

Select 717

Description :

- A carbon steel, gas shielded, flux cored electrode for welding in all positions
- Designed to operate with high argon blends of 75-95% Argon/balance CO₂
- Spatter is nearly eliminated with the high argon blends employed with this product
- Arc transfer is a small droplet, spray-like mode
- Intended for single and multiple pass welding of most carbon steels, such as ASTM A36, A285, A515-Gr 70, and A516-Gr 70
- Ideal for light gauge, as well as standard plate fabrication and structural steel welding
- Typical applications include rail cars, structural steel, and applications involving light gauge steels

Classifications:

- E71T-1M and E71T-9M per AWS A5.20, ASME SFA 5.20
- E71T1-M21A2-CS2, E71T1-M24A2-CS2 per AWS A5.36, ASME SFA 5.36

Typical Mechanical Properties:

	<u>75-80% Ar/balance CO₂</u>	<u>95% Ar/5% CO₂</u>
Ultimate Tensile Strength (psi)	82,500	88,100
Yield Strength (psi)	69,700	76,000
Percentage Elongation	27	26
CVN (ft•lbf) @ 0° F	76	97
@ -20° F	55	89

Typical Weld Deposit Composition (wt%):

<u>Shielding Gas</u>	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>
75-80% Ar/balance CO ₂	.04	0.96	.010	.010	.45
95% Ar/5% CO ₂	.04	1.12	.007	.010	.59

Recommended Welding Parameters (90Ar/10CO₂*):

<u>Diam.</u>	<u>Position</u>	<u>Optimum</u>				<u>Operating Range</u>		
		<u>WFS (ipm)</u>	<u>Amps</u>	<u>Volts</u>	<u>ESO (in.)</u>	<u>WFS (ipm)</u>	<u>Amps</u>	<u>Volts</u>
.045"	Flat	500	275	28	3/8-3/4"	140-600	120-320	23-29
	Vertical Up	400	250	26		140-540	120-300	23-27
	Overhead	400	250	27		150-540	125-300	24-28
.052"	Flat	480	340	28	3/4-1"	120-550	140-390	24-29
	Vertical Up	300	260	27		120-450	140-310	24-28
	Overhead	300	260	27		120-450	140-310	24-28
1/16"	Flat	350	340	27	3/4-1"	90-460	135-400	22-31
	Vertical Up	250	280	25		100-350	145-360	23-28
	Overhead	250	280	26		100-350	145-360	23-29

*For shielding gas with higher amounts of CO₂, voltage may need to be increased

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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.