



Leading Through Innovation

HSS-E

COMBO TAP

COMBO GEWINDEBOHRER

- For Multi Purpose Tapping
- Für Mehrbereichs-Gewindebohren



1st-cut

Andreas Stolze e.K.

Prozessoptimierung
Zerspanungslösung
Werkzeugvertrieb



Fragen zum Produkt oder
Individuelles Angebot?

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Andreas Stolze
Anwendungsspezialist

www.1st-cut.de

SELECTION GUIDE



HSS-E COMBO TAP

HSS-E TAPS for Multi-Purpose

Please visit globalyg1.com/mat for material search. Recommended cutting conditions : p.B130

Table with columns: ISO, VDI 3323, Material Description, Composition / Structure / Heat Treatment, HB, HRC, and a grid of suitability circles for various hole types and materials.

Table with columns: HOLE TYPE, TOOL MATERIAL, CHAMFER LEAD ACC. TO DIN2197, FLUTE TYPE, SPIRAL FLUTE ANGLE, and SURFACE TREATMENT.

Table with columns: MODEL and a grid of suitability circles for various hole types and materials.

Table with columns: HOLE TYPE, TOOL MATERIAL, CHAMFER LEAD ACC. TO DIN2197, FLUTE TYPE, SPIRAL FLUTE ANGLE, and SURFACE TREATMENT.

Table with columns: MODEL and a grid of suitability circles for various hole types and materials.

SELECTION GUIDE



HSS-E COMBO TAP

HSS-E TAPS for Multi-Purpose

Please visit globalyg1.com/mat for material search. Recommended cutting conditions : p.B130

Table with columns: ISO, VDI 3323, Material Description, Composition / Structure / Heat Treatment, HB, HRC, and a grid of suitability circles for various hole types and materials.

Table with columns: HOLE TYPE, TOOL MATERIAL, CHAMFER LEAD ACC. TO DIN2197, FLUTE TYPE, SPIRAL FLUTE ANGLE, and a grid of model numbers (TC, TD, TB, TCJ, TDJ, TBJ) for different series (M, MF, UNC, UNF, BSW, G(BSP), EG-M, EG-UNC, EG-UNF).

Table with columns: SURFACE TREATMENT (Bright, TIN, VAP) and MODEL, showing images of different tap finishes.

Max. 3.0xD Through Hole

Large table with columns: HSS-E, and a grid of suitability circles for various hole types and materials, similar to the left page but with a different grid layout.

COMBO TAP SETS

Combo Spiral Flute Taps

TB804SET5 TC804SET7

VAP Bright

5pcs 7pcs

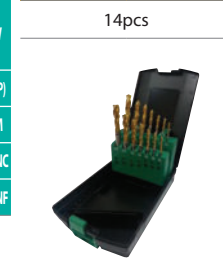


Combo Spiral Flute Taps + Gold-P Drill

TD804SET7-GLP195

TIN

14pcs



p.B129



Vap **TB804** SERIES
Bright **TC804** SERIES
TiN **TD804** SERIES

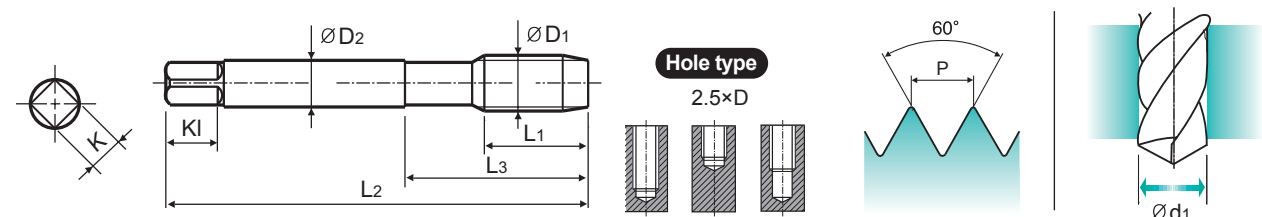
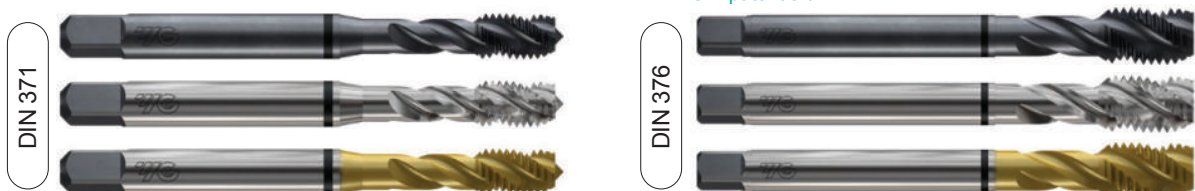
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 371/376 6H 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-------------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | Vap | Bright | TiN | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| M2 × 0.4 | | TB804136 | TC804136 | TD804136 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.6 |
| M2.2 × 0.45 | | - | TC804156 | - | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.75 |
| M2.3 × 0.4 | | TB804196 | TC804196 | TD804196 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.9 |
| M2.5 × 0.45 | | TB804176 | TC804176 | TD804176 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.05 |
| M2.6 × 0.45 | | TB804496 | TC804496 | TD804496 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.1 |
| M3 × 0.5 | | TB804206 | TC804206 | TD804206 | 6 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M3.5 × 0.6 | | - | TC804226 | TD804226 | 7 | 56 | 20 | 4 | 3 | 6 | 3 | 2.9 |
| M4 × 0.7 | | TB804246 | TC804246 | TD804246 | 7 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M4.5 × 0.75 | | TB804266 | TC804266 | TD804266 | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.7 |
| M5 × 0.8 | | TB804286 | TC804286 | TD804286 | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 × 1.0 | | TB804316 | TC804316 | TD804316 | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M7 × 1.0 | | TB804346 | TC804346 | TD804346 | 10 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6 |
| M8 × 1.25 | | TB804366 | TC804366 | TD804366 | 13 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M9 × 1.25 | | TB804396 | TC804396 | TD804396 | 13 | 90 | 35 | 9 | 7 | 10 | 3 | 7.8 |
| M10 × 1.5 | | TB804426 | TC804426 | TD804426 | 15 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M11 × 1.5 | | TB804466 | TC804466 | - | 17 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.5 |
| M12 × 1.75 | | TB804506 | TC804506 | TD804506 | 18 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 × 2.0 | | TB804546 | TC804546 | TD804546 | 20 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 × 2.0 | | TB804606 | TC804606 | TD804606 | 20 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 × 2.5 | | TB804656 | TC804656 | TD804656 | 25 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |
| M20 × 2.5 | | TB804706 | TC804706 | TD804706 | 25 | 140 | 54 | 16 | 12 | 15 | 4 | 17.5 |
| M22 × 2.5 | | TB804746 | TC804746 | TD804746 | 25 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |

► DIN 371(M2~M10) and DIN 376(M11~M52)
► The other coating(TiCN or TiAlN) is available on your request.

► NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRC | 13 | 25 | 28 | 32 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | H | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|----|-----------------------------|----|----|-------|-----------------|----|----------------|-------------------|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRC | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 15 | 30 | 25 | 38 | 34 | 400Rm | 1050Rm | 55 | 60 | 42 | 55 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |



Vap **TB804** SERIES
Bright **TC804** SERIES
TiN **TD804** SERIES

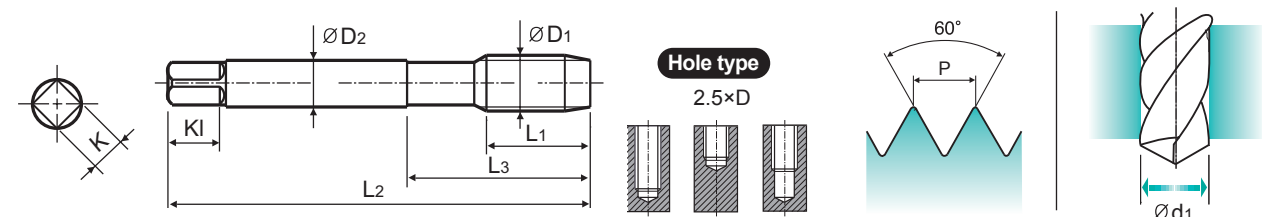
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 371/376 6H 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | Vap | Bright | TiN | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| M24 × 3.0 | | TB804786 | TC804786 | TD804786 | 30 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21 |
| M27 × 3.0 | | TB804866 | TC804866 | TD804866 | 30 | 160 | 60 | 20 | 16 | 19 | 4 | 24 |
| M30 × 3.5 | | TB804946 | TC804946 | TD804946 | 35 | 180 | 70 | 22 | 18 | 21 | 4 | 26.5 |
| M33 × 3.5 | | - | TC804A46 | TD804A46 | 35 | 180 | 70 | 25 | 20 | 23 | 4 | 29.5 |
| M36 × 4.0 | | - | TC804B36 | TD804B36 | 40 | 200 | 80 | 28 | 22 | 25 | 4 | 32.0 |
| M39 × 4.0 | | - | TC804C06 | TD804C06 | 40 | 200 | 80 | 32 | 24 | 27 | 4 | 35.0 |
| M42 × 4.5 | | - | TC804C86 | TD804C86 | 45 | 200 | 85 | 32 | 24 | 27 | 4 | 37.5 |
| M45 × 4.5 | | - | TC804D56 | TD804D56 | 45 | 220 | 85 | 36 | 29 | 32 | 4 | 40.5 |
| M48 × 5.0 | | - | TC804E26 | TD804E26 | 50 | 250 | 90 | 36 | 29 | 32 | 4 | 43.0 |
| M52 × 5.0 | | - | TC804F36 | TD804F36 | 50 | 250 | 90 | 40 | 32 | 35 | 4 | 47.0 |

► DIN 371(M2~M10) and DIN 376(M11~M52)
► The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRC | 13 | 25 | 28 | 32 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | H | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|----|-----------------------------|----|----|-------|-----------------|----|----------------|-------------------|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRC | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 15 | 30 | 25 | 38 | 34 | 400Rm | 1050Rm | 55 | 60 | 42 | 55 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |

YG COMBO TAP

Vap **TBE05** SERIES
Bright **TCE05** SERIES
TiN **TDE05** SERIES

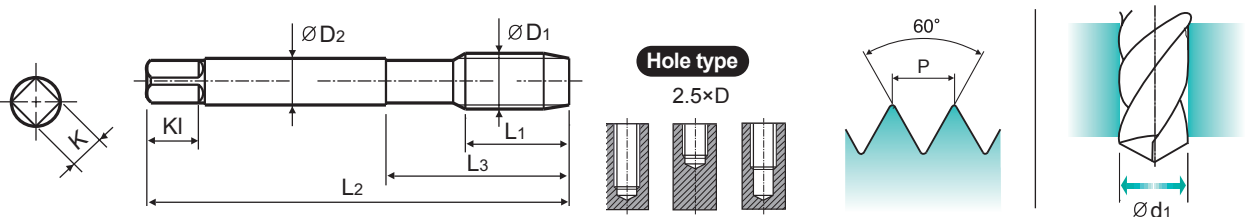
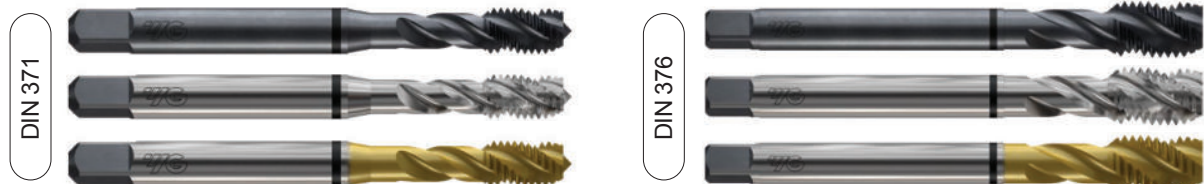
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 371/376 4H 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-------------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 | | | |
| M2 × 0.4 | | TBE05136 | TCE05136 | TDE05136 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.6 |
| M2.2 × 0.45 | | TBE05156 | TCE05156 | TDE05156 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.75 |
| M2.3 × 0.4 | | TBE05196 | TCE05196 | TDE05196 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.9 |
| M2.5 × 0.45 | | TBE05176 | TCE05176 | TDE05176 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.05 |
| M2.6 × 0.45 | | TBE05496 | TCE05496 | - | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.1 |
| M3 × 0.5 | | TBE05206 | TCE05206 | TDE05206 | 6 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M3.5 × 0.6 | | TBE05226 | TCE05226 | TDE05226 | 7 | 56 | 20 | 4 | 3 | 6 | 3 | 2.9 |
| M4 × 0.7 | | TBE05246 | TCE05246 | TDE05246 | 7 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M4.5 × 0.75 | | TBE05266 | TCE05266 | TDE05266 | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.7 |
| M5 × 0.8 | | TBE05286 | TCE05286 | TDE05286 | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 × 1.0 | | TBE05316 | TCE05316 | TDE05316 | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M7 × 1.0 | | TBE05346 | TCE05346 | TDE05346 | 10 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6 |
| M8 × 1.25 | | TBE05366 | TCE05366 | TDE05366 | 13 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M9 × 1.25 | | TBE05396 | TCE05396 | TDE05396 | 13 | 90 | 35 | 9 | 7 | 10 | 3 | 7.8 |
| M10 × 1.5 | | TBE05426 | TCE05426 | TDE05426 | 15 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M11 × 1.5 | | TBE05466 | TCE05466 | TDE05466 | 17 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.5 |
| M12 × 1.75 | | TBE05506 | TCE05506 | TDE05506 | 18 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 × 2.0 | | - | TCE05546 | TDE05546 | 20 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 × 2.0 | | TBE05606 | TCE05606 | TDE05606 | 20 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 × 2.5 | | TBE05656 | TCE05656 | TDE05656 | 25 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |
| M20 × 2.5 | | TBE05706 | TCE05706 | TDE05706 | 25 | 140 | 54 | 16 | 12 | 15 | 4 | 17.5 |
| M22 × 2.5 | | TBE05746 | TCE05746 | TDE05746 | 25 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |
| M24 × 3.0 | | TBE05786 | TCE05786 | TDE05786 | 30 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21 |
| M27 × 3.0 | | TBE05866 | TCE05866 | TDE05866 | 30 | 160 | 60 | 20 | 16 | 19 | 4 | 24 |
| M30 × 3.5 | | TBE05946 | TCE05946 | TDE05946 | 35 | 180 | 70 | 22 | 18 | 21 | 4 | 26.5 |

► DIN 371(M2~M10) and DIN 376(M11~M30)
► The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | | | | |
|-------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----|-----|-----------------|-----|-----|-----|----------------|-----|-------------------|--|---------------------|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | | | Stainless steel | | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | |
| HRC | 13 | 25 | 28 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | | | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 | | | |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | | | |

| ISO | N | | | | | | | | | | S | | | | | | H | | | | | | |
|-------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|-----|-----|-----------------------------|-----|-------|-----------------|-----|----------------|-----|-------------------|--|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | | Heat Resistant Super Alloys | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | |
| HRC | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 | | |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | | | |

YG COMBO TAP

Vap **TBE06** SERIES
Bright **TCE06** SERIES
TiN **TDE06** SERIES

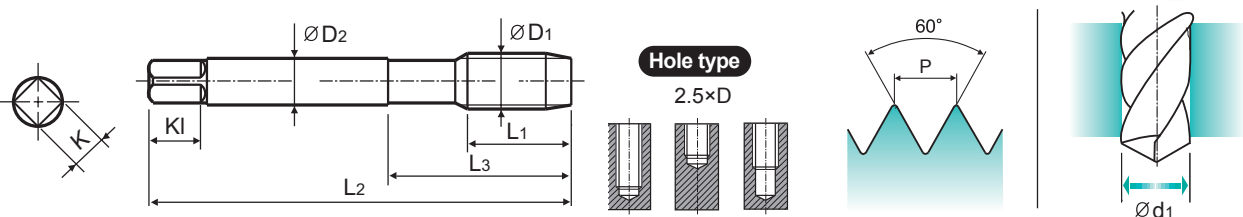
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 371/376 6H+0.1 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-------------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 | | | |
| M2 × 0.4 | | TBE06136 | TCE06136 | TDE06136 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.7 |
| M2.2 × 0.45 | | TBE06156 | TCE06156 | TDE06156 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.85 |
| M2.3 × 0.4 | | TBE06196 | TCE06196 | TDE06196 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 2 |
| M2.5 × 0.45 | | - | TCE06176 | TDE06176 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.15 |
| M2.6 × 0.45 | | TBE06496 | TCE06496 | TDE06496 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.2 |
| M3 × 0.5 | | TBE06206 | TCE06206 | - | 6 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.6 |
| M3.5 × 0.6 | | TBE06226 | TCE06226 | TDE06226 | 7 | 56 | 20 | 4 | 3 | 6 | 3 | 3 |
| M4 × 0.7 | | TBE06246 | TCE06246 | TDE06246 | 7 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.4 |
| M4.5 × 0.75 | | TBE06266 | TCE06266 | TDE06266 | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.8 |
| M5 × 0.8 | | TBE06286 | TCE06286 | TDE06286 | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.3 |
| M6 × 1.0 | | TBE06316 | TCE06316 | TDE06316 | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5.1 |
| M7 × 1.0 | | TBE06346 | TCE06346 | TDE06346 | 10 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6.1 |
| M8 × 1.25 | | TBE06366 | TCE06366 | TDE06366 | 13 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.9 |
| M9 × 1.25 | | TBE06396 | TCE06396 | TDE06396 | 13 | 90 | 35 | 9 | 7 | 10 | 3 | 7.9 |
| M10 × 1.5 | | TBE06426 | TCE06426 | TDE06426 | 15 | 100 | 39 | 10 | 8 | 11 | 3 | 8.6 |
| M11 × 1.5 | | TBE06466 | TCE06466 | TDE06466 | 17 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.6 |
| M12 × 1.75 | | TBE06506 | TCE06506 | TDE06506 | 18 | 110 | 44 | 9 | 7 | 10 | 3 | 10.3 |
| M14 × 2.0 | | TBE06546 | TCE06546 | TDE06546 | 20 | 110 | 44 | 11 | 9 | 12 | 3 | 12.1 |
| M16 × 2.0 | | TBE06606 | TCE06606 | TDE06606 | 20 | 110 | 44 | 12 | 9 | 12 | 3 | 14.1 |
| M18 × 2.5 | | TBE06656 | TCE06656 | TDE06656 | 25 | 125 | 50 | 14 | 11 | 14 | 4 | 15.6 |
| M20 × 2.5 | | TBE06706 | TCE06706 | TDE06706 | 25 | 140 | 54 | 16 | 12 | 15 | 4 | 17.6 |
| M22 × 2.5 | | TBE06746 | TCE06746 | TDE06746 | 25 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.6 |
| M24 × 3.0 | | - | TCE06786 | TDE06786 | 30 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21.1 |
| M27 × 3.0 | | TBE06866 | TCE06866 | TDE06866 | 30 | 160 | 60 | 20 | 16 | 19 | 4 | 24.1 |
| M30 × 3.5 | | TBE06946 | TCE06946 | TDE06946 | 35 | 180 | 70 | 22 | 18 | 21 | 4 | 26.6 |

