GWELD
SEAL OF TRUST

GRIBINOX 309MO

SPECIFICATIONS: AWS/SFA 5.4: E309Mo-15

CHARACTERISTICS:

A basic coated all position low carbon electrode which deposits +23%Cr/13%Ni/ 2.5%Mo austenitic stainless steel weld metal. The high alloy content and ferrite level enable the weld metal to tolerate dilution from mild and low alloy steels without hot cracking or brittle structure. It is widely used to apply buffer layers on steel components where final layers are to be deposited using 316L or other stainless steel electrodes. The deposited weld metal is of X-ray quality.

TYPICAL APPLICATIONS:

- Reclamation of hydro turbine blades of hydro power plants.
- Dissimilar joints between stainless and mild or low alloy steels.
- Joining ferritic-martensitic 410 and 430 type stainless steels.
- Buffer layer on mild and low alloy steels prior to overlaying.

Welding of similar composition 309Mo type stainless steels, ASTM stainless steels 409, 409S pipe ASTM A249, A312, A409, A814 grades TP 309S, 309.

Weld Metal Analysis (%)

C	Mn	Si
0.08 max	0.5-2.5	0.30-0.70
S	**P**	**Mo**
0.025 max	0.03 max	2.0-3.0
Cr	**Ni**	**Cu**
22-25	14-Dec	0.50 max

Mechanical Properties

UTS (MPa)	YS (MPa)	ELN % (L=4D)	CVN impact strength	
			Temp	Joules
550 Min	405 Min	30 Min	0°C	47 min

SCALING TEMPERATURE: 1000°C in air

MICROSTRUCTURE: Consists of austenite with 12 to 28 FN

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

REDRYING: 300°C / 2 hrs.

RECOMMENDED CURRENT AND PACKING DATA :

SIZE (mm)	LENGTH (mm)	AMPS DC (+)	PACKING/BOX (Pcs)	WEIGHT/1000 Pcs (Approx.)
2.5	350	50-75	100X5=500	20
3.15	350	80-120	60X5=300	32
4	350	100-160	40X5=200	51
5	350	130-210	25X5=125	76