

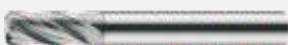
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系列目录

SERIES CATALOG

可切削材料适用表

TABLE OF RECOMMENDED MILLING MATERIALS

刀具名称及外形 Description				页码 Page	切削参数 Cutting parameters			碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel					不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
								~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB							
普通钢通用型系列 HRC38以内（通用型） Ordinary steel universal series																						
	GM-4S	4刃涂层平头立铣刀 4-Flute Coated Flat End Mill	01	69			◎		◎	○				○						○		
	GM-4R	4刃涂层圆鼻立铣刀 4-Flute Coated Round Nose End Mill	02					◎		◎	○				○						○	
	GM-2B	2刃涂层球头立铣刀 2-Flute Coated Ball End Mill	03					◎		◎	○				○						○	
	GM-2S	2刃涂层平头立铣刀 2-Flute Coated Flat End Mill	04					◎		◎	○				○						○	
	GM-4S-L	4刃涂层长柄平头立铣刀 4-Flute Coated Long Shank Flat End Mill	05					◎		◎	○				○						○	
	GM-4R-L	4刃涂层长柄圆鼻立铣刀 4-Flute Coated Long Shank Round Nose End Mill	06					◎		◎	○				○						○	
	GM-2B-L	2刃涂层长柄球头立铣刀 2-Flute Coated Long Shank Ball End Mill	07					◎		◎	○				○						○	
高硬料泛用加工系列 HRC48-53 High-hard materials general processing series																						
	PM-4S	4刃涂层平头立铣刀 4-Flute Coated Flat End Mill	08	71			◎		◎	◎				○	○					○	○	
	PM-4R	4刃涂层圆鼻立铣刀 4-Flute Coated Round Nose End Mill	09					◎		◎	◎				○	○					○	○
	PM-2B	2刃涂层球头立铣刀 2-Flute Coated Ball End Mill	10					◎		◎	◎				○	○					○	○
	PM-4S-L	4刃涂层长柄平头立铣刀 4-Flute Coated Long Shank Flat End Mill	11					◎		◎	◎				○	○					○	○
	PM-4R-L	4刃涂层长柄圆鼻立铣刀 4-Flute Coated Long Shank Round Nose End Mill	12					◎		◎	◎				○	○					○	○
	PM-2B-L	2刃涂层长柄球头立铣刀 2-Flute Coated Long Shank Ball End Mill	13					◎		◎	◎				○	○					○	○
高硬料高速铣削系列 HRC48-53 PM升级版 High-hard material high-speed milling series																						
	PH-4S	4刃涂层平头立铣刀 4-Flute Coated Flat End Mill	14	72			◎		◎	◎				○	○					○	○	
	PH-4R	4刃涂层圆鼻立铣刀 4-Flute Coated Round Nose End Mill	15					◎		◎	◎				○	○					○	○
	PH-2B	2刃涂层球头立铣刀 2-Flute Coated Ball End Mill	16					◎		◎	◎				○	○					○	○
	PH-4S-L	4刃涂层长柄平头立铣刀 4-Flute Coated Long Shank Flat End Mill	17					◎		◎	◎				○	○					○	○
	PH-4R-L	4刃涂层长柄圆鼻立铣刀 4-Flute Coated Long Shank Round Nose End Mill	18					◎		◎	◎				○	○					○	○
	PH-2B-L	2刃涂层长柄球头立铣刀 2-Flute Coated Long Shank Ball End Mill	19					◎		◎	◎				○	○					○	○
	PH-4R-NL	4刃涂层短刃圆鼻立铣刀 4-Flute Coated Short Edge Round Nose End Mill	20					◎		◎	◎				○	○					○	○
铜、铝合金通用加工系列 Copper and aluminum alloy general processing series																						
	AL-3S	3刃铝用平头立铣刀 3-Flute Aluminum Flat End Mill	21	73												◎	◎				○	

◎ 非常适合 very suitable ○ 适合 suitable

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					预硬钢 Pre-hardened steel	工具钢 Tool steel							球墨铸铁 Nodular cast iron						
					~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB							

铜、铝合金通用加工系列 Copper and aluminum alloy general processing series

AL
系列



AL-2B

2刃铝用球头立铣刀
2-Flute Aluminum Ball End Mill

22

73



AL-3S-L

3刃铝用长柄平头立铣刀
3-Flute Aluminum Long Shank Flat End Mill

23

ALS
系列



ALS-3S

3刃铝用粗精一体平头立铣刀
3-Flute Aluminum Coarse Essence Flat head End Mill

24

淬硬钢高速高精加工系列 HRC58-63 Hardened steel high speed and high precision machining series

HM
系列



HM-4S

4刃涂层平头立铣刀
4-Flute Coated Flat End Mill

25



HM-4R-SN

4刃涂层短刃圆鼻立铣刀
4-Flute Coated Short Edge Round Nose End Mill

26



HM-2B-SN

2刃涂层短刃球头立铣刀
2-Flute Coated Short Edge Ball End Mill

27



HM-4S-L

4刃涂层长柄平头立铣刀
4-Flute Coated Long Shank Flat End Mill

28



HM-4R-NL

4刃涂层长柄圆鼻立铣刀
4-Flute Coated Long Shank Round Nose End Mill

29



HM-2B-NL

2刃涂层长柄球头立铣刀
2-Flute Coated Long Shank Ball End Mill

30

汽车塑胶模具高效加工系列 HRC36-48 Efficient processing series of automobile plastic mold

GMH
系列



GMH-4S

4刃涂层平头立铣刀
4-Flute Coated Flat End Mill

31



GMH-4R

4刃涂层圆鼻立铣刀
4-Flute Coated Round Nose End Mill

32



GMH-2B

2刃涂层球头立铣刀
2-Flute Coated Ball End Mill

33



GMH-4S-L

4刃涂层长柄平头立铣刀
4-Flute Coated Long Shank Flat End Mill

34



GMH-2B-NL

2刃涂层长柄球头立铣刀
2-Flute Coated Long Shank Ball End Mill

35



GMH-4R-NL

4刃涂层长柄圆鼻立铣刀
4-Flute Coated Long Shank Round Nose End Mill

36

强力开粗，重力切削专用加工系列 Powerful roughing, gravity cutting special processing series

ZF
系列



ZF-A

3刃铝用涂层平头立铣刀
3-Flute Aluminum Coated Flat End Mill

37



ZF-G

4刃钢用涂层平头立铣刀
4-Flute For Steel Coated Flat End Mill

38



ZF-S

4刃不锈钢涂层平头立铣刀
4-Flute Stainless Steel Coated Flat End Mill

39



ZF-G

3刃不锈钢涂层平头立铣刀
3-Flute Stainless Steel Coated Flat End Mill

40

不锈钢专用加工系列 Stainless steel special processing series

SUS
系列



SUS-4S

4刃不锈钢涂层平头立铣刀
4-Flute Stainless Steel Coated Flat End Mill

41

79

⊙ 非常适合 very suitable ○ 适合 suitable

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					预硬钢 Pre-hardened steel	工具钢 Tool steel							球墨铸铁 Nodular cast iron						
					~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB							

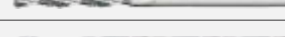
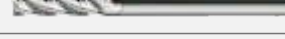
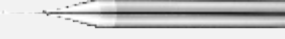
不锈钢专用加工系列 Stainless steel special processing series

SUS
系列

	SUS-2B	2刃不锈钢涂层球头立铣刀 2-edge stainless steel coated ball end mill	42	79			○	○				◎	○					○
	SUS-4R	4刃不锈钢涂层圆鼻立铣刀 4-edge stainless steel coated round nose end mill	43				○	○				◎	○					○

精密铜电极加工专用加工系列 Special processing series for precision copper electrode processing

TS
系列

	TS-2SS	2刃涂层小径平头立铣刀 2-Flute Coated Small Diameter Flat End Mill	44	80										◎	◎				○
	TS-2BS	2刃涂层小径球头立铣刀 2-Flute Coated Small Diameter Ball End Mill	45											◎	◎				○
	TS-2B	2刃涂层球头立铣刀 2-Flute Coated Ball End Mill	46											◎	◎				○
	TS-4S	4刃涂层平头立铣刀 4-Flute Coated Flat End Mill	47											◎	◎				○
	TS-4R	4刃涂层圆鼻立铣刀 4-Flute Coated Round Nose End Mill	48											◎	◎				○
	TS-2B-L	2刃涂层长柄球头立铣刀 2-Flute Coated Long Shank Ball End Mill	49											◎	◎				○
	TS-4R-L	4刃涂层长柄圆鼻立铣刀 4-Flute Coated Long Shank Round Nose End Mill	50											◎	◎				○
	TS-4S-L	4刃涂层长柄平头立铣刀 4-Flute Coated Long Shank Flat End Mill	51											◎	◎				○
	TS-2SS-NL	2刃涂层小径深沟平头立铣刀 2-Flute Coated Small Diameter Deep Groove Flat End Mill	52											◎	◎				○
	TS-2BS-NL	2刃涂层小径深沟球头立铣刀 2-Flute Coated Small Diameter Deep Groove Ball End Mill	54											◎	◎				○

小径高精度、高硬加工系列 Small diameter high precision, high hard processing series

PS
系列

	PS-2S	2刃涂层小径平头立铣刀 2-Flute Coated Small Diameter Flat End Mill	56	81			◎	◎	◎			○	○				○	○	
	PS-2S-NL	2刃涂层小径深沟平头立铣刀 2-Flute Coated Small Diameter Deep Groove Flat End Mill	57				◎	◎	◎			○	○				○	○	○
	PS-2B	2刃涂层小径球头立铣刀 2-Flute Coated Small Diameter Ball End Mill	59				◎	◎	◎			○	○				○	○	○
	PS-2B-NL	2刃涂层小径深沟球头立铣刀 2-Flute Coated Small Diameter Deep Groove Ball End Mill	60				◎	◎	◎			○	○				○	○	○

铝用小径高精度系列 Small diameter high precision series for aluminum

XJ
系列

	XJ-2S	2刃铝用小径平头立铣刀 2-Flute Aluminum Small Diameter Flat End Mill	62	85										◎	◎				○
	XJ-2S-NL	2刃铝用小径深沟平头立铣刀 2-Flute Aluminum Small Diameter Deep Groove Flat End Mill	63											◎	◎				○
	XJ-2B	2刃铝用小径球头立铣刀 2-Flute Aluminum Small Diameter Ball End Mill	65											◎	◎				○
	XJ-2B-NL	2刃铝用小径深沟球头立铣刀 2-Flute Aluminum Small Diameter Deep Groove Ball End Mill	66											◎	◎				○

非标刀具系列 Non standard tool series

68

◎ 非常适合 very suitable ○ 适合 suitable

GM系列

普通钢通用型系列

Ordinary steel universal series
HRC38以内（通用型）



特点描述 | CHARACTERISTIC DESCRIPTION

- 01** 容屑空间大，可广泛应用于碳钢、合金钢的沟槽、型腔加工。
Large chip capacity, it can be widely used in groove and cavity processing of carbon steel and alloy steel.
- 02** 通用型2刃球头立铣刀，可广泛应用于仿型加工。
Universal 2-edge ball end milling cutter can be widely used in profiling machining.
- 03** 特殊的刃口设计，可实现硬度HRC40以下工件侧壁的高效精加工、半精加工。
The special cutting edge design can realize the high-efficiency finishing and semi finishing of the side wall of the workpiece with hardness below hrc40.
- 04** 刀尖圆弧设计，抗崩刃性好，用于普通钢的高效精加工、半精加工。
The arc design of the tool tip has good resistance to edge collapse. It is used for high-efficiency finishing and semi finishing of ordinary steel.

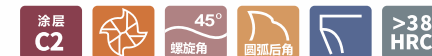
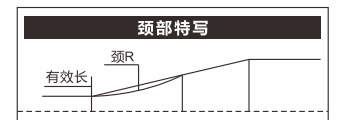
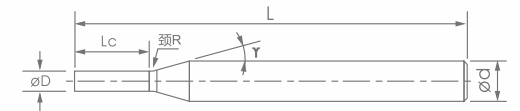
普通钢通用型系列 | HRC38以内（通用型）

Ordinary steel universal series

GM-4S

4刃涂层平头立铣刀

4-Flute Coated Flat End Mill



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGM4S010030050BD04-S	D1*3*d4*50L*4F	3	/	d4	50L
PEGM4S015040050BD04-S	D1.5*4*d4*50L*4F	4	/	d4	50L
PEGM4S020060050BD04-S	D2*6*d4*50L*4F	6	/	d4	50L
PEGM4S025080050BD04-S	D2.5*8*d4*50L*4F	8	/	d4	50L
PEGM4S030090050BD03-S	D3*9*d3*50L*4F	9	/	d3	50L
PEGM4S030090050BD04-S	D3*9*d4*50L*4F	9	/	d4	50L
PEGM4S035100050BD04-S	D3.5*10*d4*50L*4F	10	/	d4	50L
PEGM4S040120050BD04-S	D4*12*d4*50L*4F	12	/	d4	50L
PEGM4S050150050BD06-S	D5*15*d6*50L*4F	15	/	d6	50L
PEGM4S060180050BD06-S	D6*18*d6*50L*4F	18	/	d6	50L
PEGM4S070210060BD08-S	D7*21*d8*60L*4F	21	/	d8	60L
PEGM4S080240060BD08-S	D8*24*d8*60L*4F	24	/	d8	60L
PEGM4S100300075BD10-S	D10*30*d10*75L*4F	30	/	d10	75L
PEGM4S120300075BD12-S	D12*30*d12*75L*4F	30	/	d12	75L
PEGM4S120360075BD12-S	D12*36*d12*75L*4F	36	/	d12	75L
PEGM4S140400100BD14-S	D14*40*d14*100L*4F	40	/	d14	100L
PEGM4S160450100BD16-S	D16*45*d16*100L*4F	45	/	d16	100L
PEGM4S180450100BD18-S	D18*45*d18*100L*4F	45	/	d18	100L
PEGM4S200500100BD20-S	D20*50*d20*100L*4F	50	/	d20	100L

○非常适合 very suitable ○适合 suitable

可切削材料适用表

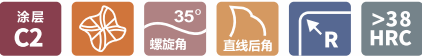
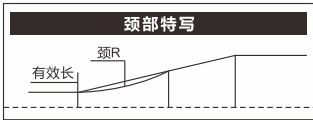
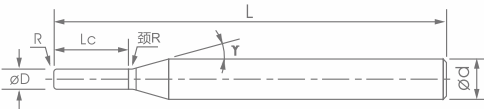
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel Pre-hardened steel	合金钢 Alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○						○	

GM-4R

4刃涂层圆鼻立铣刀
4-Flute Coated Round Nose End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,018	0~-0,020	0~-0,025	0~-0,030
R	±0,010	±0,010	±0,010	±0,010



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGM4R010030050BD04-0.2-S	D1*R0.2*3*d4*50L*4F	3	/	d4	50L
PEGM4R015040050BD04-0.2-S	D1.5*R0.2*4*d4*50L*4F	4	/	d4	50L
PEGM4R020050050BD04-0.2-S	D2*R0.2*5*d4*50L*4F	5	/	d4	50L
PEGM4R020050050BD04-0.3-S	D2*R0.3*5*d4*50L*4F	5	/	d4	50L
PEGM4R025060050BD04-0.2-S	D2.5*R0.2*6*d4*50L*4F	6	/	d4	50L
PEGM4R030080050BD03-0.5-S	D3*R0.5*8*d3*50L*4F	8	/	d3	50L
PEGM4R030080050BD04-0.2-S	D3*R0.2*8*d4*50L*4F	8	/	d4	50L
PEGM4R030080050BD04-0.3-S	D3*R0.3*8*d4*50L*4F	8	/	d4	50L
PEGM4R030080050BD04-0.5-S	D3*R0.5*8*d4*50L*4F	8	/	d4	50L
PEGM4R040100050BD04-0.2-S	D4*R0.2*10*d4*50L*4F	10	/	d4	50L
PEGM4R040100050BD04-0.5-S	D4*R0.5*10*d4*50L*4F	10	/	d4	50L
PEGM4R040100050BD04-1-S	D4*R1*10*d4*50L*4F	10	/	d4	50L
PEGM4R050120050BD06-0.5-S	D5*R0.5*12*d6*50L*4F	12	/	d6	50L
PEGM4R050120050BD06-1-S	D5*R1*12*d6*50L*4F	12	/	d6	50L
PEGM4R060150050BD06-0.5-S	D6*R0.5*15*d6*50L*4F	15	/	d6	50L
PEGM4R060150050BD06-1-S	D6*R1*15*d6*50L*4F	15	/	d6	50L
PEGM4R080200060BD08-0.5-S	D8*R0.5*20*d8*60L*4F	20	/	d8	60L
PEGM4R080200060BD08-1-S	D8*R1*20*d8*60L*4F	20	/	d8	60L
PEGM4R100250075BD10-0.5-S	D10*R0.5*25*d10*75L*4F	25	/	d10	75L
PEGM4R100250075BD10-1-S	D10*R1*25*d10*75L*4F	25	/	d10	75L
PEGM4R120300075BD12-0.5-S	D12*R0.5*30*d12*75L*4F	30	/	d12	75L
PEGM4R120300075BD12-1-S	D12*R1*30*d12*75L*4F	30	/	d12	75L
PEGM4R140350100BD14-1-S	D14*R1*35*d14*100L*4F	35	/	d14	100L
PEGM4R140350100BD14-2-S	D14*R2*35*d14*100L*4F	35	/	d14	100L
PEGM4R160400100BD16-1-S	D16*R1*40*d16*100L*4F	40	/	d16	100L
PEGM4R200400100BD20-1-S	D20*R1*40*d20*100L*4F	40	/	d20	100L

非常合适 very suitable 合适 suitable

可切削材料适用表

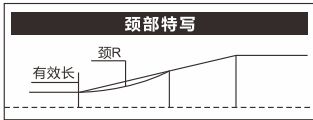
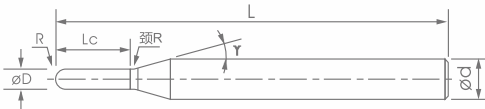
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○						○	

GM-2B

2刃涂层球头立铣刀
2-Flute Coated Ball End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,018	0~-0,020	0~-0,025	0~-0,030
R	0~-0,008	0~-0,010	0~-0,012	0~-0,015



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGM2B010020050BD04-S	D1*R0.5*2*d4*50L*2F	2	/	d4	50L
PEGM2B015030050BD04-S	D1.5*R0.75*3*d4*50L*2F	3	/	d4	50L
PEGM2B020040050BD04-S	D2*R1*4*d4*50L*2F	4	/	d4	50L
PEGM2B025050050BD04-S	D2.5*R1.25*5*d4*50L*2F	5	/	d4	50L
PEGM2B030060050BD03-S	D3*R1.5*6*d3*50L*2F	6	/	d3	50L
PEGM2B030060050BD04-S	D3*R1.5*6*d4*50L*2F	6	/	d4	50L
PEGM2B040080050BD04-S	D4*R2*8*d4*50L*2F	8	/	d4	50L
PEGM2B050100050BD06-S	D5*R2.5*10*d6*50L*2F	10	/	d6	50L
PEGM2B060120050BD06-S	D6*R3*12*d6*50L*2F	12	/	d6	50L
PEGM2B080160060BD08-S	D8*R4*16*d8*60L*2F	16	/	d8	60L
PEGM2B100200075BD10-S	D10*R5*20*d10*75L*2F	20	/	d10	75L
PEGM2B120240075BD12-S	D12*R6*24*d12*75L*2F	24	/	d12	75L
PEGM2B160320100BD16-S	D16*R8*32*d16*100L*2F	32	/	d16	100L
PEGM2B200400100BD20-S	D20*R10*40*d20*100L*2F	40	/	d20	100L

非常合适 very suitable 合适 suitable

可切削材料适用表

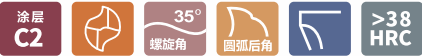
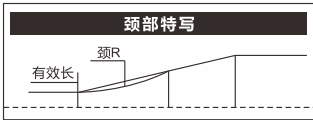
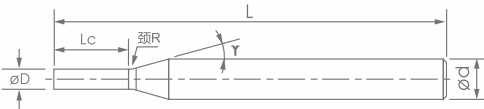
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○						○	

GM-2S

2刃涂层平头立铣刀
2-Flute Coated Flat End Mill

øD	1<D<4	4≤D≤8	8<D≤12	12<D
	0~-0,015	0~-0,020	0~-0,025	0~-0,030
	-	-	-	-



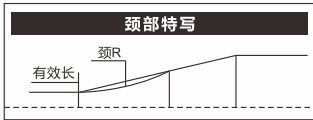
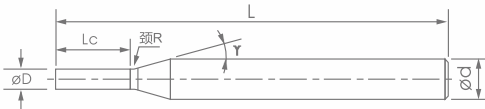
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
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PEGM2S015040050BD04-S	D1.5*4*d4*50L*2F	4	/	d4	50L
PEGM2S020060050BD04-S	D2*6*d4*50L*2F	6	/	d4	50L
PEGM2S025080050BD04-S	D2.5*8*d4*50L*2F	8	/	d4	50L
PEGM2S030090050BD04-S	D3*9*d4*50L*2F	9	/	d4	50L
PEGM2S035100050BD04-S	D3.5*10*d4*50L*2F	10	/	d4	50L
PEGM2S040120050BD04-S	D4*12*d4*50L*2F	12	/	d4	50L
PEGM2S050150050BD06-S	D5*15*d6*50L*2F	15	/	d6	50L
PEGM2S060180050BD06-S	D6*18*d6*50L*2F	18	/	d6	50L
PEGM2S070210060BD08-S	D7*21*d8*60L*2F	21	/	d8	60L
PEGM2S080200060BD08-S	D8*20*d8*60L*2F	20	/	d8	60L
PEGM2S080240060BD08-S	D8*24*d8*60L*2F	24	/	d8	60L
PEGM2S100250075BD10-S	D10*25*d10*75L*2F	25	/	d10	75L
PEGM2S100300075BD10-S	D10*30*d10*75L*2F	30	/	d10	75L
PEGM2S120300075BD12-S	D12*30*d12*75L*2F	30	/	d12	75L
PEGM2S120360075BD12-S	D12*36*d12*75L*2F	36	/	d12	75L
PEGM2S140400100BD14-S	D14*40*d14*100L*2F	40	/	d14	100L
PEGM2S160450100BD16-S	D16*45*d16*100L*2F	45	/	d16	100L
PEGM2S180450100BD18-S	D18*45*d18*100L*2F	45	/	d18	100L
PEGM2S200450100BD20-S	D20*45*d20*100L*2F	45	/	d20	100L



GM-4S-L

4刃涂层长柄平头立铣刀
4-Flute Coated Long Shank Flat End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,020	0~-0,025	0~-0,030	-
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGM4S040120075BD04-S	D4*12*d4*75L*4F	12	/	d4	75L
PEGM4S040160100BD04-S	D4*16*d4*100L*4F	16	/	d4	100L
PEGM4S060180075BD06-S	D6*18*d6*75L*4F	18	/	d6	75L
PEGM4S060240100BD06-S	D6*24*d6*100L*4F	24	/	d6	100L
PEGM4S080320075BD08-S	D8*32*d8*75L*4F	32	/	d8	75L
PEGM4S080320100BD08-S	D8*32*d8*100L*4F	32	/	d8	100L
PEGM4S100400100BD10-S	D10*40*d10*100L*4F	40	/	d10	100L
PEGM4S100500150BD10-S	D10*50*d10*150L*4F	50	/	d10	150L
PEGM4S120450100BD12-S	D12*45*d12*100L*4F	45	/	d12	100L
PEGM4S120500150BD12-S	D12*50*d12*150L*4F	50	/	d12	150L
PEGM4S140550150BD14-S	D14*55*d14*150L*4F	55	/	d14	150L
PEGM4S160600150BD16-S	D16*60*d16*150L*4F	60	/	d16	150L
PEGM4S180650150BD18-S	D18*65*d18*150L*4F	65	/	d18	150L
PEGM4S200700150BD20-S	D20*70*d20*150L*4F	70	/	d20	150L



非常合适 very suitable 合适 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
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 cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic				
预硬钢 Pre-hardened steel		工具钢 Tool steel									球墨铸铁 Nodular cast iron																
~40HRC				~45HRC		~55HRC		~60HRC		~65HRC		~35HRC		~350HB													
○				○		○						○										○					

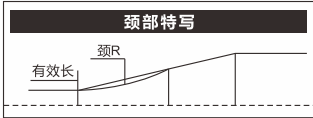
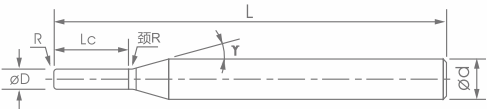
非常合适 very suitable 合适 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○						○	

GM-4R-L

4刃涂层长柄圆鼻立铣刀
4-Flute Coated Long Shank Round Nose End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,020	0~-0,025	0~-0,030	-
R	±0,010	±0,010	±0,010	-



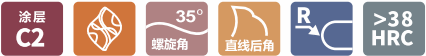
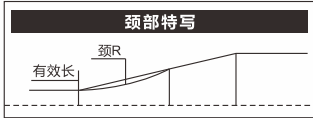
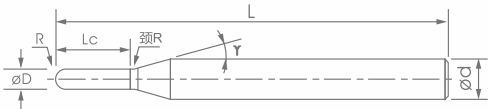
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGM4R040120075BD04-0.5-S	D4*R0.5*12*d4*75L*4F	12	/	d4	75L
PEGM4R060180075BD06-0.5-S	D6*R0.5*18*d6*75L*4F	18	/	d6	75L
PEGM4R060180100BD06-0.5-S	D6*R0.5*18*d6*100L*4F	18	/	d6	100L
PEGM4R060180075BD06-1-S	D6*R1*18*d6*75L*4F	18	/	d6	75L
PEGM4R080240075BD08-0.5-S	D8*R0.5*24*d8*75L*4F	24	/	d8	75L
PEGM4R080240075BD08-1-S	D8*R1*24*d8*75L*4F	24	/	d8	75L
PEGM4R080240100BD08-0.5-S	D8*R0.5*24*d8*100L*4F	24	/	d8	100L
PEGM4R080240100BD08-1-S	D8*R1*24*d8*100L*4F	24	/	d8	100L
PEGM4R100300100BD10-0.5-S	D10*R0.5*30*d10*100L*4F	30	/	d10	100L
PEGM4R100300100BD10-1-S	D10*R1*30*d10*100L*4F	30	/	d10	100L
PEGM4R120360100BD12-0.5-S	D12*R0.5*36*d12*100L*4F	36	/	d12	100L
PEGM4R120360100BD12-1-S	D12*R1*36*d12*100L*4F	36	/	d12	100L
PEGM4R120360100BD12-2-S	D12*R2*36*d12*100L*4F	36	/	d12	100L



GM-2B-L

2刃涂层长柄球头立铣刀
2-Flute Coated Long Shank Ball End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,020	0~-0,025	0~-0,030	-
R	0~-0,010	0~-0,012	0~-0,015	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGM2B040080075BD04-S	D4*R2*8*d4*75L*2F	8	/	d4	75L
PEGM2B040080100BD04-S	D4*R2*8*d4*100L*2F	8	/	d4	100L
PEGM2B050100075BD06-S	D5*R2.5*10*d6*75L*2F	10	/	d6	75L
PEGM2B060120075BD06-S	D6*R3*12*d6*75L*2F	12	/	d6	75L
PEGM2B060120100BD06-S	D6*R3*12*d6*100L*2F	12	/	d6	100L
PEGM2B080160075BD08-S	D8*R4*16*d8*75L*2F	16	/	d8	75L
PEGM2B080160100BD08-S	D8*R4*16*d8*100L*2F	16	/	d8	100L
PEGM2B080160150BD08-S	D8*R4*16*d8*150L*2F	16	/	d8	150L
PEGM2B100200100BD10-S	D10*R5*20*d10*100L*2F	20	/	d10	100L
PEGM2B100200150BD10-S	D10*R5*20*d10*150L*2F	20	/	d10	150L
PEGM2B120240100BD12-S	D12*R6*24*d12*100L*2F	24	/	d12	100L
PEGM2B120240150BD12-S	D12*R6*24*d12*150L*2F	24	/	d12	150L
PEGM2B160320150BD16-S	D16*R8*32*d16*150L*2F	32	/	d16	150L
PEGM2B200400150BD20-S	D20*R10*40*d20*150L*2F	40	/	d20	150L



非常合适 very suitable 合适 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○						○	

非常合适 very suitable 合适 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○						○	

PM系列

塑胶模具加工系列

Tools for plastic mold processing
HRC48-53



特点描述 | CHARACTERISTIC DESCRIPTION

- 01** 适用于48-55HRC高硬钢材料的半精加工、精加工。
Suitable for semi-finishing and finishing of 48-55HRC high-hard steel materials.
- 02** 高硬度、高韧性材质，特殊设计的几何参数及后处理。
High hardness, high toughness material, specially designed geometric parameters and post-processing.
- 03** 高稳定性刃口处理和高刚性结构设计，大幅提升金属去除率和加工效率。
High-stability edge treatment and high-rigidity structure design greatly improve metal removal rate and processing efficiency.
- 04** 自主研发的专用涂层，提升了涂层韧性、热冲击稳定性，实现了刀具使用过程的残余应力平衡，显著提升了刀具性能及寿命。
The self-developed special coating improves the toughness and thermal shock stability of the coating, realizes the residual stress balance of the tool during use, and significantly improves the performance and life of the tool.

