

ASTM B622 UNS N06022 Hastelloy C22 Pipe & Tube Specifications

INCONEL® alloy 22 (UNS N06022; W. Nr. 2.4602; NiCr21Mo14W) is a fully austenitic advanced corrosion-resistant alloy that offers resistance to both aqueous corrosion and attack at elevated temperatures.

ASTM B622 UNS N06022 seamless pipes are widely used in chemical processing, marine, flue gas scrubbers, sour gas service, and pollution control due to their **exceptional resistance to oxidizing and reducing environments**.

Standard: ASTM B622 / ASME SB622

Grade: UNS N06022 (Hastelloy C22 / Alloy C-22 / W.Nr. 2.4602)

Product Form: Seamless Pipe & Tube

Chemical Composition (%)

Element	Content (%)
Nickel (Ni)	Balance
Chromium (Cr)	20.0 - 22.5
Molybdenum (Mo)	12.5 - 14.5
Tungsten (W)	2.5 - 3.5
Iron (Fe)	2.0 - 6.0
Cobalt (Co)	≤ 2.5
Manganese (Mn)	≤ 0.5
Silicon (Si)	≤ 0.08
Carbon (C)	≤ 0.015
Phosphorus (P)	≤ 0.02
Sulfur (S)	≤ 0.02

Mechanical Properties (ASTM B622 Standard)

Property	Value
Tensile Strength (min)	690 MPa (100 ksi)
Yield Strength, 0.2% Offset (min)	283 MPa (41 ksi)
Elongation (min)	40 %

Property	Value
Hardness (HRB)	≤ 90

Available Sizes & Dimensions

- **Outer Diameter (OD):** 6 mm to 219 mm
- **Wall Thickness (WT):** 0.5 mm to 20 mm
- **Length:** Up to 12 meters (custom cut-to-length available)
- **Forms:** Seamless Pipe, Seamless Tube, Heat Exchanger Tubes, Boiler Tubes, Instrumentation Tubes

Standards & Specifications

- **Standard:** ASTM B622 / ASME SB622
- **Equivalent:** ASTM B619, B626 (welded forms)
- **Grade:** UNS N06022 | Hastelloy C22 | Alloy C-22 | W.Nr. 2.4602
- **Testing:** Hydrostatic Test, Eddy Current Test, PMI, IGC, HIC (on request)
- **Certification:** EN 10204 3.1 / 3.2, NACE MR0175, ISO 9001

