

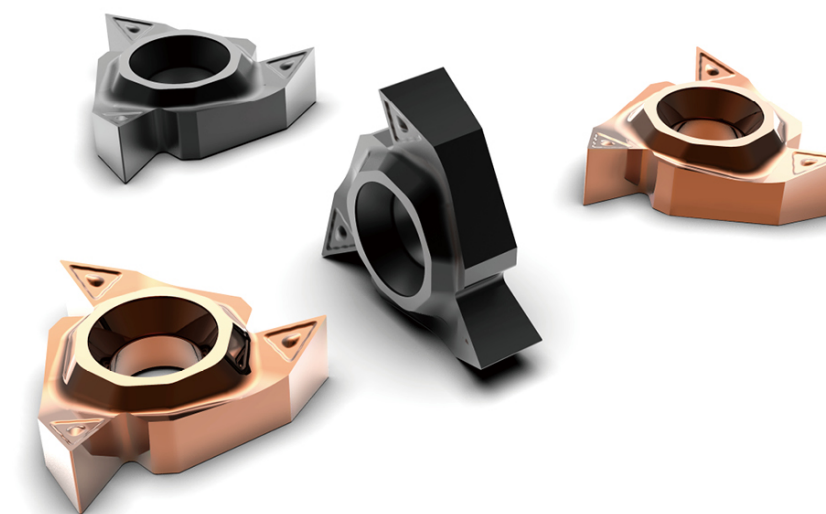


| | | |
|---------------|-------|-----------|
| 螺纹车削刀片命名 | ..... | D003 |
| 螺纹车削刀片规格 | ..... | D004 |
| ISO 公制螺纹 | ..... | D005-D006 |
| 55° 通用螺纹 | ..... | D007-D008 |
| 60° 通用螺纹 | ..... | D009-D010 |
| 惠氏螺纹 [W] | ..... | D011-D012 |
| 惠氏锥管螺纹 [BSPT] | ..... | D013-D014 |
| 统一协定螺纹 [UN] | ..... | D015-D016 |
| 美制锥管螺纹 [NPT] | ..... | D017-D018 |
| 螺纹车削技术信息 | ..... | D019-D020 |

螺纹车削刀片

THREADING INSERTS

>>>



D

螺纹车削刀片

● 螺纹车削刀片命名



1 16 E R 1.50 ISO A

| 刀片尺寸 | |
|--------------|--|
| 11-IC6.35mm | |
| 16-IC9.525mm | |
| 22-IC12.7mm | |

2 16 E R 1.50 ISO A

| 刀具类别 |
|--------------------------------|
| E- 外螺纹刀片 External threading |
| I- 内螺纹刀片 Internal threading |

3 16 E R 1.50 ISO A

| 刀片尺寸 |
|-----------------|
| R- 右手刀片 (Right) |
| L- 左手刀片 (Left) |

4 16 E R 1.50 ISO A

| 螺距或牙数 | | |
|---------------------|----------|-------|
| 全牙型 - 螺距范围 (带修光刃) | | |
| 螺距 mm | 牙数 tpi | |
| 0.5-6.0 | 48-4 | |
| 范围牙型 - 螺距范围 (不带修光刃) | | |
| 代号 | mm | tpi |
| A | 0.5-1.5 | 48-16 |
| AG | 0.5-3.0 | 48-8 |
| G | 1.75-3.0 | 14-8 |
| N | 3.5-5.0 | 7-5 |

2 16 E R 1.50 ISO A

| 螺纹标准 |
|---------------|
| 公制 ISO 螺纹 |
| 55°通用牙型螺纹 |
| 60°通用牙型螺纹 |
| 惠氏螺纹 [W] |
| 英制锥管螺纹 [BSPT] |
| 美制螺纹 [UN] |
| 美制锥管螺纹 [NPT] |

3 16 E R 1.50 ISO A

| 刀片类型 |
|-----------------|
| A= 三维断屑槽型 |
| □ = 不标注为全磨型 |

● 螺纹车削刀片材料

| |
|---|
| RS300(PVD) (涂层构成: TiAlN) |
| 耐磨性与韧性优化匹配的微晶硬质合金, 结合高粘结性的 TiAlN 涂层, 使其具有广泛的使用性能。推荐用于钢、不锈钢的螺纹加工。 |
| RP9320(PVD) (涂层构成: TiAlSiN) |
| 在耐磨性和韧性优化组合的微晶硬质合金基材上涂覆纳米晶 TiAlSiN 涂层, 具有高的涂层硬度和极好的耐高温性能。是不锈钢螺纹加工的首选。 |

