Technical Datasheet AWS 169 Rev.2



SUPER DUPLEX

Key Features

Excellent resistance to stress corrosion cracking in chloride-bearing environments

Excellent resistance to pitting and crevice corrosion

High resistance to general corrosion

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

SUPER DUPLEX available in:-

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

Packaging

Coils Spools Bars or lengths

SUPER DUPLEX



Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	ISO 15156-3	Excellent resistance to stress corrosion	Oil and gas exploration
С	-	0.03	(NACE MR 0175)	cracking in chloride-bearing environments	Marine application
Mn	-	1.2	Designations	Excellent resistance to pitting and crevice corrosion	
Si	-	0.80	W.Nr. 1.4410 UNS S32750 2507	High resistance to general corrosion	
S	-	0.015			
Р	-	0.035	AWS 169		
Cr	24.00	26.0			
Ni	6.0	8.0			
Мо	3.0	4.5			
N	0.24	0.35			
Cu	-	0.5			
Fe	Fe BAL				

Density	7.8 g/cm ³	0.28 lb/in ³	
Melting Point	1350 °C	2460 °F	
Coefficient of Expansion	13.5 μm/m °C (25 – 100 °C) 7.5 x 10 ⁻⁶ in/in °F (70 – 200 °F)		
Modulus of Rigidity	77 kN/mm²	11000 ksi	
Modulus of Elasticity	200 kN/mm ²	29000 ksi	

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

Properties							
Condition	Approx. tensile stren	gth	Approx. operating temperature				
Condition	N/mm²	ksi	°C	°F			
Solution Annealed	< 1000	< 145	-200 to +300	-330 to +570			
Spring Temper	1300 – 1900	189 – 276	-200 to +300	-330 to +570			

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

