Seamless Steel Pipe

Baolai can produce carbon seamless steel pipe diameter from 1/8" to 26",thickness from sch10 to sch160.

Seamless steel pipes are made of steel ingots or solid tube blanks through perforation to make capillaries, which are then hot-rolled, cold-rolled or cold-drawn.

The seamless steel pipe has a hollow section and is widely used as a pipeline for conveying fluid. Compared with solid steel such as round steel, the steel pipe has a lighter weight when the bending and torsional strength is the same. It is an economical section steel and is widely used in the manufacture of structures. parts and mechanical parts, such as oil drill pipes, automobile transmission shafts, bicycle frames, and steel scaffolding used in construction.

ASTM A53 Seamless Steel Pipes

Certification	ISO 9001
Standard	ASTM A53
Grade	Gr.B
Out Diameter (mm)	1/8" -26" (DN6- DN650)
Wall Thickness (mm)	Sch10 - SchXXS
Length (m)	6M/ 12M or Customized
Ends	Plain/ Bevel/ Threaded/ Grooved
Usage	Water transfer pipes/ Oil pipes and Gas pipes
Surface	Bare/ Black/ Varnish/ Oiled/ Galvanized/ 3PE, etc

ASTM A53 Seamless Steel Pipes Size

DN	NPS	OD	Schedule												
(mm)	(Inch)	(mm)	10	20	30	STD	40	60	XS	80	100	120	140	160	XXS
6	1/8	10.3							2.41	2.41					
8	1/4	13.7				2.24	2.24		3.02	3.02					
10	3/8	17.1				2.31	2.31		3.2	3.2					
15	1/2	21.3	2.11		2.41	2.77	2.77		3.73	3.73				4.78	7.47
20	3/4	26.7	2.11		2.41	2.87	2.87		3.91	3.91				5.56	7.82
25	1	33.4	2.77		2.9	3.38	3.38		4.55	4.55				6.35	9.09
32	1 1/4	42.2				3.56	3.56		4.85	4.85				6.35	9.7
40	1 1/2	48.3	2.77		3.18	3.68	3.68		5.08	5.08				7.14	10.15
50	2	60.3	2.77		3.18	3.91	3.91		5.54	5.54				8.74	11.07
65	2 1/2	73				5.49	5.49		7.01	7.01				11.13	14.02
80	3	88.9	3.05		4.78	5.49	5.49		7.62	7.62				11.13	15.24
90	3 1/2	101.6				5.74	5.74		8.08	8.08					
100	4	114.3	3.05		4.78	6.02	6.02		8.56	8.56		11.13		13.49	17.12
125	5	141.3				6.55	6.55		9.53	9.53		12.7		15.88	19.05
150	6	168.3	3.4			7.11	7.11		10.97	10.97		14.27		18.26	21.95
200	8	219.1	3.76	6.35	7.04	8.18	8.18	10.31	12.7	12.7	15.09	18.26	20.62	23.01	22.23
250	10	273	4.19	6.35	7.8	9.27	9.27	12.7	12.7	15.09	18.26	21.44	25.4	28.58	25.4
300	12	323.8	4.57	6.35	8.38	9.53	10.31	14.27	12.7	17.48	21.44	25.4	28.58	33.32	25.4
350	14	355.6	6.35	7.92	9.53	9.53	11.13	15.09	12.7	19.05	23.83	27.79	31.75	35.71	
400	16	406.4	6.35	7.92	9.53	9.53	12.7	16.66	12.7	21.44	26.19	30.96	36.53	40.49	

450	18	457	6.35	7.92	11.13	9.53	14.27	19.05	12.7	23.83	29.36	34.93	39.67	45.24	
500	20	508	6.35	9.53	12.7	9.53	15.09	20.62	12.7	26.19	32.54	38.1	44.45	50.01	
550	22	559	6.35	9.53	12.7	9.53		22.23	12.7	28.58	34.93	41.28	47.63	53.98	
600	24	610	6.35	9.53	14.27	9.53	17.48	24.61	12.7	30.96	38.89	46.02	52.37	59.54	
650	26	660	7.92	12.7		9.53			12.7						

Chemical composition (%)

Grade	C	Mn	P	S	Cu
Gr.B	≤0.3	≤1.2	≤0.05	≤0.045	≤0.40

Mechanical properties

Grade	Tensile strength (Mpa)	Yield strength (Mpa)	Longitudinal elongation (%)
Gr.B	≥415	≥240	≥30

ASTM A106 Seamless Steel Pipes

Certification	ISO 9001
Standard	ASTM A53
Grade	Gr.B
Out Diameter (mm)	1/8" -26" (DN6- DN650)
Wall Thickness (mm)	Sch10 - SchXXS
Length (m)	6M/ 12M or Customized
Ends	Plain/ Bevel/ Threaded/ Grooved
Usage	Water transfer pipes/ Oil pipes and Gas pipes
Surface	Bare/ Black/ Varnish/ Oiled/ Galvanized/ 3PE, etc

ASTM A106 Seamless Steel Pipes Size

DN	NPS	OD	Schedule												
(mm)	(Inch)	(mm)	10	20	30	STD	40	60	XS	80	100	120	140	160	XXS
6	1/8	10.3							2.41	2.41					
8	1/4	13.7				2.24	2.24		3.02	3.02					
10	3/8	17.1				2.31	2.31		3.2	3.2					
15	1/2	21.3	2.11		2.41	2.77	2.77		3.73	3.73				4.78	7.47
20	3/4	26.7	2.11		2.41	2.87	2.87		3.91	3.91				5.56	7.82
25	1	33.4	2.77		2.9	3.38	3.38		4.55	4.55				6.35	9.09
32	1 1/4	42.2				3.56	3.56		4.85	4.85				6.35	9.7
40	1 1/2	48.3	2.77		3.18	3.68	3.68		5.08	5.08				7.14	10.15
50	2	60.3	2.77		3.18	3.91	3.91		5.54	5.54				8.74	11.07
65	2 1/2	73				5.49	5.49		7.01	7.01				11.13	14.02
80	3	88.9	3.05		4.78	5.49	5.49		7.62	7.62				11.13	15.24
90	3 1/2	101.6				5.74	5.74		8.08	8.08					
100	4	114.3	3.05		4.78	6.02	6.02		8.56	8.56		11.13		13.49	17.12
125	5	141.3				6.55	6.55		9.53	9.53		12.7		15.88	19.05
150	6	168.3	3.4			7.11	7.11		10.97	10.97		14.27		18.26	21.95
200	8	219.1	3.76	6.35	7.04	8.18	8.18	10.31	12.7	12.7	15.09	18.26	20.62	23.01	22.23
250	10	273	4.19	6.35	7.8	9.27	9.27	12.7	12.7	15.09	18.26	21.44	25.4	28.58	25.4
300	12	323.8	4.57	6.35	8.38	9.53	10.31	14.27	12.7	17.48	21.44	25.4	28.58	33.32	25.4
350	14	355.6	6.35	7.92	9.53	9.53	11.13	15.09	12.7	19.05	23.83	27.79	31.75	35.71	
400	16	406.4	6.35	7.92	9.53	9.53	12.7	16.66	12.7	21.44	26.19	30.96	36.53	40.49	

