GWELD
SEAL OF TRUST

GRINOX 2553

A SUPER DUPLEX ELECTRODE WITH COPPER FOR WELDING ALLOYS OF SIMILAR COMPOSITION.

IDENTIFICATION
GRINOX 2553 E 2553-16.

CLASSIFICATION
AWS/SFA 5.4: E 2553-16, BS2926 25.6.2.Cu.R

DESCRIPTION
Grinox 2553 is designed to match similar alloys usually supplied as castings. The addition of copper improves corrosion resistance in sulphuric acid media and also increase strength and wear resistance. 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	Si	S	P	Mo	Cu	N
0.025 - 0.06	24.0 - 27.0	6.5 - 8.5	0.5 - 1.5	1 max	0.03 max	0.04 max	2.9 - 3.9	1.5 - 2.5	0.10 - 0.25

MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	EL (%) (L=4D)	CVN Impact Value	
		Temp	Joules
690 - 800	20 - 35	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
- ASTM A351, A744 (cast) - CD4MCu, UNS J93370.
- ASTM A240(wrought)- UNS S32550
- BS 3146- ANC 21, BS 3100 332C13
- DIN 1.4515, 1.4517

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

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 - 210	2 x 5 = 10	24 x 5 = 120