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圆柄刀具 ROUND TOOLS

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- 硬质合金铣刀
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- 硬质合金钻头
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圆柄刀具

ROUND TOOLS

- **硬质合金铣刀 Solid carbide endmills**

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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。
The code key for solid carbide milling cutters use 9 groups of codes to indicate the size and other characteristics of the endmills. Check Example 1 for details.

示例 1：一般表示规则

Example 1: General Representation Rules

示例：TR2G-FD6-R0.5-H8-D6-50

Example:TR2G-FD6-R0.5-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：

The code key in the model indication rules are expressed as follows:

① 所对应代号表示—————加工用途。

The corresponding code representation—————Processing purposes

T	P	N	M	H	I	G	W
General purpose	Steel	Non-ferrous metals	Stainless steel	Hardened steel	Titanium alloys	High-temperature alloys	HRSA
						Non-metallic materials	

② 所对应代号表示—————刀具类型。

The corresponding code representation—————Tool Type

B	R	E	W	J
Ball Noseendmill	Fillet mill	End mill	Wave edgerough mill	Reamer

③ 所对应代号表示—————刀具刃数。

The corresponding code representation—————Number of flutes

2	3	4
2 flutes	3 flutes	4 flutes

④ 所对应代号表示—————刀具特征。

The corresponding code representation—————Tool Features

G	R	F
General	Roughing	Finishing

⑤ 所对应代号表示-----刀具有效直径。

The corresponding code representation-----Dia of cutting edge

⑥ 所对应代号表示-----特殊形状尺寸（刀尖圆角）。

The corresponding code representation--Special shape and size (Cutting Point radius)

⑦ 所对应代号表示-----有效刃长。

The corresponding code representation--Cutting edge length

⑧ 所对应代号表示-----柄部直径。

The corresponding code representation--Dia of shank

⑨ 所对应代号表示-----刀具总长。

The corresponding code representation--Total length

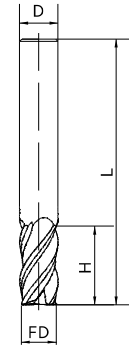


星耀系列高温合金铣刀

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。
- Unequal spiral groove design and unequal tooth spacing can reduce the vibration of the tool during machining, effectively improve tool life and workpiece surface.
- Special design of bottom edge and chip groove angle make chip flow more smooth and reduce the damage of the cutting point.
- Special design of bottom edge and chip groove angle make chip flow more smooth and reduce the damage of the cutting point.



订货规格	刃数	刃径	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Cutting edge length	Total length	Dia of Shank
	T	FD	H	L	D
GE2G-FD1-H3-D4-50	2	1.0	3.0	50.0	4.0
GE2G-FD1.5-H4-D4-50	2	1.5	4.0	50.0	4.0
GE4G-FD2-H5-D4-50	4	2.0	5.0	50.0	4.0
GE4G-FD3-H8-D4-50	4	3.0	8.0	50.0	4.0
GE4G-FD4-H10-D4-50	4	4.0	10.0	50.0	4.0
GE4G-FD5-H13-D6-50	4	5.0	13.0	50.0	6.0
GE4G-FD6-H15-D6-50	4	6.0	15.0	50.0	6.0
GE4G-FD8-H20-D8-60	4	8.0	20.0	60.0	8.0
GE4G-FD10-H25-D10-75	4	10.0	25.0	75.0	10.0
GE4G-FD12-H30-D12-75	4	12.0	30.0	75.0	12.0
GE4G-FD14-H35-D14-100	4	14.0	35.0	100.0	14.0
GE4G-FD16-H45-D16-100	4	16.0	45.0	100.0	16.0
GE4G-FD18-H45-D18-100	4	18.0	45.0	100.0	18.0
GE4G-FD20-H45-D20-100	4	20.0	45.0	100.0	20.0

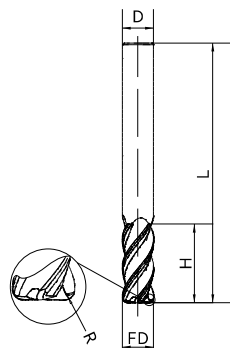
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星耀系列高温合金铣刀

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刀面设计。
- Unequal spiral groove design and unequal tooth spacing can reduce the vibration of the tool during machining, effectively improve tool life and workpiece surface quality.
- Special design of bottom edge and chip groove angle make chip flow more smooth and reduce the damage of the cutting point.
- Special treatment of cutting edge and the design of the flank surface around the teeth.
- Special treatment of cutting edge and the design of the flank surface around the teeth.



订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
GR2G-FD2-R0.1-H6-D4-50	2	2.0	0.1	6.0	50.0	4.0
GR2G-FD2-R0.2-H6-D4-50	2	2.0	0.2	6.0	50.0	4.0
GR4G-FD3-R0.1-H8-D4-50	4	3.0	0.1	8.0	50.0	4.0
GR4G-FD3-R0.2-H8-D4-50	4	3.0	0.2	8.0	50.0	4.0
GR4G-FD3-R0.3-H8-D4-50	4	3.0	0.3	8.0	50.0	4.0
GR4G-FD3-R0.5-H8-D4-50	4	3.0	0.5	8.0	50.0	4.0
GR4G-FD4-R0.1-H10-D4-50	4	4.0	0.1	10.0	50.0	4.0
GR4G-FD4-R0.2-H10-D4-50	4	4.0	0.2	10.0	50.0	4.0
GR4G-FD4-R0.3-H10-D4-50	4	4.0	0.3	10.0	50.0	4.0
GR4G-FD4-R0.5-H10-D4-50	4	4.0	0.5	10.0	50.0	4.0
GR4G-FD5-R0.1-H13-D6-50	4	5.0	0.1	13.0	50.0	6.0
GR4G-FD5-R0.2-H13-D6-50	4	5.0	0.2	13.0	50.0	6.0
GR4G-FD5-R0.3-H13-D6-50	4	5.0	0.3	13.0	50.0	6.0

星耀系列高温合金铣刀

Heat Resistance Endmills

订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
GR4G-FD5-R0.5-H13-D6-50	4	5.0	0.5	13.0	50.0	6.0
GR4G-FD6-R0.1-H15-D6-60	4	6.0	0.1	15.0	60.0	6.0
GR4G-FD6-R0.2-H15-D6-60	4	6.0	0.2	15.0	60.0	6.0
GR4G-FD6-R0.3-H15-D6-60	4	6.0	0.3	15.0	60.0	6.0
GR4G-FD6-R0.5-H15-D6-60	4	6.0	0.5	15.0	60.0	6.0
GR4G-FD8-R0.5-H20-D8-60	4	8.0	0.5	20.0	60.0	8.0
GR4G-FD8-R1-H20-D8-60	4	8.0	1.0	20.0	60.0	8.0
GR4G-FD8-R2-H20-D8-60	4	8.0	2.0	20.0	60.0	8.0
GR4G-FD10-R0.5-H25-D10-75	4	10.0	0.5	25.0	75.0	10.0
GR4G-FD10-R1-H25-D10-75	4	10.0	1.0	25.0	75.0	10.0
GR4G-FD10-R2-H25-D10-75	4	10.0	2.0	25.0	75.0	10.0
GR4G-FD12-R0.5-H30-D12-75	4	12.0	0.5	30.0	75.0	12.0
GR4G-FD12-R1-H30-D12-75	4	12.0	1.0	30.0	75.0	12.0
GR4G-FD12-R2-H30-D12-75	4	12.0	2.0	30.0	75.0	12.0
GR4G-FD14-R1-H35-D14-100	4	14.0	1.0	35.0	100.0	14.0
GR4G-FD14-R2-H35-D14-100	4	14.0	2.0	35.0	100.0	14.0
GR4G-FD14-R3-H35-D14-100	4	14.0	3.0	35.0	100.0	14.0
GR4G-FD16-R1-H40-D16-100	4	16.0	1.0	40.0	100.0	16.0
GR4G-FD16-R2-H40-D16-100	4	16.0	2.0	40.0	100.0	16.0
GR4G-FD16-R3-H40-D16-100	4	16.0	3.0	40.0	100.0	16.0
GR4G-FD18-R1-H45-D18-100	4	18.0	1.0	45.0	100.0	18.0
GR4G-FD18-R2-H45-D18-100	4	18.0	2.0	45.0	100.0	18.0
GR4G-FD18-R3-H45-D18-100	4	18.0	3.0	45.0	100.0	18.0
GR4G-FD20-R1-H50-D20-100	4	20.0	1.0	50.0	100.0	20.0
GR4G-FD20-R2-H50-D20-100	4	20.0	2.0	50.0	100.0	20.0
GR4G-FD20-R3-H50-D20-100	4	20.0	3.0	50.0	100.0	20.0

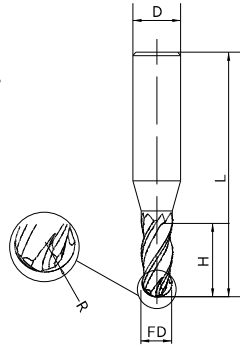
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星耀系列高温合金铣刀

Heat Resistance Endmills

● 球头铣刀 Ball nose 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。
- Unequal spiral groove design and unequal tooth spacing can reduce the vibration of the tool during machining.
- Special treatment of cutting edge and the design of the flank surface around the teeth.
- Suitable for super alloy of semi-finishing and finishing.
- Efficient machining with 4-edge ball end mill.
- Profiling processing.



公制型 Metric Type

订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
GB2G-FD1-R0.5-H2-D4-50	2	1.0	0.5	2.0	50.0	4.0
GB2G-FD2-R1-H4-D4-50	2	2.0	1.0	4.0	50.0	4.0
GB4G-FD3-R1.5-H6-D4-50	4	3.0	1.5	6.0	50.0	4.0
GB4G-FD4-R2-H8-D4-50	4	4.0	2.0	8.0	50.0	4.0
GB4G-FD5-R2.5-H12-D6-50	4	5.0	2.5	12.0	50.0	6.0
GB4G-FD6-R3-H15-D6-50	4	6.0	3.0	15.0	50.0	6.0
GB4G-FD7-R3.5-H20-D7-75	4	7.0	3.5	20.0	75.0	7.0
GB4G-FD8-R4-H25-D8-75	4	8.0	4.0	25.0	75.0	8.0
GB4G-FD10-R5-H30-D10-75	4	10.0	5.0	30.0	75.0	10.0
GB4G-FD12-R6-H35-D12-75	4	12.0	6.0	35.0	75.0	12.0
GB4G-FD16-R8-H45-D16-100	4	16.0	8.0	45.0	100.0	16.0
GB4G-FD20-R10-H50-D20-100	4	20.0	10.0	50.0	100.0	20.0

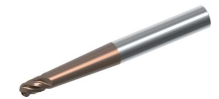
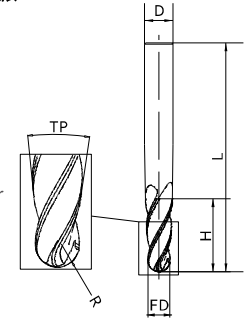
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星耀系列高温合金铣刀

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
- Solid carbide of SINKING END MILLS (for Heat-resistant Super Alloy).
- Unequal spiral groove design and unequal tooth spacing can reduce the vibration of the tool during machining.
- Suitable for Heat-resistant Super Alloy of semi-finishing and finishing.
- High efficient of profiling processing.
- Used for semi-finishing milling and finishing milling of workpiece taper surface.



公制型 Metric Type

订货规格	刃数	刃径	刀尖圆角	锥度	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Taper	Cutting edge length	Total length	Dia of Shank
	T	FD	R	Taper	H	L	D
GB4G-FD3-R1.5-A4-H12-D4-60	4	3.0	1.5	4°	12.0	60.0	4.0
GB4G-FD3-R1.5-A5-H12-D4-60	4	3.0	1.5	5°	12.0	60.0	4.0
GB4G-FD3-R1.5-A6-H12-D4-60	4	3.0	1.5	6°	12.0	60.0	4.0
GB4G-FD4-R2-A4-H12-D6-75	4	4.0	2.0	4°	12.0	75.0	6.0
GB4G-FD4-R2-A5-H12-D6-75	4	4.0	2.0	5°	12.0	75.0	6.0
GB4G-FD4-R2-A6-H12-D6-75	4	4.0	2.0	6°	12.0	75.0	6.0
GB4G-FD5-R2.5-A4-H15-D8-100	4	5.0	2.5	4°	15.0	100.0	8.0
GB4G-FD5-R2.5-A5-H15-D8-100	4	5.0	2.5	5°	15.0	100.0	8.0
GB4G-FD5-R2.5-A6-H15-D8-100	4	5.0	2.5	6°	15.0	100.0	8.0
GB4G-FD6-R3-A4-H15-D8-100	4	6.0	3.0	4°	15.0	100.0	8.0
GB4G-FD6-R3-A5-H15-D8-100	4	6.0	3.0	5°	15.0	100.0	8.0

星耀系列高温合金铣刀

Heat Resistance Endmills

● 锥度球头铣刀 Sinking end mills

订货规格	刃数	刃径	刀尖圆角	锥度	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Taper	Cutting edge length	Total length	Dia of Shank
	T	FD	R	Taper	H	L	D
GB4G-FD6-R3-A6-H15-D8-100	4	6.0	3.0	6°	15.0	100.0	8.0
GB4G-FD8-R4-A4-H15-D10-100	4	8.0	4.0	4°	15.0	100.0	10.0
GB4G-FD8-R5-A4-H15-D10-100	4	8.0	4.0	5°	15.0	100.0	10.0
GB4G-FD8-R6-A4-H15-D10-100	4	8.0	4.0	6°	15.0	100.0	10.0
GB4G-FD10-R5-A4-H20-D12-120	4	10.0	5.0	4°	20.0	120.0	12.0
GB4G-FD10-R5-A5-H20-D12-120	4	10.0	5.0	5°	20.0	120.0	12.0
GB4G-FD10-R5-A6-H20-D12-120	4	10.0	5.0	6°	20.0	120.0	12.0
GB4G-FD12-R6-A4-H25-D16-150	4	12.0	6.0	4°	25.0	150.0	16.0
GB4G-FD12-R6-A5-H25-D16-150	4	12.0	6.0	5°	25.0	150.0	16.0
GB4G-FD12-R6-A6-H25-D16-150	4	12.0	6.0	6°	25.0	150.0	16.0

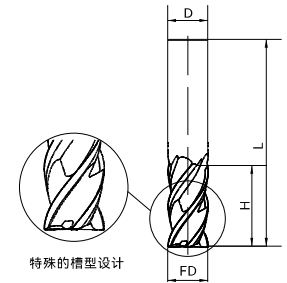
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星辉系列钛合金铣刀

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面设计
- Unequal spiral groove design and unequal tooth spacing can reduce the vibration of the tool during machining, effectively improve tool life and workpiece surface.
- Special groove design makes better chip flowing.
- Special design of bottom edge and chip groove angle make chip flow more smoothly and reduce the damage of the cutting point.
- Special treatment of cutting edge and the design of the flank surface around the teeth.



