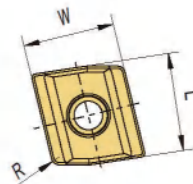
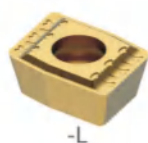
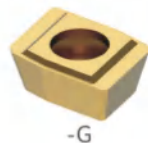
订货号 Ordering code	P	K	M	S	N	尺寸(mm, inch) Dimensions								
	PD25A	PD25A	PD25A	PD25A	PD25A	R	R°	W	W°	L	L°	S	S°	α0
800-050308M-C-G	☆	☆	☆	☆	☆	0.8	.031	8.00	.315	5.56	.218	3.17	.125	11
800-06T308M-C-G	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	6.35	.250	3.96	.156	11
800-08T308M-C-G	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	7.94	.312	3.96	.156	11
800-10T308M-C-G	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	9.53	.376	3.96	.156	11
800-12T308M-C-G	☆	☆	☆	☆	☆	0.8	.031	12.7	.500	12.7	.500	3.96	.156	11
800-050308M-C-L	☆	☆	☆	☆	☆	0.8	.031	8.00	.315	5.56	.218	3.17	.125	11
800-06T308M-C-L	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	6.35	.250	3.96	.156	11
800-08T308M-C-L	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	7.94	.312	3.96	.156	11
800-10T308M-C-L	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	9.53	.376	3.96	.156	11
800-12T308M-C-L	☆	☆	☆	☆	☆	0.8	.031	12.7	.500	12.7	.500	3.96	.156	11

中间刀片E Intermediate insert



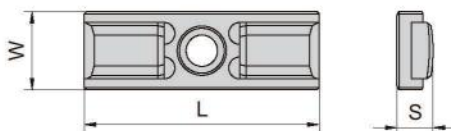
订货号 Ordering code	P	K	M	S	N	尺寸(mm, inch) Dimensions								
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800-050308M-I-G	☆	☆	☆	☆	☆	0.8	.031	8.00	.314	5.56	.218	3.17	.125	11
800-06T308M-I-G	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	6.35	.250	3.96	.156	11
800-08T308M-I-G	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	7.94	.312	3.96	.156	11
800-12T308M-I-G	☆	☆	☆	☆	☆	0.8	.031	12.7	.500	9.87	.389	3.96	.156	11
800-050308M-I-L	☆	☆	☆	☆	☆	0.8	.031	8.00	.314	5.56	.218	3.17	.125	11
800-06T308M-I-L	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	6.35	.250	3.96	.156	11
800-08T308M-I-L	☆	☆	☆	☆	☆	0.8	.031	9.87	.389	7.94	.312	3.96	.156	11
800-12T308M-I-L	☆	☆	☆	☆	☆	0.8	.031	12.7	.500	9.87	.389	3.96	.156	11

周边刀片E Peripheral insert



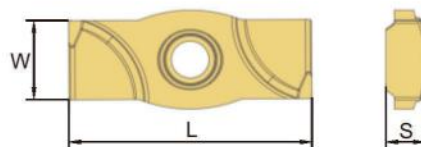
订货号 Ordering code	P	K	M	S	N	尺寸(mm, inch) Dimensions								
	PD25A	PD25A	PD25A	PD25A	PD25A	R	R [°]	W	W [°]	L	L [°]	S	S [°]	αo
800-060308H-P-G	☆	☆	☆	☆	☆	0.8	.031	8.00	.314	6.42	.253	3.17	.125	11
800-08T308H-P-G	☆	☆	☆	☆	☆	0.8	.031	9.00	.354	8.62	.339	3.96	.156	11
800-09T308H-P-G	☆	☆	☆	☆	☆	0.8	.031	9.00	.354	9.63	.379	3.96	.156	11
800-11T308H-P-G	☆	☆	☆	☆	☆	0.8	.031	9.00	.354	12.7	.500	3.96	.156	11
800-060308H-P-L	☆	☆	☆	☆	☆	0.8	.031	8.00	.314	6.42	.253	3.17	.125	11
800-08T308H-P-L	☆	☆	☆	☆	☆	0.8	.031	9.00	.354	8.62	.339	3.96	.156	11
800-09T308H-P-L	☆	☆	☆	☆	☆	0.8	.031	9.00	.354	9.63	.379	3.96	.156	11
800-11T308H-P-L	☆	☆	☆	☆	☆	0.8	.031	9.00	.354	12.7	.500	3.96	.156	11

用于800. 11和800. 21的支撑板Support pad for 800. 11 and 800. 21 drills
焊接精磨支撑板Brazed pad-fine grinding



订货号 Ordering code	P	K	M	S	N	尺寸(mm, inch) Dimensions							
	D05	D05	D05	D05	D05	W	W ²	L	L ²	S	S ²		
800-06	☆	☆	☆	☆	☆	6	.236	18	.709	3.0	.118		
800-07	☆	☆	☆	☆	☆	7	.276	20	.787	3.5	.138		
800-08	☆	☆	☆	☆	☆	8	.315	25	.984	4.5	.177		
800-10	☆	☆	☆	☆	☆	10	.394	30	1.181	4.5	.177		
800-12	☆	☆	☆	☆	☆	12	.472	35	1.378	5.5	.216		

压制精磨支撑板Solid carbide pad-fine grinding



订货号 Ordering code	P	K	M	S	N	尺寸(mm, inch) Dimensions							
	PM1	PM1	PM1	PM1	PM1	W	W ²	L	L ²	S	S ²		
800-06A	☆	☆	☆	☆	☆	6	.236	18	.709	3.0	.118		
800-07A	☆	☆	☆	☆	☆	7	.276	20	.787	3.5	.138		
800-08A	☆	☆	☆	☆	☆	8	.315	25	.984	4.5	.177		
800-10A	☆	☆	☆	☆	☆	10	.394	30	1.181	4.5	.177		
800-12A	☆	☆	☆	☆	☆	12	.472	35	1.378	5.5	.216		

喷吸钻424. 11 Ejector drill 424. 11

直径范围: 63.50~200. 00mm

孔公差: IT10

表面光洁度: Ra 3um

孔深: 100倍径

切削液: 纯油或有EP添加剂的乳化液

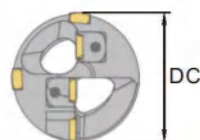
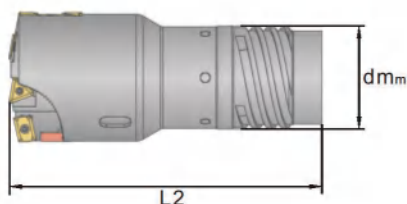
Diameter range: 63.50~200. 00mm

Hole tolerance: IT10

Surface finish: Ra 3um

Hole depth: 100XDia

Cutting fluid: Net oil or EP additive



钻头直径 Drill diameter Dc(mm)	钻杆尺寸 Tube size	订货号 Ordering code	尺寸(mm) Dimensions			刀卡 Cartridge							
			dmm	L2	直径调整量 Dia. adjustable	中心刀夹 Central cartridge	数量 Qty.	中间刀夹 Intermediate cartridge	数量 Qty.	周边刀夹 Peripheral cartridge	数量 Qty.	支撑板 Support pad	数量 Qty.
63.50	13	424.11-13D063.50	47	115	+0.5	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
65.00	13E	424.11-13ED065.00	51	115	+1.0	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
65.00	14	424.11-14D065.00	52	150	+1.0	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
69.85	15	424.11-15D069.85	58	150	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
70.00	15	424.11-15D070.00	58	150	+1.0	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
71.45	15	424.11-15D071.45	58	150	+0.5	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
75.00	16	424.11-16D075.00	63	160	+1.2	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
76.20	16	424.11-16D076.20	63	160	+1.8	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
80.00	17	424.11-17D080.00	70	190	+1.0	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
82.55	17	424.11-17D082.55	70	190	+0.5	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
85.00	17	424.11-17D085.00	70	190	+1.5	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
88.90	18	424.11-18D088.99	77	190	+1.0	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
90.00	18	424.11-18D090.00	77	190	+1.0	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
95.00	18	424.11-18D095.00	77	190	+1.0	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-14D065	2
95.25	18	424.11-18D095.25	77	190	+1.0	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-14D065	2
100.00	19	424.11-19D100.00	89	195	+1.0	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-16D100	2
101.60	19	424.11-19D101.60	89	195	+1.0	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-16D100	2
105.00	19	424.11-19D105.00	89	195	+0.2	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-16D100	2
107.95	19	424.11-19D107.95	89	195	+1.0	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
110.00	19	424.11-19D110.00	89	195	+1.0	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
114.30	20	424.11-20D114.30	101	220	+1.5	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
115.00	20	424.11-20D115.00	101	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
120.00	20	424.11-20D120.00	101	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
120.65	20	424.11-20D120.65	101	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
125.00	21	424.11-21D125.00	113	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
127.00	21	424.11-21D127.00	113	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
130.00	21	424.11-21D130.00	113	220	+0.1	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2

钻头直径范围 Drill dia.range Dc(mm)	推荐钻杆尺寸(可选钻杆尺寸) Recommended Tube size (Optional tube size)	订货号 Ordering code	尺寸(mm) Dimensions			刀卡 Cartridge							
			dmm	L2	径向调整量 Dia.adjustable	中心刀夹 Central cartridge	数量 Qty.	中间刀夹 Intermediate cartridge	数量 Qty.	周边刀夹 Peripheral cartridge	数量 Qty.	支撑板 Support pad	数量 Qty.
63.50-65.00	13.00	424.11-13DXXX.XX	47	115	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
63.50-65.00	13E	424.11-13EDXXX.XX	51	115	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
65.00-69.84	14 (13)	424.11-14(13)DXXX.XX	52	150	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
69.85-71.99	15 (14)	424.11-15(14)DXXX.XX	58	150	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
72.00-79.99	16 (15)	424.11-16(15)DXXX.XX	63	160	+0.2	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
80.00-82.99	17 (16)	424.11-17(16)DXXX.XX	70	190	+0.2	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
83.00-88.89	17 (16)	424.11-17(16)DXXX.XX	70	190	+0.2	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
88.90-91.49	18 (17)	424.11-18(17)DXXX.XX	77	190	+0.2	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
91.50-99.99	18 (17)	424.11-18(17)DXXX.XX	77	190	+0.2	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-14D065	2
100.00-104.99	19 (18)	424.11-19(18)DXXX.XX	89	195	+0.2	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-16D100	2
105.00-114.29	19 (18)	424.11-19(18)DXXX.XX	89	195	+0.2	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
114.30-121.99	20 (19)	424.11-20(19)DXXX.XX	101	220	+0.2	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
122.00-124.99	21 (20)	424.11-21(20)DXXX.XX	113	220	+0.2	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
125.00-135.99	21 (20)	424.11-21(20)DXXX.XX	113	220	+0.2	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
136.00-200.00	22-25	定制Customized design			+0.2								

订购钻头时，需注明钻头直径 (XXX.XX)

When ordering drill, state drill diameter (XXX.XX) in the ordering code

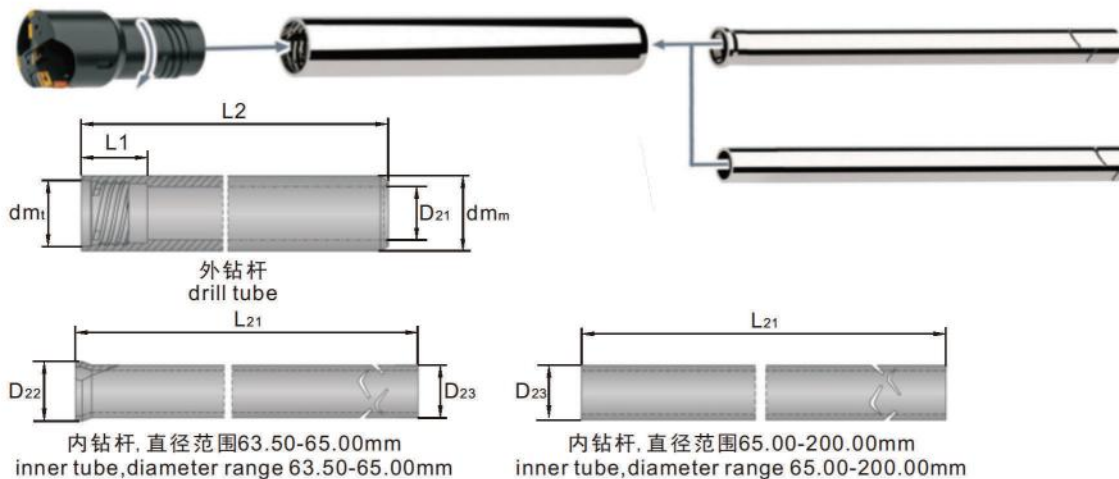
订货示例Ordering example: 424.11-14D068.00

刀片Insert

中心刀卡 Central cartridge	刀片 Insert	中间刀卡 Intermediate cartridge	刀片 Insert	周边刀卡 Peripheral cartridge	刀片 Insert
BL430-C16	TPMT16T312R-L	BR430-I16	TPMT16T312R-L	BR430-P16	424-13T308-L
	TPMT16T312R-G		TPMT16T312R-G		424-13T308-G
BL430-C22	TPMT220612R-L	BR430-I22	TPMT220612R-L	BR430-P22	424-180608-L
	TPMT220612R-G		TPMT220612R-G		424-180608-G

喷吸钻D424. 11钻杆Tubes for D424. 11 ejector drills

直径范围 Dia. range: 63.50-200.00mm Dia. range: 63.50-200.00mm



钻头直径 Drill diameter Dc(mm)	钻杆尺寸 Tube size	订货号 (外钻杆) Ordering code (drill tube)	尺寸(mm) Dimensions				订货号 (内钻杆) Ordering code(inner tube)	尺寸(mm) Dimensions	
			dmm	dmt	D21	l1		D22	D23
63.50	13	800.11-013-XXXX	55.5	47	43	44	800.11-113-XXXX	43	40
65.00	13E	800.11-013E-XXXX	56.00	51.00	43.00	44.00	800.11-113-XXXX	43.00	40.00
65.00	14	800.11-014-XXXX	56	52	43	75	800.11-114-XXXX	-	40
69.85	15	800.11-015-XXXX	62	58	48	75	800.11-115-XXXX	-	44
70.00									
71.45									
75.00	16	800.11-016-XXXX	68	63	53	75	800.11-116-XXXX	-	48
76.20									
80.00	17	800.11-017-XXXX	75	70	59	97	800.11-117-XXXX	-	54
82.55									
85.00									
88.90	18	800.11-018-XXXX	82	77	66	97	800.11-118-XXXX	-	60
90.00									
95.00									
95.25									
100.00	19	800.11-019-XXXX	94	89	78	97	800.11-119-XXXX	-	70
101.60									
105.00									
107.95									
110.00									
114.30	20	800.11-020-XXXX	106	101	90	118	800.11-120-XXXX	-	80
115.00									
120.00									
120.65									
125.00	21	800.11-021-XXXX	118	113	92	118	800.11-121-XXXX	-	80
127.00									
135.99									
136-200	22-25	定制Customized design							

订购钻杆时, 需注明钻杆长度L2, L21 (XXXX)

When ordering drill tube, state code length L2, L21(XXXX) in the ordering code

钻头直径Dc=65.00mm, 外钻杆长度为1070mm, 内钻杆长度为1260mm的订货示例:

Ordering example for drill tube length 1070mm, inner tube length 1260mm for drill diameter 65.00mm:

外钻杆Drill tube:800.11-014-1070, 内钻杆Inner tube:800.11-114-1260

钻头直径为63.50mm-123.90mm的内钻杆必须比外钻杆长190mm。

For drill diameter 63.50mm-123.90mm:inner tube must be 190mm longer than drill tube.

钻头直径为124.00mm-200.00mm的内钻杆必须比外钻杆长220mm

For drill diameter 124.00mm-200.00mm:inner tube must be 220mm longer than drill tube.

钻杆均不带扳手槽, 如需要可定制。

Drill tube without spanner slot, please state if needed.

单管钻424. 21 STS drill 424. 21

直径范围: 63.50~200.00mm

孔公差: IT10

表面光洁度: Ra 3um

孔深: 150倍径

切削液: 纯油或有EP添加剂的乳化液

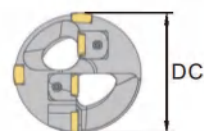
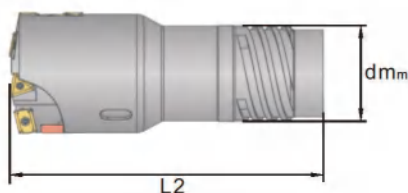
Diameter range: 63.50~200.00mm

Hole tolerance: IT10

Surface finish: Ra 3um

Hole depth: 150XDia

Cutting fluid: Net oil or EP additive



钻头直径 Drill diameter Dc(mm)	钻杆尺寸 Tube size	订货号 Ordering code	尺寸(mm) Dimensions			刀卡 Cartridge							
			dmm	L2	直径调整量 Dia.adjustable	中心刀夹 Central cartridge	数量 Qty.	中间刀夹 Intermediate cartridge	数量 Qty.	周边刀夹 Peripheral cartridge	数量 Qty.	支撑板 Support pad	数量 Qty.
63.50	13	424.21-13D063.50	47	115	+0.5	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
65.00	13E	424.21-13ED065.00	51	115	+1.0	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
65.00	14	424.21-14D065.00	52	150	+1.0	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
69.85	15	424.21-15D069.85	58	150	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
70.00	15	424.21-15D070.00	58	150	+1.0	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
71.45	15	424.21-15D071.45	58	150	+0.5	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
75.00	16	424.21-16D075.00	63	160	+1.2	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
76.20	16	424.21-16D076.20	63	160	+1.8	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
80.00	17	424.21-17D080.00	70	190	+1.0	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
82.55	17	424.21-17D082.55	70	190	+0.5	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
85.00	17	424.21-17D085.00	70	190	+1.5	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
88.90	18	424.21-18D088.99	77	190	+1.0	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
90.00	18	424.21-18D090.00	77	190	+1.0	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
95.00	18	424.21-18D095.00	77	190	+1.0	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-14D065	2
95.25	18	424.21-18D095.25	77	190	+1.0	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-14D065	2
100.00	19	424.21-19D100.00	89	195	+1.0	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-16D100	2
101.60	19	424.21-19D101.60	89	195	+1.0	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-16D100	2
105.00	19	424.21-19D105.00	89	195	+0.2	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-16D100	2
107.95	19	424.21-19D107.95	89	195	+1.0	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
110.00	19	424.21-19D110.00	89	195	+1.0	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
114.30	20	424.21-20D114.30	101	220	+1.5	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
115.00	20	424.21-20D115.00	101	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
120.00	20	424.21-20D120.00	101	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
120.65	20	424.21-20D120.65	101	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
125.00	21	424.21-21D125.00	113	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
127.00	21	424.21-21D127.00	113	220	+1.0	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
130.00	21	424.21-21D130.00	113	220	+0.1	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2

钻头直径范围 Drill dia.range Dc(mm)	推荐钻杆尺寸(可选钻杆尺寸) Recommended Tube size (Optional tube size)	订货号 Ordering code	尺寸(mm) Dimensions			刀卡 Cartridge							
			dmm	L2	径向调整量 Dia.adjustable	中心刀夹 Central cartridge	数量 Qty.	中间刀夹 Intermediate cartridge	数量 Qty.	周边刀夹 Peripheral cartridge	数量 Qty.	支撑板 Support pad	数量 Qty.
63.50-65.00	13.00	424.21-13DXXX.XX	47	115	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
63.50-65.00	13E	424.21-13EDXXX.XX	51	115	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
65.00-69.84	14 (13)	424.21-14(13)DXXX.XX	52	150	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
69.85-71.99	15 (14)	424.21-15(14)DXXX.XX	58	150	+0.2	BL430-C16	1	BR430-I16	1	BR430-P16	1	800-14D065	2
72.00-79.99	16 (15)	424.21-16(15)DXXX.XX	63	160	+0.2	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
80.00-82.99	17 (16)	424.21-17(16)DXXX.XX	70	190	+0.2	BL430-C16	1	BR430-I16	1	BR430-P22	1	800-14D065	2
83.00-88.89	17 (16)	424.21-17(16)DXXX.XX	70	190	+0.2	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
88.90-94.00	18 (17)	424.21-18(17)DXXX.XX	77	190	+0.2	BL430-C22	1	BR430-I16	1	BR430-P22	1	800-14D065	2
95.00-99.99	18 (17)	424.21-18(17)DXXX.XX	77	190	+0.2	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-14D065	2
100.00-104.99	19 (18)	424.21-19(18)DXXX.XX	89	195	+0.2	BL430-C22	1	BR430-I22	1	BR430-P22	1	800-16D100	2
105.00-114.29	19 (18)	424.21-19(18)DXXX.XX	89	195	+0.2	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
114.30-121.99	20 (19)	424.21-20(19)DXXX.XX	101	220	+0.2	BL430-C16	1	BR430-I16	3	BR430-P16	1	800-16D100	2
122.00-124.99	21 (20)	424.21-20(19)DXXX.XX	101	220	+0.2	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
125.00-135.99	21 (20)	424.21-21(20)DXXX.XX	113	220	+0.2	BL430-C16	1	BR430-I16	3	BR430-P22	1	800-16D100	2
136.00-200	22-25	定制Customized design			+0.2								

订购钻头时，需注明钻头直径 (XXX.XX)

When ordering drill, state drill diameter (XXX.XX) in the ordering code

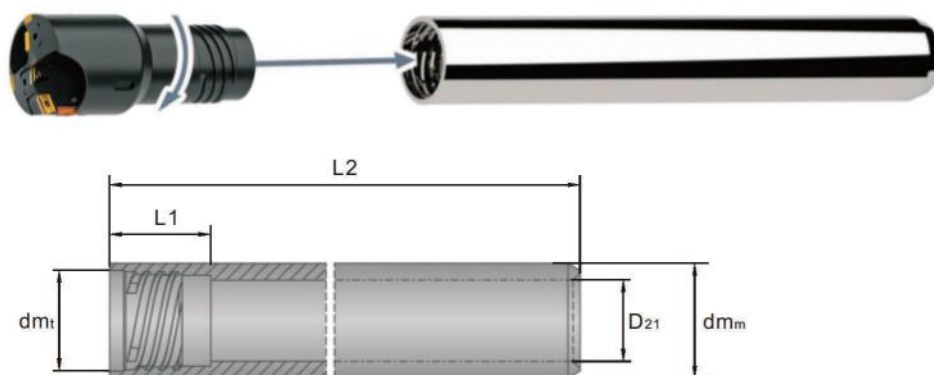
订货示例Ordering example: 424.21-14D068.00

刀片Insert

中心刀卡 Central cartridge	刀片 Insert	中间刀卡 Intermediate cartridge	刀片 Insert	周边刀卡 Peripheral cartridge	刀片 Insert
BL430-C16	TPMT16T312R-L	BR430-I16	TPMT16T312R-L	BR430-P16	424-13T308-L
	TPMT16T312R-G		TPMT16T312R-G		424-13T308-G
BL430-C22	TPMT220612R-L	BR430-I22	TPMT220612R-L	BR430-P22	424-180608-L
	TPMT220612R-G		TPMT220612R-G		424-180608-G

单管钻424. 21钻杆Tubes for 424. 21 STS drills

直径范围 Dia. range: 63. 50-200. 00mm Dia. range: 63. 50-200. 00mm



钻头直径 Drill diameter Dc(mm)	钻杆尺寸 Tube size	订货号 Ordering code	尺寸(mm) Dimensions						
			dmm	dmt	l1	D21			
63.50	13	800.21-013-XXXX	51.00	47.00	40	39			
65.00	13E	800.21-013E-XXXX	56.00	51.00	40	43			
65.00	14	800.21-014-XXXX	56	52	75	43			
69.85	15	800.21-015-XXXX	62	58	75	48			
70.00									
74.99									
75.00	16	800.21-016-XXXX	68	63	75	53			
79.99									
80.00	17	800.21-017-XXXX	75	70	97	59			
82.55									
88.89									
88.90	18	800.21-018-XXXX	82	77	97	66			
90.00									
95.00									
99.99									
100.00	19	800.21-019-XXXX	94	89	97	78			
101.60									
105.00									
107.95									
114.29									
114.30	20	800.21-020-XXXX	106	101	118	90			
115.00									
120.00									
124.99									
125.00	21	800.21-021-XXXX	118	113	118	92			
127.00									
135.99									
136-200	22-25	定制Customized design							

订购钻杆时，需注明钻杆长度L2 (XXXX)

When ordering drill tube, state code length L2(XXXX) in the ordering code

钻头直径Dc=65.00mm, 钻杆长度为2600mm的订货示例:

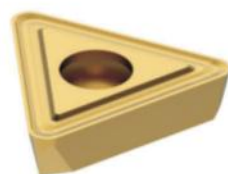
Ordering example for drill tube length 2600mm for drill diameter 65.00mm:

800.21-014-2600

钻杆均不带扳手槽，如需要可定制。

Drill tube without spanner slot, please state if needed.

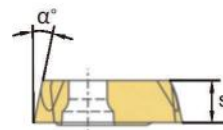
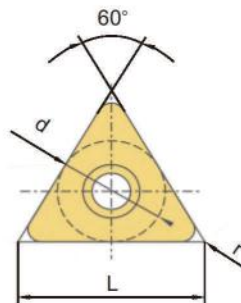
用于424. 11和424. 21的钻削刀片 Inserts for 424. 11 and 424. 21 drills
中心刀片、中间刀片 Central and intermediate insert



-G

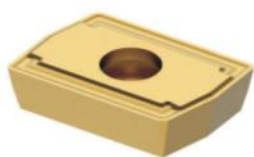


-L

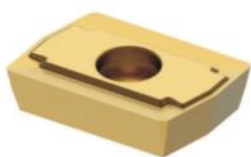


订货号 Ordering code	P	K	M	S	N	尺寸(mm) Dimensions								
	PD25A	PD25A	PD25A	PD25A	PD25A	R	R ^z	d	d ^z	L	L ^z	S	S ^z	α°
TPMT 16T312R-L	☆	☆	☆	☆	☆	1.2	0.047	9.525	0.375	16.5	0.650	3.97	0.156	11°
TPMT 16T312R-G	☆	☆	☆	☆	☆	1.2	0.047	9.525	0.375	16.5	0.65	3.97	0.156	11°
TPMT 220612R-L	☆	☆	☆	☆	☆	1.2	0.047	12.7	0.500	22.0	0.866	6.35	0.250	11°
TPMT 220612R-G	☆	☆	☆	☆	☆	1.2	0.047	12.7	0.500	22.0	0.866	6.35	0.250	11°

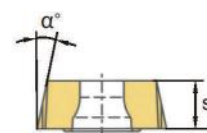
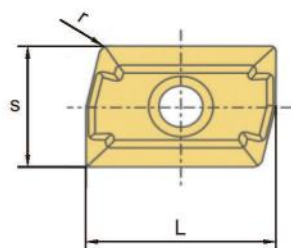
周边刀片 Peripheral insert



-G

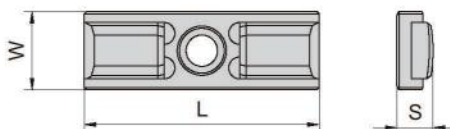


-L



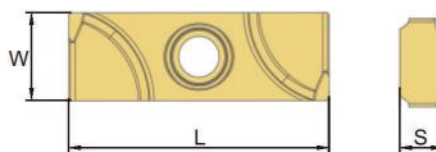
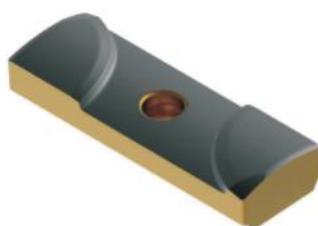
订货号 Ordering code	P	K	M	S	N	尺寸(mm) Dimensions								
	PD25A	PD25A	PD25A	PD25A	PD25A	R	R ^z	W	W ^z	L	L ^z	S	S ^z	α°
424-13T308-L	☆	☆	☆	☆	☆	0.8	0.031	10	0.394	14.7	0.579	3.97	0.156	11°
424-13T308-G	☆	☆	☆	☆	☆	0.8	0.031	10	0.394	14.7	0.579	3.97	0.156	11°
424-180608-L	☆	☆	☆	☆	☆	0.8	0.031	11.5	0.453	20.6	0.811	6.35	0.250	11°
424-180608-G	☆	☆	☆	☆	☆	0.8	0.031	11.5	0.453	20.6	0.811	6.35	0.250	11°

用于424. 11和424. 21的支撑板Support pad for 424. 11 and 424. 21 drills
焊接精磨支撑板 Brazed pad-fine grinding



钻头直径范围 Drill dia.range Dc(mm,inch)	订货号 Ordering code	P	K	M	S	N	尺寸(mm) Dimensions					
		D05	D05	D05	D05	D05	W	W ²	L	L ²	S	S ²
63.5-74.99(2.480-2.952)	800-14D065	☆	☆	☆	☆	☆	14	.551	35	1.379	7.0	.276
75.0-84.99(2.953-3.346)	800-14D075	☆	☆	☆	☆	☆	14	.551	35	1.379	7.0	.276
85.0-99.99(3.346-3.936)	800-14D085	☆	☆	☆	☆	☆	14	.551	35	1.379	7.0	.276
100-109.99(3.937-4.330)	800-16D100	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
110-119.99(4.331-4.724)	800-16D110	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
120-129.99(4.725-5.118)	800-16D120	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
130-139.99(5.119-5.511)	800-16D130	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
140-149.99(5.512-5.905)	800-16D140	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
150-159.99(5.906-6.298)	800-16D150	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
160-169.99(6.229-6.692)	800-16D160	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
170-179.99(6.693-7.086)	800-16D170	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
180-189.99(7.087-7.497)	800-16D180	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335

压制精磨支撑板 Solid carbide pad-fine grinding



钻头直径范围 Drill dia.range Dc(mm,inch)	订货号 Ordering code	P	K	M	S	N	尺寸(mm) Dimensions					
		PM1	PM1	PM1	PM1	PM1	W	W ²	L	L ²	S	S ²
63.5-74.99(2.480-2.952)	800-14D065	☆	☆	☆	☆	☆	14	.551	35	1.379	7.0	.276
75.0-84.99(2.953-3.346)	800-16D075	☆	☆	☆	☆	☆	14	.551	35	1.379	7.0	.276
85.0-99.99(3.346-3.936)	800-18D085	☆	☆	☆	☆	☆	14	.551	35	1.379	7.0	.276
100-109.99(3.937-4.330)	800-20D100	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
110-119.99(4.331-4.724)	800-22D110	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
120-129.99(4.725-5.118)	800-24D120	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335
130-139.99(5.119-5.511)	800-26D130	☆	☆	☆	☆	☆	20	.787	50	1.969	8.5	.335

可根据加工要求定制非标支撑板。
Customized design available

单管钻425. 21 STS drill 425. 21

直径范围: 48.00~135. 99mm

孔公差: IT10

表面光洁度: Ra 3um

孔深: 150倍径

切削液: 纯油或有EP添加剂的乳化液

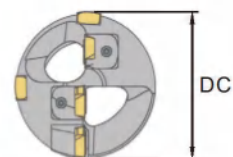
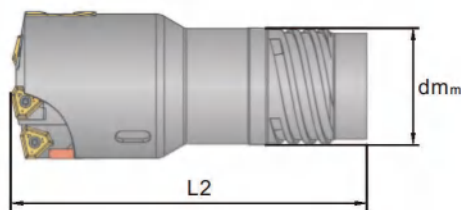
Diameter range: 48.00~135. 99mm

