

Rev. 4-99 Shaded area indicates changes

## Commercial wrought steel pipe data (continued)

Nominal pipe size	Outside diameter (D)	Schedule number	Wall thickness (t)	Inside diameter (d)	Area of metal (a)	Traverse internal area		Moment of inertia (I)	Weight of pipe	Weight of Water	External surface	Section modulus
						square inches	square feet (see note 2)					
inches	inches	(see note 1)	inches	inches	square inches	square inches	square feet (see note 2)	inches to 4th power	pounds per foot	pounds per foot of pipe	sq. ft. per foot of pipe	( $2 \frac{I}{D}$ )
10	10.75	20	.250	10.250	8.24	82.52	.5731	113.7	28.04	35.76	2.814	21.15
		30	.307	10.136	10.07	80.69	.5603	137.4	34.24	34.96	2.814	25.57
		40s	.365	10.020	11.90	78.86	.5475	160.7	40.48	34.20	2.814	29.90
		60x	.500	9.750	16.10	74.66	.5185	212.0	54.74	32.35	2.814	39.43
		80	.593	9.564	18.92	71.84	.4989	244.8	64.33	31.13	2.814	45.54
		100	.718	9.314	22.63	68.13	.4732	286.1	76.93	29.53	2.814	53.22
		120	.843	9.064	26.24	64.53	.4481	324.2	89.20	27.96	2.814	60.32
		140	1.000	8.750	30.63	60.13	.4176	367.8	104.13	26.06	2.814	68.43
160	1.125	8.500	34.02	56.75	.3941	399.3	115.65	24.59	2.814	74.29		
12	12.75	20	.250	12.250	9.82	117.86	.8185	191.8	33.38	51.07	3.338	30.20
		30	.330	12.090	12.87	114.80	.7972	248.4	43.77	49.74	3.338	38.10
		...s	.375	12.000	14.58	113.10	.7854	279.3	49.56	49.00	3.338	43.80
		40	.406	11.938	15.77	111.93	.7773	300.3	53.53	48.50	3.338	47.10
		...x	.500	11.750	19.24	108.43	.7528	361.5	65.42	46.92	3.338	56.70
		60	.562	11.626	21.52	106.16	.7372	400.4	73.16	46.00	3.338	62.80
		80	.687	11.376	26.03	101.64	.7058	475.1	88.51	44.04	3.338	74.60
		100	.843	11.064	31.53	96.14	.6677	561.6	107.20	41.66	3.338	88.10
		120	1.000	10.750	36.91	90.76	.6303	641.6	125.49	39.33	3.338	100.70
		140	1.125	10.500	41.08	86.59	.6013	700.5	133.68	37.52	3.338	109.90
160	1.312	10.126	47.14	80.53	.5592	781.1	160.27	34.89	3.338	122.60		
14	14.00	10	.250	13.500	10.80	143.14	.9940	255.3	36.71	62.03	3.665	36.60
		20	.312	13.376	13.42	140.52	.9758	314.4	45.68	60.89	3.665	45.00
		30s	.375	13.250	16.05	137.88	.9575	372.8	54.57	59.75	3.665	53.20
		40	.437	13.126	18.61	135.32	.9397	429.1	63.37	58.64	3.665	61.30
		...x	.500	13.000	21.21	132.73	.9217	483.8	72.09	57.46	3.665	69.10
		60	.593	12.814	24.98	128.96	.8956	562.3	84.91	55.86	3.665	80.30
		80	.750	12.500	31.22	122.72	.8522	687.3	106.13	53.18	3.665	98.20
		100	.937	12.126	38.45	115.49	.8020	824.4	130.73	50.04	3.665	117.80
		120	1.093	11.814	44.32	109.62	.7612	929.6	150.67	47.45	3.665	132.80
		140	1.250	11.500	50.07	103.87	.7213	1027.0	170.22	45.01	3.665	146.80
160	1.406	11.188	55.63	98.31	.6827	1117.0	189.12	42.60	3.665	159.60		
16	16.00	10	.250	15.500	12.37	188.69	1.3103	383.7	42.05	81.74	4.189	48.00
		20	.312	15.376	15.38	185.69	1.2895	473.2	52.36	80.50	4.189	59.20
		30s	.375	15.250	18.41	182.65	1.2684	562.1	62.58	79.12	4.189	70.30
