

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:ENi 6182 (Ni Cr15Fe6Mn)
Approvals:	ABS ENiCrFe-3, NAKS/HAKC 4.0 mm

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

Welding Current:	DC+
Ferrite Content:	FN 0
Alloy Type:	Ni-based Cr-alloy
Coating Type:	Basic

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
AWS			
As welded	410 MPa	640 MPa	40 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
AWS		
As welded	20 °C	100 J
As welded	-196 °C	80 J

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	50-70 A	22 V	0.63	88	50 s	0.9 kg/h
3.2 x 350 mm	65-105 A	23 V	0.62	57	60 s	1.2 kg/h
4.0 x 350 mm	75-150 A	24 V	0.64	31	60 s	2.0 kg/h
5.0 x 350 mm	120-170 A	25 V	0.64	20	68 s	2.7 kg/h