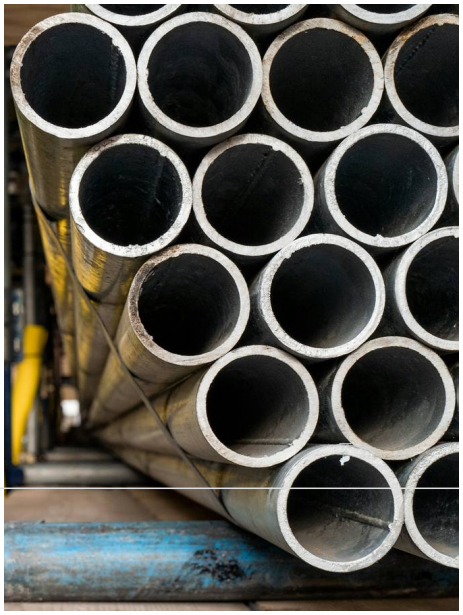
OCTG & LINE PIPE Advanced Materials. Engineered for Performance.

API 5L X65 / L450

OCTG & Line Pipe | API 5L: X65 | ISO 3183: L450

The workhorse offshore and high-pressure grade. The higher yield allows a thinner wall at the same design pressure, cutting pipe weight on risers and long tie-backs, and X65 is the grade most often specified with sour service and HIC testing.



Stock status: Mill indent - Typical lead time: 4 - 8 weeks mill indent

Key features

- PSL2 supply with controlled chemistry and impact testing
- Sour service variants to NACE MR0175 / ISO 15156 on request
- Bevelled ends, 3LPE / 3LPP coating and hydrotest reports arranged
- Third-party inspection and EN 10204 3.2 certification available

Available forms & sizes

Form	Size range
Seamless Pipes & Tubes	1/2" - 24" NB, SCH 20 - SCH 160 / XXS
Welded Pipes	6" - 56" OD, ERW, EFW and LSAW, 4 - 25 mm wall
Flanges	1/2" - 48", 150# - 2500#, WN / SO / blind
Fittings	1/2" - 48" butt weld elbows, tees, reducers and caps

Chemical composition (%)

Element	Min	Max
C	-	0.24 (PSL2 seamless)
Mn	-	1.40 - 1.65
P	-	0.025
S	-	0.015
CEpcm	-	0.25 (sour service)

Mechanical properties

Property	Value	Unit
Yield Strength (0.5% EUL)	450 - 600	MPa

Property	Value	Unit
Tensile Strength	535 - 760	MPa
Yield / Tensile ratio	0.93 max (PSL2)	-
Charpy V-notch	27 J min at 0 C (average of 3)	J

Physical properties

Property	Value	Unit
Density	7.85	g/cm3
Modulus of Elasticity	210	GPa

Standards

API 5L 46th edition (PSL1 / PSL2), ISO 3183, ASTM A106 / A53 (where specified), NACE MR0175 / ISO 15156 (sour service), EN 10204 3.1 / 3.2

Equivalent grades

L450, L450, ASTM A106 Gr B (lower grade substitute)

Industries served

Oil & Gas, Offshore, Marine, EPC Contractors

Typical applications

- Offshore risers and tie-backs
- High pressure transmission trunk lines
- Sour service flowlines with HIC testing
- Subsea spools and jumpers

Live datasheet