塑胶模具加工系列

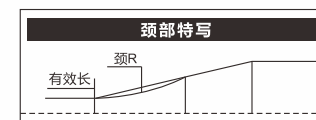
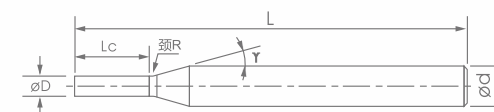
| HRC48-53

High-hard materials general processing series

PM-4S

4刃涂层平头立铣刀

4-Flute Coated Flat End Mill



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPM4S010030050BK04-S	D1*3*d4*50L*4F	3	/	d4	50L
PEPM4S015040050BK04-S	D1.5*4*d4*50L*4F	4	/	d4	50L
PEPM4S020060050BK04-S	D2*6*d4*50L*4F	6	/	d4	50L
PEPM4S025080050BK04-S	D2.5*8*d4*50L*4F	8	/	d4	50L
PEPM4S030090050BK04-S	D3*9*d4*50L*4F	9	/	d4	50L
PEPM4S035100050BK04-S	D3.5*10*d4*50L*4F	10	/	d4	50L
PEPM4S040120050BK04-S	D4*12*d4*50L*4F	12	/	d4	50L
PEPM4S050150050BK06-S	D5*15*d6*50L*4F	15	/	d6	50L
PEPM4S060180050BK06-S	D6*18*d6*50L*4F	18	/	d6	50L
PEPM4S070210060BK08-S	D7*21*d8*60L*4F	21	/	d8	60L
PEPM4S080240060BK08-S	D8*24*d8*60L*4F	24	/	d8	60L
PEPM4S100300075BK10-S	D10*30*d10*75L*4F	30	/	d10	75L
PEPM4S120360075BK12-S	D12*36*d12*75L*4F	36	/	d12	75L
PEPM4S140400100BK14-S	D14*40*d14*100L*4F	40	/	d14	100L
PEPM4S160450100BK16-S	D16*45*d16*100L*4F	45	/	d16	100L
PEPM4S180450100BK18-S	D18*45*d18*100L*4F	45	/	d18	100L
PEPM4S200450100BK20-S	D20*45*d20*100L*4F	45	/	d20	100L

○非常适合 very suitable ○适合 suitable

可切削材料适用表

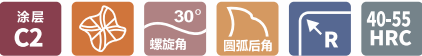
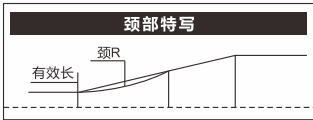
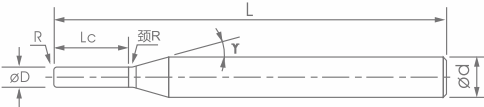
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Modular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

PM-4R

4刃涂层圆鼻立铣刀
4-Flute Coated Round Nose End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	±0,010	±0,010	±0,010	±0,010



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPM4R010030050BK04-0.2-S	D1*R0.2*3*d4*50L*4F	3	/	d4	50L
PEPM4R015040050BK04-0.2-S	D1.5*R0.2*4*d4*50L*4F	4	/	d4	50L
PEPM4R020050050BK04-0.2-S	D2*R0.2*5*d4*50L*4F	5	/	d4	50L
PEPM4R020050050BK04-0.3-S	D2*R0.3*5*d4*50L*4F	5	/	d4	50L
PEPM4R025060050BK04-0.2-S	D2.5*R0.2*6*d4*50L*4F	6	/	d4	50L
PEPM4R030080050BK04-0.2-S	D3*R0.2*8*d4*50L*4F	8	/	d4	50L
PEPM4R030080050BK04-0.3-S	D3*R0.3*8*d4*50L*4F	8	/	d4	50L
PEPM4R030080050BK04-0.5-S	D3*R0.5*8*d4*50L*4F	8	/	d4	50L
PEPM4R035090050BK04-0.5-S	D3.5*R0.5*9*d4*50L*4F	9	/	d4	50L
PEPM4R040100050BK04-0.2-S	D4*R0.2*10*d4*50L*4F	10	/	d4	50L
PEPM4R040100050BK04-0.5-S	D4*R0.5*10*d4*50L*4F	10	/	d4	50L
PEPM4R040100050BK04-1-S	D4*R1*10*d4*50L*4F	10	/	d4	50L
PEPM4R050120050BK06-0.5-S	D5*R0.5*12*d6*50L*4F	12	/	d6	50L
PEPM4R050120050BK06-1-S	D5*R1*12*d6*50L*4F	12	/	d6	50L
PEPM4R060150050BK06-0.5-S	D6*R0.5*15*d6*50L*4F	15	/	d6	50L
PEPM4R060150050BK06-1-S	D6*R1*15*d6*50L*4F	15	/	d6	50L
PEPM4R080200060BK08-0.5-S	D8*R0.5*20*d8*60L*4F	20	/	d8	60L
PEPM4R080200060BK08-1-S	D8*R1*20*d8*60L*4F	20	/	d8	60L
PEPM4R100250075BK10-0.5-S	D10*R0.5*25*d10*75L*4F	25	/	d10	75L
PEPM4R100250075BK10-1-S	D10*R1*25*d10*75L*4F	25	/	d10	75L
PEPM4R120300075BK12-0.5-S	D12*R0.5*30*d12*75L*4F	30	/	d12	75L
PEPM4R120300075BK12-1-S	D12*R1*30*d12*75L*4F	30	/	d12	75L
PEPM4R140350100BK14-1-S	D14*R1*35*d14*100L*4F	35	/	d14	100L
PEPM4R140350100BK14-2-S	D14*R2*35*d14*100L*4F	35	/	d14	100L
PEPM4R160400100BK16-1-S	D16*R1*40*d16*100L*4F	40	/	d16	100L
PEPM4R200400100BK20-1-S	D20*R1*40*d20*100L*4F	40	/	d20	100L

非常合适 very suitable 合适 suitable

可切削材料适用表

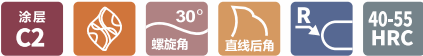
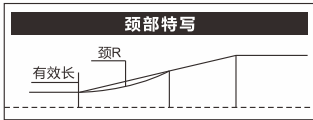
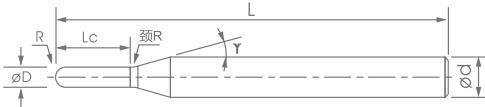
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

PM-2B

2刃涂层球头立铣刀
2-Flute Coated Ball End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	0-0,007	0~-0,010	0~-0,012	0~-0,015



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPM2B010020050BE04-S	D1*R0.5*2*d4*50L*2F	2	/	d4	50L
PEPM2B015030050BE04-S	D1.5*R0.75*3*d4*50L*2F	3	/	d4	50L
PEPM2B020040050BE04-S	D2*R1*4*d4*50L*2F	4	/	d4	50L
PEPM2B025050050BE04-S	D2.5*R1.25*5*d4*50L*2F	5	/	d4	50L
PEPM2B030060050BE04-S	D3*R1.5*6*d4*50L*2F	6	/	d4	50L
PEPM2B040080050BE04-S	D4*R2*8*d4*50L*2F	8	/	d4	50L
PEPM2B050100050BE06-S	D5*R2.5*10*d6*50L*2F	10	/	d6	50L
PEPM2B060120050BE06-S	D6*R3*12*d6*50L*2F	12	/	d6	50L
PEPM2B080160060BE08-S	D8*R4*16*d8*60L*2F	16	/	d8	60L
PEPM2B100200075BE10-S	D10*R5*20*d10*75L*2F	20	/	d10	75L
PEPM2B120240075BE12-S	D12*R6*24*d12*75L*2F	24	/	d12	75L

非常合适 very suitable 合适 suitable

可切削材料适用表

TABLE OF RECOMMENDED MILLING MATERIALS

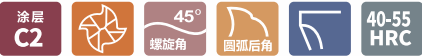
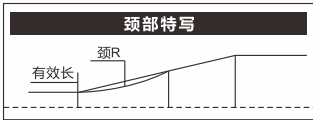
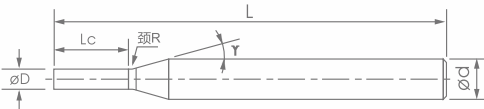
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

PM-4S-L

4刃涂层长柄平头立铣刀

4-Flute Coated Long Shank Flat End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,025	0~-0,030	0~-0,035	-
	-	-	-	-



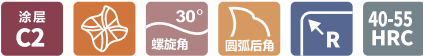
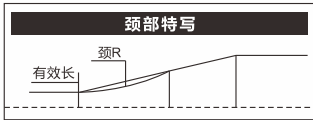
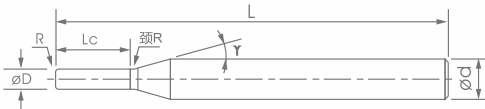
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPM4S040120075BK04-S	D4*12*d4*75L*4F	12	/	d4	75L
PEPM4S040160100BK04-S	D4*16*d4*100L*4F	16	/	d4	100L
PEPM4S060180075BK06-S	D6*18*d6*75L*4F	18	/	d6	75L
PEPM4S060240100BK06-S	D6*24*d6*100L*4F	24	/	d6	100L
PEPM4S080320075BK08-S	D8*32*d8*75L*4F	32	/	d8	75L
PEPM4S080320100BK08-S	D8*32*d8*100L*4F	32	/	d8	100L
PEPM4S100400100BK10-S	D10*40*d10*100L*4F	40	/	d10	100L
PEPM4S100500150BK10-S	D10*50*d10*150L*4F	50	/	d10	150L
PEPM4S120450100BK12-S	D12*45*d12*100L*4F	45	/	d12	100L
PEPM4S120500150BK12-S	D12*50*d12*150L*4F	50	/	d12	150L
PEPM4S140550150BK14-S	D14*55*d14*150L*4F	55	/	d14	150L
PEPM4S160600150BK16-S	D16*60*d16*150L*4F	60	/	d16	150L
PEPM4S180650150BK18-S	D18*65*d18*150L*4F	65	/	d18	150L
PEPM4S200700150BK20-S	D20*70*d20*150L*4F	70	/	d20	150L

PM-4R-L

4刃涂层长柄圆鼻立铣刀

4-Flute Coated Long Shank Round Nose End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,025	0~-0,030	0~-0,035	-
R	±0,010	±0,010	±0,010	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPM4R040120075BK04-0.5-S	D4*R0.5*12*d4*75L*4F	12	/	d4	75L
PEPM4R060180075BK06-0.5-S	D6*R0.5*18*d6*75L*4F	18	/	d6	75L
PEPM4R060180100BK06-0.5-S	D6*R0.5*18*d6*100L*4F	18	/	d6	100L
PEPM4R060180075BK06-1-S	D6*R1*18*d6*75L*4F	18	/	d6	75L
PEPM4R080240075BK08-0.5-S	D8*R0.5*24*d8*75L*4F	24	/	d8	75L
PEPM4R080240100BK08-0.5-S	D8*R0.5*24*d8*100L*4F	24	/	d8	100L
PEPM4R080240075BK08-1-S	D8*R1*24*d8*75L*4F	24	/	d8	75L
PEPM4R100300100BK10-0.5-S	D10*R0.5*30*d10*100L*4F	30	/	d10	100L
PEPM4R100300100BK10-1-S	D10*R1*30*d10*100L*4F	30	/	d10	100L
PEPM4R120360100BK12-0.5-S	D12*R0.5*36*d12*100L*4F	36	/	d12	100L
PEPM4R120360100BK12-1-S	D12*R1*36*d12*100L*4F	36	/	d12	100L

○非常适合 very suitable ○适合 suitable

可切削材料适用表

TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron ~350HB	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC							
○		○	○			○	○				○	○	

○非常适合 very suitable ○适合 suitable

可切削材料适用表

TABLE OF RECOMMENDED MILLING MATERIALS

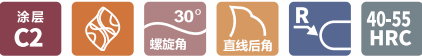
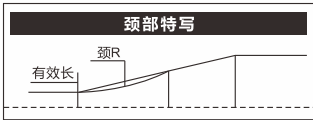
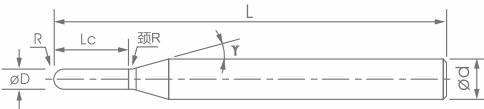
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron ~350HB	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

PM-2B-L

2刃涂层长柄球头立铣刀

2-Flute Coated Long Shank Ball End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0.020	0~-0.025	0~-0.030	-
R	0~-0.010	0~-0.012	0~-0.015	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPM2B040080075BE04-S	D4*R2*8*d4*75L*2F	8	/	d4	75L
PEPM2B040080100BE04-S	D4*R2*8*d4*100L*2F	8	/	d4	100L
PEPM2B050100075BE06-S	D5*R2.5*10*d6*75L*2F	10	/	d6	75L
PEPM2B060120075BE06-S	D6*R3*12*d6*75L*2F	12	/	d6	75L
PEPM2B060120100BE06-S	D6*R3*12*d6*100L*2F	12	/	d6	100L
PEPM2B080160075BE08-S	D8*R4*16*d8*75L*2F	16	/	d8	75L
PEPM2B080160100BE08-S	D8*R4*16*d8*100L*2F	16	/	d8	100L
PEPM2B080160150BE08-S	D8*R4*16*d8*150L*2F	16	/	d8	150L
PEPM2B100200100BE10-S	D10*R5*20*d10*100L*2F	20	/	d10	100L
PEPM2B100200150BE10-S	D10*R5*20*d10*150L*2F	20	/	d10	150L
PEPM2B120240100BE12-S	D12*R6*24*d12*100L*2F	24	/	d12	100L
PEPM2B120240150BE12-S	D12*R6*24*d12*150L*2F	24	/	d12	150L
PEPM2B160320150BE16-S	D16*R8*32*d16*150L*2F	32	/	d16	150L
PEPM2B200400150BE20-S	D20*R10*40*d20*150L*2F	40	/	d20	150L

●非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS											
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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron				耐热合金 Heat resistant alloy
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB				
●		●	●			○	○			○	○

PH系列

高硬料高速铣削系列

High-hard material high-speed
milling series

HRC48-53 PM升级版



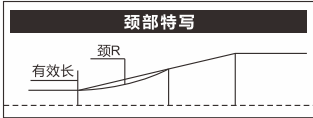
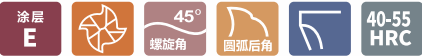
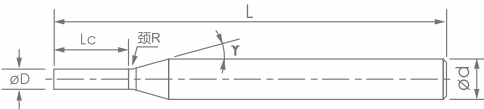
特点描述 | CHARACTERISTIC DESCRIPTION

- 01 适用于35-58HRC钢材料的半精加工、精加工。
It is suitable for semi-finishing and finishing of 35-58HRC steel materials.
- 02 高刚性的刀具结构设计，有效减少刀具加工过程中的振动。
The high-rigidity tool structure design effectively reduces the vibration during tool processing.
- 03 高强度、高韧性的基体材质配合新高硬专用涂层，有效延长刀具使用寿命，使被加工工件表面质量更佳。
The high-strength, high-toughness base material combined with the new high-hardness special coating can effectively extend the service life of the tool and make the surface quality of the processed workpiece better.

PH-4S

4刃涂层平头立铣刀
4-Flute Coated Flat End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,012	0~-0,015	0~-0,020	0~-0,025
	-	-	-	-



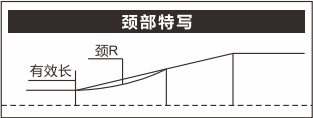
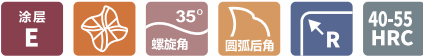
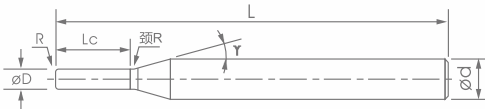
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPH4S010030050BK04	D1*3*d4*50L*4F	3	/	d4	50L
PEPH4S015040050BK04	D1.5*4*d4*50L*4F	4	/	d4	50L
PEPH4S020060050BK04	D2*6*d4*50L*4F	6	/	d4	50L
PEPH4S025080050BK04	D2.5*8*d4*50L*4F	8	/	d4	50L
PEPH4S030090050BK04	D3*9*d4*50L*4F	9	/	d4	50L
PEPH4S040120050BK04	D4*12*d4*50L*4F	12	/	d4	50L
PEPH4S060180050BK06	D6*18*d6*50L*4F	18	/	d6	50L
PEPH4S080200060BK08	D8*20*d8*60L*4F	20	/	d8	60L
PEPH4S100250075BK10	D10*25*d10*75L*4F	25	/	d10	75L
PEPH4S120300075BK12	D12*30*d12*75L*4F	30	/	d12	75L



PH-4R

4刃涂层圆鼻立铣刀
4-Flute Coated Round Nose End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,012	0~-0,015	0~-0,020	0~-0,025
R	±0,006	±0,006	±0,006	±0,006



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPH4R010025050BK04-0.2	D1*R0.2*2.5*d4*50L*4F	2.5	/	d4	50L
PEPH4R020050050BK04-0.2	D2*R0.2*5*d4*50L*4F	5	/	d4	50L
PEPH4R020050050BK04-0.3	D2*R0.3*5*d4*50L*4F	5	/	d4	50L
PEPH4R025070050BK04-0.2	D2.5*0.2*7*d4*50L*4F	7	/	d4	50L
PEPH4R030070050BK04-0.2	D3*R0.2*7*d4*50L*4F	7	/	d4	50L
PEPH4R030070050BK04-0.3	D3*R0.3*7*d4*50L*4F	7	/	d4	50L
PEPH4R040100050BK04-0.2	D4*R0.2*10*d4*50L*4F	10	/	d4	50L
PEPH4R040100050BK04-0.3	D4*R0.3*10*d4*50L*4F	10	/	d4	50L
PEPH4R040100050BK04-0.5	D4*R0.5*10*d4*50L*4F	10	/	d4	50L
PEPH4R040100050BK04-1	D4*R1*10*d4*50L*4F	10	/	d4	50L
PEPH4R050130050BK06-0.5	D5*R0.5*12*d6*50L*4F	12	/	d6	50L
PEPH4R060150050BK06-0.5	D6*R0.5*15*d6*50L*4F	15	/	d6	50L
PEPH4R060150050BK06-1	D6*R1*15*d6*50L*4F	15	/	d6	50L
PEPH4R080200060BK08-0.5	D8*R0.5*20*d8*60L*4F	20	/	d8	60L
PEPH4R080200060BK08-1	D8*R1*20*d8*60L*4F	20	/	d8	60L
PEPH4R100250075BK04-0.5	D10*R0.5*25*d10*75L*4F	25	/	d10	75L
PEPH4R100250075BK10-1	D10*R1*25*d10*75L*4F	25	/	d10	75L
PEPH4R120300075BK12-0.5	D12*R0.5*30*d12*75L*4F	30	/	d12	75L
PEPH4R120300075BK12-1	D12*R1*30*d12*75L*4F	30	/	d12	75L



○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

○非常适合 very suitable ○适合 suitable

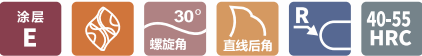
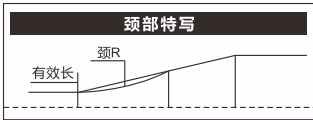
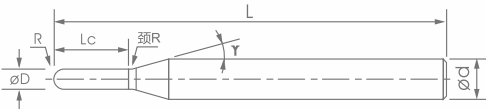
可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

PH-2B

2刃涂层球头立铣刀
2-Flute Coated Ball End Mill

øD	1<D<4	4≤D≤8	8<D≤12	12<D
	0~-0,012	0~-0,015	0~-0,020	0~-0,025
R	0~-0,006	0~-0,008	0~-0,010	0~-0,012



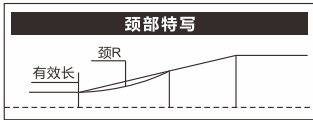
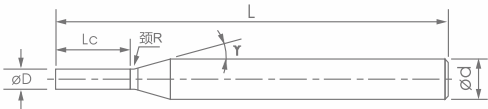
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPH2B010020050BE04	D1*R0.5*2*d4*50L*2F	2	/	d4	50L
PEPH2B015030050BE04	D1.5*R0.75*3*d4*50L*2F	3	/	d4	50L
PEPH2B020040050BE04	D2*R1*4*d4*50L*2F	4	/	d4	50L
PEPH2B030060050BE04	D3*R1.5*6*d4*50L*2F	6	/	d4	50L
PEPH2B040080050BE04	D4*R2*8*d4*50L*2F	8	/	d4	50L
PEPH2B060120050BE06	D6*R3*12*d6*50L*2F	12	/	d6	50L
PEPH2B080160060BE08	D8*R4*16*d8*60L*2F	16	/	d8	60L
PEPH2B100200075BE10	D10*R5*20*d10*75L*2F	20	/	d10	75L
PEPH2B120240075BE12	D12*R6*24*d12*75L*2F	24	/	d12	75L



PH-4S-L

4刃涂层长柄平头立铣刀
4-Flute Coated Long Shank Flat End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,020	0~-0,025	0~-0,030	-
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPH4S040120075BK04	D4*12*d4*75L*4F	12	/	d4	75L
PEPH4S060180075BK06	D6*18*d6*75L*4F	18	/	d6	75L
PEPH4S060240075BK06	D6*24*d6*75L*4F	24	/	d6	75L
PEPH4S060240100BK06	D6*24*d6*100L*4F	24	/	d6	100L
PEPH4S080200075BK08	D8*20*d8*75L*4F	20	/	d8	75L
PEPH4S080300100BK08	D8*30*d8*100L*4F	30	/	d8	100L
PEPH4S100300100BK10	D10*30*d10*100L*4F	30	/	d10	100L
PEPH4S100400100BK10	D10*40*d10*100L*4F	40	/	d10	100L
PEPH4S120300100BK12	D12*30*d12*100L*4F	30	/	d12	100L
PEPH4S120450100BK12	D12*45*d12*100L*4F	45	/	d12	100L



非常合适 very suitable 合适 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

非常合适 very suitable 合适 suitable

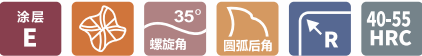
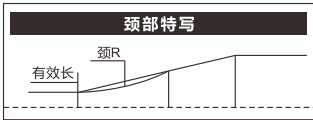
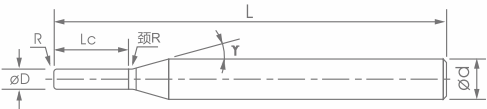
可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

PH-4R-L

4刃涂层长柄圆鼻立铣刀
4-Flute Coated Long Shank Round Nose End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0.015	0~-0.020	0~-0.025	-
R	±0.006	±0.006	±0.008	-



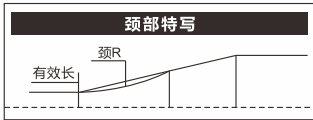
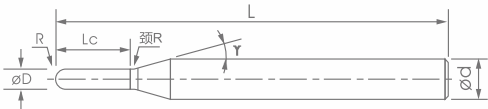
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPH4R060150075BK06-0.5	D6*R0.5*15*d6*75L*4F	15	/	d6	75L
PEPH4R060150075BK06-1.0	D6*R1*15*d6*75L*4F	15	/	d6	75L
PEPH4R060180100BK06-0.5	D6*R0.5*18*d6*100L*4F	18	/	d6	100L
PEPH4R060180100BK06-1.0	D6*R1*18*d6*100L*4F	18	/	d6	100L
PEPH4R080200075BK08-0.5	D8*R0.5*20*d8*75L*4F	20	/	d8	75L
PEPH4R080200075BK08-1.0	D8*R1*20*d8*75L*4F	20	/	d8	75L
PEPH4R080240100BK08-0.5	D8*R0.5*24*d8*100L*4F	24	/	d8	100L
PEPH4R080240100BK08-1.0	D8*R1*24*d8*100L*4F	24	/	d8	100L
PEPH4R100300100BK10-0.5	D10*R0.5*30*d10*100L*4F	30	/	d10	100L
PEPH4R100300100BK10-1.0	D10*R1*30*d10*100L*4F	30	/	d10	100L
PEPH4R120360100BK12-0.5	D12*R0.5*36*d12*100L*4F	36	/	d12	100L
PEPH4R120360100BK12-1.0	D12*R1*36*d12*100L*4F	36	/	d12	100L



PH-2B-L

2刃涂层长柄球头立铣刀
2-Flute Coated Long Shank Ball End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0.015	0~-0.020	0~-0.025	-
R	0~-0.008	0~-0.010	0~-0.012	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPH2B040080075BE04	D4*R2*8*d4*75L*2F	8	/	d4	75L
PEPH2B060120075BE06	D6*R3*12*d6*75L*2F	12	/	d6	75L
PEPH2B060120100BE06	D6*R3*12*d6*100L*2F	12	/	d6	100L
PEPH2B080160075BE08	D8*R4*16*d8*75L*2F	16	/	d8	75L
PEPH2B080160100BE08	D8*R4*16*d8*100L*2F	16	/	d8	100L
PEPH2B100200100BE10	D10*R5*20*d10*100L*2F	20	/	d10	100L
PEPH2B120240100BE12	D12*R6*24*d12*100L*2F	24	/	d12	100L



非常合适 very suitable 合适 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

非常合适 very suitable 合适 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

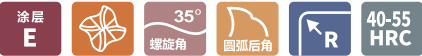
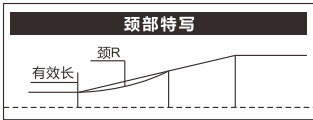
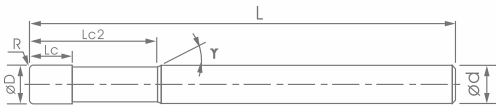
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

PH-4R-NL

4刃涂层短刃圆鼻立铣刀

4-Flute Coated Short Edge Round Nose End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,015	0~-0,020	0~-0,025	-
R	±0,006	±0,006	±0,006	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPH4R060060050BK06-0.5	D6*R0.5*6*18NL*d6*50L*4F	6	18	d6	50L
PEPH4R060060050BK06-1.0	D6*R1*6*18NL*d6*50L*4F	6	18	d6	50L
PEPH4R080080060BK08-0.5	D8*R0.5*8*24NL*d8*60L*4F	8	24	d8	60L
PEPH4R080080060BK08-1.0	D8*R1*8*24NL*d8*60L*4F	8	24	d8	60L
PEPH4R100100075BK10-0.5	D10*R0.5*10*30NL*d10*75L*4F	10	30	d10	75L
PEPH4R100100075BK10-1.0	D10*R1*10*30NL*d10*75L*4F	10	30	d10	75L
PEPH4R120120075BK12-0.5	D12*R0.5*12*30NL*d12*75L*4F	12	30	d12	75L
PEPH4R120120075BK12-1.0	D12*R1*12*30NL*d12*75L*4F	12	30	d12	75L

● 非常适合 very suitable ○ 适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS											
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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron				耐热合金 Heat resistant alloy
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB				
●		●	●			○	○				○

AL 系列

铜、铝合金通用加工系列

Copper and aluminum alloy
general processing series



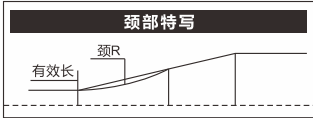
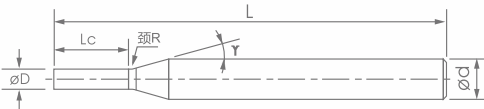
特点描述 | CHARACTERISTIC DESCRIPTION

- 01 大容屑空间及独特的刃型设计，保证铝合金零件的高效加工及优异的表面质量。
Large chip space and unique blade design ensure the efficient processing and excellent surface quality of aluminum alloy parts.
- 02 通用型2刃球头立铣刀，可广泛应用于铝合金零件的高效仿形加工。
The universal 2-flute ball-end end mill can be widely used in high-efficiency profiling machining of aluminum alloy parts.
- 03 3刃通用型设计及特殊刃口设计，可广泛用于铝合金零件高效粗加工、半粗加工，并获得优异加工表面质量。
The 3-blade universal design and special blade design can be widely used for efficient roughing and semi-roughing of aluminum alloy parts, and obtain excellent surface quality.

AL-3S

3刃铝用平头立铣刀
3-Flute Aluminum Flat End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEAL3S010030050CA04	D1*3*d4*50L*3F	3	/	d4	50L
PEAL3S015040050CA04	D1.5*4*d4*50L*3F	4	/	d4	50L
PEAL3S020060050CA04	D2*6*d4*50L*3F	6	/	d4	50L
PEAL3S025080050CA04	D2.5*8*d4*50L*3F	8	/	d4	50L
PEAL3S030090050CA04	D3*9*d4*50L*3F	9	/	d4	50L
PEAL3S040120050CA04	D4*12*d4*50L*3F	12	/	d4	50L
PEAL3S050150050CA06	D5*15*d6*50L*3F	15	/	d6	50L
PEAL3S060180050CA06	D6*18*d6*50L*3F	18	/	d6	50L
PEAL3S080240060CA08	D8*24*d8*60L*3F	24	/	d8	60L
PEAL3S100300075CA10	D10*30*d10*75L*3F	30	/	d10	75L
PEAL3S120360075CA12	D12*36*d12*75L*3F	36	/	d12	75L
PEAL3S140400100CA14	D14*40*d14*100L*3F	40	/	d14	100L
PEAL3S160450100CA16	D16*45*d16*100L*3F	45	/	d16	100L
PEAL3S180450100CA18	D18*45*d18*100L*3F	45	/	d18	100L
PEAL3S200450100CA20	D20*45*d20*100L*3F	45	/	d20	100L



可切削材料适用表

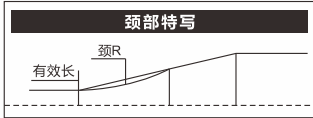
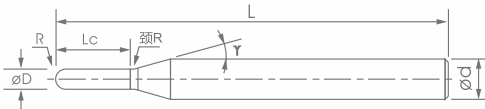
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
								○	○				○

AL-2B

2刃铝用球头立铣刀
2-Flute Aluminum Ball End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	±0,008	±0,008	±0,010	±0,012



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEAL2B010020050CA04	D1*R0.5*2*d4*50L*2F	2	/	d4	50L
PEAL2B015030050CA04	D1.5*R0.75*3*d4*50L*2F	3	/	d4	50L
PEAL2B020040050CA04	D2*R1*4*d4*50L*2F	4	/	d4	50L
PEAL2B025050050CA04	D2.5*R1.25*5*d4*50L*2F	5	/	d4	50L
PEAL2B030060050CA04	D3*R1.5*6*d4*50L*2F	6	/	d4	50L
PEAL2B040080050CA04	D4*R2*8*d4*50L*2F	8	/	d4	50L
PEAL2B060120050CA06	D6*R3*12*d6*50L*2F	12	/	d6	50L
PEAL2B080160060CA08	D8*R4*16*d8*60L*2F	16	/	d8	60L
PEAL2B100200075CA10	D10*R5*20*d10*75L*2F	20	/	d10	75L
PEAL2B120240075CA12	D12*R6*24*d12*75L*2F	24	/	d12	75L
PEAL2B160320100CA16	D16*R8*32*d16*100L*2F	32	/	d16	100L
PEAL2B200400100CA20	D20*R10*40*d20*100L*2F	40	/	d20	100L



可切削材料适用表

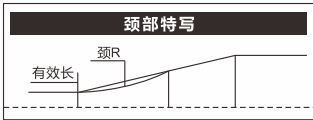
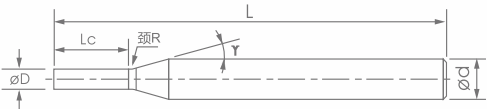
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
								○	○				○

AL-3S-L

3刃铝用长柄平头立铣刀
3-Flute Aluminum Long Shank Flat End Mill

øD	1<D<4	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEAL3S040160075CA04	D4*16*d4*75L*3F	16	/	d4	75L
PEAL3S040160100CA04	D4*16*d4*100L*3F	16	/	d4	100L
PEAL3S060240075CA06	D6*24*d6*75L*3F	24	/	d6	75L
PEAL3S060240100CA06	D6*24*d6*100L*3F	24	/	d6	100L
PEAL3S080320075CA08	D8*32*d8*75L*3F	32	/	d8	75L
PEAL3S080320100CA08	D8*32*d8*100L*3F	32	/	d8	100L
PEAL3S100400100CA10	D10*40*d10*100L*3F	40	/	d10	100L
PEAL3S100500150CA10	D10*50*d10*150L*3F	50	/	d10	150L
PEAL3S100450100CA12	D12*45*d12*100L*3F	45	/	d12	100L
PEAL3S120500150CA12	D12*50*d12*150L*3F	50	/	d12	150L
PEAL3S140550150CA14	D14*55*d14*150L*3F	55	/	d14	150L
PEAL3S160600150CA16	D16*60*d16*150L*3F	60	/	d16	150L
PEAL3S180650150CA18	D18*65*d18*150L*3F	65	/	d18	150L
PEAL3S200700150CA20	D20*70*d20*150L*3F	70	/	d20	150L



可切削材料适用表

TABLE OF RECOMMENDED MILLING MATERIALS

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 Cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
								○	○				○

ALS系列

铜、铝合金粗精一体加工系列

Copper and aluminum alloy rough and fine machining series



特点描述 | CHARACTERISTIC DESCRIPTION

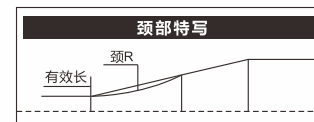
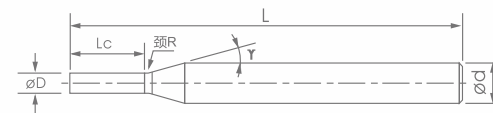
- 01 适用于铝合金、铜合金粗精加工。
It is suitable for rough and finish machining of aluminum alloy and copper alloy.
- 02 采用U型槽设计，在保证刚性同时，增加排屑空间，实现平稳切削。
U-shaped groove design is adopted to ensure rigidity, increase chip removal space and realize smooth cutting.
- 03 特殊的刃口处理，有效防止振动及解决刃口粘屑问题。
Special cutting edge treatment can effectively prevent vibration and solve the problem of cutting edge sticking.
- 04 高钝度TAC多彩涂层，使刀具表面更加顺滑，以获得良好被加工件表面光洁度。
High dullness TAC colorful coating makes the tool surface more smooth, so as to obtain a good surface finish of the machined part.