► DIN 371(M2~M10) and DIN 376(M11~M30)
► The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | | | | |
|-------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----|-----|-----------------|-----|-----|-----|----------------|-----|-------------------|--|---------------------|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | | | Stainless steel | | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | |
| HRC | 13 | 25 | 28 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | | | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 | | | |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | | | |

| ISO | N | | | | | | | | | | S | | | | | | H | | | | | | |
|-------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|-----|-----|-----------------------------|-----|-------|-----------------|-----|----------------|-----|-------------------|--|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | | Heat Resistant Super Alloys | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | |
| HRC | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 | | |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | | | |



Vap **TBE07** SERIES
Bright **TCE07** SERIES
TiN **TDE07** SERIES

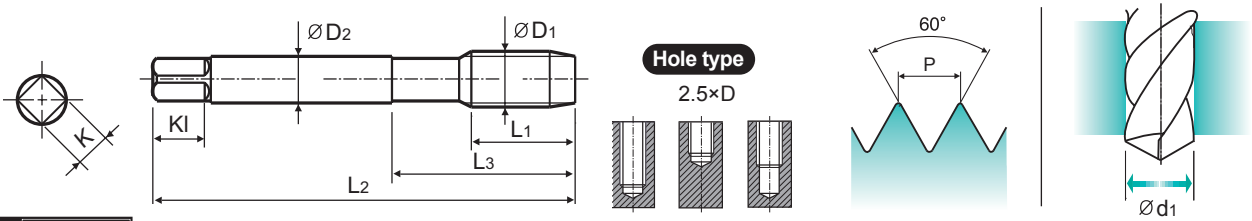
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 371/376 6G 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-------------|----------|----------|----------|-----|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | | | | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| M2 × 0.4 | - | TCE07136 | - | - | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.6 |
| M2.2 × 0.45 | TBE07156 | TCE07156 | TDE07156 | - | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.75 |
| M2.3 × 0.4 | TBE07196 | TCE07196 | TDE07196 | - | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.9 |
| M2.5 × 0.45 | - | TCE07176 | - | - | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.05 |
| M2.6 × 0.45 | TBE07496 | TCE07496 | TDE07496 | - | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.1 |
| M3 × 0.5 | TBE07206 | TCE07206 | TDE07206 | - | 6 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M3.5 × 0.6 | - | TCE07226 | TDE07226 | - | 7 | 56 | 20 | 4 | 3 | 6 | 3 | 2.9 |
| M4 × 0.7 | TBE07246 | TCE07246 | TDE07246 | - | 7 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M4.5 × 0.75 | TBE07266 | TCE07266 | TDE07266 | - | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.7 |
| M5 × 0.8 | TBE07286 | TCE07286 | TDE07286 | - | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 × 1.0 | TBE07316 | TCE07316 | TDE07316 | - | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M7 × 1.0 | TBE07346 | TCE07346 | TDE07346 | - | 10 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6 |
| M8 × 1.25 | TBE07366 | TCE07366 | TDE07366 | - | 13 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M9 × 1.25 | TBE07396 | TCE07396 | - | - | 13 | 90 | 35 | 9 | 7 | 10 | 3 | 7.8 |
| M10 × 1.5 | TBE07426 | TCE07426 | TDE07426 | - | 15 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M11 × 1.5 | TBE07466 | TCE07466 | TDE07466 | - | 17 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.5 |
| M12 × 1.75 | TBE07506 | TCE07506 | TDE07506 | - | 18 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 × 2.0 | TBE07546 | TCE07546 | - | - | 20 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 × 2.0 | TBE07606 | TCE07606 | TDE07606 | - | 20 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 × 2.5 | TBE07656 | TCE07656 | TDE07656 | - | 25 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |
| M20 × 2.5 | TBE07706 | TCE07706 | - | - | 25 | 140 | 54 | 16 | 12 | 15 | 4 | 17.5 |
| M22 × 2.5 | TBE07746 | TCE07746 | TDE07746 | - | 25 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |
| M24 × 3.0 | TBE07786 | TCE07786 | - | - | 30 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21 |
| M27 × 3.0 | TBE07866 | TCE07866 | TDE07866 | - | 30 | 160 | 60 | 20 | 16 | 19 | 4 | 24 |
| M30 × 3.5 | TBE07946 | TCE07946 | TDE07946 | - | 35 | 180 | 70 | 22 | 18 | 21 | 4 | 26.5 |

► DIN 371(M2~M10) and DIN 376(M11~M30)
► The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | M | | | | | | | | | | K | | | | | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | | H | | | | | | | | | |
|----------------------|------------------------|-----|----|----|-----|------------------------|----|-----|----|----|---|-----|-----|-----|-----|------------------------|-----------------------------|-----|-----|-----|-----|-----------------|--|----------------|-------------------|
| | Aluminum-wrought alloy | | | | | Aluminum-cast, alloyed | | | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | | | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | | | |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 15 | 30 | 25 | 38 | 34 | 55 | 60 | 42 | 42 | 55 | 55 | | | | |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 | | | | |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | | | | | |



Vap **TBE08** SERIES
Bright **TCE08** SERIES
TiN **TDE08** SERIES

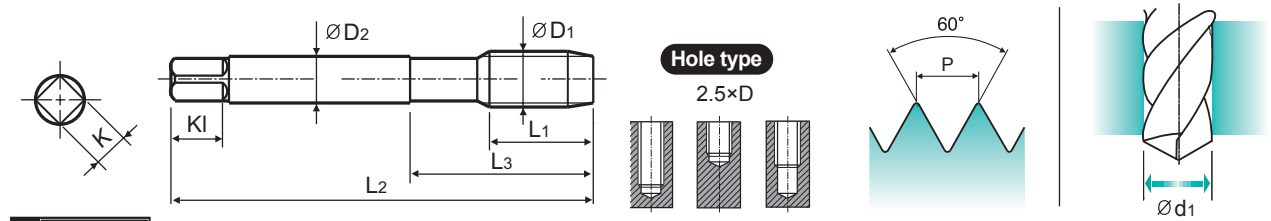
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 371/376 7G 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-------------|----------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | | | | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| M2 × 0.4 | - | TBE08136 | TCE08136 | TDE08136 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.6 |
| M2.2 × 0.45 | TBE08156 | TCE08156 | TDE08156 | - | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.75 |
| M2.3 × 0.4 | TBE08196 | TCE08196 | TDE08196 | - | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.9 |
| M2.5 × 0.45 | TBE08176 | TCE08176 | TDE08176 | - | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.05 |
| M2.6 × 0.45 | TBE08496 | - | TDE08496 | - | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.1 |
| M3 × 0.5 | TBE08206 | TCE08206 | TDE08206 | - | 6 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M3.5 × 0.6 | TBE08226 | TCE08226 | TDE08226 | - | 7 | 56 | 20 | 4 | 3 | 6 | 3 | 2.9 |
| M4 × 0.7 | TBE08246 | TCE08246 | TDE08246 | - | 7 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M4.5 × 0.75 | TBE08266 | TCE08266 | TDE08266 | - | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.7 |
| M5 × 0.8 | TBE08286 | TCE08286 | TDE08286 | - | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 × 1.0 | TBE08316 | TCE08316 | TDE08316 | - | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M7 × 1.0 | TBE08346 | TCE08346 | TDE08346 | - | 10 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6 |
| M8 × 1.25 | TBE08366 | TCE08366 | TDE08366 | - | 13 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M9 × 1.25 | TBE08396 | TCE08396 | TDE08396 | - | 13 | 90 | 35 | 9 | 7 | 10 | 3 | 7.8 |
| M10 × 1.5 | TBE08426 | TCE08426 | TDE08426 | - | 15 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M11 × 1.5 | TBE08466 | TCE08466 | TDE08466 | - | 17 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.5 |
| M12 × 1.75 | TBE08506 | TCE08506 | TDE08506 | - | 18 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 × 2.0 | TBE08546 | TCE08546 | TDE08546 | - | 20 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 × 2.0 | TBE08606 | TCE08606 | TDE08606 | - | 20 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 × 2.5 | TBE08656 | TCE08656 | TDE08656 | - | 25 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |
| M20 × 2.5 | TBE08706 | TCE08706 | TDE08706 | - | 25 | 140 | 54 | 16 | 12 | 15 | 4 | 17.5 |
| M22 × 2.5 | TBE08746 | TCE08746 | TDE08746 | - | 25 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |
| M24 × 3.0 | TBE08786 | TCE08786 | TDE08786 | - | 30 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21 |
| M27 × 3.0 | TBE08866 | TCE08866 | TDE08866 | - | 30 | 160 | 60 | 20 | 16 | 19 | 4 | 24 |
| M30 × 3.5 | TBE08946 | TCE08946 | TDE08946 | - | 35 | 180 | 70 | 22 | 18 | 21 | 4 | 26.5 |

► DIN 371(M2~M10) and DIN 376(M11~M30)
► The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | M | | | | | | | | | | K | | | | | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | | H | | | | | | | | | |
|----------------------|------------------------|-----|----|----|-----|------------------------|----|-----|----|----|---|-----|-----|-----|-----|------------------------|-----------------------------|-----|-----|-----|-----|-----------------|--|----------------|-------------------|
| | Aluminum-wrought alloy | | | | | Aluminum-cast, alloyed | | | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | | | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | | | |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 15 | 30 | 25 | 38 | 34 | 55 | 60 | 42 | 42 | 55 | 55 | | | | |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 | | | | |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | | | | | |

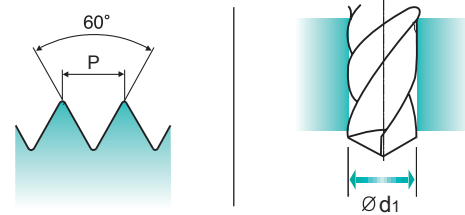
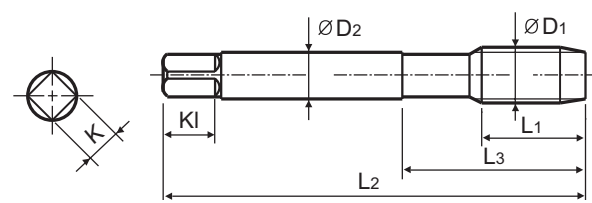
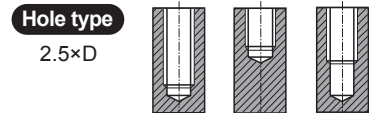
MF ISO Metric fine threads DIN 13

- Metrisches ISO-Feingewinde DIN 13
- ISO MÉTRIQUE PAS FINS DIN13
- ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

▶ 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 374 6H 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 | | | |
| M4 × 0.5 | | TB844256 | TC844256 | TD844256 | 5 | 63 | 21 | 2.8 | 2.1 | 5 | 3 | 3.5 |
| M5 × 0.5 | | TB844296 | TC844296 | TD844296 | 5 | 70 | 25 | 3.5 | 2.7 | 6 | 3 | 4.5 |
| M6 × 0.75 | | TB844326 | TC844326 | TD844326 | 8 | 80 | 30 | 4.5 | 3.4 | 6 | 3 | 5.2 |
| M6 × 0.5 | | TB844336 | TC844336 | TD844336 | 5 | 80 | 30 | 4.5 | 3.4 | 6 | 3 | 5.5 |
| M7 × 0.75 | | - | TC844356 | TD844356 | 10 | 80 | 30 | 5.5 | 4.3 | 7 | 3 | 6.2 |
| M8 × 1.0 | | TB844376 | TC844376 | TD844376 | 10 | 90 | 36 | 6 | 4.9 | 8 | 3 | 7 |
| M8 × 0.75 | | TB844386 | TC844386 | TD844386 | 8 | 80 | 30 | 6 | 4.9 | 8 | 3 | 7.2 |
| M10 × 1.25 | | - | TC844436 | TD844436 | 16 | 100 | 40 | 7 | 5.5 | 8 | 3 | 8.8 |
| M10 × 1.0 | | - | TC844446 | TD844446 | 10 | 90 | 36 | 7 | 5.5 | 8 | 3 | 9 |
| M10 × 0.75 | | TB844456 | TC844456 | TD844456 | 10 | 90 | 36 | 7 | 5.5 | 8 | 3 | 9.2 |
| M12 × 1.5 | | TB844516 | TC844516 | TD844516 | 15 | 100 | 40 | 9 | 7 | 10 | 3 | 10.5 |
| M12 × 1.25 | | TB844526 | TC844526 | TD844526 | 15 | 100 | 40 | 9 | 7 | 10 | 3 | 10.8 |
| M12 × 1.0 | | TB844536 | TC844536 | TD844536 | 11 | 100 | 40 | 9 | 7 | 10 | 3 | 11 |
| M14 × 1.5 | | TB844556 | TC844556 | TD844556 | 15 | 100 | 40 | 11 | 9 | 12 | 3 | 12.5 |
| M14 × 1.25 | | - | TC844566 | TD844566 | 15 | 100 | 40 | 11 | 9 | 12 | 3 | 12.8 |
| M14 × 1.0 | | TB844576 | TC844576 | TD844576 | 11 | 100 | 40 | 11 | 9 | 12 | 3 | 13 |
| M16 × 1.5 | | - | TC844616 | TD844616 | 15 | 100 | 40 | 12 | 9 | 12 | 3 | 14.5 |
| M16 × 1.0 | | TB844626 | TC844626 | TD844626 | 12 | 100 | 40 | 12 | 9 | 12 | 3 | 15 |
| M18 × 1.5 | | TB844676 | TC844676 | TD844676 | 17 | 110 | 44 | 14 | 11 | 14 | 4 | 16.5 |
| M18 × 1.0 | | TB844686 | TC844686 | TD844686 | 13 | 110 | 44 | 14 | 11 | 14 | 4 | 17 |
| M20 × 1.5 | | TB844726 | TC844726 | TD844726 | 17 | 125 | 50 | 16 | 12 | 15 | 4 | 18.5 |
| M20 × 1.0 | | TB844736 | TC844736 | - | 14 | 125 | 50 | 16 | 12 | 15 | 4 | 19 |
| M22 × 1.5 | | TB844766 | TC844766 | TD844766 | 17 | 125 | 50 | 18 | 14.5 | 17 | 4 | 20.5 |
| M22 × 1.0 | | - | TC844776 | TD844776 | 14 | 125 | 50 | 18 | 14.5 | 17 | 4 | 21 |

▶ The other coating(TiCN or TiAlN) is available on your request.

▶ NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | | | K | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|-----|-----|----------------|-----|-------------------|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | | | Grey cast iron | | Nodular cast iron | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 42 | 45 | 48 | 52 | 55 | 58 | 62 | 65 | 68 | 72 | 75 | 78 | 82 | 85 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | | | H | | | | | |
|----------------------|------------------------|-----|----|----|-----|------------------------|----|-----|----|----|---|-----|------------------------|-----|-----------------------------|-------|--------|-----|-----------------|-----|----------------|-------------------|
| | Aluminum-wrought alloy | | | | | Aluminum-cast, alloyed | | | | | Copper and Copper Alloys (Bronze / Brass) | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 | |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | |

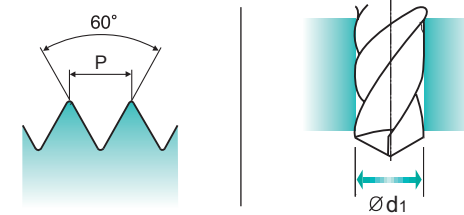
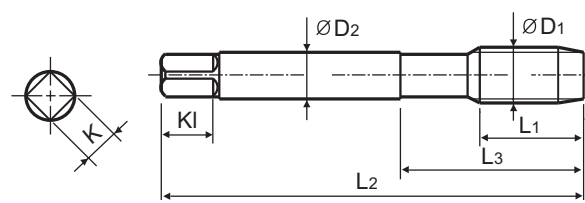
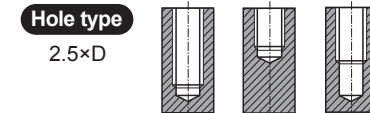
MF ISO Metric fine threads DIN 13

- Metrisches ISO-Feingewinde DIN 13
- ISO MÉTRIQUE PAS FINS DIN13
- ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

▶ 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 374 6H 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 | | | |
| M24 × 2.0 | | TB844796 | TC844796 | TD844796 | 20 | 140 | 54 | 18 | 14.5 | 17 | 4 | 22 |
| M24 × 1.5 | | - | TC844806 | TD844806 | 20 | 140 | 54 | 18 | 14.5 | 17 | 4 | 22.5 |
| M26 × 1.5 | | - | TC844856 | - | 20 | 140 | 54 | 18 | 14.5 | 17 | 4 | 24.5 |
| M27 × 2.0 | | TB844876 | TC844876 | TD844876 | 20 | 140 | 54 | 20 | 16 | 19 | 4 | 25 |
| M27 × 1.5 | | - | TC844886 | TD844886 | 20 | 140 | 54 | 20 | 16 | 19 | 4 | 25.5 |
| M28 × 1.5 | | TB844916 | TC844916 | TD844916 | 20 | 140 | 54 | 20 | 16 | 19 | 4 | 26.5 |
| M30 × 2.0 | | - | TC844966 | TD844966 | 22 | 150 | 57 | 22 | 18 | 21 | 4 | 28 |
| M30 × 1.5 | | TB844976 | TC844976 | TD844976 | 22 | 150 | 57 | 22 | 18 | 21 | 4 | 28.5 |
| M32 × 2.0 | | - | TC844A16 | TD844A16 | 22 | 150 | 57 | 22 | 18 | 21 | 4 | 30.0 |
| M32 × 1.5 | | - | TC844A26 | TD844A26 | 22 | 150 | 57 | 22 | 18 | 21 | 4 | 30.5 |
| M33 × 2.0 | | - | TC844A66 | TD844A66 | 24 | 160 | 60 | 25 | 20 | 23 | 4 | 31.0 |
| M33 × 1.5 | | - | TC844A76 | TD844A76 | 24 | 160 | 60 | 25 | 20 | 23 | 4 | 31.5 |
| M34 × 1.5 | | - | TC844A96 | TD844A96 | 24 | 170 | 70 | 28 | 22 | 25 | 4 | 32.5 |
| M35 × 1.5 | | - | TC844B16 | TD844B16 | 24 | 170 | 70 | 28 | 22 | 25 | 4 | 33.5 |
| M36 × 3.0 | | - | TC844B46 | TD844B46 | 30 | 200 | 80 | 28 | 22 | 25 | 4 | 33.0 |
| M36 × 2.0 | | - | TC844B56 | TD844B56 | 24 | 170 | 70 | 28 | 22 | 25 | 4 | 34.0 |
| M36 × 1.5 | | - | TC844B66 | TD844B66 | 24 | 170 | 70 | 28 | 22 | 25 | 4 | 34.5 |
| M38 × 1.5 | | - | TC844B86 | TD844B86 | 24 | 170 | 70 | 28 | 22 | 25 | 4 | 36.5 |
| M39 × 1.5 | | - | TC844C36 | TD844C36 | 25 | 170 | 70 | 32 | 24 | 27 | 4 | 37.5 |
| M40 × 1.5 | | - | TC844C66 | TD844C66 | 25 | 170 | 70 | 32 | 24 | 27 | 4 | 38.5 |
| M42 × 3.0 | | - | TC844D06 | TD844D06 | 30 | 200 | 80 | 32 | 24 | 27 | 4 | 39.0 |
| M42 × 2.0 | | - | TC844D16 | TD844D16 | 25 | 170 | 70 | 32 | 24 | 27 | 4 | 40.0 |
| M42 × 1.5 | | - | TC844D26 | TD844D26 | 25 | 170 | 70 | 32 | 24 | 27 | 4 | 40.5 |
| M45 × 1.5 | | - | TC844D96 | TD844D96 | 26 | 180 | 80 | 36 | 29 | 32 | 4 | 43.5 |

▶ The other coating(TiCN or TiAlN) is available on your request.

