





| 刃倾角和左手螺旋槽丝锥 | 系列   | 材质/<br>涂层        | 柄部/规格             | ● 优选<br>○ 备选 |   |   |   |   |   |  |
|-------------|------|------------------|-------------------|--------------|---|---|---|---|---|--|
|             |      |                  |                   | P            | M | K | N | S | H |  |
|             | T320 | KC7542           | 6535 HA           | ●            |   | ○ |   |   |   |  |
|             | T320 | KC7542           | 6535 HA           | ●            |   | ○ |   |   |   |  |
|             | T321 | KC7542           | 6535 HA           | ●            |   | ○ |   |   |   |  |
|             | T620 | KP6525<br>KM6515 | DIN 371, 374, 376 | ●            | ● | ○ | ○ |   |   |  |
|             | T621 | KP6525<br>KM6515 | DIN 371, 374, 376 | ●            | ● | ○ | ○ |   |   |  |
|             | T620 | KP6525           | DIN 376           | ●            |   | ● |   |   |   |  |
|             | T620 | KP6525           | XL                | ●            |   | ● |   |   |   |  |
|             | T620 | KP6525           | DIN 371, 376      | ●            | ○ | ○ |   |   |   |  |
|             | T621 | KP6525           | DIN 371, 376      | ●            | ○ | ○ |   |   |   |  |
|             | T670 | KSN38            | DIN 371, 376      |              |   |   |   | ● |   |  |
|             | T600 | KSP21            | DIN 371, 374, 376 | ●            |   |   |   |   | ○ |  |
|             | T820 | KSP32<br>KSP39   | DIN 371, 374, 376 | ●            | ○ | ● | ○ |   |   |  |
|             | T820 | KSP39            | DIN 371, 376      | ○            | ○ | ○ |   |   |   |  |
|             | T820 | KSU31<br>KSU30   | JIS               | ●            | ○ | ○ | ○ |   |   |  |

|  | 尺寸范围     | 孔   |   | 切削锥   |    | 螺旋角  | 冷却方式   |   | 页码      | 推荐切削参数 |
|--|----------|---|---|-------|----|------|--|---|---------|--------|
|  |          | 通孔  | 盲孔  | 类型    | 代码 |      | 外冷   | 通孔  |         |        |
|  |          |  |  |       |    |      |  |  |         |        |
|  | 3/8-1/2" | •   |   | D型切削锥 | D  | L15° | •  |   | M4      | M98    |
|  | M6-M16   | •   |   | D型切削锥 | D  | L15° | •  |   | M4      | M98    |
|  | M10-M16  | •   |   | D型切削锥 | D  | L15° |  | •   | M5      | M98    |
|  | M3-M20   | •   |   | D型切削锥 | D  | L15° | •  |   | M6      | M98    |
|  | M5-M18   | •   |   | D型切削锥 | D  | L15° |  | •   | M7      | M98    |
|  | M24-M42  | •   |   | D型切削锥 | D  | L15° | •  |   | M8      | M98    |
|  | M24-M42  | •   |   | D型切削锥 | D  | L15° |  | •   | M9      | M98    |
|  | #6-1/2"  | •   |   | D型切削锥 | D  | L15° | •  |   | M10     | M98    |
|  | 1/4-1/2" | •   |   | D型切削锥 | D  | L15° |  | •   | M11     | M98    |
|  | M3-M16   | •   |   | D型切削锥 | B  | 0°   | •  |   | M12     | M98    |
|  | M3-M20   | •   |   | D型切削锥 | B  | 0°   | •  |   | M13     | M98    |
|  | M2-M36   | •   |   | D型切削锥 | B  | 0°   | •  |   | M14-M15 | M99    |
|  | #4-1"    | •   |   | D型切削锥 | B  | 0°   | •  |   | M16-M17 | M99    |
|  | M3-M20   | •   |   | D型切削锥 | B  | 0°   | •  |   | M18     | M99    |


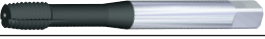
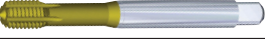

| 螺旋槽丝锥 | 系列   | 材质/<br>涂层      | 柄部/规格             | ● 优选<br>○ 备选 |   |   |   |   |   |  |
|-------|------|----------------|-------------------|--------------|---|---|---|---|---|--|
|       |      |                |                   | P            | M | K | N | S | H |  |
|       | T331 | KC7542         | 6535 HA           | ●            |   | ○ |   |   |   |  |
|       | T331 | KC7542         | 6535 HA           | ●            |   | ○ |   |   |   |  |
|       | T630 | KP6525, KM6515 | DIN 371, 374, 376 | ●            | ● | ○ | ○ |   |   |  |
|       | T631 | KP6525, KM6515 | DIN 371, 374, 376 | ●            | ● | ○ | ○ |   |   |  |
|       | T632 | KP6525         | DIN 371, 374, 376 | ●            |   | ○ |   |   |   |  |
|       | T633 | KP6525         | DIN 371, 374, 376 | ●            |   | ○ |   |   |   |  |
|       | T630 | KP6525         | DIN 376           | ●            |   | ● |   |   |   |  |
|       | T631 | KP6525         | DIN 376           | ●            |   | ● |   |   |   |  |
|       | T630 | KP6525         | XL                | ●            |   | ● |   |   |   |  |
|       | T631 | KP6525         | XL                | ●            |   | ● |   |   |   |  |
|       | T650 | KP6525         | DIN 376           | ●            |   | ● |   |   |   |  |
|       | T651 | KP6525         | DIN 376           | ●            |   | ● |   |   |   |  |
|       | T650 | KP6525         | XL                | ●            |   | ● |   |   |   |  |
|       | T651 | KP6525         | XL                | ●            |   | ● |   |   |   |  |
|       | T630 | KP6525         | DIN 371, 376      | ●            | ○ | ○ |   |   |   |  |
|       | T631 | KP6525         | DIN 371, 376      | ●            | ○ | ○ |   |   |   |  |
|       | T680 | KSN38          | DIN 371, 376      |              |   |   | ● |   |   |  |
|       | T604 | KSH26          | DIN 371, 374, 376 | ●            |   |   |   | ○ |   |  |
|       | T830 | KSP32, KSP39   | DIN 371, 374, 376 | ●            | ○ | ● | ○ |   |   |  |
|       | T832 | KSP32, KSP39   | DIN 371, 374, 376 | ●            | ○ | ● | ○ |   |   |  |
|       | T838 | KSU31, KSP39   | DIN 371, 374, 376 | ●            | ○ | ○ | ○ |   |   |  |
|       | T839 | KSU31, KSP39   | DIN 371, 376      | ●            | ○ | ○ | ○ |   |   |  |
|       | T830 | KSP39          | DIN 371, 376      | ○            | ○ | ○ |   |   |   |  |
|       | T838 | KSU31, KSP39   | DIN 371, 374, 376 | ●            | ○ | ○ | ○ |   |   |  |
|       | T830 | KSU31, KSU30   | JIS               | ●            | ○ | ○ | ○ |   |   |  |




| 尺寸范围     | 孔   |   | 切削锥   |    | 螺旋角 | 冷却方式   |   | 页码       | 推荐切削参数 |
|----------|---|---|-------|----|-----|--|---|----------|--------|
|          | 通孔  | 盲孔  | 类型    | 代码 |     | 外冷   | 通孔  |          |        |
|          |  |  |       |    |     |  |  |          |        |
| 1/4-1/2" |   | ●   | C型切削锥 | C  | 45° |  | ●   | M22      | M98    |
| M6-M16   |   | ●   | C型切削锥 | C  | 45° |  | ●   | M23      | M98    |
| M3-M20   |   | ●   | C型切削锥 | C  | 45° | ●  |   | M24      | M98    |
| M5-M18   |   | ●   | C型切削锥 | C  | 45° |  | ●   | M25      | M98    |
| M5-M16   |   | ●   | E型切削锥 | E  | 45° | ●  |   | M26      | M98    |
| M5-M16   |   | ●   | E型切削锥 | E  | 45° |  | ●   | M27      | M98    |
| M24-M42  |   | ●   | C型切削锥 | C  | 45° | ●  |   | M28      | M98    |
| M24-M42  |   | ●   | C型切削锥 | C  | 45° |  | ●   | M29      | M98    |
| M24-M42  |   | ●   | C型切削锥 | C  | 45° | ●  |   | M30      | M98    |
| M24-M42  |   | ●   | C型切削锥 | C  | 45° |  | ●   | M31      | M98    |
| M24-M42  |   | ●   | C型切削锥 | C  | 15° | ●  |   | M32      | M98    |
| M24-M42  |   | ●   | C型切削锥 | C  | 15° |  | ●   | M33      | M98    |
| M24-M42  |   | ●   | C型切削锥 | C  | 15° | ●  |   | M34      | M98    |
| M24-M42  |   | ●   | C型切削锥 | C  | 15° |  | ●   | M35      | M98    |
| #6-1/2"  |   | ●   | C型切削锥 | C  | 45° | ●  |   | M36      | M98    |
| 1/4-1/2" |   | ●   | C型切削锥 | C  | 45° |  | ●   | M37      | M98    |
| M3-M20   |   | ●   | C型切削锥 | C  | 45° | ●  |   | M38      | M98    |
| M3-M20   |   | ●   | C型切削锥 | C  | 42° | ●  |   | M39      | M98    |
| M2-M36   |   | ●   | C型切削锥 | C  | 45° | ●  |   | M40-M41  | M99    |
| M3-M20   |   | ●   | E型切削锥 | E  | 45° | ●  |   | M42      | M99    |
| M2-M52   |   | ●   | C型切削锥 | C  | 45° | ●  |   | M43-M44  | M99    |
| M3-M20   |   | ●   | E型切削锥 | E  | 45° | ●  |   | M45      | M99    |
| #4-1"    |   | ●   | C型切削锥 | C  | 45° | ●  |   | M46, M49 | M99    |
| #6-2"    |   | ●   | C型切削锥 | C  | 45° | ●  |   | M47-M48  | M99    |
| M3-M20   |   | ●   | C型切削锥 | C  | 45° | ●  |   | M50      | M99    |


| 直槽丝锥 | 系列   | 材质/<br>涂层 | 柄部/规格             | ● 优选<br>○ 备选 |   |   |   |   |   |  |
|------|------|-----------|-------------------|--------------|---|---|---|---|---|--|
|      |      |           |                   | P            | M | K | N | S | H |  |
|      | T340 | KCK17     | 6535 HA           | ○            |   | ● |   |   |   |  |
|      | T340 | KCK17     | 6535 HA           | ○            |   | ● |   |   |   |  |
|      | T351 | KCK17     | 6535 HA           | ○            |   | ● |   |   |   |  |
|      | T351 | KCK17     | 6535 HA           | ○            |   | ● |   |   |   |  |
|      | T351 | KCK17     | DIN 371, 374, 376 | ○            |   | ● |   |   |   |  |
|      | T353 | KCK17     | DIN 371, 376      | ○            |   | ● |   |   |   |  |
|      | T471 | KCN14     | 6535 HA           |              |   |   | ● |   |   |  |
|      | T471 | KCN14     | DIN 371           |              |   |   | ● |   |   |  |
|      | T410 | KCU36     | DIN 371, 374, 376 |              |   |   |   |   | ● |  |
|      | T640 | KP6525    | DIN 371, 376      |              |   | ● | ● |   |   |  |
|      | T641 | KP6525    | DIN 371, 376      |              |   | ● | ● |   |   |  |
|      | T642 | KP6525    | DIN 371, 374, 376 |              |   | ● | ● |   |   |  |
|      | T643 | KP6525    | DIN 371, 374, 376 |              |   | ● | ● |   |   |  |
|      | T640 | KP6525    | DIN 371, 376      |              |   | ● | ● |   |   |  |
|      | T641 | KP6525    | DIN 371, 376      |              |   | ● | ● |   |   |  |





\*内冷 1/4", M6 和更大尺寸

|          | 尺寸范围 | 孔   |   | 切削锥 |    | 螺旋角 | 冷却方式   |   | 页码  | 推荐切削参数 |
|----------|------|---|---|-----|----|-----|--|---|-----|--------|
|          |      | 通孔  | 盲孔  | 类型  | 代码 |     | 外冷   | 通孔  |     |        |
|          |      |  |  |     |    |     |  |  |     |        |
| #6-9/16" | ●    |   | D型切削锥   | D   | 0° | ●   |  | M54   | M98 |        |
| M4-M20   | ●    |   | D型切削锥   | D   | 0° | ●   |  | M55   | M98 |        |
| #6-3/4"  |      | ●   | E型切削锥   | E   | 0° |     | ●  | M56   | M98 |        |
| M4*-M16  |      | ●   | E型切削锥   | E   | 0° |     | ●  | M57   | M98 |        |
| M6-M14   |      | ●   | E型切削锥   | E   | 0° |     | ●  | M58   | M98 |        |
| M4*-M14  |      | ●   | C型切削锥   | C   | 0° |     | ●  | M59   | M98 |        |
| M6-M14   |      | ●   | E型切削锥   | E   | 0° |     | ●  | M60   | M98 |        |
| M6-M10   |      | ●   | E型切削锥   | E   | 0° |     | ●  | M61   | M98 |        |
| M3-M16   |      | ●   | C型切削锥   | C   | 0° | ●   |  | M62   | M98 |        |
| M4-M22   | ●    | ●   | C型切削锥   | C   | 0° | ●   |  | M63   | M98 |        |
| M5-M20   |      | ●   | C型切削锥   | C   | 0° |     | ●  | M64   | M98 |        |
| M5-M16   | ●    | ●   | E型切削锥   | E   | 0° | ●   |  | M65   | M98 |        |
| M5-M16   |      | ●   | E型切削锥   | E   | 0° |     | ●  | M66   | M98 |        |
| #6-1/2"  | ●    | ●   | C型切削锥   | C   | 0° | ●   |  | M67   | M98 |        |
| 1/4-1/2" |      | ●   | C型切削锥   | C   | 0° |     | ●  | M68   | M98 |        |

| 挤压丝锥  | 系列   | 材质/<br>涂层    | 柄部/规格    | ● 优选<br>○ 备选 |   |   |   |   |   |
|---|------|--------------|----------|--------------|---|---|---|---|---|
|   |      |              |          | P            | M | K | N | S | H |
|  | T491 | KCN14        | 6535 HA  |              |   |   | ● |   |   |
|  | T491 | KCN14        | DIN 2174 |              |   |   | ● |   |   |
|  | T622 | KSP21, KSN28 | DIN 2174 | ●            |   |   | ● |   |   |
|  | T623 | KSP21, KSN28 | DIN 2174 | ●            |   |   | ● |   |   |

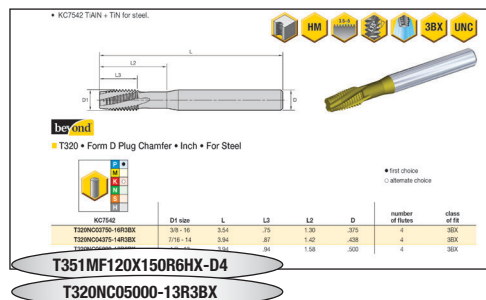
| 管用丝锥  | 系列   | 材质/<br>涂层    | 柄部/规格    | ● 优选<br>○ 备选 |   |   |   |   |   |
|---|------|--------------|----------|--------------|---|---|---|---|---|
|   |      |              |          | P            | M | K | N | S | H |
|  | T877 | KSU31, KSP39 | DIN 5156 | ●            | ○ | ○ | ○ |   |   |
|  | T857 | KSU31, KSP39 | DIN 5156 | ●            | ○ | ○ | ○ |   |   |
|  | T848 | KSU30        | DIN 5156 | ○            |   | ○ |   |   |   |

| 尺寸范围   | ☒   |   | 切削锥   |    | 螺旋角 | 冷却方式   |   | 页码  | 推荐切削参数 |
|--------|---|---|-------|----|-----|--|---|-----|--------|
|        | 通孔  | 盲孔  | 类型    | 代码 |     | 外冷   | 通孔  |     |        |
|        |  |  |       |    |     |  |  |     |        |
| M5-M12 |   | ●   | E型切削锥 | E  | -   |  | ●   | M72 | M98    |
| M6-M10 |   | ●   | E型切削锥 | E  | -   |  | ●   | M73 | M98    |
| M3-M16 | ●   | ●   | C型切削锥 | C  | -   | ●  |   | M74 | M98    |
| M5-M16 |   | ●   | C型切削锥 | C  | -   |  | ●   | M75 | M98    |

| 尺寸范围    | ☒   |   | 切削锥   |    | 螺旋角 | 冷却方式   |   | 页码  | 推荐切削参数 |
|---------|---|---|-------|----|-----|--|---|-----|--------|
|         | 通孔  | 盲孔  | 类型    | 代码 |     | 外冷   | 通孔  |     |        |
|         |  |  |       |    |     |  |  |     |        |
| 1/8-1"  | ●   |   | D型切削锥 | B  | 0°  | ●  |   | M78 | M99    |
| 1/8-1"  |   | ●   | C型切削锥 | C  | 42° | ●  |   | M78 | M99    |
| 1/16-1" | ●   | ●   | C型切削锥 | C  | 0°  | ●  |   | M79 | M99    |



整体硬质合金丝锥识别系统



公制

**T351**

**MF**

**120**

**X**

**150**

**R**

**6HX**

**-D4**

英制

**T320**

**NC**

**05000**

**-**

**13**

**R**

**3BX**

丝锥尺寸

丝锥设计

螺纹类型

螺纹公称直径

螺距

螺纹旋向

公差等级

毫米或英寸  
(根据产品类型)

毫米或TPI  
(根据产品类型)

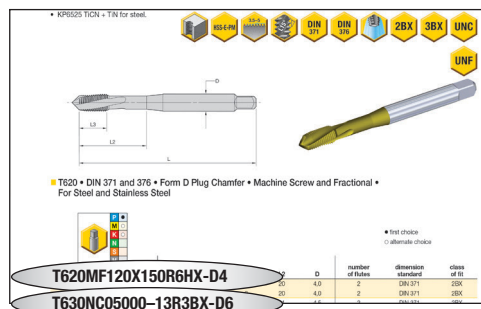
- M** = 公制粗牙螺纹 (ISO型)
- MF** = 公制细牙螺纹 (ISO型)
- NC** = 统一标准粗牙螺纹
- NF** = 统一标准细牙螺纹

- D1** = DIN 371
- D4** = DIN 374
- D6** = DIN 376
- D74** = DIN 2174
- 毛坯 = 6535 HA

丝锥设计

- T320** = 钢, 通孔, LH 螺旋槽, 整体式
- T321** = 钢, 通孔, LH 螺旋槽, 内冷
- T331** = 钢, 盲孔, RH 螺旋槽, 内冷
- T340** = 铸铁及铸铝, 通孔, 直槽, 整体式
- T351** = 铸铁及铸铝, 盲孔, 直槽, 内冷
- T353** = 铸铁及铸铝, 盲孔, 直槽, 内冷
- T410** = 淬硬钢 55-63 HRC, 通孔及盲孔, 直槽, 整体式
- T471** = 铝合金, 盲孔, 直槽, 内冷
- T491** = 铝合金, 盲孔, 挤压丝锥, 内冷

### HSS-E-PM 丝锥识别系统



|  |  |   |   |   |   |   |   |
|--|--|---|---|---|---|---|---|
| <p>公制</p> <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>T620</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>MF</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>120</b></div>   | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>X</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>150</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>R</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>6HX</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>-D4</b></div> |
| <p>英制</p> <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>T630</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>NC</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>05000</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>-</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>13</b></div>  | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>R</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>3BX</b></div> | <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 5px auto;"><b>-D6</b></div> |
| 丝锥设计   | 螺纹类型   | 螺纹公称直径  |   | 螺距  | 螺纹旋向  | 公差等级  | 丝锥尺寸  |
|  |  | 毫米或英寸<br>(根据产品类型)   |   | 毫米或TPI<br>(根据产品类型)  |   |   |   |

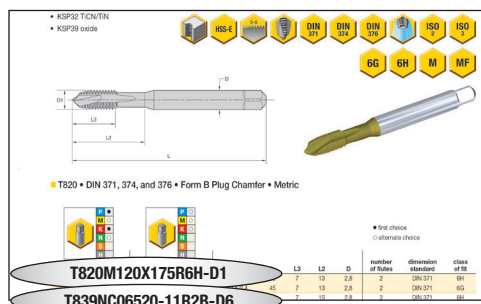
**M** = 公制粗牙螺纹 (ISO型)  
**MF** = 公制细牙螺纹 (ISO型)  
**NC** = 统一标准粗牙螺纹  
**NF** = 统一标准细牙螺纹

**D1** = DIN 371  
**D4** = DIN 374  
**D6** = DIN 376  
**D74** = DIN 2174  
**XL** = DIN 超长型

**丝锥设计**

**T600** = 钢 32-44 HRC, 通孔, 直槽, 整体式  
**T604** = 钢 32-44 HRC, 盲孔, 3 x D, RH 42°螺旋槽, 整体式  
**T620** = 钢和不锈钢, 通孔, LH螺旋槽, 整体式  
**T621** = 钢和不锈钢, 通孔, LH螺旋槽, 内冷式  
**T622** = 钢和铝合金, 盲孔和通孔, 挤压丝锥, 整体式  
**T623** = 钢和铝合金, 盲孔, 挤压丝锥, 内冷  
**T630** = 钢和不锈钢, 盲孔, RH螺旋槽, 整体式  
**T631** = 钢和不锈钢, 盲孔, RH螺旋槽, 内冷  
**T632** = 钢和不锈钢, 盲孔, RH螺旋槽, 整体式  
**T633** = 钢和不锈钢, 盲孔, RH螺旋槽, 内冷  
**T640** = 铸铁及铸铝, 通孔和盲孔, 直槽, 整体式  
**T641** = 铸铁及铸铝, 盲孔, 直槽, 内冷  
**T642** = 铸铁及铸铝, 盲孔, 直槽, 整体式  
**T643** = 铸铁及铸铝, 盲孔, 直槽, 内冷  
**T650** = 钢和铸铁, 盲孔, RH螺旋槽, 大尺寸, 整体式  
**T651** = 钢和铸铁, 盲孔, RH螺旋槽, 大尺寸, 内冷  
**T670** = 铝合金, 通孔, 螺旋槽, 整体式  
**T680** = 铝合金, 盲孔, RH螺旋槽, 整体式

G0tap HSS-E 丝锥识别系统



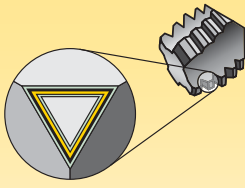
|      |             |           |                   |          |                    |          |           |            |
|------|-------------|-----------|-------------------|----------|--------------------|----------|-----------|------------|
| 公制   | <b>T820</b> | <b>M</b>  | <b>120</b>        | <b>X</b> | <b>175</b>         | <b>R</b> | <b>6H</b> | <b>-D1</b> |
| 英制   | <b>T839</b> | <b>NC</b> | <b>06520</b>      | <b>-</b> | <b>11</b>          | <b>R</b> | <b>2B</b> | <b>-D6</b> |
| 丝锥设计 |             | 螺纹类型      | 螺纹公称直径            |          | 螺距                 | 螺纹旋向     | 公差等级      | 丝锥尺寸       |
|      |             |           | 毫米或英寸<br>(根据产品类型) |          | 毫米或TPI<br>(根据产品类型) |          |           |            |

**M** = 公制粗牙螺纹 (ISO型)  
**MF** = 公制细牙螺纹 (ISO型)  
**NC** = 统一标准粗牙螺纹  
**NF** = 统一标准细牙螺纹  
**NPT** = 美标锥形管螺纹  
**NPTF** = 干式密封美标锥形管螺纹  
**G** = DIN EN ISO 228

**D1** = DIN 371  
**D4** = DIN 374  
**D6** = DIN 376  
**D56** = DIN 5156  
**J** = JIS

**丝锥设计**

**T820** = 钢、不锈钢、球墨铸铁、以及铸铝材料; 通孔、刃倾角、整体式  
**T830** = 钢、不锈钢、球墨铸铁、以及铸铝材料; 盲孔、刃倾角、C型、整体式  
**T832** = 钢、不锈钢、球墨铸铁、以及铸铝材料; 盲孔、刃倾角、E型、整体式  
**T838** = 钢、不锈钢、球墨铸铁、以及铸铝材料; 盲孔、刃倾角、TC、C型、整体式  
**T839** = 钢、不锈钢、球墨铸铁、以及铸铝材料; 盲孔、刃倾角、TC、E型、整体式  
**T848** = 钢、不锈钢、球墨铸铁、以及铸铝材料、直槽、NPT、NPTF、整体式  
**T857** = 钢、不锈钢、球墨铸铁、以及铸铝材料、螺旋槽、G、整体式  
**T877** = 钢、不锈钢、球墨铸铁、以及铸铝材料、刃倾角、G、整体式



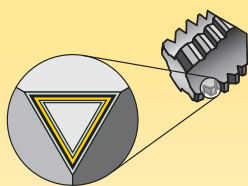
采用在特定材料攻丝加工中具有优化性能的涂层。

|   |      |
|---|------|
| P | 钢    |
| M | 不锈钢  |
| K | 铸铁   |
| N | 非铁金属 |
| S | 高温合金 |
| H | 硬材料  |

耐磨性 ←————→ 韧性

材质

| 涂层     | 材质说明  |   | 05 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
|--------|---|---|----|----|----|----|----|----|----|----|----|
| KC7542 | 带涂层硬质合金，PVD - 复合涂层，采用TiAlN和TiN材料，高强度的硬质合金基体，特别适合攻丝加工应用。在硬度高达 32 HRC 的钢材料和铸铁材料加工中，切削速度为 HSS-E-PM 丝锥的四倍。              | P |    |    |    |    |    |    |    |    |    |
|        |   | K |    |    |    |    |    |    |    |    |    |
| KCK17  | 采用 PVD AlCrN 复合涂层的细晶粒硬质合金材质。开发的特有涂层材料。在铸铁材料攻丝应用中具有良好的耐磨性。良好的高温硬度性能确保超长使用寿命，攻丝速度比 HSS-E-PM 丝锥提高 4 倍。                 | P |    |    |    |    |    |    |    |    |    |
|        |   | K |    |    |    |    |    |    |    |    |    |
| KCN14  | 带涂层硬质合金，PVD - 双层涂层，基体为细晶粒碳化物。涂层含有低摩擦性的 CrC/C 材料，基层为具有耐磨性的 TiN 材料。CrC/C 可避免非铁材料对丝锥的擦伤。在对铸铝材料和其它非铁材料的攻丝加工中，具有良好的加工性能。 | P |    |    |    |    |    |    |    |    |    |
|        |   | N |    |    |    |    |    |    |    |    |    |
| KCU36  | 带涂层硬质合金。PVD - PVD 双层涂层，底层涂层为耐热 TiAlN 材料，外层涂层为低摩擦性的 MoS <sub>2</sub> 材料，基体为硬质合金材料。用于硬度为 55-63 HRC 的硬化钢材料加工。          | P |    |    |    |    |    |    |    |    |    |
|        |   | H |    |    |    |    |    |    |    |    |    |
| KSP21  | 有涂层的HSS-E-PM。PVD - 粉末金属HSS-E基体，涂层为TiN材料。用于对硬度为 32-44 HRC 的钢材料进行攻丝加工，以及硬度为 32 HRC 的钢材料进行螺纹加工。                        | P |    |    |    |    |    |    |    |    |    |
|        |   | P |    |    |    |    |    |    |    |    |    |
| KSH26  | 有涂层的HSS-E-PM。PVD - 粉末金属HSS-E基体，TiN基层涂层和低摩擦性的 MoS <sub>2</sub> 外层涂层。用于对硬度为 32-44 HRC 的钢材料进行深盲孔加工。                    | P |    |    |    |    |    |    |    |    |    |
|        |   | P |    |    |    |    |    |    |    |    |    |



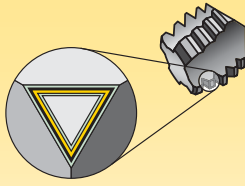
采用在特定材料攻丝加工中具有优化性能的涂层。

|   |      |
|---|------|
| P | 钢    |
| M | 不锈钢  |
| K | 铸铁   |
| N | 非铁金属 |
| S | 高温合金 |
| H | 硬材料  |

耐磨性 ←————→ 韧性

材质

| 涂层     | 材质说明   |   | 05 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
|--------|--|---|----|----|----|----|----|----|----|----|----|
| KSN25  | 有涂层的HSS-E-PM。PVD — 粉末金属 HSS-E 基体，复合涂层：TiN 基层涂层和DLC外层涂层可避免非铁材料对丝锥的擦伤。用于钛材料的攻丝加工。不适合钢材料加工。                 | P |    |    |    |    |    |    |    |    |    |
|        |  | M |    |    |    |    |    |    |    |    |    |
|        |  | K |    |    |    |    |    |    |    |    |    |
|        |  | N |    |    |    |    |    |    |    |    |    |
|        |  | S |    |    |    |    |    |    |    |    |    |
|        |  | H |    |    |    |    |    |    |    |    |    |
| KSN28  | 有涂层的HSS-E-PM。PVD — 粉末金属 HSS-E 基体，DLC 涂层。用于铝材料的挤压成形加工。不适合钢材料加工。   | P |    |    |    |    |    |    |    |    |    |
|        |  | M |    |    |    |    |    |    |    |    |    |
|        |  | K |    |    |    |    |    |    |    |    |    |
|        |  | N |    |    |    |    |    |    |    |    |    |
|        |  | S |    |    |    |    |    |    |    |    |    |
|        |  | H |    |    |    |    |    |    |    |    |    |
| KSN38  | Coated HSS-E。PVD — 低钒 HSS-E 基体材料，DLC 涂层。用于非铁材料的攻丝加工，具有与加工锻铝材料一样的低切削温度。不适合钢材料加工。                          | P |    |    |    |    |    |    |    |    |    |
|        |  | M |    |    |    |    |    |    |    |    |    |
|        |  | K |    |    |    |    |    |    |    |    |    |
|        |  | N |    |    |    |    |    |    |    |    |    |
|        |  | S |    |    |    |    |    |    |    |    |    |
|        |  | H |    |    |    |    |    |    |    |    |    |
| KP6525 | 有涂层的HSS-E-PM。PVD — 具有耐热性和耐磨性的，高钒 - 钴含量的粉末金属 HSS基体。涂层为具有耐磨性的TiCN基层涂层和低摩擦性的TiN外涂层。可用于钢、铸铁、含硅铸铝合金材料的加工。     | P |    |    |    |    |    |    |    |    |    |
|        |  | M |    |    |    |    |    |    |    |    |    |
|        |  | K |    |    |    |    |    |    |    |    |    |
|        |  | N |    |    |    |    |    |    |    |    |    |
|        |  | S |    |    |    |    |    |    |    |    |    |
|        |  | H |    |    |    |    |    |    |    |    |    |
| KIM615 | 有涂层的HSS-E-PM。PVD — 具有耐热性和耐磨性的，高钒 - 钴含量的粉末金属 HSS基体。涂层含有低摩擦性的 CrC/C 材料，基层涂层为具有耐磨性的 TiN 材料。用于不锈钢和非铁材料的攻丝加工。 | P |    |    |    |    |    |    |    |    |    |
|        |  | M |    |    |    |    |    |    |    |    |    |
|        |  | K |    |    |    |    |    |    |    |    |    |
|        |  | N |    |    |    |    |    |    |    |    |    |
|        |  | S |    |    |    |    |    |    |    |    |    |
|        |  | H |    |    |    |    |    |    |    |    |    |
| KSP32  | 高钒 - 钴含量的粉末金属 HSS 基体。涂层为具有耐磨性的 TiCN 基层涂层和低摩擦性的 TiN 外涂层。可用于多种材料的加工，包括钢、不锈钢、球墨铸铁，以及铸铝材料。KSP32 具有良好的耐磨性。    | P |    |    |    |    |    |    |    |    |    |
|        |  | M |    |    |    |    |    |    |    |    |    |
|        |  | K |    |    |    |    |    |    |    |    |    |
|        |  | N |    |    |    |    |    |    |    |    |    |
|        |  | S |    |    |    |    |    |    |    |    |    |
|        |  | H |    |    |    |    |    |    |    |    |    |



采用在特定材料攻丝加工中具有优化性能的涂层。

|   |      |
|---|------|
| P | 钢    |
| M | 不锈钢  |
| K | 铸铁   |
| N | 非铁金属 |
| S | 高温合金 |
| H | 硬材料  |

耐磨性 ←————→ 韧性

材质

| 涂层     | 材质说明   |   | 05 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |  |
|--------|--|---|----|----|----|----|----|----|----|----|----|--|
| KSMN34 | 高钎 HSS-E 基体材料，涂层材料包含耐磨 TiN 底层涂层和低摩擦系数的 CrC 表面涂层。用于不锈钢和非铁材料的攻丝加工。 | P |    |    |    |    |    |    |    |    |    |  |
|        |  | M |    |    |    |    |    |    |    |    |    |  |
|        |  | K |    |    |    |    |    |    |    |    |    |  |
|        |  | N |    |    |    |    |    |    |    |    |    |  |
|        |  | S |    |    |    |    |    |    |    |    |    |  |
| KSU31  | 带涂层 HSS-E 基体，涂层材料为 TiN PVD。可用于多种材料的加工，包括钢、不锈钢、球墨铸铁，以及铸铝材料。       | P |    |    |    |    |    |    |    |    |    |  |
|        |  | M |    |    |    |    |    |    |    |    |    |  |
|        |  | K |    |    |    |    |    |    |    |    |    |  |
|        |  | N |    |    |    |    |    |    |    |    |    |  |
|        |  | S |    |    |    |    |    |    |    |    |    |  |
| KSP39  | HSS-E 基体，表面经过黑色氧化物处理。可用于多种材料加工，包括钢、不锈钢、以及球墨铸铁材料。不推荐用于非铁金属材料的加工。  | P |    |    |    |    |    |    |    |    |    |  |
|        |  | M |    |    |    |    |    |    |    |    |    |  |
|        |  | K |    |    |    |    |    |    |    |    |    |  |
|        |  | N |    |    |    |    |    |    |    |    |    |  |
|        |  | S |    |    |    |    |    |    |    |    |    |  |
| KSU30  | 非涂层 HSS-E 材质，表面为亮色。用于易加工材料的一般用途加工。                               | P |    |    |    |    |    |    |    |    |    |  |
|        |  | M |    |    |    |    |    |    |    |    |    |  |
|        |  | K |    |    |    |    |    |    |    |    |    |  |
|        |  | N |    |    |    |    |    |    |    |    |    |  |
|        |  | S |    |    |    |    |    |    |    |    |    |  |

## ► 刃倾角和左手螺旋槽丝锥



### 用于通孔加工的高性能丝锥

- 钢和钢合金。
- 不锈钢。
- 铸铁。
- 镍基和钴基合金。
- 钛及钛合金。
- 铝合金。
- 淬硬钢。

## 高性能 Beyond™ 整体硬质合金丝锥

- 左手螺旋槽丝锥可确保丝锥前方切屑的顺利排出。
- 与常规高速钢丝锥产品相比，加工速度及使用寿命都可提高 4 倍。
- 非常适合长期项目的加工应用，减少换刀次数意味着生产率的提高。
- 可在配置同步或刚性攻丝控制系统的 CNC 机床上使用，可以使用高精度刀柄。

## 高性能 Beyond™ HSS-E-PM 丝锥

- 左手螺旋槽丝锥可确保丝锥前方切屑的顺利排出。
- 与硬质合金丝锥相比，具有更高的强度和更广泛的应用。
- 与常规 HSS-E 丝锥相比，具有更快的攻丝速度，和更长的使用寿命。
- 可用于常规型或同步攻丝机床。

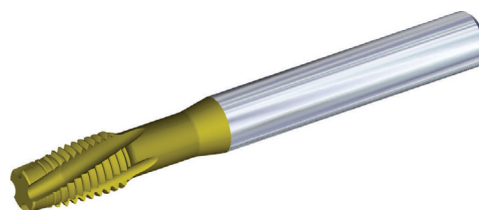
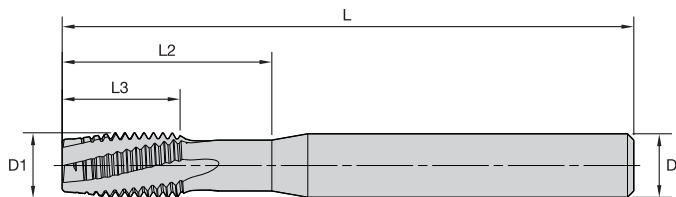
## 多功能 HSS-E GOtap™

- 优化的刃倾角槽型，在通孔应用中可确保高效的排屑性能。
- 采用高钒 HSS-E 材料制成，具有良好的耐磨性和超长的使用寿命。
- 先进的 PVD 涂层材料可以降低攻丝扭矩，因此具有较高的螺纹加工精度，以及更长的刀具寿命。
- 用于同步和非同步机床应用，包括刚性、同步，以及浮动式丝锥夹头。

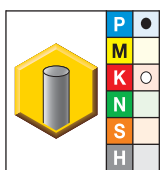




- KC7542 TiAlN + TiN 涂层, 用于钢材料加工。



■ T320 • D 型切削锥 • 英制 • 整体硬质合金 • 用于钢材料加工



- 优选
- 备选

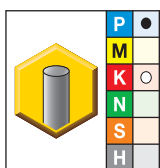
| KC7542             | D1 尺寸     | L    | L3  | L2   | D    | 刃数 | 公差等级 |
|--------------------|-----------|------|-----|------|------|----|------|
| T320NC03750-16R3BX | 3/8 - 16  | 3.54 | .75 | 1.30 | .375 | 4  | 3BX  |
| T320NC04375-14R3BX | 7/16 - 14 | 3.94 | .87 | 1.42 | .438 | 4  | 3BX  |
| T320NC05000-13R3BX | 1/2 - 13  | 3.94 | .94 | 1.58 | .500 | 4  | 3BX  |

刀杆公差等级

| D         | 公差 h6      |
|-----------|------------|
| .250-.375 | +0, -.0004 |
| .438-.625 | +0, -.0004 |



