Product: FabCOR Element XP
Diameter: .045”
Shielding Gas: M20-ArC-10
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/10/2025

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # J02631	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.9 kJ/in	29.9 kJ/in	Mechanical Properties		79.9 kJ/in	29.9 kJ/in
Voltage	28.1	25.8	Test Reference #		PE8757	PE8758
Current (amps)	315	241.4				
WFS (ipm)	570	375				
Travel Speed (ipm)	6.65	12.5	Tensile Strength (psi)	70,000	78,200	90,700
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	64,500	82,900
# of passes	6	15	Elongation (%)	22	30	27
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	61	92
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00726	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	77.8 kJ/in	28.7 kJ/in	Mechanical Properties		77.8 kJ/in	28.7 kJ/in
Voltage	28.3	26.2	Test Reference #		PF0172	PF0173
Current (amps)	296	244				
WFS (ipm)	500	375				
Travel Speed (ipm)	6.45	13.37	Tensile Strength (psi)	70,000	80,000	92,100
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	67,500	82,700
# of passes	5	15	Elongation (%)	22	28	23
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	86	94
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K01111	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.2 kJ/in	29.1 kJ/in	Mechanical Properties		79.2 kJ/in	29.1 kJ/in
Voltage	28.9	26.1	Test Reference #		PF0662	PF0663
Current (amps)	297	253				
WFS (ipm)	516	379				
Travel Speed (ipm)	6.5	13.6	Tensile Strength (psi)	70,000	78,100	91,500
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	67,600	80,200
# of passes	6	14	Elongation (%)	22	31	27
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	81	90
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	K01111	HB8560	3 (ml/100g)
7 Day Exposure	K01111	HB8561	3 (ml/100g)

James Owens, Quality Assurance Specialist

Product: FabCOR Element XP
Diameter: .045”
Shielding Gas: M21-ArC-25
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/10/2025

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # J02631	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.6 kJ/in	30.6 kJ/in	Mechanical Properties		79.6 kJ/in	30.6 kJ/in
Voltage	30.2	28	Test Reference #		PE9628	PE9233
Current (amps)	281	315				
WFS (ipm)	478	525				
Travel Speed (ipm)	6.40	17.3	Tensile Strength (psi)	70,000	74,800	86,800
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	61,900	79,400
# of passes	6	13	Elongation (%)	22	29	27
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	83	93
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00726	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	72.0 kJ/in	30.2 kJ/in	Mechanical Properties		72.0 kJ/in	30.2 kJ/in
Voltage	30.1	28.2	Test Reference #		PF0174	PF0175
Current (amps)	289.5	244.6				
WFS (ipm)	478	375				
Travel Speed (ipm)	7.26	13.7	Tensile Strength (psi)	70,000	77,100	88,900
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	64,600	76,900
# of passes	7	13	Elongation (%)	22	28	26
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	69	95
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K01111	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.3 kJ/in	29.0 kJ/in	Mechanical Properties		79.3 kJ/in	29.0 kJ/in
Voltage	29	28.2	Test Reference #		PF0664	PF0665
Current (amps)	287	255.7				
WFS (ipm)	497	378.6				
Travel Speed (ipm)	6.3	14.9	Tensile Strength (psi)	70,000	78,100	88,500
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	64,200	78,800
# of passes	6	17	Elongation (%)	22	30	26
# of layers	5	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	57	86
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	K01111	HB8558	2 (ml/100g)
7 Day Exposure	K01111	HB8559	2 (ml/100g)

James Owens, Quality Assurance Specialist

Product: FabCOR Element XP
Diameter: .052”
Shielding Gas: M20-ArC-10
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/11/2025