Hole tolerance: IT10

Surface finish: Ra 3um

Hole depth: 150XDia

Cutting fluid: Net oil or EP additive



钻头直径范围 Drill dia.range Dc(mm)	钻杆尺寸 Tube size	订货号 Ordering code	尺寸(mm) Dimensions			刀卡 Cartridge							
			dmm	L2	径向调整量 Dia.adjustable	中心刀夹 Central cartridge	数量 Qty.	中间刀夹 Intermediate cartridge	数量 Qty.	周边刀夹 Peripheral cartridge	数量 Qty.	支撑板 Support pad	数量 Qty.
48.00-51.70	11	425.21-11DXXX.XX	39	95	+0.5	425-C14	1	425-I14	1	425-P14	1		3
51.71-51.99	12	425.21-12DXXX.XX	43	100	+0.5	425-C14	1	425-I14	1	425-P14	1		3
52.00-54.99						425-C14	1	425-I14	1	425-P17	1		3
55.00-56.20						425-C17	1	425-I14	1	425-P17	1		3
56.21-57.99	13	425.21-13DXXX.XX	47	110	+0.5	425-C17	1	425-I14	1	425-P17	1		3
58.00-59.99						425-C17	1	425-I17	1	425-P17	1		3
60.00-60.60						425-C17	1	425-I17	1	425-P17	1		3
60.61-63.99	13E	425.21-13EDXXX.XX	51	110	+0.5	425-C17	1	425-I17	1	425-P17	1		3
64.00-65.00						425-C17	1	425-I17	1	425-P24	1		3
65.01-66.99	14	425.21-14DXXX.XX	52	150	+0.5	425-C17	1	425-I17	1	425-P24	1		3
67.00-67.99	15	425.21-15DXXX.XX	58	150	+0.5	425-C17	1	425-I17	1	425-P24	1		3
68.00-72.99						425-C24	1	425-I24	1	425-P17	1		3
73.00-77.99	16	425.21-16DXXX.XX	63	150	+0.5	425-C24	1	425-I24	1	425-P17	1		3
78.00-79.99						425-C24	1	425-I24	1	425-P24	1		3
80.00-84.99	17	425.21-17DXXX.XX	70	180	+0.5	425-C24	1	425-I24	1	425-P24	1		3
85.00-86.99						425-C24	1	425-I24	1	425-P28	1		3
87.00-91.99	18	425.21-18DXXX.XX	77	180	+0.5	425-C24	1	425-I24	1	425-P28	1		3
92.00-98.99						425-C28	1	425-I28	1	425-P24	1		3
99.00-99.99						425-C28	1	425-I28	1	425-P28	1		3
100.00-106.99	19	425.21-19DXXX.XX	89	180	+0.5	425-C28	1	425-I28	1	425-P28	1		3
107.00-111.99						425-C24	1	425-I17	3	425-P24	1		4
112.00-117.99	20	425.21-20DXXX.XX	101	205	+0.5	425-C24	1	425-I17	3	425-P24	1		4
118.00-123.99						425-C24	1	425-I24	3	425-P24	1		4
124.00-135.99	21	425.21-21DXXX.XX	113	205	+0.5	425-C24	1	425-I24	3	425-P24	1		4

1) 支撑板为定制

Support pads are tailor made

订购钻头时, 需注明钻头直径 (XXX.XX)

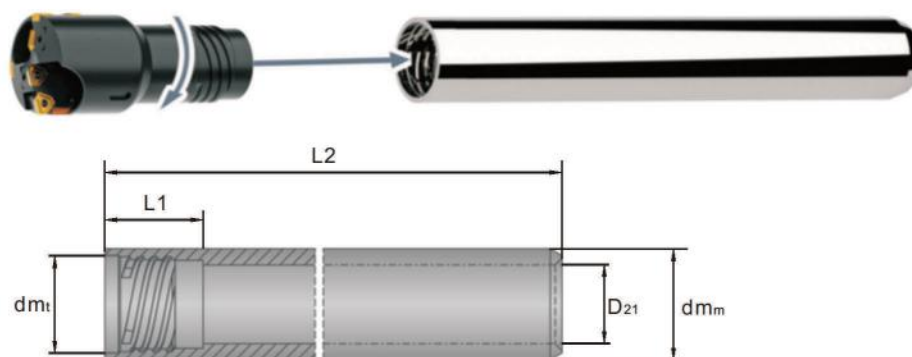
When ordering drill, state drill diameter (XXX.XX) in the ordering code

订货示例 Ordering example: 425.21-11D048.00

中心刀卡 Central cartridge	刀片 Insert	中间刀卡 Intermediate cartridge	刀片 Insert	周边刀卡 Peripheral cartridge	刀片 Insert
425-C14	TPGX1403	425-I14	TPGX1403	425-P14	TPGX1403
425-C17	TPGX1704	425-I17	TPGX1704	425-P17	TPGX1704
425-C24	TPGX2405	425-I24	TPGX2405	425-P24	TPGX2405
425-C28	TPGX2807	425-I28	TPGX2807	425-P28	TPGX2807

单管钻425.21钻杆 Tubes for 425.21 STS drills

直径范围 . range: 48.00-135.99mm



钻头直径范围 Drill dia.range Dc(mm)	钻杆尺寸 Tube size	订货号 Ordering code	尺寸(mm) Dimensions						
			dmm	dmt	l1	D21			
48.00-51.70	11	800.21-011-XXXX	43	39	36	32			
51.71-51.99	12	800.21-012-XXXX	47	43	40	35			
52.00-54.99									
55.00-56.20									
56.21-57.99	13	800.21-013-XXXX	51	47	40	40			
58.00-59.99									
60.00-60.60									
60.61-63.99	13E	800.21-013E-XXXX	56	51	40	42			
64.00-65.00									
65.01-66.99	14	800.21-014-XXXX	56	52	75	43			
67.00-67.99	15	800.21-015-XXXX	62	58	75	48			
68.00-72.99									
73.00-77.99	16	800.21-016-XXXX	68	63	75	53			
78.00-79.99									
80.00-84.99	17	800.21-017-XXXX	75	70	97	59			
85.00-86.99									
87.00-91.99	18	800.21-018-XXXX	82	77	97	66			
92.00-98.99									
99.00-99.99									
100.00-106.99	19	800.21-019-XXXX	94	89	97	78			
107.00-111.99									
112.00-117.99	20	800.21-020-XXXX	106	101	118	90			
118.00-123.99									
124.00-135.99	21	800.21-021-XXXX	118	113	118	92			

订购钻杆时，需注明钻杆长度L2 (XXXX)

When ordering drill tube, state code length L2(XXXX) in the ordering code

钻头直径Dc=48.00mm, 钻杆长度为2600mm的订货示例:

Ordering example for drill tube length 2600mm for drill diameter 48.00mm:

800.21-011-2600

钻杆均不带扳手槽，如需要可定制。

Drill tube without spanner slot, please state if needed.

B

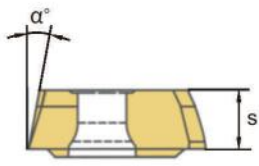
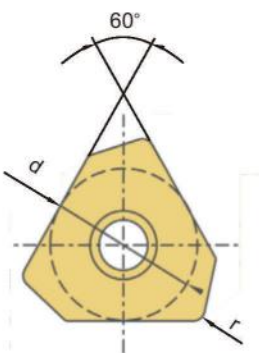
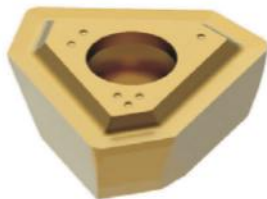


铣削

用于425. 21的钻削刀片Inserts for 425. 21 drills
中心刀片、中间刀片、周边刀片Central, intermediate and peripheral insert

C

圆柄刀具



D

订货号 Ordering code	P	K	M	S	N	尺寸(mm) Dimensions						
	PD25A	PD25A	PD25A	PD25A	PD25A	R	R ^z	d	d ^z	S	S ^z	α°
TPGX1403	☆	☆	☆	☆	☆	0.8	0.031	8.45	0.333	3.55	0.140	11
TPGX1704	☆	☆	☆	☆	☆	0.75	0.030	10.3	0.406	4.02	0.158	11
TPGX2405	☆	☆	☆	☆	☆	1.2	0.047	14.21	0.559	5.5	0.217	11
TPGX2807	☆	☆	☆	☆	☆	1.6	0.063	17	0.669	7.5	0.295	11

钻削

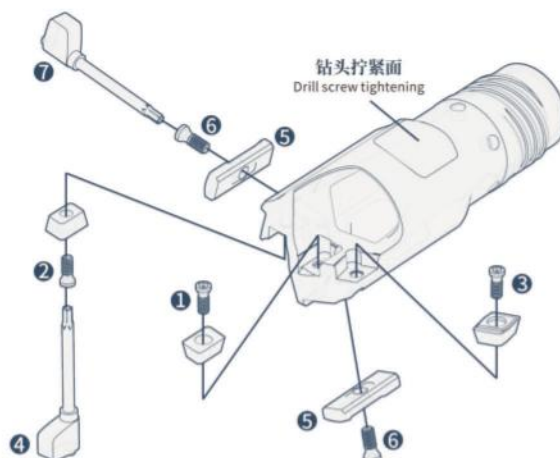
E

深孔加工

F

旋转刀柄

800深孔钻备件Spareparts for 800 ddrills



钻头直径范围 Drill dia.range Dc(mm)	1 中心刀片螺钉 Central insert screw	2 中间刀片螺钉 Intermediate insert screw	3 周边刀片螺钉 Peripheral insert screw	4 扳手 Wrench	5 支撑板 Support pad	6 螺钉 Screw	7 扳手 Wrench
25.00-28.70	B020-05	B020-05	B020-05	S01-107	800-06..	B020-20	S01-107
28.71-31.00	B020-20	B020-05	B020-05	S01-107	800-06..	B020-20	S01-107
31.01-39.60	B020-34	B020-34	B020-34	S01-108	800-07..	B020-24	S01-109
39.61-47.00	B020-34	B020-34	B020-34	S01-108	800-08..	B020-833	S01-110
47.01-65.00	B020-34	B020-34	B020-34	S01-108	800-10..-800-12..	B020-10	S01-115

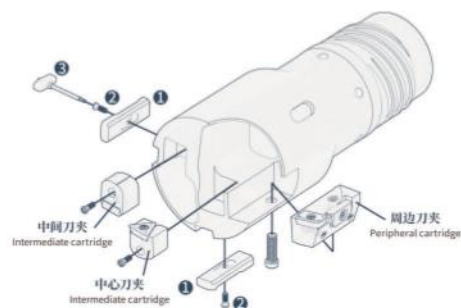
钻头拧紧面扳手钳口宽度Spanner size for drill screw tightening

钻头直径范围 Drill dia.range Dc(mm)	钳口宽度 Spanner size (mm)	扳手 Spanner	图片
25.00<-≤27.00	22	W01-220	
27.00<-≤29.00	24	W01-240	
29.00<-≤31.00	26	AW01-260 (*)	
31.00<-≤32.00	27	W01-270	
32.00<-≤35.00	28	W01-280	
35.00<-≤36.20	30	W01-300	
36.20<-≤39.60	32	W01-320	
39.60<-≤43.00	36	W01-360	
43.00<-≤47.00	38	W01-380	
47.00<-≤49.00	41	W01-410	
49.00<-≤51.70	43	AW01-430 (*)	
51.70<-≤54.00	46	W01-460	
54.00<-≤56.20	50	W01-500	
56.20<-≤60.00	50	W01-500	
60.00<-≤61.00	55	W01-550	
61.00<-≤63.00	58	AW01-580 (*)	
63.00<-≤65.00	60	W01-600	

*AW01系列扳手为开口活动扳手
AW01 is adjustable spanner

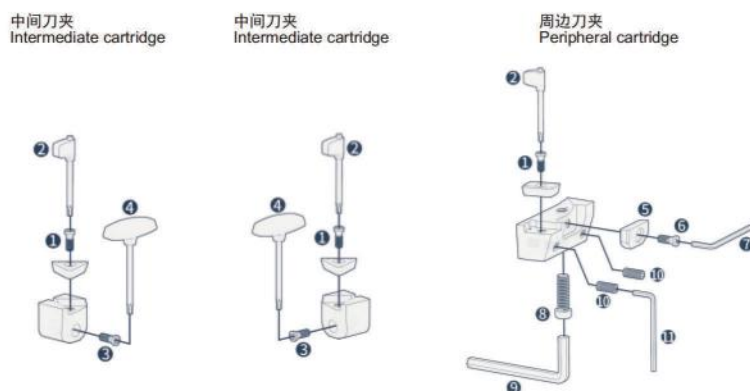
424深孔钻备件Spareparts for 424 drills

支撑板Support pad



1 支撑板 Support pad	2 螺钉 Screw	3 扳手 Wrench
D800-14D065..	B020-10	S01-115
D800-16D100..	B020-07	S01-120

刀夹Cartridge



中心刀夹 Central cartridge	中间刀夹 Intermediate cartridge	1 螺钉 screw	2 扳手 Wrench	3 螺钉 Screw	4 扳手 Wrench
BL430-C16	BR430-I16	B020-24	S01-109	B020-26	T01-120
BL430-C22	BR430-I22	B020-25	S01-115	B020-26	T01-120

周边刀夹 Peripheral cartridge	1 螺钉 Screw	2 扳手 Wrench	5 刀片保护板 Pressure pad	6 螺钉 Screw	7 扳手 Wrench	8 螺钉 Screw	9 扳手 Wrench	10 螺钉 Screw	11 扳手 Wrench
BR430-P16	B020-24	S01-109	PB-P16	S03-030 060	L02-0020	S03-060 160	L02-0040	S06-060-100	L02-0030
BR430-P22	B020-25	S01-115	PB-P22	S03-030 060	L02-0020	S03-060 200	L02-0040	S06-060-100	L02-0030

钻头直径范围 Drill dia.range Dc(mm)	月牙扳手型号 Hook Wrench	图
63.50<-≤72.99	G01-058	
73.00<-≤79.99	G01-068	
80.00<-≤99.99	G01-080	
100.00<-≤111.99	G01-095	
112.00<-≤123.99	G01-110	
124.00<-≤136.00	G01-120	

B

铣削

C

圆柄刀具

D

钻削

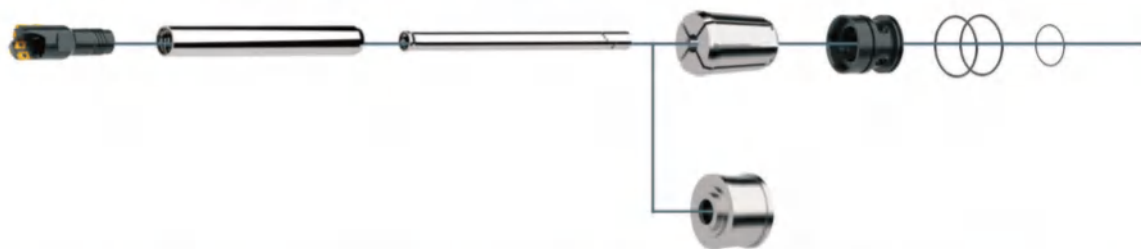
E

深孔加工

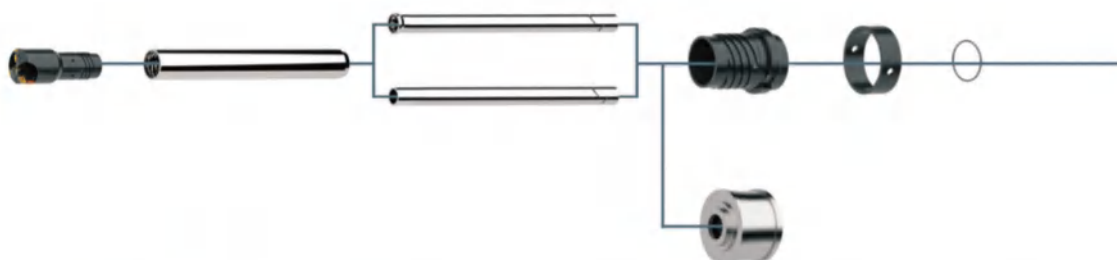
F

旋转刀柄

深孔喷吸系统部件Assembling ejector for parts system



钻头直径范围 Drill dia.range	钻杆尺寸 Tube size	喷吸钻头 Drill head	外钻管 Drill tube	内钻管 Inner tube	ER 夹套 ER collet	密封套筒 Sealing sleeve	外O型圈 (2个) O-ring(2 PCS)
25.00-26.40	03	800.11-03DXX.XX	800.11-003-XXXX	800.11-103-XXXX	424-ER03	424-SS03	EO-0313
26.41-28.70	04	800.11-04DXX.XX	800.11-004-XXXX	800.11-104-XXXX	424-ER04	424-SS04	
28.71-31.00	05	800.11-05DXX.XX	800.11-005-XXXX	800.11-105-XXXX	424-ER05	424-SS05	
31.01-33.30	06	800.11-06DXX.XX	800.11-006-XXXX	800.11-106-XXXX	424-ER06	424-SS06	
33.31-36.20	07	800.11-07DXX.XX	800.11-007-XXXX	800.11-107-XXXX	424-ER07	424-SS07	
36.21-39.60	08	800.11-08DXX.XX	800.11-008-XXXX	800.11-108-XXXX	424-ER08	424-SS08	
39.61-43.00	09	800.11-09DXX.XX	800.11-009-XXXX	800.11-109-XXXX	424-ER09	424-SS09	
43.01-47.00	10	800.11-10DXX.XX	800.11-010-XXXX	800.11-110-XXXX	424-ER10	424-SS10	
47.01-51.70	11	800.11-11DXX.XX	800.11-011-XXXX	800.11-111-XXXX	424-ER11	424-SS11	
51.71-56.20	12	800.11-12DXX.XX	800.11-012-XXXX	800.11-112-XXXX	424-ER12	424-SS12	
56.21-65.00	13	800.11-13DXX.XX	800.11-013-XXXX	800.11-113-XXXX	424-ER13	424-SS13	
63.50-65.00	13	424.11-13DXXX.XX	800.11-013-XXXX	800.11-113-XXXX	424-ER13	424-SS13	



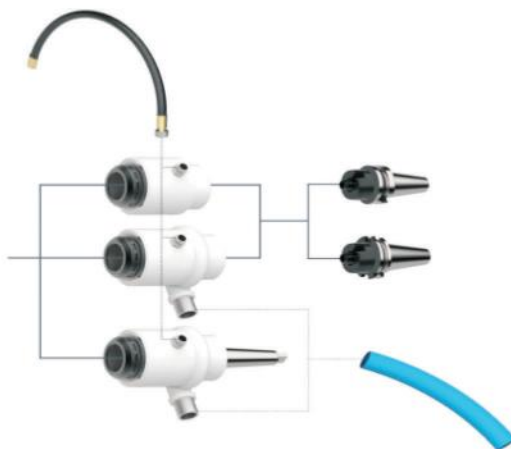
钻头直径范围 Drill dia.range	钻杆尺寸 Tube size	喷吸钻头 Drill head	外钻管 Drill tube	内钻管 Inner tube	连接套 Connecting sleeve	密封套筒 Sealing sleeve
65,00-66,99	14	424.11-14DXXX.XX	800.11-014-XXXX	800.11-114-XXXX	424-CS14	424-SS14
67,00-72,99	15	424.11-15DXXX.XX	800.11-015-XXXX	800.11-115-XXXX	424-CS15	424-SS15
73,00-79,99	16	424.11-16DXXX.XX	800.11-016-XXXX	800.11-116-XXXX	424-CS16	424-SS16
80,00-86,99	17	424.11-17DXXX.XX	800.11-017-XXXX	800.11-117-XXXX	424-CS17	424-SS17
87,00-99,99	18	424.11-18DXXX.XX	800.11-018-XXXX	800.11-118-XXXX	424-CS18	424-SS18
100,00-111,99	19	424.11-19DXXX.XX	800.11-019-XXXX	800.11-119-XXXX	424-CS19	424-SS19
112,00-123,99	20	424.11-20DXXX.XX	800.11-020-XXXX	800.11-120-XXXX	424-CS20	424-SS20
124,00-135,99	21	424.11-21DXXX.XX	800.11-021-XXXX	800.11-121-XXXX	424-CS21	424-SS21
136,00-147,99	22	424.11-22DXXX.XX	800.11-022-XXXX	800.11-122-XXXX	424-CS22	424-SS22
148,00-159,99	23	424.11-23DXXX.XX	800.11-023-XXXX	800.11-123-XXXX	424-CS23	424-SS23
160,00-171,99	24	424.11-24DXXX.XX	800.11-024-XXXX	800.11-124-XXXX	424-CS24	424-SS24
172,00-183,90	25	424.11-25DXXX.XX	800.11-025-XXXX	800.11-125-XXXX	424-CS25	424-SS25

选择完整的喷吸钻系统，请咨询Pulcut技术人员。

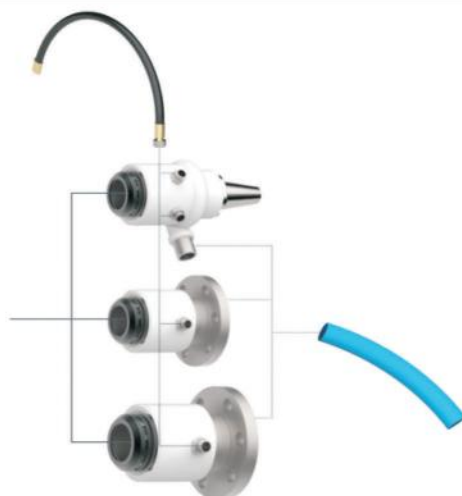
Please contact with technical engineer when choose a complete set ejector system.

可根据客户机床情况定制减震器，非旋转连接器等其它喷吸钻附件。

Vibration damper and non-rotating connectors can be tailor made according to fit the machine tool.

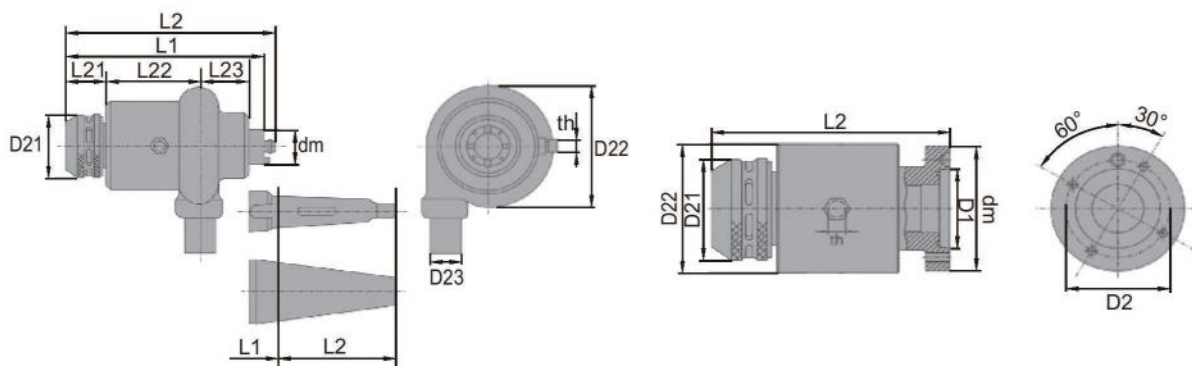


内O型圈 (1个) O-ring(1 PCS)	高压冷却液管 HP coolant hose (mm)	冷却液出水管 Coolant outlet pipe	旋转连接器 (1型) Rotation connector(Type 1)	旋转连接器 (2型) Rotation Connector(Type 2)	BT机床主刀柄 BT tool holder	JT机床主刀柄 JI tool holder
IO-03	424-HPPL-XXXX-1 连接冷却液箱 Connect to the cooler housing	424-CDL-XXXX-1	424.1-D19-65-V63 外型较小, 不需要冷却液出水管 Smaller size than 424.2-D19-65-V63, coolant outlet pipe unneeded.	424.2-D19-65-V63 体型稍大 Bigger size than 424.1-D19-65-V63	BT50-V63仅BT50机床选用 Only for BT50 spinder	JT50-V63 仅JT50机床选用 Only for JT50 spinder
IO-04						
IO-05						
IO-06						
IO-07						
IO-08						
IO-09						
IO-10						
IO-11						
IO-12						
IO-13						
IO-13						



O型圈 O-ring	高压冷却液管 (mm) HP coolant hose	冷却液出水管 Coolant outlet pipe	旋转连接器 (3型) Rotation connector(Type 3)	旋转连接器 (4型&5型) Rotation connector(Type 4&5)
EO-1425	424-HPPL-XXXX-2 连接冷却液箱 Connect to the cooler housing	424-CDL-XXXX-2	424.1-D65-124-BT50 适合较大直径钻头,2个进水口 Suitable for big size drill, 2 water inlets	424.4-D65-124-FL220 4型 Type4 直接与机床法兰连接 Coonect directly to the machine.
			/	424.5-D124-184-FL290 5型 Type5 直接与机床法兰连接 Coonect directly to the machine.

旋转连接器 Rotation connectors



旋转连接器型式 Type of rotation connector	钻头直径范围 Drill dia.range Dc(mm)	订货号 Ordering code	接口型式 Mounting type	尺寸(mm) Dimensions												选型指南 Selection guide
				dm	D21	D22	D23	D1	D2	L1	L2	L21	L22	L23	th	
1型-V63 Type 1-V63 	25.00-65.00	424.1-D19-65-V63	V63	63	115	210	-	-	-	305	-	67	135	85	M27X1.5	外型较小, 不需要选择冷却液出水管 Smaller size than 424.2-D19-65-V63, coolant outlet pipe unneeded
2型-V63 Type 2-V63 	25.00-65.00	424.2-D19-65-V63	V63	63	115	210	50	-	-	305	-	67	135	85	M27X1.5	体型稍大 Bigger size than 424.1-D19-65-V63
3型-BT50 Type 3-BT50 	65.00-123.99	424.1-D65-124-BT50	BT50	-	164	312	100	-	-	341	471	61	200	108	M27X1.5	适合较大直径钻头, 2个进水口 Suitable for big size drill, 2 water inlets
4型-法兰连接 Type 4-Flange mounting 	65.00-123.99	424.4-D65-124-FL220	法兰连接 Flange mounting	220	164	225	-	139.7	171.4	-	345	-	-	-	M45X2	直接与机床法兰连接 Coonect directly to the machine
5型-法兰连接 Type 5-Flange mounting 	124.00-183.99	424.5-D124-184-FL290	法兰连接 Flange mounting	290	244	360	-	196.9	235	-	400	-	-	-	M64X2	直接与机床法兰连接 Coonect directly to the machine
6型-莫氏5号 Type 6-Morse MT5 	25.00-65.00	424.2-D19-65-M5	莫氏5号 Morse MT5	-	115	210	50	-	-	309.5	465	67	135	85	M27X1.5	莫氏接口 Used in Morse mounting machine

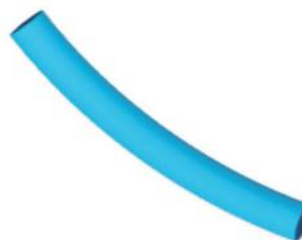
其他规格, 接口的旋转连接器均可根据客户需求进行定制。
Other type rotation connector can be tailor made.

高压冷却液管带接头High pressure coolant hose with joint



订货号 Ordering code	长度 mm length	连接器进水口规格 Size for inlet of connector	冷却液箱出水口规格 Size for outlet of cooler housing
424-HPPL-XXXX-1	XXXX	M27X1.5	NPT 1 1/2 "
424-HPPL-XXXX-2	XXXX	M45X2	NPT2 "

冷却液出水管Coolant outlet pipe



订货号 Ordering code	长度 mm length	出屑口直径 Dia. of chip outlet
424-CDL-XXXX-1	XXXX	50
424-CDL-XXXX-2	XXXX	100

ER夹套拆装器ER hand tool

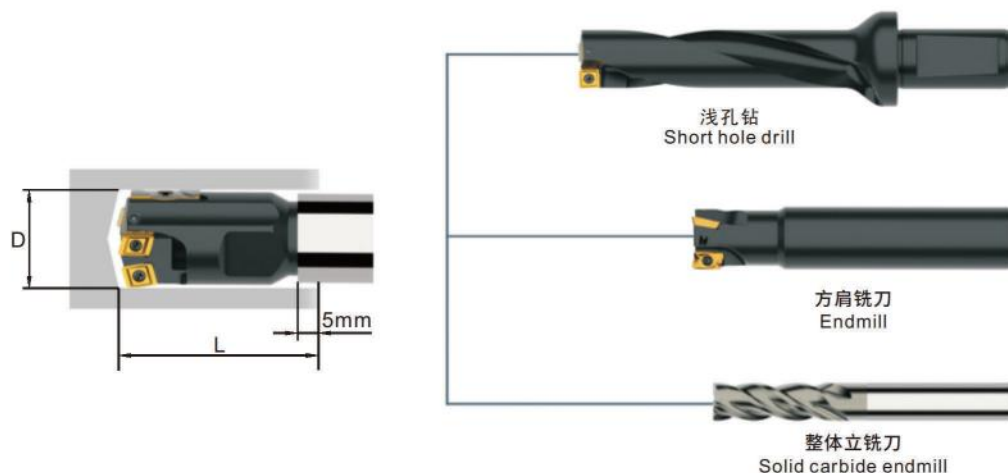


订货号 Ordering code	尺寸范围 Size range
ER-DS	ER03-ER13

主刀柄Basic holder

主刀柄型式 Basic holder type	订货号 Ordering code
	BT50-V63
	JT50-V63

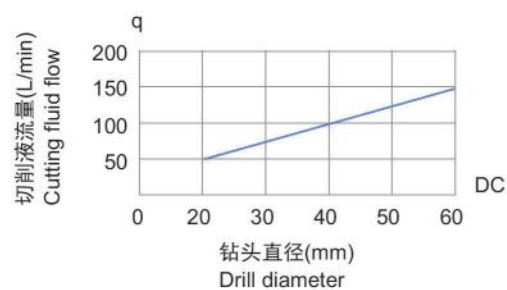
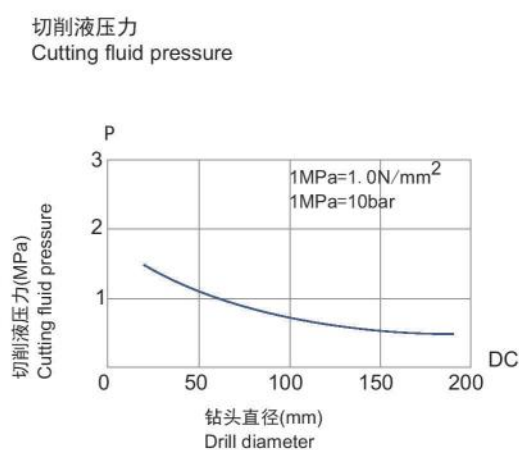
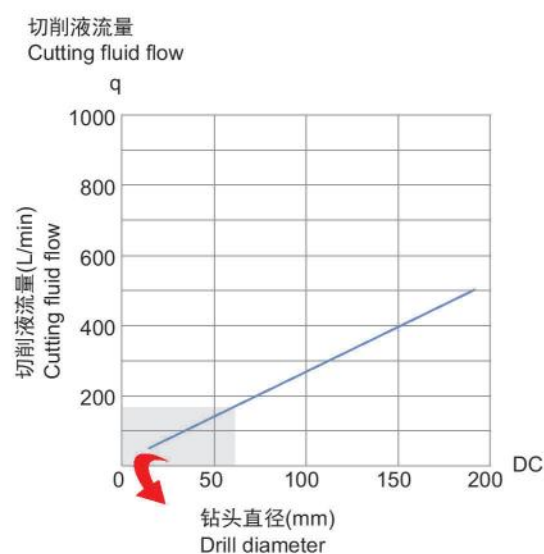
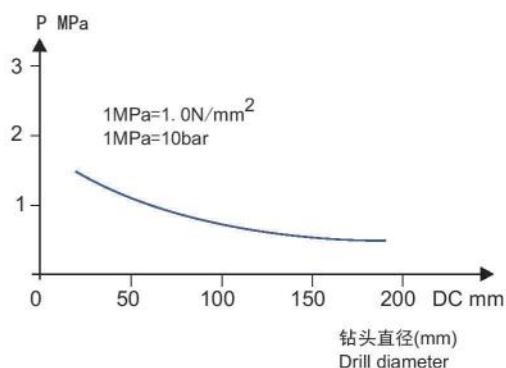
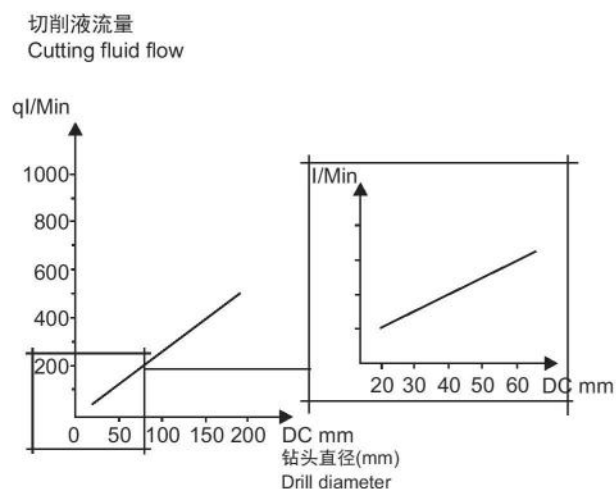
喷吸钻引导孔加工指导Instruction of pilot hole/ guiding bush hole making for ejector drilling



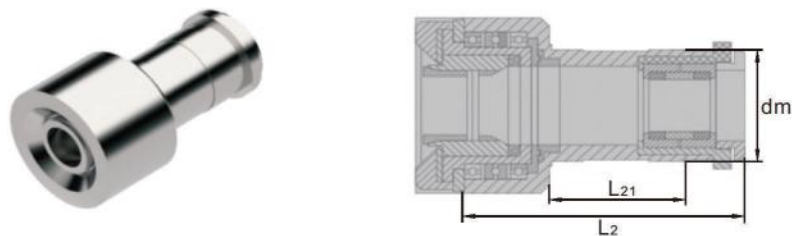
钻头直径范围 Drill dia.range Dc(mm)	钻杆尺寸 Tube size	引导孔/导向套最短尺寸 Min. Pilot Hole /guiding Bush Length L(mm)	引导孔/导向套尺寸 Pilot Hole/guiding Bush Hole Size D(mm)
25.00-26.40	03	70	+0.05/+0.03
26.41-28.70	04	70	+0.05/+0.03
28.71-31.00	05	75	+0.05/+0.03
31.01-33.30	06	75	+0.05/+0.03
33.31-36.20	07	80	+0.05/+0.03
36.21-39.60	08	80	+0.05/+0.03
39.61-43.00	09	85	+0.05/+0.03
43.01-47.00	10	90	+0.07/+0.03
47.01-51.70	11	95	+0.07/+0.03
51.71-56.20	12	100	+0.07/+0.03
56.21-65.00	13	105	+0.07/+0.03
63.50-65.00	13	105	+0.08/+0.03
65.00-66.99	14	110	+0.08/+0.03
67.00-72.99	15	115	+0.08/+0.03
73.00-79.99	16	120	+0.08/+0.03
80.00-86.99	17	130	+0.08/+0.03
87.00-99.99	18	140	+0.08/+0.03
100.00-111.99	19	150	+0.08/+0.03
112.00-123.99	20	150	+0.08/+0.03
124.00-135.99	21	150	+0.08/+0.03
136.00-147.99	22	150	+0.08/+0.03
148.00-159.99	23	150	+0.08/+0.03
160.00-171.99	24	150	+0.08/+0.03
172.00-183.90	25	150	+0.08/+0.03

喷吸钻系统冷却液流量压力要求Ejector system coolant quantity and pressure.

