

长沙比高工具有限公司

CHANGSHA BEGO TOOLS LIMITED



Be Good Go Better





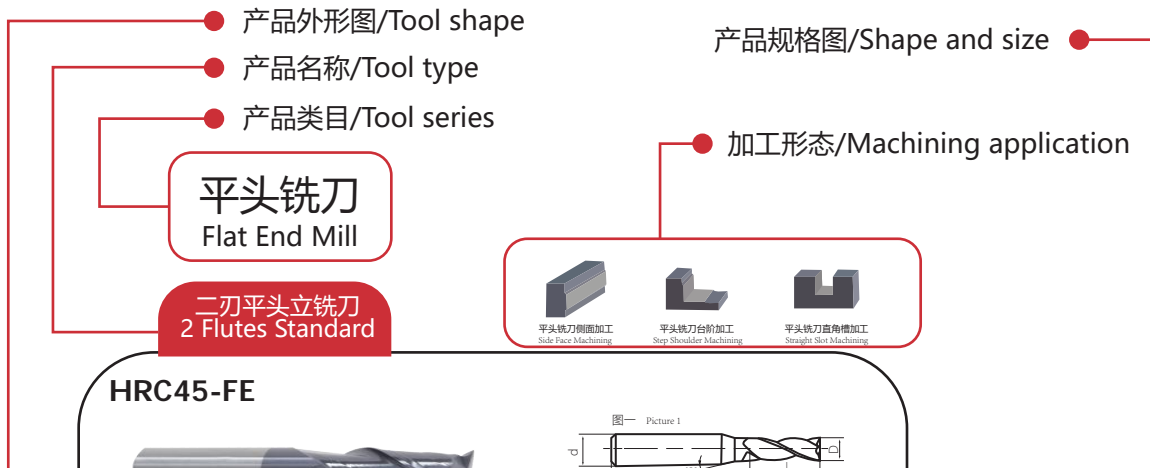
铣削

End Mill

Be Good Go Better

整体硬质合金铣刀选用方法
Selection guide for solid carbide end mills

整体硬质合金立铣刀选用方法

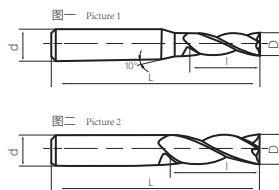


平头铣刀
Flat End Mill

二刃平头立铣刀
2 Flutes Standard



HRC45-FE



- 最适宜沟槽铣削 • 适用范围广
- Suitable for grooving • Wide application



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(L)	柄径 Shank Diameter(d)	柄长 Overall Length(L)	总长 Overall Length(L)			
FE-01-50-2F	1	3	4	50	50	2	●	1
FE-1.5-50-2F	1.5	4	4	50	50	2	●	1
FE-02-50-2F	2	5	4	50	50	2	●	1
FE-2.5-50-2F	2.5	6	4	50	50	2	●	1
FE-03-50-2F	3	8	4	50	50	2	●	1
FE-3.5-50-2F	3.5	10	4	50	50	2	●	2
FE-04-50-2F	4	11	4	50	50	2	●	1
FES-01-50-2F	1	3	6	50	50	2	●	1
FES-1.5-50-2F	1.5	4	6	50	50	2	●	1
FES-02-50-2F	2	5	6	50	50	2	●	1
FES-2.5-50-2F	2.5	6	6	50	50	2	●	1
FES-03-50-2F	3	8	6	50	50	2	●	1
FES-3.5-50-2F	3.5	10	6	50	50	2	●	1
FES-04-50-2F	4	11	6	50	50	2	●	1
FES-05-50-2F	5	13	6	50	50	2	●	1
FES-06-50-2F	6	15	6	50	50	2	●	2
FE-07-60-2F	7	17	8	60	60	2	●	1
FE-08-60-2F	8	20	8	60	60	2	●	2
FE-10-75-2F	10	25	10	75	75	2	●	2
FE-12-75-2F	12	30	12	75	75	2	●	2
FE-14-100-2F	14	35	14	100	100	2	●	2
FE-16-100-2F	16	40	16	100	100	2	●	2
FE-18-100-2F	18	40	18	100	100	2	●	2
FE-20-100-2F	20	40	20	100	100	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material										
P		M				K	N	S		
预硬钢、淬硬钢		不锈钢				铸铁	铜合金	铝合金	钛合金	耐热合金
Carbon steel		Stainless steel				Cast iron	Copper alloy	Aluminum alloy	Titanium alloy	Heat resistant alloy
○	○	○	○	○	○	○	○	○	○	○

命名规则 — P6 图标种类及识别 — P7 切削参数 — P79

- 适用被加工材料范围
Applicable workpiece material range
- 螺旋角、涂层、刀刃公差等
Helical angel, coating, cutter diameter, etc
- 产品特点/Product features

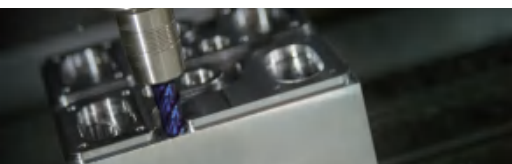
产品规格栏/Specification

命名规则、图标种类及识别、切削参数
Naming rules, Symbol introduction, cutting parameters

铣削 End Mills 铣削

整体硬质合金立铣刀

Solid Carbide End Mills



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刃数 No. of Flutes	涂层 Coating	刀具名称及外形 Series and figure	系列型号 Type	尺寸范围 Diameter Range	尺寸表 页码 Dimension Page	切削参数 页码 Cutting Parameters Page	
平头立铣刀 Flat End Mill							
	AlTiN	2刃平头 2 Flutes Standard		HRC45 FE-2F	D1 ~ D20	P10	P88
	AlTiN	2刃加长平头 2 Flutes Long		HRC45 FE-2F	D1 ~ D20	P11	P88
	AlTiN	4刃平头 4 Flutes Standard		HRC45 FE-4F	D1 ~ D20	P12	P90
	AlTiN	4刃加长平头 4 Flutes Long		HRC45 FE-4F	D1 ~ D20	P13	P90
	AlCrSiN	2刃平头 2 Flutes Standard		HRC55 FE-2F	D1 ~ D20	P14	P89
	AlCrSiN	2刃加长平头 2 Flutes Long		HRC55 FE-2F	D1 ~ D20	P15	P89
	AlCrSiN	4刃平头 4 Flutes Standard		HRC55 FE-4F	D1 ~ D20	P16	P90
	AlCrSiN	4刃加长平头 4 Flutes Long		HRC55 FE-4F	D1 ~ D20	P17	P90
	AlCrSiN	6刃平头 6 Flutes Standard		HRC55 FE-6F	D6 ~ D20	P18	P91
	nAco 3 Black	2刃平头 2 Flutes Standard		HRC60 FE-2F	D1 ~ D20	P19	P97
	nAco 3 Black	2刃加长平头 2 Flutes Long		HRC60 FE-2F	D1 ~ D20	P20	P97
	nAco 3 Black	4刃平头 4 Flutes Standard		HRC60 FE-4F	D1 ~ D20	P21	P97
	nAco 3 Black	4刃加长平头 4 Flutes Long		HRC60 FE-4F	D1 ~ D20	P22	P97
	nAco 3 Black	6刃平头 6 Flutes Standard		HRC60 FE-6F	D6 ~ D20	P23	P97
	nAco 3 Blue	2刃平头 2 Flutes Standard		HRC65 FE-2F	D1 ~ D20	P24	P99
	nAco 3 Blue	2刃加长平头 2 Flutes Long		HRC65 FE-2F	D1 ~ D20	P25	P99
	nAco 3 Blue	4刃平头 4 Flutes Standard		HRC65 FE-4F	D1 ~ D20	P26	P99
	nAco 3 Blue	4刃加长平头 4 Flutes Long		HRC65 FE-4F	D1 ~ D20	P27	P99

刃数 No. of Flutes	涂层 Coating	刀具名称及外形 Series and figure	系列型号 Type	尺寸范围 Diameter Range	尺寸表 页码 Dimension Page	切削参数 页码 Cutting Parameters Page	
球头立铣刀 Ball Nose End Mill							
	AlTiN	2刃球头 2 Flutes Standard		HRC45 BN-2F	D1 ~ D20	P29	P92
	AlTiN	2刃加长球头 2 Flutes Long		HRC45 BN-2F	D1 ~ D20	P30	P92
	AlTiN	4刃球头 4 Flutes Standard		HRC45 BN-4F	D1 ~ D20	P31	P93
	AlTiN	4刃加长球头 4 Flutes Long		HRC45 BN-4F	D1 ~ D20	P32	P93
	AlCrSiN	2刃球头 2 Flutes Standard		HRC55 BN-2F	D1 ~ D20	P33	P92
	AlCrSiN	2刃加长球头 2 Flutes Long		HRC55 BN-2F	D1 ~ D20	P34	P92
	AlCrSiN	4刃球头 4 Flutes Standard		HRC55 BN-4F	D1 ~ D20	P35	P93
	AlCrSiN	4刃加长球头 4 Flutes Long		HRC55 BN-4F	D1 ~ D20	P36	P93
	nAco 3 Black	2刃球头 2 Flutes Standard		HRC60 BN-2F	D1 ~ D20	P37	P98
	nAco 3 Black	2刃加长球头 2 Flutes Long		HRC60 BN-2F	D1 ~ D20	P38	P98
	nAco 3 Black	4刃球头 4 Flutes Standard		HRC60 BN-4F	D1 ~ D20	P39	P98
	nAco 3 Black	4刃加长球头 4 Flutes Long		HRC60 BN-4F	D1 ~ D20	P40	P98
	nAco 3 Blue	2刃球头 2 Flutes Standard		HRC65 BN-2F	D1 ~ D20	P41	P99
	nAco 3 Blue	2刃加长球头 2 Flutes Long		HRC65 BN-2F	D1 ~ D20	P42	P99
	nAco 3 Blue	4刃球头 4 Flutes Standard		HRC65 BN-4F	D1 ~ D20	P43	P99
	nAco 3 Blue	4刃加长球头 4 Flutes Long		HRC65 BN-4F	D1 ~ D20	P44	P99

刃数 No. of Flutes	涂层 Coating	刀具名称及外形 Series and figure	系列型号 Type	尺寸范围 Diameter Range	尺寸表 页码 Dimension Page	切削参数 页码 Cutting Parameters Page
刀尖圆弧立铣刀 Corner Radius End Mill						
	AlTiN	4刃刀尖圆弧 4 Flutes Standard		HRC45 CR-4F	D2 ~ D20	P46-47 P90
	AlTiN	4刃加长刀尖圆弧 4 Flutes Long		HRC45 CR-4F	D3 ~ D20	P48-49 P90
	AlCrSiN	4刃刀尖圆弧 4 Flutes Standard		HRC55 CR-4F	D3 ~ D20	P50-51 P90
	AlCrSiN	4刃加长刀尖圆弧 4 Flutes Long		HRC55 CR-4F	D3 ~ D20	P52-53 P90
	nAlCo 3 Black	4刃刀尖圆弧 4 Flutes Standard		HRC60 CR-4F	D3 ~ D20	P54-55 P97
	nAlCo 3 Black	4刃加长刀尖圆弧 4 Flutes Long		HRC60 CR-4F	D3 ~ D20	P56-57 P97
	nAlCo 3 Blue	4刃刀尖圆弧 4 Flutes Standard		HRC65 CR-4F	D3 ~ D20	P58-59 P99
	nAlCo 3 Blue	4刃加长刀尖圆弧 4 Flutes Long		HRC65 CR-4F	D3 ~ D20	P60-61 P99
铝加工立铣刀 End mill for Aluminum						
		3刃平头 3 Flutes Standard		HRC55 AL-3F	D1 ~ D20	P63 P100-P101
		3刃加长平头 3 Flutes Long		HRC55 AL-3F	D1 ~ D20	P64 P100-P101
		3刃平头 3 Flutes Standard		HRC55 AL-3F	D4 ~ D20	P65 P100-P101
		3刃加长平头 3 Flutes Long		HRC55 AL-3F	D4 ~ D20	P66 P100-P101
粗皮立铣刀 Rough End Mill						
	TiAlN	4刃平头 4 Flutes Standard		HRC55 RE-4F	D4 ~ D20	P68 P94
	TiAlN	4刃加长平头 4 Flutes Long		HRC55 RE-4F	D4 ~ D20	P69 P94

立铣刀系列 End Mill Tool Series

刃数 No. of Flutes	涂层 Coating	刀具名称及外形 Series and figure	系列型号 Type	尺寸范围 Diameter Range	尺寸表 页码 Dimension Page	切削参数 页码 Cutting Parameters Page
不锈钢加工立铣刀 End Mill for Stainless steel						
	nACo 3 Gold	4刃平头 4 Flutes Standard		HRC60 ST-4F	D1 ~ D20	P71 P95-P96
	nACo 3 Gold	4刃加长平头 4 Flutes Long		HRC60 ST-4F	D1 ~ D20	P72 P95-P96
微小径立铣刀 Micro End Mill						
	nACo 3 Black	2刃平头 2 Flutes Flat		HRC60 ME-2F	D0.2 ~ D0.9	P74 P102-P103
	nACo 3 Black	2刃球头 2 Flutes Ball Nose		HRC60 ME-2F	D0.2 ~ D0.9	P75 P102-P103
长颈立铣刀 Long Neck End Mill						
	AlCrSiN	2刃平头 2 Flutes Flat		HRC55 LN-2F	D0.5 ~ D3.0	P76-P77 P102-P103
	AlCrSiN	2刃球头 2 Flutes Ball Nose		HRC55 LN-2F	D0.5 ~ D3.0	P78-P79 P102-P103
	AlCrSiN	4刃平头 4 Flutes Flat		HRC55 LN-4F	D0.5 ~ D3.0	P80-P81 P102-P103
锥度立铣刀 Taper End Mill						
	AlCrSiN	2刃平头 4 Flutes Flat		HRC55 TE-4F	D1 ~ D10	P82-P83 P102-P103
	AlCrSiN	4刃平头 4 Flutes Flat		HRC55 TE-4F	D1 ~ D10	P84-P85 P102-P103
	AlCrSiN	2刃球头 2 Flutes Ball Nose		HRC55 TE-4F	D1 ~ D10	P86-P87 P102-P103

立铣刀系列
End Mill Tool Series



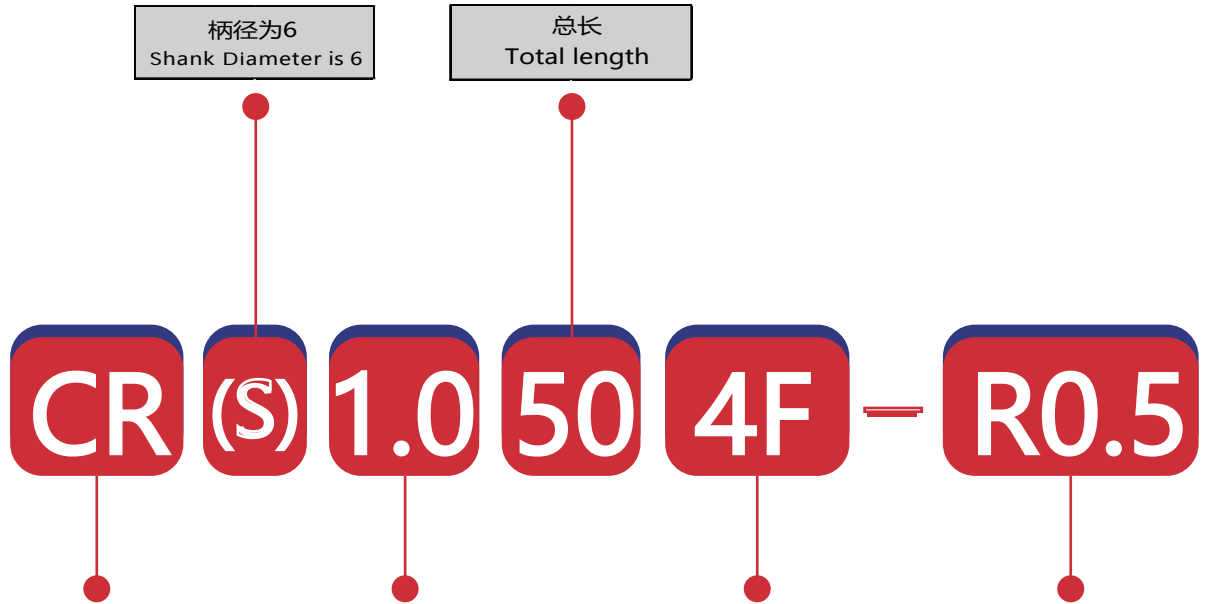
铣削

End Mill

Be Good Go Better

命名规则
Naming rules

命名规则
Naming rules



铣刀类型 Milling cutter type	
FE	平头铣刀 Flat End Mill
BN	球头铣刀 Ball Nose End Mill
CR	圆弧铣刀 Corner Radius End Mill
RE	粗皮铣刀 Rough End Mill
AL	铝加工立铣刀 End mill for Aluminum
PE	平头铣刀 Flat End Mill
ST	不锈钢加工立铣刀 End Mill for Stainless steel
UE	不等分立铣刀 Unequal Pitch End Mill
ME	微小径铣刀 Micro End Mill
LN	长颈立铣刀 Long Neck End Mill
TE/B	锥度立铣刀 Taper End Mill

刀径 Tool path

刀数 Number of edges

其他 Other
球头半径 Radius of ball nose
刀尖圆弧 Radius of nose arc
颈长 Neck Length
锥度 Taper angle

标记说明 Symbol introduction

标记说明 Symbol introduction

标记 Mark	说明 Introduction
涂层 Coating	纳米金色涂层 nano-multilayer Gold coating
	纳米黑色涂层 nano-multilayer Black coating
	纳米蓝色涂层 nano-multilayer Blue coating
	AlTiN涂层 AlTiN Coating
	TiAlN涂层 TiAlN Coating
	AlCrSiN涂层 AlCrSiN Coating
端齿类型 End tooth type	二刃平头铣刀 2 Flute Standard Length
	二刃球头铣刀 2 Flute Ball nose
	二刃圆弧铣刀 2 Flute Corner Radius
	三刃平头铣刀 3 Flute Standard Length
	四刃平头铣刀 4 Flute Standard Length
	四刃球头铣刀 4 Flute Ball nose
	四刃圆弧铣刀 4 Flute Corner Radius
	六刃平头铣刀 6 Flute Standard Length
刀尖形式 Tool tip form	尖角保护型 Corner protection
	尖角型 Sharp angle
螺旋角 Helix	β 为螺旋角: 30°, 35°, 38°, 45°, 55° β is the helix: 30°, 35°, 38°, 45°, 55°
刃径公差 Cutter diameter tolerance	
圆弧公差 Radius tolerance	

标记 Symbol	说明 introduction
加工形态 Processing form	平头铣刀侧面加工 Flat End Mill for Side Face Machining
	平头铣刀台阶加工 Flat End Mill for Step Shoulder Machining
	平头铣刀直角槽加工 Flat End Mill for Straight Slot Machining
	平头铣刀深沟加工 Flat End Mill for Deep slot Machining
	球头铣刀仿形加工 Ball Nose End Mill for Profile Machining
	球头铣刀型腔加工 Ball Nose End Mill for Cavity Machining
	球头铣刀槽加工 Ball Nose End Mill for Slot Machining
	球头铣刀深沟加工 Ball Nose End Mill for Deep Slot Machining
	圆弧铣刀侧面加工 Corner Radius End Mill for Side Face Machining
	圆弧铣刀槽加工 Corner Radius End Mill for Slot Machining
圆弧铣刀仿形加工 Corner Radius End Mill for Profile Machining	
工件材料 Workpiece Material	钢 Steels
	不锈钢 Stainless Steels
	铸铁 Cast Iron
	非铁材料 Non-ferrous Materials
	高温合金、钛合金 Heat-resistant Super Alloys, Titanium Alloys
	高硬度材料 High Hardened Materials



铣削

End Mill

Be Good Go Better

涂层
Coating introduction

Coating introduction
涂层

涂层名称 Coatings	维氏硬度 Microhardness (HV0.05)	摩擦系数 Coefficient of Friction	最高适用温度 Max.service Temperature(°C)	特点与应用 Characteristic and Application
AlTiN	3300	0.55	900	<ul style="list-style-type: none"> ●结晶方位精密控制； ●主要用于中低硬度普通钢，模具钢的各种铣削。 Extremely texture controlled,mainly suitable for ordinary steel,low hardness of die mould milling.
AlCrSiN	3400	0.4	1100	<ul style="list-style-type: none"> ●专为铣削加工开发，高抗氧化性，实现耐磨性与韧性完美平衡； ●通用性极高，适用于HRC55以下的普通钢，模具钢，钛合金的各种铣削加工。 Specially designed for milling,high oxidation resistance,good balance of abrasionresistance and toughness,versatility is extremely high,suitable for ordinary steel under HRC55,die steel and titanium alloy milling.
TiAlN	3200	0.45	900	<ul style="list-style-type: none"> ●高抗氧化性和高温耐磨性能极其优异； ●适用于不锈钢，钛合金的各种铣削。 High oxidation resistance,extremely good of high temperature abrasion resistance,suitable for stainless steel and titanium alloy milling
NaCo3 Black	4500	0.5	1200	<ul style="list-style-type: none"> ●极佳的抗氧化性和高硬度涂层； ●特别适用于HRC60的高硬度钢铣削加工。 适合干式铣削。 Excellent oxidation resistance and high hardness coating,especially suitable for high hardness steel above HRC60 dry milling.
NaCo3 Blue	4500	0.4	1200	<ul style="list-style-type: none"> ●超高硬度，高抗氧化性与红硬性； ●特别适用于HRC65的超高硬度钢铣削加工。 Superhigh hardness,high oxidation resistance and hot hardness,especially suitable for superhigh hardness steel above HRC60 milling.
NaCo3 Gold	4500	0.4	1200	<ul style="list-style-type: none"> ●高硬度和低摩擦系数 ●特别适用于不锈钢工具加工。 High hardness and low friction coefficient,especially Suitable for stainless steel milling .

平头铣刀系列

Flat End Mills Series

FE 系列

FE Series



价格具有竞争力的平头立铣刀

Flat End Mills with competitive price and durable quality

高质量和高性能通用加工立铣刀

Solid End Mills for general Machining with high quality

高性能通用加工

- HRC45-2刃平刀/4刃平刀
(HRC45-2 Flute,Standard Length/4 Flute,Standard Length)
- HRC55-2刃平刀/4刃平刀/6刃平刀
(HRC55-2 Flute/4 Flute,/6Flute Standard Length)

高硬材料、难加工材料加工

- HRC60-2刃平刀/4刃平刀/6刃平刀
(HRC60-2 Flute/4 Flute,/6Flute Standard Length)
- HRC65-2刃平刀/4刃平刀
(HRC65-2 Flute,Standard Length/4 Flute,Standard Length)

HRC45

- 适用于普通钢、铸铁材料 ($\leq 45\text{HRC}$) 的加工;
Suitable for steels&cast iron($\leq 45\text{HRC}$).
- TiAlN涂层, 通用性能强;
TiAlN Coating, Good for general machining.
- 适用于油冷冷却。
Suitable for oil cooling.

HRC60

- 适用于55-60HRC高硬钢的精加工;
For harden steel(50-60)finishing.
- 适用于大切深、大切宽的高效加工, 金属去除率高;
Applicable to high efficiency machining at large cutting depth(ap), large cutting width(ae),high material removal rate.

HRC55

- 适用于低合金钢、淬火钢、铸铁材料 ($\leq 55\text{HRC}$) 的加工;
Suitable for steels&cast iron($\leq 55\text{HRC}$).
- 采用高性能AlCrSiN涂层, 耐高温、耐磨损;
High performance AlCrSiN coating, high temperature resistance and high wear resistance.

