



## AWS D1.8 SEISMIC CERTIFICATION OF CONFORMANCE

Manufactured in the U.S.A. by :  
**SELECT-ARC, INC.**  
 600 Enterprise Dr.  
 P. O. Box 259  
 Fort Loramie, OH 45845

Supplied to :

Date:  
 Customer Order Number:  
 Order Number:  
 Lot/ Production No. Shipped:  
 Lot/ Production No. Tested: **4012H419A3701**  
 Test No: 15089-18, 15089-19

This is to certify that **Select 727** electrode, classification **E71T-1M, -9M** as supplied on the above order number, is of the same classification, manufacturing process and material requirements as the electrode used for testing. All tests required by specifications **AWS D1.8/D1.8M:2009**, for wire diameter **.045" and 75%Ar /25%CO2 Shielding Gas**, were performed in conformance with these specifications and the results met all requirements. The test results were as follows:

**MECHANICAL PROPERTIES**

AS WELDED       STRESS RELIEVED (    hr @    °F)

**WELDING PARAMETERS:**

**HIGH HEAT INPUT:**

Amperage: 205  
 Arc Voltage: 25.5  
 Current Polarity: DCEP  
 Electrical Extension (in): 3/4  
 Shielding Gas: 75Ar/25CO2  
 No. of Passes/Layers: 7/4  
 Preheat Temp (°F): 250 min.  
 Interpass Temp (°F): 450 min.  
 Heat Input Avg (kJ/in): 75  
 Travel Speed (ipm): 4.2

**LOW HEAT INPUT:**

Amperage: 186  
 Arc Voltage: 24  
 Current Polarity: DCEP  
 Electrical Extension (in): 3/4  
 Shielding Gas: 75Ar/25CO2  
 No. of Passes/Layers: 14/7  
 Preheat Temp (°F): 120 max.  
 Interpass Temp (°F): 250 max.  
 Heat Input Avg (kJ/in): 31  
 Travel Speed (ipm): 8.7

**TEST RESULTS:**

**HIGH HEAT INPUT:**

Tensile Strength (psi): 70,000 min  
 Yield Strength (psi): 58,000 min  
 Elongation (%): 22 min  
 Avg Charpy Impact: 40 min  
 ft•lb f @ 70°F: 125, 126, 124  
 125 avg  
 Avg Charpy Impact: 40 min  
 ft•lb f @ 32°F: 119, 122, 131  
 124 avg.

**REQUIREMENTS:**

**RESULTS:**

**LOW HEAT INPUT:**

Tensile Strength (psi): 70,000 min  
 Yield Strength (psi): 58,000 min  
 Elongation (%): 22 min  
 Avg Charpy Impact: 40 min  
 ft•lb f @ 70°F: 103, 107, 109  
 106 avg.  
 Avg Charpy Impact: 40 min  
 ft•lb f @ 32°F: 108, 108, 107  
 108 avg.


**REQUIREMENTS:**

**RESULTS:**

This product meets the requirements for a four week exposure at 80°F, 80% humidity.

This certification expires in October, 2017.

**The undersigned certifies that the product supplied will meet the requirements of the applicable AWS Specification when tested in accordance with that specification, and that no significant change has been made in the formulations and manufacturing procedures described in the qualification approval.**

Signed by:   
**Ben A. Pletcher, Technical Director**