

# BS 1387/1985

TUBE	SIZE		Outside Dia.of Black/Galvanized Tube				Wall thickness		Weight of Black / Galvanized Tube				Pieces per bundle
	INCH	NB (mm)	Minimum		Maximum		Plain Ends		Screwed & Socketed				
			Inches	mm	Inches	mm	Kg./Ft.	Kg./Mtr.	Kg./Ft.	Kg./Mtr.			
L I G H T	1/2"	15	0.825	21.0	0.841	21.4	0.079	2.0	0.289	0.947	0.291	0.956	153
	3/4"	20	1.041	26.4	1.059	26.9	0.091	2.3	0.421	1.38	0.424	1.39	127
	1"	25	1.309	33.2	1.328	33.8	0.102	2.6	0.603	1.98	0.61	2.00	91
	1 1/4"	32	1.65	41.9	1.67	42.5	0.102	2.6	0.774	2.54	0.783	2.57	61
	1 1/2"	40	1.882	47.8	1.903	48.4	0.114	2.9	0.985	3.23	0.997	3.27	61
	2"	50	2.347	59.6	2.370	60.2	0.114	2.9	1.240	4.08	1.26	4.15	37
	2 1/2"	65	2.960	75.2	2.991	76	0.126	3.2	1.740	5.71	1.78	5.83	37
	3"	80	3.460	87.9	3.491	88.7	0.126	3.2	2.050	6.72	2.1	6.89	19
M E D I U M	4"	100	4.450	113	4.481	113.9	0.142	3.6	2.970	9.75	3.05	10.0	19
	1/2"	15	0.831	21.1	0.856	21.7	0.102	2.6	0.369	1.21	0.372	1.22	127
	3/4"	20	1.047	26.6	1.072	27.2	0.102	2.6	0.475	1.56	0.479	1.57	101
	1"	25	1.316	33.4	1.346	34.2	0.126	3.2	0.735	2.41	0.741	2.43	61
	1 1/4"	32	1.657	42.1	1.687	42.9	0.126	3.2	0.945	3.10	0.954	3.13	51
	1 1/2"	40	1.889	48	1.919	48.8	0.126	3.2	1.090	3.57	1.100	3.61	44
	2"	50	2.354	59.8	2.394	60.8	0.142	3.6	1.530	5.03	1.550	5.10	29
	2 1/2"	65	2.969	75.4	3.014	76.6	0.142	3.6	1.960	6.43	1.990	6.55	24
	3"	80	3.469	88.1	3.524	89.5	0.157	4.0	2.550	8.37	2.600	8.54	19
	4"	100	4.459	113.3	4.524	114.9	0.177	4.5	3.720	12.2	3.810	12.5	14
H E A V Y	5"	125	5.461	138.7	5.535	140.6	0.197	5.0	5.060	16.6	5.210	17.1	10
	6"	150	6.460	164.1	6.539	166.1	0.197	5.0	6.000	19.7	6.190	20.3	7
	1/2"	15	0.831	21.1	0.856	21.7	0.126	3.2	0.439	1.44	0.442	1.45	127
	3/4"	20	1.047	26.6	1.072	27.2	0.126	3.2	0.570	1.87	0.573	1.88	101
	1"	25	1.316	33.4	1.346	34.2	0.157	4.0	0.896	2.94	0.902	2.96	61
	1 1/4"	32	1.657	42.1	1.687	42.9	0.157	4.0	1.160	3.80	1.170	3.83	51
	1 1/2"	40	1.889	48	1.919	48.8	0.157	4.0	1.330	4.38	1.350	4.42	44
	2"	50	2.354	59.8	2.394	60.8	0.177	4.5	1.890	6.19	1.910	6.26	29
	2 1/2"	65	2.969	75.4	3.014	76.6	0.177	4.5	2.420	7.93	2.450	8.05	24
	3"	80	3.469	88.1	3.524	89.5	0.197	5.0	3.140	10.3	3.200	10.5	19
4"	100	4.459	113.3	4.524	114.9	0.212	5.4	4.420	14.5	4.510	14.8	14	
5"	125	5.461	138.7	5.535	140.6	0.212	5.4	5.460	17.9	5.610	18.4	10	
6"	150	6.460	164.1	6.539	166.1	0.212	5.4	6.490	21.3	6.670	21.9	7	

- 1. TOLERANCE** :a) On Thickness Light Tubes = + Not Limited, - 8%. Medium & Heavy tubes = + Not Limited , -10%  
:b) On Mass for quantities of 150 Mtr., and over of one size =+/- 4%, for single tube =+10% / -8%.
- 2. ENDS** : Cut cleanly and nominally square with the axis of the tube and free from excessive burrs.
- 3. PROPERTIES** :a) Chemical = (Maximum) C - 0.20%, Mn - 1.20%, S - 0.045% & P - 0.045%  
:b) Mechanical = UTS - 320 to 460 N/mm<sup>2</sup>, YS - 195 N/mm<sup>2</sup> (minimum) & %Elongation on 5.65 S<sub>0</sub> - 20% (minimum).
- 4. BEND TEST (COLD)** : Applicable to tubes upto and including nominal size of 50mm.  
a) For black tubes bend upto 180 degrees around a cylindrical mandrel, the Dia of which is 6 times the OD of pipe.  
b) For Galvanized pipe bend upto 90 degree around a cylindrical mandrel, the dia of which is 8 times the OD of pipe .  
Tubes shall withstand the test without showing any signs of fracture or failure.
- 5. FLATTENING TEST (COLD)** : Applicable to tubes greater than nominal size of 50mm.  
a) For weld : Distance between the platens, measured under load is not greater than 75% of the OD of tube.  
b) For Material: Distance between the platens, measured under load is not greater than 60% of the OD of tube.
- 6. LEAK TIGHTNESS TEST** : a) Online NDT (Eddy current )  
b) Hydro test at a pressure of 50 bar.
- 7. BLACK VARNISH** : Tubes are uniformly varnished externally over their full lengths.
- 8. ZINC COATING (GALVANIZING)** : 55 to 70 Microns, uniformity of coating to withstand 4, one minute dips in copper sulphate solution.
- 9. THREADING** : For 1/2" to 3/4" - 14 TPI and from 1" to 6" - 11 TPI  
With 2 colour bands one near each ends of 50 mm width (A class - Brown, B Class - Blue & C Class - Red).  
Check with standard BS ring and plug gauges.
- 10. MARKING** : a) We can emboss mill sign "UTP/Spec." online at every one meter interval over the length of pipe.  
b) We can do online stencilling as per customer needs.
- 11. PACKING** : Hexagonal type.
- 12. MILL TEST CERTIFICATE** : We can issue a MTC, certifying that the tubes supplied comply with this British Standard.