

|                |               |                      |              |            |                |                  |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

- ① Spiral Fluted Taps (for blind hole)
- ② Spiral Fluted Taps (for through hole)
- ③ Spiral Pointed Taps (for through hole)
- ④ Hand Taps
- ⑤ Cemented Carbide Taps
- ⑥ Roll Taps
- ⑦ Special Thread Taps (Simple inspection tools)
- ⑧ Pipe Taps
- ⑨ Thread Mills (Premium Thread Mills)
- ⑩ Dies
- ⑪ Center Drills (Centering Tools)
- ⑫ Precision Machinery/ Medical Surgical Instruments



## HT OX

### Hand Taps, Oxidized



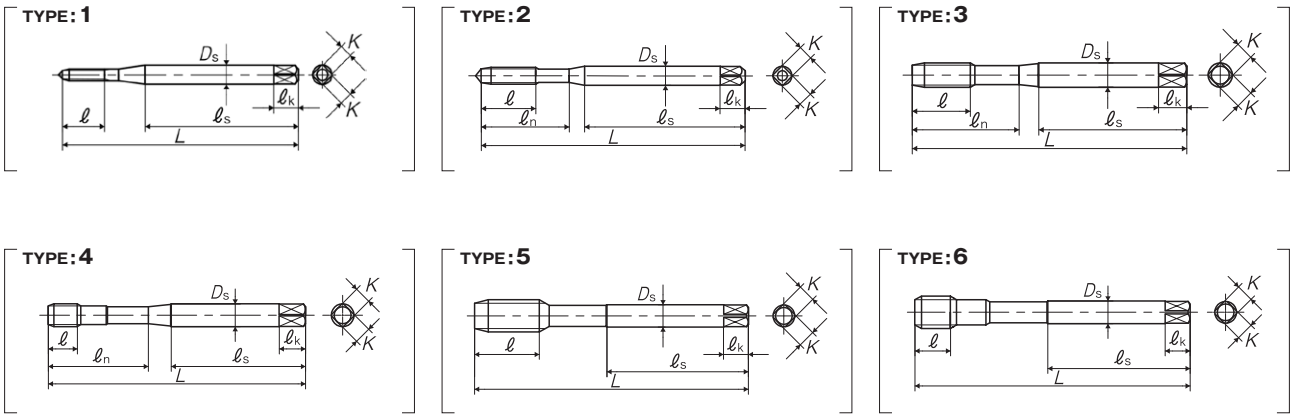
#### Specification



#### Tapping Speed depending on Materials

|                           |                              |                            |
|---------------------------|------------------------------|----------------------------|
| Low carbon steels<br>低炭素鋼 | Medium carbon steels<br>中炭素鋼 | High carbon steels<br>高炭素鋼 |
| 5~10<br>(m/min)           | 5~10<br>(m/min)              | 5~10<br>(m/min)            |

The HT OX taps are a hand tap with an oxidation treatment for preventing chip welding on the surface of the taps thread portion. It is suitable for thread processing of soft steel materials that easily welds to the taps thread such as low carbon steels.



Segment : 1A

| Size               | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|--------------------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| For Metric Threads |       |             |         |          |          |           |           |           |          |           |               |      |
| M2 × 0.4           | D3    | TS2.0E3NEX5 | 5P      | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| M2 × 0.4           | D3    | TS2.0E3NEXA | 1.5P    | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| M2.2 × 0.45        | D3    | TS2.2F3NEX5 | 5P      | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| M2.2 × 0.45        | D3    | TS2.2F3NEXA | 1.5P    | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| M2.5 × 0.45        | D3    | TS2.5F3NEX5 | 5P      | 2.205    | 0.354    | 0.693     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| M2.5 × 0.45        | D3    | TS2.5F3NEXA | 1.5P    | 2.205    | 0.354    | 0.693     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| M2.6 × 0.45        | D3    | TS2.6F3NEX5 | 5P      | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| M2.6 × 0.45        | D3    | TS2.6F3NEXA | 1.5P    | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| M3 × 0.5           | D3    | TS3.0G3NEX5 | 5P      | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| M3 × 0.5           | D3    | TS3.0G3NEXA | 1.5P    | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| M3.5 × 0.6         | D4    | TS3.5H4NEX5 | 5P      | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| M3.5 × 0.6         | D4    | TS3.5H4NEXA | 1.5P    | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| M4 × 0.7           | D4    | TS4.0I4NEX5 | 5P      | 2.48     | 0.512    | 0.815     | 1.535     | 0.168     | 0.131    | 0.25      | 3             | 2    |
| M4 × 0.7           | D4    | TS4.0I4NEXA | 1.5P    | 2.48     | 0.512    | 0.815     | 1.535     | 0.168     | 0.131    | 0.25      | 3             | 2    |
| M5 × 0.8           | D4    | TS5.0K4NEX5 | 5P      | 2.756    | 0.551    | 0.984     | 1.654     | 0.194     | 0.152    | 0.25      | 3             | 2    |
| M5 × 0.8           | D4    | TS5.0K4NEXA | 1.5P    | 2.756    | 0.551    | 0.984     | 1.654     | 0.194     | 0.152    | 0.25      | 3             | 2    |
| M6 × 1             | D5    | TS6.0M5NEX5 | 5P      | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 3             | 2    |
| M6 × 1             | D5    | TS6.0M5NEXA | 1.5P    | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 3             | 2    |

| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

| Size       | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|------------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| M7 × 1     | D5    | TS7.0M5NEX5 | 5P      | 3.543    | 0.748    | 1.339     | 1.831     | 0.318     | 0.238    | 0.375     | 3             | 3    |
| M7 × 1     | D5    | TS7.0M5NEXA | 1.5P    | 3.543    | 0.748    | 1.339     | 1.831     | 0.318     | 0.238    | 0.375     | 3             | 3    |
| M7 × 0.75  | D4    | TS7.0J4NEX5 | 5P      | 3.543    | 0.748    | 1.339     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| M7 × 0.75  | D4    | TS7.0J4NEXA | 1.5P    | 3.543    | 0.748    | 1.339     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| M7 × 0.5   | D4    | TS7.0G4NEX5 | 5P      | 3.543    | 0.394    | 1.339     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 4    |
| M7 × 0.5   | D4    | TS7.0G4NEXA | 1.5P    | 3.543    | 0.394    | 1.339     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 4    |
| M8 × 1.25  | D5    | TS8.0N5NEX5 | 5P      | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 3             | 3    |
| M8 × 1.25  | D5    | TS8.0N5NEXA | 1.5P    | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 3             | 3    |
| M8 × 1     | D5    | TS8.0M5NEX5 | 5P      | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| M8 × 1     | D5    | TS8.0M5NEXA | 1.5P    | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| M8 × 0.75  | D4    | TS8.0J4NEX5 | 5P      | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| M8 × 0.75  | D4    | TS8.0J4NEXA | 1.5P    | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| M8 × 0.5   | D4    | TS8.0G4NEX5 | 5P      | 3.543    | 0.394    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 4    |
| M8 × 0.5   | D4    | TS8.0G4NEXA | 1.5P    | 3.543    | 0.394    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 4    |
| M9 × 1.25  | D5    | TS9.0N5NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M9 × 1.25  | D5    | TS9.0N5NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M9 × 1     | D5    | TS9.0M5NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M9 × 1     | D5    | TS9.0M5NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M10 × 1.5  | D6    | TS010O6NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.126     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M10 × 1.5  | D6    | TS010O6NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.126     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M10 × 1.25 | D5    | TS010N5NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.126     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M10 × 1.25 | D5    | TS010N5NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.126     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M10 × 1    | D5    | TS010M5NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.126     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M10 × 1    | D5    | TS010M5NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.126     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| M10 × 0.75 | D4    | TS010J4NEX5 | 5P      | 3.937    | 0.512    | 1.535     | 2.126     | 0.381     | 0.286    | 0.437     | 4             | 4    |
| M10 × 0.75 | D4    | TS010J4NEXA | 1.5P    | 3.937    | 0.512    | 1.535     | 2.126     | 0.381     | 0.286    | 0.437     | 4             | 4    |
| M11 × 1.5  | D6    | TS011O6NEX5 | 5P      | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| M11 × 1.5  | D6    | TS011O6NEXA | 1.5P    | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| M12 × 1.75 | D6    | TS012P6NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| M12 × 1.75 | D6    | TS012P6NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| M12 × 1.5  | D6    | TS012O6NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| M12 × 1.5  | D6    | TS012O6NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| M12 × 1.25 | D6    | TS012N6NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| M12 × 1.25 | D6    | TS012N6NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| M12 × 1    | D5    | TS012M5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| M12 × 1    | D5    | TS012M5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| M14 × 2    | D7    | TS014Q7NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| M14 × 2    | D7    | TS014Q7NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| M14 × 1.5  | D6    | TS014O6NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| M14 × 1.5  | D6    | TS014O6NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| M14 × 1.25 | D6    | TS014N6NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| M14 × 1.25 | D6    | TS014N6NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| M14 × 1    | D5    | TS014M5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| M14 × 1    | D5    | TS014M5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| M16 × 2    | D7    | TS016Q7NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| M16 × 2    | D7    | TS016Q7NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| M16 × 1.5  | D6    | TS016O6NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| M16 × 1.5  | D6    | TS016O6NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| M16 × 1    | D5    | TS016M5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| M16 × 1    | D5    | TS016M5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |

# 4 Hand Tap Series

| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

- ① Spiral Fluted Taps (for blind hole)
- ② Spiral Fluted Taps (for through hole)
- ③ Spiral Pointed Taps (for through hole)
- ④ Hand Taps
- ⑤ Cemented Carbide Taps
- ⑥ Roll Taps
- ⑦ Special Thread Taps (Simple inspection tools)
- ⑧ Pipe Taps
- ⑨ Thread Mills (Premium Thread Mills)
- ⑩ Dies
- ⑪ Center Drills (Centering Tools)
- ⑫ Precision Machinery/ Medical Surgical Instruments