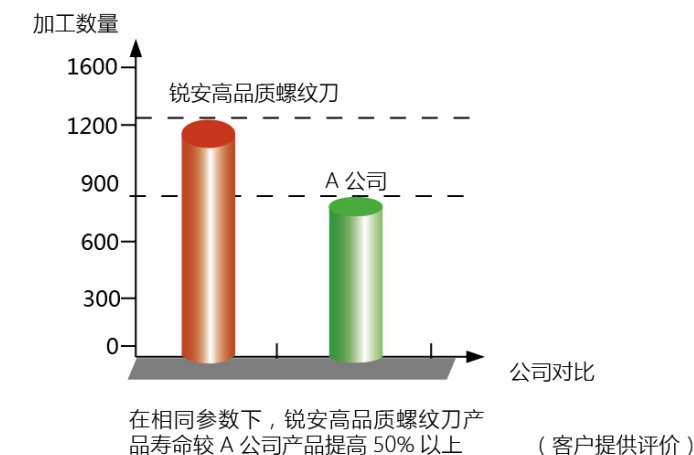
● 螺纹刀片的使用区分

| ● 带修光刃与无修光刃刀片的使用区别 | | |
|--------------------|-------|--|
| 刀片类型 | 完成面状态 | 应用特点 |
| 带修光刃 | | <ol style="list-style-type: none"> 1. 型号齐全, 螺纹螺距规格与刀片型号一一对高度匹配, 加工出来的螺纹精度高。 2. 修光刃实现了对螺纹顶径的修光, 免除了去毛刺的工序, 保证了光洁度, 减少了螺纹加工工序。 |
| 无修光刃 | | <ol style="list-style-type: none"> 1. 牙顶容易产生毛边。 2. 有必要在预先加工中对外径 (内径) 尺寸进行精加工。 3. 单个刀片可加工多种螺距规格的螺纹, 加工经济性好。 |

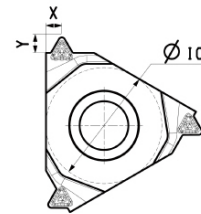
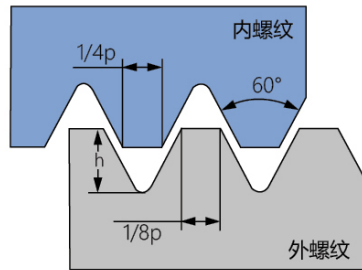
| ● 三维断屑槽型与全磨型刀片的使用区别 | | | |
|---------------------|------|------|---|
| 刀片类型 | 切屑处理 | 螺纹精度 | 应用特点 |
| 三维断屑槽 | | | <ol style="list-style-type: none"> 1. 高精度的模具技术, 实现了高品质的刀尖。 2. 刀片的切屑控制能力优异, 排屑顺畅。 3. 刀片的刀尖强度高, 耐用度高, 性价比高。 |
| 全磨型 | | | <ol style="list-style-type: none"> 1. 刀片锋利度良好, 光洁度高。 2. 小零件或细长零件需要低切削阻力加工时使用 (全磨型切削阻力小)。 3. 重视螺纹精度时, 可使用全磨型刀片。 |

● 加工实例

工件材料: 42CrMo (HB260)
 使用刀片: 16ER2.00ISOA/RS300
 螺距: p=2.0mm
 切削速度: Vc=120m/min
 加工方式: 湿式加工



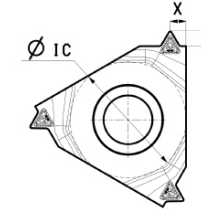
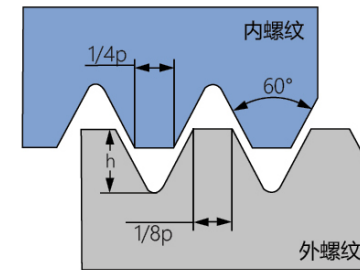
外螺纹



