Product: FabCOR Elevate
Diameter: .052”
Shielding Gas: M20-ArC-15
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M; ASME SFA 5.18
Test Completed: 8/17/2022

Certificate of Conformance
For AWS D1.8/D1.8M, Seismic Supplement

This is to certify that the product named is of the same classification, manufacturing process, and material requirements as the material, which was used for the test which was concluded on the date shown, the results of which are shown below. All test required by the code or specifications were performed at that time and the material tested met all requirements. The product was manufactured and supplied by the Quality System Program of Hobart Brothers, which meets the requirements of ISO 9001:2015, ANSI/AWS A5.01, and other specification and Military requirements, as applicable.

Test Settings	High Heat Input	Low Heat Input	Lot- # F90061-388708-7621-14	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.1 kJ/in	24.3 kJ/in	Mechanical Properties		80.1 kJ/in	24.3 kJ/in
Voltage	28.5	25.4	Test Reference #		PE4273	PE4268
Current (amps)	385	274				
WFS (ipm)	420	270				
Travel Speed (ipm)	8	17.3	Tensile Strength (psi)	70,000	75,800	86,700
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	60,900	76,800
# of passes	8	18	Elongation (%)	22	29	24
# of layers	4	8	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	86	87
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # F95233-457857-27721-1	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.7 kJ/in	25.1 kJ/in	Mechanical Properties		80.7 kJ/in	25.1 kJ/in
Voltage	28.5	26	Test Reference #		PE4277	PE4554
Current (amps)	375	265				
WFS (ipm)	420	285				
Travel Speed (ipm)	8.18	17.10	Tensile Strength (psi)	70,000	76,700	86,600
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	59,800	78,700
# of passes	7	17	Elongation (%)	22	30	23
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	84	74
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # F94219-431325-16522-2	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.0 kJ/in	26.1 kJ/in	Mechanical Properties		78.0 kJ/in	26.1 kJ/in
Voltage	28.5	26	Test Reference #		PE4269	PE4337
Current (amps)	375	270				
WFS (ipm)	420	285				
Travel Speed (ipm)	7.8	16.43	Tensile Strength (psi)	70,000	77,900	87,700
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	62,600	78,400
# of passes	8	17	Elongation (%)	22	27	24
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	74	80
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Diffusible Hydrogen - Tested in accordance with AWS A5.18/A5.18M, Clause 15 & Extended Exposure - in accordance with AWS D1.8/D1.8M

Condition	Lot - #	Test Reference #	Average (ml/100g)
As Received	F94219-431325-16522-2	HB5974	3.0 (ml/100g)
7 Day Exposure	F94219-431325-16522-2	HB5975	3.4 (ml/100g)

James Owens

James Owens, Quality Assurance Specialist

Product: FabCOR Elevate
Diameter: 1/16”
Shielding Gas: M20-ArC-10
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M; ASME SFA 5.18
Test Completed: 8/13/2024

Certificate of Conformance
For AWS D1.8/D1.8M, Seismic Supplement

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Test Settings	High Heat Input	Low Heat Input	Lot- # J92068	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	83.2 kJ/in	26.8 kJ/in	Mechanical Properties		83.2 kJ/in	26.8 kJ/in
Voltage	28	25	Test Reference #		PE8494	PE8504
Current (amps)	385	250				
WFS (ipm)	350	180				
Travel Speed (ipm)	7.7	13.9	Tensile Strength (psi)	70,000	84,100	98,200
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	63,000	89,300
# of passes	6	19	Elongation (%)	22	27	24
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	68	69
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J92356	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	82.1 kJ/in	27.0 kJ/in	Mechanical Properties		82.1 kJ/in	27.0 kJ/in
Voltage	28	25	Test Reference #		PE8500	PE8504
Current (amps)	385	260				
WFS (ipm)	350	180				
Travel Speed (ipm)	7.8	14.4	Tensile Strength (psi)	70,000	87,700	94,300
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	69,000	82,800
# of passes	6	19	Elongation (%)	22	26	23
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	60	64
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J92439	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.4 kJ/in	26 kJ/in	Mechanical Properties		81.4 kJ/in	26 kJ/in
Voltage	28	25	Test Reference #		PE8721	PE8516
Current (amps)	382	260				
WFS (ipm)	260	160				
Travel Speed (ipm)	8	15	Tensile Strength (psi)	70,000	90,600	95,300
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	74,200	84,500
# of passes	7	20	Elongation (%)	22	26	24
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	55	64
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Diffusible Hydrogen - Tested in accordance with AWS A5.18/A5.18M, Clause 15 & Extended Exposure - in accordance with AWS D1.8/D1.8M

Condition	Lot - #	Test Reference #	Average (ml/100g)
As Received	J92439	HB7804	3 (ml/100g)
7 Day Exposure	J92439	HB7822	4 (ml/100g)

James Owens, Quality Assurance Specialist

Product: FabCOR Elevate
Diameter: 1/16”
Shielding Gas: M20-ArC-15
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M; ASME SFA 5.18
Test Completed: 8/19/2024

Certificate of Conformance
For AWS D1.8/D1.8M, Seismic Supplement

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Test Settings	High Heat Input	Low Heat Input	Lot- # J92068	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.5 kJ/in	27.1 kJ/in	Mechanical Properties		80.5 kJ/in	27.1 kJ/in
Voltage	29	26	Test Reference #		PE8491	PE8487
Current (amps)	385	250				
WFS (ipm)	350	180				
Travel Speed (ipm)	8.3	14.4	Tensile Strength (psi)	70,000	78,600	92,600
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	62,500	82,400
# of passes	7	19	Elongation (%)	22	30	23
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	73	76
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J92356	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.5 kJ/in	28.3 kJ/in	Mechanical Properties		81.5 kJ/in	28.3 kJ/in
Voltage	29	26	Test Reference #		PE8507	PE8510
Current (amps)	385	260				
WFS (ipm)	350	180				
Travel Speed (ipm)	8.2	13.7	Tensile Strength (psi)	70,000	86,100	92,200
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	68,100	81,300
# of passes	6	19	Elongation (%)	22	25	24
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	73	71
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J92439	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	84.6 kJ/in	27.6 kJ/in	Mechanical Properties		84.6 kJ/in	27.6 kJ/in
Voltage	29	25	Test Reference #		PE8497	PE8502
Current (amps)	389	260				
WFS (ipm)	355	160				
Travel Speed (ipm)	8	14.1	Tensile Strength (psi)	70,000	86,600	96,800
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	70,500	87,700
# of passes	7	20	Elongation (%)	22	26	23
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	74	65
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Diffusible Hydrogen - Tested in accordance with AWS A5.18/A5.18M, Clause 15 & Extended Exposure - in accordance with AWS D1.8/D1.8M

Condition	Lot - #	Test Reference #	Average (ml/100g)
As Received	J92439	HB7805	2 (ml/100g)
7 Day Exposure	J92439	HB7823	4 (ml/100g)

James Owens, Quality Assurance Specialist