

Tap Drill Sizes

INCH SIZES - NATIONAL COARSE		INCH SIZES - NATIONAL FINE		METRIC COARSE SIZES		METRIC FINE SIZES	
TAP SIZE	DRILL SIZE	TAP SIZE	DRILL SIZE	TAP SIZE	DRILL SIZE	TAP SIZE	DRILL SIZE
#0-80	3/64"	#1-72	#53	2 x .4	1.6	4 mm x .35	3.6mm
#1-64	#53	#2-64	#50	2.2 x .45	1.75	4 x .5	3.5
#2-56	#51	#3-56	#46	2.5 x .45	2.05	5 x .5	4.5
#3-48	5/64"	#4-48	#42	3 x .5	2.5	6 x .5	5.5
#4-40	#43	#5-44	#37	3.5 x .6	2.9	6 x .75	5.25
#5-40	#39	#6-40	#33	4 x .7	3.3	7 x .75	6.25
#6-32	#36	#8-36	#29	4.5 x .75	3.7	8 x .5	7
#8-32	#29	#10-32	#21	5 x .8	4.2	8 x .75	7.25
#10-24	#25	#12-28	#15	6 x 1	5	8 x 1	7.5
#12-24	#17	1/4-28	#3	7 x 1	6	9 x 1	8
1/4-20	#7	5/16-24	I	8 x 1.25	6.8	10 x .75	9.25
5/16-18	F	3/8-24	Q	9 x 1.25	7.8	10 x 1	9
3/8-16	5/16	7/16-20	W	10 x 1.5	8.5	10 x 1.25	8.8
7/16-14	U	1/2-20	29/64	11 x 1.5	9.5	11 x 1	10
1/2-13	27/64	9/16-18	33/64	12 x 1.75	10.2	12 x .75	11.25
9/16-12	31/64	5/8-18	37/64	14 x 2	12	12 x 1	11
5/8-11	17/32	3/4-16	11/16	16 x 2	14	12 x 1.5	10.5
3/4-10	21/32	7/8-14	13/16	18 x 2.5	15.5	14 x 1	13
7/8-9	49/64	1"-14	15/16	20 x 2.5	17.5	14 x 1.25	12.8
1"-8	7/8			22 x 2.5	19.5	14 x 1.5	12.5
				24 x 3	21	16 x 1	15
				27 x 3	24	16 x 1.5	14.5
						18 x 1	17
						18 x 2	16
						20 x 1	19
						20 x 1.5	18.5
						20 x 2	18
						22 x 1	21
						22 x 1.5	20.5
						22 x 2	20
						24 x 1.5	22.5
						24 x 2	22
						26 x 1.5	24.5
						27 x 1.5	25.5
						27 x 2	25

TAPER PIPE SIZES - NPT		STRAIGHT PIPE SIZES - NPS	
TAP SIZE	DRILL SIZE	TAP SIZE	DRILL SIZE
1/8-27	R	1/8-27	S
1/4-18	7/16	1/4-18	29/64
3/8-18	37/64	3/8-18	19/32
1/2-14	23/32	1/2-14	47/64
3/4-14	59/64	3/4-14	15/16
1"-11-1/2	1-5/32	1"-11-1/2	1-3/16
1-1/4-11-1/2	1-1/2	1-1/4-11-1/2	1-33/64
1-1/2-11-1/2	1-47/64	1-1/2-11-1/2	1-3/4

These tap drill sizes allow approximately 75% of full thread engagement.

Smaller holes may cause tap breakage.

When engagement length is 1-1/2 times the nominal diameter, a 50 to 55 percent thread is satisfactory.

