

304 Stainless

Smiths Advanced Metals

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Page: 1 of 1

Weldable Stainless Steel Tube

Ideal for welding applications.

Type 304 stainless steel is an austenitic nickel alloy with minimal carbon content, making the material highly suitable for welding applications.

Our 304 stainless steel tubes offer good strength and good oxidation corrosion resistance with excellent formability and reasonable machinability. For applications requiring greater resistance to intergranular corrosion, we recommend 304L stainless since the product affords improved immunity in highly corrosive environments.

304 stainless steel is a highly versatile alloy finding use in applications, including heat exchangers, nuclear components and general engineering components.

Smiths Advanced Metals stocks 304 stainless steel tubes in seamless or welded form. Tubes from grade 304 are available in various sizes. We also provide a tube cutting service where we supply your tubular products to exact lengths.



Grades / Specifications

- AMS5566
- AMS5569
- ASTM A269
- ASTM A312
- ASTM A450
- MIL-T-6845, AMS-T-6845

Benefits

- Excellent corrosion resistance
- Excellent formability
- Excellent weldability
- Good strength

* Chemical Composition (weight %)

	C	Cr	Mn	Si	P	S	Ni	Mo	Cu	Fe
min.		18.00					8.00			
Max.	0.08	20.00	2.00	0.75	0.040	0.030	12.00	0.75	0.75	Bal

* As per AMS 5566

* Mechanical Properties

Tensile Strength	724 - 965 MPa
Proof Stress	517 - 758 MPa
Elongation	20% (min)

Physical Properties

Density	8.00 kg/m ³
Melting Point	1450 °C
Modulus of Elasticity	193 GPa
Electrical Resistivity	0.072 x10 ⁻⁶ Ω.m
Thermal Conductivity	16.2 W/m.K
Thermal Expansion	17.2 x10 ⁻⁶ /K

* Properties as per AMS 5566, Nominal OD over 4.78mm, all wall thickness's.

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