

## Select 410NiMo-AP

### Description:

Select 410NiMo-AP is a gas-shielded, flux cored, stainless steel electrode designed for single or multi-pass welding in all positions. This electrode finds wide application in power generation equipment, such as turbine blades and vanes. It is widely used to weld ASTM CA-6NM castings as well as 410, 410S and 405 stainless steels. It is designed for use with either 100% carbon dioxide or 75% Ar-25% CO<sub>2</sub>.

### Classifications:

- E410NiMoT1-1, E410NiMoT1-4 per AWS A5.22

### Characteristics:

Select 410NiMo-AP provides superb performance characteristics in all positions. Flat, well washed beads can be achieved with minimal weaving. Spatter is low and slag peeling is excellent, minimizing cleanup.

### Typical Mechanical Properties (SR 1 Hr. at 1125° F):

	CO <sub>2</sub>	Ar-25%CO <sub>2</sub>
Ultimate Tensile Strength (psi)	129,200	131,700
Yield Strength (psi)	116,100	115,500
Percent Elongation	19	17
CVN (ft • lb) @ +32°F	27	32
@ -4°F	25	22

### Typical Weld Deposit Chemistry:

Shielding Gas	C	Cr	Ni	Mo	Mn	Si
75Ar/25CO <sub>2</sub>	0.02	11.70	4.61	0.52	0.29	0.47
CO <sub>2</sub>	0.02	11.50	4.56	0.51	0.27	0.45

### Typical Welding Parameters (CO<sub>2</sub>)\*:

Diameter	Position	Optimum			Range	
		Amperage	WFS	Voltage	Amperage	Voltage
1/16"	Flat	330	330	29	150-400	22-34
	Overhead	225	180	26	150-310	22-28
	Vertical up	225	180	25	150-280	22-27
.045"	Flat	250	450	28	130-300	21-32
	Overhead	190	305	26	150-280	21-30
	Vertical up	190	305	25	130-260	21-29

\* For Ar-25%CO<sub>2</sub> reduce voltage by 1 to 1.5 volts

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Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.