



Select 727

Description:

Select 727 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. It is ideal for use on 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 rates of 40-50 CFH.

Classifications & Approvals:

- E71T-1M, E71T-1C, E71T-9M and E71T-9C per AWS A5.20
- E71T1-M21A2-CS2 and E71T1-C1A2-CS2 per AWS A5.36
- ABS 3SA-3YSA (CO₂/C25), DNV III YMS (CO₂) and AWS D1.8 (CO₂/C25) approved

Advantages:

- Produces superior bead geometry compared to conventional E71T1 electrodes
- Possesses exceptional welder appeal and all-position weldability
- Low fume generation rates and spatter emission levels

Typical Mechanical Properties:

	<u>75Ar/25CO₂</u>	<u>100CO₂</u>
Ultimate Tensile Strength (psi)	90,600	89,100
Yield Strength (psi)	82,700	78,100
Percentage Elongation	25	26
CVN (ft • lb) @ 0° F	70	85
@ -20° F	45	70

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	1.61	.005	.010	.64
<u>100CO₂</u>	.05	1.39	.008	.010	.56

Recommended Welding Parameters (CO₂*):

Diameter	Position	Optimum			Range	
		Amperage	WFS	Voltage	Amperage	Voltage
1/16"	Flat	350	300	29	150-400	22-34
	Overhead	225	160	26	150-310	22-28
	Vertical up	225	160	25	150-280	22-27
.052"	Flat	300	360	28	100-330	19-32
	Overhead	225	245	26	150-310	21-28
	Vertical up	225	245	25	150-280	21-27
.045"	Flat	250	410	28	100-300	21-32
	Overhead	200	265	26	150-280	21-29
	Vertical up	200	265	25	100-230	21-28
.035"	Flat	175	510	26	100-250	21-30
	Overhead	150	490	24	100-175	21-26
	Vertical up	150	490	24	100-175	21-26

* For 75Ar-25CO₂ shielding gas, lower the voltage by 1 to 1.5 volts.

Rev 0 (12/17/13)

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.