HRC65

- 特有的NACO 3 Blue涂层, 具有极强的抗氧化性和耐磨性;
Unique NACO-BLUE coating with excellent oxidation resistance and wear resistance.
- 适用于高温材料, 航空材料加工;
Suitable for high temperature materials and aviation materials



铣削

End Mill

Be Good Go Better

平头铣刀
Flat End Mill

二刃平头立铣刀
2 Flutes Standard



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

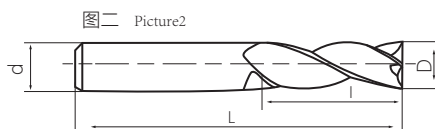
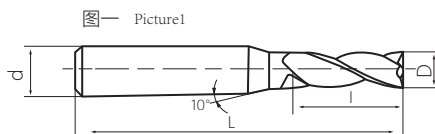
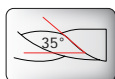


平头铣刀直角槽加工
Straight Slot Machining

HRC45-FE



- 最适宜沟槽铣削
- 适用范围广
- Suitable for grooving
- Wide applications



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (L)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
FE-1.0-50-2F	1	3	4	50	2	●	1
FE-1.5-50-2F	1.5	4.5	4	50	2	●	1
FE-2.0-50-2F	2	6	4	50	2	●	1
FE-2.5-50-2F	2.5	7.5	4	50	2	●	1
FE-3.0-50-2F	3	9	4	50	2	●	1
FE-3.5-50-2F	3.5	10	4	50	2	●	1
FE-4.0-50-2F	4	10	4	50	2	●	2
FES-1.0-50-2F	1	3	6	50	2	●	1
FES-1.5-50-2F	1.5	4	6	50	2	●	1
FES-2.0-50-2F	2	6	6	50	2	●	1
FES-2.5-50-2F	2.5	7.5	6	50	2	●	1
FES-3.0-50-2F	3	9	6	50	2	●	1
FES-3.5-50-2F	3.5	10	6	50	2	●	1
FES-4.0-50-2F	4	10	6	50	2	●	1
FES-5.0-50-2F	5	13	6	50	2	●	1
FES-6.0-50-2F	6	15	6	50	2	●	2
FE-7.0-60-2F	7	18	8	60	2	●	1
FE-8.0-60-2F	8	20	8	60	2	●	2
FE-9.0-75-2F	10	25	10	75	2	●	2
FE-12-75-2F	12	30	12	75	2	●	2
FE-14-100-2F	14	45	14	100	2	●	2
FE-16-100-2F	16	45	16	100	2	●	2
FE-18-100-2F	18	45	18	100	2	●	2
FE-20-100-2F	20	45	20	100	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation ○ 非常合适 Very Suitable ○ 合适 Suitable

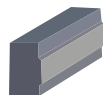
被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○					○				

命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P88
Cutting parameters — P88

平头铣刀
Flat End Mill



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining



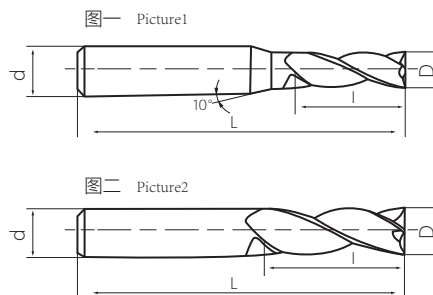
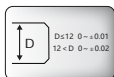
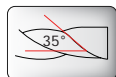
平头铣刀直角槽加工
Straight Slot Machining

二刃加长平头立铣刀 2 Flutes Extra Long

HRC45-FE



- HRC45 加长平刀系列
- HRC45 extra long



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(L)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
FE-4.0-75-2F	4	16	4	75	2	●	2
FES-6.0-75-2F	6	24	6	75	2	●	2
FE-7.0-75-2F	7	28	8	75	2	○	1
FE-8.0-75-2F	8	30	8	75	2	●	2
FE-4.0-100-2F	4	20	4	100	2	●	2
FES-6.0-100-2F	6	30	6	100	2	●	2
FE-8.0-100-2F	8	35	8	100	2	●	2
FE-10-100-2F	10	40	10	100	2	●	2
FE-12-100-2F	12	45	12	100	2	●	2
FE-8.0-150-2F	8	40	8	150	2	●	2
FE-10-150-2F	10	60	10	150	2	●	2
FE-12-150-2F	12	60	12	150	2	●	2
FE-16-150-2F	16	75	16	150	2	●	2
FE-18-150-2F	18	75	18	150	2	●	2
FE-20-150-2F	20	75	20	150	2	●	2

● 常备库存 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
◎	◎	○				◎					

平头铣刀
Flat End Mill

四刃平头立铣刀 4 Flutes Standard



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

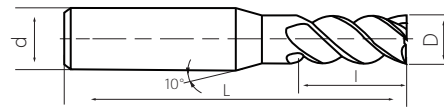


平头铣刀直角槽加工
Straight Slot Machining

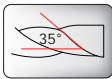
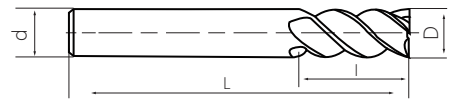
HRC45-FE



图一 Picture1



图二 Picture2



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
FE-1.0-50-4F	1	3	4	50	4	●	1
FE-1.5-50-4F	1.5	4.5	4	50	4	●	1
FE-2.0-50-4F	2	6	4	50	4	●	1
FE-2.5-50-4F	2.5	7.5	4	50	4	●	1
FE-3.0-50-4F	3	9	4	50	4	●	1
FE-3.5-50-4F	3.5	10	4	50	4	●	1
FE-4.0-50-4F	4	10	4	50	4	●	2
FES-1.0-50-4F	1	3	6	50	4	●	1
FES-1.5-50-4F	1.5	4.5	6	50	4	●	1
FES-2.0-50-4F	2	6	6	50	4	●	1
FES-2.5-50-4F	2.5	7.5	6	50	4	●	1
FES-3.0-50-4F	3	9	6	50	4	●	1
FES-3.5-50-4F	3.5	10	6	50	4	●	1
FES-4.0-50-4F	4	10	6	50	4	●	1
FES-5.0-50-4F	5	13	6	50	4	●	1
FES-6.0-50-4F	6	15	6	50	4	●	2
FE-7.0-60-4F	7	18	8	60	4	●	1
FE-8.0-60-4F	8	20	8	60	4	●	2
FE-10-75-4F	10	25	10	75	4	●	2
FE-12-75-4F	12	30	12	75	4	●	2
FE-14-100-4F	14	45	14	100	4	●	2
FE-16-100-4F	16	45	16	100	4	●	2
FE-18-100-4F	18	45	18	100	4	●	2
FE-20-100-4F	20	45	20	100	4	●	2

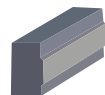
● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
◎	◎	○					◎				

平头铣刀
Flat End Mill



平头铣刀侧面加工
Side Face Machining



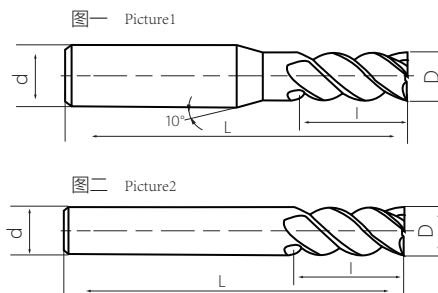
平头铣刀台阶加工
Step Shoulder Machining



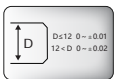
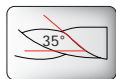
平头铣刀直角槽加工
Straight Slot Machining

四刃加长平头立铣刀
4 Flutes Extra Long

HRC45-FE



平头铣刀
Flat End Mill



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(D)	总长 Overall Length(L)			
FE-4.0-75-4F	4	16	4	75	4	●	2
FES-6.0-75-4F	6	24	6	75	4	●	2
FE-7.0-75-4F	7	28	8	75	4	○	1
FE-8.0-75-4F	8	30	8	75	4	●	2
FE-4.0-100-4F	4	20	4	100	4	●	2
FES-6.0-100-4F	6	30	6	100	4	●	2
FE-8.0-100-4F	8	35	8	100	4	●	2
FE-10-100-4F	10	40	10	100	4	●	2
FE-12-100-4F	12	45	12	100	4	●	2
FE-8.0-150-4F	8	40	8	150	4	●	2
FE-10-150-4F	10	60	10	150	4	●	2
FE-12-150-4F	12	60	12	150	4	●	2
FE-16-150-4F	16	75	16	150	4	●	2
FE-18-150-4F	18	75	18	150	4	●	2
FE-20-150-4F	20	75	20	150	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

非常合适 Very Suitable ○ 合适 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○				○					



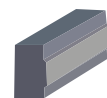
铣削

End Mill

Be Good Go Better

平头铣刀
Flat End Mill

二刃平头立铣刀
2 Flutes Standard



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

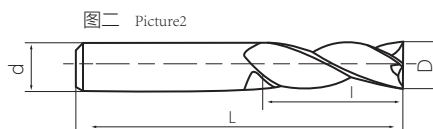
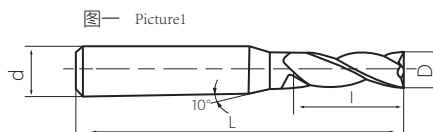
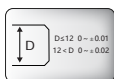
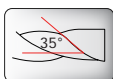


平头铣刀直角槽加工
Straight Slot Machining

HRC55-FE



- 最适宜沟槽铣削
- 适用范围广
- Suitable for grooving
- Wide applications



平头铣刀
Flat End Mill

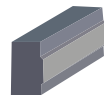
铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (D)	总长 Overall Length (L)			
FE-1.0-50-2F	1	3	4	50	2	●	1
FE-1.5-50-2F	1.5	4.5	4	50	2	●	1
FE-2.0-50-2F	2	6	4	50	2	●	1
FE-2.5-50-2F	2.5	7.5	4	50	2	●	1
FE-3.0-50-2F	3	9	4	50	2	●	1
FE-3.5-50-2F	3.5	10	4	50	2	●	1
FE-4.0-50-2F	4	10	4	50	2	●	2
FES-1.0-50-2F	1	3	6	50	2	●	1
FES-1.5-50-2F	1.5	4.5	6	50	2	●	1
FES-2.0-50-2F	2	6	6	50	2	●	1
FES-2.5-50-2F	2.5	7.5	6	50	2	●	1
FES-3.0-50-2F	3	9	6	50	2	●	1
FES-3.5-50-2F	3.5	10	6	50	2	●	1
FES-4.0-50-2F	4	10	6	50	2	●	2
FES-5.0-50-2F	5	13	6	50	2	●	1
FES-6.0-50-2F	6	15	6	50	2	●	2
FE-7.0-60-2F	7	18	8	60	2	●	1
FE-8.0-60-2F	8	20	8	60	2	●	2
FE-10-75-2F	10	25	10	75	2	●	2
FE-12-75-2F	12	30	12	75	2	●	2
FE-14-100-2F	14	45	14	100	2	●	2
FE-16-100-2F	16	45	16	100	2	●	2
FE-18-100-2F	18	45	18	100	2	●	2
FE-20-100-2F	20	45	20	100	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation ○ 非常合适 Very Suitable ○ 合适 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○				○					

平头铣刀
Flat End Mill



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining



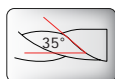
平头铣刀直槽加工
Straight Slot Machining

二刃加长平头立铣刀 2 Flutes Extra Long

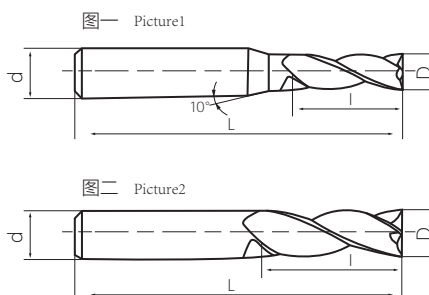
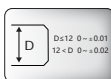
HRC55-FE



- HRC55 加长平刀系列
- HRC55 extra long



AlCrSiN



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
FE-4.0-75-2F	4	16	4	75	2	●	2
FES-6.0-75-2F	6	24	6	75	2	●	2
FE-7.0-75-2F	7	28	8	75	2	○	1
FE-8.0-75-2F	8	30	8	75	2	●	2
FE-4.0-100-2F	4	20	4	100	2	●	2
FES-6.0-100-2F	6	30	6	100	2	●	2
FE-8.0-100-2F	8	35	8	100	2	●	2
FE-10-100-2F	10	40	10	100	2	●	2
FE-12-100-2F	12	45	12	100	2	●	2
FE-8.0-150-2F	8	40	8	150	2	●	2
FE-10-150-2F	10	60	10	150	2	●	2
FE-12-150-2F	12	60	12	150	2	●	2
FE-16-150-2F	16	75	16	150	2	●	2
FE-18-150-2F	18	75	18	150	2	●	2
FE-20-150-2F	20	75	20	150	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

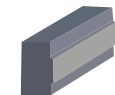
被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
◎	◎	○	◎	◎	○	◎					

平头铣刀
Flat End Mill

四刃平头立铣刀 4 Flutes Standard



平头铣刀侧面加工
Side Face Machining



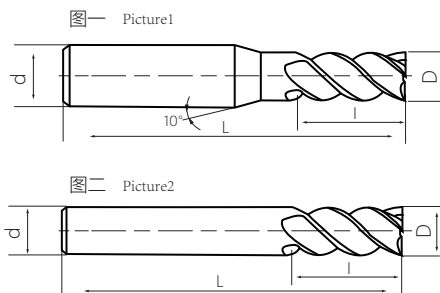
平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

平头铣刀
Flat End Mill

HRC55-FE



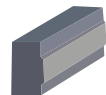
铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
FE-1.0-50-4F	1	3	4	50	4	●	1
FE-1.5-50-4F	1.5	4.5	4	50	4	●	1
FE-2.0-50-4F	2	6	4	50	4	●	1
FE-2.5-50-4F	2.5	7.5	4	50	4	●	1
FE-3.0-50-4F	3	9	4	50	4	●	1
FE-3.5-50-4F	3.5	10	4	50	4	●	1
FE-4.0-50-4F	4	10	4	50	4	●	2
FES-1.0-50-4F	1	3	6	50	4	●	1
FES-1.5-50-4F	1.5	4.5	6	50	4	●	1
FES-2.0-50-4F	2	6	6	50	4	●	1
FES-2.5-50-4F	2.5	7.5	6	50	4	●	1
FES-3.0-50-4F	3	9	6	50	4	●	1
FES-3.5-50-4F	3.5	10	6	50	4	●	1
FES-4.0-50-4F	4	10	6	50	4	●	1
FES-5.0-50-4F	5	13	6	50	4	●	1
FES-6.0-50-4F	6	15	6	50	4	●	2
FE-7.0-60-4F	7	18	8	60	4	●	1
FE-8.0-60-4F	8	20	8	60	4	●	2
FE-10-75-4F	10	25	10	75	4	●	2
FE-12-75-4F	12	30	12	75	4	●	2
FE-14-100-4F	14	40	14	100	4	●	2
FE-16-100-4F	16	45	16	100	4	●	2
FE-18-100-4F	18	45	18	100	4	●	2
FE-20-100-4F	20	45	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	

平头铣刀
Flat End Mill



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining



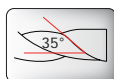
平头铣刀直角槽加工
Straight Slot Machining

四刃加长平头立铣刀 4 Flutes Extra Long

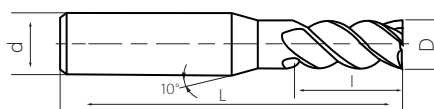
HRC55-FE



- HRC55 加长平刀系列
- HRC55 extra long



图一 Picture1



图二 Picture2



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
FE-4.0-75-4F	4	16	4	75	4	●	2
FES-6.0-75-4F	6	24	6	75	4	●	2
FE-7.0-75-4F	7	28	8	75	4	○	1
FE-8.0-75-4F	8	30	8	75	4	●	2
FE-4.0-100-4F	4	20	4	100	4	●	2
FES-6.0-100-4F	6	30	6	100	4	●	2
FE-8.0-100-4F	8	35	8	100	4	●	2
FE-10-100-4F	10	40	10	100	4	●	2
FE-12-100-4F	12	45	12	100	4	●	2
FE-8-150-4F	8	40	8	150	4	●	2
FE-10-150-4F	10	60	10	150	4	●	2
FE-12-150-4F	12	60	12	150	4	●	2
FE-16-150-4F	16	75	16	150	4	●	2
FE-18-150-4F	18	75	18	150	4	●	2
FE-20-150-4F	20	75	20	150	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

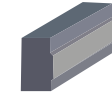
被加工材料推荐/Workpiece material recommendation

非常合适 Very Suitable ○ 合适 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○					

平头铣刀
Flat End Mill

六刃平头立铣刀 6 Flutes Standard



平头铣刀侧面加工
Side Face Machining

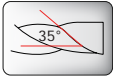
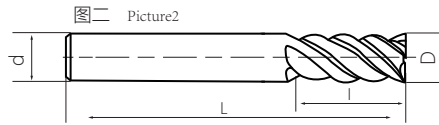
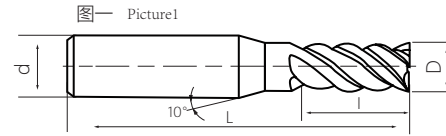


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC55-FE



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
FES-6.0-50-6F	6	15	6	50	6	○	2
FE-8.0-60-6F	8	20	8	60	6	○	2
FE-10-75-6F	10	25	10	75	2	○	2
FE-12-75-6F	12	30	12	75	2	○	2
FE-16-100-6F	16	45	16	100	2	○	2
FE-20-100-6F	20	45	20	100	2	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

平头铣刀
Flat End Mill

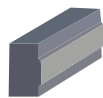
被加工材料推荐/Workpiece material recommendation

非常合适 Very Suitable ○ 合适 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	

平头铣刀
Flat End Mill

二刃平头立铣刀 2 Flutes Standard



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

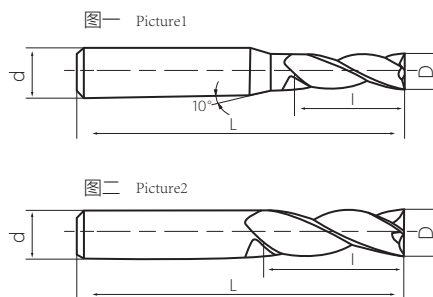
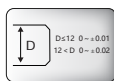
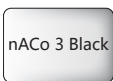
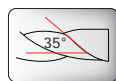


平头铣刀直角槽加工
Straight Slot Machining

HRC60-FE



- 最适宜沟槽铣削
- 适用范围广
- Suitable for grooving
- Wide applications



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
FE-1.0-50-2F	1	3	4	50	2	●	1
FE-1.5-50-2F	1.5	4.5	4	50	2	●	1
FE-2.0-50-2F	2	6	4	50	2	●	1
FE-2.5-50-2F	2.5	7.5	4	50	2	●	1
FE-3.0-50-2F	3	9	4	50	2	●	1
FE-3.5-50-2F	3.5	10	4	50	2	●	1
FE-4.0-50-2F	4	10	4	50	2	●	2
FES-1.0-50-2F	1	3	6	50	2	●	1
FES-1.5-50-2F	1.5	4.5	6	50	2	●	1
FES-2.0-50-2F	2	6	6	50	2	●	1
FES-2.5-50-2F	2.5	7.5	6	50	2	●	1
FES-3.0-50-2F	3	9	6	50	2	●	1
FES-3.5-50-2F	3.5	10	6	50	2	●	1
FES-4.0-50-2F	4	10	6	50	2	●	2
FES-5.0-50-2F	5	13	6	50	2	●	1
FES-6.0-50-2F	6	15	6	50	2	●	2
FE-7.0-60-2F	7	18	8	60	2	●	1
FE-8.0-60-2F	8	20	8	60	2	●	2
FE-10-75-2F	10	25	10	75	2	●	2
FE-12-75-2F	12	30	12	75	2	●	2
FE-14-100-2F	14	45	14	100	2	●	2
FE-16-100-2F	16	45	16	100	2	●	2
FE-18-100-2F	18	45	18	100	2	●	2
FE-20-100-2F	20	45	20	100	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

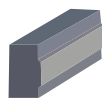
被加工材料推荐/Workpiece material recommendation

● 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~40HRC	~50HRC	~60HRC	~65HRC						
○	○		○	●		○					

平头铣刀
Flat End Mill

二刃加长平头立铣刀
2 Flutes Extra Long



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

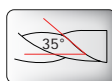


平头铣刀直角槽加工
Straight Slot Machining

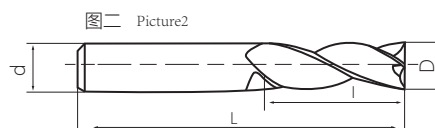
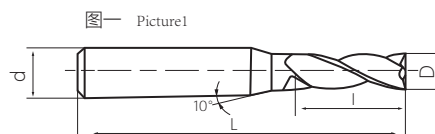
HRC60-FE



- HRC60 加长平刀系列
- HRC60 extra long



nAco 3 Black



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
FE-4.0-75-2F	4	16	4	75	2	●	2
FES-6.0-75-2F	6	24	6	75	2	●	2
FE-7.0-75-2F	7	28	8	75	2	○	1
FE-8.0-75-2F	8	30	8	75	2	●	2
FE-4.0-100-2F	4	20	4	100	2	●	2
FES-6.0-100-2F	6	30	6	100	2	●	2
FE-8.0-100-2F	8	35	8	100	2	●	2
FE-10-100-2F	10	40	10	100	2	●	2
FE-12-100-2F	12	45	12	100	2	●	2
FE-8.0-150-2F	8	40	8	150	2	●	2
FE-10-150-2F	10	60	10	150	2	●	2
FE-12-150-2F	12	60	12	150	2	●	2
FE-16-150-2F	16	75	16	150	2	●	2
FE-18-150-2F	18	75	18	150	2	●	2
FE-20-150-2F	20	75	20	150	2	●	2

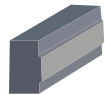
● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K		N		S	
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	●		○					

平头铣刀
Flat End Mill

四刃平头立铣刀 4 Flutes Standard



平头铣刀侧面加工
Side Face Machining

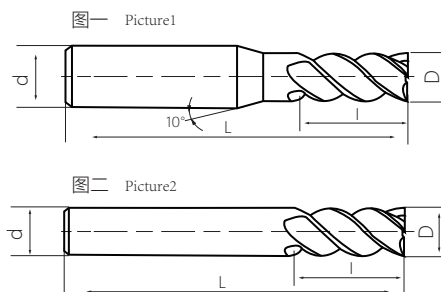


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC60-FE



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(L)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
FE-1.0-50-4F	1	3	4	50	4	●	1
FE-1.5-50-4F	1.5	4.5	4	50	4	●	1
FE-2.0-50-4F	2	6	4	50	4	●	1
FE-2.5-50-4F	2.5	7.5	4	50	4	●	1
FE-3.0-50-4F	3	9	4	50	4	●	1
FE-3.5-50-4F	3.5	10	4	50	4	●	1
FE-4.0-50-4F	4	10	4	50	4	●	2
FES-1.0-50-4F	1	3	6	50	4	●	1
FES-1.5-50-4F	1.5	4.5	6	50	4	●	1
FES-2.0-50-4F	2	6	6	50	4	●	1
FES-2.5-50-4F	2.5	7.5	6	50	4	●	1
FES-3.0-50-4F	3	9	6	50	4	●	1
FES-3.5-50-4F	3.5	10	6	50	4	●	1
FES-4.0-50-4F	4	10	6	50	4	●	1
FES-5.0-50-4F	5	13	6	50	4	●	1
FES-6.0-50-4F	6	15	6	50	4	●	2
FE-7.0-60-4F	7	18	8	60	4	●	1
FE-8.0-60-4F	8	20	8	60	4	●	2
FE-10-75-4F	10	25	10	75	4	●	2
FE-12-75-4F	12	30	12	75	4	●	2
FE-14-100-4F	14	45	14	100	4	●	2
FE-16-100-4F	16	45	16	100	4	●	2
FE-18-100-4F	18	45	18	100	4	●	2
FE-20-100-4F	20	45	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

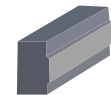
被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P				M	K	N		S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	◎		○					

平头铣刀
Flat End Mill

四刃加长平头立铣刀 4 Flutes Extra Long



平头铣刀侧面加工
Side Face Machin



平头铣刀台阶加工
Step Shoulder Machining

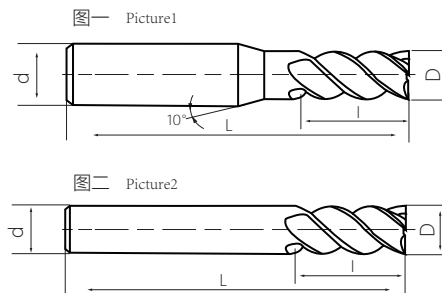
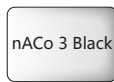
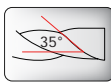


平头铣刀直角槽加工
Straight Slot Machining

HRC60-FE



- HRC60 加长平刀系列
- HRC60 extra long



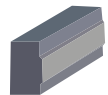
铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
FE-4.0-75-4F	4	16	4	75	4	●	2
FES-6.0-75-4F	6	24	6	75	4	●	2
FE-7.0-75-4F	7	28	8	75	4	○	1
FE-8.0-75-4F	8	30	8	75	4	●	2
FE-4.0-100-4F	4	25	4	100	4	●	2
FES-6.0-100-4F	6	30	6	100	4	●	2
FE-8.0-100-4F	8	35	8	100	4	●	2
FE-10-100-4F	10	40	10	100	4	●	2
FE-12-100-4F	12	45	12	100	4	●	2
FE-8.0-150-4F	8	40	8	150	4	●	2
FE-10-150-4F	10	60	10	150	4	●	2
FE-12-150-4F	12	60	12	150	4	●	2
FE-16-150-4F	16	75	16	150	4	●	2
FE-18-150-4F	18	75	18	150	4	●	2
FE-20-150-4F	20	75	20	150	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	◎		○					

平头铣刀
Flat End Mill



平头铣刀侧面加工
Side Face Machining



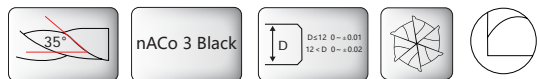
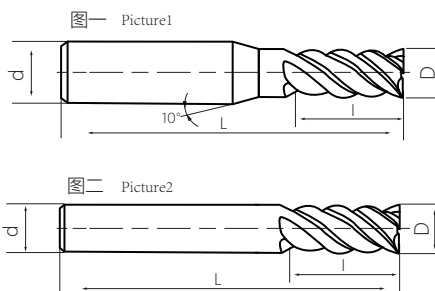
平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

六刃平头立铣刀 6 Flutes Standard

HRC60-FE



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
FES-6.0-50-6F	6	15	6	50	6	○	2
FE-8.0-60-6F	8	20	8	60	6	○	2
FE-10-75-6F	10	25	10	75	2	○	2
FE-12-75-6F	12	30	12	75	2	○	2
FE-16-100-6F	16	45	16	100	2	○	2
FE-20-100-6F	20	45	20	100	2	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	●		○					



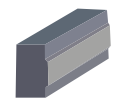
铣削

End Mill

Be Good Go Better

平头铣刀
Flat End Mill

二刃平头立铣刀
2 Flutes Standard



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

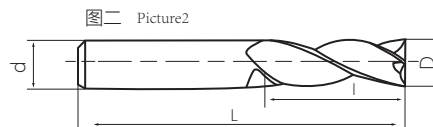
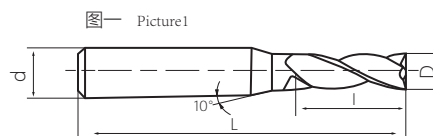
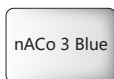
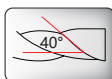


平头铣刀直角槽加工
Straight Slot Machining

HRC65-FE



- 最适宜沟槽铣削
- Suitable for grooving
- 适用范围广
- Wide applications



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
FE-1.0-50-2F	1	3	4	50	2	○	1
FE-1.5-50-2F	1.5	4.5	4	50	2	○	1
FE-2.0-50-2F	2	6	4	50	2	○	1
FE-2.5-50-2F	2.5	7.5	4	50	2	○	1
FE-3.0-50-2F	3	9	4	50	2	○	1
FE-3.5-50-2F	3.5	10	4	50	2	○	1
FE-4.0-50-2F	4	10	4	50	2	○	2
FES-1.0-50-2F	1	3	6	50	2	○	1
FES-1.5-50-2F	1.5	4.5	6	50	2	○	1
FES-2.0-50-2F	2	6	6	50	2	○	1
FES-2.5-50-2F	2.5	7.5	6	50	2	○	1
FES-3.0-50-2F	3	9	6	50	2	○	1
FES-3.5-50-2F	3.5	10	6	50	2	○	1
FES-4.0-50-2F	4	10	6	50	2	○	1
FES-5.0-50-2F	5	13	6	50	2	○	1
FES-6.0-50-2F	6	15	6	50	2	○	1
FE-7.0-60-2F	7	18	8	60	2	○	2
FE-8.0-60-2F	8	20	8	60	2	○	1
FE-10-75-2F	10	25	10	75	2	○	2
FE-12-75-2F	12	30	12	75	2	○	2
FE-14-100-2F	14	45	14	100	2	○	2
FE-16-100-2F	16	45	16	100	2	○	2
FE-18-100-2F	18	45	18	100	2	○	2
FE-20-100-2F	20	45	20	100	2	○	2

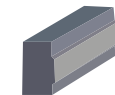
- 常备库存 ○ 按订单生产
- Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M	K	N	S						
碳素钢 Carbon steel		预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
						○				○	

平头铣刀
Flat End Mill

二刃加长平头立铣刀 2 Flutes Extra Long



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

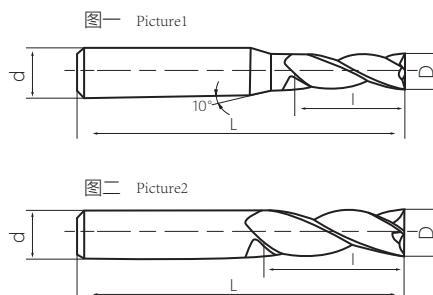
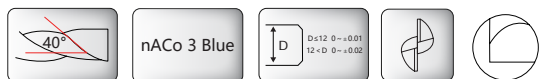


