

TAPS > HSS TAPS - HAND & MACHINE - STRAIGHT FLUTE



**suttontools**

**T385 - HSS TAPS - HAND & MACHINE - STRAIGHT  
FLUTE TAPS - Sutton Tools**

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**Features:**

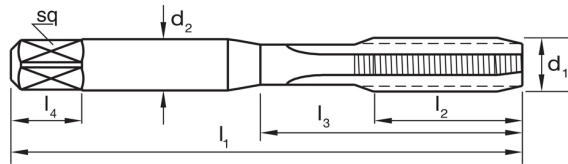
- General purpose use
  - Suitable for materials up to 1000N/mm<sup>2</sup>
  - Suitable for both hand and machine operations
  - Depths up to approx. 1 x d1
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**Specifications:**

<b>Designation:</b>	N
<b>Material:</b>	HSS
<b>Finish:</b>	Brt
<b>Max Cut Depth:</b>	1xD
<b>Shank Form:</b>	A
<b>Type:</b>	Straight Flute
<b>Standard:</b>	ISO529
<b>Thread Form:</b>	M
<b>Nut Tolerance:</b>	ISO 2 / 6H
<b>Lead:</b>	Intermediate

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Range:



Item #	d1	Pitch	Limit	l1	l2	l3	d2	sq	l4	z	Drill $\phi$
T3850200	M2	0.4	ISO 2 / 6H	41	8	-	2.5	2	4	3	1.6
T3850250	M2.5	0.45	ISO 2 / 6H	45	10	-	2.8	2.24	5	3	2.05
T3850300	M3	0.5	ISO 2 / 6H	48	11	15	3.15	2.5	5	3	2.5
T3850350	M3.5	0.6	ISO 2 / 6H	50	13	17.5	3.55	2.8	5	3	2.9
T3850400	M4	0.7	ISO 2 / 6H	53	13	18	4	3.15	6	3	3.3
T3850450	M4.5	0.75	ISO 2 / 6H	53	13	19	4.5	3.55	6	3	3.7
T3850500	M5	0.8	ISO 2 / 6H	58	16	22	5	4	7	3	4.2
T3850600	M6	1	ISO 2 / 6H	66	19	26	6.3	5	8	3	5
T3850700	M7	1	ISO 2 / 6H	66	19	26	7.1	5.6	8	4	6
T3850800	M8	1.25	ISO 2 / 6H	72	22	30	8	6.3	9	4	6.8
T3850900	M9	1.25	ISO 2 / 6H	72	22	31	9	7.1	10	4	7.8
T3851000	M10	1.5	ISO 2 / 6H	80	24	34	10	8	11	4	8.5
T3851100	M11	1.5	ISO 2 / 6H	85	25	-	8	6.3	9	4	9.5
T3851200	M12	1.75	ISO 2 / 6H	89	29	-	9	7.1	10	4	10.2
T3851400	M14	2	ISO 2 / 6H	95	30	-	11.2	9	12	4	12
T3851600	M16	2	ISO 2 / 6H	102	32	-	12.5	10	13	4	14
T3851800	M18	2.5	ISO 2 / 6H	112	37	-	14	11.2	14	4	15.5
T3852000	M20	2.5	ISO 2 / 6H	112	37	-	14	11.2	14	4	17.5
T3852200	M22	2.5	ISO 2 / 6H	118	38	-	16	12.5	16	4	19.5
T3852400	M24	3	ISO 2 / 6H	130	45	-	18	14	18	4	21
T3852700	M27	3	ISO 2 / 6H	135	45	-	20	16	20	4	24
T3853000	M30	3.5	ISO 2 / 6H	138	48	-	20	16	20	4	26.5
T3853300	M33	3.5	ISO 2 / 6H	151	51	-	22.4	18	22	4	29.5
T3853600	M36	4	ISO 2 / 6H	162	57	-	25	20	24	4	32
T3853900	M39	4	ISO 2 / 6H	170	60	-	28	22.4	26	4	35
T3854200	M42	4.5	ISO 2 / 6H	170	60	-	28	22.4	26	4	37.5
T3854500	M45	4.5	ISO 2 / 6H	187	67	-	31.5	25	28	4	40.5
T3854800	M48	5	ISO 2 / 6H	187	67	-	31.5	25	28	4	43
T3855200	M52	5	ISO 2 / 6H	200	70	-	35.5	28	31	4	47

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### Applications:

ISO	VDI	Description	Condition	Hardness	Strength	Optimal
P	1	Steel - Non-alloy, cast & free cutting (~ 0.15 %C)	Annealed	125HB	440MPa	●
P	2	Steel - Non-alloy, cast & free cutting (~ 0.45 %C)	Annealed	190HB	640MPa	●
P	3	Steel - Non-alloy, cast & free cutting (~ 0.45 %C)	Quenched & Tempered	250HB	840MPa	●
P	4	Steel - Non-alloy, cast & free cutting (~ 0.75 %C)	Annealed	270HB	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	180HB	610MPa	●
P	7	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	275HB	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		180HB	610MPa	○
K	16	Cast Iron, Grey (GG) - Pearlitic		260HB	880MPa	
K	17	Cast Iron, Nodular (GGG) - Ferritic		160HB	570MPa	○
K	18	Cast Iron, Nodular (GGG) - Pearlitic		250HB	840MPa	
K	19	Cast Iron, Malleable - Ferritic		130HB	460MPa	○
K	20	Cast Iron, Malleable - Pearlitic		230HB	780MPa	
N	21	Aluminum & Magnesium, wrought alloy - Non Heat Treatable		60HB	210MPa	○
N	22	Aluminum & Magnesium, wrought alloy - Heat Treatable	Age Hardened	100HB	360MPa	○
N	23	Aluminum & Magnesium, cast alloy ≤12% Si - Non Heat Treatabl		75HB	270MPa	○
N	24	Aluminum & Magnesium, cast alloy ≤12% Si - Heat Treatable	Age Hardened	90HB	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		110HB	390MPa	○
N	27	Copper & Copper alloys (Brass/Bronze) - Brass (CuZn, CuSnZn)		90HB	320MPa	
N	28	Copper & Copper alloys (Brass/Bronze) - Bronze (CuSn)		100HB	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