Hand Taps

For Through or Blind Holes in General Machining Applications

Hand Taps, Machine Screw and Fractional Sizes

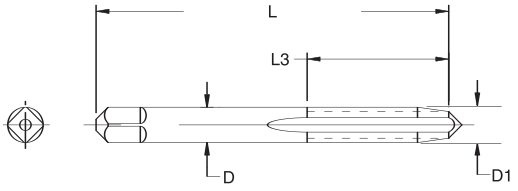
Bottoming Chamfer 1 to 2 Pitches

- **Series No. 5305TC / 5303TC TiCN Coated**
- **Series No. 2305 / 2303 TiN Coated**
- **Series No. 5305S / 5303S SH50 Steam Oxide**
- **Series No. 5305 / 5303 Uncoated**

P Steel
M Stainless Steel
K Cast Iron
N Non-Ferrous



For Blind Hole Tapping



***D1** = Tap Size* *D = Shank Diameter*
L = Overall Length *L3 = Thread Length*

Alternate Coatings Available.
(Full package quantities only)



MACHINE SCREW

D1	NC/UNC/ UNJC	NF/UNF/ UNJF	L	L3	D	Flutes	Pitch Dia. Limit	EDP Number - Bottoming Chamfer TiCN	TiN	SH50 Oxide	Uncoated
0	-	80	1.63	.313	.141	2	H1	—	—	—	15104
0	-	80	1.63	.313	.141	2	H2	19174	19204	—	15108
1	64	-	1.69	.375	.141	2	H1	—	—	—	15116
1	-	72	1.69	.375	.141	2	H1	—	—	—	15122
1	-	72	1.69	.375	.141	2	H2	—	—	—	15126
2	56	-	1.75	.438	.141	2	H2	—	—	—	15139
2	56	-	1.75	.438	.141	3	H1	—	—	—	15130
2	56	-	1.75	.438	.141	3	H2	19175	15430	—	15136
2	-	64	1.75	.438	.141	3	H1	—	—	—	15143
2	-	64	1.75	.438	.141	3	H2	—	—	—	15146
3	48	-	1.81	.500	.141	2	H2	—	15432	—	15161
3	48	-	1.81	.500	.141	3	H2	—	—	—	15158
3	-	56	1.81	.500	.141	3	H2	—	—	—	15168
4	40	-	1.88	.563	.141	2	H2	—	—	—	15190
4	40	-	1.88	.563	.141	2	H2	19176	19213	19570	15186
4	-	48	1.88	.563	.141	3	H2	—	—	—	15198
5	40	-	1.94	.625	.141	2	H2	—	—	—	15215
5	40	-	1.94	.625	.141	3	H2	19177	15436	—	15211
5	-	44	1.94	.625	.141	3	H2	—	—	—	15222
6	32	-	2.00	.688	.141	2	H2	—	—	—	15236
6	32	-	2.00	.688	.141	2	H3	—	15438	—	15246
6	32	-	2.00	.688	.141	3	H1	—	—	—	15227
6	32	-	2.00	.688	.141	3	H2	19178	19223	—	15233
6	32	-	2.00	.688	.141	3	H3	—	—	19580	15239
6	-	40	2.00	.688	.141	3	H2	—	—	—	15259
8	32	-	2.13	.750	.168	2	H2	—	—	—	15280
8	32	-	2.13	.750	.168	2	H3	—	—	—	15292
8	32	-	2.13	.750	.168	3	H2	—	—	—	15282
8	32	-	2.13	.750	.168	3	H3	—	15441	—	15294
8	32	-	2.13	.750	.168	4	H1	—	—	—	15269
8	32	-	2.13	.750	.168	4	H2	19179	19228	—	15277
8	32	-	2.13	.750	.168	4	H3	—	—	19590	15285
8	-	36	2.13	.750	.168	4	H2	—	—	—	15303
10	24	-	2.38	.875	.194	2	H3	—	—	—	15336
10	24	-	2.38	.875	.194	3	H3	—	15443	—	15338
10	24	-	2.38	.875	.194	4	H2	—	—	—	15322
10	24	-	2.38	.875	.194	4	H3	19181	19233	19605	15329
10	-	32	2.38	.875	.194	3	H2	—	15446	—	15359

Hand taps for 3B class of fit are suitable for UNJ Aerospace internal threading applications.
Bottoming chamfer machine screw sizes continue on the next page.

