

# GEMET 812

## IDENTIFICATION

Gemet 812, E CuNi

## CLASSIFICATION

AWS/SFA 5.6 ECuNi

DIN: 1733 EL CuNi30Mn (2.0838)

## DESCRIPTION

A basic coated 70/30 core wire electrode depositing weld metal with very low residuals (S, P, Pb, Zn, Sn, etc.) and hence maximum crack resistance. The deposited weld metal is resistant to the action of sea water, free of porosity and crack-resistant.

## WELD METAL ANALYSIS (RANGE) %

Mn	Fe	Si	Ni	C	P	Pb	Ti	Cu
1.0 - 2.50	0.40 - 0.75	0.5 max	29.0 - 33.0	0.05 max	0.02 max	0.02 max	0.5 max	remainder

## MECHANICAL PROPERTIES (RANGE)

UTS (N/mm <sup>2</sup> )	EL (%) (L=4D)
350 - 480	20 - 30

## TYPICAL APPLICATIONS

- For welding 70/30 alloys C71500 (Wrought) C96400 (Cast)
- 90/10 alloys C70600 (Wrought)
- C96200 (Cast)
- Alloy A
- Off-shore construction
- Desalination plant
- Evaporators, Condensers
- In salt and sea water processing systems.

## PREHEATING:

- Not normally required • Max. interpass temp 100°C • No PWHT be given

## PRECAUTIONS:

Contamination of the weld zone with foreign material particularly any source of lead, zinc, tin must be avoided to prevent weld metal cracking.

**ASME IX QUALIFICATION:** QW-432 F NO. 34

## WELDING INSTRUCTIONS

- Clean thoroughly the welding area / zone.
- Vee angle of the butt joint should be 70°C.

## PACKING PARAMETERS

Size (mm)	Length (mm)	Current Condition Amps AC / DC (+/-)	Packing / Packet (kg)	Packing / Box (kg)
2.5	350	60 - 90	2	2 x 5 = 10
3.15 / 3.20	350	75 - 120	2	2 x 5 = 10
4	350	110 - 155	2	2 x 5 = 10
5	350	130 - 210	2	2 x 5 = 10