标准 : R262(DIN 13)
公差等级 : 6g/6H

★ 带修光刃

内螺纹



标准 : R262(DIN 13)
公差等级 : 6g/6H

★ 带修光刃

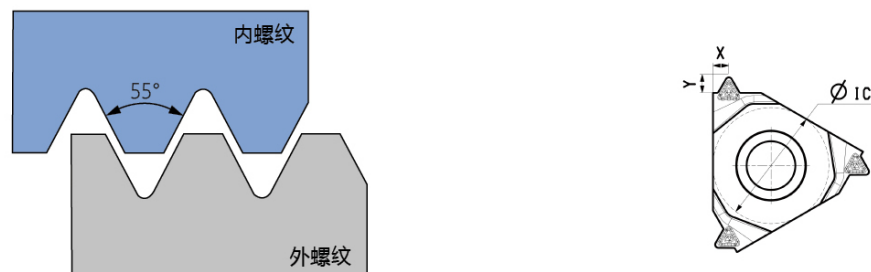
| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | | |
|-------------|----------------|-------------|------|-------|-------|------|-------|--------|---|
| | | | IC | S | X | Y | RS300 | RP9320 | |
| | mm | 牙数 / 英寸 | | | | | | | |
| | 16ER/L1.00ISOA | 1.00 | | 9.525 | 3.52 | 0.7 | 0.7 | ● | |
| | 16ER/L1.25ISOA | 1.25 | | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ER/L1.50ISOA | 1.50 | | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16ER/L1.75ISOA | 1.75 | | 9.525 | 3.52 | 1.2 | 0.9 | ● | |
| | 16ER/L2.00ISOA | 2.00 | | 9.525 | 3.52 | 1.3 | 1.0 | ● | |
| | 16ER/L2.50ISOA | 2.50 | | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER/L3.00ISOA | 3.00 | | 9.525 | 3.52 | 1.6 | 1.2 | ● | |
| | 22ER3.50ISOA | 3.50 | | 9.525 | 4.65 | 2.3 | 1.6 | ● | |
| | 22ER4.00ISOA | 4.00 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | |
| | 22ER4.50ISOA | 4.50 | | 12.7 | 4.65 | 2.4 | 1.7 | ● | |
| | 22ER5.00ISOA | 5.00 | | 12.7 | 4.65 | 2.5 | 1.7 | ● | |
| | 22ER5.50ISOA | 5.50 | | 12.7 | 4.65 | 2.5 | 1.7 | ● | |
| | 22ER6.00ISOA | 6.00 | | 12.7 | 4.65 | 2.7 | 1.8 | ● | |
| | | 16ER0.50ISO | 0.50 | | 9.525 | 3.52 | 0.4 | 0.6 | ● |
| 16ER1.00ISO | | 1.00 | | 9.525 | 3.52 | 0.7 | 0.7 | ● | |
| 16ER1.25ISO | | 1.25 | | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| 16ER1.50ISO | | 1.50 | | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| 16ER2.00ISO | | 2.00 | | 9.525 | 3.52 | 1.3 | 1.0 | ● | |
| 16ER2.50ISO | | 2.50 | | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| 16ER3.00ISO | | 3.00 | | 9.525 | 3.52 | 1.6 | 1.2 | ● | |
| 22ER3.50ISO | | 3.50 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | |
| 22ER4.00ISO | | 4.00 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | |
| 22ER4.50ISO | | 4.50 | | 12.7 | 4.65 | 2.4 | 1.7 | ● | |
| 22ER5.00ISO | | 5.00 | | 12.7 | 4.65 | 2.5 | 1.7 | ● | |

● 标准库存品

| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | | |
|-------------|----------------|-------------|------|-------|------|------|-------|--------|---|
| | | | IC | S | X | Y | RS300 | RP9320 | |
| | mm | 牙数 / 英寸 | | | | | | | |
| | 16IR/L1.00ISOA | 1.00 | | 9.525 | 3.52 | 0.7 | 0.6 | ● | |
| | 16IR/L1.25ISOA | 1.25 | | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IR/L1.50ISOA | 1.50 | | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16IR/L1.75ISOA | 1.75 | | 9.525 | 3.52 | 1.2 | 0.9 | ● | |
| | 16IR/L2.00ISOA | 2.00 | | 9.525 | 3.52 | 1.3 | 1.0 | ● | |
| | 16IR/L2.50ISOA | 2.50 | | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR/L3.00ISOA | 3.00 | | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 22IR3.50ISOA | 3.50 | | 9.525 | 4.65 | 2.3 | 1.6 | ● | |
| | 22IR4.00ISOA | 4.00 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | |
| | 22IR4.50ISOA | 4.50 | | 12.7 | 4.65 | 2.4 | 1.6 | ● | |
| | 22IR5.00ISOA | 5.00 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | |
| | 22IR5.50ISOA | 5.50 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | |
| | 22IR6.00ISOA | 6.00 | | 12.7 | 4.65 | 2.5 | 1.8 | ● | |
| | | 11IR1.00ISO | 1.00 | | 6.35 | 3.05 | 0.7 | 0.6 | ● |
| 11IR1.25ISO | | 1.25 | | 6.35 | 3.05 | 0.9 | 0.8 | ● | |
| 11IR1.50ISO | | 1.50 | | 6.35 | 3.05 | 1.0 | 0.8 | ● | |
| 11IR1.75ISO | | 1.75 | | 6.35 | 3.05 | 1.1 | 0.9 | ● | |
| 11IR2.00ISO | | 2.00 | | 6.35 | 3.05 | 1.1 | 0.9 | ● | |
| 16IR0.50ISO | | 0.50 | | 9.525 | 3.52 | 0.4 | 0.6 | ● | |
| 16IR1.00ISO | | 1.00 | | 9.525 | 3.52 | 0.7 | 0.6 | ● | |
| 16IR1.25ISO | | 1.25 | | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| 16IR1.50ISO | | 1.50 | | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| 16IR2.00ISO | | 2.00 | | 9.525 | 3.52 | 1.3 | 1.0 | ● | |
| 16IR2.50ISO | | 2.50 | | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| 16IR3.00ISO | | 3.00 | | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| 22IR3.50ISO | | 3.50 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | |
| 22IR4.00ISO | | 4.00 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | |
| 22IR4.50ISO | | 4.50 | | 12.7 | 4.65 | 2.4 | 1.6 | ● | |
| 22IR5.00ISO | 5.00 | | 12.7 | 4.65 | 2.3 | 1.6 | ● | | |

