



NEW

MINI 108, 111, 114 和 116 系列

烧结的车螺纹刀片槽型

SYSTEM MINI 108, 111, 114 AND 116

Tools for threadcutting by turning, with sintered chip breaking geometry



不同之处： 更多可能

THE DIFFERENCE: MORE POSSIBILITIES

- **稳定的加工,在难加工材料中的断屑**
Process stability through chip breaking in difficult-to-cut materials
- **优化的切屑控制,螺距0.5mm至2.5mm,过孔8mm起.**
Optimum chip control with pitches from 0.5 to 2.5 mm and diameter from 8 mm
- **标准品 Mini 108, 111, 114 和 116系列**
Available in the standard programme System Mini 108, 111, 114 and 116

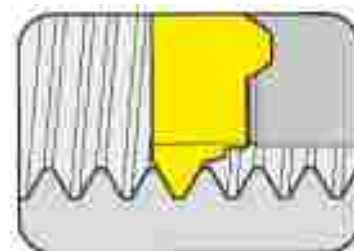
螺纹切削 (内圆) -非全牙型

Threading (internal) Partial profile



刀片
Insert

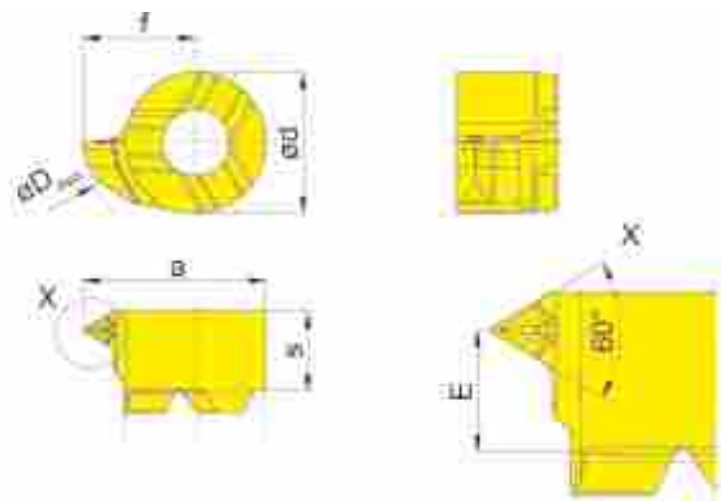
108



孔径 \varnothing 自
螺距

Bore \varnothing from
Pitch

8 mm
0,5-1,5 mm



配合刀杆
for Toolholder

型号 B108
Type

ISO米制螺纹
Metric ISO-thread

R=右手型-如图
R = right hand version shown

产品型号 Part number	P	P _{max}	E	f	a	d	s	D _{min}	EG55
R/LS108.0205.GM1	0.5	0.75	2.6	4.8	7.8	6	3.4	8	▲/▲
R/LS108.0510.GM1	1.0	1.25	2.6	4.8	7.8	6	3.4	8	▲/▲
R/LS108.0815.GM1	1.5	1.50	2.6	4.8	7.8	6	3.4	8	▲/▲

- ▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request
- 推荐 / recommended
- 次推荐 / alternative recommendation
- 不合适 / not suitable
- 非涂层 / uncoated grades
- 涂层 / coated grades
- 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm
Dimensions in mm
按需提供更多尺寸
Further sizes upon request