平头铣刀直角槽加工
Straight Slot Machining

HRC65-FE



- HRC65 加长平刀系列
- HRC65 extra long



平头铣刀
Flat End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
FE-4.0-75-2F	4	16	4	75	2	○	2
FES-6.0-75-2F	6	24	6	75	2	○	2
FE-7.0-75-2F	7	28	8	75	2	○	1
FE-8.0-75-2F	8	30	8	75	2	○	2
FE-4.0-100-2F	4	20	4	100	2	○	2
FES-6.0-100-2F	6	30	6	100	2	○	2
FE-8.0-100-2F	8	35	8	100	2	○	2
FE-10-100-2F	10	40	10	100	2	○	2
FE-12-100-2F	12	45	12	100	2	○	2
FE-8.0-150-2F	8	40	8	150	2	○	2
FE-10-150-2F	10	60	10	150	2	○	2
FE-12-150-2F	12	60	12	150	2	○	2
FE-16-150-2F	16	75	16	150	2	○	2
FE-18-150-2F	18	75	18	150	2	○	2
FE-20-150-2F	20	75	20	150	2	○	2

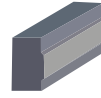
● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K		N		S	
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
										○	○

平头铣刀
Flat End Mill

四刃平头立铣刀 4 Flutes Standard



平头铣刀侧面加工
Side Face Machining

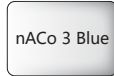
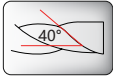
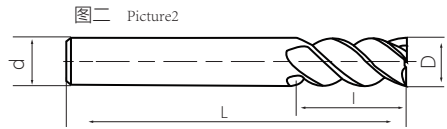
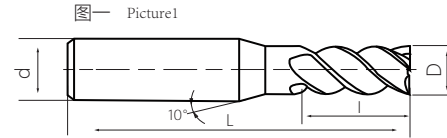


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC65-FE



平头铣刀
Flat End Mill

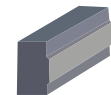
铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
FE-1.0-50-4F	1	3	4	50	4	●	1
FE-1.5-50-4F	1.5	4.5	4	50	4	●	1
FE-2.0-50-4F	2	6	4	50	4	●	1
FE-2.5-50-4F	2.5	7.5	4	50	4	●	1
FE-3.0-50-4F	3	9	4	50	4	●	1
FE-3.5-50-4F	3.5	10	4	50	4	●	1
FE-4.0-50-4F	4	10	4	50	4	●	2
FES-1.0-50-4F	1	3	6	50	4	●	1
FES-1.5-50-4F	1.5	4.5	6	50	4	●	1
FES-2.0-50-4F	2	6	6	50	4	●	1
FES-2.5-50-4F	2.5	7.5	6	50	4	●	1
FES-3.0-50-4F	3	9	6	50	4	●	1
FES-3.5-50-4F	3.5	10	6	50	4	●	1
FES-4.0-50-4F	4	10	6	50	4	●	1
FES-5.0-50-4F	5	13	6	50	4	●	1
FES-6.0-50-4F	6	15	6	50	4	●	2
FE-7.0-60-4F	7	18	8	60	4	●	1
FE-8.0-60-4F	8	20	8	60	4	●	2
FE-10-75-4F	10	25	10	75	4	●	2
FE-12-75-4F	12	30	12	75	4	●	2
FE-14-100-4F	14	45	14	100	4	●	2
FE-16-100-4F	16	45	16	100	4	●	2
FE-18-100-4F	18	45	18	100	4	●	2
FE-20-100-4F	20	45	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
										◎	◎

平头铣刀
Flat End Mill



平头铣刀侧面加工
Side Face Machining



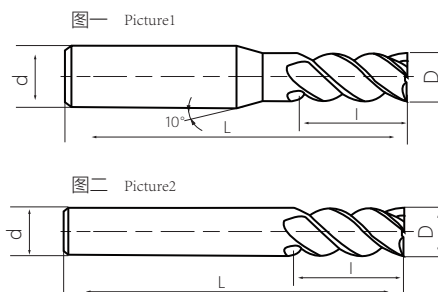
平头铣刀台阶加工
Step Shoulder Machining



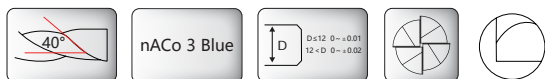
平头铣刀直角槽加工
Straight Slot Machining

四刃加长平头立铣刀 4 Flutes Extra Long

HRC65-FE



平头铣刀
Flat End Mill



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
FE-4.0-75-4F	4	16	4	75	4	●	2
FES-6.0-75-4F	6	24	6	75	4	●	2
FE-7.0-75-4F	7	28	8	75	4	○	1
FE-8.0-75-4F	8	30	8	75	4	●	2
FE-4.0-100-4F	4	20	4	100	4	●	2
FES-6.0-100-4F	6	30	6	100	4	●	2
FE-8.0-100-4F	8	35	8	100	4	●	2
FE-10-100-4F	10	40	10	100	4	●	2
FE-12-100-4F	12	45	12	100	4	●	2
FE-8.0-150-4F	8	40	8	150	4	●	2
FE-10-150-4F	10	60	10	150	4	●	2
FE-12-150-4F	12	60	12	150	4	●	2
FE-16-150-4F	16	75	16	150	4	●	2
FE-18-150-4F	18	75	18	150	4	●	2
FE-20-150-4F	20	75	20	150	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
											◎

高性能球刀系列

High Performance Carbide Ball nose End Mill

BN系列

BN Series

高精度仿形加工

High-Precision Profile Modeling Machining



- HRC45-2刃球刀/4刃球刀
(HRC45-2 Flute Ballnose/4 Flute Ballnose)
- HRC55-2刃球刀/4刃球刀
(HRC55-2 Flute Ballnose/4 Flute Ballnose)
- HRC60-2刃球刀/4刃球刀
(HRC60-2 Flute Ballnose/4 Flute Ballnose)
- HRC65-2刃球刀/4刃球刀
(HRC65-2 Flute Ballnose/4 Flute Ballnose)



2刃球刀

2 Flute Ballnose

周刃与球刃实现无缝连接
合理的球刃中心设计
极大地提高表面质量

Seamless connection between circumferential edge and ball edge ; Reasonable center design of ball edge greatly improve the surface quality



4刃球刀

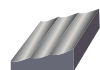
4 Flute Ballnose

高强度和锋利刃口兼顾的
球刃中心设计，妥善处理
切削加工时产生的切屑

High strength combines with sharp edge for ball edge center design, which properly handles the chips during milling.

球头铣刀 Ball Nose End Mill

二刃球头立铣刀 2 Flutes Standard



球头仿形加工
Profile Machining

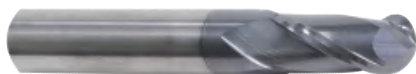


球头铣刀型腔加工
Cavity Machining

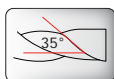


球头铣刀球槽加工
Slot Machining

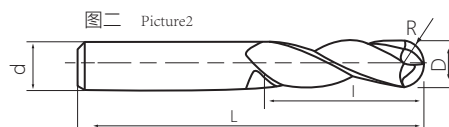
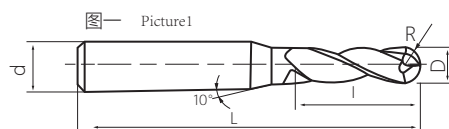
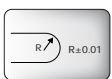
HRC45-BN



- 适用范围广
- Wide range of application



AlTiN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-50-2F-R0.5	1	2	4	50	2	●	1
BN-1.5-50-2F-R0.75	1.5	3	4	50	2	●	1
BN-2.0-50-2F-R1	2	4	4	50	2	●	1
BN-2.5-50-2F-R1.25	2.5	5	4	50	2	●	1
BN-3.0-50-2F-R1.5	3	6	4	50	2	●	1
BN-3.5-50-2F-R1.75	3.5	7	4	50	2	●	1
BN-4.0-50-2F-R2	4	8	4	50	2	●	2
BNS-1.0-50-2F-R0.5	1	2	6	50	2	●	1
BNS-1.5-50-2F-R0.75	1.5	3	6	50	2	●	1
BNS-2.0-50-2F-R1	2	4	6	50	2	●	1
BNS-3.0-50-2F-R1.5	3	6	6	50	2	●	1
BNS-4.0-50-2F-R2	4	8	6	50	2	●	1
BNS-5.0-50-2F-R2.5	5	10	6	50	2	●	1
BNS-6.0-50-2F-R3	6	12	6	50	2	●	2
BN-8.0-60-2F-R4	8	16	8	60	2	●	2
BN-10-75-2F-R5	10	20	10	75	2	●	2
BN-12-75-2F-R6	12	24	12	75	2	●	2
BN-16-100-2F-R8	16	32	16	100	2	●	2
BN-20-100-2F-R10	20	40	20	100	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

非常合适 Very Suitable 合适 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○					○				



铣削

End Mill

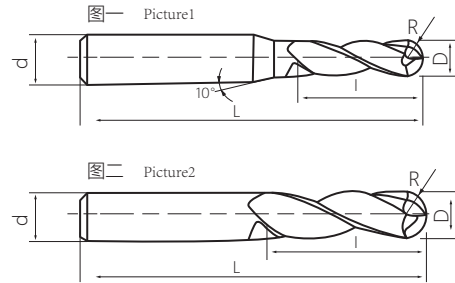
Be Good Go Better

球头铣刀
Ball Nose End Mill

二刃加长球头立铣刀
2 Flutes Extra Long



HRC45-BN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-75-2F-R0.5	1	2	4	75	2	●	1
BN-3.0-75-2F-R0.75	1.5	3	4	75	2	●	1
BN-2.0-75-2F-R1	2	4	4	75	2	●	1
BN-3.0-75-2F-R1.5	3	6	4	75	2	●	1
BN-4.0-75-2F-R2	4	8	4	75	2	●	2
BNS-1.0-75-2F-R0.5	1	2	6	75	2	●	1
BNS-1.5-75-2F-R0.75	1.5	3	6	75	2	●	1
BNS-1.0-75-2F-R1	2	4	6	75	2	●	1
BNS-3.0-75-2F-R1.5	3	6	6	75	2	●	1
BNS-4.0-75-2F-R2	4	8	6	75	2	●	1
BNS-5.0-75-2F-R2.5	5	10	6	75	2	●	1
BNS-6.0-75-2F-R3	6	12	6	75	2	●	2
BN-4.0-100-2F-R2	4	8	4	100	2	●	2
BNS-6.0-100-2F-R3	6	12	6	100	2	●	2
BN-8.0-100-2F-R4	8	16	8	100	2	●	2
BN-10-100-2F-R5	10	20	10	100	2	●	2
BN-12-100-2F-R6	12	24	12	100	2	●	2
BN-16-150-2F-R8	16	32	16	150	2	●	2
BN-20-150-2F-R10	20	40	20	150	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○				○					

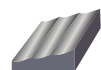
命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P92
Cutting parameters — P92

球头铣刀
Ball Nose End Mill

四刃球头立铣刀 4 Flutes Standard



球头仿形加工
Profile Machining

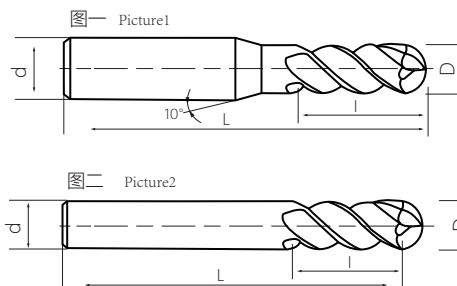


球头铣刀型腔加工
Cavity Machining



球头铣刀球型槽加工
Slot Machining

HRC45-BN



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-50-4F-R0.5	1	2	4	50	4	○	1
BN-1.5-50-4F-R0.75	1.5	3	4	50	4	○	1
BN-2.0-50-4F-R1	2	4	4	50	4	○	1
BN-2.5-50-4F-R1.25	2.5	5	4	50	4	○	1
BN-3.0-50-4F-R1.5	3	6	4	50	4	○	1
BN-3.5-50-4F-R1.75	3.5	7	4	50	4	○	1
BN-4.0-50-4F-R2	4	8	4	50	4	○	2
BNS-1.0-50-4F-R0.5	1	2	6	50	4	○	1
BNS-1.5-50-4F-R0.75	1.5	3	6	50	4	○	1
BNS-2.0-50-4F-R1	2	4	6	50	4	○	1
BNS-3.0-50-4F-R1.5	3	6	6	50	4	○	1
BNS-4.0-50-4F-R2	4	8	6	50	4	○	2
BNS-5.0-50-4F-R2.5	5	10	6	50	4	○	1
BNS-6.0-50-4F-R3	6	12	6	50	4	○	2
BN-8.0-60-4F-R4	8	16	8	60	4	○	2
BN-10-75-4F-R5	10	20	10	75	4	○	2
BN-12-75-4F-R6	12	24	12	75	4	○	2
BN-16-100-4F-R8	16	32	16	100	4	○	2
BN-20-100-4F-R10	20	40	20	100	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

球头铣刀
Ball Nose End Mill

被加工材料推荐/Workpiece material recommendation

● 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○				○					



铣削

End Mill

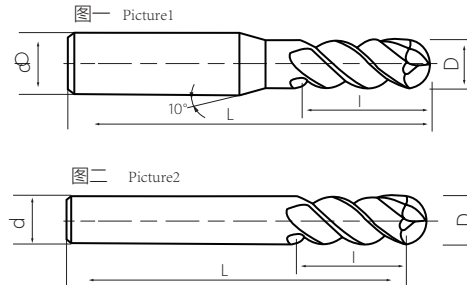
Be Good Go Better

球头铣刀
Ball Nose End Mill

四刃加长球头立铣刀
4 Flutes Extra Long



HRC45-BN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-75-4F-R0.5	1	2	4	75	4	○	1
BN-3.0-75-4F-R0.75	1.5	3	4	75	4	○	1
BN-2.0-75-4F-R1	2	4	4	75	4	○	1
BN-3.0-75-4F-R1.5	3	6	4	75	4	○	1
BN-4.0-75-4F-R2	4	8	4	75	4	○	2
BNS-1.0-75-4F-R0.5	1	2	6	75	4	○	1
BNS-1.5-75-4F-R0.75	1.5	3	6	75	4	○	1
BNS-1.0-75-4F-R1	2	4	6	75	4	○	1
BNS-3.0-75-4F-R1.5	3	6	6	75	4	○	1
BNS-4.0-75-4F-R2	4	8	6	75	4	○	1
BNS-5.0-75-4F-R2.5	5	10	6	75	4	○	1
BNS-6.0-75-4F-R3	6	12	6	75	4	○	2
BN-4.0-100-4F-R2	4	8	4	100	4	○	2
BNS-6.0-100-4F-R3	6	12	6	100	4	○	2
BN-8.0-100-4F-R4	8	16	8	100	4	○	2
BN-10-100-4F-R5	10	20	10	100	4	○	2
BN-12-100-4F-R6	12	24	12	100	4	○	2
BN-16-150-4F-R8	16	32	16	150	4	○	2
BN-20-150-4F-R10	20	40	20	150	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation ○ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○				○					

命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P93
Cutting parameters — P93

球头铣刀
Ball Nose End Mill



球头仿形加工
Profile Machining



球头铣刀型腔加工
Cavity Machining



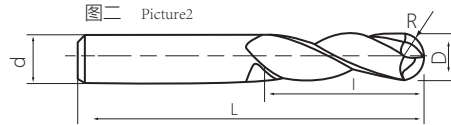
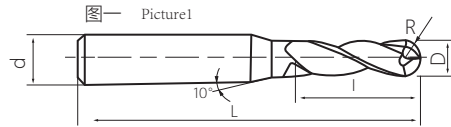
球头铣刀球型槽加工
Slot Machining

二刃球头立铣刀
2 Flutes Standard

HRC55-BN



- 适用范围广
- Wide range of applications



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-50-2F-R0.5	1	2	4	50	2	●	1
BN-1.5-50-2F-R0.75	1.5	3	4	50	2	●	1
BN-2.0-50-2F-R1	2	4	4	50	2	●	1
BN-2.5-50-2F-R1.25	2.5	5	4	50	2	●	1
BN-3.0-50-2F-R1.5	3	6	4	50	2	●	1
BN-3.5-50-2F-R1.75	3.5	7	4	50	2	●	1
BN-4.0-50-2F-R2	4	8	4	50	2	●	2
BNS-1.0-50-2F-R0.5	1	2	6	50	2	●	1
BNS-1.5-50-2F-R0.75	1.5	3	6	50	2	●	1
BNS-2.0-50-2F-R1	2	4	6	50	2	●	1
BNS-3.0-50-2F-R1.5	3	6	6	50	2	●	1
BNS-4.0-50-2F-R2	4	8	6	50	2	●	1
BNS-5.0-50-2F-R2.5	5	10	6	50	2	●	1
BNS-6.0-50-2F-R3	6	12	6	50	2	●	2
BN-8.0-60-2F-R4	8	16	8	60	2	●	2
BN-10-75-2F-R5	10	20	10	75	2	●	2
BN-12-75-2F-R6	12	24	12	75	2	●	2
BN-16-100-2F-R8	16	32	16	100	2	●	2
BN-20-100-2F-R10	20	40	20	100	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	



铣削

End Mill

Be Good Go Better

球头铣刀
Ball Nose End Mill

二刃加长球头立铣刀
2 Flutes Extra Long



球头仿形加工
Profile Machining

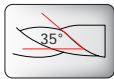
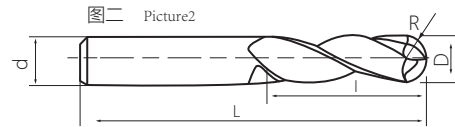
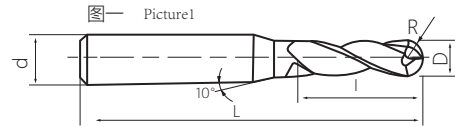


球头铣刀型腔加工
Cavity Machining



球头铣刀球型槽加工
Slot Machining

HRC55-BN



AlCrSiN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-75-2F-R0.5	1	2	4	75	2	●	1
BN-3.0-75-2F-R0.75	1.5	3	4	75	2	●	1
BN-2.0-75-2F-R1	2	4	4	75	2	●	1
BN-3.0-75-2F-R1.5	3	6	4	75	2	●	1
BN-4.0-75-2F-R2	4	8	4	75	2	●	2
BNS-1.0-75-2F-R0.5	1	2	6	75	2	●	1
BNS-1.5-75-2F-R0.75	1.5	3	6	75	2	●	1
BNS-1.0-75-2F-R1	2	4	6	75	2	●	1
BNS-3.0-75-2F-R1.5	3	6	6	75	2	●	1
BNS-4.0-75-2F-R2	4	8	6	75	2	●	1
BNS-5.0-75-2F-R2.5	5	10	6	75	2	●	1
BNS-6.0-75-2F-R3	6	12	6	75	2	●	2
BN-4.0-100-2F-R2	4	8	4	100	2	●	2
BNS-6.0-100-2F-R3	6	12	6	100	2	●	2
BN-8.0-100-2F-R4	8	16	8	100	2	●	2
BN-10-100-2F-R5	10	20	10	100	2	●	2
BN-12-100-2F-R6	12	24	12	100	2	●	2
BN-16-150-2F-R8	16	32	16	150	2	●	2
BN-20-150-2F-R10	20	40	20	150	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation ○ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	

命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P92
Cutting parameters — P92

球头铣刀
Ball Nose End Mill



球头仿形加工
Profile Machining



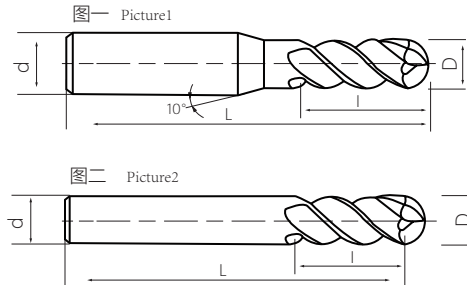
球头铣刀型腔加工
Cavity Machining



球头铣刀球型槽加工
Slot Machining

四刃球头立铣刀
4 Flutes Standard

HRC55-BN



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-50-4F-R0.5	1	2	4	50	4	●	1
BN-1.5-50-4F-R0.75	1.5	3	4	50	4	●	1
BN-2.0-50-4F-R1	2	4	4	50	4	●	1
BN-2.5-50-4F-R1.25	2.5	5	4	50	4	●	1
BN-3.0-50-4F-R1.5	3	6	4	50	4	●	1
BN-3.5-50-4F-R1.75	3.5	7	4	50	4	●	1
BN-4.0-50-4F-R2	4	8	4	50	4	●	2
BNS-1.0-50-4F-R0.5	1	2	6	50	4	○	1
BNS-1.5-50-4F-R0.75	1.5	3	6	50	4	○	1
BNS-2.0-50-4F-R1	2	4	6	50	4	○	1
BNS-3.0-50-4F-R1.5	3	6	6	50	4	○	1
BNS-4.0-50-4F-R2	4	8	6	50	4	○	1
BNS-5.0-50-4F-R2.5	5	10	6	50	4	○	1
BNS-6.0-50-4F-R3	6	12	6	50	4	○	2
BN-8.0-60-4F-R4	8	16	8	60	4	●	2
BN-10-75-4F-R5	10	20	10	75	4	●	2
BN-12-75-4F-R6	12	24	12	75	4	●	2
BN-16-100-4F-R8	16	32	16	100	4	●	2
BN-20-100-4F-R10	20	40	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

球头铣刀
Ball Nose End Mill

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	



铣削

End Mill

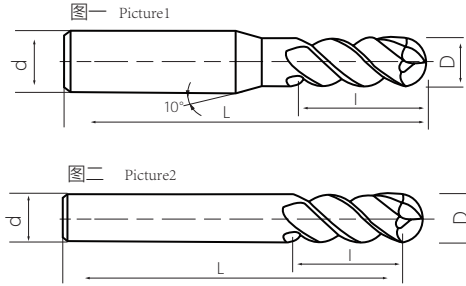
Be Good Go Better

球头铣刀
Ball Nose End Mill

四刃加长球头立铣刀
4 Flutes Extra Long



HRC55-BN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-75-4F-R0.5	1	2	4	75	4	●	1
BN-3.0-75-4F-R0.75	1.5	3	4	75	4	●	1
BN-2.0-75-4F-R1	2	4	4	75	4	●	1
BN-3.0-75-4F-R1.5	3	6	4	75	4	●	1
BN-4.0-75-4F-R2	4	8	4	75	4	●	2
BNS-1.0-75-4F-R0.5	1	2	6	75	4	●	1
BNS-1.5-75-4F-R0.75	1.5	3	6	75	4	●	1
BNS-1.0-75-4F-R1	2	4	6	75	4	○	1
BNS-3.0-75-4F-R1.5	3	6	6	75	4	○	1
BNS-4.0-75-4F-R2	4	8	6	75	4	○	1
BNS-5.0-75-4F-R2.5	5	10	6	75	4	○	1
BNS-6.0-75-4F-R3	6	12	6	75	4	○	2
BN-4.0-100-4F-R2	4	8	4	100	4	○	2
BNS-6.0-100-4F-R3	6	12	6	100	4	○	2
BN-8.0-100-4F-R4	8	16	8	100	4	●	2
BN-10-100-4F-R5	10	20	10	100	4	●	2
BN-12-100-4F-R6	12	24	12	100	4	●	2
BN-16-150-4F-R8	16	32	16	150	4	●	2
BN-20-150-4F-R10	20	40	20	150	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation ○ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P					M	K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	

命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P93
Cutting parameters — P93

球头铣刀
Ball Nose End Mill

二刃球头立铣刀
2 Flutes Standard

球头仿形加工
Profile Machining

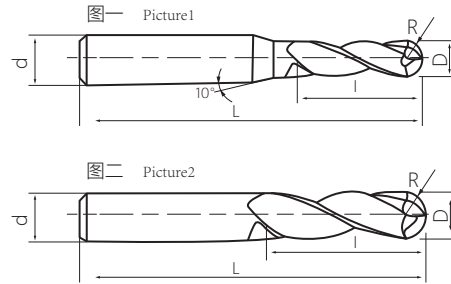
球头铣刀型腔加工
Cavity Machining

球头铣刀球型槽加工
Slot Machining

HRC60-BN



- 适用范围广
- Wide range of application



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-50-2F-R0.5	1	2	4	50	2	●	1
BN-1.5-50-2F-R0.75	1.5	3	4	50	2	●	1
BN-2.0-50-2F-R1	2	4	4	50	2	●	1
BN-2.5-50-2F-R1.25	2.5	5	4	50	2	●	1
BN-3.0-50-2F-R1.5	3	6	4	50	2	●	1
BN-3.5-50-2F-R1.75	3.5	7	4	50	2	●	1
BN-4.0-50-2F-R2	4	8	4	50	2	●	2
BNS-1.0-50-2F-R0.5	1	2	6	50	2	○	1
BNS-1.5-50-2F-R0.75	1.5	3	6	50	2	○	1
BNS-2.0-50-2F-R1	2	4	6	50	2	○	1
BNS-3.0-50-2F-R1.5	3	6	6	50	2	○	1
BNS-4.0-50-2F-R2	4	8	6	50	2	○	1
BNS-5.0-50-2F-R2.5	5	10	6	50	2	○	1
BNS-6.0-50-2F-R3	6	12	6	50	2	○	2
BN-8.0-60-2F-R4	8	16	8	60	2	●	2
BN-10-75-2F-R5	10	20	10	75	2	●	2
BN-12-75-2F-R6	12	24	12	75	2	●	2
BN-16-100-2F-R8	16	32	16	100	2	●	2
BN-20-100-2F-R10	20	40	20	100	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

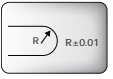
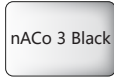
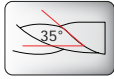
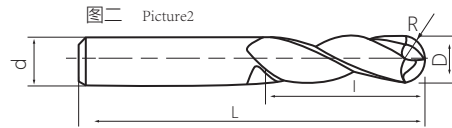
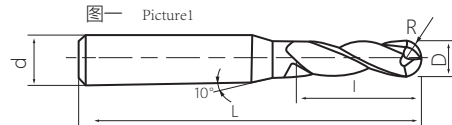
被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	●							

二刃加长球头立铣刀 2 Flutes Extra Long



HRC60-BN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-75-2F-R0.5	1	2	4	75	2	●	1
BN-3.0-75-2F-R0.75	1.5	3	4	75	2	●	1
BN-2.0-75-2F-R1	2	4	4	75	2	●	1
BN-3.0-75-2F-R1.5	3	6	4	75	2	●	1
BN-4.0-75-2F-R2	4	8	4	75	2	●	2
BNS-1.0-75-2F-R0.5	1	2	6	75	2	●	1
BNS-1.5-75-2F-R0.75	1.5	3	6	75	2	○	1
BNS-1.0-75-2F-R1	2	4	6	75	2	○	1
BNS-3.0-75-2F-R1.5	3	6	6	75	2	○	1
BNS-4.0-75-2F-R2	4	8	6	75	2	○	1
BNS-5.0-75-2F-R2.5	5	10	6	75	2	○	1
BNS-6.0-75-2F-R3	6	12	6	75	2	○	2
BN-4.0-100-2F-R2	4	8	4	100	2	●	2
BNS-6.0-100-2F-R3	6	12	6	100	2	●	2
BN-8.0-100-2F-R4	8	16	8	100	2	●	2
BN-10-100-2F-R5	10	20	10	100	2	●	2
BN-12-100-2F-R6	12	24	12	100	2	●	2
BN-16-150-2F-R8	16	32	16	150	2	●	2
BN-20-150-2F-R10	20	40	20	150	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P					M	K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	◎							

