







**Stainless Steel** 

1.4919 (316H)

**Datasheet Updated** 05 August 2021

## **SPECIFICATIONS**

Commercial	316H
EN	1.4919

A high carbon modification of alloy 316 developed for use in elevated temperature service.

### **CHEMICAL COMPOSITION**

#### EN 10269:2013

#### Stainless Steel Bar

Element	% Present
Carbon (C)	0.04 - 0.08
Chromium (Cr)	16.50 - 18.50
Molybdenum (Mo)	2.00 - 2.50
Silicon (Si)	0.00 - 1.00
Phosphorous (P)	0.00 - 0.04
Sulphur (S)	0.00 - 0.02
Nickel (Ni)	10.00 - 13.00
Manganese (Mn)	0.00 - 2.00
Nitrogen (N)	0.00 - 0.10
Iron (Fe)	Balance

#### **ALLOY DESIGNATIONS**

Stainless steel 1.4919/316H

# **SUPPLIED FORMS**

- Bar
- Fittings & Flanges
- Strip
- Pipe
- Tube
- Sheet
- Plate

## **APPLICATIONS**

- Chemical and petrochemical processing â€" pressure vessels, tanks, heat exchangers, piping systems, flanges, fittings, valves, and pumps
- Food and beverage processing
- Marine
- Medical
- Petroleum refining
- Pharmaceutical processing
- Power generation â€" nuclear
- Pulp and paper
- Textiles
- Water treatment
- Fasteners

#### **CHARACTERISTICS**

- Excellent for use in elevated temperatures
- Excellent corrosion resistance when exposed to a range of corrosive environments and media
- Good machinability
- Good weldability

## **MECHANICAL PROPERTIES**

## EN 10269:2013

#### Bar Up to 160mm

Property	Value
Proof Stress	205 Min MPa
Tensile Strength	490 to 690 MPa
Elongation A50 mm	35 %









#### **DISCLAIMER**

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