▶ NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | | | K | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|-----|-----|----------------|-----|-------------------|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | | | Grey cast iron | | Nodular cast iron | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 42 | 45 | 48 | 52 | 55 | 58 | 62 | 65 | 68 | 72 | 75 | 78 | 82 | 85 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | | | H | | | | | |
|----------------------|------------------------|-----|----|----|-----|------------------------|----|-----|----|----|---|-----|------------------------|-----|-----------------------------|-------|--------|-----|-----------------|-----|----------------|-------------------|
| | Aluminum-wrought alloy | | | | | Aluminum-cast, alloyed | | | | | Copper and Copper Alloys (Bronze / Brass) | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 | |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | |



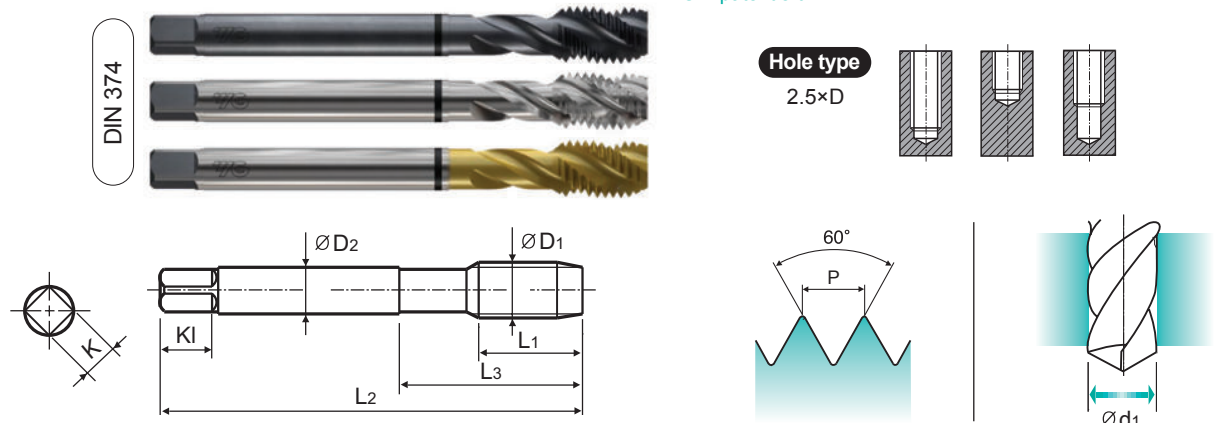
Vap **TB844** SERIES
Bright **TC844** SERIES
TiN **TD844** SERIES

MF ISO Metric fine threads DIN 13
 ● Metrisches ISO-Feingewinde DIN 13
 ○ ISO MÉTRIQUE PAS FINS DIN13
 ○ ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 374 6H 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------|-------|---------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| M48 x 3.0 | | - | TC844E56 | TD844E56 | 36 | 225 | 90 | 36 | 29 | 32 | 4 | 45.0 |
| M48 x 2.0 | | - | TC844E66 | TD844E66 | 28 | 190 | 80 | 36 | 29 | 32 | 4 | 46.0 |
| M48 x 1.5 | | - | TC844E76 | TD844E76 | 28 | 190 | 80 | 36 | 29 | 32 | 4 | 46.5 |
| M50 x 1.5 | | - | TC844F16 | TD844F16 | 28 | 190 | 80 | 36 | 29 | 32 | 4 | 48.5 |
| M52 x 3.0 | | - | TC844F56 | TD844F56 | 36 | 225 | 90 | 40 | 32 | 35 | 4 | 49.0 |
| M52 x 2.0 | | - | TC844F66 | TD844F66 | 28 | 190 | 80 | 40 | 32 | 35 | 4 | 50.0 |
| M52 x 1.5 | | - | TC844F76 | TD844F76 | 28 | 190 | 80 | 40 | 32 | 35 | 4 | 50.5 |

► The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----|-----|-----------------|-----|----------------|-------------------|---------------------|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 38 | 15 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | S | | | | | H | | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|------------------------|----|-----------------------------|-----|-----|-----|-----|-----------------|--------|----------------|-------------------|--------------------|-----|--|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| HRc | 15 | 30 | 25 | 38 | 34 | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 | |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 | |
| Recommended | | ◎ | | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | | |



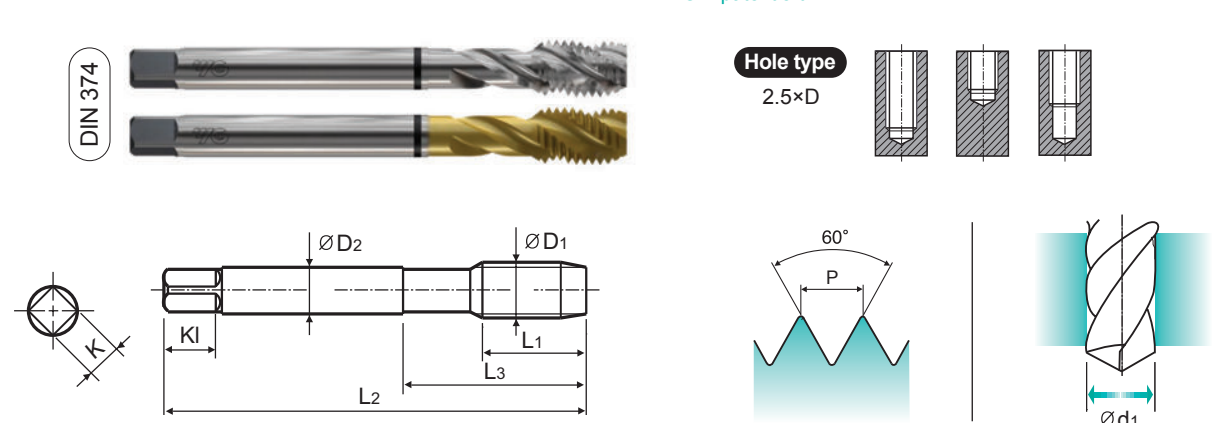
Bright **TCE09** SERIES
TiN **TDE09** SERIES

MF ISO Metric fine threads DIN 13
 ● Metrisches ISO-Feingewinde DIN 13
 ○ ISO MÉTRIQUE PAS FINS DIN13
 ○ ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 374 6G 60° C R40 TiN Bright p.B130

Unit : mm

| SIZE | Pitch | EDP No. | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------------|-------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Bright | TiN | | | | | | | | |
| M4 x 0.5 | | TCE09256 | - | 5 | 63 | 21 | 2.8 | 2.1 | 5 | 3 | 3.5 |
| M5 x 0.5 | | TCE09296 | TDE09296 | 5 | 70 | 25 | 3.5 | 2.7 | 6 | 3 | 4.5 |
| M6 x 0.5 | | TCE09336 | TDE09336 | 5 | 80 | 30 | 4.5 | 3.4 | 6 | 3 | 5.5 |
| M7 x 0.75 | | TCE09356 | TDE09356 | 10 | 80 | 30 | 5.5 | 4.3 | 7 | 3 | 6.2 |
| M8 x 1.0 | | - | TDE09376 | 10 | 90 | 36 | 6 | 4.9 | 8 | 3 | 7 |
| M8 x 0.75 | | TCE09386 | - | 8 | 80 | 30 | 6 | 4.9 | 8 | 3 | 7.2 |
| M10 x 1.25 | | TCE09436 | TDE09436 | 16 | 100 | 40 | 7 | 5.5 | 8 | 3 | 8.8 |
| M10 x 1.0 | | TCE09446 | TDE09446 | 10 | 90 | 36 | 7 | 5.5 | 8 | 3 | 9 |
| M10 x 0.75 | | TCE09456 | TDE09456 | 10 | 90 | 36 | 7 | 5.5 | 8 | 3 | 9.2 |
| M12 x 1.5 | | TCE09516 | TDE09516 | 15 | 100 | 40 | 9 | 7 | 10 | 3 | 10.5 |
| M12 x 1.25 | | TCE09526 | TDE09526 | 15 | 100 | 40 | 9 | 7 | 10 | 3 | 10.8 |
| M12 x 1.0 | | - | TDE09536 | 11 | 100 | 40 | 9 | 7 | 10 | 3 | 11 |
| M14 x 1.5 | | TCE09556 | TDE09556 | 15 | 100 | 40 | 11 | 9 | 12 | 3 | 12.5 |
| M14 x 1.25 | | TCE09566 | - | 15 | 100 | 40 | 11 | 9 | 12 | 3 | 12.8 |
| M14 x 1.0 | | TCE09576 | TDE09576 | 11 | 100 | 40 | 11 | 9 | 12 | 3 | 13 |
| M16 x 1.5 | | TCE09616 | TDE09616 | 15 | 100 | 40 | 12 | 9 | 12 | 3 | 14.5 |
| M16 x 1.0 | | TCE09626 | TDE09626 | 12 | 100 | 40 | 12 | 9 | 12 | 3 | 15 |
| M18 x 1.0 | | TCE09686 | TDE09686 | 13 | 110 | 44 | 14 | 11 | 14 | 4 | 17 |
| M20 x 1.5 | | TCE09726 | - | 17 | 125 | 50 | 16 | 12 | 15 | 4 | 18.5 |
| M20 x 1.0 | | TCE09736 | TDE09736 | 14 | 125 | 50 | 16 | 12 | 15 | 4 | 19 |
| M22 x 1.5 | | TCE09766 | TDE09766 | 17 | 125 | 50 | 18 | 14.5 | 17 | 4 | 20.5 |
| M22 x 1.0 | | TCE09776 | TDE09776 | 14 | 125 | 50 | 18 | 14.5 | 17 | 4 | 21 |

► The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

► NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----|-----|-----------------|-----|----------------|-------------------|---------------------|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 38 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | S | | | | | H | | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|------------------------|----|-----------------------------|-----|-----|-----|-----|-----------------|--------|----------------|-------------------|--------------------|-----|--|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| HRc | 15 | 30 | 25 | 38 | 34 | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 | |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 | |
| Recommended | | ◎ | | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | | |



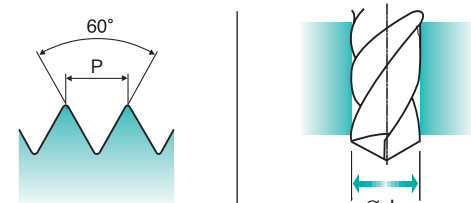
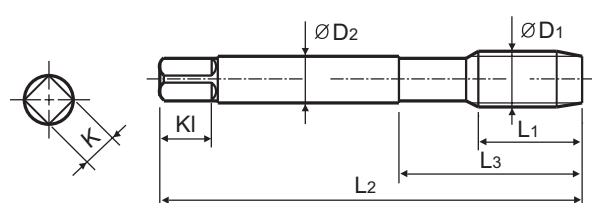
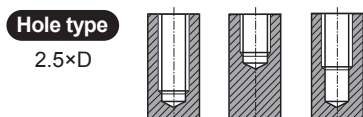
Bright **TCE09** SERIES
TIN **TDE09** SERIES

MF ISO Metric fine threads DIN 13
 ● Metrisches ISO-Feingewinde DIN 13
 ○ ISO MÉTRIQUE PAS FINS DIN13
 ○ ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E **DIN 374** **6G** **60°** **C** **R40** **TiN** Bright **p.B130**

Unit : mm

| SIZE | Pitch | EDP No. | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------|-------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| ØD1 | P | Bright | TiN | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| M24 × 2.0 | | TCE09796 | TDE09796 | 20 | 140 | 54 | 18 | 14.5 | 17 | 4 | 22 |
| M24 × 1.5 | | TCE09806 | TDE09806 | 20 | 140 | 54 | 18 | 14.5 | 17 | 4 | 22.5 |
| M26 × 1.5 | | TCE09856 | TDE09856 | 20 | 140 | 54 | 18 | 14.5 | 17 | 4 | 24.5 |
| M27 × 2.0 | | TCE09876 | - | 20 | 140 | 54 | 20 | 16 | 19 | 4 | 25 |
| M27 × 1.5 | | TCE09886 | TDE09886 | 20 | 140 | 54 | 20 | 16 | 19 | 4 | 25.5 |
| M28 × 1.5 | | TCE09916 | - | 20 | 140 | 54 | 20 | 16 | 19 | 4 | 26.5 |
| M30 × 2.0 | | TCE09966 | TDE09966 | 22 | 150 | 57 | 22 | 18 | 21 | 4 | 28 |
| M30 × 1.5 | | TCE09976 | - | 22 | 150 | 57 | 22 | 18 | 21 | 4 | 28.5 |

► The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|-----|---------------------|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | | Malleable cast iron | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 42 | 45 | 48 | 50 | 52 | 55 | 58 | 60 | 62 | 65 | 68 | 70 | 72 | 75 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | S | | | | | | H | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|---|-----|----|------------------------|----|----|-----------------------------|-----|-----|-----------------|----------------|-------------------|--------------------|-----|-----|-----|-----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | | Heat Resistant Super Alloys | | | Titanium Alloys | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | | | | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |



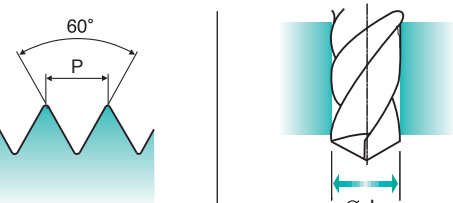
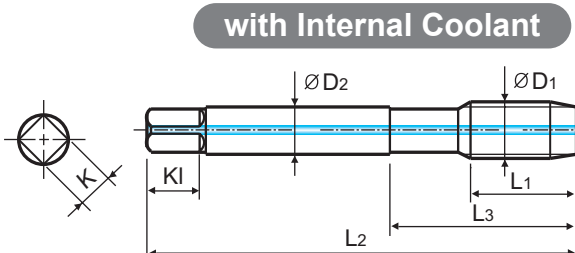
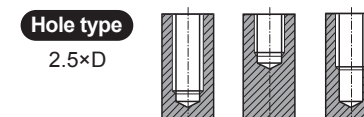
TC804-IC SERIES

M ISO Metric coarse threads DIN 13
 ● Metrisches ISO-Gewinde DIN 13
 ○ ISO MÉTRIQUE DIN13
 ○ ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E **DIN 371/376** **6H** **60°** **C** **R40** Bright **p.B130**

Unit : mm

| SIZE | Pitch | EDP No. | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------------|-------|------------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| ØD1 | P | Bright | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| M6 × 1.0 | | TC804316IC | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M8 × 1.25 | | TC804366IC | 13 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M10 × 1.5 | | TC804426IC | 15 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M12 × 1.75 | | TC804506IC | 18 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 × 2.0 | | TC804546IC | 20 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 × 2.0 | | TC804606IC | 20 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 × 2.5 | | TC804656IC | 25 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |

► DIN 371(M6~M10) and DIN 376(M12~M20)

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

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|-----|---------------------|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | | Malleable cast iron | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 42 | 45 | 48 | 50 | 52 | 55 | 58 | 60 | 62 | 65 | 68 | 70 | 72 | 75 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | S | | | | | | H | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|---|-----|----|------------------------|----|----|-----------------------------|-----|-----|-----------------|----------------|-------------------|--------------------|-----|-----|-----|-----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | | Heat Resistant Super Alloys | | | Titanium Alloys | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | | | | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |

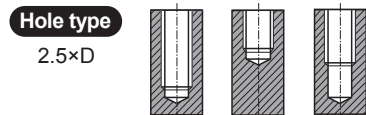
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

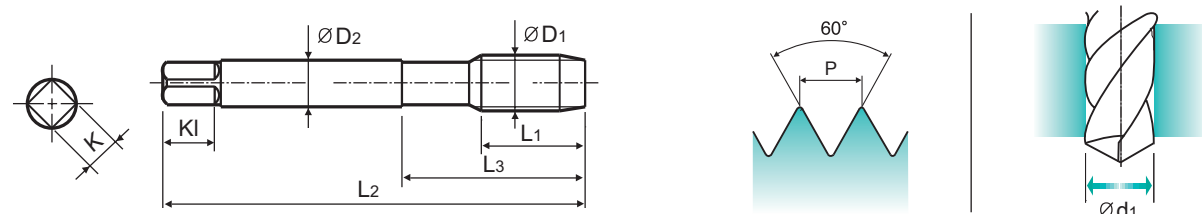
Machine taps
Maschinengewindebohrer

▶ 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Short Chamfer



Material groups: **MU** HSS-E DIN 371/376 6H 60° E R40 Bright p.B130

Unit : mm

| SIZE | Pitch | EDP No. | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------------|--------|----------|----------------|----------------|----------------|----------------|-------------|---------------|--------------|------------------------|
| ϕD_1 | P | Bright | L ₁ | L ₂ | L ₃ | ϕD_2 | K | KI | Z | ϕd_1 |
| M2 | × 0.4 | TC807136 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.6 |
| M2.2 | × 0.45 | TC807156 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.75 |
| M2.3 | × 0.4 | TC807196 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.9 |
| M2.5 | × 0.45 | TC807176 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.05 |
| M2.6 | × 0.45 | TC807496 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.1 |
| M3 | × 0.5 | TC807206 | 6 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M3.5 | × 0.6 | TC807226 | 7 | 56 | 20 | 4 | 3 | 6 | 3 | 2.9 |
| M4 | × 0.7 | TC807246 | 7 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M4.5 | × 0.75 | TC807266 | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.7 |
| M5 | × 0.8 | TC807286 | 8 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 | × 1.0 | TC807316 | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M7 | × 1.0 | TC807346 | 10 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6 |
| M8 | × 1.25 | TC807366 | 13 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M9 | × 1.25 | TC807396 | 13 | 90 | 35 | 9 | 7 | 10 | 3 | 7.8 |
| M10 | × 1.5 | TC807426 | 15 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M11 | × 1.5 | TC807466 | 17 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.5 |
| M12 | × 1.75 | TC807506 | 18 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 | × 2.0 | TC807546 | 20 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 | × 2.0 | TC807606 | 20 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 | × 2.5 | TC807656 | 25 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |
| M20 | × 2.5 | TC807706 | 25 | 140 | 54 | 16 | 12 | 15 | 4 | 17.5 |
| M22 | × 2.5 | TC807746 | 25 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |
| M24 | × 3.0 | TC807786 | 30 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21 |
| M27 | × 3.0 | TC807866 | 30 | 160 | 60 | 20 | 16 | 19 | 4 | 24 |
| M30 | × 3.5 | TC807946 | 35 | 180 | 70 | 22 | 18 | 21 | 4 | 26.5 |

