2 NPT Tap Drill Chart

National Pipe Taper (NPT) · 11.5 threads per inch · ASME B1.20.1

TAP DRILL (NO REAMING)

2-7/32" = 2.2188 in = 56.36 mm

Drills near the tap drill

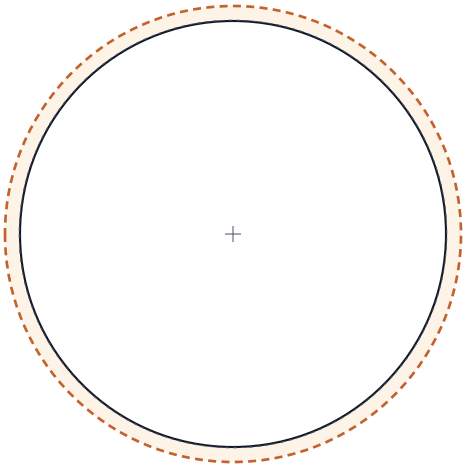
DRILL	INCH	MM	NOTE
2-1/4"	2.2500	57.15	larger
2-15/64"	2.2344	56.75	larger
2-7/32"	2.2188	56.36	Recommended
2-13/64"	2.2031	55.96	smaller
2-3/16"	2.1875	55.56	smaller

Pipe thread dimensions (ASME B1.20.1)

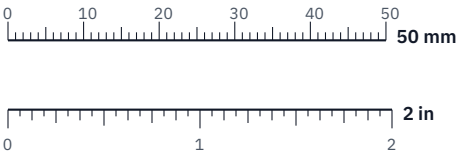
DIMENSION	INCH	MM
Pipe outside diameter (D)	2.3750	60.33
Threads per inch (pitch in mm)	11.5	2.21
Pitch diameter at pipe end (E0)	2.2690	57.63
Pitch diameter at gauge plane (E1)	2.2963	58.33
Hand-tight engagement (L1)	0.4360	11.07
Effective thread length (L2)	0.7565	19.22
Thread height (h = 0.8p)	0.0696	1.77
Minor diameter at gauge plane (E1 – h)	2.2267	56.56

Actual size

Print at 100% scale ("Actual size", not "Fit to page"). Check with the rulers below.



Dashed copper circle: pipe OD; solid: tap drill hole; dotted: minor diameter at the gauge plane.



Pipe tap drill charts vary by up to 1/32 in for sizes over 1 in. Reaming the drilled hole with a taper pipe reamer before tapping lowers tapping torque.

Scan for the interactive version:

whatsizeis.com/tap-drill/2-npt/

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/