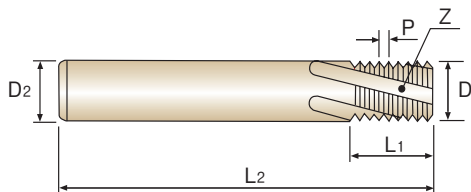


### UNF Solid Carbide Thread Mill for UNF Internal Thread - ANSI B 1.1 VOLLHARTMETALL GEWINDEFÄRÄSER für UNF INNENGEWINDE, ANSI B 1.1

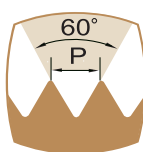
► Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



- Material : Solid Carbide
- Shank : DIN6535 HA
- Spiral Angle : 15°
- Thread Length : 2 × D

- Material : Vollhartmetall
- Schaft : DIN 6535 HA
- Drallwinkel : 15°
- Gewindelänge : 2 × D



Unit : mm

| EDP No.         | Nominal Diameter [ D ] | T.P.I | Cutter Diameter<br>D1 | Shank Diameter<br>D2 | Thread Length<br>L1 | Over All Length<br>L2 | No. of Flute<br>Z |
|-----------------|------------------------|-------|-----------------------|----------------------|---------------------|-----------------------|-------------------|
| <b>L1214420</b> | 1/4"                   | 28    | 5.0                   | 6                    | 13.6                | 57                    | 3                 |
| <b>L1214460</b> | 5/16"                  | 24    | 6.0                   | 6                    | 16.9                | 65                    | 3                 |
| <b>L1214500</b> | 3/8"                   | 24    | 8.0                   | 8                    | 20.1                | 72                    | 4                 |
| <b>L1214540</b> | 7/16"                  | 20    | 8.0                   | 8                    | 24.1                | 72                    | 4                 |
| <b>L1214580</b> | 1/2"                   | 20    | 10.0                  | 10                   | 26.7                | 80                    | 4                 |
| <b>L1214620</b> | 9/16"                  | 18    | 12.0                  | 12                   | 29.6                | 83                    | 4                 |
| <b>L1214660</b> | 5/8"                   | 18    | 12.0                  | 12                   | 33.9                | 92                    | 4                 |
| <b>L1214720</b> | 3/4"                   | 16    | 14.0                  | 14                   | 39.7                | 104                   | 5                 |

\* Other coatings are available on your request

| Carbon Steels | Alloy Steels | Heat Treated Steels | High Hardened Steel | Cast Iron | Stainless Steels | Titanium Alloy | Chrome-Nickel Alloy | Non Ferrous Materials |
|---------------|--------------|---------------------|---------------------|-----------|------------------|----------------|---------------------|-----------------------|
| ◎             | ◎            | ◎                   |                     | ◎         | ○                | ○              | ○                   | ◎                     |

◎ : Excellent ○ : Good

**RECOMMENDED CUTTING SPEED**  
**EMPFOHLENE SCHNEIDKONDITIONEN**
**RECOMMENDED CUTTING CONDITION for Thread Mills**

unit : mm

| Materials                                 | Cutting Speed<br>(m/min) | Feed per Tooth (fz)       |                           |
|---|--------------------------|---------------------------|---------------------------|
|   |                          | Cutter Diameter<br>≤ Ø8.0 | Cutter Diameter<br>> Ø8.0 |
| Low Carbon Steels<br>Medium Carbon Steels | 80 - 120                 | 0.02 - 0.04               | 0.04 - 0.10               |
| High Carbon Steels                        | 80 - 120                 | 0.02 - 0.04               | 0.04 - 0.10               |
| Alloy Steels                              | 80 - 120                 | 0.02 - 0.04               | 0.04 - 0.10               |
| Heat Treated Steels                       | 60 - 100                 | 0.02 - 0.04               | 0.04 - 0.10               |
| Stainless Steels                          | 40 - 80                  | 0.01 - 0.02               | 0.02 - 0.06               |
| Cast Iron                                 | 50 - 100                 | 0.02 - 0.04               | 0.04 - 0.10               |
| Chrome-Nickel Alloys<br>Titanium Alloys   | 20 - 60                  | 0.01 - 0.02               | 0.02 - 0.06               |
| Non Ferrous Materials                     | 100 - 300                | 0.03 - 0.07               | 0.05 - 0.10               |

**RECOMMENDED CUTTING CONDITION for Drill and Thread Mills**

unit : mm

| Material                                  | Cutting Speed<br>(m/min) | Fz(Thread Milling) - Feed per tooth |                           | Fdr(Drilling) - Feed per revolution |                           |
|---|--------------------------|-------------------------------------|---------------------------|-------------------------------------|---------------------------|
|   |                          | Cutter Diameter<br>≤ Ø8.0           | Cutter Diameter<br>> Ø8.0 | Cutter Diameter<br>≤ Ø8.0           | Cutter Diameter<br>> Ø8.0 |
| Cast Iron                                 | 80-150                   | 0.03-0.08                           | 0.08-0.12                 | 0.10-0.20                           | 0.20-0.25                 |
| Aluminium<br>Aluminium-alloy<br>Magnesium | 100-300                  | 0.05-0.10                           | 0.10-0.15                 | 0.10-0.20                           | 0.20-0.30                 |
| Plastics                                  | 80-150                   | 0.05-0.10                           | 0.10-0.15                 | 0.10-0.20                           | 0.20-0.30                 |

**RECOMMENDED CUTTING CONDITION  
for Hard Material Miniature Thread Mills**

unit : mm

| Materials                               | Cutting Speed<br>(m/min) | Feed(mm/tooth)            |                           |
|---|--------------------------|---------------------------|---------------------------|
|   |                          | Cutter Diameter<br>≤ Ø6.0 | Cutter Diameter<br>> Ø6.0 |
| Alloy Steel ≥ HB325                     | 80-120                   | 0.02-0.04                 | 0.04-0.06                 |
| Stainless Steel ≥ HB330                 | 40-80                    | 0.02-0.04                 | 0.04-0.06                 |
| Cast Iron                               | 50-100                   | 0.03-0.05                 | 0.05-0.07                 |
| Chrome-Nickel Alloys<br>Titanium Alloys | 20-60                    | 0.02-0.03                 | 0.03-0.05                 |
| Hardened Material                       | 45~50HRc                 | 25-70                     | 0.03-0.05                 |
|   | 51~55HRc                 | 25-60                     | 0.02-0.04                 |
|   | 56~62HRc                 | 25-50                     | 0.01-0.03                 |