■ T320 • D 型切削锥 • 公制 • 整体硬质合金 • 用于钢材料加工



- 优选
- 备选

| KC7542              | D1 尺寸      | L   | L3 | L2 | D    | 刃数 | 公差等级 |
|---------------------|------------|-----|----|----|------|----|------|
| T320M060X100R6HX    | M6 X 1     | 70  | 12 | 23 | 6,0  | 3  | 6HX  |
| T320M080X125R6HX    | M8 X 1,25  | 80  | 15 | 28 | 8,0  | 3  | 6HX  |
| T320M100X150R6HX    | M10 X 1,5  | 90  | 18 | 33 | 10,0 | 4  | 6HX  |
| T320M120X175R6HX    | M12 X 1,75 | 100 | 21 | 40 | 12,0 | 4  | 6HX  |
| T320MF140X150R6HX * | M14 X 1,5  | 110 | 24 | 47 | 12,0 | 4  | 6HX  |
| T320M160X200R6HX    | M16 X 2    | 110 | 24 | 53 | 14,0 | 4  | 6HX  |

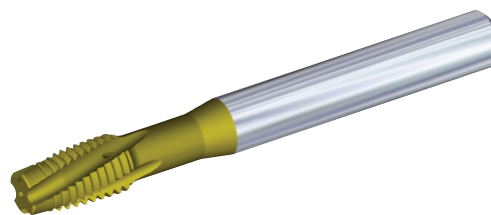
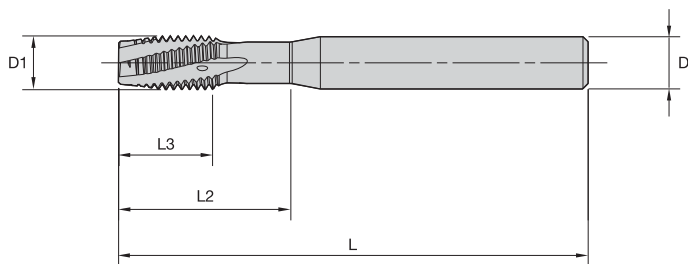
注: 专利技术。

\*按订单生产标准型产品。适用于标准定价、交期按实际生产周期而定, 以及zui低订购量的规定

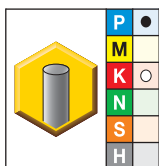
刀杆公差等级

| D     | 公差 h6      |
|-------|------------|
| 6     | +0, -0,008 |
| 8-10  | +0, -0,009 |
| 12-16 | +0, -0,011 |

- KC7542 TiAlN + TiN 涂层, 用于钢材加工。



■ T321 • D 型切削锥 • 内冷 • 公制 • 整体硬质合金 • 用于钢材加工



- 优选
- 备选

| KC7542             | D1 尺寸      | L   | L3 | L2 | D    | 刃数 | 公差等级 |
|--------------------|------------|-----|----|----|------|----|------|
| T321M100X150R6HX   | M10 X 1,5  | 90  | 18 | 33 | 10,0 | 4  | 6HX  |
| T321MF120X150R6HX  | M12 X 1,5  | 100 | 21 | 40 | 12,0 | 4  | 6HX  |
| T321M120X175R6HX   | M12 X 1,75 | 100 | 21 | 40 | 12,0 | 4  | 6HX  |
| T321MF140X150R6HX  | M14 X 1,5  | 110 | 24 | 47 | 12,0 | 4  | 6HX  |
| T321M140X200R6HX   | M14 X 2    | 110 | 24 | 47 | 12,0 | 4  | 6HX  |
| T321M160X200R6HX * | M16 X 2    | 110 | 24 | 53 | 14,0 | 4  | 6HX  |

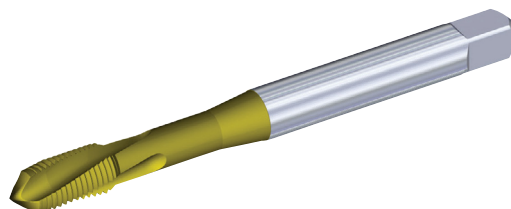
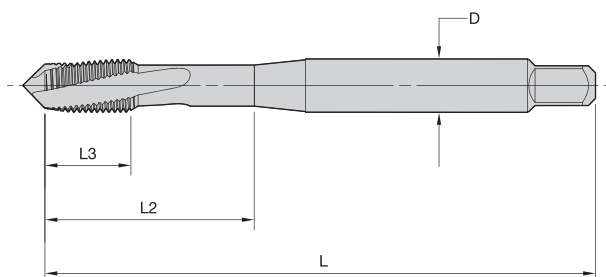
注: 专利技术。

\*按订单生产标准型产品。适用于标准定价、交期按实际生产周期而定, 以及zui低订购量的规定

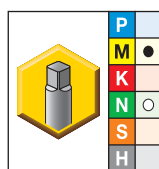
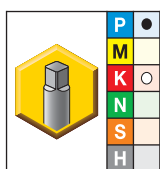
刀杆公差等级

| D     | 公差 h6      |
|-------|------------|
| 6     | +0, -0,008 |
| 8-10  | +0, -0,009 |
| 12-16 | +0, -0,011 |

- KM6515 TiN + CrC/C 涂层, 用于不锈钢材料的攻丝加工。
- KP6525 TiCN + TiN 涂层, 用于铁材料的攻丝加工。



### ■ T620 • DIN 371, 374, 和 376 • D 型切削锥 • 公制 • 用于铁和不锈钢材料加工



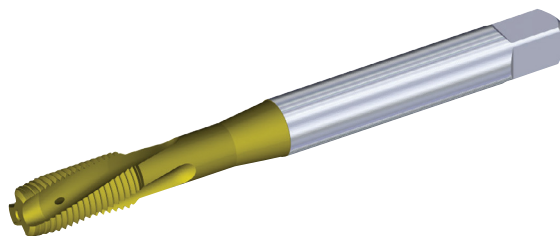
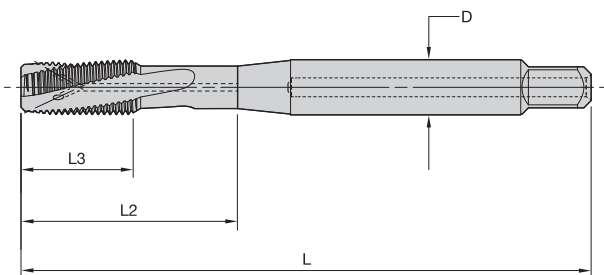
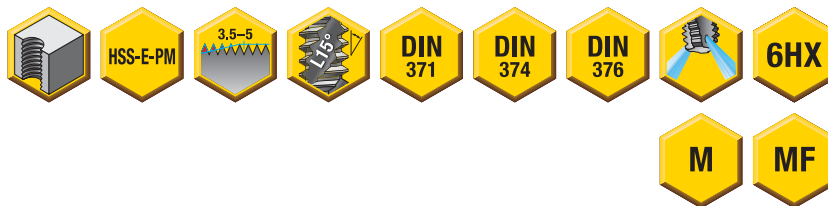
● 首选  
○ 备选

| KP6525               |                      | KM6515     |     | D1 尺寸 | L  | L3   | L2 | D       | 刃数  | 尺寸标准 | 公差等级 |
|----------------------|----------------------|------------|-----|-------|----|------|----|---------|-----|------|------|
| T620M030X050R6HX-D1  | T620M030X050R6HX-D1  | M3 X 0,5   | 56  | 8     | 18 | 3,5  | 2  | DIN 371 | 6HX |      |      |
| T620M040X070R6HX-D1  | T620M040X070R6HX-D1  | M4 X 0,7   | 63  | 10    | 21 | 4,5  | 2  | DIN 371 | 6HX |      |      |
| T620M050X080R6HX-D1  | T620M050X080R6HX-D1  | M5 X 0,8   | 70  | 10    | 25 | 6,0  | 2  | DIN 371 | 6HX |      |      |
| T620M060X100R6HX-D1  | T620M060X100R6HX-D1  | M6 X 1     | 80  | 10    | 30 | 6,0  | 3  | DIN 371 | 6HX |      |      |
| T620MF080X100R6HX-D4 | T620MF080X100R6HX-D4 | M8 X 1     | 90  | 13    | 35 | 6,0  | 3  | DIN 374 | 6HX |      |      |
| T620M080X125R6HX-D1  | T620M080X125R6HX-D1  | M8 X 1,25  | 90  | 13    | 35 | 8,0  | 3  | DIN 371 | 6HX |      |      |
| T620MF100X100R6HX-D4 | T620MF100X100R6HX-D4 | M10 X 1    | 90  | 10    | 35 | 7,0  | 3  | DIN 374 | 6HX |      |      |
| T620MF100X125R6HX-D4 | —                    | M10 X 1,25 | 100 | 15    | 39 | 7,0  | 3  | DIN 374 | 6HX |      |      |
| T620M100X150R6HX-D1  | T620M100X150R6HX-D1  | M10 X 1,5  | 100 | 15    | 39 | 10,0 | 3  | DIN 371 | 6HX |      |      |
| T620MF120X150R6HX-D4 | T620MF120X150R6HX-D4 | M12 X 1,5  | 100 | 15    | 39 | 9,0  | 3  | DIN 374 | 6HX |      |      |
| T620M120X175R6HX-D6  | T620M120X175R6HX-D6  | M12 X 1,75 | 110 | 18    | 44 | 9,0  | 3  | DIN 376 | 6HX |      |      |
| T620MF140X150R6HX-D4 | T620MF140X150R6HX-D4 | M14 X 1,5  | 100 | 15    | 47 | 11,0 | 4  | DIN 374 | 6HX |      |      |
| T620M140X200R6HX-D6  | T620M140X200R6HX-D6  | M14 X 2    | 110 | 20    | 52 | 11,0 | 4  | DIN 376 | 6HX |      |      |
| T620MF160X150R6HX-D4 | T620MF160X150R6HX-D4 | M16 X 1,5  | 100 | 15    | 46 | 12,0 | 4  | DIN 374 | 6HX |      |      |
| T620M160X200R6HX-D6  | T620M160X200R6HX-D6  | M16 X 2    | 110 | 20    | 51 | 12,0 | 4  | DIN 376 | 6HX |      |      |
| T620MF180X150R6HX-D4 | T620MF180X150R6HX-D4 | M18 X 1,5  | 110 | 15    | 50 | 14,0 | 4  | DIN 374 | 6HX |      |      |
| T620M200X250R6HX-D6  | T620M200X250R6HX-D6  | M20 X 2,5  | 140 | 25    | 64 | 16,0 | 4  | DIN 376 | 6HX |      |      |

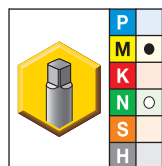
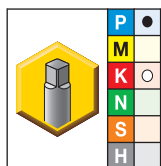
刀杆公差等级

| D     | 公差 h6      |
|-------|------------|
| 12-18 | +0, -0,011 |
| 20-30 | +0, -0,013 |
| 32-36 | +0, -0,016 |

- KM6515 TiN + CrC/C 涂层, 用于不锈钢材料加工。
- KP6525 TiCN + TiN 涂层, 用于铁材料加工。



■ T621 • DIN 371, 374, 和 376 • D 型切削锥 • 内冷 • 公制 • 用于铁和不锈钢材料加工



● 优选  
○ 备选

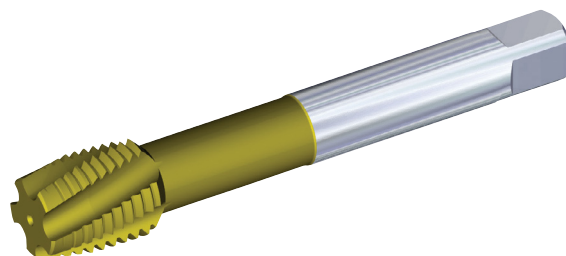
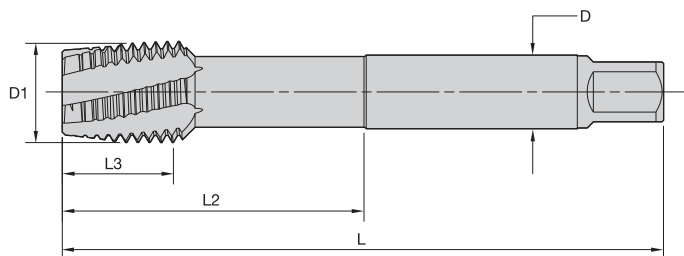
| KP6525                 | KM6515                 | D1 尺寸      | L   | L3 | L2 | D    | 刃数 | 尺寸标准    | 公差等级 |
|------------------------|------------------------|------------|-----|----|----|------|----|---------|------|
| T621M050X080R6HX-D1    | T621M050X080R6HX-D1    | M5 X 0,8   | 70  | 10 | 25 | 6,0  | 2  | DIN 371 | 6HX  |
| T621M060X100R6HX-D1    | T621M060X100R6HX-D1    | M6 X 1     | 80  | 10 | 30 | 6,0  | 3  | DIN 371 | 6HX  |
| T621MF080X100R6HX-D4 * | T621MF080X100R6HX-D4 * | M8 X 1     | 90  | 13 | 35 | 6,0  | 3  | DIN 374 | 6HX  |
| T621M080X125R6HX-D1    | T621M080X125R6HX-D1    | M8 X 1,25  | 90  | 13 | 35 | 8,0  | 3  | DIN 371 | 6HX  |
| T621MF100X100R6HX-D4   | T621MF100X100R6HX-D4   | M10 X 1    | 90  | 10 | 35 | 7,0  | 3  | DIN 374 | 6HX  |
| T621MF100X125R6HX-D4   | T621MF100X125R6HX-D4   | M10 X 1,25 | 100 | 15 | 39 | 7,0  | 3  | DIN 374 | 6HX  |
| T621M100X150R6HX-D1    | T621M100X150R6HX-D1    | M10 X 1,5  | 100 | 15 | 39 | 10,0 | 3  | DIN 371 | 6HX  |
| T621MF120X125R6HX-D4   | —                      | M12 X 1,25 | 100 | 15 | 39 | 9,0  | 3  | DIN 374 | 6HX  |
| T621MF120X150R6HX-D4   | T621MF120X150R6HX-D4   | M12 X 1,5  | 100 | 15 | 39 | 9,0  | 3  | DIN 374 | 6HX  |
| T621M120X175R6HX-D6    | T621M120X175R6HX-D6    | M12 X 1,75 | 110 | 18 | 44 | 9,0  | 3  | DIN 376 | 6HX  |
| T621MF140X125R6HX-D4   | —                      | M14 X 1,25 | 100 | 15 | 47 | 11,0 | 4  | DIN 374 | 6HX  |
| T621MF140X150R6HX-D4   | T621MF140X150R6HX-D4   | M14 X 1,5  | 100 | 15 | 47 | 11,0 | 4  | DIN 374 | 6HX  |
| T621M140X200R6HX-D6    | T621M140X200R6HX-D6    | M14 X 2    | 110 | 20 | 52 | 11,0 | 4  | DIN 376 | 6HX  |
| T621MF160X150R6HX-D4   | T621MF160X150R6HX-D4   | M16 X 1,5  | 100 | 15 | 46 | 12,0 | 4  | DIN 374 | 6HX  |
| T621M160X200R6HX-D6    | T621M160X200R6HX-D6    | M16 X 2    | 110 | 20 | 51 | 12,0 | 4  | DIN 376 | 6HX  |
| T621MF180X150R6HX-D4   | T621MF180X150R6HX-D4   | M18 X 1,5  | 110 | 15 | 50 | 14,0 | 4  | DIN 374 | 6HX  |
| T621M180X250R6HX-D6    | T621M180X250R6HX-D6    | M18 X 2,5  | 125 | 25 | 58 | 14,0 | 4  | DIN 376 | 6HX  |

注: \*按订单生产标准型产品。适用于标准定价、交期按实际生产周期而定, 以及zui低订购量的规定

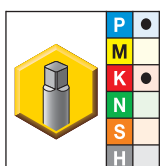
刀杆公差等级

| D     | 公差 h6      |
|-------|------------|
| 6     | +0, -0,008 |
| 8-10  | +0, -0,009 |
| 12-16 | +0, -0,011 |

- KP6525 TiCN + TiN 涂层, 用于钢和铸铁材料的攻丝加工。



### ■ T620 • DIN 376 • D 型切削锥 • 大尺寸 • 公制 • 用于钢和铸铁材料加工



- 优选
- 备选

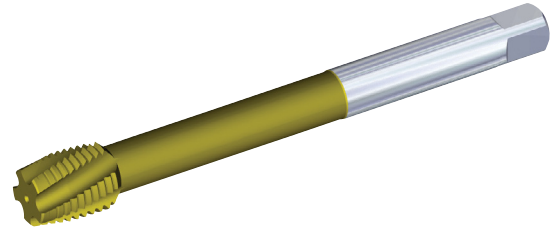
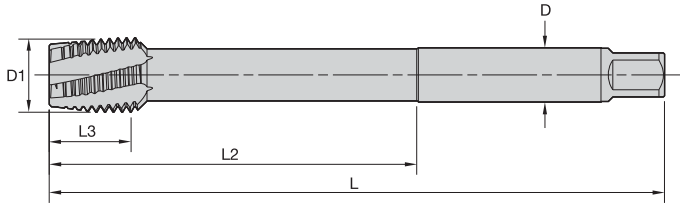
| KP6525              | D1 尺寸     | L   | L3 | L2  | D    | 刃数 | 尺寸标准    | 公差等级 |
|---------------------|-----------|-----|----|-----|------|----|---------|------|
| T620M240X300R6HX-D6 | M24 X 3   | 160 | 30 | 77  | 18,0 | 5  | DIN 376 | 6HX  |
| T620M300X350R6HX-D6 | M30 X 3,5 | 180 | 35 | 91  | 22,0 | 5  | DIN 376 | 6HX  |
| T620M330X350R6HX-D6 | M33 X 3,5 | 180 | 35 | 100 | 25,0 | 5  | DIN 376 | 6HX  |
| T620M360X400R6HX-D6 | M36 X 4   | 200 | 40 | 110 | 28,0 | 6  | DIN 376 | 6HX  |
| T620M420X450R6HX-D6 | M42 X 4,5 | 200 | 45 | 120 | 32,0 | 6  | DIN 376 | 6HX  |

刀杆公差等级

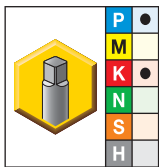
| D     | 公差 h6      |
|-------|------------|
| 12-18 | +0, -0,011 |
| 20-30 | +0, -0,013 |
| 32-36 | +0, -0,016 |

攻丝

- KP6525 TiCN + TiN 涂层,  
用于钢和铸铁材料的攻丝加工。



■ T620 • 超长型 • D 型切削锥 • 大尺寸 • 公制 • 用于钢和铸铁材料加工



- 优选
- 备选

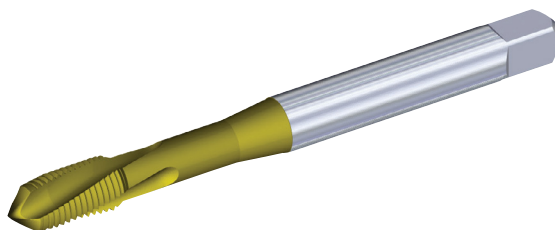
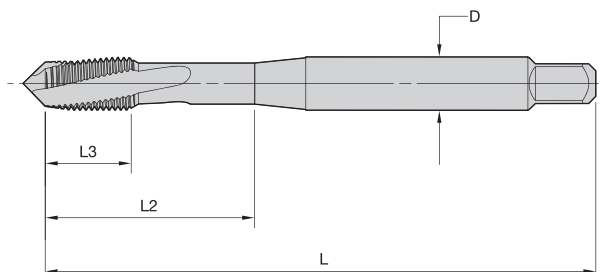
| KP6525             | D1 尺寸     | L   | L3 | L2  | D    | 刃数 | 公差等级 |
|--------------------|-----------|-----|----|-----|------|----|------|
| T620M240X300R6H-XL | M24 X 3   | 200 | 30 | 120 | 18,0 | 5  | 6HX  |
| T620M300X350R6H-XL | M30 X 3,5 | 250 | 35 | 150 | 22,0 | 5  | 6HX  |
| T620M330X350R6H-XL | M33 X 3,5 | 250 | 35 | 150 | 25,0 | 5  | 6HX  |
| T620M360X400R6H-XL | M36 X 4   | 250 | 40 | 150 | 28,0 | 6  | 6HX  |
| T620M420X450R6H-XL | M42 X 4,5 | 300 | 45 | 180 | 32,0 | 6  | 6HX  |

刀杆公差等级

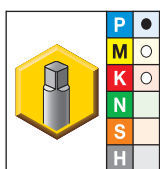
| D     | 公差 h6      |
|-------|------------|
| 12-18 | +0, -0,011 |
| 20-30 | +0, -0,013 |
| 32-36 | +0, -0,016 |



- KP6525 TiCN + TiN 涂层, 用于铁材料加工。



### ■ T620 • DIN 371 和 376 • D 型切削锥 • 英制机用 • 用于铁和不锈钢材料加工



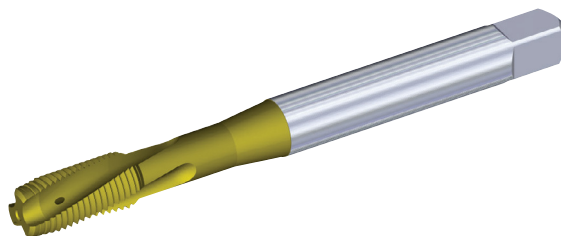
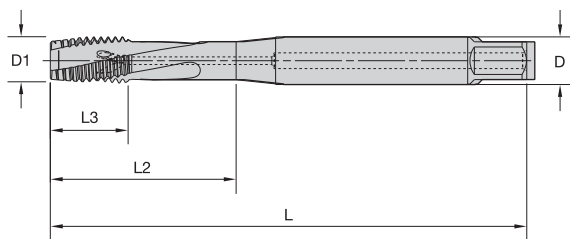
- 优选
- 备选

| KP6525                | D1 尺寸     | L   | L3 | L2 | D    | 刃数 | 尺寸标准    | 公差等级 |
|-----------------------|-----------|-----|----|----|------|----|---------|------|
| T620NC#06-32R2BX-D1   | 6 - 32    | 56  | 9  | 20 | 4,0  | 2  | DIN 371 | 2BX  |
| T620NF#06-40R2BX-D1   | 6 - 40    | 56  | 9  | 20 | 4,0  | 2  | DIN 371 | 2BX  |
| T620NC#08-32R2BX-D1   | 8 - 32    | 63  | 10 | 21 | 4,5  | 2  | DIN 371 | 2BX  |
| T620NC#10-24R2BX-D1   | 10 - 24   | 70  | 10 | 25 | 6,0  | 3  | DIN 371 | 2BX  |
| T620NF#10-32R2BX-D1   | 10 - 32   | 70  | 10 | 25 | 6,0  | 3  | DIN 371 | 2BX  |
| T620NC02500-20R3BX-D1 | 1/4 - 20  | 80  | 13 | 30 | 7,0  | 3  | DIN 371 | 3BX  |
| T620NF02500-28R3BX-D1 | 1/4 - 28  | 80  | 13 | 30 | 7,0  | 3  | DIN 371 | 3BX  |
| T620NC03125-18R3BX-D1 | 5/16 - 18 | 90  | 13 | 35 | 8,0  | 3  | DIN 371 | 3BX  |
| T620NF03125-24R3BX-D1 | 5/16 - 24 | 90  | 13 | 35 | 8,0  | 3  | DIN 371 | 3BX  |
| T620NC04375-14R3BX-D6 | 7/16 - 14 | 100 | 15 | 41 | 8,0  | 3  | DIN 376 | 3BX  |
| T620NF04375-20R3BX-D6 | 7/16 - 20 | 100 | 15 | 41 | 8,0  | 3  | DIN 376 | 3BX  |
| T620NC03750-16R3BX-D1 | 3/8 - 16  | 100 | 16 | 39 | 10,0 | 3  | DIN 371 | 3BX  |
| T620NF03750-24R3BX-D1 | 3/8 - 24  | 100 | 16 | 39 | 10,0 | 3  | DIN 371 | 3BX  |
| T620NC05000-13R3BX-D6 | 1/2 - 13  | 110 | 20 | 47 | 9,0  | 3  | DIN 376 | 3BX  |
| T620NF05000-20R3BX-D6 | 1/2 - 20  | 110 | 20 | 47 | 9,0  | 3  | DIN 376 | 3BX  |

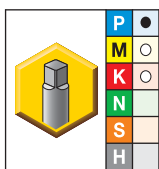
刀杆公差等级

| D 分数制  | 公差 h6      |
|--------|------------|
| >3-6   | +0, -0,008 |
| >6-10  | +0, -0,009 |
| <10-18 | +0, -0,011 |

- KP6525 TiCN + TiN 涂层, 用于铁材料加工。



■ T621 • DIN 371 和 376 • D 型切削锥 • 内冷 • 英制 • 用于铁和不锈钢材料加工



- 优选
- 备选

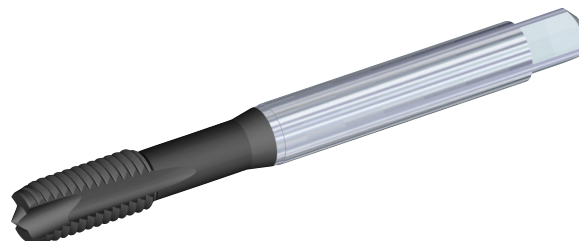
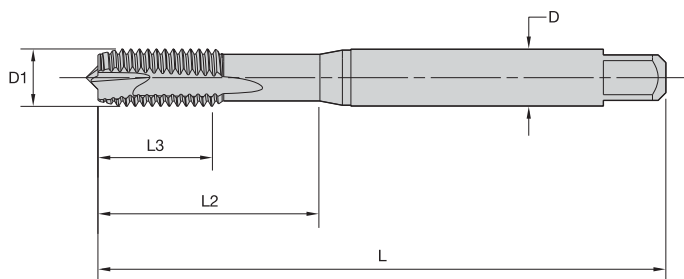
| KP6525                | D1 尺寸     | L   | L3 | L2 | D    | 刃数 | 尺寸标准    | 公差等级 |
|-----------------------|-----------|-----|----|----|------|----|---------|------|
| T621NC02500-20R3BX-D1 | 1/4 - 20  | 80  | 13 | 30 | 7,0  | 3  | DIN 371 | 3BX  |
| T621NF02500-28R3BX-D1 | 1/4 - 28  | 80  | 13 | 30 | 7,0  | 3  | DIN 371 | 3BX  |
| T621NC03125-18R3BX-D1 | 5/16 - 18 | 90  | 13 | 35 | 8,0  | 3  | DIN 371 | 3BX  |
| T621NF03125-24R3BX-D1 | 5/16 - 24 | 90  | 13 | 35 | 8,0  | 3  | DIN 371 | 3BX  |
| T621NC03750-16R3BX-D1 | 3/8 - 16  | 100 | 16 | 39 | 10,0 | 3  | DIN 371 | 3BX  |
| T621NF03750-24R3BX-D1 | 3/8 - 24  | 100 | 16 | 39 | 10,0 | 3  | DIN 371 | 3BX  |
| T621NC04375-14R3BX-D6 | 7/16 - 14 | 100 | 15 | 41 | 8,0  | 3  | DIN 376 | 3BX  |
| T621NF04375-20R3BX-D6 | 7/16 - 20 | 100 | 15 | 41 | 8,0  | 3  | DIN 376 | 3BX  |
| T621NC05000-13R3BX-D6 | 1/2 - 13  | 110 | 20 | 47 | 9,0  | 3  | DIN 376 | 3BX  |
| T621NF05000-20R3BX-D6 | 1/2 - 20  | 110 | 20 | 47 | 9,0  | 3  | DIN 376 | 3BX  |

刀杆公差等级

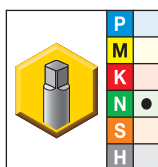
| D分数制   | 公差 h6      |
|--------|------------|
| >3-6   | +0, -0,008 |
| >6-10  | +0, -0,009 |
| <10-18 | +0, -0,011 |



- KSN38 DLC 涂层, 用于铝合金材料的攻丝加工。



### T670 • DIN 371 和 376 • B 型切削锥 • 公制 • 用于铝合金材料加工



- 优选
- 备选

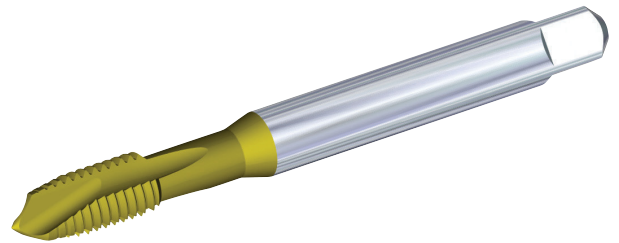
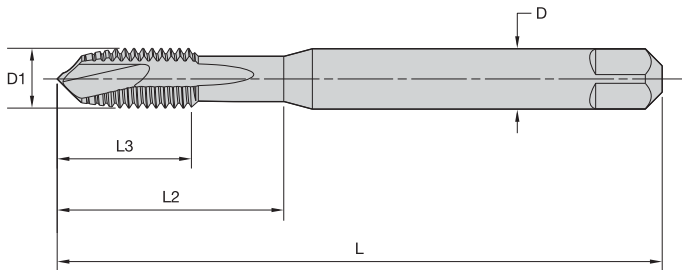
| KSN38                | D1 尺寸      | L   | L3 | L2 | D    | 刃数 | 尺寸标准    | 公差等级 |
|----------------------|------------|-----|----|----|------|----|---------|------|
| T670M030X050R6H-D1   | M3 X 0,5   | 56  | 11 | 18 | 3,5  | 2  | DIN 371 | 6H   |
| T670M040X070R6H-D1   | M4 X 0,7   | 63  | 13 | 21 | 4,5  | 2  | DIN 371 | 6H   |
| T670M050X080R6H-D1   | M5 X 0,8   | 70  | 15 | 25 | 6,0  | 2  | DIN 371 | 6H   |
| T670M060X100R6H-D1   | M6 X 1     | 80  | 17 | 30 | 6,0  | 2  | DIN 371 | 6H   |
| T670M080X125R6H-D1 * | M8 X 1,25  | 90  | 20 | 35 | 8,0  | 2  | DIN 371 | 6H   |
| T670M100X150R6H-D1   | M10 X 1,5  | 100 | 22 | 39 | 10,0 | 2  | DIN 371 | 6H   |
| T670M120X175R6H-D6   | M12 X 1,75 | 110 | 24 | —  | 9,0  | 3  | DIN 376 | 6H   |
| T670M160X200R6H-D6   | M16 X 2    | 110 | 27 | —  | 12,0 | 3  | DIN 376 | 6H   |

注: \*按订单生产标准型产品。适用于标准定价、交期按实际生产周期而定, 以及zui低订购量的规定

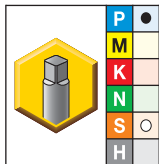
刀杆公差等级

| D     | 公差 h9      |
|-------|------------|
| 1-3   | +0, -0,025 |
| 3,5-6 | +0, -0,030 |
| 7-10  | +0, -0,036 |
| 11-18 | +0, -0,043 |

- KSP21 TiN 涂层, 用于 32-44 HRC 钢材的攻丝加工。



■ T600 • DIN 371, 374, 和 376 • B 型切削锥 • 公制 • 用于硬钢材料加工



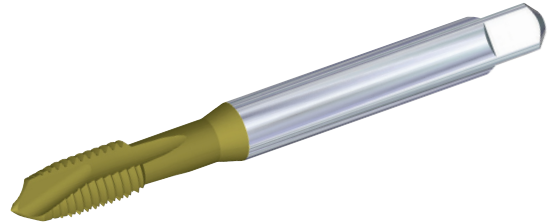
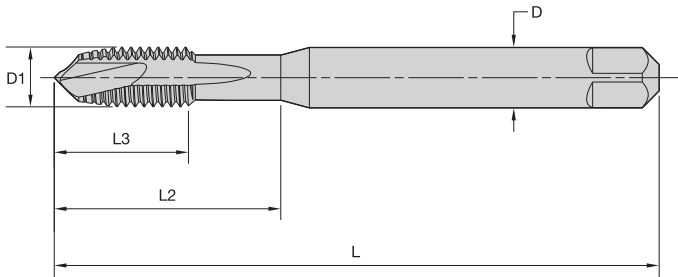
- 优选
- 备选

| KSP21                | D1 尺寸      | L   | L3 | L2 | D    | 刃数 | 尺寸标准    | 公差等级 |
|----------------------|------------|-----|----|----|------|----|---------|------|
| T600M030X050R6HX-D1  | M3 X 0,5   | 56  | 11 | 18 | 3,5  | 2  | DIN 371 | 6HX  |
| T600M040X070R6HX-D1  | M4 X 0,7   | 63  | 13 | 21 | 4,5  | 2  | DIN 371 | 6HX  |
| T600M050X080R6HX-D1  | M5 X 0,8   | 70  | 15 | 25 | 6,0  | 2  | DIN 371 | 6HX  |
| T600M060X100R6HX-D1  | M6 X 1     | 80  | 17 | 30 | 6,0  | 3  | DIN 371 | 6HX  |
| T600MF080X100R6HX-D4 | M8 X 1     | 90  | 17 | —  | 6,0  | 3  | DIN 374 | 6HX  |
| T600M080X125R6HX-D1  | M8 X 1,25  | 90  | 20 | 35 | 8,0  | 3  | DIN 371 | 6HX  |
| T600MF100X100R6HX-D4 | M10 X 1    | 90  | 18 | —  | 7,0  | 3  | DIN 374 | 6HX  |
| T600MF100X125R6HX-D4 | M10 X 1,25 | 100 | 22 | —  | 7,0  | 3  | DIN 374 | 6HX  |
| T600M100X150R6HX-D1  | M10 X 1,5  | 100 | 22 | 39 | 10,0 | 3  | DIN 371 | 6HX  |
| T600MF120X125R6HX-D4 | M12 X 1,25 | 100 | 22 | —  | 9,0  | 3  | DIN 374 | 6HX  |
| T600MF120X150R6HX-D4 | M12 X 1,5  | 100 | 22 | —  | 9,0  | 3  | DIN 374 | 6HX  |
| T600M120X175R6HX-D6  | M12 X 1,75 | 110 | 24 | —  | 9,0  | 3  | DIN 376 | 6HX  |
| T600MF140X150R6HX-D4 | M14 X 1,5  | 100 | 22 | —  | 11,0 | 3  | DIN 374 | 6HX  |
| T600M140X200R6HX-D6  | M14 X 2    | 110 | 26 | —  | 11,0 | 3  | DIN 376 | 6HX  |
| T600MF160X150R6HX-D4 | M16 X 1,5  | 100 | 22 | —  | 12,0 | 4  | DIN 374 | 6HX  |
| T600M160X200R6HX-D6  | M16 X 2    | 110 | 27 | —  | 12,0 | 4  | DIN 376 | 6HX  |
| T600M180X250R6HX-D6  | M18 X 2    | 125 | 30 | —  | 14,0 | 4  | DIN 376 | 6HX  |
| T600M200X250R6HX-D6  | M20 X 2,5  | 140 | 32 | —  | 16,0 | 4  | DIN 376 | 6HX  |

刀杆公差等级

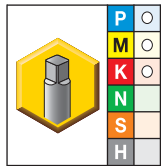
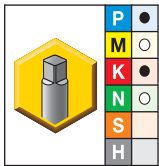
| D     | 公差 h9      |
|-------|------------|
| 1-3   | +0, -0,025 |
| 3,5-6 | +0, -0,030 |
| 7-10  | +0, -0,036 |
| 11-18 | +0, -0,043 |

- KSP32 TiCN/TiN
- KSP39 氧化黑



■ T820 • DIN 371, 374, 和 376 • B 型切削锥 • 公制

攻丝

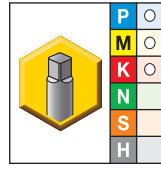
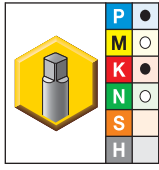


- 优选
- 备选

|  |                    | KSP32 | KSP39               | D1 尺寸       | L   | L3 | L2 | D    | 刃数 | 尺寸标准    | 公差等级 |
|--|--------------------|-------|---------------------|-------------|-----|----|----|------|----|---------|------|
|  | T820M020X040R6H-D1 |       | T820M020X040R6H-D1  | M2 X 0,4    | 45  | 7  | 13 | 2,8  | 2  | DIN 371 | 6H   |
|  | —                  |       | T820M020X040R6G-D1  | M2 X 0,4    | 45  | 7  | 13 | 2,8  | 2  | DIN 371 | 6G   |
|  | —                  |       | T820M025X045R6H-D1  | M2,5 X 0,45 | 50  | 7  | 15 | 2,8  | 2  | DIN 371 | 6H   |
|  | —                  |       | T820M025X045R6G-D1  | M2,5 X 0,45 | 50  | 7  | 15 | 2,8  | 2  | DIN 371 | 6G   |
|  | T820M030X050R6H-D1 |       | T820M030X050R6H-D1  | M3 X 0,5    | 56  | 8  | 18 | 3,5  | 2  | DIN 371 | 6H   |
|  | —                  |       | T820M030X050R6G-D1  | M3 X 0,5    | 56  | 8  | 18 | 3,5  | 2  | DIN 371 | 6G   |
|  | —                  |       | T820M035X060R6H-D1  | M3,5 X 0,6  | 56  | 9  | 20 | 4,0  | 2  | DIN 371 | 6H   |
|  | —                  |       | T820MF040X050R6H-D4 | M4 X 0,5    | 63  | 10 | 21 | 2,8  | 2  | DIN 374 | 6H   |
|  | T820M040X070R6H-D1 |       | T820M040X070R6H-D1  | M4 X 0,7    | 63  | 11 | 21 | 4,5  | 2  | DIN 371 | 6H   |
|  | —                  |       | T820M040X070R6G-D1  | M4 X 0,7    | 63  | 11 | 21 | 4,5  | 2  | DIN 371 | 6G   |
|  | —                  |       | T820MF050X050R6H-D4 | M5 X 0,5    | 70  | 12 | 25 | 3,5  | 2  | DIN 374 | 6H   |
|  | T820M050X080R6H-D1 |       | T820M050X080R6H-D1  | M5 X 0,8    | 70  | 12 | 25 | 6,0  | 2  | DIN 371 | 6H   |
|  | —                  |       | T820M050X080R6G-D1  | M5 X 0,8    | 70  | 12 | 25 | 6,0  | 2  | DIN 371 | 6G   |
|  | —                  |       | T820MF060X050R6H-D4 | M6 X 0,5    | 80  | 12 | 30 | 4,5  | 3  | DIN 374 | 6H   |
|  | —                  |       | T820MF060X075R6H-D4 | M6 X 0,75   | 80  | 12 | 30 | 4,5  | 3  | DIN 374 | 6H   |
|  | —                  |       | T820M060X100R6H-D6  | M6 X 1      | 80  | 12 | 30 | 4,5  | 3  | DIN 376 | 6H   |
|  | T820M060X100R6H-D1 |       | T820M060X100R6H-D1  | M6 X 1      | 80  | 12 | 30 | 6,0  | 3  | DIN 371 | 6H   |
|  | —                  |       | T820M060X100R6G-D1  | M6 X 1      | 80  | 12 | 30 | 6,0  | 3  | DIN 371 | 6G   |
|  | T820M070X100R6H-D1 |       | T820M070X100R6H-D1  | M7 X 1      | 80  | 12 | 30 | 7,0  | 3  | DIN 371 | 6H   |
|  | —                  |       | T820M070X100R6G-D1  | M7 X 1      | 80  | 12 | 30 | 7,0  | 3  | DIN 371 | 6G   |
|  | —                  |       | T820MF080X100R6H-D4 | M8 X 1      | 90  | 15 | 35 | 6,0  | 3  | DIN 374 | 6H   |
|  | —                  |       | T820M080X125R6H-D6  | M8 X 1,25   | 90  | 15 | 35 | 6,0  | 3  | DIN 376 | 6H   |
|  | T820M080X125R6H-D1 |       | T820M080X125R6H-D1  | M8 X 1,25   | 90  | 15 | 35 | 8,0  | 3  | DIN 371 | 6H   |
|  | —                  |       | T820M080X125R6G-D1  | M8 X 1,25   | 90  | 15 | 35 | 8,0  | 3  | DIN 371 | 6G   |
|  | —                  |       | T820MF100X100R6H-D4 | M10 X 1     | 90  | 15 | 35 | 7,0  | 3  | DIN 374 | 6H   |
|  | —                  |       | T820MF100X125R6H-D4 | M10 X 1,25  | 100 | 18 | 39 | 7,0  | 3  | DIN 374 | 6H   |
|  | —                  |       | T820M100X150R6H-D6  | M10 X 1,5   | 100 | 18 | 39 | 7,0  | 3  | DIN 376 | 6H   |
|  | T820M100X150R6H-D1 |       | T820M100X150R6H-D1  | M10 X 1,5   | 100 | 18 | 39 | 10,0 | 3  | DIN 371 | 6H   |
|  | —                  |       | T820M100X150R6G-D1  | M10 X 1,5   | 100 | 18 | 39 | 10,0 | 3  | DIN 371 | 6G   |
|  | —                  |       | T820MF120X100R6H-D4 | M12 X 1     | 100 | 21 | 39 | 9,0  | 3  | DIN 374 | 6H   |
|  | —                  |       | T820MF120X125R6H-D4 | M12 X 1,25  | 100 | 21 | 39 | 9,0  | 3  | DIN 374 | 6H   |
|  | —                  |       | T820MF120X150R6H-D4 | M12 X 1,5   | 100 | 21 | 39 | 9,0  | 3  | DIN 374 | 6H   |