P	●
M	○
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

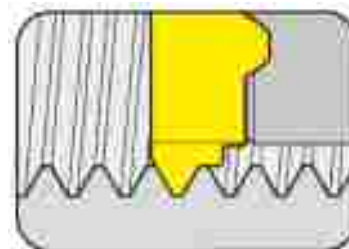
螺纹切削 (内圆) -全牙型

Threading (internal) Full profile



刀片
Insert

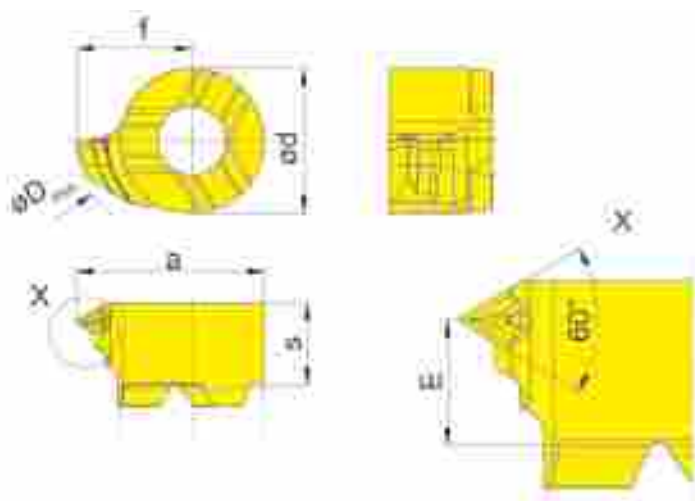
108



孔径Ø自
螺距

Bore Ø from
Pitch

8 mm
0.5-1.5 mm



配合刀杆
for Toolholder

型号 B108
Type

ISO米制螺纹
Metric ISO-thread

R=右手型-如图
R = right hand version shown

产品型号 Part number	P	E	f	a	d	s	D _{min}	EG55
R/LS108.0305.GM2	0.50	2.6	4.8	7.8	6	3.4	8	▲/▲
R/LS108.0510.GM2	1.00	2.6	4.8	7.8	6	3.4	8	▲/▲
R/LS108.0512.GM2	1.25	2.6	4.8	7.8	6	3.4	8	▲/▲
R/LS108.0815.GM2	1.50	2.6	4.8	7.8	6	3.4	8	▲/▲

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

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■ 非涂层 / uncoated grades

■ 涂层 / coated grades

■ 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm

Dimensions in mm

按需提供更多尺寸

Further sizes upon request

P	●
M	○
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

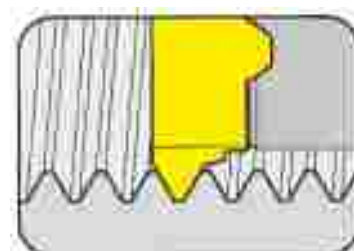
螺纹切削 (内圆) -非全牙型

Threading (internal) Partial profile



刀片
Insert

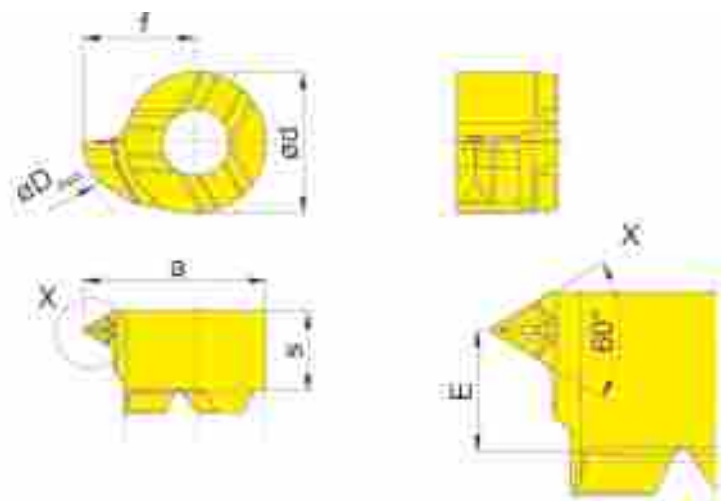
111



孔径Ø 自
螺距

Bore Ø from
Pitch

11 mm
0,5-2,0 mm



配合刀杆
for Toolholder

型号 B111
Type

ISO米制螺纹
Metric ISO-thread

R=右手型-如图
R = right hand version shown

产品型号 Part number	P	P _{max}	E	f	a	d	s	D _{min}	EG55
R/LS111.0205.GM1	0.5	0.75	3.1	6.7	10.7	8	4.1	11	▲/▲
R/LS111.0510.GM1	1.0	1.25	3.1	6.7	10.7	8	4.1	11	▲/▲
R/LS111.0815.GM1	1.5	1.75	3.1	6.7	10.7	8	4.1	11	▲/▲
R/LS111.1020.GM1	2.0	2.00	3.1	6.7	10.7	8	4.1	11	▲/▲

