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			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
AWS			
As Welded	395 MPa	640 MPa	42 %
ISO			
PWHT 8 hour(s) 620 °C	433 MPa	683 MPa	44 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
AWS		
As Welded	20 °C	110 J
As Welded	-196 °C	95 J
ISO		
PWHT 8 hour(s) 620 °C	20 °C	128 J

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**	**Efficiency (%)**	**Fusion time per electrode at 90% I max**	**Deposition Rate**
2.5 x 300 mm	50-70 A	22 V	63 %	50 sec	0.9 kg/h
3.2 x 350 mm	65-105 A	23 V	62 %	60 sec	1.2 kg/h
4.0 x 350 mm	75-150 A	24 V	64 %	60 sec	2.0 kg/h
5.0 x 350 mm	120-170 A	25 V	64 %	68 sec	2.7 kg/h