喷吸钻系统冷却液流量压力要求Ejector system cutting fluid flow and pressure

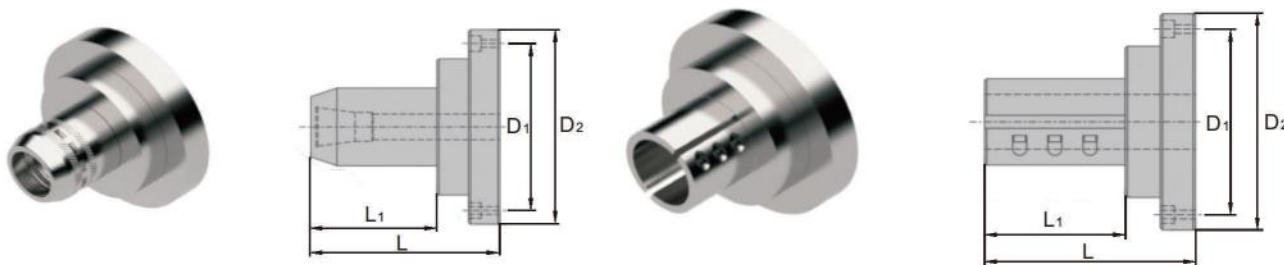


单管钻油压头定制所需主要信息Key information for customized STS Oil pressure head (OPH)



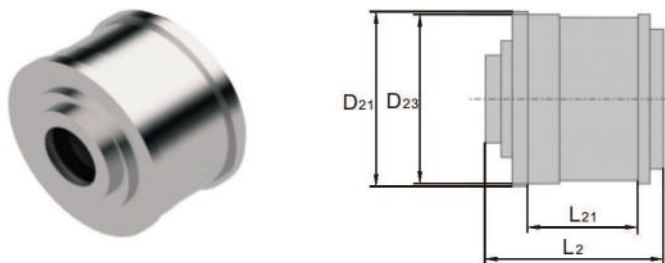
钻头直径 mm Drill diameter	mm	
钻杆尺寸 drill tube size	03-25	
是否配置油压头托架 Equipped with OPH support or not	是/否 Yes/No	
油压头托架尺寸 mm Size of support for OPH	I2	mm
	I21	mm
	dm	mm
加工时工件是否旋转 Workpiece rotate or not when drilling or boring.	是/否 Yes/No	
工件与油压头接触面是否为平面 Component surface contacting OPH flat or not	是/否 Yes/No	

单管钻钻管夹持器定制所需主要信息Key information for customized STS tube holder



钻头直径 mm Drill diameter	mm	
钻杆尺寸 drill tube size	03-25	
加工时刀具是否旋转 Tools rotate or not when drilling or boring.	是/否 Yes/No	
钻管夹持器安装尺寸 mm Size of mounting of Tube holder	L1	mm
	L	mm
	D1	mm
	D2	mm

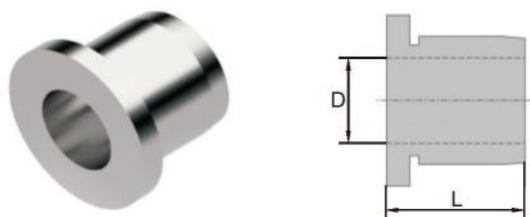
单管钻/喷吸钻减震器定制所需主要信息Key information for customized vibration dapmer for STS/DTS



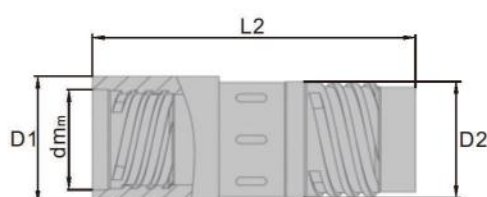
钻头直径 mm Drill diameter	mm	
钻杆尺寸 drill tube size	03-25	
减震器安装尺寸 mm Size of mounting of vibration dapmer	I2	mm
	I21	mm
	D21	mm
	D23	mm

单管钻钻套定制所需主要信息Key information for customized STS drill bush

钻头直径 (D mm) Drill diameter	mm
钻套总长 (L mm) Size of mounting of drill bush	mm

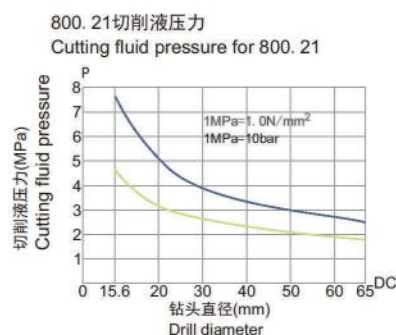
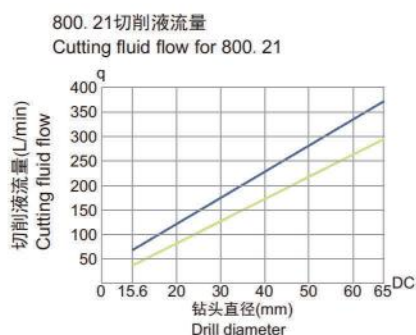


单管钻钻管转接器Adaptors for converting joint size of tube

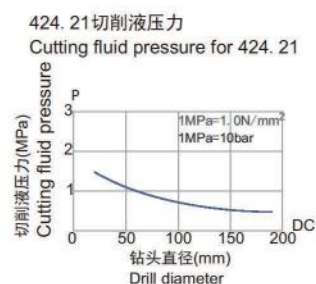
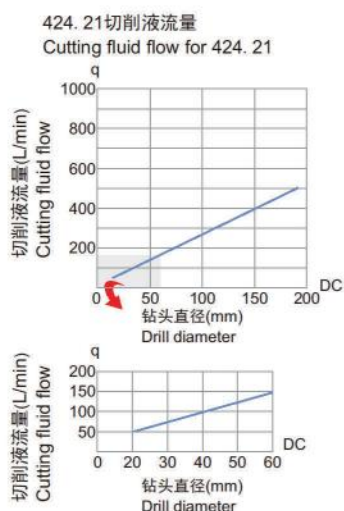


钻头直径 mm Drill diameter	mm
钻头的接口 Size of mounting of drill Head	03-25
转接器外径 mm Adaptor diameter	d1
转接器外接口 d2 Size of outer mounting of adaptor	03-25
转接器内接口 dmm Size of inner mounting of adaptor	03-25
长度 mm Lengthen of adaptor	l2

800. 21单管钻冷却液流量压力STS cutting fluid flow and pressure for 800. 21.



424. 21单管钻冷却液流量压力STS cutting fluid flow and pressure for 424.21.



B

铣削



C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄

旋转刀柄Rotation toolholder

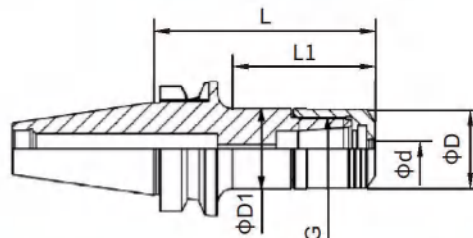
BT刀柄系列	F02
BT Series	
MBT刀柄系列	F20
MBT Series	
HSK刀柄系列	F28
HSK Series	
ISO刀柄系列	F53
ISO Series	
SK液压刀柄	F56
SK-Hydraulic Expansion Tool Holder	
CAPTO液压刀柄	F57
CAPTO-Hydraulic Expansion Tool Holder	
ST延长杆系列	F58
ST Extension Rod Series	
配件	F63
Accessories	



BT-GER-A高速弹性筒夹密封刀柄 BT-GER-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
BT30	BT30-GER16A-60	4-10	30	30.5	60	33	TR22*1.5	GER16A	ER16
BT30	BT30-GER16A-75	4-10	30	30.5	75	48	TR22*1.5	GER16A	ER16
BT30	BT30-GER16A-90	4-10	30	30.5	90	63	TR22*1.5	GER16A	ER16
BT30	BT30-GER20A-60	4-13	35	35.5	60	33	TR25*1.5	GER20A	ER20
BT30	BT30-GER20A-75	4-13	35	35.5	75	48	TR25*1.5	GER20A	ER20
BT30	BT30-GER20A-90	4-13	35	35.5	90	63	TR25*1.5	GER20A	ER20
BT30	BT30-GER20A-120	4-13	35	35.5	120	93	TR25*1.5	GER20A	ER20
BT30	BT30-GER25A-60	4-16	40	40.5	60	36	TR32*1.5	GER25A	ER25
BT30	BT30-GER25A-75	4-16	40	40.5	75	51	TR32*1.5	GER25A	ER25
BT30	BT30-GER25A-90	4-16	40	40.5	90	66	TR32*1.5	GER25A	ER25
BT30	BT30-GER25A-120	4-16	40	40.5	120	96	TR32*1.5	GER25A	ER25
BT30	BT30-GER32A-60	4-20	48	48.5	60	38	TR40*1.5	GER32A	ER32
BT30	BT30-GER32A-75	4-20	48	48.5	75	53	TR40*1.5	GER32A	ER32
BT30	BT30-GER32A-90	4-20	48	48.5	90	68	TR40*1.5	GER32A	ER32
BT30	BT30-GER32A-120	4-20	48	48.5	120	98	TR40*1.5	GER32A	ER32
BT40	BT40-GER16A-75	4-10	30	30.5	75	43	TR22*1.5	GER16A	ER16
BT40	BT40-GER16A-90	4-10	30	30.5	90	58	TR22*1.5	GER16A	ER16
BT40	BT40-GER20A-75	4-13	35	35.5	75	43	TR25*1.5	GER20A	ER20
BT40	BT40-GER20A-90	4-13	35	35.5	90	58	TR25*1.5	GER20A	ER20
BT40	BT40-GER20A-120	4-13	35	35.5	120	88	TR25*1.5	GER20A	ER20
BT40	BT40-GER25A-75	4-16	40	40.5	75	43	TR32*1.5	GER25A	ER25
BT40	BT40-GER25A-90	4-16	40	40.5	90	58	TR32*1.5	GER25A	ER25
BT40	BT40-GER25A-120	4-16	40	40.5	120	88	TR32*1.5	GER25A	ER25
BT40	BT40-GER32A-75	4-20	48	48.5	75	43	TR40*1.5	GER32A	ER32
BT40	BT40-GER32A-90	4-20	48	48.5	90	58	TR40*1.5	GER32A	ER32
BT40	BT40-GER32A-120	4-20	48	48.5	120	88	TR40*1.5	GER32A	ER32
BT50	BT50-GER16A-90	4-10	30	30.5	90	47	TR22*1.5	GER16A	ER16
BT50	BT50-GER16A-105	4-10	30	30.5	105	62	TR22*1.5	GER16A	ER16
BT50	BT50-GER20A-105	4-13	35	35.5	105	62	TR25*1.5	GER20A	ER20
BT50	BT50-GER20A-135	4-13	35	35.5	135	92	TR25*1.5	GER20A	ER20
BT50	BT50-GER20A-165	4-13	35	35.5	165	122	TR25*1.5	GER20A	ER20
BT50	BT50-GER25A-105	4-16	40	40.5	105	62	TR32*1.5	GER25A	ER25
BT50	BT50-GER25A-135	4-16	40	40.5	135	92	TR32*1.5	GER25A	ER25
BT50	BT50-GER25A-165	4-16	40	40.5	165	122	TR32*1.5	GER25A	ER25
BT50	BT50-GER32A-105	4-20	48	48.5	105	62	TR40*1.5	GER32A	ER32
BT50	BT50-GER32A-135	4-20	48	48.5	135	92	TR40*1.5	GER32A	ER32
BT50	BT50-GER32A-165	4-20	48	48.5	165	122	TR40*1.5	GER32A	ER32

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

F02

BT-GSK-A高速弹性筒夹密封刀柄

BT-GSK-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈

防尘螺帽，避免精度丢失，提高筒夹寿命

梯型螺牙设计，扭力提升50%，避免掉刀

非偏心全圆螺帽，动平衡更佳

光滑外表，风阻小，噪音低

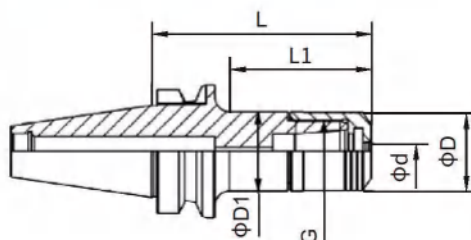
Integral stainless steel material to avoid rusting

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Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
BT30	BT30-GSK06A-60	4-6	19	19.5	60	33	TR15.5*1.0	GSK06A	SK06
BT30	BT30-GSK06A-75	4-6	19	19.5	75	48	TR15.5*1.0	GSK06A	SK06
BT30	BT30-GSK06A-90	4-6	19	19.5	90	63	TR15.5*1.0	GSK06A	SK06
BT30	BT30-GSK10A-60	4-10	27	27.5	60	33	TR21.5*1.0	GSK10A	SK10
BT30	BT30-GSK10A-75	4-10	27	27.5	75	48	TR21.5*1.0	GSK10A	SK10
BT30	BT30-GSK10A-90	4-10	27	27.5	90	63	TR21.5*1.0	GSK10A	SK10
BT30	BT30-GSK13A-60	4-13	33	33.5	60	33	TR27*1.0	GSK13A	SK13
BT30	BT30-GSK13A-75	4-13	33	33.5	75	48	TR27*1.0	GSK13A	SK13
BT30	BT30-GSK13A-90	4-13	33	33.5	90	63	TR27*1.0	GSK13A	SK13
BT30	BT30-GSK13A-120	4-13	33	33.5	120	93	TR27*1.0	GSK13A	SK13
BT30	BT30-GSK16A-60	4-16	40	40.5	60	36	TR32*1.5	GSK16A	SK16
BT30	BT30-GSK16A-75	4-16	40	40.5	75	51	TR32*1.5	GSK16A	SK16
BT30	BT30-GSK16A-90	4-16	40	40.5	90	66	TR32*1.5	GSK16A	SK16
BT30	BT30-GSK16A-120	4-16	40	40.5	120	96	TR32*1.5	GSK16A	SK16
BT30	BT30-GSK20A-60	4-20	48	48.5	60	38	TR40*1.5	GSK20A	SK20
BT30	BT30-GSK20A-75	4-20	48	48.5	75	53	TR40*1.5	GSK20A	SK20
BT30	BT30-GSK20A-90	4-20	48	48.5	90	68	TR40*1.5	GSK20A	SK20
BT30	BT30-GSK20A-120	4-20	48	48.5	120	98	TR40*1.5	GSK20A	SK20
BT40	BT40-GSK06A-75	4-6	19	19.5	75	43	TR15.5*1.0	GSK06A	SK06
BT40	BT40-GSK06A-90	4-6	19	19.5	90	58	TR15.5*1.0	GSK06A	SK06
BT40	BT40-GSK10A-75	4-10	27	27.5	75	43	TR21.5*1.0	GSK10A	SK10
BT40	BT40-GSK10A-90	4-10	27	27.5	90	58	TR21.5*1.0	GSK10A	SK10
BT40	BT40-GSK13A-75	4-13	33	33.5	75	43	TR27*1.0	GSK13A	SK13
BT40	BT40-GSK13A-90	4-13	33	33.5	90	58	TR27*1.0	GSK13A	SK13
BT40	BT40-GSK13A-120	4-13	33	33.5	120	88	TR27*1.0	GSK13A	SK13
BT40	BT40-GSK16A-75	4-16	40	40.5	75	43	TR32*1.5	GSK16A	SK16
BT40	BT40-GSK16A-90	4-16	40	40.5	90	58	TR32*1.5	GSK16A	SK16
BT40	BT40-GSK16A-120	4-16	40	40.5	120	88	TR32*1.5	GSK16A	SK16
BT40	BT40-GSK20A-75	4-20	48	48.5	75	43	TR40*1.5	GSK20A	SK20
BT40	BT40-GSK20A-90	4-20	48	48.5	90	58	TR40*1.5	GSK20A	SK20
BT40	BT40-GSK20A-120	4-20	48	48.5	120	88	TR40*1.5	GSK20A	SK20
BT50	BT50-GSK06A-90	4-6	19	19.5	90	47	TR15.5*1.0	GSK06A	SK06
BT50	BT50-GSK06A-105	4-6	19	19.5	105	62	TR15.5*1.0	GSK06A	SK06
BT50	BT50-GSK10A-90	4-10	27	27.5	90	47	TR21.5*1.0	GSK10A	SK10
BT50	BT50-GSK10A-105	4-10	27	27.5	105	62	TR21.5*1.0	GSK10A	SK10
BT50	BT50-GSK13A-90	4-13	33	33.5	90	47	TR27*1.0	GSK13A	SK13
BT50	BT50-GSK13A-105	4-13	33	33.5	105	62	TR27*1.0	GSK13A	SK13
BT50	BT50-GSK13A-135	4-13	33	33.5	135	92	TR27*1.0	GSK13A	SK13
BT50	BT50-GSK16A-90	4-16	40	40.5	90	47	TR32*1.5	GSK16A	SK16
BT50	BT50-GSK16A-105	4-16	40	40.5	105	62	TR32*1.5	GSK16A	SK16
BT50	BT50-GSK16A-135	4-16	40	40.5	135	92	TR32*1.5	GSK16A	SK16

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

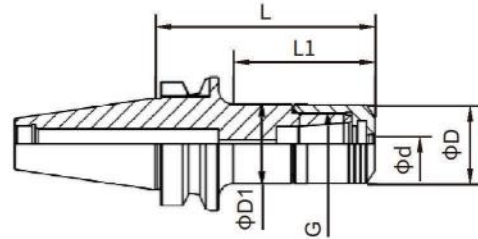
旋转刀柄



BT-GSK-A高速弹性筒夹密封刀柄 BT-GSK-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
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主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
BT50	BT50-GSK20A-90	4-20	48	48.5	90	47	TR40*1.5	GSK20A	SK20
BT50	BT50-GSK20A-105	4-20	48	48.5	105	62	TR40*1.5	GSK20A	SK20
BT50	BT50-GSK20A-135	4-20	48	48.5	135	92	TR40*1.5	GSK20A	SK20

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上表未列规格也可订做

Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

BT-GER高速弹性筒夹密封刀柄

BT-GER High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈

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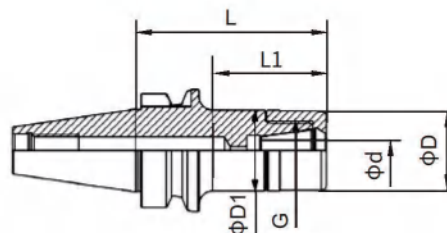
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主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
BT30	BT30-GER16-60	1-10	30	30.5	60	33	TR22*1.5	GER16	ER16
BT30	BT30-GER16-75	1-10	30	30.5	75	48	TR22*1.5	GER16	ER16
BT30	BT30-GER16-90	1-10	30	30.5	90	63	TR22*1.5	GER16	ER16
BT30	BT30-GER20-60	1-13	35	35.5	60	33	TR25*1.5	GER20	ER20
BT30	BT30-GER20-75	1-13	35	35.5	75	48	TR25*1.5	GER20	ER20
BT30	BT30-GER20-90	1-13	35	35.5	90	63	TR25*1.5	GER20	ER20
BT30	BT30-GER20-120	1-13	35	35.5	120	93	TR25*1.5	GER20	ER20
BT30	BT30-GER25-60	2-16	40	40.5	60	36	TR32*1.5	GER25	ER25
BT30	BT30-GER25-75	2-16	40	40.5	75	51	TR32*1.5	GER25	ER25
BT30	BT30-GER25-90	2-16	40	40.5	90	66	TR32*1.5	GER25	ER25
BT30	BT30-GER25-120	2-16	40	40.5	120	96	TR32*1.5	GER25	ER25
BT30	BT30-GER32-60	3-20	48	48.5	60	38	TR40*1.5	GER32	ER32
BT30	BT30-GER32-75	3-20	48	48.5	75	53	TR40*1.5	GER32	ER32
BT30	BT30-GER32-90	3-20	48	48.5	90	68	TR40*1.5	GER32	ER32
BT30	BT30-GER32-120	3-20	48	48.5	120	98	TR40*1.5	GER32	ER32
BT40	BT40-GER16-75	1-10	30	30.5	75	43	TR22*1.5	GER16	ER16
BT40	BT40-GER16-90	1-10	30	30.5	90	58	TR22*1.5	GER16	ER16
BT40	BT40-GER20-75	1-13	35	35.5	75	43	TR25*1.5	GER20	ER20
BT40	BT40-GER20-90	1-13	35	35.5	90	58	TR25*1.5	GER20	ER20
BT40	BT40-GER20-120	1-13	35	35.5	120	88	TR25*1.5	GER20	ER20
BT40	BT40-GER25-75	2-16	40	40.5	75	43	TR32*1.5	GER25	ER25
BT40	BT40-GER25-90	2-16	40	40.5	90	58	TR32*1.5	GER25	ER25
BT40	BT40-GER25-120	2-16	40	40.5	120	88	TR32*1.5	GER25	ER25
BT40	BT40-GER32-75	3-20	48	48.5	75	43	TR40*1.5	GER32	ER32
BT40	BT40-GER32-90	3-20	48	48.5	90	58	TR40*1.5	GER32	ER32
BT40	BT40-GER32-120	3-20	48	48.5	120	88	TR40*1.5	GER32	ER32
BT50	BT50-GER16-90	1-10	30	30.5	90	47	TR22*1.5	GER16	ER16
BT50	BT50-GER16-105	1-10	30	30.5	105	62	TR22*1.5	GER16	ER16
BT50	BT50-GER20-105	1-13	35	35.5	105	62	TR25*1.5	GER20	ER20
BT50	BT50-GER20-135	1-13	35	35.5	135	92	TR25*1.5	GER20	ER20
BT50	BT50-GER20-165	1-13	35	35.5	165	122	TR25*1.5	GER20	ER20
BT50	BT50-GER25-105	2-16	40	40.5	105	62	TR32*1.5	GER25	ER25
BT50	BT50-GER25-135	2-16	40	40.5	135	92	TR32*1.5	GER25	ER25
BT50	BT50-GER25-165	2-16	40	40.5	165	122	TR32*1.5	GER25	ER25
BT50	BT50-GER32-105	3-20	48	48.5	105	62	TR40*1.5	GER32	ER32
BT50	BT50-GER32-135	3-20	48	48.5	135	92	TR40*1.5	GER32	ER32
BT50	BT50-GER32-165	3-20	48	48.5	165	122	TR40*1.5	GER32	ER32

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized



BT-GSK高速弹性筒夹密封刀柄

BT-GSK High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈

梯型螺牙设计，扭力提升50%，避免掉刀

非偏心全圆螺帽，动平衡更佳

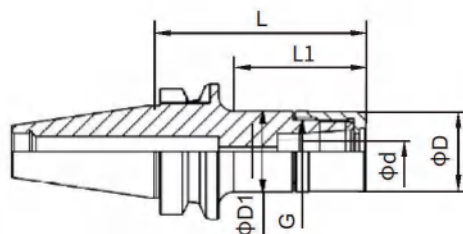
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting

Ladder screw design, torque increase 50%, avoid falling tool

Non-eccentric full round nut, better dynamic balance

Smooth appearance, low wind resistance, low noise



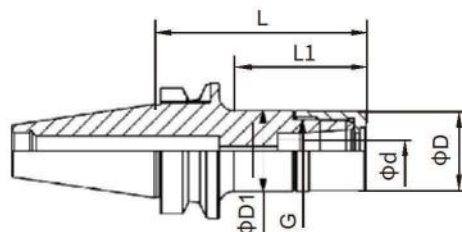
主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
BT30	BT30-GSK06-60	1-6	19	19.5	60	33	TR15.5*1.0	GSK06	SK06
BT30	BT30-GSK06-75	1-6	19	19.5	75	48	TR15.5*1.0	GSK06	SK06
BT30	BT30-GSK06-90	1-6	19	19.5	90	63	TR15.5*1.0	GSK06	SK06
BT30	BT30-GSK10-60	2-10	27	27.5	60	33	TR21.5*1.0	GSK10	SK10
BT30	BT30-GSK10-75	2-10	27	27.5	75	48	TR21.5*1.0	GSK10	SK10
BT30	BT30-GSK10-90	2-10	27	27.5	90	63	TR21.5*1.0	GSK10	SK10
BT30	BT30-GSK13-60	3-13	33	33.5	60	33	TR27*1.0	GSK13	SK13
BT30	BT30-GSK13-75	3-13	33	33.5	75	48	TR27*1.0	GSK13	SK13
BT30	BT30-GSK13-90	3-13	33	33.5	90	63	TR27*1.0	GSK13	SK13
BT30	BT30-GSK13-120	3-13	33	33.5	120	93	TR27*1.0	GSK13	SK13
BT30	BT30-GSK16-60	3-16	40	40.5	60	36	TR32*1.5	GSK16	SK16
BT30	BT30-GSK16-75	3-16	40	40.5	75	51	TR32*1.5	GSK16	SK16
BT30	BT30-GSK16-90	3-16	40	40.5	90	66	TR32*1.5	GSK16	SK16
BT30	BT30-GSK16-120	3-16	40	40.5	120	96	TR32*1.5	GSK16	SK16
BT30	BT30-GSK20-60	4-20	48	48.5	60	38	TR40*1.5	GSK20	SK20
BT30	BT30-GSK20-75	4-20	48	48.5	75	53	TR40*1.5	GSK20	SK20
BT30	BT30-GSK20-90	4-20	48	48.5	90	68	TR40*1.5	GSK20	SK20
BT30	BT30-GSK20-120	4-20	48	48.5	120	98	TR40*1.5	GSK20	SK20
BT40	BT40-GSK06-75	1-6	19	19.5	75	43	TR15.5*1.0	GSK06	SK06
BT40	BT40-GSK06-90	1-6	19	19.5	90	58	TR15.5*1.0	GSK06	SK06
BT40	BT40-GSK10-75	2-10	27	27.5	75	43	TR21.5*1.0	GSK10	SK10
BT40	BT40-GSK10-90	2-10	27	27.5	90	58	TR21.5*1.0	GSK10	SK10
BT40	BT40-GSK13-75	3-13	33	33.5	75	43	TR27*1.0	GSK13	SK13
BT40	BT40-GSK13-90	3-13	33	33.5	90	58	TR27*1.0	GSK13	SK13
BT40	BT40-GSK13-120	3-13	33	33.5	120	88	TR27*1.0	GSK13	SK13
BT40	BT40-GSK16-75	3-16	40	40.5	75	43	TR32*1.5	GSK16	SK16
BT40	BT40-GSK16-90	3-16	40	40.5	90	58	TR32*1.5	GSK16	SK16
BT40	BT40-GSK16-120	3-16	40	40.5	120	88	TR32*1.5	GSK16	SK16
BT40	BT40-GSK20-75	4-20	48	48.5	75	43	TR40*1.5	GSK20	SK20
BT40	BT40-GSK20-90	4-20	48	48.5	90	58	TR40*1.5	GSK20	SK20
BT40	BT40-GSK20-120	4-20	48	48.5	120	88	TR40*1.5	GSK20	SK20
BT50	BT50-GSK06-90	1-6	19	19.5	90	47	TR15.5*1.0	GSK06	SK06
BT50	BT50-GSK06-105	1-6	19	19.5	105	62	TR15.5*1.0	GSK06	SK06
BT50	BT50-GSK10-90	2-10	27	27.5	90	47	TR21.5*1.0	GSK10	SK10
BT50	BT50-GSK10-105	2-10	27	27.5	105	62	TR21.5*1.0	GSK10	SK10
BT50	BT50-GSK13-90	3-13	33	33.5	90	47	TR27*1.0	GSK13	SK13
BT50	BT50-GSK13-105	3-13	33	33.5	105	62	TR27*1.0	GSK13	SK13
BT50	BT50-GSK13-135	3-13	33	33.5	135	92	TR27*1.0	GSK13	SK13
BT50	BT50-GSK16-90	3-16	40	40.5	90	47	TR32*1.5	GSK16	SK16
BT50	BT50-GSK16-105	3-16	40	40.5	105	62	TR32*1.5	GSK16	SK16

BT-GSK高速弹性筒夹密封刀柄

BT-GSK High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
 梯型螺牙设计，扭力提升50%，避免掉刀
 非偏心全圆螺帽，动平衡更佳
 光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
 Ladder screw design, torque increase 50%, avoid falling tool
 Non-eccentric full round nut, better dynamic balance
 Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
BT50	BT50-GSK16-135	3-16	40	40.5	135	92	TR32*1.5	GSK16	SK16
BT50	BT50-GSK20-90	4-20	48	48.5	90	47	TR40*1.5	GSK20	SK20
BT50	BT50-GSK20-105	4-20	48	48.5	105	62	TR40*1.5	GSK20	SK20
BT50	BT50-GSK20-135	4-20	48	48.5	135	92	TR40*1.5	GSK20	SK20

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized



BT-SHR热缩刀柄

BT-SHR Shrink Fit Holder

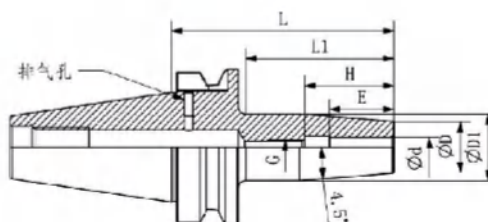
夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀
排气孔可以用螺丝堵上，内冷外冷自由切换

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing

The vent can be blocked by screw, to switch the internal and external cooling freely



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
BT30	BT30-SHR6-80	6	21	27	80	53	M5	26	36
BT30	BT30-SHR8-80	8	21	27	80	53	M6	26	36
BT30	BT30-SHR10-80	10	24	32	80	53	M8*1	32	42
BT30	BT30-SHR12-80	12	24	32	80	53	M10*1	37	47
BT30	BT30-SHR14-80	14	27	34	80	53	M10*1	37	47
BT30	BT30-SHR16-80	16	27	34	80	53	M12*1	40	50
BT30	BT30-SHR18-80	18	33	42	80	57	M12*1	40	50
BT30	BT30-SHR20-80	20	33	42	80	57	M16*1	42	52
BT40	BT40-SHR6-90	6	21	27	90	58	M5	26	36
BT40	BT40-SHR6-120	6	21	27	120	88	M5	26	36
BT40	BT40-SHR8-90	8	21	27	90	58	M6	26	36
BT40	BT40-SHR8-120	8	21	27	120	88	M6	26	36
BT40	BT40-SHR10-90	10	24	32	90	58	M8*1	32	42
BT40	BT40-SHR10-120	10	24	32	120	88	M8*1	32	42
BT40	BT40-SHR12-90	12	24	32	90	58	M10*1	37	47
BT40	BT40-SHR12-120	12	24	32	120	88	M10*1	37	47
BT40	BT40-SHR12-160	12	24	34	160	128	M10*1	37	47
BT40	BT40-SHR14-90	14	27	34	90	58	M10*1	37	47
BT40	BT40-SHR14-120	14	27	34	120	88	M10*1	37	47
BT40	BT40-SHR14-160	14	27	42	160	128	M10*1	37	47
BT40	BT40-SHR16-90	16	27	34	90	58	M12*1	40	50
BT40	BT40-SHR16-120	16	27	34	120	88	M12*1	40	50
BT40	BT40-SHR16-160	16	27	42	160	128	M12*1	40	50
BT40	BT40-SHR18-90	18	33	42	90	58	M12*1	40	50
BT40	BT40-SHR18-120	18	33	42	120	88	M12*1	40	50
BT40	BT40-SHR18-160	18	33	51	160	128	M12*1	40	50
BT40	BT40-SHR20-90	20	33	42	90	58	M16*1	42	52
BT40	BT40-SHR20-120	20	33	42	120	88	M16*1	42	52
BT40	BT40-SHR20-160	20	33	51	160	128	M16*1	42	52
BT50	BT50-SHR6-100	6	21	27	100	57	M5	26	36
BT50	BT50-SHR6-120	6	21	27	120	77	M5	26	36
BT50	BT50-SHR6-160	6	21	32	160	117	M5	26	36
BT50	BT50-SHR8-100	8	21	27	100	57	M6	26	36
BT50	BT50-SHR8-120	8	21	27	120	77	M6	26	36
BT50	BT50-SHR8-160	8	21	32	160	117	M6	26	36
BT50	BT50-SHR10-100	10	24	32	100	57	M8*1	32	42
BT50	BT50-SHR10-120	10	24	32	120	77	M8*1	32	42
BT50	BT50-SHR10-160	10	24	34	160	117	M8*1	32	42
BT50	BT50-SHR12-100	12	24	32	100	57	M10*1	37	47
BT50	BT50-SHR12-120	12	24	32	120	77	M10*1	37	47
BT50	BT50-SHR12-160	12	24	34	160	117	M10*1	37	47
BT50	BT50-SHR14-100	14	27	34	100	57	M10*1	37	47
BT50	BT50-SHR14-120	14	27	34	120	77	M10*1	37	47