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # J02631-B	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.0 kJ/in	29.5 kJ/in	Mechanical Properties		81.0 kJ/in	29.5 kJ/in
Voltage	27	27.5	Test Reference #		PE8926	PE8927
Current (amps)	300	338				
WFS (ipm)	315	315				
Travel Speed (ipm)	6	18.9	Tensile Strength (psi)	70,000	71,300	88,700
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	60,500	82,600
# of passes	7	16	Elongation (%)	22	32	25
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	126	101
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J03151	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.7 kJ/in	27.7 kJ/in	Mechanical Properties		79.7 kJ/in	27.7 kJ/in
Voltage	27	27	Test Reference #		PE8961	PE8962
Current (amps)	295	328				
WFS (ipm)	350	350				
Travel Speed (ipm)	6	19.2	Tensile Strength (psi)	70,000	75,900	89,500
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	61,100	81,100
# of passes	6	19	Elongation (%)	22	26	26
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	82	94
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00766	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	77.7 kJ/in	29.6 kJ/in	Mechanical Properties		77.7 kJ/in	29.6 kJ/in
Voltage	27.1	26.8	Test Reference #		PF0176	PF0177
Current (amps)	296	304				
WFS (ipm)	350	350				
Travel Speed (ipm)	6.2	16.5	Tensile Strength (psi)	70,000	75,800	92,400
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	63,800	86,000
# of passes	6	15	Elongation (%)	22	31	25
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	94	99
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	K00766	HB8572	4 (ml/100g)
7 Day Exposure	K00766	HB8573	4 (ml/100g)

James Owens, Quality Assurance Specialist

Product: FabCOR Element XP
Diameter: .052”
Shielding Gas: M20-ArC-15
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/11/2025

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # J02631-B	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	83.2 kJ/in	33.8 kJ/in	Mechanical Properties		83.2 kJ/in	33.8 kJ/in
Voltage	27.7	27.7	Test Reference #		PE9224	PE9226
Current (amps)	294	301				
WFS (ipm)	330	330				
Travel Speed (ipm)	5.9	14.8	Tensile Strength (psi)	70,000	76,200	89,500
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	64,300	81,700
# of passes	6	17	Elongation (%)	22	30	28
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	97	84
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J03151	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	82.8 kJ/in	32.3 kJ/in	Mechanical Properties		82.8 kJ/in	32.3 kJ/in
Voltage	27.5	27.5	Test Reference #		PE8995	PE8996
Current (amps)	301	290				
WFS (ipm)	315	300				
Travel Speed (ipm)	6	14.8	Tensile Strength (psi)	70,000	71,400	83,300
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	59,000	76,000
# of passes	7	17	Elongation (%)	22	32	27
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	116	89
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00766	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	77.9 kJ/in	30.9 kJ/in	Mechanical Properties		77.9 kJ/in	30.9 kJ/in
Voltage	27.5	27.5	Test Reference #		PF0178	PF0179
Current (amps)	290	292				
WFS (ipm)	315	300				
Travel Speed (ipm)	6.2	15.6	Tensile Strength (psi)	70,000	76,000	70,900
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	64,600	84,100
# of passes	6	15	Elongation (%)	22	32	25
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	82	105
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	K00766	HB8570	4 (ml/100g)
7 Day Exposure	K00766	HB8571	3 (ml/100g)

James Owens, Quality Assurance Specialist

Product: FabCOR Element XP
Diameter: .052”
Shielding Gas: M21-ArC-25
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/11/2025

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # J02631-B	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	71.0 kJ/in	36.5 kJ/in	Mechanical Properties		71.0 kJ/in	36.5 kJ/in
Voltage	29	29	Test Reference #		PE9356	PE9231
Current (amps)	285	300				
WFS (ipm)	300	350				
Travel Speed (ipm)	6.98	14.3	Tensile Strength (psi)	70,000	73,200	88,000
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	59,700	79,700
# of passes	7	17	Elongation (%)	22	30	27
# of layers	6	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	108	94
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J03151	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.7 kJ/in	36.5 kJ/in	Mechanical Properties		79.7 kJ/in	36.5 kJ/in
Voltage	29.6	29	Test Reference #		PE9627	PE8994
Current (amps)	311	300				
WFS (ipm)	381	350				
Travel Speed (ipm)	6.93	14.3	Tensile Strength (psi)	70,000	73,000	87,700
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	60,800	77,500
# of passes	6	17	Elongation (%)	22	30	27
# of layers	5	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	107	74
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00766	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	76.3 kJ/in	31.0 kJ/in	Mechanical Properties		76.3 kJ/in	31.0 kJ/in
Voltage	29.4	29	Test Reference #		PF0180	PF0181
Current (amps)	305	298				
WFS (ipm)	381	350				
Travel Speed (ipm)	7.05	16.72	Tensile Strength (psi)	70,000	76,500	90,000
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	61,400	81,900
# of passes	6	17	Elongation (%)	22	28	27
# of layers	5	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	77	95
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	K00766	HB8568	3 (ml/100g)
7 Day Exposure	K00766	HB8569	4 (ml/100g)

