



Product Data Sheet

E 'Manual metal-arc welding'

OK 67.45

Prepared by A-C Thorsson	Qualified by Tero Borg	Approved by Tapio Huhtala	Reg no EN007113	Cancelling EN006572	Reg date 2016-02-24	Page 1 (2)
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REASON FOR ISSUE

Ferrite FN and N added under Chemical Composition. Hardness data provided under Other Data.

GENERAL

Austenitic stainless steel electrode giving a weld metal with less than 5 % ferrite. The tough weld metal has an excellent crack resistance, also when welding steels with very poor weldability. Suitable for joining 12 to 14 % manganese steel with itself or other steels.

Also suitable for buffer layers before hard facing.

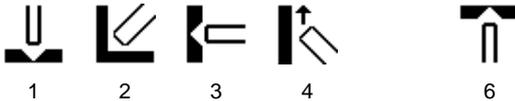
Polarity: DC+

Alloy Type: Stainless austenitic CrNiMn

Coating Type: Lime Basic

Ferrite Content: FN <5

WELDING POSITIONS



CLASSIFICATIONS Electrode

EN ISO 3581-A E 18 8 Mn B 2 2
SFA/AWS A5.4 (E307-15)

APPROVALS

ABS	Stainless
CE	EN 13479
Seproz	UNA 272580
VdTÜV	01580

CHEMICAL COMPOSITION

	All Weld Metal (%)		Nom
	Min	Max	
C	0.07	0.15	
Si	0.20	0.70	
Mn	5.0	7.0	
P		0.030	
S		0.020	
Cr	17.5	19.5	
Ni	8.0	10.0	
Mo		0.50	
Cu		0.50	
N		0.08	
Ferrite FN			1



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MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO		AWS
	Min	Typ	Min
Rp0.2 (MPa)	350	470	350
Rm (MPa)	590	605	590
A4 (%)			30
A5 (%)	28	35	
Z (%)		50	35
Charpy V at 20°C (J)	47	85	
Charpy V at -60°C (J)	32	50	

Comments:

Interpass temp. < 150 °C.

Hardness: as welded approx. 190 HV, work hardened >30 % approx. 400 HV.

ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
2.5 x 300	50	80	1.7	100	0.58	102	0.7	50	23	1,2,3,4,6
3.2 x 350	70	100	3.3	100	0.60	51	1.1	71	24	1,2,3,4,6
4.0 x 350	80	140	5.1	100	0.60	33	1.5	73	24	1,2,3,4,6
5.0 x 350	150	200	7.6	100	0.60	22	2.2	80	25	1,2,3

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

Hardness data:

Weld metal, as welded condition, base material 1.4301, V-Joint, no buttering, transverse cross section, indents along a vertical line (6 indents): 159 - 202 HV10, average 177 HV10

Redrying: 200 °C for 2h.