



Canada
SPECIAL STEEL INC



Alloy C276

ROUND BAR



Applications

INDUSTRIAL

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

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

Standard

ASTM B564

Material

Alloy C276 / UNS N10276 / 2.4819

Surface

Bright annealed / annealed

Package

Wooden case

Chemical composition (Nominal) %

Grade	Ni	Fe	Mn	C	Si	S	Cr
Alloy C-276	balance	4.0-7.0	1.0	0.010	0.08	0.03	14.5-16.5
	Mo	P	W	Co	V		
	15.0-17.0	0.04	3.0-4.5	2.5	0.35		

Physical properties

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

Mechanical properties

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

Heat treatment

Soft Annealing

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

Solution Annealing

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).