

# Carbon Steel Pipe Schedule

## What is Schedule Carbon Steel Pipes?

Carbon Steel Pipe Schedule Chart helps to understand the thickness and internal size of pipes without specific measurements. The chart uses schedules, ranging from sch 5 to **SCH 160** and XXS, to show different wall thicknesses. Higher schedule numbers, like **SCH 120 pipe**, indicate thicker walls that can support more weight and pressure, making them suitable for tough conditions. Even if pipes have the same diameter, their wall thickness can vary based on the schedule, such as the **SCH 140 pipe** compared to **schedule 40**. **Stainless steel pipes** are marked with an "S" for easy grade identification. Generally, the higher the schedule, the heavier and stronger the pipe.



## Carbon Steel Pipe Schedule 80 Based on ASME B36.10

The **SCH 80 Carbon Steel Pipe** is a type of pipe known for its strength and is part of the Carbon Steel Pipe Schedule 80 category. It's defined by its "sch 80 pipe thickness in mm," which means it has a thicker wall than standard pipes. This thickness makes it capable of handling high pressures and tough conditions, making it a preferred choice for industrial applications. You should look at the **SCH 80 Pipe chart** for exact sizes and capacities.

Nominal size (inches)	Outer Diameter (inches)	Outside Diameter (mm)	Wall Thickness (inches)	Wall Thickness (mm)	Weight (lb/ft)	Weight (kg/m)
½" DN15	0.84	21.3	0.147	3.73	1.09	1.62
¾" DN20	1.05	26.7	0.154	3.91	1.49	2.21
1" DN25	1.32	33.4	0.179	4.55	2.19	3.26
1 ¼" DN32	1.66	42.2	0.191	4.85	3.02	4.5
1 ½" DN40	1.9	48.3	0.2	5.08	3.66	5.45
2" DN 50	2.375	60.3	0.218	5.54	5.06	7.53
2 ½" DN65	2.875	73.0	0.276	7.01	7.71	11.48
3" DN80	3.5	88.9	0.3	7.62	10.33	15.37
3 ½"	4.0	101.6	0.318	8.08	12.6	18.75
4" DN100	4.5	114.3	0.337	8.56	15.1	22.46
5" DN125	5.563	141.3	0.375	9.53	20.92	31.14
6" DN150	6.625	168.3	0.432	10.97	28.78	42.83
8" DN200	8.625	219.1	0.5	12.7	43.72	65.06
10" DN250	10.75	273.1	0.5	12.7	55.15	82.02
12" DN300	12.75	323.9	0.5	12.7	65.91	98.09

## Carbon Steel Pipe Schedule 40 Chart

**SCH 40 Carbon Steel Pipe** is designed for durability and efficiency. The "schedule 40 pipe wall thickness" refers to its specific thickness, making it sturdy yet not overly heavy. Measured in "sch 40 pipe thickness in mm," it provides a reliable balance between strength and flow capacity, suitable for various uses.

Nominal size [inches]	Outside diameter [inches]	Outside diameter [mm]	Wall thickness [inches]	Wall thickness [mm]	Weight [lb/ft]	Weight [kg/m]
1/8" NPS6	0.41	10.3	0.068	1.73	0.24	0.37
1/4" NPS8	0.54	13.7	0.088	2.24	0.42	0.63
3/8" NPS10	0.68	17.1	0.091	2.31	0.57	0.84
1/2" NPS15	0.84	21.3	0.109	2.77	0.85	1.27
3/4" NPS20	1.05	26.7	0.113	2.87	1.13	1.69
1" NPS25	1.32	33.4	0.133	3.38	1.68	2.5
1 1/4" NPS32	1.66	42.2	0.14	3.56	2.27	3.39
1 1/2" NPS40	1.9	48.3	0.145	3.68	2.72	4.05
2" NPS50	2.375	60.3	0.154	3.91	3.65	5.44
2 1/2" NPS65	2.875	73	0.203	5.16	5.79	8.63
3" NPS80	3.5	88.9	0.216	5.49	7.58	11.29
3 1/2" NPS90	4	101.6	0.226	5.74	9.11	13.57
4" NPS100	4.5	114.3	0.237	6.02	10.79	16.07
5" NPS125	5.563	141.3	0.258	6.55	14.62	21.77
6" NPS150	6.625	168.3	0.28	7.11	18.97	28.26
8" NPS200	8.625	219.1	0.322	8.18	28.55	42.55
10" NPS250	10.75	273	0.365	9.27	40.48	60.31
12" NPS300	12.75	323.8	0.406	10.31	53.52	79.73
14" NPS350	14	355.6	0.437	11.13	54.57	94.55
16" NPS400	16	406.4	0.5	12.7	82.77	123.3
18" NPS450	18	457	0.562	14.27	104.67	155.8
20" NPS500	20	508	0.594	15.09	123.11	183.42
24" NPS600	24	610	0.688	17.48	171.29	255.41
32" NPS800	32	813	0.688	17.48	230.08	342.91