▶ DIN 371 (M2~M10) and DIN 376 (M11~M30)

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

◎ : Excellent ○ : Good

| ISO Material Description | P | | | | | | | | | | M | | | | | | K | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----|-----|-----|-----------------|-----|-----|----------------|-----|-----|-------------------|-----|-----|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | | | | Stainless steel | | | Grey cast iron | | | Nodular cast iron | | | Malleable cast iron | | | | | | | | | | | | | | | | | | | | | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | | | | |
| HRc | 13 | 25 | 28 | 32 | 30 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | | | | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | | |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

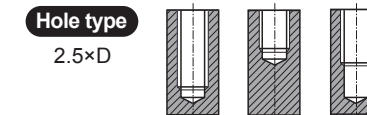
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

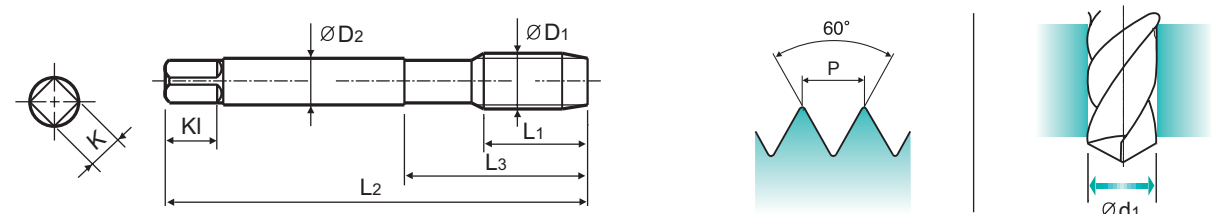
Machine taps
Maschinengewindebohrer

▶ 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Long Shank



Material groups: **MU** HSS-E LONG 6H 60° C R40 Bright p.B130

Unit : mm

| SIZE | Pitch | EDP No. | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------------|--------|----------|----------------|----------------|----------------|----------------|-------------|---------------|--------------|------------------------|
| ϕD_1 | P | Bright | L ₁ | L ₂ | L ₃ | ϕD_2 | K | KI | Z | ϕd_1 |
| M3 | × 0.5 | TC633206 | 11 | 100 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M4 | × 0.7 | TC633246 | 13 | 125 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M5 | × 0.8 | TC633286 | 15 | 140 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 | × 1.0 | TC633316 | 17 | 160 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M8 | × 1.25 | TC633366 | 20 | 180 | 35 | 6 | 4.9 | 8 | 3 | 6.8 |
| M10 | × 1.5 | TC633426 | 22 | 200 | 39 | 7 | 5.5 | 8 | 3 | 8.5 |
| M12 | × 1.75 | TC633506 | 24 | 220 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 | × 2.0 | TC633546 | 26 | 220 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 | × 2.0 | TC633606 | 27 | 220 | 44 | 12 | 9 | 12 | 3 | 14 |
| M20 | × 2.5 | TC633706 | 32 | 280 | 54 | 16 | 12 | 15 | 4 | 17.5 |

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

◎ : Excellent ○ : Good

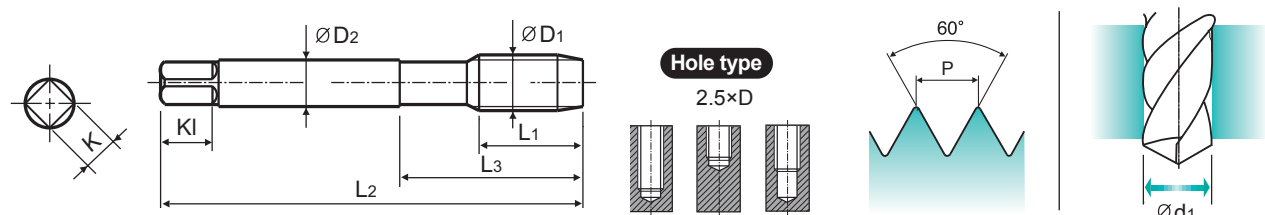
| ISO Material Description | P | | | | | | | | | | M | | | | | | K | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----|-----|-----|-----------------|-----|-----|----------------|-----|-----|-------------------|-----|-----|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | | | | Stainless steel | | | Grey cast iron | | | Nodular cast iron | | | Malleable cast iron | | | | | | | | | | | | | | | | | | | | | | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | | | | | | |
| HRc | 13 | 25 | 28 | 32 | 30 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | | | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | | |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

UNF Unified fine threads
 Unified Feingewinde
 UNF
 Unificato passo fine

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 371/374 2B 60° C R40 Vap Bright TiN p.B130

Unit : mm

| SIZE | TPI | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|--------------|----------|----------|----------|-----|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| #4 - 48UNF | - | - | TC864182 | - | 6 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.4 |
| #5 - 44UNF | TB864222 | TC864222 | TD864222 | - | 7 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.7 |
| #6 - 40UNF | TB864262 | TC864262 | - | - | 7 | 56 | 20 | 4 | 3 | 6 | 3 | 3 |
| #8 - 36UNF | - | TC864302 | TD864302 | - | 8 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.5 |
| #10 - 32UNF | TB864342 | TC864342 | TD864342 | - | 10 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.1 |
| #12 - 28UNF | TB864382 | TC864382 | TD864382 | - | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 4.7 |
| 1/4 - 28UNF | TB864422 | TC864422 | TD864422 | - | 10 | 80 | 30 | 7 | 5.5 | 8 | 3 | 5.5 |
| 5/16 - 24UNF | TB864462 | TC864462 | TD864462 | - | 10 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.9 |
| 3/8 - 24UNF | TB864502 | TC864502 | TD864502 | - | 10 | 100 | 39 | 9 | 7 | 10 | 3 | 8.5 |
| 7/16 - 20UNF | TB864542 | TC864542 | TD864542 | - | 13 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.9 |
| 1/2 - 20UNF | TB864582 | TC864582 | TD864582 | - | 13 | 100 | 40 | 9 | 7 | 10 | 3 | 11.5 |
| 9/16 - 18UNF | TB864622 | TC864622 | TD864622 | - | 15 | 100 | 40 | 11 | 9 | 12 | 3 | 12.9 |
| 5/8 - 18UNF | - | TC864662 | TD864662 | - | 15 | 100 | 40 | 12 | 9 | 12 | 3 | 14.5 |
| 3/4 - 16UNF | - | TC864722 | TD864722 | - | 17 | 110 | 44 | 14 | 11 | 14 | 4 | 17.5 |
| 7/8 - 14UNF | - | TC864762 | - | - | 17 | 125 | 50 | 18 | 14.5 | 17 | 4 | 20.5 |
| 1 - 12UNF | - | TC864802 | TD864802 | - | 20 | 140 | 54 | 20 | 16 | 19 | 4 | 23.25 |

► DIN 371(#4~3/8) and DIN 374(7/16~1)
 ► The other coating (TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

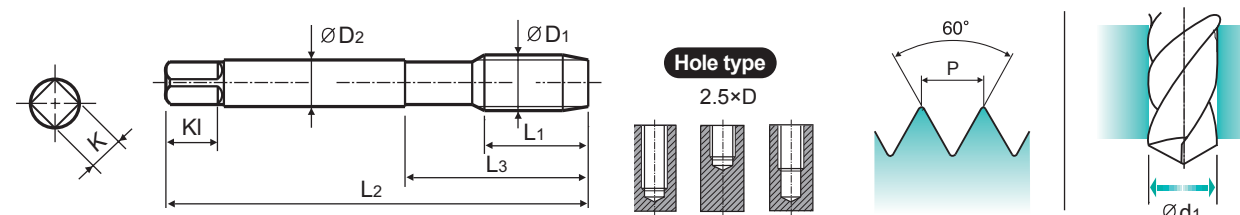
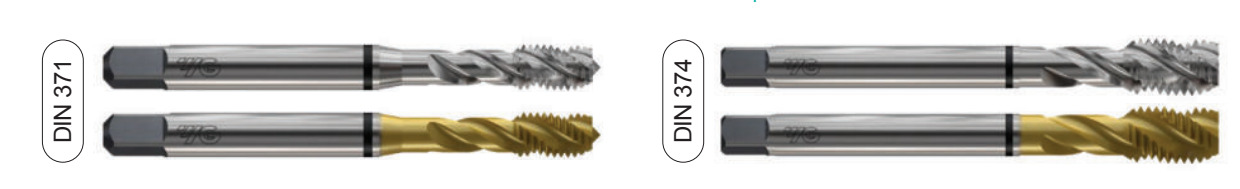
| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|-----|---------------------|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | | Malleable cast iron | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 52 | 55 | 58 | 60 | 62 | 65 | 68 | 70 | 72 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

UNF Unified fine threads
 Unified Feingewinde
 UNF
 Unificato passo fine

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 371/374 3B 60° C R40 TiN Bright p.B130

Unit : mm

| SIZE | TPI | EDP No. | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|--------------|-----|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Bright | TiN | | | | | | | | |
| #4 - 48UNF | - | TCE02182 | TDE02182 | 6 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.4 |
| #5 - 44UNF | - | TCE02222 | TDE02222 | 7 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.7 |
| #6 - 40UNF | - | TCE02262 | TDE02262 | 7 | 56 | 20 | 4 | 3 | 6 | 3 | 3 |
| #8 - 36UNF | - | TCE02302 | TDE02302 | 8 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.5 |
| #10 - 32UNF | - | - | TDE02342 | 10 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.1 |
| #12 - 28UNF | - | TCE02382 | TDE02382 | 10 | 80 | 30 | 6 | 4.9 | 8 | 3 | 4.7 |
| 1/4 - 28UNF | - | TCE02422 | TDE02422 | 10 | 80 | 30 | 7 | 5.5 | 8 | 3 | 5.5 |
| 5/16 - 24UNF | - | TCE02462 | TDE02462 | 10 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.9 |
| 3/8 - 24UNF | - | TCE02502 | TDE02502 | 10 | 100 | 39 | 9 | 7 | 10 | 3 | 8.5 |
| 7/16 - 20UNF | - | TCE02542 | TDE02542 | 13 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.9 |
| 1/2 - 20UNF | - | TCE02582 | TDE02582 | 13 | 100 | 40 | 9 | 7 | 10 | 3 | 11.5 |
| 9/16 - 18UNF | - | TCE02622 | TDE02622 | 15 | 100 | 40 | 11 | 9 | 12 | 3 | 12.9 |
| 5/8 - 18UNF | - | TCE02662 | TDE02662 | 15 | 100 | 40 | 12 | 9 | 12 | 3 | 14.5 |
| 3/4 - 16UNF | - | TCE02722 | TDE02722 | 17 | 110 | 44 | 14 | 11 | 14 | 4 | 17.5 |
| 7/8 - 14UNF | - | TCE02762 | TDE02762 | 17 | 125 | 50 | 18 | 14.5 | 17 | 4 | 20.5 |
| 1 - 12UNF | - | TCE02802 | TDE02802 | 20 | 140 | 54 | 20 | 16 | 19 | 4 | 23.25 |

► DIN 371(#4~3/8) and DIN 374(7/16~1)
 ► The other coating (TiCN or TiAlN) or Surface Treatment (Steam Homo) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|-----|---------------------|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | | Malleable cast iron | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 52 | 55 | 58 | 60 | 62 | 65 | 68 | 70 | 72 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

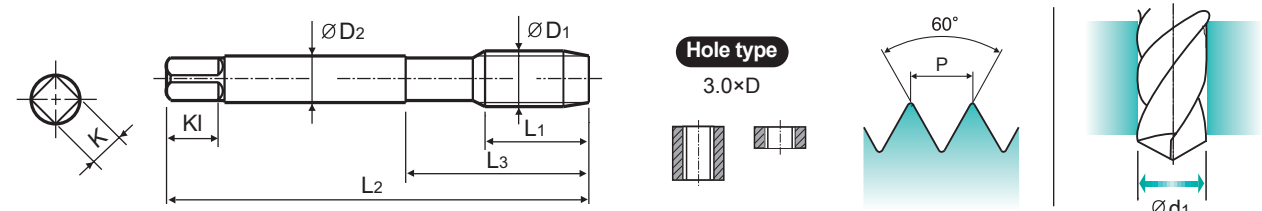
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 371/376 6H 60° B Vap Bright TiN p.B131

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------|--------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| M2 | × 0.4 | TB814136 | TC814136 | TD814136 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.6 |
| M2.2 | × 0.45 | TB814156 | TC814156 | TD814156 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.75 |
| M2.3 | × 0.4 | TB814196 | TC814196 | TD814196 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.9 |
| M2.5 | × 0.45 | TB814176 | TC814176 | TD814176 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.05 |
| M2.6 | × 0.45 | TB814496 | TC814496 | TD814496 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.1 |
| M3 | × 0.5 | TB814206 | TC814206 | TD814206 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M3.5 | × 0.6 | TB814226 | TC814226 | TD814226 | 12 | 56 | 20 | 4 | 3 | 6 | 3 | 2.9 |
| M4 | × 0.7 | TB814246 | TC814246 | TD814246 | 13 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M4.5 | × 0.75 | TB814266 | TC814266 | TD814266 | 14 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.7 |
| M5 | × 0.8 | TB814286 | TC814286 | TD814286 | 15 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 | × 1.0 | TB814316 | TC814316 | TD814316 | 17 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M7 | × 1.0 | TB814346 | TC814346 | TD814346 | 17 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6 |
| M8 | × 1.25 | TB814366 | TC814366 | TD814366 | 20 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M9 | × 1.25 | TB814396 | TC814396 | TD814396 | 20 | 90 | 35 | 9 | 7 | 10 | 3 | 7.8 |
| M10 | × 1.5 | TB814426 | TC814426 | TD814426 | 22 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M11 | × 1.5 | TB814466 | TC814466 | - | 22 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.5 |
| M12 | × 1.75 | TB814506 | TC814506 | TD814506 | 24 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 | × 2.0 | TB814546 | TC814546 | TD814546 | 26 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 | × 2.0 | TB814606 | TC814606 | TD814606 | 27 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 | × 2.5 | TB814656 | TC814656 | TD814656 | 30 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |
| M20 | × 2.5 | TB814706 | TC814706 | TD814706 | 32 | 140 | 54 | 16 | 12 | 15 | 4 | 17.5 |
| M22 | × 2.5 | TB814746 | TC814746 | TD814746 | 32 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |

▶ DIN 371(M2~M10) and DIN 376(M11~M52)
▶ The other coating(TiCN or TiAlN) is available on your request.

▶ NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRC | 13 | 25 | 28 | 32 | 35 | 38 | 42 | 45 | 48 | 52 | 55 | 58 | 60 | 62 | 65 | 68 | 70 | 72 | 74 | 76 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | S | | | | | H | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|---|------------------------|----|-----------------------------|----|----|-----------------|----|----------------|-------------------|--------------------|-------|--------|----|----|----|----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | Copper and Copper Alloys (Bronze / Brass) | Non Metallic Materials | | Heat Resistant Super Alloys | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | | | | | | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRC | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 15 | 30 | 25 | 38 | 34 | 400Rm | 1050Rm | 55 | 60 | 42 | 55 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | | | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

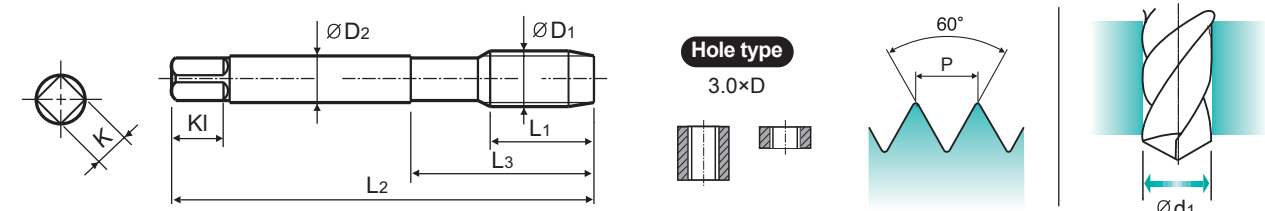
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 371/376 6H 60° B Vap Bright TiN p.B131

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| M24 | × 3.0 | - | TC814786 | TD814786 | 34 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21 |
| M27 | × 3.0 | TB814866 | TC814866 | TD814866 | 36 | 160 | 60 | 20 | 16 | 19 | 4 | 24 |
| M30 | × 3.5 | TB814946 | TC814946 | TD814946 | 40 | 180 | 70 | 22 | 18 | 21 | 4 | 26.5 |
| M33 | × 3.5 | - | TC814A46 | - | 40 | 180 | 70 | 25 | 20 | 23 | 4 | 29.5 |
| M36 | × 4.0 | - | TC814B36 | TD814B36 | 50 | 200 | 80 | 28 | 22 | 25 | 4 | 32.0 |
| M39 | × 4.0 | - | TC814C06 | TD814C06 | 50 | 200 | 80 | 32 | 24 | 27 | 4 | 35.0 |
| M42 | × 4.5 | - | TC814C86 | TD814C86 | 56 | 200 | 85 | 32 | 24 | 27 | 4 | 37.5 |
| M45 | × 4.5 | - | TC814D56 | TD814D56 | 58 | 220 | 85 | 36 | 29 | 32 | 4 | 40.5 |
| M48 | × 5.0 | - | TC814E26 | TD814E26 | 65 | 250 | 90 | 36 | 29 | 32 | 4 | 43.0 |
| M52 | × 5.0 | - | TC814F36 | TD814F36 | 65 | 250 | 90 | 40 | 32 | 35 | 4 | 47.0 |

