



Product Data Sheet

E 'Manual metal-arc welding'

OK 68.25

Prepared by Helene Rasmuson	Qualified by Tero Tolonen	Approved by Tapio Huhtala	Reg no EN006123	Cancelling EN005093	Reg date 2013-06-12	Page 1 (2)
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REASON FOR ISSUE

EN 1600 replaced by EN ISO 3581-A.

GENERAL

Basic coated electrode for welding corrosion resistant martensitic and martensitic-ferritic rolled, forged and cast steels, for example castings of 13Cr4NiMo-type.

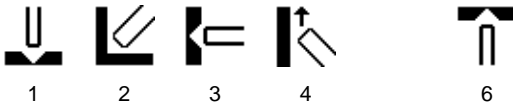
Polarity: DC+

Alloy Type: Martensitic-ferritic

Coating Type: Basic

Diff Hydrogen: <5.0 ml/100g

WELDING POSITIONS



CLASSIFICATIONS Electrode

EN 14700 E Fe7
EN ISO 3581-A E 13 4 B 4 2
SFA/AWS A5.4 E410NiMo-15
Werkstoffnummer 1.4351

APPROVALS

Seproz UNA 272580

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C		0.06
Si	0.20	0.80
Mn	0.50	1.00
P		0.030
S		0.020
Cr	11.5	12.5
Ni	4.0	5.0
Mo	0.40	0.70

MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO		AWS
	Min	Typ	Min
	PWHT 600°C 8h		Stress relieved 600°C 1h
Rp0.2 (MPa)	570	680	
Rm (MPa)	790	900	760
A4 (%)			15
A5 (%)	15	17	
at 20°C (J)		65	
at 0°C (J)		60	
at -20°C (J)		55	



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ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
3.2 x 450	90	150	4.5	117	0.64	35	1.6	63	28	1,2,3,4,6
4.0 x 450	110	190	7.0	120	0.66	22	2.2	73	28	1,2,3,4,6
5.0 x 450	140	250	10.9	121	0.67	14	3.1	86	27	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

Heat treatment: at 950 °C for 1 h followed by a new treatment at 600 °C for 8 h and cool in air.

Min. impact values:

+20 °C 80 J

+0 °C.....70 J

-20 °C.....65 J

Weld metal hardness, typical:

As welded:.....39 HRC.

Heat treatment, 600 °C for 1 hour:....30 HRC.

Heat treatment, 600 °C for 8 hours:...28 HRC.