

## DIN 2440

		Outside Dia. of Black / Galvanized Tube				Weight of Black / Galvanized Tube						
SIZE		Minimum		Maximum		Wall thickness		Plain Ends		Screwed & Socketed		Pieces
INCH	NB (mm)	Inches	mm	Inches	mm	Inches	mm	Kg./Ft.	Kg./Mtr.	Kg./Ft.	Kg./Mtr.	per bdl.
1/2"	15	0.827	21.0	0.858	21.8	0.104	2.65	0.372	1.22	0.375	1.23	127
3/4"	20	1.043	26.5	1.075	27.3	0.104	2.65	0.482	1.58	0.485	1.59	101
1"	25	1.311	33.3	1.346	34.2	0.128	3.25	0.744	2.44	0.750	2.46	61
1 1/4"	32	1.654	42.0	1.689	42.9	0.128	3.25	0.957	3.14	0.966	3.17	51
1 1/2"	40	1.886	47.9	1.921	48.8	0.128	3.25	1.101	3.61	1.113	3.65	44
2"	50	2.350	59.7	2.394	60.8	0.144	3.65	1.555	5.10	1.576	5.17	29
2 1/2"	65	2.965	75.3	3.016	76.6	0.144	3.65	1.985	6.51	2.021	6.63	24
3"	80	3.465	88.0	3.524	89.5	0.159	4.05	2.582	8.47	2.634	8.64	19
4"	100	4.453	113.1	4.528	115.0	0.177	4.50	3.689	12.10	3.780	12.4	14
5"	125	5.453	138.5	5.543	140.8	0.191	4.85	4.939	16.20	5.091	16.7	10
6"	150	6.453	163.9	6.555	166.5	0.191	4.85	5.854	19.20	6.037	19.8	7

- 1. TOLERANCE** : a) On Thickness -12.5%  
: b) On Mass - for single tube + / - 10%. For a consignment of not less than 10 ton + / - 7.5%.
- 2. ENDS** : Cut cleanly and nominally square with the axis of the tube and free from excessive burrs.
- 3. INTERNAL DEBEADING** : The height of the internal bead shall not exceed 60% of the nominal wall thickness. The height of the internal bead should not exceed 0.3mm (+0.05mm) in the welded tubes which are suitable for galvanizing.
- 4. PROPERTIES** : a) Chemical = (Maximum) C - 0.20%, S - 0.040% , P - 0.040% & N - 0.007% (Acc. to DIN 17100 St 37.2)  
: b) Mechanical = UTS - 350 to 480 N/mm<sup>2</sup>, YS - 235 N/mm<sup>2</sup> (minimum) & %Elongation - 25% (minimum).
- 5. BEND TEST (COLD)** : Applicable to tubes upto and including nominal size of 50mm.  
Should be bent to 90 degrees without cracking with a radius of 3 times tube OD for 1/2" to 1" and with a radius of 3.5 times OD in the case of tube from 1 1/4" to 2". This shall not cause any cracking. The weld shall lie alternately in the vertical & horizontal position.
- 6. FLATTENING TEST (COLD)** : In the flattening test the specimens or tube ends are to be compressed until the distance between the two platens reaches 2/3 of the original outside diameter of the tube without this causing the weld to open. The weld shall lie alternately in the vertical and horizontal position.
- 7. LEAK TIGHTNESS TEST** : a) Online NDT (Eddy current )

b) Hydro test at a pressure of 50 bar.

**8. ZINC COATING  
(GALVANIZING)**

: Zinc coating thickness on internal surface should be minimum 400 Gm/m<sup>2</sup>.

**9. THREADING**

: For 1/2" to 3/4" - 14 TPI and from 1" to 6" - 11 TPI

**10. MARKING**

: a) We can emboss mill sign "UTP" 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 Standard.