Metric Hand Taps

Features/Benefits:

- the most popular style of tap
- manufactured from select high-speed steel for increased wear life
- straight flute design
- can be used by hand or for tapping under power
- versatile taps for use in general machine tapping or CNC tapping applications
- use for through hole or blind hole tapping
- standard in right hand sizes in Unified and American National thread form
- hand taps store chips in their flutes next to the chamfered teeth during the threading operation
- for deep-hole threading more than 1 1/2 diameters of the tap-in depth, use a hand tap with fewer flutes for increased chip handling capabilities

Hand taps are available in three chamfer lengths for through hole or blind hole tapping:

- taper (7-10 pitches) - longest standard chamfer ensures easier starting and requires less tapping torque because of more working teeth
- plug (3-5 pitches) - the most universally used chamfer for hand or machine tapping in through or blind holes
- bottoming (1-2 pitches) - for threading close to the bottom of blind holes; the least efficient standard chamfer

Application Information:

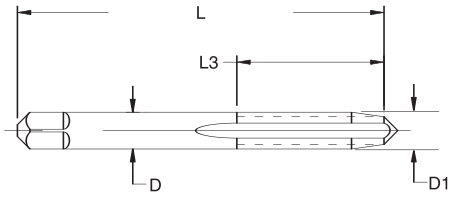
- steels < 30Rc (TiN, TiCN, SH50)
- stainless steel < 30Rc (TiN, TiCN)
- cast iron and ductile iron (TiN, TiCN, SH50)
- non-ferrous materials (uncoated, MAXI)
- cast iron (uncoated, MAXI)
- aluminum (TiN+CrC/C)

P Steel
M Stainless Steel
K Cast Iron
N Non-Ferrous




For Through Hole Tapping


For Blind Hole Tapping



D1 = *Tap Size* ***D*** = *Shank Diameter*
L = *Overall Length* ***L3*** = *Thread Length*

Metric Hand Taps

Taper Chamfer 7-10 Pitches

Series No. 5353 Uncoated

Size	L	L3	D	Flutes	Pitch Dia. Limit	EDP Number - Taper Chamfer Uncoated
M2 x 0,4	1.75	.438	.141	3	D3	14725
M3 x 0,5	1.94	.625	.141	3	D3	14741
M4 x 0,7	2.13	.750	.168	4	D4	14757
M5 x 0,8	2.38	.875	.194	4	D4	14773
M6 x 1	2.50	1.000	.255	4	D5	14781
M7 x 1	2.72	1.125	.318	4	D5	14789
M8 x 1,25	2.72	1.125	.318	4	D5	14797
M10 x 1,5	2.94	1.250	.381	4	D6	14813
M12 x 1,75	3.38	1.656	.367	4	D6	14829
M14 x 2	3.59	1.656	.429	4	D7	14845
M16 x 2	3.81	1.813	.480	4	D7	14861
M18 x 2,5	4.03	1.063	.542	4	D7	14877
M20 x 2,5	4.47	2.000	.652	4	D7	14893
M24 x 3	4.91	2.219	.760	4	D8	14909
M30 x 3,5	5.44	2.563	1.021	4	D9	14925
M36 x 4	6.06	3.000	1.233	4	D9	14941

Metric taps for 6H class of fit are suitable for MJ Aerospace internal threading applications.
Metric taps are manufactured to USCTI specifications and dimensions.
Metric tap blank dimensions are equivalent to inch taps.
Metric hand taps with plug chamfer begin on the next page.