BT-SHR热缩刀柄 BT-SHR Shrink Fit Holder

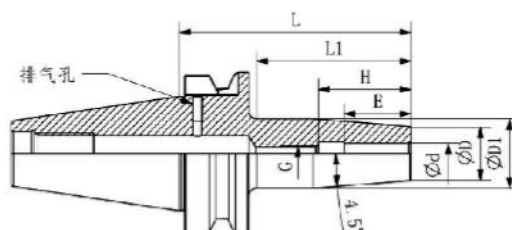
夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀
排气孔可以用螺丝堵上，内冷外冷自由切换

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing

The vent can be blocked by screw, to switch the internal and external cooling freely



主轴型号	刀柄型号	夹持径d	尺寸(mm) Dimensions					最小夹持长度E	最大夹持长度H
Spindle Model	Model No	Clamping Diameter	D	D1	L	L1	G	Min. Clamping Length	Max. Clamping Length
BT50	BT50-SHR14-160	14	27	42	160	117	M10*1	37	47
BT50	BT50-SHR16-100	16	27	34	100	57	M12*1	40	50
BT50	BT50-SHR16-120	16	27	34	120	77	M12*1	40	50
BT50	BT50-SHR16-160	16	27	42	160	117	M12*1	40	50
BT50	BT50-SHR18-100	18	33	42	100	57	M12*1	40	50
BT50	BT50-SHR18-120	18	33	42	120	77	M12*1	40	50
BT50	BT50-SHR18-160	18	33	51	160	117	M12*1	40	50
BT50	BT50-SHR20-100	20	33	42	100	57	M16*1	42	52
BT50	BT50-SHR20-120	20	33	42	120	77	M16*1	42	52
BT50	BT50-SHR20-160	20	33	51	160	117	M16*1	42	52
BT50	BT50-SHR25-110	25	44	53	110	67	M16*1	48	58
BT50	BT50-SHR25-120	25	44	53	120	77	M16*1	48	58
BT50	BT50-SHR25-160	25	44	60	160	117	M16*1	48	58
BT50	BT50-SHR32-110	32	44	53	110	67	M16*1	52	62
BT50	BT50-SHR32-120	32	44	53	120	77	M16*1	52	62
BT50	BT50-SHR32-160	32	44	60	160	117	M16*1	52	62

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance $< h6$ of handle diameter can be clamped, but not suitable for high speed steel tool

如配内冷刀具，需更换通孔拉钉，然后将排气孔堵上。用盲孔拉钉时，不可堵住排气孔

If equipped with an internal cooling tool, it is necessary to replace through-hole pullstud, and then block the vent. When pulling bolt with blind holes, the vent should not be blocked

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized



BT-SHR-S热缩刀柄

BT-SHR-S Shrink Fit Holder

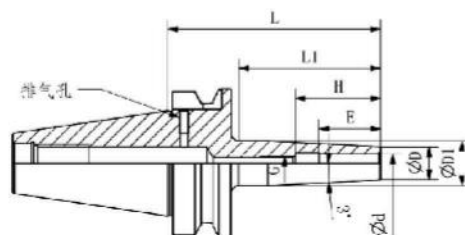
夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀
排气孔可以用螺丝堵上，内冷外冷自由切换

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing

The vent can be blocked by screw, to switch the internal and external cooling freely



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
BT30	BT30-SHR6S-90	6	12	18	90	63	M5	31	36
BT30	BT30-SHR8S-90	8	14	20	90	63	M6	31	36
BT30	BT30-SHR10S-90	10	16	22	90	63	M8*1	37	42
BT30	BT30-SHR12S-90	12	18	24	90	63	M10*1	42	47
BT30	BT30-SHR16S-90	16	22	28	90	63	M12*1	45	50
BT30	BT30-SHR20S-90	20	27	33	90	63	M16*1	47	52
BT40	BT40-SHR6S-90	6	12	18	90	58	M5	31	36
BT40	BT40-SHR8S-90	8	14	20	90	58	M6	31	36
BT40	BT40-SHR10S-90	10	16	22	90	58	M8*1	37	42
BT40	BT40-SHR12S-90	12	18	24	90	58	M10*1	42	47
BT40	BT40-SHR16S-90	16	22	28	90	58	M12*1	45	50
BT40	BT40-SHR20S-90	20	27	33	90	58	M16*1	47	52

BT-SHR-H热缩刀柄 BT-SHR-H Shrink Fit Holder

夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀

排气孔可以用螺丝堵上，内冷外冷自由切换

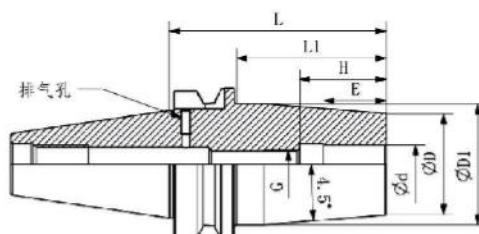
重载型加强壁厚，可用于重力切削

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing

The vent can be blocked by screw, to switch the internal and external cooling freely

Heavy-load reinforced wall thickness, which can be used in heavy cutting



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
BT50	BT50-SHR16H-110	16	50	60	110	67	M12*1	40	50
BT50	BT50-SHR20H-110	20	58	68	110	67	M16*1	42	52
BT50	BT50-SHR25H-110	25	64	74	110	67	M16*1	48	58
BT50	BT50-SHR32H-130	32	72	85	130	87	M16*1	52	62

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance $< h6$ of handle diameter can be clamped, but not suitable for high speed steel tool

如配内冷刀具，需更换通孔拉钉，然后将排气孔堵上。用盲孔拉钉时，不可堵住排气孔

If equipped with an internal cooling tool, it is necessary to replace through-hole pullstud, and then block the vent. When pulling bolt with blind holes, the vent should not be blocked

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

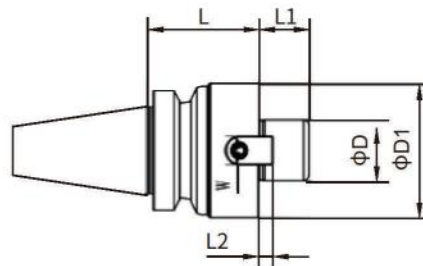
旋转刀柄



BT-FAM面铣刀刀柄 BT-FAM Surface Milling Holder

面铣刀盘专用刀柄

Special Holder for Surface Milling Cutter

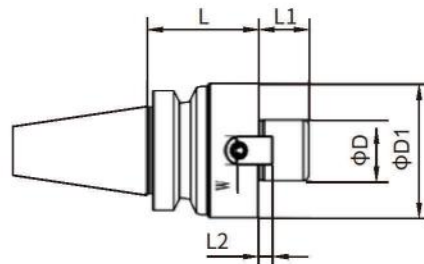


主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions					
		D	D1	L	L1	L2	W
BT30	BT30-FMA22.225-45	22.225	42	45	18	4	8.3
BT30	BT30-FMA25.4-45	25.4	50	45	22	5	9.5
BT40	BT40-FMA25.4-45	25.4	50	45	22	5	9.5
BT40	BT40-FMA25.4-90	25.4	50	90	22	5	9.5
BT40	BT40-FMA31.75-45	31.75	60	45	30	7	12.7
BT40	BT40-FMA31.75-75	31.75	60	75	30	7	12.7
BT40	BT40-FMA38.1-60	38.1	80	60	34	9	15.9
BT50	BT50-FMA25.4-45	25.4	50	45	22	5	9.5
BT50	BT50-FMA25.4-90	25.4	50	90	22	5	9.5
BT50	BT50-FMA31.75-45	31.75	60	45	30	7	12.7
BT50	BT50-FMA31.75-75	31.75	60	75	30	7	12.7
BT50	BT50-FMA31.75-105	31.75	60	105	30	7	12.7
BT50	BT50-FMA38.1-45	38.1	80	45	34	9	15.9
BT50	BT50-FMA38.1-75	38.1	80	75	34	9	15.9
BT50	BT50-FMA38.1-105	38.1	80	105	34	9	15.9
BT50	BT50-FMA47.625-45	47.625	128.57	45	38	12.5	25.3
BT50	BT50-FMA47.625-75	47.625	128.57	75	38	12.5	25.3
BT50	BT50-FMA47.625-105	47.625	128.57	105	38	12.5	25.3
BT50	BT50-FMA50.8-45	50.8	100	45	36	10	19.05
BT50	BT50-FMA50.8-75	50.8	100	75	36	10	19.05
BT50	BT50-FMA50.8-105	50.8	100	105	36	10	19.05

BT-FAM面铣刀刀柄 BT-FAM Surface Milling Holder

面铣刀盘专用刀柄

Special Holder for Surface Milling Cutter



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions					
		D	D1	L	L1	L2	W
BT30	BT30-FMB22-45	22	48	45	18	5	10
BT30	BT30-FMB27-45	27	58	45	20	6	12
BT40	BT40-FMB22-60	22	48	60	18	5	10
BT40	BT40-FMB22-90	22	48	90	18	5	10
BT40	BT40-FMB27-60	27	58	60	20	6	12
BT40	BT40-FMB27-90	27	58	90	20	6	12
BT40	BT40-FMB27-150	27	58	150	20	6	12
BT40	BT40-FMB32-60	32	78	60	22	7	14
BT40	BT40-FMB32-90	32	78	90	22	7	14
BT40	BT40-FMB32-120	32	78	120	22	7	14
BT40	BT40-FMB40-60	40	80	60	25	8	16
BT40	BT40-FMB40-75	40	80	75	25	8	16
BT40	BT40-FMB40-105	40	80	105	25	8	16
BT50	BT50-FMB22-60	22	48	60	18	5	10
BT50	BT50-FMB22-90	22	48	90	18	5	10
BT50	BT50-FMB27-60	27	58	60	20	6	12
BT50	BT50-FMB27-90	27	58	90	20	6	12
BT50	BT50-FMB27-150	27	58	150	20	6	12
BT50	BT50-FMB32-60	32	78	60	22	7	14
BT50	BT50-FMB32-90	32	78	90	22	7	14
BT50	BT50-FMB32-150	32	78	150	22	7	14
BT50	BT50-FMB40-45	40	90	45	25	8	16
BT50	BT50-FMB40-75	40	90	75	25	8	16
BT50	BT50-FMB40-105	40	90	105	25	8	16
BT50	BT50-FMB40-150	40	90	150	25	8	16

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

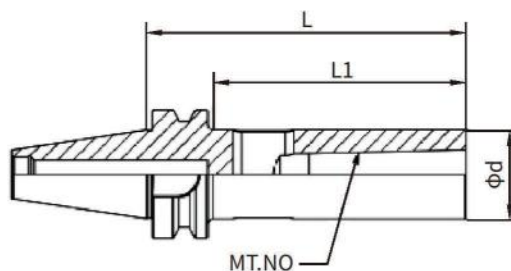
Specifications not listed in the table above can also be customized



BT-MTA莫氏锥度刀柄 BT-MTA Morse Taper Holder

适合莫氏锥柄刀具
有一定的自锁紧能力

Suitable for Morse taper cone cutter
Certain self-locking ability



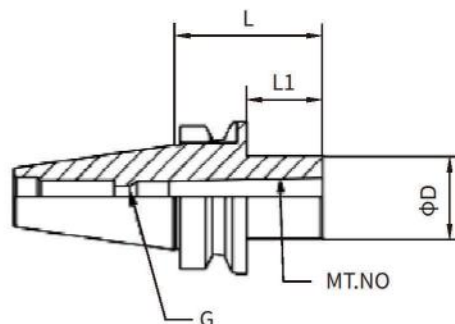
主轴型号 Spindle Model	刀柄型号 Model No	MT.No	尺寸(mm) Dimensions		
			D	L	L1
BT30	BT30-MTA1-60	1	25	60	38
BT30	BT30-MTA2-60	2	32	60	38
BT30	BT30-MTA3-80	3	40	80	58
BT40	BT40-MTA1-45	1	25	45	18
BT40	BT40-MTA1-120	1	25	120	93
BT40	BT40-MTA2-45	2	32	45	18
BT40	BT40-MTA2-120	2	32	120	93
BT40	BT40-MTA3-75	3	40	75	48
BT40	BT40-MTA3-135	3	40	135	108
BT40	BT40-MTA4-90	4	50	90	63
BT50	BT50-MTA1-45	1	25	45	7
BT50	BT50-MTA1-120	1	25	120	82
BT50	BT50-MTA1-200	1	25	200	162
BT50	BT50-MTA2-45	2	32	45	7
BT50	BT50-MTA2-120	2	32	120	82
BT50	BT50-MTA2-200	2	32	200	162
BT50	BT50-MTA3-75	3	40	75	37
BT50	BT50-MTA3-150	3	40	150	112
BT50	BT50-MTA3-210	3	40	210	172
BT50	BT50-MTA4-75	4	50	75	37
BT50	BT50-MTA4-150	4	50	150	112
BT50	BT50-MTA4-210	4	50	210	172
BT50	BT50-MTA5-105	5	65	105	67
BT50	BT50-MTA5-210	5	65	210	172

BT-MTB莫氏锥度刀柄

BT-MTB Morse Taper Holder

适合莫氏锥柄刀具
有一定的自锁紧能力

Suitable for Morse taper cone cutter
Certain self-locking ability



主轴型号 Spindle Model	刀柄型号 Model No	MT.No	尺寸(mm) Dimensions			
			D	L	L1	G
BT40	BT40-MTB1-45	1	25	45	18	M6*1
BT40	BT40-MTB2-45	2	32	45	18	M10*1.5
BT40	BT40-MTB3-75	3	40	75	48	M12*1.75
BT40	BT40-MTB4-100	4	50	100	73	M16*2
BT50	BT50-MTB1-45	1	25	45	7	M6*1
BT50	BT50-MTB2-45	2	32	45	7	M10*1.5
BT50	BT50-MTB3-60	3	40	60	22	M12*1.75
BT50	BT50-MTB4-75	4	50	75	37	M16*2
BT50	BT50-MTB5-120	5	65	120	82	M20*2.5

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized



BT-SLA侧固式刀柄

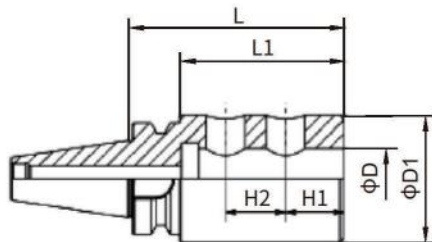
BT-SLA Sidelock End Mill Holder

适合夹持带有削平柄的刀具

安装时请对准切削平面与螺帽孔位置, 以达到最好夹持效果

Suitable for clamping cutters with flattening tool

In order to achieve the best clamping effect, please align the cutting surface and nut hole position on installation

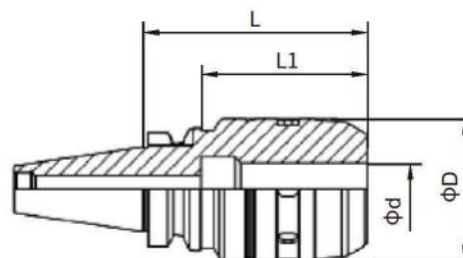


主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter D	尺寸(mm) Dimensions					
			D1	L	L1	H1	H2	G
BT30	BT30-SLA6-60	6	25	60	38	18	-	M6*1
BT30	BT30-SLA8-60	8	28	60	38	18	-	M8*1.25
BT30	BT30-SLA10-60	10	35	60	38	20	-	M10*1.5
BT30	BT30-SLA12-60	12	42	60	38	22.5	-	M12*1.75
BT30	BT30-SLA16-60	16	48	60	38	24	-	M14*2
BT30	BT30-SLA20-75	20	50	75	53	25	-	M16*2
BT30	BT30-SLA25-90	25	52	90	68	24	25	M18*2
BT40	BT40-SLA6-75	6	25	75	48	18	-	M6*1
BT40	BT40-SLA8-75	8	28	75	48	18	-	M8*1.25
BT40	BT40-SLA10-75	10	35	75	48	20	-	M10*1.5
BT40	BT40-SLA12-75	12	42	75	48	22.5	-	M12*1.75
BT40	BT40-SLA16-75	16	48	75	48	24	-	M14*2
BT40	BT40-SLA20-90	20	50	90	63	25	-	M16*2
BT40	BT40-SLA25-90	25	57	90	63	24	25	M18*2
BT40	BT40-SLA32-100	32	60	100	73	24	28	M20*2
BT50	BT50-SLA6-105	6	25	105	67	18	-	M6*1
BT50	BT50-SLA8-105	8	28	105	67	18	-	M8*1.25
BT50	BT50-SLA10-105	10	35	105	67	20	-	M10*1.5
BT50	BT50-SLA12-105	12	42	105	67	22.5	-	M12*1.75
BT50	BT50-SLA16-105	16	48	105	67	24	-	M14*2
BT50	BT50-SLA20-105	20	50	105	67	25	-	M16*2
BT50	BT50-SLA25-105	25	57	105	67	24	25	M18*2
BT50	BT50-SLA32-105	32	63	105	67	24	28	M20*2
BT50	BT50-SLA40-120	40	80	120	82	30	32	M20*2
BT50	BT50-SLA42-120	42	82	120	82	30	32	M20*2

BT-C强力刀柄 BT-C Mega Holder

夹持力强大, 重力切削好帮手
可装配直筒夹, 夹持小直径刀具

Powerful clamping torque, which is good for heavy cutting
It is suitable for straight collet and small diameter cutters



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions				筒夹 Collet
		d	D1	L	L1	
BT30	BT30-C20-75	20	53	75	53	C20
BT30	BT30-C25-80	25	62	80	58	C25
BT30	BT30-C32-100	32	70	100	78	C32
BT40	BT40-C20-80	20	53	80	53	C20
BT40	BT40-C25-80	25	62	80	53	C25
BT40	BT40-C32-105	32	70	105	78	C32
BT40	BT40-C32-135	32	70	135	108	C32
BT40	BT40-C32-165	32	70	165	138	C32
BT50	BT50-C20-90	20	53	90	52	C20
BT50	BT50-C25-90	25	62	90	52	C25
BT50	BT50-C32-105	32	70	105	67	C32
BT50	BT50-C32-135	32	70	135	97	C32
BT50	BT50-C32-165	32	70	165	127	C32
BT50	BT50-C40-115	40	92	115	77	C40
BT50	BT50-C40-135	40	92	135	97	C40
BT50	BT50-C40-165	40	92	165	127	C40

技术参数如有变动, 恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized



BT30液压刀柄

BT30 Hydraulic Expansion Tool Holder

德国设计与制造，品质卓越

夹持跳动小于等于0.003mm

转速为25,000 RPM时动平衡等级达到G2.5或 $U_{max} < 1\text{gmm}$

带轴向长度调节

用于自动换刀

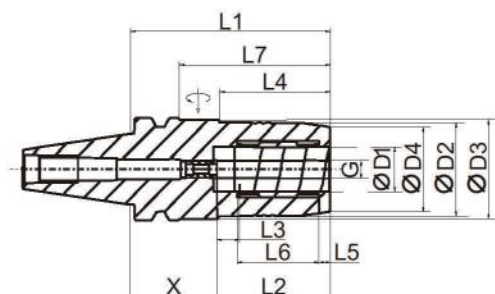
Germany design and manufacturing enables excellent quality

Runout accuracy $\leq 0.003\text{mm}$

Balancing grade G2.5 at 25,000 RPM or $U_{max} < 1\text{gmm}$

With axial length adjustment

For automatic tool change



主轴型号	刀柄型号	尺寸(mm) Dimensions							
Spindle Model	Model No	D1	D2	D4	X	L1	L2	L3	G
BT30	BT30-HE12-69	12	42	32	12	69	46	10	M8*1
BT30	BT30-HE20-90	20	42	38	20	90	51	10	M8*1

BT40液压刀柄

BT40 Hydraulic Expansion Tool Holder

德国设计与制造，品质卓越

夹持跳动小于等于0.003mm

转速为25,000 RPM时动平衡等级达到G2.5或 $U_{max} < 1\text{gmm}$

带轴向长度调节

用于自动换刀

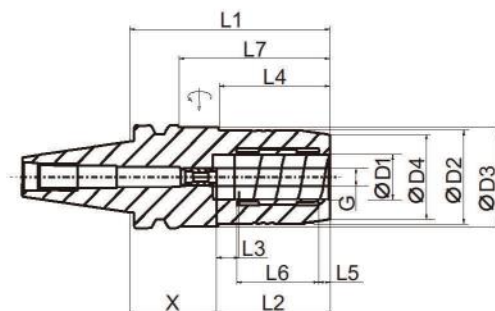
Germany design and manufacturing enables excellent quality

Runout accuracy $\leq 0.003\text{mm}$

Balancing grade G2.5 at 25,000 RPM or $U_{max} < 1\text{gmm}$

With axial length adjustment

For automatic tool change



主轴型号	刀柄型号	尺寸(mm) Dimensions							
Spindle Model	Model No	D1	D2	D4	X	L1	L2	L3	G
BT40	BT40-HE12-58	12	42	32	12	58	46	10	M8*1
BT40	BT40-HE16-72.5	16	49.25	38	21.5	72.5	51	10	M8*1
BT40	BT40-HE20-72.5	20	49.25	38	21.5	72.5	51	10	M8*1
BT40	BT40-HE12-120	12	42	32	74	120	46	10	M8*1
BT40	BT40-HE20-120	20	49.25	38	69	120	51	10	M8*1

BT50液压刀柄 BT50 Hydraulic Expansion Tool Holder

德国设计与制造，品质卓越

夹持跳动小于等于0.003mm

转速为25,000 RPM时动平衡等级达到G2.5或 $U_{max} < 1\text{gmm}$

带轴向长度调节

用于自动换刀

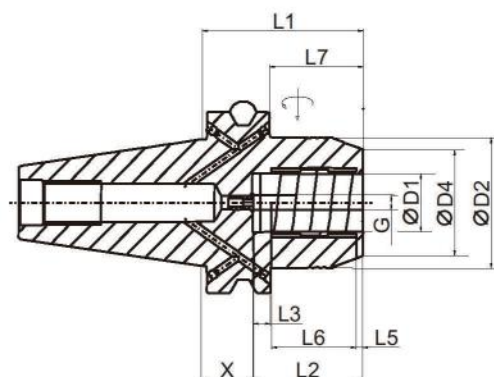
Germany design and manufacturing enables excellent quality

Runout accuracy $\leq 0.003\text{mm}$

Balancing grade G2.5 at 25,000 RPM or $U_{max} < 1\text{gmm}$

With axial length adjustment

For automatic tool change



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions							
		D1	D2	D4	X	L1	L2	L3	G
BT50	BT50-HE12-69	12	42	32	23	69	46	10	M8*1
BT50	BT50-HE20-83.5	20	49.25	38	32.5	83.5	51	10	M8*1
BT50	BT50-HE32-90	32	72	58.5	29	90	61	10	M8*1

使用减径套可夹持更多直径尺寸

Additional shank diameters can be clamped using intermediate sleeves

刀具柄部公差等级h6

Tool shank quality h6

标准发货范围中不含驱动扳手

Scope of delivery without actuation key

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

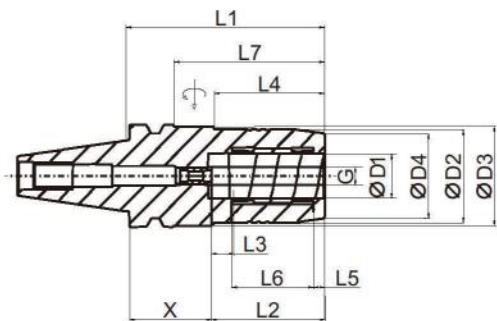
旋转刀柄



MBT30液压刀柄
MBT30 Hydraulic Expansion Tool Holder

德国设计与制造，品质卓越
夹持跳动小于等于0.003mm
转速为25,000 RPM时动平衡等级达到G2.5或 $U_{max}<1\text{gmm}$
带轴向长度调节
用于自动换刀
锥与面双面接触

Germany design and manufacturing enables excellent quality
Runout accuracy $\leq 0.003\text{mm}$
Balancing grade G2.5 at 25,000 RPM or $U_{max}<1\text{gmm}$
With axial length adjustment
For automatic tool change
Double-sided contact between cone & surface

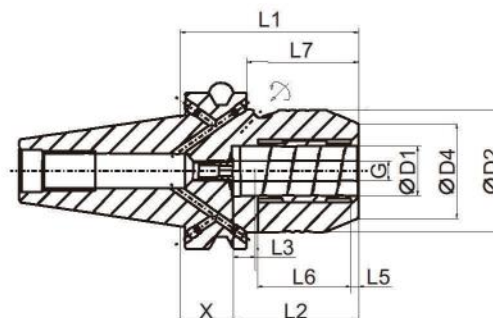


主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions							
		D1	D2	D4	X	L1	L2	L3	G
MBT30	MBT30-HE12-69	12	42	32	23	69	46	10	M8*1
MBT30	MBT30-HE20-90	20	42	38	39	90	51	10	M8*1

MBT40液压刀柄 MBT40 Hydraulic Expansion Tool Holder

德国设计与制造，品质卓越
夹持跳动小于等于0.003mm
转速为25,000 RPM时动平衡等级达到G2.5或 $U_{max} < 1\text{gmm}$
带轴向长度调节
用于自动换刀
锥与面双面接触

Germany design and manufacturing enables excellent quality
Runout accuracy $\leq 0.003\text{mm}$
Balancing grade G2.5 at 25,000 RPM or $U_{max} < 1\text{gmm}$
With axial length adjustment
For automatic tool change
Double-sided contact between cone & surface



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions							
		D1	D2	D4	X	L1	L2	L3	G
MBT40	MBT40-HE12-58	12	42	32	12	58	46	10	M8*1
MBT40	MBT40-HE20-72.5	20	49.25	38	21.5	72.5	51	10	M8*1

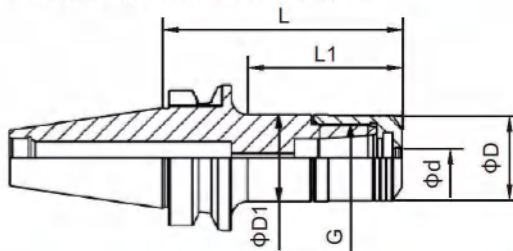
使用减径套可夹持更多直径尺寸
Additional shank diameters can be clamped using intermediate sleeves
刀具柄部公差等级h6
Tool shank quality h6
标准发货范围中不含驱动扳手
Scope of delivery without actualion key



MBT-GER-A高速弹性筒夹密封刀柄 MBT-GER-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低
锥与面双面接触

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise
Double-sided contact between cone & surface



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
MBT30	MBT30-GER16A-60	4-10	30	30.5	60	33	TR22*1.5	GER16A	ER16
MBT30	MBT30-GER16A-75	4-10	30	30.5	75	48	TR22*1.5	GER16A	ER16
MBT30	MBT30-GER16A-90	4-10	30	30.5	90	63	TR22*1.5	GER16A	ER16
MBT30	MBT30-GER20A-60	4-13	35	35.5	60	33	TR25*1.5	GER20A	ER20
MBT30	MBT30-GER20A-75	4-13	35	35.5	75	48	TR25*1.5	GER20A	ER20
MBT30	MBT30-GER20A-90	4-13	35	35.5	90	63	TR25*1.5	GER20A	ER20
MBT30	MBT30-GER20A-120	4-13	35	35.5	120	93	TR25*1.5	GER20A	ER20
MBT30	MBT30-GER25A-60	4-16	40	40.5	60	36	TR32*1.5	GER25A	ER25
MBT30	MBT30-GER25A-75	4-16	40	40.5	75	51	TR32*1.5	GER25A	ER25
MBT30	MBT30-GER25A-90	4-16	40	40.5	90	66	TR32*1.5	GER25A	ER25
MBT30	MBT30-GER25A-120	4-16	40	40.5	120	96	TR32*1.5	GER25A	ER25
MBT30	MBT30-GER32A-60	4-20	48	48.5	60	38	TR40*1.5	GER32A	ER32
MBT30	MBT30-GER32A-75	4-20	48	48.5	75	53	TR40*1.5	GER32A	ER32
MBT30	MBT30-GER32A-90	4-20	48	48.5	90	68	TR40*1.5	GER32A	ER32
MBT30	MBT30-GER32A-120	4-20	48	48.5	120	98	TR40*1.5	GER32A	ER32
MBT40	MBT40-GER16A-75	4-10	30	30.5	75	43	TR22*1.5	GER16A	ER16
MBT40	MBT40-GER16A-90	4-10	30	30.5	90	58	TR22*1.5	GER16A	ER16
MBT40	MBT40-GER20A-75	4-13	35	35.5	75	43	TR25*1.5	GER20A	ER20
MBT40	MBT40-GER20A-90	4-13	35	35.5	90	58	TR25*1.5	GER20A	ER20
MBT40	MBT40-GER20A-120	4-13	35	35.5	120	88	TR25*1.5	GER20A	ER20
MBT40	MBT40-GER25A-75	4-16	40	40.5	75	43	TR32*1.5	GER25A	ER25
MBT40	MBT40-GER25A-90	4-16	40	40.5	90	58	TR32*1.5	GER25A	ER25
MBT40	MBT40-GER25A-120	4-16	40	40.5	120	88	TR32*1.5	GER25A	ER25
MBT40	MBT40-GER32A-75	4-20	48	48.5	75	43	TR40*1.5	GER32A	ER32
MBT40	MBT40-GER32A-90	4-20	48	48.5	90	58	TR40*1.5	GER32A	ER32
MBT40	MBT40-GER32A-120	4-20	48	48.5	120	88	TR40*1.5	GER32A	ER32
MBT50	MBT50-GER16A-90	4-10	30	30.5	90	47	TR22*1.5	GER16A	ER16
MBT50	MBT50-GER16A-105	4-10	30	30.5	105	62	TR22*1.5	GER16A	ER16
MBT50	MBT50-GER20A-105	4-13	35	35.5	105	62	TR25*1.5	GER20A	ER20
MBT50	MBT50-GER20A-135	4-13	35	35.5	135	92	TR25*1.5	GER20A	ER20
MBT50	MBT50-GER20A-165	4-13	35	35.5	165	122	TR25*1.5	GER20A	ER20
MBT50	MBT50-GER25A-105	4-16	40	40.5	105	62	TR32*1.5	GER25A	ER25
MBT50	MBT50-GER25A-135	4-16	40	40.5	135	92	TR32*1.5	GER25A	ER25
MBT50	MBT50-GER25A-165	4-16	40	40.5	165	122	TR32*1.5	GER25A	ER25
MBT50	MBT50-GER32A-105	4-20	48	48.5	105	62	TR40*1.5	GER32A	ER32
MBT50	MBT50-GER32A-135	4-20	48	48.5	135	92	TR40*1.5	GER32A	ER32
MBT50	MBT50-GER32A-165	4-20	48	48.5	165	122	TR40*1.5	GER32A	ER32

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

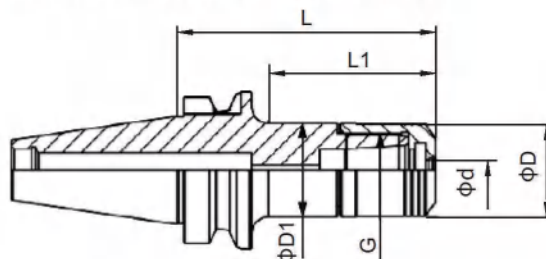
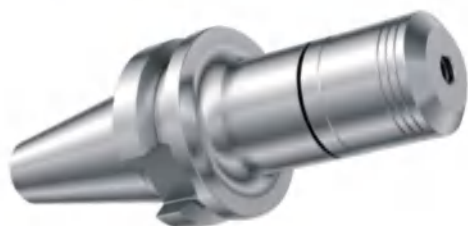
Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

F22

MBT-GSK-A高速弹性筒夹密封刀柄 MBT-GSK-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低
锥与面双面接触

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise
Double-sided contact between cone & surface



