

## SelectAlloy 622-AP

### Description:

**SelectAlloy 622-AP** is a gas-shielded, flux cored, nickel based electrode designed to weld in all positions. It has a nominal weld metal composition of 22% Cr, 13% Mo, 3% W, 4% Fe, balance Nickel. It is primarily used for welding Ni-Cr-Mo to itself or to other nickel based alloys. It is widely used for surfacing steel and for joining nickel based alloys to steel. **SelectAlloy 622-AP** is designed for use with 75% argon/balance CO<sub>2</sub> or 100% CO<sub>2</sub> shielding gas.

### Classification:

- ENiCrMo10T1-1/4 per AWS A5.34

### Characteristics:

**SelectAlloy 622-AP** provides superb performance characteristics in all positions, using either argon + 25% CO<sub>2</sub> or 100% CO<sub>2</sub> shielding gas. Out of position deposition rates are significantly higher than those achieved with solid wires or covered electrodes. Flat, well washed beads can be achieved with minimal weaving. Spatter is very low and slag peeling is excellent, minimizing cleanup.

### Applications:

**SelectAlloy 622-AP** is used in offshore and marine environments, chemical and power generation equipment and petroleum refining. It is also widely used to clad steel when exceptional corrosion resistance is required.

### Typical Mechanical Properties\*:

Ultimate Tensile Strength (psi)	106,000
Yield Strength (psi)	67,000
Percent Elongation	38

### Typical Weld Deposit Chemistry\*:

<u>C</u>	<u>Cr</u>	<u>Mo</u>	<u>W</u>	<u>Fe</u>	<u>Mn</u>	<u>Ni</u>
0.02	21.40	13.80	3.30	5.20	0.40	Bal

\*The properties shown are with CO<sub>2</sub> shielding gas. Results with Ar-25% CO<sub>2</sub> are very similar.

### Typical Welding Parameters (Ar-25%CO<sub>2</sub>)\*:

Diameter	Position	Optimum			Range	
		Amperage	WFS	Voltage	Amperage	Voltage
.045"	Flat	180	400	27-28	125-200	25-30
	V-up/OH	140	300	26	120-165	25-27
1/16"	Flat	250	300	28	130-300	23-30
	V-up/OH	200	200	26	140-240	23-27

Use 1/2" Contact tip to work distance

\* For CO<sub>2</sub> shielding increase voltage by 1.5 to 2 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.