EN 1057 - TYPE Y (PREVIOUSLY BS 2871 TABLE Y)

Size	Nom. Dia. (Outside)	Nom. Wall Thickness	Max. Working Pressures*		
			Half Hard	Hard	Annealed
mm	mm	mm	bar+	bar+	bar+
6	6	0.8	188	223	144
8	8	0.8	136	161	105
10	10	0.8	106	126	82
12	12	0.8	87	104	67
15	15	1	87	104	67
18	18	1	72	85	55
22	22	1.2	69	84	53
28	28	1.2	55	65	42
35	35	1.5	54	65	41
42	42	1.5	45	54	34
54	54	2	47	56	36
66.7	66.7	2	37	45	28
76.1	76.1	2	33	39	25
108	108	2.5	29	34	22

*Based on designated temper at 65°C +1 bar = 0.1N/mm² = 105 N/m²

Usage: Underground works and heavy duty requirements including hot and cold water supply, gas reticulation, sanitary plumbing, heating and general engineering.

ADDED TOUGHNESS & DURABILITY

EN 1057 - TYPE X (PREVIOUSLY BS 2871 TABLE X)

Size	Nom. Dia. (Outside)	Nom. Wall Thickness	Max. Working Pressures*		
			Half Hard	Hard	Annealed
mm	mm	mm	bar+	bar+	bar+
6	6	0.6	133	161	102
8	8	0.6	97	118	75
10	10	0.6	77	93	59
12	12	0.6	63	76	48
15	15	0.7	58	71	45
18	18	0.8	56	67	43
22	22	0.9	51	62	39
28	28	0.9	40	48	31
35	35	1.2	42	51	33
42	42	1.2	35	43	27
54	54	1.2	27	33	21
66.7	66.7	1.2	20	27	17
76.1	76.1	1.5	24	29	18
108	108	1.5	17	20	13
133	133	1.5	14	17	10
159	159	2	15	18	12

*Based on designated temper at 65°C +1 bar = 0.1N/mm² = 105 N/m²

Usage: Above groundservices including drinking water supply, hot and cold water systems, sanitation, central heating and other general purpose applications.

ECONOMICAL AND STRONG

EN 1057 - TYPE Z (PREVIOUSLY BS 2871 TABLE X)			
Size	**Nom. Dia. (Outside)**	**Nom. Wall Thickness**	**Max. Working Pressures***
mm	**mm**	**mm**	**bar⁺**
6	6	0.5	113
8	8	0.5	98
10	10	0.5	78
12	12	0.5	64
15	15	0.5	50
18	18	0.6	50
22	22	0.6	41
28	28	0.6	32
35	35	0.7	30
42	42	0.8	28
54	54	0.9	25
66.7	66.7	1	20
76.1	76.3	1.2	19
108	108	1.2	17
133	133	1.5	16
159	159.5	1.5	15

*Based on material in hard drawn condition at 65°C ⁺1 bar = 0.1N/mm² = 105 N/m²

Usage: Above groundservices including drinking water supply, hot and cold water systems, sanitation, central heating and other general purpose applications.

LOW COST UTILITY RANGE

MECHANICAL PROPERTIES OF TUBE TO EN 1057				
Temper	**Nom. Dia. (Outside)**	**MPa***	**Minimum Elongation**	**Hardness****
R220 Annealed	6 to 54 mm	220	40%	40 to 70
R250 Half Hard	6 to 66.7 mm	250	30%[#]	75 to 100
R250 Half Hard	6 to 159 mm	250	20%[#]	75 to 100
R290 Hard	6 to 267 mm	290	3%	100 min

[#]**Note:** Elongations for half hard tubes depend on the ratio of outside diameter to wall thickness.

* MPa: Minimum tensile strength ** Hardness HV/5 indicative

Pipe Wall Thickness (mm)