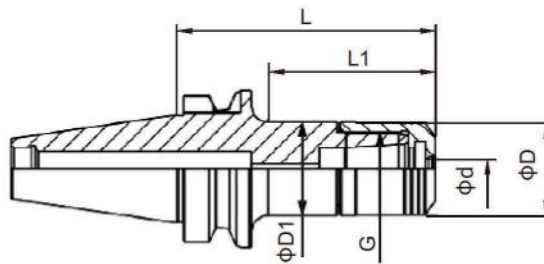
主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
MBT30	MBT30-GSK06A-60	4-6	19	19.5	60	33	TR15.5*1.0	GSK06A	SK06
MBT30	MBT30-GSK06A-75	4-6	19	19.5	75	48	TR15.5*1.0	GSK06A	SK06
MBT30	MBT30-GSK06A-90	4-6	19	19.5	90	63	TR15.5*1.0	GSK06A	SK06
MBT30	MBT30-GSK10A-60	4-10	27	27.5	60	33	TR21.5*1.0	GSK10A	SK10
MBT30	MBT30-GSK10A-75	4-10	27	27.5	75	48	TR21.5*1.0	GSK10A	SK10
MBT30	MBT30-GSK10A-90	4-10	27	27.5	90	63	TR21.5*1.0	GSK10A	SK10
MBT30	MBT30-GSK13A-60	4-13	33	33.5	60	33	TR27*1.0	GSK13A	SK13
MBT30	MBT30-GSK13A-75	4-13	33	33.5	75	48	TR27*1.0	GSK13A	SK13
MBT30	MBT30-GSK13A-90	4-13	33	33.5	90	63	TR27*1.0	GSK13A	SK13
MBT30	MBT30-GSK13A-120	4-13	33	33.5	120	93	TR27*1.0	GSK13A	SK13
MBT30	MBT30-GSK16A-60	4-16	40	40.5	60	36	TR32*1.5	GSK16A	SK16
MBT30	MBT30-GSK16A-75	4-16	40	40.5	75	51	TR32*1.5	GSK16A	SK16
MBT30	MBT30-GSK16A-90	4-16	40	40.5	90	66	TR32*1.5	GSK16A	SK16
MBT30	MBT30-GSK16A-120	4-16	40	40.5	120	96	TR32*1.5	GSK16A	SK16
MBT30	MBT30-GSK20A-60	4-20	48	48.5	60	38	TR40*1.5	GSK20A	SK20
MBT30	MBT30-GSK20A-75	4-20	48	48.5	75	53	TR40*1.5	GSK20A	SK20
MBT30	MBT30-GSK20A-90	4-20	48	48.5	90	68	TR40*1.5	GSK20A	SK20
MBT30	MBT30-GSK20A-120	4-20	48	48.5	120	98	TR40*1.5	GSK20A	SK20
MBT40	MBT40-GSK06A-75	4-6	19	19.5	75	43	TR15.5*1.0	GSK06A	SK06
MBT40	MBT40-GSK06A-90	4-6	19	19.5	90	58	TR15.5*1.0	GSK06A	SK06
MBT40	MBT40-GSK10A-75	4-10	27	27.5	75	43	TR21.5*1.0	GSK10A	SK10
MBT40	MBT40-GSK10A-90	4-10	27	27.5	90	58	TR21.5*1.0	GSK10A	SK10
MBT40	MBT40-GSK13A-75	4-13	33	33.5	75	43	TR27*1.0	GSK13A	SK13
MBT40	MBT40-GSK13A-90	4-13	33	33.5	90	58	TR27*1.0	GSK13A	SK13
MBT40	MBT40-GSK13A-120	4-13	33	33.5	120	88	TR27*1.0	GSK13A	SK13
MBT40	MBT40-GSK16A-75	4-16	40	40.5	75	43	TR32*1.5	GSK16A	SK16
MBT40	MBT40-GSK16A-90	4-16	40	40.5	90	58	TR32*1.5	GSK16A	SK16
MBT40	MBT40-GSK16A-120	4-16	40	40.5	120	88	TR32*1.5	GSK16A	SK16
MBT40	MBT40-GSK20A-75	4-20	48	48.5	75	43	TR40*1.5	GSK20A	SK20
MBT40	MBT40-GSK20A-90	4-20	48	48.5	90	58	TR40*1.5	GSK20A	SK20
MBT40	MBT40-GSK20A-120	4-20	48	48.5	120	88	TR40*1.5	GSK20A	SK20
MBT50	MBT50-GSK06A-90	4-6	19	19.5	90	47	TR15.5*1.0	GSK06A	SK06
MBT50	MBT50-GSK06A-105	4-6	19	19.5	105	62	TR15.5*1.0	GSK06A	SK06
MBT50	MBT50-GSK10A-90	4-10	27	27.5	90	47	TR21.5*1.0	GSK10A	SK10
MBT50	MBT50-GSK10A-105	4-10	27	27.5	105	62	TR21.5*1.0	GSK10A	SK10
MBT50	MBT50-GSK13A-90	4-13	33	33.5	90	47	TR27*1.0	GSK13A	SK13
MBT50	MBT50-GSK13A-105	4-13	33	33.5	105	62	TR27*1.0	GSK13A	SK13
MBT50	MBT50-GSK13A-135	4-13	33	33.5	135	92	TR27*1.0	GSK13A	SK13
MBT50	MBT50-GSK16A-90	4-16	40	40.5	90	47	TR32*1.5	GSK16A	SK16
MBT50	MBT50-GSK16A-105	4-16	40	40.5	105	62	TR32*1.5	GSK16A	SK16



MBT-GSK-A高速弹性筒夹密封刀柄 MBT-GSK-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低
锥与面双面接触

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise
Double-sided contact between cone & surface



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
MBT50	MBT50-GSK16A-135	4-16	40	40.5	135	92	TR32*1.5	GSK16A	SK16
MBT50	MBT50-GSK20A-90	4-20	48	48.5	90	47	TR40*1.5	GSK20A	SK20
MBT50	MBT50-GSK20A-105	4-20	48	48.5	105	62	TR40*1.5	GSK20A	SK20
MBT50	MBT50-GSK20A-135	4-20	48	48.5	135	92	TR40*1.5	GSK20A	SK20

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Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

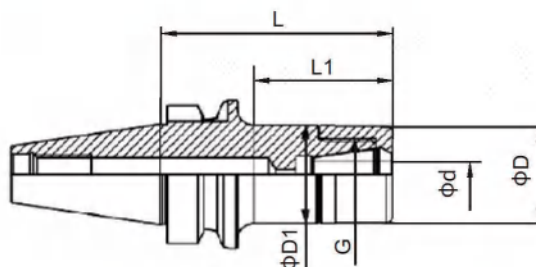
Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

MBT-GER高速弹性筒夹密封刀柄

MBT-GER High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
 梯型螺牙设计，扭力提升50%，避免掉刀
 非偏心全圆螺帽，动平衡更佳
 光滑外表，风阻小，噪音低
 锥与面双接触

Integral stainless steel material to avoid rusting
 Ladder screw design, torque increase 50%, avoid falling tool
 Non-eccentric full round nut, better dynamic balance
 Smooth appearance, low wind resistance, low noise
 Double-sided contact between cone & surface



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
MBT30	MBT30-GER16-60	1-10	30	30.5	60	33	TR22*1.5	GER16	ER16
MBT30	MBT30-GER16-75	1-10	30	30.5	75	48	TR22*1.5	GER16	ER16
MBT30	MBT30-GER16-90	1-10	30	30.5	90	63	TR22*1.5	GER16	ER16
MBT30	MBT30-GER20-60	1-13	35	35.5	60	33	TR25*1.5	GER20	ER20
MBT30	MBT30-GER20-75	1-13	35	35.5	75	48	TR25*1.5	GER20	ER20
MBT30	MBT30-GER20-90	1-13	35	35.5	90	63	TR25*1.5	GER20	ER20
MBT30	MBT30-GER20-120	1-13	35	35.5	120	93	TR25*1.5	GER20	ER20
MBT30	MBT30-GER25-60	2-16	40	40.5	60	36	TR32*1.5	GER25	ER25
MBT30	MBT30-GER25-75	2-16	40	40.5	75	51	TR32*1.5	GER25	ER25
MBT30	MBT30-GER25-90	2-16	40	40.5	90	66	TR32*1.5	GER25	ER25
MBT30	MBT30-GER25-120	2-16	40	40.5	120	96	TR32*1.5	GER25	ER25
MBT30	MBT30-GER32-60	3-20	48	48.5	60	38	TR40*1.5	GER32	ER32
MBT30	MBT30-GER32-75	3-20	48	48.5	75	53	TR40*1.5	GER32	ER32
MBT30	MBT30-GER32-90	3-20	48	48.5	90	68	TR40*1.5	GER32	ER32
MBT30	MBT30-GER32-120	3-20	48	48.5	120	98	TR40*1.5	GER32	ER32
MBT40	MBT40-GER16-75	1-10	30	30.5	75	43	TR22*1.5	GER16	ER16
MBT40	MBT40-GER16-90	1-10	30	30.5	90	58	TR22*1.5	GER16	ER16
MBT40	MBT40-GER20-75	1-13	35	35.5	75	43	TR25*1.5	GER20	ER20
MBT40	MBT40-GER20-90	1-13	35	35.5	90	58	TR25*1.5	GER20	ER20
MBT40	MBT40-GER20-120	1-13	35	35.5	120	88	TR25*1.5	GER20	ER20
MBT40	MBT40-GER25-75	2-16	40	40.5	75	43	TR32*1.5	GER25	ER25
MBT40	MBT40-GER25-90	2-16	40	40.5	90	58	TR32*1.5	GER25	ER25
MBT40	MBT40-GER25-120	2-16	40	40.5	120	88	TR32*1.5	GER25	ER25
MBT40	MBT40-GER32-75	3-20	48	48.5	75	43	TR40*1.5	GER32	ER32
MBT40	MBT40-GER32-90	3-20	48	48.5	90	58	TR40*1.5	GER32	ER32
MBT40	MBT40-GER32-120	3-20	48	48.5	120	88	TR40*1.5	GER32	ER32
MBT50	MBT50-GER16-90	1-10	30	30.5	90	47	TR22*1.5	GER16	ER16
MBT50	MBT50-GER16-105	1-10	30	30.5	105	62	TR22*1.5	GER16	ER16
MBT50	MBT50-GER20-105	1-13	35	35.5	105	62	TR25*1.5	GER20	ER20
MBT50	MBT50-GER20-135	1-13	35	35.5	135	92	TR25*1.5	GER20	ER20
MBT50	MBT50-GER20-165	1-13	35	35.5	165	122	TR25*1.5	GER20	ER20
MBT50	MBT50-GER25-105	2-16	40	40.5	105	62	TR32*1.5	GER25	ER25
MBT50	MBT50-GER25-135	2-16	40	40.5	135	92	TR32*1.5	GER25	ER25
MBT50	MBT50-GER25-165	2-16	40	40.5	165	122	TR32*1.5	GER25	ER25
MBT50	MBT50-GER32-105	3-20	48	48.5	105	62	TR40*1.5	GER32	ER32
MBT50	MBT50-GER32-135	3-20	48	48.5	135	92	TR40*1.5	GER32	ER32
MBT50	MBT50-GER32-165	3-20	48	48.5	165	122	TR40*1.5	GER32	ER32

技术参数如有变动，恕不另行通知

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上表未列规格也可订做

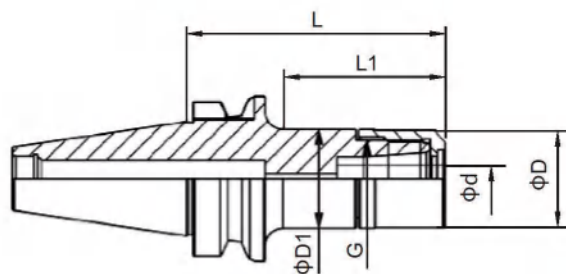
Specifications not listed in the table above can also be customized



MBT-GSK高速弹性筒夹刀柄 MBT-GSK High Speed Collet Chuck

整体不锈钢材质，避免生锈
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低
锥与面双面接触

Integral stainless steel material to avoid rusting
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Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise
Double-sided contact between cone & surface

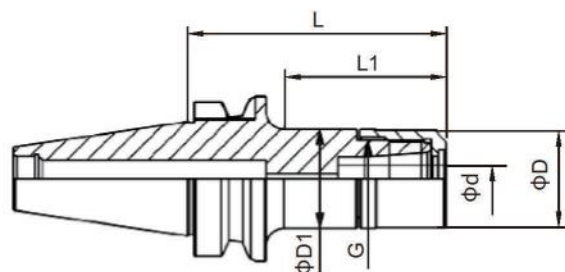


主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
MBT30	MBT30-GSK06-60	1-6	19	19.5	60	33	TR15.5*1.0	GSK06	SK06
MBT30	MBT30-GSK06-75	1-6	19	19.5	75	48	TR15.5*1.0	GSK06	SK06
MBT30	MBT30-GSK06-90	1-6	19	19.5	90	63	TR15.5*1.0	GSK06	SK06
MBT30	MBT30-GSK10-60	2-10	27	27.5	60	33	TR21.5*1.0	GSK10	SK10
MBT30	MBT30-GSK10-75	2-10	27	27.5	75	48	TR21.5*1.0	GSK10	SK10
MBT30	MBT30-GSK10-90	2-10	27	27.5	90	63	TR21.5*1.0	GSK10	SK10
MBT30	MBT30-GSK13-60	3-13	33	33.5	60	33	TR27*1.0	GSK13	SK13
MBT30	MBT30-GSK13-75	3-13	33	33.5	75	48	TR27*1.0	GSK13	SK13
MBT30	MBT30-GSK13-90	3-13	33	33.5	90	63	TR27*1.0	GSK13	SK13
MBT30	MBT30-GSK13-120	3-13	33	33.5	120	93	TR27*1.0	GSK13	SK13
MBT30	MBT30-GSK16-60	3-16	40	40.5	60	36	TR32*1.5	GSK16	SK16
MBT30	MBT30-GSK16-75	3-16	40	40.5	75	51	TR32*1.5	GSK16	SK16
MBT30	MBT30-GSK16-90	3-16	40	40.5	90	66	TR32*1.5	GSK16	SK16
MBT30	MBT30-GSK16-120	3-16	40	40.5	120	96	TR32*1.5	GSK16	SK16
MBT30	MBT30-GSK20-60	4-20	48	48.5	60	38	TR40*1.5	GSK20	SK20
MBT30	MBT30-GSK20-75	4-20	48	48.5	75	53	TR40*1.5	GSK20	SK20
MBT30	MBT30-GSK20-90	4-20	48	48.5	90	68	TR40*1.5	GSK20	SK20
MBT30	MBT30-GSK20-120	4-20	48	48.5	120	98	TR40*1.5	GSK20	SK20
MBT40	MBT40-GSK06-75	1-6	19	19.5	75	43	TR15.5*1.0	GSK06	SK06
MBT40	MBT40-GSK06-90	1-6	19	19.5	90	58	TR15.5*1.0	GSK06	SK06
MBT40	MBT40-GSK10-75	2-10	27	27.5	75	43	TR21.5*1.0	GSK10	SK10
MBT40	MBT40-GSK10-90	2-10	27	27.5	90	58	TR21.5*1.0	GSK10	SK10
MBT40	MBT40-GSK13-75	3-13	33	33.5	75	43	TR27*1.0	GSK13	SK13
MBT40	MBT40-GSK13-90	3-13	33	33.5	90	58	TR27*1.0	GSK13	SK13
MBT40	MBT40-GSK13-120	3-13	33	33.5	120	88	TR27*1.0	GSK13	SK13
MBT40	MBT40-GSK16-75	3-16	40	40.5	75	43	TR32*1.5	GSK16	SK16
MBT40	MBT40-GSK16-90	3-16	40	40.5	90	58	TR32*1.5	GSK16	SK16
MBT40	MBT40-GSK16-120	3-16	40	40.5	120	88	TR32*1.5	GSK16	SK16
MBT40	MBT40-GSK20-75	4-20	48	48.5	75	43	TR40*1.5	GSK20	SK20
MBT40	MBT40-GSK20-90	4-20	48	48.5	90	58	TR40*1.5	GSK20	SK20
MBT40	MBT40-GSK20-120	4-20	48	48.5	120	88	TR40*1.5	GSK20	SK20
MBT50	MBT50-GSK06-90	1-6	19	19.5	90	47	TR15.5*1.0	GSK06	SK06
MBT50	MBT50-GSK06-105	1-6	19	19.5	105	62	TR15.5*1.0	GSK06	SK06
MBT50	MBT50-GSK10-90	2-10	27	27.5	90	47	TR21.5*1.0	GSK10	SK10
MBT50	MBT50-GSK10-105	2-10	27	27.5	105	62	TR21.5*1.0	GSK10	SK10
MBT50	MBT50-GSK13-90	3-13	33	33.5	90	47	TR27*1.0	GSK13	SK13
MBT50	MBT50-GSK13-105	3-13	33	33.5	105	62	TR27*1.0	GSK13	SK13
MBT50	MBT50-GSK13-135	3-13	33	33.5	135	92	TR27*1.0	GSK13	SK13
MBT50	MBT50-GSK16-90	3-16	40	40.5	90	47	TR32*1.5	GSK16	SK16
MBT50	MBT50-GSK16-105	3-16	40	40.5	105	62	TR32*1.5	GSK16	SK16

MBT-GSK高速弹性筒夹刀柄 MBT-GSK High Speed Collet Chuck

整体不锈钢材质，避免生锈
梯型螺牙设计，扭力提升50%，避免掉刀
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锥与面双面接触

Integral stainless steel material to avoid rusting
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Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise
Double-sided contact between cone & surface



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
MBT50	MBT50-GSK16-135	3-16	40	40.5	135	92	TR32*1.5	GSK16	SK16
MBT50	MBT50-GSK20-90	4-20	48	48.5	90	47	TR40*1.5	GSK20	SK20
MBT50	MBT50-GSK20-105	4-20	48	48.5	105	62	TR40*1.5	GSK20	SK20
MBT50	MBT50-GSK20-135	4-20	48	48.5	135	92	TR40*1.5	GSK20	SK20

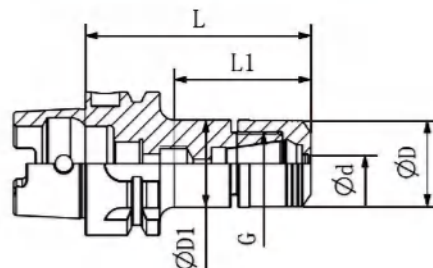
技术参数如有变动，恕不另行通知
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Specifications not listed in the table above can also be customized



HSKA-GER-A高速弹性筒夹密封刀柄 HSKA-GER-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯形螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKA40	HSKA40-GER16A-60	4-10	30	30.5	60	37	TR22*1.5	GER16A	ER16
HSKA40	HSKA40-GER16A-75	4-10	30	30.5	75	52	TR22*1.5	GER16A	ER16
HSKA40	HSKA40-GER16A-90	4-10	30	30.5	90	67	TR22*1.5	GER16A	ER16
HSKA50	HSKA50-GER16A-75	4-10	30	30.5	75	44	TR22*1.5	GER16A	ER16
HSKA50	HSKA50-GER16A-90	4-10	30	30.5	90	59	TR22*1.5	GER16A	ER16
HSKA50	HSKA50-GER20A-75	4-13	35	35.5	75	44	TR25*1.5	GER20A	ER20
HSKA50	HSKA50-GER20A-90	4-13	35	35.5	90	59	TR25*1.5	GER20A	ER20
HSKA50	HSKA50-GER20A-120	4-13	35	35.5	120	89	TR25*1.5	GER20A	ER20
HSKA50	HSKA50-GER25A-75	4-16	40	40.5	75	44	TR32*1.5	GER25A	ER25
HSKA50	HSKA50-GER25A-90	4-16	40	40.5	90	59	TR32*1.5	GER25A	ER25
HSKA50	HSKA50-GER25A-120	4-16	40	40.5	120	89	TR32*1.5	GER25A	ER25
HSKA63	HSKA63-GER16A-75	4-10	30	30.5	75	44	TR22*1.5	GER16A	ER16
HSKA63	HSKA63-GER16A-90	4-10	30	30.5	90	59	TR22*1.5	GER16A	ER16
HSKA63	HSKA63-GER20A-75	4-13	35	35.5	75	44	TR25*1.5	GER20A	ER20
HSKA63	HSKA63-GER20A-90	4-13	35	35.5	90	59	TR25*1.5	GER20A	ER20
HSKA63	HSKA63-GER20A-120	4-13	35	35.5	120	89	TR25*1.5	GER20A	ER20
HSKA63	HSKA63-GER25A-75	4-16	40	40.5	75	44	TR32*1.5	GER25A	ER25
HSKA63	HSKA63-GER25A-90	4-16	40	40.5	90	59	TR32*1.5	GER25A	ER25
HSKA63	HSKA63-GER25A-120	4-16	40	40.5	120	89	TR32*1.5	GER25A	ER25
HSKA63	HSKA63-GER32A-75	4-20	48	48.5	75	44	TR40*1.5	GER32A	ER32
HSKA63	HSKA63-GER32A-90	4-20	48	48.5	90	59	TR40*1.5	GER32A	ER32
HSKA63	HSKA63-GER32A-120	4-20	48	48.5	120	89	TR40*1.5	GER32A	ER32
HSKA100	HSKA100-GER16A-90	4-10	30	30.5	90	56	TR22*1.5	GER16A	ER16
HSKA100	HSKA100-GER16A-105	4-10	30	30.5	105	71	TR22*1.5	GER16A	ER16
HSKA100	HSKA100-GER20A-105	4-13	35	35.5	105	71	TR25*1.5	GER20A	ER20
HSKA100	HSKA100-GER20A-135	4-13	35	35.5	135	101	TR25*1.5	GER20A	ER20
HSKA100	HSKA100-GER20A-165	4-13	35	35.5	165	131	TR25*1.5	GER20A	ER20
HSKA100	HSKA100-GER25A-105	4-16	40	40.5	105	71	TR32*1.5	GER25A	ER25
HSKA100	HSKA100-GER25A-135	4-16	40	40.5	135	101	TR32*1.5	GER25A	ER25
HSKA100	HSKA100-GER25A-165	4-16	40	40.5	165	131	TR32*1.5	GER25A	ER25
HSKA100	HSKA100-GER32A-105	4-20	48	48.5	105	71	TR40*1.5	GER32A	ER32
HSKA100	HSKA100-GER32A-135	4-20	48	48.5	135	101	TR40*1.5	GER32A	ER32
HSKA100	HSKA100-GER32A-165	4-20	48	48.5	165	131	TR40*1.5	GER32A	ER32

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上表未列规格也可订做

Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

HSKA-GSK-A高速弹性筒夹密封刀柄 HSKA-GSK-A High Speed Collet Sealing Chuck

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防尘螺帽，避免精度丢失，提高筒夹寿命

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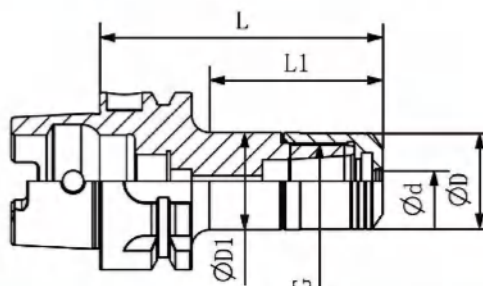
Integral stainless steel material to avoid rusting

Dust-proof nuts to avoid loss of accuracy and improve collet life

Ladder screw design, torque increase 50%, avoid falling tool

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Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKA40	HSKA40-GSK06A-75	4-6	19	19.5	75	50	TR15.5*1.0	GSK06A	SK06
HSKA40	HSKA40-GSK06A-90	4-6	19	19.5	90	65	TR15.5*1.0	GSK06A	SK06
HSKA40	HSKA40-GSK10A-75	4-10	27	27.5	75	50	TR21.5*1.0	GSK10A	SK10
HSKA40	HSKA40-GSK10A-90	4-10	27	27.5	90	65	TR21.5*1.0	GSK10A	SK10
HSKA40	HSKA40-GSK13A-75	4-13	33	33.5	75	53	TR27*1.0	GSK13A	SK13
HSKA40	HSKA40-GSK13A-90	4-13	33	33.5	90	68	TR27*1.0	GSK13A	SK13
HSKA40	HSKA40-GSK13A-120	4-13	33	33.5	120	98	TR27*1.0	GSK13A	SK13
HSKA50	HSKA50-GSK06A-75	4-6	19	19.5	75	44	TR15.5*1.0	GSK06A	SK06
HSKA50	HSKA50-GSK06A-90	4-6	19	19.5	90	59	TR15.5*1.0	GSK06A	SK06
HSKA50	HSKA50-GSK10A-75	4-10	27	27.5	75	44	TR21.5*1.0	GSK10A	SK10
HSKA50	HSKA50-GSK10A-90	4-10	27	27.5	90	59	TR21.5*1.0	GSK10A	SK10
HSKA50	HSKA50-GSK13A-75	4-13	33	33.5	75	44	TR27*1.0	GSK13A	SK13
HSKA50	HSKA50-GSK13A-90	4-13	33	33.5	90	59	TR27*1.0	GSK13A	SK13
HSKA50	HSKA50-GSK13A-120	4-13	33	33.5	120	89	TR27*1.0	GSK13A	SK13
HSKA50	HSKA50-GSK16A-75	4-16	40	40.5	75	47	TR32*1.5	GSK16A	SK16
HSKA50	HSKA50-GSK16A-90	4-16	40	40.5	90	62	TR32*1.5	GSK16A	SK16
HSKA50	HSKA50-GSK16A-120	4-16	40	40.5	120	92	TR32*1.5	GSK16A	SK16
HSKA63	HSKA63-GSK06A-75	4-6	19	19.5	75	44	TR15.5*1.0	GSK06A	SK06
HSKA63	HSKA63-GSK06A-90	4-6	19	19.5	90	59	TR15.5*1.0	GSK06A	SK06
HSKA63	HSKA63-GSK10A-75	4-10	27	27.5	75	44	TR21.5*1.0	GSK10A	SK10
HSKA63	HSKA63-GSK10A-90	4-10	27	27.5	90	59	TR21.5*1.0	GSK10A	SK10
HSKA63	HSKA63-GSK13A-75	4-13	33	33.5	75	44	TR27*1.0	GSK13A	SK13
HSKA63	HSKA63-GSK13A-90	4-13	33	33.5	90	59	TR27*1.0	GSK13A	SK13
HSKA63	HSKA63-GSK13A-120	4-13	33	33.5	120	89	TR27*1.0	GSK13A	SK13
HSKA63	HSKA63-GSK16A-75	4-16	40	40.5	75	44	TR32*1.5	GSK16A	SK16
HSKA63	HSKA63-GSK16A-90	4-16	40	40.5	90	59	TR32*1.5	GSK16A	SK16
HSKA63	HSKA63-GSK16A-120	4-16	40	40.5	120	89	TR32*1.5	GSK16A	SK16
HSKA63	HSKA63-GSK20A-75	4-20	48	48.5	75	44	TR40*1.5	GSK20A	SK20
HSKA63	HSKA63-GSK20A-90	4-20	48	48.5	90	59	TR40*1.5	GSK20A	SK20
HSKA63	HSKA63-GSK20A-120	4-20	48	48.5	120	89	TR40*1.5	GSK20A	SK20
HSKA100	HSKA100-GSK06A-90	4-6	19	19.5	90	56	TR15.5*1.0	GSK06A	SK06
HSKA100	HSKA100-GSK06A-105	4-6	19	19.5	105	71	TR15.5*1.0	GSK06A	SK06
HSKA100	HSKA100-GSK10A-90	4-10	27	27.5	90	56	TR21.5*1.0	GSK10A	SK10
HSKA100	HSKA100-GSK10A-105	4-10	27	27.5	105	71	TR21.5*1.0	GSK10A	SK10
HSKA100	HSKA100-GSK13A-90	4-13	33	33.5	90	56	TR27*1.0	GSK13A	SK13
HSKA100	HSKA100-GSK13A-105	4-13	33	33.5	105	71	TR27*1.0	GSK13A	SK13
HSKA100	HSKA100-GSK13A-135	4-13	33	33.5	135	101	TR27*1.0	GSK13A	SK13
HSKA100	HSKA100-GSK16A-90	4-16	40	40.5	90	56	TR32*1.5	GSK16A	SK16
HSKA100	HSKA100-GSK16A-105	4-16	40	40.5	105	71	TR32*1.5	GSK16A	SK16
HSKA100	HSKA100-GSK16A-135	4-16	40	40.5	135	101	TR32*1.5	GSK16A	SK16

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

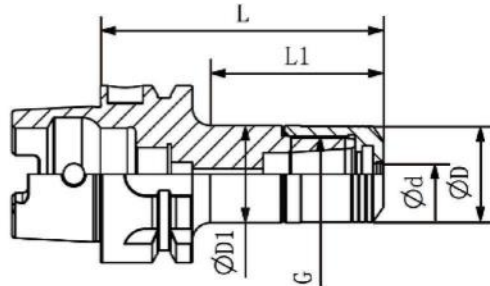
旋转刀柄



HSKA-GSK-A高速弹性筒夹密封刀柄 HSKA-GSK-A High Speed Collet Sealing Chuck

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主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKA100	HSKA100-GSK20A-90	4-20	48	48.5	90	56	TR40*1.5	GSK20A	SK20
HSKA100	HSKA100-GSK20A-105	4-20	48	48.5	105	71	TR40*1.5	GSK20A	SK20
HSKA100	HSKA100-GSK20A-135	4-20	48	48.5	135	101	TR40*1.5	GSK20A	SK20

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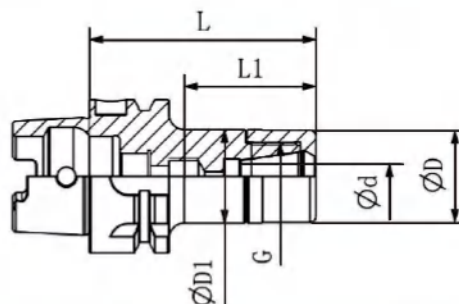
Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

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HSKA-GER High Speed Collet Sealing Chuck

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			D	D1	L	L1	G		
HSKA40	HSKA40-GER16-60	1-10	30	30.5	60	37	TR22*1.5	GER16	ER16
HSKA40	HSKA40-GER16-75	1-10	30	30.5	75	52	TR22*1.5	GER16	ER16
HSKA40	HSKA40-GER16-90	1-10	30	30.5	90	67	TR22*1.5	GER16	ER16
HSKA50	HSKA50-GER16-75	1-10	30	30.5	75	44	TR22*1.5	GER16	ER16
HSKA50	HSKA50-GER16-90	1-10	30	30.5	90	59	TR22*1.5	GER16	ER16
HSKA50	HSKA50-GER20-75	1-13	35	35.5	75	44	TR25*1.5	GER20	ER20
HSKA50	HSKA50-GER20-90	1-13	35	35.5	90	59	TR25*1.5	GER20	ER20
HSKA50	HSKA50-GER20-120	1-13	35	35.5	120	89	TR25*1.5	GER20	ER20
HSKA50	HSKA50-GER25-75	2-16	40	40.5	75	44	TR32*1.5	GER25	ER25
HSKA50	HSKA50-GER25-90	2-16	40	40.5	90	59	TR32*1.5	GER25	ER25
HSKA50	HSKA50-GER25-120	2-16	40	40.5	120	89	TR32*1.5	GER25	ER25
HSKA63	HSKA63-GER16-75	1-10	30	30.5	75	44	TR22*1.5	GER16	ER16
HSKA63	HSKA63-GER16-90	1-10	30	30.5	90	59	TR22*1.5	GER16	ER16
HSKA63	HSKA63-GER20-75	1-13	35	35.5	75	44	TR25*1.5	GER20	ER20
HSKA63	HSKA63-GER20-90	1-13	35	35.5	90	59	TR25*1.5	GER20	ER20
HSKA63	HSKA63-GER20-120	1-13	35	35.5	120	89	TR25*1.5	GER20	ER20
HSKA63	HSKA63-GER25-75	2-16	40	40.5	75	44	TR32*1.5	GER25	ER25
HSKA63	HSKA63-GER25-90	2-16	40	40.5	90	59	TR32*1.5	GER25	ER25
HSKA63	HSKA63-GER25-120	2-16	40	40.5	120	89	TR32*1.5	GER25	ER25
HSKA63	HSKA63-GER32-75	3-20	48	48.5	75	44	TR40*1.5	GER32	ER32
HSKA63	HSKA63-GER32-90	3-20	48	48.5	90	59	TR40*1.5	GER32	ER32
HSKA63	HSKA63-GER32-120	3-20	48	48.5	120	89	TR40*1.5	GER32	ER32
HSKA100	HSKA100-GER16-90	1-10	30	30.5	90	56	TR22*1.5	GER16	ER16
HSKA100	HSKA100-GER16-105	1-10	30	30.5	105	71	TR22*1.5	GER16	ER16
HSKA100	HSKA100-GER20-105	1-13	35	35.5	105	71	TR25*1.5	GER20	ER20
HSKA100	HSKA100-GER20-135	1-13	35	35.5	135	101	TR25*1.5	GER20	ER20
HSKA100	HSKA100-GER20-165	1-13	35	35.5	165	131	TR25*1.5	GER20	ER20
HSKA100	HSKA100-GER25-105	2-16	40	40.5	105	71	TR32*1.5	GER25	ER25
HSKA100	HSKA100-GER25-135	2-16	40	40.5	135	101	TR32*1.5	GER25	ER25
HSKA100	HSKA100-GER25-165	2-16	40	40.5	165	131	TR32*1.5	GER25	ER25
HSKA100	HSKA100-GER32-105	3-20	48	48.5	105	71	TR40*1.5	GER32	ER32
HSKA100	HSKA100-GER32-135	3-20	48	48.5	135	101	TR40*1.5	GER32	ER32
HSKA100	HSKA100-GER32-165	3-20	48	48.5	165	131	TR40*1.5	GER32	ER32

