

Testing and Inspection Requirements

ASTM A333 pipe inspection should focus on low-temperature performance, pipe integrity, dimensional control, and document traceability. The inspection chain should clearly connect each pipe to its heat number and test results.

Inspection Item	What It Confirms	Buyer-Side Value
Chemical Analysis	Confirms grade identity and composition limits	Verifies material basis before acceptance
Tensile Test	Confirms yield, tensile and elongation	Checks basic mechanical performance
Charpy Impact Test	Confirms low-temperature notch toughness	Proves suitability for cold service
Hydrostatic Test or NDE	Confirms pipe body or weld integrity	Reduces leakage or defect risk
Dimensional Inspection	Confirms OD, wall thickness, length and straightness	Supports fit-up and installation
Visual / Marking Check	Confirms grade, heat number and pipe identity	Helps site receiving and traceability
MTC Review	Confirms test records match delivered pipes	Supports final document approval

Document package focus: For export projects, the document package should include MTC, chemical analysis, tensile test result, Charpy impact test record, hydrostatic or NDE report, dimensional inspection summary, packing list, and heat number traceability.