

Diameter: 3/32

## 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 81-Ni1

Test Completion Date: 5/22/2020

Diameter(s): 3/32

Lot Numbers: (3/32) 6304

Lot Class: 'T4' per AWS A5.01

Certificate Expiration Date: 5/22/2023

Specifications: AWS D1.8: 2016

Classification: E80T1-Ni1C

### Weld Parameters - High Heat Input

Lot Number:	6304
Electrode Diameter:	3/32
Shielding Gas	CO2
Amperage:	458.0
Arc Voltage:	31.0
Current Polarity:	DCEP
CTWD (in):	1
No. of Passes/Layers:	10/5
Interpass Temperature(°F):	450
Heat Input Avg.(kj/in.):	64.8

### Mechanical Properties - High Heat Input

Lot Number:		6304
Shielding Gas		CO2
Requirements		Results
Test Condition:	As-Welded	As-Welded
PWHT Temperature:	-	-
Tensile Strength (psi):	80000 min	85000
Yield Strength (psi):	68000 min	72000
Elongation (%):	19 min	27
Charpy V-Notch Impacts:		74, 71, 60
ft-lb f @ 50°F	40 avg.	68 avg
Charpy V-Notch Impacts:		94, 91, 70
ft-lb f @ 70°F	40 avg.	85 avg

### Weld Parameters - Low Heat Input

Lot Number:	6304
Electrode Diameter:	3/32
Shielding Gas	CO2
Amperage:	401.0
Arc Voltage:	29.0
Current Polarity:	DCEP
CTWD (in):	3/4"
No. of Passes/Layers:	14/6
Interpass Temperature(°F):	250
Heat Input Avg.(kj/in.):	39.6

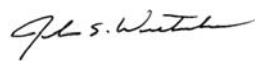
### Mechanical Properties - Low Heat Input

Lot Number:		6304
Shielding Gas		CO2
Requirements		Results
Test Condition:	As-Welded	As-Welded
PWHT Temperature:	-	-
Tensile Strength (psi):	80000 min	89000
Yield Strength (psi):	68000 min	77000
Elongation (%):	19 min	24
Charpy V-Notch Impacts:		59, 61, 57
ft-lb f @ 50°F	40 avg.	59 avg
Charpy V-Notch Impacts:		68, 61, 65
ft-lb f @ 70°F	40 avg.	65 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: \_\_\_\_\_



Joshua S Westerheide, Quality Manager