## Technical Datasheet AWS 131 Rev.2





# **STAINLESS STEEL** 1.4310

#### **Key Features**

Good mechanical properties and corrosion resistance Capable of high tensile strength following cold work

IMPORTANT We will manufacture to your required mechanical properties.

## key advantages to you, our customer



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





E.M.S available

(10 ft to 6000 Lbs)





Technical support

### STAINLESS STEEL 1.4310 available in:-

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

Packaging Coils Spools Bars or lengths

Manufacturing quality, delivering reliability | alloywire.com

## **STAINLESS STEEL 1.4310**



Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	BS EN 10088-3	Good mechanical properties and corrosion	Springs and high strength
С	0.05	0.12	DIN EN 10270-3	resistance	components
Mn	-	2.00		Capable of high tensile strength following	Engineered components
				cold work	Chemical processing
Р	-	0.045		Magnetic following cold work	Electronic equipment
S	-	0.015	Designations	·····g·······g·····	
Si	-	2.00	W.Nr. 1.4310		
Cr	16.00	19.00	UNS S30100 AWS 131		
Ni	6.00	9.50			
N	-	0.11			
Мо	-	0.80			
Fe	Fe BAL				

Density	7.90 g/cm <sup>3</sup>	0.285 lb/in <sup>3</sup>	
Melting Point	1420 °C	2590 °F	
Coefficient of Expansion	17.6 μm/m °C (20 – 100°C)	9.8 x 10 <sup>-6</sup> in/in °F (70 – 212 °F)	
Modulus of Rigidity	76 kN/mm <sup>2</sup>	11000 ksi	
Modulus of Elasticity	190 kN/mm²	28000 ksi	

Heat Treatment of Finished Parts							
Condition of sumplied by Alloy Wire	Туре	Temperature			Cooling		
Condition as supplied by Alloy Wire		°C	°F	Time (Hr)	Cooling		
Annealed or Spring Temper	Stress Relieve	250 - 400	480 - 750	1	Air		

Properties							
Condition	Approx. tensile stren	gth	Approx. operating temperature				
Condition	N/mm²	ksi	°C	°F			
Annealed	<800	<116	-200 to +300	-330 to +570			
Spring Temper	1600 – 2200	232-319	-200 to +300	-330 to +570			

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

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AS 9100 Aerospace & Defence ISO 9001 Quality Management ISO 45001 Health & Safety