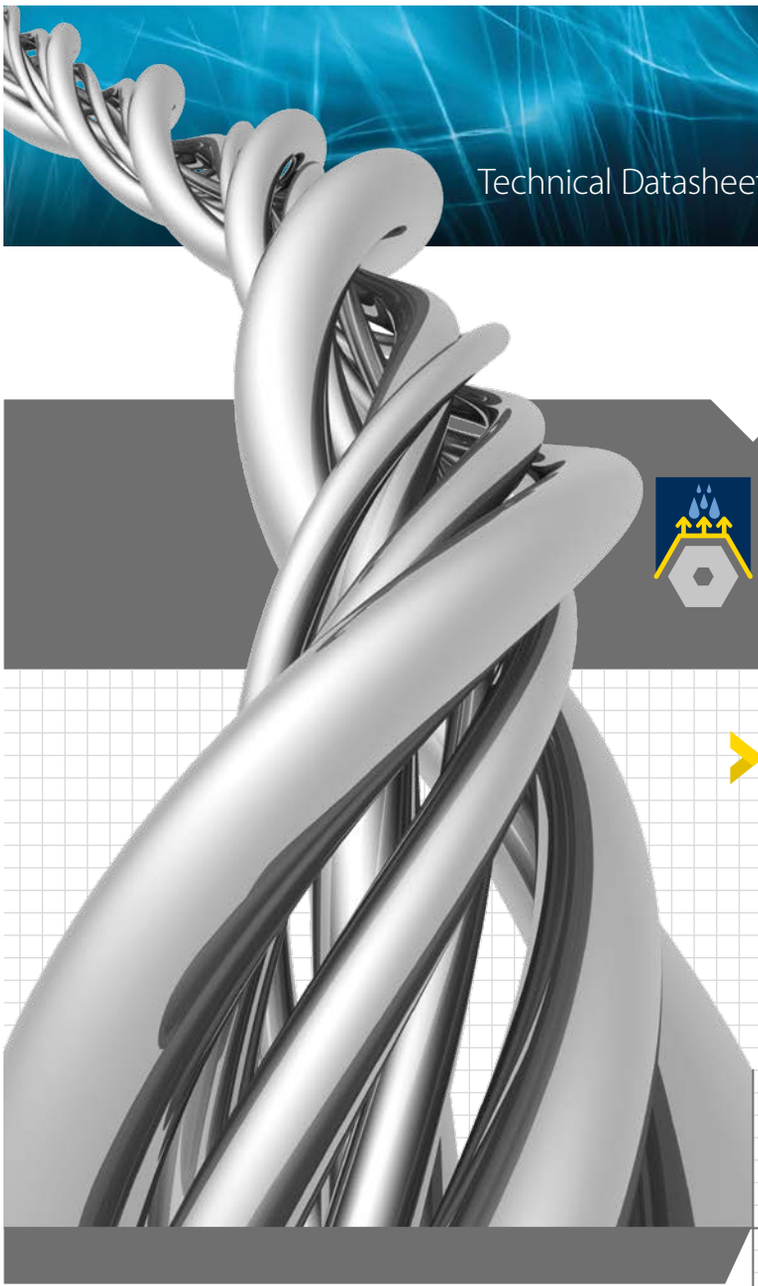
Technical Datasheet **AWS 150 Rev.1**

alloy wire international



TITANIUM Gr. 1

Key Features

Properties and chemical composition are very similar to Grade 2, but with tighter controls on O, Fe and H contents

One of the softer and more ductile grades of pure Titanium

Good strength to weight ratio

Corrosion resistant in oxidizing and mildly reducing environments

Good formability

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

TITANIUM Gr. 1 available in:-

- Round wire
- Bars or lengths
- Flat wire

Packaging

- Coils
- Spools
- Bars or lengths

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Chemical Composition		
Element	Min %	Max %
N	-	0.03
C	-	0.08
H	-	0.01
Fe	-	0.20
O	-	0.18
Residuals	-	0.40
Ti	BAL	

Specifications

ASTM B348
ASTM F67

Designations

W.Nr. 3.7025
UNS R50250
AWS 150

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Typical Applications

Aerospace
Automotive
Chemical Processing

Density	4.51 g/cm3	0.163 lb/in3
Melting Point	1670°C	3040 °F
Coefficient of Expansion	8.6 µm/m °C (20 - 100 °C)	4.8 x 10-6 in/in °F (70 - 212 °F)
Modulus of Rigidity	40 - 45 kN/mm²	5800 - 6530 ksi
Modulus of Elasticity	105 - 120 kN/mm²	15230 - 17400 ksi

Heat Treatment of Finished Parts					
Condition as supplied by Alloy Wire	**Type**	**Temperature**		**Time (Hr)**	**Cooling**
		°C	**°F**		
Annealed	Stress Relieve	480	900	0.5 - 2	Air
Spring Temper	Stress Relieve	250	480	0.5	Air

Properties				
Condition	**Approx. tensile strength**		**Approx. operating temperature**	
	N/mm²	**ksi**	**°C**	**°F**
Annealed	300 - 400	44 - 58	-200 to +400	-330 to +750
Spring Temper	550 - 850	80 - 123	-200 to +400	-330 to +750

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

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