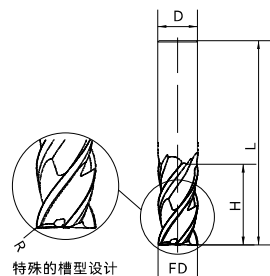
订货规格	刃数	刃径	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Cutting edge length	Total length	Dia of Shank
	T	FD	H	L	D
IE2G-FD1-H3-D4-50	2	1.0	3.0	50.0	4.0
IE2G-FD1.5-H4-D4-50	2	1.5	4.0	50.0	4.0
IE4G-FD2-H5-D4-50	4	2.0	5.0	50.0	4.0
IE4G-FD3-H8-D4-50	4	3.0	8.0	50.0	4.0
IE4G-FD4-H10-D4-50	4	4.0	10.0	50.0	4.0
IE4G-FD5-H12-D6-50	4	5.0	12.0	50.0	6.0
IE4G-FD6-H15-D6-50	4	6.0	15.0	50.0	6.0
IE4G-FD8-H20-D8-60	4	8.0	20.0	60.0	8.0
IE4G-FD10-H25-D10-75	4	10.0	25.0	75.0	10.0
IE4G-FD12-H30-D12-75	4	12.0	30.0	75.0	12.0
IE4G-FD14-H35-D14-100	4	14.0	35.0	100.0	14.0
IE4G-FD16-H45-D16-100	4	16.0	45.0	100.0	16.0
IE4G-FD18-H45-D18-100	4	18.0	45.0	100.0	18.0
IE4G-FD20-H45-D20-100	4	20.0	45.0	100.0	20.0

*接受订货 Accept order

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，有效提高了刀具的刚性，实现工件的高效切削。
- 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。
- Unequal spiral groove design and unequal tooth spacing can reduce the vibration of the tool during machining, effectively improve tool life and workpiece surface.
- The multi-slot design ensures the rigidity of the tool while ensuring the rigidity of the tool.
- Special design of bottom edge and chip groove angle make chip flow more smooth and insert tipless damage.
- Special treatment of cutting edge and the design of the flank surface around the teeth.



公制型 Metric Type



订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
IR2G-FD2-R0.1-H6-D4-50	2	2.0	0.1	6.0	50.0	4.0
IR2G-FD2-R0.2-H6-D4-50	2	2.0	0.2	6.0	50.0	4.0
IR4G-FD3-R0.1-H8-D4-50	4	3.0	0.1	8.0	50.0	4.0
IR4G-FD3-R0.2-H8-D4-50	4	3.0	0.2	8.0	50.0	4.0
IR4G-FD3-R0.3-H8-D4-50	4	3.0	0.3	8.0	50.0	4.0
IR4G-FD3-R0.5-H8-D4-50	4	3.0	0.5	8.0	50.0	4.0
IR4G-FD4-R0.1-H10-D4-50	4	4.0	0.1	10.0	50.0	4.0
IR4G-FD4-R0.2-H10-D4-50	4	4.0	0.2	10.0	50.0	4.0
IR4G-FD4-R0.3-H10-D4-50	4	4.0	0.3	10.0	50.0	4.0
IR4G-FD4-R0.5-H10-D4-50	4	4.0	0.5	10.0	50.0	4.0
IR4G-FD5-R0.1-H13-D6-50	4	5.0	0.1	13.0	50.0	6.0

星辉系列钛合金铣刀 Titanium Alloy Endmills

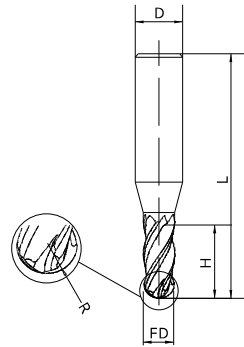
订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
IR4G-FD5-R0.2-H13-D6-50	4	5.0	0.2	13.0	50.0	6.0
IR4G-FD5-R0.3-H13-D6-50	4	5.0	0.3	13.0	50.0	6.0
IR4G-FD5-R0.5-H13-D6-50	4	5.0	0.5	13.0	50.0	6.0
IR4G-FD6-R0.1-H15-D6-60	4	6.0	0.1	15.0	60.0	6.0
IR4G-FD6-R0.2-H15-D6-60	4	6.0	0.2	15.0	60.0	6.0
IR4G-FD6-R0.3-H15-D6-60	4	6.0	0.3	15.0	60.0	6.0
IR4G-FD6-R0.5-H15-D6-60	4	6.0	0.5	15.0	60.0	6.0
IR4G-FD8-R0.5-H20-D8-60	4	8.0	0.5	20.0	60.0	8.0
IR4G-FD8-R1-H20-D8-60	4	8.0	1.0	20.0	60.0	8.0
IR4G-FD8-R2-H20-D8-60	4	8.0	2.0	20.0	60.0	8.0
IR4G-FD10-R0.5-H25-D10-75	4	10.0	0.5	25.0	75.0	10.0
IR4G-FD10-R1-H25-D10-75	4	10.0	1.0	25.0	75.0	10.0
IR4G-FD10-R2-H25-D10-75	4	10.0	2.0	25.0	75.0	10.0
IR4G-FD12-R0.5-H30-D12-75	4	12.0	0.5	30.0	75.0	12.0
IR4G-FD12-R1-H30-D12-75	4	12.0	1.0	30.0	75.0	12.0
IR4G-FD12-R2-H30-D12-75	4	12.0	2.0	30.0	75.0	12.0
IR4G-FD14-R1-H35-D14-100	4	14.0	1.0	35.0	100.0	14.0
IR4G-FD14-R2-H35-D14-100	4	14.0	2.0	35.0	100.0	14.0
IR4G-FD14-R3-H35-D14-100	4	14.0	3.0	35.0	100.0	14.0
IR4G-FD16-R1-H40-D16-100	4	16.0	1.0	40.0	100.0	16.0
IR4G-FD16-R2-H40-D16-100	4	16.0	2.0	40.0	100.0	16.0
IR4G-FD16-R3-H40-D16-100	4	16.0	3.0	40.0	100.0	16.0
IR4G-FD18-R1-H45-D18-100	4	18.0	1.0	45.0	100.0	18.0
IR4G-FD18-R2-H45-D18-100	4	18.0	2.0	45.0	100.0	18.0
IR4G-FD18-R3-H45-D18-100	4	18.0	3.0	45.0	100.0	18.0
IR4G-FD20-R1-H50-D20-100	4	20.0	1.0	50.0	100.0	20.0
IR4G-FD20-R2-H50-D20-100	4	20.0	2.0	50.0	100.0	20.0
IR4G-FD20-R3-H50-D20-100	4	20.0	3.0	50.0	100.0	20.0

*接受订货 Accept order

星辉系列钛合金铣刀 Titanium Alloy Endmills

● 球头铣刀 Ball nose 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
- Unequal spiral groove design and unequal tooth spacing can reduce the vibration of the tool during machining
- Special treatment of cutting edge and the design of the flank surface around the teeth.
- Solid carbide ball cutter suitable for semi-finishing and finishing of titanium alloy.
- Efficient machining with 4-edge ball end mill.
- Profiling processing.



公制型 Metric Type

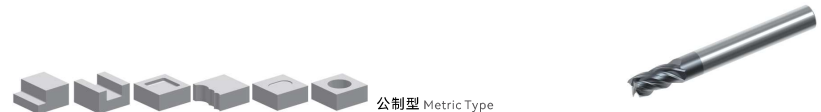
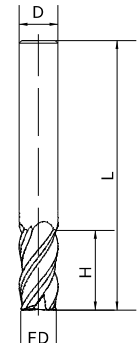
订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
IB2G-FD1-R0.5-H2-D4-50	2	1.0	0.5	2.0	50.0	4.0
IB2G-FD2-R1-H4-D4-50	2	2.0	1.0	4.0	50.0	4.0
IB4G-FD3-R1.5-H6-D4-50	4	3.0	1.5	6.0	50.0	4.0
IB4G-FD4-R2-H8-D4-50	4	4.0	2.0	8.0	50.0	4.0
IB4G-FD5-R2.5-H10-D6-50	4	5.0	2.5	10.0	50.0	6.0
IB4G-FD6-R3-H12-D6-50	4	6.0	3.0	12.0	50.0	6.0
IB4G-FD7-R3.5-15-D7-75	4	7.0	3.5	15.0	75.0	7.0
IB4G-FD8-R4-H16-D8-75	4	8.0	4.0	16.0	75.0	8.0
IB4G-FD10-R5-H20-D10-75	4	10.0	5.0	20.0	75.0	10.0
IB4G-FD12-R6-H24-D12-75	4	12.0	6.0	24.0	75.0	12.0
IB4G-FD16-R8-H32-D16-100	4	16.0	8.0	32.0	100.0	16.0
IB4G-FD20-R10-H40-D20-100	4	20.0	10.0	40.0	100.0	20.0

*接受订货 Accept order

星锐系列不锈钢专用铣刀 Stainless Endmills

● 平刀铣刀 Standard endmills

- 不锈钢专用型设计
- 用于不锈钢系列工件的加工应用
- 特殊的底刃设计及排屑槽角度，让排屑更通畅
- 特殊的切削刃口处理提高刀具的使用寿命
- Special design for stainless steel, used for machining of stainless steel series workpieces
- Special bottom edge design and chip flute angle make chip removal smoother.
- Special cutting-edge treatment improves the tool life.



公制型 Metric Type

订货规格	刃数	刃径	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Cutting edge length	Total length	Dia of Shank
	T	FD	H	L	D
ME2G-FD1-H3-D4-50	2	1.0	3.0	50.0	4.0
ME2G-FD1.5-H4-D4-50	2	1.5	4.0	50.0	4.0
ME4G-FD2-H6-D4-50	4	2.0	6.0	50.0	4.0
ME4G-FD3-H9-D4-50	4	3.0	9.0	50.0	4.0
ME4G-FD4-H12-D4-50	4	4.0	12.0	50.0	4.0
ME4G-FD5-H15-D6-50	4	5.0	15.0	50.0	6.0
ME4G-FD6-H18-D6-50	4	6.0	18.0	50.0	6.0
ME4G-FD8-H24-D8-60	4	8.0	24.0	60.0	8.0
ME4G-FD10-H30-D10-75	4	10.0	30.0	75.0	10.0
ME4G-FD12-H35-D12-75	4	12.0	35.0	75.0	12.0
ME4G-FD14-H45-D14-100	4	14.0	45.0	100.0	14.0
ME4G-FD16-H45-D16-100	4	16.0	45.0	100.0	16.0
ME4G-FD18-H50-D18-100	4	18.0	50.0	100.0	18.0
ME4G-FD20-H50-D20-100	4	20.0	50.0	100.0	20.0

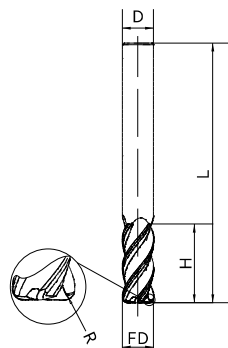
*接受订货 Accept order

星锐系列不锈钢专用铣刀

Stainless Endmills

● 圆角铣刀 Standard endmills with various radius

- 不锈钢专用型设计
- 用于不锈钢系列工件的加工应用
- 特殊的底刃设计及排屑槽角度，让排屑更通畅
- 特殊的切削刃口处理及R圆角处特殊过渡提高刀具的使用寿命
- Unique design for stainless steel, used for machining of stainless steel series workpieces
- Special bottom edge design and chip flute angle make chip removal smoother.
- Special cutting-edge treatment and special transition at rounded corners improve the tool life.



订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
MR2G-FD2-R0.1-H6-D4-50	2	2.0	0.1	6.0	50.0	4.0
MR2G-FD2-R0.2-H6-D4-50	2	2.0	0.2	6.0	50.0	4.0
MR4G-FD3-R0.1-H8-D4-50	4	3.0	0.1	8.0	50.0	4.0
MR4G-FD3-R0.2-H8-D4-50	4	3.0	0.2	8.0	50.0	4.0
MR4G-FD3-R0.3-H8-D4-50	4	3.0	0.3	8.0	50.0	4.0
MR4G-FD3-R0.5-H8-D4-50	4	3.0	0.5	8.0	50.0	4.0
MR4G-FD4-R0.1-H10-D4-50	4	4.0	0.1	10.0	50.0	4.0
MR4G-FD4-R0.2-H10-D4-50	4	4.0	0.2	10.0	50.0	4.0
MR4G-FD4-R0.3-H10-D4-50	4	4.0	0.3	10.0	50.0	4.0
MR4G-FD4-R0.5-H10-D4-50	4	4.0	0.5	10.0	50.0	4.0
MR4G-FD5-R0.1-H13-D6-50	4	5.0	0.1	13.0	50.0	6.0
MR4G-FD5-R0.2-H13-D6-50	4	5.0	0.2	13.0	50.0	6.0
MR4G-FD5-R0.3-H13-D6-50	4	5.0	0.3	13.0	50.0	6.0
MR4G-FD5-R0.5-H13-D6-50	4	5.0	0.5	13.0	50.0	6.0
MR4G-FD6-R0.1-H15-D6-60	4	6.0	0.1	15.0	60.0	6.0



星锐系列不锈钢专用铣刀

Stainless Endmills

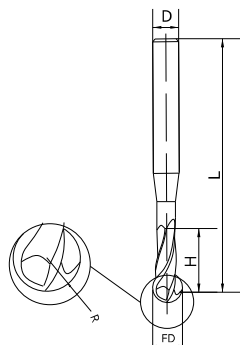
订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
MR4G-FD6-R0.2-H15-D6-60	4	6.0	0.2	15.0	60.0	6.0
MR4G-FD6-R0.3-H15-D6-60	4	6.0	0.3	15.0	60.0	6.0
MR4G-FD6-R0.5-H15-D6-60	4	6.0	0.5	15.0	60.0	6.0
MR4G-FD8-R0.5-H20-D8-60	4	8.0	0.5	20.0	60.0	8.0
MR4G-FD8-R1-H20-D8-60	4	8.0	1.0	20.0	60.0	8.0
MR4G-FD8-R2-H20-D8-60	4	8.0	2.0	20.0	60.0	8.0
MR4G-FD10-R0.5-H25-D10-75	4	10.0	0.5	25.0	75.0	10.0
MR4G-FD10-R1-H25-D10-75	4	10.0	1.0	25.0	75.0	10.0
MR4G-FD10-R2-H25-D10-75	4	10.0	2.0	25.0	75.0	10.0
MR4G-FD12-R0.5-H30-D12-75	4	12.0	0.5	30.0	75.0	12.0
MR4G-FD12-R1-H30-D12-75	4	12.0	1.0	30.0	75.0	12.0
MR4G-FD12-R2-H30-D12-75	4	12.0	2.0	30.0	75.0	12.0
MR4G-FD14-R1-H35-D14-100	4	14.0	1.0	35.0	100.0	14.0
MR4G-FD14-R2-H35-D14-100	4	14.0	2.0	35.0	100.0	14.0
MR4G-FD14-R3-H35-D14-100	4	14.0	3.0	35.0	100.0	14.0
MR4G-FD16-R1-H40-D16-100	4	16.0	1.0	40.0	100.0	16.0
MR4G-FD16-R2-H40-D16-100	4	16.0	2.0	40.0	100.0	16.0
MR4G-FD16-R3-H40-D16-100	4	16.0	3.0	40.0	100.0	16.0
MR4G-FD18-R1-H45-D18-100	4	18.0	1.0	45.0	100.0	18.0
MR4G-FD18-R2-H45-D18-100	4	18.0	2.0	45.0	100.0	18.0
MR4G-FD18-R3-H45-D18-100	4	18.0	3.0	45.0	100.0	18.0
MR4G-FD20-R1-H50-D20-100	4	20.0	1.0	50.0	100.0	20.0
MR4G-FD20-R2-H50-D20-100	4	20.0	2.0	50.0	100.0	20.0
MR4G-FD20-R3-H50-D20-100	4	20.0	3.0	50.0	100.0	20.0

*接受订货 Accept order

星锐系列不锈钢专用铣刀 Stainless Endmills

● 球头铣刀 Ball nose endmills

- 不锈钢专用型设计
- 用于不锈钢系列工件的加工应用
- 特殊的底刃设计及排屑槽角度，让排屑更通畅
- 特殊的切削刃口处理及圆角处特殊过渡，提高刀具的使用寿命
- 用于仿形加工
- Unique design for stainless steel, used for machining of stainless steel series workpieces.
- Special bottom edge design and chip flute angle make chip removal smoother.
- Special cutting-edge treatment and special transition at rounded corners improve the tool life.
- Profiling machining.



