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.

Classifications Wire Electrode	SFA/AWS A5.9 : ER2209 EN ISO 14343-A : G 22 9 3 N L
Approvals	CE EN 13479 DB 43.039.18 DNV-GL Duplex NAKS/HAKC 1.2MM VdTÜV 13039* VdTÜV 05387

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 (86 ksi)	785 MPa (114 ksi)	31 %
EN 98 Ar/2 O2 (M13)			
As Welded	610 MPa (88 ksi)	785 MPa (114 ksi)	32 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
AWS 98 Ar/2 O2 (M13)		
As Welded	-30 °C (-22 °F)	105 J (78 ft-lb)
As Welded	-46 °C (-51 °F)	90 J (67 ft-lb)
EN 98 Ar/2 O2 (M13)		
As Welded	-30 °C (-22 °F)	95 J (70 ft-lb)
As Welded	-46 °C (-51 °F)	90 J (67 ft-lb)

Typical Weld Metal Analysis %

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

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

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm (0.030 in.)	50-140 A	16-22 V	3.4-11.0 m/min (134-433 in./min)	0.8-2.7 kg/h (1.8-6.0 lb/h)
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 lb/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 lb/h)
1.6 mm (1/16 in.)	230-350 A	24-28 V	3.2-5.5 m/min (126-217 in./min)	3.0-5.2 kg/h (6.6-11. lb/h)

411163-en_US-FactSheet_Main-01 2022-01-17