

GRINOX 307

IDENTIFICATION

GRINOX 307 E307-16

CLASSIFICATION

AWS/SFA 5.4: E 307-16, DIN 8556 : E18.8Mn R26

DESCRIPTION

Heavy coated rutile type electrode manufactured using stainless steel core wire depositing fully austenitic weld metal. The non-magnetic weld metal is extremely unsusceptible to cracking and possesses high deformation capacity so that stresses are equalized and relieved. Under mechanical loading, the weld metal is inclined to work harden. It resists corrosion and scaling. The deposited weld metal meets x-ray / radiographic quality code requirements. The weld metal can be PWHT without risk of sigma phase formation and consequent loss of ductility.

WELD METAL ANALYSIS (RANGE) %

| C | Cr | Ni | Mn | Cu | Si | S | P | Mo |
|-------------|--------------|-------------|-----------|----------|----------|----------|----------|-------------|
| 0.04 - 0.14 | 18.0 - 21.50 | 9.0 - 10.70 | 4.0 - 6.0 | 0.75 max | 0.90 max | 0.03 max | 0.04 max | 0.50 - 1.50 |

MECHANICAL PROPERTIES (RANGE)

| UTS (MPa) | EL (%) (L=4D) | CVN Impact Value | |
|-----------|------------------|------------------|----------|
| | | Temp | Joules |
| 590 - 690 | 30 - 45 | 20°C | 60 - 100 |

TYPICAL APPLICATIONS

- Mild, Stainless, hardenable and armour steels to themselves or to each other.
- 13% Mn (Hadfield) Steel
- As a buffer layer before depositing highly alloyed hardfacing layers.
- As a surfacing layer which work hardness from 200 to 400 HV.
- Suitable for repair of alloy rails, crossing parts, frogs etc.

REDRYING TEMP : 250°C / 2 hrs

FERRITE NUMBER : FN

WELDING POSITION :



1G 2F 2G 3G 4G 5G

PACKING PARAMETERS

| Size (mm) | Length (mm) | AMPS AC 70 (0CV) / DC (+) | Packing / Box (kg) | Packing / Box (Pcs) |
|-------------|-------------|---------------------------------|-----------------------|------------------------|
| 2.5 | 350 | 60 - 90 | 2 x 5 = 10 | 94 x 5 = 470 |
| 3.15 / 3.20 | 350 | 80 - 120 | 2 x 5 = 10 | 60 x 5 = 300 |
| 4 | 350 | 120 - 150 | 2 x 5 = 10 | 38 x 5 = 190 |