球头铣刀 Ball Nose End Mill

四刃球头立铣刀 4 Flutes Standard



球头仿形加工
Ball Nose End Mill for Profile Machining

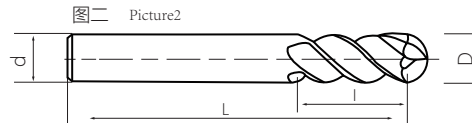
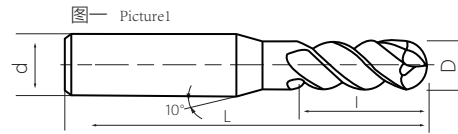


球头铣刀型腔加工
Ball Nose End Mill for Cavity Machining



球头铣刀球型槽加工
Ball Nose End Mill for Slot Machining

HRC60-BN



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-01-50-4F-R0.5	1	2	4	50	4	○	1
BN-1.5-50-4F-R0.75	1.5	3	4	50	4	○	1
BN-02-50-4F-R1	2	4	4	50	4	○	1
BN-2.5-50-4F-R1.25	2.5	5	4	50	4	○	1
BN-03-50-4F-R1.5	3	6	4	50	4	○	1
BN-3.5-50-4F-R1.75	3.5	7	4	50	4	○	1
BN-04-50-4F-R2	4	8	4	50	4	○	2
BNS-01-50-4F-R0.5	1	2	6	50	4	○	1
BNS-1.5-50-4F-R0.75	1.5	3	6	50	4	○	1
BNS-02-50-4F-R1	2	4	6	50	4	○	1
BNS-03-50-4F-R1.5	3	6	6	50	4	○	1
BNS-04-50-4F-R2	4	8	6	50	4	○	1
BNS-05-50-4F-R2.5	5	10	6	50	4	○	1
BNS-06-50-4F-R3	6	12	6	50	4	○	2
BN-08-60-4F-R4	8	16	8	60	4	○	2
BN-10-75-4F-R5	10	20	10	75	4	○	2
BN-12-75-4F-R6	12	24	12	75	4	○	2
BN-16-100-4F-R8	16	32	16	100	4	○	2
BN-20-100-4F-R10	20	40	20	100	4	○	2

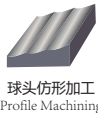
● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

球头铣刀
Ball Nose End Mill

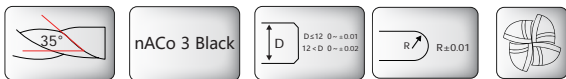
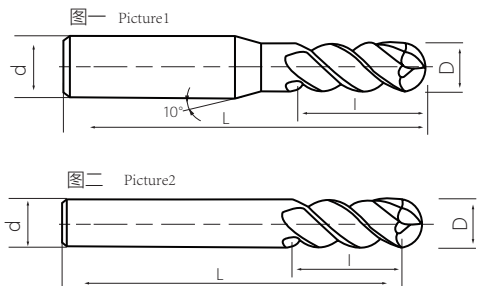
被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	●		○					

四刃加长球头立铣刀 4 Flutes Extra Long



HRC60-BN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-75-4F-R0.5	1	2	4	75	4	○	1
BN-3.0-75-4F-R0.75	1.5	3	4	75	4	○	1
BN-2.0-75-4F-R1	2	4	4	75	4	○	1
BN-3.0-75-4F-R1.5	3	6	4	75	4	○	1
BN-4.0-75-4F-R2	4	8	4	75	4	○	1
BNS-1.0-75-4F-R0.5	1	2	6	75	4	○	2
BNS-1.5-75-4F-R0.75	1.5	3	6	75	4	○	1
BNS-1.0-75-4F-R1	2	4	6	75	4	○	1
BNS-3.0-75-4F-R1.5	3	6	6	75	4	○	1
BNS-4.0-75-4F-R2	4	8	6	75	4	○	1
BNS-5.0-75-4F-R2.5	5	10	6	75	4	○	2
BNS-6.0-75-4F-R3	6	12	6	75	4	○	1
BN-4.0-100-4F-R2	4	8	4	100	4	○	2
BNS-6.0-100-4F-R3	6	12	6	100	4	○	2
BN-8.0-100-4F-R4	8	16	8	100	4	○	2
BN-10-100-4F-R5	10	20	10	100	4	○	2
BN-12-100-4F-R6	12	24	12	100	4	○	2
BN-16-150-4F-R8	16	32	16	150	4	○	2
BN-20-150-4F-R10	20	40	20	150	4	○	2

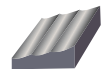
● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	●		○					

球头铣刀 Ball Nose End Mill

二刃球头立铣刀 2 Flutes Standard



球头仿形加工
Profile Machining



球头铣刀型腔加工
Cavity Machining

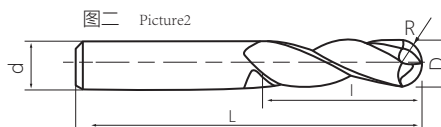
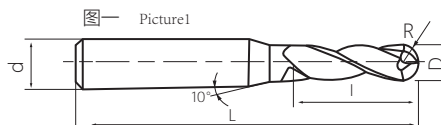
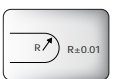
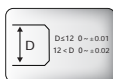
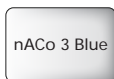
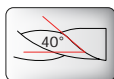


球头铣刀球型槽加工
Slot Machining

HRC65-BN



- 适用范围广
- Wide range of application



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-50-2F-R0.5	1	2	4	50	2	●	1
BN-1.5-50-2F-R0.75	1.5	3	4	50	2	●	1
BN-2.0-50-2F-R1	2	4	4	50	2	●	1
BN-2.5-50-2F-R1.25	2.5	5	4	50	2	●	1
BN-3.0-50-2F-R1.5	3	6	4	50	2	●	1
BN-3.5-50-2F-R1.75	3.5	7	4	50	2	●	1
BN-4.0-50-2F-R2	4	8	4	50	2	●	2
BNS-1.0-50-2F-R0.5	1	2	6	50	2	○	1
BNS-1.5-50-2F-R0.75	1.5	3	6	50	2	○	1
BNS-2.0-50-2F-R1	2	4	6	50	2	○	1
BNS-3.0-50-2F-R1.5	3	6	6	50	2	○	1
BNS-4.0-50-2F-R2	4	8	6	50	2	○	2
BNS-5.0-50-2F-R2.5	5	10	6	50	2	○	1
BNS-6.0-50-2F-R3	6	12	6	50	2	○	2
BN-8.0-60-2F-R4	8	16	8	60	2	●	2
BN-10-75-2F-R5	10	20	10	75	2	●	2
BN-12-75-2F-R6	12	24	12	75	2	●	2
BN-16-100-2F-R8	16	32	16	100	2	●	2
BN-20-100-2F-R10	20	40	20	100	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

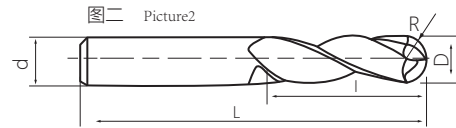
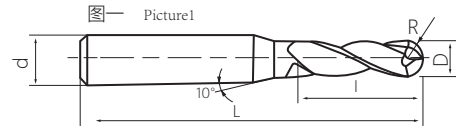
⊙ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
						⊙	○			○	○

二刃加长球头立铣刀 2 Flutes Extra Long



HRC65-BN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-75-2F-R0.5	1	2	4	75	2	●	1
BN-3.0-75-2F-R0.75	1.5	3	4	75	2	●	1
BN-2.0-75-2F-R1	2	4	4	75	2	●	1
BN-3.0-75-2F-R1.5	3	6	4	75	2	●	1
BN-4.0-75-2F-R2	4	8	4	75	2	●	2
BNS-1.0-75-2F-R0.5	1	2	6	75	2	○	1
BNS-1.5-75-2F-R0.75	1.5	3	6	75	2	○	1
BNS-1.0-75-2F-R1	2	4	6	75	2	○	1
BNS-3.0-75-2F-R1.5	3	6	6	75	2	○	1
BNS-4.0-75-2F-R2	4	8	6	75	2	○	1
BNS-5.0-75-2F-R2.5	5	10	6	75	2	○	1
BNS-6.0-75-2F-R3	6	12	6	75	2	○	2
BN-4.0-100-2F-R2	4	8	4	100	2	●	2
BNS-6.0-100-2F-R3	6	12	6	100	2	●	2
BN-8.0-100-2F-R4	8	16	8	100	2	●	2
BN-10-100-2F-R5	10	20	10	100	2	●	2
BN-12-100-2F-R6	12	24	12	100	2	●	2
BN-16-150-2F-R8	16	32	16	150	2	●	2
BN-20-150-2F-R10	20	40	20	150	2	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

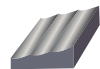
被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
						◎	○			○	○

球头铣刀 Ball Nose End Mill

四刃球头立铣刀 4 Flutes Standard



球头仿形加工
Profile Machining

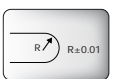
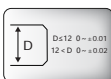
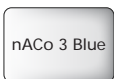
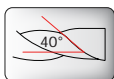
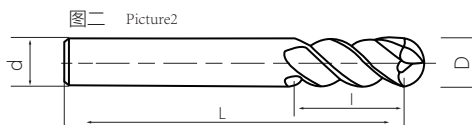
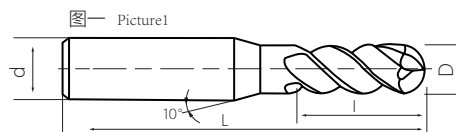


球头铣刀型腔加工
Cavity Machining



球头铣刀球型槽加工
Slot Machining

HRC65-BN



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
BN-1.0-50-4F-R0.5	1	2	4	50	4	○	1
BN-1.5-50-4F-R0.75	1.5	3	4	50	4	○	1
BN-2.0-50-4F-R1	2	4	4	50	4	○	1
BN-2.5-50-4F-R1.25	2.5	5	4	50	4	○	1
BN-3.0-50-4F-R1.5	3	6	4	50	4	○	1
BN-3.5-50-4F-R1.75	3.5	7	4	50	4	○	1
BN-4.0-50-4F-R2	4	8	4	50	4	○	2
BNS-1.0-50-4F-R0.5	1	2	6	50	4	○	1
BNS-1.5-50-4F-R0.75	1.5	3	6	50	4	○	1
BNS-2.0-50-4F-R1	2	4	6	50	4	○	1
BNS-3.0-50-4F-R1.5	3	6	6	50	4	○	1
BNS-4.0-50-4F-R2	4	8	6	50	4	○	1
BNS-5.0-50-4F-R2.5	5	10	6	50	4	○	1
BNS-6.0-50-4F-R3	6	12	6	50	4	○	2
BN-8.0-60-4F-R4	8	16	8	60	4	○	2
BN-10-75-4F-R5	10	20	10	75	4	○	2
BN-12-75-4F-R6	12	24	12	75	4	○	2
BN-16-100-4F-R8	16	32	16	100	4	○	2
BN-20-100-4F-R10	20	40	20	100	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

球头铣刀
Ball Nose End Mill

被加工材料推荐/Workpiece material recommendation

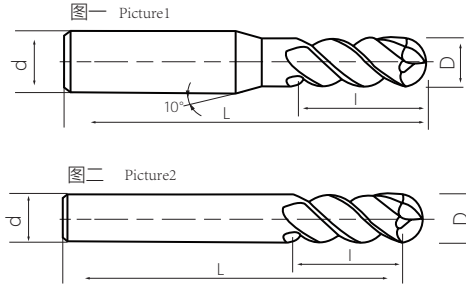
● 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
											○

四刃加长球头立铣刀 4 Flutes Extra Long



HRC65-BN



球头铣刀
Ball Nose End Mill

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter(d)	刃长 Flete Length(l)	柄径 Shank Diameter(D)	总长 Overall Length(L)			
BN-1.0-75-4F-R0.5	1	2	4	75	4	○	1
BN-1.5-75-4F-R0.75	1.5	3	4	75	4	○	1
BN-2.0-75-4F-R1	2	4	4	75	4	○	1
BN-3.0-75-4F-R1.5	3	6	4	75	4	○	1
BN-4.0-75-4F-R2	4	8	4	75	4	○	2
BNS-1.0-75-4F-R0.5	1	2	6	75	4	○	1
BNS-1.5-75-4F-R0.75	1.5	3	6	75	4	○	1
BNS-1.0-75-4F-R1	2	4	6	75	4	○	1
BNS-3.0-75-4F-R1.5	3	6	6	75	4	○	1
BNS-4.0-75-4F-R2	4	8	6	75	4	○	2
BNS-5.0-75-4F-R2.5	5	10	6	75	4	○	1
BNS-6.0-75-4F-R3	6	12	6	75	4	○	2
BN-4.0-100-4F-R2	4	8	4	100	4	○	2
BNS-6.0-100-4F-R3	6	12	6	100	4	○	2
BN-8.0-100-4F-R4	8	16	8	100	4	○	2
BN-10-100-4F-R5	10	20	10	100	4	○	2
BN-12-100-4F-R6	12	24	12	100	4	○	2
BN-16-150-4F-R8	16	32	16	150	4	○	2
BN-20-150-4F-R10	20	40	20	150	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
						◎	○			○	○

高性能 CR 系列

High Performance Carbide End Mill for CR series

大芯径，更加稳定

Large core diameter, more stable

大幅增强刀具刚性与抗震性，减少断刀

Greatly increase rigidity & anti-vibration, reduce breakage



- HRC45-4刃圆鼻刀
(HRC45-4 Flute Corner Radius)
- HRC55-4刃圆鼻刀
(HRC55-4 Flute Corner Radius)
- HRC60-4刃圆鼻刀
(HRC60-4 Flute Corner Radius)
- HRC65-4刃圆鼻刀
(HRC65-4 Flute Corner Radius)



四刃圆弧立铣刀 4 Flutes Standard



圆弧铣刀侧面加工
Side Face Machining

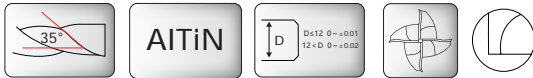
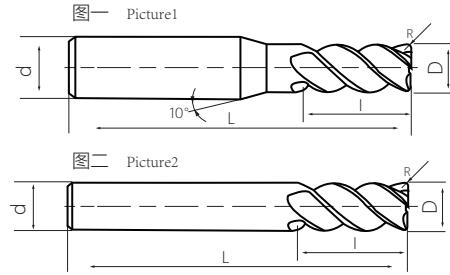


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC45-CR



Corner Radius End Mill
刀尖圆弧铣刀

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(L)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-3.0-50-4F-R0.2	3	9	4	50	4	●	1
CR-3.0-50-4F-R0.5	3	9	4	50	4	●	1
CR-4.0-50-4F-R0.2	4	10	4	50	4	●	2
CR-4.0-50-4F-R0.5	4	10	4	50	4	●	2
CR-4.0-50-4F-R1	4	10	4	50	4	●	2
CRS-5.0-50-4F-R0.5	5	13	6	50	4	●	1
CRS-5.0-50-4F-R1	5	13	6	50	4	●	1
CRS-6.0-50-4F-R0.2	6	15	6	50	4	●	2
CRS-6.0-50-4F-R0.5	6	15	6	50	4	●	2
CRS-6.0-50-4F-R1	6	15	6	50	4	●	2
CR-8.0-60-4F-R0.5	8	20	8	60	4	●	2
CR-8.0-60-4F-R1	8	20	8	60	4	●	2
CR-8.0-60-4F-R1.5	8	20	8	60	4	●	2
CR-10-75-4F-R0.5	10	25	10	75	4	●	2
CR-10-75-4F-R1	10	25	10	75	4	●	2
CR-10-75-4F-R1.5	10	25	10	75	4	●	2
CR-10-75-4F-R2	10	25	10	75	4	●	2
CR-10-75-4F-R2.5	10	25	10	75	4	●	2
CR-10-75-4F-R3	10	25	10	75	4	●	2
CR-12-75-4F-R0.5	12	30	12	75	4	●	2
CR-12-75-4F-R1	12	30	12	75	4	●	2
CR-12-75-4F-R1.5	12	30	12	75	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K		N		S	
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○			○					

刀尖圆弧铣刀 Corner Radius End Mill

四刃圆弧立铣刀 4 Flutes Standard



圆弧铣刀侧面加工
Side Face Machining

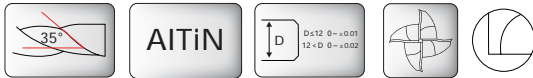
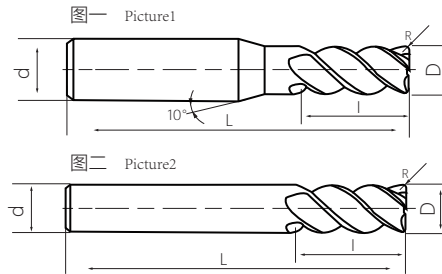


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC45-CR



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (L)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
CR-12-75-4F-R2	12	30	12	75	4	●	2
CR-12-75-4F-R2.5	12	30	12	75	4	●	2
CR-12-75-4F-R3	12	30	12	75	4	●	2
CR-14-75-4F-R0.5	14	35	14	75	4	●	2
CR-14-75-4F-R1	14	35	14	75	4	●	2
CR-14-75-4F-R2	14	35	14	75	4	●	2
CR-16-100-4F-R0.5	16	45	16	100	4	●	2
CR-16-100-4F-R1	16	45	16	100	4	●	2
CR-16-100-4F-R2	16	45	16	100	4	●	2
CR-16-100-4F-R3	16	45	16	100	4	●	2
CR-18-100-4F-R0.5	18	45	18	100	4	●	2
CR-18-100-4F-R1	18	45	18	100	4	●	2
CR-18-100-4F-R2	18	45	18	100	4	●	2
CR-18-100-4F-R3	18	45	18	100	4	●	2
CR-20-100-4F-R0.5	20	45	20	100	4	●	2
CR-20-100-4F-R1	20	45	20	100	4	●	2
CR-20-100-4F-R2	20	45	20	100	4	●	2
CR-20-100-4F-R3	20	45	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○			○					

四刃加长圆弧立铣刀 4 Flutes Extra Long



圆弧铣刀侧面加工
Side Face Machining

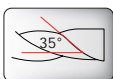
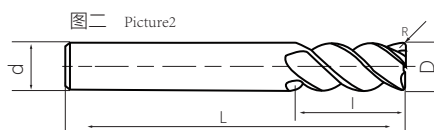
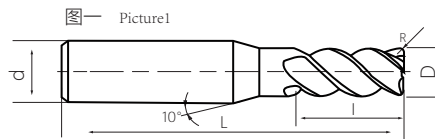


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC45-CR



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CRS-3.0-75-4F-R0.2	3	12	6	75	4	●	1
CRS-3.0-75-4F-R0.5	3	12	6	75	4	●	1
CR-4.0-75-4F-R0.2	4	14	4	75	4	●	2
CR-4.0-75-4F-R0.5	4	14	4	75	4	●	2
CR-4.0-75-4F-R1	4	14	4	75	4	●	2
CRS-5.0-75-4F-R0.5	5	15	6	75	4	●	1
CRS-5.0-75-4F-R1	5	15	6	75	4	●	1
CRS-6.0-75-4F-R0.2	6	20	6	75	4	●	2
CRS-6.0-75-4F-R0.5	6	20	6	75	4	●	2
CRS-6.0-75-4F-R1	6	20	6	75	4	●	2
CRS-6.0-75-4F-R1.5	6	20	6	75	4	●	2
CR-8.0-100-4F-R0.5	8	30	8	100	4	●	2
CR-8.0-100-4F-R1	8	30	8	100	4	●	2
CR-8.0-100-4F-R1.5	8	30	8	100	4	●	2
CR-8.0-100-4F-R2	8	30	8	100	4	●	2
CR-10-100-4F-R0.5	10	30	10	100	4	●	2
CR-10-100-4F-R1	10	30	10	100	4	●	2
CR-10-100-4F-R1.5	10	30	10	100	4	●	2
CR-10-100-4F-R2	10	30	10	100	4	●	2
CR-10-100-4F-R2.5	10	30	10	100	4	●	2
CR-10-100-4F-R3	10	30	10	100	4	●	2
CR-12-100-4F-R0.5	12	35	12	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○					○				

刀尖圆弧铣刀 Corner Radius End Mill

四刃加长圆弧立铣刀 4 Flutes Extra Long



圆弧铣刀侧面加工
Side Face Machining

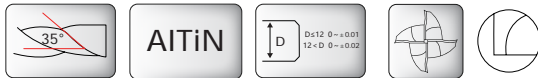
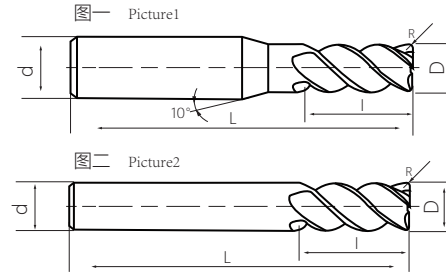


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC45-CR



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(L)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-12-100-4F-R1	12	35	12	100	4	●	2
CR-12-100-4F-R1.5	12	35	12	100	4	●	2
CR-12-100-4F-R2	12	35	12	100	4	●	2
CR-12-100-4F-R2.5	12	35	12	100	4	●	2
CR-12-100-4F-R3	12	35	12	100	4	●	2
CR-14-100-4F-R0.5	14	45	14	100	4	●	2
CR-14-100-4F-R1	14	45	14	100	4	●	2
CR-14-100-4F-R2	14	45	14	100	4	●	2
CR-16-100-4F-R0.5	16	45	16	150	4	●	2
CR-16-150-4F-R1	16	45	16	150	4	●	2
CR-16-150-4F-R2	16	45	16	150	4	●	2
CR-16-150-4F-R3	16	45	16	150	4	●	2
CR-18-150-4F-R0.5	18	45	18	150	4	●	2
CR-18-150-4F-R1	18	45	18	150	4	●	2
CR-18-150-4F-R2	18	45	18	150	4	●	2
CR-18-150-4F-R3	18	45	18	150	4	●	2
CR-20-150-4F-R0.5	20	45	20	150	4	●	2
CR-20-150-4F-R1	20	45	20	150	4	●	2
CR-20-150-4F-R2	20	45	20	150	4	●	2
CR-20-150-4F-R3	20	45	20	150	4	●	2

刀尖圆弧铣刀
Corner Radius End Mill

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○				○					

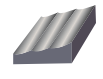
四刃圆弧立铣刀 4 Flutes Standard



圆弧铣刀侧面加工
Side Face Machining

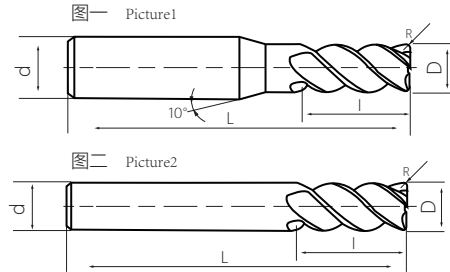


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC55-CR



Corner Radius End Mill
刀尖圆弧铣刀

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-3.0-50-4F-R0.2	3	9	4	50	4	●	1
CR-3.0-50-4F-R0.5	3	9	4	50	4	●	1
CR-4.0-50-4F-R0.2	4	10	4	50	4	●	2
CR-4.0-50-4F-R0.5	4	10	4	50	4	●	2
CR-4.0-50-4F-R1	4	10	4	50	4	●	2
CRS-5.0-50-4F-R0.5	5	13	6	50	4	●	1
CRS-5.0-50-4F-R1	5	13	6	50	4	●	1
CRS-6.0-50-4F-R0.2	6	15	6	50	4	●	2
CRS-6.0-50-4F-R0.5	6	15	6	50	4	●	2
CRS-6.0-50-4F-R1	6	15	6	50	4	●	2
CR-8.0-60-4F-R0.5	8	20	8	60	4	●	2
CR-8.0-60-4F-R1	8	20	8	60	4	●	2
CR-8.0-60-4F-R1.5	8	20	8	60	4	●	2
CR-10-75-4F-R0.5	10	25	10	75	4	●	2
CR-10-75-4F-R1	10	25	10	75	4	●	2
CR-10-75-4F-R1.5	10	25	10	75	4	●	2
CR-10-75-4F-R2	10	25	10	75	4	●	2
CR-10-75-4F-R2.5	10	25	10	75	4	●	2
CR-10-75-4F-R3	10	25	10	75	4	●	2
CR-12-75-4F-R0.5	12	30	12	75	4	●	2
CR-12-75-4F-R1	12	30	12	75	4	●	2
CR-12-75-4F-R1.5	12	30	12	75	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	

刀尖圆弧铣刀 Corner Radius End Mill

四刃圆弧立铣刀 4 Flutes Standard



圆弧铣刀侧面加工
Side Face Machining

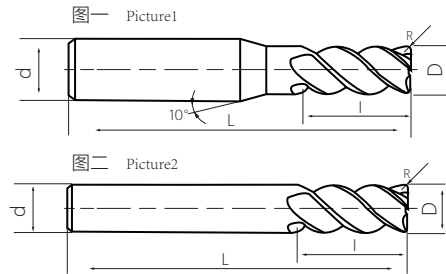


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC55-CR



AICrSiN



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (L)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
CR-12-75-4F-R2	12	30	12	75	4	●	2
CR-12-75-4F-R2.5	12	30	12	75	4	●	2
CR-12-75-4F-R3	12	30	12	75	4	●	2
CR-14-75-4F-R0.5	14	35	14	75	4	●	2
CR-14-75-4F-R1	14	35	14	75	4	●	2
CR-14-75-4F-R2	14	35	14	75	4	●	2
CR-16-100-4F-R0.5	16	45	16	100	4	●	2
CR-16-100-4F-R1	16	45	16	100	4	●	2
CR-16-100-4F-R2	16	45	16	100	4	●	2
CR-16-100-4F-R3	16	45	16	100	4	●	2
CR-18-100-4F-R0.5	18	45	18	100	4	●	2
CR-18-100-4F-R1	18	45	18	100	4	●	2
CR-18-100-4F-R2	18	45	18	100	4	●	2
CR-18-100-4F-R3	18	45	18	100	4	●	2
CR-20-100-4F-R0.5	20	45	20	100	4	●	2
CR-20-100-4F-R1	20	45	20	100	4	●	2
CR-20-100-4F-R2	20	45	20	100	4	●	2
CR-20-100-4F-R3	20	45	20	100	4	●	2

刀尖圆弧铣刀
Corner Radius End Mill

- 常备库存 ○ 按订单生产
- Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
◎	◎	○	◎	◎	○	◎					

四刃加长圆弧立铣刀 4 Flutes Extra Long



圆弧铣刀侧面加工
Side Face Machining

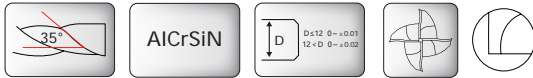
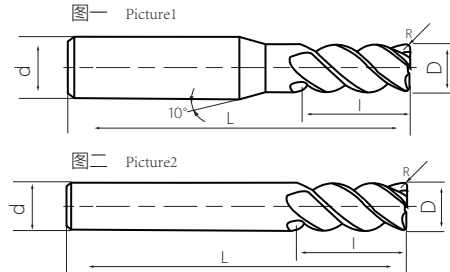


