

# GRINOX 4

## IDENTIFICATION

GRINOX 4, E 308-16

## CLASSIFICATION

AWS /SFA 5.4: E 308- 16

IS: E 19.9 R 16, BS : 2926 19.9.R, DIN 8556 E 19.9.R23

## DESCRIPTION

A rutile type & heavy coated electrode designed for welding low carbon 18% Cr/ 9% Ni type AISI 304 or equivalent austenitic stainless steel.

Weldable in all positions except vertical down. 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 deposited welds are of radiographic quality.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Cr	Ni	Mo	Cu
0.080 max	0.50 - 2.5	0.30 - 0.90	0.03 max	0.04 max	18.0 - 21.0	9.0 - 11.0	0.75 max	0.75 max

## MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	EL (%) (L=4D)	CVN Impact Value	
550 min	35 - 45	Temp	Joules
		0°C	55 min

## TYPICAL APPLICATIONS

ASTM /ASME 304, DIN: 1.4301, for welding 18/8 steels including 301, 302, 303. Cast steel: CF3, CF8, food brewery, pharmaceutical equipment, architectural, general fabrication, dairy, chemical & aircraft industries, household appliances, pipe-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 wire brush.

**MICROSTRUCTURE** : Austenite with 3-10FN

**ASME IX QUALIFICATION** : QW - 432 F NO 5, QW - 442 A NO 8

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

## WELDING POSITION :



Size (mm)	Length (mm)	AMPS AC (70V) / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	60 -85	2 x 5 = 10	94 X 5 = 470
3.15 / 3.20	350	80 - 100	2 x 5 = 10	60 X 5 = 300
4	350	110 - 140	2 x 5 = 10	38 X 5 = 190
5	350	130 - 200	2 x 5 = 10	24 x 5 = 120