Product Data Sheet

E 'Manual metal-arc welding'

OK Weartrode 65 T

Former OK 84.80

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REASON FOR ISSUE

Information under Other Data revised.

GENERAL

The electrode deposits a high density of wear resisting carbides in an austenitic matrix capable of resisting extreme conditions of abrasion up to 700 °C. Recovery approximately 220 %. Typical applications include exhaust fans, ash ploughs, conveyor screws and sinter plant components.

Polarity: DC+

Alloy Type: Austenitic iron

Coating Type: Special

WELDING POSITIONS

1 2

CLASSIFICATIONS Electrode

EN 14700 E Fe16

APPROVALS

Not applicable

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	3.0	7.0
Si	1.7	2.3
Mn	0.4	1.0
P		0.05
S		0.05
Cr	21.0	25.0
Mo	6.0	8.0
W	1.5	2.5
V	0.5	1.5
Nb	5.0	9.0

ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A) Min	Current (A) Max	W	η	N	B	H	T	U	Welding Positions
3.2 x 350	150	170	6.4	237	0.72	22	1.2	132	22	1,2
4.0 x 350	220	250	9.5	230	0.71	15	2.0	123	23	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

Welding:

Surfaces to be welded should be clean, remove oxides, grease, paint, etc.

For best welding performance use DC+, high amperage, a medium arc length.

To avoid cracking in the deposit apply preheat and elevated interpass temperature, up to 600 °C in heavier sections. After welding slow cooling down to about 100 °C.

Weld metal hardness:

At room temperature without preheat and with 100 °C interpass temperature.

57-61 HRC....1 layer on mild steel.

61-65 HRC....2 layers on mild steel.

62-66 HRC....3 layers on mild steel.

At room temperature with 600 °C preheat and interpass temperature.

50-54 HRC....3 layers on mild steel.

At 800 °C.

41-45 HRC....3 layers on mild steel.

Machinability: Grinding only

Abrasion resistance: Excellent

High temperature wear resistance: Very good

Corrosion resistance: Excellent

Redrying of the electrodes: 300 °C, 2 hours.