

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 70TR
Diameter(s): 1/16
Specifications: AWS D1.8:2016
Classification: E70T-1C, E70T-9C

Test Completion Date: 2/20/2017
Lot Numbers: (1/16) 5980 5981 5982
Certificate Expiration Date: 2/20/2020

Weld Parameters - High Heat Input

Lot Number:	5980	5981	5982
Electrode Diameter:	1/16	1/16	1/16
Shielding Gas	CO2	CO2	CO2
Amperage:	348.0	348.0	338.0
Arc Voltage:	32.0	32.0	32.0
Current Polarity:	DCEP	DCEP	DCEP
CTWD (in):	3/4	3/4	3/4
No. of Passes/Layers:	8/4	8/4	8/4
Interpass Temperature(°F):	450	450	450
Heat Input Avg.(kJ/in.):	71.6	72.8	72.8

Mechanical Properties - High Heat Input

Lot Number:		5980	5981	5982
Shielding Gas		CO2	CO2	CO2
Requirements		Results	Results	Results
Test Condition:	As-Welded	As-Welded	As-Welded	As-Welded
PWHT Temperature:	-	-	-	-
Tensile Strength (psi):	70000 min	77000	74000	74000
Yield Strength (psi):	58000 min	64000	61000	61000
Elongation (%):	22 min	31	30	31
Charpy V-Notch Impacts:		69, 58, 53	80, 63, 69	46, 52, 47
ft-lb f @ 70°F	40 avg.	60 avg	71 avg	48 avg

Weld Parameters - Low Heat Input

Lot Number:	5980	5981	5982
Electrode Diameter:	1/16	1/16	1/16
Shielding Gas	CO2	CO2	CO2
Amperage:	298.0	240.0	251.0
Arc Voltage:	28.0	28.0	28.0
Current Polarity:	DCEP	DCEP	DCEP
CTWD (in):	3/4	3/4	3/4
No. of Passes/Layers:	15/7	17/8	17/8
Interpass Temperature(°F):	250	250	250
Heat Input Avg.(kJ/in.):	32.4	27.4	26.2

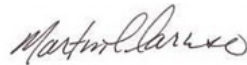
Mechanical Properties - Low Heat Input

Lot Number:		5980	5981	5982
Shielding Gas		CO2	CO2	CO2
Requirements		Results	Results	Results
Test Condition:	As-Welded	As-Welded	As-Welded	As-Welded
PWHT Temperature:	-	-	-	-
Tensile Strength (psi):	70000 min	86000	87000	87000
Yield Strength (psi):	58000 min	75000	78000	77000
Elongation (%):	22 min	29	26	27
Charpy V-Notch Impacts:		55, 53, 52	57, 64, 60	43, 52, 43
ft-lb f @ 70°F	40 avg.	53 avg	60 avg	46 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