

TESTS & INSPECTIONS PERFORMED DURING THE PRODUCTION OF API 5CT CASING (CARBON GRADES ONLY)

Test/Inspection	Method/Equipment Used	Description
Set-up Macro of Weld Profile	Visual examination	N/A
Transverse Weld Area Evaluation	Visual examination	N/A
Weld Temperature Monitor	Thermasure system provided by Thermatool	Infra-red Pyrometer
On-line NDE of weld zone	Industrial Inspection Systems	4 Channel UT unit
Seam Annealing Temperature Monitor	Thermasure system provided by Thermatool	Infra-red Pyrometer
Seam annealing penetration and microstructure	Visual and microscopic examination	N/A
Weld Seam Temperature entering the quench tank	Thermasure system provided by Thermatool	Infra-red Pyrometer
Dimensional Evaluation	Micrometers/Snap Gauges	N/A
Flattening Tests	Visual examination	N/A
Laboratory Testing (Product Chemical Composition, Tensile and Charpy Impact Toughness, where required)	Chemical composition outsourced, Tensile using hydraulic UTM, Charpy outsourced	N/A
Full Length Drift Test	WTC Design	Rack & pinion system
Hydrostatic Test	Brandt	10,000 psi capacity
Post-hydro NDE of weld zone	Industrial Inspection Systems	4 Channel UT unit
Weigh, Measure & Stencil	Brandt	N/A
Thread Elements Inspection	Thread Inspection Instrumentation	N/A
End Drift of Box End of T&C joint	End Drift Plugs as described in API 5CT	N/A
Visual Inspection at various stages throughout the process	Visual examination	N/A