

OK Autrod 2209

A continuous solid corrosion resisting Duplex wire for welding of austenitic-ferritic stainless alloys of 22% Cr, 5% Ni, 3% Mo types. OK Autrod 2209 has a high general corrosion resistance. In media containing chloride and hydrogen sulphide the alloy has a high resistance to intergranular, pitting and especially to stress corrosion. The alloy is used in a variety of applications across all industrial segments.

Specifications

Classifications	EN ISO 14343-A : G 22 9 3 N L SFA/AWS A5.9 : ER2209
Approvals	CE : EN 13479 DB : 43.039.18 DNV-GL : Duplex UKCA : EN 13479 VdTÜV : 13039*

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

Alloy Type	Austenitic-ferritic (22.5 % Cr - 8 % Ni - 3 % Mo - Low C)
Shielding Gas	M12, M13 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
AWS 98 Ar/2 O2 (M13)			
As Welded	590 MPa	785 MPa	31 %
EN 98 Ar/2 O2 (M13)			
As Welded	610 MPa	785 MPa	32 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
AWS 98 Ar/2 O2 (M13)		
As Welded	-30 °C	105 J
As Welded	-46 °C	90 J
EN 98 Ar/2 O2 (M13)		
As Welded	-46 °C	90 J
As Welded	-30 °C	95 J

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	N	PRE	FN WRC-92
0.01	1.5	0.5	8.5	22.7	3.2	0.17	35	55

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	N	Nb
0.01	1.6	0.6	0.01	0.01	9	23	3	0.1	0.01

Typical Weld Metal Analysis %

PRE	FN WRC-92
35	50

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm	50-140 A	16-22 V	3.4-11.0 m/min	0.8-2.7 kg/h
1.0 mm	80-190 A	16-24 V	2.9-8.4 m/min	1.1-3.1 kg/h
1.2 mm	180-280 A	20-28 V	4.9-8.5 m/min	2.6-4.5 kg/h

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Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.6 mm	230-350 A	24-28 V	3.2-5.5 m/min	3.0-5.2 kg/h