Pipe Dimensions Quick Reference

Common NPS outside diameters with Schedule 40, 80 and 160 nominal inside diameters

Common nominal pipe dimensions

NPS	OD (in)	Sch 40 ID	Sch 80 ID	Sch 160 ID
1/2	0.840	0.622	0.546	0.466
3/4	1.050	0.824	0.742	0.612
1	1.315	1.049	0.957	0.815
1-1/4	1.660	1.380	1.278	1.160
1-1/2	1.900	1.610	1.500	1.338
2	2.375	2.067	1.939	1.687
2-1/2	2.875	2.469	2.323	2.125
3	3.500	3.068	2.900	2.624
4	4.500	4.026	3.826	3.438
5	5.563	5.047	4.813	4.313
6	6.625	6.065	5.761	5.187
8	8.625	7.981	7.625	6.813
10	10.750	10.020	9.562	8.500
12	12.750	11.938	11.374	10.126
14	14.000	13.124	12.500	11.188
16	16.000	15.000	14.312	12.812
18	18.000	16.876	16.124	14.438
20	20.000	18.812	17.938	16.062
24	24.000	22.624	21.562	19.312
30	30.000	-	-	-
36	36.000	-	-	-
42	42.000	-	-	-
48	48.000	-	-	-

Useful calculations

Need	Calculation
Approx. ID	OD - 2 x actual measured/nominal wall
Cross-sectional flow area	pi/4 x ID^2
Metal loss % vs nominal wall	(Nominal wall - measured wall) / nominal wall x 100
Remaining wall %	Measured wall / nominal wall x 100

Reference basis: ASME B36.10 standardizes dimensions of welded and seamless wrought steel pipe. Schedule IDs above are calculated from nominal OD and nominal schedule wall thickness: ID = OD - (2 x wall). Dashes indicate schedule values not included in this quick-reference table.

Use: Field/office quick reference only. Verify the governing project specification, current code/standard edition, material, temperature, manufacturer data, and operator requirements before design, fabrication, pressure testing, or valve selection.