ALS-3S

3刃铝用粗精一体平头立铣刀

3-Flute Rough and fine integration for aluminum Flat End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEALS3S040120050HA04	D4*12*d4*50L*3F	12	/	d4	50L
PEALS3S060180050HA06	D6*18*d6*50L*3F	18	/	d6	50L
PEALS3S080240060HA08	D8*24*d8*60L*3F	24	/	d8	60L
PEALS3S100300075HA10	D10*30*d10*75L*3F	30	/	d10	75L
PEALS3S120360075HA12	D12*36*d12*75L*3F	36	/	d12	75L



○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

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 Cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB	○	○				○

HM 系列

淬硬钢高速高精加工系列

Hardened steel high speed and high precision machining series

HRC58-63



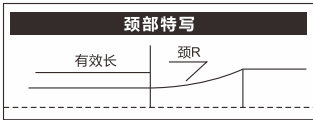
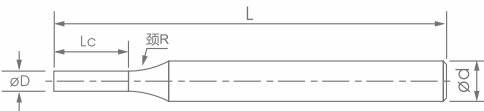
特点描述 | CHARACTERISTIC DESCRIPTION

- 01 特殊刃口设计，优异的涂层，可实现淬硬钢的半精加工、精加工。
Special blade design and excellent coating can realize semi finishing and finishing of hardened steel.
- 02 特殊刃口设计，优异的涂层，可实现淬硬钢的高效加工。
Special cutting edge design and excellent coating can realize efficient processing of hardened steel.
- 03 通用型2刃球头立铣刀配以优良涂层，可广泛应用于淬硬钢的高效仿形加工。
The universal 2-flute ball nose end mill with excellent coating can be widely used for high-efficiency profiling processing of hardened steel.
- 04 多刃、高刚性设计，实现工件的高速精加工。
Multi-blade, high-rigidity design enables high-speed finishing of workpieces.

HM-4S

4刃涂层平头立铣刀
4-Flute Coated Flat End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,010	0~-0,015	0~-0,015	0~-0,020
	-	-	-	-

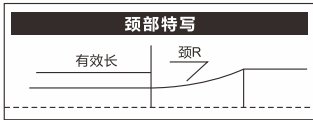
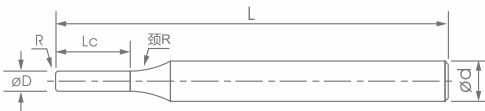


物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEHM4S010030050BT04	D1*3*d4*50L*4F	3	/	d4	50L
PEHM4S015040050BT04	D1.5*4*d4*50L*4F	4	/	d4	50L
PEHM4S020060050BT04	D2*6*d4*50L*4F	6	/	d4	50L
PEHM4S025080050BT04	D2.5*8*d4*50L*4F	8	/	d4	50L
PEHM4S030090050BT03	D3*9*d3*50L*4F	9	/	d3	50L
PEHM4S030090050BT04	D3*9*d4*50L*4F	9	/	d4	50L
PEHM4S040120050BT04	D4*12*d4*50L*4F	12	/	d4	50L
PEHM4S010030050BT06	D1*3*d6*50L*4F	3	/	d6	50L
PEHM4S020060050BT06	D2*6*d6*50L*4F	6	/	d6	50L
PEHM4S030090050BT06	D3*9*d6*50L*4F	9	/	d6	50L
PEHM4S040120050BT06	D4*12*d6*50L*4F	12	/	d6	50L
PEHM4S050130050BT06	D5*13*d6*50L*4F	13	/	d6	50L
PEHM4S060150050BT06	D6*15*d6*50L*4F	15	/	d6	50L
PEHM4S080200060BR08	D8*20*d8*60L*4F	20	/	d8	60L
PEHM4S100250075BR10	D10*25*d10*75L*4F	25	/	d10	75L
PEHM4S120300075BR12	D12*30*d12*75L*4F	30	/	d12	75L

HM-4R-SN

4刃涂层短刃圆鼻立铣刀
4-Flute Coated Short Edge Round Nose End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,010	0~-0,015	0~-0,015	0~-0,020
R	±0,006	±0,006	±0,006	±0,006



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEHM4R010025050BT04-0.1	D1*R0.1*3*d4*50L*4F	3	/	d4	50L
PEHM4R010025050BT04-0.2	D1*R0.2*3*d4*50L*4F	3	/	d4	50L
PEHM4R015040050BT04-0.2	D1.5*R0.2*4*d4*50L*4F	4	/	d4	50L
PEHM4R020050050BT04-0.2	D2*R0.2*5*d4*50L*4F	5	/	d4	50L
PEHM4R020050050BT04-0.3	D2*R0.3*5*d4*50L*4F	5	/	d4	50L
PEHM4R020050050BT04-0.5	D2*R0.5*5*d4*50L*4F	5	/	d4	50L
PEHM030080050BT03-0.2	D3*R0.2*8*d3*50L*4F	8	/	d3	50L
PEHM030080050BT03-0.5	D3*R0.5*8*d3*50L*4F	8	/	d3	50L
PEHM4R030080050BT04-0.2	D3*R0.2*8*d4*50L*4F	8	/	d4	50L
PEHM4R030080050BT04-0.3	D3*R0.3*8*d4*50L*4F	8	/	d4	50L
PEHM4R030080050BT04-0.5	D3*R0.5*8*d4*50L*4F	8	/	d4	50L
PEHM4R040080050BT04-0.2	D4*R0.2*8*12NL*d4*50L*4F	8	12	d4	50L
PEHM4R040080050BT04-0.3	D4*R0.3*8*12NL*d4*50L*4F	8	12	d4	50L
PEHM4R040080050BT04-0.5	D4*R0.5*8*12NL*d4*50L*4F	8	12	d4	50L
PEHM4R060120050BT06-0.2	D6*R0.2*12*18NL*d6*50L*4F	12	18	d6	50L
PEHM4R060120050BT06-0.5	D6*R0.5*12*18NL*d6*50L*4F	12	18	d6	50L
PEHM4R060120050BT06-1	D6*R1*12*18NL*d6*50L*4F	12	18	d6	50L
PEHM4R080160060BR08-0.2	D8*R0.2*16*24NL*d8*60L*4F	16	24	d8	60L
PEHM4R080160060BR08-0.5	D8*R0.5*16*24NL*d8*60L*4F	16	24	d8	60L
PEHM4R080160060BR08-1	D8*R1*16*24NL*d8*60L*4F	16	24	d8	60L
PEHM4R100200075BR10-0.5	D10*R0.5*20*30NL*d10*75L*4F	20	30	d10	75L
PEHM4R100200075BR10-1	D10*R1*20*30NL*d10*75L*4F	20	30	d10	75L
PEHM4R120240075BR12-0.5	D12*R0.5*24*36NL*d12*75L*4F	24	36	d12	75L
PEHM4R120240075BR12-1	D12*R1*24*36NL*d12*75L*4F	24	36	d12	75L

⊙非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
		○	⊙	⊙	⊙		○				○	○	

⊙非常适合 very suitable ○适合 suitable

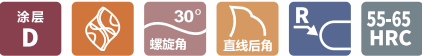
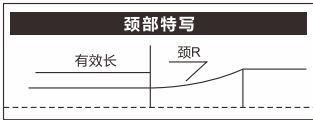
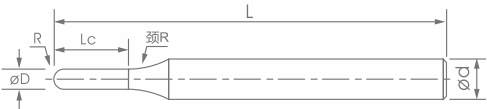
可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
		○	⊙	⊙	⊙		○				○	○	

HM-2B-SN

2刃涂层短刃球头立铣刀
2-Flute Coated Short Edge Ball End Mill

øD	1<D<4	4≤D≤8	8<D≤12	12<D
	0~-0,010	0~-0,015	0~-0,015	0~-0,020
R	0~-0,005	0~-0,008	0~-0,008	0~-0,010



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEHM2B010020050BY04	D1*R0,5*2*d4*50L*2F	2	/	d4	50L
PEHM2B015030050BY04	D1,5*R0,75*3*d4*50L*2F	3	/	d4	50L
PEHM2B020040050BY04	D2*R1*4*d4*50L*2F	4	/	d4	50L
PEHM2B025050050BY04	D2,5*R1,25*5*d4*50L*2F	5	/	d4	50L
PEHM2B030060050BY03	D3*R1,5*6*d3*50L*2F	6	/	d3	50L
PEHM2B030060050BY04	D3*R1,5*6*d4*50L*2F	6	/	d4	50L
PEHM2B040040050BY04-8NL	D4*R2*4*8NL*d4*50L*2F	4	8	d4	50L
PEHM2B050050050BY05-10NL	D5*R2,5*5*10NL*d5*50L*2F	5	10	d5	50L
PEHM2B050050050BY06-10NL	D5*R2,5*5*10NL*d6*50L*2F	5	10	d6	50L
PEHM2B060060050BY06-12NL	D6*R3*6*12NL*d6*50L*2F	6	12	d6	50L
PEHM2B080080060BR08-16NL	D8*R4*8*16NL*d8*60L*2F	8	16	d8	60L
PEHM2B100100075BR10-20NL	D10*R5*10*20NL*d10*75L*2F	10	20	d10	75L
PEHM2B120120075BR12-24NL	D12*R6*12*24NL*d12*75L*2F	12	24	d12	75L

○非常适合 very suitable ○适合 suitable

可切削材料适用表

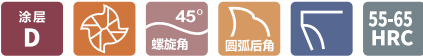
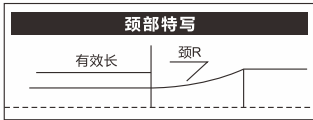
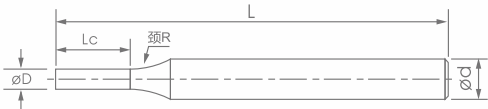
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
		○	○	○	○		○				○	○	

HM-4S-L

4刃涂层长柄平头立铣刀
4-Flute Coated Long Shank Flat End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,015	0~-0,015	0~-0,020	-
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEHM4S040120075BT04	D4*12*d4*75L*4F	12	/	d4	75L
PEHM4S040120100BT04	D4*12*d4*100L*4F	12	/	d4	100L
PEHM4S060180075BT06	D6*18*d6*75L*4F	18	/	d6	75L
PEHM4S060180100BT06	D6*18*d6*100L*4F	18	/	d6	100L
PEHM4S080240075BR08	D8*24*d8*75L*4F	24	/	d8	75L
PEHM4S080240100BR08	D8*24*d8*100L*4F	24	/	d8	100L
PEHM4S100300100BR10	D10*30*d10*100L*4F	30	/	d10	100L
PEHM4S120360100BR12	D12*36*d12*100L*4F	36	/	d12	100L

○非常适合 very suitable ○适合 suitable

可切削材料适用表

TABLE OF RECOMMENDED MILLING MATERIALS

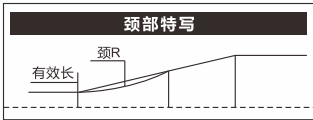
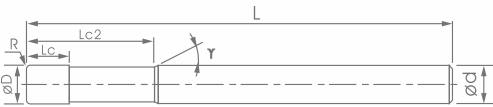
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
		○	○	○	○		○				○	○	

HM-4R-NL

4刃涂层长柄圆鼻立铣刀

4-Flute Coated Long Shank Round Nose End Mill

øD	4≤D≤8	8<D≤12	12<D	-
	0~-0,015	0~-0,015	0~-0,020	-
R	±0,006	±0,006	±0,006	-



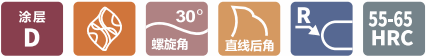
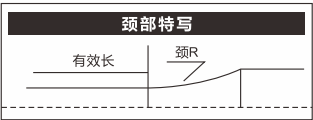
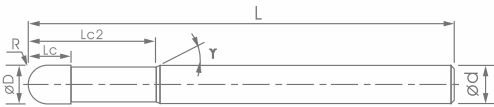
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
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PEHM4R040080100BT04-0.5	D4*R0.5*8*12NL*d4*100L*4F	8	12	d4	100L
PEHM4R060120075BT06-0.2	D6*R0.2*12*18NL*d6*75L*4F	12	18	d6	75L
PEHM4R060120075BT06-0.5	D6*R0.5*12*18NL*d6*75L*4F	12	18	d6	75L
PEHM4R060120075BT06-1	D6*R1*12*18NL*d6*75L*4F	12	18	d6	75L
PEHM4R060120100BT06-0.5	D6*R0.5*12*18NL*d6*100L*4F	12	18	d6	100L
PEHM4R060120100BT06-1	D6*R1*12*18NL*d6*100L*4F	12	18	d6	100L
PEHM4R080160075BR08-0.5	D8*R0.5*16*24NL*d8*75L*4F	16	24	d8	75L
PEHM4R080160075BR08-1	D8*R1*16*24NL*d8*75L*4F	16	24	d8	75L
PEHM4R080160100BR08-0.5	D8*R0.5*16*24NL*d8*100L*4F	16	24	d8	100L
PEHM4R080160100BR08-1	D8*R1*16*24NL*d8*100L*4F	16	24	d8	100L
PEHM4R100200100BR10-0.5	D10*R0.5*20*30NL*d10*100L*4F	20	30	d10	100L
PEHM4R100200100BR10-1	D10*R1*20*30NL*d10*100L*4F	20	30	d10	100L
PEHM4R120240100BR12-0.5	D12*R0.5*24*36NL*d12*100L*4F	24	36	d12	100L
PEHM4R120240100BR12-1	D12*R1*24*36NL*d12*100L*4F	24	36	d12	100L

HM-2B-NL

2刃涂层长柄球头立铣刀

2-Flute Coated Long Shank Ball End Mill

øD	4≤D≤8	8<D≤12	12<D	
	0~-0,015	0~-0,015	0~-0,020	
R	0~-0,008	0~-0,008	0~-0,010	



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEHM2B040040075BY04	D4*R2*4*12NL*d4*75L*2F	4	12	d4	75L
PEHM2B040040100BY04	D4*R2*4*12NL*d4*100L*2F	4	12	d4	100L
PEHM2B060060075BY06	D6*R3*6*18NL*d6*75L*2F	6	18	d6	75L
PEHM2B060060100BY06	D6*R3*6*18NL*d6*100L*2F	6	18	d6	100L
PEHM2B060060100BY06	D6*R3*6*24NL*d6*100L*2F	6	24	d6	100L
PEHM2B080080075BR08	D8*R4*8*24NL*d8*75L*2F	8	24	d8	75L
PEHM2B080080100BR08	D8*R4*8*24NL*d8*100L*2F	8	24	d8	100L
PEHM2B100100100BR10	D10*R5*10*30NL*d10*100L*2F	10	30	d10	100L
PEHM2B120120100BR12	D12*R6*12*36NL*d12*100L*2F	12	36	d12	100L

⊙非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
		○	⊙	⊙	⊙		○				○	○	

⊙非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
		○	⊙	⊙	⊙		○				○	○	

GMH系列

汽车塑胶模具高效加工系列

Efficient processing series of
automobile plastic mold

HRC36-48



特点描述 | CHARACTERISTIC DESCRIPTION

- 01** 针对718 / 738 / NAK80可实现高速精加工。
For 718/738 / NAK80, high-speed finishing can be achieved.
- 02** 新开发专用涂层,涂层膨胀系数低,冷却工况通用性强,适用于各种冷却方式。
The newly developed special coating has low expansion coefficient and strong cooling conditions, which is suitable for various cooling methods.
- 03** 拥有卓越抗振能力的刀体结构设计,可适用于大切宽、大切深的高效加工。
The cutter body structure design with excellent anti-vibration ability is suitable for high-efficiency machining of large cutting width and large cutting depth.
- 04** 非常规的磨削方式, 及后处理方式, 刀具刃口质量更佳, 涂层结合力更强, 排屑性能优异。
Unconventional grinding methods and post-processing methods have better cutting edge quality, stronger coating bonding force and excellent chip removal performance.

汽车塑胶模具高效加工系列 | HRC36-48

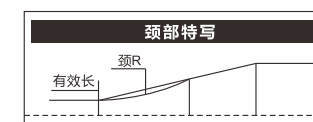
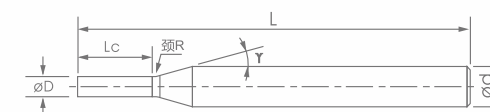
Efficient processing series of automobile plastic mold

GMH-4S

4刃涂层平头立铣刀

4-Flute Coated Flat End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,015	0~-0,020	0~-0,025	0~-0,030
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGMH4S010030050PD04	D1*3*d4*50L*4F	3	/	d4	50L
PEGMH4S015040050PD04	D1.5*4*d4*50L*4	4	/	d4	50L
PEGMH4S020060050PD04	D2*6*d4*50L*4F	6	/	d4	50L
PEGMH4S025070050PD04	D2.5*7*d4*50L*4F	7	/	d4	50L
PEGMH4S030090050PD04	D3*9*d4*50L*4F	9	/	d4	50L
PEGMH4S040120050PD04	D4*12*d4*50L*4F	12	/	d4	50L
PEGMH4S050150050PD06	D5*15*d6*50L*4F	15	/	d6	50L
PEGMH4S060180050PD06	D6*18*d6*50L*4F	18	/	d6	50L
PEGMH4S080240060PD08	D8*24*d8*60L*4F	24	/	d8	60L
PEGMH4S100300075PD10	D10*30*d10*75L*4F	30	/	d10	75L
PEGMH4S120350075PD12	D12*35*d12*75L*4F	35	/	d12	75L



○非常适合 very suitable ○适合 suitable

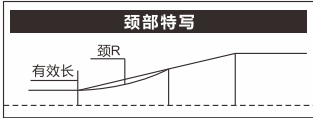
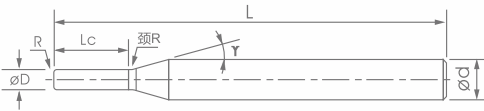
可切削材料适用表 | TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Modular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

GMH-4R

4刃涂层圆鼻立铣刀
4-Flute Coated Round Nose End Mill

øD	1≤D<4	4≤D≤8	8<D≤12
	0~-0,020	0~-0,025	0~-0,030
R	±0,006	±0,006	±0,006



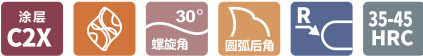
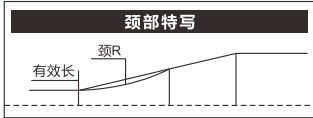
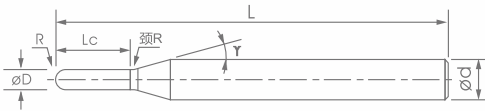
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGMH4R010025050PK04-0.2	D1*R0.2*2.5*d4*50L*4F	2.5	/	d4	50L
PEGMH4R020050050PK04-0.2	D2*R0.2*5*d4*50L*4F	5	/	d4	50L
PEGMH4R025070050PK04-0.2	D2.5*0.2*7*d4*50L*4F	7	/	d4	50L
PEGMH4R030080050PK04-0.2	D3*R0.2*8*d4*50L*4F	8	/	d4	50L
PEGMH4R040100050PK04-0.5	D4*R0.5*10*d4*50L*4F	10	/	d4	50L
PEGMH4R060150050PK06-0.5	D6*R0.5*15*d6*50L*4F	15	/	d6	50L
PEGMH4R080200060PK08-0.5	D8*R0.5*20*d8*60L*4F	20	/	d8	60L
PEGMH4R100250075PK10-0.5	D10*R0.5*25*d10*75L*4F	25	/	d10	75L
PEGMH4R120300075PK12-0.5	D12*R0.5*30*d12*75L*4F	30	/	d12	75L



GMH-2B

2刃涂层球头立铣刀
2-Flute Coated Ball End Mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	0~-0,008	0~-0,010	0~-0,012	0~-0,015



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGMH2B010020050PK04	D1*R0.5*2*d4*50L*2F	2	/	d4	50L
PEGMH2B020040050PK04	D2*R1*4*d4*50L*2F	4	/	d4	50L
PEGMH2B030060050PK04	D3*R1.5*6*d4*50L*2F	6	/	d4	50L
PEGMH2B040080050PK04	D4*R2*8*d4*50L*2F	8	/	d4	50L
PEGMH2B060120050PK06	D6*R3*12*d6*50L*2F	12	/	d6	50L
PEGMH2B080160060PK08	D8*R4*16*d8*60L*2F	16	/	d8	60L
PEGMH2B100200075PK10	D10*R5*20*d10*75L*2F	20	/	d10	75L
PEGMH2B120240075PK12	D12*R6*24*d12*75L*2F	24	/	d12	75L



非常合适 very suitable 合适 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
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 cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic				
预硬钢 Pre-hardened steel		工具钢 Tool steel									球墨铸铁 Nodular cast iron																
~40HRC				~45HRC	~55HRC	~60HRC	~65HRC	~35HRC			~350HB																
○				○	○				○		○								○		○						

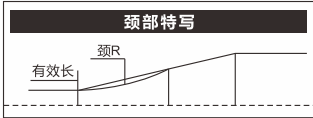
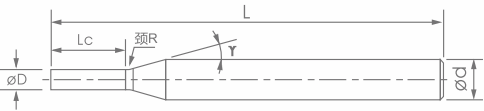
非常合适 very suitable 合适 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○				○	○	

GMH-4S-L

4刃涂层长柄平头立铣刀
4-Flute Coated Long Shank Flat End Mill

øD	4≤D≤8	8<D≤12	12<D
	0~-0,020	0~-0,025	0~-0,030
	-	-	-



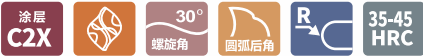
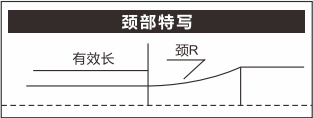
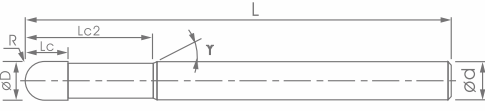
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGMH4S040120075PD04	D4*12*d4*75L*4F	12	/	d4	75L
PEGMH4S040120100PD04	D4*12*d4*100L*4F	12	/	d4	100L
PEGMH4S060180075PD06	D6*18*d6*75L*4F	18	/	d6	75L
PEGMH4S060240100PD06	D6*24*d6*100L*4F	24	/	d6	100L
PEGMH4S080240075PD08	D8*24*d8*75L*4F	24	/	d8	75L
PEGMH4S080240100PD08	D8*24*d8*100L*4F	24	/	d8	100L
PEGMH4S100300100PD10	D10*30*d10*100L*4F	30	/	d10	100L
PEGMH4S120360100PD12	D12*36*d12*100L*4F	36	/	d12	100L



GMH-2B-NL

2刃涂层长柄球头立铣刀
2-Flute Coated Long Shank Ball End Mill

øD	4≤D≤8	8<D≤12	12<D
	0~-0,020	0~-0,025	0~-0,030
R	0~-0,010	0~-0,012	0~-0,015



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGMH2B040040075PK04	D4*R2*4*12NL*d4*75L*2F	4	12	d4	75L
PEGMH2B060060075PK06	D6*R3*6*18NL*d6*75L*2F	6	18	d6	75L
PEGMH2B060060100PK06	D6*R3*6*24NL*d6*100L*2F	6	24	d6	100L
PEGMH2B080080075PK08	D8*R4*8*24NL*d8*75L*2F	8	24	d8	75L
PEGMH2B080080100PK08	D8*R4*8*32NL*d8*100L*2F	8	32	d8	100L
PEGMH2B100100100PK10	D10*R5*10*30NL*d10*100L*2F	10	30	d10	100L
PEGMH2B120120100PK12	D12*R6*12*35NL*d12*100L*2F	12	35	d12	100L



非常合适 very suitable 合适 suitable

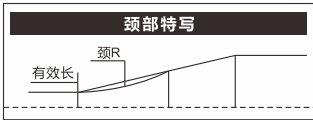
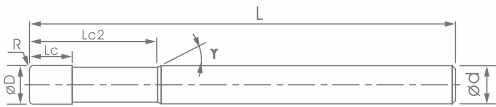
可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel	不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC	~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB				
非常合适	非常合适	合适			合适	合适		合适	合适	

GMH-4R-NL

4刃涂层长柄圆鼻立铣刀
4-Flute Coated Long Shank Round Nose End Mill

øD	4≤D≤8	8<D≤12	12<D
	0~-0.020	0~-0.025	0~-0.030
R	±0.006	±0.006	±0.006



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEGMH4R040060075PK04-0.5	D4*R0.5*6*12NL*d4*75L*4F	6	12	d4	75L
PEGMH4R060090075PK06-0.5	D6*R0.5*9*18NL*d6*75L*4F	9	18	d6	75L
PEGMH4R060090075PK06-1.0	D6*R1*9*18NL*d6*75L*4F	9	18	d6	75L
PEGMH4R080120075PK08-0.5	D8*R0.5*12*24NL*d8*75L*4F	12	24	d8	75L
PEGMH4R080120075PK08-1.0	D8*R1*12*24NL*d8*75L*4F	12	24	d8	75L
PEGMH4R080120100PK08-0.5	D8*R0.5*12*30NL*d8*100L*4F	12	30	d8	100L
PEGMH4R080120100PK08-1.0	D8*R1*12*30NL*d8*100L*4F	12	30	d8	100L
PEGMH4R100150075PK10-0.5	D10*R0.5*15*30NL*d10*75L*4F	15	30	d10	75L
PEGMH4R100150075PK10-1.0	D10*R1*15*30NL*d10*75L*4F	15	30	d10	75L
PEGMH4R100150100PK10-0.5	D10*R0.5*15*40NL*d10*100L*4F	15	40	d10	100L
PEGMH4R100150100PK10-1.0	D10*R1*15*40NL*d10*100L*4F	15	40	d10	100L
PEGMH4R120180075PK12-0.5	D12*R0.5*18*35NL*d12*75L*4F	18	35	d12	75L
PEGMH4R120180100PK12-0.5	D12*R0.5*18*40NL*d12*100L*4F	18	40	d12	100L
PEGMH4R120180075PK12-1.0	D12*R1*18*35NL*d12*75L*4F	18	35	d12	75L
PEGMH4R120180100PK12-1.0	D12*R1*18*40NL*d12*100L*4F	18	40	d12	100L

● 非常适合 very suitable ○ 适合 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
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 cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic				
预硬钢 Pre-hardened steel		工具钢 Tool steel									球墨铸铁 Nodular cast iron																
~40HRC				~45HRC	~55HRC	~60HRC	~65HRC	~35HRC			~350HB																
◎				◎	○				○		○								○		○						

ZF 系列

强力开粗，重力切削专用加工系列

Powerful roughing, gravity cutting special processing series



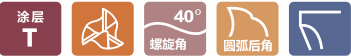
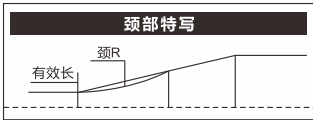
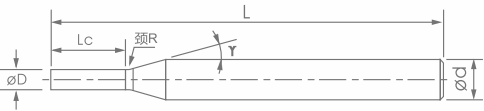
特点描述 | CHARACTERISTIC DESCRIPTION

- 01 适用于普通钢高效率、大去除量加工。
Suitable for high-efficiency and large-removal processing of ordinary steel.
- 02 特殊的表面后处理，有效降低摩擦力，排屑更顺畅，加工表面质量更优。
The special surface post-treatment effectively reduces the friction, the chip evacuation is smoother, and the processed surface quality is better.
- 03 先进的纳米复合涂层，耐热性能良好，即使在高温下也能实现稳定的加工。
The advanced nanocomposite coating has good heat resistance and can realize stable processing even at high temperatures.
- 04 全新自主研发新材料，具有更好的耐磨性和抗震性；独特的刀体结构、合理的槽型设计，成就卓越的切削性能。
Brand-new independently developed new materials, with better wear resistance and shock resistance; unique cutter body structure, reasonable groove design, achieving excellent cutting performance.

ZF-A

3刃铝用涂层平头立铣刀
3-Flute Aluminum Coated Flat End Mill

øD	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,020	0~-0,025	0~-0,030
R	-	-	-



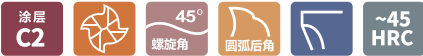
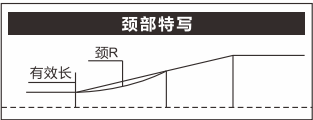
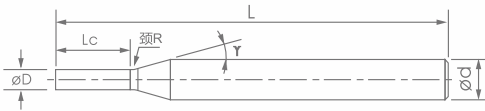
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEZF3S040120050PB04	D4*12*d4*50L*3F	12	/	d4	50L
PEZF3S060150050PB06	D6*15*d6*50L*3F	15	/	d6	50L
PEZF3S080200060PB08	D8*20*d8*60L*3F	20	/	d8	60L
PEZF3S100250075PB10	D10*25*d10*75L*3F	25	/	d10	75L
PEZF3S120300075PB12	D12*30*d12*75L*3F	30	/	d12	75L



ZF-G

4刃钢用涂层平头立铣刀
4-Flute For Steel Coated Flat End Mill

øD	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,020	0~-0,025	0~-0,030
R	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEZF4S040110050PD04	D4*11*d4*50L*4F	11	/	d4	50L
PEZF4S060150050PD06	D6*15*d6*50L*4F	15	/	d6	50L
PEZF4S080200060PD08	D8*20*d8*60L*4F	20	/	d8	60L
PEZF4S100250075PD10	D10*25*d10*75L*4F	25	/	d10	75L
PEZF4S120300075PD12	D12*30*d12*75L*4F	30	/	d12	75L



○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB	○	○				○

○非常适合 very suitable ○适合 suitable

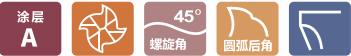
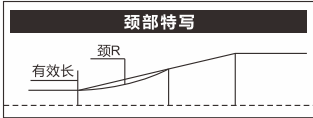
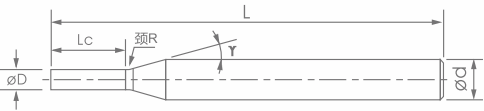
可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB					○	
○		○	○			○						○	

ZF-S

4刃不锈钢涂层平头立铣刀
4-Flute Stainless Steel Coated Flat End Mill

øD	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,020	0~-0,025	0~-0,030
R	-	-	-



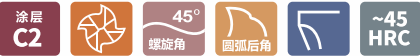
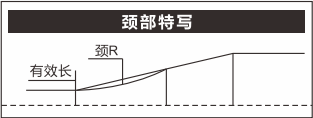
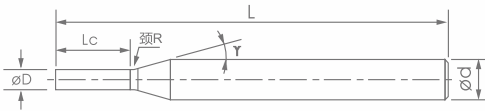
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEZF4S040110050PD04	D4*11*d4*50L*4F	11	/	d4	50L
PEZF4S060150050PD06	D6*15*d6*50L*4F	15	/	d6	50L
PEZF4S080200060PD08	D8*20*d8*60L*4F	20	/	d8	60L
PEZF4S100250075PD10	D10*25*d10*75L*4F	25	/	d10	75L
PEZF4S120300075PD12	D12*30*d12*75L*4F	30	/	d12	75L



ZF-G

3刃钢用涂层平头立铣刀
3-Flute For Steel Coated Flat End Mill

øD	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,020	0~-0,025	0~-0,030
R	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEZF3S040110050BD04	D4*11*d4*50L*3F	11	/	d4	50L
PEZF3S060150050BD06	D6*15*d6*50L*3F	15	/	d6	50L
PEZF3S080200060BD08	D8*20*d8*60L*3F	20	/	d8	60L
PEZF3S100250075BD10	D10*25*d10*75L*3F	25	/	d10	75L
PEZF3S120300075BD12	D12*30*d12*75L*3F	30	/	d12	75L



非常合适 very suitable 合适 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
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 cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic				
预硬钢 Pre-hardened steel		工具钢 Tool steel									球墨铸铁 Nodular cast iron																
~40HRC				~45HRC		~55HRC		~60HRC		~65HRC		~35HRC		~350HB													
○				○								◎		○										○			

非常合适 very suitable 合适 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○						○	

SUS系列

不锈钢专用加工系列

Stainless steel special
processing series



特点描述 | CHARACTERISTIC DESCRIPTION

- 01** 容屑空间大，可广泛应用于不锈钢零件的沟槽、型腔加工。
With large chip holding space, it can be widely used in groove and cavity processing of stainless steel parts.
- 02** 特殊的刃口设计，减少粘屑发生，可实现工件的高效粗加工、半精加工。
The special cutting edge design reduces the occurrence of sticky chips and can realize efficient rough machining and semi-finish machining of the workpiece.
- 03** 刀尖圆弧设计，抗崩刃性好，广泛用于不锈钢的高效精加工、半精加工。
The arc design of the tool tip has good chipping resistance and is widely used for high-efficiency finishing and semi-finishing of stainless steel.

