

# GRIBINOX 25.9.5L

**A SUPER DUPLEX ELECTRODE FOR WELDING ALLOYS OF SIMILAR COMPOSITION**

## IDENTIFICATION

GRIBINOX 25.9.5L E 25.9.5-15

## CLASSIFICATION

AWS/SFA 5.4:E25.9.5-15

## DESCRIPTION

Basic coated electrode designed to match similar alloys The electrode gives matching strength and corrosion resistance in the solution treated condition but can also be used in the as-welded condition. Nitrogen and nickel contents are controlled to give a balanced duplex structure to minimize the risk of cracking, particularly in highly restrained welds.

## WELD METAL ANALYSIS (RANGE) %

C	Cr	Ni	Mn	S	P	Mo	Cu	Si	N	W
0.04 max	24.0 - 27.0	8.0 - 10.5	2 max	0.025 max	0.03 max	2.5 - 4.5	0.40 - 1.50	0.7 max	0.20 - 0.30	0.4 - 1.0

## MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	EL (%) (L=4D)	CVN Impact Value	
760 min	15 min	Temp	Joules
		-40°C	45 min
		-50°C	54 min

## TYPICAL APPLICATIONS

Pumps and valves, corrosion/ wear resisting parts and process equipment for use in offshore oil and gas industries, pulp, paper and textile industries, and chemical and petrochemical plant.

## MATERIALS TO BE WELDED

- SAF 2507, ASTM S-32750, S-32760
- ASTM A351, A744 (cast) - CD4MCu, UNSS32550, S3 2750, S32760 (wrought)
- ASTM A240 (wrought) - UNS S32550
- UNS : 393770, J93380, J93404
- DIN 1.4515, 1.4517 CD 4MCuN (cast) and similar composition.
- Steel EN 1.4410, NF 23CND 2506AZ, SS2328.
- Standard duplex : S 31803 and UNS 532205

**MICROSTRUCTURE** : In the solution treated condition the microstructure is duplex with about 30-60% ferrite dependent upon dilution.

**INTERPASS TEMPERATURE** : 100°C max

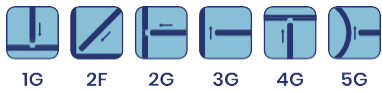
**HEAT M-PUT** : 1.0 - 1.5 kJ / mm

**SCALING TEMPERATURE** : Approx 850°C (air)

**CORROSION TEMPERATURE** : Very good resistance to pitting and stress corrosion cracking in

Chloride containing environments. Pitting resistance in accordance with ASTM G-48A better than 40°C.

**WELDING POSITION :**



**PACKING PARAMETERS**

Size (mm)	Length (mm)	Amps DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	60 - 90	2 x 5 = 10	94 x 5 = 470
3.15 / 3.20	350	70 - 120	2 x 5 = 10	60 x 5 = 300
4	350	100 - 155	2 x 5 = 10	38 x 5 = 190
5	350	130 - 180	2 x 5 = 10	24 x 5 = 120