

Technical Data Sheet

API 5CT Seamless Tubing – Grade L80 Type 1

Product	Seamless steel tubing (oil country tubular goods) for oil and gas wells
Specification	API Spec 5CT, 11th Ed. / ISO 11960
Grade / Group	L80 Type 1 / Group 2
Heat Treatment	Quenched and tempered
Application	Controlled-hardness tubing for sour (H ₂ S) service.
End Finish	Plain end, non-upset (NUE), external upset (EUE) or integral joint, with API threads and couplings
Length (Range)	R1: 6.10–7.32 m R2: 8.53–9.75 m R3: 11.58–12.80 m

1. Chemical Composition (% by mass)

Element	Min (%)	Max (%)	Test Method
C – Carbon	–	0.43 (a)	ASTM E415 / E1019
Mn – Manganese	–	1.90	ASTM E415 / E1019
Cr – Chromium	–	1.50	ASTM E415 / E1019
Ni – Nickel	–	0.25	ASTM E415 / E1019
Cu – Copper	–	0.35	ASTM E415 / E1019
P – Phosphorus	–	0.030	ASTM E415 / E1019
S – Sulphur	–	0.030	ASTM E415 / E1019
Si – Silicon	–	0.45	ASTM E415 / E1019

Elements shown shall be reported in the product analysis. (a) C max may be increased to 0.50% if the product is oil- or polymer-quenched.

2. Mechanical Properties

Property	Min	Max	Test Method
Yield Strength, MPa (ksi)	552 (80)	655 (95)	API 5CT / ASTM A370 (tensile test)
Tensile Strength, MPa (ksi)	655 (95)	–	API 5CT / ASTM A370 (tensile test)
Hardness	–	23.0 max HRC	ASTM E18 (Rockwell C)

3. Dimensions and Weights

OD, in (mm)	Nominal Weight, lb/ft (kg/m)	Wall (mm)	ID (mm)	Drift (mm)
2-3/8 (60.33)	4.6 / 4.7 (6.85 / 7.00)	4.83	50.67	48.28
2-7/8 (73.03)	6.4 / 6.5 (9.52 / 9.67)	5.51	62.00	59.61
3-1/2 (88.90)	9.2 / 9.3 (13.69 / 13.84)	6.45	76.00	72.82
3-1/2 (88.90)	10.2 (15.18)	7.34	74.22	71.04
4-1/2 (114.30)	12.6 / 12.75 (18.75 / 18.97)	6.88	100.53	97.36

Other sizes and weights per API 5CT on request. Tolerances per API 5CT: OD ± 0.79 mm (below 114.30 mm), +1.0% / –0.5% (114.30 mm and above); wall thickness –12.5%. Dimensions verified per API 5CT; drift per API 5B.

4. Supply Details

Product Specification Level	PSL-1 (PSL-2 / PSL-3 on request)
Marking and Packing	Paint stencil and die-stamp marking per API 5CT; thread protectors fitted; bundled with steel strapping
Inspection and Documents	Mill test certificate (EN 10204 3.1) and third-party inspection on request

Disclaimer: Information is typical and based on the API 5CT specification; Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without notice. Buyers should confirm requirements against the purchase order and applicable standard before ordering.

Keywords: API 5CT L80 Type 1 tubing, OCTG tubing, oil country tubular goods, seamless tubing, production tubing, EUE tubing, NUE tubing, sour service tubing, Ochnology Solution Pvt. Ltd.