450	18	457	6.35	7.92	11.13	9.53	14.27	19.05	12.7	23.83	29.36	34.93	39.67	45.24	
500	20	508	6.35	9.53	12.7	9.53	15.09	20.62	12.7	26.19	32.54	38.1	44.45	50.01	
550	22	559	6.35	9.53	12.7	9.53		22.23	12.7	28.58	34.93	41.28	47.63	53.98	
600	24	610	6.35	9.53	14.27	9.53	17.48	24.61	12.7	30.96	38.89	46.02	52.37	59.54	
650	26	660	7.92	12.7		9.53			12.7						

Chemical composition (%)

Grade	C	Mn	P	S	Si
Gr.B	≤0.30	0.29-1.06	≤0.035	≤0.035	≤0.10

Mechanical properties

Grade	Tensile strength (Mpa)	Yield strength (Mpa)	Longitudinal elongation (%)
Gr.B	≥415	≥240	≥30

API 5L Seamless Line Pipes

Certification	API 5L-0802, ISO 19001
Standard	API 5L
Grade	Gr.B/ X42/ X52/ X56/ X60/ X65/ X70/ X80
Out Diameter (mm)	1/8" -26" (DN6- DN650)
Wall Thickness (mm)	Sch10 - SchXXS
Length (m)	6M/ 12M or Customized
Ends	Plain/ Bevel
Usage	Water transfer pipes/ Oil pipes and Gas pipes
Surface	Black/ Varnish/ Galvanized/ 3PE/3LPP, etc

API 5L Seamless Steel Pipes Size

Nominal Size	Outside Diameter(D)		Wall Thickness(t)		Weight (Wpe)		Calculated Inside		Hydrostatic test Pressure				
									Grade	Grade A(L 210)		Grade B(L 245)	
	in	mm	in	mm	lb/ft	kg/	in	mm	A25(Std)	Std	Alt	Std	Alt
1/2	0.840	21.3	0.109	2.8	0.85	1.28	0.622	15.7	700	700	—	700	—
			0.147	3.7	1.09	1.61	0.546	13.9	850	850		850	
			0.294	7.5	1.72	2.55	0.252	6.3	1000	1000		1000	
3/4	1.050	26.7	0.113	2.9	1.13	1.70	0.824	20.9	700	700	—	700	—
			0.154	3.9	1.48	2.19	0.742	18.9	820	820		850	
			0.308	7.8	2.44	3.64	0.434	11.1	1000	1000		1000	
1	1.315	33.4	0.133	3.4	1.68	2.52	1.049	26.6	700	700	—	700	—
			0.179	4.5	2.17	3.21	0.957	24.4	850	850		850	
			0.358	9.1	3.66	5.45	0.599	15.2	1000	1000		1000	
1 1/4	1.660	42.2	0.140	3.6	2.27	3.43	1.380	35.0	1000	1200	—	1300	—
			0.191	4.9	3	4.51	1.278	32.4	1300	1800		1900	
			0.382	9.7	5.22	7.77	0.896	22.8	1400	2200		2300	
1 1/2	1.900	48.3	0.145	3.7	2.72	4.07	1.610	40.9	1000	1200	—	1300	—
			0.200	5.1	3.63	5.43	1.500	38.1	1300	1800		1900	
			0.400	10.2	6.41	9.58	1.100	27.9	1400	2200		2300	

Nominal Size	Outside Diameter(D)		Wall Thickness(t)	Weight (Wpe)		Hydrostatic test Pressure(psi)						
	in	mm	mm	lb/ft	kg/m		Grade B (L245)	Grade X42 (L290)	Grade X46 (L330)	Grade ×52 (L360)	Grade X56 (L390)	Grade X60 (L415)
2	2 3/8	60.3	2.1	2.03	3.01	Std	1470	1760	1930	2180	2350	2520
						Alt	1830	2200	2410	2730	2940	3150
			2.8	2.64	3.97	Std	1930	2310	2530	2860	3000	3000
						Alt	2410	2890	3170	3580	3860	4130
			3.2	3.01	4.51	Std	2210	2650	2910	3000	3000	3000
						Alt	2500	3320	3630	4110	4420	4740
			3.6	3.37	5.03	Std	2490	2990	3000	3000	3000	3000
						Alt	2500	3740	4100	4630	4990	5340
			3.9	3.66	5.42	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	4090	4470	5060	5450	5840
			4.4	4.05	6.07	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	4560	5000	5650	6080	7120
			4.8	4.40	6.57	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	4990	5460	6170	6650	7120
			5.5	5.03	7.43	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	5780	6330	7160	7260	7260
			6.4	5.68	8.51	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	6630	7260	7260	7260	7260
			7.1	6.29	9.31	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	7260	7260	7260	7260	7260
			11.1	9.04	13.47	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	7260	7260	7260	7260	7260
2 1/2	2 7/8	73.0	2.1	2.48	3.67	Std	1210	1460	1590	1800	1940	2080
						Alt	1520	1820	1990	2250	2430	2430
			2.8	3.22	4.85	Std	1590	1910	2090	2370	2550	2730
						Alt	1990	2390	2620	2960	3180	3180
			3.2	3.67	5.51	Std	1830	2190	2400	2710	2920	3000
						Alt	2280	2740	3000	3390	3650	3910
			3.6	4.12	6.16	Std	2060	2470	2710	3000	3000	3000
						Alt	2500	3090	3380	3830	4120	4410
			4	4.53	6.81	Std	2280	2730	3000	3000	3000	3000
						Alt	2500	3420	3740	4230	4560	4880
			4.4	4.97	7.44	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	3770	4130	4670	5030	5380
			4.8	5.40	8.07	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	4120	4510	5100	5490	5890