(续)

(T820 • DIN 371, 374, 和 376 • B 型切削锥 • 公制 — 续)



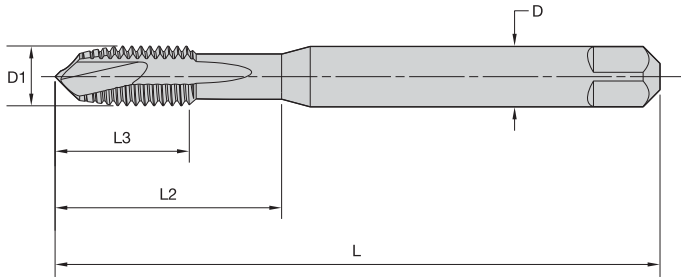
● 优选  
○ 备选

|                           |                            | D1 尺寸      | L   | L3 | L2  | D    | 刃数 | 尺寸标准    | 公差等级 |
|---------------------------|----------------------------|------------|-----|----|-----|------|----|---------|------|
| <b>KSP32</b>              | <b>T820M120X175R6H-D6</b>  | M12 X 1,75 | 110 | 21 | 44  | 9,0  | 3  | DIN 376 | 6H   |
| —                         | <b>T820M120X175R6G-D6</b>  | M12 X 1,75 | 110 | 21 | 44  | 9,0  | 3  | DIN 376 | 6G   |
| —                         | <b>T820MF140X100R6H-D4</b> | M14 X 1    | 100 | 21 | 47  | 11,0 | 3  | DIN 374 | 6H   |
| —                         | <b>T820MF140X125R6H-D4</b> | M14 X 1,25 | 100 | 21 | 47  | 11,0 | 3  | DIN 374 | 6H   |
| —                         | <b>T820MF140X150R6H-D4</b> | M14 X 1,5  | 100 | 21 | 47  | 11,0 | 3  | DIN 374 | 6H   |
| <b>T820M140X200R6H-D6</b> | <b>T820M140X200R6H-D6</b>  | M14 X 2    | 110 | 24 | 52  | 11,0 | 3  | DIN 376 | 6H   |
| —                         | <b>T820M140X200R6G-D6</b>  | M14 X 2    | 110 | 24 | 52  | 11,0 | 3  | DIN 376 | 6G   |
| —                         | <b>T820MF160X100R6H-D4</b> | M16 X 1    | 100 | 21 | 46  | 12,0 | 3  | DIN 374 | 6H   |
| —                         | <b>T820MF160X150R6H-D4</b> | M16 X 1,5  | 100 | 21 | 46  | 12,0 | 3  | DIN 374 | 6H   |
| <b>T820M160X200R6H-D6</b> | <b>T820M160X200R6H-D6</b>  | M16 X 2    | 110 | 24 | 51  | 12,0 | 3  | DIN 376 | 6H   |
| —                         | <b>T820M160X200R6G-D6</b>  | M16 X 2    | 110 | 24 | 51  | 12,0 | 3  | DIN 376 | 6G   |
| —                         | <b>T820MF180X150R6H-D4</b> | M18 X 1,5  | 110 | 21 | 50  | 14,0 | 3  | DIN 374 | 6H   |
| —                         | <b>T820MF180X200R6H-D4</b> | M18 X 2    | 125 | 30 | 58  | 14,0 | 3  | DIN 374 | 6H   |
| <b>T820M180X250R6H-D6</b> | <b>T820M180X250R6H-D6</b>  | M18 X 2,5  | 125 | 30 | 58  | 14,0 | 3  | DIN 376 | 6H   |
| —                         | <b>T820MF200X150R6H-D4</b> | M20 X 1,5  | 125 | 24 | 56  | 16,0 | 3  | DIN 374 | 6H   |
| —                         | <b>T820MF200X200R6H-D4</b> | M20 X 2    | 140 | 30 | 64  | 16,0 | 3  | DIN 374 | 6H   |
| <b>T820M200X250R6H-D6</b> | <b>T820M200X250R6H-D6</b>  | M20 X 2,5  | 140 | 30 | 64  | 16,0 | 3  | DIN 376 | 6H   |
| —                         | <b>T820MF220X150R6H-D4</b> | M22 X 1,5  | 125 | 24 | 62  | 18,0 | 3  | DIN 374 | 6H   |
| —                         | <b>T820MF220X200R6H-D4</b> | M22 X 2    | 140 | 30 | 70  | 18,0 | 3  | DIN 374 | 6H   |
| —                         | <b>T820M220X250R6H-D6</b>  | M22 X 2,5  | 140 | 30 | 70  | 18,0 | 3  | DIN 376 | 6H   |
| —                         | <b>T820MF240X150R6H-D4</b> | M24 X 1,5  | 140 | 28 | 67  | 18,0 | 3  | DIN 374 | 6H   |
| —                         | <b>T820M240X300R6H-D6</b>  | M24 X 3    | 160 | 36 | 77  | 18,0 | 3  | DIN 376 | 6H   |
| —                         | <b>T820M270X300R6H-D6</b>  | M27 X 3    | 160 | 36 | 82  | 20,0 | 4  | DIN 376 | 6H   |
| —                         | <b>T820M300X350R6H-D6</b>  | M30 X 3,5  | 180 | 42 | 91  | 22,0 | 4  | DIN 376 | 6H   |
| —                         | <b>T820M330X350R6H-D6</b>  | M33 X 3,5  | 180 | 42 | 100 | 25,0 | 4  | DIN 376 | 6H   |
| —                         | <b>T820M360X400R6H-D6</b>  | M36 X 4    | 200 | 48 | 110 | 28,0 | 4  | DIN 376 | 6H   |

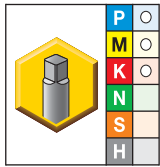
刀杆公差等级

| D mm   | 公差 h9      |
|--------|------------|
| 1-3    | +0, -0,025 |
| >3-6   | +0, -0,030 |
| >6-10  | +0, -0,036 |
| >10-18 | +0, -0,043 |
| >18-30 | +0, -0,052 |

• KSP39 氧化黑



■ T820 • DIN 371 和 376 • B 型切削锥 • UNC/UNF



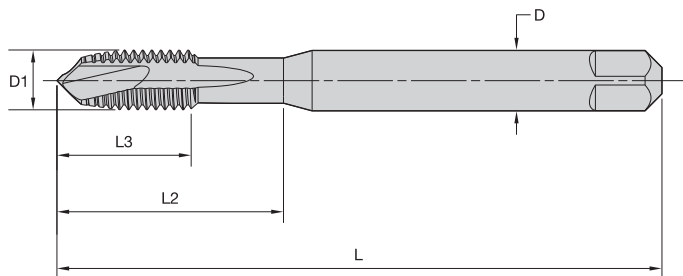
● 优选  
○ 备选

| KSP39                | 公制尺寸      |     |    |    |      | 刃数 | 尺寸标准    | 公差等级 |
|----------------------|-----------|-----|----|----|------|----|---------|------|
|                      | D1 尺寸     | L   | L3 | L2 | D    |    |         |      |
| T820NC#04-40R2B-D1   | 4 - 40    | 56  | 8  | 18 | 3,5  | 2  | DIN 371 | 2B   |
| T820NC#05-40R2B-D1   | 5 - 40    | 56  | 9  | 20 | 4,0  | 2  | DIN 371 | 2B   |
| T820NC#06-32R2B-D1   | 6 - 32    | 56  | 9  | 20 | 4,0  | 2  | DIN 371 | 2B   |
| T820NF#06-40R2B-D1   | 6 - 40    | 56  | 9  | 20 | 4,0  | 2  | DIN 371 | 2B   |
| T820NC#08-32R2B-D1   | 8 - 32    | 63  | 11 | 21 | 4,5  | 2  | DIN 371 | 2B   |
| T820NC#10-24R2B-D1   | 10 - 24   | 70  | 12 | 25 | 6,0  | 2  | DIN 371 | 2B   |
| T820NF#10-32R2B-D1   | 10 - 32   | 70  | 12 | 25 | 6,0  | 2  | DIN 371 | 2B   |
| T820NC02500-20R2B-D1 | 1/4 - 20  | 80  | 15 | 30 | 7,0  | 3  | DIN 371 | 2B   |
| T820NF02500-28R2B-D1 | 1/4 - 28  | 80  | 15 | 30 | 7,0  | 3  | DIN 371 | 2B   |
| T820NC03125-18R2B-D1 | 5/16 - 18 | 90  | 15 | 35 | 8,0  | 3  | DIN 371 | 2B   |
| T820NF03125-24R2B-D1 | 5/16 - 24 | 90  | 15 | 35 | 8,0  | 3  | DIN 371 | 2B   |
| T820NC03750-16R2B-D1 | 3/8 - 16  | 100 | 19 | 39 | 10,0 | 3  | DIN 371 | 2B   |
| T820NF03750-24R2B-D1 | 3/8 - 24  | 100 | 19 | 39 | 10,0 | 3  | DIN 371 | 2B   |
| T820NC04375-14R2B-D6 | 7/16 - 14 | 100 | 18 | 41 | 8,0  | 3  | DIN 376 | 2B   |
| T820NF04375-20R2B-D6 | 7/16 - 20 | 100 | 18 | 41 | 8,0  | 3  | DIN 376 | 2B   |
| T820NC05000-13R2B-D6 | 1/2 - 13  | 110 | 23 | 47 | 9,0  | 3  | DIN 376 | 2B   |
| T820NF05000-20R2B-D6 | 1/2 - 20  | 110 | 23 | 47 | 9,0  | 3  | DIN 376 | 2B   |
| T820NC05625-12R2B-D6 | 9/16 - 12 | 110 | 25 | 53 | 11,0 | 3  | DIN 376 | 2B   |
| T820NF05625-18R2B-D6 | 9/16 - 18 | 110 | 25 | 53 | 11,0 | 3  | DIN 376 | 2B   |
| T820NC06250-11R2B-D6 | 5/8 - 11  | 110 | 24 | 51 | 12,0 | 3  | DIN 376 | 2B   |
| T820NF06250-18R2B-D6 | 5/8 - 18  | 110 | 24 | 51 | 12,0 | 3  | DIN 376 | 2B   |
| T820NC07500-10R2B-D6 | 3/4 - 10  | 140 | 30 | 64 | 16,0 | 3  | DIN 376 | 2B   |
| T820NF07500-16R2B-D6 | 3/4 - 16  | 140 | 30 | 64 | 16,0 | 3  | DIN 376 | 2B   |
| T820NC08750-9R2B-D6  | 7/8 - 9   | 140 | 34 | 71 | 18,0 | 3  | DIN 376 | 2B   |
| T820NF08750-14R2B-D6 | 7/8 - 14  | 140 | 34 | 71 | 18,0 | 3  | DIN 376 | 2B   |
| T820NC10000-8R2B-D6  | 1 - 8     | 160 | 38 | 81 | 18,0 | 3  | DIN 376 | 2B   |
| T820NF10000-12R2B-D6 | 1 - 12    | 160 | 38 | 81 | 18,0 | 3  | DIN 376 | 2B   |

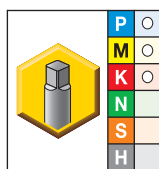
刀杆公差等级

| D mm   | 公差等级 h9    |
|--------|------------|
| 1-3    | +0, -0,025 |
| >3-6   | +0, -0,030 |
| >6-10  | +0, -0,036 |
| >10-18 | +0, -0,043 |
| >18-30 | +0, -0,052 |

• KSP39 氧化黑



■ T820 • DIN 371 和 376 • B 型切削锥 • UNJC/UNJF



● 优选  
○ 备选

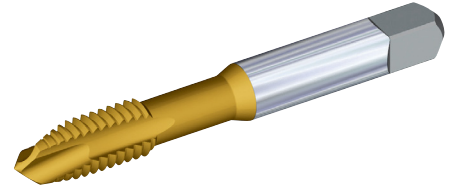
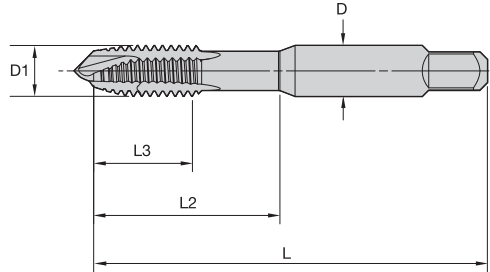
| KSP39                | 公制尺寸      |     |    |    |      | 刃数 | 尺寸标准    | 公差等级 |
|----------------------|-----------|-----|----|----|------|----|---------|------|
|                      | D1 尺寸     | L   | L3 | L2 | D    |    |         |      |
| T820NC#04-40R3B-D1   | 4 - 40    | 56  | 8  | 18 | 3,5  | 2  | DIN 371 | 3B   |
| T820NC#06-32R3B-D1   | 6 - 32    | 56  | 9  | 20 | 4,0  | 2  | DIN 371 | 3B   |
| T820NC#08-32R3B-D1   | 8 - 32    | 63  | 11 | 21 | 4,5  | 2  | DIN 371 | 3B   |
| T820NF#10-32R3B-D1   | 10 - 32   | 70  | 12 | 25 | 6,0  | 2  | DIN 371 | 3B   |
| T820NF02500-28R3B-D1 | 1/4 - 28  | 80  | 15 | 30 | 7,0  | 3  | DIN 371 | 3B   |
| T820NF03125-24R3B-D1 | 5/16 - 24 | 90  | 15 | 35 | 8,0  | 3  | DIN 371 | 3B   |
| T820NF03750-24R3B-D1 | 3/8 - 24  | 100 | 19 | 39 | 10,0 | 3  | DIN 371 | 3B   |
| T820NF04375-20R3B-D6 | 7/16 - 20 | 100 | 18 | 41 | 8,0  | 3  | DIN 376 | 3B   |
| T820NF05000-20R3B-D6 | 1/2 - 20  | 110 | 23 | 47 | 9,0  | 3  | DIN 376 | 3B   |

注: UNJC/UNJF 内螺纹可以使用 UNC/UNF 磨削螺纹丝锥加工。

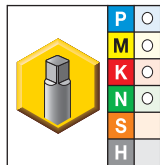
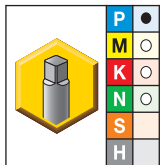
刀杆公差等级

| D mm   | 公差 h9      |
|--------|------------|
| 1-3    | +0, -0,025 |
| >3-6   | +0, -0,030 |
| >6-10  | +0, -0,036 |
| >10-18 | +0, -0,043 |
| >18-30 | +0, -0,052 |

- KSU31 TiN
- KSU30 无涂层



■ T820 • B 型切削锥 • 公制 • JIS





- 优选
- 备选

|                   |                    | D1 尺寸      | L   | L3 | L2 | D    | 刃数 | 尺寸标准 | 丝锥等级  |
|-------------------|--------------------|------------|-----|----|----|------|----|------|-------|
| <b>KSU31</b>      | <b>KSU30</b>       |            |     |    |    |      |    |      |       |
| T820M030X050R6H-J | T820M030X050R6H-J  | M3 X 0,5   | 46  | 11 | 19 | 4,0  | 2  | JIS  | ISO 2 |
| T820M040X070R6H-J | T820M040X070R6H-J  | M4 X 0,7   | 52  | 13 | 21 | 5,0  | 2  | JIS  | ISO 2 |
| T820M050X080R6H-J | T820M050X080R6H-J  | M5 X 0,8   | 60  | 16 | 24 | 5,5  | 2  | JIS  | ISO 2 |
| T820M060X100R6H-J | T820M060X100R6H-J  | M6 X 1     | 62  | 19 | 29 | 6,0  | 3  | JIS  | ISO 2 |
| T820M080X125R6H-J | T820M080X125R6H-J  | M8 X 1,25  | 70  | 22 | 37 | 6,2  | 3  | JIS  | ISO 2 |
| T820M100X150R6H-J | T820M100X150R6H-J  | M10 X 1,5  | 75  | 24 | 41 | 7,0  | 3  | JIS  | ISO 2 |
| -                 | T820MF120X125R6H-J | M12 X 1,25 | 82  | 29 | 48 | 8,5  | 3  | JIS  | ISO 2 |
| -                 | T820MF120X150R6H-J | M12 X 1,5  | 82  | 29 | 48 | 8,5  | 3  | JIS  | ISO 2 |
| -                 | T820M120X175R6H-J  | M12 X 1,75 | 82  | 29 | 48 | 8,5  | 3  | JIS  | ISO 2 |
| -                 | T820MF140X150R6H-J | M14 X 1,5  | 88  | 30 | 48 | 10,5 | 3  | JIS  | ISO 2 |
| -                 | T820M140X200R6H-J  | M14 X 2    | 88  | 30 | 48 | 10,5 | 3  | JIS  | ISO 2 |
| -                 | T820MF160X150R6H-J | M16 X 1,5  | 95  | 32 | 52 | 12,5 | 3  | JIS  | ISO 2 |
| -                 | T820M160X200R6H-J  | M16 X 2    | 95  | 32 | 52 | 12,5 | 3  | JIS  | ISO 2 |
| -                 | T820M180X250R6H-J  | M18 X 2,5  | 100 | 37 | 55 | 14,0 | 3  | JIS  | ISO 2 |
| -                 | T820M200X250R6H-J  | M20 X 2,5  | 105 | 37 | 60 | 15,0 | 3  | JIS  | ISO 2 |

刀杆公差等级



| D mm   | 公差 h9      |
|--------|------------|
| 1-3    | +0, -0,025 |
| >3-6   | +0, -0,030 |
| >6-10  | +0, -0,036 |
| >10-18 | +0, -0,043 |
| >18-30 | +0, -0,052 |

■ 高性能丝锥 • 硬质合金 • 公制

| 材料<br>分组 | <br>通孔 |            |               |        |            | <br>盲孔 |            |               |        |            |           |
|----------|---|------------|---------------|--------|------------|---|------------|---------------|--------|------------|-----------|
|          | 范围 – m/min  |            |               |        |            | 范围 – m/min  |            |               |        |            |           |
|          | 丝锥类型  | 材质         | 最小值           | 初始值    | 最大值        | 丝锥类型  | 材质         | 最小值           | 初始值    | 最大值        |           |
|          | <b>P</b>  | 1          | T320, T321    | KC7542 | 60         | <b>100</b>  | 130        | T331          | KC7542 | 50         | <b>70</b> |
|          | 2   | T320, T321 | KC7542        | 60     | <b>90</b>  | 120   | T331       | KC7542        | 40     | <b>60</b>  | 80        |
|          | 3   | T320, T321 | KC7542        | 50     | <b>80</b>  | 100   | T331       | KC7542        | 40     | <b>60</b>  | 80        |
| <b>K</b> | 1   | T340, T353 | KC7542, KCK17 | 70     | <b>105</b> | 140   | T351, T353 | KC7542, KCK17 | 50     | <b>70</b>  | 90        |
|          | 2   | T340, T353 | KC7542, KCK17 | 60     | <b>100</b> | 130   | T351, T353 | KC7542, KCK17 | 50     | <b>70</b>  | 90        |
|          | 3   | T340, T353 | KC7542, KCK17 | 60     | <b>90</b>  | 120   | T351, T353 | KC7542, KCK17 | 40     | <b>60</b>  | 80        |
| <b>N</b> | 2   | -          | -             | -      | -          | -   | T471, T491 | KCN14         | 60     | <b>80</b>  | 100       |
|          | 3   | -          | -             | -      | -          | -   | T471, T491 | KCN14         | 50     | <b>70</b>  | 90        |
|          | 4   | -          | -             | -      | -          | -   | T471, T491 | KCN14         | 40     | <b>60</b>  | 80        |
| <b>H</b> | 1   | T410       | KCU36         | 1,2    | <b>1,5</b> | 2,0   | T410       | KCU36         | 0,8    | <b>1,1</b> | 1,4       |
|          | 2   | T410       | KCU36         | 0,6    | <b>0,8</b> | 1,0   | T410       | KCU36         | 0,4    | <b>0,5</b> | 0,7       |

注: T321 冷却型丝锥的切削速度可比 T320 非冷却型丝锥的切削速度提高 25%。

■ 高性能丝锥 • HSS-E-PM • 公制

| 材料<br>分组 | <br>通孔 |      |        |        |           | <br>盲孔 |                  |                  |        |           |           |
|----------|--|------|--------|--------|-----------|--|------------------|------------------|--------|-----------|-----------|
|          | 范围 – m/min   |      |        |        |           | 范围 – m/min   |                  |                  |        |           |           |
|          | 丝锥类型   | 材质   | 最小值    | 初始值    | 最大值       | 丝锥类型   | 材质               | 最小值              | 初始值    | 最大值       |           |
|          | <b>P</b>   | 1    | T620   | KP6525 | 20        | <b>30</b>  | 45               | T630, T632, T650 | KP6525 | 14        | <b>21</b> |
|          |  | T622 | KSP21  | 18     | <b>30</b> | 50   | T622             | KSP21            | 13     | <b>21</b> | 35        |
|          | 2  | T620 | KP6525 | 17     | <b>25</b> | 38   | T630, T632, T650 | KP6525           | 12     | <b>18</b> | 26        |
|          |  | T622 | KSP21  | 15     | <b>25</b> | 42   | T622             | KSP21            | 10     | <b>18</b> | 29        |
|          | 3  | T620 | KP6525 | 12     | <b>15</b> | 20   | T630, T632, T650 | KP6525           | 8      | <b>11</b> | 14        |
|          | 4  | T600 | KSP21  | 5      | <b>6</b>  | 8  | T604             | KSH26            | 3      | <b>4</b>  | 5         |
|          | 5  | T620 | KP6525 | 12     | <b>15</b> | 20   | T630, T632, T650 | KP6525           | 8      | <b>11</b> | 14        |
|          | 6  | T600 | KSP21  | 6      | <b>8</b>  | 10   | T604             | KSH26            | 4      | <b>6</b>  | 7         |
| <b>M</b> | 1  | T620 | KM6515 | 12     | <b>15</b> | 20   | T630, T632, T650 | KM6515           | 8      | <b>11</b> | 14        |
|          | 2  | T620 | KM6515 | 9      | <b>12</b> | 16   | T630, T632, T650 | KM6515           | 6      | <b>8</b>  | 11        |
|          | 3  | T620 | KM6515 | 8      | <b>10</b> | 13   | T630, T632, T650 | KM6515           | 5      | <b>7</b>  | 9         |
| <b>K</b> | 1  | T640 | KP6525 | 27     | <b>35</b> | 46   | T640, T642       | KP6525           | 19     | <b>25</b> | 32        |
|          | 2  | T640 | KP6525 | 23     | <b>30</b> | 39   | T640, T642       | KP6525           | 16     | <b>21</b> | 27        |
|          | 3  | T640 | KP6525 | 19     | <b>25</b> | 33   | T640, T642       | KP6525           | 13     | <b>18</b> | 23        |
| <b>N</b> | 1  | T670 | KSN38  | 42     | <b>55</b> | 72   | T680             | KSN38            | 30     | <b>39</b> | 50        |
|          |  | T622 | KSN28  | 37     | <b>55</b> | 72   | T622             | KSN28            | 26     | <b>39</b> | 50        |
|          | 2  | T640 | KP6525 | 30     | <b>45</b> | 59   | T640, T642       | KP6525           | 21     | <b>32</b> | 41        |
|          |  | T622 | KSN28  | 33     | <b>50</b> | 65   | T622             | KSN28            | 23     | <b>35</b> | 46        |
|          | 4  | T640 | KP6525 | 7      | <b>10</b> | 15   | T640, T642       | KP6525           | 5      | <b>7</b>  | 11        |
| <b>S</b> | 1  | T620 | KP6525 | 8      | <b>12</b> | 18   | T630, T632       | KP6525           | 6      | <b>8</b>  | 13        |

注: 在使用冷却型丝锥 ( T621, T623, T625, T627, T631, T633, T641, T643, T651 ) 时, 加工速度可提高 25%。



## G0tap™ • 公制

| 材料<br>分组 | 通孔         |      |               |               |     | 盲孔         |                        |                        |               |     |    |    |
|----------|------------|------|---------------|---------------|-----|------------|------------------------|------------------------|---------------|-----|----|----|
|          | 范围 - m/min |      |               |               |     | 范围 - m/min |                        |                        |               |     |    |    |
|          | 丝锥类型       | 材质   | 最小值           | 初始值           | 最大值 | 丝锥类型       | 材质                     | 最小值                    | 初始值           | 最大值 |    |    |
|          |            |      |               |               |     |            |                        |                        |               |     |    |    |
| P        | 1          | T820 | KSU31, KSP32  | 23            | 30  | 38         | T830, T832, T838, T839 | KSU31, KSP32           | 15            | 21  | 30 |    |
|          |            | T820 | KSP39, KSU30  | 11            | 15  | 19         | T830, T832, T838, T839 | KSP39, KSU30           | 7             | 11  | 15 |    |
|          |            | T854 | KSU31         | 6             | 8   | 10         | T854                   | KSU31                  | 6             | 8   | 10 |    |
|          |            | T854 | KSP39         | 5             | 6   | 8          | T854                   | KSP39                  | 5             | 6   | 8  |    |
|          |            | T877 | KSU31         | 17            | 22  | 28         | T857                   | KSU31                  | 11            | 15  | 22 |    |
|          |            | T877 | KSP39         | 8             | 10  | 13         | T857                   | KSP39                  | 5             | 7   | 10 |    |
|          | 2          | T848 | KSU30         | 5             | 6   | 8          | T848                   | KSU30                  | 3             | 4   | 6  |    |
|          |            | T820 | KSU31, KSP32  | 18            | 24  | 30         | T830, T832, T838, T839 | KSU31, KSP32           | 12            | 17  | 24 |    |
|          | 3          | T820 | KSP39, KSU30  | 11            | 14  | 18         | T830, T832, T838, T839 | KSP39, KSU30           | 7             | 10  | 14 |    |
|          |            | T820 | KSU31, KSP32  | 17            | 22  | 28         | T830, T832, T838, T839 | KSU31, KSP32           | 11            | 15  | 22 |    |
|          |            | T820 | KSP39, KSU30  | 9             | 12  | 15         | T830, T832, T838, T839 | KSP39, KSU30           | 6             | 8   | 12 |    |
|          |            | T846 | KSU31         | 6             | 8   | 10         | T846                   | KSU31                  | 6             | 8   | 10 |    |
| M        | 1          | T846 | KSU30         | 4             | 5   | 6          | T846                   | KSU30                  | 4             | 5   | 6  |    |
|          |            | T820 | KSMN34, KSP32 | 14            | 18  | 23         | T830, T832, T838, T839 | KSMN34, KSP32          | 9             | 13  | 18 |    |
|          |            | T820 | KSP39, KSU30  | 8             | 10  | 13         | T830, T832, T838, T839 | KSP39, KSU30           | 5             | 7   | 10 |    |
|          |            | T854 | KSU31         | 6             | 8   | 10         | T854                   | KSU31                  | 6             | 8   | 10 |    |
|          |            | T854 | KSP39         | 4             | 5   | 6          | T854                   | KSP39                  | 4             | 5   | 6  |    |
|          |            | T877 | KSU31         | 9             | 12  | 15         | T857                   | KSU31                  | 6             | 8   | 11 |    |
|          | 3          | T877 | KSP39         | 5             | 7   | 9          | T857                   | KSP39                  | 4             | 5   | 7  |    |
|          |            | T848 | KSU30         | 4             | 5   | 6          | T848                   | KSU30                  | 3             | 4   | 6  |    |
|          | K          | 1    | T820          | KSMN34, KSP32 | 11  | 15         | 19                     | T830, T832, T838, T839 | KSMN34, KSP32 | 7   | 11 | 15 |
|          |            |      | T820          | KSP39, KSU30  | 7   | 9          | 11                     | T830, T832, T838, T839 | KSP39, KSU30  | 4   | 6  | 9  |
|          |            | 2    | T846          | KSU31         | 11  | 15         | 19                     | T846                   | KSU31         | 11  | 15 | 19 |
|          |            |      | T846          | KSU30         | 6   | 8          | 10                     | T846                   | KSU30         | 6   | 8  | 10 |
| T820     |            |      | KSU31, KSP32  | 16            | 21  | 26         | T830, T832, T838, T839 | KSU31, KSP32           | 10            | 15  | 21 |    |
| T820     |            |      | KSP39, KSU30  | 9             | 12  | 15         | T830, T832, T838, T839 | KSP39, KSU30           | 6             | 8   | 12 |    |
| N        | 1          | T877 | KSU31         | 14            | 18  | 23         | T857                   | KSU31                  | 9             | 13  | 18 |    |
|          |            | T877 | KSP39         | 7             | 9   | 11         | T857                   | KSP39                  | 4             | 6   | 9  |    |
|          | 2          | T848 | KSU30         | 4             | 5   | 6          | T848                   | KSU30                  | 2             | 4   | 5  |    |
|          |            | T820 | KSMN34, KSP32 | 37            | 49  | 61         | T830, T832, T838, T839 | KSMN34, KSP32          | 24            | 34  | 49 |    |
| N        | 4          | T820 | KSU30         | 20            | 27  | 34         | T830, T832             | KSU30                  | 13            | 19  | 27 |    |
|          |            | T820 | KSMN34, KSP32 | 30            | 40  | 50         | T830, T832, T838, T839 | KSMN34, KSP32          | 20            | 28  | 40 |    |
|          | 2          | T820 | KSU30         | 16            | 21  | 26         | T830, T832             | KSU30                  | 10            | 15  | 21 |    |
|          |            | T877 | KSU31         | 17            | 22  | 27         | T857                   | KSU31                  | 11            | 15  | 22 |    |
|          | 4          | T877 | KSP39         | 8             | 10  | 12         | T857                   | KSP39                  | 5             | 7   | 10 |    |
|          |            | T848 | KSU30         | 10            | 13  | 16         | T848                   | KSU30                  | 6             | 9   | 13 |    |

KSU30 = 亮色  
 KSP39 = 氧化黑  
 KSU31 = TiN 涂层  
 KSP32 = TiCN/TiN 涂层  
 KSMN34 = TiN + Cr/C 涂层

攻丝

# 丝锥及螺纹铣刀的技术资料

以下的技术数据可以为用户提供帮助，解决在攻丝和螺纹铣削中出现的问题。本部分内容包括丝锥型号和应用建议方面的信息，以及用于解决在攻丝和螺纹铣削中出现的常见问题的信息。

## 包括于该部分:

- 丝锥产品术语的说明。
- 丝锥倒角的说明。
- 各种型号及长度丝锥的规格信息。
- 丝锥限制性数据。
- 不同类型丝锥的切屑处理方法。
- 丝锥应用建议。
- 螺纹公差说明，以及有关公差的信息。
- 有关表面处理和涂层的信息。
- 用于确定丝锥加工速度的指南和切削速度表。
- 故障处理。
- 硬度转换表。
- 肯纳金属攻丝应用图标指南。
- 客户定制丝锥产品表格。
- 丝锥-钻头交互表。

该部分内容可以帮助你更多了解攻丝和螺纹加工应用，从而确保刀具使用性能的大化。

## 如何应用这些技术数据

在以下的举例中，可以了解如何应用本目录中的技术数据:

