

Diameter: 1/16

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 80C-Ni1S

Test Completion Date: 8/14/2020

Diameter(s): 1/16

Lot Numbers: (1/16) 0427 7179 9702

Lot Class: 'T4' per AWS A5.01

Certificate Expiration Date: 8/14/2023

Specifications: AWS D1.8: 2016

Classification: E80C-Ni1

Weld Parameters - High Heat Input

Lot Number:	0427	7179	9702
Electrode Diameter:	1/16	1/16	1/16
Shielding Gas	90%Ar / 10%CO2	90%Ar / 10%CO2	90%Ar / 10%CO2
Amperage:	343.0	352.0	353.0
Arc Voltage:	28.0	28.0	28.0
Current Polarity:	DCEP	DCEP	DCEP
CTWD (in):	1	1	1
No. of Passes/Layers:	8/5	8/5	8/5
Interpass Temperature(°F):	450	450	450
Heat Input Avg.(kJ/in.):	68.1	71	69.1

Mechanical Properties - High Heat Input

Lot Number:		0427	7179	9702
Shielding Gas		90%Ar / 10%CO2	90%Ar / 10%CO2	90%Ar / 10%CO2
Requirements		Results	Results	Results
Test Condition:	As-Welded	As-Welded	As-Welded	As-Welded
PWHT Temperature:	-	-	-	-
Tensile Strength (psi):	80000 min	81000	84000	83000
Yield Strength (psi):	68000 min	65000	66000	67000
Elongation (%):	19 min	29	27	28
Charpy V-Notch Impacts:		86, 86, 88	75, 78, 77	83, 87, 88
ft-lb f @ 70°F	40 avg.	87 avg	77 avg	86 avg
Charpy V-Notch Impacts:		63, 57, 57	45, 47, 43	62, 63, 61
ft-lb f @ 32°F	40 avg.	59 avg	45 avg	62 avg

Weld Parameters - Low Heat Input

Lot Number:	0427	7179	9702
Electrode Diameter:	1/16	1/16	1/16
Shielding Gas	90%Ar / 10%CO2	90%Ar / 10%CO2	90%Ar / 10%CO2
Amperage:	303.0	305.0	304.0
Arc Voltage:	26.0	26.0	26.0
Current Polarity:	DCEP	DCEP	DCEP
CTWD (in):	1	1	1
No. of Passes/Layers:	14/7	14/7	14/7
Interpass Temperature(°F):	250	250	250
Heat Input Avg.(kJ/in.):	31.5	32.2	31.2

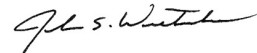
Mechanical Properties - Low Heat Input

Lot Number:		0427	7179	9702
Shielding Gas		90%Ar / 10%CO2	90%Ar / 10%CO2	90%Ar / 10%CO2
Requirements		Results	Results	Results
Test Condition:	As-Welded	As-Welded	As-Welded	As-Welded
PWHT Temperature:	-	-	-	-
Tensile Strength (psi):	80000 min	90000	93000	93000
Yield Strength (psi):	68000 min	77000	81000	83000
Elongation (%):	19 min	25	24	23
Charpy V-Notch Impacts:		77, 76, 77	73, 74, 71	77, 76, 77
ft-lb f @ 70°F	40 avg.	76 avg	73 avg	77 avg
Charpy V-Notch Impacts:		58, 61, 63	64, 64, 65	62, 56, 62
ft-lb f @ 32°F	40 avg.	61 avg	64 avg	60 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