公制型 Metric Type



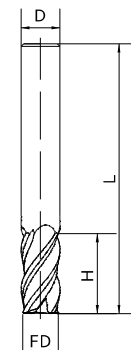
订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
MB2G-FD1-R0.5-H2-D4-50	2	1.0	0.5	2.0	50.0	4.0
MB2G-FD2-R1-H4-D4-50	2	2.0	1.0	4.0	50.0	4.0
MB2G-FD3-R1.5-H6-D4-50	2	3.0	1.5	6.0	50.0	4.0
MB2G-FD4-R2-H8-D4-50	2	4.0	2.0	8.0	50.0	4.0
MB2G-FD5-R2.5-H10-D6-50	2	5.0	2.5	10.0	50.0	6.0
MB2G-FD6-R3-H12-D6-50	2	6.0	3.0	12.0	50.0	6.0
MB2G-FD8-R4-H16-D8-75	2	8.0	4.0	16.0	75.0	8.0
MB2G-FD10-R5-H20-D10-75	2	10.0	5.0	20.0	75.0	10.0
MB2G-FD12-R6-H24-D12-75	2	12.0	6.0	24.0	75.0	12.0
MB4G-FD16-R8-H32-D16-100	4	16.0	8.0	32.0	100.0	16.0
MB4G-FD20-R10-H40-D20-100	4	20.0	10.0	40.0	100.0	20.0

*接受订货 Accept order

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
- Multiple workpiece machining applications for multiple industries.
- Special bottom edge design and chip flute angle for smooth chip evacuation and reduced tip damage.
- Special cutting edge treatment and peripheral tooth flank.



公制型 Metric Type



订货规格	刃数	刃径	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Cutting edge length	Total length	Dia of Shank
	T	FD	H	L	D
PE2G-FD1-H3-D4-50	2	1.0	3.0	50.0	4.0
PE2G-FD1.5-H4-D4-50	2	1.5	4.0	50.0	4.0
PE4G-FD2-H6-D4-50	4	2.0	6.0	50.0	4.0
PE4G-FD3-H9-D4-50	4	3.0	9.0	50.0	4.0
PE4G-FD4-H12-D4-50	4	4.0	12.0	50.0	4.0
PE4G-FD5-H15-D6-50	4	5.0	15.0	50.0	6.0
PE4G-FD6-H18-D6-50	4	6.0	18.0	50.0	6.0
PE4G-FD8-H24-D8-60	4	8.0	24.0	60.0	8.0
PE4G-FD10-H30-D10-75	4	10.0	30.0	75.0	10.0
PE4G-FD12-H35-D12-75	4	12.0	35.0	75.0	12.0
PE4G-FD14-H45-D14-100	4	14.0	45.0	100.0	14.0
PE4G-FD16-H45-D16-100	4	16.0	45.0	100.0	16.0
PE4G-FD18-H50-D18-100	4	18.0	50.0	100.0	18.0
PE4G-FD20-H50-D20-100	4	20.0	50.0	100.0	20.0

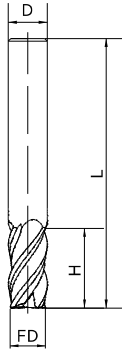
*接受订货 Accept order

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
- Universal design for hole processing of steel.
- Multiple workpiece machining applications for multiple industries.
- Special bottom edge design and chip flute angle for smooth chip evacuation and reduced tip damage.
- Special cutting edge treatment and peripheral tooth flank.



公制型 Metric Type

订货规格 Specification	刃数 No. of flute	刃径 Dia of cutting edge	刃长 Cutting edge length	总长 Total length	柄径 Dia of Shank
	T	FD	H	L	D
PE4G-FD3-H15-D6-75	4	3.0	15.0	75.0	6.0
PE4G-FD4-H20-D6-75	4	4.0	20.0	75.0	6.0
PE4G-FD5-H25-D6-75	4	5.0	25.0	75.0	6.0
PE4G-FD6-H30-D6-75	4	6.0	30.0	75.0	6.0
PE4G-FD8-H35-D8-100	4	8.0	35.0	100.0	8.0
PE4G-FD10-H45-D10-100	4	10.0	45.0	100.0	10.0
PE4G-FD12-H45-D12-100	4	12.0	45.0	100.0	12.0
PE4G-FD14-H50-D14-150	4	14.0	50.0	150.0	14.0
PE4G-FD16-H60-D16-150	4	16.0	60.0	150.0	16.0
PE4G-FD18-H70-D18-150	4	18.0	70.0	150.0	18.0
PE4G-FD20-H75-D20-150	4	20.0	75.0	150.0	20.0

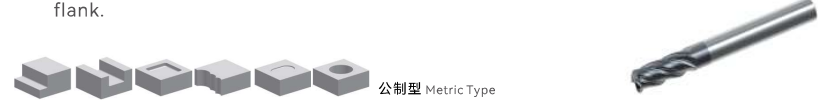
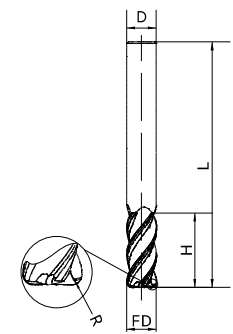
*接受订货 Accept order

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
- Universal design for hole processing of steel.
- Multiple workpiece machining applications for multiple industries.
- Special bottom edge design and chip flute angle for smooth chip evacuation and reduced tip damage.
- Special cutting edge treatment and peripheral tooth flank.



公制型 Metric Type

订货规格 Specification	刃数 No. of flute	刃径 Dia of cutting edge	刀尖圆角 Radius	刃长 Cutting edge length	总长 Total length	柄径 Dia of Shank
	T	FD	R	H	L	D
PR2G-FD2-R0.1-H6-D4-50	2	2.0	0.1	6.0	50.0	4.0
PR2G-FD2-R0.2-H6-D4-50	2	2.0	0.2	6.0	50.0	4.0
PR4G-FD3-R0.1-H8-D4-50	4	3.0	0.1	8.0	50.0	4.0
PR4G-FD3-R0.2-H8-D4-50	4	3.0	0.2	8.0	50.0	4.0
PR4G-FD3-R0.3-H8-D4-50	4	3.0	0.3	8.0	50.0	4.0
PR4G-FD3-R0.5-H8-D4-50	4	3.0	0.5	8.0	50.0	4.0
PR4G-FD4-R0.1-H10-D4-50	4	4.0	0.1	10.0	50.0	4.0
PR4G-FD4-R0.2-H10-D4-50	4	4.0	0.2	10.0	50.0	4.0
PR4G-FD4-R0.3-H10-D4-50	4	4.0	0.3	10.0	50.0	4.0
PR4G-FD4-R0.5-H10-D4-50	4	4.0	0.5	10.0	50.0	4.0
PR4G-FD5-R0.1-H13-D6-50	4	5.0	0.1	13.0	50.0	6.0
PR4G-FD5-R0.2-H13-D6-50	4	5.0	0.2	13.0	50.0	6.0
PR4G-FD5-R0.3-H13-D6-50	4	5.0	0.3	13.0	50.0	6.0
PR4G-FD5-R0.5-H13-D6-50	4	5.0	0.5	13.0	50.0	6.0
PR4G-FD6-R0.1-H15-D6-60	4	6.0	0.1	15.0	60.0	6.0
PR4G-FD6-R0.2-H15-D6-60	4	6.0	0.2	15.0	60.0	6.0
PR4G-FD6-R0.3-H15-D6-60	4	6.0	0.3	15.0	60.0	6.0

星光系列钢用铣刀

Steel Endmills

● 圆角铣刀 Standard endmills with various radius

订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
PR4G-FD6-R0.5-H15-D6-60	4	6.0	0.5	15.0	60.0	6.0
PR4G-FD8-R0.5-H20-D8-60	4	8.0	0.5	20.0	60.0	8.0
PR4G-FD8-R1-H20-D8-60	4	8.0	1.0	20.0	60.0	8.0
PR4G-FD8-R2-H20-D8-60	4	8.0	2.0	20.0	60.0	8.0
PR4G-FD10-R0.5-H25-D10-75	4	10.0	0.5	25.0	75.0	10.0
PR4G-FD10-R1-H25-D10-75	4	10.0	1.0	25.0	75.0	10.0
PR4G-FD10-R2-H25-D10-75	4	10.0	2.0	25.0	75.0	10.0
PR4G-FD12-R0.5-H30-D12-75	4	12.0	0.5	30.0	75.0	12.0
PR4G-FD12-R1-H30-D12-75	4	12.0	1.0	30.0	75.0	12.0
PR4G-FD12-R2-H30-D12-75	4	12.0	2.0	30.0	75.0	12.0
PR4G-FD14-R1-H35-D14-100	4	14.0	1.0	35.0	100.0	14.0
PR4G-FD14-R2-H35-D14-100	4	14.0	2.0	35.0	100.0	14.0
PR4G-FD14-R3-H35-D14-100	4	14.0	3.0	35.0	100.0	14.0
PR4G-FD16-R1-H40-D16-100	4	16.0	1.0	40.0	100.0	16.0
PR4G-FD16-R2-H40-D16-100	4	16.0	2.0	40.0	100.0	16.0
PR4G-FD16-R3-H40-D16-100	4	16.0	3.0	40.0	100.0	16.0
PR4G-FD18-R1-H45-D18-100	4	18.0	1.0	45.0	100.0	18.0
PR4G-FD18-R2-H45-D18-100	4	18.0	2.0	45.0	100.0	18.0
PR4G-FD18-R3-H45-D18-100	4	18.0	3.0	45.0	100.0	18.0
PR4G-FD20-R1-H50-D20-100	4	20.0	1.0	50.0	100.0	20.0
PR4G-FD20-R2-H50-D20-100	4	20.0	2.0	50.0	100.0	20.0
PR4G-FD20-R3-H50-D20-100	4	20.0	3.0	50.0	100.0	20.0

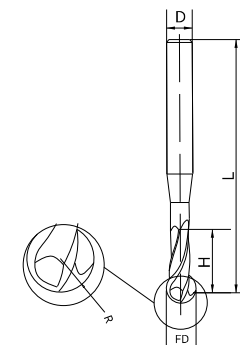
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星光系列钢用铣刀

Steel Endmills

● 球头铣刀 Ball nose 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
- Multiple workpiece machining applications for multiple industries.
- Special bottom edge design and chip flute angle for smooth chip evacuation and reduced tip damage.
- Special cutting edge treatment and peripheral tooth flank.
- For profiling.



公制型 Metric Type

订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
PB2G-FD1-R0.5-H2-D4-50	2	1.0	0.5	2.0	50.0	4.0
PB2G-FD2-R1-H4-D4-50	2	2.0	1.0	4.0	50.0	4.0
PB2G-FD3-R1.5-H6-D4-50	2	3.0	1.5	6.0	50.0	4.0
PB2G-FD4-R2-H8-D4-50	2	4.0	2.0	8.0	50.0	4.0
PB2G-FD5-R2.5-H10-D6-50	2	5.0	2.5	10.0	50.0	6.0
PB2G-FD6-R3-H12-D6-50	2	6.0	3.0	12.0	50.0	6.0
PB2G-FD8-R4-H16-D8-75	2	8.0	4.0	16.0	75.0	8.0
PB2G-FD10-R5-H20-D10-75	2	10.0	5.0	20.0	75.0	10.0
PB2G-FD12-R6-H24-D12-75	2	12.0	6.0	24.0	75.0	12.0
PB4G-FD16-R8-H32-D16-100	4	16.0	8.0	32.0	100.0	16.0
PB4G-FD20-R10-H40-D20-100	4	20.0	10.0	40.0	100.0	20.0

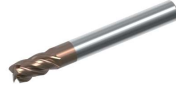
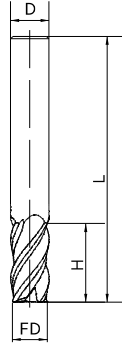
*接受订货 Accept order

星磐系列高硬钢铣刀

Endmills For Hard Steel

● 平头铣刀 Standard endmills

- 难加工材料独特设计
- 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
- 特殊的切削刃口处理及周齿后刀面设计
- Exclusive design for HRSA alloys.
- Unequal spiral groove and tooth pitch design, reduce the vibration of the tool during processing, effectively improve the tool life and the surface finish of the workpiece.
- Special bottom edge design and chip discharge groove angle make chip removal smoother.
- Special cutting-edge treatment and the design of the flank surface around the teeth.



订货规格	刃数	刃径	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Cutting edge length	Total length	Dia of Shank
	T	FD	H	L	D
HE2G-FD1-H3-D4-50	2	1.0	3.0	50.0	4.0
HE2G-FD1.5-H4-D4-50	2	1.5	4.0	50.0	4.0
HE4G-FD2-H5-D4-50	4	2.0	5.0	50.0	4.0
HE4G-FD3-H8-D4-50	4	3.0	8.0	50.0	4.0
HE4G-FD4-H10-D4-50	4	4.0	10.0	50.0	4.0
HE4G-FD5-H12-D6-50	4	5.0	12.0	50.0	6.0
HE4G-FD6-H15-D6-50	4	6.0	15.0	50.0	6.0
HE4G-FD8-H20-D8-60	4	8.0	20.0	60.0	8.0
HE4G-FD10-H25-D10-75	4	10.0	25.0	75.0	10.0
HE4G-FD12-H30-D12-75	4	12.0	30.0	75.0	12.0
HE4G-FD14-H35-D14-100	4	14.0	35.0	100.0	14.0
HE4G-FD16-H45-D16-100	4	16.0	45.0	100.0	16.0
HE4G-FD18-H45-D18-100	4	18.0	45.0	100.0	18.0
HE4G-FD20-H45-D20-100	4	20.0	45.0	100.0	20.0

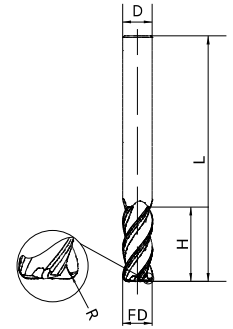
*接受订货 Accept order

星磐系列高硬钢铣刀

Endmills For Hard Steel

● 圆角铣刀 Standard endmills with various radius

- 难加工材料独特设计
- 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
- 特殊的切削刃口处理及周齿后刀面设计
- Exclusive design for HRSA alloys.
- Unequal spiral groove and tooth pitch design, reduce the vibration of the tool during processing, effectively improve the tool life and the surface finish of the workpiece.
- Special bottom edge design and chip discharge groove angle make chip removal smoother.
- Special cutting-edge treatment and the design of the flank surface around the teeth.



