

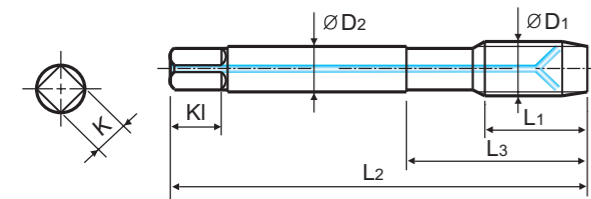
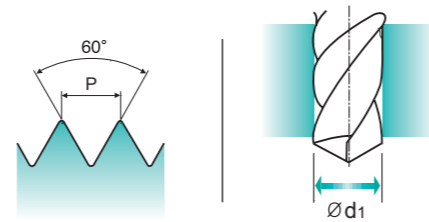
**M** TiCN-COATED HSS-PM STRAIGHT FLUTE TAPS **NEW**  
ISO Metric Coarse Threads DIN13

**TKS44-RCP SERIES**



- ▶ Coated HSS-PM (Powder Metallurgy) Taps for high-speed tapping on rigid CNC machines or equivalent machines
- ▶ Up to 3 times faster in tapping compared to conventional taps
- ▶ For high-speed synchro tapping, synchro holder for increasing tool life and thread quality is recommended
- ▶ High precision threads

with Internal Coolant



Material groups **GG** HSS PM DIN 371/376 6HX 60° C TiCN p.33

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      | TiCN        | L1            | L2             | L3          | ØD2            | K           | KI            | Z            | Ød1                    |
| M6   | × 1.0  | TKS44316RCP | 10            | 80             | 30          | 6              | 4.9         | 8             | 3            | 5.0                    |
| M8   | × 1.25 | TKS44366RCP | 13            | 90             | 35          | 8              | 6.2         | 9             | 3            | 6.8                    |
| M10  | × 1.5  | TKS44426RCP | 15            | 100            | 39          | 10             | 8           | 11            | 4            | 8.5                    |
| M12  | × 1.75 | TKS44506RCP | 18            | 110            | 44          | 9              | 7           | 10            | 4            | 10.2                   |
| M14  | × 2.0  | TKS44546RCP | 20            | 110            | 52          | 11             | 9           | 12            | 4            | 12.0                   |
| M16  | × 2.0  | TKS44606RCP | 20            | 110            | 52          | 12             | 9           | 12            | 4            | 14.0                   |
| M18  | × 2.5  | TKS44656RCP | 25            | 125            | 66          | 14             | 11          | 14            | 4            | 15.5                   |
| M20  | × 2.5  | TKS44706RCP | 25            | 140            | 72          | 16             | 12          | 15            | 4            | 17.5                   |

- ▶ DIN 371 (M6-M10) and DIN 376 (M12-M20)
- ▶ Coating (TiAlN) is available on your request
- ▶ For Specific Nut To Accommodate Sealing Disk (See Page 31-32)

◎ : 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  | 30  | 10              | 29  | 32  | 38  | 15  | 35  | 15                                 | 23  | 10  | 10  | 26              | 3   | 25             | 13  | 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                  | 60                     | 100 | 75                     | 90 | 130 | 110                                       | 90 | 100 |    |    | 15                     | 30  | 25                          | 38  | 34  | 400Rm           | 1050Rm | 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          | ○                      | ○   | ○                      | ○  | ○   | ○   | ○  | ○   | ○  | ○  | ○                      | ○   | ○                           | ○   | ○   | ○               | ○      | ○              | ○                 | ○                  | ○   |

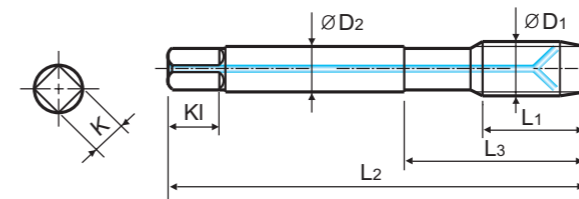
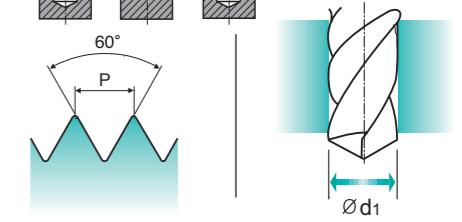
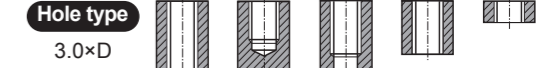
**M** TiN-COATED HSS-PM COLD FORMING TAPS **NEW**  
ISO Metric Coarse Threads DIN13

**TTS45-RCP SERIES**



- ▶ Coated HSS-PM (Powder Metallurgy) Taps for high-speed tapping on rigid CNC machines or equivalent machines
- ▶ Up to 3 times faster in tapping compared to conventional taps
- ▶ For high-speed synchro tapping, synchro holder for increasing tool life and thread quality is recommended
- ▶ High precision threads

with Internal Coolant



Material groups **GV** HSS PM DIN 371/376 6HX 60° C TiN p.33

Unit : mm

| SIZE | Pitch  | EDP No.     | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | Number of Oil Groove | Tapping Drill Diameter |
|------|--------|-------------|---------------|----------------|-------------|----------------|-------------|---------------|----------------------|------------------------|
| ØD1  | P      | TiN         | L1            | L2             | L3          | ØD2            | K           | KI            | Z                    | Ød1                    |
| M5   | × 0.8  | TTS45286RCP | 8             | 70             | 25          | 6              | 4.9         | 8             | 5                    | 4.65                   |
| M6   | × 1.0  | TTS45316RCP | 10            | 80             | 30          | 6              | 4.9         | 8             | 5                    | 5.55                   |
| M8   | × 1.25 | TTS45366RCP | 13            | 90             | 35          | 8              | 6.2         | 9             | 6                    | 7.4                    |
| M10  | × 1.5  | TTS45426RCP | 15            | 100            | 39          | 10             | 8           | 11            | 6                    | 9.3                    |
| M12  | × 1.75 | TTS45506RCP | 18            | 110            | 44          | 9              | 7           | 10            | 6                    | 11.2                   |
| M14  | × 2.0  | TTS45546RCP | 20            | 110            | 52          | 11             | 9           | 12            | 8                    | 13.0                   |
| M16  | × 2.0  | TTS45606RCP | 20            | 110            | 52          | 12             | 9           | 12            | 8                    | 15.0                   |
| M18  | × 2.5  | TTS45656RCP | 25            | 125            | 66          | 14             | 11          | 14            | 8                    | 16.8                   |
| M20  | × 2.5  | TTS45706RCP | 25            | 140            | 72          | 16             | 12          | 15            | 8                    | 18.8                   |

- ▶ DIN 371 (M5-M10) and DIN 376 (M12-M20)
- ▶ Coating (TiAlN) is available on your request
- ▶ For Specific Nut To Accommodate Sealing Disk (See Page 31-32)

◎ : 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  | 30  | 10              | 29  | 32  | 38  | 15  | 35  | 15                                 | 23  | 10  | 10  | 26              | 3   | 25             | 13  | 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                  | 60                     | 100 | 75                     | 90 | 130 | 110                                       | 90 | 100 |    |    | 15                     | 30  | 25                          | 38  | 34  | 400Rm           | 1050Rm | 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          | ◎                      | ◎   | ◎                      | ◎  | ◎   | ◎   | ◎  | ◎   | ◎  | ◎  | ◎                      | ◎   | ◎                           | ◎   | ◎   | ◎               | ◎      | ◎              | ◎                 | ◎                  | ◎   |