▶ DIN 371(M2~M10) and DIN 376(M11~M52)
▶ The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRC | 13 | 25 | 28 | 32 | 35 | 38 | 42 | 45 | 48 | 52 | 55 | 58 | 60 | 62 | 65 | 68 | 70 | 72 | 74 | 76 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | S | | | | | H | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|---|------------------------|----|-----------------------------|----|----|-----------------|----|----------------|-------------------|--------------------|-------|--------|----|----|----|----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | Copper and Copper Alloys (Bronze / Brass) | Non Metallic Materials | | Heat Resistant Super Alloys | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | | | | | | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRC | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 15 | 30 | 25 | 38 | 34 | 400Rm | 1050Rm | 55 | 60 | 42 | 55 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | | | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |



Vap **TBJ05** SERIES
Bright **TCJ05** SERIES
TiN **TDJ05** SERIES

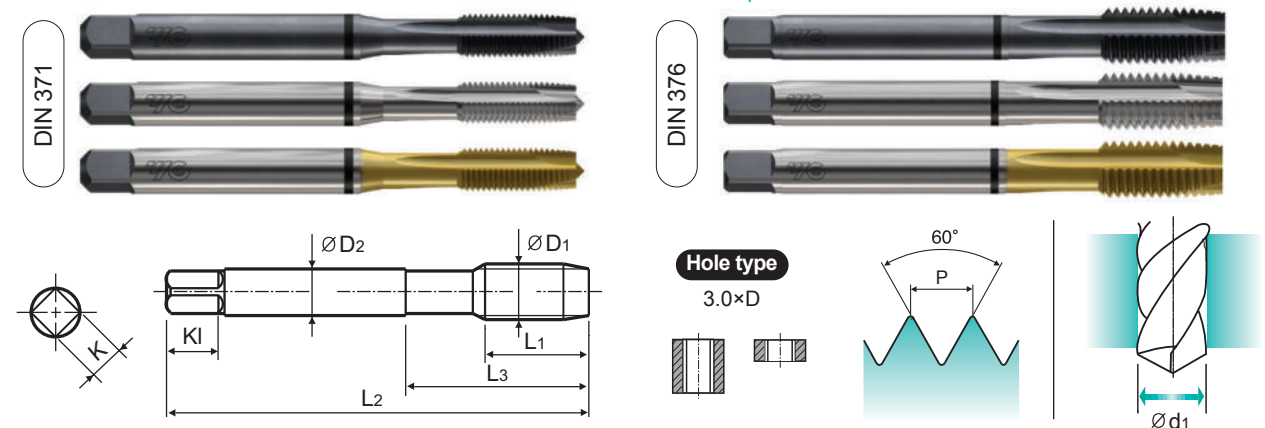
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-------------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| M2 × 0.4 | | TBJ05136 | TCJ05136 | TDJ05136 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.6 |
| M2.2 × 0.45 | | TBJ05156 | TCJ05156 | TDJ05156 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.75 |
| M2.3 × 0.4 | | TBJ05196 | TCJ05196 | TDJ05196 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.9 |
| M2.5 × 0.45 | | TBJ05176 | TCJ05176 | - | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.05 |
| M2.6 × 0.45 | | TBJ05496 | TCJ05496 | TDJ05496 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.1 |
| M3 × 0.5 | | TBJ05206 | TCJ05206 | TDJ05206 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M3.5 × 0.6 | | TBJ05226 | TCJ05226 | TDJ05226 | 12 | 56 | 20 | 4 | 3 | 6 | 3 | 2.9 |
| M4 × 0.7 | | TBJ05246 | TCJ05246 | TDJ05246 | 13 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M4.5 × 0.75 | | TBJ05266 | TCJ05266 | TDJ05266 | 14 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.7 |
| M5 × 0.8 | | TBJ05286 | TCJ05286 | TDJ05286 | 15 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 × 1.0 | | TBJ05316 | TCJ05316 | TDJ05316 | 17 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M7 × 1.0 | | TBJ05346 | TCJ05346 | TDJ05346 | 17 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6 |
| M8 × 1.25 | | TBJ05366 | TCJ05366 | TDJ05366 | 20 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M9 × 1.25 | | TBJ05396 | TCJ05396 | TDJ05396 | 20 | 90 | 35 | 9 | 7 | 10 | 3 | 7.8 |
| M10 × 1.5 | | TBJ05426 | TCJ05426 | TDJ05426 | 22 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M11 × 1.5 | | TBJ05466 | TCJ05466 | TDJ05466 | 22 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.5 |
| M12 × 1.75 | | TBJ05506 | TCJ05506 | TDJ05506 | 24 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 × 2.0 | | TBJ05546 | TCJ05546 | TDJ05546 | 26 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 × 2.0 | | TBJ05606 | TCJ05606 | TDJ05606 | 27 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 × 2.5 | | TBJ05656 | TCJ05656 | TDJ05656 | 30 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |
| M20 × 2.5 | | TBJ05706 | TCJ05706 | TDJ05706 | 32 | 140 | 54 | 16 | 12 | 15 | 4 | 17.5 |
| M22 × 2.5 | | TBJ05746 | TCJ05746 | TDJ05746 | 32 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |
| M24 × 3.0 | | TBJ05786 | TCJ05786 | TDJ05786 | 34 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21 |
| M27 × 3.0 | | TBJ05866 | TCJ05866 | TDJ05866 | 36 | 160 | 60 | 20 | 16 | 19 | 4 | 24 |
| M30 × 3.5 | | TBJ05946 | TCJ05946 | TDJ05946 | 40 | 180 | 70 | 22 | 18 | 21 | 4 | 26.5 |

► DIN 371 (M2~M10) and DIN 376 (M11~M30)
► The other coating (TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|-------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-----|-------------------|-----|---------------------|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |



Vap **TBJ06** SERIES
Bright **TCJ06** SERIES
TiN **TDJ06** SERIES

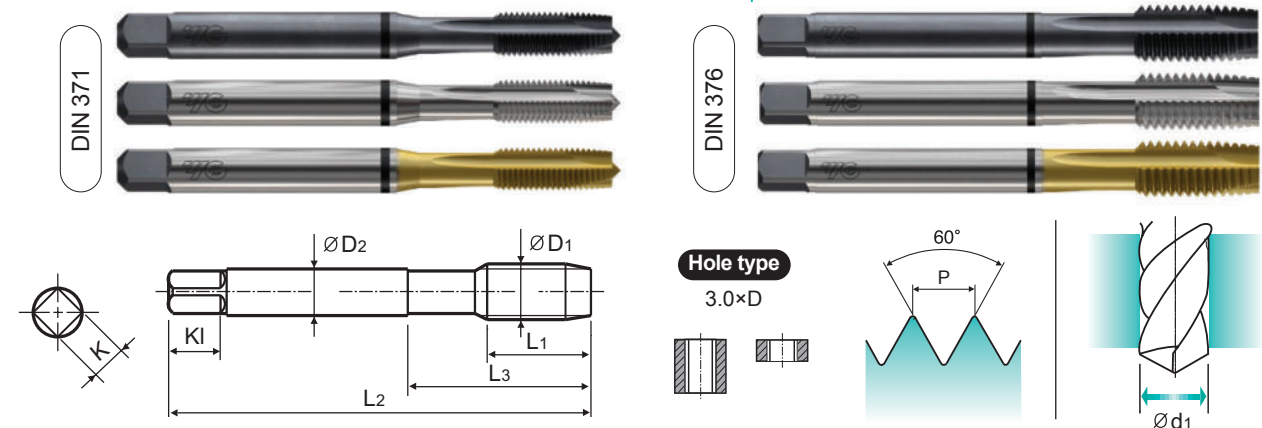
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-------------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| M2 × 0.4 | | TBJ06136 | TCJ06136 | TDJ06136 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.7 |
| M2.2 × 0.45 | | TBJ06156 | TCJ06156 | TDJ06156 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 1.85 |
| M2.3 × 0.4 | | TBJ06196 | TCJ06196 | TDJ06196 | 8 | 45 | 13 | 2.8 | 2.1 | 5 | 3 | 2 |
| M2.5 × 0.45 | | TBJ06176 | TCJ06176 | TDJ06176 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.15 |
| M2.6 × 0.45 | | TBJ06496 | TCJ06496 | TDJ06496 | 9 | 50 | 15 | 2.8 | 2.1 | 5 | 3 | 2.2 |
| M3 × 0.5 | | TBJ06206 | TCJ06206 | TDJ06206 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.6 |
| M3.5 × 0.6 | | TBJ06226 | TCJ06226 | TDJ06226 | 12 | 56 | 20 | 4 | 3 | 6 | 3 | 3 |
| M4 × 0.7 | | TBJ06246 | TCJ06246 | TDJ06246 | 13 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.4 |
| M4.5 × 0.75 | | TBJ06266 | TCJ06266 | TDJ06266 | 14 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.8 |
| M5 × 0.8 | | TBJ06286 | TCJ06286 | TDJ06286 | 15 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.3 |
| M6 × 1.0 | | TBJ06316 | TCJ06316 | TDJ06316 | 17 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5.1 |
| M7 × 1.0 | | TBJ06346 | TCJ06346 | TDJ06346 | 17 | 80 | 30 | 7 | 5.5 | 8 | 3 | 6.1 |
| M8 × 1.25 | | TBJ06366 | TCJ06366 | TDJ06366 | 20 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.9 |
| M9 × 1.25 | | TBJ06396 | TCJ06396 | TDJ06396 | 20 | 90 | 35 | 9 | 7 | 10 | 3 | 7.9 |
| M10 × 1.5 | | TBJ06426 | TCJ06426 | TDJ06426 | 22 | 100 | 39 | 10 | 8 | 11 | 3 | 8.6 |
| M11 × 1.5 | | TBJ06466 | TCJ06466 | TDJ06466 | 22 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.6 |
| M12 × 1.75 | | TBJ06506 | TCJ06506 | TDJ06506 | 24 | 110 | 44 | 9 | 7 | 10 | 3 | 10.3 |
| M14 × 2.0 | | TBJ06546 | TCJ06546 | TDJ06546 | 26 | 110 | 44 | 11 | 9 | 12 | 3 | 12.1 |
| M16 × 2.0 | | TBJ06606 | TCJ06606 | TDJ06606 | 27 | 110 | 44 | 12 | 9 | 12 | 3 | 14.1 |
| M18 × 2.5 | | TBJ06656 | TCJ06656 | TDJ06656 | 30 | 125 | 50 | 14 | 11 | 14 | 4 | 15.6 |
| M20 × 2.5 | | TBJ06706 | TCJ06706 | TDJ06706 | 32 | 140 | 54 | 16 | 12 | 15 | 4 | 17.6 |
| M22 × 2.5 | | TBJ06746 | TCJ06746 | TDJ06746 | 32 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.6 |
| M24 × 3.0 | | TBJ06786 | TCJ06786 | - | 34 | 160 | 60 | 18 | 14.5 | 17 | 4 | 21.1 |
| M27 × 3.0 | | TBJ06866 | TCJ06866 | TDJ06866 | 36 | 160 | 60 | 20 | 16 | 19 | 4 | 24.1 |
| M30 × 3.5 | | - | TCJ06946 | - | 40 | 180 | 70 | 22 | 18 | 21 | 4 | 26.6 |

► DIN 371 (M2~M10) and DIN 376 (M11~M30)
► The other coating (TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|-------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-----|-------------------|-----|---------------------|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |



Vap TBJ07 SERIES
Bright TCJ07 SERIES
TIN TDJ07 SERIES

M ISO Metric coarse threads DIN 13
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13
Machine taps
Maschinengewindebohrer

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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

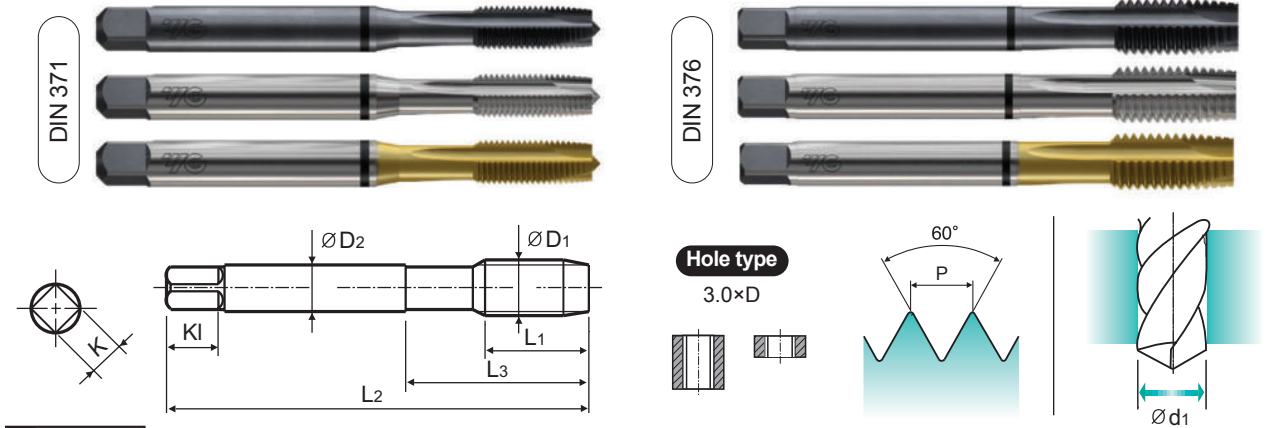


Table with 13 columns: SIZE, Pitch, EDP No., Thread Length, Overall Length, Neck Length, Shank Diameter, Square Size, Square Length, No. of Flute, Tapping Drill Diameter. Rows include sizes from M2 to M30.

DIN 371 (M2~M10) and DIN 376 (M11~M30)
The other coating (TiCN or TiAlN) is available on your request.

Material compatibility chart with columns for ISO, Material Description, and various material groups (P, M, K, N, S, H).



Vap TBJ08 SERIES
Bright TCJ08 SERIES
TIN TDJ08 SERIES

M ISO Metric coarse threads DIN 13
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13
Machine taps
Maschinengewindebohrer

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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

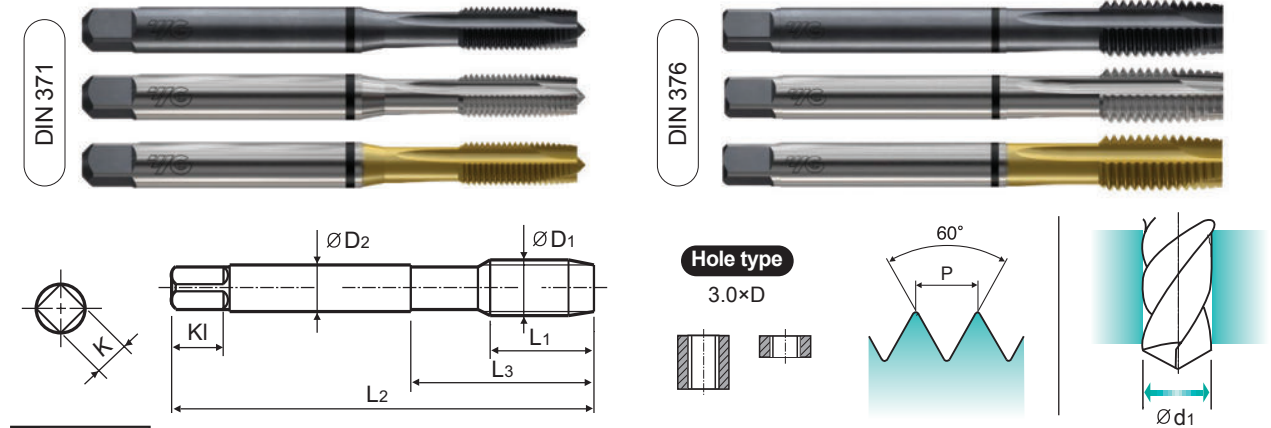


Table with 13 columns: SIZE, Pitch, EDP No., Thread Length, Overall Length, Neck Length, Shank Diameter, Square Size, Square Length, No. of Flute, Tapping Drill Diameter. Rows include sizes from M2 to M30.

DIN 371 (M2~M10) and DIN 376 (M11~M30)
The other coating (TiCN or TiAlN) is available on your request.

Material compatibility chart with columns for ISO, Material Description, and various material groups (P, M, K, N, S, H).



