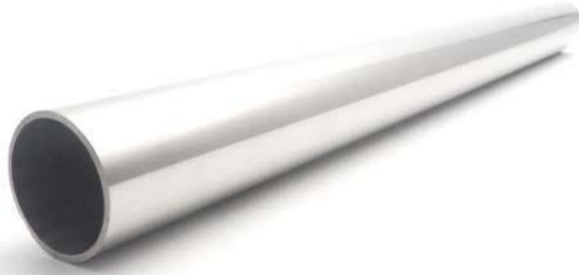




STAINLESS STEEL PIPE WEIGHT CHART AND DIMENSIONS

SS Pipe Dimensions

SS pipe weight chart is used to calculate the weight of different graded stainless steel pipe weights. The weight is calculated by the multiplication of the volume of the stainless steel material by the density of the particular material. The chart is useful in calculating the weight of an application system before building up the system.



These dimensions are applicable for all SS Pipe grades including ASTM A312 TP304L, TP316, TP316L, TP321, TP321H, TP347H, TP347, TP310S, TP304H, SS 202, SS 410, SS 317L, SS 310, SS 316H and other 200, 300 & 400 series seamless pipes & tubes.

The **ss pipe size chart** shows the different sizes of different pipe materials and standards. There are lengths, outer diameters and wall thicknesses of various specifications, standards and grades of stainless steel pipes. The **ss pipe sizes** range from standard to standard. For example, the ASME B16.5 standard covers

the pipes from ½ inches to 24 inches in outer diameter. The ASME B16.9 covers the outer diameters ranging from 26 inches to 60 inches, but these are for flanges. The **ss pipe sizes in mm** can be converted to inches by dividing the length value by 25.4 and it could be converted from inches to mm vice versa.

ASA/ ASME/ ANSI B36.19 Stainless Steel Pipe Dimensions and Weight Chart

Nominal Bore Chart		Outside Diameter (O.D)	Schedule 5S		Schedule 10S		Schedule 40S		Schedule 80S		Schedule 160S		Schedule XXS	
mm	inches		Wt	Weight	Wt	Weight	Wt	Weight	Wt	Weight	Wt	Weight	Wt	Weight
		mm	mm	(Kg. /mt)	mm	(Kg. /mt)	mm	(Kg. /mt)	mm	(Kg. /mt)	mm	(Kg. /mt)	mm	(Kg. /mt)
3	1/8	10.3	1.24	00.276	1.24	00.28	1.73	00.37	2.41	00.47	-	-	-	-
6	1/4	13.7	1.24	00.390	1.65	00.49	2.24	00.631	3.02	00.80	-	-	-	-
10	3/8	17.1	1.24	00.490	1.65	00.63	2.31	00.845	3.20	1.10	-	-	-	-
15	1/2	21.3	1.65	00.800	2.11	1.00	2.77	1.27	3.75	1.62	4.75	1.94	7.47	2.55
20	3/4	26.7	1.65	1.03	2.11	1.28	2.87	1.68	3.91	2.20	5.54	2.89	7.82	3.63
25	1	33.4	1.65	1.30	2.77	2.09	3.38	2.50	4.55	3.24	6.35	4.24	9.09	5.45
32	1 1/4	42.2	1.65	1.65	2.77	2.70	3.56	3.38	4.85	4.47	6.35	5.61	9.70	7.77
40	1 1/2	48.3	1.65	1.91	2.77	3.11	3.68	4.05	5.08	5.41	7.14	7.25	10.16	9.54
50	2	60.3	1.65	2.40	2.77	3.93	3.91	5.44	5.54	7.48	8.74	11.1	11.07	13.44
65	2 1/2	73.00	2.11	3.69	3.05	5.26	5.16	8.63	7.01	11.4	9.53	14.9	14.2	20.39
80	3	88.9	2.11	4.51	3.05	6.45	5.49	11.30	7.62	15.2	11.1	21.3	15.24	27.65
100	4	114.3	2.11	5.84	3.05	8.36	6.02	16.07	8.56	22.3	13.49	33.54	17.12	41.03
125	5	141.3	2.77	9.47	3.40	11.57	6.55	21.8	9.53	31.97	15.88	49.11	19.05	57.43
150	6	168.3	2.77	11.32	3.40	13.84	7.11	28.3	10.97	42.7	18.2	67.56	21.95	79.22
200	8	219.1	2.77	14.79	3.76	19.96	8.18	42.6	12.7	64.6	23.0	111.2	22.23	107.8
250	10	273.1	3.40	22.63	4.19	27.78	9.27	60.5	12.7	96.0	28.6	172.4	25.40	155.15
300	12	323.9	3.96	31.25	4.57	36.00	9.52	73.88	12.7	132.0	33.32	238.76	25.40	186.97
350	14	355.6	3.96	34.36	4.78	41.3	11.13	94.59	19.05	158.08	35.71	281.70	-	-
400	16	406.4	4.19	41.56	4.78	47.29	12.7	123.30	21.41	203.33	40.46	365.11	-	-
450	18	457.2	4.19	46.80	4.78	53.42	14.27	155.80	23.8	254.36	45.71	466.40	-	-
500	20	508.0	4.78	59.25	5.54	68.71	15.09	183.42	26.19	311.2	49.99	564.68	-	-
600	24	609.6	5.54	82.47	6.35	94.45	17.48	255.41	30.96	442.08	59.54	808.22	-	-

What is so essential regarding stainless-steel pipe weight chart?