Nominal Size	Outside Diameter(D)		Wall Thickness(t)	Weight (Wpe)		Hydrostatic test Pressure(psi)						
	in	mm	mm	lb/ft	kg/m		Grade B (L245)	Grade X42 (L290)	Grade X46 (L330)	Grade ×52 (L360)	Grade X56 (L390)	Grade X60 (L415)
2 1/2	2 7/8	73.0	5.2	5.80	8.69	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	4450	4870	5510	5930	6350
			5.5	6.14	9.16	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	4730	5180	5860	6310	6760
			6.4	7.02	10.51	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	5480	6000	6780	7260	7260
			7	7.67	11.39	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	6050	6620	7260	7260	7260
3	3 1/2	88.9	2.1	3.03	4.50	Std	1000	1200	1310	1480	1590	1710
						Alt	1250	1490	1640	1850	1990	2130
			2.8	3.95	5.95	Std	1310	1570	1720	1940	2090	2240
						Alt	1640	1960	2150	2430	2620	2800
			3.2	4.51	6.76	Std	1500	1800	1970	2230	2400	2570
						Alt	1880	2250	2460	2790	3000	3210
			3.6	5.06	7.57	Std	1690	2030	2220	2510	2710	2900
						Alt	2120	2540	2780	2940	3380	3630
			4.0	5.58	8.37	Std	1870	2250	2460	2780	3000	3000
						Alt	2340	2810	3080	3480	3740	4010
			4.4	6.12	9.17	Std	2060	2480	2710	3000	3000	3000
						Alt	2500	3100	3390	3830	4130	4420
			4.8	6.66	9.95	Std	2260	2710	2970	3000	3000	3000
						Alt	2500	3380	3710	4190	4510	4830
			5.5	7.58	11.31	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	3890	4260	4810	5180	5550
			6.4	8.69	13.02	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	4500	4930	5570	6000	6430
			7.1	9.67	14.32	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	5060	5540	6260	6740	7230
			7.6	10.26	15.24	Std	2500	3000	3000	3000	3000	3000
						Alt	2500	5400	5910	6690	7200	7260
3 1/2	4	101.6	2.1	3.48	5.15	Std	870	1050	1150	1290	1390	1490
						Alt	1090	1310	1430	1620	1740	1870
			2.8	4.53	6.82	Std	1140	1370	1500	1700	1830	1960
						Alt	1430	1720	1880	2130	2290	2450
			3.2	5.18	7.76	Std	1310	1580	1730	1950	2100	2250
						Alt	1640	1970	2160	2440	2630	2810

Nominal Size	Outside Diameter(D)		Wall Thickness(t)	Weight (Wpe)			Hydrostatic test Pressure(psi)					
	in	mm	mm	lb/ft	kg/m		Grade B (L245)	Grade X42 (L290)	Grade X46 (L330)	Grade ×52 (L360)	Grade X56 (L390)	Grade X60 (L415)
3 1/2	4	101.6	3.6	5.82	8.70	Std	1480	1780	1950	2200	2370	2540
						Alt	1850	2220	2430	2750	2960	3170
			4.0	6.41	9.63	Std	1640	1970	2150	2430	2620	2810
						Alt	2050	2460	2690	3040	3280	3510
			4.4	7.04	10.55	Std	1810	2170	2370	2680	2890	3000
						Alt	2260	2710	2970	3350	3610	3870
			4.8	7.66	11.46	Std	1970	2370	2590	2930	3000	3000
						Alt	2470	2960	3240	3670	3950	4230
			5.7	9.12	13.48	Std	2370	2850	3000	3000	3000	3000
						Alt	2800	3560	3900	4410	4750	5090
			6.4	10.02	15.02	Std	2630	3000	3000	3000	3000	3000
						Alt	2800	3940	4310	4880	5250	5630
			7.1	11.17	16.55	Std	2800	3000	3000	3000	3000	3000
						Alt	2800	4430	4850	5480	5900	6320
			8.1	12.52	18.68	Std	2800	3000	3000	3000	3000	3000
						Alt	2800	5010	5490	6200	6680	7160
4	4 1/2	114.3	2.1	3.92	5.81	Std	770	930	1020	1150	1240	1330
						Alt	970	1160	1270	1440	1550	1660
			3.2	5.85	8.77	Std	1170	1400	1530	1730	1870	2000
						Alt	1460	1750	1920	2170	2330	2500
			3.6	6.57	9.83	Std	1320	1580	1730	1760	2110	2260
						Alt	1650	1970	2160	2440	2630	2820
			4.0	7.24	10.88	Std	1460	1750	1910	2160	2330	2500
						Alt	1820	2180	2390	2700	2910	3120
			4.4	7.96	11.92	Std	1610	1930	2110	2390	2570	2750
						Alt	2010	2410	2640	2980	3210	3440
			4.8	8.67	12.96	Std	1750	2110	2310	2610	2810	3000
						Alt	2190	2630	2880	3260	3510	3760
			5.2	9.32	13.99	Std	1890	2270	2490	2810	3000	3000
						Alt	2370	2840	3110	3520	3790	4060
			5.6	10.02	15.01	Std	2040	2450	2690	3000	3000	3000
						Alt	2560	3070	3360	3800	4090	4380
			6.0	10.80	16.02	Std	2210	2650	2910	3000	3000	3000
						Alt	2770	3320	3630	4110	4420	4740
			6.4	11.36	17.03	Std	2330	2800	3000	3000	3000	3000
						Alt	2800	3500	3830	4330	4670	5000

Nominal Size	Outside Diameter(D)		Wall Thickness(t)	Weight (Wpe)		Hydrostatic test Pressure(psi)						
	in	mm	mm	lb/ft	kg/m		Grade B (L245)	Grade X42 (L290)	Grade X46 (L330)	Grade ×52 (L360)	Grade X56 (L390)	Grade X60 (L415)
4	4 1/2	114.3	7.1	12.67	18.77	Std	2620	3000	3000	3000	3000	3000
						Alt	2800	3930	4310	4870	5250	5620
			7.9	13.97	20.73	Std	2800	3000	3000	3000	3000	3000
						Alt	2800	4370	4780	5410	5820	6240
			8.6	15.00	22.42	Std	2800	3000	3000	3000	3000	3000
						Alt	2800	4720	5170	5840	6290	6740
			11.1	19.02	28.25	Std	2800	3000	3000	3000	3000	3000
						Alt	2800	6130	6720	7260	7260	7260
5	9/16	141.3	2.1	4.86	7.21	Std	630	750	820	930	1000	1070
						Alt	780	940	1030	1160	1250	1340
			3.2	7.27	1090	Std	940	1130	1240	1400	1510	1620
						Alt	1180	1420	1550	1750	1890	2020
			4.0	9.02	13.54	Std	1180	1410	1550	1750	1880	2020
						Alt	1470	1770	1930	2190	2360	2520
			4.8	10.80	16.16	Std	1420	1700	1870	2110	2270	2430
						Alt	1770	2130	2330	2640	2840	3040
			5.6	12.51	18.74	Std	1650	1980	2170	2460	2650	2830
						Alt	2070	2480	2720	3070	3310	3540
			6.6	14.63	21.92	Std	1950	2340	2560	2890	3000	3000
						Alt	2430	2920	3200	3620	3900	4170
			7.1	15.87	23.50	Std	2120	2550	2790	3000	3000	3000
						Alt	2650	3180	3490	3940	4240	4550
			7.9	17.51	25.99	Std	2360	2830	3000	3000	3000	3000
						Alt	2800	3530	3870	4370	4710	5050
			8.7	19.19	28.45	Std	2600	3000	3000	3000	3000	3000
						Alt	2800	3900	4270	4820	5190	5570
			9.5	20.80	30.88	Std	2800	3000	3000	3000	3000	3000
						Alt	2800	4250	4650	5260	5660	6070
6	6 5/8	168.3	2.1	5.8	8.61	Std	530	790	860	980	1050	1130
						Alt	660	790	860	980	1050	1130
			2.8	7.59	11.43	Std	690	1040	1140	1280	1380	1480
						Alt	860	1040	1140	1280	1380	1480
			3.2	8.69	13.03	Std	790	1190	1300	1470	1580	1700
						Alt	990	1190	1300	1470	1580	1700
			3.6	9.77	14.62	Std	890	1340	1470	1660	1790	1920
						Alt	1120	1340	1470	1660	1790	1920