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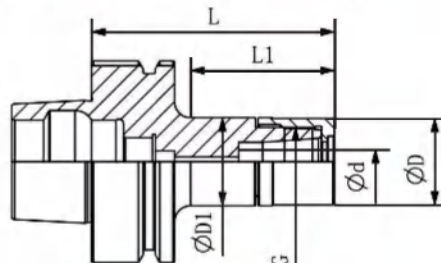
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Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKA40	HSKA40-GSK06-75	1-6	19	19.5	75	50	TR15.5*1.0	GSK06	SK06
HSKA40	HSKA40-GSK06-90	1-6	19	19.5	90	65	TR15.5*1.0	GSK06	SK06
HSKA40	HSKA40-GSK10-75	2-10	27	27.5	75	50	TR21.5*1.0	GSK10	SK10
HSKA40	HSKA40-GSK10-90	2-10	27	27.5	90	65	TR21.5*1.0	GSK10	SK10
HSKA40	HSKA40-GSK13-75	3-13	33	33.5	75	53	TR27*1.0	GSK13	SK13
HSKA40	HSKA40-GSK13-90	3-13	33	33.5	90	68	TR27*1.0	GSK13	SK13
HSKA40	HSKA40-GSK13-120	3-13	33	33.5	120	98	TR27*1.0	GSK13	SK13
HSKA50	HSKA50-GSK06-75	1-6	19	19.5	75	44	TR15.5*1.0	GSK06	SK06
HSKA50	HSKA50-GSK06-90	1-6	19	19.5	90	59	TR15.5*1.0	GSK06	SK06
HSKA50	HSKA50-GSK10-75	2-10	27	27.5	75	44	TR21.5*1.0	GSK10	SK10
HSKA50	HSKA50-GSK10-90	2-10	27	27.5	90	59	TR21.5*1.0	GSK10	SK10
HSKA50	HSKA50-GSK13-75	3-13	33	33.5	75	44	TR27*1.0	GSK13	SK13
HSKA50	HSKA50-GSK13-90	3-13	33	33.5	90	59	TR27*1.0	GSK13	SK13
HSKA50	HSKA50-GSK13-120	3-13	33	33.5	120	89	TR27*1.0	GSK13	SK13
HSKA50	HSKA50-GSK16-75	3-16	40	40.5	75	47	TR32*1.5	GSK16	SK16
HSKA50	HSKA50-GSK16-90	3-16	40	40.5	90	62	TR32*1.5	GSK16	SK16
HSKA50	HSKA50-GSK16-120	3-16	40	40.5	120	92	TR32*1.5	GSK16	SK16
HSKA63	HSKA63-GSK06-75	1-6	19	19.5	75	44	TR15.5*1.0	GSK06	SK06
HSKA63	HSKA63-GSK06-90	1-6	19	19.5	90	59	TR15.5*1.0	GSK06	SK06
HSKA63	HSKA63-GSK10-75	2-10	27	27.5	75	44	TR21.5*1.0	GSK10	SK10
HSKA63	HSKA63-GSK10-90	2-10	27	27.5	90	59	TR21.5*1.0	GSK10	SK10
HSKA63	HSKA63-GSK13-75	3-13	33	33.5	75	44	TR27*1.0	GSK13	SK13
HSKA63	HSKA63-GSK13-90	3-13	33	33.5	90	59	TR27*1.0	GSK13	SK13
HSKA63	HSKA63-GSK13-120	3-13	33	33.5	120	89	TR27*1.0	GSK13	SK13
HSKA63	HSKA63-GSK16-75	3-16	40	40.5	75	44	TR32*1.5	GSK16	SK16
HSKA63	HSKA63-GSK16-90	3-16	40	40.5	90	59	TR32*1.5	GSK16	SK16
HSKA63	HSKA63-GSK16-120	3-16	40	40.5	120	89	TR32*1.5	GSK16	SK16
HSKA63	HSKA63-GSK20-75	4-20	48	48.5	75	44	TR40*1.5	GSK20	SK20
HSKA63	HSKA63-GSK20-90	4-20	48	48.5	90	59	TR40*1.5	GSK20	SK20
HSKA63	HSKA63-GSK20-120	4-20	48	48.5	120	89	TR40*1.5	GSK20	SK20
HSKA100	HSKA100-GSK06-90	1-6	19	19.5	90	56	TR15.5*1.0	GSK06	SK06
HSKA100	HSKA100-GSK06-105	1-6	19	19.5	105	71	TR15.5*1.0	GSK06	SK06
HSKA100	HSKA100-GSK10-90	2-10	27	27.5	90	56	TR21.5*1.0	GSK10	SK10
HSKA100	HSKA100-GSK10-105	2-10	27	27.5	105	71	TR21.5*1.0	GSK10	SK10
HSKA100	HSKA100-GSK13-90	3-13	33	33.5	90	56	TR27*1.0	GSK13	SK13
HSKA100	HSKA100-GSK13-105	3-13	33	33.5	105	71	TR27*1.0	GSK13	SK13
HSKA100	HSKA100-GSK13-135	3-13	33	33.5	135	101	TR27*1.0	GSK13	SK13
HSKA100	HSKA100-GSK16-90	3-16	40	40.5	90	56	TR32*1.5	GSK16	SK16
HSKA100	HSKA100-GSK16-105	3-16	40	40.5	105	71	TR32*1.5	GSK16	SK16
HSKA100	HSKA100-GSK16-135	3-16	40	40.5	135	101	TR32*1.5	GSK16	SK16
HSKA100	HSKA100-GSK20-90	4-20	48	48.5	90	56	TR40*1.5	GSK20	SK20
HSKA100	HSKA100-GSK20-105	4-20	48	48.5	105	71	TR40*1.5	GSK20	SK20
HSKA100	HSKA100-GSK20-135	4-20	48	48.5	135	101	TR40*1.5	GSK20	SK20

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

F32

上表未列规格也可订做

Specifications not listed in the table above can also be customized

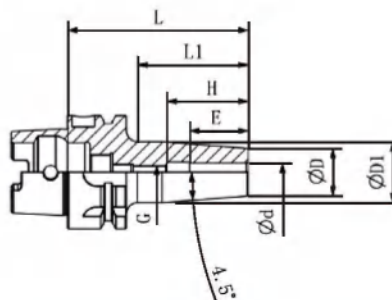
HSKA-SHR热缩刀柄 HSKA-SHR Shrink Fit Holder

夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
HSKA40	HSKA40-SHR6-80	6	21	27	80	55	M5	26	36
HSKA40	HSKA40-SHR8-80	8	21	27	80	55	M6	26	36
HSKA40	HSKA40-SHR10-80	10	24	32	80	55	M8*1	32	42
HSKA40	HSKA40-SHR12-80	12	24	32	80	55	M10*1	37	47
HSKA40	HSKA40-SHR14-80	14	27	34	80	58	M10*1	37	47
HSKA40	HSKA40-SHR16-80	16	27	34	80	58	M12*1	40	50
HSKA50	HSKA50-SHR6-80	6	21	27	80	49	M5	26	36
HSKA50	HSKA50-SHR8-80	8	21	27	80	49	M6	26	36
HSKA50	HSKA50-SHR10-85	10	24	32	85	54	M8*1	32	42
HSKA50	HSKA50-SHR12-90	12	24	32	90	59	M10*1	37	47
HSKA50	HSKA50-SHR14-90	14	27	34	90	59	M10*1	37	47
HSKA50	HSKA50-SHR16-95	16	27	34	95	64	M12*1	40	50
HSKA50	HSKA50-SHR18-95	18	33	42	95	67	M12*1	40	50
HSKA50	HSKA50-SHR20-100	20	33	42	100	72	M16*1	42	52
HSKA63	HSKA63-SHR6-100	6	21	27	100	69	M5	26	36
HSKA63	HSKA63-SHR6-120	6	21	27	120	89	M5	26	36
HSKA63	HSKA63-SHR6-160	6	21	32	160	129	M5	26	36
HSKA63	HSKA63-SHR8-100	8	21	27	100	69	M6	26	36
HSKA63	HSKA63-SHR8-120	8	21	27	120	89	M6	26	36
HSKA63	HSKA63-SHR8-160	8	21	32	160	129	M6	26	36
HSKA63	HSKA63-SHR10-100	10	24	32	100	69	M8*1	32	42
HSKA63	HSKA63-SHR10-120	10	24	32	120	89	M8*1	32	42
HSKA63	HSKA63-SHR10-160	10	24	34	160	129	M8*1	32	42
HSKA63	HSKA63-SHR12-100	12	24	32	100	69	M10*1	37	47
HSKA63	HSKA63-SHR12-120	12	24	32	120	89	M10*1	37	47
HSKA63	HSKA63-SHR12-160	12	24	34	160	129	M10*1	37	47
HSKA63	HSKA63-SHR14-100	14	27	34	100	69	M10*1	37	47
HSKA63	HSKA63-SHR14-120	14	27	34	120	89	M10*1	37	47
HSKA63	HSKA63-SHR14-160	14	27	42	160	129	M10*1	37	47
HSKA63	HSKA63-SHR16-100	16	27	34	100	69	M12*1	40	50
HSKA63	HSKA63-SHR16-120	16	27	34	120	89	M12*1	40	50
HSKA63	HSKA63-SHR16-160	16	27	42	160	129	M12*1	40	50
HSKA63	HSKA63-SHR18-100	18	33	42	100	69	M12*1	40	50
HSKA63	HSKA63-SHR18-120	18	33	42	120	89	M12*1	40	50
HSKA63	HSKA63-SHR18-160	18	33	51	160	132	M12*1	40	50
HSKA63	HSKA63-SHR20-100	20	33	42	100	69	M16*1	42	52
HSKA63	HSKA63-SHR20-120	20	33	42	120	89	M16*1	42	52
HSKA63	HSKA63-SHR20-160	20	33	51	160	132	M16*1	42	52
HSKA63	HSKA63-SHR25-110	25	44	53	110	132	M16*1	48	58
HSKA63	HSKA63-SHR25-120	25	44	53	120	132	M16*1	48	58
HSKA63	HSKA63-SHR25-160	25	44	60	160	132	M16*1	48	58
HSKA63	HSKA63-SHR32-110	32	44	53	110	132	M16*1	52	62
HSKA63	HSKA63-SHR32-120	32	44	53	120	132	M16*1	52	62



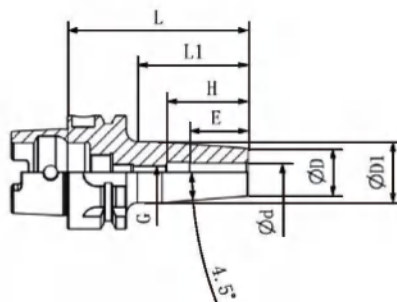
HSKA-SHR热缩刀柄 HSKA-SHR Shrink Fit Holder

夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
HSKA63	HSKA63-SHR32-160	32	44	60	160	132	M16*1	52	62
HSKA100	HSKA100-SHR6-100	6	21	27	100	66	M5	26	36
HSKA100	HSKA100-SHR6-120	6	21	27	120	86	M5	26	36
HSKA100	HSKA100-SHR6-160	6	21	32	160	126	M5	26	36
HSKA100	HSKA100-SHR8-100	8	21	27	100	66	M6	26	36
HSKA100	HSKA100-SHR8-120	8	21	27	120	86	M6	26	36
HSKA100	HSKA100-SHR8-160	8	21	32	160	126	M6	26	36
HSKA100	HSKA100-SHR10-100	10	24	32	100	66	M8*1	32	42
HSKA100	HSKA100-SHR10-120	10	24	32	120	86	M8*1	32	42
HSKA100	HSKA100-SHR10-160	10	24	34	160	126	M8*1	32	42
HSKA100	HSKA100-SHR12-100	12	24	32	100	66	M10*1	37	47
HSKA100	HSKA100-SHR12-120	12	24	32	120	86	M10*1	37	47
HSKA100	HSKA100-SHR12-160	12	24	34	160	126	M10*1	37	47
HSKA100	HSKA100-SHR14-100	14	27	34	100	66	M10*1	37	47
HSKA100	HSKA100-SHR14-120	14	27	34	120	86	M10*1	37	47
HSKA100	HSKA100-SHR14-160	14	27	42	160	126	M10*1	37	47
HSKA100	HSKA100-SHR16-100	16	27	34	100	66	M12*1	40	50
HSKA100	HSKA100-SHR16-120	16	27	34	120	86	M12*1	40	50
HSKA100	HSKA100-SHR16-160	16	27	42	160	126	M12*1	40	50
HSKA100	HSKA100-SHR18-100	18	33	42	100	66	M12*1	40	50
HSKA100	HSKA100-SHR18-120	18	33	42	120	86	M12*1	40	50
HSKA100	HSKA100-SHR18-160	18	33	51	160	129	M12*1	40	50
HSKA100	HSKA100-SHR20-100	20	33	42	100	66	M16*1	42	52
HSKA100	HSKA100-SHR20-120	20	33	42	120	86	M16*1	42	52
HSKA100	HSKA100-SHR20-160	20	33	51	160	132	M16*1	42	52
HSKA100	HSKA100-SHR25-110	25	44	53	110	132	M16*1	48	58
HSKA100	HSKA100-SHR25-120	25	44	53	120	132	M16*1	48	58
HSKA100	HSKA100-SHR25-160	25	44	60	160	132	M16*1	48	58
HSKA100	HSKA100-SHR32-110	32	44	53	110	132	M16*1	52	62
HSKA100	HSKA100-SHR32-120	32	44	53	120	132	M16*1	52	62
HSKA100	HSKA100-SHR32-160	32	44	60	160	132	M16*1	52	62

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance < h6 of handle diameter can be clamped, but not suitable for high speed steel tool

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

HSKA-GHR-S细长型热缩刀柄 HSKA-GHR-S Slim Shrink Fit Holder

夹持跳动小于等于0.003mm

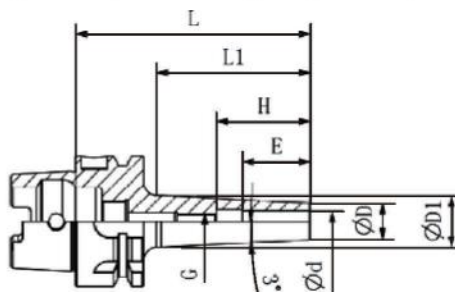
内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀
排气孔可以用螺丝堵上，内冷外冷自由切换
细长型干涉更小，适合加工深腔和形状复杂的工件

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing

The vent can be blocked by screw, to switch the internal and external cooling freely

For slim type holder the interference is smaller and suitable for machining the workpiece with deep cavity and complex shape



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
HSKA63	HSKA63-SHR6S-90	6	12	18	90	59	M5	31	36
HSKA63	HSKA63-SHR6S-120	6	12	18	120	89	M5	31	36
HSKA63	HSKA63-SHR6S-150	6	12	18	150	119	M5	31	36
HSKA63	HSKA63-SHR8S-90	8	14	20	90	59	M6	31	36
HSKA63	HSKA63-SHR8S-120	8	14	20	120	89	M6	31	36
HSKA63	HSKA63-SHR8S-150	8	14	20	150	119	M6	31	36
HSKA63	HSKA63-SHR10S-90	10	16	22	90	59	M8*1	37	42
HSKA63	HSKA63-SHR10S-120	10	16	22	120	89	M8*1	37	42
HSKA63	HSKA63-SHR10S-150	10	16	22	150	119	M8*1	37	42
HSKA63	HSKA63-SHR12S-90	12	18	24	90	59	M10*1	42	47
HSKA63	HSKA63-SHR12S-120	12	18	24	120	89	M10*1	42	47
HSKA63	HSKA63-SHR12S-150	12	18	24	150	119	M10*1	42	47
HSKA63	HSKA63-SHR16S-90	16	22	28	90	59	M12*1	45	50
HSKA63	HSKA63-SHR16S-120	16	22	28	120	89	M12*1	45	50
HSKA63	HSKA63-SHR16S-150	16	22	28	150	119	M12*1	45	50

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

旋转刀柄



HSKA-SHR-H重载型热缩刀柄

HSKA-SHR-H Heavy-load Shrink Fit Holder

夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀

排气孔可以用螺丝堵上，内冷外冷自由切换

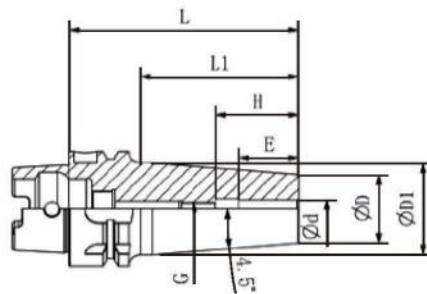
重载型加强壁厚，可用于重力切削

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing

The vent can be blocked by screw, to switch the internal and external cooling freely

Heavy-load reinforced wall thickness, which can be used in heavy cutting



主轴型号	刀柄型号	夹持径d	尺寸(mm) Dimensions					最小夹持长度E	最大夹持长度H
Spindle Model	Model No	Clamping Diameter	D	D1	L	L1	G	Min. Clamping Length	Max. Clamping Length
HSKA100	HSKA100-SHR16H-105	16	50	60	105	71	M12*1	40	50
HSKA100	HSKA100-SHR20H-110	20	58	68	110	76	M16*1	42	52
HSKA100	HSKA100-SHR25H-110	25	64	74	110	76	M16*1	48	58
HSKA100	HSKA100-SHR32H-120	32	72	85	120	86	M16*1	52	62

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance $< h6$ of handle diameter can be clamped, but not suitable for high speed steel tool

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

HSKA液压刀柄

HSKA-Hydraulic Expansion Tool Holder

德国设计与制造, 品质卓越

夹持跳动小于等于0.003mm

转速为25,000 RPM时动平衡等级达到G2.5或 $U_{max} < 1 \text{ gmm}$

带轴向长度调节

用于自动换刀

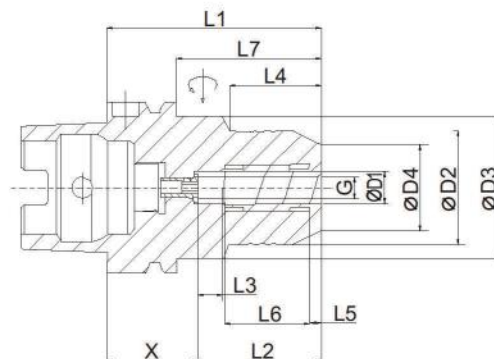
Germany design and manufacturing enables excellent quality

Runout accuracy $\leq 0.003 \text{ mm}$

Balancing grade G2.5 at 25,000 RPM or $U_{max} < 1 \text{ gmm}$

With axial length adjustment

For automatic tool change



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions							
		D1	D2	D4	X	L1	L2	L3	G
HSKA63	HSKA63-HE12-120	12	42	12	74	120	46	10	M8*1
HSKA63	HSKA63-HE20-120	20	52.5	20	69	120	51	10	M8*1
HSKA63	HSKA63-HE12-80	12	42	12	34	80	46	10	M8*1
HSKA63	HSKA63-HE16-80	16	52.5	16	29	80	51	10	M8*1
HSKA63	HSKA63-HE20-80	20	52.5	20	29	80	51	10	M8*1
HSKA100	HSKA100-HE20-90	20	52.5	38	39	90	51	10	M8*1
HSKA100	HSKA100-HE32-100	32	72	58.5	40	100	61	10	M8*1

使用减径套可夹持更多直径尺寸

Additional shank diameters can be clamped using intermediate sleeves

刀具柄部公差等级h6

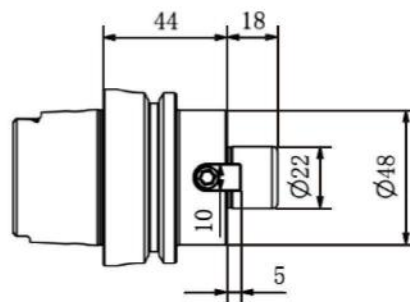
Tool shank quality h6

标准发货范围中不含驱动扳手

Scope of delivery without actuation key



HSKA-FMA面铣刀刀柄 HSKA-FMA Surface Milling Holder



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions					
		D	D1	L	L1	L2	W
HSKA50	HSKA50-FMA22.225-45	22.225	42	45	18	4	8.3
HSKA50	HSKA50-FMA25.4-45	25.4	50	45	22	5	9.5
HSKA63	HSKA63-FMA25.4-45	25.4	50	45	22	5	9.5
HSKA63	HSKA63-FMA25.4-90	25.4	50	90	22	5	9.5
HSKA63	HSKA63-FMA31.75-45	31.75	60	45	30	7	12.7
HSKA63	HSKA63-FMA31.75-75	31.75	60	75	30	7	12.7
HSKA63	HSKA63-FMA38.1-60	38.1	80	60	34	9	15.9
HSKA100	HSKA100-FMA25.4-45	25.4	50	45	22	5	9.5
HSKA100	HSKA100-FMA25.4-90	25.4	50	90	22	5	9.5
HSKA100	HSKA100-FMA31.75-45	31.75	60	45	30	7	12.7
HSKA100	HSKA100-FMA31.75-75	31.75	60	75	30	7	12.7
HSKA100	HSKA100-FMA31.75-105	31.75	60	105	30	7	12.7
HSKA100	HSKA100-FMA38.1-45	38.1	80	45	34	9	15.9
HSKA100	HSKA100-FMA38.1-75	38.1	80	75	34	9	15.9
HSKA100	HSKA100-FMA38.1-105	38.1	80	105	34	9	15.9
HSKA100	HSKA100-FMA47.625-45	47.625	128.57	45	38	12.5	25.3
HSKA100	HSKA100-FMA47.625-75	47.625	128.57	75	38	12.5	25.3
HSKA100	HSKA100-FMA47.625-105	47.625	128.57	105	38	12.5	25.3
HSKA100	HSKA100-FMA50.8-45	50.8	100	45	36	10	19.05
HSKA100	HSKA100-FMA50.8-75	50.8	100	75	36	10	19.05
HSKA100	HSKA100-FMA50.8-105	50.8	100	105	36	10	19.05

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

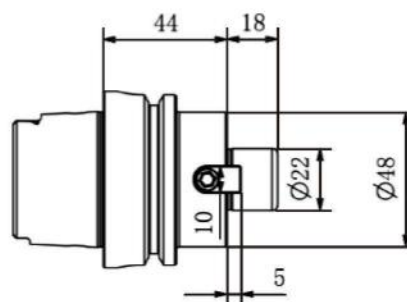
上表未列规格也可订做

Specifications not listed in the table above can also be customized

HSKA-FMB面铣刀刀柄 HSKA-FMB Surface Milling Holder

面铣刀盘专用刀柄

Special Holder for Surface Milling Cutter



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions					
		D	D1	L	L1	L2	W
HSKA50	HSKA50-FMB22-45	22	48	45	18	5	10
HSKA50	HSKA50-FMB27-45	27	58	45	20	6	12
HSKA63	HSKA63-FMB22-60	22	48	60	18	5	10
HSKA63	HSKA63-FMB22-90	22	48	90	18	5	10
HSKA63	HSKA63-FMB27-60	27	58	60	20	6	12
HSKA63	HSKA63-FMB27-90	27	58	90	20	6	12
HSKA63	HSKA63-FMB27-150	27	58	150	20	6	12
HSKA63	HSKA63-FMB32-60	32	78	60	22	7	14
HSKA63	HSKA63-FMB32-90	32	78	90	22	7	14
HSKA63	HSKA63-FMB32-120	32	78	120	22	7	14
HSKA63	HSKA63-FMB40-60	40	80	60	25	8	16
HSKA63	HSKA63-FMB40-75	40	80	75	25	8	16
HSKA63	HSKA63-FMB40-105	40	80	105	25	8	16
HSKA100	HSKA100-FMB22-60	22	48	60	18	5	10
HSKA100	HSKA100-FMB22-90	22	48	90	18	5	10
HSKA100	HSKA100-FMB27-60	27	58	60	20	6	12
HSKA100	HSKA100-FMB27-90	27	58	90	20	6	12
HSKA100	HSKA100-FMB27-150	27	58	150	20	6	12
HSKA100	HSKA100-FMB32-60	32	78	60	22	7	14
HSKA100	HSKA100-FMB32-90	32	78	90	22	7	14
HSKA100	HSKA100-FMB32-150	32	78	150	22	7	14
HSKA100	HSKA100-FMB40-45	40	90	45	25	8	16
HSKA100	HSKA100-FMB40-75	40	90	75	25	8	16
HSKA100	HSKA100-FMB40-105	40	90	105	25	8	16
HSKA100	HSKA100-FMB40-150	40	90	150	25	8	16



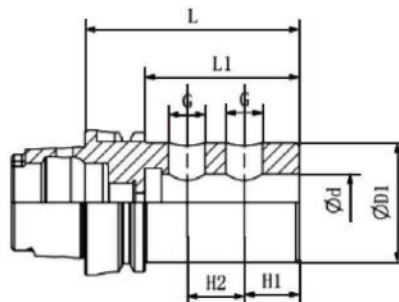
HSKA-SLA侧固式刀柄 HSKA-SLA Sidelock End Mill Holder

适合夹持带有削平柄的刀具

安装时请对准切削平面与螺帽孔位置, 以达到最好夹持效果

Suitable for clamping cutters with flattening tool

In order to achieve the best clamping effect, please align the cutting surface and nut hole position on installation



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					
			D1	L	L1	H1	H2	G
HSKA40	HSKA40-SLA6-60	6	25	60	38	18	-	M6*1
HSKA40	HSKA40-SLA8-60	8	28	60	38	18	-	M8*1.25
HSKA40	HSKA40-SLA10-60	10	35	60	38	20	-	M10*1.5
HSKA50	HSKA50-SLA6-60	6	25	60	38	18	-	M6*1
HSKA50	HSKA50-SLA8-60	8	28	60	38	18	-	M8*1.25
HSKA50	HSKA50-SLA10-60	10	35	60	38	20	-	M10*1.5
HSKA50	HSKA50-SLA12-60	12	42	60	38	22.5	-	M12*1.75
HSKA63	HSKA63-SLA6-75	6	25	75	48	18	-	M6*1
HSKA63	HSKA63-SLA8-75	8	28	75	48	18	-	M8*1.25
HSKA63	HSKA63-SLA10-75	10	35	75	48	20	-	M10*1.5
HSKA63	HSKA63-SLA12-75	12	42	75	48	22.5	-	M12*1.75
HSKA63	HSKA63-SLA16-75	16	48	75	48	24	-	M14*2
HSKA63	HSKA63-SLA20-90	20	50	90	63	25	-	M16*2
HSKA100	HSKA100-SLA6-105	6	25	105	67	18	-	M6*1
HSKA100	HSKA100-SLA8-105	8	28	105	67	18	-	M8*1.25
HSKA100	HSKA100-SLA10-105	10	35	105	67	20	-	M10*1.5
HSKA100	HSKA100-SLA12-105	12	42	105	67	22.5	-	M12*1.75
HSKA100	HSKA100-SLA16-105	16	48	105	67	24	-	M14*2
HSKA100	HSKA100-SLA20-105	20	50	105	67	25	-	M16*2
HSKA100	HSKA100-SLA25-105	25	57	105	67	24	25	M18*2
HSKA100	HSKA100-SLA32-105	32	63	105	67	24	28	M20*2
HSKA100	HSKA100-SLA40-120	40	80	120	82	30	32	M20*2
HSKA100	HSKA100-SLA42-120	42	82	120	82	30	32	M20*2

技术参数如有变动, 恕不另行通知

Technical parameters are subject to change without prior notice

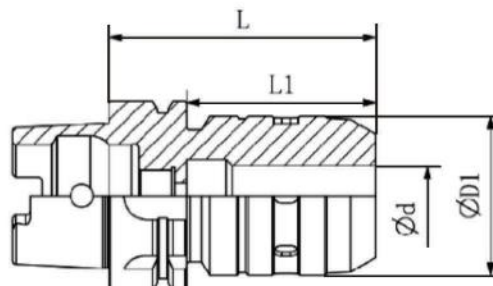
上表未列规格也可订做

Specifications not listed in the table above can also be customized

HSKA-C强力刀柄 HSKA-C Mega Holder

夹持力强大, 重力切削好帮手
可装配直筒夹, 夹持小直径刀具

Powerful clamping torque, which is good helper for heavy cutting
It is suitable for straight collet and small diameter cutters



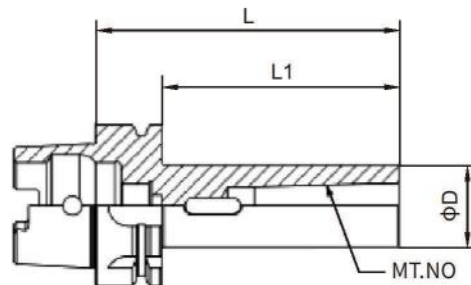
主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions				筒夹 Collet
		d	D1	L	L1	
HSKA50	HSKA50-C20-75	20	53	75	53	C20
HSKA50	HSKA50-C25-80	25	62	80	58	C25
HSKA63	HSKA63-C20-80	20	53	80	53	C20
HSKA63	HSKA63-C25-80	25	62	80	53	C25
HSKA63	HSKA63-C32-105	32	70	105	78	C32
HSKA63	HSKA63-C32-135	32	70	135	108	C32
HSKA63	HSKA63-C32-165	32	70	165	138	C32
HSKA100	HSKA100-C20-90	20	53	90	52	C20
HSKA100	HSKA100-C25-90	25	62	90	52	C25
HSKA100	HSKA100-C32-105	32	70	105	67	C32
HSKA100	HSKA100-C32-135	32	70	135	97	C32
HSKA100	HSKA100-C32-165	32	70	165	127	C32
HSKA100	HSKA100-C40-115	40	92	115	77	C40
HSKA100	HSKA100-C40-135	40	92	135	97	C40
HSKA100	HSKA100-C40-165	40	92	165	127	C40



HSKA-MTA莫氏锥度刀柄 HSKA-MTA Morse Taper Holder

适合莫氏锥柄刀具
有一定的自锁紧能力

Suitable for Morse taper cone cutter
Certain self-locking ability



主轴型号 Spindle Model	刀柄型号 Model No	MT.No	尺寸(mm) Dimensions		
			D	L	L1
HSKA50	HSKA50-MTA1-60	1	25	60	38
HSKA50	HSKA50-MTA2-60	2	32	60	38
HSKA50	HSKA50-MTA3-80	3	40	80	58
HSKA63	HSKA63-MTA1-45	1	25	45	18
HSKA63	HSKA63-MTA1-120	1	25	120	93
HSKA63	HSKA63-MTA2-45	2	32	45	18
HSKA63	HSKA63-MTA2-120	2	32	120	93
HSKA63	HSKA63-MTA3-75	3	40	75	48
HSKA63	HSKA63-MTA3-135	3	40	135	108
HSKA63	HSKA63-MTA4-90	4	50	90	63
HSKA100	HSKA100-MTA1-45	1	25	45	7
HSKA100	HSKA100-MTA1-120	1	25	120	82
HSKA100	HSKA100-MTA1-200	1	25	200	162
HSKA100	HSKA100-MTA2-45	2	32	45	7
HSKA100	HSKA100-MTA2-120	2	32	120	82
HSKA100	HSKA100-MTA2-200	2	32	200	162
HSKA100	HSKA100-MTA3-75	3	40	75	37
HSKA100	HSKA100-MTA3-150	3	40	150	112
HSKA100	HSKA100-MTA3-210	3	40	210	172
HSKA100	HSKA100-MTA4-75	4	50	75	37
HSKA100	HSKA100-MTA4-150	4	50	150	112
HSKA100	HSKA100-MTA4-210	4	50	210	172
HSKA100	HSKA100-MTA5-105	5	65	105	67
HSKA100	HSKA100-MTA5-210	5	65	210	172

技术参数如有变动，恕不另行通知

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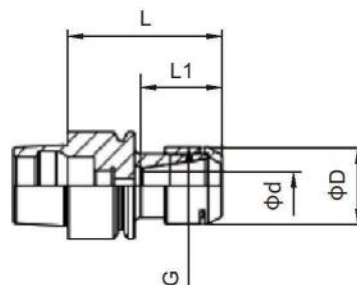
上表未列规格也可订做