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC55-CR



Corner Radius End Mill
刀尖圆弧铣刀

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
CRS-3.0-75-4F-R0.2	3	12	6	75	4	●	1
CRS-3.0-75-4F-R0.5	3	12	6	75	4	●	1
CR-4.0-75-4F-R0.2	4	14	4	75	4	●	2
CR-4.0-75-4F-R0.5	4	14	4	75	4	●	2
CR-4.0-75-4F-R1	4	14	4	75	4	●	2
CRS-5.0-75-4F-R0.5	5	15	6	75	4	●	2
CRS-5.0-75-4F-R1	5	15	6	75	4	●	1
CRS-6.0-75-4F-R0.2	6	20	6	75	4	●	1
CRS-6.0-75-4F-R0.5	6	20	6	75	4	●	2
CRS-6.0-75-4F-R1	6	20	6	75	4	●	2
CRS-6.0-75-4F-R1.5	6	20	6	75	4	●	2
CR-8.0-100-4F-R0.5	8	30	8	100	4	●	2
CR-8.0-100-4F-R1	8	30	8	100	4	●	2
CR-8.0-100-4F-R1.5	8	30	8	100	4	●	2
CR-8.0-100-4F-R2	8	30	8	100	4	●	2
CR-10-100-4F-R0.5	10	30	10	100	4	●	2
CR-10-100-4F-R1	10	30	10	100	4	●	2
CR-10-100-4F-R1.5	10	30	10	100	4	●	2
CR-10-100-4F-R2	10	30	10	100	4	●	2
CR-10-100-4F-R2.5	10	30	10	100	4	●	2
CR-10-100-4F-R3	10	30	10	100	4	●	2
CR-12-100-4F-R0.5	12	35	12	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	

刀尖圆弧铣刀 Corner Radius End Mill

四刃加长圆弧立铣刀 4 Flutes Extra Long



圆弧铣刀侧面加工
Side Face Machining

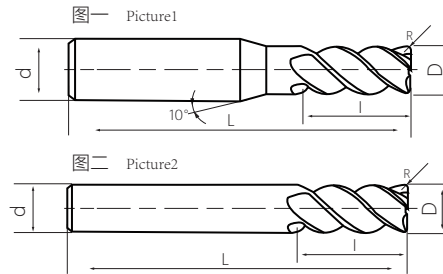


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC55-CR



AICrSiN



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(L)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-12-100-4F-R1	12	35	12	100	4	●	2
CR-12-100-4F-R1.5	12	35	12	100	4	●	2
CR-12-100-4F-R2	12	35	12	100	4	●	2
CR-12-100-4F-R2.5	12	35	12	100	4	●	2
CR-12-100-4F-R3	12	35	12	100	4	●	2
CR-14-100-4F-R0.5	14	45	14	100	4	●	2
CR-14-100-4F-R1	14	45	14	100	4	●	2
CR-14-100-4F-R2	14	45	14	100	4	●	2
CR-16-100-4F-R0.5	16	75	16	150	4	●	2
CR-16-150-4F-R1	16	75	16	150	4	●	2
CR-16-150-4F-R2	16	75	16	150	4	●	2
CR-16-150-4F-R3	16	75	16	150	4	●	2
CR-18-150-4F-R0.5	18	75	18	150	4	●	2
CR-18-150-4F-R1	18	75	18	150	4	●	2
CR-18-150-4F-R2	18	75	18	150	4	●	2
CR-18-150-4F-R3	18	75	18	150	4	●	2
CR-20-150-4F-R0.5	20	75	20	150	4	●	2
CR-20-150-4F-R1	20	75	20	150	4	●	2
CR-20-150-4F-R2	20	75	20	150	4	●	2
CR-20-150-4F-R3	20	75	20	150	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

⊙ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
⊙	⊙	○	⊙	⊙	○	⊙					

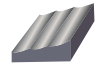
四刃圆弧立铣刀 4 Flutes Standard



圆弧铣刀侧面加工
Side Face Machining

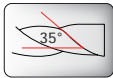
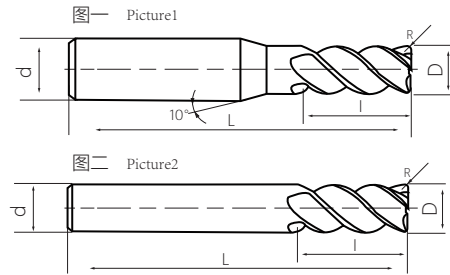


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC60-CR



nAco 3 Black



Corner Radius End Mill
刀尖圆弧铣刀

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-3.0-50-4F-R0.2	3	9	4	50	4	●	1
CR-3.0-50-4F-R0.5	3	9	4	50	4	●	1
CR-4.0-50-4F-R0.2	4	10	4	50	4	●	2
CR-4.0-50-4F-R0.5	4	10	4	50	4	●	2
CR-4.0-50-4F-R1	4	10	4	50	4	●	2
CRS-5.0-50-4F-R0.5	5	13	6	50	4	●	1
CRS-5.0-50-4F-R1	5	13	6	50	4	●	1
CRS-6.0-50-4F-R0.2	6	15	6	50	4	●	2
CRS-6.0-50-4F-R0.5	6	15	6	50	4	●	2
CRS-6.0-50-4F-R1	6	15	6	50	4	●	2
CR-8.0-60-4F-R0.5	8	20	8	60	4	●	2
CR-8.0-60-4F-R1	8	20	8	60	4	●	2
CR-8.0-60-4F-R1.5	8	20	8	60	4	●	2
CR-10-75-4F-R0.5	10	25	10	75	4	●	2
CR-10-75-4F-R1	10	25	10	75	4	●	2
CR-10-75-4F-R1.5	10	25	10	75	4	●	2
CR-10-75-4F-R2	10	25	10	75	4	●	2
CR-10-75-4F-R2.5	10	25	10	75	4	●	2
CR-10-75-4F-R3	10	25	10	75	4	●	2
CR-12-75-4F-R0.5	12	30	12	75	4	●	2
CR-12-75-4F-R1	12	30	12	75	4	●	2
CR-12-75-4F-R1.5	12	30	12	75	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

☉ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
			○	☉		○					

刀尖圆弧铣刀 Corner Radius End Mill

四刃圆弧立铣刀 4 Flutes Standard



圆弧铣刀侧面加工
Side Face Machining

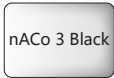
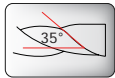
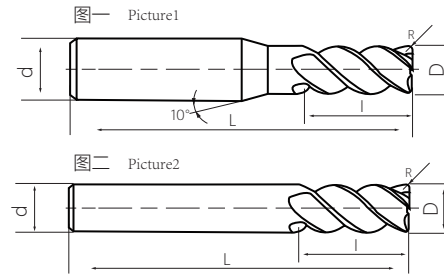


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC60-CR



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
CR-12-75-4F-R2	12	30	12	75	4	●	2
CR-12-75-4F-R2.5	12	30	12	75	4	●	2
CR-12-75-4F-R3	12	30	12	75	4	●	2
CR-14-75-4F-R0.5	14	35	14	75	4	●	2
CR-14-75-4F-R1	14	35	14	75	4	●	2
CR-14-75-4F-R2	14	35	14	75	4	●	2
CR-16-100-4F-R0.5	16	45	16	100	4	●	2
CR-16-100-4F-R1	16	45	16	100	4	●	2
CR-16-100-4F-R2	16	45	16	100	4	●	2
CR-16-100-4F-R3	16	45	16	100	4	●	2
CR-18-100-4F-R0.5	18	45	18	100	4	●	2
CR-18-100-4F-R1	18	45	18	100	4	●	2
CR-18-100-4F-R2	18	45	18	100	4	●	2
CR-18-100-4F-R3	18	45	18	100	4	●	2
CR-20-100-4F-R0.5	20	45	20	100	4	●	2
CR-20-100-4F-R1	20	45	20	100	4	●	2
CR-20-100-4F-R2	20	45	20	100	4	●	2
CR-20-100-4F-R3	20	45	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

刀尖圆弧铣刀
Corner Radius End Mill

被加工材料推荐/Workpiece material recommendation

⊙ 非常合适 Very Suitable ○ 合适 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
			○	⊙		○					

四刃加长圆弧立铣刀 4 Flutes Extra Long



圆弧铣刀侧面加工
Side Face Machining

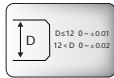
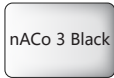
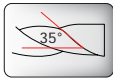
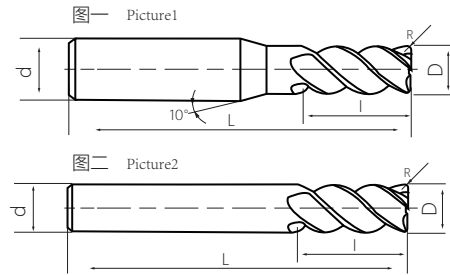


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC60-CR



Corner Radius End Mill
刀尖圆弧铣刀

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
CRS-3.0-75-4F-R0.2	3	12	6	75	4	○	1
CRS-3.0-75-4F-R0.5	3	12	6	75	4	○	1
CR-4.0-75-4F-R0.2	4	14	4	75	4	○	2
CR-4.0-75-4F-R0.5	4	14	4	75	4	○	2
CR-4.0-75-4F-R1	4	14	4	75	4	○	2
CRS-5.0-75-4F-R0.5	5	15	6	75	4	○	1
CRS-5.0-75-4F-R1	5	15	6	75	4	○	1
CRS-6.0-75-4F-R0.2	6	20	6	75	4	○	2
CRS-6.0-75-4F-R0.5	6	20	6	75	4	○	2
CRS-6.0-75-4F-R1	6	20	6	75	4	○	2
CRS-6.0-75-4F-R1.5	6	20	6	75	4	○	2
CR-8.0-100-4F-R0.5	8	30	8	100	4	○	2
CR-8.0-100-4F-R1	8	30	8	100	4	○	2
CR-8.0-100-4F-R1.5	8	30	8	100	4	○	2
CR-8.0-100-4F-R2	8	30	8	100	4	○	2
CR-10-100-4F-R0.5	10	30	10	100	4	○	2
CR-10-100-4F-R1	10	30	10	100	4	○	2
CR-10-100-4F-R1.5	10	30	10	100	4	○	2
CR-10-100-4F-R2	10	30	10	100	4	○	2
CR-10-100-4F-R2.5	10	30	10	100	4	○	2
CR-10-100-4F-R3	10	30	10	100	4	○	2
CR-12-100-4F-R0.5	12	35	12	100	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
			○	●		○					

刀尖圆弧铣刀 Corner Radius End Mill

四刃加长圆弧立铣刀 4 Flutes Extra Long



圆弧铣刀侧面加工
Side Face Machining

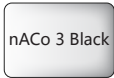
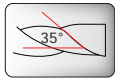
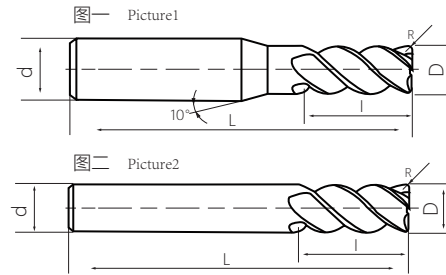


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC60-CR



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-12-100-4F-R1	12	35	12	100	4	○	2
CR-12-100-4F-R1.5	12	35	12	100	4	○	2
CR-12-100-4F-R2	12	35	12	100	4	○	2
CR-12-100-4F-R2.5	12	35	12	100	4	○	2
CR-12-100-4F-R3	12	35	12	100	4	○	2
CR-14-100-4F-R0.5	14	45	14	100	4	○	2
CR-14-100-4F-R1	14	45	14	100	4	○	2
CR-14-100-4F-R2	14	45	14	100	4	○	2
CR-16-100-4F-R0.5	16	75	16	150	4	○	2
CR-16-150-4F-R1	16	75	16	150	4	○	2
CR-16-150-4F-R2	16	75	16	150	4	○	2
CR-16-150-4F-R3	16	75	16	150	4	○	2
CR-18-150-4F-R0.5	18	75	18	150	4	○	2
CR-18-150-4F-R1	18	75	18	150	4	○	2
CR-18-150-4F-R2	18	75	18	150	4	○	2
CR-18-150-4F-R3	18	75	18	150	4	○	2
CR-20-150-4F-R0.5	20	75	20	150	4	○	2
CR-20-150-4F-R1	20	75	20	150	4	○	2
CR-20-150-4F-R2	20	75	20	150	4	○	2
CR-20-150-4F-R3	20	75	20	150	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
			○	◎		○					

刀尖圆弧铣刀
Corner Radius End Mill

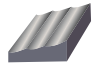
四刃圆弧立铣刀 4 Flutes Standard



圆弧铣刀侧面加工
Side Face Machining

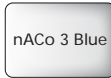
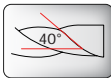
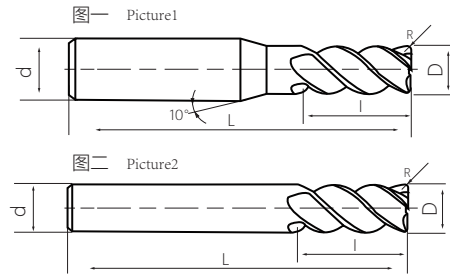


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC65-CR



Corner Radius End Mill
刀尖圆弧铣刀

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-3.0-50-4F-R0.2	3	9	4	50	4	●	1
CR-3.0-50-4F-R0.5	3	9	4	50	4	●	1
CR-4.0-50-4F-R0.2	4	10	4	50	4	●	2
CR-4.0-50-4F-R0.5	4	10	4	50	4	●	2
CR-4.0-50-4F-R1	4	10	4	50	4	●	2
CRS-5.0-50-4F-R0.5	5	13	6	50	4	●	1
CRS-5.0-50-4F-R1	5	13	6	50	4	●	1
CRS-6.0-50-4F-R0.2	6	15	6	50	4	●	2
CRS-6.0-50-4F-R0.5	6	15	6	50	4	●	2
CRS-6.0-50-4F-R1	6	15	6	50	4	●	2
CR-8.0-60-4F-R0.5	8	20	8	60	4	●	2
CR-8.0-60-4F-R1	8	20	8	60	4	●	2
CR-8.0-60-4F-R1.5	8	20	8	60	4	●	2
CR-10-75-4F-R0.5	10	25	10	75	4	●	2
CR-10-75-4F-R1	10	25	10	75	4	●	2
CR-10-75-4F-R1.5	10	25	10	75	4	●	2
CR-10-75-4F-R2	10	25	10	75	4	●	2
CR-10-75-4F-R2.5	10	25	10	75	4	●	2
CR-10-75-4F-R3	10	25	10	75	4	●	2
CR-12-75-4F-R0.5	12	30	12	75	4	●	2
CR-12-75-4F-R1	12	30	12	75	4	●	2
CR-12-75-4F-R1.5	12	30	12	75	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

⊙ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
										⊙	⊙

刀尖圆弧铣刀 Corner Radius End Mill

四刃圆弧立铣刀 4 Flutes Standard



圆弧铣刀侧面加工
Side Face Machining

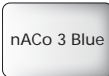
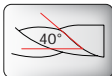
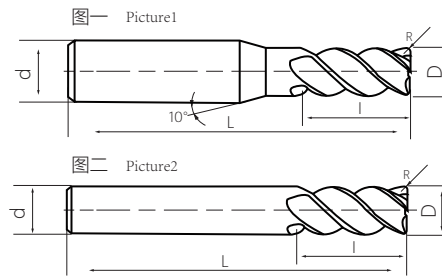


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC65-CR



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-12-75-4F-R2	12	30	12	75	4	●	2
CR-12-75-4F-R2.5	12	30	12	75	4	●	2
CR-12-75-4F-R3	12	30	12	75	4	●	2
CR-14-75-4F-R0.5	14	35	14	75	4	●	2
CR-14-75-4F-R1	14	35	14	75	4	●	2
CR-14-75-4F-R2	14	35	14	75	4	●	2
CR-16-100-4F-R0.5	16	45	16	100	4	●	2
CR-16-100-4F-R1	16	45	16	100	4	●	2
CR-16-100-4F-R2	16	45	16	100	4	●	2
CR-16-100-4F-R3	16	45	16	100	4	●	2
CR-18-100-4F-R0.5	18	45	18	100	4	●	2
CR-18-100-4F-R1	18	45	18	100	4	●	2
CR-18-100-4F-R2	18	45	18	100	4	●	2
CR-18-100-4F-R3	18	45	18	100	4	●	2
CR-20-100-4F-R0.5	20	45	20	100	4	●	2
CR-20-100-4F-R1	20	45	20	100	4	●	2
CR-20-100-4F-R2	20	45	20	100	4	●	2
CR-20-100-4F-R3	20	45	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

刀尖圆弧铣刀
Corner Radius End Mill

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
										○	○

四刃加长圆弧立铣刀 4 Flutes Extra Long



圆弧铣刀侧面加工
Side Face Machining

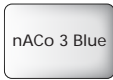
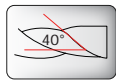
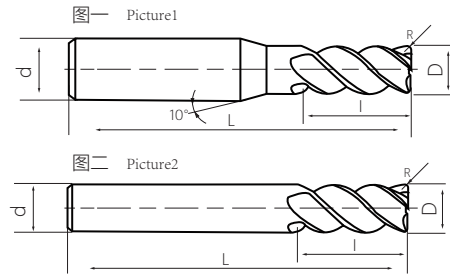


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC65-CR



Corner Radius End Mill
刀尖圆弧铣刀

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CRS-3.0-75-4F-R0.2	3	12	6	75	4	○	1
CRS-3.0-75-4F-R0.5	3	12	6	75	4	○	1
CR-4.0-75-4F-R0.2	4	14	4	75	4	○	2
CR-4.0-75-4F-R0.5	4	14	4	75	4	○	2
CR-4.0-75-4F-R1	4	14	4	75	4	○	2
CRS-5.0-75-4F-R0.5	5	15	6	75	4	○	1
CRS-5.0-75-4F-R1	5	15	6	75	4	○	1
CRS-6.0-75-4F-R0.2	6	20	6	75	4	○	2
CRS-6.0-75-4F-R0.5	6	20	6	75	4	○	2
CRS-6.0-75-4F-R1	6	20	6	75	4	○	2
CRS-6.0-75-4F-R1.5	6	20	6	75	4	○	2
CR-8.0-100-4F-R0.5	8	30	8	100	4	○	2
CR-8.0-100-4F-R1	8	30	8	100	4	○	2
CR-8.0-100-4F-R1.5	8	30	8	100	4	○	2
CR-8.0-100-4F-R2	8	30	8	100	4	○	2
CR-10-100-4F-R0.5	10	30	10	100	4	○	2
CR-10-100-4F-R1	10	30	10	100	4	○	2
CR-10-100-4F-R1.5	10	30	10	100	4	○	2
CR-10-100-4F-R2	10	30	10	100	4	○	2
CR-10-100-4F-R2.5	10	30	10	100	4	○	2
CR-10-100-4F-R3	10	30	10	100	4	○	2
CR-12-100-4F-R0.5	12	35	12	100	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

⊙ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
										⊙	⊙

刀尖圆弧铣刀 Corner Radius End Mill

四刃加长圆弧立铣刀 4 Flutes Extra Long



圆弧铣刀侧面加工
Side Face Machining

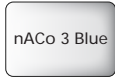
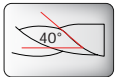
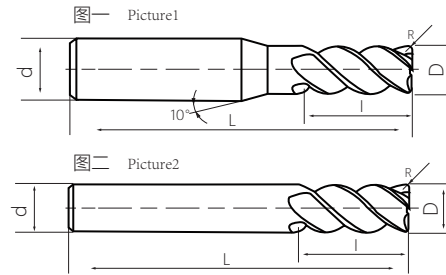


圆弧铣刀槽加工
Step Shoulder Machining



圆弧铣刀仿形加工
Straight Slot Machining

HRC65-CR



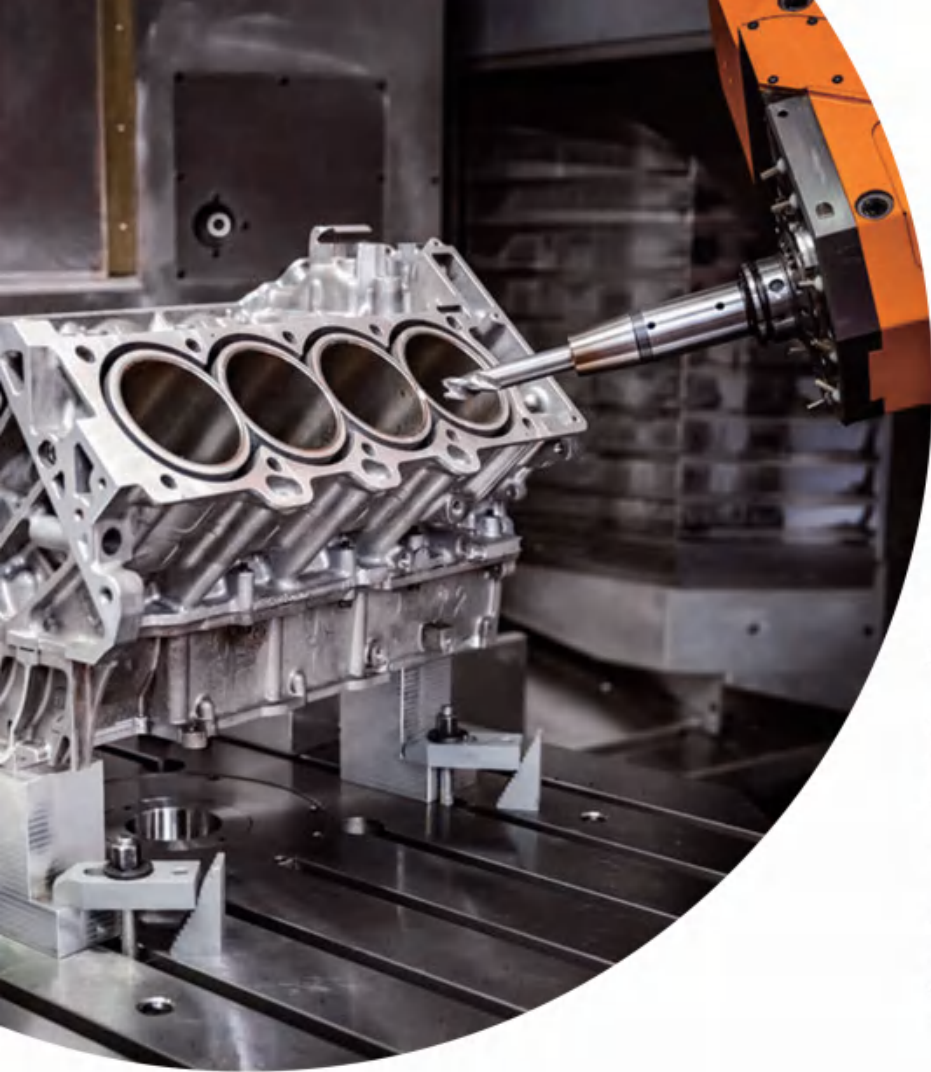
铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
CR-12-100-4F-R1	12	35	12	100	4	○	2
CR-12-100-4F-R1.5	12	35	12	100	4	○	2
CR-12-100-4F-R2	12	35	12	100	4	○	2
CR-12-100-4F-R2.5	12	35	12	100	4	○	2
CR-12-100-4F-R3	12	35	12	100	4	○	2
CR-14-100-4F-R0.5	14	45	14	100	4	○	2
CR-14-100-4F-R1	14	45	14	100	4	○	2
CR-14-100-4F-R2	14	45	14	100	4	○	2
CR-16-100-4F-R0.5	16	75	16	150	4	○	2
CR-16-150-4F-R1	16	75	16	150	4	○	2
CR-16-150-4F-R2	16	75	16	150	4	○	2
CR-16-150-4F-R3	16	75	16	150	4	○	2
CR-18-150-4F-R0.5	18	75	18	150	4	○	2
CR-18-150-4F-R1	18	75	18	150	4	○	2
CR-18-150-4F-R2	18	75	18	150	4	○	2
CR-18-150-4F-R3	18	75	18	150	4	○	2
CR-20-150-4F-R0.5	20	75	20	150	4	○	2
CR-20-150-4F-R1	20	75	20	150	4	○	2
CR-20-150-4F-R2	20	75	20	150	4	○	2
CR-20-150-4F-R3	20	75	20	150	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						

刀尖圆弧铣刀
Corner Radius End Mill



AL Series
AL 系列

铝用加工立铣刀

Aluminum machining End mill



· 适用于铝合金材料的高效超亮加工；
Suitable for efficient and super bright processing of aluminum alloy material.

· 适用于大切深，大切宽的高效加工，
金属去除率高；

Applicable for high efficiency machining at large cutting depth(a_p), large cutting width(a_e), high material removal rate.

· 特殊的刃口设计，有效解决刀具刃口
沾屑问题；

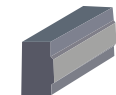
Special edge design, effectively solve the crumbs.

· 适用于油冷冷却。
Suitable for oil cooling.



