



# Product Data Sheet

E 'Manual metal-arc welding'

# OK Weartrode 55 HD

Formerly OK 84.58

Prepared by A-C Thorsson	Qualified by Tero Tolonen	Approved by Tapio Huhtala	Reg no EN006240	Cancelling None	Reg date 2013-10-29	Page 1 (2)
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## REASON FOR ISSUE

New product. Changed name from OK 84.58.

## GENERAL

A general purpose hardfacing electrode depositing a semi corrosion resistant martensitic steel with a hardness of about 57 HRC. The electrode is specially suitable for hardfacing parts exposed to different forms of abrasive and impact wear, e.g. farming equipment, forestry tools, loading machines and mixers. Additional information is found under the heading "Other Data".

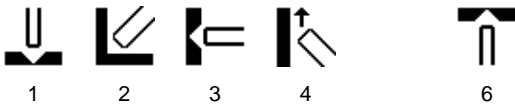
**Min AC OCV:** 65

**Polarity:** AC, DC+

**Alloy Type:** Martensitic steel

**Coating Type:** Lime Basic

## WELDING POSITIONS



## CLASSIFICATIONS Electrode

EN 14700

E Z Fe6

## CHEMICAL COMPOSITION

### All Weld Metal (%)

	Min	Max
C	0.60	0.76
Si	0.30	0.90
Mn	0.30	1.10
P		0.03
S		0.03
Cr	9.0	11.0
Mo		0.1
Nb		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	75	110	2.5	145	0.67	58	1.0	62	23	1,2,3,4,6
3.2 x 450	110	150	5.5	145	0.67	27	1.4	95	23	1,2,3,4,6
4.0 x 450	145	200	8.4	145	0.67	18	1.9	107	24	1,2,3,4
5.0 x 450	190	270	13.2	140	0.66	12	2.8	110	26	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)



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## OTHER DATA

Welding:

Preheat and an interpass temperature of about 200 °C is recommended for most applications.

Weld metal hardness, typical:

As welded (no preheat, interpass temp. 250 °C):

1 pass on mild steel.....52-59 HRC.

2 passes on mild steel...52-59 HRC.

3 passes on mild steel...53-59 HRC.

After tempering 1 hour:

°C.....HRC

100 .....55

200 .....55

300 .....52

400 .....50

500 .....54

600 .....46

700 .....31

Annealing and hardening:

Soft annealing is done at 840-860 °C. Rehardening by quenching from 950-1000 °C, in air or oil.

Machinability: grinding.

Redrying the electrodes: 200 °C, 2 hours.

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