

Nickel Alloys

Alloy C-276 Bar

Datasheet Updated
05 August 2021

SPECIFICATIONS

Commercial

Alloy C-276

Superalloy with excellent corrosion resistance in a wide range of severe environments.

CHEMICAL COMPOSITION

ASTM B161

Element	% Present
Carbon (C)	0.00 - 0.01
Chromium (Cr)	14.50 - 16.50
Cobalt (Co)	0.00 - 2.50
Iron (Fe)	4.00 - 7.00
Manganese (Mn)	0.00 - 1.00
Molybdenum (Mo)	15.00 - 17.00
Phosphorous (P)	0.00 - 0.04
Silicon (Si)	0.00 - 0.08
Sulphur (S)	0.00 - 0.03
Tungsten (W)	3.50 - 7.50
Vanadium (V)	0.00 - 0.04
Nickel (Ni)	Balance

ALLOY DESIGNATIONS

- N10276
- ASTM B574
- 2.4819

SUPPLIED FORMS

- Bar

APPLICATIONS

- Pressure vessels
- Reactors
- Mixers and agitators
- Scrubbers
- Dampers
- Heat exchangers
- Venturis
- Evaporators
- Solvent recovery plants
- Pumps and Valves

CHARACTERISTICS

- Excellent resistance to pitting and corrosion
- High mechanical properties
- Excellent resistance to oxidising atmospheres up to 1040°C
- Very high resistance to many aggressive chemicals
- One of the few alloys resistant to wet chloride gas, hypochlorite and chlorine dioxide solutions
- Good welding properties

MECHANICAL PROPERTIES

Typical

Property	Value
Proof Stress	283 MPa
Tensile Strength	690 MPa
Elongation A50 mm	4 %
Hardness Rockwell B	4 HRB

DISCLAIMER

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