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.

Specifications	
Classifications	SFA/AWS A5.11 : ENiCrFe-3 EN ISO 14172 : E Ni 6182 (NiCr15Fe6Mn)
Approvals	ABS : ENiCrFe-3

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			
Conditional Statement	**Yield Strength**	**Tensile Strength**	**Elongation**
As welded	410 MPa (59.5 ksi)	640 MPa (93 ksi)	40 %

Typical Charpy V-Notch Properties	
Testing Temperature	**Impact Value**
20 °C (68 °F)	100 J (74 ft-lb)
-196 °C (-321 °F)	80 J (59 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**	**Deposition Efficiency (%)**	**Burn-off Time /Electrode**	**Deposition Rate @ 90% I max**
2.5 x 300 mm (0.098 x 11.8 in.)	50-70 A	22 V	63 %	50 sec	0.9 kg/h (2.0 lbs/h)
3.2 x 350 mm (1/8 x 13.8 in.)	65-105 A	23 V	62 %	60 sec	1.2 kg/h (2.6 lbs/h)
4.0 x 350 mm (5/32 x 13.8 in.)	75-150 A	24 V	64 %	60 sec	2.0 kg/h (4.4 lbs/h)
5.0 x 350 mm (0.197 x 13.8 in.)	120-170 A	25 V	64 %	68 sec	2.7 kg/h (6.0 lbs/h)