## Carbon Steel Schedule 60 Pipe Chart

**Schedule 60 Carbon Steel Pipe** is a strong and durable pipe used in various applications. It is known for its thickness, which is measured in millimetres. Specifically, the "**schedule 60 pipe thickness in mm**" indicates how thick the walls of the pipe are, making it capable of handling high pressures and tough conditions.

Nominal size [inches]	Outside diameter [inches]	Outside diameter [mm]	Wall thickness [inches]	Wall thickness [mm]	Weight [lb/ft]	Weight [kg/m]
8" NPS200	8.625	219.1	0.406	10.31	35.64	53.08
10" NPS250	10.75	273.0	0.5	12.7	54.74	81.55
12" NPS300	12.75	323.8	0.562	14.27	73.15	108.96
14" NPS350	14.0	355.6	0.594	15.09	85.05	126.71
16" NPS400	16.0	406.4	0.656	16.66	107.5	160.12
18" NPS450	18.0	457.0	0.75	19.05	138.17	205.74
20" NPS500	20.0	508.0	0.812	20.62	166.4	247.83
22" NPS550	22.0	559.0	0.875	22.23	197.41	294.25
24" NPS600	24.0	610.0	0.969	24.61	238.35	355.26





## CARBON STEEL PIPE WALL THICKNESSES OTHER THAN SCHEDULES

Nominal Pipe Size	OD in inches	Intermediate Walls														
		OD — Wall x Wall = Weight per Foot of Steel Pipe (P.E.)														
1	1.315	0.065 0.87	0.109 1.40													
1-1/4	1.660	0.065 1.11	0.109 1.81													
1-1/2	1.900	0.065 1.27	0.109 2.08													
2	2.375	0.065 1.60	0.083 2.03	0.109 2.64	0.120 2.89	0.190 4.43	0.254 5.75	0.281 6.28								
2-1/2	2.875	0.083 2.47	0.109 3.22	0.120 3.53	0.188 5.40	0.217 6.16	0.308 8.44									
3	3.500	0.083 3.03	0.109 3.95	0.120 4.33	0.125 4.51	0.156 5.57	0.188 6.65	0.250 8.68	0.254 9.66	0.281 9.67	0.375 12.52					
3-1/2	4.000	0.083 3.47	0.109 4.53	0.120 4.97	0.125 5.18	0.156 6.41	0.188 7.66	0.250 10.02	0.262 10.46	0.281 11.16						
4	4.500	0.083 3.92	0.109 5.11	0.120 5.61	0.125 5.85	0.141 6.56	0.156 7.24	0.172 7.95	0.188 8.67	0.203 9.32	0.219 10.02	0.224 10.23	0.250 11.36	0.290 13.04	0.312 13.97	0.375 16.52
5	5.563	0.083 4.86	0.109 6.35	0.125 7.26	0.134 7.77	0.156 9.02	0.188 10.80	0.219 12.51	0.281 15.87	0.312 17.51	0.344 19.19					
6	6.625	0.109 7.59	0.125 8.68	0.134 9.29	0.141 9.76	0.156 10.78	0.172 11.85	0.188 12.94	0.203 13.92	0.219 15.00	0.250 17.04	0.312 21.06	0.344 23.10	0.375 25.03	0.500 32.71	0.625 40.05
