

Stainless Steel

1.4307 (304L)

Datasheet Updated
05 August 2021

RANGE		
Bar & Tube	Imperial Sizes	Metric Sizes
Round Bar	3" - 16"	
Flat Bar		20 x 10mm - 100 x 25mm
Welded Ornamental Tube	1/2" - 4"	30mm - 50mm
Welded Tube	1/2" - 2"	16mm - 50mm
Hygienic Tube	3/4" - 4"	
Sheet/Plate	Sheet Size	Thicknesses
Polished Sheet	2000 x 1000	0.7mm - 3.0mm
Polished Sheet	2500 x 1250	0.7mm - 6.0mm
Polished Sheet	3000 x 1500	1.0mm - 6.0mm
Polished Sheet (Circle)	2500 x 1250	0.7mm - 1.5mm
Sheet Cold Rolled	2500 x 1250	4.0mm - 6.0mm
Sheet Cold Rolled	3000 x 1500	4.0mm - 6.0mm
Sheet Cold Rolled	4000 x 2000	2.0mm - 6.0mm
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

Sheet/Plate	Sheet Size	Thicknesses
CPP Plate ID Finish	4000 x 2000	2.0mm - 12.0mm
Quarto Plate ID Finish	5" - 125"	

Polished sheet sizes are for mirror and super mirror finishes.

Polished Sheet options available: 240 Silicon, 240 Grit and various coating including Fiber Optic Laser for one or two sides.

SPECIFICATIONS

Commercial	304L
EN	1.4307

Low carbon chromium-nickel austenitic stainless steel.

CHEMICAL COMPOSITION

EN 10088-3 & EN 10088-2 1.4307 Steel

Element	% Present
Carbon (C)	0.00 - 0.03
Chromium (Cr)	17.50 - 19.50
Manganese (Mn)	0.00 - 2.00
Silicon (Si)	0.00 - 1.00
Phosphorous (P)	0.00 - 0.05
Sulphur (S)	0.00 - 0.02
Nickel (Ni)	8.00 - 10.50
Nitrogen (N)	0.00 - 0.11
Iron (Fe)	Balance

ALLOY DESIGNATIONS

Stainless steel grade 1.4301/304 also corresponds to the following designations **but may not be a direct equivalent**:

- S30400
- 304S11
- EN58E

SUPPLIED FORMS

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

APPLICATIONS

- Sinks and splashbacks
- Saucepans
- Cutlery and flatware
- Architectural panelling
- Sanitaryware and troughs
- Piping & tubing
- Brewery, dairy, food and pharmaceutical production equipment
- Cryogenic and food tanks and trailers
- Springs, nuts, bolts and screws

CHARACTERISTICS

- Low carbon version of 304
- Austenitic stainless steel
- Contains 18% chrome and 8% nickel
- Excellent welding and forming properties
- Machinability is reasonable
- High corrosion resistance
- Excellent drawing properties
- Good resistance to pitting and crevice corrosion
- Good ductility
- Good polishing ability

MECHANICAL PROPERTIES

EN 10088-3

Bar & Section Up to 160mm Diameter/Thickness

Property	Value
Proof Stress	175 Min MPa
Tensile Strength	500 to 700 MPa
Elongation A50 mm	45 Min %
Hardness Brinell	215 Max HB

EN 10088-2

Sheet Up to 8mm Thick

Property	Value
Proof Stress	220 Min MPa
Tensile Strength	520 to 700 MPa
Elongation A50 mm	45 Min %

EN 10088-2

Plate From 8mm to 75mm Thick

Property	Value
Proof Stress	200 Min MPa
Tensile Strength	500 to 700 MPa
Elongation A50 mm	45 Min %

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon. Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources. Material supplied by the Company may vary significantly from this data but will conform to all relevant and applicable standards. As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied. Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.