

# Nominal Wall Thickness and Mass of Steel Pipe

According to ASME B36.10M-2004

Mass calculation:  $W_{pe} = 0.0246615(D-t)t$

## Metric Units

Where:  $W_{pe}$  = nominal plain end mass rounded to the nearest 0.01 kg/m  
 D = outside diameter<sup>(1)</sup>  
 t = specified wall thickness, rounded to the nearest 0.01 mm

NPS	O.D.	Sch 10		Sch 20		Sch 30		Sch 40		Standard		Sch 60		Sch 80		Extra Strong		Sch 100		Sch 120		Sch 140		Sch 160		Dble. Ex. Strg.				
		wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	wt	kg/m	
1/8	10.3	1.24	0.28	...	...	1.45	0.32	1.73	0.37	1.73	0.37	...	...	2.41	0.47	2.41	0.47	...	...	...	...	...	...	...	...	...	...	...	...	
1/4	13.7	1.65	0.49	...	...	1.85	0.54	2.24	0.63	2.24	0.63	...	...	3.02	0.80	3.02	0.80	...	...	...	...	...	...	...	...	...	...	...	...	
3/8	17.1	1.65	0.63	...	...	1.85	0.70	2.31	0.84	2.31	0.84	...	...	3.20	1.10	3.20	1.10	...	...	...	...	...	...	...	...	...	...	...	...	
1/2	21.3	2.11	1.00	...	...	2.41	1.12	2.77	1.27	2.77	1.27	...	...	3.73	1.62	3.73	1.62	...	...	...	...	...	...	4.78	1.95	7.47	2.55	...	...	
3/4	26.7	2.11	1.28	...	...	2.41	1.44	2.87	1.69	2.87	1.69	...	...	3.91	2.20	3.91	2.20	...	...	...	...	...	...	5.56	2.90	7.82	3.64	...	...	
1	33.4	2.77	2.09	...	...	2.90	2.18	3.38	2.50	3.38	2.50	...	...	4.55	3.24	4.55	3.24	...	...	...	...	...	...	6.35	4.24	9.09	5.45	...	...	
1 1/4	42.2	2.77	2.69	...	...	2.97	2.87	3.56	3.39	3.56	3.39	...	...	4.85	4.47	4.85	4.47	...	...	...	...	...	...	6.35	5.61	9.70	7.77	...	...	
1 1/2	48.3	2.77	3.11	...	...	3.18	3.53	3.68	4.05	3.68	4.05	...	...	5.08	5.41	5.08	5.41	...	...	...	...	...	...	7.14	7.25	10.15	9.55	...	...	
2	60.3	2.77	3.93	...	...	3.18	4.48	3.91	5.44	3.91	5.44	...	...	5.54	7.48	5.54	7.48	...	...	...	...	...	...	8.74	11.11	11.07	13.44	...	...	
2 1/2	73.0	3.05	5.26	...	...	4.78	8.04	5.16	8.63	5.16	8.63	...	...	7.01	11.41	7.01	11.41	...	...	...	...	...	...	9.53	14.92	14.02	20.39	...	...	
3	88.9	3.05	6.46	...	...	4.78	9.92	5.49	11.29	5.49	11.29	...	...	7.62	15.27	7.62	15.27	...	...	...	...	...	...	11.13	21.35	15.24	27.68	...	...	
3 1/2	101.6	3.05	7.41	...	...	4.78	11.41	5.74	13.57	5.74	13.57	...	...	8.08	18.64	8.08	18.64	...	...	...	...	...	...	...	...	...	...	...	...	...
4	114.3	3.05	8.37	...	...	4.78	12.91	6.02	16.08	6.02	16.08	...	...	8.56	22.32	8.56	22.32	...	...	11.13	28.32	...	...	13.49	33.54	17.12	41.03	...	...	
5	141.3	3.40	11.56	...	...	...	...	6.55	21.77	6.55	21.77	...	...	9.53	30.97	9.53	30.97	...	...	12.70	40.28	...	...	15.88	49.12	19.05	57.43	...	...	
6	168.3	3.40	13.83	...	...	...	...	7.11	28.26	7.11	28.26	...	...	10.97	42.56	10.97	42.56	...	...	14.27	54.21	...	...	18.26	67.57	21.95	79.22	...	...	
