

Select 97

Description:

Select 97 is a carbon steel electrode for flux cored arc welding with external gas shielding. This electrode is intended for single and multiple pass welding of carbon steels where a minimum tensile strength of 70,000 psi is required. **Select 97** may be utilized with 100 percent carbon dioxide or argon with 20 to 25% CO₂ shielding gas, with a recommended flow rate of 35-50 cfh and a minimum dew point of -40°F.

Classifications & Approvals:

- E70T-1C, E70T-1M, E70T-9C, E70T-9M per AWS A5.20, SFA 5.20.
- ABS E70T-1C
- CWB E492T-9-H8

Characteristics:

Select 97 is an E70T-1 electrode that emits lower levels of welding fumes than the conventional variety of these products. Welding characteristics are good, with a soft spray-like transfer and low spatter. As with all E70T-1C electrodes, welding positions are limited to horizontal fillets and flat groove/fillet welds.

Applications:

The lower fume generation rates of **Select 97** render it well suited to welding indoors, or where less fume or smoke is desired. **Select 97** can typically be applied in structural welds, steel fabrication, and other general purpose weldments.

Typical Mechanical Properties (CO₂ shielding):

	<u>CO₂</u>	<u>75%Ar/25%CO₂</u>
Ultimate Tensile Strength (psi)	82,000	89,000
Yield Strength (psi)	77,800	75,300
Percent Elongation	25	24.6
CVN (ft•lb f) @ -20°F	27	38

Typical Deposit Composition (CO₂ shielding):

<u>Shielding Gas</u>	<u>C</u>	<u>Mn</u>	<u>Si</u>	<u>P</u>	<u>S</u>
CO ₂	.03	1.55	.50	.010	.010
75Ar/25CO ₂	.04	1.70	.40	.007	.008

Recommended Welding Parameters*:

<u>Diam.</u>	<u>Optimum</u>			<u>Range</u>			<u>CTWD</u>
	<u>Amperage</u>	<u>Voltage</u>	<u>WFS</u>	<u>Amperage</u>	<u>Voltage</u>	<u>WFS</u>	
3/32"	450	31	210	275-550	26/34	120-270	1"
5/64"	390	29	250	280-430	26/33	140-300	1"
1/16"	350	29	360	250-400	26/32	220-410	1"
.052	275	28	400	150-375	20/32	140-580	½"-1"
.045"	250	28	450	130-300	21/32	175-570	¾"

* With CO₂ shielding gas. Reduce voltage by 1 volt for 75% Ar/25% CO₂.

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. Select-Arc disclaims any warranty of merchantability of fitness for any particular purpose with respect to its products.