Dimensions of Welded and Seamless Pipe Carbon, Alloy, and Stainless Steel

ANSI B36.10,B36.19

Nominal Pipe Size (in inches)	Outside Diameter	Sch 5S	Sch 10S	Sch 10	Sch 20	Sch 30	Sch 40S	STD	Sch 40	Sch 60	Sch 80S	XS	Sch 80	Sch 100	Sch 120	Sch 140	Sch 160	XXS
1/8	10.29	-	1.24	-	-	-	1.73	1.73	1.73	-	2.41	2.41	2.41	-	-	-	-	-
1/4	13.72	-	1.65	-	-	-	1.73	1.73	1.73	-	3.02	3.02	3.02	-	-	-	-	-
3/8	17.14	-	1.65	-	-	-	2.31	2.31	2.31	-	3.2	3.2	3.2	-	-	-	-	-
1/2	21.34	1.65	2.11	-	-	-	2.77	2.77	2.77	-	3.73	3.73	3.73	-	-	-	4.75	7.47
3/4	26.67	1.65	2.11	2.11	-	-	2.87	2.87	2.87	-	3.91	3.91	3.91	-	-	-	5.54	7.82
1	33.4	1.65	2.77	2.77	-	-	3.38	3.38	3.38	-	4.55	4.55	4.55	-	-	-	6.35	9.09
1 1/4	42.16	1.65	2.77	2.77	-	-	3.56	3.56	3.56	-	4.85	4.85	4.85	-	-	-	6.35	9.7
1 1/2	48.26	1.65	2.77	2.77	-	-	3.68	3.68	3.68	-	5.08	5.08	5.08	-	-	-	7.14	10.16
2	60.32	1.65	2.77	2.77	-	-	3.91	3.91	3.91	-	5.54	5.54	5.54	-	-	-	8.71	11.07
2 1/2	73.02	2.11	3.05	3.05	-	-	5.16	5.16	5.16	-	7.01	7.01	7.01	-	-	-	9.52	14.02
3	88.9	2.11	3.05	3.05	-	-	5.49	5.49	5.49	-	7.62	7.62	7.62	-	-	-	11.13	15.24
3 1/2	101.6	2.11	3.05	3.05	-	-	5.74	5.74	5.74	-	8.08	8.08	8.08	-	-	-	-	16.15
4	114.3	2.11	3.05	3.05	-	-	6.02	6.02	6.02	-	8.56	8.56	8.56	-	11.13	-	13.49	17.12
5	141.3	2.77	3.4	3.4	-	-	6.55	6.55	6.55	-	9.53	9.53	9.53	-	12.7	-	15.88	19.05
6	168.28	2.77	3.4	-	-	-	7.11	7.11	7.11	-	10.97	10.97	10.97	-	14.27	-	18.24	21.95
8	219.08	2.77	3.76	-	6.35	7.04	8.18	8.18	8.18	10.31	12.7	12.7	12.7	15.06	18.26	20.62	23.01	22.22
10	273.05	3.4	4.19	-	6.35	7.8	9.27	9.27	9.27	12.7	12.7	12.7	15.06	18.26	21.44	25.4	28.58	25.4
12	323.85	3.96	4.57	-	6.35	8.38	9.52	9.52	10.31	14.27	12.7	12.7	17.48	21.44	25.4	28.58	33.32	25.4
14	355.6	3.96	4.78	6.35	7.92>	9.52	-	9.52	11.13	15.06		12.7	19.05	23.83	27.79	31.75	35.71	-
16	406.4	4.19	4.78	6.35	7.92	9.52	-	9.52	12.7	16.66		12.7	21.44	26.19	30.96	36.52	40.46	-
18	457.2	4.19	4.78	6.35	7.92	11.12	-	9.52	14.27	19.05		12.7	23.82	29.36	34.92	39.67	45.24	-
20	508	4.78	5.54	6.35	9.52	12.7	-	9.52	15.06	20.62		12.7	26.19	32.54	38.1	44.45	49.99	-
22	558.8	4.78	5.54	6.35	9.52	12.7	-	9.52	15.87	22.22		12.7	28.58	34.92	41.28	47.62	53.98	-
24	609.4	5.54	6.35	6.35	9.52	14.27	-	9.52	17.48	24.61		12.7	30.93	38.89	46.02	52.37	59.51	-
26	660.4	-	-			-	-	9.52	-	-		12.7	-	-	-	-	-	-
28	711.2	-	-	7.92	12.7	15.88	-	9.52	-	-		12.7	-	-	-	-	-	-
30	762	6.35	7.92	7.92	12.7	15.88	-	9.52	-	-		12.7	-	-	-	-	-	-
32	812.8	-	-	7.92	12.7	15.88	-	9.52	17.48	-		12.7	-	-	-	-	-	-
34	863.6	-	-	7.92	12.7	15.88	-	9.52	17.48	-		12.7	-	-	-	-	-	-
36	914.4	-	-	7.92	12.7	15.88	-	9.52	19.05	-		12.7	-	-	-	-	-	-
38	965.2	-	-	-	-	-	-	9.52	-	-		12.7	-	-	-	-	-	-
40	1016	-	-	-	-	-	-	9.52	-	-		12.7	-	-	-	-	-	-
42	1066.8	-	-	-	-	-	-	9.52	-	-		12.7	-	-	-	-	-	-
44	1117.6	-	-	-	-	-	-	9.52	-	-		12.7	-	-	-	-	-	-
46	1168.4	-	-	-	-	-	-	9.52	-	-		12.7	-	-	-	-	-	-
48	1219.2	-	-	-	-	-	-	9.52	-	-		12.7	-	-	-	-	-	-