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

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尺寸单位 : mm

Dimensions in mm

按需提供更多尺寸

Further sizes upon request

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M	○
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

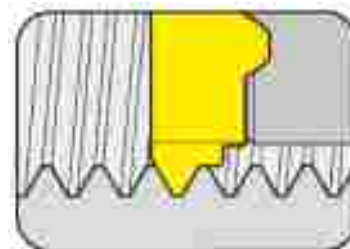
螺纹切削 (内圆) -全牙型

Threading (internal) Full profile

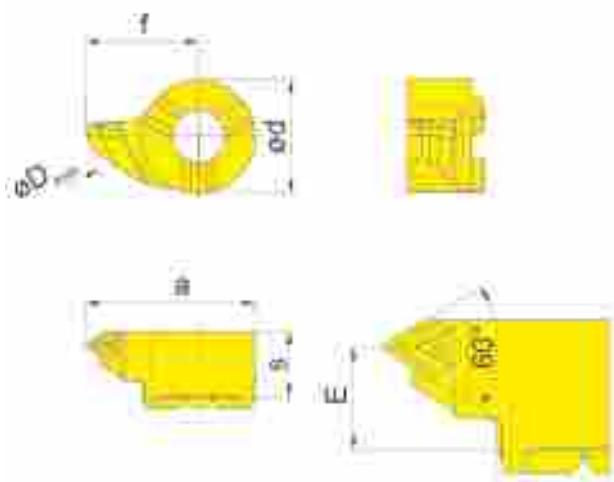


刀片
Insert

111



孔径Ø 自 螺距	Bore Ø from Pitch	11 mm 1-2 mm
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配合刀杆
for Toolholder

型号 B111
Type

ISO米制螺纹
Metric ISO-thread

R=右手型-如图
R = right hand version shown

产品型号 Part number	P	E	f	a	d	s	D _{min}	EG55
R/LS111.0510.GM2	1.0	3.1	6.7	10.7	8	4.1	11	▲/▲
R/LS111.0815.GM2	1.5	3.1	6.7	10.7	8	4.1	11	▲/▲
R/LS111.1020.GM2	2.0	3.1	6.7	10.7	8	4.1	11	▲/▲

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尺寸单位 : mm
Dimensions in mm
按需提供更多尺寸
Further sizes upon request

