



Product Data Sheet

E 'Manual metal-arc welding'

OK NiCrFe-3

Former OK 92.26

Prepared by A-C Thorsson	Qualified by Tero Borg	Approved by Tapio Huhtala	Reg no EN007081	Cancelling EN006281	Reg date 2016-02-17	Page 1 (2)
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REASON FOR ISSUE

General description revised. Approvals scope amended. NAKS/HAKC added.

GENERAL

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.

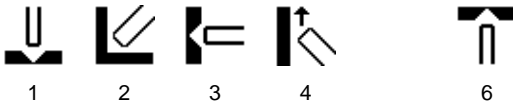
Polarity: DC+

Alloy Type: Ni-based Cr-alloy

Coating Type: Basic

Ferrite Content: FN 0

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.11 ENiCrFe-3
EN ISO 14172 E Ni 6182 (NiCr15Fe6Mn)

APPROVALS

ABS ENiCrFe-3
NAKS/HAKC 4.0 mm

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C		0.10
Si		1.0
Mn	5.0	9.5
P		0.025
S		0.015
Cr	13.0	17.0
Ni	61	79
Nb	1.0	2.5
Cu		0.50
Ti		0.5
Fe	2.0	9.0
Nb+Ta	1.0	2.5



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MECHANICAL PROPERTIES OF WELD METAL

Properties	AWS	
	Min	Typ
Rp0.2 (MPa)	360	410
Rm (MPa)	550	640
A4 (%)	30	40
Z (%)		55
Charpy V at 20°C (J)	75	100
Charpy V at -196°C (J)	65	80

Comments:

Interpass temp <100 °C.

ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
2.5 x 300	50	70	1.8	110	0.63	88	0.9	50	22	1,2,3,4,6
3.2 x 350	65	105	3.5	110	0.62	57	1.2	60	23	1,2,3,4,6
4.0 x 350	75	150	5.1	110	0.64	31	2.0	60	24	1,2,3,4,6
5.0 x 350	120	170	7.9	110	0.64	20	2.7	68	25	1,2,3

W = Weight (kg / 100 electrodes)

η = Efficiency (g weld metal x 100 / g core wire)

N = Effective value (kg weld metal / kg electrodes)

B = Changes (number of electrodes / kg weld metal)

H = Deposit rate at 90% of max current (kg weld metal / hour arc time)

T = Fusion time at 90% of max current (s / electrode)

U = Arc voltage (V)

OTHER DATA

Redrying: 200 °C, 2h.

Thermal expansion coefficient 0 to -196 °C: 0.00001035 / °C.