



Alloy C-276 - BARS

Applications

INDUSTRIAL

Paper and Pulp Industry, Acid Gas Applications, High Temperature Superconductors, ect.

Chemical Composition (Nominal) %

Element	Percentage (%)
Ni (Nickel)	Balance
Cr (Chromium)	14.5 - 16.5
Mo (Molybdenum)	15.0 - 17.0
Fe (Iron)	4.0 - 7.0
W (Tungsten)	3.0 - 4.5
Co (Cobalt)	2.5 max
Mn (Manganese)	1.0 max
Si (Silicon)	0.08 max
C (Carbon)	0.010 max
V (Vanadium)	0.35 max
P (Phosphorus)	0.04 max
S (Sulfur)	0.03 max

Features

- Extraordinary resistance across a wide range of corrosive, watery media; in particular oxidizing and reducing acids
- Particularly high resistance against chloride-induced crevice, pitting and stress corrosion

Physical Properties

Density
8.9 g/cm³ (0.32 lb/in³) at 20°C

Standard

ASTM B564

Material

HASTELLOY C276 / UNS N10276 / 2.4819

Mechanical Properties

Heat Treatment	Tensile Strength min, ksi (MPa)	Yield Strength min, (0.2% offset) ksi (MPa)	Elongation in 2 in. or 50 mm (or 4 D), min, %
Solution annealed	100 (690)	41 (283)	40

Surface

Bright annealed / annealed

Package

Wooden case

Heat Treatment

Soft Annealing / Solution Annealing

Solution annealing should take place at temperatures of between 1,100 and 1,160°C (2,012 and 2,120°F).

Fast air cooling can also be carried out at thicknesses of less than approx. 1.5 mm (0.059 in). In the process, the cooling must take place within 2 minutes between 1,000 and 600°C (1,832 and 1,112°F).

Alloy C-276 - PLATES

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