NPS Pipe Size Chart

Steel pipe wall thickness by schedule, NPS 1/8 to 12

A dash means the schedule is not published for that size. Schedules 40S and 40 are the same wall up to NPS 8 but differ at NPS 10 and 12, so both are shown.

NPS	DN	OD (in)	OD (mm)	5S	10S	10	40S / STD	40	80S / XS	80	160	XXS
1/8"	6	0.405	10.3	—	0.049	0.049	0.068	0.068	0.095	0.095	—	—
1/4"	8	0.540	13.7	—	0.065	0.065	0.088	0.088	0.119	0.119	—	—
3/8"	10	0.675	17.1	—	0.065	0.065	0.091	0.091	0.126	0.126	—	—
1/2"	15	0.840	21.3	0.065	0.083	0.083	0.109	0.109	0.147	0.147	0.188	0.294
3/4"	20	1.050	26.7	0.065	0.083	0.083	0.113	0.113	0.154	0.154	0.219	0.308
1"	25	1.315	33.4	0.065	0.109	0.109	0.133	0.133	0.179	0.179	0.250	0.358
1-1/4"	32	1.660	42.2	0.065	0.109	0.109	0.140	0.140	0.191	0.191	0.250	0.382
1-1/2"	40	1.900	48.3	0.065	0.109	0.109	0.145	0.145	0.200	0.200	0.281	0.400
2"	50	2.375	60.3	0.065	0.109	0.109	0.154	0.154	0.218	0.218	0.344	0.436
2-1/2"	65	2.875	73.0	0.083	0.120	0.120	0.203	0.203	0.276	0.276	0.375	0.552
3"	80	3.500	88.9	0.083	0.120	0.120	0.216	0.216	0.300	0.300	0.438	0.600
3-1/2"	90	4.000	101.6	0.083	0.120	0.120	0.226	0.226	0.318	0.318	—	—
4"	100	4.500	114.3	0.083	0.120	0.120	0.237	0.237	0.337	0.337	0.531	0.674
5"	125	5.563	141.3	0.109	0.134	0.134	0.258	0.258	0.375	0.375	0.625	0.750
6"	150	6.625	168.3	0.109	0.134	0.134	0.280	0.280	0.432	0.432	0.719	0.864
8"	200	8.625	219.1	0.109	0.148	0.148	0.322	0.322	0.500	0.500	0.906	0.875
10"	250	10.750	273.1	0.134	0.165	0.165	0.365	0.365	0.500	0.594	1.125	1.000
12"	300	12.750	323.9	0.156	0.180	0.180	0.375	0.406	0.500	0.688	1.312	1.000

Inside diameter and weight by schedule

Inside diameter = OD − 2 × wall. Steel weight per foot = 10.69 × wall × (OD − wall), with OD and wall in inches. Published weights can differ by a fraction of a pound per foot.

NPS	Schedule	Wall (in)	Wall (mm)	ID (in)	ID (mm)	Plain-end steel weight (lb/ft)
1/8"	10S	0.049	1.24	0.307	7.8	0.19
1/8"	10	0.049	1.24	0.307	7.8	0.19
1/8"	40S / STD	0.068	1.73	0.269	6.8	0.24
1/8"	40	0.068	1.73	0.269	6.8	0.24
1/8"	80S / XS	0.095	2.41	0.215	5.5	0.31
1/8"	80	0.095	2.41	0.215	5.5	0.31
1/4"	10S	0.065	1.65	0.410	10.4	0.33
1/4"	10	0.065	1.65	0.410	10.4	0.33
1/4"	40S / STD	0.088	2.24	0.364	9.2	0.43
1/4"	40	0.088	2.24	0.364	9.2	0.43
1/4"	80S / XS	0.119	3.02	0.302	7.7	0.54
1/4"	80	0.119	3.02	0.302	7.7	0.54
3/8"	10S	0.065	1.65	0.545	13.8	0.42
3/8"	10	0.065	1.65	0.545	13.8	0.42
3/8"	40S / STD	0.091	2.31	0.493	12.5	0.57
3/8"	40	0.091	2.31	0.493	12.5	0.57
3/8"	80S / XS	0.126	3.20	0.423	10.7	0.74
3/8"	80	0.126	3.20	0.423	10.7	0.74
1/2"	5S	0.065	1.65	0.710	18.0	0.54
1/2"	10S	0.083	2.11	0.674	17.1	0.67
1/2"	10	0.083	2.11	0.674	17.1	0.67
1/2"	40S / STD	0.109	2.77	0.622	15.8	0.85
1/2"	40	0.109	2.77	0.622	15.8	0.85
1/2"	80S / XS	0.147	3.73	0.546	13.9	1.09
1/2"	80	0.147	3.73	0.546	13.9	1.09
1/2"	160	0.188	4.78	0.464	11.8	1.31
1/2"	XXS	0.294	7.47	0.252	6.4	1.72
3/4"	5S	0.065	1.65	0.920	23.4	0.68

