

Select 720

Description:

Select 720 is an all-position flux cored, gas shielded electrode designed for single or multi-pass welding applications using. This electrode is developed for optimum weldability on 100% CO₂ shielding gas and produces excellent notch toughness at subzero temperatures. It is ideal for use in general plate fabrication, shipbuilding and construction equipment applications. Argon/ 20-25% CO₂ shielding gas may also be used, with no significant effect on toughness or tensile properties.

Classifications & Approvals:

- E71T-1C, E71T-1M, E71T-9C, E71T-9M, E71T-12C and E71T-12M per AWS A5.20
- E71T1-M21A2-CS2 and E71T1-C1A2-CS2 per AWS A5.36
- MIL-71T-1-HYC, MIL-71T-1-HYM and MIL-71T-1C per MIL-E-24403/1
- ABS 3SA-3YSA (CO₂/C25), DNV III YMS (CO₂), Lloyd's 3YS (C25), Lloyd's 3YS, CWB E491T-9-H8, CWB E491T-9M-H8, MIL-71T-1-HYC, MIL-71T-1-HYM and MIL-71T-1C approved

Advantages:

- Possesses excellent notch toughness using 100%CO₂ or Ar/ 20-25%CO₂ shielding gases
- Low fume generation rates and minimal spatter emission
- Excellent bead geometry and all-position weldability
- Smooth spray transfer mode and a deep penetrating arc

Typical Mechanical Properties:

	<u>100CO₂</u>	<u>75Ar/25CO₂</u>
Ultimate Tensile Strength (psi)	84,000	88,100
Yield Strength (psi)	77,000	78,900
Percentage Elongation	28	27
CVN (ft • lb) @ 0° F	95	99
@ -20° F	91	88

Typical Weld Deposit Composition (wt%):

<u>Shielding Gas</u>	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>
100CO ₂	.05	1.25	.008	.010	.50
75Ar/25CO ₂	.05	1.39	.008	.009	.56

Recommended Welding Parameters (CO₂*):

<u>Diameter</u>	<u>Position</u>	<u>Optimum</u>			<u>Range</u>		<u>CTWD</u>
		<u>Amperage</u>	<u>WFS</u>	<u>Voltage</u>	<u>Amperage</u>	<u>Voltage</u>	
5/64"	Flat	390	250	29	240-430	26-33	1"-1 1/4"
	V-Up/ OH	250	135	26	240-300	24-28	
1/16"	Flat	350	350	28	150-400	22-33	3/4"-1"
	V-Up/OH	225	180	25	150-310	22-28	
.052"	Flat	300	440	27	100-330	19-31	3/4"-1"
	V-Up/OH	200	245	25	150-310	21-28	
.045"	Flat	250	450	27	100-300	21-31	3/4"-1"
	V-Up/OH	190	305	25	150-280	21-29	
.035"	Flat	200	600	29	100-250	21-31	3/4"-1"
	V-Up/OH	160	410	25	100-175	21-27	

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

Rev 1 (05/18/2017)

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.