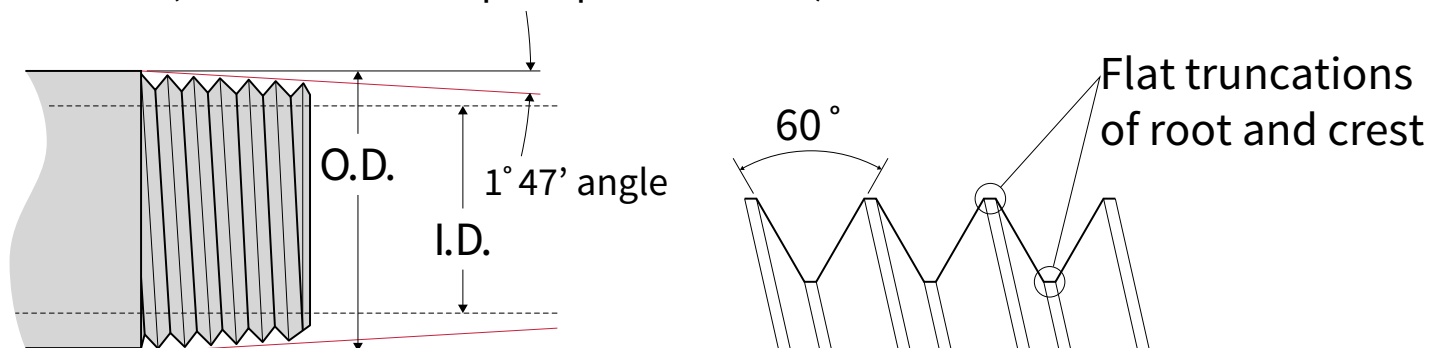


ANSI/ASME B1.20.3 (NPT - National Pipe Tapered Thread)



Seal is made by the threads. The seal requires either pipe tape or pipe dope (sealing compound) to be used. The use of such provides lubrication to prevent galling of the metal and assists in sealing.

Common Sizes for Valve End Connections

NPT size	Actual Pipe O.D. (inches)	Threads per Inch (also called Pitch)	Length of Engagement Hand Tight	Hand Tight Turns	Wrench Makeup Turns	Length of Effective Thread	Tap Drill Size (inches)
1/4"	0.540	18	0.200	4	3	0.401	7/16
3/8"	0.675	18	0.240	4.50	3	0.408	37/64
1/2"	0.840	14	0.320	4.50	3	0.534	23/32
3/4"	1.050	14	0.340	4.50	3	0.546	59/64
1"	1.315	11.5	0.400	4.50	3.25	0.682	1-5/32
1-1/4"	1.660	11.5	0.420	4.50	3.25	0.707	1-1/2
1-1/2"	1.900	11.5	0.420	4.50	3.25	0.724	1-47/64
2"	2.375	11.5	0.436	5	3	0.756	2-7/32
2-1/2"	2.875	8	0.682	5.50	3	1.136	2-5/8
3"	3.500	8	0.766	6	3	1.2000	3-1/4
3-1/2"	4.000	8	0.821	6.50	3.50	1.2500	3-3/4
4"	4.500	8	0.844	6.75	3.50	1.3000	4-1/4
5"	5.563	8	0.937	7.50	3.75	1.4063	5-9/32

The ANSI/ASME B1.20.3 standard actually includes 25 sizes from 1/16" to 24". These are simply the sizes commonly used on valves. For a complete listing of all sizes refer to Wikipedia at: https://en.wikipedia.org/wiki/National_pipe_thread