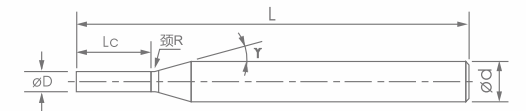
不锈钢专用加工系列

Stainless steel special processing series

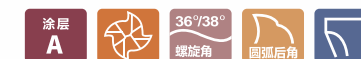
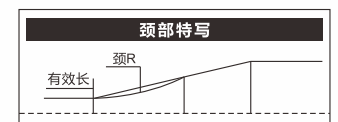
SUS-4S

4刃不锈钢涂层平头立铣刀

4-Flute Stainless Steel Coated Flat End Mill



øD	1≤D<4	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PESUS010030050PK04	D1*3*d4*50L*4F	3	/	d4	50L
PESUS015040050PK04	D1.5*4*d4*50L*4F	4	/	d4	50L
PESUS020060050PK04	D2*6*d4*50L*4F	6	/	d4	50L
PESUS030090050PK04	D3*9*d4*50L*4F	9	/	d4	50L
PESUS040120050PK04	D4*12*d4*50L*4F	12	/	d4	50L
PESUS060180050PK06	D6*18*d6*50L*4F	18	/	d6	50L
PESUS080200060PK08	D8*20*d8*60L*4F	20	/	d8	60L
PESUS080240060PK08	D8*24*d8*60L*4F	24	/	d8	60L
PESUS100025075PK10	D10*25*d10*75L*4F	25	/	d10	75L
PESUS120300075PK12	D12*30*d12*75L*4F	30	/	d12	75L
PESUS120360075PK12	D12*36*d12*75L*4F	36	/	d12	75L

●非常适合 very suitable ○适合 suitable

可切削材料适用表 | TABLE OF RECOMMENDED MILLING MATERIALS

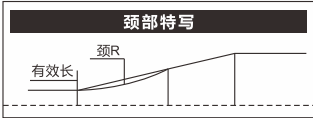
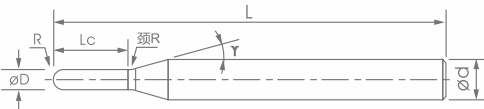
碳素钢 Carbon steel	合金钢 alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel	~40HRC	~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB					
		○	○				●	○				○	

SUS-2B

2刃不锈钢涂层球头立铣刀

2-edge stainless steel coated ball end mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,012	0~-0,015	0~-0,020	0~-0,025
R	0~-0,006	0~-0,008	0~-0,010	0~-0,012



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PESUS2B010020050JD04	D1*R0.5*2*d4*50L*2F	2	/	d4	50L
PESUS2B015030050JD04	D1.5*R0.75*3*d4*50L*2F	3	/	d4	50L
PESUS2B020040050JD04	D2*R1*4*d4*50L*2F	4	/	d4	50L
PESUS2B030060050JD04	D3*R1.5*6*d4*50L*2F	6	/	d4	50L
PESUS2B040080050JD04	D4*R2*8*d4*50L*2F	8	/	d4	50L
PESUS2B060120050JD06	D6*R3*12*d6*50L*2F	12	/	d6	50L
PESUS2B080160060JD08	D8*R4*16*d8*60L*2F	16	/	d8	60L
PESUS2B100200075JD10	D10*R5*20*d10*75L*2F	20	/	d10	75L
PESUS2B120240075JD12	D12*R6*24*d12*75L*2F	24	/	d12	75L



○非常适合 very suitable ○适合 suitable

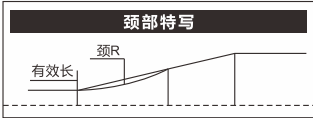
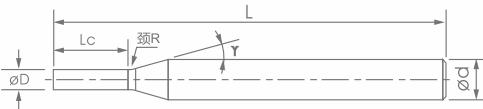
可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS																					
碳素钢 Carbon steel		合金钢 alloy steel		预硬钢、淬硬钢 Pre-hardened steel, hardened steel						不锈钢 stainless steel		铸铁 cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic											
预硬钢 Pre-hardened steel		工具钢 Tool steel										球墨铸铁 Nodular cast iron																							
~40HRC				~45HRC				~55HRC				~60HRC				~65HRC				~35HRC				~350HB											
○				○																								○							

SUS-4R

4刃不锈钢涂层圆鼻立铣刀

4-edge stainless steel coated round nose end mill

øD	1≤D<4	4≤D≤8	8<D≤12	12<D
D Tolerance	0~-0,015	0~-0,020	0~-0,025	0~-0,030
R	±0,008	±0,008	±0,008	±0,008



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PESUS4R010020050JD04-0.2	D1*R0.2*2*d4*50L*4F	2	/	d4	50L
PESUS4R020040050JD04-0.2	D2*R0.2*4*d4*50L*4F	4	/	d4	50L
PESUS4R030060050JD04-0.2	D3*R0.2*6*d4*50L*4F	6	/	d4	50L
PESUS4R040080050JD04-0.5	D4*R0.5*8*d4*50L*4F	8	/	d4	50L
PESUS4R040080050JD04-1	D4*R1*8*d4*50L*4F	8	/	d4	50L
PESUS4R060120050JD06-0.5	D6*R0.5*12*d6*50L*4F	12	/	d6	50L
PESUS4R060120050JD06-1	D6*R1*12*d6*50L*4F	12	/	d6	50L
PESUS4R080160060JD08-0.5	D8*R0.5*16*d8*60L*4F	16	/	d8	60L
PESUS4R080160060JD08-1	D8*R1*20*d8*60L*4F	20	/	d8	60L
PESUS4R100200075JD10-0.5	D10*R0.5*20*d10*75L*4F	20	/	d10	75L
PESUS4R100200075JD10-1	D10*R1*20*d10*75L*4F	20	/	d10	75L
PESUS4R120240075JD12-0.5	D12*R0.5*24*d12*75L*4F	24	/	d12	75L
PESUS4R120240075JD12-1	D12*R1*24*d12*75L*4F	24	/	d12	75L



○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 Cast iron 球墨铸铁 Nodular cast iron ~350HB	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC							
○		○				○	○					○	

TS系列

精密铜电极加工专用加工系列

Special processing series for precision copper electrode processing



特点描述 | CHARACTERISTIC DESCRIPTION

- 01** 适用于铜电极专用加工。
Suitable for special processing of copper electrodes.
- 02** 全新的高性能涂层及刀具基体加成效应实现了高品质的刀具切削性能。
The new high-performance coating and the additive effect of the tool matrix achieve high-quality tool cutting performance.
- 03** 专用刀型设计、高精度品质管控，实现卓越的铜电极材料加工性能。
Special knife design, high-precision quality control, to achieve excellent copper electrode material processing performance.
- 04** 针对性的刀口设计，保持刀口锋利的同时增强刀具尖角的强度。最大限制、抑制毛刺的产生，并使切削能更顺利的排出。
The targeted cutting edge design keeps the cutting edge sharp while enhancing the strength of the tool sharp corners. Maximum limit, suppress the generation of burrs, and make the cutting can be discharged more smoothly.

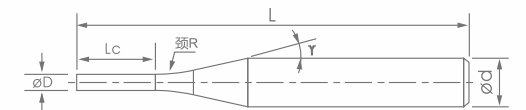
精密铜电极加工专用加工系列

Special processing series for precision copper electrode processing

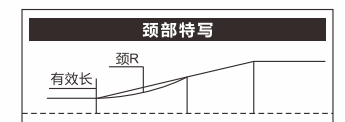
TS-2SS

2刃涂层小径平头立铣刀

2-Flute Coated Small Diameter Flat End Mill



ϕD	$0.2 \leq D < 1$	$1 \leq D < 4$	-	-
	$0 \sim -0.008$	$0 \sim -0.010$	-	-
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS2S002004050KY04	D0.2*0.4*d4*50L*2F	0.4	/	d4	50L
PETS2S003006050KY04	D0.3*0.6*d4*50L*2F	0.6	/	d4	50L
PETS2S004008050KY04	D0.4*0.8*d4*50L*2F	0.8	/	d4	50L
PETS2S005010050KY04	D0.5*1.0*d4*50L*2F	1.0	/	d4	50L
PETS2S006012050KY04	D0.6*1.2*d4*50L*2F	1.2	/	d4	50L
PETS2S008016050KY04	D0.8*1.6*d4*50L*2F	1.6	/	d4	50L



● 非常适合 very suitable ○ 适合 suitable

可切削材料适用表

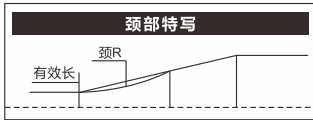
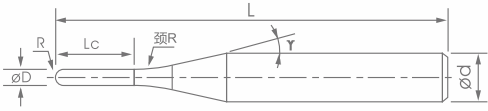
TABLE OF RECOMMENDED MILLING MATERIALS

碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 Cast iron 球墨铸铁 Nodular cast iron ~350HB	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC		●	●				○

TS-2BS

2刃涂层小径球头立铣刀
2-Flute Coated Small Diameter Ball End Mill

øD	0,2≤D<1	1≤D<4	-	-
R	0~-0,008	0~-0,010	-	-
	0~-0,004	0~-0,005	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS2B002004050KY04	D0,2*R0,1*0,4*d4*50L*2F	0.4	/	d4	50L
PETS2B003006050KY04	D0,3*R0,15*0,6*d4*50L*2F	0.6	/	d4	50L
PETS2B004008050KY04	D0,4*R0,2*0,8*d4*50L*2F	0.8	/	d4	50L
PETS2B005010050KY04	D0,5*R0,25*1,0*d4*50L*2F	1.0	/	d4	50L
PETS2B006015050KY04	D0,6*R0,3*1,5*d4*50L*2F	1.5	/	d4	50L
PETS2B008016050KY04	D0,8*R0,4*1,6*d4*50L*2F	1.6	/	d4	50L



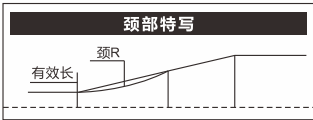
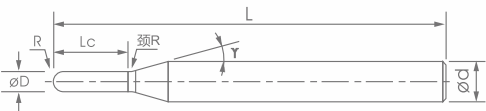
○非常适合 very suitable ○适合 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel 预硬钢 Pre-hardened steel		合金钢 alloy steel 工具钢 Tool steel		预硬钢、淬硬钢 Pre-hardened steel, hardened steel					不锈钢 stainless steel		铸铁 cast iron 球墨铸铁 Nodular cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic				
~40HRC				~45HRC		~55HRC		~60HRC		~65HRC		~35HRC		~350HB													
																◎		◎						○			

TS-2B

2刃涂层球头立铣刀
2-Flute Coated Ball End Mill

øD	1≤D<4	4≤D≤6	6<D≤12	-
R	0~-0,010	0~-0,015	0~-0,015	-
	0~-0,005	0~-0,008	0~-0,008	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS2B010020050KY04	D1*R0,5*2*d4*50L*2F	2	/	d4	50L
PETS2B015030050KY04	D1,5*R0,75*3*d4*50L*2F	3	/	d4	50L
PETS2B020040050KY04	D2*R1*4*d4*50L*2F	4	/	d4	50L
PETS2B030060050KY04	D3*R1,5*6*d4*50L*2F	6	/	d4	50L
PETS2B040080050KY04	D4*R2*8*d4*50L*2F	8	/	d4	50L
PETS2B060120050KY06	D6*R3*12*d6*50L*2F	12	/	d6	50L



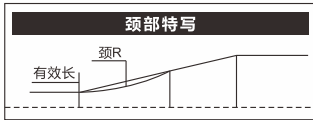
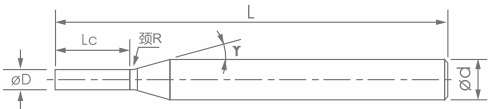
○非常适合 very suitable ○适合 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic													
预硬钢 Pre-hardened steel	工具钢 Tool steel							球墨铸铁 Nodular cast iron																			
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB																				
									◎	◎				○													

TS-4S

4刃涂层平头立铣刀
4-Flute Coated Flat End Mill

øD	1≤D<4	4≤D≤6	6<D≤12	-
	0~-0,010	0~-0,015	0~-0,015	-
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS4S010030050KT04	D1*3*d4*50L*4F	3	/	d4	50L
PETS4S015040050KT04	D1.5*4*d4*50L*4F	4	/	d4	50L
PETS4S020060050KT04	D2*6*d4*50L*4F	6	/	d4	50L
PETS4S025070050KT04	D2.5*7*d4*50L*4F	7	/	d4	50L
PETS4S030090050KT04	D3*9*d4*50L*4F	9	/	d4	50L
PETS4S040120050KT04	D4*12*d4*50L*4F	12	/	d4	50L
PETS4S060180050KT06	D6*18*d6*50L*4F	18	/	d6	50L
PETS4S080240060KT08	D8*24*d8*60L*4F	24	/	d8	60L
PETS4S100250075KT10	D10*25*d10*75L*4F	25	/	d10	75L
PETS4S120300075KT12	D12*30*d12*75L*4F	30	/	d12	75L



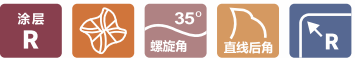
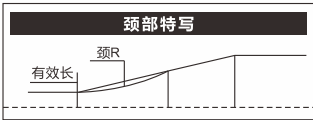
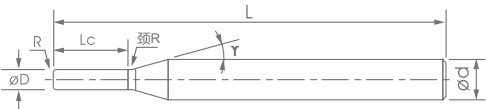
非常合适 very suitable 合适 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel 预硬钢 Pre-hardened steel		合金钢 alloy steel 工具钢 Tool steel		预硬钢、淬硬钢 Pre-hardened steel, hardened steel					不锈钢 stainless steel		铸铁 cast iron 球墨铸铁 Nodular cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic				
~40HRC				~45HRC		~55HRC		~60HRC		~65HRC		~35HRC		~350HB													
																◎		◎						○			

TS-4R

4刃涂层圆鼻立铣刀
4-Flute Coated Round Nose End Mill

øD	1≤D<4	4≤D≤6	6<D≤12	-
	0~-0,010	0~-0,015	0~-0,015	-
R	±0,005	±0,005	±0,005	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS4R020050050KT04-0.2	D2*R0.2*5*d4*50L*4F	5	/	d4	50L
PETS4R020050050KT04-0.3	D2*R0.3*5*d4*50L*4F	5	/	d4	50L
PETS4R030080050KT04-0.2	D3*R0.2*8*d4*50L*4F	8	/	d4	50L
PETS4R030080050KT04-0.3	D3*R0.3*8*d4*50L*4F	8	/	d4	50L
PETS4R040100050KT04-0.2	D4*R0.2*10*d4*50L*4F	10	/	d4	50L
PETS4R040100050KT04-0.3	D4*R0.3*10*d4*50L*4F	10	/	d4	50L
PETS4R040100050KT04-0.5	D4*R0.5*10*d4*50L*4F	10	/	d4	50L
PETS4R060150050KT06-0.3	D6*R0.3*15*d6*50L*4F	15	/	d6	50L
PETS4R060150050KT06-0.5	D6*R0.5*15*d6*50L*4F	15	/	d6	50L
PETS4R080200060KT08-0.3	D8*R0.3*20*d8*60L*4F	20	/	d8	60L
PETS4R080200060KT08-0.5	D8*R0.5*20*d8*60L*4F	20	/	d8	60L
PETS4R100250075KT10-0.5	D10*R0.5*25*d10*75L*4F	25	/	d10	75L
PETS4R120300075KT12-0.5	D12*R0.5*30*d12*75L*4F	30	/	d12	75L



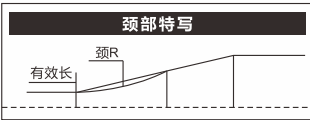
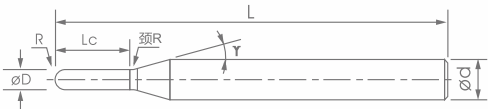
非常合适 very suitable 合适 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
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 cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic			
预硬钢 Pre-hardened steel		工具钢 Tool steel										球墨铸铁 Nodular cast iron															
~40HRC				~45HRC		~55HRC		~60HRC		~65HRC		~35HRC		~350HB													
																◎		◎								○	

TS-2B-L

2刃涂层长柄球头立铣刀
2-Flute Coated Long Shank Ball End Mill

øD	4≤D≤6	6<D≤12	-	-
	0~-0,015	0~-0,015	-	-
R	0~-0,008	0~-0,008	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS2B040080075KT04	D4*R2*8*d4*75L*2F	8	/	d4	75L
PETS2B040080100KT04	D4*R2*8*d4*100L*2F	8	/	d4	100L
PETS2B060120075KT06	D6*R3*12*d6*75L*2F	12	/	d6	75L
PETS2B060120100KT06	D6*R3*12*d6*100L*2F	12	/	d6	100L
PETS2B080160075KT08	D8*R4*16*d8*75L*2F	16	/	d8	75L
PETS2B080160100KT08	D8*R4*16*d8*100L*2F	16	/	d8	100L



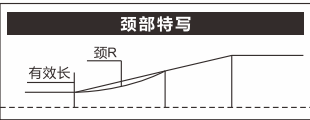
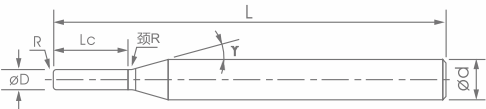
○非常适合 very suitable ○适合 suitable

可切削材料适用表		TABLE OF RECOMMENDED MILLING MATERIALS											
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
								○	○				○

TS-4R-L

4刃涂层长柄圆鼻立铣刀
4-Flute Coated Long Shank Round Nose End Mill

øD	4≤D≤6	6<D≤12	-	-
	0~-0,015	0~-0,015	-	-
R	±0,005	±0,005	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS4R040120075KT04-0.3	D4*R0.3*12*d4*75L*4F	12	/	d4	75L
PETS4R040120075KT04-0.5	D4*R0.5*12*d4*75L*4F	12	/	d4	75L
PETS4R040120100KT04-0.3	D4*R0.3*12*d4*100L*4F	12	/	d4	100L
PETS4R040120100KT04-0.5	D4*R0.5*12*d4*100L*4F	12	/	d4	100L
PETS4R060180075KT06-0.3	D6*R0.3*18*d6*75L*4F	18	/	d6	75L
PETS4R060180075KT06-0.5	D6*R0.5*18*d6*75L*4F	18	/	d6	75L
PETS4R060180100KT06-0.3	D6*R0.3*18*d6*100L*4F	18	/	d6	100L
PETS4R060180100KT06-0.5	D6*R0.5*18*d6*100L*4F	18	/	d6	100L
PETS4R080240075KT08-0.3	D8*R0.3*24*d8*75L*4F	24	/	d8	75L
PETS4R080240075KT08-0.5	D8*R0.5*24*d8*75L*4F	24	/	d8	75L
PETS4R080240075KT08-1.0	D8*R1*24*d8*75L*4F	24	/	d8	75L
PETS4R080240100KT08-0.5	D8*R0.5*32*d8*100L*4F	32	/	d8	100L
PETS4R080240100KT08-1	D8*R1*24*d8*100L*4F	24	/	d8	100L



○非常适合 very suitable ○适合 suitable

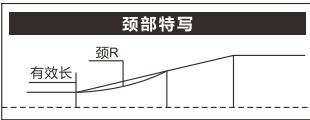
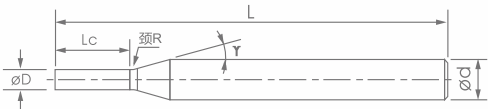
可切削材料适用表		TABLE OF RECOMMENDED MILLING MATERIALS											
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
								⊙	⊙				○

TS-4S-L

4刃涂层长柄平头立铣刀

4-Flute Coated Long Shank Flat End Mill

øD	4≤D≤6	6<D≤12	-	-
D Tolerance	0~-0,015	0~-0,015	-	-
R	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS4S040120075KT04	D4*12*d4*75L*4F	12	/	d4	75L
PETS4S040160100KT04	D4*16*d4*100L*4F	16	/	d4	100L
PETS4S060180075KT06	D6*18*d6*75L*4F	18	/	d6	75L
PETS4S060240100KT06	D6*24*d6*100L*4F	24	/	d6	100L
PETS4S080240075KT08	D8*24*d8*75L*4F	24	/	d8	75L
PETS4S080320100KT08	D8*32*d8*100L*4F	32	/	d8	100L
PETS4S100400100KT10	D10*40*d10*100L*4F	40	/	d10	100L



非常合适 very suitable 合适 suitable

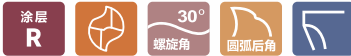
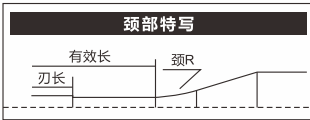
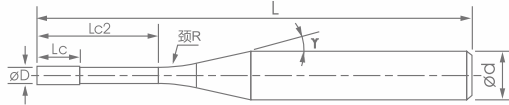
可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel 预硬钢 Pre-hardened steel		合金钢 alloy steel 工具钢 Tool steel		预硬钢、淬硬钢 Pre-hardened steel, hardened steel					不锈钢 stainless steel		铸铁 cast iron 球墨铸铁 Nodular cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic				
~40HRC				~45HRC		~55HRC		~60HRC		~65HRC		~35HRC		~350HB													

TS-2SS-NL

2刃涂层小径深沟平头立铣刀

2-Flute Coated Small Diameter Deep Groove Flat End Mill

øD	0,2≤D<1	1≤D<4	-	-
D Tolerance	0~-0,008	0~-0,010	-	-
R	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS2S002004050KY04-0,5NL	D0.2*0.4*d0.18*0.5NL*d4*50L*2F	0.4	0,5	d4	50L
PETS2S002004050KY04-1NL	D0.2*0.4*d0.18*1NL*d4*50L*2F	0.4	1	d4	50L
PETS2S002004050KY04-1,5NL	D0.2*0.4*d0.18*1.5NL*d4*50L*2F	0.4	1,5	d4	50L
PETS2S003006050KY04-1NL	D0.3*0.6*d0.28*1NL*d4*50L*2F	0.6	1	d4	50L
PETS2S003006050KY04-1,5NL	D0.3*0.6*d0.28*1.5NL*d4*50L*2F	0.6	1,5	d4	50L
PETS2S003006050KY04-2NL	D0.3*0.6*d0.28*2NL*d4*50L*2F	0.6	2	d4	50L
PETS2S004008050KY04-1NL	D0.4*0.8*d0.37*1NL*d4*50L*2F	0.8	1	d4	50L
PETS2S004008050KY04-2NL	D0.4*0.8*d0.37*2NL*d4*50L*2F	0.8	2	d4	50L
PETS2S004008050KY04-3NL	D0.4*0.8*d0.37*3NL*d4*50L*2F	0.8	3	d4	50L
PETS2S004008050KY04-4NL	D0.4*0.8*d0.37*4NL*d4*50L*2F	0.8	4	d4	50L
PETS2S005010050KY04-1,5NL	D0.5*1.0*d0.46*1.5NL*d4*50L*2F	1.0	1,5	d4	50L
PETS2S005010050KY04-2NL	D0.5*1.0*d0.46*2NL*d4*50L*2F	1.0	2	d4	50L
PETS2S005010050KY04-3NL	D0.5*1.0*d0.46*3NL*d4*50L*2F	1.0	3	d4	50L
PETS2S005010050KY04-4NL	D0.5*1.0*d0.46*4NL*d4*50L*2F	1.0	4	d4	50L
PETS2S005010050KY04-6NL	D0.5*1.0*d0.46*6NL*d4*50L*2F	1.0	6	d4	50L



非常合适 very suitable 合适 suitable

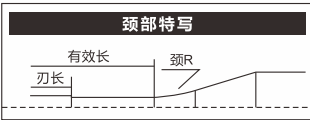
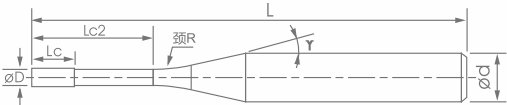
可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel 预硬钢 Pre-hardened steel		合金钢 alloy steel 工具钢 Tool steel		预硬钢、淬硬钢 Pre-hardened steel, hardened steel					不锈钢 stainless steel		铸铁 cast iron 球墨铸铁 Nodular cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic				
~40HRC				~45HRC		~55HRC		~60HRC		~65HRC		~35HRC		~350HB													
																◎		◎						○			

TS-2SS-NL

2刃涂层小径深沟平头立铣刀

2-Flute Coated Small Diameter Deep Groove Flat End Mill

øD	0,2≤D<1	1≤D<4	-	-
D Tolerance	0~-0,008	0~-0,010	-	-
R	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS2S006012050KY04-2NL	D0,6*1,2*d0,56*2NL*d4*50L*2F	1,2	2	d4	50L
PETS2S006012050KY04-3NL	D0,6*1,2*d0,56*3NL*d4*50L*2F	1,2	3	d4	50L
PETS2S006012050KY04-4NL	D0,6*1,2*d0,56*4NL*d4*50L*2F	1,2	4	d4	50L
PETS2S006012050KY04-6NL	D0,6*1,2*d0,56*6NL*d4*50L*2F	1,2	6	d4	50L
PETS2S008016050KY04-3NL	D0,8*1,6*d0,76*3NL*d4*50L*2F	1,6	3	d4	50L
PETS2S008016050KY04-4NL	D0,8*1,6*d0,76*4NL*d4*50L*2F	1,6	4	d4	50L
PETS2S008016050KY04-6NL	D0,8*1,6*d0,76*6NL*d4*50L*2F	1,6	6	d4	50L
PETS2S008016050KY04-8NL	D0,8*1,6*d0,76*8NL*d4*50L*2F	1,6	8	d4	50L
PETS2S010020050KY04-3NL	D1*2*d0,95*3NL*d4*50L*2F	2	3	d4	50L
PETS2S010020050KY04-4NL	D1*2*d0,95*4NL*d4*50L*2F	2	4	d4	50L
PETS2S010020050KY04-5NL	D1*2*d0,95*5NL*d4*50L*2F	2	5	d4	50L
PETS2S010020050KY04-6NL	D1*2*d0,95*6NL*d4*50L*2F	2	6	d4	50L
PETS2S010020050KY04-8NL	D1*2*d0,95*8NL*d4*50L*2F	2	8	d4	50L
PETS2S010020050KY04-10NL	D1*2*d0,95*10NL*d4*50L*2F	2	10	d4	50L
PETS2S010020050KY04-12NL	D1*2*d0,95*12NL*d4*50L*2F	2	12	d4	50L



○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

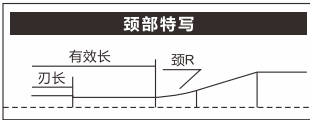
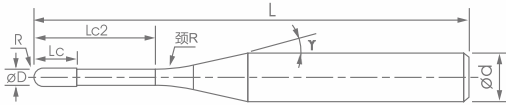
碳素钢 Carbon steel	合金钢 alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB	○	○				○

TS-2BS-NL

2刃涂层小径深沟球头立铣刀

2-Flute Coated Small Diameter Deep Groove Ball End Mill

øD	0,2≤D<1	1≤D<4	-	-
D Tolerance	0~-0,008	0~-0,010	-	-
R	0~-0,004	0~-0,005	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS2B002003050KY04-0,5NL	D0,2*R0,1*0,3*d0,18*0,5NL*d4*50L*2F	0,3	0,5	d4	50L
PETS2B002003050KY04-1NL	D0,2*R0,1*0,3*d0,18*1NL*d4*50L*2F	0,3	1	d4	50L
PETS2B002001050KY04-1,5NL	D0,2*R0,1*0,3*d0,18*1,5NL*d4*50L*2F	0,3	1,5	d4	50L
PETS2B003004050KY04-1NL	D0,3*R0,15*0,45*d0,28*1NL*d4*50L*2F	0,45	1	d4	50L
PETS2B003004050KY04-1,5NL	D0,3*R0,15*0,45*d0,28*1,5NL*d4*50L*2F	0,45	1,5	d4	50L
PETS2B003004050KY04-2NL	D0,3*R0,15*0,45*d0,28*2NL*d4*50L*2F	0,45	2	d4	50L
PETS2B004006050KY04-1NL	D0,4*R0,2*0,6*d0,37*1NL*d4*50L*2F	0,6	1	d4	50L
PETS2B004006050KY04-2NL	D0,4*R0,2*0,6*d0,37*2NL*d4*50L*2F	0,6	2	d4	50L
PETS2B004003050KY04-3NL	D0,4*R0,2*0,6*d0,37*3NL*d4*50L*2F	0,6	3	d4	50L
PETS2B004006050KY04-4NL	D0,4*R0,2*0,6*d0,37*4NL*d4*50L*2F	0,6	4	d4	50L
PETS2B005007050KY04-2NL	D0,5*R0,25*0,75*d0,46*2NL*d4*50L*2F	0,75	2	d4	50L
PETS2B005007050KY04-3NL	D0,5*R0,25*0,75*d0,46*3NL*d4*50L*2F	0,75	3	d4	50L
PETS2B005007050KY04-4NL	D0,5*R0,25*0,75*d0,46*4NL*d4*50L*2F	0,75	4	d4	50L
PETS2B005007050KY04-5NL	D0,5*R0,25*0,75*d0,46*5NL*d4*50L*2F	0,75	5	d4	50L
PETS2B006009050KY04-2NL	D0,6*R0,3*0,9*d0,56*2NL*d4*50L*2F	0,9	2	d4	50L



○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

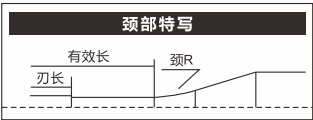
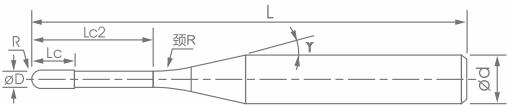
碳素钢 Carbon steel	合金钢 alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB	○	○				○

TS-2BS-NL

2刃涂层小径深沟球头立铣刀

2-Flute Coated Small Diameter Deep Groove Ball End Mill

øD	0.2≤D<1	1≤D<4	-	-
	0~-0.008	0~-0.010	-	-
R	0~-0.004	0~-0.005	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PETS2B006009050KY04-3NL	D0.6*R0.3*0.9*d0.56*3NL*d4*50L*2F	0.9	3	d4	50L
PETS2B006009050KY04-4NL	D0.6*R0.3*0.9*d0.56*4NL*d4*50L*2F	0.9	4	d4	50L
PETS2B006009050KY04-5NL	D0.6*R0.3*0.9*d0.56*5NL*d4*50L*2F	0.9	5	d4	50L
PETS2B006009050KY04-6NL	D0.6*R0.3*0.9*d0.56*6NL*d4*50L*2F	0.9	6	d4	50L
PETS2B008012050KY04-3NL	D0.8*R0.4*1.2*d0.76*3NL*d4*50L*2F	1.2	3	d4	50L
PETS2B008012050KY04-4NL	D0.8*R0.4*1.2*d0.76*4NL*d4*50L*2F	1.2	4	d4	50L
PETS2B008012050KY04-6NL	D0.8*R0.4*1.2*d0.76*6NL*d4*50L*2F	1.2	6	d4	50L
PETS2B008012050KY04-8NL	D0.8*R0.4*1.2*d0.76*8NL*d4*50L*2F	1.2	8	d4	50L
PETS2B010015050KY04-3NL	D1.0*R0.5*1.5*d0.95*3NL*d4*50L*2F	1.5	3	d4	50L
PETS2B010015050KY04-4NL	D1.0*R0.5*1.5*d0.95*4NL*d4*50L*2F	1.5	4	d4	50L
PETS2B010015050KY04-5NL	D1.0*R0.5*1.5*d0.95*5NL*d4*50L*2F	1.5	5	d4	50L
PETS2B010015050KY04-6NL	D1.0*R0.5*1.5*d0.95*6NL*d4*50L*2F	1.5	6	d4	50L
PETS2B010015050KY04-8NL	D1.0*R0.5*1.5*d0.95*8NL*d4*50L*2F	1.5	8	d4	50L
PETS2B010015050KY04-10NL	D1.0*R0.5*1.5*d0.95*10NL*d4*50L*2F	1.5	10	d4	50L
PETS2B010015050KY04-12NL	D1.0*R0.5*1.5*d0.95*12NL*d4*50L*2F	1.5	12	d4	50L

○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Modular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB	○	○				○

PS系列

小径高精度、高硬加工系列

Small diameter high precision, high hard processing series



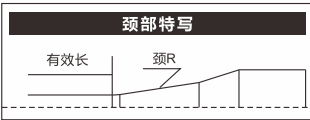
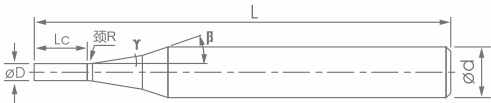
特点描述 | CHARACTERISTIC DESCRIPTION

- 01 适用于精密模具行业碳钢、合金钢、淬硬钢的材料（硬度≤HRC55）加工。
It is suitable for the processing of carbon steel, alloy steel and hardened steel (hardness≤HRC55) in the precision mold industry.
- 02 高精度的刃径、球头轮廓、圆弧轮廓尺寸管控。
High-precision size control of blade diameter, ball profile, and arc profile.
- 03 更具耐高温性、耐磨性的新型高性能纳米涂层。
New high-performance nano-coating with more high temperature resistance and wear resistance.
- 04 特殊的颈部过渡处理及更合理的避空设计。
Special neck transition treatment and more reasonable avoidance design.

