

Select 720

Description:

- A carbon steel, gas shielded, flux cored electrode
- Designed for ease of welding in all positions
- Arc transfer is soft; resides on the puddle in a small to medium droplet transfer
- Mechanical properties exceed the minimum AWS requirements and rival E7018 electrodes
- Intended for use with 100% CO₂ or 75-80% Ar/balance CO₂
- Excels in general fabrication, structural steel, and shipbuilding applications
- Although a dual gas electrode, it is optimized for use on 75-80% Ar/balance CO₂

Classifications & Approvals:

- E71T-1C, E71T-1M, E71T-9C, and E71T-9M per AWS A5.20, ASME SFA5.20
- E71T1-M21A2-CS1 and E71T1-C1A2-CS1 per AWS A5.36
- Approved by NAVSEA to MIL-71T-1-HYC and MIL-71T-1-HYM per MIL-E-24403/1F
- ABS 3SA-3YSA (100% CO₂ and 75% Ar/25% CO₂), DNV III YMS (100% CO₂), Lloyd's 3YS (75% Ar/25% CO₂)
- CWB E491T-9C-H4, CWB E491T-9M-H4
- AWS D1.8:2016 .045", .052", 1/16" (100% CO₂ and 75-80% Ar/Balance CO₂)

Typical Mechanical Properties:

	<u>100% CO₂</u>	<u>75-80% Ar/Balance CO₂</u>
Ultimate Tensile Strength (psi)	85,500	93,000
Yield Strength (psi)	79,500	89,000
Percentage Elongation	27	26
CVN (ft-lbf) @ 0° F	67 avg	90 avg
@ -20° F	37 avg	74 avg

Typical Weld Deposit Composition (wt%):

<u>Shielding Gas</u>	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>
100% CO ₂	.04	1.18	.015	.010	.50
75-80%Ar/Bal. CO ₂	.04	1.46	.016	.010	.55

Recommended Welding Parameters (CO₂*):

<u>Diameter</u>	<u>Position</u>	<u>WFS</u>	<u>Optimum</u>		<u>Amperage</u>	<u>Range</u>	<u>CTWD</u>
			<u>Amperage</u>	<u>Voltage</u>		<u>Voltage</u>	
1/16"	Flat	350	350	28	150-400	22-33	1-1 ¼"
	V-Up/OH	225	180	25	150-310	22-28	
.052"	Flat	440	300	27	100-330	19-31	1-1 ¼"
	V-Up/OH	245	200	25	150-310	21-28	
.045"	Flat	450	250	27	100-300	21-31	¾"-1"
	V-Up/OH	305	190	25	150-280	21-29	

*For 75-80%Ar-Balance CO₂ shielding gas, decrease voltage by 1 to 1.5 volts

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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.