● 标准库存品

外螺纹



内螺纹



★ 无修光刃

★ 无修光刃

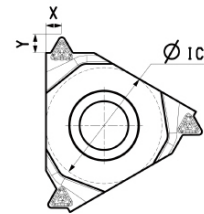
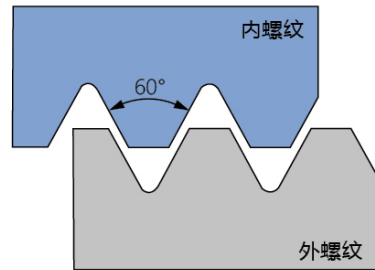
| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | | |
|---|-----------|----------|-------|-------|------|-----|-------|--------|--|
| | | | IC | S | X | Y | RS300 | RP9320 | |
| | mm | 牙数 / 英寸 | | | | | | | |
|  | 16ERA55A | 0.5-1.5 | 48-16 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ERAG55A | 0.5-3.0 | 48-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16ERG55A | 1.75-3.0 | 14-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 22ERN55A | 3.5-5.0 | 7-5 | 12.7 | 4.65 | 2.5 | 1.7 | ● | |
| | | | | | | | | | |
|  | 16ERA55 | 0.5-1.5 | 48-16 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ERAG55 | 0.5-3.0 | 48-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16ERG55 | 1.75-3.0 | 14-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 22ERN55 | 3.5-5.0 | 7-5 | 12.7 | 4.65 | 2.5 | 1.7 | ● | |
| | | | | | | | | | |

● 标准库存品

| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | | |
|---|-----------|----------|-------|-------|------|-----|-------|--------|--|
| | | | IC | S | X | Y | RS300 | RP9320 | |
| | mm | 牙数 / 英寸 | | | | | | | |
|  | 11IRA55A | 0.5-1.5 | 48-16 | 6.35 | 3.05 | 0.9 | 0.8 | ● | |
| | 16IRA55A | 0.5-1.5 | 48-16 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IRAG55A | 0.5-3.0 | 48-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16IRG55A | 1.75-3.0 | 14-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 22IRN55A | 3.5-5.0 | 7-5 | 12.7 | 4.65 | 2.5 | 1.7 | | |
| | | | | | | | | | |
|  | 11IRA55 | 0.5-1.5 | 48-16 | 6.35 | 3.05 | 0.9 | 0.8 | ● | |
| | 16IRA55 | 0.5-1.5 | 48-16 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IRAG55 | 0.5-3.0 | 48-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16IRG55 | 1.75-3.0 | 14-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 22IRN55 | 3.5-5.0 | 7-5 | 12.7 | 4.65 | 2.5 | 1.7 | | |
| | | | | | | | | | |

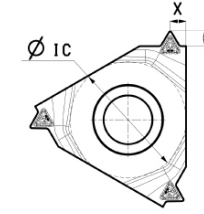
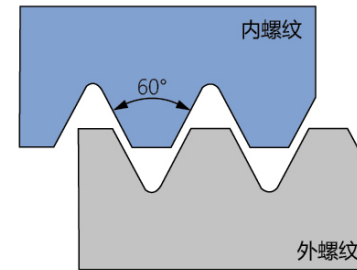
● 标准库存品

外螺纹



★ 无修光刃

内螺纹



★ 无修光刃

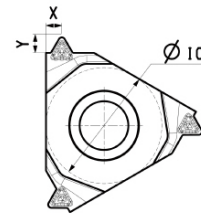
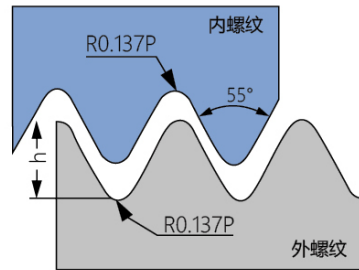
| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | | |
|---|-----------|----------|-------|-------|------|-----|-------|--------|--|
| | | | IC | S | X | Y | RS300 | RP9320 | |
| | mm | 牙数 / 英寸 | | | | | | | |
|  | 16ERA60A | 0.5-1.5 | 48-16 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ERAG60A | 0.5-3.0 | 48-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16ERG60A | 1.75-3.0 | 14-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 22ERN60A | 3.5-5.0 | 7-5 | 12.7 | 4.65 | 2.5 | 1.7 | ● | |
| | | | | | | | | | |
|  | 16ERA60 | 0.5-1.5 | 48-16 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ERAG60 | 0.5-3.0 | 48-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16ERG60 | 1.75-3.0 | 14-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 22ERN60 | 3.5-5.0 | 7-5 | 12.7 | 4.65 | 2.5 | 1.7 | ● | |
| | | | | | | | | | |

