

OK NiCrFe-3



OK NiCrFe-3 is a 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.

OK NiCrFe-3 provides a very crack resistant weld metal.

Classifications	SFA/AWS A5.11 : ENiCrFe-3 EN ISO 14172 : E Ni 6182 (NiCr15Fe6Mn)
Approvals	ABS ENiCrFe-3 NAKS/HAKC 2.5 - 4.0 mm

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

Welding Current	DC+
Alloy Type	Ni-based Cr-alloy
Coating Type	Basic

Typical Tensile Properties

Yield Strength	Tensile Strength	Elongation
ISO		
AWS		

Typical Charpy V-Notch Properties

Testing Temperature	Impact Value
AWS	
20 °C (68 °F)	110 J (81 ft-lb)
-196 °C (-321 °F)	95 J (70 ft-lb)
ISO	
20 °C (68 °F)	128 J (95 ft-lb)

Typical Weld Metal Analysis %

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

Deposition Data

Diameter	Current	Voltage	Number of electrodes/ kg weld metal	Burn-off Time/ Electrode	Deposition Efficiency %	Deposition Rate @ 90% I max
2.5 x 300.0 mm (0.098 x 11.8 in.)	50-70 A	22 V	88	50 sec	63 %	0.9 kg/h (2.0 lb/h)
3.2 x 350.0 mm (1/8 x 13.8 in.)	65-105 A	23 V	57	60 sec	62 %	1.2 kg/h (2.6 lb/h)
4.0 x 350.0 mm (5/32 x 13.8 in.)	75-150 A	24 V	31	60 sec	64 %	2.0 kg/h (4.4 lb/h)
5.0 x 350.0 mm (0.197 x 13.8 in.)	120-170 A	25 V	20	68 sec	64 %	2.7 kg/h (6.0 lb/h)