

# GEMET 824N

## IDENTIFICATION

Gemet 824N, ENiCrMo-14

## CLASSIFICATION

AWS/SFA-5.11 ENiCrMo-14

## DESCRIPTION

Basic coated nickel-base electrode with widespread applications. The electrode deposits a strong tough corrosion and heat resistant deposit. The deposited welds are of X-Ray quality.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	Cr	Mo	S	P	Cu	Fe	W	Ti	Ni
0.02 Max	1 max	0.25 max	19 - 23	15 - 17	0.012 max	0.02 max	0.5 max	5 max	3.0 - 4.4	0.25 max	Remainder

## MECHANICAL PROPERTIES (RANGE)

TS (MPa)	YS (MPa)	EL (%) (L=4D)
760 min	510 min	35 min

## TYPICAL APPLICATIONS

- It is used for welding of duplex, super duplex & super austenitic various grades of stainless steel.
- Used for depositing overlays having outstanding corrosion resistance properties. The high alloy levels (of Cr+Mo+W) result in increased resistance to pitting, crevice and general corrosion.
- The electrode is used where corrosion resistance are required in media like HCL or sulfuric acid, for resistance to crevice corrosion in hot, concentrated acid chloride solutions such as sulfur dioxide, saturated NaCl solutions, oxidising chloride solutions.
- Use for cladding overlays, pumps, valves joining faces in off-shore and marine environments.
- For welding Alloy 59 (N06059).

## CORROSION RESISTANCE :

Very good resistance to general and intergranular corrosion. Maximum resistance to pitting corrosion crevice corrosion and stress corrosion cracking in chloride bearing environments.

**SCALING TEMPERATURE :** The weld metal is resistant to oxidation in air upto 1150°C.

**WELDING CURRENT :** DC (+)

**SHIELDING GAS :** 99.99% Argon 6-12 l/mn.

## PACKING PARAMETERS

Size (mm)	Length (mm)	Current Condition Amps DC (+)	Packing / Packet (kg)	Packing / Box (kg)
2.5	350	60 - 90	2	2 x 5 = 10

3.15 / 3.20	350	90 - 120	2	2 x 5 = 10
4	350	120 - 170	2	2 x 5 = 10