



Product Data Sheet

E 'Manual metal-arc welding'

OK 83.28

Signed by A-C Gustavsson	Approved by Tapio Huhtala/Barbro Karlström	Reg no EN002059	Cancelling EN000464	Reg date 2004-06-07	Page 1 (2)
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REASON FOR ISSUE

Approvals UDT and Sepros added. DB changed.

GENERAL

Electrode depositing a low alloy steel for the protection of parts exposed to metallic wear.

Typical application include rail and rail crossing section, cog wheels of cast steel, detail in rolling mills, e.g. grooved rollers and clutches.

Weld metal hardness approximately 30 HRC.

Min AC OCV: 70

Polarity: AC, DC+

Alloy Type: Martensitic steel

Coating Type: Lime Basic

WELDING POSITIONS



CLASSIFICATIONS Electrode

DIN 8555

E1-UM-300

APPROVALS

DB 20.039.01

Sepros UNA 485155

UDT DIN 8555

CHEMICAL COMPOSITION

All Weld Metal (%)

Compound	Min	Max
C	0.06	0.14
Si		0.7
Mn	0.4	1.0
P		0.03
S		0.03
Cr	2.5	3.9

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	N	B	H	T	U
\varnothing x Length	Min	Max							
2.5 x 350	60	90	2.3	120	0.64	69.0	0.70	75	20
3.2 x 450	100	140	4.4	115	0.66	34.0	1.20	88	21
4.0 x 450	140	190	6.7	110	0.66	23.0	1.70	92	22
5.0 x 450	190	260	9.8	110	0.68	15.0	2.80	86	23
6.0 x 450	230	320	14.2	110	0.68	10.5	3.70	92	23

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

Weld metal hardness, typical:

- as welded : 30 HRC (no preheat, interpass temp. < 90 °C).

- after tempering:

Temp °C.....HRC (1h tempering)....HRC (24 h tempering)

100.....33.....33

300.....33.....33

400.....34.....34

500.....35.....28

600.....27.....17

700.....18

Machinability: cutting.

Redrying the electrodes: 200 °C, 2 h.
