



suttontools

T903 -Straight Flute Tap Sets - UNC -Sutton Tools

Features:

- General purpose use
- Suitable for materials up to 1000N/mm²
- Through & blind holes
- Suitable for both hand and machine operations
- Depths up to approx. 1 x d1

Specifications:

| | |
|-----------------------|--------|
| Designation: | N |
| Material: | HSS |
| Finish: | Brt |
| Max Cut Depth: | 1xD |
| Shank Form: | A |
| Standard: | ISO529 |
| Thread Form: | UNC |
| Nut Tolerance: | 2B |
| Lead: | Set |

Range:

| Item # | d1 | Limit | Length l1 (mm) | Length l2 (mm) | Diameter d2 (mm) | sq | Length l4 (mm) | z |
|----------|-------|-------|-------------------|-------------------|---------------------|------|-------------------|---|
| T9030284 | #4 | 2B | 48 | 15 | 3.15 | 2.5 | 5 | 3 |
| T9030318 | #5 | 2B | 48 | 15 | 3.15 | 2.5 | 5 | 3 |
| T9030351 | #6 | 2B | 50 | 17 | 3.55 | 2.8 | 5 | 3 |
| T9030417 | #8 | 2B | 53 | 13 | 4.5 | 3.55 | 6 | 3 |
| T9030483 | #10 | 2B | 58 | 16 | 5 | 4 | 7 | 3 |
| T9030549 | #12 | 2B | 62 | 17 | 5.6 | 4.5 | 7 | 3 |
| T9030476 | 3/16 | 2B | 58 | 16 | 5 | 4 | 7 | 3 |
| T9030635 | 1/4 | 2B | 66 | 19 | 6.3 | 5 | 8 | 3 |
| T9030794 | 5/16 | 2B | 72 | 22 | 8 | 6.3 | 9 | 4 |
| T9030953 | 3/8 | 2B | 80 | 24 | 10 | 8 | 11 | 4 |
| T9031111 | 7/16 | 2B | 85 | 25 | 8 | 6.3 | 9 | 4 |
| T9031270 | 1/2 | 2B | 89 | 29 | 9 | 7.1 | 10 | 4 |
| T9031429 | 9/16 | 2B | 95 | 30 | 11.2 | 9 | 12 | 4 |
| T9031588 | 5/8 | 2B | 102 | 32 | 12.5 | 10 | 13 | 4 |
| T9031905 | 3/4 | 2B | 112 | 37 | 14 | 11.2 | 14 | 4 |
| T9032223 | 7/8 | 2B | 118 | 38 | 16 | 12.5 | 16 | 4 |
| T9032540 | 1 | 2B | 130 | 45 | 18 | 14 | 18 | 4 |
| T9033175 | 1 1/4 | 2B | 151 | 51 | 22.4 | 18 | 22 | 4 |
| T9033810 | 1 1/2 | 2B | 170 | 60 | 28 | 22.4 | 26 | 4 |

Applications:

