

OK NiCrFe-3

Nickel based electrode for welding Inconel 600 and similar Inconel alloys, cryogenic steels, martensitic to austenitic steels, dissimilar steels, heat resisting steel castings of limited weldability.

Classifications:	SFA/AWS A5.11:ENiCrFe-3, EN ISO 14172:E Ni 6182 (NiCr15Fe6Mn)
Approvals:	ABS ENiCrFe-3, NAKS/HAKC 4.0 mm

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

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
AWS			
As welded	410 MPa (59 ksi)	640 MPa (93 ksi)	40 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
AWS		
As welded	20 °C (68 °F)	100 J (74 ft-lb)
As welded	-196 °C (-321 °F)	80 J (59 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	Ni	Cr	Fe	Nb
0.04	6.7	0.8	71	15.6	6.3	1.7

Deposition Data

Diameter	Current	Voltage	kg weld metal/ kg electrodes	Number of electrodes/kg weld metal	Fusion time per electrode at 90% I max	Deposition rate 90% I max
2.5 x 300 mm (3/32 x 12 in.)	50-70 A	22 V	0.63	88	50 s	0.9 kg/h (2.0 lb/h)
3.2 x 350 mm (1/8 x 14 in.)	65-105 A	23 V	0.62	57	60 s	1.2 kg/h (2.6 lb/h)
4.0 x 350 mm (5/32 x 14 in.)	75-150 A	24 V	0.64	31	60 s	2.0 kg/h (4.4 lb/h)
5.0 x 350 mm (3/16 x 14 in.)	120-170 A	25 V	0.64	20	68 s	2.7 kg/h (6.0 lb/h)