Nominal Size	Outside Diameter(D)		Wall Thickness(t)	Weight (Wpe)		Hydrostatic test Pressure(psi)						
	in	mm	mm	lb/ft	kg/m		Grade B (L245)	Grade X42 (L290)	Grade X46 (L330)	Grade ×52 (L360)	Grade X56 (L390)	Grade X60 (L415)
6	6 5/8	168.3	4	10.79	16.21	Std	990	1480	1620	1840	1980	2120
						Alt	1240	1480	1620	1840	1980	2120
			4.4	11.87	17.78	Std	1090	1640	1790	2030	2180	2340
						Alt	1360	1640	1790	2030	2180	2340
			4.8	12.94	19.35	Std	1190	1790	1960	2210	2380	2550
						Alt	1490	1790	1960	2210	2380	2550
			5.2	13.94	20.91	Std	1290	1930	2110	2390	2570	2760
						Alt	1610	1930	2110	2390	2570	2760
			5.6	15.00	22.47	Std	1390	2080	2280	2580	2780	2980
						Alt	1740	2080	2280	2580	2780	2980
			6.4	17.04	25.55	Std	1580	2380	2600	2940	3000	3000
						Alt	1980	2380	2600	2940	3170	3400
			7.1	18.99	28.22	Std	1780	2660	2920	3000	3000	3000
						Alt	2220	2660	2920	3300	3550	3800
			7.9	21.06	31.25	Std	1980	2970	3000	3000	3000	3000
						Alt	2470	2970	3250	3670	3960	4240
			8.7	23.10	34.24	Std	2180	3000	3000	3000	3000	3000
						Alt	2730	3270	3580	4050	4360	4670
			9.5	25.05	37.20	Std	2380	3000	3000	3000	3000	3000
						Alt	2800	3570	3910	4420	4750	5090
			11.0	28.60	42.67	Std	2740	3000	3000	3000	3000	3000
						Alt	2800	4110	4500	5090	5480	5870
8	8 5/8	219.1	3.2	11.36	17.04	Std	610	910	1000	1130	1220	1300
						Alt	760	910	1000	1130	1220	1300
			4.0	14.12	21.22	Std	760	1140	1250	1410	1520	1630
						Alt	950	1140	1250	1410	1520	1630
			4.8	16.96	25.37	Std	920	1370	1500	1700	1830	1960
						Alt	1140	1370	1500	1700	1830	1960
			5.2	18.28	27.43	Std	990	1480	1620	1840	1980	2120
						Alt	1240	1480	1620	1840	1980	2120
			5.6	19.68	29.48	Std	1070	1600	1750	1980	2130	2290
						Alt	1330	1600	1750	1980	2130	2290
			6.4	22.38	33.57	Std	1220	1830	2000	2260	2430	2610
						Alt	1520	1830	2000	2260	2430	2610
			7.0	24.72	36.61	Std	1350	2020	2220	2510	2700	2890
						Alt	1690	2020	2220	2510	2700	2890

Nominal Size	Outside Diameter(D)		Wall Thickness(t)	Weight (Wpe)		Hydrostatic test Pressure(psi)						
	in	mm	mm	lb/ft	kg/m		Grade B (L245)	Grade X42 (L290)	Grade X46 (L330)	Grade ×52 (L360)	Grade X56 (L390)	Grade X60 (L415)
8	8 5/8	219.1	7.9	27.73	41.14	Std	1520	2280	2500	2820	3000	3000
						Alt	1900	2280	2500	2820	3040	3260
			8.2	28.58	42.65	Std	1570	2350	2580	2910	3000	3000
						Alt	1960	2350	2580	2910	3140	3360
			8.7	30.45	45.14	Std	1680	2510	2750	3000	3000	3000
						Alt	2090	2510	2750	3110	3350	3590
			9.5	33.07	49.10	Std	1830	2740	3000	3000	3000	3000
						Alt	2280	2740	3000	3390	3650	3910
			11.1	38.33	56.94	Std	2130	3000	3000	3000	3650	3000
						Alt	2670	3200	3500	3960	4270	4570
			12.7	43.43	64.64	Std	2430	3000	3000	3000	3000	3000
						Alt	2800	3650	4000	4520	4870	5220
10	10 3/4	273.1	4.0	17.67	26.54	Std	610	1040	1130	1280	1380	1480
						Alt	760	1040	1130	1280	1380	1480
			4.8	21.23	31.76	Std	730	1250	1370	1550	1660	1780
						Alt	920	1250	1370	1550	1660	1780
			5.2	22.89	34.35	Std	790	1350	1480	1670	1800	1930
						Alt	990	1350	1480	1670	1800	1930
			5.6	24.65	36.94	Std	860	1450	1590	1800	1940	2080
						Alt	1070	1450	1590	1800	1940	2080
			6.4	28.06	42.09	Std	980	1660	1820	2060	2210	2370
						Alt	1220	1660	1820	2060	2210	2370
			7.1	31.23	46.57	Std	1090	1850	2030	2290	2470	2650
						Alt	1360	1850	2030	2290	2470	2650
			7.8	34.27	51.03	Std	1200	2040	2230	2520	2720	2910
						Alt	1500	2040	2230	2520	2720	2910
			8.7	38.27	56.72	Std	1340	2280	2500	2830	3000	3000
						Alt	1680	2280	2500	2830	3050	3260
			9.3	40.52	60.50	Std	1430	2420	2660	3000	3000	3000
						Alt	1780	2420	2660	3000	3230	3460
			11.1	48.28	71.72	Std	1710	2910	3000	3000	3000	3000
						Alt	2140	2910	3190	3600	3880	4160
			12.7	54.79	81.55	Std	1950	3000	3000	3000	3000	3000
						Alt	2440	3320	3640	4110	4430	4740

