

Select 701

Description:

Select 701 is a carbon steel, flux cored electrode for use without external gas shielding. This electrode is intended for semi-automatic and automatic welding of carbon steel in single pass and limited multiple pass applications. **Select 701** is designed to operate on straight polarity (DCEN).

Classification:

- E71T-11 per AWS A5.20, SFA 5.20.

Characteristics:

Select 701 operates with no external shielding gas. The arc transfer is quite smooth and exceptionally low in spatter. The soft arc minimizes burn through on thin materials and in instances of poor fit up. A fast freezing slag facilitates welding in all positions.

Applications:

Select 701 is ideal for those applications where the use of shielding gas is inappropriate and where charpy v-notch toughness is not of prime concern. This electrode is well suited for butt, lap, and fillet welds on steels from 16 gauge through 1/2". When welding on steels from 3/8" to 1/2" thick, a preheat of 325-375° F is strongly recommended. The .045" electrode is not usually welded on steels greater than 3/8" thick, normally the 1/16" diameter electrode (or larger) is selected for these applications. The versatility of **Select 701** makes it an excellent selection for assembly and maintenance welding in all positions.

Typical Mechanical Properties:

Ultimate Tensile Strength (psi)	89,400
Yield Strength (psi)	66,600
Percent Elongation	23.5

Typical Deposit Composition:

	<u>Wt%</u>	<u>C</u>	<u>Mn</u>	<u>Si</u>	<u>P</u>	<u>S</u>	<u>Al</u>
		.21	.30	.15	.010	.010	1.50

<u>Diam (in)</u>	<u>Amps</u>	<u>Volts</u>	<u>WFS</u>	<u>Rate Lb/Hr</u>	<u>Deposition Eff.%</u>
.030"	50	15	80	1.2	85
	100	16	225	1.8	
	150	17	375	2.7	
	175	17	445	3.3	
.035"	75	15	70	1.2	90
	100	16	110	1.9	
	150	17	180	3	
	200	18	305	4.5	
.045"	100	15	70	1.5	90
	150	16	120	2.2	
	200	17	195	4.5	
	225	18	245	5.1	
1/16"	150	17	60	3.3	93
	200	18	85	3.8	
	250	18	135	5	
	300	19	180	7.8	
5/64"	200	19	60	3.6	87.5
	250	20	80	4.4	
	300	21	115	5.7	
	325	120	6.6		

701 Data using DCEN
Recommended Stick out

<u>Diameter</u>	<u>(mm)</u>	<u>CTWD</u>
.030"	0.8	3/8"-1/2"
.035"	0.9	3/8"-1/2"
.045"	1.2	1/2"-5/8"
1/16"	1.6	1/2"-3/4"
5/64"	2.0	3/4"-1"

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