

GRINOX 10



IDENTIFICATION : GRINOX-10 E310-16

SPECIFICATIONS : AWS A 5.4 : E 310 - 16 IS : E 25.20 R 26 X DIN 8556 E25.20R 23

DESCRIPTION :

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

WELDING PROPERTIES :

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 bead is finely-rippled, smooth and regular. The deposit is highly resistant to cracking. Scale resistance upto 1000°C 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.

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 : O

WELD METAL ANALYSIS (RANGE) % :

C	Mn	S	P	Cr	Ni	Mo	Cu
0.08-0.16	1.0-2.5	0.03 max	0.03 max	25.0-28.0	20.0-22.50	0.75 max	0.50 max

MECHANICAL PROPERTIES (RANGE) :

Tensile Strength N/mm ²	Yield Stress N/mm ²	Elongation (%) (L=4D)	Impact Value	
560-660	380-480	30-40	Temp	Joules
			27° C	70-120

SCALING TEMPERATURE : 1000°C in air

MICROSTRUCTURE : Consists of austenite with 14 to 28 FN

ASME IX QUALIFICATION : QW-432 F-NUMBER 5, QW-442 A-NUMBER 8

REDRYING : 300°C / 2 hrs., max 5 cycles, 10 hr. total.

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