NPS	Schedule	Wall (in)	Wall (mm)	ID (in)	ID (mm)	Plain-end steel weight (lb/ft)
2-1/2"	40	0.203	5.16	2.469	62.7	5.80
2-1/2"	80S / XS	0.276	7.01	2.323	59.0	7.67
2-1/2"	80	0.276	7.01	2.323	59.0	7.67
2-1/2"	160	0.375	9.52	2.125	54.0	10.02
2-1/2"	XXS	0.552	14.02	1.771	45.0	13.71
3"	5S	0.083	2.11	3.334	84.7	3.03
3"	10S	0.120	3.05	3.260	82.8	4.34
3"	10	0.120	3.05	3.260	82.8	4.34
3"	40S / STD	0.216	5.49	3.068	77.9	7.58
3"	40	0.216	5.49	3.068	77.9	7.58
3"	80S / XS	0.300	7.62	2.900	73.7	10.26
3"	80	0.300	7.62	2.900	73.7	10.26
3"	160	0.438	11.13	2.624	66.6	14.34
3"	XXS	0.600	15.24	2.300	58.4	18.60
3-1/2"	5S	0.083	2.11	3.834	97.4	3.48
3-1/2"	10S	0.120	3.05	3.760	95.5	4.98
3-1/2"	10	0.120	3.05	3.760	95.5	4.98
3-1/2"	40S / STD	0.226	5.74	3.548	90.1	9.12
3-1/2"	40	0.226	5.74	3.548	90.1	9.12
3-1/2"	80S / XS	0.318	8.08	3.364	85.4	12.52

NPS	Schedule	Wall (in)	Wall (mm)	ID (in)	ID (mm)	Plain-end steel weight (lb/ft)
3/4"	10S	0.083	2.11	0.884	22.5	0.86
3/4"	10	0.083	2.11	0.884	22.5	0.86
3/4"	40S / STD	0.113	2.87	0.824	20.9	1.13
3/4"	40	0.113	2.87	0.824	20.9	1.13
3/4"	80S / XS	0.154	3.91	0.742	18.8	1.48
3/4"	80	0.154	3.91	0.742	18.8	1.48
3/4"	160	0.219	5.56	0.612	15.5	1.95
3/4"	XXS	0.308	7.82	0.434	11.0	2.44
1"	5S	0.065	1.65	1.185	30.1	0.87
1"	10S	0.109	2.77	1.097	27.9	1.41
1"	10	0.109	2.77	1.097	27.9	1.41
1"	40S / STD	0.133	3.38	1.049	26.6	1.68
1"	40	0.133	3.38	1.049	26.6	1.68
1"	80S / XS	0.179	4.55	0.957	24.3	2.17
1"	80	0.179	4.55	0.957	24.3	2.17
1"	160	0.250	6.35	0.815	20.7	2.85
1"	XXS	0.358	9.09	0.599	15.2	3.66
1-1/4"	5S	0.065	1.65	1.530	38.9	1.11
1-1/4"	10S	0.109	2.77	1.442	36.6	1.81
1-1/4"	10	0.109	2.77	1.442	36.6	1.81
1-1/4"	40S / STD	0.140	3.56	1.380	35.1	2.27
1-1/4"	40	0.140	3.56	1.380	35.1	2.27
1-1/4"	80S / XS	0.191	4.85	1.278	32.5	3.00
1-1/4"	80	0.191	4.85	1.278	32.5	3.00

NPS	Schedule	Wall (in)	Wall (mm)	ID (in)	ID (mm)	Plain-end steel weight (lb/ft)
3-1/2"	80	0.318	8.08	3.364	85.4	12.52
4"	5S	0.083	2.11	4.334	110.1	3.92
4"	10S	0.120	3.05	4.260	108.2	5.62
4"	10	0.120	3.05	4.260	108.2	5.62
4"	40S / STD	0.237	6.02	4.026	102.3	10.80
4"	40	0.237	6.02	4.026	102.3	10.80
4"	80S / XS	0.337	8.56	3.826	97.2	15.00
4"	80	0.337	8.56	3.826	97.2	15.00
4"	160	0.531	13.49	3.438	87.3	22.53
4"	XXS	0.674	17.12	3.152	80.1	27.57
5"	5S	0.109	2.77	5.345	135.8	6.36
5"	10S	0.134	3.40	5.295	134.5	7.78
5"	10	0.134	3.40	5.295	134.5	7.78
5"	40S / STD	0.258	6.55	5.047	128.2	14.63
5"	40	0.258	6.55	5.047	128.2	14.63
5"	80S / XS	0.375	9.52	4.813	122.3	20.80
5"	80	0.375	9.52	4.813	122.3	20.80
5"	160	0.625	15.88	4.313	109.6	32.99
5"	XXS	0.750	19.05	4.063	103.2	38.59
6"	5S	0.109	2.77	6.407	162.7	7.59
6"	10S	0.134	3.40	6.357	161.5	9.30
6"	10	0.134	3.40	6.357	161.5	9.30
6"	40S / STD	0.280	7.11	6.065	154.1	18.99
6"	40	0.280	7.11	6.065	154.1	18.99
6"	80S / XS	0.432	10.97	5.761	146.3	28.60
6"	80	0.432	10.97	5.761	146.3	28.60
6"	160	0.719	18.26	5.187	131.7	45.39
6"	XXS	0.864	21.95	4.897	124.4	53.21
8"	5S	0.109	2.77	8.407	213.5	9.92
8"	10S	0.148	3.76	8.329	211.6	13.41