Specifications not listed in the table above can also be customized

HSKE-ER-MS弹性筒夹刀柄 HSKE-ER-MS Collet Chuck

整体不锈钢材质，避免生锈
高速雕铣机专用刀柄
小型螺帽，更适合雕铣机用
非偏心螺帽，动平衡更好

Integral stainless steel material to avoid rusting
Special tool handle for high speed carving milling machine
Small nuts, more suitable for carving and milling machine
Non-eccentric nut, better dynamic balance



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions				适合螺帽 Nut	适合筒夹 Collet	防尘螺帽 rust-proof
			D	L	L1	G			
HSKE32	HSKE32-ER16-50MS	1-10	22	50	27	M19*1	ER16MS	ER16	MER16-A
HSKE32	HSKE32-ER20-50MS	1-13	28	50	27	M24*1	ER20MS	ER20	MER20-A
HSKE40	HSKE40-ER16-70MS	1-10	22	70	47	M19*1	ER16MS	ER16	MER16-A
HSKE40	HSKE40-ER20-70MS	1-13	28	70	47	M24*1	ER20MS	ER20	MER20-A

技术参数如有变动，恕不另行通知

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上表未列规格也可订做

Specifications not listed in the table above can also be customized

螺帽可换ER-MS-A防尘螺帽

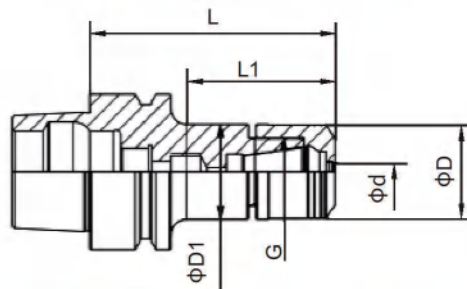
Replacable to ER-MS-A rust-proof nuts



HSKE-GER-A高速弹性筒夹密封刀柄 HSKE-GER-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯形螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling too
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKE40	HSKE40-GER16A-60	4-10	30	30.5	60	37	TR22*1.5	GER16A	ER16
HSKE40	HSKE40-GER16A-75	4-10	30	30.5	75	52	TR22*1.5	GER16A	ER16
HSKE40	HSKE40-GER16A-90	4-10	30	30.5	90	67	TR22*1.5	GER16A	ER16
HSKE50	HSKE50-GER16A-75	4-10	30	30.5	75	44	TR22*1.5	GER16A	ER16
HSKE50	HSKE50-GER16A-90	4-10	30	30.5	90	59	TR22*1.5	GER16A	ER16
HSKE50	HSKE50-GER20A-75	4-13	35	35.5	75	44	TR25*1.5	GER20A	ER20
HSKE50	HSKE50-GER20A-90	4-13	35	35.5	90	59	TR25*1.5	GER20A	ER20
HSKE50	HSKE50-GER20A-120	4-13	35	35.5	120	89	TR25*1.5	GER20A	ER20
HSKE50	HSKE50-GER25A-75	4-16	40	40.5	75	44	TR32*1.5	GER25A	ER25
HSKE50	HSKE50-GER25A-90	4-16	40	40.5	90	59	TR32*1.5	GER25A	ER25
HSKE50	HSKE50-GER25A-120	4-16	40	40.5	120	89	TR32*1.5	GER25A	ER25
HSKE63	HSKE63-GER16A-75	4-10	30	30.5	75	44	TR22*1.5	GER16A	ER16
HSKE63	HSKE63-GER16A-90	4-10	30	30.5	90	59	TR22*1.5	GER16A	ER16
HSKE63	HSKE63-GER20A-75	4-13	35	35.5	75	44	TR25*1.5	GER20A	ER20
HSKE63	HSKE63-GER20A-90	4-13	35	35.5	90	59	TR25*1.5	GER20A	ER20
HSKE63	HSKE63-GER20A-120	4-13	35	35.5	120	89	TR25*1.5	GER20A	ER20
HSKE63	HSKE63-GER25A-75	4-16	40	40.5	75	44	TR32*1.5	GER25A	ER25
HSKE63	HSKE63-GER25A-90	4-16	40	40.5	90	59	TR32*1.5	GER25A	ER25
HSKE63	HSKE63-GER25A-120	4-16	40	40.5	120	89	TR32*1.5	GER25A	ER25
HSKE63	HSKE63-GER32A-75	4-20	48	48.5	75	44	TR40*1.5	GER32A	ER32
HSKE63	HSKE63-GER32A-90	4-20	48	48.5	90	59	TR40*1.5	GER32A	ER32
HSKE63	HSKE63-GER32A-120	4-20	48	48.5	120	89	TR40*1.5	GER32A	ER32

技术参数如有变动，恕不另行通知

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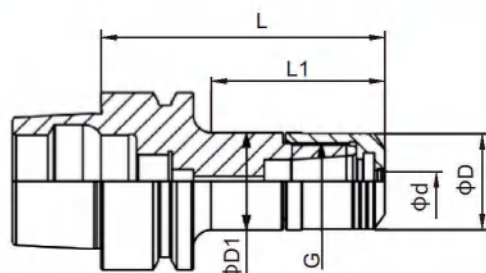
防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one chucking diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

HSKE-GSK-A高速弹性筒夹密封刀柄 HSKE-GDK-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling too
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKE40	HSKE40-GSK06A-75	4-6	19	19.5	75	50	TR15.5*1.0	GSK06A	SK06
HSKE40	HSKE40-GSK06A-90	4-6	19	19.5	90	65	TR15.5*1.0	GSK06A	SK06
HSKE40	HSKE40-GSK10A-75	4-10	27	27.5	75	50	TR21.5*1.0	GSK10A	SK10
HSKE40	HSKE40-GSK10A-90	4-10	27	27.5	90	65	TR21.5*1.0	GSK10A	SK10
HSKE40	HSKE40-GSK13A-75	4-13	33	33.5	75	53	TR27*1.0	GSK13A	SK13
HSKE40	HSKE40-GSK13A-90	4-13	33	33.5	90	68	TR27*1.0	GSK13A	SK13
HSKE40	HSKE40-GSK13A-120	4-13	33	33.5	120	98	TR27*1.0	GSK13A	SK13
HSKE50	HSKE50-GSK06A-75	4-6	19	19.5	75	44	TR15.5*1.0	GSK06A	SK06
HSKE50	HSKE50-GSK06A-90	4-6	19	19.5	90	59	TR15.5*1.0	GSK06A	SK06
HSKE50	HSKE50-GSK10A-75	4-10	27	27.5	75	44	TR21.5*1.0	GSK10A	SK10
HSKE50	HSKE50-GSK10A-90	4-10	27	27.5	90	59	TR21.5*1.0	GSK10A	SK10
HSKE50	HSKE50-GSK13A-75	4-13	33	33.5	75	44	TR27*1.0	GSK13A	SK13
HSKE50	HSKE50-GSK13A-90	4-13	33	33.5	90	59	TR27*1.0	GSK13A	SK13
HSKE50	HSKE50-GSK13A-120	4-13	33	33.5	120	89	TR27*1.0	GSK13A	SK13
HSKE50	HSKE50-GSK16A-75	4-16	40	40.5	75	47	TR32*1.5	GSK16A	SK16
HSKE50	HSKE50-GSK16A-90	4-16	40	40.5	90	62	TR32*1.5	GSK16A	SK16
HSKE50	HSKE50-GSK16A-120	4-16	40	40.5	120	92	TR32*1.5	GSK16A	SK16
HSKE63	HSKE63-GSK06A-75	4-6	19	19.5	75	44	TR15.5*1.0	GSK06A	SK06
HSKE63	HSKE63-GSK06A-90	4-6	19	19.5	90	59	TR15.5*1.0	GSK06A	SK06
HSKE63	HSKE63-GSK10A-75	4-10	27	27.5	75	44	TR21.5*1.0	GSK10A	SK10
HSKE63	HSKE63-GSK10A-90	4-10	27	27.5	90	59	TR21.5*1.0	GSK10A	SK10
HSKE63	HSKE63-GSK13A-75	4-13	33	33.5	75	44	TR27*1.0	GSK13A	SK13
HSKE63	HSKE63-GSK13A-90	4-13	33	33.5	90	59	TR27*1.0	GSK13A	SK13
HSKE63	HSKE63-GSK13A-120	4-13	33	33.5	120	89	TR27*1.0	GSK13A	SK13
HSKE63	HSKE63-GSK16A-75	4-16	40	40.5	75	44	TR32*1.5	GSK16A	SK16
HSKE63	HSKE63-GSK16A-90	4-16	40	40.5	90	59	TR32*1.5	GSK16A	SK16
HSKE63	HSKE63-GSK16A-120	4-16	40	40.5	120	89	TR32*1.5	GSK16A	SK16
HSKE63	HSKE63-GSK20A-75	4-20	48	48.5	75	44	TR40*1.5	GSK20A	SK20
HSKE63	HSKE63-GSK20A-90	4-20	48	48.5	90	59	TR40*1.5	GSK20A	SK20
HSKE63	HSKE63-GSK20A-120	4-20	48	48.5	120	89	TR40*1.5	GSK20A	SK20

技术参数如有变动，恕不另行通知

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Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

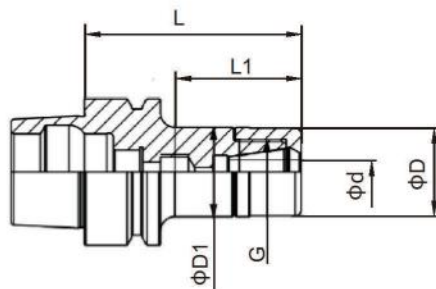
Dust-proof nuts can only be fitted with one chucking diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately



HSKE-GER高速弹性筒夹刀柄 HSKE-GER High Speed Collet Chuck

整体不锈钢材质，避免生锈
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Ladder screw design, torque increase 50%, avoid falling too
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKE40	HSKE40-GER16-60	1-10	30	30.5	60	37	TR22*1.5	GER16	ER16
HSKE40	HSKE40-GER16-75	1-10	30	30.5	75	52	TR22*1.5	GER16	ER16
HSKE40	HSKE40-GER16-90	1-10	30	30.5	90	67	TR22*1.5	GER16	ER16
HSKE50	HSKE50-GER16-75	1-10	30	30.5	75	44	TR22*1.5	GER16	ER16
HSKE50	HSKE50-GER16-90	1-10	30	30.5	90	59	TR22*1.5	GER16	ER16
HSKE50	HSKE50-GER20-75	1-13	35	35.5	75	44	TR25*1.5	GER20	ER20
HSKE50	HSKE50-GER20-90	1-13	35	35.5	90	59	TR25*1.5	GER20	ER20
HSKE50	HSKE50-GER20-120	1-13	35	35.5	120	89	TR25*1.5	GER20	ER20
HSKE50	HSKE50-GER25-75	2-16	40	40.5	75	44	TR32*1.5	GER25	ER25
HSKE50	HSKE50-GER25-90	2-16	40	40.5	90	59	TR32*1.5	GER25	ER25
HSKE50	HSKE50-GER25-120	2-16	40	40.5	120	89	TR32*1.5	GER25	ER25
HSKE63	HSKE63-GER16-75	1-10	30	30.5	75	44	TR22*1.5	GER16	ER16
HSKE63	HSKE63-GER16-90	1-10	30	30.5	90	59	TR22*1.5	GER16	ER16
HSKE63	HSKE63-GER20-75	1-13	35	35.5	75	44	TR25*1.5	GER20	ER20
HSKE63	HSKE63-GER20-90	1-13	35	35.5	90	59	TR25*1.5	GER20	ER20
HSKE63	HSKE63-GER20-120	1-13	35	35.5	120	89	TR25*1.5	GER20	ER20
HSKE63	HSKE63-GER25-75	2-16	40	40.5	75	44	TR32*1.5	GER25	ER25
HSKE63	HSKE63-GER25-90	2-16	40	40.5	90	59	TR32*1.5	GER25	ER25
HSKE63	HSKE63-GER25-120	2-16	40	40.5	120	89	TR32*1.5	GER25	ER25
HSKE63	HSKE63-GER32-75	3-20	48	48.5	75	44	TR40*1.5	GER32	ER32
HSKE63	HSKE63-GER32-90	3-20	48	48.5	90	59	TR40*1.5	GER32	ER32
HSKE63	HSKE63-GER32-120	3-20	48	48.5	120	89	TR40*1.5	GER32	ER32

技术参数如有变动，恕不另行通知

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上表未列规格也可订做

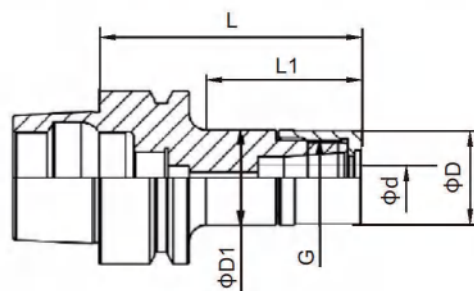
Specifications not listed in the table above can also be customized

HSKE-GSK高速弹性筒夹刀柄

HSKE-GSK High Speed Collet Chuck

整体不锈钢材质，避免生锈
 梯型螺牙设计，扭力提升50%，避免掉刀
 非偏心全圆螺帽，动平衡更佳
 光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
 Ladder screw design, torque increase 50%, avoid falling too
 Non-eccentric full round nut, better dynamic balance
 Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKE40	HSKE40-GSK06-75	1-6	19	19.5	75	50	TR15.5*1.0	GSK06	SK06
HSKE40	HSKE40-GSK06-90	1-6	19	19.5	90	65	TR15.5*1.0	GSK06	SK06
HSKE40	HSKE40-GSK10-75	2-10	27	27.5	75	50	TR21.5*1.0	GSK10	SK10
HSKE40	HSKE40-GSK10-90	2-10	27	27.5	90	65	TR21.5*1.0	GSK10	SK10
HSKE40	HSKE40-GSK13-75	3-13	33	33.5	75	53	TR27*1.0	GSK13	SK13
HSKE40	HSKE40-GSK13-90	3-13	33	33.5	90	68	TR27*1.0	GSK13	SK13
HSKE40	HSKE40-GSK13-120	3-13	33	33.5	120	98	TR27*1.0	GSK13	SK13
HSKE50	HSKE50-GSK06-75	1-6	19	19.5	75	44	TR15.5*1.0	GSK06	SK06
HSKE50	HSKE50-GSK06-90	1-6	19	19.5	90	59	TR15.5*1.0	GSK06	SK06
HSKE50	HSKE50-GSK10-75	2-10	27	27.5	75	44	TR21.5*1.0	GSK10	SK10
HSKE50	HSKE50-GSK10-90	2-10	27	27.5	90	59	TR21.5*1.0	GSK10	SK10
HSKE50	HSKE50-GSK13-75	3-13	33	33.5	75	44	TR27*1.0	GSK13	SK13
HSKE50	HSKE50-GSK13-90	3-13	33	33.5	90	59	TR27*1.0	GSK13	SK13
HSKE50	HSKE50-GSK13-120	3-13	33	33.5	120	89	TR27*1.0	GSK13	SK13
HSKE50	HSKE50-GSK16-75	3-16	40	40.5	75	47	TR32*1.5	GSK16	SK16
HSKE50	HSKE50-GSK16-90	3-16	40	40.5	90	62	TR32*1.5	GSK16	SK16
HSKE50	HSKE50-GSK16-120	3-16	40	40.5	120	92	TR32*1.5	GSK16	SK16
HSKE63	HSKE63-GSK06-75	1-6	19	19.5	75	44	TR15.5*1.0	GSK06	SK06
HSKE63	HSKE63-GSK06-90	1-6	19	19.5	90	59	TR15.5*1.0	GSK06	SK06
HSKE63	HSKE63-GSK10-75	2-10	27	27.5	75	44	TR21.5*1.0	GSK10	SK10
HSKE63	HSKE63-GSK10-90	2-10	27	27.5	90	59	TR21.5*1.0	GSK10	SK10
HSKE63	HSKE63-GSK13-75	3-13	33	33.5	75	44	TR27*1.0	GSK13	SK13
HSKE63	HSKE63-GSK13-90	3-13	33	33.5	90	59	TR27*1.0	GSK13	SK13
HSKE63	HSKE63-GSK13-120	3-13	33	33.5	120	89	TR27*1.0	GSK13	SK13
HSKE63	HSKE63-GSK16-75	3-16	40	40.5	75	44	TR32*1.5	GSK16	SK16
HSKE63	HSKE63-GSK16-90	3-16	40	40.5	90	59	TR32*1.5	GSK16	SK16
HSKE63	HSKE63-GSK16-120	3-16	40	40.5	120	89	TR32*1.5	GSK16	SK16
HSKE63	HSKE63-GSK20-75	4-20	48	48.5	75	44	TR40*1.5	GSK20	SK20
HSKE63	HSKE63-GSK20-90	4-20	48	48.5	90	59	TR40*1.5	GSK20	SK20
HSKE63	HSKE63-GSK20-120	4-20	48	48.5	120	89	TR40*1.5	GSK20	SK20

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized



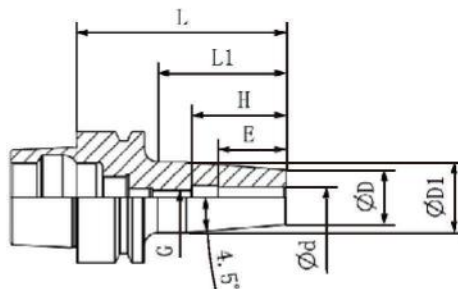
HSKE-SHR热缩刀柄 HSKE-SHR Shrink Fit Holder

夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
HSKE25	HSKE25-SHR6-50	6	15	19	50	35	M5	31	36
HSKE32	HSKE32-SHR6-70	6	21	27	70	45	M5	26	36
HSKE32	HSKE32-SHR8-70	8	21	27	70	45	M6	26	36
HSKE32	HSKE32-SHR10-70	10	24	32	70	45	M8*1	32	42
HSKE32	HSKE32-SHR12-70	12	24	32	70	45	M10*1	37	47
HSKE40	HSKE40-SHR6-80	6	21	27	80	55	M5	26	36
HSKE40	HSKE40-SHR8-80	8	21	27	80	55	M6	26	36
HSKE40	HSKE40-SHR10-80	10	24	32	80	55	M8*1	32	42
HSKE40	HSKE40-SHR12-80	12	24	32	80	55	M10*1	37	47
HSKE40	HSKE40-SHR14-90	14	27	34	90	68	M10*1	37	47
HSKE40	HSKE40-SHR16-90	16	27	34	90	68	M12*1	40	50
HSKE50	HSKE50-SHR6-80	6	21	27	80	49	M5	26	36
HSKE50	HSKE50-SHR8-80	8	21	27	80	49	M6	26	36
HSKE50	HSKE50-SHR10-85	10	24	32	85	54	M8*1	32	42
HSKE50	HSKE50-SHR12-90	12	24	32	90	59	M10*1	37	47
HSKE50	HSKE50-SHR14-90	14	27	34	90	59	M10*1	37	47
HSKE50	HSKE50-SHR16-95	16	27	34	95	64	M12*1	40	50
HSKE50	HSKE50-SHR18-95	18	33	42	95	67	M12*1	40	50
HSKE50	HSKE50-SHR20-100	20	33	42	100	72	M16*1	42	52
HSKE63	HSKE63-SHR6-80	6	21	27	80	49	M5	26	36
HSKE63	HSKE63-SHR8-80	8	21	27	80	49	M6	26	36
HSKE63	HSKE63-SHR10-85	10	24	32	85	54	M8*1	32	42
HSKE63	HSKE63-SHR12-90	12	24	32	90	59	M10*1	37	47
HSKE63	HSKE63-SHR14-90	14	27	34	90	59	M10*1	37	47
HSKE63	HSKE63-SHR16-95	16	27	42	95	64	M12*1	40	50
HSKE63	HSKE63-SHR18-95	18	33	42	95	64	M12*1	40	50
HSKE63	HSKE63-SHR20-100	20	33	51	100	132	M16*1	42	52
HSKE63	HSKE63-SHR25-115	25	44	53	115	132	M16*1	48	58

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance < h6 of handle diameter can be clamped, but not suitable for high speed steel tool

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

HSKE-SHR-S细长型热缩刀柄 HSKE-SHR-S Slim Shrink Fit Holder

夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后

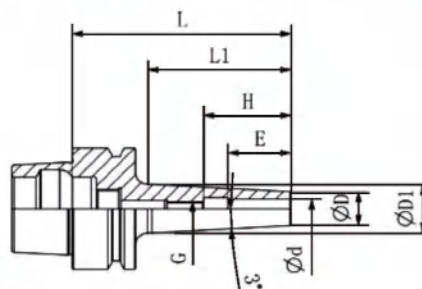
不用重新对刀

细长型干涉更小，适合加工深腔和形状复杂的工件

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no

For slim type holder the interference is smaller and suitable for



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
HSKE25	HSKE25-SHR6S-45	6	12	15.5	45	33	-	31	36
HSKE25	HSKE25-SHR6S-70	6	12	18	70	58	M5	31	36
HSKE25	HSKE25-SHR8S-50	8	14	18	50	38	-	31	36
HSKE25	HSKE25-SHR8S-70	8	14	18	70	58	M6	31	36
HSKE25	HSKE25-SHR10S-50	10	16	19	50	38	-	37	42
HSKE25	HSKE25-SHR10S-70	10	16	19	70	58	M8*1	37	42
HSKE32	HSKE32-SHR6S-75	6	12	17	75	53	M5	31	36
HSKE32	HSKE32-SHR6S-105	6	12	20	105	83	M5	31	36
HSKE32	HSKE32-SHR8S-75	8	14	19	75	53	M6	31	36
HSKE32	HSKE32-SHR8S-105	8	14	22	105	83	M6	31	36
HSKE32	HSKE32-SHR10S-80	10	16	21	80	58	M8*1	37	42
HSKE32	HSKE32-SHR10S-105	10	16	22	105	83	M8*1	37	42
HSKE40	HSKE40-SHR6S-65	6	12	18	65	40	M5	31	36
HSKE40	HSKE40-SHR6S-95	6	12	21	95	70	M5	31	36
HSKE40	HSKE40-SHR6S-115	6	12	24	115	90	M5	31	36
HSKE40	HSKE40-SHR8S-65	8	14	20	65	40	M6	31	36
HSKE40	HSKE40-SHR8S-95	8	14	23	95	70	M6	31	36
HSKE40	HSKE40-SHR8S-115	8	14	26	115	90	M6	31	36
HSKE40	HSKE40-SHR10S-65	10	16	22	65	40	M8*1	37	42
HSKE40	HSKE40-SHR10S-95	10	16	25	95	70	M8*1	37	42
HSKE40	HSKE40-SHR10S-115	10	16	28	115	90	M8*1	37	42
HSKE40	HSKE40-SHR12S-65	12	18	24	65	40	M10*1	42	47
HSKE40	HSKE40-SHR12S-95	12	18	27	95	70	M10*1	42	47
HSKE40	HSKE40-SHR12S-115	12	18	30	115	90	M10*1	42	47
HSKE50	HSKE50-SHR6S-90	6	12	18	90	59	M5	31	36
HSKE50	HSKE50-SHR6S-120	6	12	21	120	89	M5	31	36
HSKE50	HSKE50-SHR6S-150	6	12	24	150	119	M5	31	36
HSKE50	HSKE50-SHR8S-90	8	14	20	90	59	M6	31	36
HSKE50	HSKE50-SHR8S-120	8	14	23	120	89	M6	31	36
HSKE50	HSKE50-SHR8S-150	8	14	26	150	119	M6	31	36
HSKE50	HSKE50-SHR10S-90	10	16	22	90	59	M8*1	37	42
HSKE50	HSKE50-SHR10S-120	10	16	25	120	89	M8*1	37	42
HSKE50	HSKE50-SHR10S-150	10	16	28	150	119	M8*1	37	42
HSKE50	HSKE50-SHR12S-90	12	18	24	90	59	M10*1	42	47
HSKE50	HSKE50-SHR12S-120	12	18	27	120	89	M10*1	42	47
HSKE50	HSKE50-SHR12S-150	12	18	30	150	119	M10*1	42	47
HSKE50	HSKE50-SHR16S-90	16	22	28	90	59	M12*1	45	50
HSKE50	HSKE50-SHR16S-120	16	22	31	120	89	M12*1	45	50
HSKE50	HSKE50-SHR16S-150	16	22	34	150	119	M12*1	45	50

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance $< h6$ of handle diameter can be clamped, but not suitable for high speed steel tool

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

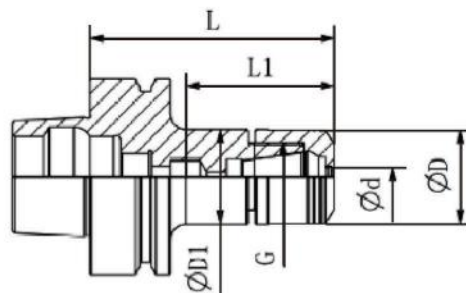
Specifications not listed in the table above can also be customized



HSKF-GER-A高速弹性筒夹密封刀柄 HSKF-GER-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling too
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKF50	HSKF50-GER16A-75	4-10	30	30.5	75	44	TR22*1.5	GER16A	ER16
HSKF50	HSKF50-GER16A-90	4-10	30	30.5	90	59	TR22*1.5	GER16A	ER16
HSKF50	HSKF50-GER20A-75	4-13	35	35.5	75	44	TR25*1.5	GER20A	ER20
HSKF50	HSKF50-GER20A-90	4-13	35	35.5	90	59	TR25*1.5	GER20A	ER20
HSKF50	HSKF50-GER20A-120	4-13	35	35.5	120	89	TR25*1.5	GER20A	ER20
HSKF50	HSKF50-GER25A-75	4-16	40	40.5	75	44	TR32*1.5	GER25A	ER25
HSKF50	HSKF50-GER25A-90	4-16	40	40.5	90	59	TR32*1.5	GER25A	ER25
HSKF50	HSKF50-GER25A-120	4-16	40	40.5	120	89	TR32*1.5	GER25A	ER25
HSKF63	HSKF63-GER16A-75	4-10	30	30.5	75	44	TR22*1.5	GER16A	ER16
HSKF63	HSKF63-GER16A-90	4-10	30	30.5	90	59	TR22*1.5	GER16A	ER16
HSKF63	HSKF63-GER20A-75	4-13	35	35.5	75	44	TR25*1.5	GER20A	ER20
HSKF63	HSKF63-GER20A-90	4-13	35	35.5	90	59	TR25*1.5	GER20A	ER20
HSKF63	HSKF63-GER20A-120	4-13	35	35.5	120	89	TR25*1.5	GER20A	ER20
HSKF63	HSKF63-GER25A-75	4-16	40	40.5	75	44	TR32*1.5	GER25A	ER25
HSKF63	HSKF63-GER25A-90	4-16	40	40.5	90	59	TR32*1.5	GER25A	ER25
HSKF63	HSKF63-GER25A-120	4-16	40	40.5	120	89	TR32*1.5	GER25A	ER25
HSKF63	HSKF63-GER32A-75	4-20	48	48.5	75	44	TR40*1.5	GER32A	ER32
HSKF63	HSKF63-GER32A-90	4-20	48	48.5	90	59	TR40*1.5	GER32A	ER32
HSKF63	HSKF63-GER32A-120	4-20	48	48.5	120	89	TR40*1.5	GER32A	ER32

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

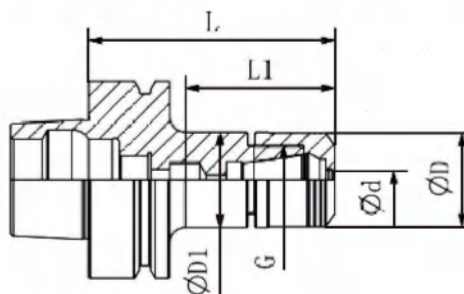
防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

HSKF-GSK-A高速弹性筒夹密封刀柄 HSKF-GSK-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling too
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
HSKF50	HSKF50-GSK06A-75	4-6	19	19.5	75	44	TR15.5*1.0	GSK06A	SK06
HSKF50	HSKF50-GSK06A-90	4-6	19	19.5	90	59	TR15.5*1.0	GSK06A	SK06
HSKF50	HSKF50-GSK10A-75	4-10	27	27.5	75	44	TR21.5*1.0	GSK10A	SK10
HSKF50	HSKF50-GSK10A-90	4-10	27	27.5	90	59	TR21.5*1.0	GSK10A	SK10
HSKF50	HSKF50-GSK13A-75	4-13	33	33.5	75	44	TR27*1.0	GSK13A	SK13
HSKF50	HSKF50-GSK13A-90	4-13	33	33.5	90	59	TR27*1.0	GSK13A	SK13
HSKF50	HSKF50-GSK13A-120	4-13	33	33.5	120	89	TR27*1.0	GSK13A	SK13
HSKF50	HSKF50-GSK16A-75	4-16	40	40.5	75	47	TR32*1.5	GSK16A	SK16
HSKF50	HSKF50-GSK16A-90	4-16	40	40.5	90	62	TR32*1.5	GSK16A	SK16
HSKF50	HSKF50-GSK16A-120	4-16	40	40.5	120	92	TR32*1.5	GSK16A	SK16
HSKF63	HSKF63-GSK06A-75	4-6	19	19.5	75	44	TR15.5*1.0	GSK06A	SK06
HSKF63	HSKF63-GSK06A-90	4-6	19	19.5	90	59	TR15.5*1.0	GSK06A	SK06
HSKF63	HSKF63-GSK10A-75	4-10	27	27.5	75	44	TR21.5*1.0	GSK10A	SK10
HSKF63	HSKF63-GSK10A-90	4-10	27	27.5	90	59	TR21.5*1.0	GSK10A	SK10
HSKF63	HSKF63-GSK13A-75	4-13	33	33.5	75	44	TR27*1.0	GSK13A	SK13
HSKF63	HSKF63-GSK13A-90	4-13	33	33.5	90	59	TR27*1.0	GSK13A	SK13
HSKF63	HSKF63-GSK13A-120	4-13	33	33.5	120	89	TR27*1.0	GSK13A	SK13
HSKF63	HSKF63-GSK16A-75	4-16	40	40.5	75	44	TR32*1.5	GSK16A	SK16
HSKF63	HSKF63-GSK16A-90	4-16	40	40.5	90	59	TR32*1.5	GSK16A	SK16
HSKF63	HSKF63-GSK16A-120	4-16	40	40.5	120	89	TR32*1.5	GSK16A	SK16
HSKF63	HSKF63-GSK20A-75	4-20	48	48.5	75	44	TR40*1.5	GSK20A	SK20
HSKF63	HSKF63-GSK20A-90	4-20	48	48.5	90	59	TR40*1.5	GSK20A	SK20
HSKF63	HSKF63-GSK20A-120	4-20	48	48.5	120	89	TR40*1.5	GSK20A	SK20

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately



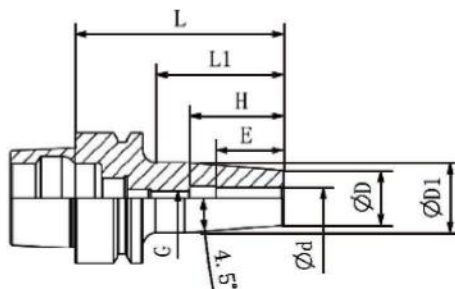
HSKF-SHR热缩刀柄 HSKF-SHR Shrink Fit Holder

夹持跳动小于等于0.003mm

内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
			D	D1	L	L1	G		
HSKF50	HSKF50-SHR6-80	6	21	27	80	49	M5	26	36
HSKF50	HSKF50-SHR8-80	8	21	27	80	49	M6	26	36
HSKF50	HSKF50-SHR10-85	10	24	32	85	54	M8*1	32	42
HSKF50	HSKF50-SHR12-90	12	24	32	90	59	M10*1	37	47
HSKF50	HSKF50-SHR14-90	14	27	34	90	59	M10*1	37	47
HSKF50	HSKF50-SHR16-95	16	27	34	95	64	M12*1	40	50
HSKF50	HSKF50-SHR18-95	18	33	42	95	67	M12*1	40	50
HSKF50	HSKF50-SHR20-100	20	33	42	100	72	M16*1	42	52
HSKF63	HSKF63-SHR6-80	6	21	27	80	49	M5	26	36
HSKF63	HSKF63-SHR8-80	8	21	27	80	49	M6	26	36
HSKF63	HSKF63-SHR10-85	10	24	32	85	54	M8*1	32	42
HSKF63	HSKF63-SHR12-90	12	24	32	90	59	M10*1	37	47
HSKF63	HSKF63-SHR14-90	14	27	34	90	59	M10*1	37	47
HSKF63	HSKF63-SHR16-95	16	27	42	95	64	M12*1	40	50
HSKF63	HSKF63-SHR18-95	18	33	42	95	64	M12*1	40	50
HSKF63	HSKF63-SHR20-100	20	33	51	100	132	M16*1	42	52
HSKF63	HSKF63-SHR25-115	25	44	53	115	132	M16*1	48	58

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance < h6 of handle diameter can be clamped, but not suitable for high speed steel tool

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

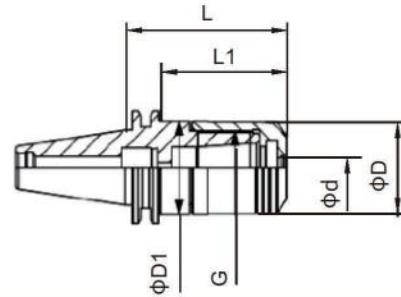
上表未列规格也可订做

Specifications not listed in the table above can also be customized

ISO-GSK-A高速弹性筒夹密封刀柄 ISO-GSK-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
ISO10	ISO10-GSK06A-35	1-6	19	19.5	35	29.5	M15.5*1	GSK06	SK06
ISO20	ISO20-GSK06A-35	1-6	19	19.5	35	29.5	M15.5*1	GSK06A	SK06
ISO20	ISO20-GSK10A-45	2-10	27	27.5	45	26.2	M21.5*1	GSK10A	SK10
ISO25	ISO25-GSK06A-45	1-6	19	19.5	45	29.5	M15.5*1	GSK06A	SK06
ISO25	ISO25-GSK10A-60	2-10	27	27.5	60	26.2	M21.5*1	GSK10A	SK10

技术参数如有变动，恕不另行通知
Technical parameters are subject to change without prior notice
上表未列规格也可订做
Specifications not listed in the table above can also be customized

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

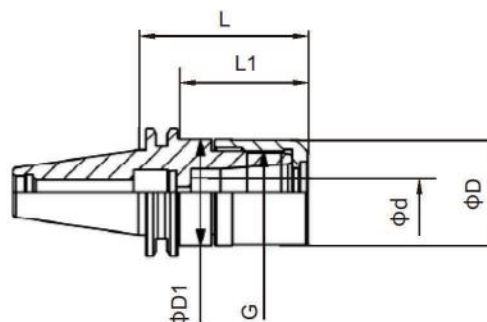
旋转刀柄



ISO-GSK高速弹性筒夹刀柄 ISO-GSK High Speed Collet Chuck

整体不锈钢材质，避免生锈
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



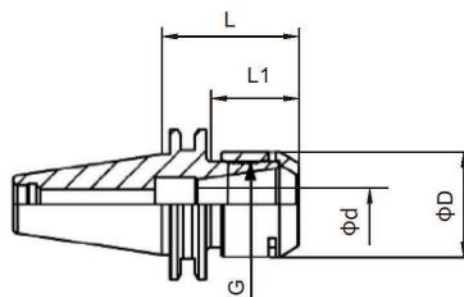
主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
ISO10	ISO10-GSK06-35	1-6	19	19.5	35	29.5	M15.5*1	GSK06	SK06
ISO20	ISO20-GSK06-35	1-6	19	19.5	35	29.5	M15.5*1	GSK06	SK06
ISO20	ISO20-GSK10-45	2-10	27	27.5	45	26.2	M21.5*1	GSK10	SK10
ISO25	ISO25-GSK06-45	1-6	19	19.5	45	29.5	M15.5*1	GSK06	SK06
ISO25	ISO25-GSK10-60	2-10	27	27.5	60	26.2	M21.5*1	GSK10	SK10

技术参数如有变动，恕不另行通知
Technical parameters are subject to change without prior notice
上表未列规格也可订做
Specifications not listed in the table above can also be customized

ISO-ER-MS弹性筒夹刀柄 ISO-ER-MS Collet Chuck

整体不锈钢材质，避免生锈
高速雕铣机专用刀柄
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Special tool handle for high speed carving milling machine
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



主轴型号 Spindle Model	刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions					适合螺帽 Nut	适合筒夹 Collet
			D	D1	L	L1	G		
SO10	ISO10-ER11-25MS	1-7	16	25	18.5	M14*0.75	ER11MS	ER11	MER11-A
ISO20	ISO20-ER16-35MS	1-10	22	35	27	M19*1	ER16MS	ER16	MER16-A
ISO20	ISO20-ER20-35MS	1-13	28	35	27	M24*1	ER20MS	ER20	MER20-A
ISO25	ISO25-ER16-35MS	1-10	22	35	27	M19*1	ER16MS	ER16	MER16-A
ISO25	ISO25-ER20-35MS	1-13	28	35	27	M24*1	ER20MS	ER20	MER20-A
ISO25	ISO25-ER25-35MS	2-16	35	35	27	M30*1	ER25MS	ER25	MER25-A

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted.

