

MATERIAL DATA SHEET

Alloy Grade UNS: HPNb – Contains Niobium



OVERVIEW

Contains Niobium that improves stress rupture strength and carburization resistance but lowers ductility. The service limit is 2010 degrees Fahrenheit (1100 degrees Celsius). This stainless-steel alloy has good tensile strength.

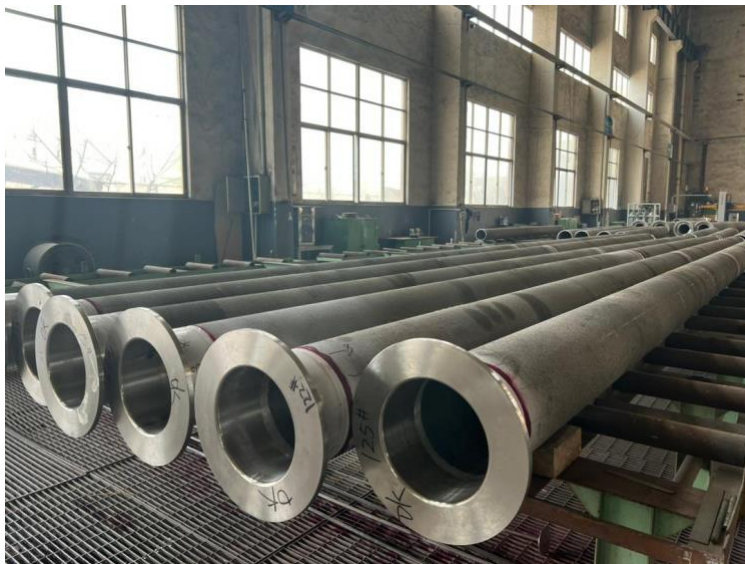


TYPICAL USES

Petrochemical furnaces, equally well suited for reformer and ethylene furnace applications.



GRADE HPNb (25-35Nb)



SIMILAR SPECIFICATIONS

Cast ASTM: A297 MOD.

TYPICAL CHEMICAL COMPOSITION (% By Wt.)

Aluminum: N/A	Nickel: 32 - 37
Carbon: 0.35 - 0.55	Lead: N/A
Chromium: 23 - 27	TIN: N/A
Manganese: 1.5	Silicon: 2
Iron: BAL	Zinc: N/A
Copper: N/A	
Other: Mo 0.50; Nb 0.60 – 1.00	



MINIMUM MECHANICAL PROPERTIES

Tensile, ksi

65



Yield, ksi

33



Tensile, MPa

450



Yield, MPa



Elongation

6%



Heat Treatment: Not Heat Treated

