

STAINLESS STEEL AND ALLOYS PIPE DIMENSIONS AND WEIGHTS





ARMOR ALLOYS

Edmonton, AB T. (780) 463-2207 Calgary, AB T. (403) 265-3190 Vancouver, BC T. (604) 942-2424

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Registered to ISO 9001

NPS	OD	SCHEDULE*	WAL		WEIGHT	BURST PRESSURE*		ID	NPS	OD	SCHEDULE*	WAL		WEIGHT	BURST PRESSURE*	II	D
			INCH	M M	LBS/FT	PSI	INCH	M M	_			INCH	MM	LBS/FT	PSI	INCH	MM
1/8	0.405	10 / 10S	0.049	1.24	0.186	18148	0.307	7.80	4.1/2	5.000	STD / 40 / 40S	0.247	6.27	12.538	7410	4.506	114.45
	[10.20]	STD / 40 / 40S		1.73	0.245	25185	0.269	6.83	4 1/2	[127.00]	XS/80/80S		9.02	17.611	10650	4.290	108.97
	-	XS / 80 / 80S 10 / 10S		2.41 1.65	0.315	35185 18056	0.215	5.46 10.41	[]	1 111	5 / 5S	_	18.03 2.77	32.530 6.349	21300 2939	3.580 5.345	90.93 135.76
1/4		STD / 40 / 40S		2.24	0.425	24444	0.364	9.25			10 / 10S	0.134	3.40	7.770	3613	5.295	134.49
[8]	[13.72]	XS / 80 / 80S		3.02	0.535	33056	0.302	7.67	5	5.563	STD / 40 / 40S		6.55	14.618	6957	5.047	128.19
3/8 [10]	[17.15]	10 / 10S STD / 40 / 40S		1.65 2.31	0.423	14444 20222	0.545	13.84	[125]	[141.30]	XS / 80 / 80S 120		9.53 12.70	20.778	10111 13482	4.813	122.25 115.90
		XS/80/80S		3.20	0.739	28000	0.423	10.74			160		15.88	32.961	16852	4.313	109.55
1/2 [15]		5 / 5S 10 / 10S		1.65 2.11	0.538	11607 14821	0.710	18.03 17.12	-		5 / 5S		19.05 2.77	38.552 7.585	20223 2468	4.063 6.407	103.20
	0.840	STD / 40 / 40S		2.77	0.851	19464	0.622	15.80			10 / 10S	0.134	3.40	9.289	3034	6.357	161.47
	[21.34]	XS / 80 / 80S		3.73 4.78	1.088	26250 33571	0.546	13.87 11.79	6	6.625	STD / 40 / 40S XS / 80 / 80S		7.11 10.97	18.974	6340 9781	6.065 5.761	154.05 146.33
		160 XX		7.47	1.309	52500	0.464	6.40	[150]	[168.28]	120		14.27	28.573 36.391	12725	5.501	139.73
		5 / 5S		1.65	0.684	9286	0.920	23.37			160	_	18.26	45.352	16279	5.187	131.75
3/4	1.050	10 / 10S STD / 40 / 40S		2.11	0.857 1.131	11857 16143	0.884	22.45	-		XX 5S		21.95 2.77	53.160 9.914	19562 1896	4.897 8.407	124.38 213.54
[20]		XS / 80 / 80S		3.91	1.474	22000	0.742	18.85			10 / 10S		3.76	13.399	2574	8.329	211.56
		160		5.56	1.944	31286	0.612	15.54			20		6.35	22.361	4348	8.125	206.38
		XX 5 / 5S		7.82 1.65	2.441 0.868	44000 7414	0.434 1.185	11.02 30.10			30 STD / 40 / 40S	_	7.04 8.18	24.696 28.554	4817 5600	8.071 7.981	205.00 202.72
		10 / 10S	0.109	2.77	1.404	12433	1.097	27.86	8	8.625	60	0.406	10.31	35.638	7061	7.813	198.45
1 (25)	1.315	STD / 40 / 40S XS / 80 / 80S		3.38 4.55	1.679 2.172	15171 20418	1.049 0.957	26.64	[200]	[219.08]	XS / 80 / 80S 100		12.70 15.09	43.388 50.948	86957 10330	7.625	193.68 188.90
[25]	[33.40]	160		6.35	2.172	28517	0.937	20.70			120	_	18.26	60.710	12504	7.187	182.55
		XX		9.09	3.659	40837	0.599	15.21			140		20.62	67.756	14122	7.001	177.83
		5 / 5S 10 / 10S		1.65 2.77	1.107 1.806	5873 9849	1.530	38.86	9		160		22.23 23.01	72.424 74.690	15217 15757	6.875	174.63 173.05
1 1/4	1.660	STD / 40 / 40S		3.56	2.273	12651	1.380	35.05		9.625 [244.48]	STD / 40 / 40S		8.69	33.907	5330	8.941	227.10