## HT OX Hand Taps, Oxidized

| Size      | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|-----------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| M18 × 2.5 | D7    | TS018R7NEX5 | 5P      | 4.921    | 1.299    | -         | 2.52      | 0.542     | 0.406    | 0.625     | 4             | 5    |
| M18 × 2.5 | D7    | TS018R7NEXA | 1.5P    | 4.921    | 1.299    | -         | 2.52      | 0.542     | 0.406    | 0.625     | 4             | 5    |
| M18 × 2   | D7    | TS018Q7NEX5 | 5P      | 4.921    | 1.299    | -         | 2.52      | 0.542     | 0.406    | 0.625     | 4             | 5    |
| M18 × 2   | D7    | TS018Q7NEXA | 1.5P    | 4.921    | 1.299    | -         | 2.52      | 0.542     | 0.406    | 0.625     | 4             | 5    |
| M18 × 1.5 | D6    | TS018O6NEX5 | 5P      | 4.921    | 0.945    | -         | 2.52      | 0.542     | 0.406    | 0.625     | 4             | 6    |
| M18 × 1.5 | D6    | TS018O6NEXA | 1.5P    | 4.921    | 0.945    | -         | 2.52      | 0.542     | 0.406    | 0.625     | 4             | 6    |
| M18 × 1   | D5    | TS018M5NEX5 | 5P      | 4.921    | 0.945    | -         | 2.52      | 0.542     | 0.406    | 0.625     | 4             | 6    |
| M18 × 1   | D5    | TS018M5NEXA | 1.5P    | 4.921    | 0.945    | -         | 2.52      | 0.542     | 0.406    | 0.625     | 4             | 6    |
| M20 × 2.5 | D7    | TS020R7NEX5 | 5P      | 5.512    | 1.299    | -         | 2.795     | 0.652     | 0.489    | 0.687     | 4             | 5    |
| M20 × 2.5 | D7    | TS020R7NEXA | 1.5P    | 5.512    | 1.299    | -         | 2.795     | 0.652     | 0.489    | 0.687     | 4             | 5    |
| M20 × 2   | D7    | TS020Q7NEX5 | 5P      | 5.512    | 1.299    | -         | 2.795     | 0.652     | 0.489    | 0.687     | 4             | 5    |
| M20 × 2   | D7    | TS020Q7NEXA | 1.5P    | 5.512    | 1.299    | -         | 2.795     | 0.652     | 0.489    | 0.687     | 4             | 5    |
| M20 × 1.5 | D6    | TS020O6NEX5 | 5P      | 5.512    | 0.945    | -         | 2.795     | 0.652     | 0.489    | 0.687     | 4             | 6    |
| M20 × 1.5 | D6    | TS020O6NEXA | 1.5P    | 5.512    | 0.945    | -         | 2.795     | 0.652     | 0.489    | 0.687     | 4             | 6    |
| M20 × 1   | D5    | TS020M5NEX5 | 5P      | 5.512    | 0.945    | -         | 2.795     | 0.652     | 0.489    | 0.687     | 4             | 6    |
| M20 × 1   | D5    | TS020M5NEXA | 1.5P    | 5.512    | 0.945    | -         | 2.795     | 0.652     | 0.489    | 0.687     | 4             | 6    |
| M22 × 2.5 | D7    | TS022R7NEX5 | 5P      | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| M22 × 2.5 | D7    | TS022R7NEXA | 1.5P    | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| M22 × 2   | D7    | TS022Q7NEX5 | 5P      | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| M22 × 2   | D7    | TS022Q7NEXA | 1.5P    | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| M22 × 1.5 | D6    | TS022O6NEX5 | 5P      | 5.512    | 0.945    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 6    |
| M22 × 1.5 | D6    | TS022O6NEXA | 1.5P    | 5.512    | 0.945    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 6    |
| M22 × 1   | D5    | TS022M5NEX5 | 5P      | 5.512    | 0.945    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 6    |
| M22 × 1   | D5    | TS022M5NEXA | 1.5P    | 5.512    | 0.945    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 6    |
| M24 × 3   | D8    | TS024S8NEX5 | 5P      | 6.299    | 1.457    | -         | 3.228     | 0.76      | 0.57     | 0.75      | 4             | 5    |
| M24 × 3   | D8    | TS024S8NEXA | 1.5P    | 6.299    | 1.457    | -         | 3.228     | 0.76      | 0.57     | 0.75      | 4             | 5    |
| M24 × 2   | D7    | TS024Q7NEX5 | 5P      | 6.299    | 1.063    | -         | 3.228     | 0.76      | 0.57     | 0.75      | 4             | 6    |
| M24 × 2   | D7    | TS024Q7NEXA | 1.5P    | 6.299    | 1.063    | -         | 3.228     | 0.76      | 0.57     | 0.75      | 4             | 6    |
| M24 × 1.5 | D6    | TS024O6NEX5 | 5P      | 6.299    | 1.063    | -         | 3.228     | 0.76      | 0.57     | 0.75      | 4             | 6    |
| M24 × 1.5 | D6    | TS024O6NEXA | 1.5P    | 6.299    | 1.063    | -         | 3.228     | 0.76      | 0.57     | 0.75      | 4             | 6    |
| M24 × 1   | D5    | TS024M5NEX5 | 5P      | 6.299    | 1.063    | -         | 3.228     | 0.76      | 0.57     | 0.75      | 4             | 6    |
| M24 × 1   | D5    | TS024M5NEXA | 1.5P    | 6.299    | 1.063    | -         | 3.228     | 0.76      | 0.57     | 0.75      | 4             | 6    |
| M25 × 1.5 | D6    | TS025O6NEX5 | 5P      | 6.299    | 1.063    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 6    |
| M25 × 1.5 | D6    | TS025O6NEXA | 1.5P    | 6.299    | 1.063    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 6    |
| M26 × 1.5 | D6    | TS026O6NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M26 × 1.5 | D6    | TS026O6NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M27 × 3   | D8    | TS027S8NEX5 | 5P      | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| M27 × 3   | D8    | TS027S8NEXA | 1.5P    | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| M27 × 2   | D7    | TS027Q7NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M27 × 2   | D7    | TS027Q7NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M27 × 1.5 | D6    | TS027O6NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M27 × 1.5 | D6    | TS027O6NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M27 × 1   | D5    | TS027M5NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M27 × 1   | D5    | TS027M5NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M28 × 2   | D7    | TS028Q7NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M28 × 2   | D7    | TS028Q7NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M28 × 1.5 | D6    | TS028O6NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M28 × 1.5 | D6    | TS028O6NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M28 × 1   | D5    | TS028M5NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |
| M28 × 1   | D5    | TS028M5NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 6    |

| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

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## HT OX Hand Taps, Oxidized

| Size      | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|-----------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| M30 × 3.5 | D9    | TS030T9NEX5 | 5P      | 7.087    | 1.732    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| M30 × 3.5 | D9    | TS030T9NEXA | 1.5P    | 7.087    | 1.732    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| M30 × 2   | D7    | TS030Q7NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 6    |
| M30 × 2   | D7    | TS030Q7NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 6    |
| M30 × 1.5 | D6    | TS030O6NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 6    |
| M30 × 1.5 | D6    | TS030O6NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 6    |
| M30 × 1   | D5    | TS030M5NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 6    |
| M30 × 1   | D5    | TS030M5NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 6    |
| M32 × 2   | D7    | TS032Q7NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| M32 × 2   | D7    | TS032Q7NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| M32 × 1.5 | D6    | TS032O6NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| M32 × 1.5 | D6    | TS032O6NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| M32 × 1   | D5    | TS032M5NEX5 | 5P      | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| M32 × 1   | D5    | TS032M5NEXA | 1.5P    | 7.087    | 1.063    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| M33 × 3.5 | D9    | TS033T9NEX5 | 5P      | 7.087    | 1.732    | -         | 3.622     | 1.108     | 0.831    | 1.062     | 4             | 5    |
| M33 × 3.5 | D9    | TS033T9NEXA | 1.5P    | 7.087    | 1.732    | -         | 3.622     | 1.108     | 0.831    | 1.062     | 4             | 5    |
| M33 × 2   | D7    | TS033Q7NEX5 | 5P      | 7.087    | 1.142    | -         | 3.622     | 1.108     | 0.831    | 1.062     | 4             | 6    |
| M33 × 2   | D7    | TS033Q7NEXA | 1.5P    | 7.087    | 1.142    | -         | 3.622     | 1.108     | 0.831    | 1.062     | 4             | 6    |
| M33 × 1.5 | D6    | TS033O6NEX5 | 5P      | 7.087    | 1.142    | -         | 3.622     | 1.108     | 0.831    | 1.062     | 4             | 6    |
| M33 × 1.5 | D6    | TS033O6NEXA | 1.5P    | 7.087    | 1.142    | -         | 3.622     | 1.108     | 0.831    | 1.062     | 4             | 6    |
| M33 × 1   | D5    | TS033M5NEX5 | 5P      | 7.087    | 1.142    | -         | 3.622     | 1.108     | 0.831    | 1.062     | 4             | 6    |
| M33 × 1   | D5    | TS033M5NEXA | 1.5P    | 7.087    | 1.142    | -         | 3.622     | 1.108     | 0.831    | 1.062     | 4             | 6    |
| M36 × 4   | D9    | TS036U9NEX5 | 5P      | 7.874    | 2.047    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 5    |
| M36 × 4   | D9    | TS036U9NEXA | 1.5P    | 7.874    | 2.047    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 5    |
| M36 × 3   | D8    | TS036S8NEX5 | 5P      | 7.874    | 2.047    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 5    |
| M36 × 3   | D8    | TS036S8NEXA | 1.5P    | 7.874    | 2.047    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 5    |
| M36 × 2   | D7    | TS036Q7NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 6    |
| M36 × 2   | D7    | TS036Q7NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 6    |
| M36 × 1.5 | D6    | TS036O6NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 6    |
| M36 × 1.5 | D6    | TS036O6NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 6    |
| M36 × 1   | D5    | TS036M5NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 6    |
| M36 × 1   | D5    | TS036M5NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 6    |
| M39 × 4   | D9    | TS039U9NEX5 | 5P      | 7.874    | 2.047    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 5    |
| M39 × 4   | D9    | TS039U9NEXA | 1.5P    | 7.874    | 2.047    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 5    |
| M39 × 3   | D8    | TS039S8NEX5 | 5P      | 7.874    | 2.047    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 5    |
| M39 × 3   | D8    | TS039S8NEXA | 1.5P    | 7.874    | 2.047    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 5    |
| M39 × 2   | D7    | TS039Q7NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 6    |
| M39 × 2   | D7    | TS039Q7NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 6    |
| M39 × 1.5 | D6    | TS039O6NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 6    |
| M39 × 1.5 | D6    | TS039O6NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 6    |
| M39 × 1   | D5    | TS039M5NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 6    |
| M39 × 1   | D5    | TS039M5NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.305     | 0.979    | 1.125     | 4             | 6    |
| M42 × 4.5 | D10   | TS042VONEX5 | 5P      | 7.874    | 2.047    | -         | 4.016     | 1.43      | 1.072    | 1.25      | 4             | 5    |
| M42 × 4.5 | D10   | TS042VONEXA | 1.5P    | 7.874    | 2.047    | -         | 4.016     | 1.43      | 1.072    | 1.25      | 4             | 5    |
| M42 × 2   | D7    | TS042Q7NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.43      | 1.072    | 1.25      | 4             | 6    |
| M42 × 2   | D7    | TS042Q7NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.43      | 1.072    | 1.25      | 4             | 6    |
| M42 × 1.5 | D6    | TS042O6NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.43      | 1.072    | 1.25      | 4             | 6    |
| M42 × 1.5 | D6    | TS042O6NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.43      | 1.072    | 1.25      | 4             | 6    |
| M42 × 1   | D5    | TS042M5NEX5 | 5P      | 7.874    | 1.142    | -         | 4.016     | 1.43      | 1.072    | 1.25      | 4             | 6    |
| M42 × 1   | D5    | TS042M5NEXA | 1.5P    | 7.874    | 1.142    | -         | 4.016     | 1.43      | 1.072    | 1.25      | 4             | 6    |

