

## AWS D1.8 Seismic Certificate of Conformance

This is to certify that the product stated below is of the same classification, manufacturing process, and material requirements as the electrode used for the testing on the date stated. All tests required by the specifications for classification were performed and the material met all requirements. It was manufactured and supplied according to the quality management system of Select-Arc, Inc., which meets the requirements of ISO 9001 and other applicable specifications. This certificate complies with the requirements of EN 10204, Type 2.2.

Product: Select 730

Test Completion Date: 10/19/2018

Diameter(s): 1/16

Lot Numbers: (1/16) 0174 0175 0176

Specifications: AWS D1.8:2016

Certificate Expiration Date: 10/19/2021

Classification: E71T-1M, E71T-9M

### Weld Parameters - High Heat Input

Lot Number:	0174	0175	0176
Electrode Diameter:	1/16	1/16	1/16
Shielding Gas	75-80% Ar / Bal CO2	75-80% Ar / Bal CO2	75-80% Ar / Bal CO2
Amperage:	234.0	230.0	226.0
Arc Voltage:	25.0	25.0	25.0
Current Polarity:	DCEP	DECP	DCEP
CTWD (in):	5/8	5/8	5/8
No. of Passes/Layers:	8/4	8/4	8/4
Interpass Temperature(°F):	450	450	450
Heat Input Avg.(kJ/in.):	73	72.3	72.9

### Mechanical Properties - High Heat Input

Lot Number:		0174	0175	0176
Shielding Gas		75-80% Ar / Bal CO2	75-80% Ar / Bal CO2	75-80% Ar / Bal CO2
Requirements		Results	Results	Results
Test Condition:	As-Welded	As-Welded	As-Welded	As-Welded
PWHT Temperature:	-	-	-	-
Tensile Strength (psi):	70000 min	85000	89000	90000
Yield Strength (psi):	58000 min	74000	78000	79000
Elongation (%):	22 min	28	27	27
Charpy V-Notch Impacts:		93, 108, 118	95, 97, 98	106, 99, 101
ft-lb f @ 72°F	40 avg.	106 avg	97 avg	102 avg
Charpy V-Notch Impacts:		100, 90, 103	80, 60, 85	91, 83, 84
ft-lb f @ 32°F	40 avg.	98 avg	75 avg	86 avg

### Weld Parameters - Low Heat Input

Lot Number:	0174	0175	0176
Electrode Diameter:	1/16	1/16	1/16
Shielding Gas	75-80% Ar / Bal CO2	75-80% Ar / Bal CO2	75-80% Ar / Bal CO2
Amperage:	205.0	205.0	205.0
Arc Voltage:	25.5	25.5	25.0
Current Polarity:	DCEP	DCEP	DCEP
CTWD (in):	3/4	3/4	3/4
No. of Passes/Layers:	18/9	17/9	16/8
Interpass Temperature(°F):	250	250	250
Heat Input Avg.(kJ/in.):	30.7	31	32.6

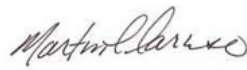
### Mechanical Properties - Low Heat Input

Lot Number:		0174	0175	0176
Shielding Gas		75-80% Ar / Bal CO2	75-80% Ar / Bal CO2	75-80% Ar / Bal CO2
Requirements		Results	Results	Results
Test Condition:	As-Welded	As-Welded	As-Welded	As-Welded
PWHT Temperature:	-	-	-	-
Tensile Strength (psi):	70000 min	85000	84000	83000
Yield Strength (psi):	58000 min	75000	77000	76000
Elongation (%):	22 min	26	30	28
Charpy V-Notch Impacts:		173, 181, 145	151, 147, 145	175, 142, 146
ft-lb f @ 72°F	40 avg.	166 avg	148 avg	154 avg
Charpy V-Notch Impacts:		130, 126, 130	127, 126, 130	153, 140, 128
ft-lb f @ 32°F	40 avg.	129 avg	128 avg	140 avg

This product meets the requirements for a 2 week exposure at 80°F, 80% humidity (per Annex E of AWS D1.8:2016)

The undersigned certifies that the product supplied will meet the requirements of the applicable AWS Filler Metal Specification when tested in accordance with that specification.

Signed By: \_\_\_\_\_



Martin L. Caruso, Director of Technology