铝加工铣刀
End mill for Aluminum

三刃平头立铣刀 3 Flutes Standard



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

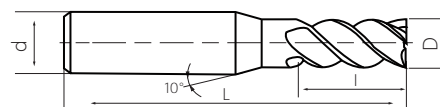


平头铣刀直角槽加工
Straight Slot Machining

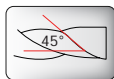
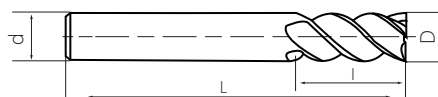
HRC55-AL



图一 Picture1



图二 Picture2



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(L)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
AL-1.0-50-3F	1	3	4	50	3	●	1
AL-1.5-50-3F	1.5	4.5	4	50	3	●	1
AL-2.0-50-3F	2	6	4	50	3	●	1
AL-2.5-50-3F	2.5	7.5	4	50	3	●	1
AL-3.0-50-3F	3	9	4	50	3	●	1
AL-4.0-50-3F	4	12	4	50	3	●	2
ASL-5.0-50-3F	5	15	6	50	3	●	1
ALS-6.0-50-3F	6	18	6	50	3	●	2
AL-7.0-60-3F	7	21	8	60	3	●	1
AL-8.0-60-3F	8	24	8	60	3	●	2
AL-10-75-3F	10	30	10	75	3	●	2
AL-12-75-3F	12	35	12	75	3	●	2
AL-14-100-3F	14	45	14	100	3	●	2
AL-16-100-3F	16	45	16	100	3	●	2
AL-18-100-3F	18	45	18	100	3	●	2
AL-20-100-3F	20	45	20	100	3	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

铝加工铣刀
End mill for Aluminum

被加工材料推荐/Workpiece material recommendation

⊙ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
								⊙	⊙		



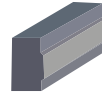
铣削

End Mill

Be Good Go Better

铝加工铣刀
End mill for Aluminum

三刃加长平头立铣刀
3 Flutes Extra Long



平头铣刀侧面加工
Side Face Machining

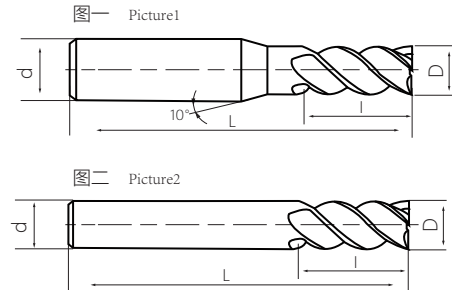


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC55-AL



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
AL-4.0-75-3F	4	16	4	75	3	●	2
ALS-5.0-75-3F	5	20	6	75	3	●	1
ALS-6.0-75-3F	6	24	6	75	3	●	2
AL-8.0-75-3F	8	30	8	75	3	●	2
AL-4.0-100-3F	4	20	4	100	3	●	2
ALS-5.0-100-3F	5	25	6	100	3	●	1
ALS-6.0-100-3F	6	30	6	100	3	●	2
AL-8.0-100-3F	8	35	8	100	3	●	2
AL-10-100-3F	10	40	10	100	3	●	2
AL-12-100-3F	12	40	12	100	3	●	2
AL-4.0-150-3F	4	40	4	150	3	●	2
ALS-6.0-150-3F	6	45	6	150	3	●	2
AL-8.0-150-3F	8	50	8	150	3	●	2
AL-10-150-3F	10	60	10	150	3	●	2
AL-12-150-3F	12	60	12	150	3	●	2
AL-16-150-3F	16	75	16	150	3	●	2
AL-20-150-3F	20	75	20	150	3	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

End mill for Aluminum
铝加工铣刀

被加工材料推荐/Workpiece material recommendation ◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
							◎	◎			

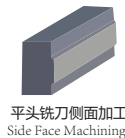
命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

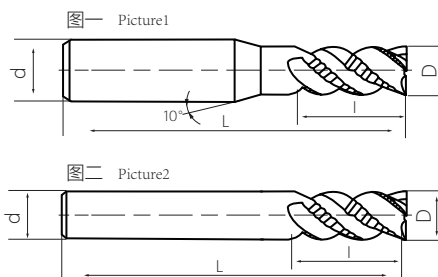
切削参数 — P100-P101
Cutting parameters — P100-P101

铝加工铣刀
End mill for Aluminum

三刃平头立铣刀
3 Flutes Standard



HRC55-AL



HRC55 Rough End Mill



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
AL-4.0-50-3F	4	12	4	50	3	●	2
ALS-6.0-50-3F	6	18	6	50	3	●	2
AL8.0-60-3F	8	24	8	60	3	●	2
AL-10-75-3F	10	30	10	75	3	●	2
AL-12-75-3F	12	35	12	75	3	●	2
AL-14-100-3F	14	45	14	100	3	●	2
AL-16-100-3F	16	45	16	100	3	●	2
AL-18-100-3F	18	45	18	100	3	●	2
AL-20-100-3F	20	45	20	100	3	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

铝加工铣刀
End mill for Aluminum

被加工材料推荐/Workpiece material recommendation

○ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
								○	○		



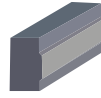
铣削

End Mill

Be Good Go Better

铝加工铣刀
End mill for Aluminum

三刃加长平头立铣刀
3 Flutes Extra Long



平头铣刀侧面加工
Side Face Machining



平头铣刀台阶加工
Step Shoulder Machining

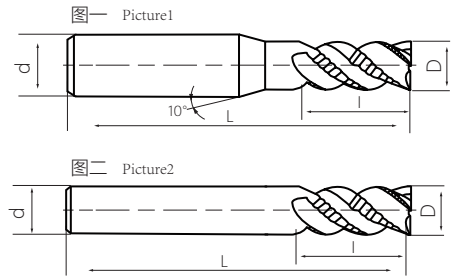


平头铣刀直角槽加工
Straight Slot Machining

HRC55-AL



HRC55 Rough End Mill



End mill for Aluminum
铝加工铣刀

铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
AL-4.0-75-3F	4	16	4	75	3	○	2
AL-4.0-100-3F	4	20	4	100	3	○	2
ALS-6.0-75-3F	6	24	6	75	3	○	2
ALS-6.0-100-3F	6	30	6	100	3	○	2
AL-8.0-100-3F	8	35	8	100	3	○	2
AL-10-100-3F	10	40	10	100	2	○	2
AL-12-100-3F	12	45	12	100	3	○	2
AL-16-150-3F	16	75	16	150	3	○	2
AL-20-150-3F	20	75	20	150	3	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation ⊙ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
								⊙	⊙		



Long Tool Life
Roughing Work



TiAlN

粗加工立铣刀

Roughing end mill

RE 系列

RE series

- 适用于普通钢、铸铁材料
($\leq 55\text{HRC}$)的粗加工

Suitable for roughing of steels&cast iron($\leq 55\text{HRC}$).

- 特殊的刃口断屑槽处理，适用于
于工件的沟槽和侧壁粗加工；

Special chip-breaking cutting edge design,for roughing applications.

- 采用TiAlN涂层；
TiAlN Coating.

- 适用于油冷冷却
Suitable for oil cooling.



粗皮铣刀
Rough End Mill

四刃平头立铣刀 4 Flutes Standard



平头铣刀侧面加工
Side Face Machining

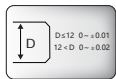
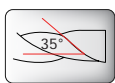
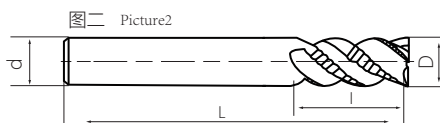
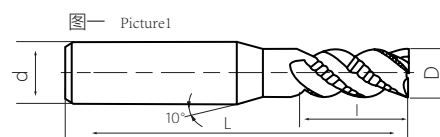


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC55-RE



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(D)	总长 Overall Length(L)			
RE-4.0-50-4F	4	10	4	50	4	●	2
RES-6.0-50-4F	6	15	6	50	4	●	2
RE-8.0-60-4F	8	20	8	60	4	●	2
RE-10-75-4F	10	25	10	75	4	●	2
RE-12-75-4F	12	30	12	75	4	●	2
RE-14-100-4F	14	45	14	100	4	●	2
RE-16-100-4F	16	45	16	100	4	●	2
RE-18-100-4F	18	45	18	100	4	●	2
RE-20-100-4F	20	45	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

粗皮铣刀
Rough End Mill

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P					M	K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
◎	◎	◎	◎	○			○	◎			

Be Good Go Better

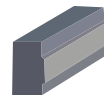
铣削

End Mill



粗皮铣刀
Rough End Mill

四刃加长平头立铣刀
4 Flutes Extra Long



平头铣刀侧面加工
Side Face Machining

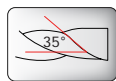
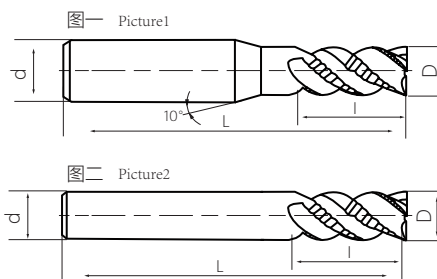


平头铣刀台阶加工
Step Shoulder Machining

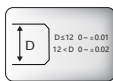


平头铣刀直角槽加工
Straight Slot Machining

HRC55-RE



AlTiN



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter (d)	刃长 Flute Length (l)	柄径 Shank Diameter (D)	总长 Overall Length (L)			
RE-4.0-75-4F	4	16	4	75	4	○	2
RE-4.0-100-4F	4	20	4	100	4	○	2
RES-6.0-75-4F	6	24	6	75	4	○	2
RES-6.0-100-4F	6	30	6	100	4	○	2
RE-8.0-100-4F	8	35	8	100	4	○	2
RE-10-100-4F	10	40	10	100	4	○	2
RE-12-100-4F	12	45	12	100	4	○	2
RE-14-100-4F	14	45	14	100	4	○	2
RE-16-150-4F	16	75	16	150	4	○	2
RE-18-150-4F	18	75	18	150	4	○	2
RE-20-150-4F	20	75	20	150	4	○	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

粗皮铣刀
Rough End Mill

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
◎	◎	◎	◎	○							

命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P94
Cutting parameters — P94

不锈钢立铣刀

ST series

End Mill for
Stainless Steel

Sharp and Wearable
锋利且耐磨

Large Chip Removal
大排屑槽

Resistance 1200°C
最高耐温1200°

Smooth Surface
表面光滑



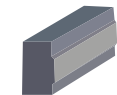
nAco 3 Blue Coating

Unique nAco 3 Blue coating with excellent oxidation resistance and wear resistance.

特有的NACO-BLUE涂层，具有极强的抗氧化性和耐磨性

不锈钢铣刀
End Mill for Stainless steel

四刃平头立铣刀 4 Flutes Standard



平头铣刀侧面加工
Side Face Machining

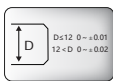
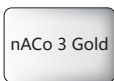
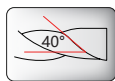
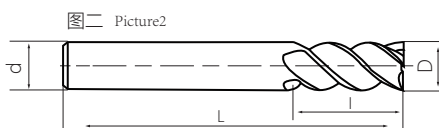
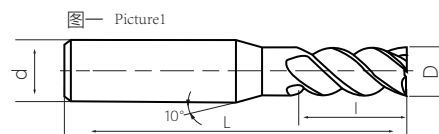


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC60-ST



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(L)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
ST-1.0-50-4F	1	3	4	50	4	●	1
ST-1.5-50-4F	1.5	4.5	4	50	4	●	1
ST-2.0-50-4F	2	6	4	50	4	●	1
ST-2.5-50-4F	2.5	7.5	4	50	4	●	1
ST-3.0-50-4F	3	9	4	50	4	●	1
ST-3.5-50-4F	3.5	10	4	50	4	●	1
ST-4.0-50-4F	4	10	4	50	4	●	2
STS-1.0-50-4F	1	3	6	50	4	●	1
STS-1.5-50-4F	1.5	4.5	6	50	4	●	1
STS-2.0-50-4F	2	6	6	50	4	●	1
STS-2.5-50-4F	2.5	7.5	6	50	4	●	1
STS-3.0-50-4F	3	9	6	50	4	●	1
STS-3.5-50-4F	3.5	10	6	50	4	●	1
STS-4.0-50-4F	4	10	6	50	4	●	2
STS-5.0-50-4F	5	13	6	50	4	●	2
STS-6.0-50-4F	6	15	6	50	4	●	2
ST-7.0-60-4F	7	18	8	60	4	●	1
ST-8.0-60-4F	8	20	8	60	4	●	2
ST-10-75-4F	10	25	10	75	4	●	2
ST-12-75-4F	12	30	12	75	4	●	2
ST-14-100-4F	14	45	14	100	4	●	2
ST-16-100-4F	16	45	16	100	4	●	2
ST-18-100-4F	18	45	18	100	4	●	2
ST-20-100-4F	20	45	20	100	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
						◎				○	

End Mill for Stainless steel

不锈钢铣刀



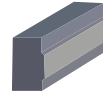
铣削

End Mill

Be Good Go Better

不锈钢铣刀
End Mill for Stainless steel

四刃加长平头立铣刀
4 Flutes Extra Long



平头铣刀侧面加工
Side Face Machining

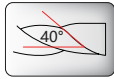
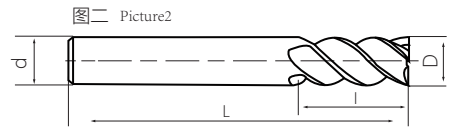
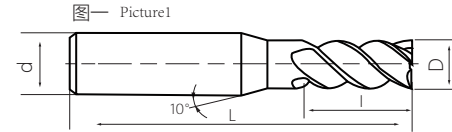


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直槽加工
Straight Slot Machining

HRC60-ST



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
ST-4.0-75-4F	4	16	4	75	4	●	2
STS-6.0-75-4F	6	24	6	75	4	●	2
ST-7.0-75-4F	7	28	8	75	4	●	1
ST-8.0-75-4F	8	30	8	75	4	●	2
ST-4.0-100-4F	4	20	4	100	4	●	2
STS-6.0-100-4F	6	30	6	100	4	●	2
ST-8.0-100-4F	8	35	8	100	4	●	2
ST-10-100-4F	10	40	10	100	4	●	2
ST-12-100-4F	12	45	12	100	4	●	2
ST-8.0-150-4F	8	50	8	150	4	●	2
ST-10-150-4F	10	60	10	150	4	●	2
ST-12-150-4F	12	60	12	150	4	●	2
ST-16-150-4F	16	75	16	150	4	●	2
ST-18-150-4F	18	75	18	150	4	●	2
ST-20-150-4F	20	75	20	150	4	●	2

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

End Mill for Stainless steel
不锈钢铣刀

被加工材料推荐/Workpiece material recommendation ○ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
						◎			○		

命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P95-P96
Cutting parameters — P95-P96

其它加工立铣刀

Other end mills

● 锥颈型立铣刀

Taper end mill

最适合高效，高精度模具的加工

It is the most suitable for high-efficient and high-precision mold processing

配合模具的拔模斜度，有多种角度可供选择

With a draft angle of the mold, there are a variety of choice



微小径立铣刀

Micro End Mill

长颈立铣刀
Long Neck End Mill

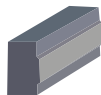
锥颈结构，极大地提高了刀具刚性

Taper neck structure, greatly improves rigidity of carbide end mill

耐磨性与韧性俱佳的超细颗粒硬质合金
Ultrafine particle cemented carbide with excellent wear resistance and toughness



二刃平头立铣刀 2 Flutes Standard



平头铣刀侧面加工
Side Face Machining

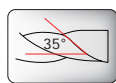
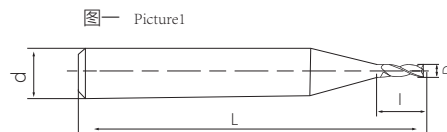


平头铣刀台阶加工
Step Shoulder Machining

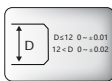


平头铣刀直角槽加工
Straight Slot Machining

HRC60-ME



nACo 3 Black



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	刃长 Flute Length (l)	柄径 Shank Diameter (d)	总长 Overall Length (L)			
ME-0.2-50-2F	0.2	0.4	4	50	2	●	1
ME-0.3-50-2F	0.3	0.6	4	50	2	●	1
ME-0.4-50-2F	0.4	0.8	4	50	2	●	1
ME-0.5-50-2F	0.5	1	4	50	2	●	1
ME-0.6-50-2F	0.6	1.2	4	50	2	●	1
ME-0.7-50-2F	0.7	1.4	4	50	2	●	1
ME-0.8-50-2F	0.8	1.6	4	50	2	●	1
ME-0.9-50-2F	0.9	1.8	4	50	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	●		○	○				

微小径铣刀
Micro End Mill

二刃球头立铣刀 2 Flutes Standard



球头仿形加工
Profile Machining

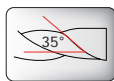
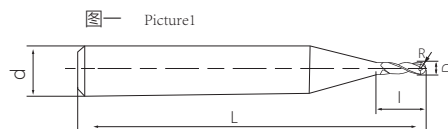


球头铣刀型腔加工
Cavity Machining

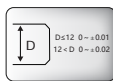


球头铣刀球型槽加工
Slot Machining

HRC60-ME



nAco 3 Black



铣刀型号 Milling cutter model	基本尺寸 Basic Size				刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	刃长 Flute Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
ME-0.2-50-2F-R0.1	0.2	0.4	4	50	2	●	1
ME-0.3-50-2F-R0.15	0.3	0.6	4	50	2	●	1
ME-0.4-50-2F-R0.4	0.8	0.8	4	50	2	●	1
ME-0.5-50-2F-R0.25	0.5	1	4	50	2	●	1
ME-0.6-50-2F-R0.3	0.6	1.2	4	50	2	●	1
ME-0.7-50-2F-R0.35	0.7	1.4	4	50	2	●	1
ME-0.8-50-2F-R0.4	0.8	1.6	4	50	2	●	1
ME-0.9-50-2F-R0.45	0.9	1.8	4	50	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

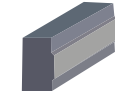
微小径铣刀
Micro End Mill

被加工材料推荐/Workpiece material recommendation

非常合适 Very Suitable ○ 合适 Suitable

被加工材料/Workpiece Material											
P				M	K	N	S				
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○		○	◎		○	○				

二刃平头立铣刀 2 Flutes Standard



平头铣刀侧面加工
Side Face Machining

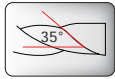
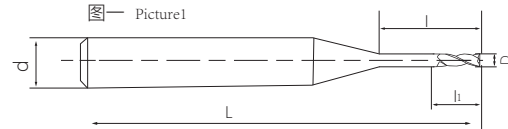


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC55-LN



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter(D)	有效避让长 Effective Avoidance(L)	刃长 Cutting Length(L1)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
LN-0.5-50-2F-L4	0.5	4	0.7	4	50	4	●	1
LN-0.5-50-2F-L6	0.5	6	0.7	4	50	4	●	1
LN-0.5-50-2F-L8	0.5	8	0.7	4	50	4	●	1
LN-0.8-50-2F-L4	0.8	4	1.2	4	50	4	●	1
LN-0.8-50-2F-L6	0.8	6	1.2	4	50	4	●	1
LN-0.8-50-2F-L8	0.8	8	1.2	4	50	4	●	1
LN-0.8-50-2F-L10	0.8	10	1.2	4	50	4	●	1
LN-01-50-2F-L4	1	4	1.5	4	50	4	●	1
LN-01-50-2F-L6	1	6	1.5	4	50	4	●	1
LN-01-50-2F-L8	1	8	1.5	4	50	4	●	1
LN-01-50-2F-L10	1	10	1.5	4	50	4	●	1
LN-01-50-2F-L12	1	12	1.5	4	50	4	●	1
LN-01-50-2F-L14	1	14	1.5	4	50	4	●	1
LN-1.2-50-2F-L6	1.2	6	1.8	4	50	4	●	1
LN-1.2-50-2F-L8	1.2	8	1.8	4	50	4	●	1
LN-1.2-50-2F-L10	1.2	10	1.8	4	50	4	●	1
LN-1.2-50-2F-L12	1.2	12	1.8	4	50	4	●	1
LN-1.5-50-2F-L6	1.5	6	2.3	4	50	4	●	1
LN-1.5-50-2F-L8	1.5	8	2.3	4	50	4	●	1
LN-1.5-50-2F-L10	1.5	10	2.3	4	50	4	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

被加工材料推荐/Workpiece material recommendation

非常合适 Very Suitable (Red circle) 适合 Suitable (Blue circle)

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○	○	○	○	○	○					

长颈立铣刀 Long Neck End Mill

二刃平头立铣刀 2 Flutes Standard



平头铣刀侧面加工
Side Face Machining

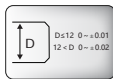
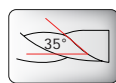
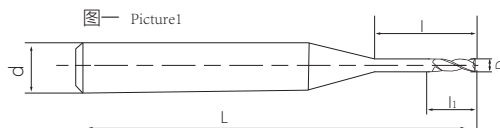


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC55-LN



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter (d)	有效避空长 Effective Avoidance (l)	刃长 Cutting Length (l1)	柄径 Shank Diameter (D)	总长 Overall Length (L)			
LN-1.5-50-2F-L12	1.5	12	2.3	4	50	4	●	1
LN-1.5-50-2F-L14	1.5	14	2.3	4	50	4	●	1
LN-02-50-2F-L6	2	6	3	4	50	4	●	1
LN-02-50-2F-L8	2	8	3	4	50	4	●	1
LN-02-50-2F-L10	2	10	3	4	50	4	●	1
LN-02-50-2F-L12	2	12	3	4	50	4	●	1
LN-02-50-2F-L14	2	14	3	4	50	4	●	1
LN-02-50-2F-L16	2	16	3	4	50	4	●	1
LN-2.5-50-2F-L8	2.5	8	3.7	4	50	4	●	1
LN-2.5-50-2F-L10	2.5	10	3.7	4	50	4	●	1
LN-2.5-50-2F-L12	2.5	12	3.7	4	50	4	●	1
LN-2.5-50-2F-L14	2.5	14	3.7	4	50	4	●	1
LN-2.5-60-2F-L16	2.5	16	3.7	4	60	4	●	1
LN-2.5-60-2F-L18	2.5	18	3.7	4	60	4	●	1
LN-2.5-60-2F-L20	2.5	20	3.7	4	60	4	●	1
LN-03-50-2F-L6	3	6	4.5	6	50	4	●	1
LN-03-50-2F-L8	3	8	4.5	6	50	4	●	1
LN-03-50-2F-L10	3	10	4.5	6	50	4	●	1
LN-03-50-2F-L12	3	12	4.5	6	50	4	●	1
LN-03-60-2F-L14	3	14	4.5	6	60	4	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

长颈立铣刀
Long Neck End Mill

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
◎	◎	○	◎	◎	○	◎					



铣削

End Mill

Be Good Go Better

长颈立铣刀
Long Neck End Mill

二刃球头立铣刀
2 Flutes Standard



球头仿形加工
Profile Machining

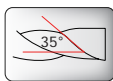
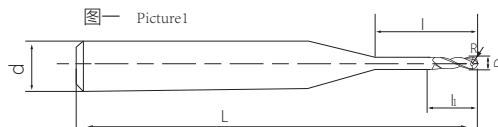


球头铣刀型腔加工
Cavity Machining

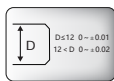


球头铣刀球型槽加工
Slot Machining

HRC55-LN



AlCrSiN



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter(D)	有效避空长 Effective Avoidance(L)	刃长 Cutting Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
LN-0.5-50-2F-R0.25	0.5	4	0.7	4	50	2	●	1
LN-0.5-50-2F-R0.25	0.5	6	0.7	4	50	2	●	1
LN-0.6-50-2F-R0.3	0.6	4	0.9	4	50	2	●	1
LN-0.6-50-2F-R0.3	0.6	6	0.9	4	50	2	●	1
LN-0.6-50-2F-R0.3	0.6	8	0.9	4	50	2	●	1
LN-0.8-50-2F-R0.4	0.8	4	1.2	4	50	2	●	1
LN-0.8-50-2F-R0.4	0.8	6	1.2	4	50	2	●	1
LN-0.8-50-2F-R0.4	0.8	8	1.2	4	50	2	●	1
LN-0.8-50-2F-R0.4	0.8	10	1.2	4	50	2	●	1
LN-01-50-2F-R0.5	1	4	1.5	4	50	2	●	1
LN-01-50-2F-R0.5	1	6	1.5	4	50	2	●	1
LN-01-50-2F-R0.5	1	8	1.5	4	50	2	●	1
LN-01-50-2F-R0.5	1	10	1.5	4	50	2	●	1
LN-01-50-2F-R0.5	1	12	1.5	4	50	2	●	1
LN-1.2-50-2F-R0.6	1.2	6	1.8	4	50	2	●	1
LN-1.2-50-2F-R0.6	1.2	8	1.8	4	50	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

Long Neck End Mill
长颈立铣刀

被加工材料推荐/Workpiece material recommendation ○ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○	○	○	○	○	○					

命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

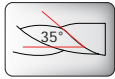
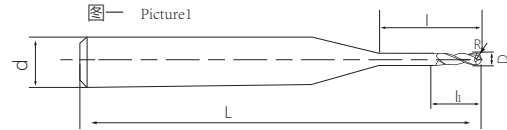
切削参数 — P102-P103
Cutting parameters — P102-P103

长颈立铣刀 Long Neck End Mill

二刃球头立铣刀 2 Flutes Standard



HRC55-LN



AlCrSiN



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter (d)	有效避空长 Effective Avoidance (l)	刃长 Cutting Length (l1)	柄径 Shank Diameter (D)	总长 Overall Length (L)			
LN-1.2-50-2F-R0.6	1.2	12	1.8	4	50	2	●	1
LN-1.2-50-2F-R0.6	1.2	16	1.8	4	50	2	●	1
LN-1.5-50-2F-R0.75	1.5	8	2.3	4	50	2	●	1
LM-1.5-50-2F-R0.75	1.5	12	2.3	4	50	2	●	1
LN-1.5-50-2F-R0.75	1.5	16	2.3	4	50	2	●	1
LN-02-50-2F-R1	2	6	3	4	50	2	●	1
LN-02-50-2F-R1	2	8	3	4	50	2	●	1
LN-02-50-2F-R1	2	10	3	4	50	2	●	1
LN-02-50-2F-R1	2	12	3	4	50	2	●	1
LN-02-50-2F-R1	2	16	3	4	50	2	●	1
LN-02-50-2F-R1	2	20	3	4	50	2	●	1
LN-2.5-50-2F-R1.25	2.5	8	3.7	4	50	2	●	1
LN-2.5-50-2F-R1.25	2.5	12	3.7	4	50	2	●	1
LN-2.5-60-2F-R1.25	2.5	16	3.7	4	60	2	●	1
LN-2.5-60-2F-R1.25	2.5	20	3.7	4	60	2	●	1
LN-03-50-2F-R1.5	3	8	3.7	6	50	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

长颈立铣刀
Long Neck End Mill

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	



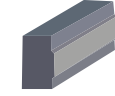
铣削

End Mill

Be Good Go Better

长颈立铣刀
Long Neck End Mill

四刃平头立铣刀
4 Flutes Standard



平头铣刀侧面加工
Side Face Machining

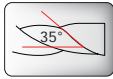
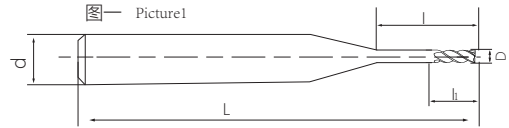


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC55-LN



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter(D)	有效避让空长 Effective Avoidance(L)	刃长 Cutting Length(l)	柄径 Shank Diameter(d)	总长 Overall Length(L)			
LN-0.5-50-4F-L4	0.5	4	0.7	4	50	4	●	1
LN-0.5-50-4F-L6	0.5	6	0.7	4	50	4	●	1
LN-0.5-50-4F-L8	0.5	8	0.7	4	50	4	●	1
LN-0.8-50-4F-L4	0.8	4	1.2	4	50	4	●	1
LN-0.8-50-4F-L6	0.8	6	1.2	4	50	4	●	1
LN-0.8-50-4F-L8	0.8	8	1.2	4	50	4	●	1
LN-0.8-50-4F-L10	0.8	10	1.2	4	50	4	●	1
LN-01-50-4F-L4	1	4	1.5	4	50	4	●	1
LN-01-50-4F-L6	1	6	1.5	4	50	4	●	1
LN-01-50-4F-L8	1	8	1.5	4	50	4	●	1
LN-01-50-4F-L10	1	10	1.5	4	50	4	●	1
LN-01-50-4F-L12	1	12	1.5	4	50	4	●	1
LN-01-50-4F-L14	1	14	1.5	4	50	4	●	1
LN-1.2-50-4F-L6	1.2	6	1.8	4	50	4	●	1
LN-1.2-50-4F-L8	1.2	8	1.8	4	50	4	●	1
LN-1.2-50-4F-L10	1.2	10	1.8	4	50	4	●	1
LN-1.2-50-4F-L12	1.2	12	1.8	4	50	4	●	1
LN-1.5-50-4F-L6	1.5	6	2.3	4	50	4	●	1
LN-1.5-50-4F-L8	1.5	8	2.3	4	50	4	●	1
LN-1.5-50-4F-L10	1.5	10	2.3	4	50	4	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

Long Neck End Mill
长颈立铣刀

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	

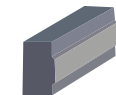
命名规则 — P6
Naming rules — P6

图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P102-P103
Cutting parameters — P102-P103

