



STAINLESS STEEL 316



Key Features

Better corrosion resistance and non-magnetic properties than 302 & 304 stainless

Better pitting and crevice corrosion resistance than 302 & 304 stainless

IMPORTANT

We will manufacture to your required mechanical properties.

key advantages to you, *our customer*



0.025mm to 21mm
(.001" to .827")



Order 3m to 3t
(10 ft to 6000 Lbs)



Delivery:
within 3 weeks



Wire to your spec



E.M.S available



Technical support

STAINLESS STEEL 316 available in:-

- Round wire
- Bars or lengths
- Flat wire
- Shaped wire
- Rope/Strand

Packaging

- Coils
- Spools
- Bars or lengths



STAINLESS STEEL 316

Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	ASTM A313 ASTM A580 BS 970 BS 2056 Designations W.Nr. 1.4401 W.Nr. 1.4404 UNS S31600 AWS 162	Better corrosion resistance and non-magnetic properties than 302 and 304 stainless Better pitting and crevice corrosion resistance than 302 and 304 stainless	More suited to Marine, Food and Medical applications than 302 and 304 stainless Food processing Springs Engineered components Wire mesh Wire cloth Hose braiding
C	-	0.07			
Mn	-	2.00			
P	-	0.045			
S	-	0.03			
Si	-	1.00			
Cr	16.00	18.50			
Ni	9.50	13.00			
Mo	2.00	2.50			

Density	8.0 g/cm ³	0.289 lb/in ³
Melting Point	1398 °C	2555 °F
Coefficient of Expansion	17.5 µm/m °C (20 – 100 °C)	9.7 x 10 ⁻⁶ in/in °F (70 – 212 °F)
Modulus of Rigidity	70.3 kN/mm ²	10196 ksi
Modulus of Elasticity	187.5 kN/mm ²	27195 ksi

Heat Treatment of Finished Parts					
Condition as supplied by Alloy Wire	Type	Temperature		Time (Hr)	Cooling
		°C	°F		
Annealed or Spring Temper	Stress Relieve	250	480	1	Air

Properties				
Condition	Approx. tensile strength		Approx. operating temperature	
	N/mm ²	ksi	°C	°F
Annealed	<800	<116	-200 to +300	-330 to +570
Spring Temper	1300 – 2200	189 – 319	-200 to +300	-330 to +570

The above tensile strength ranges are typical. If you require different please ask.