

API 5CT Casing Pipe - Sizes, Grades & Connections - Data Sheet

Mejor Steel, export sourcing for steel pipe and OCTG | Request a quotation: <https://mejorsteel.com/get-a-quote/>

Specifications

Outer diameter	4-1/2" - 20" (114.3 - 508 mm)
Wall thickness	Per API 5CT weight schedule, 5.21 - 22.22 mm
Size range	4-1/2" to 20" outside diameter
Length	R1 4.88 - 7.62 m, R2 7.62 - 10.36 m, R3 10.36 - 14.63 m
Ends	STC, LTC, BTC, premium connections
Surface treatment	Black varnish, phosphating, zinc coating on threads
Manufacturing process	Seamless, ERW welded
Pressure rating	Per API 5C3 burst, collapse and tensile ratings
Connection type	STC, LTC, BTC, premium gas-tight

What to state on the enquiry

- Grade and type: H40, J55, K55, N80 Type 1 or N80Q, L80, P110, Q125.
- Outside diameter, wall thickness or nominal weight, and length range R1, R2 or R3.
- Connection: STC, LTC, BTC or a named premium connection, with the coupling grade.
- Whether the string is sour-service qualified, and the environment details that decide it.
- Accessories required on the same shipment: couplings as spares, pup joints, crossovers, centralizers.

Grade comparison - strength, hardness and sour service

Grade	Yield strength range	Maximum hardness	Sour service	Where it is normally chosen
H40	276-552 MPa (40-80 ksi)	Not specified	Not a sour-service grade	Shallow, low-pressure strings
J55	379-552 MPa (55-80 ksi)	Not specified	Not a sour-service grade by itself	Intermediate strings, general service
K55	379-552 MPa (55-80 ksi)	Not specified	Not a sour-service grade by itself	Same yield as J55, higher minimum tensile
N80 (Type 1 and Q)	552-758 MPa (80-110 ksi)	Not specified	Requires qualification; no hardness ceiling in the standard	Intermediate and deeper wells
L80	552-655 MPa (80-95 ksi)	23 HRC	Qualified for sour service when specified	Wells where wet H2S is present
P110	758-965 MPa (110-140 ksi)	Not specified	Not a sour-service grade by itself	Deep, high-pressure, high-load strings
Q125	862-1,034 MPa (125-150 ksi)	No fixed maximum in the standard	Not a sour-service grade	Extreme load cases, where the connection can carry it

Inspection and documentation checklist for a casing order

Item	What it covers	When to specify it
Drift test	Verifies the internal diameter so tools and equipment pass	Specify the drift requirement the well needs, not only the standard default
Hydrostatic test	Pressure integrity of each joint	State the test pressure basis if the project specifies one
Non-destructive examination	Body and weld discontinuities	State the scope: full body, weld only, or both
Thread inspection	Conformance of STC, LTC or BTC threads, checked with the applicable gauges	Always, and state who performs it
Make-up torque	Coupling make-up to the specified torque	State the torque basis, and whether a make-up record is required
Mill test certificate	Traceability from heat to joint, with chemistry and mechanical results	EN 10204 3.1; state 3.2 at the enquiry stage if a third party must countersign
Third-party witnessing	Inspection witnessed at the mill rather than only recorded	Must be stated before production, not after