● 标准库存品

| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | | |
|---|-----------|----------|-------|-------|------|-----|-------|--------|--|
| | | | IC | S | X | Y | RS300 | RP9320 | |
| | mm | 牙数 / 英寸 | | | | | | | |
|  | 11IRA60A | 0.5-1.5 | 48-16 | 6.35 | 3.05 | 0.9 | 0.8 | ● | |
| | 16IRA60A | 0.5-1.5 | 48-16 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IRAG60A | 0.5-3.0 | 48-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16IRG60A | 1.75-3.0 | 14-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 22IRN60A | 3.5-5.0 | 7-5 | 12.7 | 4.65 | 2.5 | 1.7 | | |
| | | | | | | | | | |
|  | 11IRA60 | 0.5-1.5 | 48-16 | 6.35 | 3.05 | 0.9 | 0.8 | ● | |
| | 16IRA60 | 0.5-1.5 | 48-16 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IRAG60 | 0.5-3.0 | 48-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16IRG60 | 1.75-3.0 | 14-8 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 22IRN60 | 3.5-5.0 | 7-5 | 12.7 | 4.65 | 2.5 | 1.7 | | |
| | | | | | | | | | |

● 标准库存品

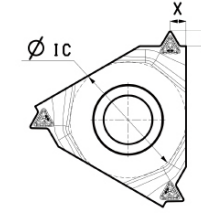
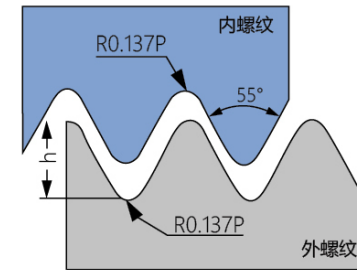
外螺纹



标准：B.S.84：1956，DIN259，ISO288/1：1982
公差等级：中等 级别等级 A

★ 带修光刃

内螺纹




标准：B.S.84：1956，DIN259，ISO288/1：1982
公差等级：中等 级别等级 A

★ 带修光刃

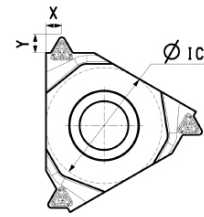
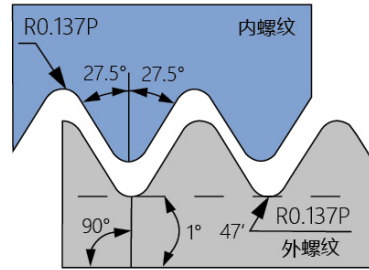
| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | |
|---|----------|---------|-------|------|-----|-----|-------|--------|
| | | | IC | S | X | Y | RS300 | RP9320 |
| | mm | 牙数 / 英寸 | | | | | | |
|  | 16ER8WA | 8 | 9.525 | 3.52 | 1.5 | 1.2 | ● | |
| | 16ER9WA | 9 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16ER10WA | 10 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER11WA | 11 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER12WA | 12 | 9.525 | 3.52 | 1.4 | 1.1 | ● | |
| | 16ER14WA | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16ER16WA | 16 | 9.525 | 3.52 | 1.1 | 0.9 | ● | |
| | 16ER18WA | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16ER19WA | 19 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
|  | 16ER8W | 8 | 9.525 | 3.52 | 1.5 | 1.2 | ● | |
| | 16ER9W | 9 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16ER10W | 10 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER11W | 11 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER12W | 12 | 9.525 | 3.52 | 1.4 | 1.1 | ● | |
| | 16ER14W | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16ER16W | 16 | 9.525 | 3.52 | 1.1 | 0.9 | ● | |
| | 16ER18W | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16ER19W | 19 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |

