

OK Autrod 2509

A continuous solid corrosion resisting "Super Duplex" wire for welding of austenitic-ferritic stainless alloys of 25% Cr, 7% Ni, 4% Mo, low C types. OK Autrod 2509 has high intergranular, pitting and stress corrosion resistance. The alloy is widely used in applications where corrosion resistance is of utmost importance. Pulp & paper industry, offshore and gas industry are areas of interest.

Specifications

Classifications	EN ISO 14343-A : G 25 9 4 N L SFA/AWS A5.9 : ER2594
Approvals	CE : EN 13479 NAKS/HAKC : 1.0 mm

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Austenitic-ferritic (25 % Cr - 10 % Ni - 4 % Mo - Low C)
Shielding Gas	M12, M13 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	659 MPa (96 ksi)	832 MPa (121 ksi)	30 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	159 J (118 ft-lb)
As Welded	-40 °C (-40 °F)	129 J (95 ft-lb)

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	N	PRE	FN WRC-92
0.01	0.4	0.4	9.4	25.2	3.9	0.24	42	50

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.0 mm (0.040 in.)	80-190 A	16-24 V	2.9-8.4 m/min (114-331 in./min)	1.1-3.1 kg/h (2.4-6.8 lbs/h)
1.2 mm (0.047 in.)	180-280 A	20-28 V	4.9-8.5 m/min (193-335 in./min)	2.6-4.5 kg/h (5.7-9.9 lbs/h)