NPS	Schedule	Wall (in)	Wall (mm)	ID (in)	ID (mm)	Plain-end steel weight (lb/ft)
1-1/4"	160	0.250	6.35	1.160	29.5	3.77
1-1/4"	XXS	0.382	9.70	0.896	22.8	5.22
1-1/2"	5S	0.065	1.65	1.770	45.0	1.28
1-1/2"	10S	0.109	2.77	1.682	42.7	2.09
1-1/2"	10	0.109	2.77	1.682	42.7	2.09
1-1/2"	40S / STD	0.145	3.68	1.610	40.9	2.72
1-1/2"	40	0.145	3.68	1.610	40.9	2.72
1-1/2"	80S / XS	0.200	5.08	1.500	38.1	3.63
1-1/2"	80	0.200	5.08	1.500	38.1	3.63
1-1/2"	160	0.281	7.14	1.338	34.0	4.86
1-1/2"	XXS	0.400	10.16	1.100	27.9	6.41
2"	5S	0.065	1.65	2.245	57.0	1.61
2"	10S	0.109	2.77	2.157	54.8	2.64
2"	10	0.109	2.77	2.157	54.8	2.64
2"	40S / STD	0.154	3.91	2.067	52.5	3.66
2"	40	0.154	3.91	2.067	52.5	3.66
2"	80S / XS	0.218	5.54	1.939	49.3	5.03
2"	80	0.218	5.54	1.939	49.3	5.03
2"	160	0.344	8.74	1.687	42.8	7.47
2"	XXS	0.436	11.07	1.503	38.2	9.04
2-1/2"	5S	0.083	2.11	2.709	68.8	2.48

NPS	Schedule	Wall (in)	Wall (mm)	ID (in)	ID (mm)	Plain-end steel weight (lb/ft)
8"	10	0.148	3.76	8.329	211.6	13.41
8"	40S / STD	0.322	8.18	7.981	202.7	28.58
8"	40	0.322	8.18	7.981	202.7	28.58
8"	80S / XS	0.500	12.70	7.625	193.7	43.43
8"	80	0.500	12.70	7.625	193.7	43.43
8"	160	0.906	23.01	6.813	173.1	74.76
8"	XXS	0.875	22.22	6.875	174.6	72.49
10"	5S	0.134	3.40	10.482	266.2	15.21
10"	10S	0.165	4.19	10.420	264.7	18.67
10"	10	0.165	4.19	10.420	264.7	18.67
10"	40S / STD	0.365	9.27	10.020	254.5	40.52
10"	40	0.365	9.27	10.020	254.5	40.52
10"	80S / XS	0.500	12.70	9.750	247.6	54.79
10"	80	0.594	15.09	9.562	242.9	64.49
10"	160	1.125	28.57	8.500	215.9	115.75
10"	XXS	1.000	25.40	8.750	222.2	104.23
12"	5S	0.156	3.96	12.438	315.9	21.00
12"	10S	0.180	4.57	12.390	314.7	24.19
12"	10	0.180	4.57	12.390	314.7	24.19
12"	40S / STD	0.375	9.52	12.000	304.8	49.61
12"	40	0.406	10.31	11.938	303.2	53.57
12"	80S / XS	0.500	12.70	11.750	298.4	65.48
12"	80	0.688	17.48	11.374	288.9	88.71
12"	160	1.312	33.32	10.126	257.2	160.42
12"	XXS	1.000	25.40	10.750	273.1	125.61

NPS	Schedule	Wall (in)	Wall (mm)	ID (in)	ID (mm)	Plain-end steel weight (lb/ft)
2-1/2"	10S	0.120	3.05	2.635	66.9	3.53
2-1/2"	10	0.120	3.05	2.635	66.9	3.53
2-1/2"	40S / STD	0.203	5.16	2.469	62.7	5.80

Disclaimer. Ratings depend on temperature, fittings and installation. Check the manufacturer's current data. Charts & Specs is an independent reference site. It is not affiliated with any manufacturer, standards body or code organization, and it uses brand and standard names only to identify what a value applies to.