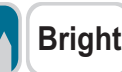
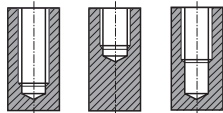


# UNF

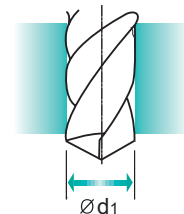
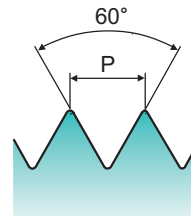
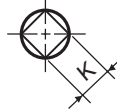
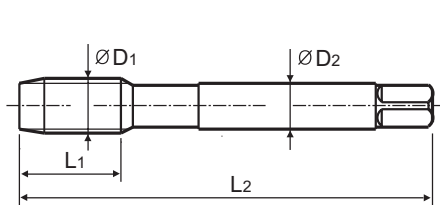
## Unified fine threads Unified Feingewinde

► For using multi-purpose, and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

**Hole type**


Machine taps  
Maschinengewindebohrer



Unit : mm

| SIZE  | TPI     | EDP No.         | Thread Length | Overall Length | Shank Diameter | Square Size | Tapping drill diameter |
|-------|---------|-----------------|---------------|----------------|----------------|-------------|------------------------|
| ØD1   |         |                 | L1            | L2             | ØD2            | K           | Ød1                    |
| #4    | - 48UNF | <b>TC864182</b> | 6             | 56             | 3.5            | 2.7         | 2.4                    |
| #5    | - 44UNF | <b>TC864222</b> | 7             | 56             | 3.5            | 2.7         | 2.7                    |
| #6    | - 40UNF | <b>TC864262</b> | 7             | 56             | 4              | 3           | 3                      |
| #8    | - 36UNF | <b>TC864302</b> | 8             | 63             | 4.5            | 3.4         | 3.5                    |
| #10   | - 32UNF | <b>TC864342</b> | 10            | 70             | 6              | 4.9         | 4.1                    |
| #12   | - 28UNF | <b>TC864382</b> | 10            | 80             | 6              | 4.9         | 4.7                    |
| 1/4"  | - 28UNF | <b>TC864422</b> | 10            | 80             | 7              | 5.5         | 5.5                    |
| 5/16" | - 24UNF | <b>TC864462</b> | 10            | 90             | 8              | 6.2         | 6.9                    |
| 3/8"  | - 24UNF | <b>TC864502</b> | 10            | 100            | 9              | 7           | 8.5                    |
| 7/16" | - 20UNF | <b>TC864542</b> | 13            | 100            | 8              | 6.2         | 9.9                    |
| 1/2"  | - 20UNF | <b>TC864582</b> | 13            | 100            | 9              | 7           | 11.5                   |
| 9/16" | - 18UNF | <b>TC864622</b> | 15            | 100            | 11             | 9           | 12.9                   |
| 5/8"  | - 18UNF | <b>TC864662</b> | 15            | 100            | 12             | 9           | 14.5                   |
| 3/4"  | - 16UNF | <b>TC864722</b> | 17            | 110            | 14             | 11          | 17.5                   |
| 7/8"  | - 14UNF | <b>TC864762</b> | 17            | 125            | 18             | 14.5        | 20.5                   |
| 1"    | - 12UNF | <b>TC864802</b> | 20            | 140            | 20             | 16          | 23.25                  |

► DIN371 (#4~3/8") and DIN374 (7/16"~1")

