

### **ASTM A333 GRADE 1 SEAMLESS ALLOY PIPE**

ASTM A333 Grade 1 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 and Welded Steel Pipe 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 1

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 1 Chemical Compositions (%)

Compositions	Data
Carbon (max.)	0.30
Manganese	0.40–1.06
Phosphorus (max.)	0.025
Sulfur (max.)	0.025
Silicon	
Nickel	
Chromium	
Other Elements	



### Mechanical properties for ASTM A333 Grade 1 Alloy Steel

Properties	Data
Yield strength (min)	205Mpa
Tensile strength (min)	380Mpa
Elongation (%)	35

## Strike Temperature Condition for ASTM A333 Grade 1

The lowest temperature for strike test	
°F	°C
-50	-45

#### 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 Ferro alloys
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