

Material	Pipe	Forged Steel (Fittings & Flanges)	Butt Weld Fittings	Forged Steel (Valves)	Cast Steel (Valves)
CARBON STEEL					
CARBON -1/2 MOLY ALLOY STEEL					
MODERATE / HIGH-TEMP SERVICE	A106/APL5LB/A672	ASTM A105/A105N	A234-WPB	ASTM A105/A105N	A216-WCB, WCC
LOW TEMP CARBON STEEL					
CARBON -1/2 MOLY ALLOY STEEL					
LOW-TEMP SERVICE	A333-GR.6/A671	A350-LF2 CL1	A420-WPL6	A350-LF2 CL1	A352-LCB, LCC
CHROME ALLOY STEEL					
1-1/4CR-1/2MO ALLOY STEEL	A335-P11	A182-F11 CL2	A234-WP11 CL2	A182-F11 CL2	A217-WC6
2-1/4CR-1/2MO-VD ALLOY STEEL	A335-P22	A182-F22 CL3	A234-WP22 CL3	A182-F22 CL3	A217-WC9
5CR-1/2MO ALLOY STEEL	A335-P5	A182-F5	A234-WP5	A182-F5	
5CR-1/2MO ALLOY STEEL		A182-F5A		A182-F5A	A217-C5
9CR-1MO ALLOY STEEL	A335-9	A182-F9	A234-WP9	A182-F9	A217-GR.C12
9CR-1MO-V. VANADIUM	A335-91	A182-F91		A182-F91	A217-C12A
STAINLESS STEEL					
TYPE 304 STAINLESS STEEL 18CR-8NI					
STANDARD	A312-TP304	A182-F304	A403-WP304	A182-F304	A351-CF8
LOW CARBON	A312-TP304L	A182-F304L	A403-WP304L	A182-F304L	A351-CF3, CF3A
HIGH TEMP SERVICE	A312-TP304H	A182-F304H	A403-WP304H	A182-F304H	A351-CF10
TYPE 316 STAINLESS STEEL 16CR-12NI-2MO					
STANDARD	A312-TP316	A182-F316	A403-WP316	A182-F316	A351-CF8M
LOW CARBON	A312-TP316L	A182-F316L	A403-WP316L	A182-F316L	A351-CF3M
HIGH TEMP SERVICE	A312-TP316H	A182-F316H	A403-WP316H	A182-F316H	A351-CF10M
EXOTIC STAINLESS STEEL					
TYPE 317 STAINLESS STEEL 18CR-13NI-3MO					
STANDARD	A312-TP317	A182-F317	A403-WP317	A182-F317	A351-CG8M*
HIGH TEMP SERVICE		A182-F317H		A182-F317H	A351-CF8A
TYPE 321 STAINLESS STEEL 18CR-10NI-TI					
STANDARD	A312-TP321	A182-F321	A403-WP321	A182-F321	
HIGH TEMP SERVICE	A312-TP321H	A182-F321H	A403-WP321H	A182-F321H	
TYPE 347 STAINLESS STEEL 18CR-10NI-CB					
STANDARD	A312-TP347	A182-F347	A403-WP347	A182-F347	A351-CF8C
HIGH TEMP SERVICE	A312-TP347H	A182-F347H	A403-WP347H	A182-F347H	A351-CF8C
DUPLEX STAINLESS STEEL					
22CR-5NI-3MO-N DUPLEX STEEL	A789/A790-UNS31803	A182-F51	S31803/S32205	A182-F51	A351-CD3MN/A890-4A*
25CR-7NI-4MO-N DUPLEX STEEL	A789/A790-UNS32750	A182-F53	S32750	A182-F53	CD4MCU*/CE3MN*/5A*
25CR-7.5NI-3.5MO-N-CU-W DUPLEX STEEL		A182-F55		A182-F55	