API 5CT Tubing (OCTG: Oil Country Tubular Goods)

Certification	API 5CT-0755, ISO 19001
Standard	API 5CT
Grade	J55/ K55/ N80/QL80/ C90/ C95/ T95/ P110/ Q125
Out Diameter (mm)	1.05" - 4 1/2"
Wall Thickness (mm)	2.9 - 16 mm
Length (m)	R1/ R2/ R3
Ends	BTC (Buttress Thread Coupling), LTC (Long Buttress Thread Coupling), Premium connection.

API 5CT SMLS Tubing Size

Size	Outside Diameter (OD)		Wall Thickness (t)		Weight (Wpe)		Hydrostatic test Pressure (psi)				
	in	mm	in	mm	lb/ft	kg/m		H40	J55	N80	L80
3/4	1.05	26.7	0.113	2.9	1.13	1.7	Std	3000	3000	3000	3000
							Alt	6900	9500	—	—
			0.154	3.9	1.48	2.19	Std	3000	3000	3000	3000
							Alt	9400	10000	—	—
1	1.315	33.4	0.133	3.4	1.68	2.52	Std	3000	3000	3000	3000
							Alt	6500	8900	—	—
			0.179	4.5	2.17	3.21	Std	3000	3000	3000	3000
							Alt	8700	10000	—	—
1 1/4	1.66	42.2	0.125	3.2	2.05	3.08	Std	3000	3000	3000	3000
							Alt	4800	6600	—	—
			0.14	3.6	2.27	3.43	Std	3000	3000	—	—
							Alt	5400	7400	—	—
			0.191	4.9	3	4.51	Std	3000	3000	3000	3000
							Alt	7400	10000	—	—
1 1/2	1.9	48.3	0.125	3.2	2.37	3.56	Std	3000	3000	3000	3000
							Alt	4200	5800	—	—
			0.145	3.7	2.72	4.07	Std	3000	3000	3000	3000
							Alt	4900	6700	—	—
			0.2	5.1	3.63	5.43	Std	3000	3000	3000	3000
							Alt	6700	9300	—	—

Size	Outside Diameter (OD)		Wall Thickness (t)		Weight (Wpe)		Hydrostatic test Pressure (psi)				
	in	mm	in	mm	lb/ft	kg/m		H40	J55	N80	L80
1 1/2	1.9	48.3	0.25	6.4	4.41	6.6	Std	—	—	—	3000
							Alt	—	—	—	—
			0.3	7.6	5.13	7.63	Std	—	—	—	3000
							Alt	—	—	—	—
2 3/8	2.375	60.3	0.167	4.2	3.94	5.81	Std	3000	3000	3000	3000
							Alt	4500	6200	—	—
			0.19	4.8	4.44	6.57	Std	3000	3000	3000	3000
							Alt	5100	7000	—	—
			0.254	6.5	5.76	8.62	Std	—	—	—	3000
							Alt	—	—	—	—
			0.295	7.5	6.56	9.77	Std	—	—	—	3000
							Alt	—	—	—	—
			0.336	8.5	7.67	10.86	Std	—	—	—	3000
							Alt	—	—	—	—
2 7/8	2.875	73	0.217	5.5	6.17	9.16	Std	3000	3000	3000	3000
							Alt	4800	6600	—	—
			0.276	7	7.32	11.39	Std	—	—	3000	3000
							Alt	—	—	—	—
			0.308	7.8	8.45	12.54	Std	—	—	3000	3000
							Alt	—	—	—	—
			0.34	8.6	9.21	13.66	Std	—	—	—	3000
							Alt	—	—	—	—
			0.392	10	10.4	15.54	Std	—	—	—	3000
							Alt	—	—	—	—
			0.44	11.2	11.45	17.07	Std	—	—	—	3000
							Alt	—	—	—	—
3 1/2	3.500	88.9	0.216	5.5	7.58	11.31	Std	3000	3000	3000	3000
							Alt	3900	5400	—	—
			0.254	6.5	8.81	13.21	Std	3000	3000	3000	3000
							Alt	4600	6400	—	—
			0.289	7.3	9.92	14.69	Std	3000	3000	3000	3000
							Alt	5300	7300	—	—
			0.375	9.5	12.53	18.6	Std	—	—	—	3000
							Alt	—	—	—	—
			0.43	10.9	14.11	20.97	Std	—	—	—	3000
							Alt	—	—	—	—
			0.476	12.1	15.39	22.92	Std	—	—	—	—
							Alt	—	—	—	—
			0.530	13.5	16.83	25.10	Std	—	—	—	3000
							Alt	—	—	—	—

Size	Outside		Wall		Weight		Hydrostatic test Pressure				
	in	mm	in	mm	lb/ft	kg/m		H40	J55	N80	L80
4	4.000	101.6	0.226	5.7	9.12	13.48	Std	3000	3000	3000	3000
							Alt	3600	5000	—	—
			0.262	6.7	10.47	15.68	Std	3000	3000	3000	3000
							Alt	4200	5800	—	—
			0.330	8.4	12.95	19.31	Std	—	—	—	3000
							Alt	—	—	—	—
			0.415	10.5	15.90	23.59	Std	—	—	—	3000
							Alt	—	—	—	—
			0.500	12.7	18.71	27.84	Std	—	—	—	3000
							Alt	—	—	—	—
			0.610	15.5	22.11	32.91	Std	—	—	—	3000
							Alt	—	—	—	—
4 1/2	4.500	114.3	0.271	6.9	12.25	18.27	Std	3000	3000	3000	3000
							Alt	3900	5300	—	—
			0.337	8.6	15	22.42	Std	—	—	—	3000
							Alt	—	—	—	—
			0.38	9.7	16.77	25.02	Std	—	—	—	3000
							Alt	—	—	—	—
			0.430	10.9	18.71	27.79	Std	—	—	—	3000
							Alt	—	—	—	—
			0.500	12.7	21.38	31.82	Std	—	—	—	3000
							Alt	—	—	—	—
			0.560	14.2	23.59	35.05	Std	—	—	—	3000
							Alt	—	—	—	—
			0.630	16.0	26.06	38.79	Std	—	—	—	3000
							Alt	—	—	—	—

API 5CT Casing (OCTG: Oil Country Tubular Goods)

Certification	API 5CT-0802, ISO 19001
Standard	API 5CT
Grade	J55/ K55/ N80/QL80/ C90/ C95/ T95/ P110/ Q125
Out Diameter (mm)	4 1/2" - 20"
Wall Thickness (mm)	5.21 - 16.13 mm
Length (m)	R1/ R2/ R3
Ends	BTC (Buttress Thread Coupling), LTC (Long Buttress Thread Coupling), Premium connection.

