GWELD
SEAL OF TRUST

GRINOX 25.9.5L

A SUPER DUPLEX ELECTRODE FOR WELDING ALLOYS OF SIMILAR COMPOSITION

IDENTIFICATION
GRINOX 25.9.5L E 25.9.5 -16

CLASSIFICATION
AWS/SFA 5.4:E25.9.5 -16

DESCRIPTION
Grinox 25.9.5L electrode is 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	1.2 max	0.20 - 0.30	0.4 - 1.0

MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	EL (%) (L=4D)	CVN Impact Value	
		Temp	Joules
760 - 910	15 - 27	20°C	45 - 80

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 IN - PUT : 0.5-1.5 kJ / mm
WELDING POSITION :
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 AC (OCV:70V) / 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