UNC 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 Coarse (UNC)

THREAD	TAP DRILL	INCH	MM	THREAD %	CLOSE FIT	NORMAL FIT
1-64 UNC	#53	**0.0595**	**1.51**	**67%**	#46	#44
2-56 UNC	#50	**0.0700**	**1.78**	**69%**	#41	#37
3-48 UNC	#47	**0.0785**	**1.99**	**76%**	7/64"	#32
4-40 UNC	#43	**0.0890**	**2.26**	**71%**	#31	#30
5-40 UNC	#38	**0.1015**	**2.58**	**72%**	#29	#27
6-32 UNC	#36	**0.1065**	**2.71**	**78%**	#26	#23
8-32 UNC	#29	**0.1360**	**3.45**	**69%**	#16	#13
10-24 UNC	#25	**0.1495**	**3.80**	**75%**	13/64"	#3
12-24 UNC	#16	**0.1770**	**4.50**	**72%**	A	B
1/4-20 UNC	#7	**0.2010**	**5.11**	**75%**	H	J
5/16-18 UNC	F	**0.2570**	**6.53**	**77%**	Q	T
3/8-16 UNC	5/16"	**0.3125**	**7.94**	**77%**	X	27/64"
7/16-14 UNC	U	**0.3680**	**9.35**	**75%**	15/32"	1/2"
1/2-13 UNC	27/64"	**0.4219**	**10.72**	**78%**	35/64"	9/16"
9/16-12 UNC	31/64"	**0.4844**	**12.30**	**72%**	39/64"	5/8"
5/8-11 UNC	17/32"	**0.5313**	**13.49**	**79%**	43/64"	11/16"
3/4-10 UNC	21/32"	**0.6563**	**16.67**	**72%**	51/64"	27/32"
7/8-9 UNC	49/64"	**0.7656**	**19.45**	**76%**	59/64"	31/32"
1-8 UNC	7/8"	**0.8750**	**22.23**	**77%**	1-3/64"	1-7/64"
1-1/8-7 UNC	63/64"	**0.9844**	**25.00**	**76%**	1-11/64"	1-1/4"
1-1/4-7 UNC	1-7/64"	**1.1094**	**28.18**	**76%**	1-19/64"	1-3/8"
1-3/8-6 UNC	1-7/32"	**1.2188**	**30.96**	**72%**	1-27/64"	1-1/2"
1-1/2-6 UNC	1-11/32"	**1.3438**	**34.13**	**72%**	1-35/64"	1-5/8"

Scan for the interactive version:

whatsizeis.com/tap-drill/unc/

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/