订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
HR2G-FD2-R0.1-H6-D4-50	2	2.0	0.1	6.0	50.0	4.0
HR2G-FD2-R0.2-H6-D4-50	2	2.0	0.2	6.0	50.0	4.0
HR4G-FD3-R0.1-H8-D4-50	4	3.0	0.1	8.0	50.0	4.0
HR4G-FD3-R0.2-H8-D4-50	4	3.0	0.2	8.0	50.0	4.0
HR4G-FD3-R0.3-H8-D4-50	4	3.0	0.3	8.0	50.0	4.0
HR4G-FD3-R0.5-H8-D4-50	4	3.0	0.5	8.0	50.0	4.0
HR4G-FD4-R0.1-H10-D4-50	4	4.0	0.1	10.0	50.0	4.0
HR4G-FD4-R0.2-H10-D4-50	4	4.0	0.2	10.0	50.0	4.0
HR4G-FD4-R0.3-H10-D4-50	4	4.0	0.3	10.0	50.0	4.0
HR4G-FD4-R0.5-H10-D4-50	4	4.0	0.5	10.0	50.0	4.0
HR4G-FD5-R0.1-H13-D6-50	4	5.0	0.1	13.0	50.0	6.0
HR4G-FD5-R0.2-H13-D6-50	4	5.0	0.2	13.0	50.0	6.0
HR4G-FD5-R0.3-H13-D6-50	4	5.0	0.3	13.0	50.0	6.0

星磐系列高硬钢铣刀

Endmills For Hard Steel

● 圆角铣刀 Standard endmills with various radius

订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
HR4G-FD5-R0.5-H13-D6-50	4	5.0	0.5	13.0	50.0	6.0
HR4G-FD6-R0.1-H15-D6-60	4	6.0	0.1	15.0	60.0	6.0
HR4G-FD6-R0.2-H15-D6-60	4	6.0	0.2	15.0	60.0	6.0
HR4G-FD6-R0.3-H15-D6-60	4	6.0	0.3	15.0	60.0	6.0
HR4G-FD6-R0.5-H15-D6-60	4	6.0	0.5	15.0	60.0	6.0
HR4G-FD8-R0.5-H20-D8-60	4	8.0	0.5	20.0	60.0	8.0
HR4G-FD8-R1-H20-D8-60	4	8.0	1.0	20.0	60.0	8.0
HR4G-FD8-R2-H20-D8-60	4	8.0	2.0	20.0	60.0	8.0
HR4G-FD10-R0.5-H25-D10-75	4	10.0	0.5	25.0	75.0	10.0
HR4G-FD10-R1-H25-D10-75	4	10.0	1.0	25.0	75.0	10.0
HR4G-FD10-R2-H25-D10-75	4	10.0	2.0	25.0	75.0	10.0
HR4G-FD12-R0.5-H30-D12-75	4	12.0	0.5	30.0	75.0	12.0
HR4G-FD12-R1-H30-D12-75	4	12.0	1.0	30.0	75.0	12.0
HR4G-FD12-R2-H30-D12-75	4	12.0	2.0	30.0	75.0	12.0
HR4G-FD14-R1-H35-D14-100	4	14.0	1.0	35.0	100.0	14.0
HR4G-FD14-R2-H35-D14-100	4	14.0	2.0	35.0	100.0	14.0
HR4G-FD14-R3-H35-D14-100	4	14.0	3.0	35.0	100.0	14.0
HR4G-FD16-R1-H40-D16-100	4	16.0	1.0	40.0	100.0	16.0
HR4G-FD16-R2-H40-D16-100	4	16.0	2.0	40.0	100.0	16.0
HR4G-FD16-R3-H40-D16-100	4	16.0	3.0	40.0	100.0	16.0
HR4G-FD18-R1-H45-D18-100	4	18.0	1.0	45.0	100.0	18.0
HR4G-FD18-R2-H45-D18-100	4	18.0	2.0	45.0	100.0	18.0
HR4G-FD18-R3-H45-D18-100	4	18.0	3.0	45.0	100.0	18.0
HR4G-FD20-R1-H50-D20-100	4	20.0	1.0	50.0	100.0	20.0
HR4G-FD20-R2-H50-D20-100	4	20.0	2.0	50.0	100.0	20.0
HR4G-FD20-R3-H50-D20-100	4	20.0	3.0	50.0	100.0	20.0

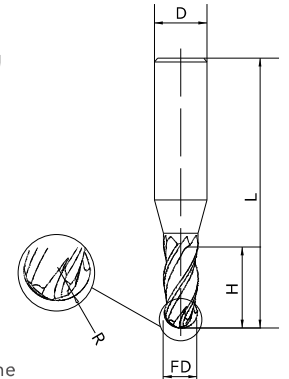
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星磐系列高硬钢铣刀

Endmills For Hard Steel

● 球头铣刀 Ball nose endmills

- 难加工材料独特设计
- 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
- The unique design for HRSA alloys.
- Enequal spiral groove and tooth pitch design, reduce the vibration of the tool during processing, effectively improve the tool life and the surface finish of the workpiece.
- Special cutting edge treatment and the design of the flank surface around the teeth.
- Solid carbide ball end mills for semi-finishing and finishing superalloys.
- 4-flute ball end mill for efficient machining.
- Profiling machining.



公制型 Metric Type

订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
HB2G-FD1-R0.5-H2-D4-50	2	1.0	0.5	2.0	50.0	4.0
HB2G-FD2-R1-H4-D4-50	2	2.0	1.0	4.0	50.0	4.0
HB4G-FD3-R1.5-H6-D4-50	4	3.0	1.5	6.0	50.0	4.0
HB4G-FD4-R2-H6-D4-50	4	4.0	2.0	6.0	50.0	4.0
HB4G-FD5-R2.5-H8-D6-50	4	5.0	2.5	8.0	50.0	6.0
HB4G-FD6-R3-H9-D6-50	4	6.0	3.0	9.0	50.0	6.0
HB4G-FD7-R3.5-H12-D7-75	4	7.0	3.5	12.0	75.0	7.0
HB4G-FD8-R4-H12-D8-75	4	8.0	4.0	12.0	75.0	8.0
HB4G-FD10-R5-H15-D10-75	4	10.0	5.0	15.0	75.0	10.0
HB4G-FD12-R6-H18-D12-75	4	12.0	6.0	18.0	75.0	12.0
HB4G-FD16-R8-H24-D16-100	4	16.0	8.0	24.0	100.0	16.0
HB4G-FD20-R10-H30-D20-100	4	20.0	10.0	30.0	100.0	20.0

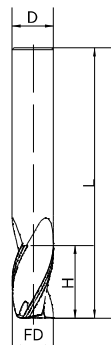
*接受订货 Accept order

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
- High-gloss, sharp cutting edges and large helix angles on tool edges.
- Special design of grooves for better chip evacuation.
- Vibration resistant design of the cutting edge for improved surface finish.
- Application to non-ferrous metal cutting.



订货规格	刃数	刃径	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Cutting edge length	Total length	Dia of Shank
	T	FD	H	L	D
NE2G-FD1-H3-D4-50	2	1.0	3.0	50.0	4.0
NE2G-FD1.5-H4-D4-50	2	1.5	4.0	50.0	4.0
NE3G-FD2-H6-D4-50	3	2.0	6.0	50.0	4.0
NE3G-FD3-H9-D4-50	3	3.0	9.0	50.0	4.0
NE3G-FD4-H12-D4-50	3	4.0	12.0	50.0	4.0
NE3G-FD5-H15-D6-50	3	5.0	15.0	50.0	6.0
NE3G-FD6-H18-D6-50	3	6.0	18.0	50.0	6.0
NE3G-FD8-H24-D8-60	3	8.0	24.0	60.0	8.0
NE3G-FD10-H30-D10-75	3	10.0	30.0	75.0	10.0
NE3G-FD12-H35-D12-75	3	12.0	35.0	75.0	12.0
NE3G-FD14-H45-D14-100	3	14.0	45.0	100.0	14.0
NE3G-FD16-H45-D16-100	3	16.0	45.0	100.0	16.0
NE3G-FD18-H50-D18-100	3	18.0	50.0	100.0	18.0
NE3G-FD20-H50-D20-100	3	20.0	50.0	100.0	20.0

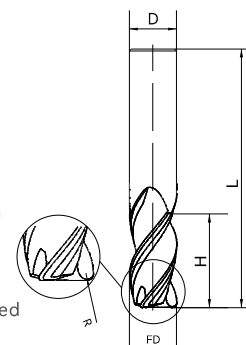
*接受订货 Accept order

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
- High-gloss, sharp cutting edges and large helix angles on tool edges.
- Special design of grooves for better chip evacuation.
- Vibration resistant design of the cutting edge for improved surface finish.
- Application to non-ferrous metal cutting.



订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
NR3G-FD2-R0.1-H6-D4-50	3	2.0	0.1	6.0	50.0	4.0
NR3G-FD2-R0.2-H6-D4-50	3	2.0	0.2	6.0	50.0	4.0
NR3G-FD3-R0.1-H8-D4-50	3	3.0	0.1	8.0	50.0	4.0
NR3G-FD3-R0.2-H8-D4-50	3	3.0	0.2	8.0	50.0	4.0
NR3G-FD3-R0.3-H8-D4-50	3	3.0	0.3	8.0	50.0	4.0
NR3G-FD3-R0.5-H8-D4-50	3	3.0	0.5	8.0	50.0	4.0
NR3G-FD4-R0.1-H10-D4-50	3	4.0	0.1	10.0	50.0	4.0
NR3G-FD4-R0.2-H10-D4-50	3	4.0	0.2	10.0	50.0	4.0
NR3G-FD4-R0.3-H10-D4-50	3	4.0	0.3	10.0	50.0	4.0
NR3G-FD4-R0.5-H10-D4-50	3	4.0	0.5	10.0	50.0	4.0
NR3G-FD5-R0.1-H13-D6-50	3	5.0	0.1	13.0	50.0	6.0
NR3G-FD5-R0.2-H13-D6-50	3	5.0	0.2	13.0	50.0	6.0
NR3G-FD5-R0.3-H13-D6-50	3	5.0	0.3	13.0	50.0	6.0
NR3G-FD5-R0.5-H13-D6-50	3	5.0	0.5	13.0	50.0	6.0
NR3G-FD6-R0.1-H15-D6-60	3	6.0	0.1	15.0	60.0	6.0
NR3G-FD6-R0.2-H15-D6-60	3	6.0	0.2	15.0	60.0	6.0

星彩系列铝合金铣刀

Aluminium Endmills

● 圆角铣刀 Standard endmills with various radius

订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
NR3G-FD6-R0.3-H15-D6-60	3	6.0	0.3	15.0	60.0	6.0
NR3G-FD6-R0.5-H15-D6-60	3	6.0	0.5	15.0	60.0	6.0
NR3G-FD8-R0.5-H20-D8-60	3	8.0	0.5	20.0	60.0	8.0
NR3G-FD8-R1-H20-D8-60	3	8.0	1.0	20.0	60.0	8.0
NR3G-FD8-R2-H20-D8-60	3	8.0	2.0	20.0	60.0	8.0
NR3G-FD10-R0.5-H25-D10-75	3	10.0	0.5	25.0	75.0	10.0
NR3G-FD10-R1-H25-D10-75	3	10.0	1.0	25.0	75.0	10.0
NR3G-FD10-R2-H25-D10-75	3	10.0	2.0	25.0	75.0	10.0
NR3G-FD12-R0.5-H30-D12-75	3	12.0	0.5	30.0	75.0	12.0
NR3G-FD12-R1-H30-D12-75	3	12.0	1.0	30.0	75.0	12.0
NR3G-FD12-R2-H30-D12-75	3	12.0	2.0	30.0	75.0	12.0
NR3G-FD14-R1-H35-D14-100	3	14.0	1.0	35.0	100.0	14.0
NR3G-FD14-R2-H35-D14-100	3	14.0	2.0	35.0	100.0	14.0
NR3G-FD14-R3-H35-D14-100	3	14.0	3.0	35.0	100.0	14.0
NR3G-FD16-R1-H40-D16-100	3	16.0	1.0	40.0	100.0	16.0
NR3G-FD16-R2-H40-D16-100	3	16.0	2.0	40.0	100.0	16.0
NR3G-FD16-R3-H40-D16-100	3	16.0	3.0	40.0	100.0	16.0
NR3G-FD18-R1-H45-D18-100	3	18.0	1.0	45.0	100.0	18.0
NR3G-FD18-R2-H45-D18-100	3	18.0	2.0	45.0	100.0	18.0
NR3G-FD18-R3-H45-D18-100	3	18.0	3.0	45.0	100.0	18.0
NR3G-FD20-R1-H50-D20-100	3	20.0	1.0	50.0	100.0	20.0
NR3G-FD20-R2-H50-D20-100	3	20.0	2.0	50.0	100.0	20.0
NR3G-FD20-R3-H50-D20-100	3	20.0	3.0	50.0	100.0	20.0

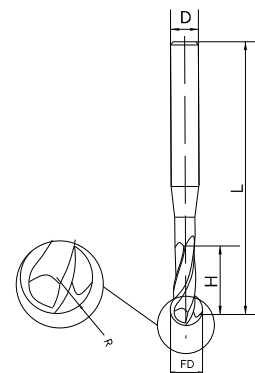
*接受订货 Accept order

星彩系列铝合金铣刀

Aluminium Endmills

● 球头铣刀 Ball nose 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
- High-gloss, sharp cutting edges and large helix angles on the tool edge.
- Vibration resistant design of the cutting edge for improved surface finish.
- Applications in non-ferrous metal cutting.
- For profiling.



公制型 Metric Type



订货规格	刃数	刃径	刀尖圆角	刃长	总长	柄径
Specification	No. of flute	Dia of cutting edge	Radius	Cutting edge length	Total length	Dia of Shank
	T	FD	R	H	L	D
NB2G-FD1-R0.5-H2-D4-50	2	1.0	0.5	2.0	50.0	4.0
NB2G-FD2-R1-H4-D4-50	2	2.0	1.0	4.0	50.0	4.0
NB2G-FD3-R1.5-H6-D4-50	2	3.0	1.5	6.0	50.0	4.0
NB2G-FD4-R2-H8-D4-50	2	4.0	2.0	8.0	50.0	4.0
NB2G-FD5-R2.5-H10-D6-50	2	5.0	2.5	10.0	50.0	6.0
NB2G-FD6-R3-H12-D6-50	2	6.0	3.0	12.0	50.0	6.0
NB2G-FD8-R4-H16-D8-75	2	8.0	4.0	16.0	75.0	8.0
NB2G-FD10-R5-H20-D10-75	2	10.0	5.0	20.0	75.0	10.0
NB2G-FD12-R6-H24-D12-75	2	12.0	6.0	24.0	75.0	12.0
NB2G-FD16-R8-H32-D16-100	2	16.0	8.0	32.0	100.0	16.0
NB2G-FD20-R10-H40-D20-100	2	20.0	10.0	40.0	100.0	20.0

*接受订货 Accept order

硬质合金钻头命名规则

Code key for solid carbide endmills

- 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。
The code key for solid carbide milling cutters use 9 groups of codes to indicate the size and other characteristics of the endmills. Check Example 1 for details.

