EEL TECHNICAL DATASHEET

304 Stainless Steel

Smiths Advanced Metals

Rev: SAM/datasheets/stainless-steel-sheet/304-stainless/feb-2022

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 \$30400, UNS \$30403
- AMS5511
- AMS5513

Applications Areas

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

* Chem	* Chemical Composition (weight %)										
	С	Cr	Mn	Si	Р	S	Ni	Мо	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 Al	* As per AMS 5511										

* Mechanical Properti	es	Physical Properties				
Tensile Strength Elongation A5	689 MPa max 40% (min)	Density Melting Point Modulus of Elasticity Electrical Resistivity Thermal Conductivity Thermal Expansion	8.00 kg/m ³ 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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ADVANCED METALS

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- ASME SA240, ASME SA666
- ASTM A240, ASTM A666, ASTM F899
- NACE MR0103, NACE MR0175

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