The **stainless pipe sizes schedules** are there to give a combination of wall thicknesses and pipe outer diameters so that the coordination provides a degree of pressure capacity. The **stainless steel pipe dimensions** correspond to the pressure capacities. The pressure capacities are governed by the pressure classes such as 150, 300, 600, 2500 and by the PN6, up to PN64 pressure classes etc. The pressure classes help to determine which grade and dimensions of pipes are to be applied in specific applications. You can check our **stainless steel pipe weight chart** to know how heavy your applications would be or how heavy the pipes would weigh.

The calculation involves calculating the volume of stainless steel in a pipe. This can be done manually by taking the thickness of the pipe, the perimeter of the pipe diameter and then the length of the pipe and multiplying all these values by the density of the stainless steel material. Each grade of stainless steel has a different density. The weight chart makes it easy and provides you with accurate calculations. The **ss erw pipe pressure rating** depends on the wall thickness, diameter and the grade of stainless steel as well. Our **ss seamless pipe weight chart** will help you to understand the different weights caused by the different material and dimensions of pipes. This information is much useful for transportation of the stainless steel pipes. Please check the tables below for the charts.

Stainless Steel Pipe and Tubing ASTM Specification & Tolerances

Specification	Allowable Outside Diameter Variation in mm			Allowable Wall Thickness Variation		Exact Length Tolerance in mm		Testing
	Nominal Diameter	Over	Under	%Over	%Under	Over	Under	
ASTM A213/ ASME SA 213 Seamless Boiler Superheater and Heat Exchanger Tubes	Under 25.4	.1016	.1016	+20	-0	3.175	0	Flattening Test
	25.4-38.1 incl.	.1524	.1524	+22	-0	3.175	0	Tension Test
	38.1-50.8 excl.	.2032	.2032	+22	-0	3.176	0	Flare Test
	50.8-63.5 excl.	.254	.254	+2	-0	4.46	0	Hardness Test
	63.5-76.2 excl.	.3048	.3048	+22	-0	4.76	0	100% Hydrostatic test
	76.2-101.6 incl.	.381	.381	+22	-0	4.76	0	Refer to ASTM A450/ SA 450
ASTM A249/ ASME SA 249 Welded Boiler Superheater, Heat Exchanger And Condenser Tubes	Under 25.4	.1016	.1016	+10	-10	3.175	0	Tension Test
	25.4-38.1 incl.	.1524	.1524	+10	-10	3.175	0	Flattening Test
	38.1-50.8 excl.	.2032	.2032	+10	-10	3.175	0	Flange Test
	50.0-63.5 excl.	.254	.254	+10	-10	4.762	0	Reverse Bend Test
	63.5-76.2 excl.	.3848	.3848	+10	-10	4.762	0	Hardness Test
	76.2-101.6 incl.	.381	.381	+10	-10	4.762	0	100% Hydrostatic Test Refer to ASTM A450/ SA 450
ASTM A269/ ASME SA 269 Seamless & Welded Tubing for General Service	Untp12.7	.13	.13	+15	-15	3.2	0	Flare Test (Seamless Only)
	12.7-38.1 excl.	.13	.13	+10	-10	3.2	0	Flange Test (Welded Only)
	38.1-88.9 excl.	.25	.25	+10	-10	4.8	0	Hardness Test
	88.9-139.7 excl.	.38	.38	+10	-10	4.8	0	Reverse Flattening Test
	139.7-203.2 excl.	.76	.76	+10	-10	4.8	0	(Welded only) 100% Hydrostatic Test Refer to ASTM A269/ SA 269
ASTM A270/ ASME SA 270 Seamless & Welded Sanitary Tubing	25.4	.05	.20	+10.0	-10.0	3.2	0	Reverse flattening Test
	38.1	.05	.20	+10.0	-10.0	3.2	0	100% Hydrostatic Test
	50.8	.05	.28	+10.0	-10.0	3.2	0	External' polish on all tubes
	60.5	.05	.28	+10.0	-10.0	3.2	0	Refer to ASTM A270/ SA 270
	76.2	.08	.30	+10.0	-10.0	3.2	0	
	101.6	.08	.38	+10.0	-10.0	3.2	0	
ASTM A312/ ASME SA 312 Seamless & Welded pipes	3.175-38.1 incl.	.4	.79	Minimum Wall 12.5% under nominal wall Specified		6.4 0	0	Tension Test
	38.1-1016 incl.	.79	.79			6.4 0	0	Flattening Test
	101.6-203.2 incl.	1.59	.79			6.4 0	0	100% Hydrostatic Test
						(Normally Random Lengths ordered)		Refer to ASTM A530/ SA 530
ASTM A358/ ASME SA 358 Welded pipes	219.08-750mm or 0.01 inch	+0.5%		-0.3		6.0		Refer to ASTM A530/ SA 530

