



MACHINE SCREW TAPS (NC & NF)

SIZE	OVERALL LENGTH	THREAD LENGTH	SQUARE LENGTH	SHANK DIAMETER	SQUARE
#0 (.060)	1-5/8	5/16	3/16	.141	.110
#1 (.073)	1-11/16	3/8	3/16	.141	.110
#2 (.066)	1-3/4	7/16	3/16	.141	.110
#3 (.099)	1-13/16	1/2	3/16	.141	.110
#4 (.112)	1-7/8	9/16	3/16	.141	.110
#5 (.125)	1-15/16	5/8	3/16	.141	.110
#6 (.138)	2	11/16	3/16	.141	.110
#8 (.164)	2-1/8	3/4	1/4	.168	.131
#10 (.190)	2-3/8	7/8	1/4	.194	.152
#12 (.216)	2-3/8	15/16	9/32	.220	.165

FRACTIONAL SIZE TAPS (NC&NF)

SIZE	OVERALL LENGTH	THREAD LENGTH	SQUARE LENGTH	SHANK DIAMETER	SQUARE
1/4	2-1/2	1	5/16	.255	.191
5/16	2-23/32	1-1/8	3/8	.318	.238
3/8	2-15/16	1-1/4	7/16	.381	.286
7/16	3-5/32	1-7/16	13/32	.323	.242
1/2	3-3/8	1-21/32	7/16	.367	.275
9/16	3-19/32	1-21/32	1/2	.429	.322
5/8	3-13/16	1-13/16	9/16	.480	.360
11/16	4-1/32	1-13/16	5/8	.542	.406
3/4	4-1/4	2	11/16	.590	.442
7/8	4-11/16	2-7/32	3/4	.697	.523
1	5-1/8	2-1/2	13/16	.800	.600
1-1/8	5-7/16	2-9/16	7/8	.896	.672
1-1/4	5-3/4	2-9/16	1	1.021	.766
1-3/8	6-1/16	3	1-1/16	1.108	.831
1-1/2	6-3/8	3	1-1/8	1.233	.925

PIPE TAPS - STRAIGHT & TAPER

SIZE	OVERALL LENGTH	THREAD LENGTH	SQUARE LENGTH	SHANK DIAMETER	SQUARE
1/16 - 27	2-1/8	11/16	3/8	.3125	.234
1/8 - 27	2-1/8	3/4	3/8	.3125(SS)	.234
1/8 - 27	2-1/8	3/4	3/8	.4375(LS)	.328
1/4 - 18	2-7/16	1-1/16	7/16	.5625	.421
3/8 - 18	2-9/16	1-1/16	1/2	.7000	.531
1/2 - 14	3-1/8	1-3/8	5/8	.6875	.515
3/4 - 14	3-1/4	1-3/8	11/16	.9063	.679
1 - 11-1/2	3-3/4	1-3/4	13/16	1.1250	.843
1-1/4 - 11-1/2	4	1-3/4	15/16	1.3125	.984
1-1/2 - 11-1/2	4-1/4	1-3/4	1	1.5000	1.125
2 - 11-1/2	4-1/2	1-3/4	1-1/8	1.8750	1.406

(SS) = Small Shank (LS) = Large Shank

PULLEY TAPS

SIZE	THREAD LENGTH	SQUARE LENGTH	SHANK DIAMETER	SQUARE	NECK LENGTH	GROUND LENGTH
1/4	1	5/16	.255	.191	3/8	1-1/2
5/16	1-1/8	3/8	.318	.238	3/8	1-9/16
3/8	1-1/4	7/16	.381	.286	3/8	1-5/8
7/16	1-7/16	1/2	.444	.333	7/16	1-11/16
1/2	1-21/32	9/16	.507	.380	1/2	1-11/16
5/8	1-13/16	11/16	.633	.475	5/8	2
3/4	2	3/4	.759	.569	3/4	2-1/4

