

SelectAlloy 625-C

Description:

SelectAlloy 625-C is a gas-shielded, metal cored, nickel based electrode. It is primarily used for welding alloys 625, 601, 802 and 9% nickel to themselves and to steel. It is also widely used for surfacing steel and for joining other nickel based alloys to steel. **SelectAlloy 625-C** is designed for use with argon/2% O₂ shielding gas.

Classification:

- ERNiCrMo-3 per AWS A5.14

Characteristics:

SelectAlloy 625-C operates with a smooth, spray arc transfer. It produces little or no slag and virtually no spatter, minimizing cleanup. It offers higher deposition rates and more controlled penetration than the equivalent solid electrode. As a result it operates at higher travel speeds and handles poor fitup

Applications:

SelectAlloy 625-C is widely used in offshore and marine environments. It is also an excellent choice for welding piping systems and reactor components in the power generation industry. Other applications are the joining of 9% nickel steels utilized in LNG storage and conveyance equipment and in joining steel to nickel based alloys.

Typical Mechanical Properties:

Ultimate Tensile Strength (psi)	110,000
Yield Strength (psi)	60,000
Percent Elongation	30

Typical Weld Deposit Chemistry:

<u>C</u>	<u>Cr</u>	<u>Mo</u>	<u>Nb</u>	<u>Fe</u>	<u>Ni</u>
0.01	20.50	9.0	3.70	0.60	Bal.

Typical Welding Parameters (Ar-2% O₂):

Diameter	Optimum			Range	
	Amperage	WFS	Voltage	Amperage	Voltage
.045"	220	400	23	180-280	21-26
1/16"	280	250	25	200-380	24-27

Use 1/2-5/8" Contact tip to work distance

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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.