API 5CT SMLS Casing Size

Size	Outside Diameter (OD)		Wall Thickness (T)		Weight (Wpe)		Hydrostatic test Pressure (psi)					
	in	mm	in	mm	lb/ft	kg/m		H40	J55/K55	M65	N80	L80
4 1/2	4.500	114.3	0.205	5.2	9.41	13.99	Std	2900	3000	3000	—	—
							Alt	—	4000	—	—	—
			0.224	5.7	10.24	15.27	Std	—	3000	3000	—	—
							Alt	—	4400	—	—	—
			0.250	6.4	11.36	17.03	Std	—	3000	3000	3000	3000
							Alt	—	4900	—	—	—
			0.290	7.4	13.05	19.51	Std	—	—	3000	3000	3000
							Alt	—	—	—	—	—
			0.337	8.6	15.00	22.42	Std	—	—	—	—	—
							Alt	—	—	—	—	—
6 5/8	6.625	168.3	0.288	7.3	19.51	28.98	Std	2800	2700	3000	—	—
							Alt	—	—	—	—	—
			0.352	8.9	23.60	34.98	Std	—	—	—	—	—
							Alt	—	—	—	—	—
			0.417	10.6	27.67	41.22	Std	—	3000	3000	—	—
							Alt	—	3600	—	—	—
			0.415	12.1	31.23	46.61	Std	—	3000	3000	3000	3000
							Alt	—	4100	—	—	—
8 5/8	8.625	219.1	0.264	6.7	23.60	35.09	Std	—	—	3000	3000	3000
							Alt	—	—	—	—	—
			0.304	7.7	27.04	40.14	Std	2300	—	3000	3000	3000
							Alt	—	—	—	—	—
			0.352	8.9	31.13	46.13	Std	2600	—	—	3000	3000
							Alt	—	—	—	—	—

Size	Outside Diameter (OD)		Wall Thickness (T)		Weight (Wpe)		Hydrostatic test Pressure (psi)					
	in	mm	in	mm	lb/ft	kg/m		H40	J55/K55	M65	N80	L80
8 5/8	8.625	219.1	0.400	10.2	35.17	52.55	Std	—	—	—	—	—
							Alt	—	—	—	—	—
			0.450	11.4	39.33	58.39	Std	—	—	—	—	—
							Alt	—	—	—	—	—
			0.500	12.7	43.43	64.64	Std	—	—	—	—	—
							Alt	—	—	—	—	—
			0.557	14.1	48.04	71.28	Std	—	—	—	—	—
							Alt	—	—	—	—	—
10 3/4	10.750	273.1	0.279	7.1	31.23	46.57	Std	1200	—	—	—	—
							Alt	1700	—	—	—	—
			0.350	8.9	38.91	57.99	Std	1600	2100	3000	—	—
							Alt	2100	2900	—	—	—
			0.400	10.2	44.26	66.13	Std	—	2500	3900	—	—
							Alt	—	3300	—	—	—
			0.450	11.4	49.55	73.57	Std	—	2800	3000	3000	3000
							Alt	—	3700	—	—	—
			0.495	12.6	54.26	80.94	Std	—	—	3000	3000	3000
							Alt	—	—	—	—	—
			0.545	13.8	59.45	88.24	Std	—	—	—	—	—
							Alt	—	—	—	—	—
			0.595	15.1	64.59	96.07	Std	—	—	—	—	—
							Alt	—	—	—	—	—
			0.672	17.1	72.40	107.95	Std	—	—	—	—	—
							Alt	—	—	—	—	—
			0.734	18.6	78.59	116.73	Std	—	—	—	—	—
							Alt	—	—	—	—	—
			0.797	20.2	84.80	125.98	Std	—	—	—	—	—
							Alt	—	—	—	—	—
16	16.000	406.4	0.375	9.5	62.64	92.98	Std	1100	—	—	—	—
							Alt	—	—	—	—	—
			0.438	11.1	72.86	108.20	Std	—	1800	2800	—	—
							Alt	—	—	—	—	—
			0.495	12.6	82.05	122.36	Std	—	2000	3000	—	—
							Alt	—	—	—	—	—
			0.656	16.7	107.60	160.49	Std	—	—	—	3000	—
							Alt	—	—	—	—	—
20	20.000	508.0	0.438	11.1	91.59	136.01	Std	1100	1400	2300	—	—
							Alt	—	—	—	—	—
			0.500	12.7	104.23	155.12	Std	—	1600	2600	—	3000
							Alt	—	—	—	—	—
			0.635	16.1	131.45	195.30	Std	—	2100	—	—	—
							Alt	—	—	—	—	—

Chemical composition (%)

Group	Grade	Type	C		Mn		Mo		Cr		Ni	Cu	P	S	Si
			min	max	min	max	min	max	min	max	max	max	max	max	max
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*
1	H40	-	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
	J55	-	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
	K55	-	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
	N80	1	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
	N80	Q	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
2	M65	-	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
	L80	1	-	0.43[a]	-	1.90	-	-	-	-	0.25	0.35	0.030	0.030	0.45
	L80	9Cr	-	0.15	0.30	0.60	0.90	1.10	8.00	10.0	0.50	0.25	0.020	0.010	1.00
	L80	13Cr	0.15	0.22	0.25	1.00	-	-	12.0	14.0	0.50	0.25	0.020	0.010	1.00
	C90	1	-	0.35	-	1.20	0.25[b]	0.85	-	1.50	0.99	-	0.020	0.010	-
	C90	2	-	0.50	-	1.90	-	NL	-	NL	0.99	-	0.030	0.010	-
	C95	-	-	0.45[c]	-	1.90	-	-	-	-	-	-	0.030	0.030	0.45
	T95	1	-	0.35	-	1.20	0.25[d]	0.85	0.40	1.50	0.99	-	0.020	0.010	-
	T95	2	-	0.50	-	1.90	-	-	-	-	0.99	-	0.030	0.010	-
3	P110	[e]	-	-	-	-	-	-	-	-	-	-	0.030[e]	0.030[e]	-
4	Q125	1	-	0.35	-	1.35	-	0.85	-	1.50	0.99	-	0.020	0.010	-
	Q125	2	-	0.35	-	1.00	-	NL	-	NL	0.99	-	0.020	0.020	-
	Q125	3	-	0.50	-	1.90	-	NL	-	NL	0.99	-	0.030	0.010	-
	Q125	4	-	0.50	-	1.90	-	NL	-	NL	0.99	-	0.030	0.020	-

