HUNAN BALING STEEL CO.,LTD
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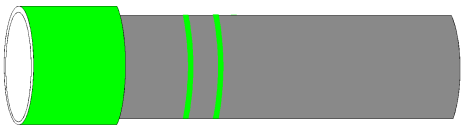
Datasheet for K55 casing



Premium API 5CT K55 Casing Pipe for Oil & Gas Wells

K55 is a normalized or normalized-and-tempered grade defined under API 5CT, delivering a minimum yield strength of 55,000 psi,the same as J55,but with a higher minimum tensile strength of 95,000 psi. This enhanced tensile performance gives K55 superior resistance to burst and collapse pressures, making it the preferred upgrade for wells that demand extra reliability without moving to costlier high-alloy grades.

- Applicable Product:Casing & Tubing 4½″–20″.
- Thread Types: BC, STC / LTC.
- Available Lengths: R1 / R2 / R3.

Chemical Composition

K55 shares the same chemical composition requirements as J55 per API 5CT. The composition is not tightly specified.The standard allows the manufacturer flexibility, provided the final product meets mechanical performance targets through appropriate heat treatment.

Element	C	Mn	Mo	Cr	Ni	Cu	P	S	Si
K55 (max %)	—	—	—	—	—	—	0.030	0.030	—
Typical Range	0.34–0.39	1.25–1.50	≤ 0.15	≤ 0.15	≤ 0.15	≤ 0.15	≤ 0.020	≤ 0.015	0.15–0.35

Note: "—" indicates no API 5CT maximum limit is specified for that element. Typical ranges reflect common mill practice. Actual values are recorded on each heat's Mill Test Certificate (MTC / EN 10204 3.1).

Mechanical Properties

K55 achieves its properties through normalizing or normalizing-and-tempering heat treatment. It shares the same yield strength window as J55 but requires a significantly higher minimum tensile strength 655 MPa vs 517 MPa.Providing better burst and collapse resistance.

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Property	Value	Unit
Yield Strength (min)	379	MPa (55,000 psi)
Yield Strength (max)	552	MPa (80,000 psi)
Tensile Strength (min)	655	MPa (95,000 psi)
Elongation (min)	15	%
Hardness (max)	—	HRC (not specified)
Heat Treatment	Normalized or Normalized & Tempered	

Impact Test: Transverse CVN ≥ 20 J (min individual); Longitudinal CVN ≥ 27 J (full-size specimen). Per API 5CT Table C.6 / C.7.

K55 Casing Heat Treatment Requirements

K55 steel is a carbon-manganese grade with a minimum yield strength of 55 ksi (379 MPa) and a minimum tensile strength of 95 ksi (655 MPa). According to API 5CT, the heat treatment requirements for K55 depend on the product type:

Product Type	Heat Treatment Requirement	API 5CT Condition Code
Seamless Pipe	May be delivered as-rolled or normalized. No mandatory quench-and-temper process is required, which distinguishes K55 from higher grades such as N80Q or P110.	"None" or "N"
ERW Pipe	Full pipe body must receive heat treatment at ≥ 540 °C (1000 °F), or the weld seam must be normalized after welding so that no	"None" (with seam treatment) or "N"

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Product Type	Heat Treatment Requirement	API 5CT Condition Code
	untempered martensite remains in the heat-affected zone (HAZ).	

K55 vs J55 — Key Differences

Both grades belong to the same API 5CT product group (Group 1) and share identical yield strength ranges. The critical distinction is tensile strength, which makes K55 the stronger option for applications requiring higher burst and collapse performance.

Property	J55	K55	Difference
Yield Strength (min)	379 MPa	379 MPa	Same
Yield Strength (max)	552 MPa	552 MPa	Same
Tensile Strength (min)	517 MPa	655 MPa	+26.7%
Min Elongation	19%	15%	K55 lower
Impact Test	Required	Required	Same criteria