



Product Data Sheet

E 'Manual metal-arc welding'

OK 67.43

| | | | | | | |
|-----------------------------|-------------------------------|------------------------------|--------------------|------------------------|------------------------|---------------|
| Prepared by A-C Thorsson | Qualified by P-O Oskarsson | Approved by Tapio Huhtala | Reg no EN007463 | Cancelling EN007112 | Reg date 2017-02-06 | Page 1 (2) |
|-----------------------------|-------------------------------|------------------------------|--------------------|------------------------|------------------------|---------------|

REASON FOR ISSUE

Nominal Ferrite FN under Chemical composition amended. Hardness data amended and ferrite content information added under Other data.

GENERAL

Austenitic stainless steel MMA-electrode giving a weld metal of the CrNiMn-type. The weld metal, which contains a small amount of uniformly distributed ferrite, is tough and has an excellent crack resistance. Suitable for joining 13%Mn-steels and such steels to other steels. Also suitable for welding of other steels with very poor weldability.

Min AC OCV: 65

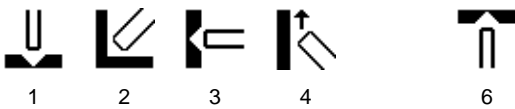
Polarity: AC, DC+

Alloy Type: Austenitic. CrNiMn

Coating Type: Rutile Basic

Ferrite Content: FN <5

WELDING POSITIONS



CLASSIFICATIONS Electrode

EN 14700 E Fe10
EN ISO 3581-A E 18 8 Mn R 1 2
SFA/AWS A5.4 (E307-16)
Werkstoffnummer 1.4370

APPROVALS

CE EN 13479
DB 30.039.07
VdTÜV 06797

CHEMICAL COMPOSITION

All Weld Metal (%)

| | Min | Max | Nom |
|------------|------|-------|-----|
| C | 0.07 | 0.20 | |
| Si | 0.5 | 1.0 | |
| Mn | 5.0 | 7.0 | |
| P | | 0.035 | |
| S | | 0.020 | |
| Cr | 17.5 | 19.5 | |
| Ni | 8.0 | 10.0 | |
| Mo | 0 | 0.50 | |
| Cu | | 0.50 | |
| N | | 0.09 | |
| Ferrite FN | | | 2 |



Product Data Sheet

E 'Manual metal-arc welding'

OK 67.43

| | | | | | | |
|-----------------------------|-------------------------------|------------------------------|--------------------|------------------------|------------------------|---------------|
| Prepared by A-C Thorsson | Qualified by P-O Oskarsson | Approved by Tapio Huhtala | Reg no EN007463 | Cancelling EN007112 | Reg date 2017-02-06 | Page 2 (2) |
|-----------------------------|-------------------------------|------------------------------|--------------------|------------------------|------------------------|---------------|

MECHANICAL PROPERTIES OF WELD METAL

| Properties | ISO | |
|-----------------------|-----|-----|
| | Min | Typ |
| Rp0.2 (MPa) | 360 | 440 |
| Rm (MPa) | 570 | 630 |
| A5 (%) | 25 | 35 |
| Charpy V at 20°C (J) | 47 | 80 |
| Charpy V at -60°C (J) | 32 | 52 |

Comments:

Max. interpass temperature 150 °C.

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 | 60 | 80 | 1.8 | 95 | 0.51 | 106 | 0.8 | 46 | 22 | 1,2,3,4,6 |
| 3.2 x 350 | 90 | 115 | 3.3 | 95 | 0.54 | 57 | 1.3 | 54 | 23 | 1,2,3,4,6 |
| 4.0 x 350 | 100 | 150 | 5.0 | 95 | 0.56 | 35 | 1.7 | 61 | 23 | 1,2,3 |
| 5.0 x 450 | 130 | 210 | 10.0 | 100 | 0.60 | 17 | 2.8 | 86 | 24 | 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

Ferrite content:

All weld metal, as welded condition, transverse cross section of a buttered ISO-joint, measurements done with a Feritscope: FN 1.8 - 2.2, average FN 2.1.

Hardness data:

Weld metal, as welded condition, base material Werkstoff Nr. 1.4583, V-joint, no buttering, transverse cross section, indents along vertical line, 6 indents: 177 - 228 HV10, average 204 HV10

All weld metal, as welded condition, transverse cross section of a buttered ISO joint, measurements done along a horizontal - (10 indents) and a vertical line (10 indents), 1 sample tested: 187 - 232 HV10, average 208 HV10.

The weld metal has great capability to workharden. When the cold working degree is >30%, the hardness level is approx. 400HV.

Redrying: 350 °C. 2h.