

# GRINOX 47

## IDENTIFICATION

GRINOX 47 : E 347-16

## CLASSIFICATION

AWS/SFA 5.4: E347-16 IS: E 19.9 Nb R 26

## DESCRIPTION

An extruded, rutile based heavy coated electrode for welding 18/8 Chromium Nickel Stabilised stainless steel type AISI/ASTM 321 or 347 grade. Weldable in all positions. Arc striking and re-striking properties are excellent. Arc is soft & stable. The spatter is very low and the slag is easy to remove. The weld deposit is free from cracks and porosity. The weld bead is finely - rippled, smooth and regular. Due to stabilisation with Columbium, the weld deposit has increased resistance against intergranular Corrosion.

## WELD METAL ANALYSIS (RANGE) %

| C        | Mn          | Si       | S         | P        | Cr          | Ni         | Cb                       |
|----------|-------------|----------|-----------|----------|-------------|------------|--------------------------|
| 0.08 max | 0.70 - 2.50 | 0.90 max | 0.025 max | 0.03 max | 18.0 - 21.0 | 9.0 - 11.0 | 8X % C min or<br>1 % max |

## MECHANICAL PROPERTIES (RANGE)

| UTS (MPa) | EL (%)<br>(L=4D) | CVN Impact Value |          |
|-----------|------------------|------------------|----------|
|           |                  | Temp             | Joules   |
| 540 - 640 | 30 - 40          | 27°C             | 70 - 120 |

## TYPICAL APPLICATIONS

For welding stainless steels type 321, 347, 304. Also for surfacing unalloyed, low alloy and cast steels, Food Stuffs, Dairy, Textile, Chemical & Aircraft Industries, Household appliances, pipe-line fittings, Hospital Apparatus, etc.

## WELDING PROCEDURE

The base metal should be free from oil, Grease or Dirt before welding. Keep a short arc-length. The weld bead should be cleaned with stainless steel brush. Maintain interpass temperature 150°C max. Redry electrodes if required at 200°C for one hour.

## WELDING POSITION :



## PACKING PARAMETERS

| Size (mm) | Length (mm) | AMPS AC /<br>DC (+) | Packing /<br>Box (kg) | Packing / Box<br>(Pcs) |
|-----------|-------------|---------------------|-----------------------|------------------------|
|-----------|-------------|---------------------|-----------------------|------------------------|

|             |     |           |                   |                     |
|-------------|-----|-----------|-------------------|---------------------|
| 2.5         | 350 | 55 - 75   | $2 \times 5 = 10$ | $94 \times 5 = 470$ |
| 3.15 / 3.20 | 350 | 85 - 110  | $2 \times 5 = 10$ | $60 \times 5 = 300$ |
| 4           | 350 | 110 - 140 | $2 \times 5 = 10$ | $38 \times 5 = 190$ |
| 5           | 350 | 140 - 180 | $2 \times 5 = 10$ | $24 \times 5 = 120$ |