UNEF 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 Extra Fine (UNEF)

THREAD	TAP DRILL	INCH	MM	THREAD %	CLOSE FIT	NORMAL FIT
12-32 UNEF	#13	**0.1850**	**4.70**	**76%**	A	B
1/4-32 UNEF	7/32"	**0.2188**	**5.56**	**77%**	H	J
5/16-32 UNEF	9/32"	**0.2813**	**7.14**	**77%**	Q	T
3/8-32 UNEF	11/32"	**0.3438**	**8.73**	**77%**	X	27/64"
7/16-28 UNEF	Y	**0.4040**	**10.26**	**72%**	15/32"	1/2"
1/2-28 UNEF	15/32"	**0.4688**	**11.91**	**67%**	35/64"	9/16"
9/16-24 UNEF	33/64"	**0.5156**	**13.10**	**87%**	39/64"	5/8"
5/8-24 UNEF	37/64"	**0.5781**	**14.68**	**87%**	43/64"	11/16"
11/16-24 UNEF	41/64"	**0.6406**	**16.27**	**87%**	47/64"	49/64"
3/4-20 UNEF	45/64"	**0.7031**	**17.86**	**72%**	51/64"	27/32"
13/16-20 UNEF	49/64"	**0.7656**	**19.45**	**72%**	55/64"	29/32"
7/8-20 UNEF	53/64"	**0.8281**	**21.03**	**72%**	59/64"	31/32"
15/16-20 UNEF	57/64"	**0.8906**	**22.62**	**72%**	63/64"	1-1/32"
1-20 UNEF	61/64"	**0.9531**	**24.21**	**72%**	1-3/64"	1-7/64"
1-1/16-18 UNEF	1-1/64"	**1.0156**	**25.80**	**65%**	1-7/64"	1-3/16"
1-1/8-18 UNEF	1-5/64"	**1.0781**	**27.38**	**65%**	1-11/64"	1-1/4"
1-3/16-18 UNEF	1-9/64"	**1.1406**	**28.97**	**65%**	1-15/64"	1-5/16"
1-1/4-18 UNEF	1-13/64"	**1.2031**	**30.56**	**65%**	1-19/64"	1-3/8"
1-5/16-18 UNEF	1-17/64"	**1.2656**	**32.15**	**65%**	1-23/64"	1-7/16"
1-3/8-18 UNEF	1-21/64"	**1.3281**	**33.73**	**65%**	1-27/64"	1-1/2"
1-7/16-18 UNEF	1-25/64"	**1.3906**	**35.32**	**65%**	1-31/64"	1-9/16"
1-1/2-18 UNEF	1-29/64"	**1.4531**	**36.91**	**65%**	1-35/64"	1-5/8"

Scan for the interactive version:

whatsizeis.com/tap-drill/unef/

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/