a The carbon content for L80 may be increased up to 0.50 % max. if the product is oil-quenched.
b The molybdenum content for Grade C90 Type 1 has no minimum tolerance if the wall thickness is less than 0.700 in.
c The carbon content for R95 may be increased up to 0.55 % max. if the product is oil-quenched.
d The molybdenum content for T95 Type 1 may be decreased to 0.15 % min. if the wall thickness is less than 0.700 in.
e For EW Grade P110, the phosphorus content shall be 0.020 % max. and the sulfur content 0.010 % max.
I I
NL = no limit. Elements shown shall be reported in product analysis.

Mechanical properties

Group	Grade	Type	Total %	Yield Strength ksi		Tensile Strength	Hardness max		Specified Wall Thickness	Allowable Hardness Variation HRC
				min	max	Min ksi	HRC	HBW/HBS	In.	
1	H40	-	0.5	40	80	60	-	-	-	-
	J55	-	0.5	55	80	75	-	-	-	-
	K55	-	0.5	55	80	95	-	-	-	-
	N80	1	0.5	80	110	100	-	-	-	-
	N80	Q	0.5	80	110	100	-	-	-	-
2	M65	-	0.5	65	85	85	22	235	-	-
	L80	1	0.5	80	95	95	23	241	-	-
	L80	9Cr	0.5	80	95	95	23	241	-	-
	L80	13Cr	0.5	80	95	95	23	241	-	-
	C90	1, 2	0.5	90	105	100	25.4	255	≤0.500	3.0
	C90	1, 2	0.5	90	105	100	25.4	255	0.501 ~ 0.749	4.0
	C90	1, 2	0.5	90	105	100	25.4	255	0.750 ~ 0.999	5.0
	C90	1, 2	0.5	90	105	100	25.4	255	≥1.000	6.0
	C95	-	0.5	95	110	105	-	-	-	-
	T95	1, 2	0.5	95	110	105	25.4	255	≤0.500	3.0
	T95	1, 2	0.5	95	110	105	25.4	255	0.501 ~ 0.749	4.0
	T95	1, 2	0.5	95	110	105	25.4	255	0.750 ~ 0.999	5.0
	T95	1, 2	0.5	95	110	105	25.4	255	≥1.000	6.0
3	P110	-	0.6	110	140	125	-	-	-	-
4	Q125	-	0.65	125	150	135	[b]	-	≤0.500	3.0
	Q125	-	0.65	125	150	135	[b]	-	0.501 ~ 0.749	4.0
	Q125	-	0.65	125	150	135	[b]	-	≥0.750	5.0

ASTM A500 Round Tubes

Certification	ISO 19001
Standard	ASTM A500
Grade	Grade A/ B/ C/ D
Out Diameter (mm)	1/2" - 24"
Wall Thickness (mm)	Sch10/ Sch40/ Sch80/ Sch160
Length (m)	6M/ 12M or customized
Ends	Plain/ Bevel/ Threaded/ Grooved
Surface	Black/ Vanish/ Galvanized/ 3PE, etc

API 500 ERW Steel Tube Size

Nominal Size	Outside Diameter		Wall Thickness		Weight		
	in	mm	in	mm	lb/ft	kg/ft	kg/m
1/2	0.840	21.3	0.109	2.77	0.85	0.39	1.27
3/4	1.050	26.7	0.113	2.87	1.13	0.51	1.69
1	1.315	33.4	0.104	2.64	1.34	0.61	2.00
1 1/4	1.660	42.2	0.110	2.79	1.81	0.82	2.71
	1.660	42.2	0.140	3.56	2.27	1.03	3.39
	1.660	42.2	0.191	4.85	3.00	1.36	4.47
1 1/2	1.900	48.3	0.114	2.90	2.17	0.98	3.25
	1.900	48.3	0.145	3.68	2.72	1.23	4.05
	1.900	48.3	0.200	5.08	3.63	1.64	5.41
2	2.375	60.3	0.121	3.07	2.92	1.32	4.33
	2.375	60.3	0.154	3.91	3.65	1.66	5.44
	2.375	60.3	0.218	5.54	5.02	2.28	7.48
2 1/2	2.875	73.0	0.156	3.96	4.53	2.05	6.74
	2.875	73.0	0.188	4.78	5.40	2.45	8.04
	2.875	73.0	0.203	5.16	5.79	2.63	8.63
	2.875	73.0	0.276	7.01	7.66	3.47	11.41
3	3.500	88.9	0.156	3.96	5.58	2.53	8.29
	3.500	88.9	0.188	4.78	6.63	3.01	9.92
	3.500	88.9	0.226	5.49	7.58	3.44	11.29
3 1/2	4.000	101.6	0.156	3.96	6.40	2.90	9.53
	4.000	101.6	0.188	4.78	7.63	3.46	11.41
	4.000	101.6	0.226	5.74	9.11	4.13	13.57

Nominal Size	Outside Diameter		Wall Thickness		Weight		
	in	mm	in	mm	lb/ft	kg/ft	kg/m
4	4.500	114.3	0.156	3.96	7.25	3.29	10.78
	4.500	114.3	0.188	4.78	8.64	3.92	12.91
	4.500	114.3	0.219	5.56	10.00	4.54	14.91
	4.500	114.3	0.237	6.02	70.79	4.89	16.07
	4.500	114.3	0.337	8.56	14.98	6.79	22.32
5	5.563	141.3	0.258	6.55	14.62	6.63	21.77
	5.563	141.3	0.375	9.53	20.78	9.43	30.97
6	6.625	168.3	0.280	7.11	18.97	8.60	28.26
8	8.625	219.1	0.322	8.18	28.55	12.95	42.55
	8.625	219.1	0.500	12.70	43.39	19.68	64.64
10	10.750	273.0	0.365	9.27	40.48	18.36	60.29
	10.750	273.0	0.500	12.70	54.74	24.83	81.52
12	12.750	323.8	0.375	9.53	49.56	22.48	73.78
	12.750	323.8	0.500	12.70	65.42	29.67	97.43
14	14.000	355.6	0.375	9.52	54.57	24.75	81.25
	14.000	355.6	0.500	12.70	72.09	32.70	107.39
16	16.000	406.4	0.375	9.52	62.58	28.39	93.17
	16.000	406.4	0.500	12.70	82.77	37.54	123.30

