

# GM 625

## IDENTIFICATION

GM 625, ERNiCrMo3

## CLASSIFICATION

AWS/SFA-5.14: ERNiCrMo3 BS 2901 -90 NA43

## DESCRIPTION

Solid nickel-base wire to match "625" type alloys with widespread applications. The wire gives a strong tough corrosion and heat resistant deposit. The deposited welds are of X-Ray quality. Also suitable for welding Alloy 825 and for dissimilar joint welding involving Inconel alloy 625 and Incoloy 825 alloys, carbon steel low alloy steel and stainless steel.

## CHEMICAL ANALYSIS (RANGE) %

C	Mn	Si	Cr	Nb	Ni	Mo	S	P	Fe	Ti	Cu	Al
0.1 max	0.5 max	0.5 max	20 - 23	3.15 - 4.15	58 min	08-Oct	0.015 max	0.015 max	5 max	0.4 max	0.5 max	0.4 max

## MECHANICAL PROPERTIES (RANGE)

TS (N/mm <sup>2</sup> )	YS (N/mm <sup>2</sup> )	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
760 - 850	510 - 610	30 - 40	-196°C	50 - 90

## TYPICAL APPLICATIONS

- Use for general purpose welding high nickel alloys for furnace parts for welding 6 % Mo super-austenitic stainless steels.
- Use for cladding overlays, pumps, valves join faces in off-shore and marine environments.
- Suitable for welding 9 % nickel steels for cryogenic applications.

## 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)	Weight / Spool (kg)
0.8	12.5
1	12.5

1.2	12.5
1.6	12.5

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