		40x	.500	15.000	24.35	176.72	1.2272	731.9	82.77	76.58	4.189	91.50
		60	.656	14.688	31.62	169.44	1.1766	932.4	107.50	73.42	4.189	116.60
		80	.843	14.314	40.14	160.92	1.1175	1155.8	136.46	69.73	4.189	144.50
		100	1.031	13.938	48.48	152.58	1.0596	1364.5	164.83	66.12	4.189	170.50
		120	1.218	13.564	56.56	144.50	1.0035	1555.8	192.29	62.62	4.189	194.50
		140	1.437	13.126	65.74	135.32	.9397	1760.3	223.64	58.64	4.189	220.00
		160	1.593	12.814	72.10	128.96	.8956	1893.5	245.11	55.83	4.189	236.70
18	18.00	10	.250	17.500	13.94	240.53	1.6703	549.1	47.39	104.21	4.712	61.10
		20	.312	17.376	17.34	237.13	1.6467	678.2	59.03	102.77	4.712	75.50
		...s	.375	17.250	20.76	233.71	1.6230	806.7	70.59	101.18	4.712	89.60
		30	.437	17.126	24.11	230.36	1.5997	930.3	82.06	99.84	4.712	103.40
		...x	.500	17.000	27.49	226.98	1.5763	1053.2	92.45	98.27	4.712	117.00
		40	.562	16.876	30.79	223.68	1.5533	1171.5	104.75	96.93	4.712	130.10
		60	.750	16.500	40.64	213.83	1.4849	1514.7	138.17	92.57	4.712	168.30
		80	.937	16.126	50.23	204.24	1.4183	1833.0	170.75	88.50	4.712	203.80
		100	1.156	15.688	61.17	193.30	1.3423	2180.0	207.96	83.76	4.712	242.30
		120	1.375	15.250	71.81	182.66	1.2684	2498.1	244.14	79.07	4.712	277.60
140	1.562	14.876	80.66	173.80	1.2070	2749.0	274.23	75.32	4.712	305.50		
160	1.781	14.438	90.75	163.72	1.1369	3020.0	308.51	70.88	4.712	335.60		
20	20.00	10	.250	19.500	15.51	298.65	2.0740	756.4	52.73	129.42	5.236	75.60
		20s	.375	19.250	23.12	290.04	2.0142	1113.0	78.60	125.67	5.236	113.30
		30x	.500	19.000	30.63	283.53	1.9690	1457.0	104.13	122.87	5.236	145.70
		40	.593	18.814	36.15	278.00	1.9305	1703.0	122.91	120.46	5.236	170.40
		60	.812	18.376	48.95	265.21	1.8417	2257.0	166.40	114.92	5.236	225.70
		80	1.031	17.938	61.44	252.72	1.7550	2772.0	208.87	109.51	5.236	277.10
		100	1.281	17.438	75.33	238.83	1.6585	3315.2	256.10	103.39	5.236	331.50
		120	1.500	17.000	87.18	226.98	1.5762	3754.0	296.37	98.35	5.236	375.50
		140	1.750	16.500	100.33	213.82	1.4849	4216.0	341.10	92.66	5.236	421.70
		160	1.968	16.064	111.49	202.67	1.4074	4585.5	379.01	87.74	5.236	458.50
24	24.00	10	.250	23.500	18.65	433.74	3.0121	1315.4	63.41	187.95	6.283	109.60
		20s	.375	23.250	27.83	424.56	2.9483	1942.0	94.62	183.95	6.283	161.90
		...x	.500	23.000	36.91	415.48	2.8853	2549.5	125.49	179.87	6.283	212.50
		30	.562	22.876	41.39	411.00	2.8542	2843.0	140.80	178.09	6.283	237.00
		40	.687	22.626	50.31	402.07	2.7921	3421.3	171.17	174.23	6.283	285.10
		60	.968	22.064	70.04	382.35	2.6552	4652.8	238.11	165.52	6.283	387.70
		80	1.218	21.564	87.17	365.22	2.5362	5672.0	296.36	158.26	6.283	472.80
		100	1.531	20.938	108.07	344.32	2.3911	6849.9	367.40	149.06	6.283	570.80
		120	1.812	20.376	126.31	326.08	2.2645	7825.0	429.39	141.17	6.283	652.10
		140	2.062	19.876	142.11	310.28	2.1547	8625.0	483.13	134.45	6.283	718.90
160	2.343	19.314	159.41	292.98	2.0346	9455.9	541.94	126.84	6.283	787.90		