See page 301 for overall lengths available

SMALL SHANK EXTENSION TAPS

SIZE	NC/NF	THREAD LENGTH	SQUARE LENGTH	SHANK DIA	SQUARE
6 - 32	NC	11/16	3/16	.097	.073
8 - 32	NC	3/4	1/4	.123	.092
10 - 24	NC	7/8	1/4	.136	.102
10 - 32	NF	7/8	1/4	.136	.102
1/4 - 20	NC	1	5/16	.185	.139
1/4 - 28	NF	1	5/16	.185	.139
5/16 - 18	NC	1-1/8	3/8	.240	.180
5/16 - 24	NF	1-1/8	3/8	.240	.180
3/8 - 16	NC	1-1/4	7/16	.275	.206
3/8 - 24	NF	1-1/4	7/16	.275	.206
7/16 - 14	NC	1-7/16	13/32	.323	.242
7/16 - 20	NF	1-7/16	13/32	.323	.242
1/2 - 13	NC	1-21/32	7/16	.367	.275
1/2 - 20	NF	1-21/32	7/16	.367	.275
5/8 - 11	NC	1-13/16	9/16	.480	.360
5/8 - 18	NF	1-13/16	9/16	.480	.360
3/4 - 10	NC	2	11/16	.590	.442
3/4 - 16	NF	2	11/16	.590	.442

METRIC TAPS

SIZE	OVERALL LENGTH	THREAD LENGTH	SQUARE LENGTH	SHANK DIA	SQUARE	INCH BLANK
M1.6 x 0.35	1-5/8	5/16	3/16	.141	.110	#0
M2 x 0.40	1-3/4	7/16	3/16	.141	.110	#2
M2.5 x 0.45	1-13/16	1/2	3/16	.141	.110	#3
M3 x 0.50	1-15/16	5/8	3/16	.141	.110	#5
M3.5 x 0.60	2	11/16	3/16	.141	.110	#6
M4 x 0.70	2-1/8	3/4	1/4	.168	.131	#8
M4.5 x 0.75	2-3/8	7/8	1/4	.194	.152	#10
M5 x 0.80	2-3/8	7/8	1/4	.194	.152	#10
M6 x 1	2-1/2	1	5/16	.255	.191	1/4
M6.3 x 1	2-1/2	1	5/16	.255	.191	1/4
M7 x 1	2-23/32	1-1/8	3/8	.318	.238	5/16
M8 x 1.25	2-23/32	1-1/8	3/8	.318	.238	5/16
M10 x 1.50	2-15/16	1-1/4	7/16	.381	.286	3/8
M12 x 1.75	3-3/8	1-21/32	7/16	.367	.275	1/2
M14 x 2	3-19/32	1-21/32	1/2	.429	.322	9/16
M16 x 2	3-13/16	1-13/16	9/16	.480	.360	5/8
M18 x 2.50	4-1/32	1-13/16	5/8	.542	.406	11/16
M20 x 2.50	4-15/32	2	11/16	.652	.489	13/16
M24 x 3	4-29/32	2-7/32	3/4	.760	.570	15/16
M30 x 3.50	5-7/16	2-9/16	1	1.021	.766	1-3/16
M36 x 4	6-1/16	3	1-1/8	1.233	.925	1-7/16



TAP RECOMMENDATIONS FOR CLASSES 2B & 3B UNIFIED INCH SCREW THREADS

SIZE	THREADS PER INCH		RECOMMENDED TAP LIMITS		INTERNAL THREAD PITCH DIAMETER LIMITS		
	NC UC	NF UNF	CLASS 2B	CLASS 3B	MIN. ALL CLASSES (BASIC)	MAX CLASS 2B	MAX CLASS 3B
0	–	80	H2	H1	.0519	.0542	.0536
1	64	–	H2	H1	.0629	.0655	.0648
1	–	72	H2	H1	.0640	.0665	.0659
2	56	–	H2	H1	.0744	.0772	.0765
2	–	64	H2	H1	.0759	.0786	.0779
3	48	–	H2	H1	.0855	.0885	.0877
3	–	56	H2	H1	.0874	.0902	.0895
4	40	–	H2	H2	.0958	.0991	.0982
4	–	48	H2	H1	.0985	.1016	.1008
5	40	–	H2	H2	.1088	.1121	.1113
5	–	44	H2	H1	.1102	.1134	.1126
6	32	–	H3	H2	.1177	.1214	.1204
6	–	40	H2	H1	.1218	.1252	.1243
8	32	–	H3	H2	.1437	.1475	.1465
8	–	36	H2	H1	.1460	.1496	.1487
10	24	–	H3	H3	.1629	.1672	.1661
10	–	32	H3	H2	.1697	.1736	.1726
12	24	–	H3	H3	.1889	.1933	.1922
12	–	28	H3	H3	.1928	.1970	.1959
1/4	20	–	H5	H3	.2175	.2223	.2211
1/4	–	28	H4	H3	.2268	.2311	.2300
5/16	18	–	H5	H3	.2764	.2817	.2803
5/16	–	24	H4	H3	.2854	.2902	.2890
3/8	16	–	H5	H3	.3344	.3401	.3387
3/8	–	24	H4	H3	.3479	.3528	.3516
7/16	14	–	H5	H3	.3911	.3972	.3957
7/16	–	20	H5	H3	.4050	.4104	.4091
1/2	13	–	H5	H3	.4500	.4565	.4548
1/2	–	20	H5	H3	.4675	.4731	.4717
9/16	12	–	H5	H3	.5084	.5152	.5135
9/16	–	18	H5	H3	.5264	.5323	.5308
5/8	11	–	H5	H3	.5660	.5732	.5714
5/8	–	18	H5	H3	.5889	.5949	.5934
3/4	10	–	H5	H5	.6850	.6927	.6907
3/4	–	16	H5	H3	.7094	.7159	.7143
7/8	9	–	H6	H4	.8028	.8110	.8089
7/8	–	14	H6	H4	.8286	.8356	.8339

