UNF Tap Drill Chart

Recommended tap drill (75% thread for UNC/UNF/UNEF, D – P for metric, no-ream size for NPT) with clearance holes. Thread % = (D – drill) / (1.299 × pitch).

Unified National Fine (UNF)

THREAD	TAP DRILL	INCH	MM	THREAD %	CLOSE FIT	NORMAL FIT
0-80 UNF	3/64"	**0.0469**	**1.19**	**81%**	#51	#50
1-72 UNF	#53	**0.0595**	**1.51**	**75%**	#46	#44
2-64 UNF	#50	**0.0700**	**1.78**	**79%**	#41	#37
3-56 UNF	#45	**0.0820**	**2.08**	**73%**	7/64"	#32
4-48 UNF	#42	**0.0935**	**2.37**	**68%**	#31	#30
5-44 UNF	#37	**0.1040**	**2.64**	**71%**	#29	#27
6-40 UNF	#33	**0.1130**	**2.87**	**77%**	#26	#23
8-36 UNF	#29	**0.1360**	**3.45**	**78%**	#16	#13
10-32 UNF	#21	**0.1590**	**4.04**	**76%**	13/64"	#3
12-28 UNF	#14	**0.1820**	**4.62**	**73%**	A	B
1/4-28 UNF	#3	**0.2130**	**5.41**	**80%**	H	J
5/16-24 UNF	I	**0.2720**	**6.91**	**75%**	Q	T
3/8-24 UNF	Q	**0.3320**	**8.43**	**79%**	X	27/64"
7/16-20 UNF	25/64"	**0.3906**	**9.92**	**72%**	15/32"	1/2"
1/2-20 UNF	29/64"	**0.4531**	**11.51**	**72%**	35/64"	9/16"
9/16-18 UNF	33/64"	**0.5156**	**13.10**	**65%**	39/64"	5/8"
5/8-18 UNF	37/64"	**0.5781**	**14.68**	**65%**	43/64"	11/16"
3/4-16 UNF	11/16"	**0.6875**	**17.46**	**77%**	51/64"	27/32"
7/8-14 UNF	13/16"	**0.8125**	**20.64**	**67%**	59/64"	31/32"
1-12 UNF	59/64"	**0.9219**	**23.42**	**72%**	1-3/64"	1-7/64"
1-1/8-12 UNF	1-3/64"	**1.0469**	**26.59**	**72%**	1-11/64"	1-1/4"
1-1/4-12 UNF	1-11/64"	**1.1719**	**29.77**	**72%**	1-19/64"	1-3/8"
1-3/8-12 UNF	1-19/64"	**1.2969**	**32.94**	**72%**	1-27/64"	1-1/2"
1-1/2-12 UNF	1-27/64"	**1.4219**	**36.12**	**72%**	1-35/64"	1-5/8"

Scan for the interactive version:

whatsizeis.com/tap-drill/unf/

Values from the ASME B1.1, ISO 261/68-1 and ASME B1.20.1 thread formulas; drill sizes per ASME B94.11M; clearance holes per ISO 273. Method: whatsizeis.com/how-we-calculate/