P	●
M	○
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

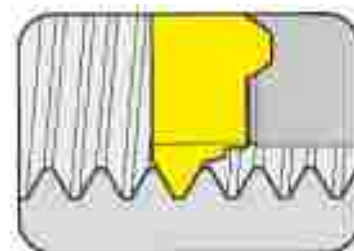
螺纹切削 (内圆) -非全牙型

Threading (internal) Partial profile



刀片
Insert

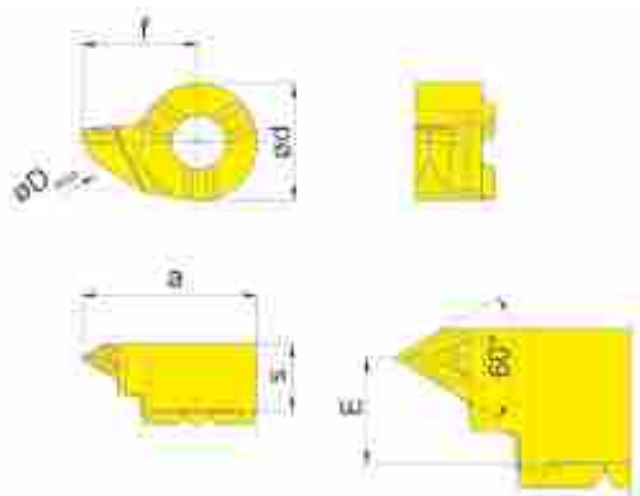
114



孔径Ø 自
螺距

Bore Ø from
Pitch

14 mm
0.5-2.5 mm



配合刀杆
for Toolholder

型号 B114
Type

R=右手型-如图
R = right hand version shown

ISO米制螺纹
Metric ISO-thread

产品型号 Part number	P	P _{max}	E	f	a	d	s	D _{min}	EG55
R/LS114.0205.GM1	0.5	0.75	4.1	9	13.5	9	5.2	14	▲/▲
R/LS114.0510.GM1	1.0	1.25	4.1	9	13.5	9	5.2	14	▲/▲
R/LS114.0815.GM1	1.5	1.75	4.1	9	13.5	9	5.2	14	▲/▲
R/LS114.1020.GM1	2.0	2.00	4.1	9	13.5	9	5.2	14	▲/▲
R/LS114.1325.GM1	2.5	2.50	4.1	9	13.5	9	5.2	14	▲/▲

- ▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request
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- 非涂层 / uncoated grades
- 涂层 / coated grades
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尺寸单位 : mm
Dimensions in mm
按需提供更多尺寸
Further sizes upon request

P	•
M	○
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

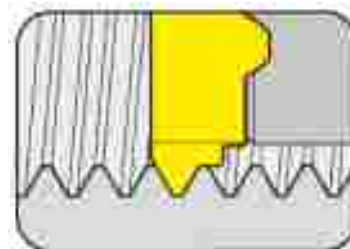
螺纹切削 (内圆) -全牙型

Threading (internal) Full profile

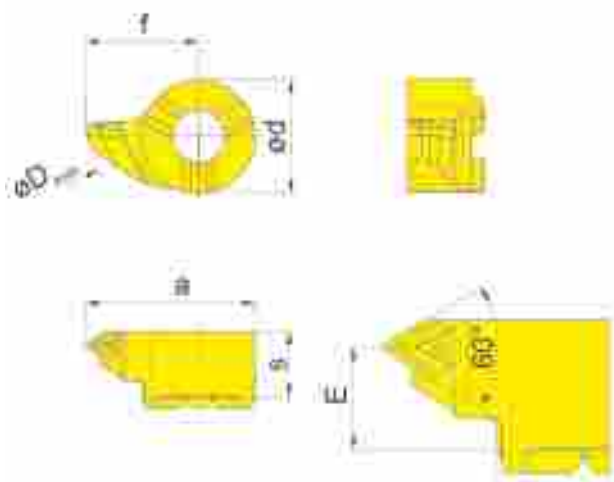


刀片
Insert

114



孔径Ø 自 螺距	Bore Ø from Pitch	14 mm 1-2.5 mm
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配合刀杆
for Toolholder

型号 B114
Type

ISO米制螺纹
Metric ISO-thread

R=右手型-如图
R = right hand version shown

产品型号 Part number	P	E	f	a	d	s	D _{min}	EG55
R/LS114.0510.GM2	1.0	4.1	9	13.5	9	5.2	14	▲/▲
R/LS114.0815.GM2	1.5	4.1	9	13.5	9	5.2	14	▲/▲
R/LS114.1020.GM2	2.0	4.1	9	13.5	9	5.2	14	▲/▲
R/LS114.1325.GM2	2.5	4.1	9	13.5	9	5.2	14	▲/▲

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

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○ 次推荐 / alternative recommendation

