



Select 707

Description:

Select 707 is an all-position flux cored, gas shielded electrode designed for single and multi-pass welding applications in all positions. This electrode is developed specifically for enhanced welder appeal and exceptional weldability at both high and low end parameters. It is ideal for use in general fabrication, structural steel, construction equipment, railcar fabrication and shipbuilding. Argon with 20-25% CO₂ or 100%CO₂ may be used as a shielding gas, with a flow rate of 40-50 CFH.

Classifications & Approvals:

- E71T-1M-H8, E71T-1C-H8, E71T-9M-H8 and E71T-9C-H8 per AWS A5.20
- E71T1-M21A2-CS2-H8 and E71T1-C1A2-CS2-H8 per AWS A5.36
- Certified by CWB to CSA W48-06 classification E491T-9M-H8 and E491T-9C-H8

Advantages:

- Excellent all-position weldability at low or high current settings
- Exhibits an exceptionally smooth spray transfer and outstanding arc stability
- Robust mechanical properties at subzero temperatures

Typical Mechanical Properties:

	<u>75Ar/25CO₂</u>	<u>100CO₂</u>
Ultimate Tensile Strength (psi)	91,000	89,000
Yield Strength (psi)	78,300	79,000
Percentage Elongation	29	27
CVN (ft • lb) @ -20° F	65	53

Typical Weld Deposit Composition (wt%):

<u>Shielding Gas</u>	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>
<u>75Ar/25CO₂</u>	.05	1.40	.012	.009	.78
<u>100CO₂</u>	.05	1.19	.012	.010	.63

Recommended Welding Parameters (100CO₂*):

<u>Diameter</u>	<u>Position</u>	<u>Optimum</u>			<u>Range</u>		<u>CTWD</u>
		<u>Amperage</u>	<u>WFS (iom)</u>	<u>Voltage</u>	<u>Amperage</u>	<u>Voltage</u>	
1/16"	Flat	325	320	29	150-360	23-31	1"-1 1/4"
	Overhead	225	180	26	150-260	23-28	
	Vertical up	225	180	25	150-250	23-27	
.052"	Flat	270	360	28	120-340	20-31	3/4"-1"
	Overhead	210	240	26	120-260	21-28	
	Vertical up	210	240	25	120-250	21-27	
.045"	Flat	250	440	28	100-290	23-30	3/4"-1"
	Overhead	195	310	26	100-250	22-29	
	Vertical up	195	310	25	100-240	22-28	

* For 75Ar-25CO₂ shielding gas, lower the voltage by 1 to 1.5 volts. A contact tip to work distance of 3/4 to 1" is recommended.

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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.