

API 5CT T95

- ALLLAND Production Standards Overview



Definition and Applications

1. Definition

API 5CT T95 is a high-strength, hydrogen sulfide-resistant (sour service) steel grade used in oil casing and tubing, primarily for high-pressure, deep-well environments containing H₂S (hydrogen sulfide). It belongs to the high-strength sour service steel grade system within the API 5CT standard and is positioned between C90 and P110.

ALLLAND API 5CT T95 Steel Pipe Dimensions

Parameters	Dimensions
O.D.	Csing 4 1/2" – 20" (114.3 mm – 508 mm)
	Tubing 2 3/8" – 4 1/2" (60.33 mm – 114.30 mm)
WT	Csing 5.21 mm – 16.13 mm (common)
	Tubing 4.83 mm – 8.56 mm (common)
Length	Casing : R1 R2 R3 (4.88-14.63 m)
	Tubing : R1 R2 R3 (6.10–12.80 m)
End Finish	Plain End (PE), Threaded & Coupled (T&C), Upset Ends
Process	SEAMLESS / ERW
Connection	BTC, LTC, STC, EUE, NUE, Premium Thread
Product Type	Casing Pipe & Tubing Pipe
Color Code	Purple Band



2. Application

API 5CT T95 Steel Pipe is mainly used for oil and gas well casing and tubing applications in deep and high-pressure wells. It offers high strength, excellent collapse resistance, and good resistance to sulfide stress cracking in demanding environments. T95 is commonly used in sour service wells, shale gas production, and complex drilling conditions where reliable performance is required.

Critical Tolerances

Our API 5CT T95 standard steel pipes are manufactured in strict compliance with the specification requirements.

Item	API 5CT T95 Tolerance Requirement
Outside Diameter (OD)	< 4-1/2" (114.3 mm): ± 0.79 mm; $\geq 4-1/2$ " : -0.5% to +1% of OD
Wall Thickness	-12.5% of specified wall thickness
Mass (Weight)	Single pipe: -3.5% to +6.5%
Surface Imperfections	Maximum permissible depth: 5% of specified wall thickness
Length Tolerance	According to API 5CT R1, R2, R3 length requirements
Straightness	Shall meet API 5CT requirements for casing and tubing products

Standard Chemical Composition of API 5CT T95 Casing & Tubing

The chemical composition of **API 5CT T95 casing and tubing** is designed to provide high strength, toughness, and improved resistance to **sulfide stress cracking (SSC)** in demanding oil and gas well environments. T95 is a **low-alloy Cr-Mo steel grade** with controlled carbon, chromium, and molybdenum contents.

Element	Chemical Composition (Max, %)
Carbon (C)	0.35
Manganese (Mn)	1.20
Silicon (Si)	0.45
Phosphorus (P)	0.020
Sulfur (S)	0.010
Chromium (Cr)	1.50
Molybdenum (Mo)	0.25
Nickel (Ni)	0.30
Copper (Cu)	0.25

Note: API 5CT T95 requires strict chemical control and heat treatment to achieve its high mechanical strength and sour service performance. The exact composition may vary slightly depending on the steel manufacturer and product specification requirements.

API 5CT T95 Standard Mechanical Properties

Property	Requirement
Minimum Yield Strength	655 MPa (95,000 psi)
Maximum Yield Strength	758 MPa (110,000 psi)
Minimum Tensile Strength	724 MPa (105,000 psi)
Minimum Elongation	0.5% (under load)
Maximum Hardness	25.4 HRC (255 HBW)
Heat Treatment	Quenched and Tempered
Service Performance	Sour Service Resistant (H ₂ S Environment)

API 5CT T95 Casing & Tubing Sizes Charts

API 5CT T95 Casing Pipe Size Chart

Casing Size	OD (mm)	Wall Thickness (mm)	Weight Range (lb/ft)	Common Connection
4-1/2"	114.30	5.21 - 8.56	9.50 - 15.10	STC / LTC / BTC
5"	127.00	6.43 - 9.19	11.50 - 18.00	STC / LTC / BTC
5-1/2"	139.70	6.98 - 10.54	14.00 - 23.00	STC / LTC / BTC
6-5/8"	168.28	7.32 - 12.06	20.00 - 32.00	BTC
7"	177.80	6.91 - 14.27	17.00 - 38.00	LTC / BTC
7-5/8"	193.68	8.33 - 15.11	24.00 - 45.30	BTC
8-5/8"	219.08	8.94 - 16.13	24.70 - 49.00	BTC
9-5/8"	244.48	8.94 - 15.11	32.30 - 58.40	BTC
10-3/4"	273.05	7.09 - 13.84	32.75 - 65.70	BTC
11-3/4"	298.45	8.46 - 13.56	42.00 - 60.00	BTC
13-3/8"	339.72	8.38 - 15.11	48.00 - 72.00	BTC

API 5CT T95 Tubing Pipe Size Chart

Tubing Size	OD (mm)	Wall Thickness (mm)	Weight Range (lb/ft)	Connection
1.050"	26.70	2.87 - 3.91	1.14 - 1.48	NUE / EUE
1.315"	33.40	3.38 - 4.55	1.70 - 2.19	NUE / EUE
1.660"	42.16	3.56 - 4.85	2.30 - 3.03	NUE / EUE
1.900"	48.26	3.68 - 5.08	2.40 - 3.73	NUE / EUE
2-3/8"	60.32	4.24 - 6.45	4.60 - 7.90	NUE / EUE
2-7/8"	73.02	5.51 - 7.01	6.40 - 9.20	NUE / EUE
3-1/2"	88.90	5.49 - 8.05	9.20 - 12.70	NUE / EUE
4"	101.60	6.65 - 8.38	10.60 - 14.00	Premium
4-1/2"	114.30	6.35 - 10.54	12.60 - 20.00	Premium

API 5CT T95 Advantages

High Strength Performance

T95 provides a minimum yield strength of 95 ksi (655 MPa), offering higher load capacity than conventional OCTG grades.

Excellent Collapse Resistance

Suitable for deep wells where external formation pressure is high.

Sour Service Capability

Controlled chemistry and heat treatment improve resistance to Sulfide Stress Cracking (SSC).

Reliable Connection Performance

Compatible with various API and premium threaded connections.

ALLLAND API 5CT T95 Product Images



The image shows steel pipes actually produced by our company