NPT 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).

National Pipe Taper (NPT)

THREAD	TAP DRILL	INCH	MM	THREAD %	CLOSE FIT	NORMAL FIT
1/16-27 NPT	1/4"	**0.2500**	**6.35**	–	–	–
1/8-27 NPT	11/32"	**0.3438**	**8.73**	–	–	–
1/4-18 NPT	7/16"	**0.4375**	**11.11**	–	–	–
3/8-18 NPT	37/64"	**0.5781**	**14.68**	–	–	–
1/2-14 NPT	23/32"	**0.7188**	**18.26**	–	–	–
3/4-14 NPT	59/64"	**0.9219**	**23.42**	–	–	–
1-11.5 NPT	1-5/32"	**1.1563**	**29.37**	–	–	–
1-1/4-11.5 NPT	1-1/2"	**1.5000**	**38.10**	–	–	–
1-1/2-11.5 NPT	1-3/4"	**1.7500**	**44.45**	–	–	–
2-11.5 NPT	2-7/32"	**2.2188**	**56.36**	–	–	–

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/