



TAP DRILL SIZES - UNIFIED THREAD

Size	Threads Per Inch		Drills for Cutting Taps				Drill for Forming Taps
	UNC	UNF	Tap Drill	Inch Equiv.	Probable Hole Size (Inch)	Probable Percent of Thread	Drill for 65%
0		80	3/64	.0469	.0484	71	54 or 1.4mm
1	64	72	53	.0595	.0610	59	51 or 1.7mm
2	56	64	50	.0700	.0717	62	51 or 1.75mm
3	48	56	47	.0785	.0804	69	47 or 2.0mm
4	40	48	45	.0820	.0839	65	2.0mm
5	40	44	43	.1015	.1038	65	2.3mm
6	32	40	42	.1040	.1063	61	2.3mm
8	32	36	38	.1065	.1088	65	39
10	24	32	37	.1130	.1156	63	33 or 2.9mm
12	24	28	33	.1360	.1389	72	33 or 2.9mm
1/4	20	24	29	.1590	.1622	69	3.1mm
5/16	18	20	25	.1770	.1805	69	1/8 or 3.2mm
3/8	16	18	21	.1820	.1855	68	25 or 3.8mm
7/16	14	16	16	.2010	.2048	66	24
1/2	13	14	14	.2130	.2168	66	11/64
9/16	12	12	7	.2570	.2608	70	16 or .176
5/8	11	11	3	.2720	.2761	72	9 or 5.0mm
3/4	10	10	28	.3125	.3169	72	7 or 5.1mm
7/8	9	9	28	.3320	.3364	72	5.75mm
1	8	8	24	.3680	.3726	72	A
1-1/8	7	7	24	.3906	.3952	67	7.25mm
1-1/4	7	7	20	.4219	.4266	65	.293
1-3/8	6	6	20	.4531	.4578	65	S or 11/32mm
1-1/2	6	6	18	.4844	.4892	68	9.0mm
			18	.5156	.5204	58	Z or 10.5mm
			17/32	.5312	.5362	75	.463
			37/64	.5781	.5831	58	.476
			21/32	.6562	.6613	68	.521
			11/16	.6875	.6925	71	.536
			49/64	.7656	.7708	72	37/64
			13/16	.8125	.8177	62	.598
			7/8	.8750	.8809	73	45/64
			59/64	.9219	.9279	67	23/32
			63/64	.9844	.9911	72	.823
			1-3/64	1.0469	1.0541	65	27/32
			1-7/64	1.1094	—	—	.963
			1-11/64	1.1719	—	—	
			1-7/32	1.2187	—	—	
			1-19/64	1.2969	—	—	
			1-11/32	1.3437	—	—	
			1-27/64	1.4219	—	—	



TAP DRILL SIZES - METRIC THREAD

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA

Size	Pitch	Recommended Metric Drill				Closest Recommended Inch Drill				Drill for Forming Taps
		Tap Drill (mm)	Inch Equiv.	Probable Hole Size (Inch)	Probable Percent of Thread	Tap Drill	Inch Equiv.	Probable Hole Size (Inch)	Probable Percent of Thread	6H Recommended
M1.6	0.35	1.25	.0492	.0507	69	—	—	—	—	1.45
M1.8	0.35	1.45	.0571	.0586	69	—	—	—	—	1.65
M2	0.40	1.6	.0630	.0647	69	52	.0635	.0652	66	1.85
M2.2	0.45	1.75	.0689	.0706	70	—	—	—	—	2.0
M2.5	0.45	2.05	.0807	.0826	69	46	.0810	.0829	67	2.3
M3	0.50	2.5	.0984	.1007	68	40	.0980	.1003	70	#35
M3.5	0.60	2.9	.1142	.1168	68	33	.1130	.1156	72	#30
M4	0.70	3.3	.1299	.1328	69	30	.1285	.1314	73	3.7
M4.5	0.75	3.7	.1457	.1486	74	26	.1470	.1502	70	4.16
M5	0.80	4.2	.1654	.1686	69	19	.1660	.1692	68	#14
M6	1.00	5.0	.1968	.2006	70	9	.1960	.1998	71	5.5
M7	1.00	6.0	.2362	.2400	70	15/64	.2344	.2382	73	6.5
M8	1.25	6.7	.2638	.2679	74	17/64	.2656	.2697	71	7.4
	1.00	7.0	.2756	.2797	69	J	.2770	.2811	66	7.55
M10	1.50	8.5	.3346	.3390	71	Q	.3320	.3364	75	9.3
	1.25	8.7	.3425	.3471	73	11/32	.3438	.3483	71	9.4
M12	1.75	10.2	.4016	.4063	74	Y	.4040	.4087	71	7/16
	1.25	10.8	.4252	.4299	67	27/64	.4219	.4266	72	11.3
M14	2.00	12.0	.4724	.4772	72	15/32	.4688	.4736	76	—
	1.50	12.5	.4921	.4969	71	—	—	—	—	—
M16	2.00	14.0	.5512	.5561	72	35/64	.5469	.5518	76	—
	1.50	14.5	.5709	.5758	71	—	—	—	—	—
M18	2.50	15.5	.6102	.6152	73	39/64	.6094	.6144	74	—
	1.50	16.5	.6496	.6546	70	—	—	—	—	—
M20	2.50	17.5	.6890	.6942	73	11/16	.6875	.6925	74	—
	1.50	18.5	.7283	.7335	70	—	—	—	—	—
M22	2.50	19.5	.7677	.7729	73	49/64	.7656	.7708	75	—
	1.50	20.5	.8071	.8123	70	—	—	—	—	—
M24	3.00	21.0	.8268	.8327	73	53/64	.8281	.8340	72	—
	2.00	22.0	.8661	.8720	71	—	—	—	—	—
M27	3.00	24.0	.9449	.9511	73	15/16	.9375	.9435	78	—
	2.00	25.0	.9843	.9913	70	63/64	.9844	.9914	70	—
M30	3.00	26.5	1.0433	Reaming Recommended to the Drill Size Shown						
	2.00	28.0	1.1024							
M33	3.50	29.5	1.1614							
	2.00	31.0	1.2205							
M36	4.00	32.0	1.2598							
	3.00	33.0	1.2992							
M39	4.00	35.0	1.3780							
	3.00	36.0	1.4173							



