

# GRINOX 9Mo

## IDENTIFICATION

GRINOX 9Mo E309 Mo-16

## CLASSIFICATION

AWS/SFA 5.4: E309Mo-16 IS: E23.12.2 R 26

## DESCRIPTION

An extruded, rutile based heavy coated electrode giving 25 Cr / 12 Ni / 2.5 Mo type stainless steel deposit. The arc is soft & stable with easy strike and restrike. Low spatter and easily detachable slag. Weld bead is finely-rippled. Addition of Molybdenum improves tensile strength and corrosion resistance. Weld metal is resistant to temperatures upto 1100°C.

## WELD METAL ANALYSIS (RANGE) %

| C        | Mn        | Si      | S        | P        | Cr          | Ni          | Mo        |
|----------|-----------|---------|----------|----------|-------------|-------------|-----------|
| 0.10 max | 0.5 - 2.5 | 0.9 max | 0.03 max | 0.03 max | 22.0 - 25.0 | 12.0 - 14.0 | 2.0 - 3.0 |

## MECHANICAL PROPERTIES (RANGE)

| TS (MPa) | EL (%)<br>(L=4D) | CVN Impact Value |        |
|----------|------------------|------------------|--------|
|          |                  | Temp             | Joules |
| 550 min  | 30 min           | 27°C             | 65     |

## TYPICAL APPLICATIONS

- For welding AISI 309, 309 Mo, 316 type of stainless steels of steels clad with such materials.
- Also suitable for joining Molybdenum containing high alloyed and unalloyed steels.
- Used for welding difficult to weld steels and for building up carbon steel to improve its wear resistance.
- Applicable for For AISI 309, 309-Mo, 316 type stainless Steels or Molybdenum containing high alloyed steels and unalloyed steels.

## WELDING PROCEDURE

The base metal should be free from oil, Grease or Dirt before welding. Keep a short arc and avoid weaving. Weld is to be cleaned with stainless steel brush.

## WELDING POSITION :



## PACKING PARAMETERS

| Size (mm)   | Length (mm) | AMPS AC / DC (+) | Packing / Box (kg) | Packing / Box (Pcs) |
|-------------|-------------|------------------|--------------------|---------------------|
| 2.5         | 350         | 70 - 90          | 2 x 5 = 10         | 94 x 5 = 470        |
| 3.15 / 3.20 | 350         | 100 - 120        | 2 x 5 = 10         | 60 x 5 = 300        |

|   |     |           |            |              |
|---|-----|-----------|------------|--------------|
| 4 | 350 | 120 - 140 | 2 x 5 = 10 | 38 x 5 = 190 |
| 5 | 350 | 140 - 180 | 2 x 5 = 10 | 24 x 5 = 120 |