示例 1：一般表示规则

示例：TD2E-A118-FD4-H8-D6-50

Example 1:General rules

Example:TD2E-A118-FD4-H8-D6-50

T	D	2	E	A118	FD4	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：

The code key in the model indication rules are expressed as follows:

① 所对应代号表示————加工用途

The corresponding code representation————Processing purposes

T	P	N	M	H	I	G	W
General purpose	Steel	Non-ferrous metals	Stainless steel	Hardened steel	Titanium alloys	High-temperature alloys	HRSA
						Non-metallic materials	

② 所对应代号表示————钻头类型

The corresponding code representation————Drill Type

A	D
Center drill	Drill

③ 所对应代号表示————钻头刃数

The corresponding code representation————Number of flutes

1	2	3
1 flutes	2 flutes	3 flutes

④ 所对应代号表示————钻头特征

The corresponding code representation————Tool Features

G	R	F
General	General	Finishing

⑤ 所对应代号表示————钻尖角度

The corresponding code representation————Drill point angle

A118	Drill point angle 118°
A135	Drill point angle 135°
.....

⑥ 所对应代号表示————钻尖直径

Corresponding code representation--Dia of cutting edge

⑦ 所对应代号表示————刻背长度（刃长）

The corresponding code representation--Groove length

⑧ 所对应代号表示————柄部直径。

The corresponding code representation--Dia of shank

⑨ 所对应代号表示————钻头总长。

The corresponding code representation--Total length

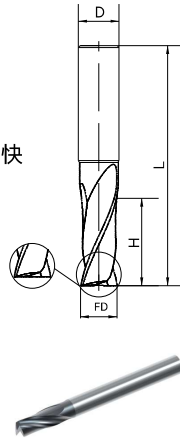


硬质合金钻头

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
- Universal design of the drill for flat bottom hole.
- Designed with dual cutting edges to reduce burr during machining.
- Special groove back width design enhances the rigidity and vibration resistance of the cutting tool while allowing for faster chip removal.
- Applied to shallow hole drilling of steel, stainless steel, cast iron, and hardened materials



公制型 Metric Type

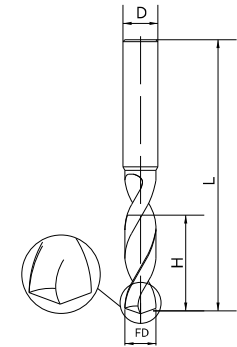
订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
	No.offlute	Diaofcuttingdge	point angle	Groove length	Total length	DiaofShank
Specification	T	FD		H	L	D
TD2E-A180-FD3-H12-D4-50	2	3.0	180.0	12.0	50.0	4.0
TD2E-A180-FD3.5-H12-D4-50	2	3.5	180.0	12.0	50.0	4.0
TD2E-A180-FD4-H12-D4-50	2	4.0	180.0	12.0	50.0	4.0
TD2E-A180-FD4.5-H16-D6-65	2	4.5	180.0	16.0	65.0	6.0
TD2E-A180-FD5-H16-D6-65	2	5.0	180.0	16.0	65.0	6.0
TD2E-A180-FD5.5-H22-D6-65	2	5.5	180.0	22.0	65.0	6.0
TD2E-A180-FD6-H22-D6-65	2	6.0	180.0	22.0	65.0	6.0
TD2E-A180-FD6.5-H25-D8-65	2	6.5	180.0	25.0	65.0	8.0
TD2E-A180-FD7-H25-D8-65	2	7.0	180.0	25.0	65.0	8.0
TD2E-A180-FD7.5-H30-D8-65	2	7.5	180.0	30.0	75.0	8.0
TD2E-A180-FD8-H35-D8-75	2	8.0	180.0	30.0	75.0	8.0
TD2E-A180-FD8.5-H35-D10-85	2	8.5	180.0	35.0	85.0	10.0
TD2E-A180-FD9-H35-D10-85	2	9.0	180.0	35.0	85.0	10.0
TD2E-A180-FD9.5-H38-D10-85	2	9.5	180.0	38.0	85.0	10.0
TD2E-A180-FD10-H38-D10-85	2	10.0	180.0	38.0	85.0	10.0
TD2E-A180-FD10.5-H42-D12-95	2	10.5	180.0	42.0	95.0	12.0
TD2E-A180-FD11-H42-D12-95	2	11.0	180.0	42.0	95.0	12.0
TD2E-A180-FD11.5-H46-D12-95	2	11.5	180.0	46.0	95.0	12.0
TD2E-A180-FD12-H46-D12-95	2	12.0	180.0	46.0	95.0	12.0

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
- Universal design for hole machining of steel.
- Applications for multiple workpiece hole processing for multiple industries.



公制型 Metric Type

订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
	No.offlute	Diaofcuttingdge	point angle	Groove length	Total length	DiaofShank
Specification	T	FD		H	L	D
TD2E-A140-FD3.0-H20-D6-62	2	3.0	140.0	20.0	62.0	6.0
TD2E-A140-FD3.1-H20-D6-62	2	3.1	140.0	20.0	62.0	6.0
TD2E-A140-FD3.2-H20-D6-62	2	3.2	140.0	20.0	62.0	6.0
TD2E-A140-FD3.3-H20-D6-62	2	3.3	140.0	20.0	62.0	6.0
TD2E-A140-FD3.4-H20-D6-62	2	3.4	140.0	20.0	62.0	6.0
TD2E-A140-FD3.5-H20-D6-62	2	3.5	140.0	20.0	62.0	6.0
TD2E-A140-FD3.6-H20-D6-62	2	3.6	140.0	20.0	62.0	6.0
TD2E-A140-FD3.7-H20-D6-62	2	3.7	140.0	20.0	62.0	6.0
TD2E-A140-FD3.8-H24-D6-66	2	3.8	140.0	24.0	66.0	6.0
TD2E-A140-FD3.9-H24-D6-66	2	3.9	140.0	24.0	66.0	6.0
TD2E-A140-FD4.0-H24-D6-66	2	4.0	140.0	24.0	66.0	6.0
TD2E-A140-FD4.1-H24-D6-66	2	4.1	140.0	24.0	66.0	6.0
TD2E-A140-FD4.2-H24-D6-66	2	4.2	140.0	24.0	66.0	6.0
TD2E-A140-FD4.3-H24-D6-66	2	4.3	140.0	24.0	66.0	6.0
TD2E-A140-FD4.4-H24-D6-66	2	4.4	140.0	24.0	66.0	6.0

订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
Specification	No.offlute	Diaofcuttingdge	point angle	Groove length	Total length	DiaofShank
	T	FD		H	L	D
TD2E-A140-FD4.5-H24-D6-66	2	4.5	140.0	24.0	66.0	6.0
TD2E-A140-FD4.6-H24-D6-66	2	4.6	140.0	24.0	66.0	6.0
TD2E-A140-FD4.7-H28-D6-66	2	4.7	140.0	28.0	66.0	6.0
TD2E-A140-FD4.8-H28-D6-66	2	4.8	140.0	28.0	66.0	6.0
TD2E-A140-FD4.9-H28-D6-66	2	4.9	140.0	28.0	66.0	6.0
TD2E-A140-FD5.0-H28-D6-66	2	5.0	140.0	28.0	66.0	6.0
TD2E-A140-FD5.1-H28-D6-66	2	5.1	140.0	28.0	66.0	6.0
TD2E-A140-FD5.2-H28-D6-66	2	5.2	140.0	28.0	66.0	6.0
TD2E-A140-FD5.3-H28-D6-66	2	5.3	140.0	28.0	66.0	6.0
TD2E-A140-FD5.4-H28-D6-66	2	5.4	140.0	28.0	66.0	6.0
TD2E-A140-FD5.5-H28-D6-66	2	5.5	140.0	28.0	66.0	6.0
TD2E-A140-FD5.6-H28-D6-66	2	5.6	140.0	28.0	66.0	6.0
TD2E-A140-FD5.7-H28-D6-66	2	5.7	140.0	28.0	66.0	6.0
TD2E-A140-FD5.8-H28-D6-66	2	5.8	140.0	28.0	66.0	6.0
TD2E-A140-FD5.9-H28-D6-66	2	5.9	140.0	28.0	66.0	6.0
TD2E-A140-FD6.0-H28-D6-66	2	6.0	140.0	28.0	66.0	6.0
TD2E-A140-FD6.1-H34-D8-79	2	6.1	140.0	34.0	79.0	8.0
TD2E-A140-FD6.2-H34-D8-79	2	6.2	140.0	34.0	79.0	8.0
TD2E-A140-FD6.3-H34-D8-79	2	6.3	140.0	34.0	79.0	8.0
TD2E-A140-FD6.4-H34-D8-79	2	6.4	140.0	34.0	79.0	8.0
TD2E-A140-FD6.5-H34-D8-79	2	6.5	140.0	34.0	79.0	8.0
TD2E-A140-FD6.6-H34-D8-79	2	6.6	140.0	34.0	79.0	8.0
TD2E-A140-FD6.7-H34-D8-79	2	6.7	140.0	34.0	79.0	8.0
TD2E-A140-FD6.8-H34-D8-79	2	6.8	140.0	34.0	79.0	8.0
TD2E-A140-FD6.9-H34-D8-79	2	6.9	140.0	34.0	79.0	8.0
TD2E-A140-FD7.0-H34-D8-79	2	7.0	140.0	34.0	79.0	8.0
TD2E-A140-FD7.1-H41-D8-79	2	7.1	140.0	41.0	79.0	8.0
TD2E-A140-FD7.2-H41-D8-79	2	7.2	140.0	41.0	79.0	8.0
TD2E-A140-FD7.3-H41-D8-79	2	7.3	140.0	41.0	79.0	8.0
TD2E-A140-FD7.4-H41-D8-79	2	7.4	140.0	41.0	79.0	8.0
TD2E-A140-FD7.5-H41-D8-79	2	7.5	140.0	41.0	79.0	8.0
TD2E-A140-FD7.6-H41-D8-79	2	7.6	140.0	41.0	79.0	8.0
TD2E-A140-FD7.7-H41-D8-79	2	7.7	140.0	41.0	79.0	8.0
TD2E-A140-FD7.8-H41-D8-79	2	7.8	140.0	41.0	79.0	8.0
TD2E-A140-FD7.9-H41-D8-79	2	7.9	140.0	41.0	79.0	8.0
TD2E-A140-FD8.0-H41-D8-79	2	8.0	140.0	41.0	79.0	8.0
TD2E-A140-FD8.1-H47-D10-89	2	8.1	140.0	47.0	89.0	10.0
TD2E-A140-FD8.2-H47-D10-89	2	8.2	140.0	47.0	89.0	10.0

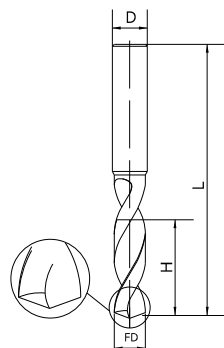
订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
Specification	No.offlute	Diaofcuttingdge	point angle	Groove length	Total length	DiaofShank
	T	FD		H	L	D
TD2E-A140-FD8.3-H47-D10-89	2	8.3	140.0	47.0	89.0	10.0
TD2E-A140-FD8.4-H47-D10-89	2	8.4	140.0	47.0	89.0	10.0
TD2E-A140-FD8.5-H47-D10-89	2	8.5	140.0	47.0	89.0	10.0
TD2E-A140-FD8.6-H47-D10-89	2	8.6	140.0	47.0	89.0	10.0
TD2E-A140-FD8.7-H47-D10-89	2	8.7	140.0	47.0	89.0	10.0
TD2E-A140-FD8.8-H47-D10-89	2	8.8	140.0	47.0	89.0	10.0
TD2E-A140-FD8.9-H47-D10-89	2	8.9	140.0	47.0	89.0	10.0
TD2E-A140-FD9.0-H47-D10-89	2	9.0	140.0	47.0	89.0	10.0
TD2E-A140-FD9.1-H47-D10-89	2	9.1	140.0	47.0	89.0	10.0
TD2E-A140-FD9.2-H47-D10-89	2	9.2	140.0	47.0	89.0	10.0
TD2E-A140-FD9.3-H47-D10-89	2	9.3	140.0	47.0	89.0	10.0
TD2E-A140-FD9.4-H47-D10-89	2	9.4	140.0	47.0	89.0	10.0
TD2E-A140-FD9.5-H47-D10-89	2	9.5	140.0	47.0	89.0	10.0
TD2E-A140-FD9.6-H47-D10-89	2	9.6	140.0	47.0	89.0	10.0
TD2E-A140-FD9.7-H47-D10-89	2	9.7	140.0	47.0	89.0	10.0
TD2E-A140-FD9.8-H47-D10-89	2	9.8	140.0	47.0	89.0	10.0
TD2E-A140-FD9.9-H47-D10-89	2	9.9	140.0	47.0	89.0	10.0
TD2E-A140-FD10.0-H47-D10-89	2	10.0	140.0	47.0	89.0	10.0
TD2E-A140-FD10.1-H55-D12-102	2	10.1	140.0	55.0	102.0	12.0
TD2E-A140-FD10.2-H55-D12-102	2	10.2	140.0	55.0	102.0	12.0
TD2E-A140-FD10.3-H55-D12-102	2	10.3	140.0	55.0	102.0	12.0
TD2E-A140-FD10.4-H55-D12-102	2	10.4	140.0	55.0	102.0	12.0
TD2E-A140-FD10.5-H55-D12-102	2	10.5	140.0	55.0	102.0	12.0
TD2E-A140-FD10.6-H55-D12-102	2	10.6	140.0	55.0	102.0	12.0
TD2E-A140-FD10.7-H55-D12-102	2	10.7	140.0	55.0	102.0	12.0
TD2E-A140-FD10.8-H55-D12-102	2	10.8	140.0	55.0	102.0	12.0
TD2E-A140-FD10.9-H55-D12-102	2	10.9	140.0	55.0	102.0	12.0
TD2E-A140-FD11.0-H55-D12-102	2	11.0	140.0	55.0	102.0	12.0
TD2E-A140-FD11.1-H55-D12-102	2	11.1	140.0	55.0	102.0	12.0
TD2E-A140-FD11.2-H55-D12-102	2	11.2	140.0	55.0	102.0	12.0
TD2E-A140-FD11.3-H55-D12-102	2	11.3	140.0	55.0	102.0	12.0
TD2E-A140-FD11.4-H55-D12-102	2	11.4	140.0	55.0	102.0	12.0
TD2E-A140-FD11.5-H55-D12-102	2	11.5	140.0	55.0	102.0	12.0
TD2E-A140-FD11.6-H55-D12-102	2	11.6	140.0	55.0	102.0	12.0
TD2E-A140-FD11.7-H55-D12-102	2	11.7	140.0	55.0	102.0	12.0
TD2E-A140-FD11.8-H55-D12-102	2	11.8	140.0	55.0	102.0	12.0
TD2E-A140-FD11.9-H55-D12-102	2	11.9	140.0	55.0	102.0	12.0
TD2E-A140-FD12.0-H55-D12-102	2	12.0	140.0	55.0	102.0	12.0

硬质合金钻头

Solid carbide drill

● 不锈钢硬质合金钻 Drills for stainless steel

- 不锈钢系列工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
- Universal design for hole machining of stainless steel.
- Applications for multiple workpiece hole processing for multiple industries.



