

Stainless Steel

1.4401 (316)

Datasheet Updated
07 March 2022

RANGE

Product Form	Sheet Size	Thicknesses
Sheet 2B Finish	2000 x 1000	0.6mm - 3.0mm
Sheet 2B Finish	2500 x 1250	0.7mm - 6.0mm
Sheet 2B Finish	3000 x 1500	1.2mm - 3.0mm
Polished Sheet 240 Silicon	2000 x 1000	0.6mm - 3.0mm
Polished Sheet 240 Silicon	2500 x 1250	0.7mm - 6.0mm
Polished Sheet 240 Silicon	3000 x 1500	1.0mm - 3.0mm
CPP Plate ID Finish	2000 x 1000	3.0mm - 6.0mm
CPP Plate ID Finish	2500 x 1250	3.0mm - 12.0mm
CPP Plate ID Finish	3000 x 1500	3.0mm - 12.0mm
CPP Plate ID Finish	4000 x 1500	10.0mm - 12.0mm
CPP Plate ID Finish	4000 x 2000	2.0mm - 12.0mm
Quarto Plate ID Finish	5" - 125"	-
Welded Mesh	96" x 48"	Contact Service Centre

SPECIFICATIONS

Commercial	316
EN	1.4401

A chromium-nickel-molybdenum austenitic stainless steel.

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CHEMICAL COMPOSITION

EN 10088-2
1.4401 Steel

Element	% Present
Carbon (C)	0.00 - 0.07
Chromium (Cr)	16.50 - 18.50
Molybdenum (Mo)	2.00 - 2.50
Silicon (Si)	0.00 - 1.00
Phosphorous (P)	0.00 - 0.05
Sulphur (S)	0.00 - 0.02
Nickel (Ni)	10.00 - 13.00
Manganese (Mn)	0.00 - 2.00
Nitrogen (N)	0.00 - 0.11
Iron (Fe)	Balance

ALLOY DESIGNATIONS

Stainless steel grade 1.4401/316 also corresponds to the following designations **but may not be a direct equivalent**:

- UNS S31600
- 316S31
- EN 58H

SUPPLIED FORMS

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

APPLICATIONS

- Food processing equipment
- Brewery equipment
- Chemical and petrochemical equipment
- Laboratory benches & equipment
- Coastal architectural panelling
- Coastal balustrading
- Boat fittings
- Chemical transportation containers
- Heat exchangers
- Mining screens
- Nuts and bolts
- Springs
- Medical implants

CHARACTERISTICS

- Excellent corrosion resistance when exposed to a range of corrosive environments and media
- Good machinability
- Excellent weldability
- Good formability

MECHANICAL PROPERTIES

EN 10088-3

Bar & Section Up to 160mm Dia / Thickness

Property	Value
Proof Stress	200 Min MPa
Tensile Strength	500 to 700 MPa
Elongation A50 mm	40 Min %
Hradness Brinell	215 Max HB

EN 10088-2

Sheet Up to 8mm Thick

Property	Value
Proof Stress	240 Min MPa
Tensile Strength	530 to 680 MPa
Elongation A50 mm	40 Min %

EN 10088-2

Plate From 8mm to 75mm Thick

Property	Value
Proof Stress	220 Min MPa
Tensile Strength	520 to 670 MPa
Elongation A50 mm	45 Min %

DISCLAIMER

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