



ASTM A333 GRADE 4 SEAMLESS ALLOY PIPE

ASTM A333 Grade4 is the part of standard covers wall seamless and welded carbon and alloy steel pipe intended for use at low temperatures. ASTM A333 Grade 1 alloy pipe shall be made by the seamless or welding process with the addition of no filler metal in the welding operation.

Seamless size for Low-Temperature Service:

Outer Dimensions:	19.05mm – 610m
Wall Thickness:	2.0mm – 70mm
Length:	Max 16000mm
Application:	Seamless and Welded Steel Pipe for Low-Temperature Service
Steel grade:	ASTM A333 Grade 4
Packing:	Bare packing/bundle packing/crate packing/wooden protection at the both sides of tubes and suitably protected for sea-worthy delivery or as requested.
Inspection and Test:	Chemical Composition Inspection, Mechanical Properties Test (Tensile Strength, Yield Strength, Elongation, Flaring, Flattening, Bending, Hardness, Impact Test), Surface and Dimension Test, Non-destructive Test, Hydrostatic Test.
Surface treatment:	Oil-dip, Varnish, Passivation, Phosphating, Shot Blasting. Both ends of each crate will indicate the order no., heat no., dimensions, weight and bundles or as requested.

ASTM A333 Grade 4 Chemical Compositions (%)

Compositions	Data
Carbon (max.)	0.12
Manganese	0.50-1.05
Phosphorus (max.)	0.025
Sulfur (max.)	0.025
Silicon	0.18-0.37
Nickel	3.18-3.82
Chromium	0.44-1.01
Al	0.04-0.30



Mechanical properties for ASTM A333 Grade 4 Alloy Steel

Properties	Data
Yield strength (min)	415 Mpa
Tensile strength (min)	240 Mpa
Elongation (% min) Y	30
Elongation (% min) X	16.5

Strike Temperature Condition for ASTM A333 Grade 4

The lowest temperature for strike test	
°F	°C
-150	-100

Other ASTM Standards

A262 Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels

A941 Terminology Relating to Steel, Stainless Steel, Related Alloys, and Ferroalloys

A1016/A1016M Specification for General Requirements for Ferritic Alloy Steel, Austenitic Alloy Steel, and Stainless Steel Tubes

E112 Test Methods for Determining Average Grain Size