

GRINOX 16H

IDENTIFICATION

GRINOX 16 E316H-16

CLASSIFICATION

AWS A 5.4: E 316H-16

DESCRIPTION

A medium heavy coated rutile based electrode depositing weld metal having 18% Cr, 13% Ni, 2.5% Mo with controlled ferrite number of 3-8. Weldable in all positions. Weld bead is uniform with fine ripples and easy slag removable property. Excellent arc striking and restriking properties.

WELD METAL ANALYSIS (RANGE) %

| C | Mn | Si | S | Cu | P | Cr | Ni | Mo |
|---------------|-----------|-------------|----------|----------|----------|-------------|-------------|-----------|
| 0.040 - 0.080 | 0.5 - 2.5 | 0.30 - 0.90 | 0.03 max | 0.50 max | 0.03 max | 17.0 - 20.0 | 11.0 - 14.0 | 2.0 - 3.0 |

MECHANICAL PROPERTIES (RANGE)

| UTS (MPa) | EL (%) (L=4D) | CVN Impact Value | |
|-----------|---------------|------------------|--------|
| 550 min | 30 min | Temp | Joules |
| | | 27°C | 60 min |

TYPICAL APPLICATIONS

ASTM/ ASME, 316, CF3M, CF8M stainless steels, pulp and paper mill equipments, bleaching solutions, chemical mixers, paint and dye industries, etc.

WELDING PROCEDURE

- The base metal should be free from oil, grease or dirt
- Before welding. Keep a short arc - length. The deposited weld metal should be cleaned with stainless steel wire brush.
- Redry electrodes at 200°C / 2hrs.

REDRYING : 250°C / 2hrs., max 5 cycles, 10 hr. total

SCALING TEMPERATURE : Approx. 850°C in air.

CORROSION RESISTANCE

Good resistance to general corrosion, specially in the more severe environments e.g. dilute hot acids. Good resistance to chloride pitting corrosion.

WELDING POSITION :



PACKING PARAMETERS

| Size (mm) | Length (mm) | AMPS AC (70 OCV) / DC (+) | Packing / Box (kg) | Packing / Box (Pcs) |
|-------------|-------------|---------------------------------|-----------------------|------------------------|
| 2.5 | 350 | 65 - 80 | 2 x 5 = 10 | 94 x 5 = 470 |
| 3.15 / 3.20 | 350 | 80 - 110 | 2 x 5 = 10 | 60 x 5 = 300 |
| 4 | 350 | 110 - 140 | 2 x 5 = 10 | 38 x 5 = 190 |
| 5 | 350 | 140 - 180 | 2 x 5 = 10 | 24 x 5 = 120 |