

Exaton 2209

2209 is a chromium-nickel-molybdenum-nitrogen covered electrode with basic coating for welding of 22-23%Cr duplex (austenitic-ferritic) stainless steels 2205. The basic type of electrode combines good welding properties in all positions and high impact strength at low temperatures. The weld metal is characterized by high strength and very good pitting corrosion resistance as well as very good resistance to stress corrosion cracking in chloride containing media. 2209 is used for welding of duplex and lean duplex stainless steels in service temperatures up to 280°C (536°F), where good impact strength at temperatures below -40°C is required. Typical base materials to be welded are ISO: 1.4462, 1.4362, 1.4162, 1.4662, 1.4660 and 1.4417.

Specifications	
Classifications	EN ISO 3581-A : E 22 9 3 N L B SFA/AWS A5.4 : E2209-15 Werkstoffnummer : 1.4462
Approvals	BV : E2209-15 CE : EN13479 DNV : Duplex UKCA : EN13479

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

Welding Current	DC+
Ferrite Content	FN 35-50
Alloy Type	Duplex CrNiMoN
Coating Type	Basic

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	670 MPa (97 ksi)	840 MPa (122 ksi)	27 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
ISO		
As Welded	-46 °C (-51 °F)	80 J (59 ft-lb)
As Welded	20 °C (68 °F)	110 J (81 ft-lb)
As Welded	-60 °C (-76 °F)	67 J (50 ft-lb)

Typical Weld Metal Analysis %									
C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
<=0.04	1	0.6	<=0.025	<=0.03	9	23	3.2	0.1	0.18

Typical Weld Metal Analysis %	
PRE	FN WRC-92
>=35	44

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.)	55-80 A	24 V	56 %	49 sec	0.7 kg/h (1.5 lbs/h)
3.2 x 350.0 mm (1/8 x 13.8 in.)	70-115 A	24 V	60 %	61 sec	1.2 kg/h (2.6 lbs/h)
4.0 x 350.0 mm (5/32 x 13.8 in.)	90-175 A	25 V	57 %	62 sec	1.6 kg/h (3.5 lbs/h)