公制型 Metric Type

订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
Specification	No.offlute	Diaofcuttinge dge	point angle	Groove length	Total length	DiaofShank
	T	FD	H	L	L	D
TD2E-A140-FD3.0-H20-D6-62	2	3.0	140.0	20.0	62.0	6.0
TD2E-A140-FD3.1-H20-D6-62	2	3.1	140.0	20.0	62.0	6.0
TD2E-A140-FD3.2-H20-D6-62	2	3.2	140.0	20.0	62.0	6.0
TD2E-A140-FD3.3-H20-D6-62	2	3.3	140.0	20.0	62.0	6.0
TD2E-A140-FD3.4-H20-D6-62	2	3.4	140.0	20.0	62.0	6.0
TD2E-A140-FD3.5-H20-D6-62	2	3.5	140.0	20.0	62.0	6.0
TD2E-A140-FD3.6-H20-D6-62	2	3.6	140.0	20.0	62.0	6.0
TD2E-A140-FD3.7-H20-D6-62	2	3.7	140.0	20.0	62.0	6.0
TD2E-A140-FD3.8-H24-D6-66	2	3.8	140.0	24.0	66.0	6.0
TD2E-A140-FD3.9-H24-D6-66	2	3.9	140.0	24.0	66.0	6.0
TD2E-A140-FD4.0-H24-D6-66	2	4.0	140.0	24.0	66.0	6.0
TD2E-A140-FD4.1-H24-D6-66	2	4.1	140.0	24.0	66.0	6.0
TD2E-A140-FD4.2-H24-D6-66	2	4.2	140.0	24.0	66.0	6.0
TD2E-A140-FD4.3-H24-D6-66	2	4.3	140.0	24.0	66.0	6.0
TD2E-A140-FD4.4-H24-D6-66	2	4.4	140.0	24.0	66.0	6.0
TD2E-A140-FD4.5-H24-D6-66	2	4.5	140.0	24.0	66.0	6.0
TD2E-A140-FD4.6-H24-D6-66	2	4.6	140.0	24.0	66.0	6.0
TD2E-A140-FD4.7-H28-D6-66	2	4.7	140.0	28.0	66.0	6.0
TD2E-A140-FD4.8-H28-D6-66	2	4.8	140.0	28.0	66.0	6.0

订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
Specification	No.offlute	Diaofcuttinge dge	point angle	Groove length	Total length	DiaofShank
	T	FD	H	H	L	D
MD2E-A140-FD4.9-H28-D6-66	2	4.9	140.0	28.0	66.0	6.0
MD2E-A140-FD5.0-H28-D6-66	2	5.0	140.0	28.0	66.0	6.0
MD2E-A140-FD5.1-H28-D6-66	2	5.1	140.0	28.0	66.0	6.0
MD2E-A140-FD5.2-H28-D6-66	2	5.2	140.0	28.0	66.0	6.0
MD2E-A140-FD5.3-H28-D6-66	2	5.3	140.0	28.0	66.0	6.0
MD2E-A140-FD5.4-H28-D6-66	2	5.4	140.0	28.0	66.0	6.0
MD2E-A140-FD5.5-H28-D6-66	2	5.5	140.0	28.0	66.0	6.0
MD2E-A140-FD5.6-H28-D6-66	2	5.6	140.0	28.0	66.0	6.0
MD2E-A140-FD5.7-H28-D6-66	2	5.7	140.0	28.0	66.0	6.0
MD2E-A140-FD5.8-H28-D6-66	2	5.8	140.0	28.0	66.0	6.0
MD2E-A140-FD5.9-H28-D6-66	2	5.9	140.0	28.0	66.0	6.0
MD2E-A140-FD6.0-H28-D6-66	2	6.0	140.0	28.0	66.0	6.0
MD2E-A140-FD6.1-H34-D8-79	2	6.1	140.0	34.0	79.0	8.0
MD2E-A140-FD6.2-H34-D8-79	2	6.2	140.0	34.0	79.0	8.0
MD2E-A140-FD6.3-H34-D8-79	2	6.3	140.0	34.0	79.0	8.0
MD2E-A140-FD6.4-H34-D8-79	2	6.4	140.0	34.0	79.0	8.0
MD2E-A140-FD6.5-H34-D8-79	2	6.5	140.0	34.0	79.0	8.0
MD2E-A140-FD6.6-H34-D8-79	2	6.6	140.0	34.0	79.0	8.0
MD2E-A140-FD6.7-H34-D8-79	2	6.7	140.0	34.0	79.0	8.0
MD2E-A140-FD6.8-H34-D8-79	2	6.8	140.0	34.0	79.0	8.0
MD2E-A140-FD6.9-H34-D8-79	2	6.9	140.0	34.0	79.0	8.0
MD2E-A140-FD7.0-H34-D8-79	2	7.0	140.0	34.0	79.0	8.0
MD2E-A140-FD7.1-H41-D8-79	2	7.1	140.0	41.0	79.0	8.0
MD2E-A140-FD7.2-H41-D8-79	2	7.2	140.0	41.0	79.0	8.0
MD2E-A140-FD7.3-H41-D8-79	2	7.3	140.0	41.0	79.0	8.0
MD2E-A140-FD7.4-H41-D8-79	2	7.4	140.0	41.0	79.0	8.0
MD2E-A140-FD7.5-H41-D8-79	2	7.5	140.0	41.0	79.0	8.0
MD2E-A140-FD7.6-H41-D8-79	2	7.6	140.0	41.0	79.0	8.0
MD2E-A140-FD7.7-H41-D8-79	2	7.7	140.0	41.0	79.0	8.0
MD2E-A140-FD7.8-H41-D8-79	2	7.8	140.0	41.0	79.0	8.0
MD2E-A140-FD7.9-H41-D8-79	2	7.9	140.0	41.0	79.0	8.0
MD2E-A140-FD8.0-H41-D8-79	2	8.0	140.0	41.0	79.0	8.0
MD2E-A140-FD8.1-H47-D10-89	2	8.1	140.0	47.0	89.0	10.0
MD2E-A140-FD8.2-H47-D10-89	2	8.2	140.0	47.0	89.0	10.0
MD2E-A140-FD8.3-H47-D10-89	2	8.3	140.0	47.0	89.0	10.0
MD2E-A140-FD8.4-H47-D10-89	2	8.4	140.0	47.0	89.0	10.0
MD2E-A140-FD8.5-H47-D10-89	2	8.5	140.0	47.0	89.0	10.0

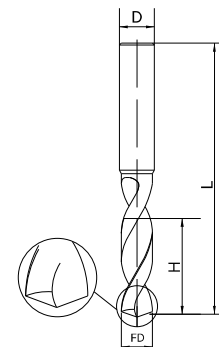
订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
Specification	No.offlute	Diaofcuttingdge	point angle	Groove length	Total length	DiaofShank
	T	FD		H	L	D
MD2E-A140-FD8.6-H47-D10-89	2	8.6	140.0	47.0	89.0	10.0
MD2E-A140-FD8.7-H47-D10-89	2	8.7	140.0	47.0	89.0	10.0
MD2E-A140-FD8.8-H47-D10-89	2	8.8	140.0	47.0	89.0	10.0
MD2E-A140-FD8.9-H47-D10-89	2	8.9	140.0	47.0	89.0	10.0
MD2E-A140-FD9.0-H47-D10-89	2	9.0	140.0	47.0	89.0	10.0
MD2E-A140-FD9.1-H47-D10-89	2	9.1	140.0	47.0	89.0	10.0
MD2E-A140-FD9.2-H47-D10-89	2	9.2	140.0	47.0	89.0	10.0
MD2E-A140-FD9.3-H47-D10-89	2	9.3	140.0	47.0	89.0	10.0
MD2E-A140-FD9.4-H47-D10-89	2	9.4	140.0	47.0	89.0	10.0
MD2E-A140-FD9.5-H47-D10-89	2	9.5	140.0	47.0	89.0	10.0
MD2E-A140-FD9.6-H47-D10-89	2	9.6	140.0	47.0	89.0	10.0
MD2E-A140-FD9.7-H47-D10-89	2	9.7	140.0	47.0	89.0	10.0
MD2E-A140-FD9.8-H47-D10-89	2	9.8	140.0	47.0	89.0	10.0
MD2E-A140-FD9.9-H47-D10-89	2	9.9	140.0	47.0	89.0	10.0
MD2E-A140-FD10.0-H47-D10-89	2	10.0	140.0	47.0	89.0	10.0
MD2E-A140-FD10.1-H55-D12-102	2	10.1	140.0	55.0	102.0	12.0
MD2E-A140-FD10.2-H55-D12-102	2	10.2	140.0	55.0	102.0	12.0
MD2E-A140-FD10.3-H55-D12-102	2	10.3	140.0	55.0	102.0	12.0
MD2E-A140-FD10.4-H55-D12-102	2	10.4	140.0	55.0	102.0	12.0
MD2E-A140-FD10.5-H55-D12-102	2	10.5	140.0	55.0	102.0	12.0
MD2E-A140-FD10.6-H55-D12-102	2	10.6	140.0	55.0	102.0	12.0
MD2E-A140-FD10.7-H55-D12-102	2	10.7	140.0	55.0	102.0	12.0
MD2E-A140-FD10.8-H55-D12-102	2	10.8	140.0	55.0	102.0	12.0
MD2E-A140-FD10.9-H55-D12-102	2	10.9	140.0	55.0	102.0	12.0
MD2E-A140-FD11.0-H55-D12-102	2	11.0	140.0	55.0	102.0	12.0
MD2E-A140-FD11.1-H55-D12-102	2	11.1	140.0	55.0	102.0	12.0
MD2E-A140-FD11.2-H55-D12-102	2	11.2	140.0	55.0	102.0	12.0
MD2E-A140-FD11.3-H55-D12-102	2	11.3	140.0	55.0	102.0	12.0
MD2E-A140-FD11.4-H55-D12-102	2	11.4	140.0	55.0	102.0	12.0
MD2E-A140-FD11.5-H55-D12-102	2	11.5	140.0	55.0	102.0	12.0
MD2E-A140-FD11.6-H55-D12-102	2	11.6	140.0	55.0	102.0	12.0
MD2E-A140-FD11.7-H55-D12-102	2	11.7	140.0	55.0	102.0	12.0
MD2E-A140-FD11.8-H55-D12-102	2	11.8	140.0	55.0	102.0	12.0
MD2E-A140-FD11.9-H55-D12-102	2	11.9	140.0	55.0	102.0	12.0
MD2E-A140-FD12.0-H55-D12-102	2	12.0	140.0	55.0	102.0	12.0

*接受订货 Accept order

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
- General design for hole processing of non-ferrous metals.
- Applicate to different kinds of hole processing in various industries.



公制型 Metric Type

订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
Specification	No.offlute	Diaofcuttingdge	point angle	Groove length	Total length	DiaofShank
	T	FD		H	L	D
ND2E-A118-FD3.0-H20-D6-62	2	3.0	118.0	20.0	62.0	6.0
ND2E-A118-FD3.1-H20-D6-62	2	3.1	118.0	20.0	62.0	6.0
ND2E-A118-FD3.2-H20-D6-62	2	3.2	118.0	20.0	62.0	6.0
ND2E-A118-FD3.3-H20-D6-62	2	3.3	118.0	20.0	62.0	6.0
ND2E-A118-FD3.4-H20-D6-62	2	3.4	118.0	20.0	62.0	6.0
ND2E-A118-FD3.5-H20-D6-62	2	3.5	118.0	20.0	62.0	6.0
ND2E-A118-FD3.6-H20-D6-62	2	3.6	118.0	20.0	62.0	6.0
ND2E-A118-FD3.7-H20-D6-62	2	3.7	118.0	20.0	62.0	6.0
ND2E-A118-FD3.8-H24-D6-66	2	3.8	118.0	24.0	66.0	6.0
ND2E-A118-FD3.9-H24-D6-66	2	3.9	118.0	24.0	66.0	6.0
ND2E-A118-FD4.0-H24-D6-66	2	4.0	118.0	24.0	66.0	6.0
ND2E-A118-FD4.1-H24-D6-66	2	4.1	118.0	24.0	66.0	6.0
ND2E-A118-FD4.2-H24-D6-66	2	4.2	118.0	24.0	66.0	6.0
ND2E-A118-FD4.3-H24-D6-66	2	4.3	118.0	24.0	66.0	6.0
ND2E-A118-FD4.4-H24-D6-66	2	4.4	118.0	24.0	66.0	6.0
ND2E-A118-FD4.5-H24-D6-66	2	4.5	118.0	24.0	66.0	6.0
ND2E-A118-FD4.6-H24-D6-66	2	4.6	118.0	24.0	66.0	6.0
ND2E-A118-FD4.7-H28-D6-66	2	4.7	118.0	28.0	66.0	6.0
ND2E-A118-FD4.8-H28-D6-66	2	4.8	118.0	28.0	66.0	6.0

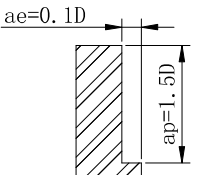
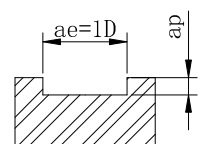
订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
Specification	No.offlute	Diaofcuttingdge	point angle	Groove length	Total length	DiaofShank
	T	FD		H	L	D
ND2E-A118-FD4.9-H28-D6-66	2	4.9	118.0	28.0	66.0	6.0
ND2E-A118-FD5.0-H28-D6-66	2	5.0	118.0	28.0	66.0	6.0
ND2E-A118-FD5.1-H28-D6-66	2	5.1	118.0	28.0	66.0	6.0
ND2E-A118-FD5.2-H28-D6-66	2	5.2	118.0	28.0	66.0	6.0
ND2E-A118-FD5.3-H28-D6-66	2	5.3	118.0	28.0	66.0	6.0
ND2E-A118-FD5.4-H28-D6-66	2	5.4	118.0	28.0	66.0	6.0
ND2E-A118-FD5.5-H28-D6-66	2	5.5	118.0	28.0	66.0	6.0
ND2E-A118-FD5.6-H28-D6-66	2	5.6	118.0	28.0	66.0	6.0
ND2E-A118-FD5.7-H28-D6-66	2	5.7	118.0	28.0	66.0	6.0
ND2E-A118-FD5.8-H28-D6-66	2	5.8	118.0	28.0	66.0	6.0
ND2E-A118-FD5.9-H28-D6-66	2	5.9	118.0	28.0	66.0	6.0
ND2E-A118-FD6.0-H28-D6-66	2	6.0	118.0	28.0	66.0	6.0
ND2E-A118-FD6.1-H34-D8-79	2	6.1	118.0	34.0	79.0	8.0
ND2E-A118-FD6.2-H34-D8-79	2	6.2	118.0	34.0	79.0	8.0
ND2E-A118-FD6.3-H34-D8-79	2	6.3	118.0	34.0	79.0	8.0
ND2E-A118-FD6.4-H34-D8-79	2	6.4	118.0	34.0	79.0	8.0
ND2E-A118-FD6.5-H34-D8-79	2	6.5	118.0	34.0	79.0	8.0
ND2E-A118-FD6.6-H34-D8-79	2	6.6	118.0	34.0	79.0	8.0
ND2E-A118-FD6.7-H34-D8-79	2	6.7	118.0	34.0	79.0	8.0
ND2E-A118-FD6.8-H34-D8-79	2	6.8	118.0	34.0	79.0	8.0
ND2E-A118-FD6.9-H34-D8-79	2	6.9	118.0	34.0	79.0	8.0
ND2E-A118-FD7.0-H34-D8-79	2	7.0	118.0	34.0	79.0	8.0
ND2E-A118-FD7.1-H41-D8-79	2	7.1	118.0	41.0	79.0	8.0
ND2E-A118-FD7.2-H41-D8-79	2	7.2	118.0	41.0	79.0	8.0
ND2E-A118-FD7.3-H41-D8-79	2	7.3	118.0	41.0	79.0	8.0
ND2E-A118-FD7.4-H41-D8-79	2	7.4	118.0	41.0	79.0	8.0
ND2E-A118-FD7.5-H41-D8-79	2	7.5	118.0	41.0	79.0	8.0
ND2E-A118-FD7.6-H41-D8-79	2	7.6	118.0	41.0	79.0	8.0
ND2E-A118-FD7.7-H41-D8-79	2	7.7	118.0	41.0	79.0	8.0
ND2E-A118-FD7.8-H41-D8-79	2	7.8	118.0	41.0	79.0	8.0
ND2E-A118-FD7.9-H41-D8-79	2	7.9	118.0	41.0	79.0	8.0
ND2E-A118-FD8.0-H41-D8-79	2	8.0	118.0	41.0	79.0	8.0
ND2E-A118-FD8.1-H47-D10-89	2	8.1	118.0	47.0	89.0	10.0
ND2E-A118-FD8.2-H47-D10-89	2	8.2	118.0	47.0	89.0	10.0
ND2E-A118-FD8.3-H47-D10-89	2	8.3	118.0	47.0	89.0	10.0
ND2E-A118-FD8.4-H47-D10-89	2	8.4	118.0	47.0	89.0	10.0
ND2E-A118-FD8.5-H47-D10-89	2	8.5	118.0	47.0	89.0	10.0