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■ 非涂层 / uncoated grades

■ 涂层 / coated grades

■ 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm

Dimensions in mm

按需提供更多尺寸

Further sizes upon request

P	●
M	○
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

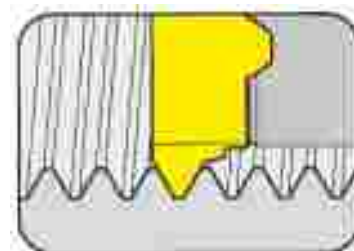
螺纹切削 (内圆) -非全牙型

Threading (internal) Partial profile



刀片
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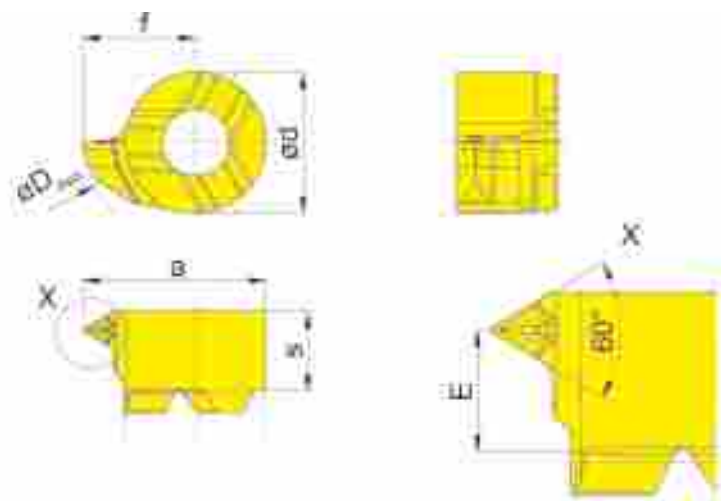
116



孔径Ø自
螺距

Bore Ø from
Pitch

16 mm
1-2.5 mm



配合刀杆
for Toolholder

型号 B116
Type

ISO米制螺纹
Metric ISO-thread

R=右手型-如图
R = right hand version shown

产品型号 Part number	P	P _{max}	E	f	a	d	s	D _{min}	EG55
R/LS116.0510.GM1	1.0	1.25	4.1	10.2	15.7	11	5.2	16	▲/▲
R/LS116.0815.GM1	1.5	1.75	4.1	10.2	15.7	11	5.2	16	▲/▲
R/LS116.1020.GM1	2.0	2.00	4.1	10.2	15.7	11	5.2	16	▲/▲
R/LS116.1325.GM1	2.5	2.50	4.1	10.2	15.7	11	5.2	16	▲/▲

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

● 推荐 / recommended

○ 次推荐 / alternative recommendation

- 不合适 / not suitable

■ 非涂层 / uncoated grades

■ 涂层 / coated grades

■ 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm

Dimensions in mm

按需提供更多尺寸

Further sizes upon request

P	●
M	○
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

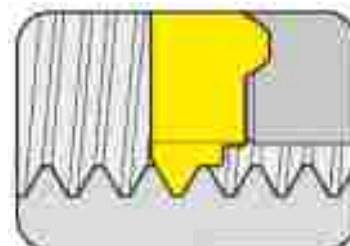
螺纹切削 (内圆) -全牙型

Threading (internal) Full profile



刀片
Insert

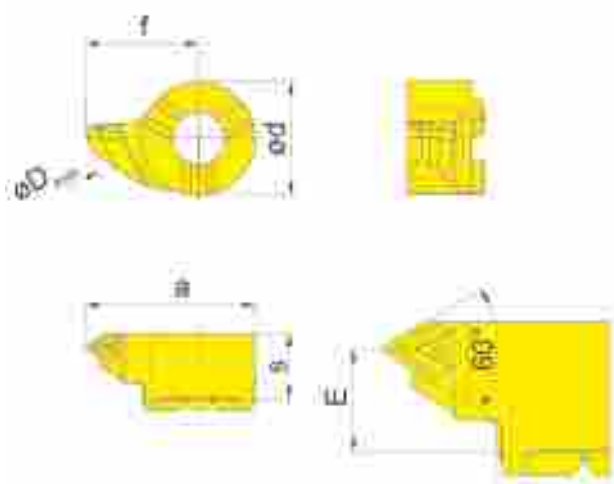
116



孔径Ø 自
螺距

Bore Ø from
Pitch

16 mm
1-2.5 mm



配合刀杆
for Toolholder

型号 B116
Type

ISO米制螺纹
Metric ISO-thread

R=右手型-如图
R = right hand version shown

产品型号 Part number	P	E	f	a	d	s	D _{min}	EG55
R/LS116.0510.GM2	1.0	4.1	10.2	15.7	11	5.2	16	▲/▲
R/LS116.0815.GM2	1.5	4.1	10.2	15.7	11	5.2	16	▲/▲
R/LS116.1020.GM2	2.0	4.1	10.2	15.7	11	5.2	16	▲/▲
R/LS116.1325.GM2	2.5	4.1	10.2	15.7	11	5.2	16	▲/▲

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

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○ 次推荐 / alternative recommendation