● 标准库存品

| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | |
|---|----------|---------|-------|------|-----|-----|-------|--------|
| | | | IC | S | X | Y | RS300 | RP9320 |
| | mm | 牙数 / 英寸 | | | | | | |
|  | 16IR8WA | 8 | 9.525 | 3.52 | 1.5 | 1.2 | ● | |
| | 16IR9WA | 9 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16IR10WA | 10 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR11WA | 11 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR12WA | 12 | 9.525 | 3.52 | 1.4 | 1.1 | ● | |
| | 16IR14WA | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16IR16WA | 16 | 9.525 | 3.52 | 1.1 | 0.9 | ● | |
| | 16IR18WA | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16IR19WA | 19 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
|  | 16IR8W | 8 | 9.525 | 3.52 | 1.5 | 1.2 | ● | |
| | 16IR9W | 9 | 9.525 | 3.52 | 1.7 | 1.2 | ● | |
| | 16IR10W | 10 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR11W | 11 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR12W | 12 | 9.525 | 3.52 | 1.4 | 1.1 | ● | |
| | 16IR14W | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16IR16W | 16 | 9.525 | 3.52 | 1.1 | 0.9 | ● | |
| | 16IR18W | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16IR19W | 19 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |

● 标准库存品

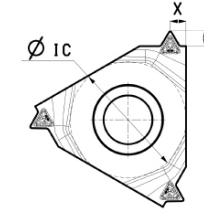
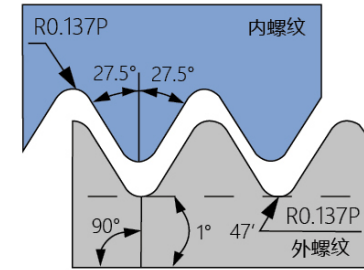
外螺纹



标准：B.S.21：1985
公差等级：英制 BSPT 螺纹



★ 带修光刃

内螺纹





标准：B.S.21：1985
公差等级：英制 BSPT 螺纹

★ 带修光刃

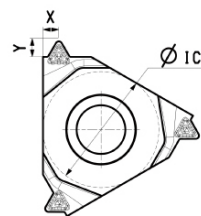
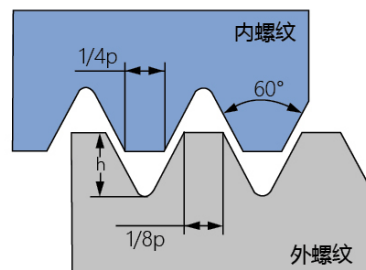
| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | |
|---|-------------|---------|-------|------|-----|-----|-------|--------|
| | | | IC | S | X | Y | RS300 | RP9320 |
| | mm | 牙数 / 英寸 | | | | | | |
|  | 16ER11BSPTA | 11 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER14BSPTA | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16ER19BSPTA | 19 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ER28BSPTA | 28 | 9.525 | 3.52 | 0.6 | 0.6 | ● | |
|  | 16ER11BSPT | 11 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER14BSPT | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16ER19BSPT | 19 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ER28BSPT | 28 | 9.525 | 3.52 | 0.6 | 0.6 | ● | |

● 标准库存品

| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | |
|---|-------------|---------|-------|------|-----|-----|-------|--------|
| | | | IC | S | X | Y | RS300 | RP9320 |
| | mm | 牙数 / 英寸 | | | | | | |
|  | 16IR11BSPTA | 11 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR14BSPTA | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16IR19BSPTA | 19 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IR28BSPTA | 28 | 9.525 | 3.52 | 0.6 | 0.6 | ● | |
|  | 16IR11BSPT | 11 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR14BSPT | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16IR19BSPT | 19 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IR28BSPT | 28 | 9.525 | 3.52 | 0.6 | 0.6 | ● | |

● 标准库存品

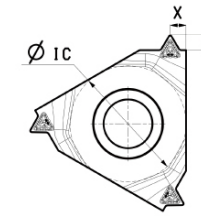
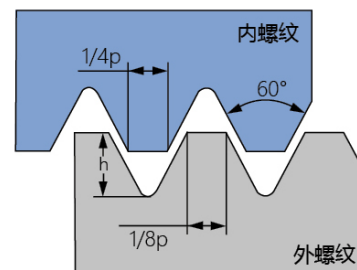
外螺纹



