

## Imperial Tap Drill Chart

Machine Screw Size		Number of Threads Per Inch	Minor Dia.	Tap Drills				Clearance Hole Drills			
				Aluminum, Brass & Plastics		Stainless Steel, Steels & Iron		All Materials			
No. or Dia.	Major Dia.			75% Thread		50% Thread		Close Fit		Free Fit	
				Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.
0	.0600	80	.0447	3/64	.0469	55	.0520	52	.0635	50	.0700
1	.0730	64	.0538	53	.0595	1/16	.0625	48	.0760	46	.0810
		72	.0560	53	.0595	52	.0635				
2	.0860	56	.0641	50	.0700	49	.0730	43	.0890	41	.0960
		64	.0668	50	.0700	48	.0760				
3	.0990	48	.0734	47	.0785	44	.0860	37	.1040	35	.1100
		56	.0771	45	.0820	43	.0890				
4	.1120	40	.0813	43	.0890	41	.0960	32	.1160	30	.1285
		48	.0864	42	.0935	40	.0980				
5	.1250	40	.0943	38	.1015	7/64	.1094	30	.1285	29	.1360
		44	.0971	37	.1040	35	.1100				
6	.1380	32	.0997	36	.1065	32	.1160	27	.1440	25	.1495
		40	.1073	33	.1130	31	.1200				
8	.1640	32	.1257	29	.1360	27	.1440	18	.1695	16	.1770
		36	.1299	29	.1360	26	.1470				
10	.1900	24	.1389	25	.1495	20	.1610	9	.1960	7	.2010
		32	.1517	21	.1590	18	.1695				
12	.2160	24	.1649	16	.1770	12	.1890	2	.2210	1	.2280
		28	.1722	14	.1820	10	.1935				
		32	.1777	13	.1850	9	.1960				
1/4	.2500	20	.1887	7	.2010	7/32	.2188	F	.2570	H	.2660
		28	.2062	3	.2130	1	.2280				
		32	.2117	7/32	.2188	1	.2280				
5/16	.3125	18	.2443	F	.2570	J	.2770	P	.3230	Q	.3320
		24	.2614	I	.2720	9/32	.2812				

		32	.2742	9/32	.2812	L	.2900				
3/8	.3750	16	.2983	5/16	.3125	Q	.3320	W	.3860	X	.3970
		24	.3239	Q	.3320	S	.3480				
		32	.3367	11/32	.3438	T	.3580				
7/16	.4375	14	.3499	U	.3680	25/64	.3906	29/64	.4531	15/32	.4687
		20	.3762	25/64	.3906	13/32	.4062				
		28	.3937	Y	.4040	Z	.4130				
1/2	.5000	13	.4056	27/64	.4219	29/64	.4531	33/64	.5156	17/32	.5312
		20	.4387	29/64	.4531	15/32	.4688				
		28	.4562	15/32	.4688	15/32	.4688				
9/16	.5625	12	.4603	31/64	.4844	33/64	.5156	37/64	.5781	19/32	.5938
		18	.4943	33/64	.5156	17/32	.5312				
		24	.5114	33/64	.5156	17/32	.5312				
5/8	.6250	11	.5135	17/32	.5312	9/16	.5625	41/64	.6406	21/32	.6562
		18	.5568	37/64	.5781	19/32	.5938				
		24	.5739	37/64	.5781	19/32	.5938				
11/16	.6875	24	.6364	41/64	.6406	21/32	.6562	45/64	.7031	23/32	.6562
3/4	.7500	10	.6273	21/32	.6562	11/16	.6875	49/64	.7656	25/32	.7812
		16	.6733	11/16	.6875	45/64	.7031				
		20	.6887	45/64	.7031	23/32	.7188				
13/16	.8125	20	.7512	49/64	.7656	25/32	.7812	53/64	.8281	27/32	.8438
7/8	.8750	9	.7387	49/64	.7656	51/64	.7969	57/64	.8906	29/32	.9062
		14	.7874	13/16	.8125	53/64	.8281				
		20	.8137	53/64	.8281	27/32	.8438				
15/16	.9375	20	.8762	57/64	.8906	29/32	.9062	61/64	.9531	31/32	.9688
1	1.000	8	.8466	7/8	.8750	59/64	.9219	1- 1/64	1.0156	1- 1/32	1.0313
		12	.8978	15/16	.9375	61/64	.9531				
		20	.9387	61/64	.9531	31/32	.9688				
1- 1/16	1.0625	18	.9943	1.000	1.000	1- 1/64	1.0156	1- 5/64	1.0781	1- 3/32	1.0938
1-1/8	1.1250	7	.9497	63/64	.9844	1- 1/32	1.0313	1- 9/64	1.1406	1- 5/32	1.1562
		12	1.0228	1- 3/64	1.0469	1- 5/64	1.0781				
		18	1.0568	1- 1/16	1.0625	1- 5/64	1.0781				

