

Select 70TR

Description:

Select 70TR is a carbon steel electrode for flux cored arc welding with external gas shielding. It is intended for single and multiple pass welding of carbon, and certain low alloy, steels in the flat and horizontal fillet positions. This electrode is designed for use with carbon dioxide shielding gas or a blend of 75-80% argon/balance carbon dioxide. Gas flow rates should be maintained at 35-50 cfh. Dew point of the gas must be at least -40°F.

Classifications:

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

Characteristics:

Select 70TR is a general purpose E70T-1C/M electrode with extremely high welder appeal. This wire has excellent wetting characteristics, resulting in a superior bead shape and near seamless tie-in. This allows multiple weld beads to be stacked in a horizontal fillet with a minimum of 'roll' or convexity. Spatter levels are low and the slag removes easily. The high level of deoxidation facilitates welding over mill scale, rust, and other mild contaminants on the plate.

Applications:

Select 70TR is ideal for those applications involving the welding of structural carbon steels, where high deposition rates and superior penetration characteristics are preferred. The bead geometry is superior to most conventional E70T-1C/M electrodes, with a flat profile and minimal "double beading". **Select 70TR** is an ideal choice for welding steels such as A36, A285, A515, and A516.

Typical Mechanical Properties:

	<u>CO₂</u>	<u>75% Ar/25% CO₂</u>
Ultimate Tensile Strength (psi)	88,700	94,100
Yield Strength (psi)	74,400	81,100
Percent Elongation	24	24
CVN (ft•lb f) @ -20°F	31	30

Typical Deposit Composition (wt%):

<u>Shielding Gas</u>	<u>C</u>	<u>Mn</u>	<u>Si</u>	<u>P</u>	<u>S</u>
100 CO ₂	.06	1.56	.58	.006	.010
75Ar/25CO ₂	.06	1.68	.70	.007	.009

Recommended Welding Parameter:

Diam.	Optimum			Range			ESO
	Amps	Volts	WFS	Amps(DCEP)	Volts	WFS(in/min)	
3/32"	425	29	180	300-500	26/34	110-240	1-1¼"
5/64"	390	29	250	280-430	26-33	140-300	¾"-1¼"
1/16"	320	29	320	150-350	24/34	130-385	¾"-1"
.045	250	28	450	130-300	21/32	175-570	½"-1"

Gas Flow Rate: 40-55 cfh

Rev 2(12/30/2015)

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.