Product Data Sheet

E 'Manual metal-arc welding'

OK 61.50

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
A-C Thorsson	Tero Borg	Tapio Huhtala	EN007256	EN007129	2016-05-19	1 (2)

REASON FOR ISSUE

Approvals revised. NAKS/HAKC approval deleted.

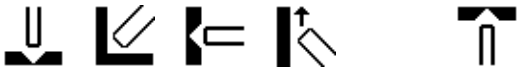
GENERAL

OK 61.50 is a stainless steel electrode for welding of 19Cr 9 Ni austenitic stainless steels with a carbon content >0.04%. Especially designed for high temperature applications.

Min AC OCV: 55
Polarity: DC+, AC

Alloy Type: Austenitic CrNi
Coating Type: Acid Rutile
Ferrite Content: FN 3 - 8

WELDING POSITIONS



1 2 3 4 6

CLASSIFICATIONS Electrode

EN ISO 3581-A	E 19 9 H R 1 2
SFA/AWS A5.4	E308H-17

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max	Nom
C	0.04	0.08	
Si	0.50	1.00	
Mn	0.5	1.2	
P		0.025	
S		0.020	
Cr	18.5	20.5	
Ni	9.0	11.0	
Mo		0.5	
Cu		0.3	
N		0.15	
Ferrite FN			4

MECHANICAL PROPERTIES OF WELD METAL

	AWS	
	As welded	
Properties	**Min**	**Typ**
Rp0.2 (MPa)	350	430
Rm (MPa)	550	600
A4 (%)	35	45
Z (%)	45	55
Charpy V at 20°C (J)		60

Comments:

Interpass temperature max 150 °C.

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ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	N	B	H	T	U	Welding
Ø x Length	Min	Max								Positions
2.5 x 300	50	85	1.8	101	0.56	98	0.9	42	27	1,2,3,4,6
3.2 x 350	70	110	3.5	101	0.56	51	1.1	63	27	1,2,3,4,6
4.0 x 350	110	165	5.3	100	0.56	34	1.7	62	28	1,2

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

Hardness data:

As welded condition, all weld metal, transverse cross section of ISO joint, measurements done along a horizontal (5 indents)- and vertical line (10 indents), 2 samples tested: 174 - 244 HV10, average 211 HV10

Redrying: 350 °C, 2h