BS1387 ERW steel tube

ERW steel tube is formed by rolling strip and welding the seam, with tighter dimensional tolerances and less weight. The weld seam is heat treated after welding that no untempered martensite remains, and the weld flash can be removed from both inner and outer surfaces.

BS 1387:1985 is a classic ERW steel tube specification with Light, Medium & Heavy series. It is suitable for water lines (cold & hot), firefighting pipeline, HVAC lines. And tubes can be also supplied threaded according to BS 21 (ISO 7-1).

- Certificate: ISO
- Standard: BS1387
- Length: 6m / 5.8m / 11.8m / 12m / 20ft, etc.
- End: Plain (square cut) / beveled to 30° / roll groove as ISO 6182-12 / BSPT thread as ISO 7-1 / NPT thread as ANSI B1.20.1
- Surface: Fusion bonded epoxy (FBE) / polyester resin / hot dip galvanized / red paint / black paint, etc.

Available size for Light tube

Size			Thickness	Mass for plain end	Mass for threaded & socketed	Test pressure	Ref. No.
Inch	DN	OD (mm)	T (mm)	kg/m	kg/m	MPa	
1/2"	15	21.3	2.0	0.95	0.96	5.0	P0401
3/4"	20	26.9	2.3	1.38	1.39	5.0	P0402
1"	25	33.7	2.6	1.98	2.00	5.0	P0403
1-1/4"	32	42.4	2.6	2.54	2.57	5.0	P0404
1-1/2"	40	48.3	2.9	3.23	3.27	5.0	P0405
2"	50	60.3	2.9	4.08	4.15	5.0	P0406
2-1/2"	65	76.1	3.2	5.71	5.83	5.0	P0407
3"	80	88.9	3.2	6.72	6.89	5.0	P0408
4"	100	114.3	3.6	9.75	10.00	5.0	P0409

Note: Dimension and mass meet ISO 65 Light series 2 and EN 10255 L2.

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Available size for Medium tube

Size			Thickness	Mass for plain end	Mass for threaded & socketed	Test pressure	Ref. No.
Inch	DN	OD (mm)	T (mm)	kg/m	kg/m	MPa	
1/2"	15	21.3	2.6	1.21	1.22	5.0	P0411
3/4"	20	26.9	2.6	1.56	1.57	5.0	P0412
1"	25	33.7	3.2	2.41	2.43	5.0	P0413
1-1/4"	32	42.4	3.2	3.10	3.13	5.0	P0414
1-1/2"	40	48.3	3.2	3.57	3.61	5.0	P0415
2"	50	60.3	3.6	5.03	5.10	5.0	P0416
2-1/2"	65	76.1	3.6	6.43	6.55	5.0	P0417
3"	80	88.9	4.0	8.37	8.54	5.0	P0418
4"	100	114.3	4.5	12.20	12.50	5.0	P0419
5"	125	139.7	5.0	16.60	17.10	5.0	P0420
6"	150	165.1	5.0	19.70	20.30	5.0	P0421

Note: Dimension and mass meet ISO 65 M series and EN 10255 M.

Available size for Heavy tube

Size			Thickness	Mass for plain end	Mass for threaded & socketed	Test pressure	Ref. No.
Inch	DN	OD (mm)	T (mm)	kg/m	kg/m	MPa	
1/2"	15	21.3	3.2	1.44	1.45	5.0	P0431
3/4"	20	26.9	3.2	1.87	1.88	5.0	P0432
1"	25	33.7	4.0	2.94	2.96	5.0	P0433
1-1/4"	32	42.4	4.0	3.80	3.83	5.0	P0434
1-1/2"	40	48.3	4.0	4.38	4.42	5.0	P0435
2"	50	60.3	4.5	6.19	6.26	5.0	P0436
2-1/2"	65	76.1	4.5	7.93	8.05	5.0	P0437
3"	80	88.9	5.0	10.30	10.50	5.0	P0438
4"	100	114.3	5.4	14.50	14.80	5.0	P0439
5"	125	139.7	5.4	17.90	18.40	5.0	P0440
6"	150	165.1	5.4	21.30	21.90	5.0	P0441

Note: Dimension and mass meet ISO 65 H series and EN 10255 H.

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Chemical compositions (%) and Mechanical properties

C	Mn	P	S	Cu	Ni	Cr	Mo	V
≤ 0.20	≤ 1.20	≤ 0.045	≤ 0.045	-	-	-	-	-
Tensile strength (MPa)			**Yield strength (MPa)**			**Elongation (%)**		
320-460			≥ 195			≥ 20		

Leak tightness test and electromagnetic test

· Each tube shall be tested at a pressure of 50 bar for hydraulic test.

· The pressure shall be maintaining sufficiently long time for proof and inspection.

· Eddy current testing is an alternative to the hydraulic leak tightness test.

Other tests

· Tensile test, bending test and flattening test.

· Dimensional inspection: outer diameter, thickness, length.

· Ovality (out of roundness): The tolerance on out of roundness is included in the OD tolerance (Refer to EN10255).

· Visual examination / coating test.

· Quantity and weight measurement.