8	8.625	0.109 9.91	0.125 11.35	0.156 14.11	0.172 15.53	0.188 16.96	0.203 18.28	0.219 19.68	0.264 23.57	0.312 27.73	0.344 30.45	0.375 33.07	0.438 38.33	0.562 48.40	0.625 53.40	
10	10.750	0.156 17.65	0.172 19.43	0.188 21.23	0.203 22.89	0.219 24.65	0.279 31.23	0.344 38.27	0.350 38.88	0.400 44.22	0.438 48.28	0.562 61.15	0.625 67.58	0.812 86.18		
12	12.750	0.172 23.11	0.188 25.22	0.203 27.23	0.219 29.34	0.281 37.46	0.312 41.48	0.344 45.62	0.438 57.65	0.625 80.93	0.750 96.12	0.812 103.5	0.875 111.0	1.500 180.2	1.750 205.6	2.000 229.6
14	14.000	0.188 27.73	0.203 29.91	0.219 32.26	0.281 41.21	0.344 50.22	0.406 58.94	0.469 67.84	0.562 80.66	0.625 89.28	0.688 97.81	0.812 114.4	0.875 122.7	2.000 256.56	2.125 269.76	2.500 307.34
16	16.000	0.188 31.75	0.203 34.25	0.219 36.95	0.281 47.22	0.344 57.57	0.406 67.62	0.438 72.86	0.469 77.87	0.625 102.6	0.750 122.2	0.812 131.7	0.938 150.9	1.125 178.7	1.618 248.5	2.000 299.0
18	18.000	0.188 35.76	0.219 41.59	0.281 53.23	0.344 64.93	0.406 76.36	0.469 87.81	0.625 116.0	0.688 127.2	0.812 149.1	0.875 160.0	1.000 181.6	1.125 202.8	1.250 223.6	1.500 264.3	
20	20.000	0.219 46.27	0.281 59.23	0.312 65.66	0.344 72.28	0.406 84.04	0.438 91.59	0.469 97.92	0.625 129.3	0.750 154.2	0.875 178.7	1.000 202.9	1.250 250.3	1.375 273.5		
24	24.000	0.281 71.25	0.312 79.01	0.344 86.99	0.406 102.40	0.438 110.32	0.469 117.98	0.625 156.0	0.750 186.2	0.875 216.1	1.000 245.6	1.250 303.7	1.312 317.9	1.500 360.5		
26	26.000	0.250 68.82	0.281 77.26	0.344 94.35	0.406 111.08	0.438 119.69	0.469 128.00	0.562 152.83	0.625 169.4	0.656 177.6	0.688 186.0	0.750 202.3	0.875 234.8	1.000 267.0	1.188 314.8	
30	30.000	0.281 89.19	0.344 109.0	0.406 128.3	0.438 138.3	0.469 147.9	0.562 176.7	0.656 205.6	0.750 234.3	0.875 272.2	1.000 309.7	1.250 383.8				
36	36.000	0.281 107.2	0.312 119.03	0.344 131.0	0.406 154.3	0.438 166.4	0.469 178.0	0.562 212.7	0.656 247.6	0.688 259.5	0.875 328.2	1.000 373.8	1.250 463.9	1.500 552.7		
42	42.000	0.312 138.9	0.344 153.0	0.406 180.4	0.438 194.4	0.469 208.0	0.562 248.7	0.625 276.2	0.656 289.7	0.688 303.6	0.750 330.4	0.875 384.3	1.000 437.9	1.125 491.1	1.250 554.0	
48	48.000	0.406 206.4	0.438 222.5	0.469 238.0	0.562 284.7	0.625 316.2	0.656 331.7	0.688 347.6	0.750 378.5	0.812 409.2	0.875 440.4	0.938 471.5	1.000 502.0	1.125 563.2	1.250 624.1	