[32]	[42.16]	XS / 80 / 80S		4.85	2.997	17259	1.278	32.46	[225]		XS / 80 / 80S		12.70	48.728	7792	8.625	219.08
		160 XX		6.35 9.70	3.765 5.214	22590 34518	1.160 0.896	29.46			XX 5S		3.40	81.769 15.193	13636 1870	7.875	200.03
		5 / 5S		1.65	1.274	5132	1.770	44.96			10S		4.19	18.653	2302	10.420	264.67
1 1/2	1.900	10 / 10S STD / 40 / 40S		2.77 3.68	2.085	8605 11447	1.682	42.72			30		7.80	28.035 34.240	3488 4284	10.250	260.35 257.45
[40]		XS / 80 / 80S		5.08	3.631	15789	1.500	38.10	10	10.750	STD / 40 / 40S		9.27	40.483	5093	10.020	254.51
		160		7.14	4.859	22184	1.338	33.99	[250]	[273.05] 11.750 [298.45]	XS / 60 / 80S 80		12.70	54.735	6977	9.750	247.65
		XX 5 / 5S		10.16 1.65	6.408 1.604	31579 4105	1.100 2.245	27.94 57.02			100	_	15.09 18.26	64.429 77.027	8288 10033	9.562	242.87 236.52
	[60.33]	10 / 10S		2.77	2.638	6884	2.157	54.79			120		21.44	89.292	11777	9.062	230.17
2 [50]		STD / 40 / 40S		3.91	3.653 5.022	9726	2.067 1.939	52.50 49.25			140		25.40	104.130 115.644	13953 15698	8.750	222.25 215.90
[30]				8.74	7.462	13768 21726	1.687	42.85	11		STD / 40 / 40S		9.53	45.557	4787		279.40
				11.07	9.029	27537	1.503	38.18	[275]		XS / 80 / 80S		12.70	60.075	6383		273.05
	2.875 [73.03]	5 / 5S 10 / 10S		3.05	2.475 3.531	4330 6261	2.709	68.81		12.750 [323.85]	5S 10S	0.156 0.180		20.983	1835 2118		315.93 314.71
2 1/2		STD / 40 / 40S	0.203	5.16	5.793	10591	2.469	62.71			20	0.250	6.35	33.375	2941	12.250	311.15
[65]		XS / 80 / 80S 160		7.01 9.53	7.661 10.013	14400 19565	2.323	59.00 53.98			30 STD / 40S	0.330		43.773 49.562	3882 4412		307.09 304.80
		XX		14.02	13.695	28800	1.771	44.98	12 [300]		40	0.406		53.525	4776		303.23
3 [80]	3.500 [88.90]	5 / 5 \$		2.11	3.029	3557	3.334	84.68			XS / 80S	0.500		65.415	5882		298.45
		10 / 10S STD / 40 / 40S		3.05 5.49	4.332 7.576	5143 9257	3.260	82.80 77.93			80	0.562		73.154 88.630	6612 8094		295.30 288.90
			0.300	7.62	10.253	12857	2.900	73.66			100	0.844	21.44	107.320	9929	11.062	280.97
		160 XX		11.13 15.24	14.324 18.583	18771 25714	2.624	66.65 58.42			120 140	1.000 I		125.490 139.674	11765 13235		273.05 266.70
3 1/2 [90]	4.000 [101.60]	5 / 5S		2.11	3.472	3113	3.834	97.38		14.000 [355.60]	160	1.312		160.271	15435		257.20
		10 / 10S	0.120	3.05	4.973	4500	3.760	95.50			10S	0.188	4.78	27.732	2014	13.624	346.05
		STD / 40 / 40S XS / 80 / 80S		5.74 8.08	9.109 12.505	8475 11925	3.548	90.12 85.45			10	0.250		36.713 45.611	2679 3343		342.90 339.75
		XX	0.636	16.15	22.850	23850	2.728	69.29			STD / 30 / 40S	0.375	9.53	54.568	4018	13.250	336.55
4 [100]	4.500 [114.30]			2.11	3.915	2767	4.334	110.08			40	0.438		63.441	4693		333.35
		10 / 10S STD / 40 / 40S		3.05 6.02	5.613 10.790	4000 7900	4.260	108.20 102.26			XS / 80S 60	0.500		72.090 85.047	5357 6364		330.20 325.42
		STD / 40 / 40S XS / 80 / 80S		8.56	14.983	11233	3.826	97.18			80	0.750	19.05	106.133	8036	12.500	317.50
		120		11.13	19.001	14600	3.624	92.05			100	0.938	23.83	130.853	10050	12.124	307.95



