





## Product Data Sheet

## **SUPERMIG 410NiMo**

SS MIG WELDING WIRE Stainless and Heat resistant steels

Classification:

AWS A 5.9 : ER 410NiMo EN ISO 14343 : G 13 4

**Description:** SUPERMIG 410NiMo is an solid MAG welding wire supplied precision layer wound depositing a C-12Cr4Ni0.5Mo weld metal suitable for use with Ar-Co2 mix shielding gases.

SUPERMIG 410NiMo is used for the welding of high strength martensitic steels, with excellent resistance to corrosion , hydrocavitation & sulphide induced stress corrosion cracking , Good subzero notch toughness properties .

SUPERMIG 410NiMo contains less chromium and more Nickel than SUPERMIG 410 to eliminate ferrite in the microstructure as it has a deleterious effect on mechanical properties. AISI 410NiMo steels are self hardening steel and usually required pre heating and stress relieving treatments in order to obtain adequate ductility.

Precision layer winding technologies ensure smooth, virtually trouble-free feeding.

#### Materials to be welded

ASTM CA6NM ;G-X5CrNi 13-4 ; Z6 CND 1304 M ; X6CrAl13

**Typical Chemical Composition (%)** 

С	Mn	Si	Cr	Ni	Мо	Cu	S	Р
0.060 max.	0.60 Max	0.50 Max	11.00-12.50	4.00-5.00	0.40-0.70.	0.75 max.	0.03 max.	0.03 max.

### **Typical All Weld Mechanical Properties**

Yield Strength	Tensile Strength N/mm <sup>2</sup>	Elongation	Impact Energy	
N/mm <sup>2</sup>		A5 (%)	ISO-V(J) 20° C	
<u>≥</u> 500	<u>&gt;</u> 760	<u>&gt;</u> 15%	<u>&gt;</u> 50	

The chemistry and all weld mechanical properties will vary with the type of shielding gas used. Recommended shielding gas is 98% Ar + 2% O2 or Ar + 2 - 3% Co2.

**Welding Directions :-** MIG welding can be performed as short, spray or pulsed arc. Short arc is preferably used for thin gauges, both for horizontal and positional welding. Spray arc increases the deposition rate. Welding with pulsed arc gives excellent possibilities for a good result in varying plate thicknesses in all positions. The highest flexibility using pulsed arc is achieved with 1.20 mm

**Current Conditions:-** DC (+)

Storage: - Keep dry and avoid condensation.







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### Welding position:-



### **Recommended Welding Data:-**

D	iameter (mm)				
		8.0	1.0	1.2	
Operating range					
Ar+1~2%CO <sub>2</sub>	Amp	40~120	80~160	100~210	
AIT1~2 /0CO2	Volt	15~20	16~22	17~22	
Ar+1~2%O <sub>2</sub>	Amp	160~210	180~280	200~300	
AIT 1~2 /0U2	Volt	24~28	24~30	24~30	

### Packing Data:

Size (mm )	0.80	0.90	1.00	1.10	1.20	1.60
Weight (kg)	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00

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