PS-2S

2刃涂层小径平头立铣刀
2-Flute Coated Small Diameter Flat End Mill

øD	0.2≤D<1	1≤D<4	-	-
	0~-0.008	0~-0.010	-	-
	-	-	-	-

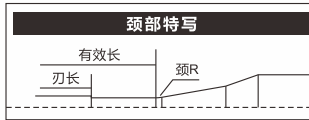
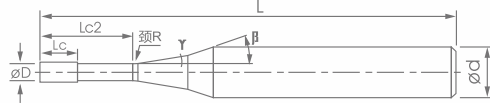


物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPS2S002004050BK04	D0.2*0.4*d4*50L*2F	0.4	/	d4	50L
PEPS2S003006050BK04	D0.3*0.6*d4*50L*2F	0.6	/	d4	50L
PEPS2S004008050BK04	D0.4*0.8*d4*50L*2F	0.8	/	d4	50L
PEPS2S005010050BK04	D0.5*1.0*d4*50L*2F	1.0	/	d4	50L
PEPS2S006012050BK04	D0.6*1.2*d4*50L*2F	1.2	/	d4	50L
PEPS2S008016050BK04	D0.8*1.6*d4*50L*2F	1.6	/	d4	50L

PS-2S-NL

2刃涂层小径深沟平头立铣刀
2-Flute Coated Small Diameter Deep Groove Flat End Mill

øD	0.2≤D<1	1≤D<4	-	-
	0~-0.008	0~-0.010	-	-
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPS2S002004050BK04-0.5NL	D0.2*0.4*d0.18*0.5NL*d4*50L*2F	0.4	0.5	d4	50L
PEPS2S002004050BK04-1NL	D0.2*0.4*d0.18*1NL*d4*50L*2F	0.4	1	d4	50L
PEPS2S002004050BK04-1.5NL	D0.2*0.4*d0.18*1.5NL*d4*50L*2F	0.4	1.5	d4	50L
PEPS2S003006050BK04-1NL	D0.3*0.6*d0.28*1NL*d4*50L*2F	0.6	1	d4	50L
PEPS2S003006050BK04-1.5NL	D0.3*0.6*d0.28*1.5NL*d4*50L*2F	0.6	1.5	d4	50L
PEPS2S003006050BK04-2NL	D0.3*0.6*d0.28*2NL*d4*50L*2F	0.6	2	d4	50L
PEPS2S004008050BK04-1NL	D0.4*0.8*d0.37*1NL*d4*50L*2F	0.8	1	d4	50L
PEPS2S004008050BK04-2NL	D0.4*0.8*d0.37*2NL*d4*50L*2F	0.8	2	d4	50L
PEPS2S004008050BK04-3NL	D0.4*0.8*d0.37*3NL*d4*50L*2F	0.8	3	d4	50L
PEPS2S004008050BK04-4NL	D0.4*0.8*d0.37*4NL*d4*50L*2F	0.8	4	d4	50L
PEPS2S005010050BK04-1.5NL	D0.5*1.0*d0.46*1.5NL*d4*50L*2F	1.0	1.5	d4	50L
PEPS2S005010050BK04-2NL	D0.5*1.0*d0.46*2NL*d4*50L*2F	1.0	2	d4	50L
PEPS2S005010050BK04-3NL	D0.5*1.0*d0.46*3NL*d4*50L*2F	1.0	3	d4	50L
PEPS2S005010050BK04-4NL	D0.5*1.0*d0.46*4NL*d4*50L*2F	1.0	4	d4	50L
PEPS2S005010050BK04-6NL	D0.5*1.0*d0.46*6NL*d4*50L*2F	1.0	6	d4	50L

⊙非常适合 very suitable ○适合 suitable

可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS																	
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 cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic							
预硬钢 Pre-hardened steel		工具钢 Tool steel										球墨铸铁 Nodular cast iron																			
~40HRC				~45HRC				~55HRC				~60HRC				~65HRC				~35HRC				~350HB							
◎				◎				◎												○				○							

⊙非常适合 very suitable ○适合 suitable

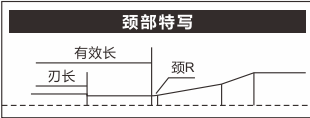
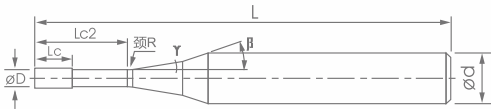
可切削材料适用表														TABLE OF RECOMMENDED MILLING MATERIALS													
碳素钢 Carbon steel		合金钢 alloy steel		预硬钢、淬硬钢 Pre-hardened steel, hardened steel						不锈钢 stainless steel		铸铁 cast iron		铜合金 Copper alloy		铝合金 Aluminum alloy		石墨 Graphite		钛合金 Titanium alloy		耐热合金 Heat resistant alloy		塑料 plastic			
预硬钢 Pre-hardened steel		工具钢 Tool steel										球墨铸铁 Nodular cast iron															
~40HRC				~45HRC		~55HRC		~60HRC		~65HRC		~35HRC		~350HB													
◎				◎		◎						○		○								○		○		○	

PS-2S-NL

2刃涂层小径深沟平头立铣刀

2-Flute Coated Small Diameter Deep Groove Flat End Mill

øD	0,2≤D<1	1≤D<4	-	-
	0~-0,008	0~-0,010	-	-
	-	-	-	-



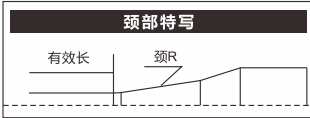
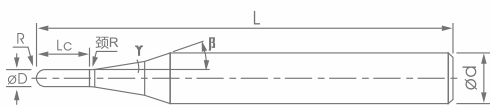
物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPS2S006012050BK04-2NL	D0.6*1.2*d0.56*2NL*d4*50L*2F	1.2	2	d4	50L
PEPS2S006012050BK04-3NL	D0.6*1.2*d0.56*3NL*d4*50L*2F	1.2	3	d4	50L
PEPS2S006012050BK04-4NL	D0.6*1.2*d0.56*4NL*d4*50L*2F	1.2	4	d4	50L
PEPS2S006012050BK04-6NL	D0.6*1.2*d0.56*6NL*d4*50L*2F	1.2	6	d4	50L
PEPS2S008016050BK04-3NL	D0.8*1.6*d0.76*3NL*d4*50L*2F	1.6	3	d4	50L
PEPS2S008016050BK04-4NL	D0.8*1.6*d0.76*4NL*d4*50L*2F	1.6	4	d4	50L
PEPS2S008016050BK04-6NL	D0.8*1.6*d0.76*6NL*d4*50L*2F	1.6	6	d4	50L
PEPS2S008016050BK04-8NL	D0.8*1.6*d0.76*8NL*d4*50L*2F	1.6	8	d4	50L
PEPS2S010020050BK04-3NL	D1*2*0.95*3NL*d4*50L*2F	2	3	d4	50L
PEPS2S010020050BK04-4NL	D1*2*0.95*4NL*d4*50L*2F	2	4	d4	50L
PEPS2S010020050BK04-5NL	D1*2*0.95*5NL*d4*50L*2F	2	5	d4	50L
PEPS2S010020050BK04-6NL	D1*2*0.95*6NL*d4*50L*2F	2	6	d4	50L
PEPS2S010020050BK04-8NL	D1*2*0.95*8NL*d4*50L*2F	2	8	d4	50L
PEPS2S010020050BK04-10NL	D1*2*0.95*10NL*d4*50L*2F	2	10	d4	50L
PEPS2S010020050BK04-12NL	D1*2*0.95*12NL*d4*50L*2F	2	12	d4	50L

PS-2B

2刃涂层小径球头立铣刀

2-Flute Coated Small Diameter Ball End Mill

øD	0,2≤D<1	1≤D<4	-	-
	0~-0,008	0~-0,010	-	-
R	0~-0,004	0~-0,005	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPS2B002004050BE04	D0.2*R0.1*0.4*d4*50L*2F	0.4	/	d4	50L
PEPS2B003006050BE04	D0.3*R0.15*0.6*d4*50L*2F	0.6	/	d4	50L
PEPS2B004008050BE04	D0.4*R0.2*0.8*d4*50L*2F	0.8	/	d4	50L
PEPS2B005010050BE04	D0.5*R0.25*1.0*d4*50L*2F	1.0	/	d4	50L
PEPS2B006015050BE04	D0.6*R0.3*1.5*d4*50L*2F	1.5	/	d4	50L
PEPS2B008016050BE04	D0.8*R0.4*1.6*d4*50L*2F	1.6	/	d4	50L

○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel	~40HRC	~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB					
○		○	○				○	○			○	○	○

○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

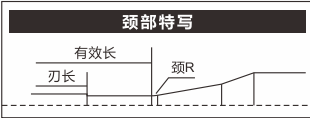
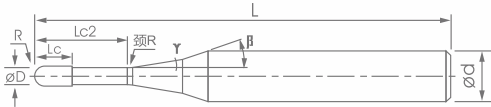
碳素钢 Carbon steel	合金钢 alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel	~40HRC	~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB					
○		○	○	○			○	○			○	○	○

PS-2B-NL

2刃涂层小径深沟球头立铣刀

2-Flute Coated Small Diameter Deep Groove Ball End Mill

øD	0,2≤D<1	1≤D<4	-	-
	0~-0,008	0~-0,010	-	-
R	0~-0,004	0~-0,005	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPS2B002001050BE04-0,5NL	D0,2*R0,1*0,3*d0,18*0,5NL*d4*50L*2F	0,3	0,5	d4	50L
PEPS2B002001050BE04-1NL	D0,2*R0,1*0,3*d0,18*1NL*d4*50L*2F	0,3	1	d4	50L
PEPS2B002001050BE04-1,5NL	D0,2*R0,1*0,3*d0,18*1,5NL*d4*50L*2F	0,3	1,5	d4	50L
PEPS2B003002050BE04-1NL	D0,3*R0,15*0,45*d0,28*1NL*d4*50L*2F	0,45	1	d4	50L
PEPS2B003002050BE04-1,5NL	D0,3*R0,15*0,45*d0,28*1,5NL*d4*50L*2F	0,45	1,5	d4	50L
PEPS2B003002050BE04-2NL	D0,3*R0,15*0,45*d0,28*2NL*d4*50L*2F	0,45	2	d4	50L
PEPS2B004003050BE04-1NL	D0,4*R0,2*0,6*d0,37*1NL*d4*50L*2F	0,6	1	d4	50L
PEPS2B004003050BE04-2NL	D0,4*R0,2*0,6*d0,37*2NL*d4*50L*2F	0,6	2	d4	50L
PEPS2B004003050BE04-3NL	D0,4*R0,2*0,6*d0,37*3NL*d4*50L*2F	0,6	3	d4	50L
PEPS2B004003050BE04-4NL	D0,4*R0,2*0,6*d0,37*4NL*d4*50L*2F	0,6	4	d4	50L
PEPS2B005003050BE04-2NL	D0,5*R0,25*0,75*d0,46*2NL*d4*50L*2F	0,75	2	d4	50L
PEPS2B005003050BE04-3NL	D0,5*R0,25*0,75*d0,46*3NL*d4*50L*2F	0,75	3	d4	50L
PEPS2B005003050BE04-4NL	D0,5*R0,25*0,75*d0,46*4NL*d4*50L*2F	0,75	4	d4	50L
PEPS2B005003050BE04-5NL	D0,5*R0,25*0,75*d0,46*5NL*d4*50L*2F	0,75	5	d4	50L
PEPS2B006004050BE04-2NL	D0,6*R0,3*0,9*d0,56*2NL*d4*50L*2F	0,9	2	d4	50L



○非常适合 very suitable ○适合 suitable

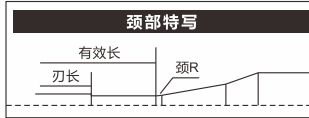
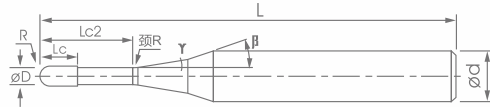
可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS											
碳素钢 Carbon steel	合金钢 alloy steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron				耐热合金 Heat resistant alloy
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB				
○		○	○			○	○			○	○

PS-2B-NL

2刃涂层小径深沟球头立铣刀

2-Flute Coated Small Diameter Deep Groove Ball End Mill

øD	0,2≤D<1	1≤D<4	-	-
	0~-0,008	0~-0,010	-	-
R	0~-0,004	0~-0,005	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEPS2B006004050BE04-3NL	D0,6*R0,3*0,9*d0,56*3NL*d4*50L*2F	0,9	3	d4	50L
PEPS2B006004050BE04-4NL	D0,6*R0,3*0,9*d0,56*4NL*d4*50L*2F	0,9	4	d4	50L
PEPS2B006004050BE04-5NL	D0,6*R0,3*0,9*d0,56*5NL*d4*50L*2F	0,9	5	d4	50L
PEPS2B006004050BE04-6NL	D0,6*R0,3*0,9*d0,56*6NL*d4*50L*2F	0,9	6	d4	50L
PEPS2B008006050BE04-3NL	D0,8*R0,4*1,2*d0,76*3NL*d4*50L*2F	1,2	3	d4	50L
PEPS2B008006050BE04-4NL	D0,8*R0,4*1,2*d0,76*4NL*d4*50L*2F	1,2	4	d4	50L
PEPS2B008006050BE04-6NL	D0,8*R0,4*1,2*d0,76*6NL*d4*50L*2F	1,2	6	d4	50L
PEPS2B008006050BE04-8NL	D0,8*R0,4*1,2*d0,76*8NL*d4*50L*2F	1,2	8	d4	50L
PEPS2B010007050BE04-3NL	D1,0*R0,5*1,5*d0,95*3NL*d4*50L*2F	1,5	3	d4	50L
PEPS2B010007050BE04-4NL	D1,0*R0,5*1,5*d0,95*4NL*d4*50L*2F	1,5	4	d4	50L
PEPS2B010007050BE04-5NL	D1,0*R0,5*1,5*d0,95*5NL*d4*50L*2F	1,5	5	d4	50L
PEPS2B010007050BE04-6NL	D1,0*R0,5*1,5*d0,95*6NL*d4*50L*2F	1,5	6	d4	50L
PEPS2B010007050BE04-8NL	D1,0*R0,5*1,5*d0,95*8NL*d4*50L*2F	1,5	8	d4	50L
PEPS2B010007050BE04-10NL	D1,0*R0,5*1,5*d0,95*10NL*d4*50L*2F	1,5	10	d4	50L
PEPS2B010007050BE04-12NL	D1,0*R0,5*1,5*d0,95*12NL*d4*50L*2F	1,5	12	d4	50L



○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS											
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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron				耐热合金 Heat resistant alloy
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB				
○		○	○			○	○			○	○

XJ 系列

铝用小径高精度系列

Small diameter high precision series for aluminum



特点描述 | CHARACTERISTIC DESCRIPTION

- 01 适用精密铝材加工
Suitable for precision aluminum processing
- 02 采用锋利的切削刃，防止铝材特有的积屑瘤
Use sharp cutting edges to prevent the unique built-up edge of aluminum
- 03 切削性能优异，无振颤，可实现高精度加工
Excellent cutting performance, no chatter, high precision machining can be achieved
- 04 高精度的刃径、球头轮廓、圆弧轮廓尺寸管控
High-precision size control of blade diameter, ball profile, and arc profile

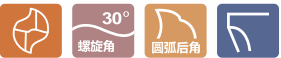
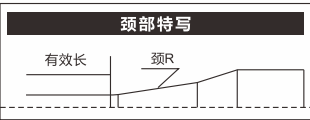
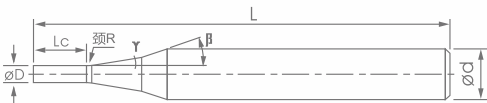
铝用小径高精度系列

Small diameter high precision series for aluminum

XJ-2S

2刃铝用小径平头立铣刀

2-Flute Aluminum Small Diameter Flat End Mill



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEXJ2S002004050CK04	D0.2*0.4*d4*50L*2F	0.4	/	d4	50L
PEXJ2S003006050CK04	D0.3*0.6*d4*50L*2F	0.6	/	d4	50L
PEXJ2S004008050CK04	D0.4*0.8*d4*50L*2F	0.8	/	d4	50L
PEXJ2S005010050CK04	D0.5*1.0*d4*50L*2F	1.0	/	d4	50L
PEXJ2S006012050CK04	D0.6*1.2*d4*50L*2F	1.2	/	d4	50L
PEXJ2S008016050CK04	D0.8*1.6*d4*50L*2F	1.6	/	d4	50L



○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

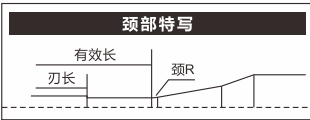
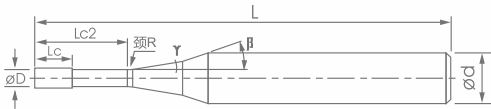
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 Cast iron 球墨铸铁 Nodular cast iron ~350HB	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC							
								○	○				○

XJ-2S-NL

2刃铝用小径深沟平头立铣刀

2-Flute Aluminum Small Diameter Deep Groove Flat End Mill

øD	0.2≤D<1	1≤D<4	-	-
	0~-0.008	0~-0.010	-	-
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEXJ2S002004050CK04-0.5NL	D0.2*0.4*d0.18*0.5NL*d4*50L*2F	0.4	0.5	d4	50L
PEXJ2S002004050CK04-1NL	D0.2*0.4*d0.18*1NL*d4*50L*2F	0.4	1	d4	50L
PEXJ2S002004050CK04-1.5NL	D0.2*0.4*d0.18*1.5NL*d4*50L*2F	0.4	1.5	d4	50L
PEXJ2S003006050CK04-1NL	D0.3*0.6*d0.28*1NL*d4*50L*2F	0.6	1	d4	50L
PEXJ2S003006050CK04-1.5NL	D0.3*0.6*d0.28*1.5NL*d4*50L*2F	0.6	1.5	d4	50L
PEXJ2S003006050CK04-2NL	D0.3*0.6*d0.28*2NL*d4*50L*2F	0.6	2	d4	50L
PEXJ2S004008050CK04-1NL	D0.4*0.8*d0.37*1NL*d4*50L*2F	0.8	1	d4	50L
PEXJ2S004008050CK04-2NL	D0.4*0.8*d0.37*2NL*d4*50L*2F	0.8	2	d4	50L
PEXJ2S004008050CK04-3NL	D0.4*0.8*d0.37*3NL*d4*50L*2F	0.8	3	d4	50L
PEXJ2S004008050CK04-4NL	D0.4*0.8*d0.37*4NL*d4*50L*2F	0.8	4	d4	50L
PEXJ2S005010050CK04-1.5NL	D0.5*1.0*d0.46*1.5NL*d4*50L*2F	1.0	1.5	d4	50L
PEXJ2S005010050CK04-2NL	D0.5*1.0*d0.46*2NL*d4*50L*2F	1.0	2	d4	50L
PEXJ2S005010050CK04-3NL	D0.5*1.0*d0.46*3NL*d4*50L*2F	1.0	3	d4	50L
PEXJ2S005010050CK04-4NL	D0.5*1.0*d0.46*4NL*d4*50L*2F	1.0	4	d4	50L
PEXJ2S005010050CK04-6NL	D0.5*1.0*d0.46*6NL*d4*50L*2F	1.0	6	d4	50L



○非常适合 very suitable ○适合 suitable

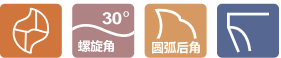
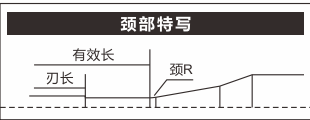
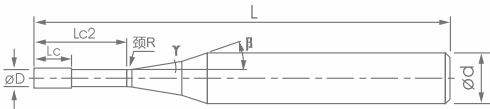
可切削材料适用表		TABLE OF RECOMMENDED MILLING MATERIALS											
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
								○	○				○

XJ-2S-NL

2刃铝用小径深沟平头立铣刀

2-Flute Aluminum Small Diameter Deep Groove Flat End Mill

øD	0.2≤D<1	1≤D<4	-	-
	0~-0.008	0~-0.010	-	-
	-	-	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEXJ2S006012050CK04-2NL	D0.6*1.2*d0.56*2NL*d4*50L*2F	1.2	2	d4	50L
PEXJ2S006012050CK04-3NL	D0.6*1.2*d0.56*3NL*d4*50L*2F	1.2	3	d4	50L
PEXJ2S006012050CK04-4NL	D0.6*1.2*d0.56*4NL*d4*50L*2F	1.2	4	d4	50L
PEXJ2S006012050CK04-6NL	D0.6*1.2*d0.56*6NL*d4*50L*2F	1.2	6	d4	50L
PEXJ2S008016050CK04-3NL	D0.8*1.6*d0.76*3NL*d4*50L*2F	1.6	3	d4	50L
PEXJ2S008016050CK04-4NL	D0.8*1.6*d0.76*4NL*d4*50L*2F	1.6	4	d4	50L
PEXJ2S008016050CK04-6NL	D0.8*1.6*d0.76*6NL*d4*50L*2F	1.6	6	d4	50L
PEXJ2S008016050CK04-8NL	D0.8*1.6*d0.76*8NL*d4*50L*2F	1.6	8	d4	50L
PEXJ2S010020050CK04-3NL	D1*2*d0.95*3NL*d4*50L*2F	2	3	d4	50L
PEXJ2S010020050CK04-4NL	D1*2*d0.95*4NL*d4*50L*2F	2	4	d4	50L
PEXJ2S010020050CK04-5NL	D1*2*d0.95*5NL*d4*50L*2F	2	5	d4	50L
PEXJ2S010020050CK04-6NL	D1*2*d0.95*6NL*d4*50L*2F	2	6	d4	50L
PEXJ2S010020050CK04-8NL	D1*2*d0.95*8NL*d4*50L*2F	2	8	d4	50L
PEXJ2S010020050CK04-10NL	D1*2*d0.95*10NL*d4*50L*2F	2	10	d4	50L
PEXJ2S010020050CK04-12NL	D1*2*d0.95*12NL*d4*50L*2F	2	12	d4	50L



○非常适合 very suitable ○适合 suitable

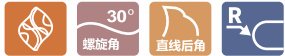
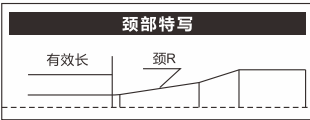
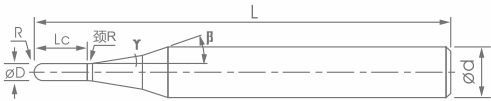
可切削材料适用表		TABLE OF RECOMMENDED MILLING MATERIALS											
碳素钢 Carbon steel 预硬钢 Pre-hardened steel	合金钢 alloy steel 工具钢 Tool steel	预硬钢、淬硬钢 Pre-hardened steel, hardened steel				不锈钢 stainless steel	铸铁 cast iron 球墨铸铁 Nodular cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
								⊙	⊙				○

XJ-2B

2刃铝用小径球头立铣刀

2-Flute Aluminum Small Diameter Ball End Mill

ϕD	$0.2 \leq D < 1$	$1 \leq D < 4$	-	-
R	$0 \sim -0.008$	$0 \sim -0.010$	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEXJ2B002004050CK04	D0.2*R0.1*0.4*d4*50L*2F	0.4	/	d4	50L
PEXJ2S003006050CK04	D0.3*R0.15*0.6*d4*50L*2F	0.6	/	d4	50L
PEXJ2S004008050CK04	D0.4*R0.2*0.8*d4*50L*2F	0.8	/	d4	50L
PEXJ2S005010050CK04	D0.5*R0.25*1.0*d4*50L*2F	1.0	/	d4	50L
PEXJ2S006012050CK04	D0.6*R0.3*1.2*d4*50L*2F	1.2	/	d4	50L
PEXJ2S008016050CK04	D0.8*R0.4*1.6*d4*50L*2F	1.6	/	d4	50L

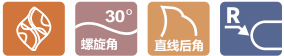
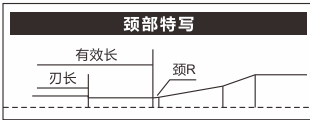
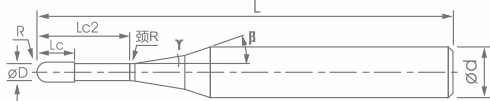


XJ-2B-NL

2刃铝用小径深沟球头立铣刀

2-Flute Aluminum Small Diameter Deep Groove Ball End Mill

ϕD	$0.2 \leq D < 1$	$1 \leq D < 4$	-	-
R	$0 \sim -0.008$	$0 \sim -0.010$	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEXJ2B002001050CK04-0.5NL	D0.2*R0.1*0.15*d0.18*0.5NL*d4*50L*2F	0.15	0.5	d4	50L
PEXJ2B002001050CK04-1NL	D0.2*R0.1*0.15*d0.18*1NL*d4*50L*2F	0.15	1	d4	50L
PEXJ2B002001050CK04-1.5NL	D0.2*R0.1*0.15*d0.18*1.5NL*d4*50L*2F	0.15	1.5	d4	50L
PEXJ2B003002050CK04-1NL	D0.3*R0.15*0.2*d0.28*1NL*d4*50L*2F	0.2	1	d4	50L
PEXJ2B003002050CK04-1.5NL	D0.3*R0.15*0.2*d0.28*1.5NL*d4*50L*2F	0.2	1.5	d4	50L
PEXJ2B003002050CK04-2NL	D0.3*R0.15*0.2*d0.28*2NL*d4*50L*2F	0.2	2	d4	50L
PEXJ2B004003050CK04-1NL	D0.4*R0.2*0.3*d0.37*1NL*d4*50L*2F	0.3	1	d4	50L
PEXJ2B004003050CK04-2NL	D0.4*R0.2*0.3*d0.37*2NL*d4*50L*2F	0.3	2	d4	50L
PEXJ2B004003050CK04-3NL	D0.4*R0.2*0.3*d0.37*3NL*d4*50L*2F	0.3	3	d4	50L
PEXJ2B004003050CK04-4NL	D0.4*R0.2*0.3*d0.37*4NL*d4*50L*2F	0.3	4	d4	50L
PEXJ2B005003050CK04-2NL	D0.5*R0.25*0.35*d0.46*2NL*d4*50L*2F	0.35	2	d4	50L
PEXJ2B005003050CK04-3NL	D0.5*R0.25*0.35*d0.46*3NL*d4*50L*2F	0.35	3	d4	50L
PEXJ2B005003050CK04-4NL	D0.5*R0.25*0.35*d0.46*4NL*d4*50L*2F	0.35	4	d4	50L
PEXJ2B005003050CK04-5NL	D0.5*R0.25*0.35*d0.46*5NL*d4*50L*2F	0.35	5	d4	50L
PEXJ2B006004050CK04-2NL	D0.6*R0.3*0.45*d0.56*2NL*d4*50L*2F	0.45	2	d4	50L



○非常适合 very suitable ○适合 suitable

可切削材料适用表

TABLE OF RECOMMENDED MILLING MATERIALS

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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB	○	○				○

○非常适合 very suitable ○适合 suitable

可切削材料适用表

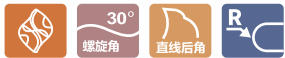
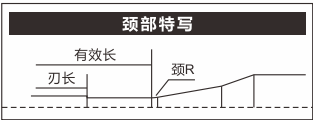
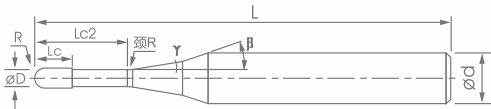
TABLE OF RECOMMENDED MILLING MATERIALS

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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB	○	○				○

XJ-2B-NL

2刃铝用小径深沟球头立铣刀
2-Flute Aluminum Small Diameter Deep Groove Ball End Mill

øD	0,2≤D<1	1≤D<4	-	-
	0~-0,008	0~-0,010	-	-
R	0~-0,004	0~-0,005	-	-



物料编码 Material coding	规格 Specification	刃长 Lc	有效长 El	柄径 d	全长 L
PEXJ2B006004050CK04-3NL	D0.6*R0.3*0.45*d0.56*3NL*d4*50L*2F	0.45	3	d4	50L
PEXJ2B006004050CK04-4NL	D0.6*R0.3*0.45*d0.56*4NL*d4*50L*2F	0.45	4	d4	50L
PEXJ2B006004050CK04-5NL	D0.6*R0.3*0.45*d0.56*5NL*d4*50L*2F	0.45	5	d4	50L
PEXJ2B006004050CK04-6NL	D0.6*R0.3*0.45*d0.56*6NL*d4*50L*2F	0.45	6	d4	50L
PEXJ2B008006050CK04-3NL	D0.8*R0.4*0.6*d0.76*3NL*d4*50L*2F	0.6	3	d4	50L
PEXJ2B008006050CK04-4NL	D0.8*R0.4*0.6*d0.76*4NL*d4*50L*2F	0.6	4	d4	50L
PEXJ2B008006050CK04-6NL	D0.8*R0.4*0.6*d0.76*6NL*d4*50L*2F	0.6	6	d4	50L
PEXJ2B008006050CK04-8NL	D0.8*R0.4*0.6*d0.76*8NL*d4*50L*2F	0.6	8	d4	50L
PEXJ2B010007050CK04-3NL	D1.0*R0.5*0.75*d0.95*3NL*d4*50L*2F	0.75	3	d4	50L
PEXJ2B010007050CK04-4NL	D1.0*R0.5*0.75*d0.95*4NL*d4*50L*2F	0.75	4	d4	50L
PEXJ2B010007050CK04-5NL	D1.0*R0.5*0.75*d0.95*5NL*d4*50L*2F	0.75	5	d4	50L
PEXJ2B010007050CK04-6NL	D1.0*R0.5*0.75*d0.95*6NL*d4*50L*2F	0.75	6	d4	50L
PEXJ2B010007050CK04-8NL	D1.0*R0.5*0.75*d0.95*8NL*d4*50L*2F	0.75	8	d4	50L
PEXJ2B010007050CK04-10NL	D1.0*R0.5*0.75*d0.95*10NL*d4*50L*2F	0.75	10	d4	50L
PEXJ2B010007050CK04-12NL	D1.0*R0.5*0.75*d0.95*12NL*d4*50L*2F	0.75	12	d4	50L



非标刀具系列

Non standard tool series



石墨刀 | Graphite knife

- 01 高精度的尺寸管控，高刚性的刀具结构设计。
High precision dimension control and high rigidity tool structure design.
- 02 采用高钝度金刚石涂层，特殊的预处理工艺，具有良好高附着，卓越的耐磨性。
With high blunt diamond coating and special pretreatment process, it has good high adhesion and excellent wear resistance.
- 03 适用于石墨电极、石墨制品等石墨工件的半精加工和精加工。
It is suitable for semi finishing and finishing of graphite workpieces such as graphite electrodes and graphite products.