8	219.1	3.76	19.97	6.35	33.32	7.04	36.82	8.18	42.55	8.18	42.55	10.31	53.09	12.70	64.64	12.70	64.64	15.09	75.92	18.26	90.44	20.62	100.93	23.01	111.27	22.23	107.93	...	...	
10	273.0	4.19	27.78	6.35	41.76	7.80	51.01	9.27	60.29	9.27	60.29	12.70	81.53	15.09	95.98	12.70	81.53	18.26	114.71	21.44	133.01	25.40	155.10	28.58	172.27	25.40	155.10	...	...	
12	323.8	4.57	35.98	6.35	49.71	8.38	65.19	10.31	79.71	9.53	73.86	14.27	108.93	17.48	132.05	12.70	97.44	21.44	159.87	25.40	186.92	28.58	208.08	33.32	238.69	25.40	186.92	...	...	
14	355.6	6.35	54.69	7.92	67.91	9.53	81.33	11.13	94.55	9.53	81.33	15.09	126.72	19.05	158.11	12.70	107.40	23.83	194.98	27.79	224.66	31.75	253.58	35.71	281.72	...	...	...	...	
16	406.4	6.35	62.65	7.92	77.83	9.53	93.27	12.70	123.31	9.53	93.27	16.66	160.13	21.44	203.54	12.70	123.31	26.19	245.57	30.96	286.66	36.53	333.21	40.49	365.38	...	...	...	...	
18	457	6.35	70.57	7.92	87.71	11.13	122.38	14.27	155.81	9.53	105.17	19.05	205.75	23.83	254.57	12.70	139.16	29.36	309.64	34.93	363.58	39.67	408.28	45.24	459.39	...	...	...	...	
20	508	6.35	78.56	9.53	117.15	12.70	155.13	15.09	183.43	9.53	117.15	20.62	247.84	26.19	311.19	12.70	155.13	32.54	381.55	38.10	441.52	44.45	508.15	50.01	564.85	...	...	...	...	
22	559	6.35	86.55	9.53	129.14	12.70	171.10	...	...	9.53	129.14	22.23	294.27	28.58	373.85	12.70	171.10	34.93	451.45	41.28	527.05	47.63	600.67	53.98	672.30	...	...	...	...	
24	610	6.35	94.53	9.53	141.12	14.27	209.65	17.48	255.43	9.53	141.12	24.61	355.28	30.96	442.11	12.70	187.07	38.89	547.74	46.02	640.07	52.37	720.19	59.54	808.27	...	...	...	...	
26	660	7.92	127.36	12.70	202.74	...	...	...	...	9.53	152.88	...	...	...	...	12.70	202.74	...	...	...	...	...	...	...	...	...	...	...	...	...
28	711	7.92	137.32	12.70	218.71	15.88	272.23	...	...	9.53	164.86	...	...	...	...	12.70	218.71	...	...	...	...	...	...	...	...	...	...	...	...	...
30	762	7.92	147.29	12.70	234.68	15.88	292.20	...	...	9.53	176.85	...	...	...	...	12.70	234.68	...	...	...	...	...	...	...	...	...	...	...	...	...
32	813	7.92	157.25	12.70	250.65	15.88	312.17	17.48	342.94	9.53	188.83	...	...	...	...	12.70	250.65	...	...	...	...	...	...	...	...	...	...	...	...	...
34	864	7.92	167.21	12.70	266.63	15.88	332.14	17.48	364.92	9.53	200.82	...	...	...	...	12.70	266.63	...	...	...	...	...	...	...	...	...	...	...	...	...
36	914	7.92	176.97	12.70	282.29	15.88	351.73	19.05	420.45	9.53	212.57	...	...	...	...	12.70	282.29	...	...	...	...	...	...	...	...	...	...	...	...	...

All dimensions are given in millimeters, all masses are given in kgs. per meter.

<sup>(1)</sup> to the nearest 0.1 mm for outside diameters of 16 in. (406.4 mm) and smaller, and to the nearest 1.0 mm for outside diameters larger than 16 in. (406.4 mm).