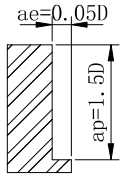
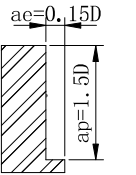
订货规格	刃数	刃径	钻尖角	刃长	总长	柄径
Specification	No.offlute	Diaofcuttingdge	point angle	Groove length	Total length	DiaofShank
	T	FD		H	L	D
ND2E-A118-FD8.6-H47-D10-89	2	8.6	118.0	47.0	89.0	10.0
ND2E-A118-FD8.7-H47-D10-89	2	8.7	118.0	47.0	89.0	10.0
ND2E-A118-FD8.8-H47-D10-89	2	8.8	118.0	47.0	89.0	10.0
ND2E-A118-FD8.9-H47-D10-89	2	8.9	118.0	47.0	89.0	10.0
ND2E-A118-FD9.0-H47-D10-89	2	9.0	118.0	47.0	89.0	10.0
ND2E-A118-FD9.1-H47-D10-89	2	9.1	118.0	47.0	89.0	10.0
ND2E-A118-FD9.2-H47-D10-89	2	9.2	118.0	47.0	89.0	10.0
ND2E-A118-FD9.3-H47-D10-89	2	9.3	118.0	47.0	89.0	10.0
ND2E-A118-FD9.4-H47-D10-89	2	9.4	118.0	47.0	89.0	10.0
ND2E-A118-FD9.5-H47-D10-89	2	9.5	118.0	47.0	89.0	10.0
ND2E-A118-FD9.6-H47-D10-89	2	9.6	118.0	47.0	89.0	10.0
ND2E-A118-FD9.7-H47-D10-89	2	9.7	118.0	47.0	89.0	10.0
ND2E-A118-FD9.8-H47-D10-89	2	9.8	118.0	47.0	89.0	10.0
ND2E-A118-FD9.9-H47-D10-89	2	9.9	118.0	47.0	89.0	10.0
ND2E-A118-FD10.0-H47-D10-89	2	10.0	118.0	47.0	89.0	10.0
ND2E-A118-FD10.1-H55-D12-102	2	10.1	118.0	55.0	102.0	12.0
ND2E-A118-FD10.2-H55-D12-102	2	10.2	118.0	55.0	102.0	12.0
ND2E-A118-FD10.3-H55-D12-102	2	10.3	118.0	55.0	102.0	12.0
ND2E-A118-FD10.4-H55-D12-102	2	10.4	118.0	55.0	102.0	12.0
ND2E-A118-FD10.5-H55-D12-102	2	10.5	118.0	55.0	102.0	12.0
ND2E-A118-FD10.6-H55-D12-102	2	10.6	118.0	55.0	102.0	12.0
ND2E-A118-FD10.7-H55-D12-102	2	10.7	118.0	55.0	102.0	12.0
ND2E-A118-FD10.8-H55-D12-102	2	10.8	118.0	55.0	102.0	12.0
ND2E-A118-FD10.9-H55-D12-102	2	10.9	118.0	55.0	102.0	12.0
ND2E-A118-FD11.0-H55-D12-102	2	11.0	118.0	55.0	102.0	12.0
ND2E-A118-FD11.1-H55-D12-102	2	11.1	118.0	55.0	102.0	12.0
ND2E-A118-FD11.2-H55-D12-102	2	11.2	118.0	55.0	102.0	12.0
ND2E-A118-FD11.3-H55-D12-102	2	11.3	118.0	55.0	102.0	12.0
ND2E-A118-FD11.4-H55-D12-102	2	11.4	118.0	55.0	102.0	12.0
ND2E-A118-FD11.5-H55-D12-102	2	11.5	118.0	55.0	102.0	12.0
ND2E-A118-FD11.6-H55-D12-102	2	11.6	118.0	55.0	102.0	12.0
ND2E-A118-FD11.7-H55-D12-102	2	11.7	118.0	55.0	102.0	12.0
ND2E-A118-FD11.8-H55-D12-102	2	11.8	118.0	55.0	102.0	12.0
ND2E-A118-FD11.9-H55-D12-102	2	11.9	118.0	55.0	102.0	12.0
ND2E-A118-FD12.0-H55-D12-102	2	12.0	118.0	55.0	102.0	12.0

*接受订货 Accept order

繁星系列平底铣刀加工参数推荐 (普通切削)

Recommended cutting datas for standard endmills (General processing)

Workpieces materials	General steel (HRC-30)				Stainless steel				
	Diameter	Vc	fz	ae	ap	Vc	fz	ae	ap
2	50-150	0.01-0.015	0.2	3	3	50-150	0.01-0.015	0.2	3
3	50-150	0.015-0.02	0.3	4.5	4.5	50-150	0.015-0.02	0.3	4.5
4	80-160	0.015-0.02	0.4	6	6	60-120	0.015-0.02	0.4	6
5	80-160	0.02-0.03	0.5	7.5	7.5	60-120	0.02-0.03	0.5	7.5
6	80-160	0.03-0.045	0.6	9	9	60-120	0.03-0.045	0.6	9
8	80-160	0.04-0.06	0.8	12	12	60-120	0.04-0.06	0.8	12
10	80-160	0.04-0.07	1	15	15	60-120	0.04-0.07	1	15
12	80-160	0.05-0.08	1.2	18	18	60-120	0.05-0.08	1.2	18
14	80-160	0.06-0.09	1.4	21	21	60-120	0.06-0.09	1.4	21
16	80-160	0.07-0.11	1.6	24	24	60-120	0.07-0.11	1.6	24
18	80-160	0.07-0.12	1.8	27	27	60-120	0.07-0.12	1.8	27
20	80-160	0.08-0.12	2	30	30	60-120	0.08-0.12	2	30
MAX ap					Tool's diameter		ap		
					$\phi 1 \leq D \leq \phi 3$		0.15D		
					$\phi 3 \leq D \leq \phi 6$		0.3D		
					$\phi 6 \leq D \leq \phi 20$		0.5D		

HRSA alloys				Aluminum alloys			
Vc	fz	ae	ap	Vc	fz	ae	ap
30-90	0.005-0.01	0.1	3	50-150	0.01-0.02	0.3	3
30-90	0.015-0.02	0.15	4.5	50-150	0.01-0.02	0.45	4.5
30-90	0.015-0.02	0.2	6	90-180	0.02-0.04	0.6	6
30-90	0.02-0.03	0.25	7.5	90-180	0.02-0.04	0.75	7.5
30-90	0.03-0.045	0.3	9	90-180	0.03-0.06	0.9	9
30-90	0.04-0.06	0.4	12	90-180	0.035-0.08	1.2	12
30-90	0.04-0.07	0.5	15	90-180	0.045-0.1	1.5	15
30-90	0.05-0.08	0.6	18	90-180	0.05-0.12	1.8	18
30-90	0.06-0.09	0.7	21	90-180	0.06-0.14	2.1	21
30-90	0.07-0.11	0.8	24	90-180	0.075-0.16	2.4	24
30-90	0.07-0.12	0.9	27	90-180	0.08-0.16	2.7	27
30-90	0.08-0.12	1	30	90-180	0.09-0.2	3	30
							
				Tool's diameter		ap	
				$\phi 1 \leq D \leq \phi 3$		0.15D	
				$\phi 3 \leq D \leq \phi 6$		0.3D	
				$\phi 6 \leq D \leq \phi 20$		0.5D	

繁星系列圆角铣刀加工参数推荐 (普通切削)

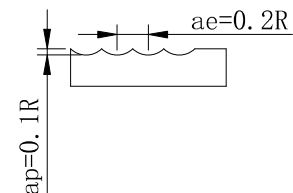
Recommended cutting datas for Standard endmills with various radius(General processing)

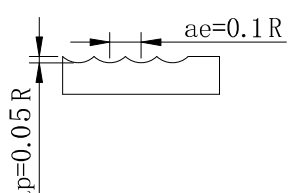
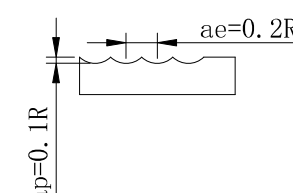
Workpieces materials	General steel (HRC-30)				Stainless steel			
	Vc	fz	ae	ap	Vc	fz	ae	ap
Diameter								
D2R0.1/0.2	50-150	0.01-0.014	1	0.02-0.06	50-150	0.01-0.014	1	0.02-0.06
D3R0.1/0.2/0.3/0.5	50-150	0.01-0.015	1.5	0.02-0.1	50-150	0.01-0.015	1.5	0.02-0.1
D4R0.1/0.2/0.3/0.5	60-120	0.01-0.02	2	0.02-0.1	60-120	0.01-0.02	2	0.02-0.1
D5R0.1/0.2/0.3/0.5	60-120	0.015-0.03	2.5	0.02-0.1	60-120	0.015-0.03	2.5	0.02-0.1
D6R0.1/0.2/0.3/0.5	60-120	0.015-0.035	3	0.02-0.1	60-120	0.015-0.035	3	0.02-0.1
D8R0.5/1/2	60-120	0.02-0.035	4	0.1-0.4	60-120	0.02-0.035	4	0.1-0.4
D10R0.5/1/2	60-120	0.02-0.04	5	0.1-0.4	60-120	0.02-0.04	5	0.1-0.4
D12R0.5/1/2	60-120	0.03-0.04	6	0.1-0.4	60-120	0.03-0.04	6	0.1-0.4
D14R1/2/3	60-120	0.035-0.06	7	0.2-0.6	60-120	0.035-0.06	7	0.2-0.6
D16R1/2/3	60-120	0.035-0.06	8	0.2-0.6	60-120	0.035-0.06	8	0.2-0.6
D18R1/2/3	60-120	0.04-0.08	9	0.2-0.6	60-120	0.04-0.08	9	0.2-0.6
MAX ap								

HRSA alloys				Aluminum alloys			
Vc	fz	ae	ap	Vc	fz	ae	ap
30-90	0.008-0.015	0.02-0.06	0.02-0.06	50-150	0.01-0.02	1	2
30-90	0.01-0.015	0.02-0.1	0.02-0.1	50-150	0.01-0.02	1.5	3
40-80	0.01-0.015	0.02-0.1	0.02-0.1	60-200	0.02-0.04	2	4
40-80	0.01-0.02	0.02-0.1	0.02-0.1	60-200	0.02-0.04	2.5	5
40-80	0.01-0.02	0.02-0.1	0.02-0.1	60-200	0.03-0.06	3	6
40-80	0.015-0.03	0.1-0.4	0.1-0.4	60-200	0.035-0.08	4	8
40-80	0.02-0.03	0.1-0.4	0.1-0.4	60-200	0.045-0.08	5	10
40-80	0.02-0.03	0.1-0.4	0.1-0.4	60-200	0.05-0.1	6	12
40-80	0.03-0.05	0.2-0.6	0.2-0.6	60-200	0.065-0.12	7	14
40-80	0.03-0.06	0.2-0.6	0.2-0.6	60-200	0.08-0.15	8	16
40-80	0.03-0.07	0.2-0.6	0.2-0.6	60-200	0.09-0.2	9	18

繁星系列球头铣刀加工参数推荐 (普通切削)

Recommended cutting datas for Ball nose endmills (General processing)

Workpieces materials	General steel (HRC~30)				Stainless steel			
	Vc	fz	ae	ap	Vc	fz	ae	ap
D1R0.5	25-62	0.008-0.012	0.1	0.05	25-62	0.008-0.012	0.1	0.05
D2R1	30-110	0.01-0.015	0.2	0.1	30-110	0.01-0.015	0.2	0.1
D3R1.5	30-110	0.01-0.015	0.3	0.15	30-110	0.01-0.015	0.3	0.15
D4R2	30-110	0.015-0.02	0.4	0.2	30-110	0.015-0.02	0.4	0.2
D5R2.5	30-110	0.015-0.02	0.5	0.25	30-110	0.015-0.02	0.5	0.25
D6R3	30-110	0.02-0.03	0.6	0.3	30-110	0.02-0.03	0.6	0.3
D7R3.5	30-110	0.02-0.03	0.7	0.35	30-110	0.02-0.03	0.7	0.35
D8R4	30-110	0.02-0.04	0.8	0.4	30-110	0.02-0.04	0.8	0.4
D10R5	30-110	0.02-0.06	1	0.5	30-110	0.02-0.06	1	0.5
D12R6	30-110	0.03-0.08	1.2	0.6	30-110	0.03-0.08	1.2	0.6
D16R8	30-110	0.03-0.1	1.6	0.8	30-110	0.03-0.1	1.6	0.8
D20R10	30-110	0.03-0.12	2	1	30-110	0.03-0.12	2	1
MAX ap								

HRSA alloys				Aluminum alloys			
Vc	fz	ae	ap	Vc	fz	ae	ap
20-32	0.005-0.012	0.05	0.025	25-62	0.01-0.02	0.1	0.05
20-90	0.008-0.012	0.1	0.05	30-110	0.015-0.02	0.2	0.1
30-90	0.01-0.014	0.15	0.075	30-110	0.015-0.02	0.3	0.15
30-90	0.01-0.023	0.2	0.1	30-110	0.02-0.04	0.4	0.2
30-90	0.01-0.028	0.25	0.125	30-110	0.02-0.04	0.5	0.25
30-90	0.015-0.035	0.3	0.15	30-110	0.03-0.06	0.6	0.3
30-90	0.015-0.035	0.35	0.175	30-110	0.03-0.06	0.7	0.35
30-90	0.015-0.04	0.4	0.2	30-110	0.03-0.08	0.8	0.4
30-90	0.015-0.045	0.5	0.25	30-110	0.03-0.08	1	0.5
30-90	0.02-0.05	0.6	0.3	30-110	0.03-0.1	1.2	0.6
30-90	0.02-0.065	0.8	0.4	30-110	0.03-0.15	1.6	0.8
30-90	0.03-0.075	1	0.5	30-110	0.05-0.2	2	1
							