Chemical composition (%)

ELEMENT	COMPOSITION			
	Grade A, B and D		Grade C	
	Heat Analysis	Product Analysis	Heat Analysis	Product Analysis
Carbon, Max	0.26	0.3	0.23	0.27
Manganese, Max	1.35	1.4	1.35	1.4
Phosphorus	0.035	0.045	0.035	0.045
Sulfur,Max	0.035	0.045	0.035	0.045
Copper,Min	0.02	0.18	0.2	0.18

Mechanical properties

	Tensile Strength,min,psi [Mpa]	Yield Strength,min,psi [Mpa]	Elongation in 2 in. [50mm],min,%
Grade A	45 000 [310]	33 000 [228]	25B
Grade B	58 000 [400]	42 000 [290]	23C
Grade C	62 000 [427]	46 000 [317]	21D
Grade D	58 000 [400]	36 000 [250]	23C

Hot Dipped Galvanized Steel Pipes and Tubes

Certification	ISO 19001
Out Diameter (mm)	1/8" - " (DN6 - DN150)
Wall Thickness (mm)	2.0mm-5.4mm
Length (m)	6M/ 12M or customized
Ends	Grooved/ Threaded/ Plain/Bevel
The thickness of the Zinc	200 - 550 g/㎡

Hot dipped galvanized is an effective anti-corrosion treatment for a wide range of steel products.
Hot dip galvanized pipes are manufactured by dipping the descaled steel pipe into a zinc solution at around 500°C. The galvanized layer enhances the anti-corrosion properties of the steel pipe and extends the service life of the pipe.

Hot dipped galvanized steel pipe is mostly utilized in the transmission of coal, gas, and steam, also used for construction, such as scaffolding, greenhouse, and structure.

Hot Dipped Galvanized Steel Tube Size

	Out Diameter			Seamless and Welded Steel Pipe											
	DN	NPS	mm	10	20	30	STD	40	60	XS	80	100	120	140	160	XXS
1	6	1/8	10.3				1.73	1.73		2.41	2.41					
2	8	1/4	13.7				2.24	2.24		3.02	3.02					
3	10	3/8	17.1				2.31	2.31		3.20	3.20					
4	15	1/2	21.3	2.11		2.41	2.77	2.77		3.73	3.73				4.78	7.47
5	20	314	26.7	2.11		2.41	2.87	2.87		3.91	3.91				5.56	7.82
6	25	1	33.4	2.77		2.90	3.38	3.38		4.55	4.55				6.35	9.09
7	32	11/4	42.2				3.56	3.56		4.85	4.85				6.35	9.7
8	40	11/2	48.3	2.77		3.18	3.68	3.68		5.08	5.08				7.14	10.15
9	50	2	60.3	2.77		3.18	3.91	3.91		5.54	5.54				8.74	11.07
10	65	21/2	73.0				5.16	5.16		7.01	7.01				11.13	14.02
11	80	3	88.9	3.05		4.78	5.49	5.49		7.62	7.62				11.13	15.24
12	90	31/2	101.6				5.74	5.74		8.08	8.08					
13	100	4	114.3	3.05		4.78	6.02	6.02		8.56	8.56		11.13		13.49	17.12
14	125	5	141.3				6.55	6.55		9.53	9.53		12.70		15.88	19.05
15	150	6	168.3	3.40			7.11	7.11		10.97	10.97		14.27		18.26	21.95
16	200	8	219.1	3.76	6.35	7.04	8.18	8.18	10.31	12.70	12.70	15.09	18.26	20.62	23.01	22.23
17	250	10	273	4.19	6.35	7.80	9.27	9.27	12.70	12.70	15.09	18.26	21.44	25.40	28.58	25.40
18	300	12	323.8	4.57	6.35	8.38	9.53	10.31	14.27	12.70	17.48	21.44	25.40	28.58	33.32	25.40
19	350	14	355.6	6.35	7.92	9.53	9.53	11.13	15.09	12.70	19.05	23.83	27.79	31.75	35.71	
20	400	16	406.4	6.35	7.92	9.53	9.53	12.70	16.66	12.70	21.44	26.19	30.96	36.53	40.49	
21	450	18	457	6.35	7.92	11.13	9.53	14.27	19.05	12.70	23.83	29.36	34.93	39.67	45.24	
22	500	20	508	6.35	9.53	12.70	9.53	15.09	20.62	12.70	26.19	32.54	38.10	44.45	50.01	
23	550	22	559	6.35	9.53	12.70	9.53		22.23	12.70	28.58	34.93	41.28	47.63	53.98	
24	600	24	610	6.35	9.53	14.27	9.53	17.48	24.61	12.70	30.96	38.89	46.02	52.37	59.54	

	Out Diameter			Seamless and Welded Steel Pipe											
	DN	NPS	mm	10	20	30	STD	40	60	XS	80	100	120	140	160	XXS
25	650	26	660	7.92	12.70		9.53			12.70						
26	700	28	711	7.92	12.70	15.88	9.53			12.70						
27	750	30	762	7.92	12.70	15.88	9.53			12.70						
28	800	32	813	7.92	12.70	15.88	9.53	17.48		12.70						
29	850	34	864	7.92	12.70	15.88	9.53	17.48		12.70						
30	900	36	914	7.92	12.70	15.88	9.53	19.05		12.70						
31	950	38	965				9.53			12.70						
32	1000	40	1016				9.53			12.70						
33	1050	42	1067				9.53			12.70						
34	1100	44	1118				9.53			12.70						
35	1150	46	1168				9.53			12.70						
36	1200	48	1219				9.53			12.70						
37	1300	52	1321	12.70	14.27	15.88	30.18	17.48	19.05	31.75	20.62	22.23	23.83	25.40	26.97	28.58
38	1400	56	1422	12.70	14.27	15.88	30.18	17.48	19.05	31.75	20.62	22.23	23.83	25.40	26.97	28.58
39	1500	60	1524	12.70	14.27	15.88	30.18	17.48	19.05	31.75	20.62	22.23	23.83	25.40	26.97	28.58
40	1600	64	1626	12.70	14.27	15.88	30.18	17.48	19.05	31.75	20.62	22.23	23.83	25.40	26.97	28.58
41	1700	68	1727	12.70	14.27	15.88	30.18	17.48	19.05	31.75	20.62	22.23	23.83	25.40	26.97	28.58
42	1800	72	1829	12.70	14.27	15.88	30.18	17.48	19.05	31.75	20.62	22.23	23.83	25.40	26.97	28.58