

304 Stainless Steel

Smiths Advanced Metals

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Verstatile Stainless Steel Sheet

Excellent welding and forming characteristics.

304 is an austenitic stainless steel containing 18% chrome and 8% nickel, and represents one of the most frequently used alloys in the stainless steel family.

304 stainless steel sheet offers excellent weldability and forming properties (if welding, use 304L). The material also provides reasonable machinability and very good drawability. The alloys combination of low yield strength and high elongation allows for complex parts to be formed, although the material will harden quickly. The alloy can be severely deep drawn and, for this reason, is the alloy of choice in applications such as saucepans and sinks.

304 stainless steel represents one of the most versatile stainless steel alloys available, and we guillotine your sheets to your size requirements in-house.

We stock [304 stainless steel sheets](#) in a wide range of thicknesses and surface finishes (including polished, 1BA finish, 2BA finish, 2B finish and 2D finishes).



Grades / Specifications

- 1.4301, 1.4307
- UNS S30400, UNS S30403
- AMS5511
- AMS5513
- ASME SA240, ASME SA666
- ASTM A240, ASTM A666, ASTM F899
- NACE MR0103, NACE MR0175

Applications Areas

- Food processing equipment, heat exchangers, machinery parts, filtration devices.

* Chemical Composition (weight %)

	C	Cr	Mn	Si	P	S	Ni	Mo	Cu	Fe
min.		18.00					8.00			
Max.	0.030	20.00	2.00	1.00	0.040	0.030	11.00	0.75	0.75	Bal

* As per AMS 5511

* Mechanical Properties

Tensile Strength
Elongation A5

689 MPa max
40% (min)

Physical Properties

Density
Melting Point
Modulus of Elasticity
Electrical Resistivity
Thermal Conductivity
Thermal Expansion

8.00 kg/m³
1450 °C
193 GPa
0.072 x10⁻⁶ Ω.m
16.2 W/m.K
17.2 x10⁻⁶ /K

* Properties as per AMS 5511, products over 0.13mm

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