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■ 非涂层 / uncoated grades

■ 涂层 / coated grades

■ 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm

Dimensions in mm

按需提供更多尺寸

Further sizes upon request

P	●
M	○
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

推荐切削参数

Recommended number of passes

硬质合金牌号 / Carbide grade	钢 (拉伸强度 Nmm ²) Steel (N/mm ² Tensile strength)					不锈钢 Stainless steel	灰铸铁 Grey cast iron	铝 Aluminium	
	400-500	500-700	700-850	850-1150	> 1150				
V _{max} m/min	160	140	120	90	70	90	100	300	
螺距 / Pitch P mm Gg"/ tpi		走刀次数 / Number of passes							
0,8	32	5	5	5	5	8	8	5	5
1,0	24	6	6	6	6	8	8	6	6
1,25	20 - 19	7	7	7	7	8	8	7	7
1,5	16	8	8	8	8	10	10	8	8
1,75	14	10	10	10	10	12	12	10	10
2,0	12 - 11	12	12	12	12	14	14	12	12
2,5	10	13	13	13	13	15	15	13	13
3,0 - 3,5	8	15	15	16	16	18	18	16	15

表中的推荐切削行程数为近似值

请注意:

- 为了避免切削刃的损坏，首行程切深不宜过大
- 最后零切深的精修在表内未考虑

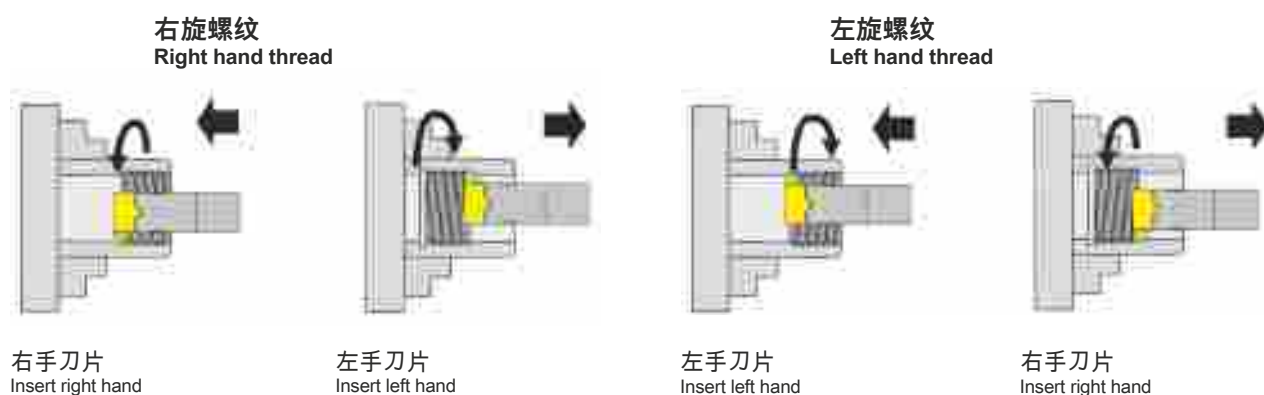
The recommended number of passes in the above table are approxiamte figures.

Please note:

- to avoid breakages at the cutting edge, the depth of cut at the first pass should not be to deep
- finishing passes (with zero depth of cut) are not considered in the table

进给率 内螺纹加工

Feed direction internal threading



进给

In-Feed

径向进给

同时切削刀片两边的材料，这是加工螺纹时最普通的方法。

Radial In-Feed

Metal removed on both sides of the insert simultaneously. The most commonly used method for thread production.



改进的侧刃进给

更小的后刀面磨损和相应的工件侧面上的更好的表面光洁度。

Modified Flank In-Feed

Less wear of the trailing edge and better surface finish on corresponding flank.



变化的后刀面进给

两个刃都被充分利用，意味着刀片寿命更长。

Alternating Flank In-Feed

Both edges are being fully utilised which means longer insert life.



后刀面进给

更好的断屑和散热

Flank In-Feed

More easily formed chip and better heat dissipation.



更多信息详见Supermini&Mini样本

Further information can be found in our catalogue
SUPERMINI AND MINI - INTERNAL MACHINING.