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				\LL	WEIGHT	BURST	ID		
NPS	OD	SCHEDULE*		KNESS		PRESSURE*			
			INCH	MM	LBS/FT	PSI	INCH	M M	
		100	0.100	4.70	21.740	17/2	15 (04	20/ 05	
		10S 10	0.188	4.78 6.35	31.748	1763 2344	15.624	396.85 393.70	
		20	0.230	7.92	42.053 52.275	2925	15.500 15.376		
		STD / 30 / 40S	0.375	9.53	62.578	3516	15.250	387.35	
1.	1 / 000	XS / 40 / 80S	0.500	12.70	82.770	4688	15.000	_	
16	16.000	60	0.656	16.66	107.501	6150	14.688	373.08	
[400]	[406.40]	80	0.844	21.44	136.615	7913	14.312	363.52	
		100	1.031	26.19	164.825	9666	13.938	354.03	
		120	1.219	30.96	192.433	11428	13.562	344.47	
		140	1.438	36.53	223.641	13481	13.124	333.35	
		160 10S	1.594 0.188	40.49	245.247 35.764	14944 1567	12.812	325.42 447.65	
		10	0.250	6.35	47.393	2083	17.500	444.50	
		20	0.312	7.92	58.939	2600	17.376	441.35	
		STD / 40S	0.375	9.53	70.588	3125	17.250	438.15	
		30	0.438	11.13	82.152	3650	17.124	434.95	
18	18.000	XS / 80S	0.500	12.70	93.450	4167	17.000		
[450]	[457.20]	40	0.562	14.27	104.666	4683	16.876		
		60	0.750	19.05	138.173	6250	16.500	419.10	
		100	0.938	23.83	170.924 207.957	7817 9633	16.124 15.688	409.55 398.48	
		120	1.375	34.93	244.138	11458	15.250	387.35	
		140	1.562	39.67	274.221	13017	14.876	377.85	
		160	1.781	45.24	308.503	14842	14.438	366.73	
		10S	0.218	5.54	46.057	1635	19.564	496.93	
		10	0.250	6.35	52.733	1875	19.500	495.30	
		STD / 40S	0.375	9.53	78.598	2813	19.250	488.95	
		XS / 80S	0.500	12.70	104.130	37500	19.000	482.60	
20	20.000	40	0.594	15.09	123.110	4455	18.812	477.82	
[500]	[508.00]	80	1.031	20.62	166.401 208.869	6090 7733	18.376 17.938	466.75 455.63	
		100	1.281	32.54	256.096	9608	17.438	442.93	
		120	1.500	38.10	296.370	11250	17.000	431.80	
		140	1.750	44.45	341.093	13125	16.500	419.10	
		160	1.969	50.01	379.172	14768	16.062	407.97	
		10S	0.218	5.54	50.714	1486	21.564	547.73	
		10	0.250	6.35	58.073	1705	21.500	546.10	
		STD / 20 / 40S	0.375	9.53	86.608	2557	21.250	539.75	
22	22.000	XS / 30 / 80S 60	0.500	12.70	114.810	3409 5966	21.000	533.40 514.35	
[550]	[558.80]	80	1.125	28.58	250.813	7670	19.750	501.65	
[550]		100	1.375	34.93	302.878	9375	19.250		
		120	1.625	41.28	353.608	11080		476.25	
		140	1.875	47.63	403.003	12784	18.250	463.55	
		160	2.125	53.98	451.063	14489	17.750		
		10 / 10S	0.250	6.35	63.413	1563	23.500	596.90	
		STD / 20 / 40S	0.375	9.53	94.618	2344	23.250	590.55	
		XS / 80S / 30	0.500	12.70 14.27	125.490 140.679	3125 3513	23.000	584.20 581.05	
		40	0.562	17.48	171.293	4300	22.624	574.65	
24	24.000	60	0.969	24.61	238.346	6056	22.024	560.37	
[600]	[609.60]	80	1.219	30.96	296.584	7619	21.562	547.67	
		100	1.531	38.89	367.392	9569	20.938	531.83	
		120	1.812	46.02	429.386	11325	20.376		
		140	2.062	52.37	483.122	12888	19.876	504.85	
		160	2.344	59.54	542.135	14650	19.312	490.52	
26 [650]	26.000 [660.40]	10	0.312	7.92	85.597	1800	25.376	644.55	
		STD / 40S XS / 80S	0.375	9.53 12.70	102.628	2163 2885	25.250	641.35	
		10	0.500	7.92	136.170 92.261	1671	25.000 27.376	635.00	
28 [700]	28.000 [711.20]	STD / 40S /	0.375	9.53	110.638	2009	27.250	692.15	
		XS / 20 / 80S	0.500	12.70	146.850	2679	27.000	685.80	
		30	0.625	15.88	182.728	3348	26.750	679.45	
30 [750]	30.000 [762.00]	10	0.312	7.92	98.925	1560	29.376	746.15	
		STD / 40S	0.375	9.53	118.648	1875	29.250	742.95	
		XS / 20 / 80S	0.500	12.70	157.530	2500	29.000		
		30	0.625	15.88	196.078	3125	28.750	730.25	

