

## Select 737

### Description:

**Select 737** is an all-position flux cored, gas shielded electrode designed to produce robust mechanical properties in the as-welded condition. This electrode is developed to produce high tensile strength and notch toughness at -40°F using several different gas mixtures. It is ideal for use on structural fabrication, farm machinery and construction equipment. Argon with 10-25% CO<sub>2</sub> or 100%CO<sub>2</sub> may be used as a shielding gas, with a flow rates of 40-50 CFH.

### Classifications & Approvals:

- E71T-1M, E71T-1C, E71T-9M, E71T-9C, E71T-12MJ and E71T-12CJ per AWS A5.20
- E71T1-M21A4-CS2, E71T1-M20A4-CS2 and E71T1-C1A4-CS2 per AWS A5.36
- ABS Grade 3YSA (C25) approved

### Advantages:

- Possesses excellent notch toughness at -40°F in the as-welded condition
- Deep penetrating arc that reduces the potential for lack of fusion
- Maintains tensile and notch toughness properties using various Ar-CO<sub>2</sub> mixtures or 100% CO<sub>2</sub>
- Fast freezing slag facilitates excellent all-position welding and slag removal

### Typical Mechanical Properties:

	<u>75Ar/25CO<sub>2</sub></u>	<u>90Ar/10CO<sub>2</sub></u>	<u>100CO<sub>2</sub></u>
Ultimate Tensile Strength (psi)	84,400	90,300	78,900
Yield Strength (psi)	70,000	78,300	67,900
Percentage Elongation	30	24	33
CVN (ft • lb)			
@ -20° F	110	88	-
@ -40° F	90	74	93
@ -60° F	-	-	75

### Typical Weld Deposit Composition (wt%):

<u>Shielding Gas</u>	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>
75Ar/25CO <sub>2</sub>	.06	1.50	.008	.010	.40
90Ar/10CO <sub>2</sub>	.07	1.53	.009	.009	.42
100CO <sub>2</sub>	.06	1.30	.010	.010	.24

### Recommended Welding Parameters:

<u>Diameter</u>	<u>Position</u>	<u>Optimum</u>			<u>Range</u>	
		<u>Amperage</u>	<u>WFS</u>	<u>Voltage</u>	<u>Amperage</u>	<u>Voltage</u>
1/16"	Flat	350	350	28	150-400	22-33
	Overhead	225	180	25	150-310	22-28
	Vertical up	225	180	24	150-280	22-27
.052"	Flat	300	440	27	100-330	19-31
	Overhead	200	245	25	150-310	21-28
	Vertical up	200	245	24	150-280	21-27
.045"	Flat	250	450	27	100-300	21-31
	Overhead	190	305	25	150-280	21-29
	Vertical up	190	305	24	100-230	21-28
.035"	Flat	200	600	29	100-250	21-31
	Overhead	160	410	25	100-175	21-27
	Vertical up	160	410	24	100-175	21-27

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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.