

OK NiCrFe-2

Nickel based electrode for welding Inconel 600 and similar alloys, cryogenic steels (e.g. 9% and 5% Ni steel), martensitic to austenitic steels, dissimilar steels, heat resisting steel castings of limited weldability etc. Good weldability in all positions, including overhead.

Specifications

Classifications	SFA/AWS A5.11 : ENiCrFe-2 EN ISO 14172 : E Ni 6133 (NiCr16Fe12NbMo)
Approvals	ABS

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

Welding Current	DC+
Alloy Type	Nickel alloy
Coating Type	Basic

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
AWS			
2.PWHT 4.5 hour(s) 982 °C (1800 °F)	321 MPa (47 ksi)	668 MPa (97 ksi)	50 %
As Welded	420 MPa (61 ksi)	660 MPa (96 ksi)	45 %
4.PWHT 4.5 hour(s) 982 °C (1800 °F)	233 MPa (34 ksi)	515 MPa (75 ksi)	46 %
1.PWHT 4.5 hour(s) 982 °C (1800 °F)	329 MPa (48 ksi)	673 MPa (98 ksi)	50 %
3.PWHT 4.5 hour(s) 982 °C (1800 °F)	239 MPa (35 ksi)	526 MPa (76 ksi)	44 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
AWS		
As Welded	-196 °C (-321 °F)	90 J (67 ft-lb)
As Welded	20 °C (68 °F)	110 J (81 ft-lb)
2.PWHT	-60 °C (-76 °F)	118 J (87 ft-lb)
1.PWHT	-60 °C (-76 °F)	122 J (90 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	Ni	Cr	Mo	Nb	Fe
0.03	2.7	0.5	69	16.1	1.9	1.9	7.7

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.)	50-80 A	22 V	63 %	45 sec	0.9 kg/h (2.0 lbs/h)
3.2 x 350.0 mm (1/8 x 13.8 in.)	70-105 A	23 V	62 %	57 sec	1.3 kg/h (2.9 lbs/h)
4.0 x 350.0 mm (5/32 x 13.8 in.)	95-140 A	24 V	65 %	58 sec	2.1 kg/h (4.6 lbs/h)