### 故障

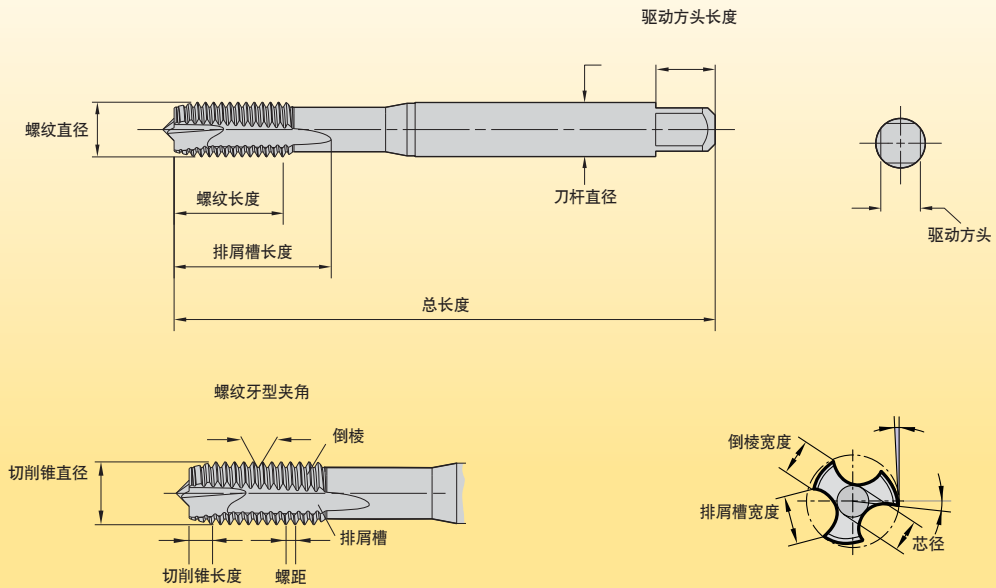
- 在不锈钢材料加工应用中，螺纹孔尺寸过大，丝锥寿命缩短。

### 解决方案

- 参考技术信息部分的故障排除指南，发现解决问题的方法。



# 定义与角度、尖端、以及排屑槽类型



## 排屑槽类型



直槽、C型切削锥，无刃倾角



右手螺旋槽

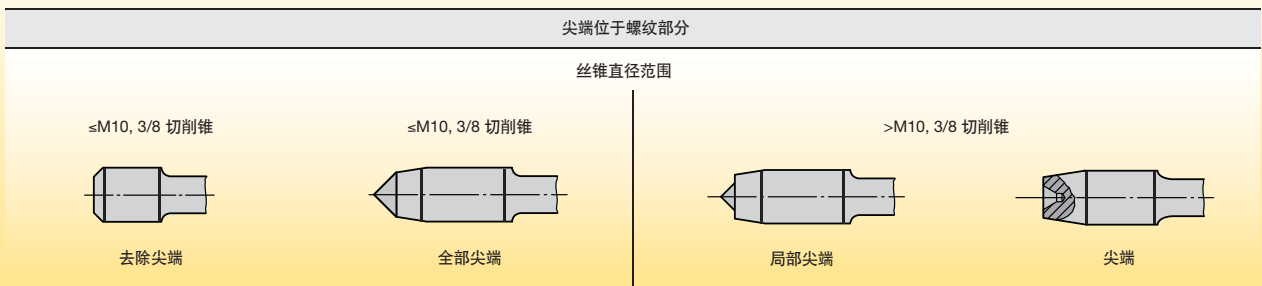


直槽、B型切削锥，刃倾角



左手螺旋槽

## 尖端类型 (符合 DIN 2197/DIN 2175 标准)



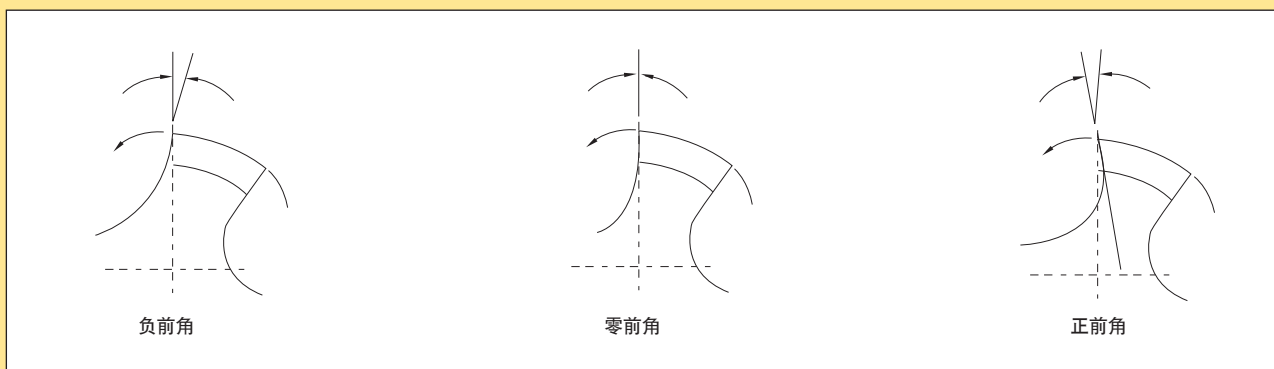
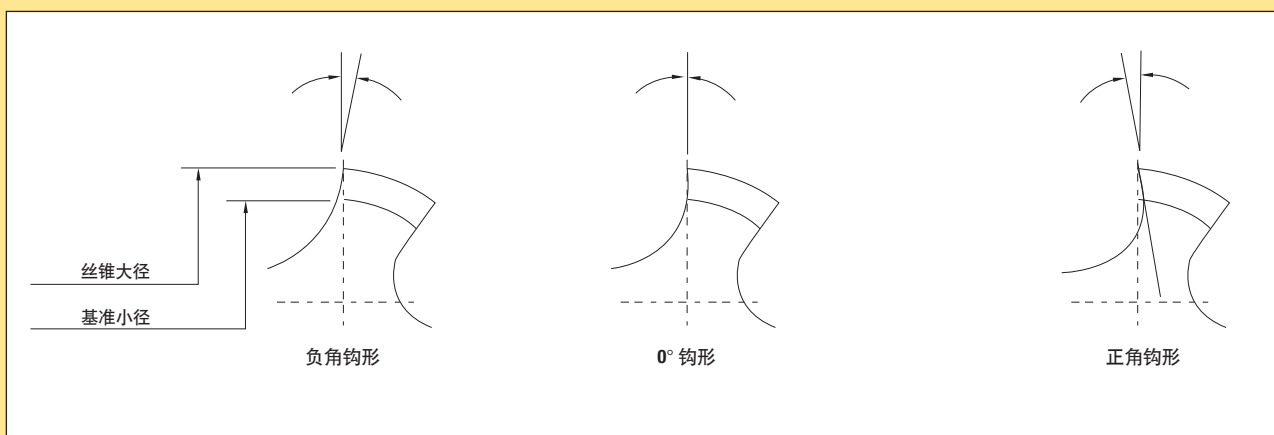
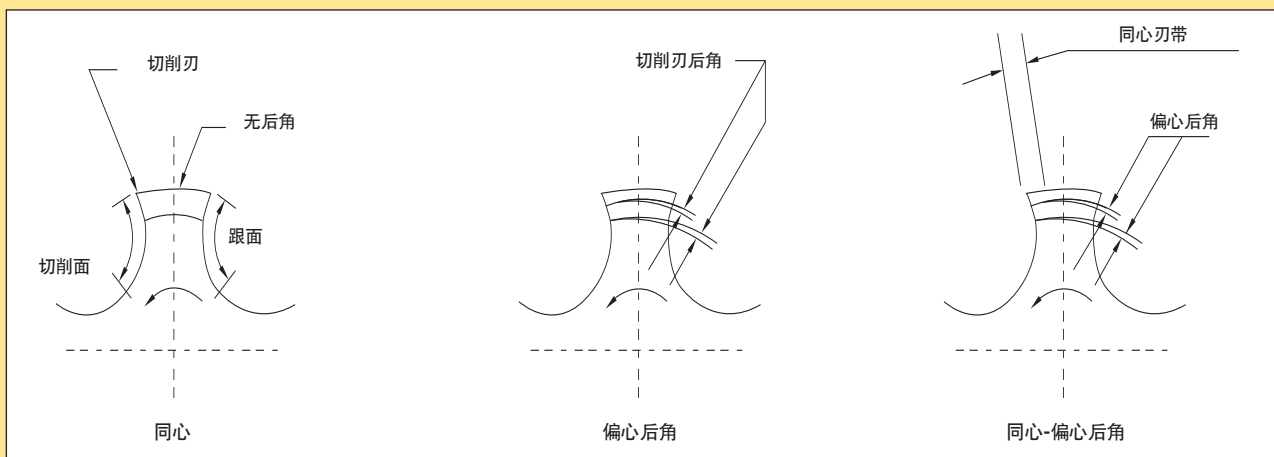
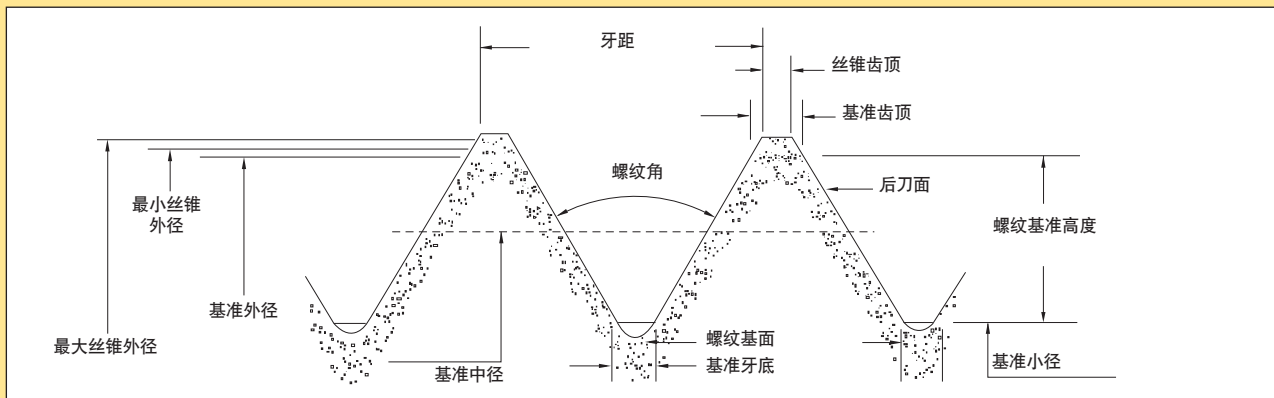
## 冷却孔类型



轴向冷却液供应系统，带有轴向冷却液出口

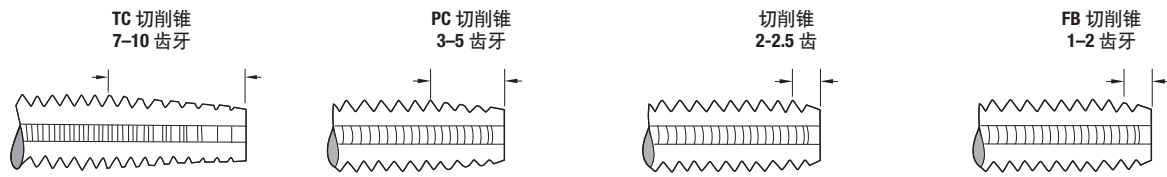


轴向冷却液供应系统，带有径向冷却液出口，出口位于排屑槽部位。



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## ■ 丝锥切削锥 • DIN 丝锥



## 手用丝锥切削锥

**A 型 (6-8 齿牙)**

A 型切削锥具有较长的标准型斜面，便于初始加工操作。因为有较多的工作齿牙，因此只需较小的攻丝扭矩。

**B/D 型 (3.5-5 齿牙)**

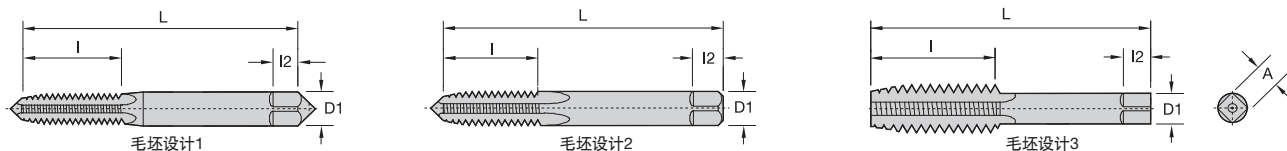
常见的切削锥，适合通孔和盲孔的手用或机用加工。B 型适用于螺尖型丝锥，D 型适用于直槽及螺旋槽丝锥。这种类型的切削锥比 E 型或 C 型切削锥更加高效。

**C 型 (2-2.5 齿)**

这款短斜面切削锥可用于靠近盲孔底部的螺纹加工。这种类型的切削锥因为有较长的斜面以及更多的工作齿，因此比 E 型切削锥更加高效。

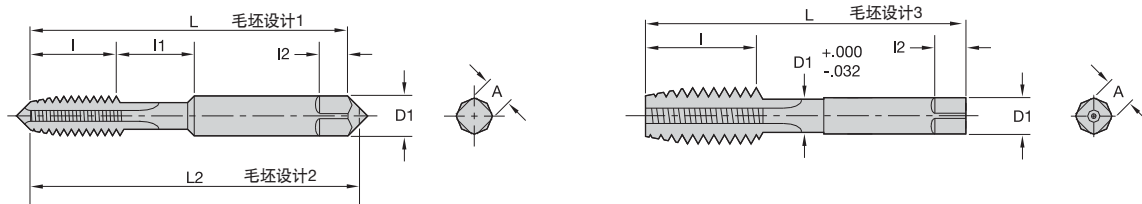
**E 型 (1.5-2 齿牙)**

在靠近盲孔底部的螺纹加工中，E 型切削锥是目前效率低的产品。



| 公称直径范围 (英寸) | 机用螺钉尺寸编号 (英寸) | 公称分数制直径 (英寸)    | 公称公制直径 (毫米 (英寸))          | 毛坯产品编号 | 总长度 L | 螺纹长度 l | 方头长度 l2 | 刀杆直径 D1 | 方头尺寸 A |
|-------------|---------------|-----------------|---------------------------|--------|-------|--------|---------|---------|--------|
| .052-.065   | 0 (.0600)     | —               | M1.6 (.0630)              | 1      | 1.63  | .31    | .19     | .1410   | .110   |
| .065-.078   | 1 (.0730)     | —               | M1.8 (.0709)              | 1      | 1.69  | .38    | .19     | .1410   | .110   |
| .078-.091   | 2 (.0860)     | —               | M2 (0.0787), M2.2 (.0866) | 1      | 1.75  | .44    | .19     | .1410   | .110   |
| .091-.104   | 3 (.0990)     | —               | M2.5 (.0984)              | 1      | 1.81  | .50    | .19     | .1410   | .110   |
| .104-.117   | 4 (.1120)     | —               | —                         | 1      | 1.88  | .56    | .19     | .1410   | .110   |
| .117-.130   | 5 (.1250)     | —               | M3 (.1181)                | 1      | 1.94  | .63    | .19     | .1410   | .110   |
| .130-.145   | 6 (.1380)     | —               | M3.5 (.1378)              | 1      | 2.00  | .69    | .19     | .1410   | .110   |
| .145-.171   | 8 (.1640)     | —               | M4 (.1575)                | 1      | 2.13  | .75    | .25     | .1680   | .131   |
| .171-.197   | 10 (.1900)    | —               | M4.5 (.1772), M5 (.1969)  | 1      | 2.38  | .88    | .25     | .1940   | .152   |
| .197-.223   | 12 (.2160)    | —               | —                         | 1      | 2.38  | .94    | .28     | .2200   | .165   |
| .223-.260   | —             | 1/4 (.2500)     | M6 (.2362)                | 2      | 2.50  | 1.00   | .31     | .2550   | .191   |
| .260-.323   | —             | 5/16 (.3125)    | M7 (.2756), M8 (.3150)    | 2      | 2.72  | 1.13   | .38     | .3180   | .238   |
| .323-.395   | —             | 3/8 (.3750)     | M10 (.3937)               | 2      | 2.94  | 1.25   | .44     | .3810   | .286   |
| .395-.448   | —             | 7/16 (.4375)    | —                         | 3      | 3.16  | 1.44   | .41     | .3230   | .242   |
| .448-.510   | —             | 1/2 (.5000)     | M12 (.4724)               | 3      | 3.38  | 1.66   | .44     | .3670   | .275   |
| .510-.573   | —             | 9/16 (.5625)    | M14 (.5512)               | 3      | 3.59  | 1.66   | .50     | .4290   | .322   |
| .573-.635   | —             | 5/8 (.6250)     | M16 (.6299)               | 3      | 3.81  | 1.81   | .56     | .4800   | .360   |
| .635-.709   | —             | 11/16 (.6875)   | M18 (.7087)               | 3      | 4.03  | 1.81   | .63     | .5420   | .406   |
| .709-.760   | —             | 3/4 (.7500)     | —                         | 3      | 4.25  | 2.00   | .69     | .5900   | .442   |
| .760-.823   | —             | 13/16 (.8125)   | M20 (.7874)               | 3      | 4.47  | 2.00   | .69     | .6520   | .489   |
| .823-.885   | —             | 7/8 (.8750)     | M22 (.8661)               | 3      | 4.69  | 2.22   | .75     | .6970   | .523   |
| .885-.948   | —             | 15/16 (.9375)   | M24 (.9449)               | 3      | 4.91  | 2.22   | .75     | .7600   | .570   |
| .948-1.010  | —             | 1 (1.0000)      | M25 (.9843)               | 3      | 5.13  | 2.50   | .81     | .8000   | .600   |
| 1.010-1.073 | —             | 1-1/16 (1.0625) | M27 (1.0630)              | 3      | 5.13  | 2.50   | .88     | .8960   | .672   |
| 1.073-1.135 | —             | 1-1/8 (1.1250)  | —                         | 3      | 5.44  | 2.56   | .88     | .8960   | .672   |
| 1.135-1.198 | —             | 1-3/16 (1.1875) | M30 (1.1811)              | 3      | 5.44  | 2.56   | 1.00    | 1.0210  | .766   |
| 1.198-1.260 | —             | 1-1/4 (1.2500)  | —                         | 3      | 5.75  | 2.56   | 1.00    | 1.0210  | .766   |
| 1.260-1.323 | —             | 1-5/16 (1.3125) | M33 (1.2992)              | 3      | 5.75  | 2.56   | 1.06    | 1.1080  | .831   |
| 1.323-1.385 | —             | 1-3/8 (1.3750)  | —                         | 3      | 6.06  | 3.00   | 1.06    | 1.1080  | .831   |
| 1.358-1.448 | —             | 1-7/16 (1.4375) | M36 (1.4173)              | 3      | 6.06  | 3.00   | 1.13    | 1.2330  | .925   |
| 1.448-1.510 | —             | 1-1/2 (1.5000)  | —                         | 3      | 6.38  | 3.00   | 1.13    | 1.2330  | .925   |
| 1.510-1.635 | —             | 1-5/8 (1.6250)  | M39 (1.5354)              | 3      | 6.69  | 3.19   | 1.13    | 1.3050  | .979   |
| 1.635-1.760 | —             | 1-3/4 (1.7500)  | M42 (1.6535)              | 3      | 7.00  | 3.19   | 1.25    | 1.4300  | 1.072  |
| 1.760-1.885 | —             | 1-7/8 (1.8750)  | —                         | 3      | 7.31  | 3.56   | 1.25    | 1.5190  | 1.139  |
| 1.885-2.010 | —             | 2 (2.0000)      | M48 (1.8898)              | 3      | 7.63  | 3.56   | 1.38    | 1.6440  | 1.233  |
| 2.010-2.135 | —             | 2-1/8 (2.1250)  | —                         | 3      | 8.00  | 3.56   | 1.38    | 1.7690  | 1.327  |
| 2.135-2.260 | —             | 2-1/4 (2.2500)  | M56 (2.2047)              | 3      | 8.25  | 3.56   | 1.44    | 1.8940  | 1.420  |
| 2.260-2.385 | —             | 2-3/8 (2.3750)  | —                         | 3      | 8.50  | 4.00   | 1.44    | 2.0190  | 1.514  |
| 2.385-2.510 | —             | 2-1/2 (2.5000)  | —                         | 3      | 8.75  | 4.00   | 1.50    | 2.1000  | 1.575  |
| 2.510-2.635 | —             | 2-5/8 (2.6250)  | M64 (2.5197)              | 3      | 8.75  | 4.00   | 1.50    | 2.2250  | 1.669  |
| 2.635-2.760 | —             | 2-3/4 (2.7500)  | —                         | 3      | 9.25  | 4.00   | 1.56    | 2.3500  | 1.762  |
| 2.760-2.885 | —             | 2-7/8 (2.8750)  | M72 (2.8346)              | 3      | 9.25  | 4.00   | 1.56    | 2.4750  | 1.856  |
| 2.885-3.010 | —             | 3 (3.0000)      | —                         | 3      | 9.75  | 4.56   | 1.63    | 2.5430  | 1.907  |
| 3.010-3.135 | —             | 3-1/8 (3.1250)  | —                         | 3      | 9.75  | 4.56   | 1.63    | 2.6680  | 2.001  |
| 3.135-3.260 | —             | 3-1/4 (3.2500)  | M80 (3.1496)              | 3      | 10.00 | 4.56   | 1.75    | 2.7930  | 2.095  |
| 3.260-3.385 | —             | 3-3/8 (3.3750)  | —                         | 3      | 10.00 | 4.56   | 1.75    | 2.8830  | 2.162  |
| 3.385-3.510 | —             | 3-1/2 (3.5000)  | —                         | 3      | 10.25 | 4.94   | 2.00    | 3.0080  | 2.256  |
| 3.510-3.635 | —             | 3-5/8 (3.6250)  | M90 (3.5433)              | 3      | 10.25 | 4.94   | 2.00    | 3.1330  | 2.350  |
| 3.635-3.760 | —             | 3-3/4 (3.7500)  | —                         | 3      | 10.50 | 5.31   | 2.13    | 3.2170  | 2.413  |
| 3.760-3.885 | —             | 3-7/8 (3.8750)  | —                         | 3      | 10.50 | 5.31   | 2.13    | 3.3420  | 2.506  |
| 3.885-4.010 | —             | 4 (4.0000)      | M100 (3.9370)             | 3      | 10.75 | 5.31   | 2.25    | 3.4670  | 2.600  |

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■ 基本尺寸

丝锥尺寸 - 英寸

| 公称直径范围 (英寸) | 机用螺钉规格 (英寸) | 公称分数制直径 (英寸)  | 公制产品直径毫米 (英寸)           | 毛胚设计产品编号 | 总长度 L | 螺纹长度 l | 颈部长度 l1 | 方头长度 l2 | 刀杆直径 D1 | 方头尺寸 A |
|-------------|-------------|---------------|-------------------------|----------|-------|--------|---------|---------|---------|--------|
| .104 .117   | 4 (.1120)   | —             | —                       | 1        | 1.88  | .31    | .25     | .19     | .1410   | .110   |
| .117 .130   | 5 (.1250)   | —             | M3 (.1181)              | 1        | 1.94  | .31    | .31     | .19     | .1410   | .110   |
| .130 .145   | 6 (.1380)   | —             | M3.5 (.1378)            | 1        | 2.00  | .38    | .31     | .19     | .1410   | .110   |
| .145 .171   | 8 (.1640)   | —             | M4 (.1575)              | 1        | 2.13  | .38    | .38     | .25     | .1680   | .131   |
| .171 .197   | 10 (.1900)  | —             | M4.5 (.1772)            | 1        | 2.38  | .50    | .38     | .25     | .1940   | .152   |
| — —         | — —         | —             | M5 (.1969)              | —        | —     | —      | —       | —       | —       | —      |
| .197 .223   | 12 (.2160)  | — —           | — —                     | 1        | 2.38  | .50    | .44     | .28     | .2200   | .165   |
| .223 .260   | —           | 1/4 (.2500)   | M6 (.2362)              | 2        | 2.50  | .63    | .38     | .31     | .2550   | .191   |
| .260 .323   | —           | 5/16 (.3125)  | M7, M8 (.2756), (.3150) | 2        | 2.72  | .69    | .44     | .38     | .3180   | .238   |
| .323 .395   | —           | 3/8 (.3750)   | M10 (.3937)             | 2        | 2.94  | .75    | .50     | .44     | .3810   | .286   |
| .395 .448   | —           | 7/16 (.4375)  | —                       | 3        | 3.16  | .88    | —       | .41     | .3230   | .242   |
| .448 .510   | —           | 1/2 (.5000)   | M12 (.4724)             | 3        | 3.38  | .94    | —       | .44     | .3670   | .275   |
| .510 .573   | —           | 9/16 (.5625)  | M14 (.5541)             | 3        | 3.59  | 1.00   | —       | .50     | .4290   | .322   |
| .573 .635   | —           | 5/8 (.6250)   | M16 (.6299)             | 3        | 3.81  | 1.09   | —       | .56     | .4800   | .360   |
| .635 .709   | —           | 11/16 (.6875) | M18 (.7087)             | 3        | 4.03  | 1.09   | —       | .63     | .5420   | .406   |
| .709 .760   | —           | 3/4 (.7500)   | —                       | 3        | 4.25  | 1.22   | —       | .69     | .5900   | .442   |
| .760 .823   | —           | 13/16 (.8125) | M20 (.7874)             | 3        | 4.47  | 1.22   | —       | .69     | .6520   | .489   |
| .823 .885   | —           | 7/8 (.8750)   | M22 (.8661)             | 3        | 4.69  | 1.34   | —       | .75     | .3670   | .523   |
| .885 .948   | —           | 15/16 (.9375) | M24 (.9449)             | 3        | 4.91  | 1.34   | —       | .75     | .7600   | .570   |
| .948 1.010  | —           | 1 (1.0000)    | M25 (.9843)             | 3        | 5.13  | 1.50   | —       | .81     | .8000   | .600   |

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注: 螺纹长度根据12螺牙UNC螺纹系列产品计算。螺纹长度“l”为zui小值, 没有公差规定  
在螺纹长度“l”与颈部长度“l1”相加后, 总长度不得小于USCTI 302表中的最小螺纹长度值“l”。  
。除非另有注明, 公差值符合USCTI 302表的标准。偏心度公差请参看USCTI 317表。  
提供的302表仅供参考。肯纳金属丝锥尺寸可能会有不同。

■ 公差等级

| 几何尺寸      | 公称直径范围 (英寸)   | 方向  | 公差 (英寸) |
|-----------|---------------|-----|---------|
| 总长度 — L   | .0520-1.0100  | 加或减 | .031    |
|           | 1.0100-4.0100 | 加或减 | .063    |
| 螺纹长度 — l  | .0520-.2230   | 加或减 | .047    |
|           | .2230-.5100   | 加或减 | .063    |
| 方头长度 — l2 | .5100-1.5100  | 加或减 | .094    |
|           | 1.5100-4.0100 | 加或减 | .125    |
| 方头尺寸 — a  | .0520-1.0100  | 加或减 | .031    |
|           | 1.0100-4.0100 | 加或减 | .063    |
| 刀杆直径 — d1 | .0520-.2230   | 减   | .0015   |
|           | .2230-.6350   | 减   | .0015   |
| 刀杆直径 — d1 | .6350-1.0100  | 减   | .0020   |
|           | 1.0100-1.5100 | 减   | .0020   |
|           | 1.5100-2.0100 | 减   | .0030   |
| 刀杆直径 — d1 | 2.0100-4.0100 | 减   | .0030   |
|           | .0520-.5100   | 减   | .004    |
| 刀杆直径 — d1 | .5100-1.0100  | 减   | .006    |
|           | 1.0100-2.0100 | 减   | .008    |
| 刀杆直径 — d1 | 2.0100-4.0100 | 减   | .010    |

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■ 特殊丝锥

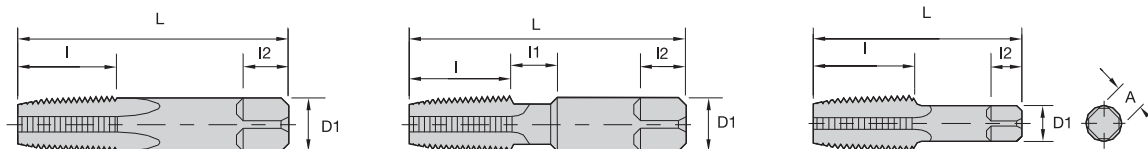
除非另有标定: 包括直径为1.010-1.510英寸的特殊丝锥产品, 每英寸螺纹数为14或以上, 螺距为1.75毫米或更小; 直径超过1.510英寸, 每英寸螺纹数为10或以上, 螺距为2.5毫米或更小; 这些特殊丝锥产品的尺寸符合USCTI 303表中基本尺寸的规定。特殊丝锥螺纹限度由统一英制螺纹USCTI 331表中的公式, 以及公制M型螺纹USCTI 341表中的公式确定。

注: 规格为.395" 或更小的丝锥在螺纹末端处有一个尖端 (切削锥上可以去除)。规格为.125" 或更小的丝锥在刀杆末端处有一个尖端。规格为.224-.395" 的丝锥在刀杆末端处有一个局部短锥型尖端 (短锥长度约为刀杆直径的1/4。规格超过.395" 的丝锥在螺纹末端处和刀杆末端处均有一个尖端。

了解标准型螺纹限度及统一英制螺纹公差, 请参看USCTI 327表; 了解公制螺纹请参看USCTI 337表。

丝锥几何尺寸中的偏心度公差请参看USCTI 317表。





■ 基本尺寸

| 公称尺寸<br>(英寸) | 尺寸 (英寸) |        |         |         |        |           |
|--------------|---------|--------|---------|---------|--------|-----------|
|              | 总长度 L   | 螺纹长度 l | 方头长度 l2 | 刀杆直径 D1 | 方头尺寸 A | 可选刀颈长度 l1 |
| 1/16         | 2.13    | .69    | .38     | .3125   | .234   | .375      |
| 1/8          | 2.13    | .75    | .38     | .3125   | .234   | -         |
| 1/8          | 2.13    | .75    | .38     | .4375   | .328   | .375      |
| 1/4          | 2.44    | 1.06   | .44     | .5625   | .421   | .375      |
| 3/8          | 2.56    | 1.06   | .50     | .7000   | .531   | .375      |
| 1/2          | 3.13    | 1.38   | .63     | .6875   | .515   | -         |
| 3/4          | 3.25    | 1.38   | .69     | .9063   | .679   | -         |
| 1            | 3.75    | 1.75   | .81     | 1.1250  | .843   | -         |
| 1-1/4        | 4.00    | 1.75   | .94     | 1.3125  | .984   | -         |
| 1-1/2        | 4.25    | 1.75   | 1.00    | 1.5000  | 1.125  | -         |
| 2            | 4.25    | 1.75   | 1.13    | 1.8750  | 1.406  | -         |
| 2-1/2        | 5.50    | 2.56   | 1.25    | 2.2500  | 1.687  | -         |
| 3            | 6.00    | 2.63   | 1.38    | 2.6250  | 1.968  | -         |
| 3-1/2        | 6.50    | 2.69   | 1.50    | 2.8125  | 2.108  | -         |
| 4            | 6.75    | 2.75   | 1.56    | 3.0000  | 2.250  | -         |

■ 公差等级

| 几何尺寸      | 范围            | 方向  | 公差等级  |
|-----------|---------------|-----|-------|
| 总长度 - L   | 1/16-3/4 inc. | 加/减 | .031  |
|           | 1-4 inc.      | 加/减 | .063  |
| 螺纹长度 - l  | 1/16-3/4 inc. | 加/减 | .063  |
|           | 1-1-1/4 inc.  | 加/减 | .094  |
| 方头长度 - l2 | 1-1/2-4       | 加/减 | .125  |
|           | 1/16-3/4 inc. | 加/减 | .031  |
| 刀杆直径 - d1 | 1-4 inc.      | 加/减 | .063  |
|           | 1/4-1 inc.    | 减   | .0020 |
| 方头尺寸 - a  | 1-1/4-4 inc.  | 减   | .0030 |
|           | 1/16-1/8      | 减   | .004  |
|           | 1/4-3/4 inc.  | 减   | .006  |
|           | 1-4 inc.      | 减   | .008  |

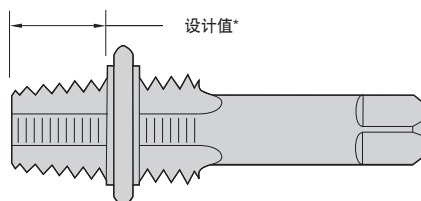
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攻丝





美国标准锥形管螺纹牙型 (NPT)  
航空国家标准锥形管螺纹牙型 (ANPT)  
干式密封美国国家标准锥形管螺纹牙型 (NPTF)



每英尺斜度限度

| 公称尺寸 (英寸) | 每英寸螺纹数 | 悬伸量* (英寸) | 悬伸量公差 +/- | 最小值  | 最大值  | 长度L1  | 螺孔钻尺寸**<br>NPT, ANPT, NPTF |
|-----------|--------|-----------|-----------|------|------|-------|----------------------------|
| 1/16      | 27     | .312      | .063      | .719 | .781 | .160  | C                          |
| 1/8       | 27     | .312      | .063      | .719 | .781 | .1615 | Q                          |
| 1/4       | 18     | .459      | .063      | .719 | .781 | .2278 | 7/16                       |
| 3/8       | 18     | .454      | .063      | .719 | .781 | .240  | 9/16                       |
| 1/2       | 14     | .579      | .063      | .719 | .781 | .320  | 45/64                      |
| 3/4       | 14     | .565      | .063      | .719 | .781 | .339  | 29/32                      |
| 1         | 11-1/2 | .678      | .094      | .719 | .781 | .400  | 1-9/64                     |
| 1-1/4     | 11-1/2 | .686      | .094      | .719 | .781 | .420  | 1-31/64                    |
| 1-1/2     | 11-1/2 | .699      | .094      | .719 | .781 | .420  | 1-23/32                    |
| 2         | 11-1/2 | .667      | .094      | .719 | .781 | .436  | 2-3/16                     |
| 2-1/2     | 8      | .925      | .094      | .734 | .781 | .682  | 2-39/64                    |
| 3         | 8      | .925      | .094      | .734 | .781 | .766  | 3-15/64                    |
| 3-1/2     | 8      | .938      | .125      | .734 | .781 | .821  | —                          |
| 4         | 8      | .950      | .125      | .734 | .781 | .844  | —                          |

\* 丝锥小端悬伸量是从 L1 锥形螺纹环规处开始计算。

\*\* 推荐尺寸丝锥可以在未对孔进行较削情况下直接攻丝，但仅在全螺纹长度约为 L1 长度的情况下。经过美国刀具协会 (USCTI) 批准印刷。肯纳金属公司发布 ©2014。保留所有权利。

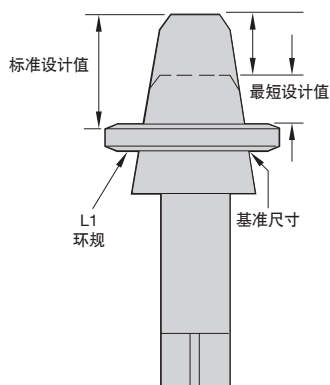
### ■ 管用丝锥

通用型管用丝锥适合对多种材料进行螺纹加工，包括铁质材料和非铁材料。

磨光螺纹管用丝锥在美国标准管用螺纹牙型 (NPT) 以及美国标准干式密封管用螺纹牙型 (NPTF) 中为标准型产品。NPT 螺纹需要使用密封材料，如 Teflon® 密封带或管复合材料。干密封丝锥用于水管连接件，可以在不使用密封材料的情况下形成紧密联接。

管用丝锥的公称尺寸是用于攻丝的管径尺寸，而不是丝锥的实际尺寸。螺纹的每英尺斜度为 3/4 英寸。

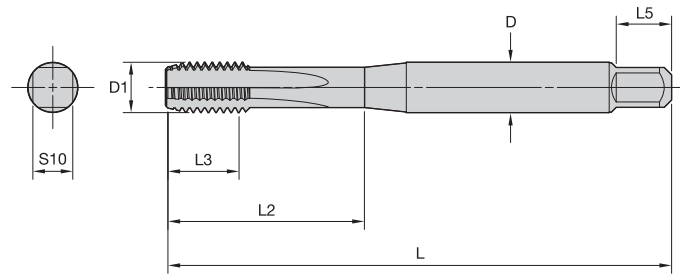
所有管用丝锥经过 2-1/2-3-1/2 螺纹倒角精加工处理。



短悬伸管用丝锥的悬伸量比标准丝锥悬伸量小，用于对攻丝深度受到限制的锥形管攻丝加工。

特殊短悬伸锥形管用丝锥可以精加工为美国国家标准锥形管螺纹 (ANPT)，或是干密封美国国家标准锥形管螺纹 (NPTF、PTF-SAE 短型，或 PTF-SPL 超短型)。

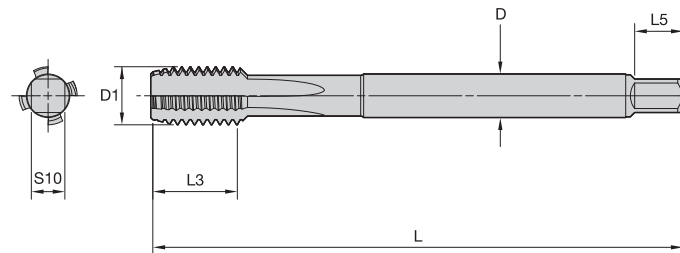
了解短悬伸管用丝锥信息，以及加工 NPT、NPTF 和 ANPT 内管螺纹时的孔口加工前准备工作，请查看肯纳金属技术信息公告。



■ DIN 371

| D1   | 螺距   | D   | L   | L3* | L2 | L5 | S10 |
|------|------|-----|-----|-----|----|----|-----|
| M3   | 0,5  | 3,5 | 56  | 11  | 18 | 6  | 2,7 |
| M3,5 | 0,6  | 4   | 56  | 12  | 20 | 6  | 3   |
| M4   | 0,7  | 4,5 | 63  | 13  | 21 | 6  | 3,4 |
| M4,5 | 0,75 | 6   | 70  | 16  | 25 | 8  | 4,9 |
| M5   | 0,8  | 6   | 70  | 16  | 25 | 8  | 4,9 |
| M6   | 1    | 6   | 80  | 19  | 30 | 8  | 4,9 |
| M7   | 1    | 7   | 80  | 19  | 30 | 8  | 5,5 |
| M8   | 0,75 | 8   | 80  | 18  | 30 | 9  | 6,2 |
| M8   | 1,25 | 8   | 90  | 22  | 35 | 9  | 6,2 |
| M9   | 0,75 | 9   | 80  | 18  | 30 | 10 | 7   |
| M9   | 1,25 | 9   | 90  | 22  | 35 | 10 | 7   |
| M10  | 1    | 10  | 90  | 20  | 35 | 11 | 8   |
| M10  | 1,5  | 10  | 100 | 24  | 39 | 11 | 8   |

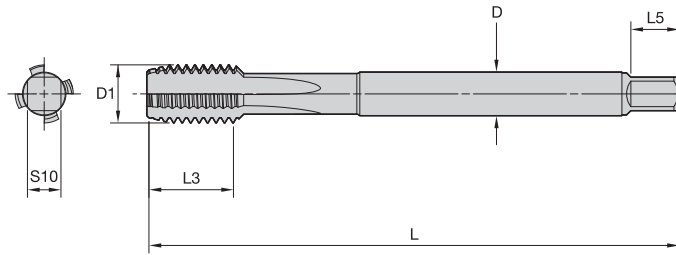
\* 最大值



■ DIN 376

| D1  | 螺距   | D  | L   | L3* | L5 | S10  |
|-----|------|----|-----|-----|----|------|
| M8  | 1,25 | 6  | 90  | 22  | 8  | 4,9  |
| M9  | 1,25 | 7  | 90  | 22  | 8  | 5,5  |
| M10 | 1,5  | 7  | 100 | 24  | 8  | 5,5  |
| M11 | 1,5  | 8  | 100 | 24  | 9  | 6,2  |
| M12 | 1,75 | 9  | 110 | 28  | 10 | 7    |
| M14 | 2    | 11 | 110 | 30  | 12 | 9    |
| M16 | 2    | 12 | 110 | 32  | 12 | 9    |
| M18 | 2,5  | 14 | 125 | 34  | 14 | 11   |
| M20 | 2,5  | 16 | 140 | 34  | 15 | 12   |
| M22 | 2,5  | 18 | 140 | 34  | 17 | 14,5 |
| M24 | 3    | 18 | 160 | 38  | 17 | 14,5 |
| M27 | 3    | 20 | 160 | 38  | 19 | 16   |
| M30 | 3,5  | 22 | 180 | 45  | 21 | 18   |
| M33 | 3,5  | 25 | 180 | 50  | 23 | 20   |
| M36 | 4    | 28 | 200 | 56  | 25 | 22   |
| M39 | 4    | 32 | 200 | 60  | 27 | 24   |
| M42 | 4,5  | 32 | 200 | 60  | 27 | 24   |
| M45 | 4,5  | 36 | 220 | 65  | 32 | 29   |

\* 最大值



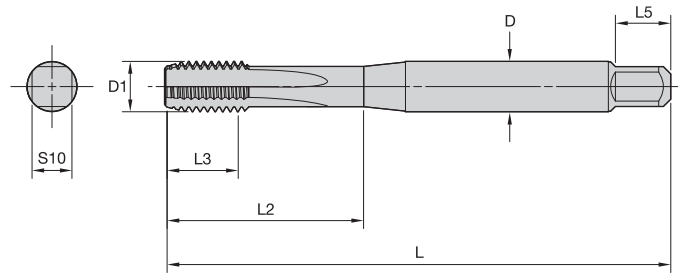
## ■ DIN 374

螺距

| D1  | 最小值  | 最大值  | D  | L   | L3* | L5 | S10  |
|-----|------|------|----|-----|-----|----|------|
| M8  | 0,2  | 0,75 | 6  | 80  | 18  | 8  | 4,9  |
| M8  | —    | 1    | 6  | 90  | 22  | 8  | 4,9  |
| M9  | 0,2  | 0,75 | 7  | 80  | 18  | 8  | 5,5  |
| M9  | —    | 1    | 7  | 90  | 22  | 8  | 5,5  |
| M10 | 0,2  | 1    | 7  | 90  | 20  | 8  | 5,5  |
| M10 | —    | 1,25 | 7  | 100 | 24  | 8  | 5,5  |
| M11 | 0,35 | 1    | 8  | 90  | 20  | 9  | 6,2  |
| M12 | 0,35 | 1,5  | 9  | 100 | 22  | 10 | 7    |
| M14 | 0,35 | 1,5  | 11 | 100 | 22  | 12 | 9    |
| M16 | 0,35 | 1,5  | 12 | 100 | 22  | 12 | 9    |
| M16 | —    | 2    | 12 | 110 | 32  | 12 | 9    |
| M18 | 0,35 | 1,5  | 14 | 110 | 25  | 14 | 11   |
| M18 | —    | 2    | 14 | 125 | 34  | 14 | 11   |
| M20 | 0,35 | 1,5  | 16 | 125 | 25  | 15 | 12   |
| M20 | —    | 2    | 16 | 140 | 34  | 15 | 12   |
| M22 | 0,35 | 1,5  | 18 | 125 | 25  | 17 | 14,5 |
| M22 | —    | 2    | 18 | 140 | 34  | 17 | 14,5 |
| M24 | 0,35 | 2    | 18 | 140 | 28  | 17 | 14,5 |
| M27 | 0,35 | 2    | 20 | 140 | 28  | 19 | 16   |
| M30 | 0,35 | 2    | 22 | 150 | 28  | 21 | 18   |
| M30 | —    | 3    | 22 | 180 | 45  | 21 | 18   |