Spiral Fluted Taps  
(for blind hole) ①Spiral Fluted Taps  
(for through hole) ②Spiral Pointed Taps  
(for through hole) ③

Hand Taps ④

Cemented Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps  
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills  
Premium Thread Mills ⑨

Dies ⑩

Center Drills  
Centering Tools ⑪Precision Machinery/  
Metal Surgical Instruments ⑫

ANSI

④-58

# 4 Hand Tap Series

| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

- ① Spiral Fluted Taps (for blind hole)
- ② Spiral Fluted Taps (for through hole)
- ③ Spiral Pointed Taps (for through hole)
- ④ Hand Taps
- ⑤ Cemented Carbide Taps
- ⑥ Roll Taps
- ⑦ Special Thread Taps (Simple inspection tools)
- ⑧ Pipe Taps
- ⑨ Thread Mills (Premium Thread Mills)
- ⑩ Dies
- ⑪ Center Drills (Centering Tools)
- ⑫ Precision Machinery/ Medical Surgical Instruments

## HT OX Hand Taps, Oxidized

| Size                | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|---------------------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| M45 × 4.5           | D10   | TS045VONEX5 | 5P      | 8.661    | 2.323    | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 5    |
| M45 × 4.5           | D10   | TS045VONEXA | 1.5P    | 8.661    | 2.323    | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 5    |
| M45 × 3             | D8    | TS045S8NEX5 | 5P      | 8.661    | 2.323    | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 5    |
| M45 × 3             | D8    | TS045S8NEXA | 1.5P    | 8.661    | 2.323    | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 5    |
| M45 × 2             | D7    | TS045Q7NEX5 | 5P      | 8.661    | 1.22     | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 6    |
| M45 × 2             | D7    | TS045Q7NEXA | 1.5P    | 8.661    | 1.22     | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 6    |
| M45 × 1.5           | D6    | TS045O6NEX5 | 5P      | 8.661    | 1.22     | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 6    |
| M45 × 1.5           | D6    | TS045O6NEXA | 1.5P    | 8.661    | 1.22     | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 6    |
| M45 × 1             | D5    | TS045M5NEX5 | 5P      | 8.661    | 1.22     | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 6    |
| M45 × 1             | D5    | TS045M5NEXA | 1.5P    | 8.661    | 1.22     | -         | 4.409     | 1.519     | 1.139    | 1.25      | 4             | 6    |
| M48 × 5             | D11   | TS048W-NEX5 | 5P      | 9.843    | 2.559    | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 5    |
| M48 × 5             | D11   | TS048W-NEXA | 1.5P    | 9.843    | 2.559    | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 5    |
| M48 × 3             | D9    | TS048S9NEX5 | 5P      | 9.843    | 2.559    | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 5    |
| M48 × 3             | D9    | TS048S9NEXA | 1.5P    | 9.843    | 2.559    | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 5    |
| M48 × 2             | D7    | TS048Q7NEX5 | 5P      | 9.843    | 1.22     | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 6    |
| M48 × 2             | D7    | TS048Q7NEXA | 1.5P    | 9.843    | 1.22     | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 6    |
| M48 × 1.5           | D7    | TS048O7NEX5 | 5P      | 9.843    | 1.22     | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 6    |
| M48 × 1.5           | D7    | TS048O7NEXA | 1.5P    | 9.843    | 1.22     | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 6    |
| M48 × 1             | D6    | TS048M6NEX5 | 5P      | 9.843    | 1.22     | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 6    |
| M48 × 1             | D6    | TS048M6NEXA | 1.5P    | 9.843    | 1.22     | -         | 5.039     | 1.644     | 1.233    | 1.375     | 4             | 6    |
| For Unified Threads |       |             |         |          |          |           |           |           |          |           |               |      |
| No.0-80UNF          | GH1   | TSUN0B1NEX5 | 5P      | 1.772    | 0.236    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.0-80UNF          | GH1   | TSUN0B1NEXA | 1.5P    | 1.772    | 0.236    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.0-80UNF          | GH2   | TSUN0B2NEX5 | 5P      | 1.772    | 0.236    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.0-80UNF          | GH2   | TSUN0B2NEXA | 1.5P    | 1.772    | 0.236    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.1-64UNC          | GH1   | TSUN1D1NEX5 | 5P      | 1.772    | 0.276    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.1-64UNC          | GH1   | TSUN1D1NEXA | 1.5P    | 1.772    | 0.276    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.1-64UNC          | GH2   | TSUN1D2NEX5 | 5P      | 1.772    | 0.276    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.1-64UNC          | GH2   | TSUN1D2NEXA | 1.5P    | 1.772    | 0.276    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.1-72UNF          | GH1   | TSUN1C1NEX5 | 5P      | 1.772    | 0.276    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.1-72UNF          | GH1   | TSUN1C1NEXA | 1.5P    | 1.772    | 0.276    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.1-72UNF          | GH2   | TSUN1C2NEX5 | 5P      | 1.772    | 0.276    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.1-72UNF          | GH2   | TSUN1C2NEXA | 1.5P    | 1.772    | 0.276    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 2             | 1    |
| No.2-56UNC          | GH1   | TSUN2E1NEX5 | 5P      | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| No.2-56UNC          | GH1   | TSUN2E1NEXA | 1.5P    | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| No.2-56UNC          | GH2   | TSUN2E2NEX5 | 5P      | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| No.2-56UNC          | GH2   | TSUN2E2NEXA | 1.5P    | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| No.2-64UNF          | GH1   | TSUN2D1NEX5 | 5P      | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| No.2-64UNF          | GH1   | TSUN2D1NEXA | 1.5P    | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| No.2-64UNF          | GH2   | TSUN2D2NEX5 | 5P      | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| No.2-64UNF          | GH2   | TSUN2D2NEXA | 1.5P    | 1.772    | 0.314    | -         | 1.161     | 0.141     | 0.11     | 0.187     | 3             | 1    |
| No.3-48UNC          | GH1   | TSUN3F1NEX5 | 5P      | 2.205    | 0.354    | 0.681     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.3-48UNC          | GH1   | TSUN3F1NEXA | 1.5P    | 2.205    | 0.354    | 0.681     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.3-48UNC          | GH2   | TSUN3F2NEX5 | 5P      | 2.205    | 0.354    | 0.681     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.3-48UNC          | GH2   | TSUN3F2NEXA | 1.5P    | 2.205    | 0.354    | 0.681     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.3-56UNF          | GH1   | TSUN3E1NEX5 | 5P      | 2.205    | 0.354    | 0.681     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.3-56UNF          | GH1   | TSUN3E1NEXA | 1.5P    | 2.205    | 0.354    | 0.681     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.3-56UNF          | GH2   | TSUN3E2NEX5 | 5P      | 2.205    | 0.354    | 0.681     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.3-56UNF          | GH2   | TSUN3E2NEXA | 1.5P    | 2.205    | 0.354    | 0.681     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |

| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

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## HT OX Hand Taps, Oxidized

| Size        | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|-------------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| No.4-40UNC  | GH2   | TSUN4H2NEX5 | 5P      | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.4-40UNC  | GH2   | TSUN4H2NEXA | 1.5P    | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.4-40UNC  | GH3   | TSUN4H3NEX5 | 5P      | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.4-40UNC  | GH3   | TSUN4H3NEXA | 1.5P    | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.4-48UNF  | GH1   | TSUN4F1NEX5 | 5P      | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.4-48UNF  | GH1   | TSUN4F1NEXA | 1.5P    | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.4-48UNF  | GH2   | TSUN4F2NEX5 | 5P      | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.4-48UNF  | GH2   | TSUN4F2NEXA | 1.5P    | 2.205    | 0.354    | 0.709     | 1.28      | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-40UNC  | GH2   | TSUN5H2NEX5 | 5P      | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-40UNC  | GH2   | TSUN5H2NEXA | 1.5P    | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-40UNC  | GH3   | TSUN5H3NEX5 | 5P      | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-40UNC  | GH3   | TSUN5H3NEXA | 1.5P    | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-44UNF  | GH1   | TSUN5G1NEX5 | 5P      | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-44UNF  | GH1   | TSUN5G1NEXA | 1.5P    | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-44UNF  | GH2   | TSUN5G2NEX5 | 5P      | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-44UNF  | GH2   | TSUN5G2NEXA | 1.5P    | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-44UNF  | GH3   | TSUN5G3NEX5 | 5P      | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.5-44UNF  | GH3   | TSUN5G3NEXA | 1.5P    | 2.205    | 0.433    | 0.736     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.6-32UNC  | GH2   | TSUN6J2NEX5 | 5P      | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.6-32UNC  | GH2   | TSUN6J2NEXA | 1.5P    | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.6-32UNC  | GH3   | TSUN6J3NEX5 | 5P      | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.6-32UNC  | GH3   | TSUN6J3NEXA | 1.5P    | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.6-40UNF  | GH2   | TSUN6H2NEX5 | 5P      | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.6-40UNF  | GH2   | TSUN6H2NEXA | 1.5P    | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.6-40UNF  | GH3   | TSUN6H3NEX5 | 5P      | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.6-40UNF  | GH3   | TSUN6H3NEXA | 1.5P    | 2.205    | 0.433    | 0.748     | 1.339     | 0.141     | 0.11     | 0.187     | 3             | 2    |
| No.8-32UNC  | GH2   | TSUN8J2NEX5 | 5P      | 2.48     | 0.512    | 0.827     | 1.535     | 0.168     | 0.131    | 0.25      | 4             | 2    |
| No.8-32UNC  | GH2   | TSUN8J2NEXA | 1.5P    | 2.48     | 0.512    | 0.827     | 1.535     | 0.168     | 0.131    | 0.25      | 4             | 2    |
| No.8-32UNC  | GH3   | TSUN8J3NEX5 | 5P      | 2.48     | 0.512    | 0.827     | 1.535     | 0.168     | 0.131    | 0.25      | 4             | 2    |
| No.8-32UNC  | GH3   | TSUN8J3NEXA | 1.5P    | 2.48     | 0.512    | 0.827     | 1.535     | 0.168     | 0.131    | 0.25      | 4             | 2    |
| No.8-36UNF  | GH2   | TSUN8I2NEX5 | 5P      | 2.48     | 0.512    | 0.827     | 1.535     | 0.168     | 0.131    | 0.25      | 4             | 2    |
| No.8-36UNF  | GH2   | TSUN8I2NEXA | 1.5P    | 2.48     | 0.512    | 0.827     | 1.535     | 0.168     | 0.131    | 0.25      | 4             | 2    |
| No.8-36UNF  | GH3   | TSUN8I3NEX5 | 5P      | 2.48     | 0.512    | 0.827     | 1.535     | 0.168     | 0.131    | 0.25      | 4             | 2    |
| No.8-36UNF  | GH3   | TSUN8I3NEXA | 1.5P    | 2.48     | 0.512    | 0.827     | 1.535     | 0.168     | 0.131    | 0.25      | 4             | 2    |
| No.10-24UNC | GH2   | TSUNAM2NEX5 | 5P      | 2.756    | 0.551    | 0.945     | 1.654     | 0.194     | 0.152    | 0.25      | 4             | 2    |
| No.10-24UNC | GH2   | TSUNAM2NEXA | 1.5P    | 2.756    | 0.551    | 0.945     | 1.654     | 0.194     | 0.152    | 0.25      | 4             | 2    |
| No.10-24UNC | GH3   | TSUNAM3NEX5 | 5P      | 2.756    | 0.551    | 0.945     | 1.654     | 0.194     | 0.152    | 0.25      | 4             | 2    |
| No.10-24UNC | GH3   | TSUNAM3NEXA | 1.5P    | 2.756    | 0.551    | 0.945     | 1.654     | 0.194     | 0.152    | 0.25      | 4             | 2    |
| No.10-32UNF | GH2   | TSUNAJ2NEX5 | 5P      | 2.756    | 0.551    | 0.945     | 1.654     | 0.194     | 0.152    | 0.25      | 4             | 2    |
| No.10-32UNF | GH2   | TSUNAJ2NEXA | 1.5P    | 2.756    | 0.551    | 0.945     | 1.654     | 0.194     | 0.152    | 0.25      | 4             | 2    |
| No.10-32UNF | GH3   | TSUNAJ3NEX5 | 5P      | 2.756    | 0.551    | 0.945     | 1.654     | 0.194     | 0.152    | 0.25      | 4             | 2    |
| No.10-32UNF | GH3   | TSUNAJ3NEXA | 1.5P    | 2.756    | 0.551    | 0.945     | 1.654     | 0.194     | 0.152    | 0.25      | 4             | 2    |
| No.12-24UNC | GH2   | TSUNCM2NEX5 | 5P      | 3.15     | 0.591    | 0.984     | 1.953     | 0.22      | 0.165    | 0.281     | 4             | 2    |
| No.12-24UNC | GH2   | TSUNCM2NEXA | 1.5P    | 3.15     | 0.591    | 0.984     | 1.953     | 0.22      | 0.165    | 0.281     | 4             | 2    |
| No.12-24UNC | GH3   | TSUNCM3NEX5 | 5P      | 3.15     | 0.591    | 0.984     | 1.953     | 0.22      | 0.165    | 0.281     | 4             | 2    |
| No.12-24UNC | GH3   | TSUNCM3NEXA | 1.5P    | 3.15     | 0.591    | 0.984     | 1.953     | 0.22      | 0.165    | 0.281     | 4             | 2    |
| No.12-28UNF | GH2   | TSUNCK2NEX5 | 5P      | 3.15     | 0.591    | 0.984     | 1.953     | 0.22      | 0.165    | 0.281     | 4             | 2    |
| No.12-28UNF | GH2   | TSUNCK2NEXA | 1.5P    | 3.15     | 0.591    | 0.984     | 1.953     | 0.22      | 0.165    | 0.281     | 4             | 2    |
| No.12-28UNF | GH3   | TSUNCK3NEX5 | 5P      | 3.15     | 0.591    | 0.984     | 1.953     | 0.22      | 0.165    | 0.281     | 4             | 2    |
| No.12-28UNF | GH3   | TSUNCK3NEXA | 1.5P    | 3.15     | 0.591    | 0.984     | 1.953     | 0.22      | 0.165    | 0.281     | 4             | 2    |

