Product Data Sheet

E 'Manual metal-arc welding'

OK NiCu-7

Former OK 92.86

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
A-C Thorsson	P-O Oskarsson	Tapio Huhtala	EN007405	EN007080	2016-11-08	1 (2)

REASON FOR ISSUE

Hardness data added under Other Data.

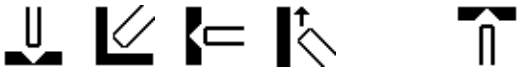
GENERAL

OK NiCu-7 is used for welding NiCu-alloys to themselves and to mild- and low alloy steel. Also suitable for welding NiCu-cladding on mild and low alloy steel.

Polarity: DC+

Alloy Type: NiCu-alloy
Coating Type: Basic
Ferrite Content: FN 0

WELDING POSITIONS



1 2 3 4 6

CLASSIFICATIONS Electrode

SFA/AWS A5.11	ENiCu-7
EN ISO 14172	E Ni 4060 (NiCu30Mn3Ti)

APPROVALS

Not applicable

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C		0.10
Si		1.0
Mn	1.0	4.0
P		0.020
S		0.015
Ni	62.0	69.0
Nb		0.3
Cu	27.0	34.0
Al		0.5
Ti		1.0
Fe	0.5	2.5
Nb+Ta		0.3

MECHANICAL PROPERTIES OF WELD METAL

	AWS	
	As welded	
Properties	**Min**	**Typ**
Rp0.2 (MPa)	260	410
Rm (MPa)	480	640
A4 (%)	30	40
Z (%)		55
Charpy V at 20°C (J)	80	100
Charpy V at -196°C (J)	70	80

Comments:

Interpass temp <100 °C.

Product Data Sheet

E 'Manual metal-arc welding'

OK NiCu-7

Former OK 92.86

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
A-C Thorsson	P-O Oskarsson	Tapio Huhtala	EN007405	EN007080	2016-11-08	2 (2)

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	70	1.9	105	0.63	83	1.0	45	22	1,2,3,4,6
3.2 x 350	70	120	3.7	105	0.63	42	1.6	52	26	1,2,3,4,6
4.0 x 350	120	140	5.6	105	0.63	28	2.4	54	28	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.

Hardness data:

As welded condition, transverse cross section of an ISO joint, measurements done along a vertical centre line (9 indents), and a horizontal line at top layer (10 indents), 2 samples tested: 121 - 173 HV10, average 150 HV10.