\* 最大值

攻丝

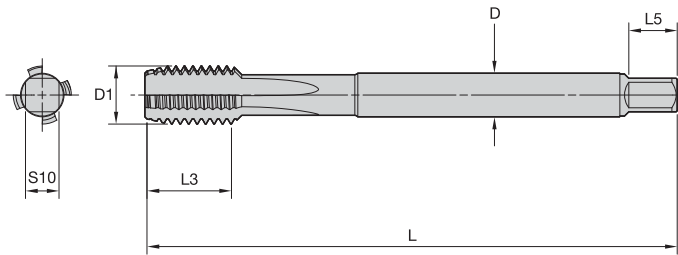


■ JIS 2型公制粗牙

公制尺寸

| D1   | 螺距   | D   | L  | L3 | L2 | L5 | S10 |
|------|------|-----|----|----|----|----|-----|
| M3   | 0,5  | 4   | 46 | 11 | 19 | 6  | 3,2 |
| M3,5 | 0,6  | 4   | 48 | 13 | 20 | 6  | 3,2 |
| M4   | 0,7  | 5   | 52 | 13 | 21 | 7  | 4   |
| M4,5 | 0,75 | 5   | 55 | 13 | 21 | 7  | 4   |
| M5   | 0,8  | 5,5 | 60 | 16 | 24 | 7  | 4,5 |
| M6   | 1    | 6   | 62 | 19 | 29 | 7  | 4,5 |

攻丝



■ JIS 3型公制粗牙

公制尺寸

| D1  | 螺距   | D    | L   | L3 | L5 | S10 |
|-----|------|------|-----|----|----|-----|
| M8  | 1,25 | 6,2  | 70  | 22 | 8  | 5   |
| M9  | 1,25 | 7    | 72  | 22 | 8  | 5,5 |
| M10 | 1,5  | 7    | 75  | 24 | 8  | 5,5 |
| M11 | 1,5  | 8    | 80  | 25 | 9  | 6   |
| M12 | 1,75 | 8,5  | 82  | 29 | 9  | 6,5 |
| M14 | 2    | 10,5 | 88  | 30 | 11 | 8   |
| M16 | 2    | 12,5 | 95  | 32 | 13 | 10  |
| M18 | 2,5  | 14   | 100 | 37 | 14 | 11  |
| M20 | 2,5  | 15   | 105 | 37 | 15 | 12  |
| M22 | 2,5  | 17   | 115 | 38 | 16 | 13  |
| M24 | 3    | 19   | 120 | 45 | 18 | 15  |

■ 螺纹加工 • UNC, UNF, 和 8牙

| 丝锥尺寸  | 每英寸牙数 |     |       | 65% 螺纹嵌合率 |       |          |          |        |          | 70% 螺纹嵌合率 |       |          |          |        |          | 75% 螺纹嵌合率 |       |          |          |        |          |
|-------|-------|-----|-------|-----------|-------|----------|----------|--------|----------|-----------|-------|----------|----------|--------|----------|-----------|-------|----------|----------|--------|----------|
|       |       |     |       | 公制        |       |          | 英制       |        |          | 公制        |       |          | 英制       |        |          | 公制        |       |          | 英制       |        |          |
|       | UNC   | UNF | 8牙    | 最小<br>钻径  | 理论值   | 最大<br>钻径 | 最小<br>钻径 | 理论值    | 最大<br>钻径 | 最小<br>钻径  | 理论值   | 最大<br>钻径 | 最小<br>钻径 | 理论值    | 最大<br>钻径 | 最小<br>钻径  | 理论值   | 最大<br>钻径 | 最小<br>钻径 | 理论值    | 最大<br>钻径 |
| #0    | -     | 80  | -     | 1.20      | 1.26  | 1.30     | 0.0472   | 0.0494 | 0.0512   | 1.20      | 1.24  | 1.30     | 0.0472   | 0.0486 | 0.0512   | 1.20      | 1.21  | 1.30     | 0.0472   | 0.0478 | 0.0512   |
| #1    | 64    | -   | -     | 1.50      | 1.52  | 1.60     | 0.0591   | 0.0598 | 0.0630   | 1.40      | 1.49  | 1.50     | 0.0551   | 0.0588 | 0.0591   | 1.40      | 1.47  | 1.50     | 0.0551   | 0.0578 | 0.0591   |
|       | -     | 72  | -     | 1.50      | 1.56  | 1.60     | 0.0591   | 0.0613 | 0.0630   | 1.50      | 1.53  | 1.60     | 0.0591   | 0.0604 | 0.0630   | 1.50      | 1.51  | 1.60     | 0.0591   | 0.0595 | 0.0630   |
| #2    | 56    | -   | -     | 1.80      | 1.80  | 1.80     | 0.0709   | 0.0709 | 0.0709   | 1.70      | 1.77  | 1.80     | 0.0669   | 0.0698 | 0.0709   | 1.70      | 1.74  | 1.80     | 0.0669   | 0.0686 | 0.0709   |
|       | -     | 64  | -     | 1.80      | 1.85  | 1.90     | 0.0709   | 0.0728 | 0.0748   | 1.80      | 1.82  | 1.90     | 0.0709   | 0.0718 | 0.0748   | 1.80      | 1.80  | 1.80     | 0.0669   | 0.0708 | 0.0709   |
| #3    | 48    | -   | -     | 2.00      | 2.07  | 2.10     | 0.0787   | 0.0814 | 0.0827   | 2.00      | 2.03  | 2.10     | 0.0787   | 0.0801 | 0.0827   | 2.00      | 2.00  | 2.00     | 0.0787   | 0.0787 | 0.0787   |
|       | -     | 56  | -     | 2.10      | 2.13  | 2.20     | 0.0827   | 0.0839 | 0.0866   | 2.10      | 2.10  | 2.10     | 0.0827   | 0.0828 | 0.0866   | 2.00      | 2.07  | 2.10     | 0.0787   | 0.0816 | 0.0827   |
| #4    | 40    | -   | -     | 2.30      | 2.31  | 2.38     | 0.0906   | 0.0909 | 0.0938   | 2.20      | 2.27  | 2.30     | 0.0866   | 0.0893 | 0.0906   | 2.20      | 2.23  | 2.30     | 0.0866   | 0.0876 | 0.0906   |
|       | -     | 48  | -     | 2.40      | 2.40  | 2.40     | 0.0938   | 0.0944 | 0.0945   | 2.30      | 2.36  | 2.38     | 0.0906   | 0.0931 | 0.0938   | 2.30      | 2.33  | 2.38     | 0.0906   | 0.0917 | 0.0938   |
| #5    | 40    | -   | -     | 2.64      | 2.64  | 2.64     | 0.1024   | 0.1039 | 0.1040   | 2.60      | 2.60  | 2.60     | 0.1015   | 0.1023 | 0.1024   | 2.50      | 2.56  | 2.58     | 0.0984   | 0.1006 | 0.1015   |
|       | -     | 44  | -     | 2.64      | 2.69  | 2.70     | 0.1040   | 0.1058 | 0.1063   | 2.64      | 2.65  | 2.70     | 0.1040   | 0.1043 | 0.1063   | 2.60      | 2.61  | 2.64     | 0.1024   | 0.1029 | 0.1040   |
| #6    | 32    | -   | -     | 2.82      | 2.83  | 2.87     | 0.1100   | 0.1116 | 0.1130   | 2.78      | 2.78  | 2.78     | 0.1094   | 0.1096 | 0.1102   | 2.71      | 2.73  | 2.78     | 0.1065   | 0.1076 | 0.1094   |
|       | -     | 40  | -     | 2.95      | 2.97  | 3.00     | 0.1160   | 0.1169 | 0.1181   | 2.90      | 2.93  | 2.95     | 0.1142   | 0.1153 | 0.1160   | 2.87      | 2.89  | 2.90     | 0.1130   | 0.1136 | 0.1142   |
| #8    | 32    | -   | -     | 3.50      | 3.50  | 3.50     | 0.1360   | 0.1376 | 0.1378   | 3.40      | 3.44  | 3.46     | 0.1339   | 0.1356 | 0.1360   | 3.30      | 3.39  | 3.40     | 0.1299   | 0.1336 | 0.1339   |
|       | -     | 36  | -     | 3.57      | 3.57  | 3.57     | 0.1378   | 0.1405 | 0.1406   | 3.50      | 3.52  | 3.57     | 0.1378   | 0.1387 | 0.1406   | 3.46      | 3.48  | 3.50     | 0.1360   | 0.1369 | 0.1378   |
| #10   | 24    | -   | -     | 3.90      | 3.93  | 3.97     | 0.1535   | 0.1548 | 0.1563   | 3.80      | 3.86  | 3.90     | 0.1496   | 0.1521 | 0.1535   | 3.73      | 3.79  | 3.80     | 0.1470   | 0.1494 | 0.1496   |
|       | -     | 32  | -     | 4.10      | 4.16  | 4.20     | 0.1614   | 0.1636 | 0.1654   | 4.10      | 4.10  | 4.10     | 0.1614   | 0.1616 | 0.1654   | 4.04      | 4.05  | 4.09     | 0.1590   | 0.1596 | 0.1610   |
| #12   | 24    | -   | -     | 4.50      | 4.59  | 4.60     | 0.1772   | 0.1808 | 0.1811   | 4.50      | 4.52  | 4.60     | 0.1772   | 0.1781 | 0.1811   | 4.40      | 4.46  | 4.50     | 0.1732   | 0.1754 | 0.1772   |
|       | -     | 28  | -     | 4.70      | 4.72  | 4.76     | 0.1850   | 0.1858 | 0.1875   | 4.62      | 4.66  | 4.70     | 0.1820   | 0.1835 | 0.1850   | 4.60      | 4.60  | 4.60     | 0.1811   | 0.1812 | 0.1820   |
| 1/4   | 20    | -   | -     | 5.20      | 5.28  | 5.30     | 0.2047   | 0.2078 | 0.2087   | 5.20      | 5.20  | 5.20     | 0.2031   | 0.2045 | 0.2047   | 5.11      | 5.11  | 5.11     | 0.2010   | 0.2013 | 0.2031   |
|       | -     | 28  | -     | 5.56      | 5.58  | 5.60     | 0.2188   | 0.2198 | 0.2205   | 5.50      | 5.53  | 5.56     | 0.2165   | 0.2175 | 0.2188   | 5.41      | 5.47  | 5.50     | 0.2130   | 0.2152 | 0.2165   |
| 5/16  | 18    | -   | -     | 6.75      | 6.75  | 6.75     | 0.2656   | 0.2656 | 0.2656   | 6.63      | 6.65  | 6.70     | 0.2610   | 0.2620 | 0.2638   | 6.53      | 6.56  | 6.60     | 0.2570   | 0.2584 | 0.2598   |
|       | -     | 24  | -     | 7.00      | 7.04  | 7.10     | 0.2756   | 0.2773 | 0.2795   | 6.90      | 6.98  | 7.00     | 0.2717   | 0.2746 | 0.2756   | 6.90      | 6.91  | 7.00     | 0.2717   | 0.2719 | 0.2756   |
| 3/8   | 16    | -   | -     | 8.10      | 8.18  | 8.20     | 0.3189   | 0.3222 | 0.3228   | 8.00      | 8.08  | 8.10     | 0.3150   | 0.3182 | 0.3189   | 7.94      | 7.98  | 8.00     | 0.3125   | 0.3141 | 0.3150   |
|       | -     | 24  | -     | 8.60      | 8.63  | 8.70     | 0.3386   | 0.3398 | 0.3425   | 8.50      | 8.56  | 8.60     | 0.3346   | 0.3371 | 0.3386   | 8.43      | 8.49  | 8.50     | 0.3320   | 0.3344 | 0.3346   |
| 7/16  | 14    | -   | -     | 9.53      | 9.58  | 9.60     | 0.3750   | 0.3772 | 0.3780   | 9.40      | 9.46  | 9.50     | 0.3701   | 0.3726 | 0.3740   | 9.30      | 9.34  | 9.35     | 0.3661   | 0.3679 | 0.3680   |
|       | -     | 20  | -     | 10.00     | 10.04 | 10.10    | 0.3937   | 0.3953 | 0.3976   | 9.92      | 9.96  | 10.00    | 0.3906   | 0.3920 | 0.3937   | 9.80      | 9.88  | 9.90     | 0.3858   | 0.3888 | 0.3898   |
| 1/2   | 13    | -   | -     | 11.00     | 11.05 | 11.10    | 0.4331   | 0.4351 | 0.4370   | 10.90     | 10.92 | 11.00    | 0.4291   | 0.4301 | 0.4331   | 10.80     | 10.80 | 10.80    | 0.4219   | 0.4251 | 0.4252   |
|       | -     | 20  | -     | 11.60     | 11.63 | 11.70    | 0.4528   | 0.4578 | 0.4606   | 11.51     | 11.55 | 11.60    | 0.4528   | 0.4545 | 0.4606   | 11.40     | 11.46 | 11.50    | 0.4488   | 0.4513 | 0.4528   |
| 9/16  | 12    | -   | -     | 12.50     | 12.50 | 12.50    | 0.4921   | 0.4921 | 0.4921   | 12.30     | 12.36 | 12.40    | 0.4844   | 0.4867 | 0.4882   | 12.20     | 12.23 | 12.30    | 0.4803   | 0.4813 | 0.4843   |
|       | -     | 18  | -     | 13.10     | 13.10 | 13.10    | 0.5118   | 0.5156 | 0.5157   | 13.00     | 13.00 | 13.00    | 0.5118   | 0.5120 | 0.5157   | 12.80     | 12.91 | 13.00    | 0.5039   | 0.5084 | 0.5118   |
| 5/8   | 11    | -   | -     | 13.80     | 13.93 | 14.00    | 0.5433   | 0.5482 | 0.5512   | 13.50     | 13.78 | 13.80    | 0.5315   | 0.5423 | 0.5433   | 13.50     | 13.63 | 13.80    | 0.5315   | 0.5364 | 0.5433   |
|       | -     | 18  | -     | 14.50     | 14.68 | 15.00    | 0.5709   | 0.5781 | 0.5906   | 14.50     | 14.59 | 15.00    | 0.5709   | 0.5745 | 0.5906   | 14.50     | 14.50 | 14.50    | 0.5709   | 0.5709 | 0.5709   |
| 3/4   | 10    | -   | -     | 16.50     | 16.91 | 17.00    | 0.6496   | 0.6656 | 0.6693   | 16.50     | 16.74 | 17.00    | 0.6496   | 0.6591 | 0.6693   | 16.50     | 16.58 | 17.00    | 0.6496   | 0.6526 | 0.6560   |
|       | -     | 16  | -     | 17.50     | 17.71 | 18.00    | 0.6890   | 0.6972 | 0.7087   | 17.50     | 17.61 | 18.00    | 0.6890   | 0.6932 | 0.7087   | 17.50     | 17.50 | 17.50    | 0.6890   | 0.6891 | 0.6969   |
| 7/8   | 9     | -   | -     | 19.50     | 19.84 | 20.00    | 0.7677   | 0.7812 | 0.7874   | 19.50     | 19.66 | 20.00    | 0.7677   | 0.7740 | 0.7874   | 19.00     | 19.48 | 19.50    | 0.7660   | 0.7668 | 0.7677   |
|       | -     | 14  | -     | 20.50     | 20.69 | 21.00    | 0.8071   | 0.8147 | 0.8268   | 20.50     | 20.58 | 21.00    | 0.8071   | 0.8101 | 0.8268   | 20.00     | 20.46 | 20.50    | 0.8012   | 0.8054 | 0.8071   |
| 1     | 8     | -   | -     | 22.50     | 22.72 | 22.77    | 0.8858   | 0.8945 | 0.8965   | 22.50     | 22.51 | 22.77    | 0.8858   | 0.8863 | 0.8965   | 22.23     | 22.31 | 22.44    | 0.8750   | 0.8782 | 0.8840   |
|       | -     | 12  | -     | 23.50     | 23.61 | 23.81    | 0.9252   | 0.9296 | 0.9375   | 23.42     | 23.48 | 23.50    | 0.9220   | 0.9242 | 0.9252   | 23.30     | 23.34 | 23.42    | 0.9173   | 0.9188 | 0.9220   |
| 1-1/8 | 7     | -   | -     | 25.50     | 25.51 | 25.60    | 1.0039   | 1.0044 | 1.0080   | 25.07     | 25.28 | 25.40    | 0.9870   | 0.9951 | 1.0000   | 25.00     | 25.04 | 25.07    | 0.9843   | 0.9858 | 0.9870   |
|       | -     | 12  | -     | 26.70     | 26.79 | 27.00    | 1.0512   | 1.0546 | 1.0610   | 26.59     | 26.65 | 26.70    | 1.0470   | 1.0492 | 1.0512   | 26.50     | 26.51 | 26.59    | 1.0433   | 1.0438 | 1.0470   |
| 1-1/4 | -     | -   | 8     | 25.81     | 25.89 | 26.00    | 1.0160   | 1.0195 | 1.0236   | 25.67     | 25.69 | 25.81    | 1.0110   | 1.0113 | 1.0160   | 25.40     | 25.48 | 25.50    | 1.0000   | 1.0032 | 1.0039   |
|       | 7     | -   | -     | 28.58     | 28.69 | 29.00    | 1.1250   | 1.1294 | 1.1417   | 28.18     | 28.45 | 28.50    | 1.1090   | 1.1201 | 1.1220   | 28.18     | 28.21 | 28.50    | 1.1090   | 1.1108 | 1.1220   |
|       | -     | 12  | -     | 29.77     | 29.96 | 30.00    | 1.1720   | 1.1796 | 1.1811   | 29.77     | 29.83 | 30.00    | 1.1720   | 1.1742 | 1.1811   | 29.50     | 29.69 | 29.73    | 1.1614   | 1.1688 | 1.1720   |
| -     | -     | 8   | 29.00 | 29.07     | 29.50 | 1.1417   | 1.1445   | 1.1560 | 28.58    | 28.86     | 29.00 | 1.1250   | 1.1363   | 1.1417 | 28.58    | 28.66     | 29.00 | 1.1250   | 1.1282   | 1.1417 |          |

(续)

(螺纹加工 • UNC, UNF, 和 8牙 – 续)

| 丝锥尺寸  | 每英寸牙数 |     |    | 65% 螺纹嵌合率 |              |          |          |               |          | 70% 螺纹嵌合率 |              |          |          |               |          | 75% 螺纹嵌合率 |              |          |          |               |          |
|-------|-------|-----|----|-----------|--------------|----------|----------|---------------|----------|-----------|--------------|----------|----------|---------------|----------|-----------|--------------|----------|----------|---------------|----------|
|       |       |     |    | 公制        |              |          | 英制       |               |          | 公制        |              |          | 英制       |               |          | 公制        |              |          | 英制       |               |          |
|       | UNC   | UNF | 8牙 | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 |
| 1-3/8 | 6     | -   | -  | 31.00     | <b>31.35</b> | 31.50    | 1.2200   | <b>1.2343</b> | 1.2402   | 31.00     | <b>31.08</b> | 31.50    | 1.2200   | <b>1.2235</b> | 1.2402   | 30.56     | <b>30.80</b> | 30.96    | 1.2030   | <b>1.2126</b> | 1.2190   |
|       | -     | 12  | -  | 33.00     | <b>33.14</b> | 33.34    | 1.2992   | <b>1.3046</b> | 1.3130   | 33.00     | <b>33.00</b> | 33.00    | 1.2992   | <b>1.2992</b> | 1.2992   | 32.54     | <b>32.86</b> | 32.94    | 1.2810   | <b>1.2938</b> | 1.2970   |
|       | -     | -   | 8  | 32.00     | <b>32.24</b> | 32.50    | 1.2598   | <b>1.2695</b> | 1.2795   | 32.00     | <b>32.04</b> | 32.50    | 1.2598   | <b>1.2613</b> | 1.2795   | 31.75     | <b>31.83</b> | 32.00    | 1.2500   | <b>1.2532</b> | 1.2598   |
| 1-1/2 | 6     | -   | -  | 34.50     | <b>34.53</b> | 34.93    | 1.3583   | <b>1.3593</b> | 1.3750   | 34.13     | <b>34.25</b> | 34.50    | 1.3440   | <b>1.3485</b> | 1.3583   | 33.73     | <b>33.98</b> | 34.00    | 1.3280   | <b>1.3376</b> | 1.3386   |
|       | -     | 12  | -  | 36.12     | <b>36.31</b> | 36.50    | 1.4220   | <b>1.4296</b> | 1.4375   | 36.12     | <b>36.18</b> | 36.50    | 1.4220   | <b>1.4242</b> | 1.4375   | 36.00     | <b>36.04</b> | 36.12    | 1.4173   | <b>1.4188</b> | 1.4220   |
|       | -     | -   | 8  | 35.00     | <b>35.42</b> | 35.50    | 1.3780   | <b>1.3945</b> | 1.3976   | 35.00     | <b>35.21</b> | 35.50    | 1.3780   | <b>1.3863</b> | 1.3976   | 35.00     | <b>35.01</b> | 35.50    | 1.3780   | <b>1.3782</b> | 1.3976   |
| 1-5/8 | -     | -   | 8  | 38.50     | <b>38.59</b> | 39.00    | 1.5157   | <b>1.5195</b> | 1.5354   | 38.10     | <b>38.39</b> | 38.46    | 1.5000   | <b>1.5113</b> | 1.5140   | 38.10     | <b>38.18</b> | 38.46    | 1.5000   | <b>1.5032</b> | 1.5140   |
| 1-3/4 | 5     | -   | -  | 40.00     | <b>40.16</b> | 41.00    | 1.5750   | <b>1.5811</b> | 1.6140   | 39.50     | <b>39.83</b> | 40.00    | 1.5551   | <b>1.5681</b> | 1.5748   | 39.50     | <b>39.50</b> | 39.50    | 1.5551   | <b>1.5552</b> | 1.5748   |
|       | -     | -   | 8  | 41.00     | <b>41.77</b> | 42.00    | 1.6140   | <b>1.6445</b> | 1.6540   | 41.00     | <b>41.56</b> | 42.00    | 1.6140   | <b>1.6363</b> | 1.6540   | 41.00     | <b>41.36</b> | 42.00    | 1.6140   | <b>1.6282</b> | 1.6540   |
| 1-7/8 | -     | -   | 8  | 44.00     | <b>44.94</b> | 45.00    | 1.7320   | <b>1.7695</b> | 1.7720   | 44.00     | <b>44.74</b> | 45.00    | 1.7320   | <b>1.7613</b> | 1.7720   | 44.00     | <b>44.53</b> | 45.00    | 1.7320   | <b>1.7532</b> | 1.7720   |
| 2     | 4 1/2 | -   | -  | 46.00     | <b>46.03</b> | 47.00    | 1.8110   | <b>1.8124</b> | 1.8500   | 45.00     | <b>45.67</b> | 46.00    | 1.7720   | <b>1.7979</b> | 1.8110   | 45.00     | <b>45.30</b> | 46.00    | 1.7720   | <b>1.7835</b> | 1.8110   |
|       | -     | -   | 8  | 48.00     | <b>48.12</b> | 49.00    | 1.8900   | <b>1.8945</b> | 1.9290   | 47.00     | <b>47.91</b> | 48.00    | 1.8500   | <b>1.8863</b> | 1.8900   | 47.00     | <b>47.71</b> | 48.00    | 1.8500   | <b>1.8782</b> | 1.8900   |
| 2-1/4 | 4 1/2 | -   | -  | 52.00     | <b>52.38</b> | 53.00    | 2.0470   | <b>2.0624</b> | 2.0870   | 52.00     | <b>52.02</b> | 53.00    | 2.0470   | <b>2.0479</b> | 2.0870   | 51.00     | <b>51.65</b> | 52.00    | 2.0080   | <b>2.0335</b> | 2.0470   |
|       | -     | -   | 8  | 54.00     | <b>54.47</b> | 55.00    | 2.1260   | <b>2.1445</b> | 2.1650   | 54.00     | <b>54.26</b> | 55.00    | 2.1260   | <b>2.1363</b> | 2.1650   | 54.00     | <b>54.06</b> | 55.00    | 2.1260   | <b>2.1282</b> | 2.1650   |
| 2-1/2 | 4     | -   | -  | 58.00     | <b>58.14</b> | 59.00    | 2.2840   | <b>2.2889</b> | 2.3230   | 57.00     | <b>57.73</b> | 58.00    | 2.2440   | <b>2.2727</b> | 2.2840   | 57.00     | <b>57.31</b> | 58.00    | 2.2440   | <b>2.2564</b> | 2.2840   |
|       | -     | -   | 8  | 60.00     | <b>60.82</b> | 61.00    | 2.3620   | <b>2.3945</b> | 2.4020   | 60.00     | <b>60.61</b> | 61.00    | 2.3620   | <b>2.3863</b> | 2.4020   | 60.00     | <b>60.41</b> | 61.00    | 2.3620   | <b>2.3782</b> | 2.4020   |

螺纹加工 • M和MF

■ 螺纹加工 • M和MF

| 丝锥尺寸 | 螺距   |      | 65% 螺纹嵌合率 |             |          |          |               |          | 70% 螺纹嵌合率 |             |          |          |               |          | 75% 螺纹嵌合率 |             |          |          |               |          |
|------|------|------|-----------|-------------|----------|----------|---------------|----------|-----------|-------------|----------|----------|---------------|----------|-----------|-------------|----------|----------|---------------|----------|
|      |      |      | 公制        |             |          | 英制       |               |          | 公制        |             |          | 英制       |               |          | 公制        |             |          | 英制       |               |          |
|      | M    | MF   | 最小<br>钻径  | 理论值         | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 | 最小<br>钻径  | 理论值         | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 | 最小<br>钻径  | 理论值         | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 |
| M1.6 | 0.35 | -    | 1.20      | <b>1.30</b> | 1.30     | 0.0512   | <b>0.0512</b> | 0.0512   | 1.20      | <b>1.28</b> | 1.30     | 0.0472   | <b>0.0504</b> | 0.0512   | 1.20      | <b>1.26</b> | 1.30     | 0.0472   | <b>0.0496</b> | 0.0512   |
| M1.7 | 0.35 | -    | 1.40      | <b>1.40</b> | 1.40     | 0.0551   | <b>0.0551</b> | 0.0551   | 1.32      | <b>1.38</b> | 1.40     | 0.0520   | <b>0.0543</b> | 0.0550   | 1.32      | <b>1.36</b> | 1.40     | 0.0520   | <b>0.0535</b> | 0.0550   |
| M1.8 | 0.35 | -    | 1.50      | <b>1.50</b> | 1.50     | 0.0591   | <b>0.0591</b> | 0.0591   | 1.40      | <b>1.48</b> | 1.50     | 0.0551   | <b>0.0583</b> | 0.0591   | 1.40      | <b>1.46</b> | 1.50     | 0.0551   | <b>0.0575</b> | 0.0591   |
| M2   | 0.4  | -    | 1.60      | <b>1.66</b> | 1.70     | 0.0630   | <b>0.0654</b> | 0.0669   | 1.60      | <b>1.64</b> | 1.70     | 0.0630   | <b>0.0646</b> | 0.0669   | 1.60      | <b>1.61</b> | 1.70     | 0.0630   | <b>0.0634</b> | 0.0669   |
| M2.2 | 0.45 | -    | 1.80      | <b>1.82</b> | 1.90     | 0.0709   | <b>0.0717</b> | 0.0748   | 1.70      | <b>1.79</b> | 1.80     | 0.0669   | <b>0.0705</b> | 0.0709   | 1.70      | <b>1.76</b> | 1.80     | 0.0669   | <b>0.0693</b> | 0.0709   |
| M2.5 | 0.45 | -    | 2.10      | <b>2.12</b> | 2.20     | 0.0827   | <b>0.0835</b> | 0.0866   | 2.00      | <b>2.09</b> | 2.10     | 0.0787   | <b>0.0823</b> | 0.0827   | 2.00      | <b>2.06</b> | 2.10     | 0.0787   | <b>0.0811</b> | 0.0827   |
| M2.6 | 0.45 | -    | 2.20      | <b>2.22</b> | 2.30     | 0.0866   | <b>0.0874</b> | 0.0906   | 2.10      | <b>2.19</b> | 2.20     | 0.0827   | <b>0.0862</b> | 0.0866   | 2.10      | <b>2.16</b> | 2.20     | 0.0827   | <b>0.0850</b> | 0.0866   |
| M3   | 0.5  | -    | 2.58      | <b>2.58</b> | 2.58     | 0.1015   | <b>0.1016</b> | 0.1024   | 2.50      | <b>2.55</b> | 2.58     | 0.0984   | <b>0.1004</b> | 0.1015   | 2.50      | <b>2.51</b> | 2.58     | 0.0984   | <b>0.0988</b> | 0.1015   |
|      | -    | 0.35 | 2.70      | <b>2.70</b> | 2.70     | 0.1063   | <b>0.1063</b> | 0.1063   | 2.64      | <b>2.68</b> | 2.70     | 0.1040   | <b>0.1055</b> | 0.1063   | 2.64      | <b>2.66</b> | 2.70     | 0.1040   | <b>0.1047</b> | 0.1063   |
| M3.5 | 0.6  | -    | 2.95      | <b>2.99</b> | 3.00     | 0.1160   | <b>0.1177</b> | 0.1181   | 2.95      | <b>2.95</b> | 3.00     | 0.1160   | <b>0.1161</b> | 0.1181   | 2.90      | <b>2.92</b> | 2.95     | 0.1142   | <b>0.1150</b> | 0.1160   |
| M4   | 0.7  | -    | 3.40      | <b>3.41</b> | 3.46     | 0.1339   | <b>0.1343</b> | 0.1360   | 3.30      | <b>3.36</b> | 3.40     | 0.1299   | <b>0.1323</b> | 0.1339   | 3.30      | <b>3.32</b> | 3.40     | 0.1299   | <b>0.1307</b> | 0.1339   |
|      | -    | 0.5  | 3.57      | <b>3.58</b> | 3.60     | 0.1406   | <b>0.1409</b> | 0.1417   | 3.50      | <b>3.54</b> | 3.57     | 0.1378   | <b>0.1394</b> | 0.1406   | 3.50      | <b>3.51</b> | 3.57     | 0.1378   | <b>0.1382</b> | 0.1406   |
| M4.5 | 0.75 | -    | 3.80      | <b>3.87</b> | 3.90     | 0.1496   | <b>0.1524</b> | 0.1535   | 3.80      | <b>3.82</b> | 3.90     | 0.1496   | <b>0.1504</b> | 0.1535   | 3.73      | <b>3.77</b> | 3.80     | 0.1470   | <b>0.1484</b> | 0.1496   |
| M5   | 0.8  | -    | 4.30      | <b>4.32</b> | 4.37     | 0.1693   | <b>0.1701</b> | 0.1719   | 4.22      | <b>4.27</b> | 4.30     | 0.1660   | <b>0.1681</b> | 0.1693   | 4.22      | <b>4.22</b> | 4.30     | 0.1660   | <b>0.1661</b> | 0.1693   |
|      | -    | 0.5  | 4.50      | <b>4.58</b> | 4.60     | 0.1772   | <b>0.1803</b> | 0.1811   | 4.50      | <b>4.54</b> | 4.60     | 0.1772   | <b>0.1787</b> | 0.1811   | 4.50      | <b>4.51</b> | 4.60     | 0.1772   | <b>0.1776</b> | 0.1811   |
| M6   | 1    | -    | 5.16      | <b>5.16</b> | 5.16     | 0.2031   | <b>0.2031</b> | 0.2031   | 5.00      | <b>5.09</b> | 5.10     | 0.1969   | <b>0.2004</b> | 0.2008   | 5.00      | <b>5.03</b> | 5.10     | 0.1969   | <b>0.1980</b> | 0.2008   |
|      | -    | 0.75 | 5.30      | <b>5.37</b> | 5.40     | 0.2087   | <b>0.2114</b> | 0.2126   | 5.30      | <b>5.32</b> | 5.40     | 0.2087   | <b>0.2094</b> | 0.2126   | 5.20      | <b>5.27</b> | 5.30     | 0.2047   | <b>0.2075</b> | 0.2087   |
| M7   | 1    | -    | 6.10      | <b>6.16</b> | 6.20     | 0.2402   | <b>0.2425</b> | 0.2441   | 6.00      | <b>6.09</b> | 6.10     | 0.2362   | <b>0.2398</b> | 0.2402   | 6.00      | <b>6.03</b> | 6.10     | 0.2362   | <b>0.2374</b> | 0.2402   |

(续)

