

# GEMET 801

## IDENTIFICATION

Gemet 801, ENi-1

## CLASSIFICATION

AWS/SFA 5.11: ENi-1

## DESCRIPTION

A special basic coated electrode depositing low carbon pure nickel weld metal, deoxidised and refined with about 1.5% titanium. The welds are porosity free. Pure nickel weld metals are sluggish which may lead to bead irregularities which in turn require ante -run dressing.

## WELD METAL ANALYSIS (RANGE) %

C	Fe	Mn	Si	S	P	Ti	Cu	Al	Ni
0.1 max	0.7 max	0.75 max	1.2 max	0.015 max	0.025 max	1.0 - 4.0	0.2 max	1 max	92 min

## MECHANICAL PROPERTIES (RANGE)

TS (N/mm <sup>2</sup> )	YS (N/mm <sup>2</sup> )	EL (%) (L=4D)
410 - 510	220 - 300	20 - 28

## TYPICAL APPLICATIONS

- Joining pure nickel to itself for buffer layer and for cladding joint faces and flanges, tanks and vessels, process pipe work, heat exchangers.
- In chemical plant : Salt production, chlorination and evaporation of caustic soda.
- Used for equipment handling corrosive alkalies and halides.
- For Joining low-alloy steels to Nickel-Copper alloys.

## PROCEDURE

- Clean the area to be welded thoroughly.
- Use short arc with stringer bead.
- Dry the electrodes at 250°C for 2 hrs.

**ASME IX QUALIFICATION : QW-432, F NO. 41**

## PACKING PARAMETERS

Size (mm)	Length (mm)	Current Condition Amps AC / DC (+/-)	Packing / Packet (kg)	Packing / Box (kg)
2.5	350	60 - 80	2	2 x 5 = 10
3.15 / 3.20	350	80 - 190	2	2 x 5 = 10
4	350	100 - 140	2	2 x 5 = 10