| ISO | VDI | Description | Condition | Hardness | Strength | Optimal |
|-----|------|---|---------------------|----------|----------|---------|
| P | 1 | Steel - Non-alloy, cast & free cutting (~ 0.15 %C) | Annealed | 125MPa | 440MPa | ● |
| P | 2 | Steel - Non-alloy, cast & free cutting (~ 0.45 %C) | Annealed | 190MPa | 640MPa | ● |
| P | 3 | Steel - Non-alloy, cast & free cutting (~ 0.45 %C) | Quenched & Tempered | 250MPa | 840MPa | ● |
| P | 4 | Steel - Non-alloy, cast & free cutting (~ 0.75 %C) | Annealed | 270MPa | 910MPa | ● |
| P | 5 | Steel - Non-alloy, cast & free cutting (~ 0.75 %C) | Quenched & Tempered | 300HB | 1010MPa | |
| P | 6 | Steel - Low alloy & cast < 5% of alloying elements | Annealed | 180MPa | 610MPa | ● |
| P | 7 | Steel - Low alloy & cast < 5% of alloying elements | Quenched & Tempered | 275MPa | 930MPa | ○ |
| P | 8 | Steel - Low alloy & cast < 5% of alloying elements | Quenched & Tempered | 300HB | 1010MPa | |
| P | 9 | Steel - Low alloy & cast < 5% of alloying elements | Quenched & Tempered | 350HB | 1180MPa | |
| P | 10 | Steel - High alloy, cast & tool | Annealed | 200HB | 680MPa | |
| P | 11 | Steel - High alloy, cast & tool | Hardened & Tempered | 325HB | 1100MPa | |
| P | 12 | Steel - Corrosion resistant & cast - Ferritic / Martensitic | Annealed | 200HB | 680MPa | |
| P | 13 | Steel - Corrosion resistant & cast - Martensitic | Quenched & Tempered | 240HB | 810MPa | |
| M | 14.1 | Stainless Steel - Austenitic | Age Hardened | 180HB | 610MPa | |
| M | 14.2 | Stainless Steel - Duplex | | 250HB | 840MPa | |
| M | 14.3 | Stainless Steel - Precipitation Hardening | | 250HB | 840MPa | |
| K | 15 | Cast Iron, Grey (GG) - Ferritic / Pearlitic | | 180MPa | 610MPa | ○ |
| K | 16 | Cast Iron, Grey (GG) - Pearlitic | | 260HB | 880MPa | |
| K | 17 | Cast Iron, Nodular (GGG) - Ferritic | | 160MPa | 570MPa | ○ |
| K | 18 | Cast Iron, Nodular (GGG) - Pearlitic | | 250HB | 840MPa | |
| K | 19 | Cast Iron, Malleable - Ferritic | | 130MPa | 460MPa | ○ |
| K | 20 | Cast Iron, Malleable - Pearlitic | | 230HB | 780MPa | |
| N | 21 | Aluminum & Magnesium, wrought alloy - Non Heat Treatable | | 60MPa | 210MPa | ○ |
| N | 22 | Aluminum & Magnesium, wrought alloy - Heat Treatable | Age Hardened | 100MPa | 360MPa | ○ |
| N | 23 | Aluminum & Magnesium, cast alloy ?12% Si - Non Heat Treatable | | 75MPa | 270MPa | ○ |
| N | 24 | Aluminum & Magnesium, cast alloy ?12% Si - Heat Treatable | Age Hardened | 90MPa | 320MPa | ○ |
| N | 25 | Aluminum & Magnesium, cast alloy >12% Si - Non Heat Treatabl | | 130HB | 460MPa | |
| N | 26 | Copper & Copper alloys (Brass/Bronze) - Free cutting, Pb > 1% | | 110MPa | 390MPa | ○ |
| N | 27 | Copper & Copper alloys (Brass/Bronze) - Brass (CuZn, CuSnZn) | | 90HB | 320MPa | |
| N | 28 | Copper & Copper alloys (Brass/Bronze) - Bronze (CuSn) | | 100MPa | 360MPa | ○ |
| N | 29 | Non-metallic - Thermosetting & fiber-reinforced plastics | | | | |
| N | 30 | Non-metallic - Hard rubber, wood etc. | | | | |
| S | 31 | High temperature alloys - Fe based | Annealed | 200HB | 680MPa | |
| S | 32 | High temperature alloys - Fe based | Age Hardened | 280HB | 950MPa | |
| S | 33 | High temperature alloys - Ni / Co based | Annealed | 250HB | 840MPa | |
| S | 34 | High temperature alloys - Ni / Co based | Age Hardened | 350HB | 1180MPa | |
| S | 35 | High temperature alloys - Ni / Co based | Cast | 320HB | 1080MPa | |
| S | 36 | Titanium & Titanium alloys - CP Titanium | | | 400MPa | |
| S | 37.1 | Titanium & Titanium alloys - Alpha alloys | | | 860MPa | |
| S | 37.2 | Titanium & Titanium alloys - Alpha / Beta alloys | Annealed | | 960MPa | |
| S | 37.3 | Titanium & Titanium alloys - Alpha / Beta alloys | Age Hardened | | 1170MPa | |
| S | 37.4 | Titanium & Titanium alloys - Beta alloys | Annealed | | 830MPa | |
| S | 37.5 | Titanium & Titanium alloys - Beta alloys | Age Hardened | | 1400MPa | |
| H | 38.1 | Hardened steel | Hardened & Tempered | 45HRC | | |
| H | 38.2 | Hardened steel | Hardened & Tempered | 55HRC | | |

KEY

● Optimal ○ Effective | **P** Steel **M** Stainless **K** Cast Iron **N** Non-Ferous Metals **S** Titanium & Super Alloys **H** Hard Materials

Applications:

| ISO | VDI | Description | Condition | Hardness | Strength | Optimal |
|-----|------|---------------------|---------------------|----------|----------|---------|
| H | 39.1 | Hardened steel | Hardened & Tempered | 58HRC | | |
| H | 39.2 | Hardened steel | Hardened & Tempered | 62HRC | | |
| H | 40 | Cast Iron - Chilled | Cast | 400HB | 1350MPa | |
| H | 41 | Cast Iron | Hardened & Tempered | 55HRC | | |

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