Product Data Sheet

E 'Manual metal-arc welding'

OK 68.53

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
A-C Thorsson	Tero Borg	Tapio Huhtala	EN007245	EN007125	2016-05-13	1 (2)

REASON FOR ISSUE

Approvals revised. DNV amended to DNV-GL.

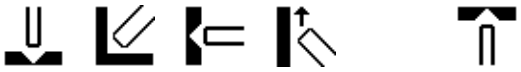
GENERAL

Stainless MMA electrode for welding austenittic-ferritic stainless steels of the so called Superduplex types i.e. steel grade SAF 2507 and Zeron 100.

Min AC OCV: 60
Polarity: DC+, AC

Alloy Type: Austenitic-ferritic CrNiMo
Coating Type: Basic Rutile
Ferrite Content: FN 35-50

WELDING POSITIONS



1 2 3 4 6

CLASSIFICATIONS Electrode

EN ISO 3581-A	E 25 9 4 N L R 32
SFA/AWS A5.4	E2594-16
Werkstoffnummer	(1.4410)

APPROVALS

CE	EN 13479
DNV-GL	Duplex
VdTÜV	07377

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max	Nom
C		0.04	
Si	0.30	0.80	
Mn	0.50	1.10	
P		0.025	
S		0.015	
Cr	24.5	26.0	
Ni	9.3	10.3	
Mo	3.7	4.3	
Cu		0.75	
N	0.22	0.28	
Ferrite FN			39

MECHANICAL PROPERTIES OF WELD METAL

	ISO	
	As welded	
Properties	**Min**	**Typ**
Rp0.2		700
Rm (MPa)	620	850
A5 (%)	18	30
Charpy V at 20°C (J)	47	50
Charpy V at -40°C (J)	32	40

Comments:

Interpass temperature max. 150 °C.

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ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	N	B	H	T	U	Welding
Ø x Length	Min	Max								Positions
2.5 x 300	55	85	1.7	106	0.60	94	0.9	43	22	1,2,3,4,6
3.2 x 350	70	110	3.5	106	0.60	47	1.2	62	22	1,2,3,4,6
4.0 x 350	80	150	5.1	106	0.60	32	1.7	67	23	1,2,3,4,6

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

Corrosion data, typical values: Streicher-test ASTM A-262: pr B < 0.1 mm/year.

CPT-test ASTM G48-76: 55-60 °C.
Huey-test ASTM A-262: pr C < 0.3 mm/year.
SCC-test NACE TM 0177:
Stress(MPa): 770 ; 805
Time to fracture (h): 720 ; 2
Comments: No fracture , Fracture

Redrying: 250 °C, 2h.