

A4 Stainless Steel



Common Standards

DIN	1.4401
AISI	316

Chemical Content

	%
Carbon (C)	<0.08
Silicon (S)	<1
Manganese (Mn)	<2
Phosphorus (P)	<0.045
Sulphur (S)	0.03
Chromium (Cr)	16 - 18.5
Molybdenum (Mo)	2 - 3
Nickel (Ni)	10.5 - 14
Copper (Cu)	4

Physical Properties

	Nominal Value
Density	8000 kg/m ³
Elastic Modulus	193 Gpa
Specific Heat 0-100°C	500 J/kg
Electrical Resistivity	740 nΩ.m

Mechanical Properties

	Nominal Value
Yield Strength	205 Mpa
Tensile Strength	500 - 700 Mpa
Elongation	> 40%
Rockwell Hardness	< 95
Brinell Hardness	< 217
Recommended Temperature Range	-196 - 300°C

Thermal Properties

	Nominal Value
Mean Thermal Expansion	
0 - 100°C	15.9 µm/m/°C
0 - 315°C	16.2 µm/m/°C
0 - 538°C	17.5 µm/m/°C

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