(螺纹加工 • M和MF — 续)

| 丝锥尺寸 | 螺距   |      | 65% 螺纹嵌合率 |              |          |          |               |          | 70% 螺纹嵌合率 |              |          |          |               |          | 75% 螺纹嵌合率 |              |          |          |               |          |
|------|------|------|-----------|--------------|----------|----------|---------------|----------|-----------|--------------|----------|----------|---------------|----------|-----------|--------------|----------|----------|---------------|----------|
|      |      |      | 公制        |              |          | 英制       |               |          | 公制        |              |          | 英制       |               |          | 公制        |              |          | 英制       |               |          |
|      | M    | MF   | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 |
| M8   | 1.25 | -    | 6.90      | <b>6.94</b>  | 7.00     | 0.2717   | <b>0.2732</b> | 0.2756   | 6.80      | <b>6.86</b>  | 6.90     | 0.2677   | <b>0.2701</b> | 0.2717   | 6.75      | <b>6.78</b>  | 6.80     | 0.2656   | <b>0.2669</b> | 0.2677   |
|      | -    | 1    | 7.15      | <b>7.16</b>  | 7.20     | 0.2813   | <b>0.2819</b> | 0.2835   | 7.00      | <b>7.09</b>  | 7.10     | 0.2756   | <b>0.2791</b> | 0.2795   | 7.00      | <b>7.03</b>  | 7.10     | 0.2756   | <b>0.2768</b> | 0.2795   |
|      | -    | 0.75 | 7.30      | <b>7.37</b>  | 7.40     | 0.2874   | <b>0.2902</b> | 0.2913   | 7.30      | <b>7.32</b>  | 7.40     | 0.2874   | <b>0.2882</b> | 0.2913   | 7.20      | <b>7.27</b>  | 7.30     | 0.2835   | <b>0.2862</b> | 0.2874   |
| M10  | 1.5  | -    | 8.70      | <b>8.73</b>  | 8.73     | 0.3425   | <b>0.3437</b> | 0.3438   | 8.60      | <b>8.64</b>  | 8.70     | 0.3386   | <b>0.3402</b> | 0.3425   | 8.50      | <b>8.54</b>  | 8.60     | 0.3346   | <b>0.3362</b> | 0.3386   |
|      | -    | 1.25 | 8.90      | <b>8.94</b>  | 9.00     | 0.3504   | <b>0.3520</b> | 0.3543   | 8.80      | <b>8.86</b>  | 8.90     | 0.3465   | <b>0.3488</b> | 0.3504   | 8.73      | <b>8.78</b>  | 8.80     | 0.3438   | <b>0.3457</b> | 0.3465   |
|      | -    | 1    | 9.13      | <b>9.16</b>  | 9.20     | 0.3594   | <b>0.3606</b> | 0.3622   | 9.00      | <b>9.09</b>  | 9.10     | 0.3543   | <b>0.3579</b> | 0.3583   | 9.00      | <b>9.03</b>  | 9.10     | 0.3543   | <b>0.3555</b> | 0.3583   |
|      | -    | 0.75 | 9.35      | <b>9.37</b>  | 9.40     | 0.3680   | <b>0.3689</b> | 0.3701   | 9.30      | <b>9.32</b>  | 9.35     | 0.3661   | <b>0.3669</b> | 0.3680   | 9.20      | <b>9.27</b>  | 9.30     | 0.3622   | <b>0.3650</b> | 0.3661   |
| M12  | 1.75 | -    | 10.50     | <b>10.52</b> | 10.60    | 0.4134   | <b>0.4142</b> | 0.4173   | 10.40     | <b>10.41</b> | 10.50    | 0.4094   | <b>0.4098</b> | 0.4134   | 10.30     | <b>10.30</b> | 10.30    | 0.4055   | <b>0.4055</b> | 0.4055   |
|      | -    | 1.5  | 10.72     | <b>10.73</b> | 10.80    | 0.4219   | <b>0.4224</b> | 0.4252   | 10.60     | <b>10.64</b> | 10.70    | 0.4173   | <b>0.4189</b> | 0.4213   | 10.50     | <b>10.54</b> | 10.60    | 0.4134   | <b>0.4150</b> | 0.4173   |
|      | -    | 1.25 | 10.90     | <b>10.94</b> | 11.00    | 0.4291   | <b>0.4307</b> | 0.4331   | 10.80     | <b>10.86</b> | 10.90    | 0.4252   | <b>0.4276</b> | 0.4291   | 10.72     | <b>10.78</b> | 10.80    | 0.4219   | <b>0.4244</b> | 0.4252   |
|      | -    | 1    | 11.15     | <b>11.16</b> | 11.20    | 0.4375   | <b>0.4394</b> | 0.4409   | 11.00     | <b>11.09</b> | 11.10    | 0.4331   | <b>0.4366</b> | 0.4370   | 11.00     | <b>11.03</b> | 11.10    | 0.4331   | <b>0.4343</b> | 0.4370   |
| M14  | 2    | -    | 12.30     | <b>12.31</b> | 12.40    | 0.4844   | <b>0.4846</b> | 0.4882   | 12.10     | <b>12.18</b> | 12.20    | 0.4764   | <b>0.4795</b> | 0.4803   | 12.00     | <b>12.05</b> | 12.10    | 0.4724   | <b>0.4744</b> | 0.4764   |
|      | -    | 1.5  | 12.70     | <b>12.73</b> | 12.80    | 0.5000   | <b>0.5012</b> | 0.5039   | 12.60     | <b>12.64</b> | 12.70    | 0.4961   | <b>0.4976</b> | 0.5000   | 12.50     | <b>12.54</b> | 12.60    | 0.4921   | <b>0.4937</b> | 0.4961   |
| M16  | 2    | -    | 14.20     | <b>14.31</b> | 14.50    | 0.5591   | <b>0.5634</b> | 0.5709   | 14.00     | <b>14.18</b> | 14.20    | 0.5512   | <b>0.5583</b> | 0.5591   | 14.00     | <b>14.05</b> | 14.20    | 0.5512   | <b>0.5531</b> | 0.5591   |
|      | -    | 1.5  | 14.50     | <b>14.73</b> | 15.00    | 0.5709   | <b>0.5799</b> | 0.5906   | 14.50     | <b>14.64</b> | 15.00    | 0.5709   | <b>0.5764</b> | 0.5906   | 14.50     | <b>14.54</b> | 15.00    | 0.5709   | <b>0.5724</b> | 0.5906   |
| M18  | 2.5  | -    | 15.80     | <b>15.89</b> | 16.00    | 0.6220   | <b>0.6256</b> | 0.6299   | 15.50     | <b>15.73</b> | 15.80    | 0.6102   | <b>0.6193</b> | 0.6220   | 15.50     | <b>15.56</b> | 15.80    | 0.6102   | <b>0.6126</b> | 0.6220   |
|      | -    | 1.5  | 16.50     | <b>16.73</b> | 17.00    | 0.6496   | <b>0.6587</b> | 0.6693   | 16.50     | <b>16.64</b> | 17.00    | 0.6496   | <b>0.6551</b> | 0.6693   | 16.50     | <b>16.54</b> | 17.00    | 0.6496   | <b>0.6512</b> | 0.6693   |
| M20  | 2.5  | -    | 17.50     | <b>17.89</b> | 18.00    | 0.6890   | <b>0.7043</b> | 0.7087   | 17.50     | <b>17.73</b> | 18.00    | 0.6890   | <b>0.6980</b> | 0.7087   | 17.50     | <b>17.56</b> | 18.00    | 0.6890   | <b>0.6913</b> | 0.7087   |
|      | -    | 1.5  | 18.50     | <b>18.73</b> | 19.00    | 0.7283   | <b>0.7374</b> | 0.7480   | 18.50     | <b>18.64</b> | 19.00    | 0.7283   | <b>0.7339</b> | 0.7480   | 18.50     | <b>18.54</b> | 19.00    | 0.7283   | <b>0.7299</b> | 0.7480   |
|      | -    | 1    | 19.00     | <b>19.16</b> | 19.50    | 0.7480   | <b>0.7543</b> | 0.7677   | 19.00     | <b>19.09</b> | 19.50    | 0.7480   | <b>0.7516</b> | 0.7677   | 19.00     | <b>19.03</b> | 19.50    | 0.7480   | <b>0.7492</b> | 0.7677   |
| M22  | 2.5  | -    | 19.50     | <b>19.89</b> | 20.00    | 0.7677   | <b>0.7831</b> | 0.7874   | 19.50     | <b>19.73</b> | 20.00    | 0.7677   | <b>0.7768</b> | 0.7874   | 19.50     | <b>19.56</b> | 20.00    | 0.7677   | <b>0.7701</b> | 0.7874   |
|      | -    | 2    | 20.00     | <b>20.31</b> | 20.50    | 0.7874   | <b>0.7996</b> | 0.8071   | 20.00     | <b>20.18</b> | 20.50    | 0.7874   | <b>0.7945</b> | 0.8071   | 20.00     | <b>20.05</b> | 20.50    | 0.7874   | <b>0.7894</b> | 0.8071   |
|      | -    | 1.5  | 20.50     | <b>20.73</b> | 21.00    | 0.8071   | <b>0.8161</b> | 0.8268   | 20.50     | <b>20.64</b> | 21.00    | 0.8071   | <b>0.8126</b> | 0.8268   | 20.50     | <b>20.54</b> | 21.00    | 0.8071   | <b>0.8087</b> | 0.8268   |
| M24  | 3    | -    | 21.43     | <b>21.47</b> | 21.50    | 0.8440   | <b>0.8453</b> | 0.8460   | 21.15     | <b>21.27</b> | 21.33    | 0.8327   | <b>0.8374</b> | 0.8398   | 21.00     | <b>21.08</b> | 21.15    | 0.8268   | <b>0.8299</b> | 0.8327   |
|      | -    | 2    | 22.23     | <b>22.31</b> | 22.44    | 0.8750   | <b>0.8783</b> | 0.8840   | 22.00     | <b>22.18</b> | 22.23    | 0.8661   | <b>0.8732</b> | 0.8750   | 22.00     | <b>22.05</b> | 22.23    | 0.8661   | <b>0.8681</b> | 0.8750   |
|      | -    | 1.5  | 22.50     | <b>22.73</b> | 22.77    | 0.8858   | <b>0.8949</b> | 0.8965   | 22.50     | <b>22.64</b> | 22.77    | 0.8858   | <b>0.8913</b> | 0.8965   | 22.50     | <b>22.54</b> | 22.77    | 0.8858   | <b>0.8874</b> | 0.8965   |
| M27  | 3    | -    | 24.30     | <b>24.47</b> | 24.50    | 0.9567   | <b>0.9634</b> | 0.9646   | 24.00     | <b>24.27</b> | 24.30    | 0.9449   | <b>0.9555</b> | 0.9567   | 24.00     | <b>24.08</b> | 24.30    | 0.9449   | <b>0.9480</b> | 0.9567   |
|      | -    | 2    | 25.07     | <b>25.31</b> | 25.40    | 0.9870   | <b>0.9965</b> | 1.0000   | 25.07     | <b>25.18</b> | 25.40    | 0.9870   | <b>0.9913</b> | 1.0000   | 25.00     | <b>25.05</b> | 25.07    | 0.9843   | <b>0.9862</b> | 0.9870   |
|      | -    | 1.5  | 25.67     | <b>25.73</b> | 25.81    | 1.0110   | <b>1.0130</b> | 1.0160   | 25.61     | <b>25.64</b> | 25.65    | 1.0080   | <b>1.0094</b> | 1.0098   | 25.50     | <b>25.54</b> | 25.60    | 1.0039   | <b>1.0055</b> | 1.0080   |
| M30  | 3.5  | -    | 27.00     | <b>27.04</b> | 27.50    | 1.0630   | <b>1.0646</b> | 1.0827   | 26.70     | <b>26.82</b> | 27.00    | 1.0512   | <b>1.0559</b> | 1.0610   | 26.59     | <b>26.59</b> | 26.59    | 1.0433   | <b>1.0469</b> | 1.0470   |
|      | -    | 2    | 28.18     | <b>28.31</b> | 28.50    | 1.1090   | <b>1.1146</b> | 1.1220   | 28.18     | <b>28.18</b> | 28.18    | 1.1090   | <b>1.1094</b> | 1.1220   | 28.00     | <b>28.05</b> | 28.10    | 1.1024   | <b>1.1043</b> | 1.1063   |
|      | -    | 1.5  | 28.58     | <b>28.73</b> | 29.00    | 1.1250   | <b>1.1311</b> | 1.1417   | 28.58     | <b>28.64</b> | 29.00    | 1.1250   | <b>1.1276</b> | 1.1417   | 28.50     | <b>28.54</b> | 28.58    | 1.1220   | <b>1.1236</b> | 1.1250   |
| M33  | 3.5  | -    | 30.00     | <b>30.04</b> | 30.16    | 1.1811   | <b>1.1827</b> | 1.1875   | 29.77     | <b>29.82</b> | 30.00    | 1.1720   | <b>1.1740</b> | 1.1811   | 29.50     | <b>29.59</b> | 29.73    | 1.1614   | <b>1.1650</b> | 1.1720   |
|      | -    | 2    | 31.00     | <b>31.31</b> | 31.50    | 1.2200   | <b>1.2327</b> | 1.2402   | 31.00     | <b>31.18</b> | 31.50    | 1.2200   | <b>1.2276</b> | 1.2402   | 31.00     | <b>31.05</b> | 31.50    | 1.2200   | <b>1.2224</b> | 1.2402   |
| M36  | 4    | -    | 32.54     | <b>32.62</b> | 32.94    | 1.2810   | <b>1.2843</b> | 1.2970   | 32.00     | <b>32.36</b> | 32.50    | 1.2598   | <b>1.2740</b> | 1.2795   | 32.00     | <b>32.10</b> | 32.50    | 1.2598   | <b>1.2638</b> | 1.2795   |
|      | -    | 3    | 33.40     | <b>33.47</b> | 33.50    | 1.3130   | <b>1.3177</b> | 1.3189   | 33.00     | <b>33.27</b> | 33.34    | 1.2992   | <b>1.3098</b> | 1.3130   | 33.00     | <b>33.08</b> | 33.34    | 1.2992   | <b>1.3024</b> | 1.3130   |
|      | -    | 2    | 34.13     | <b>34.31</b> | 34.50    | 1.3440   | <b>1.3508</b> | 1.3583   | 34.13     | <b>34.18</b> | 34.50    | 1.3440   | <b>1.3457</b> | 1.3583   | 34.00     | <b>34.05</b> | 34.13    | 1.3386   | <b>1.3406</b> | 1.3440   |
| M39  | 4    | -    | 35.50     | <b>35.62</b> | 35.72    | 1.3976   | <b>1.4024</b> | 1.4060   | 35.00     | <b>35.36</b> | 35.50    | 1.3780   | <b>1.3921</b> | 1.3976   | 35.00     | <b>35.10</b> | 35.50    | 1.3780   | <b>1.3819</b> | 1.3976   |
|      | -    | 2    | 37.31     | <b>37.31</b> | 37.31    | 1.4567   | <b>1.4689</b> | 1.4690   | 37.00     | <b>37.18</b> | 37.31    | 1.4567   | <b>1.4638</b> | 1.4690   | 37.00     | <b>37.05</b> | 37.31    | 1.4567   | <b>1.4587</b> | 1.4690   |
| M42  | 4.5  | -    | 38.10     | <b>38.20</b> | 38.46    | 1.5000   | <b>1.5039</b> | 1.5140   | 37.50     | <b>37.91</b> | 38.00    | 1.4764   | <b>1.4925</b> | 1.4961   | 37.50     | <b>37.62</b> | 38.00    | 1.4764   | <b>1.4811</b> | 1.4961   |
|      | -    | 3    | 39.00     | <b>39.47</b> | 39.50    | 1.5354   | <b>1.5539</b> | 1.5551   | 39.00     | <b>39.27</b> | 39.50    | 1.5354   | <b>1.5461</b> | 1.5551   | 39.00     | <b>39.08</b> | 39.50    | 1.5354   | <b>1.5386</b> | 1.5551   |
|      | -    | 2    | 40.00     | <b>40.31</b> | 41.00    | 1.5750   | <b>1.5870</b> | 1.6140   | 40.00     | <b>40.18</b> | 41.00    | 1.5750   | <b>1.5819</b> | 1.6140   | 40.00     | <b>40.05</b> | 41.00    | 1.5750   | <b>1.5768</b> | 1.6140   |



■ 挤压丝锥 • UNC和UNF

| 丝锥尺寸 | 螺距 |    | 65% 螺纹嵌合率 |              |          |          |               |          | 70% 螺纹嵌合率 |              |          |          |               |          | 75% 螺纹嵌合率 |              |          |          |               |          |
|------|----|----|-----------|--------------|----------|----------|---------------|----------|-----------|--------------|----------|----------|---------------|----------|-----------|--------------|----------|----------|---------------|----------|
|      |    |    | 公制        |              |          | 英制       |               |          | 公制        |              |          | 英制       |               |          | 公制        |              |          | 英制       |               |          |
|      |    |    | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 | 最小<br>钻径  | 理论值          | 最大<br>钻径 | 最小<br>钻径 | 理论值           | 最大<br>钻径 |
| #0   | -  | 80 | 1.32      | <b>1.38</b>  | 1.40     | 0.0520   | <b>0.0545</b> | 0.0550   | 1.32      | <b>1.38</b>  | 1.40     | 0.0520   | <b>0.0540</b> | 0.0550   | 1.32      | <b>1.36</b>  | 1.40     | 0.0520   | <b>0.0536</b> | 0.0550   |
| #1   | 64 | -  | 1.60      | <b>1.68</b>  | 1.70     | 0.0630   | <b>0.0661</b> | 0.0669   | 1.60      | <b>1.67</b>  | 1.70     | 0.0630   | <b>0.0655</b> | 0.0669   | 1.60      | <b>1.65</b>  | 1.70     | 0.0630   | <b>0.0650</b> | 0.0669   |
|      | -  | 72 | 1.70      | <b>1.70</b>  | 1.70     | 0.0669   | <b>0.0669</b> | 0.0669   | 1.60      | <b>1.69</b>  | 1.70     | 0.0630   | <b>0.0663</b> | 0.0669   | 1.60      | <b>1.67</b>  | 1.70     | 0.0630   | <b>0.0659</b> | 0.0669   |
| #2   | 56 | -  | 1.98      | <b>1.98</b>  | 1.98     | 0.0781   | <b>0.0781</b> | 0.0781   | 1.90      | <b>1.97</b>  | 1.98     | 0.0748   | <b>0.0774</b> | 0.0781   | 1.90      | <b>1.95</b>  | 1.98     | 0.0748   | <b>0.0769</b> | 0.0781   |
|      | -  | 64 | 2.00      | <b>2.01</b>  | 2.10     | 0.0787   | <b>0.0791</b> | 0.0827   | 2.00      | <b>2.00</b>  | 2.00     | 0.0781   | <b>0.0785</b> | 0.0787   | 1.98      | <b>1.98</b>  | 1.98     | 0.0748   | <b>0.0780</b> | 0.0781   |
| #3   | 48 | -  | 2.20      | <b>2.28</b>  | 2.30     | 0.0866   | <b>0.0898</b> | 0.0906   | 2.20      | <b>2.27</b>  | 2.30     | 0.0866   | <b>0.0890</b> | 0.0906   | 2.20      | <b>2.25</b>  | 2.30     | 0.0866   | <b>0.0884</b> | 0.0906   |
|      | -  | 56 | 2.30      | <b>2.31</b>  | 2.38     | 0.0906   | <b>0.0911</b> | 0.0938   | 2.30      | <b>2.31</b>  | 2.38     | 0.0866   | <b>0.0904</b> | 0.0906   | 2.20      | <b>2.28</b>  | 2.30     | 0.0866   | <b>0.0899</b> | 0.0906   |
| #4   | 40 | -  | 2.50      | <b>2.57</b>  | 2.58     | 0.0984   | <b>0.1010</b> | 0.1015   | 2.50      | <b>2.55</b>  | 2.58     | 0.0984   | <b>0.1000</b> | 0.1015   | 2.50      | <b>2.52</b>  | 2.58     | 0.0984   | <b>0.0993</b> | 0.1015   |
|      | -  | 48 | 2.60      | <b>2.61</b>  | 2.64     | 0.1024   | <b>0.1028</b> | 0.1040   | 2.60      | <b>2.60</b>  | 2.60     | 0.1015   | <b>0.1020</b> | 0.1024   | 2.58      | <b>2.58</b>  | 2.58     | 0.0984   | <b>0.1014</b> | 0.1015   |
| #5   | 40 | -  | 2.90      | <b>2.90</b>  | 2.90     | 0.1130   | <b>0.1140</b> | 0.1142   | 2.87      | <b>2.88</b>  | 2.90     | 0.1130   | <b>0.1130</b> | 0.1130   | 2.82      | <b>2.85</b>  | 2.87     | 0.1110   | <b>0.1123</b> | 0.1130   |
|      | -  | 44 | 2.90      | <b>2.92</b>  | 2.95     | 0.1142   | <b>0.1150</b> | 0.1160   | 2.90      | <b>2.91</b>  | 2.95     | 0.1130   | <b>0.1141</b> | 0.1142   | 2.87      | <b>2.88</b>  | 2.90     | 0.1130   | <b>0.1134</b> | 0.1142   |
| #6   | 32 | -  | 3.10      | <b>3.16</b>  | 3.18     | 0.1220   | <b>0.1243</b> | 0.1250   | 3.10      | <b>3.14</b>  | 3.18     | 0.1220   | <b>0.1230</b> | 0.1250   | 3.10      | <b>3.10</b>  | 3.10     | 0.1220   | <b>0.1221</b> | 0.1250   |
|      | -  | 40 | 3.20      | <b>3.23</b>  | 3.26     | 0.1260   | <b>0.1270</b> | 0.1285   | 3.20      | <b>3.21</b>  | 3.26     | 0.1260   | <b>0.1260</b> | 0.1260   | 3.18      | <b>3.18</b>  | 3.18     | 0.1250   | <b>0.1253</b> | 0.1260   |
| #8   | 32 | -  | 3.80      | <b>3.82</b>  | 3.90     | 0.1496   | <b>0.1503</b> | 0.1535   | 3.80      | <b>3.80</b>  | 3.80     | 0.1470   | <b>0.1490</b> | 0.1496   | 3.73      | <b>3.76</b>  | 3.80     | 0.1470   | <b>0.1481</b> | 0.1496   |
|      | -  | 36 | 3.80      | <b>3.86</b>  | 3.90     | 0.1496   | <b>0.1518</b> | 0.1535   | 3.80      | <b>3.84</b>  | 3.90     | 0.1496   | <b>0.1507</b> | 0.1535   | 3.80      | <b>3.80</b>  | 3.80     | 0.1496   | <b>0.1498</b> | 0.1535   |
| #10  | 24 | -  | 4.30      | <b>4.36</b>  | 4.37     | 0.1693   | <b>0.1716</b> | 0.1719   | 4.30      | <b>4.34</b>  | 4.37     | 0.1693   | <b>0.1700</b> | 0.1719   | 4.22      | <b>4.29</b>  | 4.30     | 0.1660   | <b>0.1688</b> | 0.1693   |
|      | -  | 32 | 4.40      | <b>4.48</b>  | 4.50     | 0.1732   | <b>0.1762</b> | 0.1772   | 4.40      | <b>4.46</b>  | 4.50     | 0.1732   | <b>0.1750</b> | 0.1772   | 4.40      | <b>4.42</b>  | 4.50     | 0.1732   | <b>0.1741</b> | 0.1772   |
| #12  | 24 | -  | 5.00      | <b>5.02</b>  | 5.10     | 0.1969   | <b>0.1976</b> | 0.2008   | 5.00      | <b>5.00</b>  | 5.00     | 0.1929   | <b>0.1960</b> | 0.1969   | 4.90      | <b>4.95</b>  | 5.00     | 0.1929   | <b>0.1948</b> | 0.1969   |
|      | -  | 28 | 5.00      | <b>5.09</b>  | 5.10     | 0.1969   | <b>0.2002</b> | 0.2008   | 5.00      | <b>5.07</b>  | 5.10     | 0.1969   | <b>0.1990</b> | 0.2008   | 5.00      | <b>5.02</b>  | 5.10     | 0.1969   | <b>0.1978</b> | 0.2008   |
| 1/4  | 20 | -  | 5.70      | <b>5.79</b>  | 5.80     | 0.2244   | <b>0.2279</b> | 0.2283   | 5.70      | <b>5.76</b>  | 5.80     | 0.2244   | <b>0.2260</b> | 0.2283   | 5.70      | <b>5.70</b>  | 5.70     | 0.2244   | <b>0.2245</b> | 0.2283   |
|      | -  | 28 | 5.95      | <b>5.95</b>  | 5.95     | 0.2323   | <b>0.2342</b> | 0.2344   | 5.90      | <b>5.94</b>  | 5.95     | 0.2323   | <b>0.2329</b> | 0.2344   | 5.80      | <b>5.89</b>  | 5.90     | 0.2283   | <b>0.2318</b> | 0.2323   |
| 5/16 | 18 | -  | 7.30      | <b>7.31</b>  | 7.40     | 0.2874   | <b>0.2879</b> | 0.2913   | 7.30      | <b>7.30</b>  | 7.30     | 0.2835   | <b>0.2861</b> | 0.2874   | 7.20      | <b>7.22</b>  | 7.30     | 0.2835   | <b>0.2842</b> | 0.2874   |
|      | -  | 24 | 7.40      | <b>7.47</b>  | 7.50     | 0.2913   | <b>0.2941</b> | 0.2953   | 7.40      | <b>7.46</b>  | 7.50     | 0.2913   | <b>0.2927</b> | 0.2953   | 7.40      | <b>7.40</b>  | 7.40     | 0.2874   | <b>0.2912</b> | 0.2913   |
| 3/8  | 16 | -  | 8.80      | <b>8.82</b>  | 8.90     | 0.3465   | <b>0.3474</b> | 0.3504   | 8.80      | <b>8.80</b>  | 8.80     | 0.3438   | <b>0.3452</b> | 0.3465   | 8.70      | <b>8.71</b>  | 8.73     | 0.3425   | <b>0.3431</b> | 0.3438   |
|      | -  | 24 | 9.00      | <b>9.06</b>  | 9.10     | 0.3543   | <b>0.3566</b> | 0.3583   | 9.00      | <b>9.06</b>  | 9.10     | 0.3543   | <b>0.3552</b> | 0.3583   | 8.90      | <b>8.98</b>  | 9.00     | 0.3504   | <b>0.3537</b> | 0.3543   |
| 7/16 | 14 | -  | 10.30     | <b>10.31</b> | 10.32    | 0.4055   | <b>0.4059</b> | 0.4063   | 10.20     | <b>10.29</b> | 10.30    | 0.4016   | <b>0.4035</b> | 0.4055   | 10.10     | <b>10.19</b> | 10.20    | 0.3976   | <b>0.4011</b> | 0.4016   |
|      | -  | 20 | 10.50     | <b>10.55</b> | 10.60    | 0.4134   | <b>0.4154</b> | 0.4173   | 10.50     | <b>10.55</b> | 10.60    | 0.4134   | <b>0.4137</b> | 0.4173   | 10.40     | <b>10.46</b> | 10.50    | 0.4094   | <b>0.4120</b> | 0.4134   |
| 1/2  | 13 | -  | 11.80     | <b>11.84</b> | 11.90    | 0.4646   | <b>0.4660</b> | 0.4685   | 11.80     | <b>11.82</b> | 11.90    | 0.4606   | <b>0.4634</b> | 0.4646   | 11.70     | <b>11.70</b> | 11.70    | 0.4606   | <b>0.4608</b> | 0.4646   |
|      | -  | 20 | 12.10     | <b>12.14</b> | 12.20    | 0.4764   | <b>0.4779</b> | 0.4803   | 12.10     | <b>12.14</b> | 12.20    | 0.4724   | <b>0.4762</b> | 0.4764   | 12.00     | <b>12.05</b> | 12.10    | 0.4724   | <b>0.4745</b> | 0.4764   |
| 9/16 | 12 | -  | 13.10     | <b>13.35</b> | 13.50    | 0.5157   | <b>0.5257</b> | 0.5315   | 13.10     | <b>13.33</b> | 13.50    | 0.5157   | <b>0.5229</b> | 0.5315   | 13.10     | <b>13.21</b> | 13.50    | 0.5157   | <b>0.5200</b> | 0.5315   |
|      | -  | 18 | 13.50     | <b>13.66</b> | 13.80    | 0.5315   | <b>0.5379</b> | 0.5433   | 13.50     | <b>13.67</b> | 13.80    | 0.5315   | <b>0.5361</b> | 0.5433   | 13.50     | <b>13.57</b> | 13.80    | 0.5315   | <b>0.5342</b> | 0.5433   |
| 5/8  | 11 | -  | 14.50     | <b>14.85</b> | 15.00    | 0.5709   | <b>0.5848</b> | 0.5906   | 14.50     | <b>14.83</b> | 15.00    | 0.5709   | <b>0.5817</b> | 0.5906   | 14.50     | <b>14.70</b> | 15.00    | 0.5709   | <b>0.5787</b> | 0.5906   |
|      | -  | 18 | 15.10     | <b>15.25</b> | 15.50    | 0.5945   | <b>0.6004</b> | 0.6102   | 15.10     | <b>15.26</b> | 15.50    | 0.5945   | <b>0.5986</b> | 0.6102   | 15.10     | <b>15.16</b> | 15.50    | 0.5945   | <b>0.5967</b> | 0.6102   |
| 3/4  | 10 | -  | 17.50     | <b>17.93</b> | 18.00    | 0.6890   | <b>0.7058</b> | 0.7087   | 17.50     | <b>17.91</b> | 18.00    | 0.6890   | <b>0.7024</b> | 0.7087   | 17.50     | <b>17.75</b> | 18.00    | 0.6890   | <b>0.6990</b> | 0.7087   |
|      | -  | 16 | 18.00     | <b>18.35</b> | 18.50    | 0.7087   | <b>0.7224</b> | 0.7283   | 18.00     | <b>18.37</b> | 18.50    | 0.7087   | <b>0.7202</b> | 0.7283   | 18.00     | <b>18.24</b> | 18.50    | 0.7087   | <b>0.7181</b> | 0.7283   |
| 7/8  | 9  | -  | 20.50     | <b>20.98</b> | 21.00    | 0.8071   | <b>0.8259</b> | 0.8268   | 20.50     | <b>20.96</b> | 21.00    | 0.8071   | <b>0.8221</b> | 0.8268   | 20.50     | <b>20.78</b> | 21.00    | 0.8071   | <b>0.8183</b> | 0.8268   |
|      | -  | 14 | 21.33     | <b>21.42</b> | 21.43    | 0.8398   | <b>0.8434</b> | 0.8440   | 21.43     | <b>21.45</b> | 21.50    | 0.8398   | <b>0.8410</b> | 0.8440   | 21.15     | <b>21.30</b> | 21.33    | 0.8327   | <b>0.8386</b> | 0.8398   |
| 1    | 8  | -  | 24.00     | <b>24.00</b> | 24.00    | 0.9380   | <b>0.9448</b> | 0.9449   | 23.81     | <b>23.98</b> | 24.00    | 0.9380   | <b>0.9405</b> | 0.9449   | 23.50     | <b>23.78</b> | 23.81    | 0.9252   | <b>0.9363</b> | 0.9375   |
|      | -  | 12 | 24.30     | <b>24.47</b> | 24.50    | 0.9567   | <b>0.9632</b> | 0.9646   | 24.30     | <b>24.49</b> | 24.50    | 0.9567   | <b>0.9603</b> | 0.9646   | 24.30     | <b>24.32</b> | 24.50    | 0.9567   | <b>0.9575</b> | 0.9646   |

攻丝



## ■ 挤压丝锥 • M和MF

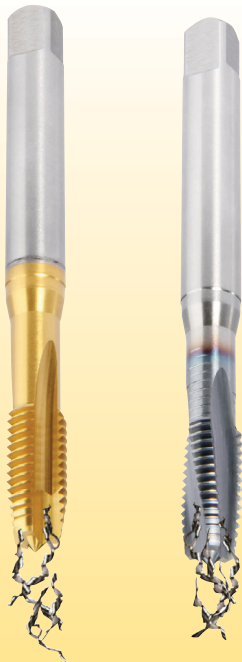
| 丝锥尺寸 | 螺距   |       | 65% 螺纹嵌合率 |       |          |          |        |          | 70% 螺纹嵌合率 |       |          |          |        |          | 75% 螺纹嵌合率 |       |          |          |        |          |
|------|------|-------|-----------|-------|----------|----------|--------|----------|-----------|-------|----------|----------|--------|----------|-----------|-------|----------|----------|--------|----------|
|      |      |       | 公制        |       |          | 英制       |        |          | 公制        |       |          | 英制       |        |          | 公制        |       |          | 英制       |        |          |
|      |      |       | 最小<br>钻径  | 理论值   | 最大<br>钻径 | 最小<br>钻径 | 理论值    | 最大<br>钻径 | 最小<br>钻径  | 理论值   | 最大<br>钻径 | 最小<br>钻径 | 理论值    | 最大<br>钻径 | 最小<br>钻径  | 理论值   | 最大<br>钻径 | 最小<br>钻径 | 理论值    | 最大<br>钻径 |
| M1.6 | 0.35 | -     | 1.40      | 1.45  | 1.50     | 0.0551   | 0.0571 | 0.0591   | 1.40      | 1.43  | 1.50     | 0.0551   | 0.0563 | 0.0591   | 1.40      | 1.42  | 1.50     | 0.0551   | 0.0559 | 0.0591   |
| M1.7 | 0.35 | -     | 1.50      | 1.58  | 1.60     | 0.0591   | 0.0623 | 0.0630   | 1.50      | 1.57  | 1.60     | 0.0591   | 0.0620 | 0.0630   | 1.50      | 1.56  | 1.60     | 0.0591   | 0.0617 | 0.0630   |
| M1.8 | 0.35 | -     | 1.60      | 1.65  | 1.70     | 0.0630   | 0.0650 | 0.0669   | 1.60      | 1.63  | 1.70     | 0.0630   | 0.0642 | 0.0669   | 1.60      | 1.62  | 1.70     | 0.0630   | 0.0638 | 0.0669   |
| M2   | 0.4  | -     | 1.80      | 1.82  | 1.90     | 0.0709   | 0.0717 | 0.0748   | 1.80      | 1.81  | 1.90     | 0.0709   | 0.0713 | 0.0748   | 1.80      | 1.80  | 1.80     | 0.0709   | 0.0709 | 0.0709   |
| M2.2 | 0.45 | -     | 2.00      | 2.00  | 2.00     | 0.0787   | 0.0787 | 0.0787   | 1.98      | 1.99  | 2.00     | 0.0781   | 0.0783 | 0.0787   | 1.90      | 1.97  | 1.98     | 0.0748   | 0.0776 | 0.0781   |
| M2.5 | 0.45 | -     | 2.30      | 2.30  | 2.30     | 0.0906   | 0.0906 | 0.0906   | 2.20      | 2.29  | 2.30     | 0.0866   | 0.0902 | 0.0906   | 2.20      | 2.27  | 2.30     | 0.0866   | 0.0894 | 0.0906   |
| M2.6 | 0.45 | -     | 2.40      | 2.43  | 2.44     | 0.0945   | 0.0957 | 0.0960   | 2.40      | 2.42  | 2.44     | 0.0945   | 0.0953 | 0.0960   | 2.40      | 2.41  | 2.44     | 0.0945   | 0.0949 | 0.0960   |
| M3   | 0.5  | -     | 2.78      | 2.78  | 2.80     | 0.1094   | 0.1094 | 0.1094   | 2.71      | 2.76  | 2.78     | 0.1065   | 0.1087 | 0.1094   | 2.71      | 2.75  | 2.78     | 0.1065   | 0.1083 | 0.1094   |
|      | -    | 0.35  | 2.87      | 2.88  | 2.90     | 0.1130   | 0.1134 | 0.1142   | 2.87      | 2.87  | 2.87     | 0.1130   | 0.1130 | 0.1130   | 2.82      | 2.86  | 2.87     | 0.1110   | 0.1126 | 0.1130   |
| M3.5 | 0.6  | -     | 3.20      | 3.23  | 3.26     | 0.1260   | 0.1272 | 0.1285   | 3.20      | 3.21  | 3.26     | 0.1260   | 0.1264 | 0.1285   | 3.18      | 3.19  | 3.20     | 0.1250   | 0.1256 | 0.1260   |
| M4   | 0.7  | -     | 3.66      | 3.69  | 3.70     | 0.1440   | 0.1453 | 0.1457   | 3.66      | 3.67  | 3.70     | 0.1440   | 0.1445 | 0.1457   | 3.60      | 3.64  | 3.66     | 0.1417   | 0.1433 | 0.1440   |
|      | -    | 0.5   | 3.73      | 3.78  | 3.80     | 0.1470   | 0.1488 | 0.1496   | 3.73      | 3.76  | 3.80     | 0.1470   | 0.1480 | 0.1496   | 3.73      | 3.75  | 3.80     | 0.1470   | 0.1476 | 0.1496   |
| M4.5 | 0.75 | -     | 4.10      | 4.17  | 4.20     | 0.1614   | 0.1642 | 0.1654   | 4.10      | 4.14  | 4.20     | 0.1614   | 0.1630 | 0.1654   | 4.10      | 4.12  | 4.20     | 0.1614   | 0.1622 | 0.1654   |
| M5   | 0.8  | -     | 4.62      | 4.65  | 4.70     | 0.1820   | 0.1831 | 0.1850   | 4.60      | 4.62  | 4.62     | 0.1811   | 0.1819 | 0.1820   | 4.50      | 4.59  | 4.60     | 0.1772   | 0.1807 | 0.1811   |
|      | -    | 0.5   | 4.76      | 4.78  | 4.80     | 0.1875   | 0.1882 | 0.1890   | 4.70      | 4.76  | 4.76     | 0.1850   | 0.1874 | 0.1875   | 4.70      | 4.75  | 4.76     | 0.1850   | 0.1870 | 0.1875   |
| M6   | 1    | -     | 5.56      | 5.56  | 5.60     | 0.2188   | 0.2189 | 0.2205   | 5.50      | 5.52  | 5.56     | 0.2165   | 0.2173 | 0.2188   | 5.41      | 5.49  | 5.50     | 0.2130   | 0.2161 | 0.2165   |
|      | -    | 0.75  | 5.62      | 5.67  | 5.70     | 0.2211   | 0.2232 | 0.2244   | 5.62      | 5.64  | 5.70     | 0.2211   | 0.2220 | 0.2244   | 5.62      | 5.62  | 5.70     | 0.2211   | 0.2213 | 0.2244   |
| M7   | 1    | -     | 6.53      | 6.56  | 6.60     | 0.2570   | 0.2583 | 0.2598   | 6.50      | 6.52  | 6.53     | 0.2559   | 0.2567 | 0.2570   | 6.40      | 6.49  | 6.50     | 0.2520   | 0.2555 | 0.2559   |
| M8   | 1.25 | -     | 7.40      | 7.45  | 7.50     | 0.2913   | 0.2933 | 0.2953   | 7.40      | 7.41  | 7.50     | 0.2913   | 0.2917 | 0.2953   | 7.30      | 7.36  | 7.40     | 0.2874   | 0.2898 | 0.2913   |
|      | -    | 1     | 7.54      | 7.56  | 7.60     | 0.2969   | 0.2976 | 0.2992   | 7.50      | 7.52  | 7.54     | 0.2953   | 0.2961 | 0.2969   | 7.40      | 7.49  | 7.50     | 0.2913   | 0.2949 | 0.2953   |
|      | -    | 0.75  | 7.60      | 7.67  | 7.70     | 0.2992   | 0.3020 | 0.3031   | 7.60      | 7.64  | 7.70     | 0.2992   | 0.3008 | 0.3031   | 7.60      | 7.62  | 7.70     | 0.2992   | 0.3000 | 0.3031   |
| M10  | 1.5  | -     | 9.30      | 9.34  | 9.35     | 0.3661   | 0.3677 | 0.3680   | 9.20      | 9.29  | 9.30     | 0.3622   | 0.3657 | 0.3661   | 9.20      | 9.24  | 9.30     | 0.3622   | 0.3638 | 0.3661   |
|      | -    | 1.25  | 9.40      | 9.45  | 9.50     | 0.3701   | 0.3720 | 0.3740   | 9.40      | 9.41  | 9.50     | 0.3701   | 0.3705 | 0.3740   | 9.35      | 9.36  | 9.40     | 0.3680   | 0.3685 | 0.3701   |
|      | -    | 1     | 9.53      | 9.56  | 9.60     | 0.3750   | 0.3764 | 0.3780   | 9.50      | 9.52  | 9.53     | 0.3740   | 0.3748 | 0.3750   | 9.40      | 9.49  | 9.50     | 0.3701   | 0.3736 | 0.3740   |
|      | -    | 0.75  | 9.60      | 9.67  | 9.70     | 0.3780   | 0.3807 | 0.3819   | 9.60      | 9.64  | 9.70     | 0.3780   | 0.3795 | 0.3819   | 9.60      | 9.62  | 9.70     | 0.3780   | 0.3787 | 0.3819   |
| M12  | 1.75 | -     | 11.20     | 11.23 | 11.30    | 0.4409   | 0.4421 | 0.4449   | 11.15     | 11.17 | 11.20    | 0.4375   | 0.4398 | 0.4409   | 11.10     | 11.11 | 11.15    | 0.4370   | 0.4374 | 0.4375   |
|      | -    | 1.5   | 11.30     | 11.34 | 11.40    | 0.4449   | 0.4465 | 0.4488   | 11.20     | 11.29 | 11.30    | 0.4449   | 0.4484 | 0.4488   | 11.20     | 11.24 | 11.30    | 0.4409   | 0.4425 | 0.4449   |
|      | -    | 1.25  | 11.40     | 11.45 | 11.50    | 0.4488   | 0.4508 | 0.4528   | 11.40     | 11.41 | 11.50    | 0.4488   | 0.4492 | 0.4528   | 11.30     | 11.36 | 11.40    | 0.4449   | 0.4472 | 0.4488   |
|      | -    | 1     | 11.51     | 11.56 | 11.60    | 0.4531   | 0.4551 | 0.4567   | 11.51     | 11.52 | 11.60    | 0.4531   | 0.4535 | 0.4567   | 11.40     | 11.49 | 11.50    | 0.4488   | 0.4524 | 0.4528   |
| M14  | 2    | -     | 13.10     | 13.12 | 13.50    | 0.5157   | 0.5165 | 0.5315   | 13.00     | 13.05 | 13.10    | 0.5118   | 0.5138 | 0.5157   | 12.80     | 12.98 | 13.00    | 0.5039   | 0.5110 | 0.5118   |
|      | -    | 1.5   | 13.10     | 13.34 | 13.50    | 0.5157   | 0.5252 | 0.5315   | 13.10     | 13.29 | 13.50    | 0.5157   | 0.5232 | 0.5315   | 13.10     | 13.24 | 13.50    | 0.5157   | 0.5213 | 0.5315   |
| M16  | 2    | -     | 15.10     | 15.12 | 15.50    | 0.5945   | 0.5953 | 0.6102   | 15.00     | 15.05 | 15.10    | 0.5906   | 0.5925 | 0.5945   | 14.50     | 14.98 | 15.00    | 0.5709   | 0.5898 | 0.5906   |
|      | -    | 1.5   | 15.10     | 15.34 | 15.50    | 0.5945   | 0.6039 | 0.6102   | 15.10     | 15.29 | 15.50    | 0.5945   | 0.6020 | 0.6102   | 15.10     | 15.24 | 15.50    | 0.5945   | 0.6000 | 0.6102   |
| M18  | 2.5  | -     | 16.50     | 16.90 | 17.00    | 0.6496   | 0.6654 | 0.6693   | 16.50     | 16.81 | 17.00    | 0.6496   | 0.6618 | 0.6693   | 16.50     | 16.73 | 17.00    | 0.6496   | 0.6587 | 0.6693   |
|      | -    | 1.5   | 17.00     | 17.34 | 17.50    | 0.6693   | 0.6827 | 0.6890   | 17.00     | 17.29 | 17.50    | 0.6693   | 0.6807 | 0.6890   | 17.00     | 17.24 | 17.50    | 0.6693   | 0.6787 | 0.6890   |
| M20  | 2.5  | -     | 18.50     | 18.90 | 19.00    | 0.7283   | 0.7441 | 0.7480   | 18.50     | 18.81 | 19.00    | 0.7283   | 0.7406 | 0.7480   | 18.50     | 18.73 | 19.00    | 0.7283   | 0.7374 | 0.7480   |
|      | -    | 1.5   | 19.00     | 19.34 | 19.50    | 0.7480   | 0.7614 | 0.7677   | 19.00     | 19.29 | 19.50    | 0.7480   | 0.7594 | 0.7677   | 19.00     | 19.24 | 19.50    | 0.7480   | 0.7575 | 0.7677   |
| -    | 1    | 19.50 | 19.56     | 20.00 | 0.7677   | 0.7701   | 0.7874 | 19.50    | 19.52     | 20.00 | 0.7677   | 0.7685   | 0.7874 | 19.00    | 19.49     | 19.50 | 0.7480   | 0.7673   | 0.7677 |          |
| M22  | 2.5  | -     | 20.50     | 20.90 | 21.00    | 0.8071   | 0.8228 | 0.8268   | 20.50     | 20.81 | 21.00    | 0.8071   | 0.8193 | 0.8268   | 20.50     | 20.73 | 21.00    | 0.8071   | 0.8161 | 0.8268   |
|      | -    | 2     | 21.00     | 21.12 | 21.15    | 0.8268   | 0.8315 | 0.8327   | 21.00     | 21.05 | 21.15    | 0.8268   | 0.8287 | 0.8327   | 20.50     | 20.98 | 21.00    | 0.8071   | 0.8260 | 0.8268   |
|      | -    | 1.5   | 21.33     | 21.34 | 21.43    | 0.8398   | 0.8402 | 0.8440   | 21.15     | 21.29 | 21.33    | 0.8327   | 0.8382 | 0.8398   | 21.15     | 21.24 | 21.33    | 0.8327   | 0.8362 | 0.8398   |
| M24  | 3    | -     | 22.50     | 22.67 | 22.77    | 0.8858   | 0.8925 | 0.8965   | 22.50     | 22.57 | 22.77    | 0.8858   | 0.8886 | 0.8965   | 22.44     | 22.47 | 22.50    | 0.8840   | 0.8846 | 0.8858   |
|      | -    | 2     | 23.10     | 23.12 | 23.30    | 0.9094   | 0.9102 | 0.9173   | 23.00     | 23.05 | 23.10    | 0.9055   | 0.9075 | 0.9094   | 22.77     | 22.98 | 23.00    | 0.8965   | 0.9047 | 0.9055   |
|      | -    | 1.5   | 23.30     | 23.34 | 23.42    | 0.9173   | 0.9189 | 0.9220   | 23.10     | 23.29 | 23.30    | 0.9094   | 0.9169 | 0.9173   | 23.10     | 23.24 | 23.30    | 0.9094   | 0.9150 | 0.9173   |



■ 管螺纹

| 管螺纹尺寸        | NPT 和 NPTF |        | NPSM   | NPSC   | NPSF   |
|--------------|------------|--------|--------|--------|--------|
|              | 不使用铰刀      | 使用铰刀   |        |        |        |
| 1/16-27      | 0.2420     | 0.2344 | —      | 0.2500 | 0.2460 |
| 1/8-27       | 0.3320     | 0.3281 | 0.3580 | 0.3320 | 0.3390 |
| 1/4-18       | 0.4375     | 0.4219 | 0.4688 | 0.4375 | 0.4375 |
| 3/8-18       | 0.5625     | 0.5625 | 0.6030 | 0.5781 | 0.5781 |
| 1/2-14       | 0.7031     | 0.6875 | 0.7480 | 0.7087 | 0.7087 |
| 3/4-14       | 0.9063     | 0.8906 | 0.9531 | 0.9219 | 0.9219 |
| 1-11 1/2     | 1.1406     | 1.1250 | 1.2031 | 1.1563 | 1.1563 |
| 1 1/4-11 1/2 | 1.4844     | 1.4688 | 1.5460 | 1.5000 | —      |
| 1 1/2-11 1/2 | 1.7188     | 1.7031 | 1.7813 | 1.7344 | —      |
| 2-11 1/2     | 2.1875     | 2.1719 | 2.2500 | 2.2031 | —      |

通孔向前推出切屑



刃倾角

LHSF



- 刃倾角或 LHSF 型（左手螺旋槽）。
- 适合长切屑型材料。

盲孔向后排屑



RHSF



- RHSF（右手螺旋槽）。
- 适合长切屑型材料。

盲孔或通孔存储切屑



STFL



- STFL（直槽）。
- 适合短切屑型材料。

盲孔或通孔无切屑



挤压丝锥



- 成型加工。
- 特别适合延展性材料加工 <32 HRC.

