

Exaton 2209

2209 is a chromium-nickel-molybdenum-nitrogen covered electrode with rutile coating for welding of 22-23%Cr duplex (ferritic-austenitic) stainless steels 2205. The electrode has excellent arc stability, low spatter, self peeling slag and smooth weld bead finishing. The weld metal is characterized by high strength and very good corrosion resistance pitting in chloride containing media and to stress corrosion cracking. The all-weld metal for 2209 is austenitic-ferritic with a ferrite content of approximately 40 FN according to WRC-92. 2209 is used for welding of duplex and lean duplex stainless steels in service temperatures up to 280°C (536°F). Typical base materials welded include ISO: 1.4462, 1.4362, 1.4162, 1.4662, 1.4460 and 1.4417.

Specifications

Classifications	EN ISO 3581-A : E 22 9 3 N L R SFA/AWS A5.4 : E2209-17 Werkstoffnummer : 1.4462
Approvals	CE : EN 13479 CWB : E2209-17 UKCA : EN 13479 VdTÜV : 19476

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

Welding Current	DC+, AC
Ferrite Content	FN 30-60
Alloy Type	Duplex CrNiMoN
Coating Type	Acid Rutile

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	690 MPa (100 ksi)	850 MPa (123 ksi)	25 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
ISO		
As Welded	-40 °C (-40 °F)	40 J (30 ft-lb)
As Welded	20 °C (68 °F)	60 J (44 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
<=0.03	0.7	0.8	<=0.025	<=0.03	9	23	3	0.1	0.18

Typical Weld Metal Analysis %

PRE	FN WRC-92
=>35.0	37

Deposition Data

Diameter	Current	Voltage	Deposition Efficiency (%)	Burn-off Time /Electrode	Deposition Rate @ 90% I max
2.5 x 300.0 mm (0.098 x 11.8 in.)	50-100 A	29 V	54 %	34 sec	1.1 kg/h (2.4 lbs/h)
3.2 x 350.0 mm (1/8 x 13.8 in.)	70-130 A	28 V	59 %	50 sec	1.5 kg/h (3.3 lbs/h)
4.0 x 350.0 mm (5/32 x 13.8 in.)	75-185 A	29 V	58 %	53 sec	2.1 kg/h (4.6 lbs/h)