1-3/16	1.1875	18	1.1193	1-1/8	1.1250	1-9/64	1.1406	1-13/64	1.2031	1-7/32	1.2188
1-1/4	1.2500	7	1.0747	1-7/64	1.1094	1-5/32	1.1562	1-17/64	1.2656	1-9/32	1.2812
		12	1.1478	1-11/64	1.1719	1-13/64	1.2031				
		18	1.1818	1-3/16	1.1875	1-13/64	1.2031				
1-5/16	1.3125	18	1.2443	1-1/4	1.2500	1-17/64	1.2656	1-21/64	1.3281	1-11/32	1.3438
1-3/8	1.3750	6	1.1705	1-7/32	1.2187	1-17/64	1.2656	1-25/64	1.3906	1-13/32	1.4062
		12	1.2728	1-19/64	1.2969	1-21/64	1.3281				
		18	1.3068	1-5/16	1.3125	1-21/64	1.3281				
1-7/16	1.4375	18	1.3693	1-3/8	1.3750	1-25/64	1.3906	1-29/64	1.4531	1-15/32	1.4688
1-1/2	1.500	6	1.2955	1-11/32	1.3437	1-25/64	1.3906	1-33/64	1.5156	1-17/32	1.5312
		12	1.3978	1-27/64	1.4219	1-7/16	1.4375				
		18	1.4318	1-7/16	1.4375	1-29/64	1.4531				
1-9/16	1.5625	18	1.4943	1-1/2	1.500	1-33/64	1.5156	1-37/64	1.5781	1-19/32	1.5938
1-5/8	1.625	18	1.5568	1-9/16	1.5625	1-37/64	1.5781	1-41/64	1.6406	1-21/32	1.6562
1-11/16	1.6875	18	1.6193	1-5/8	1.6250	1-41/64	1.6406	1-45/64	1.7031	1-23/32	1.7188
1-3/4	1.750	5	1.5046	1-9/16	1.5625	1-5/8	1.6250	1-49/64	1.7659	1-25/32	1.7812

### Metric Tap Drill Chart

Tap size	Major Dia (mm)	Threads per	Tap Drill (mm)	Tap Drill (inch)	Clearance (mm)	Clearance (inch)
M1.6x0.35	1.6	0.35	1.25	#55	1.8	#49
M2x0.4	2.0	0.40	1.60	#52	2.4	#41
M2.5x0.45	2.5	0.45	2.05	#46	2.9	#32

M3x.05	3.0	0.50	2.50	#39	3.4	#29
M3.5x0.6	3.5	0.60	2.90	#32	3.9	#23
M4x0.7	4.0	0.70	3.30	#30	4.5	#16
M5x0.8	5.0	0.80	4.20	#19	5.5	7/32
M6x1	6.0	1.00	5.0	#8	6.6	G
M8x1.25	8.0	1.25	6.8	H	9.0	T
M8x1	8.0	1.00	7.0	J	9.0	T
M10x1.5	10.0	1.50	8.5	R	12.0	31/64
M10x1.25	10.0	1.25	8.8	11/32	12.0	31/64
M12x1.75	12.0	1.75	10.2	13/32	14.0	35/64
M12x1.25	12.0	1.25	10.8	27/64	14.0	35/64
M14x2	14.0	2.00	12.0	15/32	16.0	5/8
M14x1.5	14.0	1.5	12.5	1/2	16.0	5/8
M16x2	16.0	2.00	14.0	35/64	18.0	45/64
M16x1.5	16.0	1.50	14.5	37/64	18.0	45/64
M18x2.5	18.0	2.50	15.5	39/64	20.0	51/64
M18x1.5	18.0	1.50	16.5	21/32	20.0	51/64
M20x2.5	20.0	2.50	17.5	11/16	22.0	7/8
M20x1.5	20.0	1.50	18.5	47/64	22.0	7/8
M22x2.5	22.0	2.50	19.5	49/64	25.0	1
M22x1.5	22.0	1.50	20.5	13/16	25.0	1
M24x3	24.0	3.00	21.0	53/64	27.0	1-5/64
M24x2	24.0	2.00	22.0	7/8	27.0	1-5/64
M27x3	27.0	3.00	24.0	15/16	30.0	1-3/16
M27x2	27.0	2.0	25.0	1	30.0	1-3/16

## Pipe Threads

-	American Standard			British Standard		
	Nominal OD	Threads per inch	NPT	NPS	Threads per inch	Drill size
1/16		27	D	1/4	28	G
1/8		27	R	S	28	11/32
1/4		18	7/16	29/64	19	15/32
3/8		18	37/64	19/32	19	39/64
1/2		14	23/32	47/64	14	3/4

5/8	-	-	-	14	53/64
3/4	14	59/64	15/16	14	31/32
7/8	-	-	-	14	1-7/64
1	11.5	1-5/32	1-3/16	11	1-7/32