► Coating(TiN, TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

Unit : N/mm<sup>2</sup>

◎ : Excellent ○ : Good

|                 |             |                |                 |                  |                  |                 |                  |               |               |                |                |                    |                   |                |
|-----------------|-------------|----------------|-----------------|------------------|------------------|-----------------|------------------|---------------|---------------|----------------|----------------|--------------------|-------------------|----------------|
| Steel < 400     | Steel < 700 | Steel < 850    | St. Alloy < 850 | St. Alloy ≤ 1200 | St. Alloy > 1200 | INOX Free < 850 | INOX Aust. < 850 | INOX < 1000   | GG Cast < 500 | GG Cast < 1000 | GGG Cast < 700 | GGG Cast < 1000    | Ti < 700          | Ti Alloy < 900 |
| ◎               | ◎           | ◎              | ◎               | ◎                | ◎                | ◎               | ◎                | ◎             | ◎             | ◎              | ◎              | ◎                  | ◎                 | ◎              |
| Ti Alloy ≤ 1300 | Ni < 500    | Ni Alloy < 900 | Ni Alloy ≤ 1400 | Cu < 350         | Cu Alloy Short   | Cu Alloy Long   | Cu-Al-Fe < 1500  | Al / Mg < 350 | Al Wrought    | Al Si ≤ 10%    | Al Si > 10%    | Plastic Thermosoft | Plastic Thermoset | Plastic FRP    |
| ◎               | ◎           | ◎              | ◎               | ◎                | ◎                | ◎               | ◎                | ◎             | ◎             | ◎              | ◎              | ◎                  | ◎                 | ◎              |

## RECOMMENDED TAPPING SPEEDS

| Work Materials   |   | Spiral Flute | Tapping Speed | Gun point   | Tapping Speed |
|------------------|---|--------------|---------------|-------------|---------------|
|                  |   | TC814,TC834  | (m/min)       | TC804,TC824 | (m/min)       |
| Steels           | Structure steels  | ●            | 15 ~ 20       | ●           | 15 ~ 20       |
|                  | Plain carbon steels                                     | ●            | 12 ~ 18       | ●           | 12 ~ 18       |
|                  | Alloy steels up to 850N/mm <sup>2</sup>                 | ●            | 10 ~ 15       | ●           | 10 ~ 15       |
|                  | Hardened & Tempered steels up to 1,200N/mm <sup>2</sup> | ○            | 6 ~ 10        | ○           | 6 ~ 10        |
| Stainless steels | Free machining  | ●            | 7 ~ 10        | ●           | 7 ~ 10        |
|                  | Austenitic  | ●            | 5 ~ 8         | ●           | 5 ~ 8         |
| Cast iron        | Grey Cast irons up to 500N/mm <sup>2</sup>              | ○            | 10 ~ 15       | ○           | 10 ~ 15       |
|                  | Malleable Cast irons up to 700N/mm <sup>2</sup>         | ○            | 10 ~ 15       | ○           | 10 ~ 15       |
|                  | Nodular graphite up to 700N/mm <sup>2</sup>             | ○            | 10 ~ 15       | ○           | 10 ~ 15       |
| Aluminum         | Alloyed Aluminum, Si<10%                                | ○            | 15 ~ 20       | ○           | 15 ~ 20       |
|                  | Alloyed Aluminum, Si>10%                                | ●            | 10 ~ 15       | ●           | 10 ~ 15       |
| Titanium         | Unalloyed Titanium                                      | ●            | 10 ~ 15       | ●           | 10 ~ 15       |
|                  | Alloyed Titanium up to 900N/mm <sup>2</sup>             | ○            | 8 ~ 12        | ○           | 8 ~ 12        |
| Nickel           | Unalloyed Nickel  | ●            | 8 ~ 12        | ●           | 8 ~ 12        |
|                  | Alloyed Nickel up to 900N/mm <sup>2</sup>               | ○            | 10 ~ 15       | ○           | 10 ~ 15       |
| Copper           | Unalloyed Copper  | ●            | 8 ~ 12        | ●           | 8 ~ 12        |
|                  | Long chipping Copper                                    | ●            | 15 ~ 20       | ●           | 15 ~ 20       |
| Brass            | Long chipping Brass                                     | ●            | 15 ~ 20       | ●           | 15 ~ 20       |
| Bronze           | Long chipping Bronze                                    | ●            | 15 ~ 20       | ●           | 15 ~ 20       |

● : RECOMMENDED  
○ : SUITABLE

**International  
patent**

### FEATURES OF COMBO TAP

1. Thread configuration with a special design. (International patent )
  - \* Prevents over-feeding, thin thread and pitch diameter oversize.
2. Flute geometry with special design.
  - \* Better chip evacuation.
  - \* Prevents chip clogging.
  - \* Improves thread quality.
3. Applicable for wide applications.
  - \* Blind and through holes.
4. Excellent performance on various materials.
  - \* Carbon Steels, Alloyed Steels, Tool Steel etc.