长颈立铣刀 Long Neck End Mill

四刃平头立铣刀 4 Flutes Standard



平头铣刀侧面加工
Side Face Machining

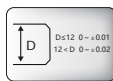
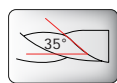
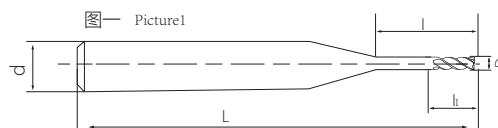


平头铣刀台阶加工
Step Shoulder Machining



平头铣刀直角槽加工
Straight Slot Machining

HRC55-LN



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Flute Diameter (d)	有效避让长 Effective Avoidance (l)	刃长 Cutting Length (l1)	柄径 Shank Diameter (D)	总长 Overall Length (L)			
LN-1.5-50-4F-L12	1.5	12	2.3	4	50	4	●	1
LN-1.5-50-4F-L14	1.5	14	2.3	4	50	4	●	1
LN-02-50-4F-L6	2	6	3	4	50	4	●	1
LN-02-50-4F-L8	2	8	3	4	50	4	●	1
LN-02-50-4F-L10	2	10	3	4	50	4	●	1
LN-02-50-4F-L12	2	12	3	4	50	4	●	1
LN-02-50-4F-L14	2	14	3	4	50	4	●	1
LN-02-50-4F-L16	2	16	3	4	50	4	●	1
LN-2.5-50-4F-L8	2.5	8	3.7	4	50	4	●	1
LN-2.5-50-4F-L10	2.5	10	3.7	4	50	4	●	1
LN-2.5-50-4F-L12	2.5	12	3.7	4	50	4	●	1
LN-2.5-50-4F-L14	2.5	14	3.7	4	50	4	●	1
LN-2.5-60-4F-L16	2.5	16	3.7	4	60	4	●	1
LN-2.5-60-4F-L18	2.5	18	3.7	4	60	4	●	1
LN-2.5-60-4F-L20	2.5	20	3.7	4	60	4	●	1
LN-03-50-4F-L6	3	6	4.5	6	50	4	●	1
LN-03-50-4F-L8	3	8	4.5	6	50	4	●	1
LN-03-50-4F-L10	3	10	4.5	6	50	4	●	1
LN-03-50-4F-L12	3	12	4.5	6	50	4	●	1
LN-03-60-4F-L14	3	14	4.5	6	60	4	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

长颈立铣刀
Long Neck End Mill

被加工材料推荐/Workpiece material recommendation

◎ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 cast iron Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 60HRC	~ 65HRC						
◎	◎	○	◎	◎	○	◎					



铣削

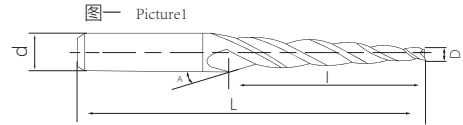
End Mill

Be Good Go Better

锥度立铣刀
Taper End Mill

二刃平头立铣刀
2 Flutes Standard

HRC55-TE



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	粗短径 Wide Diameter(L)	柄径 Shank Diameter(d)	A度 A°	总长 Overall Length(L)			
TE-1.0-50-2F-R0.5	1	1.07	4	0.5	50	2	●	1
TE-1.0-50-2F-R1	1	1.14	4	1	50	2	●	1
TE-1.0-50-2F-R1.5	1	1.21	4	1.5	50	2	●	1
TE-1.0-50-2F-R2	1	1.28	4	2	50	2	●	1
TE-1.0-50-2F-R2.5	1	1.35	4	2.5	50	2	●	1
TE-1.0-50-2F-R3	1	1.42	4	3	50	2	●	1
TE-1.0-50-2F-R5	1	1.7	4	5	50	2	●	1
TE-1.0-50-2F-R7	1	1.98	4	7	50	2	●	1
TE-1.0-50-2F-R10	1	2.41	4	10	50	2	●	1
TE-1.5-50-2F-R0.5	1.5	1.59	4	0.5	50	2	●	1
TE-1.5-50-2F-R1	1.5	1.68	4	1	50	2	●	1
TE-1.5-50-2F-R1.5	1.5	1.76	4	1.5	50	2	●	1
TE-1.5-50-2F-R2	1.5	1.85	4	2	50	2	●	1
TE-1.5-50-2F-R2.5	1.5	1.93	4	2.5	50	2	●	1
TE-1.5-50-2F-R3	1.5	2.02	4	3	50	2	●	1
TE-1.5-50-2F-R5	1.5	2.37	4	5	50	2	●	1
TE-2.0-50-2F-R0.5	2	2.1	4	0.5	50	2	●	1
TE-2.0-50-2F-R1	2	2.21	4	1	50	2	●	1
TE-2.0-50-2F-R1.5	2	2.31	4	1.5	50	2	●	1
TE-2.0-50-2F-R2	2	2.41	4	2	50	2	●	1
TE-2.0-50-2F-R2.5	2	2.52	4	2.5	50	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

锥度立铣刀
Taper End Mill

被加工材料推荐/Workpiece material recommendation ○ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○					

命名规则 — P6
Naming rules — P6

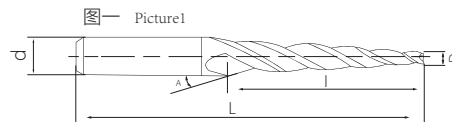
图标种类及识别 — P7
Symbol introduction — P7

切削参数 — P102-P103
Cutting parameters — P102-P103

锥度立铣刀
Taper End Mill

二刃平头立铣刀 2 Flutes Standard

HRC55-TE



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	粗短径 Wide Diameter(i)	柄径 Shank Diameter(d)	A度 A°	总长 Overall Length(L)			
TE-2.0-50-2F-R3	2	2.65	4	3	50	2	●	1
TE-2.0-50-2F-R3	2	3.05	4	3	50	2	●	1
TE-2.0-50-2F-R7	2	3.47	4	7	50	2	●	1
TES-2.0-50-2F-R10	2	1.11	6	10	50	2	●	1
TE-2.5-50-2F-R0.5	2.5	2.64	4	0.5	50	2	●	1
TE-2.5-50-2F-R1	2.5	2.87	4	1	50	2	●	1
TE-2.5-50-2F-R1.5	2.5	2.91	4	1.5	50	2	●	1
TE-2.5-50-2F-R2	2.5	3.05	4	2	50	2	●	1
TE-2.5-50-2F-R2.5	2.5	3.2	4	2.5	50	2	●	1
TE-2.5-50-2F-R3	2.5	3.33	4	3	50	2	●	1
TE-2.5-50-2F-R5	2.5	3.9	4	5	50	2	●	1
TES-3.0-50-2F-R0.5	3	3.17	6	0.5	50	2	●	1
TES-3.0-50-2F-R1	3	3.35	6	1	50	2	●	1
TES-3.0-50-2F-R1.5	3	3.52	6	1.5	50	2	●	1
TES-3.0-50-2F-R2	3	3.69	6	2	50	2	●	1
TES-3.0-50-2F-R2.5	3	3.87	6	2.5	50	2	●	1
TES-3.0-50-2F-R3	3	4.05	6	3	50	2	●	1
TES-3.0-50-2F-R5	3	4.75	6	5	50	2	●	1
TES-3.0-50-2F-R7	3	6	6	7	50	2	●	1
TE-3.0-50-2F-R10	3	6.52	8	10	50	2	●	1
TES-4.0-50-2F-R0.5	4	4.26	6	0.5	50	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

锥度立铣刀
Taper End Mill

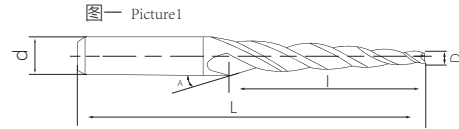
被加工材料推荐/Workpiece material recommendation

⊙ 非常合适 Very Suitable ○ 合适 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
⊙	⊙	○	⊙	⊙	○	⊙					

四刃平头立铣刀 4 Flutes Standard

HRC55-TE



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	粗短径 Wide Diameter(L)	柄径 Shank Diameter(d)	A度 A°	总长 Overall Length(L)			
TE-1.0-50-4F-R0.5	1	1.07	4	0.5	50	4	●	1
TE-1.0-50-4F-R1	1	1.14	4	1	50	4	●	1
TE-1.0-50-4F-R1.5	1	1.21	4	1.5	50	4	●	1
TE-1.0-50-4F-R2	1	1.28	4	2	50	4	●	1
TE-1.0-50-4F-R2.5	1	1.35	4	2.5	50	4	●	1
TE-1.0-50-4F-R3	1	1.42	4	3	50	4	●	1
TE-1.0-50-4F-R5	1	1.7	4	5	50	4	●	1
TE-1.0-50-4F-R7	1	1.98	4	7	50	4	●	1
TE-1.0-50-4F-R10	1	2.41	4	10	50	4	●	1
TE-1.5-50-4F-R0.5	1.5	1.59	4	0.5	50	4	●	1
TE-1.5-50-4F-R1	1.5	1.68	4	1	50	4	●	1
TE-1.5-50-4F-R1.5	1.5	1.76	4	1.5	50	4	●	1
TE-1.5-50-4F-R2	1.5	1.85	4	2	50	4	●	1
TE-1.5-50-4F-R2.5	1.5	1.93	4	2.5	50	4	●	1
TE-1.5-50-4F-R3	1.5	2.02	4	3	50	4	●	1
TE-1.5-50-4F-R5	1.5	2.37	4	5	50	4	●	1
TE-2.0-50-4F-R0.5	2	2.1	4	0.5	50	4	●	1
TE-2.0-50-4F-R1	2	2.21	4	1	50	4	●	1
TE-2.0-50-4F-R1.5	2	2.31	4	1.5	50	4	●	1
TE-2.0-50-4F-R2	2	2.41	4	2	50	4	●	1
TE-2.0-50-4F-R2.5	2	2.52	4	2.5	50	4	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

锥度立铣刀
Taper End Mill

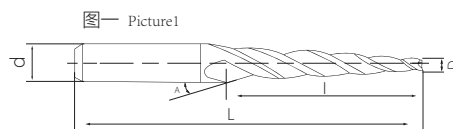
被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○				

锥度立铣刀
Taper End Mill

四刃平头立铣刀 4 Flutes Standard

HRC55-TE



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of edges	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	粗短径 Wide Diameter(L)	柄径 Shank Diameter(d)	A度 A°	总长 Overall Length(L)			
TE-2.0-50-4F-R3	2	2.65	4	3	50	4	●	1
TE-2.0-50-4F-R3	2	3.05	4	3	50	4	●	1
TE-2.0-50-4F-R7	2	3.47	4	7	50	4	●	1
TES-2.0-50-4F-R10	2	1.11	6	10	50	4	●	1
TE-2.5-50-4F-R0.5	2.5	2.64	4	0.5	50	4	●	1
TE-2.5-50-4F-R1	2.5	2.87	4	1	50	4	●	1
TE-2.5-50-4F-R1.5	2.5	2.91	4	1.5	50	4	●	1
TE-2.5-50-4F-R2	2.5	3.05	4	2	50	4	●	1
TE-2.5-50-4F-R2.5	2.5	3.2	4	2.5	50	4	●	1
TE-2.5-50-4F-R3	2.5	3.33	4	3	50	4	●	1
TE-2.5-50-4F-R5	2.5	3.9	4	5	50	4	●	1
TES-3.0-50-4F-R0.5	3	3.17	6	0.5	50	4	●	1
TES-3.0-50-4F-R1	3	3.35	6	1	50	4	●	1
TES-3.0-50-4F-R1.5	3	3.52	6	1.5	50	4	●	1
TES-3.0-50-4F-R2	3	3.69	6	2	50	4	●	1
TES-3.0-50-4F-R2.5	3	3.87	6	2.5	50	4	●	1
TES-3.0-50-4F-R3	3	4.05	6	3	50	4	●	1
TES-3.0-50-4F-R5	3	4.75	6	5	50	4	●	1
TES-3.0-50-4F-R7	3	6	6	7	50	4	●	1
TE-3.0-50-4F-R10	3	6.52	8	10	50	4	●	1
TES-4.0-50-4F-R0.5	4	4.26	6	0.5	50	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

锥度立铣刀
Taper End Mill

被加工材料推荐/Workpiece material recommendation

● 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	



铣削

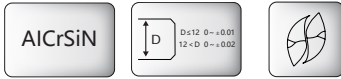
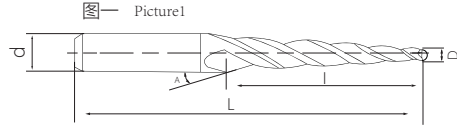
End Mill

Be Good Go Better

锥度立铣刀
Taper End Mill

二刃球头立铣刀
4 Flutes Standard

HRC55-TE



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter (D)	粗短径 Wide Diameter (l)	柄径 Shank Diameter (d)	A/度 A°	总长 Overall Length (L)			
TBS-4.0-50-2F-R1	4	4.52	6	1	50	2	●	1
TBS-4.0-50-2F-R1.5	4	4.79	6	1.5	50	2	●	1
TBS-4.0-50-2F-R2	4	5.02	6	2	50	2	●	1
TBS-4.0-50-2F-R.5	4	5.31	6	2.5	50	2	●	1
TBS-4.0-50-2F-R3	4	5.37	6	3	50	2	●	1
TB-4.0-60-2F-R5	4	6.62	8	5	60	2	●	1
TB-4.0-60-2F-R7	4	8	8	7	60	2	●	1
TB-4.0-75-2F-R10	4	10	10	10	75	2	●	1
TBS-5.0-60-2F-R0.5	5	5.34	6	0.5	60	2	●	1
TBS-5.0-60-2F-R1	5	5.7	6	1	60	2	●	1
TBS-5.0-60-2F-R1.5	5	6	6	1.5	60	2	●	1
TB-5.0-60-2F-R2	5	6.39	8	2	60	2	●	1
TB-5.0-60-2F-R2.5	5	6.74	8	2.5	60	2	●	1
TB-5.0-60-2F-R3	5	7.1	8	3	60	2	●	1
TB-5.0-75-2F-R5	5	8.5	10	5	75	2	●	1
TB-5.0-75-2F-R10	5	12	12	10	75	2	●	1
TB-6.0-60-2F-R0.5	6	6.33	8	0.5	60	2	●	1
TB-6.0-60-2F-R1.5	6	7.05	8	1.5	60	2	●	1
TB-6.0-60-2F-R2	6	7.4	8	2	60	2	●	1
TB-6.0-60-2F-R2	6	7.75	8	2.5	60	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

锥度立铣刀
Taper End Mill

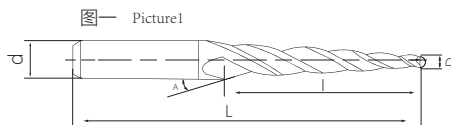
被加工材料推荐/Workpiece material recommendation ○ 非常适合 Very Suitable ○ 适合 Suitable

被加工材料/Workpiece Material											
P		M				K	N	S			
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○					

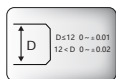
锥度立铣刀
Taper End Mill

二刃球头立铣刀 2 Flutes Standard

HRC55-TE



AlCrSiN



铣刀型号 Milling cutter model	基本尺寸 Basic Size					刃数 Number of Flute	库存状态 Inventory status	参照图号 Reference number
	刃径 Cutter Diameter(D)	粗短径 Wide Diameter(L)	柄径 Shank Diameter(d)	A度 A°	总长 Overall Length(L)			
TB-6.0-75-2F-R3	6	8.1	10	3	75	2	●	1
TB-6.0-75-2F-R5	6	9.5	10	5	75	2	●	1
TB-6.0-75-2F-R7	6	11	12	7	75	2	●	1
TB-4.0-50-2F-R10	6	14	14	10	75	2	●	1
TB-8.0-75-2F-R0.5	8	8.44	10	0.5	75	2	●	1
TB-8.0-75-2F-R1	8	8.87	10	1	75	2	●	1
TB-8.0-75-2F-R1.5	8	9.32	10	1.5	75	2	●	1
TB-8.0-75-2F-R2	8	9.75	10	2	75	2	●	1
TB-8.0-75-2F-R3	8	10.63	12	3	75	2	●	1
TB-8.0-75-2F-R5	8	12.37	14	5	75	2	●	1
TB-8.0-100-2F-R7	8	14	16	7	100	2	●	1
TB-8.0-100-2F-R10	8	18	18	10	100	2	●	1
TB-10-75-2F-R0.5	10	10.61	12	0.5	75	2	●	1
TB-10-75-2F-R1	10	11.22	12	1	75	2	●	1
TB-10-75-2F-R1.5	10	11.83	12	1.5	75	2	●	1
TB-10-75-2F-R2	10	13.06	14	2	75	2	●	1
TB-10-75-2F-R3	10	13.67	14	3	75	2	●	1
TB-10-100-2F-R5	10	16	16	5	100	2	●	1

● 常备库存 ○ 按订单生产
● Standard Stock ○ Produce by order

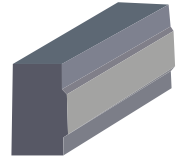
锥度立铣刀
Taper End Mill

被加工材料推荐/Workpiece material recommendation

被加工材料/Workpiece Material											
P		M				K	N		S		
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 Stainless steel	铸铁 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat resistant alloy
		~ 40HRC	~ 50HRC	~ 55HRC	~ 65HRC						
○	○	○	○	○	○	○	○	○	○	○	

FE-2F / CR-2F HRC45

钢件、铸铁 For Steels, Cast Iron —— 侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	1	2	4	6	8	10	12	16	20
P	碳钢合金钢 (< 45HRC)	ap ≤ 1D	170	转速 (min-1)	50000	27070	13540	9020	6770	5410	4510	3380	2710
		ae ≤ 0.12D		进给速度 (mm/min)	1410	1080	890	810	840	810	770	740	650
	合金钢 (45HRC)	ap ≤ 1D	120	转速 (min-1)	38220	19110	9550	6370	4780	3820	3190	2390	1910
		ae ≤ 0.1D		进给速度 (mm/min)	540	460	480	480	550	500	450	360	330
M	不锈钢	ap ≤ 1D	130	转速 (min-1)	41400	20700	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.12D		进给速度 (mm/min)	830	620	620	550	620	580	550	470	410
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 1D	150	转速 (min-1)	47770	23890	11940	7960	5970	4780	3980	2990	2390
		ae ≤ 0.12D		进给速度 (mm/min)	960	760	720	720	660	620	600	540	480
	高合金铸铁 (35-45HRC)	ap ≤ 1D	130	转速 (min-1)	41400	20700	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.1D		进给速度 (mm/min)	660	540	500	550	520	500	480	410	370

FE-2F / CR-2F HRC45

钢件、铸铁 For Steels, Cast Iron —— 槽铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	1	2	4	6	8	10	12	16	20
P	碳钢合金钢 (< 45HRC)	ap ≤ 1D	80	转速 (min-1)	25480	12740	6370	4250	3190	2550	2120	1590	1270
				进给速度 (mm/min)	510	510	510	430	380	360	340	380	380
	合金钢 (45HRC)	ap ≤ 0.5D	60	转速 (min-1)	19110	9550	4780	3190	2390	1910	1590	1190	960
				进给速度 (mm/min)	230	230	290	260	220	210	210	220	210
M	不锈钢	ap ≤ 0.3D	55	转速 (min-1)	17520	8760	4380	2920	2190	1750	1460	1100	880
				进给速度 (mm/min)	250	180	150	190	190	190	190	160	150
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 0.8D	55	转速 (min-1)	17520	8760	4380	2920	2190	1750	1460	1100	880
				进给速度 (mm/min)	320	210	180	210	210	200	200	180	160
	高合金铸铁 (35-45HRC)	ap ≤ 0.5D	55	转速 (min-1)	17520	8760	4380	2920	2190	1750	1460	1100	880
				进给速度 (mm/min)	250	180	150	190	190	190	190	160	150

推荐切削参数
Recommenden Cutting Data

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

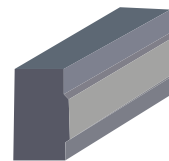
Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

FE-2F / CR-2F HRC55

钢件、铸铁 For Steels, Cast Iron —— 侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	3	4	6	8	10	12	16	20
P	碳合金钢 (< 45HRC)	ap ≤ 1.5D	180	转速 (min-1)	19110	14330	9550	7170	5730	4780	3580	2870
		ae ≤ 0.15D		进给速度 (mm/min)	1070	1030	920	930	920	860	860	860
	合金钢 (45HRC)	ap ≤ 1D	130	转速 (min-1)	19800	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.12D		进给速度 (mm/min)	610	580	550	620	560	500	410	370
M	不锈钢	ap ≤ 1.5D	130	转速 (min-1)	13800	10350	6900	5180	4140	3450	2590	2070
ae ≤ 0.15D	进给速度 (mm/min)	690		660	590	650	610	590	490	460		
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 1.5D	160	转速 (min-1)	16990	12740	8490	6370	5100	4250	3190	2550
		ae ≤ 0.15D		进给速度 (mm/min)	850	820	820	750	700	680	610	560
	高合金铸铁 (35-45HRC)	ap ≤ 1D	140	转速 (min-1)	14860	11150	7430	5570	4460	3720	2790	2230
		ae ≤ 0.12D		进给速度 (mm/min)	650	670	670	620	580	560	500	460

FE-2F / CR-2F HRC55

钢件、铸铁 For Steels, Cast Iron —— 槽铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	3	4	6	8	10	12	16	20
P	碳合金钢 (< 45HRC)	ap ≤ 0.8D	80	转速 (min-1)	8490	6370	4250	3190	2550	2120	1590	1270
				进给速度 (mm/min)	430	540	440	400	370	350	400	410
	合金钢 (45HRC)	ap ≤ 0.3D	60	转速 (min-1)	6370	4780	3190	2390	1910	1590	1190	960
				进给速度 (mm/min)	260	310	270	230	220	220	230	230
M	不锈钢	ap ≤ 0.3D	55	转速 (min-1)	5840	4380	2920	2190	1750	1460	1100	880
进给速度 (mm/min)	140	160	200	200	190	170	160					
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 0.5D	55	转速 (min-1)	5840	4380	2920	2190	1750	1460	1100	880
				进给速度 (mm/min)	210	250	250	220	210	200	190	170
	高合金铸铁 (35-45HRC)	ap ≤ 0.3D	50	转速 (min-1)	5310	3980	2650	1990	1590	1330	1000	800
				进给速度 (mm/min)	160	180	210	180	180	170	160	140

推荐切削参数
Recommended Cutting Data

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

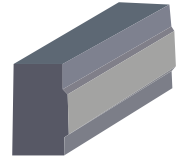
Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

FE-4F / CR-4F HRC45

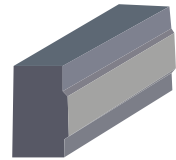
钢件、铸铁 For Steels, Cast Iron —— 侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	1	2	4	6	8	10	12	16	20
P	碳合金钢 (< 45HRC)	ap ≤ 1D	170	转速 (min-1)	50000	27070	13540	9020	6770	5410	4510	3380	2710
		ae ≤ 0.12D		进给速度 (mm/min)	2820	2170	1790	1620	1680	1620	1530	1490	1300
	合金钢 (45HRC)	ap ≤ 1D	120	转速 (min-1)	38220	19110	9550	6370	4780	3820	3190	2390	1910
		ae ≤ 0.1D		进给速度 (mm/min)	1070	920	960	970	1110	990	890	720	650
M	不锈钢	ap ≤ 1D	130	转速 (min-1)	41400	20700	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.12D		进给速度 (mm/min)	1660	1240	1240	1100	1240	1160	1100	930	830
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 1D	150	转速 (min-1)	47770	23890	11940	7960	5970	4780	3980	2990	2390
		ae ≤ 0.12D		进给速度 (mm/min)	1910	1530	1430	1430	1310	1240	1190	1080	960
	高合金铸铁 (35-45HRC)	ap ≤ 1D	130	转速 (min-1)	41400	20700	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.1D		进给速度 (mm/min)	1330	1080	990	1100	1040	990	970	830	750

FE-4F / CR-4F HRC55

钢件、铸铁 For Steels, Cast Iron —— 侧铣 Side Milling

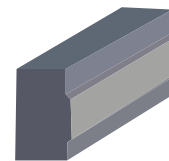


被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	3	4	6	8	10	12	16	20
P	碳合金钢 (< 45HRC)	ap ≤ 1.5D	180	转速 (min-1)	19110	14330	9550	7170	5730	4780	3580	2870
		ae ≤ 0.15D		进给速度 (mm/min)	2140	2060	1830	1860	1830	1720	1720	1720
	合金钢 (45HRC)	ap ≤ 1D	130	转速 (min-1)	19800	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.12D		进给速度 (mm/min)	1210	1160	1100	1240	1130	1010	830	750
M	不锈钢	ap ≤ 1.5D	130	转速 (min-1)	13800	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.15D		进给速度 (mm/min)	1380	1330	1190	1300	1230	1170	980	910
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 1.5D	160	转速 (min-1)	16990	12740	8490	6370	5100	4250	3190	2550
		ae ≤ 0.15D		进给速度 (mm/min)	1700	1630	1630	1500	1410	1360	1210	1120
	高合金铸铁 (35-45HRC)	ap ≤ 1D	140	转速 (min-1)	14860	11150	7430	5570	4460	3720	2790	2230
		ae ≤ 0.12D		进给速度 (mm/min)	1310	1340	1340	1250	1160	1120	1000	910

1. 请使用刚性较高的机床和刀柄。
Make sure work piece and machine are stable and use a precision holder.
2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。
Please adjust the speed, feed and cutting depth according to actual cutting conditons.
3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深。
The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

FE-6F HRC55

钢件、铸铁 For Steels, Cast Iron —— 侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	3	4	6	8	10	12	16	20
P	碳钢合金钢 (< 45HRC)	ap ≤ 1.5D	180	转速 (min-1)	19110	14330	9550	7170	5730	4780	3580	2870
		ae ≤ 0.15D		进给速度 (mm/min)	3210	3100	2750	2800	2750	2580	2580	2580
	合金钢 (45HRC)	ap ≤ 1D	130	转速 (min-1)	19800	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.12D		进给速度 (mm/min)	1820	1740	1660	1860	1690	1510	1240	1120
M	不锈钢	ap ≤ 1.5D	130	转速 (min-1)	13800	10350	6900	5180	4140	3450	2590	2070
		ae ≤ 0.15D		进给速度 (mm/min)	2070	1990	1780	1960	1840	1760	1480	1370
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 1.5D	160	转速 (min-1)	16990	12740	8490	6370	5100	4250	3190	2550
		ae ≤ 0.15D		进给速度 (mm/min)	2550	2450	2450	2260	2110	2040	1820	1680
	高合金铸铁 (35-45HRC)	ap ≤ 1D	140	转速 (min-1)	14860	11150	7430	5570	4460	3720	2790	2230
		ae ≤ 0.12D		进给速度 (mm/min)	1960	2010	2010	1870	1740	1670	1510	1360

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

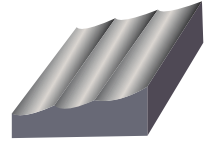
Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

BN-2F HRC45

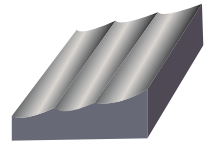
钢件、铸铁 For Steels, Cast Iron —— 仿形铣 Profiling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	1	2	4	6	8	10	12	16	20
P	碳钢合金钢 (< 45HRC)	ap ≤ 0.2D	160	转速 (min-1)	50000	25480	12740	8490	6370	5100	4250	3190	2550
		ae ≤ 0.3D		进给速度 (mm/min)	920	920	970	990	970	970	980	960	820
	合金钢 (45HRC)	ap ≤ 0.2D	120	转速 (min-1)	38220	19110	9550	6370	4780	3820	3190	2390	1910
		ae ≤ 0.25D		进给速度 (mm/min)	460	460	540	590	620	610	640	570	570
M	不锈钢	ap ≤ 0.2D	110	转速 (min-1)	35030	17520	8760	5840	4380	3500	2920	2190	1750
		ae ≤ 0.2D		进给速度 (mm/min)	490	530	560	610	610	600	610	570	560
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 0.2D	140	转速 (min-1)	44590	22290	11150	7430	5570	4460	3720	2790	2230
		ae ≤ 0.2D		进给速度 (mm/min)	620	670	710	770	780	760	780	730	710
	高合金铸铁 (35-45HRC)	ap ≤ 0.3D	110	转速 (min-1)	35030	17520	8760	5840	4380	3500	2920	2190	1750
		ae ≤ 0.4D		进给速度 (mm/min)	1400	1400	1400	1400	1400	1400	1400	1400	1400

FE-2F HRC55

钢件、铸铁 For Steels, Cast Iron —— 仿形铣 Profiling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	4	5	6	7	8	9	10	11	12
P	碳钢合金钢 (< 45HRC)	ap ≤ 0.2D	160	转速 (min-1)	12740	10190	8490	7280	6370	5660	5100	4630	4250
		ae ≤ 0.3D		进给速度 (mm/min)	1020	1020	1020	1020	1020	1020	1020	1020	1020
	合金钢 (45HRC)	ap ≤ 0.15D	120	转速 (min-1)	9550	7640	6370	5460	4780	4250	3820	3470	3190
		ae ≤ 0.15D		进给速度 (mm/min)	610	640	660	630	620	610	610	610	610
M	不锈钢	ap ≤ 0.2D	110	转速 (min-1)	8760	7010	5840	5010	4380	3890	3500	3190	2920
		ae ≤ 0.2D		进给速度 (mm/min)	610	630	640	630	630	620	630	640	640
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 0.2D	140	转速 (min-1)	11150	8920	7430	6370	5570	4950	4460	4050	3720
		ae ≤ 0.2D		进给速度 (mm/min)	780	800	8220	800	800	790	800	810	820
	高合金铸铁 (35-45HRC)	ap ≤ 0.1D	120	转速 (min-1)	9550	7640	6370	5460	4780	4250	3820	3470	3190
		ae ≤ 0.1D		进给速度 (mm/min)	610	640	660	660	670	650	650	660	670

推荐切削参数
Recommenden Cutting Data

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

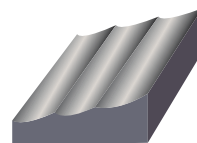
The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.