Vap **TB854** SERIES
Bright **TC854** SERIES
TiN **TD854** SERIES

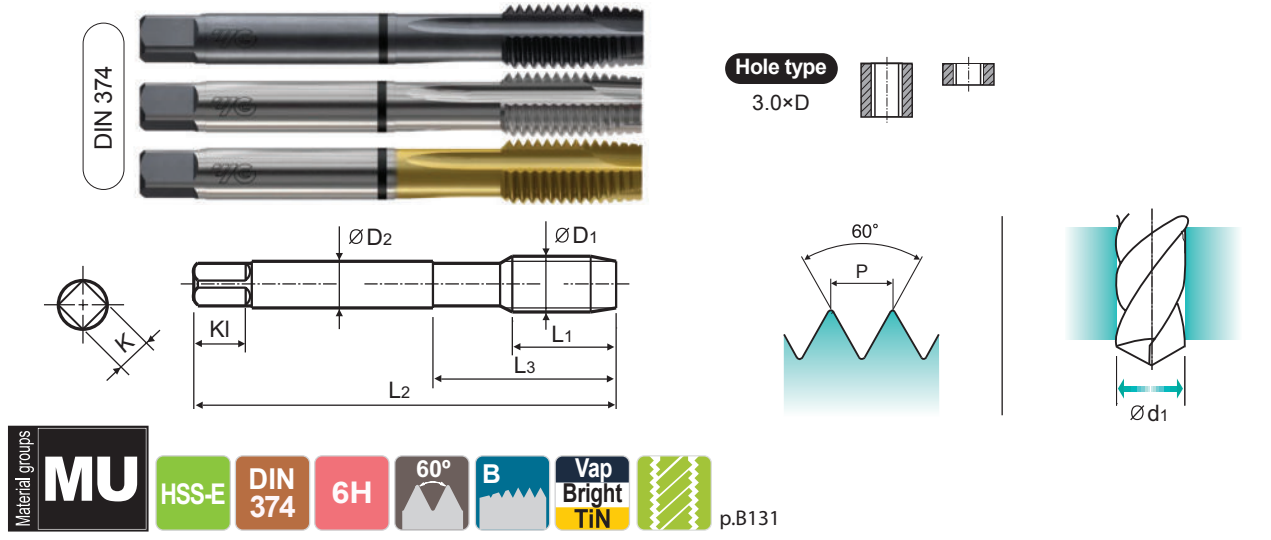
MF ISO Metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 374 6H 60° B Vap Bright TiN p.B131

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 | | | |
| M4 × 0.5 | | TB854256 | TC854256 | - | 10 | 63 | 21 | 2.8 | 2.1 | 5 | 3 | 3.5 |
| M5 × 0.5 | | - | TC854296 | TD854296 | 11 | 70 | 25 | 3.5 | 2.7 | 6 | 3 | 4.5 |
| M6 × 0.75 | | TB854326 | TC854326 | TD854326 | 13 | 80 | 30 | 4.5 | 3.4 | 6 | 3 | 5.2 |
| M6 × 0.5 | | TB854336 | TC854336 | - | 13 | 80 | 30 | 4.5 | 3.4 | 6 | 3 | 5.5 |
| M7 × 0.75 | | TB854356 | TC854356 | TD854356 | 14 | 80 | 30 | 5.5 | 4.3 | 7 | 3 | 6.2 |
| M8 × 1.0 | | TB854376 | TC854376 | TD854376 | 17 | 90 | 36 | 6 | 4.9 | 8 | 3 | 7 |
| M8 × 0.75 | | TB854386 | TC854386 | TD854386 | 14 | 80 | 30 | 6 | 4.9 | 8 | 3 | 7.2 |
| M10 × 1.25 | | TB854436 | TC854436 | TD854436 | 22 | 100 | 40 | 7 | 5.5 | 8 | 3 | 8.8 |
| M10 × 1.0 | | TB854446 | TC854446 | TD854446 | 18 | 90 | 36 | 7 | 5.5 | 8 | 3 | 9 |
| M10 × 0.75 | | - | TC854456 | TD854456 | 18 | 90 | 36 | 7 | 5.5 | 8 | 3 | 9.2 |
| M12 × 1.5 | | TB854516 | TC854516 | TD854516 | 22 | 100 | 40 | 9 | 7 | 10 | 3 | 10.5 |
| M12 × 1.25 | | TB854526 | TC854526 | TD854526 | 22 | 100 | 40 | 9 | 7 | 10 | 3 | 10.8 |
| M12 × 1.0 | | - | TC854536 | TD854536 | 18 | 100 | 40 | 9 | 7 | 10 | 3 | 11 |
| M14 × 1.5 | | TB854556 | TC854556 | TD854556 | 22 | 100 | 40 | 11 | 9 | 12 | 3 | 12.5 |
| M14 × 1.25 | | TB854566 | TC854566 | TD854566 | 22 | 100 | 40 | 11 | 9 | 12 | 3 | 12.8 |
| M14 × 1.0 | | TB854576 | TC854576 | TD854576 | 22 | 100 | 40 | 11 | 9 | 12 | 3 | 13 |
| M16 × 1.5 | | TB854616 | TC854616 | TD854616 | 22 | 100 | 40 | 12 | 9 | 12 | 3 | 14.5 |
| M16 × 1.0 | | TB854626 | TC854626 | TD854626 | 18 | 100 | 40 | 12 | 9 | 12 | 3 | 15 |
| M18 × 1.5 | | TB854676 | TC854676 | TD854676 | 25 | 110 | 44 | 14 | 11 | 14 | 4 | 16.5 |
| M18 × 1.0 | | TB854686 | TC854686 | TD854686 | 20 | 110 | 44 | 14 | 11 | 14 | 4 | 17 |
| M20 × 1.5 | | TB854726 | TC854726 | TD854726 | 25 | 125 | 50 | 16 | 12 | 15 | 4 | 18.5 |
| M20 × 1.0 | | TB854736 | TC854736 | TD854736 | 20 | 125 | 50 | 16 | 12 | 15 | 4 | 19 |

► The other coating (TiCN or TiAlN) is available on your request. ► NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----------------------------------|-----|-----------------|-----|----------------|-------------------|-----|---------------------|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | | Malleable cast iron | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRC | 13 | 25 | 28 | 32 | 35 | 38 | 42 | 45 | 48 | 50 | 55 | 60 | 65 | 70 | 20 | 26 | 3 | 25 | 21 | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | H | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|-----|-----------------------------|-----|-----------------|----------------|-------------------|--------------------|-----|-----|-----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | Heat Resistant Super Alloys | | Titanium Alloys | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | | | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRC | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | | | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |



Vap **TB854** SERIES
Bright **TC854** SERIES
TiN **TD854** SERIES

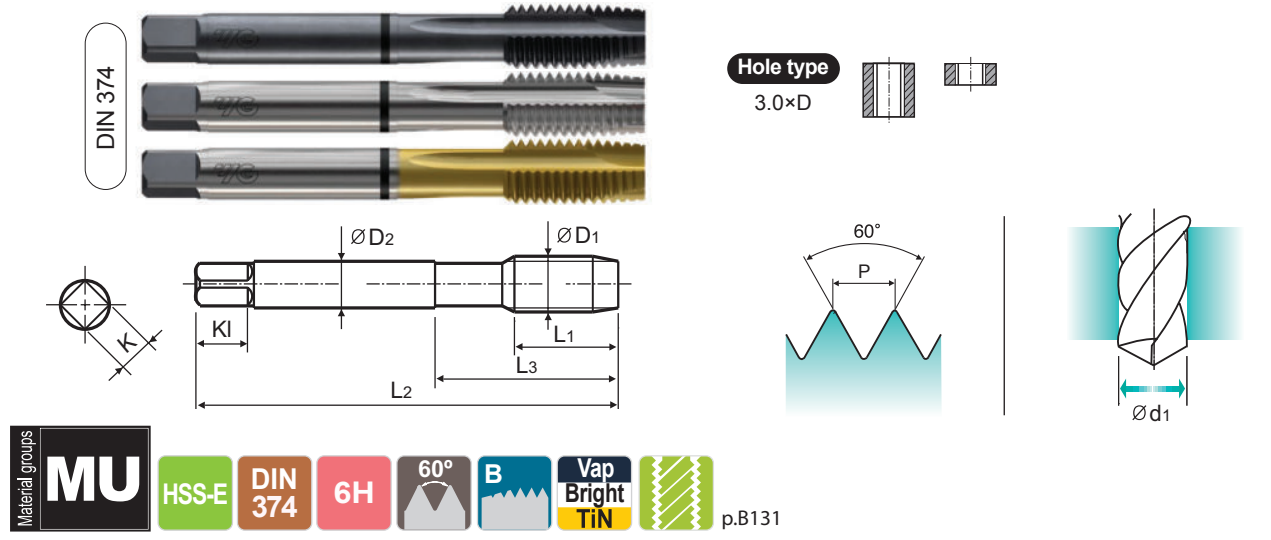
MF ISO Metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** HSS-E DIN 374 6H 60° B Vap Bright TiN p.B131

Unit : mm

| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------|-------|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | P | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 | | | |
| M22 × 1.5 | | TB854766 | TC854766 | TD854766 | 25 | 125 | 50 | 18 | 14.5 | 17 | 4 | 20.5 |
| M22 × 1.0 | | TB854776 | TC854776 | TD854776 | 20 | 125 | 50 | 18 | 14.5 | 17 | 4 | 21 |
| M24 × 2.0 | | TB854796 | TC854796 | TD854796 | 27 | 140 | 54 | 18 | 14.5 | 17 | 4 | 22 |
| M24 × 1.5 | | TB854806 | TC854806 | TD854806 | 27 | 140 | 54 | 18 | 14.5 | 17 | 4 | 22.5 |
| M26 × 1.5 | | TB854856 | TC854856 | TD854856 | 28 | 140 | 54 | 18 | 14.5 | 17 | 4 | 24.5 |
| M27 × 2.0 | | TB854876 | TC854876 | TD854876 | 28 | 140 | 54 | 20 | 16 | 19 | 4 | 25 |
| M27 × 1.5 | | - | TC854886 | TD854886 | 28 | 140 | 54 | 20 | 16 | 19 | 4 | 25.5 |
| M28 × 1.5 | | TB854916 | TC854916 | TD854916 | 28 | 140 | 54 | 20 | 16 | 19 | 4 | 26.5 |
| M30 × 2.0 | | TB854966 | TC854966 | - | 30 | 150 | 57 | 22 | 18 | 21 | 4 | 28 |
| M30 × 1.5 | | TB854976 | TC854976 | TD854976 | 30 | 150 | 57 | 22 | 18 | 21 | 4 | 28.5 |
| M32 × 2.0 | | - | TC854A16 | TD854A16 | 30 | 150 | 57 | 22 | 18 | 21 | 4 | 30.0 |
| M32 × 1.5 | | - | TC854A26 | TD854A26 | 30 | 150 | 57 | 22 | 18 | 21 | 4 | 30.5 |
| M33 × 2.0 | | - | TC854A66 | TD854A66 | 33 | 160 | 60 | 25 | 20 | 23 | 4 | 31.0 |
| M33 × 1.5 | | - | TC854A76 | TD854A76 | 32 | 160 | 60 | 25 | 20 | 23 | 4 | 31.5 |
| M34 × 1.5 | | - | TC854A96 | TD854A96 | 33 | 170 | 70 | 28 | 22 | 25 | 4 | 32.5 |
| M35 × 1.5 | | - | TC854B16 | TD854B16 | 33 | 170 | 70 | 28 | 22 | 25 | 4 | 33.5 |
| M36 × 3.0 | | - | TC854B46 | TD854B46 | 45 | 200 | 80 | 28 | 22 | 25 | 4 | 33.0 |
| M36 × 2.0 | | - | TC854B56 | TD854B56 | 33 | 170 | 70 | 28 | 22 | 25 | 4 | 34.0 |
| M36 × 1.5 | | - | TC854B66 | TD854B66 | 33 | 170 | 70 | 28 | 22 | 25 | 4 | 34.5 |
| M38 × 1.5 | | - | TC854B86 | TD854B86 | 33 | 170 | 70 | 28 | 22 | 25 | 4 | 36.5 |
| M39 × 1.5 | | - | TC854C36 | TD854C36 | 33 | 170 | 70 | 32 | 24 | 27 | 4 | 37.5 |
| M40 × 1.5 | | - | TC854C66 | TD854C66 | 33 | 170 | 70 | 32 | 24 | 27 | 4 | 38.5 |

► The other coating (TiCN or TiAlN) is available on your request. ► NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----------------------------------|-----|-----------------|-----|----------------|-------------------|-----|---------------------|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | | Malleable cast iron | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRC | 13 | 25 | 28 | 32 | 35 | 38 | 42 | 45 | 48 | 50 | 55 | 60 | 65 | 70 | 20 | 26 | 3 | 25 | 21 | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | H | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|-----|-----------------------------|-----|-----------------|----------------|-------------------|--------------------|-----|-----|-----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | Heat Resistant Super Alloys | | Titanium Alloys | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | | | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRC | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | | | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |



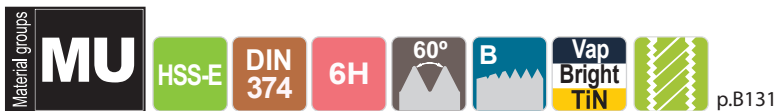
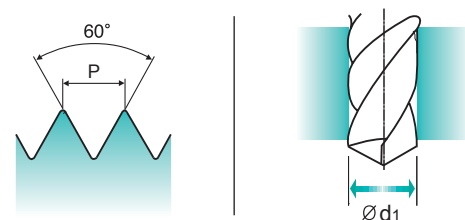
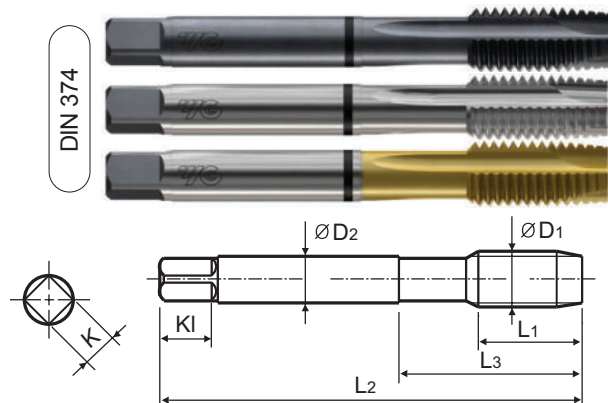
Vap **TB854** SERIES
Bright **TC854** SERIES
TiN **TD854** SERIES

MF ISO Metric fine threads DIN 13
 ● Metrisches ISO-Feingewinde DIN 13
 ○ ISO MÉTRIQUE PAS FINS DIN13
 ○ ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



| SIZE | Pitch | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------|-------|---------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| M42 x 3.0 | | - | TC854D06 | TD854D06 | 45 | 200 | 80 | 32 | 24 | 27 | 4 | 39.0 |
| M42 x 2.0 | | - | TC854D16 | TD854D16 | 33 | 170 | 70 | 32 | 24 | 27 | 4 | 40.0 |
| M42 x 1.5 | | - | TC854D26 | TD854D26 | 33 | 170 | 70 | 32 | 24 | 27 | 4 | 40.5 |
| M45 x 1.5 | | - | TC854D96 | TD854D96 | 33 | 180 | 80 | 36 | 29 | 32 | 4 | 43.5 |
| M48 x 3.0 | | - | TC854E56 | TD854E56 | 45 | 225 | 90 | 36 | 29 | 32 | 4 | 45.0 |
| M48 x 2.0 | | - | TC854E66 | TD854E66 | 36 | 190 | 80 | 36 | 29 | 32 | 4 | 46.0 |
| M48 x 1.5 | | - | TC854E76 | TD854E76 | 36 | 190 | 80 | 36 | 29 | 32 | 4 | 46.5 |
| M50 x 1.5 | | - | TC854F16 | TD854F16 | 36 | 190 | 80 | 36 | 29 | 32 | 4 | 48.5 |
| M52 x 3.0 | | - | TC854F56 | TD854F56 | 45 | 225 | 90 | 40 | 32 | 35 | 4 | 49.0 |
| M52 x 2.0 | | - | TC854F66 | TD854F66 | 36 | 190 | 80 | 40 | 32 | 35 | 4 | 50.0 |
| M52 x 1.5 | | - | TC854F76 | TD854F76 | 36 | 190 | 80 | 40 | 32 | 35 | 4 | 50.5 |

► The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-----|-------------------|-----|---------------------|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 125 | 130 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | S | | | | | H | | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|------------------------|----|----|-----------------------------|----|----|----|----|-----------------|----|----------------|----|-------------------|----|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | Non Metallic Materials | | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | | Hardened Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| HRc | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 15 | 30 | 25 | 38 | 34 | 55 | 60 | 42 | 55 | 55 | 55 | |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | |



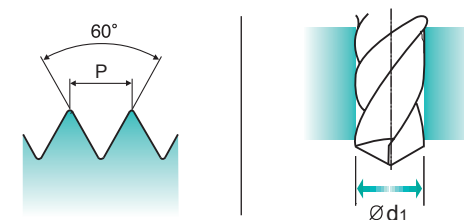
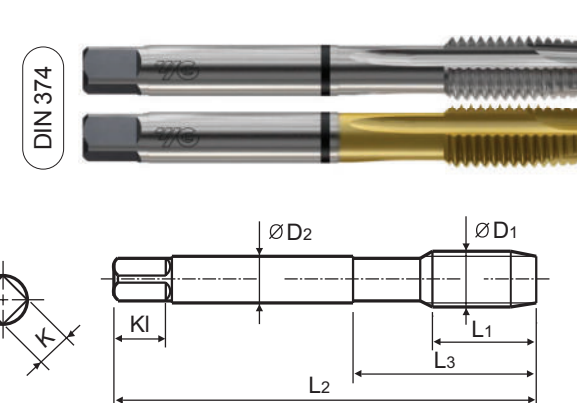
Bright **TCJ09** SERIES
TiN **TDJ09** SERIES

MF ISO Metric fine threads DIN 13
 ● Metrisches ISO-Feingewinde DIN 13
 ○ ISO MÉTRIQUE PAS FINS DIN13
 ○ ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

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



| SIZE | Pitch | EDP No. | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------------|-------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Bright | TiN | | | | | | | | |
| M4 x 0.5 | | TCJ09256 | TDJ09256 | 10 | 63 | 21 | 2.8 | 2.1 | 5 | 3 | 3.5 |
| M5 x 0.5 | | TCJ09296 | TDJ09296 | 11 | 70 | 25 | 3.5 | 2.7 | 6 | 3 | 4.5 |
| M6 x 0.75 | | TCJ09326 | - | 13 | 80 | 30 | 4.5 | 3.4 | 6 | 3 | 5.2 |
| M6 x 0.5 | | - | TDJ09336 | 13 | 80 | 30 | 4.5 | 3.4 | 6 | 3 | 5.5 |
| M7 x 0.75 | | TCJ09356 | TDJ09356 | 14 | 80 | 30 | 5.5 | 4.3 | 7 | 3 | 6.2 |
| M8 x 1.0 | | TCJ09376 | TDJ09376 | 17 | 90 | 36 | 6 | 4.9 | 8 | 3 | 7 |
| M8 x 0.75 | | TCJ09386 | TDJ09386 | 14 | 80 | 30 | 6 | 4.9 | 8 | 3 | 7.2 |
| M10 x 1.0 | | TCJ09446 | TDJ09446 | 18 | 90 | 36 | 7 | 5.5 | 8 | 3 | 9 |
| M10 x 0.75 | | TCJ09456 | TDJ09456 | 18 | 90 | 36 | 7 | 5.5 | 8 | 3 | 9.2 |
| M12 x 1.5 | | TCJ09516 | TDJ09516 | 22 | 100 | 40 | 9 | 7 | 10 | 3 | 10.5 |
| M12 x 1.25 | | TCJ09526 | TDJ09526 | 22 | 100 | 40 | 9 | 7 | 10 | 3 | 10.8 |
| M12 x 1.0 | | TCJ09536 | - | 18 | 100 | 40 | 9 | 7 | 10 | 3 | 11 |
| M14 x 1.5 | | TCJ09556 | TDJ09556 | 22 | 100 | 40 | 11 | 9 | 12 | 3 | 12.5 |
| M14 x 1.25 | | TCJ09566 | TDJ09566 | 22 | 100 | 40 | 11 | 9 | 12 | 3 | 12.8 |
| M14 x 1.0 | | TCJ09576 | TDJ09576 | 22 | 100 | 40 | 11 | 9 | 12 | 3 | 13 |
| M16 x 1.5 | | TCJ09616 | TDJ09616 | 22 | 100 | 40 | 12 | 9 | 12 | 3 | 14.5 |
| M16 x 1.0 | | TCJ09626 | TDJ09626 | 18 | 100 | 40 | 12 | 9 | 12 | 3 | 15 |
| M18 x 1.5 | | TCJ09676 | TDJ09676 | 25 | 110 | 44 | 14 | 11 | 14 | 4 | 16.5 |
| M18 x 1.0 | | TCJ09686 | TDJ09686 | 20 | 110 | 44 | 14 | 11 | 14 | 4 | 17 |
| M20 x 1.5 | | TCJ09726 | TDJ09726 | 25 | 125 | 50 | 16 | 12 | 15 | 4 | 18.5 |
| M20 x 1.0 | | TCJ09736 | TDJ09736 | 20 | 125 | 50 | 16 | 12 | 15 | 4 | 19 |

► The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

► NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-----|-------------------|-----|---------------------|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 125 | 130 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | S | | | | | H | | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|------------------------|----|----|-----------------------------|----|----|----|----|-----------------|----|----------------|----|-------------------|----|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | Non Metallic Materials | | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | | Hardened Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| HRc | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 15 | 30 | 25 | 38 | 34 | 55 | 60 | 42 | 55 | 55 | 55 | |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | |

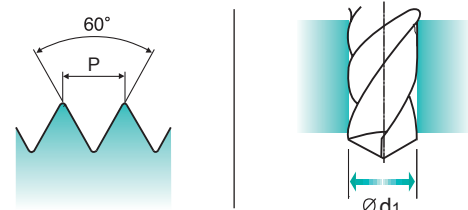
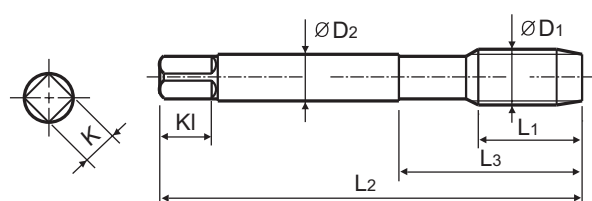
MF ISO Metric fine threads DIN 13

- Metrisches ISO-Feingewinde DIN 13
- ISO MÉTRIQUE PAS FINS DIN13
- ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

► 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.