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• This product is different from JIS products in shape and dimensions, please be careful when using.

# 4 Hand Tap Series

| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

- ① Spiral Fluted Taps (for blind hole)
- ② Spiral Fluted Taps (for through hole)
- ③ Spiral Pointed Taps (for through hole)
- ④ Hand Taps
- ⑤ Cemented Carbide Taps
- ⑥ Roll Taps
- ⑦ Special Thread Taps (Simple inspection tools)
- ⑧ Pipe Taps
- ⑨ Thread Mills (Premium Thread Mills)
- ⑩ Dies
- ⑪ Center Drills (Centering Tools)
- ⑫ Precision Machinery/ Medical Surgical Instruments

## HT OX Hand Taps, Oxidized

| Size       | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|------------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| 1/4-20UNC  | GH3   | TSU04N3NEX5 | 5P      | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-20UNC  | GH3   | TSU04N3NEXA | 1.5P    | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-20UNC  | GH4   | TSU04N4NEX5 | 5P      | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-20UNC  | GH4   | TSU04N4NEXA | 1.5P    | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-20UNC  | GH5   | TSU04N5NEX5 | 5P      | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-20UNC  | GH5   | TSU04N5NEXA | 1.5P    | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-28UNF  | GH2   | TSU04K2NEX5 | 5P      | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-28UNF  | GH2   | TSU04K2NEXA | 1.5P    | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-28UNF  | GH3   | TSU04K3NEX5 | 5P      | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-28UNF  | GH3   | TSU04K3NEXA | 1.5P    | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-28UNF  | GH4   | TSU04K4NEX5 | 5P      | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 1/4-28UNF  | GH4   | TSU04K4NEXA | 1.5P    | 3.15     | 0.591    | 1.181     | 1.713     | 0.255     | 0.191    | 0.312     | 4             | 2    |
| 5/16-18UNC | GH3   | TSU05O3NEX5 | 5P      | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-18UNC | GH3   | TSU05O3NEXA | 1.5P    | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-18UNC | GH4   | TSU05O4NEX5 | 5P      | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-18UNC | GH4   | TSU05O4NEXA | 1.5P    | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-18UNC | GH5   | TSU05O5NEX5 | 5P      | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-18UNC | GH5   | TSU05O5NEXA | 1.5P    | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-24UNF | GH3   | TSU05M3NEX5 | 5P      | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-24UNF | GH3   | TSU05M3NEXA | 1.5P    | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-24UNF | GH4   | TSU05M4NEX5 | 5P      | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 5/16-24UNF | GH4   | TSU05M4NEXA | 1.5P    | 3.543    | 0.748    | 1.378     | 1.831     | 0.318     | 0.238    | 0.375     | 4             | 3    |
| 3/8-16UNC  | GH3   | TSU06P3NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| 3/8-16UNC  | GH3   | TSU06P3NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| 3/8-16UNC  | GH5   | TSU06P5NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| 3/8-16UNC  | GH5   | TSU06P5NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| 3/8-24UNF  | GH3   | TSU06M3NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| 3/8-24UNF  | GH3   | TSU06M3NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| 3/8-24UNF  | GH4   | TSU06M4NEX5 | 5P      | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| 3/8-24UNF  | GH4   | TSU06M4NEXA | 1.5P    | 3.937    | 0.906    | 1.535     | 2.028     | 0.381     | 0.286    | 0.437     | 4             | 3    |
| 7/16-14UNC | GH4   | TSU07Q4NEX5 | 5P      | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| 7/16-14UNC | GH4   | TSU07Q4NEXA | 1.5P    | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| 7/16-14UNC | GH5   | TSU07Q5NEX5 | 5P      | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| 7/16-14UNC | GH5   | TSU07Q5NEXA | 1.5P    | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| 7/16-20UNF | GH3   | TSU07N3NEX5 | 5P      | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| 7/16-20UNF | GH3   | TSU07N3NEXA | 1.5P    | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| 7/16-20UNF | GH4   | TSU07N4NEX5 | 5P      | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| 7/16-20UNF | GH4   | TSU07N4NEXA | 1.5P    | 3.937    | 0.906    | -         | 2.008     | 0.323     | 0.242    | 0.406     | 4             | 5    |
| 1/2-13UNC  | GH3   | TSU08R3NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-13UNC  | GH3   | TSU08R3NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-13UNC  | GH4   | TSU08R4NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-13UNC  | GH4   | TSU08R4NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-13UNC  | GH5   | TSU08R5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-13UNC  | GH5   | TSU08R5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-20UNF  | GH3   | TSU08N3NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-20UNF  | GH3   | TSU08N3NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-20UNF  | GH4   | TSU08N4NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-20UNF  | GH4   | TSU08N4NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-20UNF  | GH5   | TSU08N5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |
| 1/2-20UNF  | GH5   | TSU08N5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.367     | 0.275    | 0.437     | 4             | 5    |

| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

4

ANSI

HT OX Hand Taps, Oxidized

| Size       | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|------------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| 9/16-12UNC | GH3   | TSU09S3NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-12UNC | GH3   | TSU09S3NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-12UNC | GH4   | TSU09S4NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-12UNC | GH4   | TSU09S4NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-12UNC | GH5   | TSU09S5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-12UNC | GH5   | TSU09S5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-18UNF | GH3   | TSU09O3NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-18UNF | GH3   | TSU09O3NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-18UNF | GH4   | TSU09O4NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-18UNF | GH4   | TSU09O4NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-18UNF | GH5   | TSU09O5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 9/16-18UNF | GH5   | TSU09O5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.429     | 0.322    | 0.5       | 4             | 5    |
| 5/8-11UNC  | GH3   | TSU10U3NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-11UNC  | GH3   | TSU10U3NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-11UNC  | GH4   | TSU10U4NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-11UNC  | GH4   | TSU10U4NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-11UNC  | GH5   | TSU10U5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-11UNC  | GH5   | TSU10U5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-11UNC  | GH6   | TSU10U6NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-11UNC  | GH6   | TSU10U6NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-18UNF  | GH3   | TSU10O3NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-18UNF  | GH3   | TSU10O3NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-18UNF  | GH4   | TSU10O4NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-18UNF  | GH4   | TSU10O4NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-18UNF  | GH5   | TSU10O5NEX5 | 5P      | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 5/8-18UNF  | GH5   | TSU10O5NEXA | 1.5P    | 4.331    | 1.024    | -         | 2.205     | 0.48      | 0.36     | 0.562     | 4             | 5    |
| 3/4-10UNC  | GH3   | TSU12V3NEX5 | 5P      | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-10UNC  | GH3   | TSU12V3NEXA | 1.5P    | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-10UNC  | GH5   | TSU12V5NEX5 | 5P      | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-10UNC  | GH5   | TSU12V5NEXA | 1.5P    | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-10UNC  | GH6   | TSU12V6NEX5 | 5P      | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-10UNC  | GH6   | TSU12V6NEXA | 1.5P    | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-16UNF  | GH3   | TSU12P3NEX5 | 5P      | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-16UNF  | GH3   | TSU12P3NEXA | 1.5P    | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-16UNF  | GH4   | TSU12P4NEX5 | 5P      | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-16UNF  | GH4   | TSU12P4NEXA | 1.5P    | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-16UNF  | GH5   | TSU12P5NEX5 | 5P      | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 3/4-16UNF  | GH5   | TSU12P5NEXA | 1.5P    | 4.921    | 1.299    | -         | 2.52      | 0.59      | 0.442    | 0.687     | 4             | 5    |
| 7/8-9UNC   | GH5   | TSU14W5NEX5 | 5P      | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| 7/8-9UNC   | GH5   | TSU14W5NEXA | 1.5P    | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| 7/8-9UNC   | GH6   | TSU14W6NEX5 | 5P      | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| 7/8-9UNC   | GH6   | TSU14W6NEXA | 1.5P    | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| 7/8-14UNF  | GH4   | TSU14Q4NEX5 | 5P      | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| 7/8-14UNF  | GH4   | TSU14Q4NEXA | 1.5P    | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| 7/8-14UNF  | GH6   | TSU14Q6NEX5 | 5P      | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |
| 7/8-14UNF  | GH6   | TSU14Q6NEXA | 1.5P    | 5.512    | 1.299    | -         | 2.795     | 0.697     | 0.523    | 0.75      | 4             | 5    |

Spiral Fluted Taps  
(for blind hole) ①

Spiral Fluted Taps  
(for through hole) ②

Spiral Pointed Taps  
(for through hole) ③

Hand Taps ④

Cemented Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps  
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills  
Premium Thread Mills ⑨

Dies ⑩

Center Drills  
Centering Tools ⑪

Precision Machinery/  
Metal/Surgical Instruments ⑫

ANSI

④-62

• This product is different from JIS products in shape and dimensions, please be careful when using.