繁星系列平底钻头钻削参数推荐（普通切削）
Recommended drilling data of drills for flat bottom hole
(General processing)

Workpieces materials	General steel (HRC-30)		Stainless steel		Aluminum alloys	
	Vc	fz	Vc	fz	Vc	fz
Diameter						
3.0-4.5	35-55	0.01-0.03	20-30	0.01-0.02	20-120	0.05-0.08
5.0-5.5	35-55	0.02-0.03	20-35	0.01-0.03	20-120	0.05-0.08
6.0-6.5	45-65	0.03-0.05	23-35	0.02-0.04	20-120	0.05-0.08
7.0-7.5	45-65	0.03-0.05	23-35	0.03-0.05	30-120	0.06-0.1
8.0-8.5	50-55	0.05-0.06	25-30	0.03-0.06	30-120	0.06-0.1
9.0-9.5	50-55	0.05-0.06	25-30	0.04-0.08	30-120	0.06-0.1
10.0-10.5	55-70	0.05-0.07	25-30	0.04-0.08	30-120	0.06-0.1
11.0-11.5	55-70	0.05-0.07	25-30	0.05-0.09	30-120	0.1-0.15
12.0	45-65	0.06-0.08	22-30	0.05-0.09	30-120	0.1-0.15

繁星系列3D（外冷）钻头钻削参数推荐（普通切削）
Recommended drilling data of 3D external coolant drills
(General processing)

Workpieces materials	General steel (HRC-30)		Stainless steel		HRSA alloys		Aluminum alloys	
	Vc	fz	Vc	fz	Vc	fz	Vc	fz
Diameter								
2.1-3.0	30-120	0.03-0.05	30-60	0.02-0.05	10-25	0.02-0.04	30-120	0.05-0.08
3.1-4.0	30-120	0.03-0.05	30-60	0.02-0.05	10-25	0.02-0.04	30-120	0.05-0.08
4.1-5.0	30-120	0.03-0.05	30-60	0.02-0.05	10-25	0.02-0.04	30-120	0.05-0.08
5.1-6.0	30-120	0.05-0.1	23-60	0.04-0.08	10-18	0.03-0.05	30-120	0.06-0.1
6.1-7.0	30-120	0.05-0.1	23-60	0.04-0.08	10-18	0.03-0.05	30-120	0.06-0.1
7.1-8.0	30-120	0.05-0.1	23-60	0.04-0.08	10-18	0.03-0.05	30-120	0.06-0.1
8.1-9.0	30-120	0.05-0.1	23-60	0.04-0.08	10-18	0.03-0.05	30-120	0.06-0.1
9.1-10.0	30-120	0.06-0.15	23-60	0.05-0.09	10-18	0.04-0.065	30-120	0.1-0.15
10.1-12.0	30-120	0.06-0.15	23-60	0.05-0.09	10-18	0.04-0.065	30-120	0.1-0.15





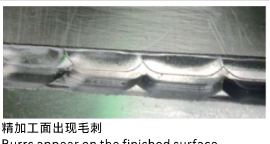
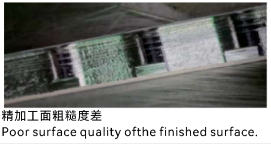
繁星系列5D（内冷）钻头钻削参数推荐（普通切削）
Recommended drilling data of 5D internal coolant drills
(General processing)

Workpieces materials	General steel (HRC-30)		Stainless steel		HRSA alloys		Aluminum alloys	
	Vc	fz	Vc	fz	Vc	fz	Vc	fz
Diameter								
2.1-3.0	20-90	0.03-0.05	18-60	0.03-0.05	10-25	0.02-0.04	20-110	0.05-0.08
3.1-4.0	20-90	0.03-0.05	18-60	0.03-0.05	10-25	0.02-0.04	20-110	0.05-0.08
4.1-5.0	20-90	0.03-0.05	18-60	0.03-0.05	10-25	0.02-0.04	20-110	0.05-0.08
5.1-6.0	30-90	0.05-0.1	20-60	0.05-0.08	10-18	0.03-0.05	30-110	0.06-0.1
6.1-7.0	30-90	0.05-0.1	20-60	0.05-0.08	10-18	0.03-0.05	30-110	0.06-0.1
7.1-8.0	30-90	0.05-0.1	20-60	0.05-0.08	10-18	0.03-0.05	30-110	0.06-0.1
8.1-9.0	30-90	0.05-0.1	20-60	0.05-0.08	10-18	0.03-0.05	30-110	0.06-0.1
9.1-10.0	30-90	0.06-0.15	20-60	0.05-0.09	10-18	0.04-0.065	30-110	0.1-0.15
10.1-12.0	30-90	0.06-0.15	20-60	0.05-0.09	10-18	0.04-0.065	30-110	0.1-0.15

其它信息

Other information

● 铣刀失效分析 Analysis for endmills

铣刀失效分析 Analysis and Solutions for Endmill		
故障现象Failure	原因Reason	对策Trouble-shooting
 切削时发生震动 Vibration occurs during cutting	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.The rake angle and clearance angle are too small. 2. Poor installation of the workpiece. 3. Insufficient rigidity of the tool shank and lathe. 4. The cutting speed and feed speed are too fast.	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 1. Correct rake angle and clearance angle 2. Clean the chuck and fasten the tool. 3. Replace the lathe and chuck. 4. Change the cutting parameters and conditions.
 切削时发生折损 Damage occurs during cutting	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. Insufficient rigidity of the tool. 2. The feed speed are too fast. 3. The cutting depth is too large. 4. Excessive protrusion during clamping. 5. The cutting edge is worn and the tool is not sharp. 6. The cutting length exceeds requirement.	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.更换短刃刀具 1. Using rigid designed cutting tools. 2. Reduce feed speed. 3. Reduce cutting depth. 4. Shorten the clamping length. 5. Check the wear of the cutting tools frequently and return them for grinding. 6. Replace tools with short cutting length.
 切削时发生刃口破损 The cutting edge damaged during cutting	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. The workpiece is not fixed firmly. 2. The feeding speed is too fast. 3. The cutting edge is too sharp. 4. The cutting tools is not fixed firmly. 5. The cutting depth is too large. 6. Insufficient rigidity of the lathe.	1.牢固地固定工件 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 1. Fix the workpiece firmly. 2. Reduce the feeding 3. Grinding the cutting edge. 4. Clamping the tool firmly. 5. Reduce the cutting depth. 6. Replace the lathe.
 磨损、烧伤明显 Obvious wear and burns	1.切削速度太快 2.切削阻力过大 3.工件材料硬度太高 1. The cutting speed is too fast. 2. Excessive cutting resistance. 3. The workpiece material is with high hardness.	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 1. Reduce the cutting speed. 2. Replace the tools with matching properties. 3. Select proper tools to machine hard materials.
 切削卡住 Obvious wear and burns	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. The cutting depth is too large. 2. The chip pocket is too small. 3. Insufficient cutting fluid pressure. 4. The shape of the chip pocket is bad.	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 1. Adjust the feeding speed and cutting depth. 2. Increase the room of the chip pocket. 3. Supply sufficient cutting liquid. 4. Change the shape of the chip pocket.
 精加工面出现毛刺 Burrs appear on the finished surface	1.刀具槽前角/后角不合适 2.切削条件选择错误 3.刀具刃口磨损太快 1. Improper rake angle and clearance angle. 2. The cutting conditions is wrongly selected. 3. The cutting edge wears out quickly.	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 1. Correct the rake angle and clearance angle. 2. Reset the cutting conditions. 3. Regrind the cutting tools as soon as possible.
 精加工面粗糙度差 Poor surface quality of the finished surface.	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. The feed rate is too fast. 2. The cutting speed is too fast. 3. Excessive wear of the cutting edge. 4. Chip evacuation not smoothly.	1.降低进给速度 2.提高转速 3.更换刀具 4.减小切削深度 1. Reduce feed rate. 2. Increase the speed. 3. Replace the tool. 4. Reduce the cutting depth.

钻头加工时的故障及其原因, 对策
ANALYSIS FOR DRILL FAILURE

故障现象Fault form	可能原因Possible reason		对策Solutions
	客户User	刀具Tools	
 负载大 Overload	-	刀具刃型选择不当 The cutting edge shapes not properly chosen	-
	-	刃口处理不当 Improper cutting edge treatment	-
	切削用量不恰当 Improper cutting	-	降低转速, 增大进给 Lower the rotations, increase feed
	冷却不充分 Insufficient cooling	-	改善冷却 Optimize cooling method
 不耐磨, 寿命短 Poor wear-resistance, short tool life	-	刀具材料选择不当 Improper tool material	选择高硬度牌号如K10 Choose higher hardness grade such as K10
	-	刀具涂层 Make coating	刀具涂层 Make coating
主轴刀柄连接精度低, 刀尖跳动大 Low connection accuracy of the spindle tool handle, large runout	-	-	改善连接精度, 如更换液压或热胀夹头 Improving connection accuracy, such as replacing hydraulic or thermal expansion clamps
	主轴刀柄刀具刚性差 Poor rigidity of spindle tool handle	-	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 Improve rigidity, reduce tool overhang length use spring chuck type rather than drill chuck
	工件夹持不穩定 Unstable workpiece clamping	-	改善工件装夹 Improve workpiece clamping
孔偏大 Hole is too large	-	内刃主刃不对称 Asymmetric inner edge, main edge, lateral edge	-
	-	钻头公差选择过高 Tolerance of drills is too high	M7改为H7或H6 Change M7 to H7 and H6
 切削速度过高 Too high cutting speed	-	-	降低主轴转速 Reduce spindle speed
	冷却不充分 Insufficient cooling	-	检查冷却状态, 增大冷却压力 Check the cooling status and increase the cooling pressure
孔壁毛刺孔壁螺旋状划痕 Burrs, spiral scratches on the hole wall	-	棱边倒锥过小, 甚至正锥 Edge inverted cone is too small or even straight cone	及时修磨 Timely grinding
	-	棱边过宽 Too wide edge	-
 出口毛刺 Exit burr	-	刀具材料亲和性 Tool material affinity	选择涂层 Choose coating
	进给过快 Too fast feed	-	减少进给 Lower the feed
材料热处理不稳定, 偏软 Material's heat treatment is unstable and soft	-	-	保证热处理稳定 Make stable heat treatment
	-	顶角小 Small top angle	增大顶角 Enlarge top angle
-	-	刀尖倒棱 Cutting edge chamfering	不倒棱 No chamfering

其它信息

Other information

钻头加工时的故障及其原因, 对策 ANALYSIS FOR DRILL FAILURE			
故障现象Fault form	可能原因Possible reason		对策Solutions
	客户User	刀具Tools	
 崩刃、崩棱边、近刀尖棱边缠绕 Broken edgetwist around	主轴刀柄连接精度低, 刀尖跳动大 Low connection accuracy of the spindle tool handle, large runout	-	改善连接精度, 如更换液压或热胀夹头 Improve connection accuracy, such as replacing hydraulic or thermal expansion clamps
	-	刃型不正确, 断屑不好 Improper cutting edge shape, bad chip breaking	改善刃型, 选择正确钻头 Improve shape and choose the correct drill Bit
	-	槽型不正确, 排屑不畅 Improper cutting edge shape, bad chip removing	改善槽型, 选择正确钻头 Improve shape and choose the correct drill Bit
	-	棱边过宽, 倒锥太小 Too wide edge, too small inverted cone	减少棱边, 增大倒锥 Reduce edges and increase inverted cones
 断刀 Tools Broken	撞刀 Tools-crashing	-	减少操作失误 Reduce operational errors
	进给过大, 切削速度过低 Too large feed while low cutting speed	-	校核切削速度, 减少进给 Check cutting speed to reduce feed
	刀具悬伸过长 Too long over hang length	-	减少刀具悬伸 Reduce overhang length
	未及时修磨 Failure to repair inatimely manner	-	及时修磨 repair it timely
	排屑槽堵塞 Blocked chip removal slot	-	选择恰当钻头, 啄钻 Choose the appropriate drill bit to peck the drill
	-	-	改善冷却 Improve cooling
	-	刃口强度不够, 芯厚不足 Insufficient blade strength	改善钻头强度 Insufficient core thickness
-	长径比过大 Excessive aspect ratio	-	

其它信息

Other information

● 非标定制 Specific order

Customized Tools					
Machine and workpiece materials:					
Machine name:					
Machine type:	Vertical machining center	Horizontal machining center	Special Cutting Machine	CNC lathe	OTHER
Machine tool spindle type:	BT30	B40	BT50	HSK	OTHER
Clamping Type:	Spring chuck	Hydraulic collet	Thermal expansion chuck	Side fixed type	OTHER
Workpiece name:					
Workpiece material/ grade:					
Hardness HB/HRS:					
Heat-treatment:	YES	No			
processing requirement:	1				
	2				
	3				
	4				
	5				
Lifetime requirements:					
Tools Information:	Special endmill	Special Drill bits	Special reamer		
Tolerance requirements:					

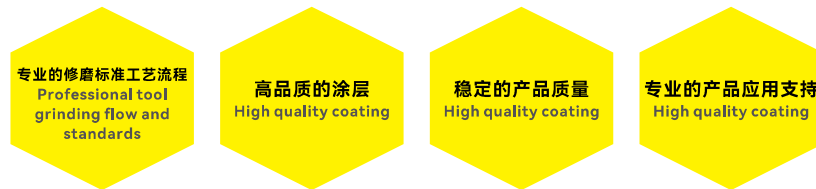
专业刀具修磨服务

Professional Tool Grinding Services

邦普刀具提供高质量的刀具修磨服务，公司在刀具修磨方面积累了丰富的技术经验。邦普采用严谨的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，可为客户节省大量的刀具成本。

Based on our rich technical experience in tool grinding.

Bangpu will provide customers with high-quality tool grinding services using rigorous process flow and grinding standards. After grinding, the tool life will reach over 80% of that of new tools, achieving significant cost savings.



● 修磨刀具流程:

Grinding Services flow:

- 1.客户提出刀具修磨需要
1.The customer proposes the need for tool grinding.
- 2.我们专业工艺人员全检分类，并和客户沟通修磨细节
2.Our professionals will conduct full inspection and classification, and communicate with customers about the details of grinding.
- 3.工程人员按分类好的修磨刀具分别定制修磨工艺
3.Engineer will customize the grinding process according to the classified grinding tools.
- 4.进口五轴磨床对刀具进行修磨处理
4.Imported five-axis grinding machine for tool grinding treatment.
- 5.修磨后刀具钝化，刃口强化处理
5.After grinding, the tool will be passivated and the edge is strengthened.
- 6.根据客户需求如需涂层，进行高效涂层
6.If the coating is required according to customer needs, carry out efficient coating.
- 7.入库交付修磨刀具
7.Warehousing & delivery of the finished tools.
- 8.回访客户修磨刀具信息
8. Follow-up information on the tools.

● 可修磨的刀具种类:

Types of repairable tools

- 整体硬质合金钻头
Solid carbide drill bit
- 整体硬质合金铣刀
Solid carbide endmill
- 模块化钻头（附带刀杆修磨）
Modular drill bit (with toolholder grinding)
- 模块化铣刀（附带刀杆修磨）
Modular milling cutter (with toolholder grinding)