



Product Data Sheet

E 'Manual metal-arc welding'

OK 67.75

| | | | | | | |
|-----------------------------|---------------------------|------------------------------|--------------------|------------------------|------------------------|---------------|
| Prepared by A-C Thorsson | Qualified by Tero Borg | Approved by Tapio Huhtala | Reg no EN007277 | Cancelling EN007123 | Reg date 2016-06-15 | Page 1 (2) |
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REASON FOR ISSUE

Approvals revised. DNV removed, and DNV-GL added.

GENERAL

Basic coated stainless steel electrode for welding steels of the type 24Cr 13Ni, welding transition layers when surfacing mild steel with stainless, joining dissimilar steels and welding root runs in the stainless side of clad steels.

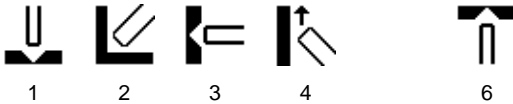
Polarity: DC+

Alloy Type: Austenitic CrNi

Coating Type: Basic

Ferrite Content: FN 8-15

WELDING POSITIONS



CLASSIFICATIONS Electrode

EN ISO 3581-A E 23 12 L B 4 2
SFA/AWS A5.4 E309L-15
Werkstoffnummer 1.4332

APPROVALS

ABS Stainless
DNV-GL VL 309
LR SS/CMn
NAKS/HAKC 2.5-5.0 mm
Seproz UNA 272580
VdTÜV 00633

APPROVAL COMMENT

NAKS/HAKC: Valid for lot numbers starting with SB

CHEMICAL COMPOSITION

All Weld Metal (%)

| | Min | Max | Nom |
|------------|------|-------|-----|
| C | | 0.04 | |
| Si | 0.20 | 0.70 | |
| Mn | 1.80 | 2.50 | |
| P | | 0.025 | |
| S | | 0.020 | |
| Cr | 23.0 | 25.0 | |
| Ni | 12.0 | 14.0 | |
| Mo | | 0.50 | |
| Cu | | 0.3 | |
| N | | 0.08 | |
| Ferrite FN | | | 11 |



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MECHANICAL PROPERTIES OF WELD METAL

| Properties | ISO | AWS | |
|-----------------------|------------------|------------------|-----|
| | As welded Min | As welded Min | Typ |
| Rp0.2 (MPa) | 380 | 380 | 470 |
| Rm (MPa) | 520 | 520 | 600 |
| A4 (%) | | 30 | 35 |
| A5 (%) | 30 | | |
| Z (%) | | 40 | 50 |
| Charpy V at 20°C (J) | 47 | 47 | 75 |
| Charpy V at -50°C (J) | | 47 | 64 |
| Charpy V at -80°C (J) | 32 | 32 | 55 |

Comments:

Interpass temp. < 150 °C. Hardness all weld metal 190-230 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 | 1.8 | 120 | 0.73 | 78 | 1.1 | 42 | 22 | 1,2,3,4,6 |
| 3.2 x 350 | 80 | 110 | 3.5 | 120 | 0.73 | 39 | 1.5 | 60 | 24 | 1,2,3,4,6 |
| 4.0 x 350 | 80 | 150 | 5.4 | 120 | 0.73 | 25 | 2.3 | 62 | 26 | 1,2,3,4,6 |
| 5.0 x 350 | 160 | 220 | 8.5 | 120 | 0.73 | 17 | 3.4 | 65 | 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

Hardness data:
all weld metal in cladding application: 213 HV10

Redrying 200°C, 2h.