Nuts need to be purchased separately



SK液压刀柄

SK Hydraulic Expansion Tool Holder

德国设计与制造，品质卓越

夹持跳动小于等于0.003mm

转速为25,000 RPM时动平衡等级达到G2.5或 $U_{max} < 1 \text{ gmm}$

带轴向长度调节

用于自动换刀

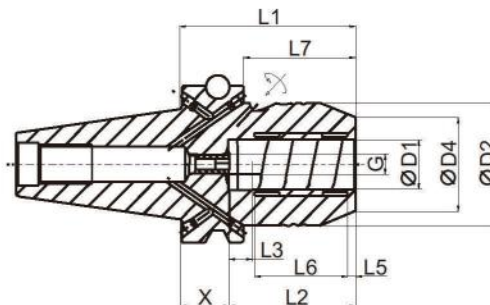
Germany design and manufacturing enables excellent quality

Runout accuracy $\leq 0.003 \text{ mm}$

Balancing grade G2.5 at 25,000 RPM or $U_{max} < 1 \text{ gmm}$

With axial length adjustment

For automatic tool change



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions							
		D1	D2	D4	X	L1	L2	L3	G
SK40	SK40-HE12-120	12	42	32	74	120	46	10	M8*1
SK40	SK40-HE20-120	20	49.5	38	69	120	51	10	M8*1
SK40	SK40-HE12-50	12	42	32	4	50	46	10	M8*1
SK40	SK40-HE16-64.5	16	49.5	38	13.5	64.5	51	10	M8*1
SK40	SK40-HE20-64.5	20	49.5	38	13.5	64.5	51	10	M8*1
SK50	SK50-HE12-50	12	42	32	4	50	46	10	M8*1
SK50	SK50-HE20-64.5	20	49.5	38	13.5	64.5	51	10	M8*1
SK50	SK50-HE32-81	32	72	58.5	20	81	61	10	M8*1

使用减径套可夹持更多直径尺寸

Additional shank diameters can be clamped using intermediate sleeves

刀具柄部公差等级h6

Tool shank quality h6

标准发货范围中不含驱动扳手

Scope of delivery without actuation key

CAPTO液压刀柄 CAPTO Hydraulic Expansion Tool Holder

德国设计与制造，品质卓越

夹持跳动小于等于0.003mm

转速为25,000 RPM时动平衡等级达到G2.5或 $U_{max} < 1\text{gmm}$

带轴向长度调节

用于自动换刀

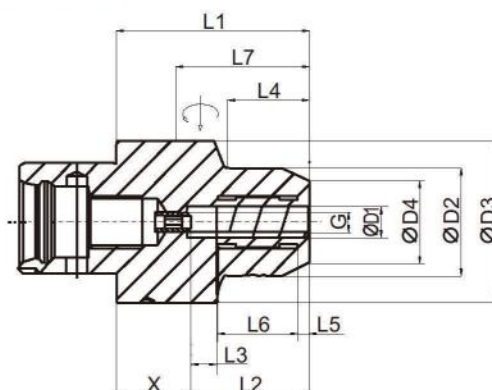
Germany design and manufacturing enables excellent quality

Runout accuracy $\leq 0.003\text{mm}$

Balancing grade G2.5 at 25,000 RPM or $U_{max} < 1\text{gmm}$

With axial length adjustment

For automatic tool change



主轴型号 Spindle Model	刀柄型号 Model No	尺寸(mm) Dimensions							
		D1	D2	D4	X	L1	L2	L3	G
CAPTO C4	CAPTO4-HE12-65	12	39.5	32		65	46	10	M8*1
CAPTO C4	CAPTO4-HE20-83	20	45.5	38		83	51	10	M8*1
CAPTO C5	CAPTO5-HE12-70	12	39.5	32		70	46	10	M8*1
CAPTO C5	CAPTO5-HE20-75	20	45.5	38		75	51	10	M8*1
CAPTO C6	CAPTO6-HE12-75	12	42	32		75	46	10	M8*1
CAPTO C6	CAPTO6-HE20-80	20	52.5	38		80	51	10	M8*1
CAPTO C6	CAPTO6-HE32-90	32	62.5	58.5		90	61	10	M8*1
CAPTO C6	CAPTO6-HE12-120	12	42	32		120	46	10	M8*1
CAPTO C6	CAPTO6-HE20-120	20	52.5	38		120	51	10	M8*1

使用减径套可夹持更多直径尺寸

Additional shank diameters can be clamped using intermediate sleeves

刀具柄部公差等级h6

Tool shank quality h6

标准发货范围中不含驱动扳手

Scope of delivery without actuation key

可按要求定制其他尺寸和特殊设计

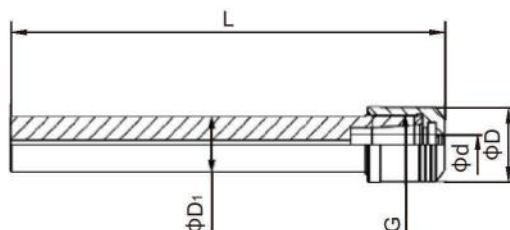
Additional sizes and special designs are available on request



ST-GER-A高速弹性筒夹密封刀柄 ST-GER-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions				适合螺帽 Nut	适合筒夹 Collet
		D	D1	L	G		
ST25-GER16A-100	1-10	30	25	100	TR22*1.5	GER16A	ER16
ST25-GER16A-150	1-10	30	25	150	TR22*1.5	GER16A	ER16
ST25-GER20A-100	1-13	35	25	100	TR25*1.5	GER20A	ER20
ST25-GER20A-150	1-13	35	25	150	TR25*1.5	GER20A	ER20
ST25-GER20A-200	1-13	35	25	200	TR25*1.5	GER20A	ER20
ST25-GER16A-100	1-10	30	25	100	TR22*1.5	GER16A	ER16
ST25-GER16A-150	1-10	30	25	150	TR22*1.5	GER16A	ER16
ST25-GER20A-100	1-13	35	25	100	TR25*1.5	GER20A	ER20
ST25-GER20A-150	1-13	35	25	150	TR25*1.5	GER20A	ER20
ST25-GER20A-200	1-13	35	25	200	TR25*1.5	GER20A	ER20
ST32-GER16A-100	1-10	30	32	100	TR22*1.5	GER16A	ER16
ST32-GER16A-150	1-10	30	32	150	TR22*1.5	GER16A	ER16
ST32-GER20A-100	1-13	35	32	100	TR25*1.5	GER20A	ER20
ST32-GER20A-150	1-13	35	32	150	TR25*1.5	GER20A	ER20
ST32-GER20A-200	1-13	35	32	200	TR25*1.5	GER20A	ER20
ST32-GER25A-100	2-16	40	32	100	TR32*1.5	GER25A	ER25
ST32-GER25A-150	2-16	40	32	150	TR32*1.5	GER25A	ER25
ST32-GER25A-200	2-16	40	32	200	TR32*1.5	GER25A	ER25

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

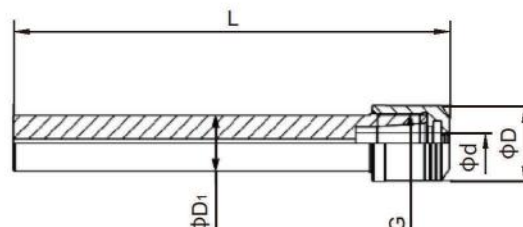
防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

ST-GSK-A高速弹性筒夹密封刀柄 ST-GSK-A High Speed Collet Sealing Chuck

整体不锈钢材质，避免生锈
防尘螺帽，避免精度丢失，提高筒夹寿命
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Dust-proof nuts to avoid loss of accuracy and improve collet life
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions				适合螺帽 Nut	适合筒夹 Collet
		D	D1	L	G		
ST20-GSK06A-100	1-6	19	20	100	TR15.5*1.0	GSK06A	SK06
ST20-GSK06A-150	1-6	19	20	150	TR15.5*1.0	GSK06A	SK06
ST20-GSK10A-100	2-10	27	20	100	TR21.5*1.0	GSK10A	SK10
ST20-GSK10A-150	2-10	27	20	150	TR21.5*1.0	GSK10A	SK10
ST25-GSK06A-100	1-6	19	25	100	TR15.5*1.0	GSK06A	SK06
ST25-GSK06A-150	1-6	19	25	150	TR15.5*1.0	GSK06A	SK06
ST25-GSK10A-100	2-10	27	25	100	TR21.5*1.0	GSK10A	SK10
ST25-GSK10A-150	2-10	27	25	150	TR21.5*1.0	GSK10A	SK10
ST32-GSK06A-100	1-6	19	32	100	TR15.5*1.0	GSK06A	SK06
ST32-GSK06A-150	1-6	19	32	150	TR15.5*1.0	GSK06A	SK06
ST32-GSK10A-100	2-10	27	32	100	TR21.5*1.0	GSK10A	SK10
ST32-GSK10A-150	2-10	27	32	150	TR21.5*1.0	GSK10A	SK10
ST32-GSK13A-100	3-13	33	32	100	TR27*1.0	GSK13A	SK13
ST32-GSK13A-150	3-13	33	32	150	TR27*1.0	GSK13A	SK13
ST32-GSK13A-200	3-13	33	32	200	TR27*1.0	GSK13A	SK13
ST32-GSK16A-100	3-16	40	32	100	TR32*1.5	GSK16A	SK16
ST32-GSK16A-150	3-16	40	32	150	TR32*1.5	GSK16A	SK16
ST32-GSK16A-200	3-16	40	32	200	TR32*1.5	GSK16A	SK16

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

防尘螺帽一个规格只能配一种夹持径，要夹持不同直径的刀具，需要配不同的螺帽，螺帽需另外选购

Dust-proof nuts can only be fitted with one clamping diameter per specification. To clamp cutters of different diameters, different nuts need to be fitted. Nuts need to be purchased separately

B

铣削

C

圆柄刀具

D

钻削

E

深孔加工

F

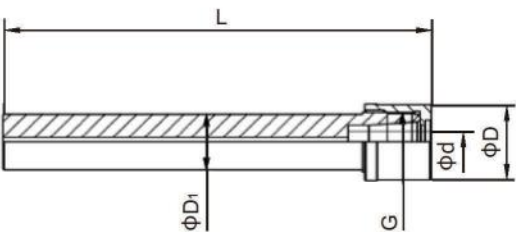
旋转刀柄



ST-GER高速弹性筒夹刀柄
ST-GER High Speed Collet Chuck

整体不锈钢材质，避免生锈
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



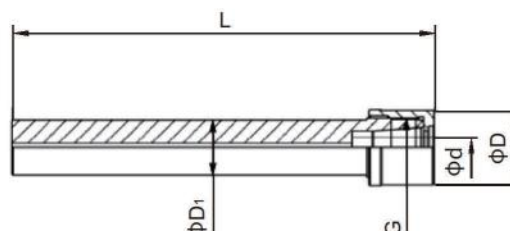
刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions				适合螺帽 Nut	适合筒夹 Collet
		D	D1	L	G		
ST25-GER16-100	1-10	30	25	100	TR22*1.5	GER16	ER16
ST25-GER16-150	1-10	30	25	150	TR22*1.5	GER16	ER16
ST25-GER20-100	1-13	35	25	100	TR25*1.5	GER20	ER20
ST25-GER20-150	1-13	35	25	150	TR25*1.5	GER20	ER20
ST25-GER20-200	1-13	35	25	200	TR25*1.5	GER20	ER20
ST32-GER16-100	1-10	30	32	100	TR22*1.5	GER16	ER16
ST32-GER16-150	1-10	30	32	150	TR22*1.5	GER16	ER16
ST32-GER20-100	1-13	35	32	100	TR25*1.5	GER20	ER20
ST32-GER20-150	1-13	35	32	150	TR25*1.5	GER20	ER20
ST32-GER20-200	1-13	35	32	200	TR25*1.5	GER20	ER20
ST32-GER25-100	2-16	40	32	100	TR32*1.5	GER25	ER25
ST32-GER25-150	2-16	40	32	150	TR32*1.5	GER25	ER25

技术参数如有变动，恕不另行通知
Technical parameters are subject to change without prior notice
上表未列规格也可订做
Specifications not listed in the table above can also be customized

ST-GSK高速弹性筒夹刀柄 ST-GSK High Speed Collet Chuck

整体不锈钢材质，避免生锈
梯型螺牙设计，扭力提升50%，避免掉刀
非偏心全圆螺帽，动平衡更佳
光滑外表，风阻小，噪音低

Integral stainless steel material to avoid rusting
Ladder screw design, torque increase 50%, avoid falling tool
Non-eccentric full round nut, better dynamic balance
Smooth appearance, low wind resistance, low noise



刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions				适合螺帽 Nut	适合筒夹 Collet
		D	D1	L	G		
ST20-GSK06-100	1-6	19	20	100	TR15.5*1.0	GSK06	SK06
ST20-GSK06-150	1-6	19	20	150	TR15.5*1.0	GSK06	SK06
ST20-GSK10-100	2-10	27	20	100	TR21.5*1.0	GSK10	SK10
ST20-GSK10-150	2-10	27	20	150	TR21.5*1.0	GSK10	SK10
ST25-GSK06-100	1-6	19	25	100	TR15.5*1.0	GSK06	SK06
ST25-GSK06-150	1-6	19	25	150	TR15.5*1.0	GSK06	SK06
ST25-GSK10-100	2-10	27	25	100	TR21.5*1.0	GSK10	SK10
ST25-GSK10-150	2-10	27	25	150	TR21.5*1.0	GSK10	SK10
ST32-GSK06-100	1-6	19	32	100	TR15.5*1.0	GSK06	SK06
ST32-GSK06-150	1-6	19	32	150	TR15.5*1.0	GSK06	SK06
ST32-GSK10-100	2-10	27	32	100	TR21.5*1.0	GSK10	SK10
ST32-GSK10-150	2-10	27	32	150	TR21.5*1.0	GSK10	SK10
ST32-GSK13-100	3-13	33	32	100	TR27*1.0	GSK13	SK13
ST32-GSK13-150	3-13	33	32	150	TR27*1.0	GSK13	SK13
ST32-GSK13-200	3-13	33	32	200	TR27*1.0	GSK13	SK13
ST32-GSK16-100	3-16	40	32	100	TR32*1.5	GSK16	SK16
ST32-GSK16-150	3-16	40	32	150	TR32*1.5	GSK16	SK16
ST32-GSK16-200	3-16	40	32	200	TR32*1.5	GSK16	SK16

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized



ST-SHR-S细长型热缩刀柄

ST-SHR-S High Slim Shrink Fit Holder

夹持跳动小于等于0.003mm

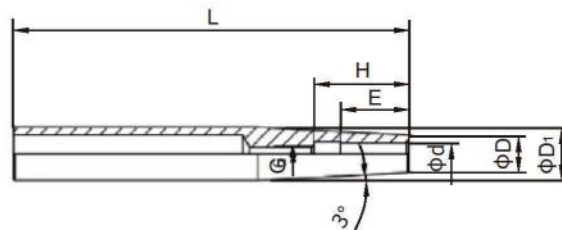
内有长度调整螺丝，可调节装夹长度，换刀后不用重新对刀

细长型干涉更小，适合加工深腔和形状复杂的工件

Runout accuracy $\leq 0.003\text{mm}$

Length adjusting screw inside to adjust clamping length, so that no need to re-setting the tool after tool changing

For slim type holder the interference is smaller and suitable for machining the workpiece with deep cavity and complex shape



刀柄型号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions				最小夹持长度E Min. Clamping Length	最大夹持长度H Max. Clamping Length
		D	D1	L	G		
ST20-SHR6S-100	6	12	20	100	M5	31	36
ST20-SHR6S-200	6	12	20	200	M5	31	36
ST20-SHR8S-100	8	14	20	100	M6	31	36
ST20-SHR8S-200	8	14	20	200	M6	31	36
ST20-SHR10S-100	10	16	20	100	M8*1	37	42
ST20-SHR10S-200	10	16	20	200	M8*1	37	42
ST25-SHR6S-100	6	12	25	100	M5	31	36
ST25-SHR6S-200	6	12	25	200	M5	31	36
ST25-SHR6S-300	6	12	25	300	M5	31	36
ST25-SHR8S-100	8	14	25	100	M6	31	36
ST25-SHR8S-200	8	14	25	200	M6	31	36
ST25-SHR8S-300	8	14	25	300	M6	31	36
ST25-SHR10S-100	10	16	25	100	M8*1	37	42
ST25-SHR10S-200	10	16	25	200	M8*1	37	42
ST25-SHR10S-300	10	16	25	300	M8*1	37	42
ST25-SHR12S-100	12	18	25	100	M10*1	42	47
ST25-SHR12S-200	12	18	25	200	M10*1	42	47
ST25-SHR12S-300	12	18	25	300	M10*1	42	47
ST32-SHR6S-100	6	12	32	100	M5	31	36
ST32-SHR6S-200	6	12	32	200	M5	31	36
ST32-SHR6S-300	6	12	32	300	M5	31	36
ST32-SHR8S-100	8	14	32	100	M6	31	36
ST32-SHR8S-200	8	14	32	200	M6	31	36
ST32-SHR8S-300	8	14	32	300	M6	31	36
ST32-SHR10S-100	10	16	32	100	M8*1	37	42
ST32-SHR10S-200	10	16	32	200	M8*1	37	42
ST32-SHR10S-300	10	16	32	300	M8*1	37	42
ST32-SHR12S-100	12	18	32	100	M10*1	42	47
ST32-SHR12S-200	12	18	32	200	M10*1	42	47
ST32-SHR12S-300	12	18	32	300	M10*1	42	47
ST32-SHR16S-100	16	22	32	100	M12*1	45	50
ST32-SHR16S-200	16	22	32	200	M12*1	45	50
ST32-SHR16S-300	16	22	32	300	M12*1	45	50

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance $< h6$ of handle diameter can be clamped, but not suitable for high speed steel tool

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

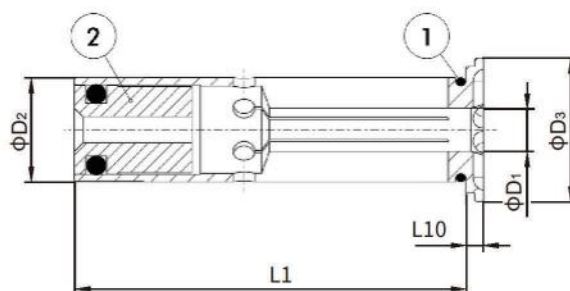
上表未列规格也可订做

Specifications not listed in the table above can also be customized

IS筒夹 Intermediate Sleeves

内部冷却
端面密封
可承受冷却液压力高达80 bar

Internal cooling
End surface seal
Cooling pressure up to max.80 bar



型 号 Model No.	尺寸(mm) Dimensions				
	d1	d2	d3	L1	L10
IS-12-IC3	3	12	16.5	45	2
IS-12-IC4	4	12	16.5	45	2
IS-12-IC5	5	12	16.5	45	2
IS-12-IC6	6	12	16.5	45	2
IS-12-IC8	8	12	16.5	45	2
IS-12-IC10	10	12	16.5	45	2
IS-20-IC3	3	20	24	50.5	2
IS-20-IC4	4	20	24	50.5	2
IS-20-IC5	5	20	24	50.5	2
IS-20-IC6	6	20	24	50.5	2
IS-20-IC7	7	20	24	50.5	2
IS-20-IC8	8	20	24	50.5	2
IS-20-IC9	9	20	24	50.5	2
IS-20-IC10	10	20	24	50.5	2
IS-20-IC11	11	20	24	50.5	2
IS-20-IC12	12	20	24	50.5	2
IS-20-IC13	13	20	24	50.5	2
IS-20-IC14	14	20	24	50.5	2
IS-20-IC15	15	20	24	50.5	2
IS-20-IC16	16	20	24	50.5	2
IS-32-IC6	6	32	16.5	45	2
IS-32-IC8	8	32	16.5	45	2
IS-32-IC10	10	32	16.5	45	2
IS-32-IC12	12	32	16.5	45	2
IS-32-IC14	14	32	16.5	45	2
IS-32-IC16	16	32	16.5	45	2
IS-32-IC18	18	32	16.5	45	2
IS-32-IC20	20	32	16.5	45	2
IS-32-IC25	25	32	16.5	45	2

只能夹持柄径公差h6以内的硬质合金（钨钢）刀具，不可夹持高速钢刀具

Only carbide (tungsten steel) tool with tolerance < h6 of handle diameter can be clamped, but not suitable for high speed steel tool

技术参数如有变动，恕不另行通知

Technical parameters are subject to change without prior notice

上表未列规格也可订做

Specifications not listed in the table above can also be customized

B

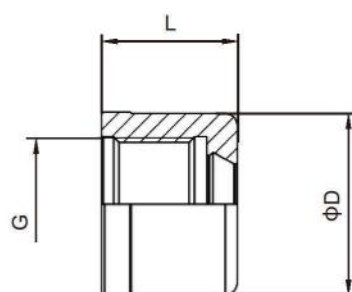
铣削

Pulcut
普努克

GER螺帽
GER Nuts

C

圆柄刀具



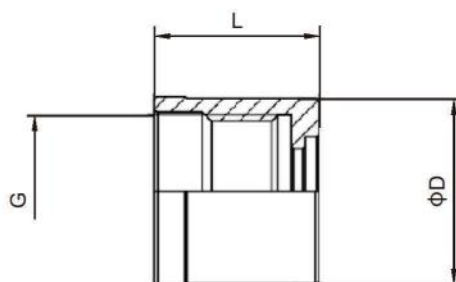
D

型 号 Model No	尺寸(mm) Dimensions		
	D	L	G
GER16	30	24.7	TR22×1.5
GER20	35	25.5	TR25×1.5
GER25	40	25.9	TR32×1.5
GER32	48	26.6	TR40×1.5

钻削

E

深孔加工



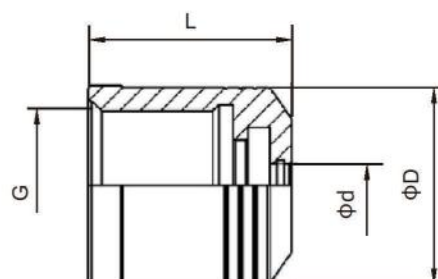
F

型 号 Model No	尺寸(mm) Dimensions		
	D	L	G
GSK06	19	21.3	TR15.5×1.0
GSK10	27	24	TR21.5×1.0
GSK13	33	24	TR27×1.0
GSK16	40	31	TR32×1.5
GSK20	48	50	TR40×1.0
GSK25	55	37.5	TR45×1.5

旋转刀柄

F64

GER-A防尘螺帽
GER-A Dust-proof Nuts



型 号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions		
		D	L	G
GER16A-4	4	30	27.7	TR22×1.5
GER16A-6	6	30	27.7	TR22×1.5
GER16A-8	8	30	27.7	TR22×1.5
GER16A-10	10	30	27.7	TR22×1.5
GER20A-4	4	35	28.5	TR25×1.5
GER20A-6	6	35	28.5	TR25×1.5
GER20A-8	8	35	28.5	TR25×1.5
GER20A-10	10	35	28.5	TR25×1.5
GER20A-12	12	35	28.5	TR25×1.5
GER25A-6	6	40	28.9	TR32×1.5
GER25A-8	8	40	28.9	TR32×1.5
GER25A-10	10	40	28.9	TR32×1.5
GER25A-12	12	40	28.9	TR32×1.5
GER25A-16	16	48	28.9	TR32×1.5
GER32A-10	10	48	29.6	TR40×1.5
GER32A-12	12	48	29.6	TR40×1.5
GER32A-16	16	48	29.6	TR40×1.5
GER32A-20	20	48	29.6	TR40×1.5

GER-A防尘螺帽
GER-A Dust-proof Nuts

B

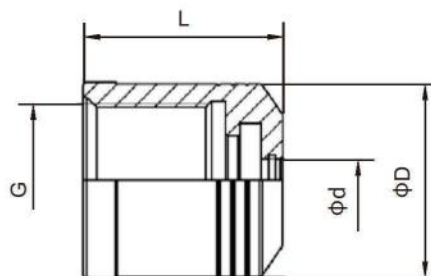
铣削

Pulcut
普努克

GSK-A防尘螺帽
GSK-A Dust-proof Nuts

C

圆柄刀具



D

钻削

E

深孔加工

F

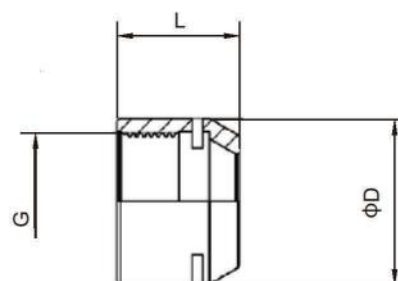
旋转刀柄

型 号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions		
		D	L	G
GSK06A-4	4	19	24.3	TR15.5×1.0
GSK06A-6	6	19	24.3	TR15.5×1.0
GSK10A-4	4	27	27	TR21.5×1.0
GSK10A-6	6	27	27	TR21.5×1.0
GSK10A-8	8	27	27	TR21.5×1.0
GSK10A-10	10	27	27	TR21.5×1.0
GSK13A-4	4	33	27	TR27×1.0
GSK13A-6	6	33	27	TR27×1.0
GSK13A-8	8	33	27	TR27×1.0
GSK13A-10	10	33	27	TR27×1.0
GSK13A-12	12	33	27	TR27×1.0
GSK16A-8	8	40	34	TR32×1.5
GSK16A-10	10	40	34	TR32×1.5
GSK16A-12	12	40	34	TR32×1.5
GSK16A-16	16	40	34	TR32×1.5
GSK20A-8	8	48	53	TR40×1.0
GSK20A-10	10	48	53	TR40×1.0
GSK20A-12	12	48	53	TR40×1.0
GSK20A-16	16	48	53	TR40×1.0
GSK20A-20	20	48	53	TR40×1.0
GSK25A-10	10	55	40.5	TR45×1.5
GSK25A-16	16	55	40.5	TR45×1.5
GSK25A-20	20	55	40.5	TR45×1.5
GSK25A-25	25	55	40.5	TR45×1.5

GSK-A防尘螺帽
GSK-A Dust-proof Nuts

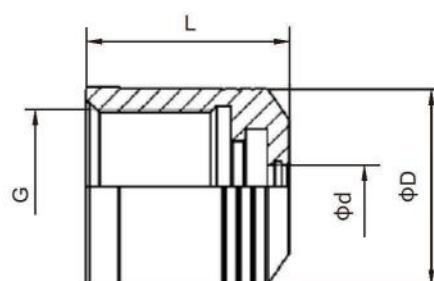
F66

ER-MS螺帽
ER-MS Nuts



型 号 Model No	尺寸(mm) Dimensions		
	D	L	G
ER16MS	23	23	M19×1.0
ER20MS	28	28	M24×1.0
ER25MS	35	35	M30×1.0

MER-A防尘螺帽
MER-A Dust-proof Nuts



型 号 Model No	夹持径d Clamping Diameter	尺寸(mm) Dimensions		
		D	L	G
MER16A-4	4	23	27.7	TR22×1.5
MER16A-6	6	23	27.7	TR22×1.5
MER16A-8	8	23	27.7	TR22×1.5
MER16A-10	10	23	27.7	TR22×1.5
MER20A-4	4	28	28.5	TR25×1.5
MER20A-6	6	28	28.5	TR25×1.5
MER20A-8	8	28	28.5	TR25×1.5
MER20A-10	10	28	28.5	TR25×1.5
MER20A-12	12	28	28.5	TR25×1.5
MER25A-6	6	35	23	M30×1.0
MER25A-8	8	35	23	M30×1.0
MER25A-10	10	35	23	M30×1.0
MER25A-12	12	35	23	M30×1.0
MER25A-16	16	35	23	M30×1.0

B

铣削

C

圆柄刀具

D

钻削

E

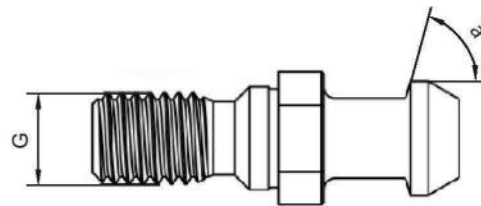
深孔加工

F

旋转刀柄



拉钉
Pullstud



主轴型号 Spindle Model	型 号 Model No.	尺寸(mm) Dimensions	
		A	G
BT30	BT30-45°	45°	M12
BT30	BT30-60°	60°	M12
BT40	BT40-45°	45°	M16
BT40	BT40-60°	60°	M16
BT50	BT50-45°	45°	M24
BT50	BT50-60°	60°	M24
ISO20	ISO20	75°	M8
ISO25	ISO25	75°	M8



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