标准：ANSI B1.1 : 74
公差等级：2A/2B

★ 带修光刃

内螺纹





标准：ANSI B1.1 : 74
公差等级：2A/2B

★ 带修光刃

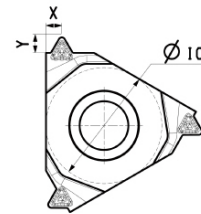
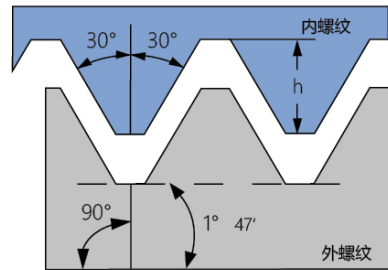
| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | |
|---|-----------|---------|-------|------|-----|-----|-------|--------|
| | | | IC | S | X | Y | RS300 | RP9320 |
| | mm | 牙数 / 英寸 | | | | | | |
|  | 16ER8UNA | 8 | 9.525 | 3.52 | 1.6 | 1.2 | ● | |
| | 16ER10UNA | 10 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER12UNA | 12 | 9.525 | 3.52 | 1.4 | 1.1 | ● | |
| | 16ER14UNA | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16ER16UNA | 16 | 9.525 | 3.52 | 1.1 | 0.9 | ● | |
| | 16ER18UNA | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16ER20UNA | 20 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ER24UNA | 24 | 9.525 | 3.52 | 0.8 | 0.7 | ● | |
|  | 16ER8UN | 8 | 9.525 | 3.52 | 1.6 | 1.2 | ● | |
| | 16ER10UN | 10 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER12UN | 12 | 9.525 | 3.52 | 1.4 | 1.1 | ● | |
| | 16ER14UN | 14 | 9.525 | 3.52 | 1.2 | 1.0 | ● | |
| | 16ER16UN | 16 | 9.525 | 3.52 | 1.1 | 0.9 | ● | |
| | 16ER18UN | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16ER20UN | 20 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16ER24UN | 24 | 9.525 | 3.52 | 0.8 | 0.7 | ● | |

● 标准库存品

| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | |
|---|-----------|---------|-------|------|-----|-----|-------|--------|
| | | | IC | S | X | Y | RS300 | RP9320 |
| | mm | 牙数 / 英寸 | | | | | | |
|  | 16IR8UNA | 8 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR10UNA | 10 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR12UNA | 12 | 9.525 | 3.52 | 1.4 | 1.1 | ● | |
| | 16IR14UNA | 14 | 9.525 | 3.52 | 1.2 | 0.9 | ● | |
| | 16IR16UNA | 16 | 9.525 | 3.52 | 1.1 | 0.9 | ● | |
| | 16IR18UNA | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16IR20UNA | 20 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IR24UNA | 24 | 9.525 | 3.52 | 0.8 | 0.7 | ● | |
|  | 16IR8UN | 8 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR10UN | 10 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR12UN | 12 | 9.525 | 3.52 | 1.4 | 1.1 | ● | |
| | 16IR14UN | 14 | 9.525 | 3.52 | 1.2 | 0.9 | ● | |
| | 16IR16UN | 16 | 9.525 | 3.52 | 1.1 | 0.9 | ● | |
| | 16IR18UN | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16IR20UN | 20 | 9.525 | 3.52 | 0.9 | 0.8 | ● | |
| | 16IR24UN | 24 | 9.525 | 3.52 | 0.8 | 0.7 | ● | |

● 标准库存品

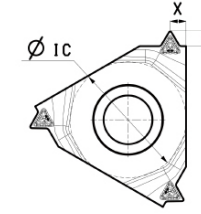
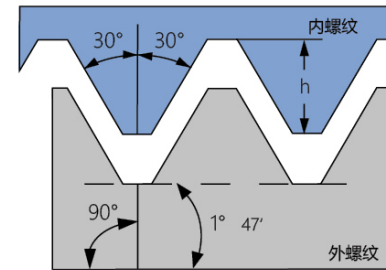
外螺纹



标准：USAS B2.1:1968
公差等级：美制 NPT 螺纹

★ 带修光刃

内螺纹



标准：USAS B2.1:1968
公差等级：美制 NPT 螺纹

★ 带修光刃

| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | |
|---|--------------|---------|-------|------|-----|-----|-------|--------|
| | | | IC | S | X | Y | RS300 | RP9320 |
| | mm | 牙数 / 英寸 | | | | | | |
|  | 16ER8NPTA | 8 | 9.525 | 3.52 | 1.8 | 13 | ● | |
| | 16ER11.5NPTA | 11.5 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER14NPTA | 14 | 9.525 | 3.52 | 1.2 | 0.9 | ● | |
| | 16ER18NPTA | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16ER27NPTA | 27 | 9.525 | 3.52 | 0.8 | 0.7 | ● | |
|  | 16ER8NPT | 8 | 9.525 | 3.52 | 1.8 | 13 | ● | |
| | 16ER11.5NPT | 11.5 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16ER14NPT | 14 | 9.525 | 3.52 | 1.2 | 0.9 | ● | |
| | 16ER18NPT | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16ER27NPT | 27 | 9.525 | 3.52 | 0.8 | 0.7 | ● | |