Stainless Steel Square Pipe & Tubing dimensions and weight chart

Size Range	Thickness	Weight Kg / Metre
20 X 20	2	1.11
25 X 25	2	1.43
25 X 25	2.5	1.74
25 X 25	3	2.04
30 X 30	2	1.74
30 X 30	2.5	2.14s
30 X 30	3	2.51s
30 X 30	3.2	2.65s
40 X 40	2	2.37s
40 X 40	2.5	2.92s
40 X 40	3	3.45s
40 X 40	4	4.46s
40 X 40	5	5.40s
50 X 50	2	3.00s
50 X 50	2.5	3.71s
50 X 50	3	4.39s
50 X 50	4	5.72s
50 X 50	5	6.97
50 X 50	6	8.20s



50 X 50	8	10.50s
60 X 60	3	5.34
60 X 60	3.2	5.67s
60 X 60	3.6	6.34
60 X 60	4	6.97
60 X 60	5	8.54
70 X 70	2.5	5.28
70 X 70	3	6.28
70 X 70	3.5	7.25
70 X 70	3.6	7.46
70 X 70	4	8.23
70 X 70	5	10.10
70 X 70	8	15.29
70 X 70	10	19.13
80 X 80	3	7.22
80 X 80	3.5	8.35
80 X 80	3.6	8.59
80 X 80	4	9.48
80 X 80	5	11.70
80 X 80	6	13.80
80 X 80	6.3	14.40
80 X 80	8	17.83
80 X 80	10	21.88
90 X 90	3	8.16
90 X 90	3.5	9.45
90 X 90	3.6	9.72
90 X 90	4	10.70
90 X 90	5	13.30
90 X 90	6	15.70
90 X 90	6.3	16.40
90 X 90	8	20.32
90 X 90	10	25.53
100 X 100	3	9.10
100 X 100	4	12.00
100 X 100	5	14.80
100 X 100	6	17.60
100 X 100	6.3	18.40
100 X 100	8	22.90
100 X 100	10	27.86
100 X 100	12	33.44
120 X 120	4	14.50
120 X 120	5	18.00
120 X 120	6	21.30
120 X 120	6.3	22.30
120 X 120	8	27.90
120 X 120	10	34.13
120 X 120	12	39.94
120 X 120	16	54.64
140 X 140	6	25.97
140 X 140	8	32.89
140 X 140	10	41.15
150 X 150	4	18.30
150 X 150	5	22.70
150 X 150	6	27.00
150 X 150	6.3	28.30
150 X 150	8	35.40
150 X 150	10	43.47
150 X 150	12	53.48
150 X 150	16	65.05
160 X 160	6	27.39
160 X 160	8	36.90
160 X 160	10	46.88
180 X 180	5	27.97
180 X 180	6	33.26
180 X 180	8	43.00
180 X 180	10	53.00
180 X 180	12	61.01
180 X 180	12.5	65.20
180 X 180	16	81.30
200 X 200	5	31.18
200 X 200	6	37.09
200 X 200	8	48.00



200 X 200	10	59.30
200 X 200	12	68.84
200 X 200	12.5	73.00
200 X 200	16	90.91
250 X 250	6	46.83
250 X 250	8	60.50
250 X 250	10	75.00
250 X 250	12	88.45
250 X 250	12.5	92.70
250 X 250	16	111.48
300 X 300	6	55.30
300 X 300	8	74.18
300 X 300	10	90.70
300 X 300	12	108.68
300 X 300	12.5	112.00
300 X 300	16	141.84
350 X 350	10	105.93
350 X 350	12	126.74
350 X 350	16	166.94
400 X 400	8	97.56
400 X 400	10	121.95
400 X 400	12	151.97
400 X 400	16	191.94

Stainless Steel Elliptical and oval tube sizes

Sizes	S/S Grade 304			S/S Grade 316		
	Wall thickness			Wall thickness		
	1.5mm	2.0mm	3.0mm	1.5mm	2.0mm	3.0mm
21 x 16	✓			✓		
32 x 16	✓	✓		✓	✓	
49 x 24.5	✓	✓		✓		
50 x 38		✓			✓	
65 x 32						
65 x 33		✓			✓	
70 x 35						
72 x 26.5	✓			✓		
75 x 25						
78 x 39	✓	✓		✓	✓	
90 x 45		✓			✓	
90 x 60			✓			✓
98 x 50						
103 x 51						
129 x 70		✓	✓			
130 x 66						
146 x 76		✓			✓	
162 x 83						
164 x 87		✓			✓	
197 x 103		✓			✓	