

TAP DRILLING GUIDE

METRIC SIZES

IMPERIAL SIZES

TAP DRILLING SIZE

METRIC			
Size		Root Dia.	Drill
M	Pitch in mm	max. mm	Dia. mm
1.6	0.35	1.321	1.25
1.8	0.35	1.521	1.45
2	0.4	1.679	1.6
2.2	0.45	1.838	1.75
2.5	0.45	2.138	2.05
3	0.5	2.599	2.5
3.5	0.6	3.010	2.9
4	0.7	3.422	3.3
4.5	0.75	3.878	3.7
5	0.8	4.334	4.2
6	1	5.153	5
7	1	6.153	6
8	1.25	6.912	6.8
9	1.25	7.912	7.8
10	1.5	8.676	8.5
11	1.5	9.676	9.5
12	1.75	10.441	10.2
14	2	12.210	12
16	2	14.210	14
18	2.5	15.744	15.5
20	2.5	17.744	17.5
22	2.5	19.744	19.5
24	3	21.252	21
27	3	24.252	24
30	3.5	26.771	26.5
33	3.5	29.771	29.5
36	4	32.270	32
39	4	35.270	35
42	4.5	37.799	37.5
45	4.5	40.799	40.5
48	5	43.297	43
52	5	47.297	47

METRIC FINE		
Size	Root Dia. max. mm	Drill Dia. mm
M		
3×0.35	2.721	2.65
4×0.5	3.599	3.5
5×0.5	4.599	4.5
6×0.75	5.378	5.2
7×0.75	6.378	6.2
8×0.75	7.378	7.2
8×1	7.153	7
9×1	8.153	8
10×0.75	9.378	9.2
10×1	9.153	9
10×1.25	8.912	8.8
11×1	10.153	10
12×1	11.153	11
12×1.25	10.912	10.8
12×1.5	10.676	10.5
14×1	13.153	13
14×1.25	12.912	12.8
14×1.5	12.676	12.5
15×1	14.153	14
15×1.5	13.676	13.5
16×1	15.153	15
16×1.5	14.676	14.5
18×1	17.153	17
18×1.5	16.676	16.5
18×2	16.210	16
20×1	19.153	19
20×1.5	18.676	18.5
20×2	18.210	18
22×1	21.153	21
22×1.5	20.676	20.5
22×2	20.210	20
24×1	23.153	23
24×1.5	22.676	22.5
24×2	22.210	22
25×1	24.153	24
25×1.5	23.676	23.5
26×1.5	24.676	24.5
27×1.5	25.676	25.5
27×2	25.210	25
28×1.5	26.676	26.5
30×1.5	28.676	28.5
30×2	28.210	28
32×1.5	30.676	30.5
33×2	31.210	31
35×1.5	33.676	33.5
36×1.5	34.676	34.5
36×2	34.210	34
36×3	33.252	33
38×1.5	36.676	36.5
39×3	36.252	36
40×1.5	38.676	38.5
42×1.5	40.676	40.5
45×1.5	43.676	43.5
50×1.5	48.676	48.5

TAP DRILLING SIZE

UNC		
Size	Root Dia. max. mm	Drill Dia. mm
UNC		
nr 4—40	2.385	2.35
nr 5—40	2.697	2.65
nr 6—32	2.896	2.85
nr 8—32	3.531	3.5
nr 10—24	3.962	3.9
nr 12—24	4.597	4.5
1/4—20	5.268	5.1
3/16—18	6.734	6.6"
3/8—16	8.164	8
7/16—14	9.550	9.4
1/2—13	11.013	10.8
9/16—12	12.456	12.2
5/8—11	13.868	13.5
3/4—10	16.833	16.5
7/8—9	19.748	19.5
1—8	22.598	22.25
1 1/8—7	25.349	25
1 1/4—7	28.524	28
1 3/8—6	31.120	30.5
1 1/2—6	34.295	34
1 3/4—5	39.814	39.5
2—4 1/2	45.598	45

WHITWORTH			
Size		Root Dia. max. mm	Drill Dia. mm
W	Pitch per inch		
3/32	48	1.910	1.85
1/8	40	2.590	2.55
5/32	32	3.211	3.2
3/16	24	3.744	3.7
7/32	24	4.538	4.5
1/4	20	5.224	5.1
5/16	18	6.661	6.5
3/8	16	8.052	7.9
7/16	14	9.379	9.2
1/2	12	10.610	10.5
9/16	12	12.176	12
5/8	11	13.598	13.5
3/4	10	16.538	16.5
7/8	9	19.411	19.25
1	8	22.185	22
1 1/8	7	24.879	24.75
1 1/4	7	28.054	28
1 3/8	6	30.555	30.5
1 1/2	6	33.730	33.5
1 3/4	5	35.921	35.5
1 7/8	5	39.096	39
2	4 1/2	41.648	41.5
2	4 1/2	44.823	44.5

UNF FINE/SAE		
Size	Root Dia. max. mm	Drill Dia. mm
UNF		
nr 4—48	2.459	2.4
nr 5—44	2.741	2.7
nr 6—40	3.023	2.95
nr 8—36	3.607	3.5
nr 10—32	4.166	4.1
nr 12—28	4.724	4.7
1/4—28	5.580	5.5
3/16—24	7.038	6.9
1/4—24	6.626	6.5
7/16—20	10.030	9.9
1/2—20	11.618	11.5
9/16—18	13.084	12.9
5/8—18	14.671	14.5
3/4—16	17.689	17.5
7/8—14	20.663	20.5
1—12	23.569	23.25
1 1/8—12	26.744	26.5
1 1/4—12	29.919	29.5
1 3/8—12	33.094	33
1 1/2—12	36.269	36

GAS/PIPE THREAD			
Size		Root Dia. max. mm	Drill Dia. mm
GAS	Pitch per inch		
1/8	28	8.848	8.8
1/4	19	11.890	11.8
3/8	19	15.395	15.25
1/2	14	19.172	19
5/8	14	21.128	21
3/4	14	24.658	24.5
7/8	14	28.418	28
1	11	30.931	30.5
1 1/4	11	39.592	39.5
1 1/2	11	45.485	45
1 3/4	11	51.428	51
2	11	57.296	57