

Select 70C-6LS

Description:

- A carbon steel, composite metal cored electrode for gas shielded arc welding
- Designed to produce cleaner weld deposits, with minimal slag islands, than conventional metal cored electrodes
- Minimizing slag islands and spatter allows multiple beads to be deposited with no cleanup in between
- Arc transfer is a stable, fine droplet spray
- Ideal for welding structural steel, thin plate fabrication, general fabrication, and welding of thin walled tanks.
- Intended for welding carbon steels such as ASTM A36, A285, A515-Gr 70, and A516-Gr 70

Classification & Approvals:

- E70C-6M per AWS A5.18, ASME SFA 5.18
- E70T15-M21A2-CS1, E70T15-M24A2-CS1 per AWS A5.36, ASME SFA5.36
- ABS 3SA, 3YSA
- Per CSA W48-18; E491T15-GA3-CS1-H4 (E491C-6M-H4), E491T15-M20A3-CS1-H4 (E491C-6M-H4), and E491T15-M21A3-CS1-H4 (E491C-6M-H4)

Typical Mechanical Properties:

	<u>75-80% Ar/balance CO₂</u>	<u>90% Ar/10% CO₂</u>
Ultimate Tensile Strength (psi)	81,500	78,800
Yield Strength (psi)	64,500	61,500
Percent Elongation	27	38
CVN (ft-lbf) @ -20° F	32	57

Typical Chemical Composition:

<u>Wt%</u>	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>
75-80% Ar/balance CO ₂	.05	1.54	.007	.010	.60
90% Ar/10% CO ₂	.04	1.70	.011	.019	.66

Typical Welding Parameters: Metal Cored – Argon/Carbon Dioxide

<u>Diam.(in.)</u>	<u>Optimum</u>			<u>Range</u>			<u>ESO</u>
	<u>Amperage</u>	<u>WFS</u>	<u>Voltage</u>	<u>Amperage</u>	<u>WFS</u>	<u>Voltage</u>	
.035	200	550	29-30	160-250	350-750	24-35	1/2"-3/4"
.045	255	410	29-30	180-330	240-600	25-33	1/2"-1"
.052	300	350	29-30	220-460	220-620	25-35	1/2"-1"
1/16	300	275	29-30	190-340	160-320	26-32	3/4"-1 1/4"

Typical Short Arc Parameters (for out of position welding):

	<u>Amperage</u>	<u>WFS</u>	<u>Voltage</u>
.035	100	145	15-16
.045	140	150	16-17
.052	125	120	17-18

* Welding parameters are for 75-80% Ar/balance CO₂. At higher levels of argon the voltage should be gradually decreased; 1/2-1 volt for 85% Ar/15% CO₂, 1-1 1/2 volts for 90% Ar/10% CO₂ and 1-2 volts for 95% Ar/5% CO₂.

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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. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. 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.