The above recommended taps normally produce the Class of Thread indicated in average materials when used with reasonable care. However, if the tap specified does not give a satisfactory gage fit in the work, a choice of some other limit tap will be necessary.



TAP RECOMMENDATIONS FOR CLASSES 2B & 3B UNIFIED INCH SCREW THREADS

SIZE	THREADS PER INCH		RECOMMENDED TAP LIMITS		INTERNAL THREAD PITCH DIAMETER LIMITS		
	NC UC	NF UNF	CLASS 2B	CLASS 3B	MIN. ALL CLASSES (BASIC)	MAX CLASS 2B	MAX CLASS 3B
1	8	-	H6	H4	.9188	.9276	.9254
1	-	12	H6	H4	.9459	.9535	.9516
1	NS		H6	H4	.9536	.9609	.9590
1 1/8	7	-	H6	H4	1.0332	1.0416	.10393
1 1/8	-	12	H6	H4	1.0709	1.0787	.10768
1 1/4	7	-	H6	H4	1.1572	1.1668	1.1644
1 1/4	-	12	H6	H4	1.1959	1.2309	1.2019
1 3/8	6	-	H6	H4	1.2667	1.2771	1.2745
1 3/8	-	12	H6	H4	1.3209	1.3291	1.3270
1 1/2	6	-	H6	H4	1.3917	1.4022	1.3996
1 1/2	-	12	H6	H4	1.4459	1.4542	1.4522

TAP RECOMMENDATIONS FOR CLASS 6H METRIC SCREW THREADS

THREAD SIZE		RECOMMENDED TAP LIMIT	INTERNAL THREAD - PRODUCT LIMITS - CLASS 6H				
NOMINAL DIA. (MM)	PITCH (MM)		LIMIT NUMBER	PITCH DIAMETER (MM)		PITCH DIAMETER (MM)	
				MIN.	MAX.	MIN.	MAX.
1.6	.35	D3	1.373	1.458	.05406	.05740	
2	.4	D3	1.740	1.830	.06850	.07205	
2.5	.45	D3	2.208	2.303	.08693	.09067	
3	.5	D3	2.675	2.775	.10531	.10925	
3.5	.6	D4	3.110	3.222	.12244	.12685	
4	.7	D4	3.545	3.663	.13957	.14421	
4.5	.75	D4	4.013	4.131	.15789	.16264	
5	.8	D4	4.480	4.605	.17638	.18130	
6	1	D5	5.350	5.500	.21063	.21654	
7	1	D5	6.350	6.500	.25000	.25591	
8	1.25	D5	7.188	7.348	.28299	.28929	
10	1.5	D6	9.026	9.206	.35935	.36244	
12	1.75	D6	10.863	11.063	.42758	.43555	
14	2	D7	12.701	12.913	.50004	.50839	
16	2	D7	14.701	14.913	.57878	.58713	
20	2.5	D7	18.376	18.600	.72346	.73228	
24	3	D8	22.051	22.316	.86815	.87858	
30	3.5	D9	27.727	28.007	1.09161	1.10264	
36	4	D9	33.402	33.702	1.31504	1.32685	