Material groups: **MU** HSS-E DIN 374 6G 60° B TIN Bright p.B131

Unit : mm

| SIZE | Pitch | EDP No. | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------|-------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Bright | TiN | | | | | | | | |
| ØD1 | P | | | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| M22 × 1.5 | | TCJ09766 | TDJ09766 | 25 | 125 | 50 | 18 | 14.5 | 17 | 4 | 20.5 |
| M22 × 1.0 | | TCJ09776 | TDJ09776 | 20 | 125 | 50 | 18 | 14.5 | 17 | 4 | 21 |
| M24 × 2.0 | | TCJ09796 | TDJ09796 | 27 | 140 | 54 | 18 | 14.5 | 17 | 4 | 22 |
| M24 × 1.5 | | TCJ09806 | TDJ09806 | 27 | 140 | 54 | 18 | 14.5 | 17 | 4 | 22.5 |
| M26 × 1.5 | | TCJ09856 | TDJ09856 | 28 | 140 | 54 | 18 | 14.5 | 17 | 4 | 24.5 |
| M27 × 2.0 | | TCJ09876 | TDJ09876 | 28 | 140 | 54 | 20 | 16 | 19 | 4 | 25 |
| M27 × 1.5 | | - | - | 28 | 140 | 54 | 20 | 16 | 19 | 4 | 25.5 |
| M28 × 1.5 | | TCJ09916 | TDJ09916 | 28 | 140 | 54 | 20 | 16 | 19 | 4 | 26.5 |
| M30 × 2.0 | | TCJ09966 | TDJ09966 | 30 | 150 | 57 | 22 | 18 | 21 | 4 | 28 |
| M30 × 1.5 | | - | TDJ09976 | 30 | 150 | 57 | 22 | 18 | 21 | 4 | 28.5 |

► The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 52 | 55 | 58 | 60 | 62 | 65 | 68 | 70 | 72 |
| HB | 125 | 190 | 250 | 270 | 300 | 320 | 350 | 380 | 400 | 420 | 450 | 480 | 500 | 520 | 550 | 600 | 650 | 700 | 750 | 800 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | S | | | | | H | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|------------------------|----|-----------------------------|-----|-----|-----|-----|-----------------|--------|----------------|-------------------|--------------------|-----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |

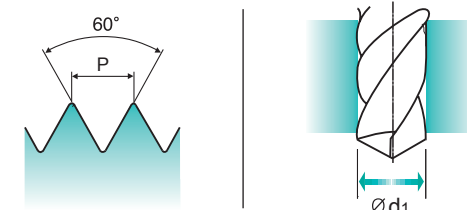
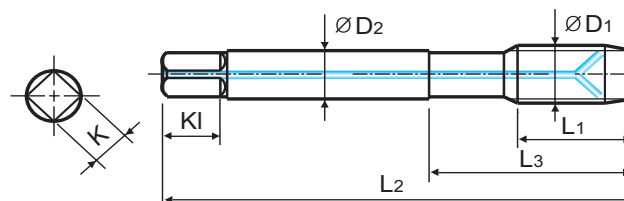
M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13, AVEC ARROSAGE CENTRAL
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► 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.



Material groups: **MU** HSS-E DIN 371/376 6H 60° B Bright p.B131

Unit : mm

| SIZE | Pitch | EDP No. | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------------|-------|------------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | | | | | | | | | |
| ØD1 | P | | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| M6 × 1.0 | | TC814316IC | 17 | 80 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M8 × 1.25 | | TC814366IC | 20 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.8 |
| M10 × 1.5 | | TC814426IC | 22 | 100 | 39 | 10 | 8 | 11 | 3 | 8.5 |
| M12 × 1.75 | | TC814506IC | 24 | 110 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 × 2.0 | | TC814546IC | 26 | 110 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 × 2.0 | | TC814606IC | 27 | 110 | 44 | 12 | 9 | 12 | 3 | 14 |
| M18 × 2.5 | | TC814656IC | 30 | 125 | 50 | 14 | 11 | 14 | 4 | 15.5 |
| M20 × 2.5 | | TC814706IC | 32 | 140 | 54 | 16 | 12 | 15 | 4 | 17.5 |

► DIN 371(M6~M10) and DIN 376(M12~M20)
► Coating(TiN, TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 52 | 55 | 58 | 60 | 62 | 65 | 68 | 70 | 72 |
| HB | 125 | 190 | 250 | 270 | 300 | 320 | 350 | 380 | 400 | 420 | 450 | 480 | 500 | 520 | 550 | 600 | 650 | 700 | 750 | 800 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | S | | | | | H | | | | | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|------------------------|----|-----------------------------|-----|-----|-----|-----|-----------------|--------|----------------|-------------------|--------------------|-----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |

M ISO Metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

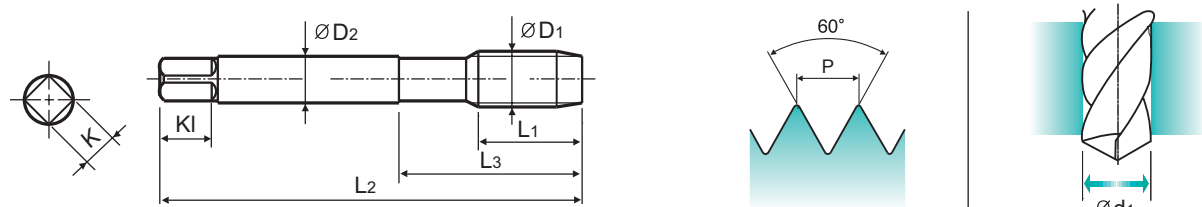
Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Long Shank



Material groups: **MU** HSS-E LONG 6H 60° B Bright p.B131

| SIZE | Pitch | EDP No. | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------------|--------|----------|----------------|----------------|----------------|-----------------|-------------|---------------|--------------|------------------------|
| ØD ₁ | P | Bright | L ₁ | L ₂ | L ₃ | ØD ₂ | K | KI | Z | Ød ₁ |
| M3 | × 0.5 | TC445206 | 11 | 100 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M4 | × 0.7 | TC445246 | 13 | 125 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M5 | × 0.8 | TC445286 | 15 | 140 | 25 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 | × 1.0 | TC445316 | 17 | 160 | 30 | 6 | 4.9 | 8 | 3 | 5 |
| M8 | × 1.25 | TC445366 | 20 | 180 | 35 | 6 | 4.9 | 8 | 3 | 6.8 |
| M10 | × 1.5 | TC445426 | 22 | 200 | 39 | 7 | 5.5 | 8 | 3 | 8.5 |
| M12 | × 1.75 | TC445506 | 24 | 220 | 44 | 9 | 7 | 10 | 3 | 10.2 |
| M14 | × 2.0 | TC445546 | 26 | 220 | 44 | 11 | 9 | 12 | 3 | 12 |
| M16 | × 2.0 | TC445606 | 27 | 220 | 44 | 12 | 9 | 12 | 3 | 14 |
| M20 | × 2.5 | TC445706 | 32 | 280 | 54 | 16 | 12 | 15 | 4 | 17.5 |

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

◎ : Excellent ○ : Good

| ISO Material Description | P | | | | | | | | | | M | | | | K | | | | | |
|--------------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 38 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO Material Description | N | | | | | S | | | | | H | | | | | | | | | | |
|--------------------------|------------------------|-----|------------------------|----|-----|---|----|-----|------------------------|----|-----------------------------|-----|-----|-----|-----|-----------------|--------|----------------|-------------------|--------------------|-----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |

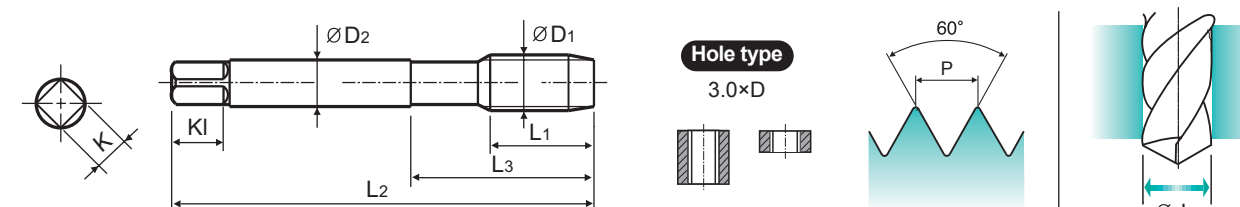
UNC Unified coarse threads

- Unified Grobgewinde
- UNC
- Unificato passo grosso

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 371/376 2B 60° B Vap Bright TiN p.B131

| SIZE | TPI | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|-----------------|-----|----------|----------|----------|----------------|----------------|----------------|-----------------|-------------|---------------|--------------|------------------------|
| ØD ₁ | | Vap | Bright | TiN | L ₁ | L ₂ | L ₃ | ØD ₂ | K | KI | Z | Ød ₁ |
| #4 - 40 UNC | | TB834162 | TC834162 | TD834162 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.3 |
| #5 - 40 UNC | | TB834202 | TC834202 | TD834202 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.6 |
| #6 - 32 UNC | | - | TC834242 | TD834242 | 12 | 56 | 20 | 4 | 3 | 6 | 3 | 2.85 |
| #8 - 32 UNC | | TB834282 | TC834282 | TD834282 | 13 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.5 |
| #10 - 24 UNC | | TB834322 | TC834322 | TD834322 | 15 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.9 |
| #12 - 24 UNC | | TB834362 | TC834362 | TD834362 | 16 | 80 | 30 | 6 | 4.9 | 8 | 3 | 4.5 |
| 1/4 - 20 UNC | | TB834402 | TC834402 | TD834402 | 17 | 80 | 30 | 7 | 5.5 | 8 | 3 | 5.2 |
| 5/16 - 18 UNC | | TB834442 | TC834442 | TD834442 | 20 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.6 |
| 3/8 - 16 UNC | | TB834482 | TC834482 | TD834482 | 22 | 100 | 39 | 9 | 7 | 10 | 3 | 8 |
| 7/16 - 14 UNC | | TB834522 | TC834522 | TD834522 | 22 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.4 |
| 1/2 - 13 UNC | | TB834562 | TC834562 | TD834562 | 25 | 110 | 44 | 9 | 7 | 10 | 3 | 10.75 |
| 9/16 - 12 UNC | | - | TC834602 | TD834602 | 26 | 110 | 44 | 11 | 9 | 12 | 3 | 12.25 |
| 5/8 - 11 UNC | | TB834642 | TC834642 | TD834642 | 27 | 110 | 44 | 12 | 9 | 12 | 3 | 13.5 |
| 3/4 - 10 UNC | | TB834702 | TC834702 | TD834702 | 30 | 125 | 50 | 14 | 11 | 14 | 4 | 16.5 |
| 7/8 - 9 UNC | | TB834742 | TC834742 | - | 32 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |
| 1 - 8 UNC | | - | TC834782 | TD834782 | 36 | 160 | 60 | 20 | 16 | 19 | 4 | 22.25 |

► DIN 371(#4~3/8) and DIN 376(7/16~1)
► The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO Material Description | P | | | | | | | | | | M | | | | K | | | | | |
|--------------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|---------------------|-----|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | Malleable cast iron | | | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 38 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

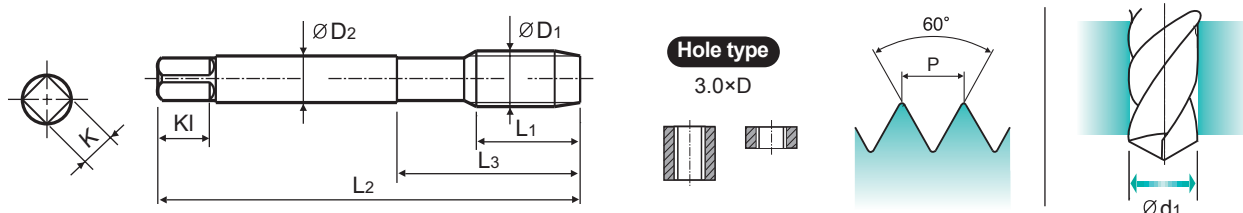
| ISO Material Description | N | | | | | S | | | | | H | | | | | | | | | | |
|--------------------------|------------------------|-----|------------------------|----|-----|---|----|-----|------------------------|----|-----------------------------|-----|-----|-----|-----|-----------------|--------|----------------|-------------------|--------------------|-----|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron | |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |

UNC Unified coarse threads
 Unified Grobgewinde
 UNC
 Unificato passo grosso

Machine taps
Maschinengewindebohrer

▶ 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 371/376 3B 60° B TiN Bright p.B131

Unit : mm

| SIZE | TPI | EDP No. | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|---------------|-----|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Bright | TiN | | | | | | | | |
| ØD1 | | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 | | |
| #4 - 40 UNC | | TCJ01162 | TDJ01162 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.3 |
| #5 - 40 UNC | | TCJ01202 | TDJ01202 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.6 |
| #6 - 32 UNC | | TCJ01242 | TDJ01242 | 12 | 56 | 20 | 4 | 3 | 6 | 3 | 2.85 |
| #8 - 32 UNC | | TCJ01282 | - | 13 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.5 |
| #10 - 24 UNC | | TCJ01322 | TDJ01322 | 15 | 70 | 25 | 6 | 4.9 | 8 | 3 | 3.9 |
| #12 - 24 UNC | | TCJ01362 | TDJ01362 | 16 | 80 | 30 | 6 | 4.9 | 8 | 3 | 4.5 |
| 1/4 - 20 UNC | | TCJ01402 | TDJ01402 | 17 | 80 | 30 | 7 | 5.5 | 8 | 3 | 5.2 |
| 5/16 - 18 UNC | | TCJ01442 | TDJ01442 | 20 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.6 |
| 3/8 - 16 UNC | | TCJ01482 | - | 22 | 100 | 39 | 9 | 7 | 10 | 3 | 8 |
| 7/16 - 14 UNC | | TCJ01522 | TDJ01522 | 22 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.4 |
| 1/2 - 13 UNC | | TCJ01562 | TDJ01562 | 25 | 110 | 44 | 9 | 7 | 10 | 3 | 10.75 |
| 9/16 - 12 UNC | | TCJ01602 | TDJ01602 | 26 | 110 | 44 | 11 | 9 | 12 | 3 | 12.25 |
| 5/8 - 11 UNC | | TCJ01642 | TDJ01642 | 27 | 110 | 44 | 12 | 9 | 12 | 3 | 13.5 |
| 3/4 - 10 UNC | | TCJ01702 | TDJ01702 | 30 | 125 | 50 | 14 | 11 | 14 | 4 | 16.5 |
| 7/8 - 9 UNC | | TCJ01742 | TDJ01742 | 32 | 140 | 54 | 18 | 14.5 | 17 | 4 | 19.5 |
| 1 - 8 UNC | | TCJ01782 | TDJ01782 | 36 | 160 | 60 | 20 | 16 | 19 | 4 | 22.25 |

▶ DIN 371(#4~3/8) and DIN 376(7/16~1)
 ▶ The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|-----|---------------------|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | | Malleable cast iron | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

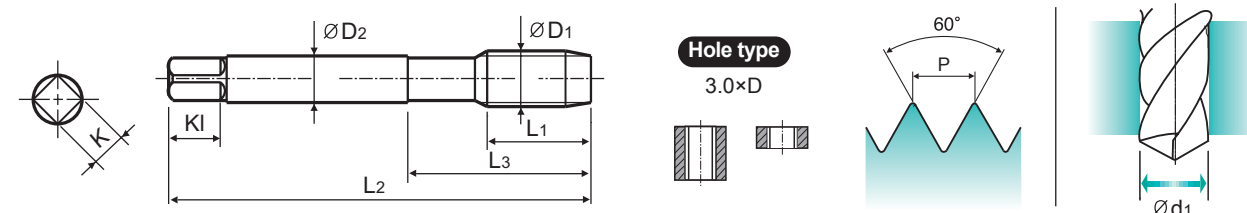
| ISO | N | | | | | | | | | | S | | | | H | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|-----|-----------------------------|-----|-----|-------|-----------------|-----|----------------|-------------------|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

UNF Unified fine threads
 Unified Feingewinde
 UNF
 Unificato passo fine

Machine taps
Maschinengewindebohrer

▶ 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups: **MU** HSS-E DIN 371/374 2B 60° B Vap Bright TiN p.B131

Unit : mm

| SIZE | TPI | EDP No. | | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|---------------|-----|----------|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Vap | Bright | TiN | | | | | | | | |
| ØD1 | | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 | | | |
| #4 - 48 UNF | | - | TC874182 | TD874182 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.4 |
| #5 - 44 UNF | | - | TC874222 | TD874222 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.7 |
| #6 - 40 UNF | | - | TC874262 | TD874262 | 12 | 56 | 20 | 4 | 3 | 6 | 3 | 3 |
| #8 - 36 UNF | | TB874302 | TC874302 | TD874302 | 13 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.5 |
| #10 - 32 UNF | | TB874342 | TC874342 | TD874342 | 15 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.1 |
| #12 - 28 UNF | | - | TC874382 | TD874382 | 16 | 80 | 30 | 6 | 4.9 | 8 | 3 | 4.7 |
| 1/4 - 28 UNF | | - | TC874422 | TD874422 | 17 | 80 | 30 | 7 | 5.5 | 8 | 3 | 5.5 |
| 5/16 - 24 UNF | | TB874462 | TC874462 | TD874462 | 17 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.9 |
| 3/8 - 24 UNF | | TB874502 | TC874502 | TD874502 | 18 | 100 | 39 | 9 | 7 | 10 | 3 | 8.5 |
| 7/16 - 20 UNF | | TB874542 | TC874542 | TD874542 | 22 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.9 |
| 1/2 - 20 UNF | | TB874582 | TC874582 | TD874582 | 22 | 100 | 40 | 9 | 7 | 10 | 3 | 11.5 |
| 9/16 - 18 UNF | | - | TC874622 | TD874622 | 22 | 100 | 40 | 11 | 9 | 12 | 3 | 12.9 |
| 5/8 - 18 UNF | | TB874662 | TC874662 | TD874662 | 22 | 100 | 40 | 12 | 9 | 12 | 3 | 14.5 |
| 3/4 - 16 UNF | | TB874722 | TC874722 | TD874722 | 25 | 110 | 44 | 14 | 11 | 14 | 4 | 17.5 |
| 7/8 - 14 UNF | | - | TC874762 | TD874762 | 26 | 125 | 50 | 18 | 14.5 | 17 | 4 | 20.5 |
| 1 - 12 UNF | | - | TC874802 | TD874802 | 28 | 140 | 54 | 20 | 16 | 19 | 4 | 23.25 |

▶ DIN 371(#4~3/8) and DIN 374(7/16~1)
 ▶ The other coating(TiCN or TiAlN) is available on your request.