# 4 Hand Tap Series

| Overall length | Thread length | Thread + Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|---------------|----------------------|--------------|------------|----------------|------------------|
| L              | ℓ             | ℓn                   | ℓs           | Ds         | K              | ℓk               |

- ① Spiral Fluted Taps (for blind hole)
- ② Spiral Fluted Taps (for through hole)
- ③ Spiral Pointed Taps (for through hole)
- ④ Hand Taps
- ⑤ Cemented Carbide Taps
- ⑥ Roll Taps
- ⑦ Special Thread Taps (Simple inspection tools)
- ⑧ Pipe Taps
- ⑨ Thread Mills (Premium Thread Mills)
- ⑩ Dies
- ⑪ Center Drills (Centering Tools)
- ⑫ Precision Machinery/ Medical Surgical Instruments

## HT OX Hand Taps, Oxidized

| Size        | Class | Code        | Chamfer | L (inch) | ℓ (inch) | ℓn (inch) | ℓs (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|-------------|-------|-------------|---------|----------|----------|-----------|-----------|-----------|----------|-----------|---------------|------|
| 1 -8UNC     | GH4   | TSU16X4NEX5 | 5P      | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -8UNC     | GH4   | TSU16X4NEXA | 1.5P    | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -8UNC     | GH5   | TSU16X5NEX5 | 5P      | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -8UNC     | GH5   | TSU16X5NEXA | 1.5P    | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -8UNC     | GH6   | TSU16X6NEX5 | 5P      | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -8UNC     | GH6   | TSU16X6NEXA | 1.5P    | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -8UNC     | GH7   | TSU16X7NEX5 | 5P      | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -8UNC     | GH7   | TSU16X7NEXA | 1.5P    | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -12UNF    | GH4   | TSU16S4NEX5 | 5P      | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -12UNF    | GH4   | TSU16S4NEXA | 1.5P    | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -12UNF    | GH5   | TSU16S5NEX5 | 5P      | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -12UNF    | GH5   | TSU16S5NEXA | 1.5P    | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -12UNF    | GH6   | TSU16S6NEX5 | 5P      | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 -12UNF    | GH6   | TSU16S6NEXA | 1.5P    | 6.299    | 1.457    | -         | 3.228     | 0.8       | 0.6      | 0.812     | 4             | 5    |
| 1 1/8-7UNC  | GH6   | TSU18Y6NEX5 | 5P      | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| 1 1/8-7UNC  | GH6   | TSU18Y6NEXA | 1.5P    | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| 1 1/8-7UNC  | GH7   | TSU18Y7NEX5 | 5P      | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| 1 1/8-7UNC  | GH7   | TSU18Y7NEXA | 1.5P    | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| 1 1/8-12UNF | GH5   | TSU18S5NEX5 | 5P      | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| 1 1/8-12UNF | GH5   | TSU18S5NEXA | 1.5P    | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| 1 1/8-12UNF | GH6   | TSU18S6NEX5 | 5P      | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| 1 1/8-12UNF | GH6   | TSU18S6NEXA | 1.5P    | 7.087    | 1.732    | -         | 3.622     | 0.896     | 0.672    | 0.875     | 4             | 5    |
| 1 1/4-7UNC  | GH6   | TSU20Y6NEX5 | 5P      | 7.087    | 1.929    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| 1 1/4-7UNC  | GH6   | TSU20Y6NEXA | 1.5P    | 7.087    | 1.929    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| 1 1/4-7UNC  | GH8   | TSU20Y8NEX5 | 5P      | 7.087    | 1.929    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| 1 1/4-7UNC  | GH8   | TSU20Y8NEXA | 1.5P    | 7.087    | 1.929    | -         | 3.622     | 1.021     | 0.766    | 1         | 4             | 5    |
| 1 1/4-12UNF | GH5   | TSU20S5NEX5 | 5P      | 7.087    | 1.929    | -         | 3.622     | 1.021     | 0.766    | 1         | 6             | 5    |
| 1 1/4-12UNF | GH5   | TSU20S5NEXA | 1.5P    | 7.087    | 1.929    | -         | 3.622     | 1.021     | 0.766    | 1         | 6             | 5    |
| 1 1/4-12UNF | GH6   | TSU20S6NEX5 | 5P      | 7.087    | 1.929    | -         | 3.622     | 1.021     | 0.766    | 1         | 6             | 5    |
| 1 1/4-12UNF | GH6   | TSU20S6NEXA | 1.5P    | 7.087    | 1.929    | -         | 3.622     | 1.021     | 0.766    | 1         | 6             | 5    |
| 1 3/8-6UNC  | GH6   | TSU22Z6NEX5 | 5P      | 7.874    | 2.165    | -         | 4.016     | 1.108     | 0.831    | 1.062     | 4             | 5    |
| 1 3/8-6UNC  | GH6   | TSU22Z6NEXA | 1.5P    | 7.874    | 2.165    | -         | 4.016     | 1.108     | 0.831    | 1.062     | 4             | 5    |
| 1 3/8-6UNC  | GH8   | TSU22Z8NEX5 | 5P      | 7.874    | 2.165    | -         | 4.016     | 1.108     | 0.831    | 1.062     | 4             | 5    |
| 1 3/8-6UNC  | GH8   | TSU22Z8NEXA | 1.5P    | 7.874    | 2.165    | -         | 4.016     | 1.108     | 0.831    | 1.062     | 4             | 5    |
| 1 3/8-12UNF | GH5   | TSU22S5NEX5 | 5P      | 7.874    | 2.165    | -         | 4.016     | 1.108     | 0.831    | 1.062     | 6             | 5    |
| 1 3/8-12UNF | GH5   | TSU22S5NEXA | 1.5P    | 7.874    | 2.165    | -         | 4.016     | 1.108     | 0.831    | 1.062     | 6             | 5    |
| 1 3/8-12UNF | GH6   | TSU22S6NEX5 | 5P      | 7.874    | 2.165    | -         | 4.016     | 1.108     | 0.831    | 1.062     | 6             | 5    |
| 1 3/8-12UNF | GH6   | TSU22S6NEXA | 1.5P    | 7.874    | 2.165    | -         | 4.016     | 1.108     | 0.831    | 1.062     | 6             | 5    |
| 1 1/2-6UNC  | GH6   | TSU24Z6NEX5 | 5P      | 7.874    | 2.323    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 5    |
| 1 1/2-6UNC  | GH6   | TSU24Z6NEXA | 1.5P    | 7.874    | 2.323    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 5    |
| 1 1/2-6UNC  | GH8   | TSU24Z8NEX5 | 5P      | 7.874    | 2.323    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 5    |
| 1 1/2-6UNC  | GH8   | TSU24Z8NEXA | 1.5P    | 7.874    | 2.323    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 4             | 5    |
| 1 1/2-12UNF | GH5   | TSU24S5NEX5 | 5P      | 7.874    | 2.323    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 6             | 5    |
| 1 1/2-12UNF | GH5   | TSU24S5NEXA | 1.5P    | 7.874    | 2.323    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 6             | 5    |
| 1 1/2-12UNF | GH7   | TSU24S7NEX5 | 5P      | 7.874    | 2.323    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 6             | 5    |
| 1 1/2-12UNF | GH7   | TSU24S7NEXA | 1.5P    | 7.874    | 2.323    | -         | 4.016     | 1.233     | 0.925    | 1.125     | 6             | 5    |