Technical Datasheet **AWS 131 Rev.1**

alloy wire international

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*

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

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

DELIVERY 3 WEEKS
Delivery:
within 3 weeks

Wire to your spec

E.M.S available

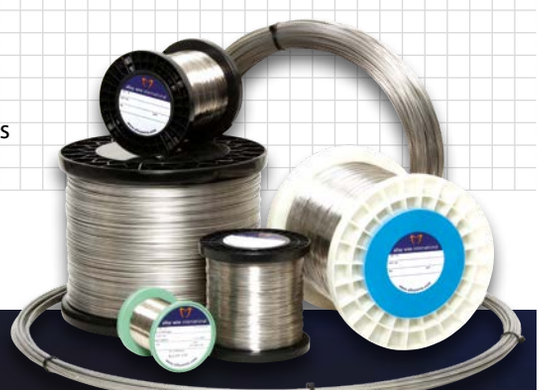
HOW CAN I HELP?
Technical support

STAINLESS STEEL 1.4310 available in:-

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

Packaging

- Coils
- Spools
- Bars or lengths



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Chemical Composition		
Element	Min %	Max %
C	0.05	0.12
Mn	-	2.00
P	-	0.045
S	-	0.015
Si	-	2.00
Cr	16.00	19.00
Ni	6.00	9.50
N	-	0.11
Mo	-	0.80
Fe	BAL	

Specifications

BS EN 10088-3
DIN EN 10270-3

Designations

W.Nr. 1.4310
UNS S30100
AWS 131

Key Features

Good mechanical properties and corrosion resistance

Capable of high tensile strength following cold work

Magnetic following cold work

Typical Applications

Springs and high strength components

Engineered components

Chemical processing

Electronic equipment

Density	7.90 g/cm^3	0.285 lb/in^3
Melting Point	1420 °C	2590 °F
Coefficient of Expansion	17.6 µm/m °C (20 – 100°C)	9.8 x 10^{-6} in/in °F (70 – 212 °F)
Modulus of Rigidity	76 kN/mm^2	11000 ksi
Modulus of Elasticity	190 kN/mm^2	28000 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 - 400	480 - 750	1	Air

Properties				
Condition	**Approx. tensile strength**		**Approx. operating temperature**	
	N/mm^2	**ksi**	**°C**	**°F**
Annealed	600 – 800	87 – 116	-200 to +300	-330 to +570
Spring Temper	1600 – 2200	189 – 319	-200 to +300	-330 to +570

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

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