■ 统一标准英制螺纹

| 螺纹尺寸/牙距   | 推荐丝锥限度 <sup>1</sup> |      | 内螺栓中径限度       |         |         |
|-----------|---------------------|------|---------------|---------|---------|
|           | 2B 级                | 3B 级 | 所有级别最小值 (基本型) | 2B 级最大值 | 3B 级最大值 |
| 0 - 80    | H2                  | H2   | 0.0519        | 0.0542  | 0.0536  |
| 1 - 64    | H2                  | H2   | 0.0629        | 0.0655  | 0.0648  |
| 1 - 72    | H2                  | H2   | 0.0640        | 0.0665  | 0.0659  |
| 2 - 56    | H2                  | H2   | 0.0744        | 0.0772  | 0.0765  |
| 2 - 64    | H2                  | H2   | 0.0759        | 0.0786  | 0.0779  |
| 3 - 48    | H3                  | H2   | 0.0855        | 0.0885  | 0.0877  |
| 3 - 56    | H2                  | H2   | 0.0874        | 0.0902  | 0.0895  |
| 4 - 40    | H3                  | H2   | 0.0958        | 0.0991  | 0.0982  |
| 4 - 48    | H3                  | H2   | 0.0985        | 0.1016  | 0.1008  |
| 5 - 40    | H3                  | H2   | 0.1088        | 0.1121  | 0.1113  |
| 5 - 44    | H3                  | H2   | 0.1102        | 0.1134  | 0.1126  |
| 6 - 32    | H3                  | H2   | 0.1177        | 0.1214  | 0.1204  |
| 6 - 40    | H3                  | H2   | 0.1218        | 0.1252  | 0.1243  |
| 8 - 32    | H3                  | H3   | 0.1437        | 0.1475  | 0.1465  |
| 8 - 36    | H3                  | H3   | 0.1460        | 0.1496  | 0.1487  |
| 10 - 24   | H3                  | H3   | 0.1629        | 0.1672  | 0.1661  |
| 10 - 32   | H3                  | H3   | 0.1697        | 0.1736  | 0.1726  |
| 12 - 24   | H3                  | H3   | 0.1889        | 0.1933  | 0.1922  |
| 12 - 28   | H3                  | H3   | 0.1928        | 0.1970  | 0.1959  |
| 1/4 - 20  | H5                  | H3   | 0.2175        | 0.2224  | 0.2211  |
| 1/4 - 28  | H4                  | H3   | 0.2268        | 0.2311  | 0.2300  |
| 5/16 - 18 | H5                  | H3   | 0.2764        | 0.2817  | 0.2803  |
| 5/16 - 24 | H4                  | H3   | 0.2854        | 0.2902  | 0.2890  |
| 3/8 - 16  | H5                  | H3   | 0.3344        | 0.3401  | 0.3387  |
| 3/8 - 24  | H4                  | H3   | 0.3479        | 0.3528  | 0.3516  |
| 7/16 - 14 | H5                  | H3   | 0.3911        | 0.3972  | 0.3957  |
| 7/16 - 20 | H5                  | H3   | 0.4050        | 0.4104  | 0.4091  |
| 1/2 - 13  | H5                  | H4   | 0.4500        | 0.4565  | 0.4548  |
| 1/2 - 20  | H5                  | H3   | 0.4675        | 0.4731  | 0.4717  |
| 9/16 - 12 | H5                  | H4   | 0.5084        | 0.5152  | 0.5135  |
| 9/16 - 18 | H5                  | H3   | 0.5264        | 0.5323  | 0.5308  |
| 5/8 - 11  | H5                  | H4   | 0.5660        | 0.5732  | 0.5714  |
| 5/8 - 18  | H5                  | H3   | 0.5889        | 0.5949  | 0.5934  |
| 3/4 - 10  | H5                  | H4   | 0.6850        | 0.6927  | 0.6907  |

(续)

<sup>1</sup>选择用于 3B 级别的 H 限度丝锥也可加工 2B 级别的螺纹。

注: 以上推荐的丝锥在正常使用的情况下, 可在普通材料的加工中形成指定类别的螺纹。  
但是, 如果指定丝锥不具备满意的配合精度, 可以选择备用丝锥限度值。

攻丝

■ 统一标准英制螺纹 (续)

| 螺纹尺寸/牙距    | 推荐丝锥限度 <sup>1</sup> |      | 内螺柱中径限度       |         |         |
|------------|---------------------|------|---------------|---------|---------|
|            | 2B 级                | 3B 级 | 所有级别最小值 (基本型) | 2B 级最大值 | 3B 级最大值 |
| 3/4 - 16   | H5                  | H4   | 0.7094        | 0.7159  | 0.7143  |
| 7/8 - 9    | H6                  | H4   | 0.8028        | 0.8110  | 0.8089  |
| 7/8 - 14   | H6                  | H4   | 0.8286        | 0.8356  | 0.8339  |
| 1" - 8     | H6                  | H5   | 0.9188        | 0.9276  | 0.9254  |
| 1" - 12    | H6                  | H4   | 0.9459        | 0.9535  | 0.9516  |
| 1-1/8 - 7  | H8                  | H6   | 1.0322        | 1.0416  | 1.0393  |
| 1-1/8 - 8  | H8                  | H6   | 1.0438        | 1.0528  | 1.0505  |
| 1-1/8 - 12 | H6                  | H5   | 1.0709        | 1.0787  | 1.0768  |
| 1-1/4 - 7  | H8                  | H6   | 1.1572        | 1.1668  | 1.1644  |
| 1-1/4 - 8  | H8                  | H6   | 1.1688        | 1.1780  | 1.1757  |
| 1-1/4 - 12 | H6                  | H5   | 1.1959        | 1.2039  | 1.2019  |
| 1-3/8 - 6  | H8                  | H6   | 1.2667        | 1.2771  | 1.2745  |
| 1-3/8 - 8  | H8                  | H6   | 1.2938        | 1.3031  | 1.3008  |
| 1-3/8 - 12 | H6                  | H5   | 1.3209        | 1.3291  | 1.3270  |
| 1-1/2 - 6  | H8                  | H6   | 1.3917        | 1.4022  | 1.3996  |
| 1-1/2 - 8  | H8                  | H6   | 1.4188        | 1.4283  | 1.4259  |
| 1-1/2 - 12 | H6                  | H5   | 1.4459        | 1.4542  | 1.4522  |
| 1-3/4 - 5  | H8                  | H7   | 1.6201        | 1.6317  | 1.6288  |
| 2 - 4 1/2  | H8                  | H7   | 1.8557        | 1.8681  | 1.8650  |

<sup>1</sup>选择用于 3B 级别的 H 限度丝锥也可加工 2B 级别的螺纹。

■ 用于 6H 类别公制螺纹加工的推荐丝锥

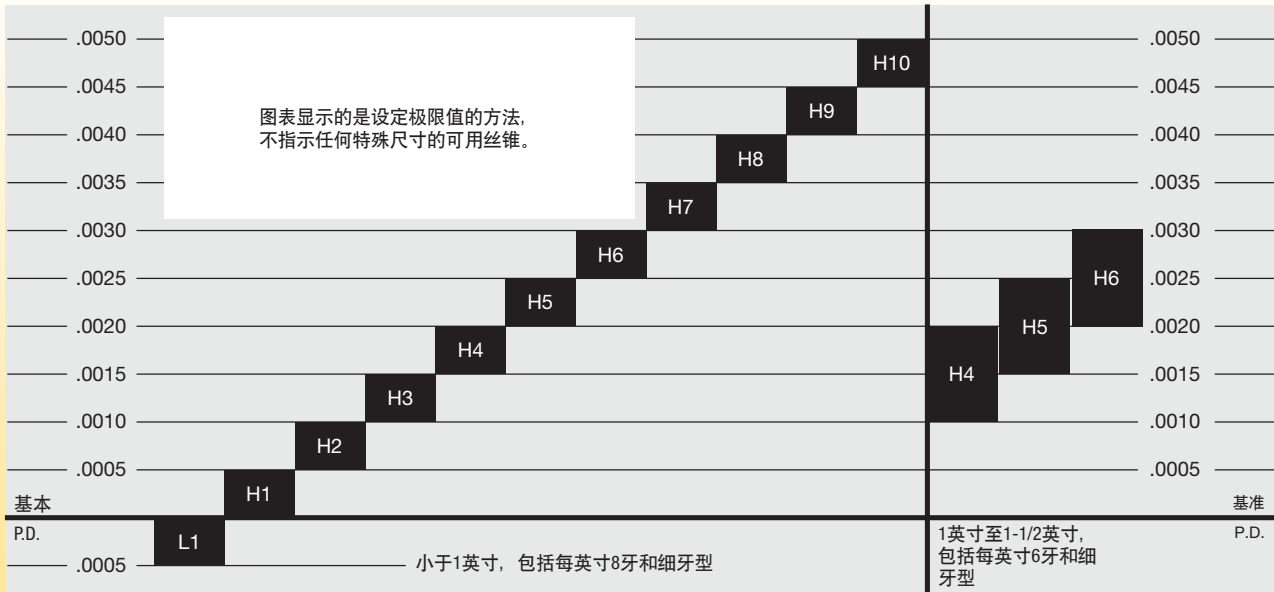
| 螺纹尺寸      |         | 推荐丝锥 | 内螺柱产品限度 — 6H 级 |         |         |         |
|-----------|---------|------|----------------|---------|---------|---------|
| 标称直径 (mm) | 螺距 (mm) |      | 限度值            | 中径 (mm) |         | 中径 (in) |
|           |         |      | 最小值            | 最大值     | 最小值     | 最大值     |
| 1,6       | 0,35    | D3   | 1,373          | 1,458   | .05406  | .05740  |
| 2         | 0,4     | D3   | 1,740          | 1,830   | .06850  | .07205  |
| 2,5       | 0,45    | D3   | 2,208          | 2,303   | .08693  | .09067  |
| 3         | 0,5     | D3   | 2,675          | 2,775   | .10531  | .10925  |
| 3,5       | 0,6     | D4   | 3,110          | 3,222   | .12244  | .12685  |
| 4         | 0,7     | D4   | 3,545          | 3,663   | .13957  | .14421  |
| 4,5       | 0,75    | D4   | 4,013          | 4,131   | .15789  | .16264  |
| 5         | 0,8     | D4   | 4,480          | 4,605   | .17638  | .18130  |
| 6         | 1       | D5   | 5,350          | 5,500   | .21063  | .21654  |
| 7         | 1       | D5   | 6,350          | 6,500   | .25000  | .25591  |
| 8         | 1,25    | D5   | 7,188          | 7,348   | .28299  | .28929  |
| 10        | 1,5     | D6   | 9,026          | 9,206   | .35535  | .36244  |
| 12        | 1,75    | D6   | 10,863         | 11,063  | .42768  | .43555  |
| 14        | 2       | D7   | 12,701         | 12,913  | .50004  | .50839  |
| 16        | 2       | D7   | 14,701         | 14,913  | .57878  | .58713  |
| 20        | 2,5     | D7   | 18,376         | 18,600  | .72346  | .73228  |
| 24        | 3       | D8   | 22,051         | 22,316  | .86815  | .87858  |
| 30        | 3,5     | D9   | 27,727         | 28,007  | 1.09161 | 1.10264 |
| 36        | 4       | D9   | 33,402         | 33,702  | 1.31504 | 1.32685 |

在为特定加工任务选择磨削螺纹丝锥时，除了丝锥的标称尺寸和牙距以外，还有另外一个重要的尺寸参数应当考虑。这个参数是螺纹中径公差“H”和“L”。“H”表示高于基本中径值；“L”表示低于基本中径值。设定丝锥公差是为了选择较好规格的丝锥产品，从而加工出预期类型的螺纹。

图一 描述了编号系统以及相连限度之间的 0.0005 英寸增量。因为初始点为基本中径，以千分之英寸为单位将公差值分为两个数值，确定了“H”系列中超过基本中径的zui大丝锥中径值，以及“L”系列中低于基本中径的zui小丝锥中径值。

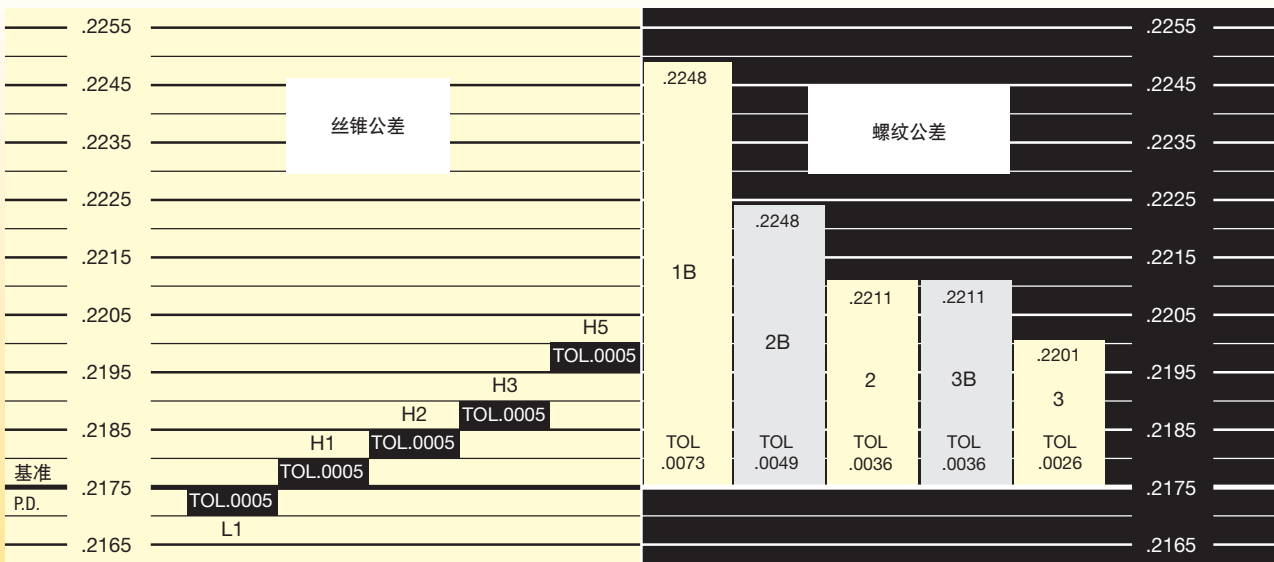
图二 描述了与各种类型，规格为 1/4-20 螺纹相关的丝锥公差定位。

图一



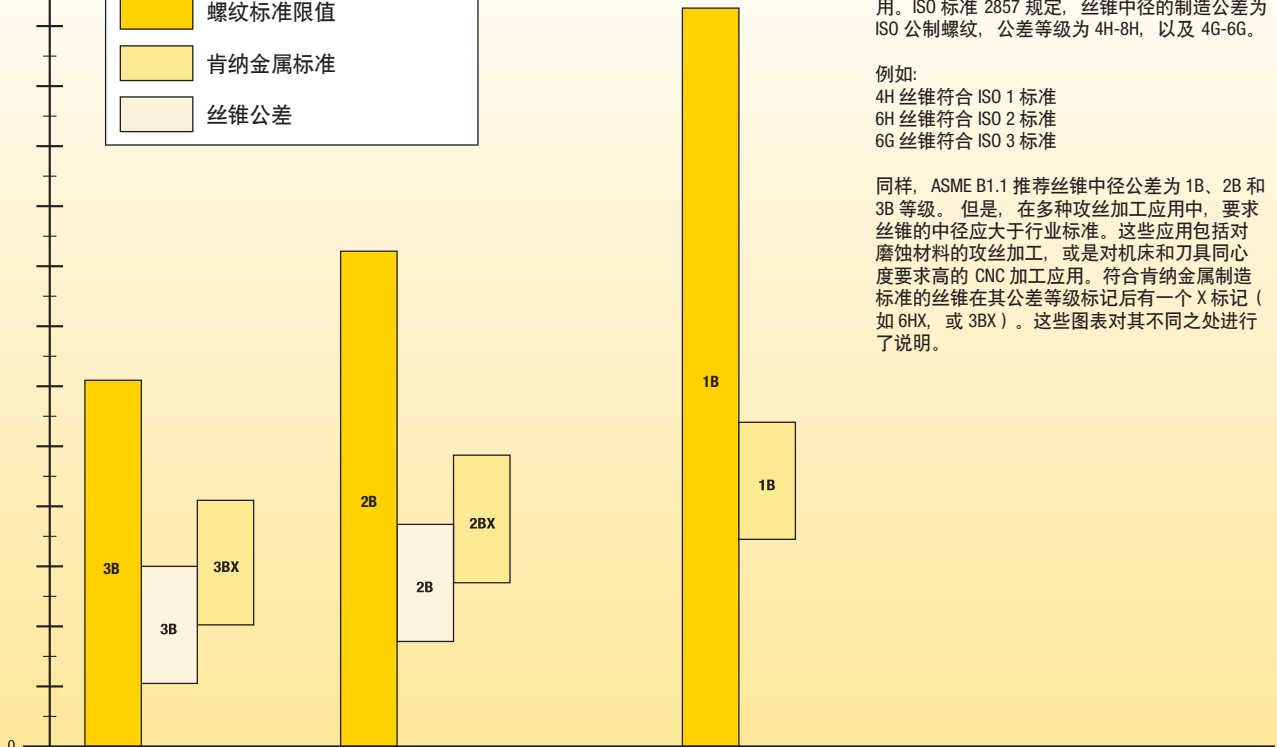
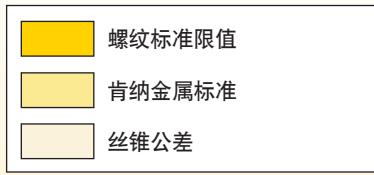
图二

UNC1/4-20和NC螺纹等级



+ $\mu\text{m}$

### 统一内螺纹



为了方便丝锥使用人的操作，新一代的肯纳金属丝锥已将公差等级调整为适合内螺纹加工应用。ISO 标准 2857 规定，丝锥中径的制造公差为 ISO 公制螺纹，公差等级为 4H-8H，以及 4G-6G。

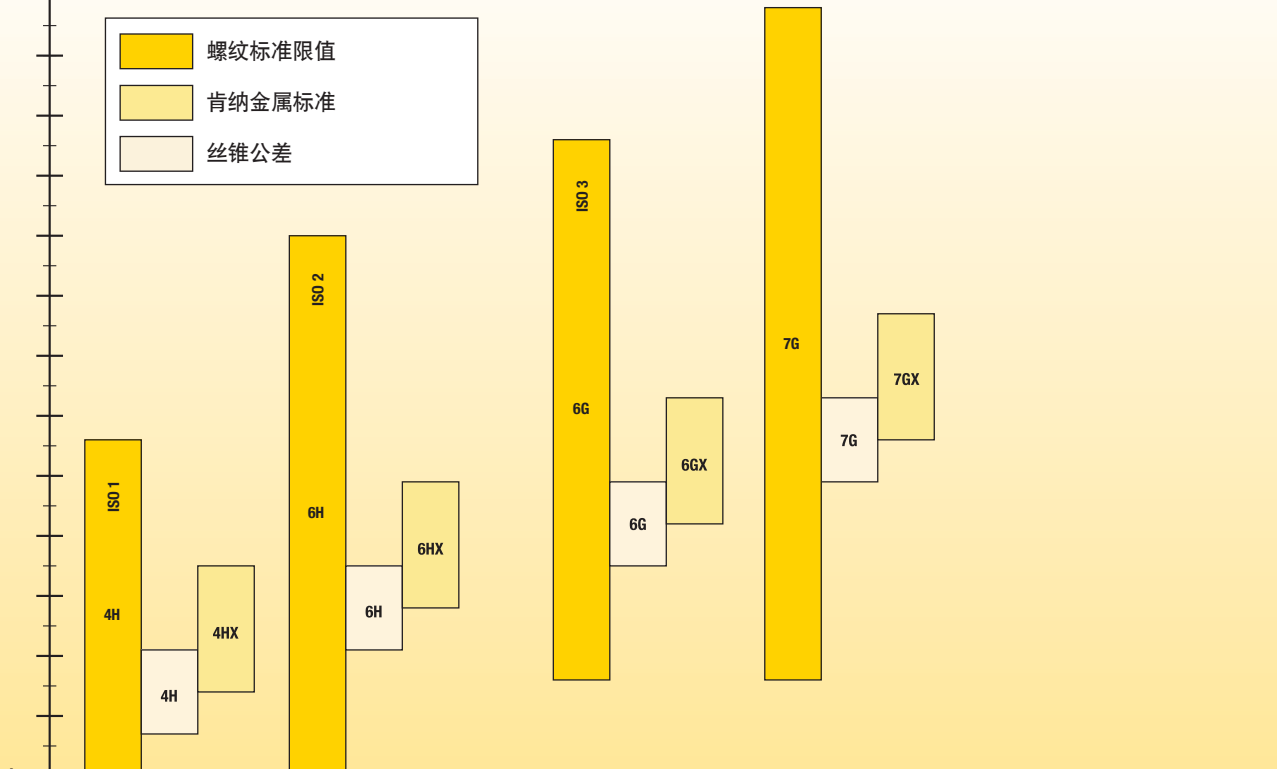
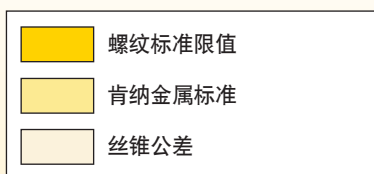
例如：  
4H 丝锥符合 ISO 1 标准  
6H 丝锥符合 ISO 2 标准  
6G 丝锥符合 ISO 3 标准

同样，ASME B1.1 推荐丝锥中径公差为 1B、2B 和 3B 等级。但是，在多种攻丝加工应用中，要求丝锥的中径应大于行业标准。这些应用包括对磨蚀材料的攻丝加工，或是对机床和刀具同心度要求高的 CNC 加工应用。符合肯纳金属制造标准的丝锥在其公差等级标记后有一个 X 标记（如 6HX，或 3BX）。这些图表对其不同之处进行了说明。

公称中径直径（基准）

+ $\mu\text{m}$

### 公制内螺纹



公称中径直径（基准）

在批量生产过程中，产品不可能完全具备图纸中标定的理论参数。图纸中的理论参数与实际产品之间出现许可范围内的略微差别被称为公差。

**公差**

配合零件之间预留的尺寸差。这个尺寸差是配合零件之间相距的zui小距离或是接触的zui大距离。

**螺纹角**

螺纹两侧面之间的夹角，在轴向平面上测量。

**半螺纹角**

螺纹一个侧面与轴向垂直线之间的夹角，在轴向平面上测量。

**螺纹导程**

螺纹转动一圈的轴向距离。在单线螺纹中，导程与螺距相同。在双线螺纹中，导程为螺距的2倍；在三线螺纹中，导程为螺距的3倍，以此类推。

**大径**

直螺纹的zui大直径。

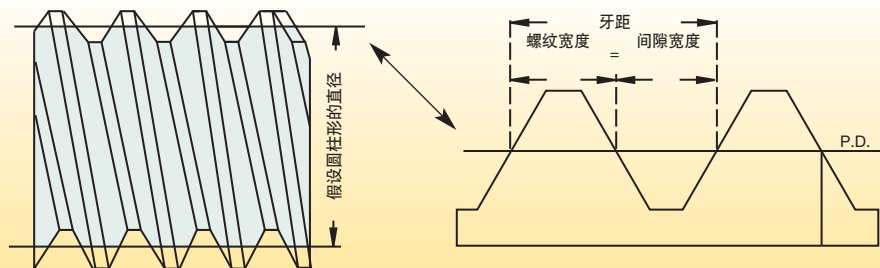
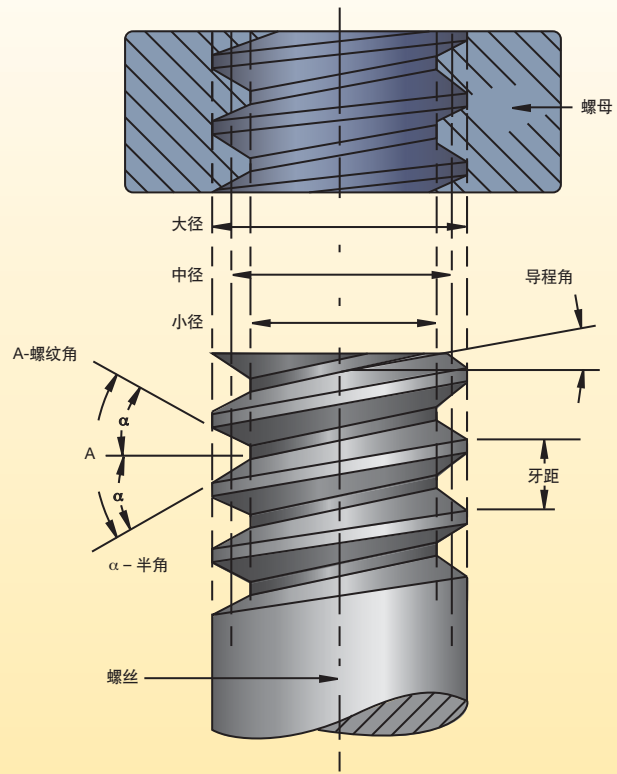
**小径**

直螺纹的zui小直径。

**牙距**

相邻二牙在中径线上对应二点间的轴向距离。

$$\text{英寸螺距} = \frac{1}{\text{每英寸螺纹牙数}}$$

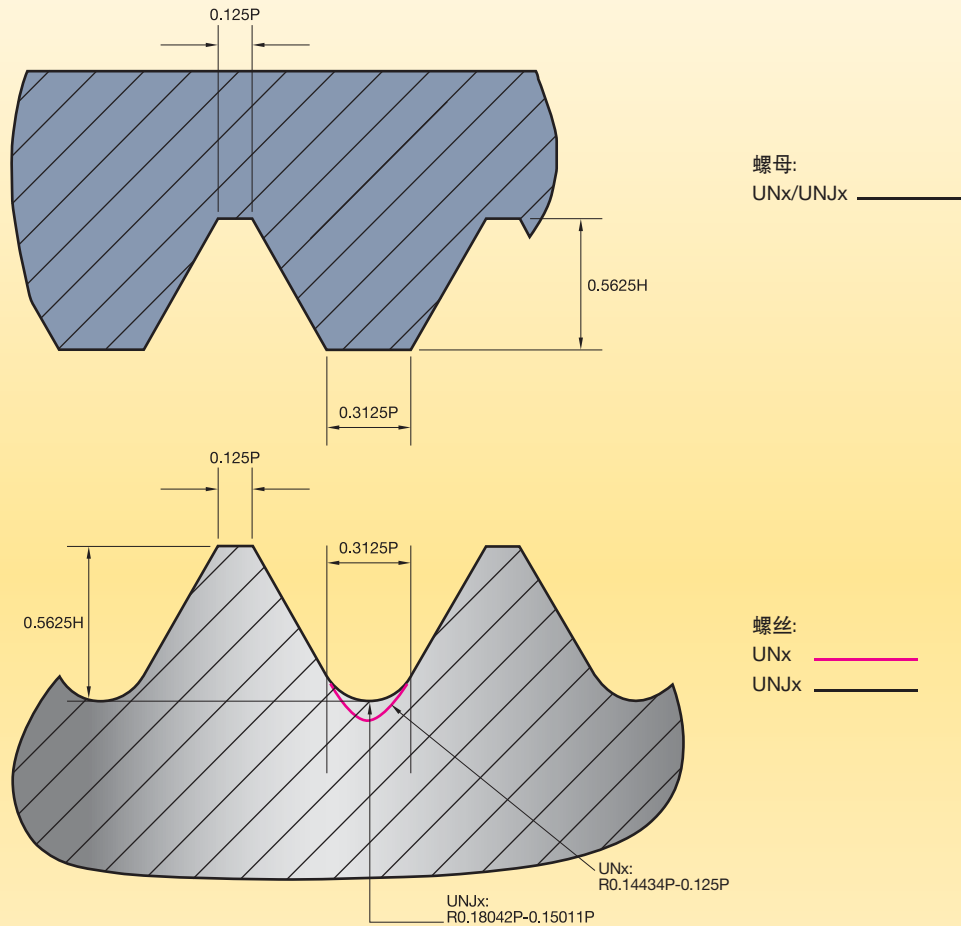


**中径**

在直螺纹上穿过螺纹的虚拟圆柱面所处的位置为螺纹宽度与圆柱表面去除后的表面宽度相等。



一种适合航天工业以及其它对抗疲劳强度有较高要求应用的螺纹系统。UNJ 螺纹牙型符合 ASME B1.15 标准，并与军用 MIL-S-8879 标准非常相似。螺纹装配件包括外螺纹和内螺纹。为了减少 UNJ 外螺纹上的应力，采用了相当于 0.15011P - 0.18042P 的可控牙底圆角，其中 P 为螺纹螺距。UNJ 内螺纹不要在其大径处或小径处有圆角。

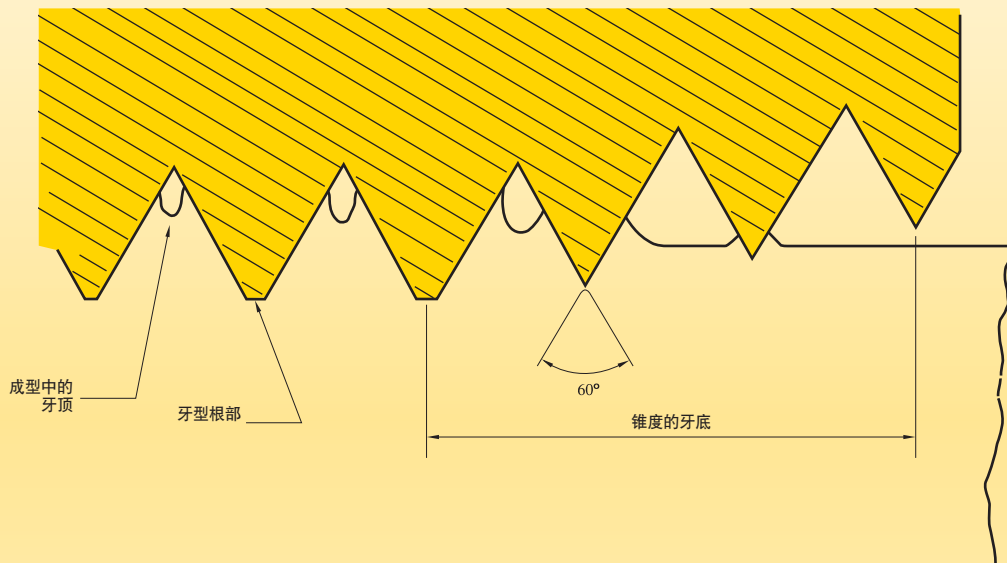


因为 UNJ 外螺纹在加工过程中需要确定的牙底半径，可能不能使用标准型 UN 刀具。但是，UNF 内螺纹在加工过程中可以使用磨削螺纹 UN 丝锥，并且具有适当的公差等级。不需要在丝锥上标记字母 J。必须对螺孔钻特别注意，因为需要标记出小径值，从而可提供牙底半径与外螺纹之间的间隙值。

了解 UNJ 螺纹参数，读者可以参考 ASME B1.15。请注意，该标准包括三级和二级 UNJ 螺纹。但是，仅有三级 UNJ 螺纹符合军用 MIL-S-8879 标准中的规定。了解统一英制 (UN) 螺纹参数，请参看 ASME B1.1。

与用来进行材料去除的切削丝锥不同，挤压丝锥可将材料移位并形成V型螺纹，从而加工出内螺纹。一种常见的误解是人们认为在加工中出现了螺纹滚轧过程。相反，在丝锥旋转进入孔内时，在丝锥锥形进刀处上方会形成螺纹。

接下来更深的钻进过程会在进口处上方，对丝锥螺纹侧面之间的材料形成径向塑性变形，直达到进口长度。在这个点上，将形成具有正确螺纹高度的完整螺纹。



与切削丝锥相比，挤压丝锥具有多种优势。明显的优势在于挤压丝锥不会形成切屑。不会导致排屑问题。鸟巢状切屑的形成是在对长切屑材料进行盲孔攻丝加工中，切屑缠绕在螺旋槽丝锥的刀杆上而导致的。挤压丝锥可以避免这种问题。因为挤压丝锥可以避免这种问题，因此产品更加坚固，并且具有更好的抗断裂性。另外一个误区是，挤压丝锥加工出的螺纹更加坚固。尽管在成型过程中，螺纹的侧面得到硬化，但对螺纹大径几乎没有任何效果，而这个部位正是内螺纹出现剥离的位置。

挤压丝锥仅能用于延性材料的加工。与切削丝锥相比，挤压丝锥在加工过程增大了摩擦系数，因此需要更大的加工扭矩。在有些情况下，需要使用油基润滑液，这种情况可能并不适合需要水基冷却液的CNC加工中心。在这种情况下，需要增加润滑液浓度。

