EN10255 seamless steel tube

Seamless steel tube (SMLS) is formed by drawing a solid billet over a piercing rod to create the hollow shell, without welding or seam. It is suitable for bending and cutting. The advantage of seamless steel tube is the ability of with standing higher pressure.

EN10255 is a non-alloy steel tubes specification covering seamless tube suitable for welding and threading. It is used for the conveyance of fluid for fire protection pipeline, water pipeline (Cold & hot), HVAC pipeline, etc.

- Certificate: ISO
- Standard: EN10255, seamless (S), S195T
- 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 Heavy series

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	P1401
3/4"	20	26.9	3.2	1.87	1.88	5.0	P1402
1"	25	33.7	4.0	2.93	2.95	5.0	P1403
1-1/4"	32	42.4	4.0	3.79	3.82	5.0	P1404
1-1/2"	40	48.3	4.0	4.37	4.41	5.0	P1405
2"	50	60.3	4.5	6.19	6.26	5.0	P1406
2-1/2"	65	76.1	4.5	7.93	8.05	5.0	P1407
3"	80	88.9	5.0	10.30	10.50	5.0	P1408
4"	100	114.3	5.4	14.50	14.80	5.0	P1409
5"	125	139.7	5.4	17.90	18.40	5.0	P1410
6"	150	165.1	5.4	21.30	21.90	5.0	P1411

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Available size for Medium series

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	P1421
3/4"	20	26.9	2.6	1.56	1.57	5.0	P1422
1"	25	33.7	3.2	2.41	2.43	5.0	P1423
1-1/4"	32	42.4	3.2	3.10	3.13	5.0	P1424
1-1/2"	40	48.3	3.2	3.56	3.60	5.0	P1425
2"	50	60.3	3.6	5.03	5.10	5.0	P1426
2-1/2"	65	76.1	3.6	6.42	6.54	5.0	P1427
3"	80	88.9	4.0	8.36	8.53	5.0	P1428
4"	100	114.3	4.5	12.20	12.50	5.0	P1429
5"	125	139.7	5.0	16.60	17.10	5.0	P1430
6"	150	165.1	5.0	19.80	20.40	5.0	P1431

Available size for Type L2

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	P1441
3/4"	20	26.9	2.3	1.38	1.39	5.0	P1442
1"	25	33.7	2.6	1.98	2.00	5.0	P1443
1-1/4"	32	42.4	2.6	2.54	2.57	5.0	P1444
1-1/2"	40	48.3	2.9	3.23	3.27	5.0	P1445
2"	50	60.3	2.9	4.08	4.15	5.0	P1446
2-1/2"	65	76.1	3.2	5.71	5.83	5.0	P1447
3"	80	88.9	3.2	6.72	6.89	5.0	P1448
4"	100	114.3	3.6	9.75	10.00	5.0	P1449

Note: Dimension and mass meet ISO 65 Light series 2 and BS 1387.

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Chemical compositions (%) and Mechanical properties

C	Mn	P	S	Cu	Ni	Cr	Mo	V
≤ 0.20	≤ 1.40	≤ 0.035	≤ 0.030	-	-	-	-	-
Tensile strength (MPa)			**Upper Yield strength (MPa)**			**Elongation (%)**		
320-520			≥ 195			≥ 20		

Leak tightness test and electromagnetic test

· Each tube (before threading, if applicable) shall be tested for leak-tightness.

· The test can be a hydrostatic test at a minimum of 50 bar for at least 5s.

· An electro-magnetic test is alternative in accordance with EN 10246-1, including eddy current method, or flux leakage method.

Other tests

· Tensile test, bending test and flattening test.

· Dimensional inspection: outer diameter, thickness, length.

· Stra ightness: The finished pipe shall be reasonably straight. For tube ≥ DN25, the tube length L shall not exceed 0.002 L.

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

· Visual examination / coating test.

· Quantity and weight measurement.