钻头 | DRILLING BIT

- 01 适用于普通钢、铸件、不锈钢、有色金属加工
It is applicable to the processing of ordinary steel, castings, stainless steel and non-ferrous metals.
- 02 曲线型切削刃，切削力更好，强度高
Curved cutting edge, better cutting force and high strength.
- 03 纳米级新型涂层，卓越的耐磨性和耐高温性能
Nano scale new coating, excellent wear resistance and high temperature resistance.

模架刀 | MOLD BASE KNIFE

- 01 高精度的刃口垂直度，适用于工件沟槽和深侧壁精加工
High precision blade perpendicularity, suitable for workpiece groove and deep side wall finishing.
- 02 专业的涂层后处理技术，加工表面质量更优
Professional coating post-treatment technology, better processing surface quality.
- 03 独特的刃型设计，能够有效防止振动
The unique blade design can effectively prevent vibration.

○非常适合 very suitable ○适合 suitable

可切削材料适用表 TABLE OF RECOMMENDED MILLING MATERIALS

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 cast iron	铜合金 Copper alloy	铝合金 Aluminum alloy	石墨 Graphite	钛合金 Titanium alloy	耐热合金 Heat resistant alloy	塑料 plastic
预硬钢 Pre-hardened steel	工具钢 Tool steel						球墨铸铁 Nodular cast iron						
~40HRC		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
								○	○				○

GM-4S/4R/4S-L/4R-L

钢件、铸铁——侧铣

Steel, cast iron - side milling

工作材料 Working materials		Vc m/min	刃径 (mm)	3			4			6			8			10			12			16			20		
P	碳合金钢 (<35HRC)	190	转速 (min-1)	20170	ap≤	4.5	15127	ap≤	6	10085	ap≤	9	7564	ap≤	12	6051	ap≤	15	5042	ap≤	18	3782	ap≤	24	3025	ap≤	30
			进给速度 (mm/min)	1775	ae≤	0.45	1936	ae≤	0.6	1815	ae≤	0.9	1815	ae≤	1.2	1888	ae≤	1.5	1714	ae≤	1.8	1664	ae≤	2.4	1694	ae≤	3
	合金钢 (35-45HRC)	140	转速 (min-1)	14862	ap≤	3	11146	ap≤	4	7431	ap≤	6	5573	ap≤	8	4459	ap≤	10	3715	ap≤	12	2787	ap≤	16	2229	ap≤	20
			进给速度 (mm/min)	1189	ae≤	0.36	1115	ae≤	0.48	1011	ae≤	0.72	1248	ae≤	0.96	1159	ae≤	1.2	1040	ae≤	1.44	869	ae≤	1.92	758	ae≤	2.4
M	不锈钢	140	转速 (min-1)	14862	ap≤	4.5	11146	ap≤	6	7431	ap≤	9	5573	ap≤	12	4459	ap≤	15	3715	ap≤	18	2787	ap≤	24	2229	ap≤	30
			进给速度 (mm/min)	1367	ae≤	0.45	1338	ae≤	0.6	1189	ae≤	0.9	1338	ae≤	1.2	1248	ae≤	1.5	1189	ae≤	1.8	1003	ae≤	2.4	892	ae≤	3
	灰铸铁 球墨铸铁 (<32HRC)	170	转速 (min-1)	18047	ap≤	4.5	13535	ap≤	6	9023	ap≤	9	6768	ap≤	12	5414	ap≤	15	4512	ap≤	18	3384	ap≤	24	2707	ap≤	30
			进给速度 (mm/min)	1805	ae≤	0.45	1624	ae≤	0.6	1624	ae≤	0.9	1489	ae≤	1.2	1408	ae≤	1.5	1408	ae≤	1.8	1218	ae≤	2.4	1083	ae≤	3
K	高合金铸铁 (35-45HRC)	150	转速 (min-1)	15924	ap≤	3	11943	ap≤	4	7962	ap≤	6	5971	ap≤	8	4777	ap≤	10	3981	ap≤	12	2986	ap≤	16	2389	ap≤	20
			进给速度 (mm/min)	1274	ae≤	0.36	1338	ae≤	0.48	1274	ae≤	0.72	1242	ae≤	0.96	1185	ae≤	1.2	1115	ae≤	1.44	1015	ae≤	1.92	879	ae≤	2.4

GM-2B/2B-L

钢件、铸铁——仿形铣

Steel, cast iron - Profiling milling

工作材料 Working materials		Vc m/min	刃径 (mm)	4			5			6			8			10			12			16			20		
P	碳合金钢 (<35HRC)	170	转速 (min-1)	13535	ap≤	0.8	10828	ap≤	1	9023	ap≤	1.2	6768	ap≤	1.6	5414	ap≤	2	4512	ap≤	2.4	3384	ap≤	3.2	2707	ap≤	4
			进给速度 (mm/min)	975	ae≤	1.2	996	ae≤	1.5	1011	ae≤	1.8	1056	ae≤	2.4	1029	ae≤	3	993	ae≤	3.6	812	ae≤	4.8	704	ae≤	6
	合金钢 (35-45HRC)	130	转速 (min-1)	10350	ap≤	0.6	8280	ap≤	0.75	6900	ap≤	0.9	5175	ap≤	1.2	4140	ap≤	1.5	3450	ap≤	1.8	2588	ap≤	2.4	2070	ap≤	3
			进给速度 (mm/min)	621	ae≤	0.6	497	ae≤	0.75	690	ae≤	0.9	642	ae≤	1.2	646	ae≤	1.5	621	ae≤	1.8	518	ae≤	2.4	414	ae≤	3
M	不锈钢	120	转速 (min-1)	9554	ap≤	0.8	7643	ap≤	1	6369	ap≤	1.2	4777	ap≤	1.6	3822	ap≤	2	3185	ap≤	2.4	2389	ap≤	3.2	1911	ap≤	4
			进给速度 (mm/min)	573	ae≤	0.8	642	ae≤	1	662	ae≤	1.2	669	ae≤	1.6	650	ae≤	2	669	ae≤	2.4	545	ae≤	3.2	470	ae≤	4
	灰铸铁 球墨铸铁 (<32HRC)	150	转速 (min-1)	11943	ap≤	0.8	9554	ap≤	1	7962	ap≤	1.2	5971	ap≤	1.6	4777	ap≤	2	3981	ap≤	2.4	2986	ap≤	3.2	2389	ap≤	4
			进给速度 (mm/min)	717	ae≤	0.8	803	ae≤	1	828	ae≤	1.2	836	ae≤	1.6	812	ae≤	2	836	ae≤	2.4	687	ae≤	3.2	573	ae≤	4
K	高合金铸铁 (35-45HRC)	130	转速 (min-1)	10350	ap≤	0.4	8280	ap≤	0.5	6900	ap≤	0.6	5175	ap≤	0.8	4140	ap≤	1	3450	ap≤	1.2	2588	ap≤	1.6	2070	ap≤	2
			进给速度 (mm/min)	580	ae≤	0.4	662	ae≤	0.5	690	ae≤	0.6	693	ae≤	0.8	662	ae≤	1	690	ae≤	1.2	569	ae≤	1.6	497	ae≤	2

GM-2S

钢件、铸铁——侧铣

Steel, cast iron - side milling

工作材料 Working materials		Vc m/min	刃径 (mm)	3			4			6			8			10			12			16			20		
P	碳合金钢 (<35HRC)	190	转速 (min-1)	20170	ap≤	4.5	15127	ap≤	6	10085	ap≤	9	7564	ap≤	12	6051	ap≤	15	5042	ap≤	18	3782	ap≤	24	3025	ap≤	30
			进给速度 (mm/min)	928	ae≤	0.45	1059	ae≤	0.6	847	ae≤	0.9	908	ae≤	1.2	871	ae≤	1.5	857	ae≤	1.8	870	ae≤	2.4	847	ae≤	3
	合金钢 (35-45HRC)	140	转速 (min-1)	14862	ap≤	3	11146	ap≤	4	7431	ap≤	6	5573	ap≤	8	4459	ap≤	10	3715	ap≤	12	2787	ap≤	16	2229	ap≤	20
			进给速度 (mm/min)	594	ae≤	0.36	513	ae≤	0.48	520	ae≤	0.72	613	ae≤	0.96	553	ae≤	1.2	520	ae≤	1.44	446	ae≤	1.92	401	ae≤	2.4
M	不锈钢	140	转速 (min-1)	14862	ap≤	4.5	11146	ap≤	6	7431	ap≤	9	5573	ap≤	12	4459	ap≤	15	3715	ap≤	18	2787	ap≤	24	2229	ap≤	30
			进给速度 (mm/min)	654	ae≤	0.45	669	ae≤	0.6	594	ae≤	0.9	669	ae≤	1.2	624	ae≤	1.5	609	ae≤	1.8	518	ae≤	2.4	446	ae≤	3
	灰铸铁 球墨铸铁 (<32HRC)	170	转速 (min-1)	18047	ap≤	4.5	13535	ap≤	6	9023	ap≤	9	6768	ap≤	12	5414	ap≤	15	4512	ap≤	18	3384	ap≤	24	2707	ap≤	30
			进给速度 (mm/min)	812	ae≤	0.45	758	ae≤	0.6	758	ae≤	0.9	758	ae≤	1.2	671	ae≤	1.5	704	ae≤	1.8	623	ae≤	2.4	596	ae≤	3
K	高合金铸铁 (35-45HRC)	150	转速 (min-1)	15924	ap≤	3	11943	ap≤	4	7962	ap≤	6	5971	ap≤	8	4777	ap≤	10	3981	ap≤	12	2986	ap≤	16	2389	ap≤	20
			进给速度 (mm/min)	637	ae≤	0.36	621	ae≤	0.48	637	ae≤	0.72	621	ae≤	0.96	573	ae≤	1.2	573	ae≤	1.44	514	ae≤	1.92	482	ae≤	2.4

GM-2S

钢件、铸铁——槽铣

Steel, cast iron - Slot milling

工作材料 Working materials		Vc m/min	刃径 (mm)	3			4			6			8			10			12			16			20		
P	碳合金钢 (<35HRC)	100	转速 (min-1)	10616	ap≤	2.4	7962	ap≤	3.2	5308	ap≤	4.8	3981	ap≤	6.4	3185	ap≤	8	2654	ap≤	9.6	1990	ap≤	12.8	1592	ap≤	16
			进给速度 (mm/min)	425	ae≤	3	478	ae≤	4	425	ae≤	6	438	ae≤	8	414	ae≤	10	403	ae≤	12	398	ae≤	16	414	ae≤	20
	合金钢 (35-45HRC)	80	转速 (min-1)	8493	ap≤	0.9	6369	ap≤	1.2	4246	ap≤	1.8	3185	ap≤	2.4	2548	ap≤	3	2123	ap≤	3.6	1592	ap≤	4.8	1274	ap≤	6
			进给速度 (mm/min)	255	ae≤	3	318	ae≤	4	255	ae≤	6	255	ae≤	8	260	ae≤	10	263	ae≤	12	271	ae≤	16	255	ae≤	20
M	不锈钢	75	转速 (min-1)	7962	ap≤	0.9	5971	ap≤	1.2	3981	ap≤	1.8	2986	ap≤	2.4	2389	ap≤	3	1990	ap≤	3.6	1493	ap≤	4.8	1194	ap≤	6
			进给速度 (mm/min)	159	ae≤	3	179	ae≤	4	239	ae≤	6	245	ae≤	8	239	ae≤	10	243	ae≤	12	200	ae≤	16	203	ae≤	20
	灰铸铁 球墨铸铁 (<32HRC)	75	转速 (min-1)	7962	ap≤	1.5	5971	ap≤	2	3981	ap≤	3	2986	ap≤	4	2389	ap≤	5	1990	ap≤	6	1493	ap≤	8	1194	ap≤	10
			进给速度 (mm/min)	207	ae≤	3	275	ae≤	4	318	ae≤	6	299	ae≤	8	263	ae≤	10	239	ae≤	12	233	ae≤	16	215	ae≤	20
K	高合金铸铁 (35-45HRC)	65	转速 (min-1)	6900	ap≤	0.9	5175	ap≤	1.2	3450	ap≤	1.8	2588	ap≤	2.4	2070	ap≤	3	1725	ap≤	3.6	1294	ap≤	4.8	1035	ap≤	6
			进给速度 (mm/min)	166	ae≤	3	207	ae≤	4	214	ae≤	6	207	ae≤	8	207	ae≤	10	207	ae≤	12	186	ae≤	16	166	ae≤	20

注意 | BE CAREFUL

- 1.请配合使用较高的刚性机床和刀柄。
- 2.请侧铣加工时,建议顺铣加工。
- 3.请根据切削速度,设备刚性等因素,适当调整转速和进给速度。
- 4.图表中数据是按照刀具伸长为直径3倍以下时所制作的,若刀具伸出刀柄过长,加工会振动和异常现象,此时应相对降低转速,进给速度和吃深量。
- 5.在不干涉工件的条件下,尽可能使刀具伸长量最短。

PM-4S/4R/4S-L/4R-L

钢件、铸铁——侧铣

Steel, cast iron - side milling

工作材料 Working materials		Vc m/min	刃径 (mm)	3			4			6			8			10			12			16			20		
P	碳钢合金钢 (<35HRC)	180	转速 (min-1)	19108	ap≤	4.5	14331	ap≤	6	9554	ap≤	9	7166	ap≤	12	5732	ap≤	15	4777	ap≤	18	3583	ap≤	24	2866	ap≤	30
			进给速度 (mm/min)	2140	ae≤	0.45	2064	ae≤	0.6	1834	ae≤	0.9	1863	ae≤	1.2	1834	ae≤	1.5	1720	ae≤	1.8	1720	ae≤	2.4	1720	ae≤	3
	合金钢 (35-45HRC)	130	转速 (min-1)	13800	ap≤	3	10350	ap≤	4	6900	ap≤	6	5175	ap≤	8	4140	ap≤	10	3450	ap≤	12	2588	ap≤	16	2070	ap≤	20
			进给速度 (mm/min)	1214	ae≤	0.36	1159	ae≤	0.48	1104	ae≤	0.72	1242	ae≤	0.96	1126	ae≤	1.2	1007	ae≤	1.44	828	ae≤	1.92	754	ae≤	2.4
	合金钢 (35-55HRC)	90	转速 (min-1)	9554	ap≤	3	7166	ap≤	4	4777	ap≤	6	3583	ap≤	8	2866	ap≤	10	2389	ap≤	12	1791	ap≤	16	1433	ap≤	20
			进给速度 (mm/min)	459	ae≤	0.12	659	ae≤	0.16	764	ae≤	0.24	903	ae≤	0.32	780	ae≤	0.4	717	ae≤	0.48	573	ae≤	0.64	487	ae≤	0.8
M	不锈钢	130	转速 (min-1)	13800	ap≤	4.5	10350	ap≤	6	6900	ap≤	9	5175	ap≤	12	4140	ap≤	15	3450	ap≤	18	2588	ap≤	24	2070	ap≤	30
			进给速度 (mm/min)	1380	ae≤	0.45	1325	ae≤	0.6	1187	ae≤	0.9	1304	ae≤	1.2	1242	ae≤	1.5	1173	ae≤	1.8	983	ae≤	2.4	911	ae≤	3
	灰铸铁 球墨铸铁 (<32HRC)	160	转速 (min-1)	16985	ap≤	4.5	12739	ap≤	6	8493	ap≤	9	6369	ap≤	12	5096	ap≤	15	4246	ap≤	18	3185	ap≤	24	2548	ap≤	30
			进给速度 (mm/min)	1699	ae≤	0.45	1631	ae≤	0.6	1631	ae≤	0.9	1503	ae≤	1.2	1406	ae≤	1.5	1359	ae≤	1.8	1210	ae≤	2.4	1121	ae≤	3
	高合金铸铁 (35-45HRC)	140	转速 (min-1)	14862	ap≤	3	11146	ap≤	4	7431	ap≤	6	5573	ap≤	8	4459	ap≤	10	3715	ap≤	12	2787	ap≤	16	2229	ap≤	20
			进给速度 (mm/min)	1308	ae≤	0.36	1338	ae≤	0.48	1338	ae≤	0.72	1248	ae≤	0.96	1159	ae≤	1.2	1115	ae≤	1.44	1003	ae≤	1.92	910	ae≤	2.4

PM-2B/2B-L

钢件、铸铁——仿形铣

Steel, cast iron - Profiling milling

工作材料 Working materials		Vc m/min	刃径 (mm)	4			5			6			8			10			12			16			20		
P	碳钢合金钢 (<35HRC)	160	转速 (min-1)	12739	ap≤	0.8	10191	ap≤	1	8493	ap≤	1.2	6369	ap≤	1.6	5096	ap≤	2	4246	ap≤	2.4	3185	ap≤	3.2	2548	ap≤	4
			进给速度 (mm/min)	1019	ae≤	1.2	1019	ae≤	1.5	1019	ae≤	1.8	1019	ae≤	2.4	1019	ae≤	3	1019	ae≤	3.6	828	ae≤	4.8	713	ae≤	6
	合金钢 (35-55HRC)	120	转速 (min-1)	9554	ap≤	0.6	7643	ap≤	0.75	6369	ap≤	0.9	4777	ap≤	1.2	3822	ap≤	1.5	3185	ap≤	1.8	2389	ap≤	2.4	1911	ap≤	3
			进给速度 (mm/min)	611	ae≤	0.6	489	ae≤	0.75	662	ae≤	0.9	621	ae≤	1.2	611	ae≤	1.5	605	ae≤	1.8	492	ae≤	2.4	401	ae≤	3
M	不锈钢	110	转速 (min-1)	8758	ap≤	0.8	7006	ap≤	1	5839	ap≤	1.2	4379	ap≤	1.6	3503	ap≤	2	2919	ap≤	2.4	2189	ap≤	3.2	1752	ap≤	4
			进给速度 (mm/min)	613	ae≤	0.8	631	ae≤	1	642	ae≤	1.2	631	ae≤	1.6	631	ae≤	2	642	ae≤	2.4	521	ae≤	3.2	448	ae≤	4
	灰铸铁 球墨铸铁 (<32HRC)	140	转速 (min-1)	11146	ap≤	0.8	8917	ap≤	1	7431	ap≤	1.2	5573	ap≤	1.6	4459	ap≤	2	3715	ap≤	2.4	2787	ap≤	3.2	2229	ap≤	4
			进给速度 (mm/min)	780	ae≤	0.8	803	ae≤	1	817	ae≤	1.2	803	ae≤	1.6	803	ae≤	2	817	ae≤	2.4	669	ae≤	3.2	580	ae≤	4
K	高合金铸铁 (35-45HRC)	120	转速 (min-1)	9554	ap≤	0.4	7643	ap≤	0.5	6369	ap≤	0.6	4777	ap≤	0.8	3822	ap≤	1	3185	ap≤	1.2	2389	ap≤	1.6	1911	ap≤	2
			进给速度 (mm/min)	611	ae≤	0.4	642	ae≤	0.5	662	ae≤	0.6	669	ae≤	0.8	650	ae≤	1	669	ae≤	1.2	549	ae≤	1.6	478	ae≤	2

注意 | BE CAREFUL

- 1.请配合使用较高的刚性机床和刀柄。
- 2.请侧铣加工时，建议顺铣加工。
- 3.请根据切削速度，设备刚性等因素，适当调整转速和进给速度。
- 4.图表中数据是按照刀具伸长为直径3倍以下时所制作的，若刀具伸出刀柄过长，加工会振动和异常现象，此时应相对降低转速，进给速度和吃深量。
- 5.在不干涉工件的条件下，尽可能使刀具伸长量最短。

PH-4S/4R/4S-L/4R-L/4R-NL

合金钢、淬硬钢——侧铣

Alloy steel, hardened steel - side milling

工作材料 Working materials		切削域 Cutting domain	Vc m/min	切削条件 Cutting conditions	刃径 (mm)																	
					2			4			6			8			10			12		
P	合金钢 (35-45HRC)	通用条件	90	转速 (min-1)	14331	ap≤	2.4	7166	ap≤	4.8	4777	ap≤	7.2	3583	ap≤	9.6	2866	ap≤	12	2389	ap≤	14.4
				进给速度 (mm/min)	745	ae≤	0.16	889	ae≤	0.32	994	ae≤	0.48	1089	ae≤	0.64	1032	ae≤	0.8	1003	ae≤	0.96
		高速条件	130	转速 (min-1)	20701	ap≤	2.4	10350	ap≤	4.8	6900	ap≤	7.2	5175	ap≤	9.6	4140	ap≤	12	3450	ap≤	14.4
				进给速度 (mm/min)	1242	ae≤	0.16	1366	ae≤	0.32	1573	ae≤	0.48	1760	ae≤	0.64	1573	ae≤	0.8	1380	ae≤	0.96
H	淬硬钢 (45-55HRC)	通用条件	80	转速 (min-1)	12739	ap≤	2	6369	ap≤	4	4246	ap≤	6	3185	ap≤	8	2548	ap≤	10	2123	ap≤	12
				进给速度 (mm/min)	510	ae≤	0.08	586	ae≤	0.16	696	ae≤	0.24	777	ae≤	0.32	693	ae≤	0.4	637	ae≤	0.48
		高速条件	115	转速 (min-1)	18312	ap≤	2	9156	ap≤	4	6104	ap≤	6	4578	ap≤	8	3662	ap≤	10	3052	ap≤	12
				进给速度 (mm/min)	879	ae≤	0.08	1135	ae≤	0.16	1294	ae≤	0.24	1373	ae≤	0.32	1318	ae≤	0.4	1160	ae≤	0.48
	淬硬钢 (55-60HRC)	通用条件	70	转速 (min-1)	11146	ap≤	1.6	5573	ap≤	3.2	3715	ap≤	4.8	2787	ap≤	6.4	2229	ap≤	8	1858	ap≤	9.6
				进给速度 (mm/min)	432	ae≤	0.04	490	ae≤	0.08	580	ae≤	0.12	624	ae≤	0.16	562	ae≤	0.2	535	ae≤	0.24
		高速条件	100	转速 (min-1)	15924	ap≤	1.6	7962	ap≤	3.2	5308	ap≤	4.8	3981	ap≤	6.4	3185	ap≤	8	2654	ap≤	9.6
				进给速度 (mm/min)	828	ae≤	0.04	860	ae≤	0.08	1019	ae≤	0.12	1067	ae≤	0.16	955	ae≤	0.2	881	ae≤	0.24

PH-2B/2B-L

合金钢、淬火钢——仿形铣

Alloy steel, quenched steel - profile milling

工作材料 Working materials		切削域 Cutting domain	Vc m/min	切削条件 Cutting conditions	刃径 (mm)																	
					2			4			6			8			10			12		
P	合金钢 (35-45HRC)	通用条件	130	转速 (min-1)	20701	ap≤	0.1	10350	ap≤	0.2	6900	ap≤	0.3	5175	ap≤	0.4	4140	ap≤	0.5	3450	ap≤	0.6
				进给速度 (mm/min)	1490	ae≤	0.04	1615	ae≤	0.08	1587	ae≤	0.12	1708	ae≤	0.16	1697	ae≤	0.2	1725	ae≤	0.24
		高速条件	220	转速 (min-1)	35032	ap≤	0.1	17516	ap≤	0.2	11677	ap≤	0.3	8758	ap≤	0.4	7006	ap≤	0.5	5839	ap≤	0.6
				进给速度 (mm/min)	2592	ae≤	0.04	2732	ae≤	0.08	2686	ae≤	0.12	2803	ae≤	0.16	2831	ae≤	0.2	2803	ae≤	0.24
H	淬硬钢 (45-55HRC)	通用条件	100	转速 (min-1)	15924	ap≤	0.1	7962	ap≤	0.2	5308	ap≤	0.3	3981	ap≤	0.4	3185	ap≤	0.5	2654	ap≤	0.6
				进给速度 (mm/min)	1274	ae≤	0.04	1274	ae≤	0.08	1274	ae≤	0.12	1274	ae≤	0.16	1338	ae≤	0.2	1380	ae≤	0.24
		高速条件	180	转速 (min-1)	28662	ap≤	0.1	14331	ap≤	0.2	9554	ap≤	0.3	7166	ap≤	0.4	5732	ap≤	0.5	4777	ap≤	0.6
				进给速度 (mm/min)	2236	ae≤	0.04	2293	ae≤	0.08	2293	ae≤	0.12	2293	ae≤	0.16	2293	ae≤	0.2	2389	ae≤	0.24
	淬硬钢 (55-60HRC)	通用条件	75	转速 (min-1)	11943	ap≤	0.1	5971	ap≤	0.2	3981	ap≤	0.3	2986	ap≤	0.4	2389	ap≤	0.5	1990	ap≤	0.6
				进给速度 (mm/min)	836	ae≤	0.04	955	ae≤	0.08	955	ae≤	0.12	932	ae≤	0.16	922	ae≤	0.2	876	ae≤	0.24
		高速条件	160	转速 (min-1)	25478	ap≤	0.1	12739	ap≤	0.2	8493	ap≤	0.3	6369	ap≤	0.4	5096	ap≤	0.5	4246	ap≤	0.6
				进给速度 (mm/min)	1987	ae≤	0.04	1834	ae≤	0.08	1783	ae≤	0.12	1529	ae≤	0.16	1529	ae≤	0.2	1444	ae≤	0.24

AL-3S/3S-L

铝合金——侧铣
Aluminum alloy - side milling

工作材料 Working materials	Vc m/min	刃径 (mm)	1		2		4		6		8		10		12		16		20	
N	锻造铝合金 铸造铝合金 (Si<12%)	200 (50-360)	转速 (min-1)		17516		ap≤ 1.5		13535		ap≤ 3		12739		ap≤ 6		10616		ap≤ 9	
			进给速度 (mm/min)		788		ae≤ 0.2		853		ae≤ 0.4		1452		ae≤ 0.8		1688		ae≤ 1.2	
	铜合金 (<Hb200)	200 (50-360)	转速 (min-1)		17516		ap≤ 1.5		13694		ap≤ 3		12739		ap≤ 6		10616		ap≤ 9	
			进给速度 (mm/min)		841		ae≤ 0.2		945		ae≤ 0.4		1261		ae≤ 0.8		1369		ae≤ 1.2	

AL-3S/3S-L

铝合金——槽铣
Aluminum alloy - slot milling

工作材料 Working materials	Vc m/min	刃径 (mm)	1		2		4		6		8		10		12		16		20	
N	锻造铝合金 铸造铝合金 (Si<12%)	200 (50-360)	转速 (min-1)		17516		ap≤ 0.5		10350		ap≤ 1		9156		ap≤ 2		8227		ap≤ 3	
			进给速度 (mm/min)		473		ae≤ 1		559		ae≤ 2		961		ae≤ 4		1111		ae≤ 6	
	铜合金 (<Hb200)	200 (50-360)	转速 (min-1)		17516		ap≤ 0.5		10350		ap≤ 1		9156		ap≤ 2		8227		ap≤ 3	
			进给速度 (mm/min)		447		ae≤ 1		528		ae≤ 2		879		ae≤ 4		864		ae≤ 6	

AL-2B

铝合金——仿形铣
Aluminum alloy - profile milling

工作材料 Working materials	Vc m/min	刃径 (mm)	1		2		4		6		8		10		12		16		20	
N	锻造铝合金 铸造铝合金 (Si<12%)	200 (50-360)	转速 (min-1)		20701		ap≤ 0.3		15924		ap≤ 0.6		11943		ap≤ 1.2		10616		ap≤ 1.8	
			进给速度 (mm/min)		952		ae≤ 0.3		1592		ae≤ 0.6		1911		ae≤ 1.2		2548		ae≤ 1.8	
	铜合金 (<Hb200)	200 (50-360)	转速 (min-1)		20701		ap≤ 0.3		15924		ap≤ 0.6		11943		ap≤ 1.2		10616		ap≤ 1.8	
			进给速度 (mm/min)		869		ae≤ 0.3		1433		ae≤ 0.6		1720		ae≤ 1.2		2335		ae≤ 1.8	

注意 | BE CAREFUL

- 1.请配合使用较高的刚性机床和刀柄。
- 2.请侧铣加工时,建议顺铣加工。
- 3.请根据切削速度,设备刚性等因素,适当调整转速和进给速度。
- 4.图表中数据是按照刀具伸长为直径3倍以下时所制作的,若刀具伸出刀柄过长,加工会振动和异常现象,此时应相对降低转速,进给速度和吃深量。
- 5.在不干涉工件的条件下,尽可能使刀具伸长量最短。

ALS-3S

铝合金——侧铣
Aluminum alloy - side milling

工作材料 Working materials	Vc m/min	刃径 (mm)	2		4		6		8		10		12	
N	锻造铝合金 铸造铝合金 (Si<12%)	200 (50-360)	转速 (min-1)		16083		ap≤ 3		12341		ap≤ 6		10616	
			进给速度 (mm/min)		1110		ae≤ 0.4		1666		ae≤ 0.8		1688	
	铜合金 (<Hb200)	200 (50-360)	转速 (min-1)		16083		ap≤ 3		12341		ap≤ 6		10616	
			进给速度 (mm/min)		1110		ae≤ 0.4		1481		ae≤ 0.8		1465	

ALS-3S

铝合金——槽铣
Aluminum alloy - Slot milling

工作材料 Working materials	Vc m/min	刃径 (mm)	2		4		6		8		10		12	
N	锻造铝合金 铸造铝合金 (Si<12%)	200 (50-360)	转速 (min-1)		13535		ap≤ 1		10350		ap≤ 2		9554	
			进给速度 (mm/min)		771		ae≤ 2		1087		ae≤ 4		1433	
	铜合金 (<Hb200)	200 (50-360)	转速 (min-1)		13535		ap≤ 1		10350		ap≤ 2		9554	
			进给速度 (mm/min)		650		ae≤ 2		963		ae≤ 4		1232	

注意 | BE CAREFUL

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- 2.请侧铣加工时,建议顺铣加工。
- 3.请根据切削速度,设备刚性等因素,适当调整转速和进给速度。
- 4.图表中数据是按照刀具伸长为直径3倍以下时所制作的,若刀具伸出刀柄过长,加工会振动和异常现象,此时应相对降低转速,进给速度和吃深量。
- 5.在不干涉工件的条件下,尽可能使刀具伸长量最短。

