

# GRINOX 310Mo



IDENTIFICATION : GRINOX-310Mo

CLASSIFICATION : AWS A 5.4 : E 310Mo - 16

## DESCRIPTION :

An extruded, rutile based heavy coated electrode for welding 25/20 Chromium Nickel Stainless Steel.

## WELDING PROPERTIES :

Weldable in all positions. The weld bead is finely-rippled, smooth, and regular. The deposit is highly resistant to cracking. Scale resistance upto 1000oC. The deposited weld metal is of radiographic quality.

## TYPICAL USES :

- For joining the above heat resisting steels and also for surfacing unalloyed, low/high alloy and cast steels. Furnace fabrication, apparatus, steam boilers, piping & fittings, textile, paper, paint, rubber and glass industries, heat treatment shops, gas turbines, oil refineries, furnace fabrication, etc.
- Overlay on castings.
- Welding of heat resisting castings.

## APPLICABLE FOR :

Highly stressed corrosion-resistant Stainless steel containing about 25% Chromium & 20% Nickel. Also for Stainless Steel AISI grades 309 & 310 and clad steels. Also used for joining dissimilar steels, straight Chromium Steels, welding intermediate zones between mild steel and Stainless Steels, joining difficult alloy/High Carbon Steels.

## 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.

**Ferrite Number of the weld : 0**

WELD METAL ANALYSIS (RANGE) % :

C	Mn	S	P	Cr	Ni	Mo	Cu	Si
0.12 max	1.0-2.5	0.03 max	0.03 max	25.0-28.0	20.0-22.0	2.00-3.00	0.50 max	0.75 max

MECHANICAL PROPERTIES (RANGE) :

Ultimate Tensile Strength MPa	Yield Stress MPa	Elongation (%) (L=4D)	Impact Value	
550 min	380 min	30-40	Temp	Joules
			0°C	70-120

RECOMMENDED CURRENT AND PACKING DATA :

SIZE (mm)	LENGTH (mm)	AC 70(OCV) / DC(+) Current Range (Amps)	PACKING PER BOX	WEIGHT 1000 Pcs
2.50	350	60-90	100X6=600	21.0
3.15	350	80-110	60X6=360	33.0
4.00	350	110-140	40X6=240	52.0
5.00	350	140-180	25x6=150	82.0