WALL THICKNESS
LBS PER FOOT

Pipe Size	OD	SCH 5	SCH 10	SCH 20	SCH 30	SCH 40	STD	SCH 60	SCH 80	XH	SCH 100	SCH 120	SCH 140	SCH 160	XXH			
1/8	0.405	0.035	0.049			0.068	0.068		0.095	0.095								
		0.140	0.190			0.240	0.240		0.310	0.310								
1/4	0.540	0.049	0.065			0.088	0.088		0.119	0.119								
		0.0260	0.330			0.420	0.420		0.540	0.540								
3/8	0.675	0.049	0.065			0.091	0.091		0.126	0.126								
		0.330	0.420			0.570	0.570		0.740	0.740								
1/2	0.840	0.0365	0.083			0.109	0.109		0.147	0.147				0.187	0.294			
		0.540	0.670			0.850	0.850		1.090	1.090				1.300	1.710			
3/4	1.05	0.065	0.083			0.113	0.113		0.154	0.154				0.218	0.308			
		0.680	0.860			1.130	1.130		1.470	1.470				1.940	2.440			
1	1.315	0.065	0.109			0.133	0.133		0.179	0.179				0.250	0.358			
		0.870	1.400			1.680	1.680		2.170	2.170				2.840	3.660			
1-1/4	1.660	0.065	0.109			0.140	0.140		0.191	0.191				0.250	0.382			
		1.110	1.810			2.270	2.270		3.000	3.000				3.770	5.210			
1-1/2	1.990	0.065	0.109			0.145	0.145		0.200	0.200				0.281	0.400			
		1.270	2.090			2.720	2.720		3.630	3.630				4.860	6.410			
2	2.375	0.065	0.109			0.154	0.154		0.218	0.218				0.344	0.436			
		1.600	2.640			3.660	3.660		5.030	5.030				7.470	9.040			
2-1/2	2.875	0.083	0.120			0.203	0.203		0.276	0.276				0.375	0.552			
		3.030	3.530			5.800	5.800		7.670	7.670				10.02	13.71			
3	3.500	0.083	0.120			0.216	0.216		0.300	0.300				0.438	0.600			
		2.480	4.340			7.580	7.580		10.26	10.26				14.34	19.60			
3-1/2	4.000	0.083	0.120			0.226	0.226		0.318	0.318					0.636			
		3.480	4.980			9.120	9.120		12.52	12.52					22.87			
4	4.500	0.083	0.120	0.156		0.188	0.237	0.237	0.337	0.337		0.438		0.531	0.674			
		3.920	5.620	7.240		8.670	10.80	10.80	15.00	15.00		19.02		22.53	27.57			
5	5.563	0.109	0.134		0.188		0.258	0.258	0.375	0.375		0.500		0.625	0.750			
		6.630	7.780		10.80		14.63	14.63	20.80	20.80		27.06		32.99	36.59			
6	6.625	0.109	0.134	0.156	0.188	0.219	0.0250	0.280	0.280	0.432	0.432		0.562		0.719	0.864		
		7.590	9.300	10.79	12.94	15.00	17.04	18.99	18.99	28.60	28.60		36.43		45.39	53.21		
8	8.625	0.109	0.156	0.148	0.188	0.250	0.219	0.277	0.322	0.406	0.500	0.500	0.594	0.719	0.812	0.906	0.875	
		9.920	14.12	13.41	16.96	22.38	19.68	24.72	25.58	28.58	35.67	43.43	43.43	51.00	60.77	67.82	74.76	72.49
10	10.750	0.134	0.188	0.165	0.219	0.250	0.279	0.307	0.365	0.365	0.500	0.594	0.500	0.719	0.844	1.000	1.125	1.000
		15.21	21.23	18.67	24.65	28.06	31.23	34.29	40.52	40.52	54.79	64.49	54.79	77.10	89.38	104.23	115.78	104.23
12	12.750	0.165	0.188	0.180	0.219	0.250	0.312	0.330	0.406	0.375	0.562	0.688	0.500	0.844	1.000	1.125	1.312	1.000
		22.20	25.25	24.19	29.34	33.41	41.48	43.81	53.57	49.61	73.22	88.71	65.48	107.42	125.61	139.81	160.42	125.61
14	14.000	0.219	0.250		0.312		0.375	0.438	0.375	0.594	0.750	0.500	0.938	1.094	1.250	1.406		
		32.26	36.75		45.65		54.62	63.50	54.62	85.13	106.23	72.16	130.98	150.93	170.37	189.29		
16	16.000	0.219	0.250		0.312		0.375	0.500	0.375	0.656	0.844	0.500	1.031	1.219	1.468	1.594		
		36.95	42.09		52.32		62.64	82.85	62.64	107.60	136.74	82.85	164.98	192.61	228.05	245.48		
18	18.000	0.250			0.312		0.138	0.562	0.375	0.750	0.938	0.500	1.156	1.375	1.562	1.781		
		47.44			58.99		82.23	104.76	70.65	138.30	171.08	93.54	208.15	244.37	274.48	308.79		
20	20.000		0.250	0.312	0.375		0.500	0.500	0.375	0.812	1.031	0.500	1.281	1.500	1.750	1.969		
			52.78	65.66	78.67		104.23	123.23	78.67	166.56	209.06	104.23	256.34	296.65	341.41	379.53		
22	22.000		0.250		0.375		0.500		0.375	0.875	1.125	0.500	1.375	1.625	1.875	2.125		
			58.13		86.69		114.92		86.69	197.60	251.05	114.92	303.16	353.94	403.38	451.49		
24	24.000		0.250	0.312	0.375		0.562	0.688	0.375	0.969	1.219	0.500	1.531	1.812	2.062	2.344		
			63.47	79.01	94.71		140.81	171.45	94.71	238.57	296.86	125.61	367.74	429.79	483.57	542.64		
26	26.000	0.250			0.312				0.375			0.500						
		68.82			85.68		136.3		102.72			136.30						
28	28.000	0.250			0.312			0.625		0.375		0.500						
		75.16			92.34		146.99		182.90		110.4		146.99					
30	30.000	0.250			0.312	0.750	0.500	1.000	0.625		0.375	0.500						
		79.51			99.05	234.51	157.68	310.01	196.26		118.76		157.68					
32	32.000	0.250			0.312			0.625	0.688	0.375		0.500						
		84.85			105.99		168.37		209.62	230.29	126.78		168.37					
34	34.000	0.250			0.344			0.625	0.688	0.375		0.500						
		90.20			123.77		179.05		222.99	245.00	134.79		179.06					
36	36.000	0.250			0.312			0.625	0.75	0.375		0.500						
		95.54			119.13		189.75		236.35	282.62	142.81		189.75					
42	42.000									0.375		0.500						
										166.7		221.60						
48	48.000									0.375		0.500						