NPS	OD	SCHEDULE*	WALL THICKNESS		WEIGHT	BURST PRESSURE*	ID		
			INCH		LBS/FT	PSI	INCH	MM	
32 [800]	32.000 [812.80]	10	0.312	7.92	105.589	1463	31.376	796.95	
		STD	0.375	9.53	126.658	1758	31.250	793.75	
		XS / 20	0.500	12.70	168.210	2344	31.000	787.40	
		30	0.625	15.88	209.428	2930	30.750	781.05	
		40	0.688	17.48	230.076	3225	30.624	777.85	
	34.000 [863.60]	10	0.312	7.92	112.254	1376	33.376	847.75	
34		STD	0.375	9.53	134.668	1654	33.250	844.55	
[850]		XS / 20	0.500	12.70	178.890	2206	33.000	838.20	
[000]		30	0.625	15.88	222.778	2757	32.750	831.85	
		40	0.688	17.48	244.771	3035	32.624	828.65	
36	36.000 [914.40]	10	0.312	7.92	118.918	1300	35.376	898.55	
[900]		STD / 40S	0.375	9.53	142.678	1563	35.250	895.35	
[900]		XS / 80S	0.500	12.70	189.570	2083	35.000	889.00	
	42.000 [1066.80]	STD / 40S	0.375	9.53	166.708	1339	41.250	1047.75	
42		XS / 80S	0.500	12.70	221.610	1786	41.000	1041.40	
[1050]		30	0.625	15.88	276.178	2232	40.750	1035.05	
		40	0.750	19.05	330.413	2679	40.500	1028.70	
48	48.000	STD / 40S	0.375	9.53	190.738	1172	47.250	1200.15	
[1200]	[1219.20]	XS / 80S	0.500	12.70	253.650	1563	47.000	1193.80	

^{*}As per ASME

Material Grades

304L, 316L, 317L, 310, 321/H, 347/H, 304H, 316H, 904L, AL 6XN

Duplex 2205, 2507

Nickel Alloys 20, 400, 600, 625, 800, 800H, 800HT, 825, C276, Ferrilium 255

Chrome Moly P5, P9, P11, P22, P91

Titanium Grade 2 & 7

Aluminum 6061-T6, 6063-T6

Specifications

A/SA312, A/SA335, A/SA358 Cl.1 & Cl.2, A/SA778, A/SA790, A/SA 928 B729, B464, B165, B725, B167, B517, B444, B705, B407, B514, B423, B705

Burst Pressures are theoretical and are derived from Barlow's formula. For Working Pressure, use safety factor of 4 (Bursting Pressure divided by 4).

 $P = \frac{2St}{D}$ At Ambient Temperature (-20°F to 100°F)

Barlow's Formula

P = pressure (psi)

S = allowable stress (75000 psi)

t = wall thickness (inches)

D = outside diameter (inches)



^{**}Lbs/ft weight calculated using formula (OD-wallthickness) x wall thickness x 10.68