HM-4S/4R-SN/4S-L/4R-NL

合金钢、淬硬钢——侧铣

Alloy steel, hardened steel - side milling

工作材料 Working materials	Vc m/min	切削条件 Cutting conditions	刃径 (mm)															
			1		2		4		6		8		10		12			
H	淬硬钢 (<55HRC)	150	转速 (min-1)	41000	ap≤	1	23885	ap≤	2	11943	ap≤	4	7962	ap≤	6	5971	ap≤	8
			进给速度 (mm/min)	1312	ae≤	0.02	1433	ae≤	0.04	2389	ae≤	0.08	1752	ae≤	0.12	1433	ae≤	0.16
	淬硬钢 (55-60HRC)	130	转速 (min-1)	36000	ap≤	1	20701	ap≤	2	10350	ap≤	4	6900	ap≤	6	5175	ap≤	8
			进给速度 (mm/min)	1008	ae≤	0.015	1159	ae≤	0.03	2070	ae≤	0.06	1518	ae≤	0.09	1242	ae≤	0.12
	淬硬钢 (> 60HRC)	100	转速 (min-1)	22000	ap≤	1	15924	ap≤	2	7962	ap≤	4	5308	ap≤	6	3981	ap≤	8
			进给速度 (mm/min)	704	ae≤	0.01	828	ae≤	0.02	1592	ae≤	0.04	1168	ae≤	0.06	955	ae≤	0.08

HM-2B-SN/2B-NL

合金钢、淬硬钢——仿形铣

Alloy steel, hardened steel - Profiling milling

工作材料 Working materials	Vc m/min	切削条件 Cutting conditions	刃径 (mm)															
			1		2		4		6		8		10		12			
H	淬硬钢 (<55HRC)	150	转速 (min-1)	30000	ap≤	0.02	21000	ap≤	0.04	11943	ap≤	0.08	7962	ap≤	0.12	5971	ap≤	0.16
			进给速度 (mm/min)	1200	ae≤	0.02	1680	ae≤	0.04	1672	ae≤	0.08	1592	ae≤	0.12	1433	ae≤	0.16
	淬硬钢 (55-60HRC)	120	转速 (min-1)	29000	ap≤	0.015	19108	ap≤	0.03	9554	ap≤	0.06	6369	ap≤	0.09	4777	ap≤	0.12
			进给速度 (mm/min)	1334	ae≤	0.015	1720	ae≤	0.03	1338	ae≤	0.06	1656	ae≤	0.09	1242	ae≤	0.12
	淬硬钢 (> 60HRC)	100	转速 (min-1)	23000	ap≤	0.01	15924	ap≤	0.02	7962	ap≤	0.04	5308	ap≤	0.06	3981	ap≤	0.08
			进给速度 (mm/min)	782	ae≤	0.01	1433	ae≤	0.02	1115	ae≤	0.04	1062	ae≤	0.06	796	ae≤	0.08

注意 | BE CAREFUL

- 1.请配合使用较高的刚性机床和刀柄。
- 2.请使用空气冷却或油雾型冷却,不可使用水溶性切屑液加工。
- 3.请侧铣加工时,建议顺铣加工。
- 4.请根据切削速度,设备刚性等因素,适当调整转速和进给速度。
- 5.图表中数据是按照刀具伸长为直径3倍以下时所制作的,若刀具伸出刀柄过长,加工会振动和异常现象,此时应相对降低转速,进给速度和吃深量。
- 6.在不干涉工件的条件下,尽可能使刀具伸长量最短。

GMH-4S/4R/4S-L/4R-NL

钢件、铸铁——侧铣

Steel, cast iron - side milling

工作材料 Working materials	Vc m/min	刃径 (mm)	3		4		6		8		10		12		16		20	
P	碳钢合金钢 (<35HRC)	210	转速 (min-1)	22293	ap≤	4.5	16720	ap≤	6	11146	ap≤	9	8360	ap≤	12	6688	ap≤	15
			进给速度 (mm/min)	2854	ae≤	0.45	2809	ae≤	0.6	2318	ae≤	0.9	2341	ae≤	1.2	2274	ae≤	1.5
	合金钢 (35-48HRC)	160	转速 (min-1)	16985	ap≤	3	12739	ap≤	4	8493	ap≤	6	6369	ap≤	8	5096	ap≤	10
			进给速度 (mm/min)	1834	ae≤	0.36	1682	ae≤	0.48	1529	ae≤	0.72	1656	ae≤	0.96	1468	ae≤	1.2
M	不锈钢	160	转速 (min-1)	16985	ap≤	4.5	12739	ap≤	6	8493	ap≤	9	6369	ap≤	12	5096	ap≤	15
			进给速度 (mm/min)	2242	ae≤	0.45	1885	ae≤	0.6	1631	ae≤	0.9	1783	ae≤	1.2	1631	ae≤	1.5
	灰铸铁 球墨铸铁 (<32HRC)	180	转速 (min-1)	19108	ap≤	4.5	14331	ap≤	6	9554	ap≤	9	7166	ap≤	12	5732	ap≤	15
			进给速度 (mm/min)	2293	ae≤	0.45	2121	ae≤	0.6	2102	ae≤	0.9	1863	ae≤	1.2	1720	ae≤	1.5
K	高合金铸铁 (35-45HRC)	160	转速 (min-1)	16985	ap≤	3	12739	ap≤	4	8493	ap≤	6	6369	ap≤	8	5096	ap≤	10
			进给速度 (mm/min)	1834	ae≤	0.36	1783	ae≤	0.48	1699	ae≤	0.72	1529	ae≤	0.96	1427	ae≤	1.2

GMH-4S/4R/4S-L/4R-NL

钢件、铸铁——槽铣

Steel, cast iron - slot milling

工作材料 Working materials	Vc m/min	刃径 (mm)	3		4		6		8		10		12		16		20	
P	碳钢合金钢 (<35HRC)	90	转速 (min-1)	9554	ap≤	3	7166	ap≤	4	4777	ap≤	6	3583	ap≤	8	2866	ap≤	10
			进给速度 (mm/min)	1185	ae≤	3	1433	ae≤	4	1089	ae≤	6	975	ae≤	8	917	ae≤	10
	合金钢 (35-48HRC)	70	转速 (min-1)	7431	ap≤	1.5	5573	ap≤	2	3715	ap≤	3	2787	ap≤	4	2229	ap≤	5
			进给速度 (mm/min)	773	ae≤	3	847	ae≤	4	713	ae≤	6	580	ae≤	8	553	ae≤	10
M	不锈钢	65	转速 (min-1)	6900	ap≤	0.9	5175	ap≤	1.2	3450	ap≤	1.8	2588	ap≤	2.4	2070	ap≤	3
			进给速度 (mm/min)	552	ae≤	3	518	ae≤	4	552	ae≤	6	538	ae≤	8	513	ae≤	10
	灰铸铁 球墨铸铁 (<32HRC)	65	转速 (min-1)	6900	ap≤	2.4	5175	ap≤	3.2	3450	ap≤	4.8	2588	ap≤	6.4	2070	ap≤	8
			进给速度 (mm/min)	662	ae≤	3	704	ae≤	4	662	ae≤	6	569	ae≤	8	538	ae≤	10
K	高合金铸铁 (35-45HRC)	60	转速 (min-1)	6369	ap≤	1.5	4777	ap≤	2	3185	ap≤	3	2389	ap≤	4	1911	ap≤	5
			进给速度 (mm/min)	535	ae≤	3	554	ae≤	4	586	ae≤	6	497	ae≤	8	459	ae≤	10

GMH-2B/2B-NL

钢件、铸铁——仿形铣

Steel parts, cast iron - profile milling

工作材料 Working materials	Vc m/min	刃径 (mm)	1		2		3		4		6		8		10		12	
P	碳钢合金钢 (<35HRC)	230	转速 (min-1)	50955	ap≤	0.04	36624	ap≤	0.08	24416	ap≤	0.12	18312	ap≤	0.16	12208	ap≤	0.24
			进给速度 (mm/min)	2854	ae≤	0.04	2930	ae≤	0.08	2930	ae≤	0.12	2857	ae≤	0.16	2930	ae≤	0.24
	合金钢 (35-48HRC)	190	转速 (min-1)	49682	ap≤	0.02	30255	ap≤	0.04	20170	ap≤	0.06	15127	ap≤	0.08	10085	ap≤	0.12
			进给速度 (mm/min)	1987	ae≤	0.02	2118	ae≤	0.04	2098	ae≤	0.06	2118	ae≤	0.08	2118	ae≤	0.12
M	不锈钢	230	转速 (min-1)	50000	ap≤	0.04	36624	ap≤	0.08	24416	ap≤	0.12	18312	ap≤	0.16	12208	ap≤	0.24
			进给速度 (mm/min)	2500	ae≤	0.04	2564	ae≤	0.08	2686	ae≤	0.12	2747	ae≤	0.16	2686	ae≤	0.24
	灰铸铁 球墨铸铁 (<32HRC)	230	转速 (min-1)	50000	ap≤	0.04	36624	ap≤	0.08	24416	ap≤	0.12	18312	ap≤	0.16	12208	ap≤	0.24
			进给速度 (mm/min)	2500	ae≤	0.04	2564	ae≤	0.08	2686	ae≤	0.12	2747	ae≤	0.16	2686	ae≤	0.24
K	高合金铸铁 (35-45HRC)	230	转速 (min-1)	49682	ap≤	0.04	36624	ap≤	0.08	24416	ap≤	0.12	18312	ap≤	0.16	12208	ap≤	0.24
			进给速度 (mm/min)	2385	ae≤	0.04	2564	ae≤	0.08	2539	ae≤	0.12	2564	ae≤	0.16	2564	ae≤	0.24

注意 | BE CAREFUL

- 1.请配合使用较高的刚性机床和刀柄。
- 2.请侧铣加工时,建议顺铣加工。
- 3.请根据切削速度,设备刚性等因素,适当调整转速和进给速度。
- 4.图表中数据是按照刀具伸长为直径3倍以下时所制作的,若刀具伸出刀柄过长,加工会振动和异常现象,此时应相对降低转速,进给速度和吃深量。
- 5.在不干涉工件的条件下,尽可能使刀具伸长量最短。

ZF-G-4F

钢件、铸铁——侧铣

Steel, cast iron - side milling

工作材料 Working materials		Vc m/min	刃径 (mm)	3			4			6			8			10			12		
P	碳钢合金钢 (<35HRC)	210	转速 (min-1)	22293	ap≤	4.5	16720	ap≤	6	11146	ap≤	9	8360	ap≤	12	6688	ap≤	15	5573	ap≤	18
			进给速度 (mm/min)	2854	ae≤	0.45	2809	ae≤	0.6	2318	ae≤	0.9	2341	ae≤	1.2	2274	ae≤	1.5	2229	ae≤	1.8
	合金钢 (35-48HRC)	160	转速 (min-1)	16985	ap≤	3	12739	ap≤	4	8493	ap≤	6	6369	ap≤	8	5096	ap≤	10	4246	ap≤	12
			进给速度 (mm/min)	1834	ae≤	0.36	1682	ae≤	0.48	1529	ae≤	0.72	1656	ae≤	0.96	1468	ae≤	1.2	1359	ae≤	1.44
M	不锈钢	160	转速 (min-1)	16985	ap≤	4.5	12739	ap≤	6	8493	ap≤	9	6369	ap≤	12	5096	ap≤	15	4246	ap≤	18
			进给速度 (mm/min)	2242	ae≤	0.45	1885	ae≤	0.6	1631	ae≤	0.9	1783	ae≤	1.2	1631	ae≤	1.5	1529	ae≤	1.8
K	灰铸铁 球墨铸铁 (<32HRC)	180	转速 (min-1)	19108	ap≤	4.5	14331	ap≤	6	9554	ap≤	9	7166	ap≤	12	5732	ap≤	15	4777	ap≤	18
			进给速度 (mm/min)	2293	ae≤	0.45	2121	ae≤	0.6	2102	ae≤	0.9	1863	ae≤	1.2	1720	ae≤	1.5	1624	ae≤	1.8
	高合金铸铁 (35-45HRC)	160	转速 (min-1)	16985	ap≤	3	12739	ap≤	4	8493	ap≤	6	6369	ap≤	8	5096	ap≤	10	4246	ap≤	12
			进给速度 (mm/min)	1834	ae≤	0.36	1783	ae≤	0.48	1699	ae≤	0.72	1529	ae≤	0.96	1427	ae≤	1.2	1359	ae≤	1.44

ZF-G-4F

钢件、铸铁——槽铣

Steel, cast iron - slot milling

工作材料 Working materials		Vc m/min	刃径 (mm)	3			4			6			8			10			12		
P	碳钢合金钢 (<35HRC)	90	转速 (min-1)	9554	ap≤	3	7166	ap≤	4	4777	ap≤	6	3583	ap≤	8	2866	ap≤	10	2389	ap≤	12
			进给速度 (mm/min)	1185	ae≤	3	1433	ae≤	4	1089	ae≤	6	975	ae≤	8	917	ae≤	10	860	ae≤	12
	合金钢 (35-48HRC)	70	转速 (min-1)	7431	ap≤	1.5	5573	ap≤	2	3715	ap≤	3	2787	ap≤	4	2229	ap≤	5	1858	ap≤	6
			进给速度 (mm/min)	773	ae≤	3	847	ae≤	4	713	ae≤	6	580	ae≤	8	553	ae≤	10	557	ae≤	12
M	不锈钢	65	转速 (min-1)	6900	ap≤	0.9	5175	ap≤	1.2	3450	ap≤	1.8	2588	ap≤	2.4	2070	ap≤	3	1725	ap≤	3.6
			进给速度 (mm/min)	552	ae≤	3	518	ae≤	4	552	ae≤	6	538	ae≤	8	513	ae≤	10	518	ae≤	12
K	灰铸铁 球墨铸铁 (<32HRC)	65	转速 (min-1)	6900	ap≤	2.4	5175	ap≤	3.2	3450	ap≤	4.8	2588	ap≤	6.4	2070	ap≤	8	1725	ap≤	9.6
			进给速度 (mm/min)	662	ae≤	3	704	ae≤	4	662	ae≤	6	569	ae≤	8	538	ae≤	10	552	ae≤	12
	高合金铸铁 (35-45HRC)	60	转速 (min-1)	6369	ap≤	1.5	4777	ap≤	2	3185	ap≤	3	2389	ap≤	4	1911	ap≤	5	1592	ap≤	6
			进给速度 (mm/min)	535	ae≤	3	554	ae≤	4	586	ae≤	6	497	ae≤	8	459	ae≤	10	446	ae≤	12

注意 | BE CAREFUL

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- 4.请根据切削速度,设备刚性等因素,适当调整转速和进给速度。
- 5.图表中数据是按照刀具伸长为直径3倍以下时所制作的,若刀具伸出刀柄过长,加工会振动和异常现象,此时应相对降低转速,进给速度和吃深量。
- 6.在不干涉工件的条件下,尽可能使刀具伸长量最短。

ZF-G-3F

钢件、铸铁——槽铣

Steel, cast iron - slot milling

工作材料 Working materials		Vc m/min	刃径 (mm)	3			4			6			8			10			12			16			20		
P	碳钢合金钢 (<35HRC)	150	转速 (min-1)	15924	ap≤	3	11943	ap≤	4	7962	ap≤	6	5971	ap≤	8	4777	ap≤	10	3981	ap≤	12	2986	ap≤	16	2389	ap≤	20
			进给速度 (mm/min)	955	ae≤	3	1254	ae≤	4	1075	ae≤	6	896	ae≤	8	975	ae≤	10	955	ae≤	12	1030	ae≤	16	1146	ae≤	20
	合金钢 (35-48HRC)	110	转速 (min-1)	11677	ap≤	1.5	8758	ap≤	2	5839	ap≤	3	4379	ap≤	4	3503	ap≤	5	2919	ap≤	6	2189	ap≤	8	1752	ap≤	10
			进给速度 (mm/min)	701	ae≤	3	788	ae≤	4	701	ae≤	6	552	ae≤	8	546	ae≤	10	569	ae≤	12	558	ae≤	16	631	ae≤	20
M	不锈钢	100	转速 (min-1)	10616	ap≤	0.9	7962	ap≤	1.2	5308	ap≤	1.8	3981	ap≤	2.4	3185	ap≤	3	2654	ap≤	3.6	1990	ap≤	4.8	1592	ap≤	6
			进给速度 (mm/min)	478	ae≤	3	478	ae≤	4	478	ae≤	6	502	ae≤	8	497	ae≤	10	518	ae≤	12	436	ae≤	16	382	ae≤	20
K	灰铸铁 球墨铸铁 (<32HRC)	100	转速 (min-1)	10616	ap≤	2.4	7962	ap≤	3.2	5308	ap≤	4.8	3981	ap≤	6.4	3185	ap≤	8	2654	ap≤	9.6	1990	ap≤	12.8	1592	ap≤	16
			进给速度 (mm/min)	637	ae≤	3	717	ae≤	4	637	ae≤	6	537	ae≤	8	525	ae≤	10	518	ae≤	12	508	ae≤	16	454	ae≤	20
	高合金铸铁 (35-45HRC)	100	转速 (min-1)	10616	ap≤	1.5	7962	ap≤	2	5308	ap≤	3	3981	ap≤	4	3185	ap≤	5	2654	ap≤	6	1990	ap≤	8	1592	ap≤	10
			进给速度 (mm/min)	573	ae≤	3	478	ae≤	4	637	ae≤	6	478	ae≤	8	478	ae≤	10	478	ae≤	12	478	ae≤	16	382	ae≤	20

ZF-G-3F

钢件、铸铁——侧铣

Steel, cast iron - side milling

工作材料 Working materials		Vc m/min	刃径 (mm)	3			4			6			8			10			12			16			20		
P	碳钢合金钢 (<35HRC)	220	转速 (min-1)	23355	ap≤	4.5	17516	ap≤	6	11677	ap≤	9	8758	ap≤	12	7006	ap≤	15	5839	ap≤	18	4379	ap≤	24	3503	ap≤	30
			进给速度 (mm/min)	2242	ae≤	0.45	2154	ae≤	0.6	1822	ae≤	0.9	1813	ae≤	1.2	1787	ae≤	1.5	1752	ae≤	1.8	1642	ae≤	2.4	1576	ae≤	3
	合金钢 (35-48HRC)	170	转速 (min-1)	18047	ap≤	3	13535	ap≤	4	9023	ap≤	6	6768	ap≤	8	5414	ap≤	10	4512	ap≤	12	3384	ap≤	16	2707	ap≤	20
			进给速度 (mm/min)	1462	ae≤	0.36	1299	ae≤	0.48	1218	ae≤	0.72	1320	ae≤	0.96	1218	ae≤	1.2	1056	ae≤	1.44	863	ae≤	1.92	771	ae≤	2.4
M	不锈钢	170	转速 (min-1)	18047	ap≤	4.5	13535	ap≤	6	9023	ap≤	9	6768	ap≤	12	5414	ap≤	15	4512	ap≤	18	3384	ap≤	24	2707	ap≤	30
			进给速度 (mm/min)	1787	ae≤	0.45	1502	ae≤	0.6	1299	ae≤	0.9	1462	ae≤	1.2	1299	ae≤	1.5	1191	ae≤	1.8	1015	ae≤	2.4	934	ae≤	3
K	灰铸铁 球墨铸铁 (<32HRC)	190	转速 (min-1)	20170	ap≤	4.5	15127	ap≤	6	10085	ap≤	9	7564	ap≤	12	6051	ap≤	15	5042	ap≤	18	3782	ap≤	24	3025	ap≤	30
			进给速度 (mm/min)	1815	ae≤	0.45	1679	ae≤	0.6	1604	ae≤	0.9	1475	ae≤	1.2	1361	ae≤	1.5	1286	ae≤	1.8	1135	ae≤	2.4	1044	ae≤	3
	高合金铸铁 (35-45HRC)	160	转速 (min-1)	16985	ap≤	3	12739	ap≤	4	8493	ap≤	6	6369	ap≤	8	5096	ap≤	10	4246	ap≤	12	3185	ap≤	16	2548	ap≤	20
			进给速度 (mm/min)	1376	ae≤	0.36	1338	ae≤	0.48	1274	ae≤	0.72	1146	ae≤	0.96	1070	ae≤	1.2	1045	ae≤	1.44	908	ae≤	1.92	803	ae≤	2.4

注意 | BE CAREFUL

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- 3.请侧铣加工时,建议顺铣加工。
- 4.请根据切削速度,设备刚性等因素,适当调整转速和进给速度。
- 5.图表中数据是按照刀具伸长为直径3倍以下时所制作的,若刀具伸出刀柄过长,加工会振动和异常现象,此时应相对降低转速,进给速度和吃深量。
- 6.在不干涉工件的条件下,尽可能使刀具伸长量最短。

SUS-4S/4R

不锈钢-侧铣

Stainless steel - side milling

工作材料 Working materials		Vc m/min	刃径 (mm)	1		2		4		6		8		10		12		16		20										
M	不锈钢	100 (80-120)	转速 (min-1)	24522	ap≤	1	15924	ap≤	2	7962	ap≤	4	5308	ap≤	6	3981	ap≤	8	3185	ap≤	10	2654	ap≤	12	1990	ap≤	16	1592	ap≤	20
			进给速度 (mm/min)	687	ae≤	0.1	637	ae≤	0.2	318	ae≤	0.4	679	ae≤	0.6	732	ae≤	0.8	662	ae≤	1	637	ae≤	1.2	494	ae≤	1.6	459	ae≤	2

SUS-4S/4R

不锈钢-槽铣

Stainless steel - slot milling

工作材料 Working materials		Vc m/min	刃径 (mm)	1			2			4			6			8			10			12			16			20		
M	不锈钢	50 (35-55)	转速 (min-1)	15924	ap≤	0.1	7962	ap≤	0.2	3981	ap≤	0.4	2654	ap≤	0.6	2189	ap≤	0.8	1752	ap≤	1	1460	ap≤	1.2	1095	ap≤	1.6	876	ap≤	2
			进给速度 (mm/min)	446	ae≤	1	318	ae≤	2	271	ae≤	4	350	ae≤	6	377	ae≤	8	315	ae≤	10	350	ae≤	12	307	ae≤	16	263	ae≤	20

SUS-2B

不锈钢-仿形铣

Stainless steel profile milling

工作材料 Working materials		Vc m/min	刃径 (mm)	1		2		4		6		8		10		12		16		20										
M	不锈钢	100 (80-120)	转速 (min-1)	25478	ap≤	0.2	15924	ap≤	0.4	7962	ap≤	0.8	5308	ap≤	1.2	3981	ap≤	1.6	3185	ap≤	2	2654	ap≤	2.4	1990	ap≤	3.2	1592	ap≤	4
			进给速度 (mm/min)	561	ae≤	0.2	478	ae≤	0.4	525	ae≤	0.8	510	ae≤	1.2	557	ae≤	1.6	541	ae≤	2	531	ae≤	2.4	518	ae≤	3.2	510	ae≤	4

注意 | BE CAREFUL

- 1.请配合使用较高的刚性机床和刀柄。
- 2.请侧铣加工时, 建议顺铣加工。
- 3.请根据切削速度, 设备刚性等因素, 适当调整转速和进给速度。
- 4.图表中数据是按照刀具伸长为直径3倍以下时所制作的, 若刀具伸出刀柄过长, 加工会振动和异常现象, 此时应相对降低转速, 进给速度和吃深量。
- 5.在不干涉工件的条件下, 尽可能使刀具伸长量最短。

TS-4S/4R/4S-L/4R-L

铜合金，铝合金——侧铣

Copper alloy, aluminum alloy - side milling

工作材料 Working materials		Vc m/min	刃径 (mm)	1		2		4		6		8		10		12		16		20										
N	锻造铝合金	200 (50-360)	转速 (min-1)	17516	ap≤	1.5	13535	ap≤	3	12739	ap≤	6	10616	ap≤	9	10151	ap≤	12	9554	ap≤	15	9289	ap≤	18	7166	ap≤	24	5732	ap≤	30
	铸造铝合金 (Si<12%)		进给速度 (mm/min)	1051	ae≤	0.2	1137	ae≤	0.4	1936	ae≤	0.8	2251	ae≤	1.2	2233	ae≤	1.6	2866	ae≤	2	3715	ae≤	2.4	4013	ae≤	3.2	4357	ae≤	4
	铜合金 (<Hb200)	200 (50-360)	转速 (min-1)	17516	ap≤	1.5	13694	ap≤	3	12739	ap≤	6	10616	ap≤	9	10151	ap≤	12	9554	ap≤	15	9289	ap≤	18	7166	ap≤	24	5732	ap≤	30
			进给速度 (mm/min)	1121	ae≤	0.2	1260	ae≤	0.4	1682	ae≤	0.8	1826	ae≤	1.2	2030	ae≤	1.6	2484	ae≤	2	2972	ae≤	2.4	3439	ae≤	3.2	4127	ae≤	4

TS-4S/4R/4S-L/4R-L

铜合金，铝合金——槽铣

Copper alloy, aluminum alloy - Slot milling

工作材料 Working materials		Vc m/min	刃径 (mm)	1		2		4		6		8		10		12		16		20										
N	锻造铝合金	200 (50-360)	转速 (min-1)	17516	ap≤	0.5	10350	ap≤	1	9156	ap≤	2	8227	ap≤	3	7962	ap≤	4	8121	ap≤	5	6821	ap≤	6	5115	ap≤	8	4092	ap≤	10
	铸造铝合金 (Si<12%)		进给速度 (mm/min)	631	ae≤	1	745	ae≤	2	1282	ae≤	4	1481	ae≤	6	1911	ae≤	8	1949	ae≤	10	2183	ae≤	12	2251	ae≤	16	2455	ae≤	20
	铜合金 (<Hb200)	200 (50-360)	转速 (min-1)	17516	ap≤	0.5	10350	ap≤	1	9156	ap≤	2	8227	ap≤	3	7962	ap≤	4	8121	ap≤	5	6821	ap≤	6	5115	ap≤	8	4092	ap≤	10
			进给速度 (mm/min)	596	ae≤	1	704	ae≤	2	1172	ae≤	4	1152	ae≤	6	1592	ae≤	8	1624	ae≤	10	1910	ae≤	12	2046	ae≤	16	1964	ae≤	20

TS-2B/2B-L

铜合金，铝合金——仿形铣

Copper alloy, aluminum alloy - Profiling milling

工作材料 Working materials		Vc m/min	刃径 (mm)	1		2		4		6		8		10		12		16		20										
N	锻造铝合金	200 (50-360)	转速 (min-1)	20701	ap≤	0.3	15924	ap≤	0.6	11943	ap≤	1.2	10616	ap≤	1.8	8161	ap≤	2.4	7962	ap≤	3	7962	ap≤	3.6	7166	ap≤	4.8	5732	ap≤	6
	铸造铝合金 (Si<12%)		进给速度 (mm/min)	952	ae≤	0.3	1592	ae≤	0.6	1911	ae≤	1.2	2548	ae≤	1.8	2611	ae≤	2.4	3185	ae≤	3	3822	ae≤	3.6	4586	ae≤	4.8	3783	ae≤	6
	铜合金 (<Hb200)	200 (50-360)	转速 (min-1)	20701	ap≤	0.3	15924	ap≤	0.6	11943	ap≤	1.2	10616	ap≤	1.8	8161	ap≤	2.4	7962	ap≤	3	7962	ap≤	3.6	7166	ap≤	4.8	5732	ap≤	6
			进给速度 (mm/min)	869	ae≤	0.3	1433	ae≤	0.6	1720	ae≤	1.2	2335	ae≤	1.8	2448	ae≤	2.4	2866	ae≤	3	3503	ae≤	3.6	4156	ae≤	4.8	3439	ae≤	6

注意 | BE CAREFUL

- 1.请配合使用较高的刚性机床和刀柄。
- 2.请侧铣加工时, 建议顺铣加工。
- 3.请根据切削速度, 设备刚性等因素, 适当调整转速和进给速度。
- 4.图表中数据是按照刀具伸长为直径3倍以下时所制作的, 若刀具伸出刀柄过长, 加工会振动和异常现象, 此时应相对降低转速, 进给速度和吃深量。
- 5.在不干涉工件的条件下, 尽可能使刀具伸长量最短。

PS-2S/2S-NL

小径深加工2刃平头立铣刀

Small diameter deep machining 2-edge flat end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D0.2				D0.3				D0.4			
			颈长				颈长				颈长			
			0.5	1	1.5	1	1.5	2	1	2	3	4		
P	碳钢, 合金钢 (180~250HB)	转速 (min-1)	41000	ap≤ 0.009	41000	ap≤ 0.006	37000	ap≤ 0.004	36000	ap≤ 0.012	36000	ap≤ 0.01	33000	ap≤ 0.007
		进给速度 (mm/min)	400	ae≤ 0.009	400	ae≤ 0.006	330	ae≤ 0.004	410	ae≤ 0.012	400	ae≤ 0.01	330	ae≤ 0.007
	合金钢 (30-45HRC)	转速 (min-1)	37000	ap≤ 0.009	37000	ap≤ 0.006	33000	ap≤ 0.004	33000	ap≤ 0.012	33000	ap≤ 0.01	29000	ap≤ 0.007
		进给速度 (mm/min)	360	ae≤ 0.008	350	ae≤ 0.005	300	ae≤ 0.004	370	ae≤ 0.011	360	ae≤ 0.009	300	ae≤ 0.006
	Ph与铁素体 马氏体钢 (35-45HRC)	转速 (min-1)	35000	ap≤ 0.009	35000	ap≤ 0.006	31000	ap≤ 0.004	31000	ap≤ 0.012	31000	ap≤ 0.01	28000	ap≤ 0.007
		进给速度 (mm/min)	250	ae≤ 0.006	240	ae≤ 0.004	230	ae≤ 0.003	260	ae≤ 0.008	250	ae≤ 0.007	230	ae≤ 0.005
H	淬硬钢 (45-55HRC)	转速 (min-1)	30000	ap≤ 0.009	30000	ap≤ 0.006	28000	ap≤ 0.004	27000	ap≤ 0.012	27000	ap≤ 0.01	25000	ap≤ 0.007
		进给速度 (mm/min)	190	ae≤ 0.005	180	ae≤ 0.003	170	ae≤ 0.002	210	ae≤ 0.006	220	ae≤ 0.005	170	ae≤ 0.004
	淬硬钢 (55-60HRC)	转速 (min-1)	29000	ap≤ 0.009	28000	ap≤ 0.006	26000	ap≤ 0.004	26000	ap≤ 0.012	26000	ap≤ 0.01	23000	ap≤ 0.007
		进给速度 (mm/min)	150	ae≤ 0.004	140	ae≤ 0.003	130	ae≤ 0.002	170	ae≤ 0.005	160	ae≤ 0.005	140	ae≤ 0.003
		转速 (min-1)	29000	ap≤ 0.009	28000	ap≤ 0.006	26000	ap≤ 0.004	26000	ap≤ 0.012	26000	ap≤ 0.01	23000	ap≤ 0.007
		进给速度 (mm/min)	150	ae≤ 0.004	140	ae≤ 0.003	130	ae≤ 0.002	170	ae≤ 0.005	160	ae≤ 0.005	140	ae≤ 0.003

