

# 301 Stainless Steel

Smiths Advanced Metals



Rev: SAM/datasheets/stainless-steel-sheet/301-stainless/feb-2022

Page: 1 of 1

## Austenitic Stainless Steel Sheet

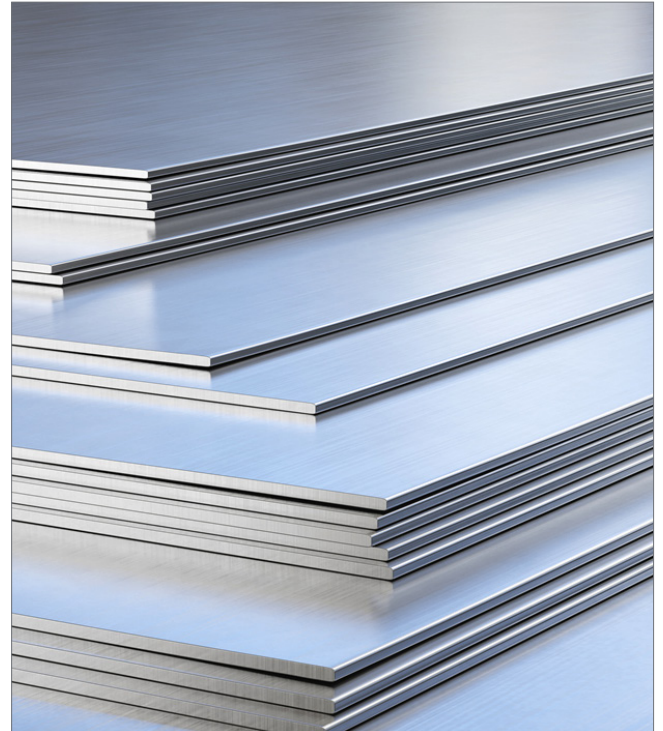
High strength with good ductility

301 stainless steel combines high strength with good corrosion resistance making the material ideal for many commercial engineering applications.

The product is available in various tempers and conditions depending on the required strength levels. The material benefits from good weldability, and ductility is also good when cold worked. 301 offers good oxidation resistance and is highly suitable for architectural and decorative applications.

The alloy is also suitable in structural applications due to the high strength and hardness achieved through cold working. Typical examples include aircraft structural parts, automotive parts and decorative applications. The alloy is non-hardenable by heat treatment but may be easily formed and drawn.

We stock [301 stainless steel sheets](#) in a wide range of thicknesses and conditions (including annealed, full hard, half-hard and ¼ hard conditions).



## Grades / Specifications

- AMS5517
- AMS5518
- AMS5519
- AMS5901
- ASME SA240, ASME SA666
- ASTM A240, ASTM A480, ASTM B666
- NACE MR0103, NACE MR0175
- QQ5766
- UNS S30100

### \* Chemical Composition (weight %)

	C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Fe
min.						16.00	6.00			Bal
Max.	0.15	2.00	0.040	0.030	1.00	18.00	8.00	0.75	0.75	Bal

\* As per AMS 5517

### \* Mechanical Properties (at room temperature)

Tensile Strength:	862 MPa min	Elongation:	25% min
0.2% Yield:	517 MPa min	Hardness:	25 HRC min

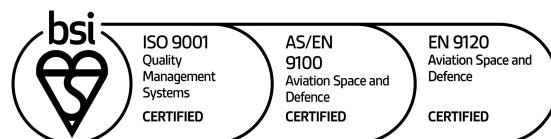
\* Properties as per AMS 5517, products over 0.13mm.

[www.smithsadvanced.com](http://www.smithsadvanced.com)

[info@smithsadvanced.com](mailto:info@smithsadvanced.com)



Stratton Business Park,  
London Road, Biggleswade,  
Bedfordshire SG18 8QB  
Tel: **+44 (0) 1767 604710**



All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.