



Product Data Sheet

E 'Manual metal-arc welding'

OK Weartrode 50

Formerly OK 83.50

Prepared by A-C Thorsson	Qualified by Tero Tolonen	Approved by Tapio Huhtala	Reg no EN006239	Cancelling None	Reg date 2013-10-29	Page 1 (2)
-----------------------------	------------------------------	------------------------------	--------------------	--------------------	------------------------	---------------

REASON FOR ISSUE

New product. Changed name from OK 83.50.

GENERAL

General purpose hardfacing electrode for repair welding worn parts on agricultural equipment, forestry tools, loading machines, etc.

Transformers with low low open circuit voltage can be used (>45 volt).

Min AC OCV: 45

Alloy Type: Martensitic steel

Polarity: AC, DC+

Coating Type: Acid Rutile

WELDING POSITIONS



CLASSIFICATIONS Electrode

EN 14700

E Z Fe2

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.3	0.5
Si		0.6
Mn		1.0
P		0.030
S		0.030
Cr	5.3	6.7
Ni		0.3
Mo	0.43	0.77
W		0.1
V		0.1

ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
2.5 x 350	60	120	2.5	95	0.46	88	0.8	49	28	1,2,3
3.2 x 350	90	160	4.2	100	0.46	52	1.2	59	30	1,2,3
4.0 x 450	125	210	8.2	100	0.48	26	1.7	82	33	1,2,3
5.0 x 450	160	260	12.9	100	0.48	16	2.6	86	37	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)



Product Data Sheet

E 'Manual metal-arc welding'

OK Weartrode 50

Formerly OK 83.50

Prepared by A-C Thorsson	Qualified by Tero Tolonen	Approved by Tapio Huhtala	Reg no EN006239	Cancelling None	Reg date 2013-10-29	Page 2 (2)
-----------------------------	------------------------------	------------------------------	--------------------	--------------------	------------------------	---------------

OTHER DATA

Hardness:

Typical, as welded 50-60 HRC one-, two- and three-layer bead (preheat and interpass temp. ca 250 °C).

Tempering resistance:

Hardness at room temperature of top layer on three-layer test specimens made by 2.5 mm electrode after tempering 1 hour.

Temp. °C... HRC

20056

30054

40053

50052

55051

60044

65041

70034

Redrying: 300 °C for 2h.