PS-2S/2S-NL

小径深加工2刃平头立铣刀

Small diameter deep machining 2-edge flat end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D0.5											
			颈长											
			1		1.5		2		3		4		6	
P	碳钢, 合金钢 (180~250HB)	转速 (min-1)	29000	ap≤ 0.02	29000	ap≤ 0.016	28000	ap≤ 0.013	26000	ap≤ 0.01	26000	ap≤ 0.009	24000	ap≤ 0.007
		进给速度 (mm/min)	590	ae≤ 0.02	580	ae≤ 0.016	570	ae≤ 0.013	410	ae≤ 0.01	400	ae≤ 0.009	320	ae≤ 0.007
	合金钢 (30-45HRC)	转速 (min-1)	26000	ap≤ 0.02	26000	ap≤ 0.016	26000	ap≤ 0.013	24000	ap≤ 0.01	24000	ap≤ 0.009	20000	ap≤ 0.007
		进给速度 (mm/min)	520	ae≤ 0.018	510	ae≤ 0.014	500	ae≤ 0.012	370	ae≤ 0.009	360	ae≤ 0.008	280	ae≤ 0.006
	Ph与铁素体 马氏体钢 (35-45HRC)	转速 (min-1)	25000	ap≤ 0.02	25000	ap≤ 0.016	25000	ap≤ 0.013	22000	ap≤ 0.01	22000	ap≤ 0.009	20000	ap≤ 0.007
		进给速度 (mm/min)	400	ae≤ 0.014	390	ae≤ 0.011	380	ae≤ 0.009	310	ae≤ 0.007	300	ae≤ 0.006	190	ae≤ 0.005
H	淬硬钢 (45-55HRC)	转速 (min-1)	22000	ap≤ 0.02	22000	ap≤ 0.016	22000	ap≤ 0.013	20000	ap≤ 0.01	20000	ap≤ 0.009	18000	ap≤ 0.007
		进给速度 (mm/min)	270	ae≤ 0.01	260	ae≤ 0.008	250	ae≤ 0.007	200	ae≤ 0.005	190	ae≤ 0.005	160	ae≤ 0.004
	淬硬钢 (55-60HRC)	转速 (min-1)	21000	ap≤ 0.02	21000	ap≤ 0.016	21000	ap≤ 0.013	19000	ap≤ 0.01	19000	ap≤ 0.009	17000	ap≤ 0.007
		进给速度 (mm/min)	210	ae≤ 0.009	200	ae≤ 0.007	190	ae≤ 0.006	170	ae≤ 0.005	160	ae≤ 0.004	130	ae≤ 0.003
		转速 (min-1)	22000	ap≤ 0.02	22000	ap≤ 0.016	22000	ap≤ 0.013	20000	ap≤ 0.01	20000	ap≤ 0.009	18000	ap≤ 0.007
		进给速度 (mm/min)	270	ae≤ 0.01	260	ae≤ 0.008	250	ae≤ 0.007	200	ae≤ 0.005	190	ae≤ 0.005	160	ae≤ 0.004

PS-2S/2S-NL

小径深加工2刃平头立铣刀

Small diameter deep machining 2-edge flat end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)													
			D0.6								D0.8					
			颈长								颈长					
			2	3	4	5	6	4	6	8	10					
P	碳钢, 合金钢 (180~250HB)	转速 (min-1)	29000	ap≤ 0.025	26000	ap≤ 0.02	26000	ap≤ 0.015	25000	ap≤ 0.013	25000	ap≤ 0.011	29000	ap≤ 0.025	26000	ap≤ 0.02
		进给速度 (mm/min)	820	ae≤ 0.025	670	ae≤ 0.02	660	ae≤ 0.015	590	ae≤ 0.013	580	ae≤ 0.011	810	ae≤ 0.025	590	ae≤ 0.02
	合金钢 (30-45HRC)	转速 (min-1)	26000	ap≤ 0.025	24000	ap≤ 0.02	24000	ap≤ 0.015	23000	ap≤ 0.013	23000	ap≤ 0.011	26000	ap≤ 0.025	24000	ap≤ 0.02
		进给速度 (mm/min)	730	ae≤ 0.023	600	ae≤ 0.018	590	ae≤ 0.014	530	ae≤ 0.012	520	ae≤ 0.01	730	ae≤ 0.023	530	ae≤ 0.018
	Ph与铁素体 马氏体钢 (35-45HRC)	转速 (min-1)	25000	ap≤ 0.025	22000	ap≤ 0.02	22000	ap≤ 0.015	22000	ap≤ 0.013	22000	ap≤ 0.011	25000	ap≤ 0.025	22000	ap≤ 0.02
		进给速度 (mm/min)	510	ae≤ 0.018	460	ae≤ 0.014	450	ae≤ 0.011	410	ae≤ 0.009	400	ae≤ 0.008	570	ae≤ 0.018	510	ae≤ 0.014
H	淬硬钢 (45-55HRC)	转速 (min-1)	22000	ap≤ 0.025	20000	ap≤ 0.02	20000	ap≤ 0.015	20000	ap≤ 0.013	20000	ap≤ 0.011	22000	ap≤ 0.025	19000	ap≤ 0.02
		进给速度 (mm/min)	380	ae≤ 0.013	340	ae≤ 0.01	330	ae≤ 0.008	300	ae≤ 0.007	290	ae≤ 0.006	420	ae≤ 0.013	380	ae≤ 0.01
	淬硬钢 (55-60HRC)	转速 (min-1)	21000	ap≤ 0.025	19000	ap≤ 0.02	19000	ap≤ 0.015	19000	ap≤ 0.013	18000	ap≤ 0.011	20000	ap≤ 0.025	19000	ap≤ 0.02
		进给速度 (mm/min)	310	ae≤ 0.011	270	ae≤ 0.009	260	ae≤ 0.007	240	ae≤ 0.006	230	ae≤ 0.005	340	ae≤ 0.011	310	ae≤ 0.009
		转速 (min-1)	22000	ap≤ 0.025	20000	ap≤ 0.02	20000	ap≤ 0.015	20000	ap≤ 0.013	20000	ap≤ 0.011	22000	ap≤ 0.025	19000	ap≤ 0.02
		进给速度 (mm/min)	380	ae≤ 0.013	340	ae≤ 0.01	330	ae≤ 0.008	300	ae≤ 0.007	290	ae≤ 0.006	420	ae≤ 0.013	380	ae≤ 0.01

PS-2S/2S-NL

小径深加工2刃平头立铣刀

Small diameter deep machining 2-edge flat end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D1.0											
			颈长											
			3	4	5	6	8	10	12					
P	碳钢, 合金钢 (180~250HB)	转速 (min-1)	26000	ap≤ 0.035	26000	ap≤ 0.03	26000	ap≤ 0.025	24000	ap≤ 0.02	24000	ap≤ 0.015	24000	ap≤ 0.01
		进给速度 (mm/min)	950	ae≤ 0.035	900	ae≤ 0.03	850	ae≤ 0.025	830	ae≤ 0.02	820	ae≤ 0.015	800	ae≤ 0.01
	合金钢 (30-45HRC)	转速 (min-1)	24000	ap≤ 0.035	24000	ap≤ 0.03	24000	ap≤ 0.025	21000	ap≤ 0.02	21000	ap≤ 0.015	21000	ap≤ 0.01
		进给速度 (mm/min)	970	ae≤ 0.032	960	ae≤ 0.027	950	ae≤ 0.023	810	ae≤ 0.018	800	ae≤ 0.014	730	ae≤ 0.009
	Ph与铁素体 马氏体钢 (35-45HRC)	转速 (min-1)	22000	ap≤ 0.035	22000	ap≤ 0.030	22000	ap≤ 0.025	20000	ap≤ 0.02	20000	ap≤ 0.015	20000	ap≤ 0.01
		进给速度 (mm/min)	830	ae≤ 0.025	820	ae≤ 0.021	810	ae≤ 0.018	690	ae≤ 0.014	680	ae≤ 0.011	620	ae≤ 0.007
H	淬硬钢 (45-55HRC)	转速 (min-1)	19000	ap≤ 0.035	19000	ap≤ 0.03	19000	ap≤ 0.025	18000	ap≤ 0.02	18000	ap≤ 0.015	18000	ap≤ 0.01
		进给速度 (mm/min)	610	ae≤ 0.018	600	ae≤ 0.015	590	ae≤ 0.013	510	ae≤ 0.01	500	ae≤ 0.008	410	ae≤ 0.005
	淬硬钢 (55-60HRC)	转速 (min-1)	18000	ap≤ 0.035	18000	ap≤ 0.03	18000	ap≤ 0.025	17000	ap≤ 0.02	17000	ap≤ 0.015	17000	ap≤ 0.01
		进给速度 (mm/min)	490	ae≤ 0.016	480	ae≤ 0.014	470	ae≤ 0.011	370	ae≤ 0.009	360	ae≤ 0.007	330	ae≤ 0.005
		转速 (min-1)	19000	ap≤ 0.035	19000	ap≤ 0.03	19000	ap≤ 0.025	18000	ap≤ 0.02	18000	ap≤ 0.015	18000	ap≤ 0.01
		进给速度 (mm/min)	610	ae≤ 0.018	600	ae≤ 0.015	590	ae≤ 0.013	510	ae≤ 0.01	500	ae≤ 0.008	410	ae≤ 0.005

PS-2B/2B-NL

小径深加工2刃球头立铣刀

Small diameter deep machining 2-edge ball end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)																					
			D0.2R0.1						D0.3R0.15						D0.4R0.2									
			颈长						颈长						颈长									
			0.5		1		1.5		1		1.5		2		1		2		3		4			
P	碳钢, 合金钢 (180~250HB)	转速 (min-1)	45000	ap≤ 0.01	45000	ap≤ 0.008	44000	ap≤ 0.005	45000	ap≤ 0.012	45000	ap≤ 0.009	45000	ap≤ 0.006	43000	ap≤ 0.015	43000	ap≤ 0.012	39000	ap≤ 0.008	39000	ap≤ 0.004		
		进给速度 (mm/min)	320	ae≤ 0.01	310	ae≤ 0.008	300	ae≤ 0.005	440	ae≤ 0.012	420	ae≤ 0.009	430	ae≤ 0.006	510	ae≤ 0.015	500	ae≤ 0.012	420	ae≤ 0.008	410	ae≤ 0.004		
	合金钢 (30-45HRC)	转速 (min-1)	45000	ap≤ 0.01	45000	ap≤ 0.008	44000	ap≤ 0.005	45000	ap≤ 0.012	45000	ap≤ 0.009	44000	ap≤ 0.006	39000	ap≤ 0.015	39000	ap≤ 0.012	35000	ap≤ 0.008	35000	ap≤ 0.004		
		进给速度 (mm/min)	310	ae≤ 0.009	300	ae≤ 0.007	270	ae≤ 0.005	440	ae≤ 0.011	420	ae≤ 0.008	390	ae≤ 0.005	460	ae≤ 0.014	450	ae≤ 0.011	370	ae≤ 0.007	360	ae≤ 0.004		
	Ph与铁素体 马氏体钢 (35-45HRC)	转速 (min-1)	45000	ap≤ 0.01	45000	ap≤ 0.008	41000	ap≤ 0.005	45000	ap≤ 0.012	45000	ap≤ 0.009	42000	ap≤ 0.006	37000	ap≤ 0.015	37000	ap≤ 0.012	33000	ap≤ 0.008	33000	ap≤ 0.004		
		进给速度 (mm/min)	290	ae≤ 0.008	280	ae≤ 0.006	240	ae≤ 0.004	400	ae≤ 0.01	390	ae≤ 0.007	330	ae≤ 0.005	400	ae≤ 0.012	390	ae≤ 0.01	320	ae≤ 0.006	310	ae≤ 0.003		
H	淬硬钢 (45-55HRC)	转速 (min-1)	41000	ap≤ 0.01	41000	ap≤ 0.008	37000	ap≤ 0.005	41000	ap≤ 0.012	41000	ap≤ 0.009	37000	ap≤ 0.006	33000	ap≤ 0.015	33000	ap≤ 0.012	30000	ap≤ 0.008	30000	ap≤ 0.004		
		进给速度 (mm/min)	250	ae≤ 0.007	240	ae≤ 0.005	190	ae≤ 0.003	340	ae≤ 0.008	330	ae≤ 0.006	270	ae≤ 0.004	320	ae≤ 0.01	310	ae≤ 0.008	260	ae≤ 0.005	250	ae≤ 0.003		
	淬硬钢 (55-60HRC)	转速 (min-1)	38000	ap≤ 0.01	38000	ap≤ 0.008	34000	ap≤ 0.005	38000	ap≤ 0.012	38000	ap≤ 0.009	34000	ap≤ 0.006	31000	ap≤ 0.015	31000	ap≤ 0.012	28000	ap≤ 0.008	28000	ap≤ 0.004		
		进给速度 (mm/min)	190	ae≤ 0.006	180	ae≤ 0.005	150	ae≤ 0.003	300	ae≤ 0.007	290	ae≤ 0.005	240	ae≤ 0.004	300	ae≤ 0.009	290	ae≤ 0.007	240	ae≤ 0.005	230	ae≤ 0.002		

PS-2B/2B-NL

小径深加工2刃球头立铣刀

Small diameter deep machining 2-edge ball end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D0.5R0.25											
			颈长											
			1		1.5		2		3		4		5	
P	碳钢, 合金钢 (180~250HB)	转速 (min-1)	36000	ap≤ 0.02	36000	ap≤ 0.015	36000	ap≤ 0.012	33000	ap≤ 0.01	32000	ap≤ 0.009	32000	ap≤ 0.007
		进给速度 (mm/min)	720	ae≤ 0.02	710	ae≤ 0.015	700	ae≤ 0.012	580	ae≤ 0.01	570	ae≤ 0.009	560	ae≤ 0.007
	合金钢 (30-45HRC)	转速 (min-1)	33000	ap≤ 0.02	33000	ap≤ 0.015	33000	ap≤ 0.012	30000	ap≤ 0.01	30000	ap≤ 0.009	30000	ap≤ 0.007
		进给速度 (mm/min)	640	ae≤ 0.018	630	ae≤ 0.014	620	ae≤ 0.011	520	ae≤ 0.009	510	ae≤ 0.008	500	ae≤ 0.006
	Ph与铁素体 马氏体钢 (35-45HRC)	转速 (min-1)	31000	ap≤ 0.02	31000	ap≤ 0.015	31000	ap≤ 0.012	28000	ap≤ 0.01	28000	ap≤ 0.009	28000	ap≤ 0.007
		进给速度 (mm/min)	550	ae≤ 0.016	540	ae≤ 0.012	530	ae≤ 0.01	440	ae≤ 0.008	430	ae≤ 0.007	420	ae≤ 0.006
H	淬硬钢 (45-55HRC)	转速 (min-1)	27000	ap≤ 0.02	27000	ap≤ 0.015	27000	ap≤ 0.012	25000	ap≤ 0.01	25000	ap≤ 0.009	25000	ap≤ 0.007
		进给速度 (mm/min)	480	ae≤ 0.013	470	ae≤ 0.01	460	ae≤ 0.008	390	ae≤ 0.007	380	ae≤ 0.006	370	ae≤ 0.005
	淬硬钢 (55-60HRC)	转速 (min-1)	25000	ap≤ 0.02	25000	ap≤ 0.015	25000	ap≤ 0.012	23000	ap≤ 0.01	23000	ap≤ 0.009	23000	ap≤ 0.007
		进给速度 (mm/min)	420	ae≤ 0.012	410	ae≤ 0.009	400	ae≤ 0.007	340	ae≤ 0.006	330	ae≤ 0.005	320	ae≤ 0.004

PS-2B/2B-NL

小径深加工2刃球头立铣刀

Small diameter deep machining 2-edge ball end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)																			
			D0.6R0.3								D0.8R0.4											
			颈长								颈长											
			2		3		4		5		6		2		4		6		8			
P	碳钢, 合金钢 (180~250HB)	转速 (min-1)	36000	ap≤ 0.02	36000	ap≤ 0.018	33000	ap≤ 0.016	33000	ap≤ 0.014	32000	ap≤ 0.012	36000	ap≤ 0.03	36000	ap≤ 0.023	33000	ap≤ 0.018	29000	ap≤ 0.014		
		进给速度 (mm/min)	1050	ae≤ 0.02	1030	ae≤ 0.018	920	ae≤ 0.016	870	ae≤ 0.014	860	ae≤ 0.012	1290	ae≤ 0.03	1280	ae≤ 0.023	1050	ae≤ 0.018	930	ae≤ 0.014		
	合金钢 (30-45HRC)	转速 (min-1)	33000	ap≤ 0.02	33000	ap≤ 0.018	30000	ap≤ 0.016	30000	ap≤ 0.014	29000	ap≤ 0.012	33000	ap≤ 0.03	33000	ap≤ 0.023	30000	ap≤ 0.018	26000	ap≤ 0.014		
		进给速度 (mm/min)	970	ae≤ 0.018	960	ae≤ 0.016	830	ae≤ 0.014	780	ae≤ 0.013	760	ae≤ 0.011	1160	ae≤ 0.027	1150	ae≤ 0.021	940	ae≤ 0.016	840	ae≤ 0.013		
	Ph与铁素体 马氏体钢 (35-45HRC)	转速 (min-1)	31000	ap≤ 0.02	31000	ap≤ 0.018	28000	ap≤ 0.016	28000	ap≤ 0.014	27000	ap≤ 0.012	31000	ap≤ 0.03	31000	ap≤ 0.023	28000	ap≤ 0.018	25000	ap≤ 0.014		
		进给速度 (mm/min)	800	ae≤ 0.016	790	ae≤ 0.014	680	ae≤ 0.013	640	ae≤ 0.011	630	ae≤ 0.01	970	ae≤ 0.024	960	ae≤ 0.018	790	ae≤ 0.014	700	ae≤ 0.011		
H	淬硬钢 (45-55HRC)	转速 (min-1)	28000	ap≤ 0.02	28000	ap≤ 0.018	25000	ap≤ 0.016	25000	ap≤ 0.014	24000	ap≤ 0.012	27000	ap≤ 0.03	27000	ap≤ 0.023	24000	ap≤ 0.018	22000	ap≤ 0.014		
		进给速度 (mm/min)	640	ae≤ 0.013	630	ae≤ 0.012	550	ae≤ 0.01	520	ae≤ 0.009	500	ae≤ 0.008	810	ae≤ 0.02	800	ae≤ 0.015	650	ae≤ 0.012	580	ae≤ 0.009		
	淬硬钢 (55-60HRC)	转速 (min-1)	26000	ap≤ 0.02	26000	ap≤ 0.018	23000	ap≤ 0.016	23000	ap≤ 0.014	22000	ap≤ 0.012	25000	ap≤ 0.03	25000	ap≤ 0.023	23000	ap≤ 0.018	21000	ap≤ 0.014		
		进给速度 (mm/min)	500	ae≤ 0.012	490	ae≤ 0.011	430	ae≤ 0.01	400	ae≤ 0.008	380	ae≤ 0.007	700	ae≤ 0.018	690	ae≤ 0.014	570	ae≤ 0.011	500	ae≤ 0.008		

PS-2B/2B-NL

小径深加工2刃球头立铣刀

Small diameter deep machining 2-edge ball end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)															
			D1.0R0.5															
			颈长															
			3		4		5		6		8		10		12			
P	碳钢, 合金钢 (180~250HB)	转速 (min-1)	33000	ap≤ 0.05	32000	ap≤ 0.04	32000	ap≤ 0.03	29000	ap≤ 0.025	29000	ap≤ 0.02	29000	ap≤ 0.015	26000	ap≤ 0.008		
		进给速度 (mm/min)	1630	ae≤ 0.05	1620	ae≤ 0.04	1610	ae≤ 0.03	1310	ae≤ 0.025	1300	ae≤ 0.02	1290	ae≤ 0.015	1100	ae≤ 0.008		
	合金钢 (30-45HRC)	转速 (min-1)	30000	ap≤ 0.05	29000	ap≤ 0.04	29000	ap≤ 0.03	27000	ap≤ 0.025	27000	ap≤ 0.02	27000	ap≤ 0.015	23000	ap≤ 0.008		
		进给速度 (mm/min)	1460	ae≤ 0.045	1450	ae≤ 0.036	1440	ae≤ 0.027	1180	ae≤ 0.023	1160	ae≤ 0.018	1150	ae≤ 0.014	980	ae≤ 0.007		
	Ph与铁素体 马氏体钢 (35-45HRC)	转速 (min-1)	28000	ap≤ 0.05	27000	ap≤ 0.04	27000	ap≤ 0.03	25000	ap≤ 0.025	25000	ap≤ 0.02	25000	ap≤ 0.015	22000	ap≤ 0.008		
		进给速度 (mm/min)	1240	ae≤ 0.04	1230	ae≤ 0.032	1220	ae≤ 0.024	1000	ae≤ 0.02	950	ae≤ 0.016	900	ae≤ 0.012	830	ae≤ 0.006		
	H	淬硬钢 (45-55HRC)	转速 (min-1)	25000	ap≤ 0.05	24000	ap≤ 0.04	24000	ap≤ 0.03	22000	ap≤ 0.025	22000	ap≤ 0.02	22000	ap≤ 0.015	20000	ap≤ 0.008	
			进给速度 (mm/min)	1030	ae≤ 0.033	1020	ae≤ 0.026	1010	ae≤ 0.02	820	ae≤ 0.016	810	ae≤ 0.013	800	ae≤ 0.01	690	ae≤ 0.005	
淬硬钢 (55-60HRC)		转速 (min-1)	23000	ap≤ 0.05	22000	ap≤ 0.04	22000	ap≤ 0.03	21000	ap≤ 0.025	21000	ap≤ 0.02	21000	ap≤ 0.015	18000	ap≤ 0.008		
		进给速度 (mm/min)	900	ae≤ 0.03	890	ae≤ 0.024	880	ae≤ 0.018	730	ae≤ 0.015	720	ae≤ 0.012	710	ae≤ 0.009	600	ae≤ 0.005		

TS-2SS/2SS-NL XJ-2S/2S-NL

小径深加工2刃平头立铣刀

Small diameter deep machining 2-edge flat end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)															
			D0.2				D0.3				D0.4							
			颈长				颈长				颈长							
			0.5		1		1.5		1		1.5		2		1		2	
N	铜合金 (<Hb200)	转速 (min-1)	45000	ap≤ 0.012	45000	ap≤ 0.009	45000	ap≤ 0.005	44000	ap≤ 0.015	43000	ap≤ 0.012	39000	ap≤ 0.01	35000	ap≤ 0.02	35000	ap≤ 0.015
		进给速度 (mm/min)	320	ae≤ 0.013	630	ae≤ 0.01	620	ae≤ 0.006	620	ae≤ 0.017	610	ae≤ 0.013	500	ae≤ 0.011	760	ae≤ 0.022	750	ae≤ 0.017
	锻造铝合金 铸造铝合金 (Si<12%)	转速 (min-1)	45000	ap≤ 0.012	45000	ap≤ 0.009	45000	ap≤ 0.005	44000	ap≤ 0.015	44000	ap≤ 0.012	40000	ap≤ 0.01	36000	ap≤ 0.02	36000	ap≤ 0.015
		进给速度 (mm/min)	310	ae≤ 0.013	640	ae≤ 0.01	630	ae≤ 0.006	630	ae≤ 0.017	620	ae≤ 0.013	510	ae≤ 0.011	770	ae≤ 0.022	760	ae≤ 0.017

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D0.5											
			颈长											
			1		1.5		2		3		4		6	
N	铜合金 (<Hb200)	转速 (min-1)	35000	ap≤ 0.023	35000	ap≤ 0.02	35000	ap≤ 0.017	35000	ap≤ 0.014	35000	ap≤ 0.011	35000	ap≤ 0.009
		进给速度 (mm/min)	760	ae≤ 0.025	750	ae≤ 0.022	740	ae≤ 0.019	730	ae≤ 0.015	720	ae≤ 0.012	710	ae≤ 0.01
	锻造铝合金 铸造铝合金 (Si<12%)	转速 (min-1)	36000	ap≤ 0.023	36000	ap≤ 0.02	36000	ap≤ 0.017	36000	ap≤ 0.014	36000	ap≤ 0.011	36000	ap≤ 0.009
		进给速度 (mm/min)	770	ae≤ 0.025	760	ae≤ 0.022	750	ae≤ 0.019	740	ae≤ 0.015	730	ae≤ 0.012	720	ae≤ 0.01

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D0.6											
			颈长											
			2		3		4		5		6		4	
N	铜合金 (<Hb200)	转速 (min-1)	35000	ap≤ 0.021	32000	ap≤ 0.018	32000	ap≤ 0.015	32000	ap≤ 0.012	32000	ap≤ 0.01	35000	ap≤ 0.023
		进给速度 (mm/min)	1050	ae≤ 0.023	900	ae≤ 0.02	890	ae≤ 0.017	880	ae≤ 0.013	870	ae≤ 0.011	1080	ae≤ 0.025
	锻造铝合金 铸造铝合金 (Si<12%)	转速 (min-1)	36000	ap≤ 0.021	33000	ap≤ 0.018	33000	ap≤ 0.015	33000	ap≤ 0.012	33000	ap≤ 0.01	36000	ap≤ 0.023
		进给速度 (mm/min)	1060	ae≤ 0.023	1000	ae≤ 0.02	950	ae≤ 0.017	930	ae≤ 0.013	900	ae≤ 0.011	1100	ae≤ 0.025

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D1.0											
			颈长											
			3		4		5		6		8		10	
N	铜合金 (<Hb200)	转速 (min-1)	32000	ap≤ 0.035	32000	ap≤ 0.03	32000	ap≤ 0.025	28000	ap≤ 0.02	28000	ap≤ 0.016	28000	ap≤ 0.012
		进给速度 (mm/min)	1460	ae≤ 0.039	1450	ae≤ 0.033	1440	ae≤ 0.028	1210	ae≤ 0.022	1150	ae≤ 0.018	1100	ae≤ 0.013
	锻造铝合金 铸造铝合金 (Si<12%)	转速 (min-1)	33000	ap≤ 0.035	33000	ap≤ 0.03	33000	ap≤ 0.025	29000	ap≤ 0.02	29000	ap≤ 0.016	29000	ap≤ 0.012
		进给速度 (mm/min)	1500	ae≤ 0.039	1460	ae≤ 0.033	1450	ae≤ 0.028	1300	ae≤ 0.022	1200	ae≤ 0.018	1150	ae≤ 0.013

TS-2BS/2BS-NL XJ-2B/2B-NL

小径深加工2刃球头立铣刀

Small diameter deep machining 2-edge ball end milling cutter

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)															
			D0.2R0.1				D0.3R0.15				D0.4R0.2							
			颈长				颈长				颈长							
			0.5		1		1.5		1		1.5		2		1		2	
N	铜合金 (<Hb200)	转速 (min-1)	45000	ap≤ 0.011	45000	ap≤ 0.009	45000	ap≤ 0.006	45000	ap≤ 0.011	45000	ap≤ 0.011	45000	ap≤ 0.006	45000	ap≤ 0.02	45000	ap≤ 0.013
		进给速度 (mm/min)	380	ae≤ 0.011	370	ae≤ 0.009	360	ae≤ 0.006	550	ae≤ 0.011	540	ae≤ 0.011	480	ae≤ 0.006	620	ae≤ 0.02	610	ae≤ 0.013
	锻造铝合金 铸造铝合金 (Si<12%)	转速 (min-1)	45000	ap≤ 0.011	45000	ap≤ 0.009	45000	ap≤ 0.006	45000	ap≤ 0.011	45000	ap≤ 0.011	45000	ap≤ 0.006	45000	ap≤ 0.02	45000	ap≤ 0.013
		进给速度 (mm/min)	400	ae≤ 0.01	390	ae≤ 0.008	380	ae≤ 0.005	560	ae≤ 0.01	550	ae≤ 0.01	540	ae≤ 0.005	640	ae≤ 0.018	630	ae≤ 0.012

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D0.5R0.25											
			颈长											
			1		1.5		2		3		4		6	
N	铜合金 (<Hb200)	转速 (min-1)	43000	ap≤ 0.023	43000	ap≤ 0.02	43000	ap≤ 0.017	39000	ap≤ 0.014	39000	ap≤ 0.01	39000	ap≤ 0.007
		进给速度 (mm/min)	860	ae≤ 0.023	850	ae≤ 0.02	840	ae≤ 0.017	700	ae≤ 0.014	690	ae≤ 0.01	680	ae≤ 0.007
	锻造铝合金 铸造铝合金 (Si<12%)	转速 (min-1)	44000	ap≤ 0.023	44000	ap≤ 0.02	44000	ap≤ 0.017	40000	ap≤ 0.014	40000	ap≤ 0.01	40000	ap≤ 0.007
		进给速度 (mm/min)	900	ae≤ 0.021	890	ae≤ 0.018	880	ae≤ 0.015	720	ae≤ 0.013	700	ae≤ 0.009	690	ae≤ 0.006

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)																	
			D0.6R0.3										D0.8R0.4							
			颈长										颈长							
			2		3		4		5		6		2		4		6		8	
N	铜合金 (<Hb200)	转速 (m·n-1)	43000	ap≤ 0.021	43000	ap≤ 0.017	39000	ap≤ 0.012	39000	ap≤ 0.01	39000	ap≤ 0.007	43000	ap≤ 0.035	43000	ap≤ 0.028	39000	ap≤ 0.016	35000	ap≤ 0.01
		进给速度 (mm/min)	1300	ae≤ 0.021	1280	ae≤ 0.017	1100	ae≤ 0.012	1050	ae≤ 0.01	1030	ae≤ 0.007	1560	ae≤ 0.035	1550	ae≤ 0.028	1260	ae≤ 0.016	1120	ae≤ 0.01
	锻造铝合金 铸造铝合金 (Si<12%)	转速 (min-1)	44000	ap≤ 0.021	44000	ap≤ 0.017	40000	ap≤ 0.012	40000	ap≤ 0.01	40000	ap≤ 0.007	44000	ap≤ 0.035	44000	ap≤ 0.028	40000	ap≤ 0.016	38000	ap≤ 0.01
		进给速度 (mm/min)	1350	ae≤ 0.019	1330	ae≤ 0.015	1200	ae≤ 0.011	1100	ae≤ 0.009	1050	ae≤ 0.006	1600	ae≤ 0.032	1590	ae≤ 0.025	1300	ae≤ 0.014	1200	ae≤ 0.009

工作材料 Working materials		切削 条件 Cutting conditions	刃径 (mm)											
			D1.0R0.5											
			颈长											
			3		4		5		6		8		10	
N	铜合金 (<Hb200)	转速 (min-1)	39000	ap≤ 0.05	39000	ap≤ 0.035	39000	ap≤ 0.03	35000	ap≤ 0.02	35000	ap≤ 0.016	35000	ap≤ 0.012
		进给速度 (mm/min)	1950	ae≤ 0.05	1940	ae≤ 0.035	1920	ae≤ 0.03	1580	ae≤ 0.02	1570	ae≤ 0.016	1550	ae≤ 0.012
	锻造铝合金 铸造铝合金 (Si<12%)	转速 (min-1)	40000	ap≤ 0.05	40000	ap≤ 0.035	40000	ap≤ 0.03	36000	ap≤ 0.02	36000	ap≤ 0.016	36000	ap≤ 0.012
		进给速度 (mm/min)	1980	ae≤ 0.045	1970	ae≤ 0.032	1960	ae≤ 0.027	1620	ae≤ 0.018	1600	ae≤ 0.014	1580	ae≤ 0.011

注意 | BE CAREFUL

- 1.请配合使用较高的刚性机床和高精度筒夹刀柄。
- 2.请根据切削速度,设备刚性等因素,适当调整转速和进给速度。
- 3.图表中数据是按照刀具伸长为10MM以下时所制作的,若刀具伸出刀柄过长,加工会振动和异常现象,此时应相对降低转速,进给速度和吃深量。
- 4.在不干涉工件的条件下,尽可能使刀具伸长量最短。
- 5.请依据工件材料及加工形状,使用合理的冷却方式,建议水冷,油冷和油雾冷却。
- 6.根据加工形状,使用机台等原因,对加工条件进行调整。
- 7.如果机台转速较低及主轴型号较大,摆动向心力大,请调整进给速度及转速。
- 8.加工深槽及肋位等闭环空间时,切削屑不易排出,切削深度及切削宽度适当调整。