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-------------------|-----|---------------------|-----|-----|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | Grey cast iron | Nodular cast iron | | Malleable cast iron | | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | 13 | 25 | 28 | 32 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

| ISO | N | | | | | | | | | | S | | | | H | | | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|-----|-----------------------------|-----|-----|-------|-----------------|-----|----------------|-------------------|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |



Bright **TCJ02** SERIES
TIN **TDJ02** SERIES

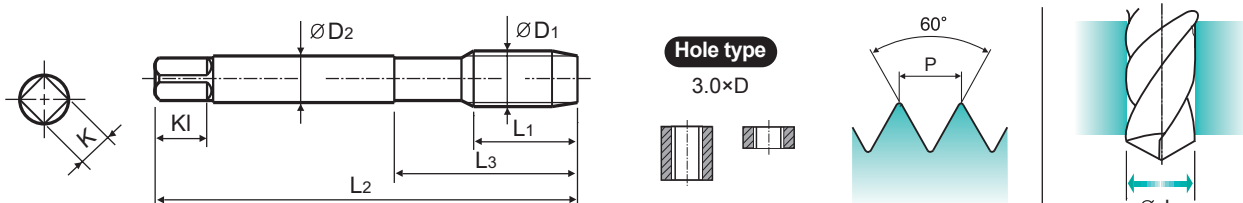
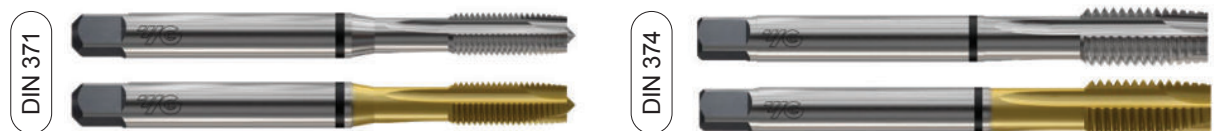
UNF Unified fine threads

- Unified Grobgewinde
- UNF
- Unificato passo fine

Machine taps
Maschinengewindebohrer

► 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 Standzeit dank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Hole type
3.0×D

Material groups: **MU** HSS-E DIN 371/374 3B 60° B TiN Bright p.B131

Unit : mm

| SIZE | TPI | EDP No. | | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|---------------|-----|----------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| | | Bright | TiN | | | | | | | | |
| #4 - 48 UNF | 48 | TCJ02182 | TDJ02182 | L1 | L2 | L3 | ØD2 | K | KI | Z | Ød1 |
| #5 - 44 UNF | 44 | TCJ02222 | TDJ02222 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.4 |
| #6 - 40 UNF | 40 | TCJ02262 | TDJ02262 | 11 | 56 | 18 | 3.5 | 2.7 | 6 | 3 | 2.7 |
| #8 - 36 UNF | 36 | TCJ02302 | TDJ02302 | 12 | 56 | 20 | 4 | 3 | 6 | 3 | 3 |
| #10 - 32 UNF | 32 | TCJ02342 | TDJ02342 | 13 | 63 | 21 | 4.5 | 3.4 | 6 | 3 | 3.5 |
| #12 - 28 UNF | 28 | TCJ02382 | TDJ02382 | 15 | 70 | 25 | 6 | 4.9 | 8 | 3 | 4.1 |
| 1/4 - 28 UNF | 28 | TCJ02422 | - | 16 | 80 | 30 | 6 | 4.9 | 8 | 3 | 4.7 |
| 5/16 - 24 UNF | 24 | TCJ02462 | - | 17 | 80 | 30 | 7 | 5.5 | 8 | 3 | 5.5 |
| 3/8 - 24 UNF | 24 | TCJ02502 | TDJ02502 | 17 | 90 | 35 | 8 | 6.2 | 9 | 3 | 6.9 |
| 7/16 - 20 UNF | 20 | TCJ02542 | - | 18 | 100 | 39 | 9 | 7 | 10 | 3 | 8.5 |
| 1/2 - 20 UNF | 20 | TCJ02582 | - | 22 | 100 | 40 | 8 | 6.2 | 9 | 3 | 9.9 |
| 9/16 - 18 UNF | 18 | TCJ02622 | TDJ02622 | 22 | 100 | 40 | 9 | 7 | 10 | 3 | 11.5 |
| 5/8 - 18 UNF | 18 | TCJ02662 | TDJ02662 | 22 | 100 | 40 | 11 | 9 | 12 | 3 | 12.9 |
| 3/4 - 16 UNF | 16 | TCJ02722 | TDJ02722 | 22 | 100 | 40 | 12 | 9 | 12 | 3 | 14.5 |
| 7/8 - 14 UNF | 14 | TCJ02762 | TDJ02762 | 25 | 110 | 44 | 14 | 11 | 14 | 4 | 17.5 |
| 1 - 12 UNF | 12 | TCJ02802 | TDJ02802 | 26 | 125 | 50 | 18 | 14.5 | 17 | 4 | 20.5 |
| | | | | 28 | 140 | 54 | 20 | 16 | 19 | 4 | 23.25 |

- DIN 371(#4~3/8) and DIN 374(7/16~1)
- The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

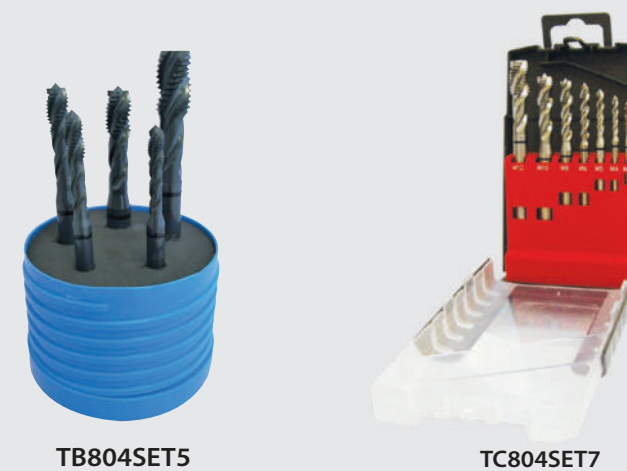
◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | M | | | | | | K | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|-----|-----|----------------|-----|-------------------|-----|---------------------|--|
| | Non-alloy steel | | | | | Low alloy steel | | | | | High alloyed steel, and tool steel | | Stainless steel | | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | |
| HRc | 13 | 25 | 28 | 32 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | 21 | | | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 | | |
| Recommended | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ○ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | | |

| ISO | N | | | | | | | | | | S | | | | | | H | | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|----|----|------------------------|----|-----------------------------|----|----|-------|-----------------|----|----------------|-------------------|--------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron | Hardened Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 15 | 30 | 25 | 38 | 34 | 400Rm | 1050Rm | 55 | 60 | 42 | 55 |
| Recommended | | | ◎ | | | ◎ | ◎ | ◎ | | | | | | | | | | | | | |



Combo Spiral Flute Tap Set



TB804SET5

TC804SET7

| Set No. | Series | Surface Treatment | Size | Quantity |
|-----------|--------|-------------------|------------------------------|----------|
| TB804SET5 | TB804 | VAP | M5, M6, M8, M10, M12 | 5 pcs |
| TC804SET7 | TC804 | Bright | M3, M4, M5, M6, M8, M10, M12 | 7 pcs |

Combo Spiral Flute Tap + Gold-P Drill (HSS-E, DIN 338, Straight Shank, 135° Split Point, Jobber Length) Set



TD804SET7-GLP195

| Set No. | Series | Surface Treatment | Size | | | | | | | | Quantity |
|------------------|---------|-------------------|------|-----|-----|----|-----|-----|------|--------|----------|
| | | | M3 | M4 | M5 | M6 | M8 | M10 | M12 | | |
| TD804SET7-GLP195 | TD804 | TiN | M3 | M4 | M5 | M6 | M8 | M10 | M12 | 14 pcs | |
| | DLGP195 | TiN | 2.5 | 3.3 | 4.2 | 5 | 6.8 | 8.5 | 10.2 | | |



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

| ISO | VDI 3323 | Material Description | HB | HRc | Vc (m/min.) | | | | | | | | |
|-----|----------|---|------------------------------------|-----|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------|-------|-------|-------|
| | | | | | TC804 TC844 TC824 TC864 | TD804 TD844 TD824 TD864 | TB804 TB844 TB824 TB864 | TCE05 TCE09 TCE01 TCE02 | TDE05 TDE09 TDE01 TDE02 | TBE05 | TCE06 | TDE06 | TBE06 |
| P | 1 | Non-alloy steel | 125 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 |
| | 2 | | 190 | 13 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 |
| | 3 | | 250 | 25 | 12-18 | 18-24 | 12-18 | 12-18 | 18-24 | 12-18 | 12-18 | 18-24 | 12-18 |
| | 4 | | 270 | 28 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 5 | | 300 | 32 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 |
| | 6 | Low alloy steel | 180 | 10 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 7 | | 275 | 29 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 8 | | 300 | 32 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 |
| | 9 | | 350 | 38 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 |
| | 10 | | High alloyed steel, and tool steel | 200 | 15 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 |
| M | 12 | Stainless steel | 200 | 15 | 7-10 | 10-15 | 7-10 | 7-10 | 10-15 | 7-10 | 7-10 | 10-15 | 7-10 |
| | 13 | | 240 | 23 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 |
| | 14 | | 180 | 10 | 4-6 | 6-8 | 4-6 | 4-6 | 6-8 | 4-6 | 4-6 | 6-8 | 4-6 |
| K | 15 | Grey cast iron | 180 | 10 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 16 | | 260 | 26 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 |
| | 17 | Nodular cast iron | 160 | 3 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 18 | | 250 | 25 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 |
| N | 23 | Aluminum-cast, alloyed | 75 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 |
| | 26 | Copper and Copper Alloys (Bronze / Brass) | 110 | | 25-35 | 35-40 | 25-35 | 25-35 | 35-40 | 25-35 | 25-35 | 35-40 | 25-35 |
| | 27 | | 90 | | 8-12 | 12-17 | 8-12 | 8-12 | 12-17 | 8-12 | 8-12 | 12-17 | 8-12 |
| | 28 | | 100 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 |

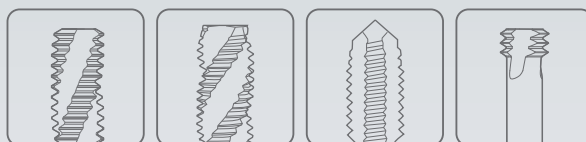
| ISO | VDI 3323 | Material Description | HB | HRc | Vc (m/min.) | | | | | | | | |
|-----|----------|---|------------------------------------|-----|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------|-------|-------|-------|
| | | | | | TC814 TC854 TC834 TC874 | TD814 TD854 TD834 TD874 | TB814 TB854 TB834 TB874 | TCJ05 TCJ09 TCJ01 TCJ02 | TDJ05 TDJ09 TDJ01 TDJ02 | TBJ05 | TCJ06 | TDJ06 | TBJ06 |
| P | 1 | Non-alloy steel | 125 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 |
| | 2 | | 190 | 13 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 |
| | 3 | | 250 | 25 | 12-18 | 18-24 | 12-18 | 12-18 | 18-24 | 12-18 | 12-18 | 18-24 | 12-18 |
| | 4 | | 270 | 28 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 5 | | 300 | 32 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 |
| | 6 | Low alloy steel | 180 | 10 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 7 | | 275 | 29 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 8 | | 300 | 32 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 |
| | 9 | | 350 | 38 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 |
| | 10 | | High alloyed steel, and tool steel | 200 | 15 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 |
| M | 12 | Stainless steel | 200 | 15 | 7-10 | 10-15 | 7-10 | 7-10 | 10-15 | 7-10 | 7-10 | 10-15 | 7-10 |
| | 13 | | 240 | 23 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 |
| | 14 | | 180 | 10 | 4-6 | 6-8 | 4-6 | 4-6 | 6-8 | 4-6 | 4-6 | 6-8 | 4-6 |
| K | 15 | Grey cast iron | 180 | 10 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 16 | | 260 | 26 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 |
| | 17 | Nodular cast iron | 160 | 3 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 |
| | 18 | | 250 | 25 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 |
| N | 23 | Aluminum-cast, alloyed | 75 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 |
| | 26 | Copper and Copper Alloys (Bronze / Brass) | 110 | | 25-35 | 35-40 | 25-35 | 25-35 | 35-40 | 25-35 | 25-35 | 35-40 | 25-35 |
| | 27 | | 90 | | 8-12 | 12-17 | 8-12 | 8-12 | 12-17 | 8-12 | 8-12 | 12-17 | 8-12 |
| | 28 | | 100 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 |

| ISO | VDI 3323 | Material Description | HB | HRc | Vc (m/min.) | | | | | | | |
|-----|----------|---|------------------------------------|-----|-------------|-------|-------|-------|-------|-------|----------|-------|
| | | | | | TCE07 | TDE07 | TBE07 | TCE08 | TDE08 | TBE08 | TC804-IC | TC633 |
| P | 1 | Non-alloy steel | 125 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 15-20 |
| | 2 | | 190 | 13 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 15-20 |
| | 3 | | 250 | 25 | 12-18 | 18-24 | 12-18 | 12-18 | 18-24 | 12-18 | 12-18 | 12-18 |
| | 4 | | 270 | 28 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 5 | | 300 | 32 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 | 6-10 | 6-10 |
| | 6 | Low alloy steel | 180 | 10 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 7 | | 275 | 29 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 8 | | 300 | 32 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 | 6-10 | 6-10 |
| | 9 | | 350 | 38 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 | 3-5 | 3-5 |
| | 10 | | High alloyed steel, and tool steel | 200 | 15 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 | 3-5 |
| M | 12 | Stainless steel | 200 | 15 | 7-10 | 10-15 | 7-10 | 7-10 | 10-15 | 7-10 | 7-10 | 7-10 |
| | 13 | | 240 | 23 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 5-8 |
| | 14 | | 180 | 10 | 4-6 | 6-8 | 4-6 | 4-6 | 6-8 | 4-6 | 4-6 | 4-6 |
| K | 15 | Grey cast iron | 180 | 10 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 16 | | 260 | 26 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 5-8 |
| | 17 | Nodular cast iron | 160 | 3 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 18 | | 250 | 25 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 5-8 |
| N | 23 | Aluminum-cast, alloyed | 75 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 15-20 |
| | 26 | Copper and Copper Alloys (Bronze / Brass) | 110 | | 25-35 | 35-40 | 25-35 | 25-35 | 35-40 | 25-35 | 25-35 | 25-35 |
| | 27 | | 90 | | 8-12 | 12-17 | 8-12 | 8-12 | 12-17 | 8-12 | 8-12 | 8-12 |
| | 28 | | 100 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 15-20 |

| ISO | VDI 3323 | Material Description | HB | HRc | Vc (m/min.) | | | | | | | |
|-----|----------|---|------------------------------------|-----|-------------|-------|-------|-------|-------|-------|----------|-------|
| | | | | | TCJ07 | TDJ07 | TBJ07 | TCJ08 | TDJ08 | TBJ08 | TC814-IC | TC445 |
| P | 1 | Non-alloy steel | 125 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 15-20 |
| | 2 | | 190 | 13 | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 15-20 |
| | 3 | | 250 | 25 | 12-18 | 18-24 | 12-18 | 12-18 | 18-24 | 12-18 | 12-18 | 12-18 |
| | 4 | | 270 | 28 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 5 | | 300 | 32 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 | 6-10 | 6-10 |
| | 6 | Low alloy steel | 180 | 10 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 7 | | 275 | 29 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 8 | | 300 | 32 | 6-10 | 10-14 | 6-10 | 6-10 | 10-14 | 6-10 | 6-10 | 6-10 |
| | 9 | | 350 | 38 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 | 3-5 | 3-5 |
| | 10 | | High alloyed steel, and tool steel | 200 | 15 | 3-5 | 5-7 | 3-5 | 3-5 | 5-7 | 3-5 | 3-5 |
| M | 12 | Stainless steel | 200 | 15 | 7-10 | 10-15 | 7-10 | 7-10 | 10-15 | 7-10 | 7-10 | 7-10 |
| | 13 | | 240 | 23 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 5-8 |
| | 14 | | 180 | 10 | 4-6 | 6-8 | 4-6 | 4-6 | 6-8 | 4-6 | 4-6 | 4-6 |
| K | 15 | Grey cast iron | 180 | 10 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 16 | | 260 | 26 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 5-8 |
| | 17 | Nodular cast iron | 160 | 3 | 10-15 | 15-20 | 10-15 | 10-15 | 15-20 | 10-15 | 10-15 | 10-15 |
| | 18 | | 250 | 25 | 5-8 | 8-11 | 5-8 | 5-8 | 8-11 | 5-8 | 5-8 | 5-8 |
| N | 23 | Aluminum-cast, alloyed | 75 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 15-20 |
| | 26 | Copper and Copper Alloys (Bronze / Brass) | 110 | | 25-35 | 35-40 | 25-35 | 25-35 | 35-40 | 25-35 | 25-35 | 25-35 |
| | 27 | | 90 | | 8-12 | 12-17 | 8-12 | 8-12 | 12-17 | 8-12 | 8-12 | 8-12 |
| | 28 | | 100 | | 15-20 | 20-25 | 15-20 | 15-20 | 20-25 | 15-20 | 15-20 | 15-20 |



Global Cutting Tool Leader **YG-1**



THREADING