GWELD
SEAL OF TRUST

GEMET 829N

IDENTIFICATION
Gemet 829N, ENiCrFe-9

CLASSIFICATION
AWS A 5.11: ENiCrFe9

DESCRIPTION
A versatile non-synthetic electrode for welding of Inconel 600 and similar composition alloys. Medium heavy coated, basic type all - position electrode manufactured by using inconel core wire intended for welding Inconel 600 and similar composition alloys. The deposit tolerates high dilution levels and is very resistant to hot cracking. It is not susceptible to sigma phase embrittlement or carbon migration and is therefore ideal for service at elevated temperatures. The weld metal passes X-ray quality. Above 3.15mm size, electrode shall be used in horizontal and flat position.

WELD METAL ANALYSIS (RANGE) %

C	Cr	Mn	Si	S	P	Ti	Cu	Fe	Ne+Ta	Ni	Mo	Al	W
0.15 max	12.0 - 17.0	5 max	0.75 max	0.015 max	0.03 max	1 max	0.5 max	10 max	0.50 - 3.0	59 min	2.5 - 5.5	0.5 max	1.5 max

MECHANICAL PROPERTIES (RANGE)

TS (N/mm²)	YS (N/mm²)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
550 - 690	360 - 510	30 - 45	-196°C	60 - 120
Bend Test : Satisfactory				

TYPICAL APPLICATIONS
- Suitable for dissimilar joining combination between nickel-base alloys, monel, mild and low alloy steels and austenitic stainless steels.
- Can be used to clad carbon steel with inconel type surface.
- For welding 5 % and 9 % nickel steel for cryogenic applications.
- For welding Inconel 600 and similar composition alloys.

FERRITE CONTE : FN 0

CORROSION RESISTANCE : Extremely good resistance to general and intergranular corrosion and very good resistance to stress corrosion cracking.

HIGH TEMPERATURE PROPERTIES : Resistance to oxidation in air upto 115°C, in sulphur dioxide upto 800°C.

PACKING PARAMETERS

Size (mm)	Length (mm)	Current Condition Amps DC (+)	Packing / Packet (kg)	Packing / Box (kg)
2.5	350	60 – 80	2	2 x 5 = 10

3.15 / 3.20	350	70 – 110	2	2 x 5 = 10
4	350	100 – 155	2	2 x 5 = 10
5	350	150 - 200	2	2 x 5 = 10