● 标准库存品

| 型号 | 加工螺距范围 | | 刀片尺寸 | | | | 涂层 | |
|---|--------------|---------|-------|------|-----|-----|-------|--------|
| | | | IC | S | X | Y | RS300 | RP9320 |
| | mm | 牙数 / 英寸 | | | | | | |
|  | 16IR8NPTA | 8 | 9.525 | 3.52 | 1.8 | 13 | ● | |
| | 16IR11.5NPTA | 11.5 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR14NPTA | 14 | 9.525 | 3.52 | 1.2 | 0.9 | ● | |
| | 16IR18NPTA | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16IR27NPTA | 27 | 9.525 | 3.52 | 0.8 | 0.7 | ● | |
|  | 16IR8NPT | 8 | 9.525 | 3.52 | 1.8 | 13 | ● | |
| | 16IR11.5NPT | 11.5 | 9.525 | 3.52 | 1.5 | 1.1 | ● | |
| | 16IR14NPT | 14 | 9.525 | 3.52 | 1.2 | 0.9 | ● | |
| | 16IR18NPT | 18 | 9.525 | 3.52 | 1.0 | 0.8 | ● | |
| | 16IR27NPT | 27 | 9.525 | 3.52 | 0.8 | 0.7 | ● | |

● 标准库存品

● 螺纹加工注意事项

1. 带修光刃刀片加工使用,应在精加工量的基础上半径加0.05-0.08mm进行前加工;
2. 预防第一次过刀时发生崩刃,应在加工件上作C0.3-C0.5的倒角加工;
3. 最后精加工的切深,一般设定在0.05-0.08mm之间;
4. 推荐采用湿式切削。

● 螺纹加工切削方法

| 进刀方式 | 特点 |
|--|---|
|  <p>径向垂直车螺纹</p> | <ul style="list-style-type: none"> ●左右切削刃的磨损平均 ●由于左右切屑接触长度长,容易产生振动使刀尖承受负荷大 ●适用于加工性好的工件材料的小螺距螺纹加工 ●使用最为简单,通用性高 |
|  <p>侧向单边车螺纹</p> | <ul style="list-style-type: none"> ●右侧切削刃也能一定程度切深,能抑制右侧后刀面的磨损 ●切屑处理性能好 ●适用于大螺距螺纹、粘性材料的加工,能有效解决振动问题 ●使用较简单 |
|  <p>侧向单边修正车螺纹</p> | <ul style="list-style-type: none"> ●右侧切削刃也能参与一定程度切深,能减少右侧后刀面的磨损 ●切屑处理性能好 ●适用于大螺距螺纹、粘性材料的加工,能有效解决振动问题 |
|  <p>侧向单边修正车螺纹</p> | <ul style="list-style-type: none"> ●左右交替使用切削刃,切削刃磨损均匀,能延长刀具使用寿命 ●适用于大螺距螺纹、粘性材料的加工,能有效解决振动问题 ●切屑左右方向流出,有时会产生缠绕 |

● 螺纹加工故障分析与解决措施

| 故障内容 | 现象 | 原因 | 措施 |
|-----------|-----------------|------------------|--------------------|
| 螺纹精度差 | 螺纹牙型不正确 | 中心高度不正确 | 调整中心高 |
| | | 机床上的螺距不正确 | 校正机床 |
| | 螺纹牙浅 | 切削深度设定不正确 | 调整切削深度 |
| 精加工面差 | 表面损伤 | 切屑卷入或接触 | 改为齿侧面横切 |
| | | 刀片的切削刃侧面发生干涉 | 检查导程角,选择合适刀垫 |
| | 表面出现挤裂 | 产生积屑瘤 | 提高切削速度 |
| | | 切削力过大 | 提高切削液压力与浓度 |
| | 振动 | 切削参数不正确 | 降低每步切削深度 |
| | | 工件或刀具的夹紧不足 | 调整切削参数 |
| 刀具装夹不正确 | | 调整工件与刀具夹紧状态 | |
| 刀具寿命短 | 后面磨损过大 | 切削速度过快 | 调整中心高度 |
| | | 步数多,发生摩擦磨损 | 降低切削速度 |
| | | 精加工步骤的切削深度小 | 减少步数,减少切削刃摩擦 |
| | 左,右切削刃摩擦不均 | 刀片位于中心线以上 | 以0.05mm以上为标准,不做0切削 |
| | | 工件与刀具的导程角不一致 | 采用正确的中心高 |
| | 崩刃、破损 | 侧向进刀方式不正确 | 确认工件的导程角,选择合适的刀垫 |
| | | 切削速度过慢 | 改变侧向进刀方式 |
| | | | 切削力过大 | 提高切削速度 |
| | | 在不稳定夹紧状态下切削 | 增加步数,降低每步的切削压力 |
| 检查工件是否有振摆 | | | |
| 减小刀具的悬伸量 | | | |
| 塑性变形 | 咬入切屑 | 确认工件与刀具的夹紧状态 | |
| | 工件没有倒角,咬入时切削力过大 | 增加冷却液压力,吹散切屑 | |
| | 切削速度快,发热量大 | 变更刀具的行进方式,稳妥处理切屑 | |
| 切削液供给不足 | 对入口和出口进行倒角 | | |
| | 降低切削速度 | | |
| | 增加切削液供给 | | |
| 切削力过大 | 增加步数,降低每步的切削力 | | |