推荐铣削参数
Recommended Cutting Data

BN-4F HRC45

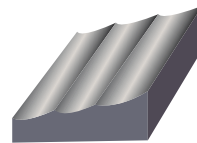
钢件、铸铁 For Steels, Cast Iron —— 仿形铣 Profiling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	1	2	4	6	8	10	12	16	20
P	碳合金钢 (< 45HRC)	ap ≤ 0.2D	160	转速 (min-1)	50000	25480	12740	8490	6370	5100	4250	3190	2550
		ae ≤ 0.3D		进给速度 (mm/min)	1830	1830	1940	1970	1940	1940	1950	1910	1830
	合金钢 (45HRC)	ap ≤ 0.2D	120	转速 (min-1)	38220	19110	9550	6370	4780	3820	3190	2390	1910
		ae ≤ 0.25D		进给速度 (mm/min)	920	920	1070	1140	1240	1220	1270	1150	1150
M	不锈钢	ap ≤ 0.2D	110	转速 (min-1)	35030	17520	8760	5840	4380	3500	2920	2190	1750
		ae ≤ 0.2D		进给速度 (mm/min)	980	1050	1120	1210	1230	1190	1230	1140	1120
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 0.2D	140	转速 (min-1)	44590	22290	11150	7430	5570	4460	3720	2790	2230
		ae ≤ 0.2D		进给速度 (mm/min)	1250	1340	1430	1550	1560	1520	1560	1450	1430
	高合金铸铁 (35-45HRC)	ap ≤ 0.3D	110	转速 (min-1)	35030	17520	8760	5840	4380	3500	2920	2190	1750
		ae ≤ 0.4D		进给速度 (mm/min)	2800	2800	2800	2800	2800	2800	2800	2800	2800

FE-4F HRC55

钢件、铸铁 For Steels, Cast Iron —— 仿形铣 Profiling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	4	5	6	7	8	9	10	11	12
P	碳合金钢 (< 45HRC)	ap ≤ 0.2D	160	转速 (min-1)	12740	10190	8490	7280	6370	5660	5100	4630	4250
		ae ≤ 0.3D		进给速度 (mm/min)	2040	2040	2040	2040	2040	2040	2040	2040	2040
	合金钢 (45HRC)	ap ≤ 0.15D	120	转速 (min-1)	9550	7640	6370	5460	4780	4250	3820	3470	3190
		ae ≤ 0.15D		进给速度 (mm/min)	1220	1280	1330	1270	1240	1220	1220	1210	1210
M	不锈钢	ap ≤ 0.2D	110	转速 (min-1)	8760	7010	5840	5010	4380	3890	3500	3190	2920
		ae ≤ 0.2D		进给速度 (mm/min)	1230	1260	1290	1260	1260	1250	1260	1270	1290
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 0.2D	140	转速 (min-1)	11150	8920	7430	6370	5570	4950	4460	4050	3720
		ae ≤ 0.2D		进给速度 (mm/min)	1560	1610	1640	1610	1610	1590	1610	1620	1640
	高合金铸铁 (35-45HRC)	ap ≤ 0.1D	120	转速 (min-1)	9550	7640	6370	5460	4780	4250	3820	3470	3190
		ae ≤ 0.1D		进给速度 (mm/min)	1220	1280	1330	1310	1340	1310	1300	1320	1340

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

推荐切削参数
Recommended Cutting Data

RE-4F HRC55

钢件、铸铁 For Steels, Cast Iron —— 槽铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	6	8	10	12	16	9
P	碳钢合金钢 (< 45HRC)	$ap \leq 1D$	80	转速 (min-1)	4250	3190	2550	2120	1590	1270
				进给速度 (mm/min)	760	700	660	640	700	710
	合金钢 (45HRC)	$ap \leq 0.5D$	60	转速 (min-1)	3190	2390	1910	1590	1190	960
				进给速度 (mm/min)	380	380	380	380	330	310
M	不锈钢	$ap \leq 0.5D$	55	转速 (min-1)	2920	2190	1750	1460	1100	880
				进给速度 (mm/min)	350	350	350	350	310	280
K	灰铸铁 球墨铸铁 (< 32HRC)	$ap \leq 1D$	55	转速 (min-1)	2920	2190	1750	1460	1100	880
				进给速度 (mm/min)	370	370	360	350	310	280
	高合金铸铁 (35-45HRC)	$ap \leq 0.8D$	55	转速 (min-1)	2920	2190	1750	1460	1100	880
				进给速度 (mm/min)	350	350	350	320	290	260
N	锻造铝合金 铸造铝合金 (Si < 12%)	$ap \leq 1D$	180	转速 (min-1)	9550	7170	5730	4780	3580	2870
				进给速度 (mm/min)	1910	1720	1610	1530	1860	1930
	铜合金 (< HB200)	$ap \leq 1D$	160	转速 (min-1)	8490	6370	5100	4250	3190	2550
				进给速度 (mm/min)	1530	1400	1300	1270	1400	1430

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

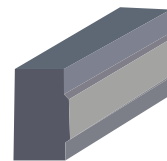
Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

ST-4F HRC60

不锈钢 For Stainless Steels——侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	1	2	4	6	8	10	12	16	20
M	不锈钢	$ap \leq 0.1D$	100 (80-120)	转速 (min ⁻¹)	25000	15900	7960	5300	3980	3180	2650	1990	1590
		$ae \leq 0.1D$		进给速度 (mm/min)	700	635	700	680	760	660	600	490	460

ST-4F HRC60

不锈钢 For Stainless Steels——槽铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	1	2	4	6	8	10	12	16	20
M	不锈钢	$ap \leq 0.1D$	45 (35-55)	转速 (min ⁻¹)	14330	7165	3580	2390	1790	1430	1195	895	715
		$ae \leq 1D$		进给速度 (mm/min)	400	280	240	310	310	310	310	270	240

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.



铣削

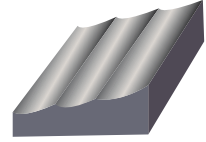
End Mill

Be Good Go Better

推荐铣削参数
Recommended Cutting Data

ST-2F HRC60

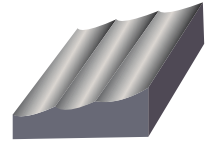
不锈钢 For Stainless Steels——仿形铣 Profiling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	1	2	4	6	8	10	12	16	20
M	不锈钢	$ap \leq 0.2D$	100 (80-120)	转速 (min-1)	25000	15900	7960	5300	3980	3180	2650	1990	1590
		$ae \leq 0.2D$		进给速度 (mm/min)	280	480	510	550	560	540	560	520	510

ST-4F HRC60

不锈钢 For Stainless Steels——仿形铣 Profiling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	1	2	4	6	8	10	12	16	20
M	不锈钢	$ap \leq 0.2D$	45 (35-55)	转速 (min-1)	25000	15900	7960	5300	3980	3180	2650	1990	1590
		$ae \leq 0.2D$		进给速度 (mm/min)	560	955	1020	1100	1110	1080	1115	1030	1020

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

Please adjust the speed, feed and cutting depth according to actual cutting conditons.

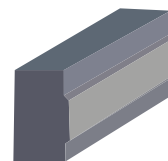
3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

推荐切削参数
Recommenden Cutting Data

FE-2F / CR-2F HRC60

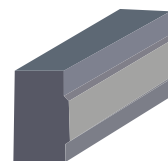
合金钢、淬硬钢 For Alloy steel, Hardenen Steel——侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	2	4	6	8	10	12	16	20
H	合金钢 淬硬钢 (< 600HRC)	ap ≤ 1D	120	转速 (min-1)	19110	9550	6370	4780	3820	3190	2390	1910
		ae ≤ 0.05D		进给速度 (mm/min)	380	380	380	380	370	360	310	290

FE-4F / FE-6F / CR-4F HRC60

合金钢、淬硬钢 For Alloy steel, Hardenen Steel——侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	2	4	6	8	10	12	16	20
H	合金钢 淬硬钢 (< 600HRC)	ap ≤ 1D	120	转速 (min-1)	19110	9550	6370	4780	3820	3190	2390	1910
		ae ≤ 0.05D		进给速度 (mm/min)	760	760	760	760	730	710	620	570

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.



铣削

End Mill

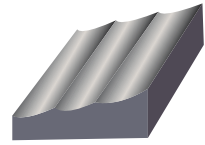
Be Good Go Better

推荐铣削参数

Recommended Cutting Data

BN-2F HRC60

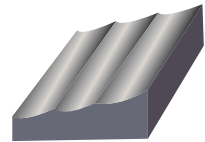
合金钢、淬硬钢 For Alloy steel, Hardenen Steel——仿形铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	2	4	6	8	10	12	16	20
H	合金钢 淬硬钢 (< 600HRC)	ap≤0.03D	200	转速 (min-1)	31850	15920	10620	7960	6370	5310	4550	3980
		ae≤0.03D		进给速度 (mm/min)	510	570	590	610	570	570	530	490

BN-4F HRC60

合金钢、淬硬钢 For Alloy steel, Hardenen Steel——仿形铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	2	4	6	8	10	12	16	20
H	合金钢 淬硬钢 (< 600HRC)	ap≤0.03D	200	转速 (min-1)	31850	15920	10620	7960	6370	5310	4550	3980
		ae≤0.03D		进给速度 (mm/min)	1020	1150	1190	1210	1150	1150	1060	990

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

Please adjust the speed, feed and cutting depth according to actual cutting conditons.

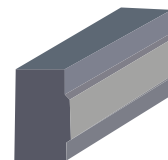
3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

推荐切削参数
Recommenden Cutting Data

FE-2F HRC65

钢件、铸铁 For Steels, Cast Iron——侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	0.4	0.6	0.8	1	1.5	2
H	合金钢 淬硬钢 (< 600HRC)	ap ≤ 0.7D	60	转速 (min-1)	47770	31850	23890	19110	12740	9550
		ae ≤ 0.08D		进给速度 (mm/min)	1020	1150	1190	1210	1150	1150

FE-2F HRC65

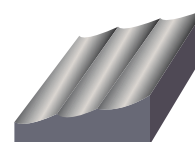
钢件、铸铁 For Steels, Cast Iron——槽铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	0.4	0.6	0.8	1	1.5	2
H	合金钢 淬硬钢 (< 600HRC)	ap ≤ 0.1D	35	转速 (min-1)	27870	18580	13930	11150	7430	5570
				进给速度 (mm/min)	450	410	390	450	370	330

BN-2F HRC65

钢件、铸铁 For Steels, Cast Iron——仿形铣 Profiling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	0.4	0.6	0.8	1	1.2	1.5	2
H	合金钢 淬硬钢 (< 600HRC)	ap ≤ 0.03D	40	转速 (min-1)	31850	21230	15920	12740	10620	8490	6370
		ae ≤ 0.03D		进给速度 (mm/min)	1150	890	760	660	640	590	570

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

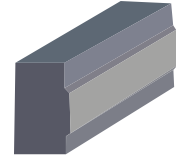
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The milling conditions are for an end mill where the tool overhang length is less than 4*(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

AL-3F / CR-3F HRC55

铝合金 For Aluminium Alloy ——侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	1	2	4	6	8	10	12	16	20
N	锻造铝合金 铸造铝合金 (Si < 12%)	ap ≤ 1.5D	150 (60-350)	转速 (min-1)	16000	13000	12000	10600	10000	9500	9280	7000	5600
		ae ≤ 0.2D		进给速度 (mm/min)	650	850	1430	1530	1670	2050	2800	3000	3150
	铜合金 (≤HB200)	ap ≤ 1.5D	150 (60-350)	转速 (min-1)	16000	13000	12000	10600	10000	9500	9280	7000	5600
		ae ≤ 0.2D		进给速度 (mm/min)	720	900	1200	1200	1500	1800	2225	2500	3000

AL-3F / CR-3F HRC55

铝合金 For Aluminium Alloy ——槽铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	1	2	4	6	8	10	12	16	20
N	锻造铝合金 铸造铝合金 (Si < 12%)	ap ≤ 0.5D	150 (60-350)	转速 (min-1)	16000	10000	9000	8000	7800	8000	6800	5000	4000
		ae ≤ 1D		进给速度 (mm/min)	450	570	960	1050	1300	1500	1620	1680	1800
	铜合金 (≤HB200)	ap ≤ 0.5D	150 (60-350)	转速 (min-1)	16000	10000	9000	8000	7800	8000	6800	5000	4000
		ae ≤ 1D		进给速度 (mm/min)	450	520	860	830	60	1240	1500	1550	1510

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

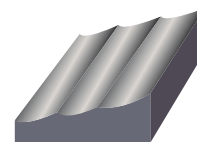
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The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

AL-3F / CR-3F HRC55

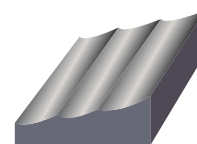
铝合金 For Aluminium Alloy ——侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	10	12	16	20	25	32
N	铝合金 7075, 7050等 (Si < 6%)	ap ≤ 0.25D	900 (700- 1100)	转速 (min-1)	20000	20000	20000	20000	1800	1800
		ae ≤ 0.5D		进给速度 (mm/min)	5200	6000	6600	6800	7560	7920

AL-3F / CR-3F HRC55

铝合金 For Aluminium Alloy ——槽铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀刃 Tool Diameter	12	16	20	25	32
N	铝合金 7075, 7050等 (Si < 6%)	ap ≤ 0.25D	900 (700-1100)	转速 (min-1)	20000	20000	20000	20000	1800
		ae ≤ 0.5D		进给速度 (mm/min)	8400	9000	9000	1000	1800

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

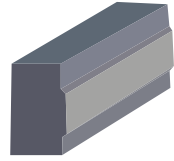
Please adjust the speed, feed and cutting depth according to actual cutting conditons.

3. 上表是按照刀具悬长为直径4倍以下时所定制，如果刀具悬长过长，加工时易产生振动；此时，请适当调整转速，进给速度和切深量。

The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

ME-2F HRC60

钢件、铸铁 For Steels, Cast Iron——侧铣 Side Milling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	0.8	0.9	1	1.2	1.4	1.6	1.8	2
P	碳钢合金钢 (< 45HRC)	ap ≤ 0.5D	90	转速 (min-1)	35830	31850	28660	23890	20470	17910	15920	14330
		ae ≤ 0.05D		进给速度 (mm/min)	1150	1150	1150	1100	1110	1070	1110	1150
	合金钢 (45HRC)	ap ≤ 0.5D	70	转速 (min-1)	27870	24770	22290	18580	15820	13930	12380	11150
		ae ≤ 0.05D		进给速度 (mm/min)	840	840	850	820	800	780	820	850
M	不锈钢	ap ≤ 0.5D	60	转速 (min-1)	23890	21230	19110	15920	13650	11940	10620	9550
		ae ≤ 0.03D		进给速度 (mm/min)	760	760	760	730	740	720	740	760
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 0.5D	90	转速 (min-1)	35830	31850	28660	23890	20470	17910	15920	14330
		ae ≤ 0.05D		进给速度 (mm/min)	1150	1150	1150	1100	1100	1070	1110	1150
	高合金铸铁 (35-45HRC)	ap ≤ 0.5D	80	转速 (min-1)	31850	28310	25480	21230	18200	15920	14150	12740
		ap ≤ 0.03D		进给速度 (mm/min)	830	850	820	760	800	860	910	940

ME-2F HRC60

钢件、铸铁 For Steels, Cast Iron——槽铣 Slotting



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	0.8	0.9	1	1.2	1.4	1.6	1.8	2
P	碳钢合金钢 (< 45HRC)	ap ≤ 0.3D	50	转速 (min-1)	19900	17690	15920	13270	11370	9950	8850	7960
				进给速度 (mm/min)	400	390	380	370	390	400	410	400
	合金钢 (45HRC)	ap ≤ 0.1D	40	转速 (min-1)	15920	14150	12740	10620	9100	7960	7080	6370
				进给速度 (mm/min)	250	250	250	250	270	290	300	290
M	不锈钢	ap ≤ 0.2D	40	转速 (min-1)	13930	12380	11150	9290	7960	6970	6190	5570
				进给速度 (mm/min)	250	250	250	240	250	260	270	270
K	灰铸铁 球墨铸铁 (< 32HRC)	ap ≤ 0.3D	40	转速 (min-1)	15920	14150	12740	10620	9100	7960	7080	6370
				进给速度 (mm/min)	320	310	310	300	310	320	330	320
	高合金铸铁 (35-45HRC)	ap ≤ 0.2D	30	转速 (min-1)	11940	10920	9550	7960	66820	5970	5310	1780
				进给速度 (mm/min)	210	210	210	210	220	230	230	230

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

2. 请根据切削速度、设备刚性等情况可适当调整转速和进给速度。

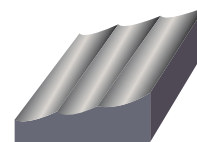
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The milling conditions are for an end mill where the tool overhang length is less than 4*(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

ME-2F HRC60

钢件、铸铁 For Steels, Cast Iron——仿形铣 Profiling



被加工材料 Workpiece Material		切削量 (mm)	Vc m/min	刀具 Tool Diameter	0.6	0.8	1	1.2	1.6	2
P	碳钢合金钢 (< 45HRC)	ap≤0.02D	90	转速 (min-1)	42460	31850	25480	21230	15920	12740
		ae≤0.02D		进给速度 (mm/min)	1440	1460	1430	1490	1430	1400
	合金钢 (45HRC)	ap≤0.01D	70	转速 (min-1)	37150	27870	22290	18580	13930	11150
		ae≤0.01D		进给速度 (mm/min)	1190	1170	1160	1190	1170	1160
M	不锈钢	ap≤0.02D	70	转速 (min-1)	34500	25880	20700	17250	12940	10350
		ae≤0.02D		进给速度 (mm/min)	1170	1190	1160	1210	1160	1140
K	灰铸铁 球墨铸铁 (< 32HRC)	ap≤0.02D	80	转速 (min-1)	42460	31850	25480	21230	15920	12740
		ae≤0.02D		进给速度 (mm/min)	1440	1460	1430	1490	1430	1400
	高合金铸铁 (35-45HRC)	ap≤0.2D	70	转速 (min-1)	37150	27870	22290	18580	13930	11150
		ae≤0.02D		进给速度 (mm/min)	1190	1170	1160	1190	1170	1160

1. 请使用刚性较高的机床和刀柄。

Make sure work piece and machine are stable and use a precision holder.

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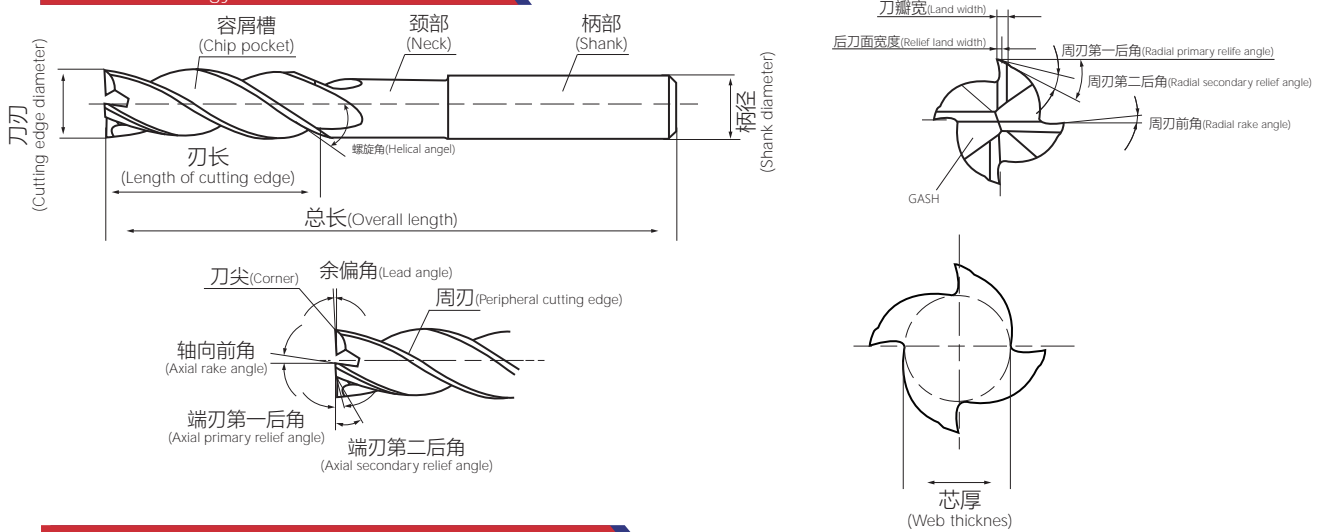
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The milling conditions are for an end mill where the tool overhang length is less than 4*D(mill dia) when the tool overhang length is longer, please adjust the speed, feed and cutting depth.

立铣刀各部分名称

Parts terminology of end mill



刃数、容屑槽和刀具刚性

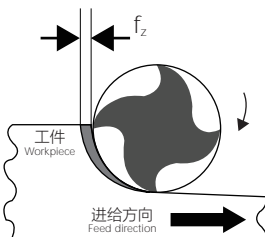
Number of teeth, chip pock and tool rigidity

刃数 Number of teeth		二刃 2 Flutes	三刃 3 Flutes	四刃 4 Flutes
横截面形状 Profile of cross section				
横截面所占比例 Proportion of cross section		54%	56%	60%
特征 Features	优点 Advantages	<ul style="list-style-type: none"> 容屑空间大 Large chip pocket 切屑排出容易 Easy chip removal 	<ul style="list-style-type: none"> 切屑排出容易 Easy chip removal 表面光洁度良好 Perfect surface finish 	<ul style="list-style-type: none"> 刚性好 Good rigidity 表面光洁度良好 Perfect surface finish
	缺点 Disadvantages	刚性差 Low rigidity	外径测定比较困难 Difficult to measure external diameter	切屑排出不畅 Chip removal is not smooth
用途 Functions		<ol style="list-style-type: none"> 切槽加工 Slot machining 侧面加工 Side facemachining 孔加工 Hole machining 	<ol style="list-style-type: none"> 切槽加工 Slot machining 侧面加工 Side face machining 重切削 Heavy cutting 精加工 For finishing 	<ol style="list-style-type: none"> 切槽加工 Shallow slot machining 侧面加工 Side face machining 精加工 For finishing

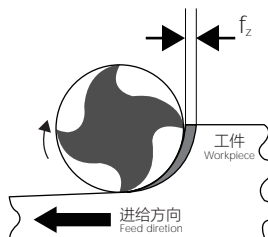
顺铣和逆铣

Down milling and up milling

侧面切削时
Side milling

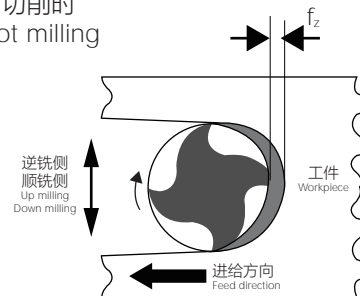


逆铣
Up milling



顺铣
Down milling

槽切削时
Slot milling



逆铣侧
Up milling

顺铣侧
Down milling

立铣刀常见问题及对策

Common problems and solutions for end mill

操作建议

OPERATION SUGGESTION

1. 选用高精度、高刚度的机床刀架
Select high-precision and rigidity machine tool holder.
2. 侧磨推荐下磨
Down milling is recommended for side milling.
3. 振动时降低进给和转速
Reduce feed and rotating speed when it has vibration.
4. 尽可能固定工具的悬伸部分
Fix short overhang of tool if possible.

Solutions of Malfunction

Solutions / Questions	Cutting Speed	Feed Rate	Cutting Depth	Increase Cutting Liquid	HeliX Angle	Number of Tooth	Reduce Overhang Lenth	Change collet	Increas clamping force
Fracture		↓	↓			↓	✓	✓	✓
Low Wear-resistant	↓	↑							
Blade break	↓	↓	↓				✓	✓	
Severe Chips Bond				✓	↑				
Poor Surface		↓	↓						
Uneven		↓	↓		↓	↑		✓	
Side Uneven		↓	↓		↑	↑	✓		
Burrs/Breakage		↓	↓		↓				
Large Vibration	↓	↑			↑	↓	✓	✓	✓
Poor Chip Removal		↓	↓	✓		↓			
<p>↑ Up ↓ Down ✓ Yes</p>									

专业生产铣刀

Professional production of milling cutters



长沙比高工具有限公司

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