因为挤压丝锥会造成材料的位移，因此需要更大直径的预钻孔。在将切削丝锥更换为挤压丝锥的情况下，这一点尤为重要。如果采用切削丝锥的预加工孔，位移材料将过度充塞于丝锥的齿牙之间，并导致齿牙断裂。请参看挤压丝锥加工孔参数表。

| 涂层                      | 属性和应用   | 防范措施   |
|-------------------------|---|--|
| 氮化钛 (TiN)               | 专利 TiN 涂层 (维氏硬度 2300) 具有显著改善的耐磨损性能和螺纹精加工性能, 在多种类型材料加工中, 特别是钢、铁, 和塑料材料加工中具有较高的攻丝速度性能。金色外观。                                     | 在例如铝之类的非铁材料应用中应谨慎使用, 因为可能产生刮擦磨损。                         |
| 碳氮化钛 (TiCN)             | 与 TiN 涂层相比, 专利 TiCN 涂层 (维氏硬度 3000) 是一种硬度更高, 韧性更好, 更加耐磨损的涂层, 适用于一般切削温度条件下的加工。与 TiN 相似, TiCN 可用于多种材料的高速切削应用, 特别是钢和铁材料的加工。蓝灰色外观。 | 在例如铝之类的非铁材料应用中应谨慎使用, 因为可能产生刮擦磨损。在超高温条件下, TiAlN 是一种更好的选择。 |
| 氮化钛 + 碳化铬 (TiN + CrC/C) | 专利涂层 (韦氏硬度为 2300) 产品, 将光滑的 TiN 涂层的耐磨性和碳化铬表层涂层的润滑性结合在一起。在不锈钢和包括铝和钛在内的非铁材料加工中非常高效。非常适合 300 系列不锈钢, 锻铝和铸铝材料的加工。黑色/灰色外观。           | 在铁基材料和非铁材料加工中都非常高效。                                      |
| 氮化钛铝 (TiAlN)            | 纳米 TiAlN 涂层 (韦氏硬度为 3300) 具有更好的耐磨性和螺纹精加工性能, 特别是在高温应用条件下有出色的表现。可用于 PH 不锈钢和类似于 INCONEL® 的镍基合金材料加工。紫罗兰色/灰色外观。                     | 在非铁材料应用中应谨慎使用, 因为可能产生刮擦磨损。                               |
| 氮化铬 (CrN)               | CrN 是一种中等硬度 (维氏硬度为 1800) 的涂层, 耐磨性比 TiN, TiCN 和 TiAlN 要低。但是, 与这些涂层不一样的是, CrN 在一些非铁材料加工中不会出现刮擦磨损。用于黄铜、青铜、锌合金, 以及锰合金材料的加工。银色外观。  | 在铁基材料加工中效率低。   |
| 氮化硼                     | 硬化表面确保在磨损性材料加工中有更长的磨损寿命。用于铝材料和非铁金属材料加工。   | 避免用于锥形管、陡螺旋, 小直径 (<#6), 以及密齿攻丝应用, 因为这将导致齿牙崩裂的可能。         |
| 氧化                      | 在铁基材料加工中可提高防刮擦磨损的性能。用于钢材料的平稳切削。用于钢、不锈钢、铁材料加工。   | 在非铁材料, 例如铝材料的加工中有导致刮擦磨损的可能。                              |
| 氮化和氧化处理                 | 将氮化和氧化表面处理的优点结合在一起。用于钢、不锈钢, 以及镍合金材料的加工。   | 参看氮氧化表面处理的防范措施。  |

确定攻丝速度的因素:

- 攻丝材料
- 丝锥上的切削锥长度
- 全螺纹切削比例
- 孔长度 (螺纹深度)
- 螺距
- 切削液
- 机床
- 水平或垂直攻丝

与其它多种刀具产品一样, 在计算丝锥加工速度时, 并不能确定准确的数值。

在使用其它种类刀具时, 可以在任何位置对每转进给量进行设定, 并且可根据具体情况进行变动。但丝锥则不同, 丝锥的每转进给量须保持为单个螺距距离。丝锥类型也会导致加工条件的变化。

举例而言, 在使用E型切削锥丝锥时, 在每个切削锥上的第一个齿牙切削出完整高度的螺纹; 而在使用锥形或初始丝锥时, 在形成完整高度的螺纹之前, 多个齿牙同时参与切削过程。

螺纹深度也会根据牙距而发生改变。牙距越大, 丝锥的每转进给量就越大, 去除的材料量就越多。

丝锥的进给方式, 以及驱动设备的类型也会对加工速度造成影响。如果丝锥采用机械进给方式, 并按照适当的进给率, 就可按照较高的速度进行加工; 如果采用手动进给, 并需要拉动机床上的某些工件时, 加工速度则较低。

可根据以下部分或全部因素调整加工速度:

- 在螺纹长度增加的情况下必须降低加工速度, 因为在较深螺纹孔中, 聚集的切屑会增加摩擦, 并影响润滑性能。
- 与B型切削锥丝锥相比, E型切削锥丝锥的加工速度应该更低。
- 在进行全高度螺纹攻丝加工中, 需要降低加工速度; 而在商业用 75% 高度螺纹加工中, 则可相对调高加工速度。
- 与相同直径的细牙丝锥相比, 较大直径的粗牙丝锥应当降低加工速度。
- 切削液的数量及质量会对加工速度的影响可达一倍。
- 包括管用丝锥在内的锥形螺纹丝锥的加工速度应为相同大径规格的直螺纹丝锥加工速度的 1/2-3/4。

## ■ RPM 计算公式

SFM = 每分钟表面英尺数

RPM = 每分钟转数

IPM = 每分钟英寸数

TPI = 每英寸螺纹牙数

S m/min = 每分钟表面米数

$\pi = 3.1416$

mm/min = 每分钟毫米

P = 牙距 (1/每英寸螺纹牙数)

### 英寸规格

$$\begin{aligned} \text{SFM} &= \frac{\text{RPM} \times \text{刀具直径}}{3.82} && \text{或} && 0.26 \times \text{RPM} \times \text{刀具直径} \\ \text{RPM} &= \frac{3.82 \times \text{SFM}}{\text{刀具直径}} \\ \text{IPM} &= \frac{\text{RPM}}{\text{TPI}^*} && \text{或} && *P \times \text{RPM} \end{aligned}$$

### 公制尺寸

$$\begin{aligned} \text{S m/min} &= \frac{\pi \times \text{刀具直径} \times \text{RPM}}{1000} \\ \text{RPM} &= \frac{\text{mm/min} \times 1000}{\pi \times \text{刀具直径}} \\ \text{mm/min} &= \text{mm P} \times \text{RPM} \end{aligned}$$

■ UNC/UNF 和 NPT/NPTF

| 丝锥规格  | 锥形管用<br>丝锥 | 每分钟表面英尺数 (SFM) |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------|------------|----------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |            | 5'             | 10' | 15' | 20'  | 25'  | 30'  | 40'  | 50'  | 60'  | 70'  | 80'  | 90'  | 100' | 110' | 120' | 130' | 140' | 150' |
|       |            | 每分钟转数 (RPM)    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0     | —          | 318            | 637 | 955 | 1273 | 1592 | 1910 | 2546 | 3183 | 3820 | 4456 | 5093 | 5729 | 6366 | 7003 | 7639 | 8276 | 8913 | 9549 |
| 1     | —          | 273            | 546 | 819 | 1046 | 1308 | 1570 | 2093 | 2617 | 3140 | 3663 | 4186 | 4710 | 5233 | 5756 | 6279 | 6805 | 7326 | 1849 |
| 2     | —          | 212            | 424 | 637 | 888  | 1110 | 1333 | 1777 | 2221 | 2665 | 3109 | 3554 | 3999 | 4442 | 4886 | 5330 | 5774 | 6218 | 6662 |
| 3     | —          | 191            | 382 | 573 | 772  | 964  | 1157 | 1543 | 1929 | 2315 | 2701 | 3086 | 3472 | 3858 | 4244 | 4629 | 5015 | 5401 | 5787 |
| 4     | —          | 174            | 347 | 521 | 682  | 853  | 1023 | 1364 | 1705 | 2046 | 2387 | 2728 | 3069 | 3411 | 3751 | 4092 | 4434 | 4775 | 5115 |
| 5     | —          | 147            | 294 | 441 | 611  | 764  | 917  | 1222 | 1528 | 1833 | 2139 | 2445 | 2750 | 3056 | 3361 | 3667 | 3973 | 4278 | 4584 |
| 6     | —          | 136            | 273 | 409 | 553  | 691  | 829  | 1106 | 1382 | 1659 | 1935 | 2212 | 2488 | 2766 | 3042 | 3318 | 3595 | 3871 | 4148 |
| 8     | —          | 119            | 239 | 358 | 466  | 583  | 699  | 932  | 1165 | 1398 | 1631 | 1864 | 2097 | 2330 | 2563 | 2796 | 3029 | 3262 | 3495 |
| 10    | —          | 101            | 201 | 302 | 402  | 502  | 603  | 804  | 1005 | 1205 | 1406 | 1607 | 1808 | 2009 | 2210 | 2411 | 2612 | 2813 | 3014 |
| 12    | —          | 87             | 174 | 260 | 354  | 442  | 531  | 707  | 884  | 1061 | 1238 | 1415 | 1592 | 1769 | 1945 | 2122 | 2300 | 2476 | 2653 |
| 1/4   | —          | 76             | 153 | 229 | 306  | 382  | 458  | 611  | 764  | 917  | 1070 | 1222 | 1375 | 1528 | 1681 | 1833 | 1986 | 2139 | 2292 |
| 5/16  | —          | 62             | 123 | 185 | 245  | 306  | 367  | 489  | 611  | 733  | 856  | 978  | 1100 | 1222 | 1345 | 1467 | 1589 | 1711 | 1833 |
| 3/8   | —          | 50             | 101 | 151 | 204  | 255  | 305  | 407  | 509  | 611  | 713  | 815  | 917  | 1019 | 1120 | 1222 | 1324 | 1426 | 1528 |
| 7/16  | 1/8        | 43             | 87  | 130 | 175  | 219  | 262  | 349  | 437  | 524  | 611  | 698  | 786  | 873  | 960  | 1048 | 1135 | 1222 | 1310 |
| 1/2   | —          | 38             | 76  | 115 | 153  | 191  | 229  | 305  | 382  | 458  | 535  | 611  | 688  | 764  | 840  | 917  | 993  | 1070 | 1146 |
| 9/16  | 1/4        | 34             | 68  | 102 | 137  | 172  | 206  | 274  | 342  | 410  | 478  | 547  | 616  | 683  | 752  | 820  | 888  | 952  | 1020 |
| 5/8   | —          | 32             | 64  | 96  | 122  | 153  | 183  | 244  | 306  | 367  | 428  | 489  | 550  | 611  | 672  | 733  | 794  | 856  | 917  |
| 11/16 | 3/8        | 28             | 55  | 83  | 111  | 138  | 167  | 222  | 278  | 333  | 389  | 444  | 500  | 556  | 611  | 667  | 722  | 778  | 833  |
| 3/4   | —          | 25             | 51  | 76  | 102  | 128  | 153  | 203  | 255  | 305  | 357  | 407  | 458  | 509  | 560  | 611  | 662  | 713  | 764  |
| 7/8   | 1/2        | 22             | 43  | 65  | 87   | 109  | 131  | 175  | 218  | 262  | 306  | 350  | 392  | 437  | 480  | 524  | 568  | 611  | 655  |
| 1     | —          | 19             | 38  | 57  | 76   | 96   | 115  | 153  | 191  | 230  | 268  | 305  | 344  | 382  | 420  | 458  | 497  | 535  | 573  |
| 1-1/8 | 3/4        | 17             | 34  | 51  | 68   | 84   | 102  | 136  | 170  | 204  | 238  | 272  | 306  | 340  | 373  | 407  | 441  | 475  | 509  |
| 1-1/4 | —          | 15             | 31  | 46  | 61   | 76   | 92   | 122  | 153  | 183  | 214  | 244  | 275  | 305  | 336  | 367  | 397  | 428  | 458  |
| 1-3/8 | 1          | 14             | 28  | 42  | 56   | 69   | 83   | 111  | 139  | 167  | 194  | 222  | 250  | 278  | 306  | 333  | 361  | 389  | 417  |
| 1-1/2 | —          | 13             | 25  | 38  | 51   | 63   | 76   | 102  | 127  | 153  | 178  | 204  | 229  | 255  | 280  | 305  | 331  | 356  | 382  |
| 1-5/8 | —          | 12             | 23  | 35  | 47   | 59   | 71   | 94   | 118  | 141  | 165  | 188  | 212  | 235  | 259  | 282  | 306  | 329  | 353  |
| 1-3/4 | —          | 11             | 22  | 33  | 44   | 55   | 65   | 87   | 109  | 131  | 153  | 175  | 196  | 218  | 240  | 262  | 284  | 306  | 327  |
| 1-7/8 | —          | 10             | 20  | 30  | 41   | 51   | 61   | 81   | 102  | 122  | 143  | 163  | 183  | 204  | 224  | 244  | 265  | 285  | 306  |
| 2     | —          | 9              | 19  | 29  | 38   | 48   | 57   | 76   | 96   | 115  | 134  | 153  | 172  | 191  | 210  | 229  | 248  | 267  | 287  |



■ 公制

| 公制丝锥 | Vc = 每分钟米数 (m/min) |     |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |
|------|--------------------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
|      | 1,5                | 3   | 4,5  | 6    | 7,5  | 10   | 12   | 15   | 18   | 21   | 24   | 27   | 30   | 33    | 36    | 39    | 42    | 45    |
|      | 每分钟转数 (RPM)        |     |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |
| M1   | 490                | 979 | 1469 | 1959 | 2449 | 2938 | 3918 | 4897 | 5877 | 6856 | 7836 | 8815 | 9795 | 10774 | 11754 | 12733 | 13713 | 14692 |
| M2   | 242                | 484 | 725  | 967  | 1209 | 1451 | 1934 | 2418 | 2901 | 3385 | 3868 | 4352 | 4835 | 5319  | 5803  | 6286  | 6770  | 7253  |
| M3   | 162                | 324 | 486  | 647  | 809  | 971  | 1295 | 1619 | 1942 | 2266 | 2590 | 2914 | 3237 | 3561  | 3885  | 4208  | 4532  | 4856  |
| M3.5 | 138                | 277 | 415  | 554  | 692  | 830  | 1107 | 1384 | 1661 | 1938 | 2214 | 2491 | 2768 | 3045  | 3322  | 3599  | 3875  | 4152  |
| M4   | 122                | 243 | 365  | 487  | 608  | 730  | 973  | 1217 | 1460 | 1703 | 1946 | 2190 | 2433 | 2676  | 2920  | 3163  | 3406  | 3650  |
| M5   | 97                 | 194 | 291  | 388  | 485  | 582  | 776  | 970  | 1163 | 1357 | 1551 | 1745 | 1939 | 2133  | 2327  | 2521  | 2715  | 2905  |
| M6   | 81                 | 162 | 243  | 324  | 405  | 486  | 647  | 809  | 971  | 1133 | 1295 | 1457 | 1619 | 1781  | 1942  | 2104  | 2266  | 2428  |
| M7   | 69                 | 138 | 208  | 277  | 346  | 415  | 554  | 692  | 830  | 969  | 1107 | 1246 | 1384 | 1522  | 1661  | 1799  | 1938  | 2076  |
| M8   | 61                 | 121 | 182  | 243  | 303  | 364  | 485  | 606  | 728  | 849  | 970  | 1091 | 1213 | 1334  | 1455  | 1577  | 1698  | 1819  |
| M10  | 48                 | 97  | 145  | 194  | 242  | 291  | 388  | 485  | 582  | 679  | 776  | 873  | 970  | 1067  | 1163  | 1260  | 1357  | 1454  |
| M12  | 40                 | 81  | 121  | 162  | 202  | 243  | 324  | 405  | 486  | 567  | 647  | 728  | 809  | 890   | 971   | 1052  | 1133  | 1214  |
| M14  | 35                 | 69  | 104  | 139  | 173  | 208  | 277  | 347  | 416  | 485  | 555  | 624  | 693  | 763   | 832   | 901   | 971   | 1040  |
| M16  | 30                 | 61  | 91   | 121  | 152  | 182  | 243  | 303  | 364  | 424  | 485  | 546  | 606  | 667   | 728   | 788   | 849   | 910   |
| M18  | 27                 | 54  | 81   | 108  | 135  | 162  | 216  | 269  | 323  | 377  | 431  | 485  | 539  | 593   | 647   | 700   | 754   | 808   |
| M20  | 24                 | 49  | 73   | 97   | 121  | 146  | 194  | 243  | 291  | 340  | 388  | 437  | 485  | 534   | 582   | 631   | 680   | 728   |
| M22  | 22                 | 44  | 66   | 88   | 110  | 132  | 176  | 221  | 265  | 309  | 353  | 397  | 441  | 485   | 529   | 573   | 618   | 662   |
| M24  | 20                 | 40  | 61   | 81   | 101  | 121  | 162  | 202  | 243  | 283  | 323  | 364  | 404  | 445   | 485   | 526   | 566   | 606   |
| M27  | 18                 | 36  | 54   | 72   | 90   | 108  | 144  | 180  | 216  | 252  | 287  | 323  | 359  | 395   | 431   | 467   | 503   | 539   |
| M30  | 16                 | 32  | 49   | 65   | 81   | 97   | 129  | 162  | 194  | 226  | 259  | 291  | 323  | 356   | 388   | 420   | 453   | 485   |

### 攻丝故障部分解决方案

| 应用       | 现象          | 常见原因           | 排除方法                                |
|----------|-------------|----------------|-------------------------------------|
| 普通应用     | 环规超限        | 丝锥规格与环规不配套     | 根据环规选择丝锥规格                          |
|          | 螺纹尺寸过大      | 工件对准, 主轴进给     | 校正                                  |
|          | 顶部尺寸过大      | 跳动或工件对准        | 校正                                  |
|          | 通规部分不过      | 刀具磨损, 丝锥导向能力减小 | 更换丝锥, 采用同步刀柄                        |
|          | 过切螺纹        | 进给错误, 轴向力过大    | 编程, 同步刀柄                            |
|          | 崩刃          | 切削力过大, 丝锥磨损    | 丝锥槽型, 更换丝锥                          |
|          | 破损          | 切屑阻塞排屑槽        | 丝锥槽型, 攻丝深度                          |
|          | —           | 刀具磨损, 高扭矩      | 更换新丝锥                               |
|          | 寿命短, 速度低    | 过度磨损           | SC 或 HSS-E-PM HP 丝锥                 |
| 钢        | 盲孔鸟巢切屑      | 长型, 延性切屑。      | T630 KP6505 (氧化处理), 断续进给            |
|          | 崩刃          | 材料硬度大          | T600, T602 KSP21 (TiN)              |
|          | 盲孔内破损       | 孔深 >2D, 切屑卡滞   | T604 KHS26 (TiN/MoS <sub>2</sub> )  |
| 不锈钢      | 螺纹尺寸过大, 寿命短 | 磨擦             | T620, T630 KM6515 (TiN-CrC/C)       |
|          | 寿命短         | 工件硬化型芯孔        | 更换钻头                                |
| 铸铁       | 过度磨损        | 磨损             | T640 KP6525 (TiCN)                  |
| 铸铝       | 过度磨损        | 高硅             | T640 KP6525 (TiCN)                  |
| 锻铝       | 螺纹尺寸过大      | 磨损             | T672, T682, T686 KSMN34 (TiN-CrC/C) |
| 镍基, 钴基合金 | 寿命短         | 切削温度高          | T690, T692, T694 KSP27 (AlCrTiN)    |
| 钛        | 寿命短         | 切削温度高          | T660, T662 KSSM24 (TiN-CrC/C)       |

### 螺纹铣刀

|           | 震动标记 | 主齿顶磨损                    | 崩刃                       | 锥形螺纹 | 进刀标记 |
|-----------|------|--------------------------|--------------------------|------|------|
| 切削速度      | 检查   | 减小                       | —                        | —    | —    |
| 每齿进给量     | 检查   | 增大                       | 减小                       | —    | —    |
| 工件夹持      | 改善   | 改善                       | 改善                       | —    | 改善   |
| 刀具稳定性。    | 改善   | 改善                       | 改善                       | —    | 改善   |
| 悬臂        | 缩短   | 缩短                       | —                        | —    | 缩短   |
| 螺旋角       | 增大   | 减小                       | —                        | —    | —    |
| 径向跳动      | 检查   | 检查                       | —                        | —    | —    |
| 涂层        | —    | 改善                       | 改善                       | —    | —    |
| 铣削加工      | —    | 顺铣                       | 顺铣                       | 顺铣   | —    |
| 线性进给/进刀坡度 | 检查   | 检查                       | —                        | —    | 改善   |
| 冷却剂压力     | —    | 检查<br>(>20 bar, 290 psi) | 检查<br>(>20 bar, 290 psi) | —    | —    |

| 钻头尺寸   | 十进制 (英寸) | 钻头尺寸   | 十进制 (英寸) | 钻头尺寸       | 十进制 (英寸) | 钻头尺寸   | 十进制 (英寸) | 钻头尺寸    | 十进制 (英寸) | 钻头尺寸    | 十进制 (英寸) |
|--------|----------|--------|----------|------------|----------|--------|----------|---------|----------|---------|----------|
| 0,30mm | .0118    | 54     | .0550    | 3,10mm     | .1220    | 5,50mm | .2165    | 8,50mm  | .3346    | 9/16    | .5625    |
| 0,32mm | .0126    | 1,40mm | .0551    | 1/18       | .1250    | 7/32   | .2188    | 8,60mm  | .3386    | 14,50mm | .5709    |
| 80     | .0135    | 1,45mm | .0571    | 3,20mm     | .1260    | 5,60mm | .2205    | R       | .3390    | 37/64   | .5781    |
| 0,35mm | .0138    | 1,50mm | .0591    | 30         | .1285    | 2      | .2210    | 8,70mm  | .3425    | 14,75mm | .5807    |
| 79     | .0145    | 53     | .0595    | 3,30mm     | .1299    | 5,70mm | .2244    | 11/32   | .3438    | 15,00mm | .5906    |
| 0,38mm | .0150    | 1,55mm | .0610    | 3,40mm     | .1339    | 1      | .2280    | 8,80mm  | .3465    | 19/32   | .5938    |
| 1/64   | .0156    | 1/16   | .0625    | 29         | .1360    | 5,80mm | .2283    | S       | .3480    | 15,25mm | .6004    |
| 0,40mm | .0157    | 1,60mm | .0630    | 3,50mm     | .1378    | 5,90mm | .2323    | 8,90mm  | .3504    | 39/64   | .6094    |
| 78     | .0160    | 52     | .0635    | 28         | .1405    | A      | .2340    | 9,00mm  | .3543    | 15,50mm | .6102    |
| 0,42mm | .0165    | 1,65mm | .0650    | 9/64       | .1406    | 15/64  | .2344    | T       | .3580    | 15,75mm | .6201    |
| 0,45mm | .0177    | 1,70mm | .0669    | 3,60mm     | .1417    | 6,00mm | .2362    | 9,10mm  | .3583    | 5/8     | .6250    |
| 77     | .0180    | 51     | .0670    | 27         | .1440    | B      | .2380    | 23/64   | .3594    | 16,00mm | .6299    |
| 0,48mm | .0189    | 1,75mm | .0689    | 3,70mm     | .1457    | 6,10mm | .2402    | 9,20mm  | .3622    | 16,25mm | .6398    |
| 0,50mm | .0197    | 50     | .0700    | 26         | .1470    | C      | .2420    | 9,30mm  | .3661    | 41/64   | .6406    |
| 76     | .0200    | 1,80mm | .0709    | 25         | .1495    | 6,20mm | .2441    | U       | .3680    | 16,50mm | .6496    |
| 75     | .0210    | 1,85mm | .0728    | 3,80mm     | .1496    | D      | .2460    | 9,40mm  | .3701    | 21/32   | .6562    |
| 0,55mm | .0217    | 49     | .0730    | 24         | .1520    | 6,30mm | .2480    | 9,50mm  | .3740    | 16,75mm | .6594    |
| 74     | .0225    | 1,90mm | .0748    | 3,90mm     | .1535    | 1/4, E | .2500    | 3/8     | .3750    | 17,00mm | .6693    |
| 0,60mm | .0236    | 48     | .0760    | 23         | .1540    | 6,40mm | .2520    | V       | .3770    | 43/64   | .6719    |
| 73     | .0240    | 1,95mm | .0768    | 5/32       | .1562    | 6,50mm | .2559    | 9,60mm  | .3780    | 17,25mm | .6791    |
| 0,62mm | .0244    | 5/64   | .0781    | 22         | .1570    | F      | .2570    | 9,70mm  | .3819    | 11/16   | .6875    |
| 72     | .0250    | 47     | .0785    | 4,00mm     | .1575    | 6,60mm | .2598    | 9,80mm  | .3858    | 17,50mm | .6890    |
| 0,65mm | .0256    | 2,00mm | .0787    | 21         | .1590    | G      | .2610    | W       | .3860    | 45/64   | .7031    |
| 71     | .0260    | 2,05mm | .0807    | 20         | .1610    | 6,70mm | .2638    | 9,90mm  | .3898    | 18,00mm | .7087    |
| 0,70mm | .0276    | 46     | .0810    | 4,10mm     | .1614    | 17/64  | .2656    | 25/64   | .3906    | 23/32   | .7188    |
| 70     | .0280    | 45     | .0820    | 4,20mm     | .1654    | H      | .2660    | 10,00mm | .3937    | 18,50mm | .7283    |
| 69     | .0292    | 2,10mm | .0827    | 19         | .1660    | 6,80mm | .2677    | X       | .3970    | 47/64   | .7344    |
| 0,75mm | .0295    | 2,15mm | .0846    | 4,30mm     | .1693    | 6,90mm | .2717    | 10,20mm | .4016    | 19,00mm | .7480    |
| 68     | .0310    | 44     | .0860    | 18         | .1695    | I      | .2720    | Y       | .4040    | 3/4     | .7500    |
| 1/32   | .0312    | 2,20mm | .0866    | 11/64      | .1719    | 7,00mm | .2756    | 13/32   | .4062    | 49/64   | .7656    |
| 0,80mm | .0315    | 2,25mm | .0886    | 17         | .1730    | J      | .2770    | Z       | .4130    | 19,50mm | .7677    |
| 67     | .0320    | 43     | .0890    | 4,40mm     | .1732    | 7,10mm | .2795    | 10,50mm | .4134    | 25/32   | .7812    |
| 66     | .0330    | 2,30mm | .0906    | 16         | .1770    | K      | .2810    | 27/64   | .4219    | 20,00mm | .7874    |
| 0,85mm | .0335    | 2,35mm | .0925    | 4,50mm     | .1772    | 9/32   | .2812    | 10,80mm | .4252    | 51/64   | .7969    |
| 65     | .0350    | 42     | .0935    | 15         | .1800    | 7,20mm | .2835    | 11,00mm | .4331    | 20,50mm | .8071    |
| 0,90mm | .0354    | 3/32   | .0938    | 4,60mm     | .1811    | 7,30mm | .2874    | 7/16    | .4375    | 13/16   | .8125    |
| 64     | .0360    | 2,40mm | .0945    | 14         | .1820    | L      | .2900    | 11,20mm | .4409    | 21,00mm | .8268    |
| 63     | .0370    | 41     | .0960    | 4,70mm, 13 | .1850    | 7,40mm | .2913    | 11,50mm | .4528    | 53/64   | .8281    |
| 0,95mm | .0374    | 2,45mm | .0965    | 3/16       | .1875    | M      | .2950    | 29/64   | .4531    | 27/32   | .8438    |
| 62     | .0380    | 40     | .0980    | 4,80mm, 12 | .1890    | 7,50mm | .2953    | 11,80mm | .4646    | 21,50mm | .8465    |
| 61     | .0390    | 2,50mm | .0984    | 11         | .1910    | 19/64  | .2969    | 15/32   | .4688    | 55/64   | .8594    |
| 1,00mm | .0394    | 39     | .0995    | 4,90mm     | .1929    | 7,60mm | .2992    | 12,00mm | .4724    | 22,00mm | .8661    |
| 60     | .0400    | 38     | .1015    | 10         | .1935    | N      | .3020    | 12,20mm | .4803    | 7/8     | .8750    |
| 59     | .0410    | 2,60mm | .1024    | 9          | .1960    | 7,70mm | .3031    | 31/64   | .4844    | 22,50mm | .8858    |
| 1,05mm | .0413    | 37     | .1040    | 5,00mm     | .1969    | 7,80mm | .3071    | 12,50mm | .4921    | 57/64   | .8906    |
| 58     | .0420    | 2,70mm | .1063    | 8          | .1990    | 7,90mm | .3110    | 1/2     | .5000    | 23,00mm | .9055    |
| 57     | .0430    | 36     | .1065    | 5,10mm     | .2008    | 5/16   | .3125    | 12,80mm | .5039    | 29/32   | .9062    |
| 1,10mm | .0433    | 7/64   | .1094    | 7          | .2010    | 8,00mm | .3150    | 13,00mm | .5118    | 59/64   | .9219    |
| 1,15mm | .0453    | 35     | .1100    | 13/64      | .2031    | O      | .3160    | 33/64   | .5156    | 23,50mm | .9252    |
| 56     | .0465    | 2,80mm | .1102    | 6          | .2040    | 8,10mm | .3189    | 13,20mm | .5197    | 15/16   | .9375    |
| 3/64   | .0469    | 34     | .1110    | 5,20mm     | .2047    | 8,20mm | .3228    | 17/32   | .5312    | 24,00mm | .9449    |
| 1,20mm | .0472    | 33     | .1130    | 5          | .2055    | P      | .3230    | 13,50mm | .5315    | 61/64   | .9531    |
| 1,25mm | .0492    | 2,90mm | .1142    | 5,30mm     | .2087    | 8,30mm | .3268    | 13,80mm | .5433    | 24,50mm | .9646    |
| 1,30mm | .0512    | 32     | .1160    | 4          | .2090    | 21/64  | .3281    | 35/64   | .5469    | 31/32   | .9688    |
| 55     | .0520    | 3,00mm | .1181    | 5,40mm     | .2126    | 8,40mm | .3307    | 14,00mm | .5512    | 25,00mm | .9843    |
| 1,35mm | .0531    | 31     | .1200    | 3          | .2130    | Q      | .3320    | 14,25mm | .5610    | 63/64   | .9844    |
| —      | —        | —      | —        | —          | —        | —      | —        | —       | —        | 1"      | 1.0000   |

■ 公制      ■ 分数制      ■ 标线制      ■ 字母制

### 定制丝锥产品表格

使用这份客户订单表订购产品，可以根据具体要求对现有产品数据进行修改。如果这些类别的产品不能满足客户的要求，请与当地的肯纳金属经销商联系。

我们的经销商和技术团队有着非常丰富的经验，可为客户提供良好的产品解决方案，值得客户的信赖。

1. 首先填写与客户产品规格最接近的标准型产品信息:

产品目录编号

材质/涂层

2. 所需丝锥类型:

|                                 |                                  |                               |                              |
|---------------------------------|----------------------------------|-------------------------------|------------------------------|
| <input type="checkbox"/> 整体硬质合金 | <input type="checkbox"/> 高性能 HSS | <input type="checkbox"/> 通用加工 | <input type="checkbox"/> 刃倾角 |
| <input type="checkbox"/> 方向     | <input type="checkbox"/> 挤压      | <input type="checkbox"/> 螺旋槽  |                              |
| _____ (以及类型)                    |                                  |                               | _____ 其它                     |

3. 切削方向 (圈选一个):

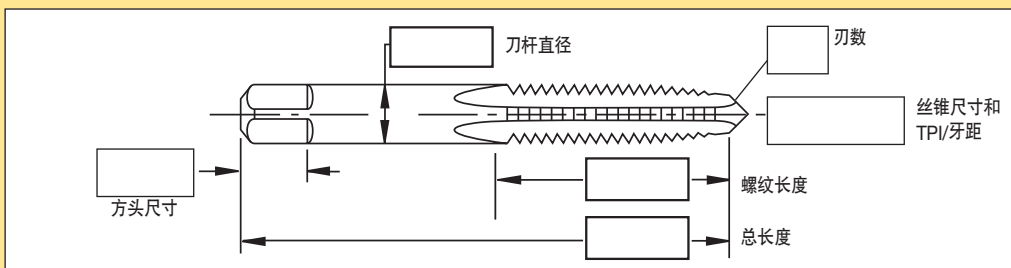
左手

右手

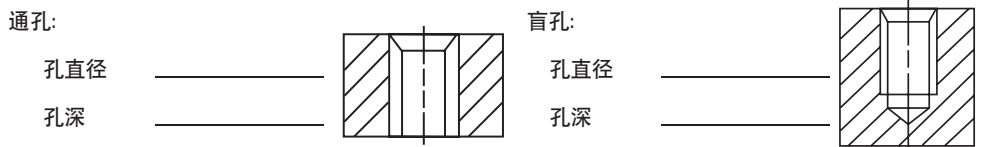
4. 材料概览:

ANSI  DIN  JIS  其它

5. 需要尺寸:



6. 选择一个:



7. 切削锥:

锥形: 7-10 个齿牙  切削锥: 3-5 个螺牙  半底: 2-3 个螺牙  底部: 1-2 个螺牙



8. 公差等级:

H 限度

公制 D 限度

中径限度

9. 工件材料:

10. 硬度:

11. 需要丝锥数量:

12. 价格

联系当地的肯纳金属授权经销商。

13. 其它要求:

|           |        |
|-----------|--------|
| 客户公司名称    | 日期     |
| 地址        | 电话号码   |
| 城市, 州, 邮编 | 传真机号码  |
| 客户联系人     | 客户电子邮箱 |
| 销售人员      |        |





了解将要进行攻丝加工材料的硬度，对于选择最适用的丝锥产品非常必要。

| 10 mm/min<br>球体<br>3000 kg | 120°<br>圆锥体<br>150 kg | 1/16"<br>球体<br>100 kg | C 型      | 1000磅<br>每平方英寸 | 10 mm/min<br>球体<br>3000 kg | 120°<br>圆锥体<br>150 kg | 1/16"<br>球体<br>100 kg | C 型      | 1000磅<br>每平方英寸 |
|----------------------------|-----------------------|-----------------------|----------|----------------|----------------------------|-----------------------|-----------------------|----------|----------------|
| 布氏硬度                       | 洛氏硬度 C                | 洛氏硬度 B                | 肖氏<br>硬度 | 抗拉<br>强度       | 布氏硬度                       | 洛氏硬度 C                | 洛氏硬度 B                | 肖氏<br>硬度 | 抗拉<br>强度       |
| 800                        | 72                    | -                     | 100      | -              | 276                        | 30                    | 105                   | 42       | 136            |
| 780                        | 71                    | -                     | 99       | -              | 269                        | 29                    | 104                   | 41       | 132            |
| 760                        | 70                    | -                     | 98       | -              | 261                        | 28                    | 103                   | 40       | 129            |
| 745                        | 68                    | -                     | 97       | 367            | 258                        | 27                    | 102                   | 39       | 127            |
| 725                        | 67                    | -                     | 96       | 357            | 255                        | 26                    | 102                   | 39       | 125            |
| 712                        | 66                    | -                     | 95       | 350            | 249                        | 25                    | 101                   | 38       | 123            |
| 682                        | 65                    | -                     | 93       | 337            | 245                        | 24                    | 100                   | 37       | 119            |
| 668                        | 64                    | -                     | 91       | 326            | 240                        | 23                    | 99                    | 36       | 117            |
| 652                        | 63                    | -                     | 89       | 318            | 237                        | 23                    | 99                    | 35       | 115            |
| 626                        | 62                    | -                     | 87       | 306            | 229                        | 22                    | 98                    | 34       | 113            |
| 614                        | 61                    | -                     | 85       | 299            | 224                        | 21                    | 97                    | 33       | 110            |
| 601                        | 60                    | -                     | 83       | 292            | 217                        | 20                    | 96                    | 33       | 107            |
| 590                        | 59                    | -                     | 81       | 290            | 211                        | 19                    | 95                    | 32       | 104            |
| 576                        | 57                    | -                     | 79       | 281            | 206                        | 18                    | 94                    | 32       | 102            |
| 552                        | 56                    | -                     | 76       | 270            | 203                        | 17                    | 94                    | 31       | 100            |
| 545                        | 55                    | -                     | 75       | 268            | 200                        | 16                    | 93                    | 31       | 98             |
| 529                        | 54                    | -                     | 74       | 259            | 196                        | 15                    | 92                    | 30       | 96             |
| 514                        | 53                    | 120                   | 72       | 254            | 191                        | 14                    | 92                    | 30       | 94             |
| 502                        | 52                    | 119                   | 70       | 247            | 187                        | 13                    | 91                    | 29       | 92             |
| 495                        | 51                    | 119                   | 69       | 244            | 185                        | 12                    | 91                    | 29       | 91             |
| 477                        | 49                    | 118                   | 67       | 233            | 183                        | 11                    | 90                    | 28       | 90             |
| 461                        | 48                    | 117                   | 66       | 227            | 180                        | 10                    | 89                    | 28       | 89             |
| 451                        | 47                    | 117                   | 65       | 223            | 175                        | 9                     | 88                    | 27       | 86             |
| 444                        | 46                    | 116                   | 64       | 219            | 170                        | 7                     | 87                    | 27       | 84             |
| 427                        | 46                    | 115                   | 62       | 209            | 167                        | 6                     | 87                    | 27       | 82             |
| 415                        | 44                    | 115                   | 60       | 204            | 165                        | 5                     | 86                    | 26       | 81             |
| 401                        | 43                    | 114                   | 58       | 196            | 163                        | 4                     | 85                    | 26       | 80             |
| 388                        | 42                    | 114                   | 57       | 191            | 160                        | 3                     | 84                    | 25       | 78             |
| 375                        | 41                    | 113                   | 55       | 184            | 156                        | 2                     | 83                    | 25       | 76             |
| 370                        | 40                    | 112                   | 54       | 182            | 154                        | 1                     | 82                    | 25       | 75             |
| 362                        | 39                    | 111                   | 53       | 179            | 152                        | -                     | 82                    | 24       | 74             |
| 351                        | 38                    | 111                   | 51       | 173            | 150                        | -                     | 81                    | 24       | 74             |
| 346                        | 37                    | 110                   | 50       | 170            | 147                        | -                     | 80                    | 24       | 72             |
| 341                        | 37                    | 110                   | 49       | 168            | 145                        | -                     | 79                    | 23       | 71             |
| 331                        | 36                    | 109                   | 47       | 163            | 143                        | -                     | 79                    | 23       | 70             |
| 323                        | 35                    | 109                   | 46       | 158            | 141                        | -                     | 78                    | 23       | 69             |
| 311                        | 34                    | 108                   | 46       | 153            | 140                        | -                     | 77                    | 22       | 69             |
| 301                        | 33                    | 107                   | 45       | 148            | 135                        | -                     | 75                    | 22       | 67             |
| 293                        | 32                    | 106                   | 44       | 144            | 130                        | -                     | 72                    | 22       | 65             |
| 285                        | 31                    | 105                   | 43       | 140            | -                          | -                     | -                     | -        | -              |

攻丝