STI TAP DRILL RECOMMENDATION

Metric

Size	RECOMMENDATION	
	Drill Size	
	Inch	metric (mm)
M2 × 0.4	.0827	2.10
M2.2 × 0.45	.0906	2.30
M2.5 × 0.45	.1024	2.60
M3 × 0.5	.1240	3.15
M3.5 × 0.6	.1457	3.70
M4 × 0.7	.1654	4.20
M5 × 0.8	.2047	5.20
M6 × 1.0	.2480	6.30
M7 × 1.0	.2874	7.30
M8 × 1.0	.3268	8.30
M8 × 1.25	.3307	8.40
M9 × 1.25	.3701	9.40
M10 × 1.25	.4094	10.40
M10 × 1.5	.4134	10.50
M11 × 1.5	.4528	11.50
M12 × 1.25	.4882	12.40
M12 × 1.5	.4921	12.50
M12 × 1.75	.4921	12.50
M14 × 1.5	.5709	14.50
M14 × 2.0	.5709	14.50
M16 × 1.5	.6496	16.50
M16 × 2.0	.6496	16.50
M18 × 1.5	.7283	18.50
M18 × 2.0	.7283	18.50
M18 × 2.5	.7382	18.75
M20 × 1.5	.8071	20.50
M20 × 2.0	.8071	20.50
M20 × 2.5	.8169	20.75
M22 × 1.5	.8858	22.50
M22 × 2.0	.8858	22.50
M22 × 2.5	.8957	22.75
M24 × 2.0	.9646	24.50
M24 × 3.0	.9843	25.00
M27 × 3.0	1.1024	28.00
M30 × 3.5	1.2205	31.00

Unified

Size	RECOMMENDATION	
	Drill Size	
	Inch	metric (mm)
#2 - 56 UNC	.0906	2.30
#3 - 48 UNC	.1063	2.70
#3 - 56 UNF	.1043	2.65
#4 - 40 UNC	.1181	3.00
#4 - 48 UNF	.1181	3.00
#5 - 40 UNC	.1339	3.40
#5 - 44 UNF	.1299	3.30
#6 - 32 UNC	.1457	3.70
#6 - 40 UNF	.1457	3.70
#8 - 32 UNC	.1732	4.40
#8 - 36 UNF	.1732	4.40
#10 - 24 UNC	.2008	5.10
#10 - 32 UNF	.2008	5.10
#12 - 24 UNC	.2283	5.80
1/4 - 20 UNC	.2638	6.70
1/4 - 28 UNF	.2598	6.60
5/16 - 18 UNC	.3307	8.40
5/16 - 24 UNF	.3228	8.20
3/8 - 16 UNC	.3937	10.00
3/8 - 24 UNF	.3858	9.80
7/16 - 14 UNC	.4528	11.50
7/16 - 20 UNF	.4528	11.50
1/2 - 13 UNC	.5236	13.30
1/2 - 20 UNF	.5157	13.10
9/16 - 12 UNC	.5866	14.90
9/16 - 18 UNF	.5787	14.70
5/8 - 11 UNC	.6496	16.50
5/8 - 18 UNF	.6417	16.30
3/4 - 10 UNC	.7795	19.80
3/4 - 16 UNF	.7677	19.50
7/8 - 9 UNC	.9055	23.00
7/8 - 14 UNF	.8858	22.50
1 - 8 UNC	1.0433	26.50
1 - 12 UNF	1.0236	26.00
1-1/8 - 7 UNC	1.1713	29.75
1-1/8 - 8 UN	1.1417	29.00
1-1/8 - 12 UNF	1.1516	29.25
1-1/4 - 7 UNC	1.2992	33.00
1-1/4 - 8 UN	1.2795	32.50
1-1/4 - 12 UNF	1.2795	32.50
1-3/8 - 6 UNC	1.4173	36.00
1-3/8 - 8 UN	1.3976	35.50
1-3/8 - 12 UNF	1.4173	36.00
1-1/2 - 6 UNC	1.5354	39.00
1-1/2 - 8 UN	1.5354	39.00
1-1/2 - 12 UNF	1.5354	39.00