James Owens, Quality Assurance Specialist

Product: FabCOR Element XP
Diameter: .052”
Shielding Gas: Ozoline C8
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/11/2025

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # J02631-B	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.0 kJ/in	30.6 kJ/in	Mechanical Properties		80.0 kJ/in	30.6 kJ/in
Voltage	28	26	Test Reference #		PE9412	PE9413
Current (amps)	322	301				
WFS (ipm)	420	338				
Travel Speed (ipm)	6.76	15.35	Tensile Strength (psi)	70,000	79,600	91,600
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	67,800	85,400
# of passes	6	15	Elongation (%)	22	29	25
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	81	104
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J03151	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	75.7 kJ/in	30.8 kJ/in	Mechanical Properties		75.7 kJ/in	30.8 kJ/in
Voltage	28.3	26.3	Test Reference #		PE8997	PE8998
Current (amps)	339	295				
WFS (ipm)	460	340				
Travel Speed (ipm)	7.6	15.1	Tensile Strength (psi)	70,000	77,100	93,100
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	65,900	87,400
# of passes	7	15	Elongation (%)	22	26	25
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	103	101
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00766	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.0 kJ/in	29.5 kJ/in	Mechanical Properties		78.0 kJ/in	29.5 kJ/in
Voltage	26.8	26.2	Test Reference #		PF0182	PF0183
Current (amps)	297	293				
WFS (ipm)	350	350				
Travel Speed (ipm)	6.13	15.6	Tensile Strength (psi)	70,000	77,600	94,000
Stick Out	3/4”	3/4”	Yield Strength (psi)	58,000	65,900	88,200
# of passes	6	15	Elongation (%)	22	30	25
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	87	98
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	K00766	HB8574	4 (ml/100g)
7 Day Exposure	K00766	HB8575	6 (ml/100g)

James Owens, Quality Assurance Specialist

Product: FabCOR Element XP
Diameter: 1/16”
Shielding Gas: M20-ArC-10
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/17/25

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # J02631-C	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.1 kJ/in	30.4 kJ/in	Mechanical Properties		79.1 kJ/in	30.4 kJ/in
Voltage	26.3	26.1	Test Reference #		PE8928	PE8929
Current (amps)	352	293				
WFS (ipm)	295	220				
Travel Speed (ipm)	7	15	Tensile Strength (psi)	70,000	76,300	88,600
Stick Out	1”	1”	Yield Strength (psi)	58,000	65,100	83,200
# of passes	6	17	Elongation (%)	22	29	26
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	96	104
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J03151	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	74.9 kJ/in	30.0 kJ/in	Mechanical Properties		74.9 kJ/in	30.0 kJ/in
Voltage	26.4	26.1	Test Reference #		PE8948	PE8946
Current (amps)	342	294				
WFS (ipm)	290	220				
Travel Speed (ipm)	7.2	15.4	Tensile Strength (psi)	70,000	77,400	89,000
Stick Out	1”	1”	Yield Strength (psi)	58,000	63,600	80,200
# of passes	6	17	Elongation (%)	22	30	25
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	73	99
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00729	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.8 kJ/in	29.5 kJ/in	Mechanical Properties		80.8 kJ/in	29.5 kJ/in
Voltage	27.4	26	Test Reference #		PF0184	PF0185
Current (amps)	339	291				
WFS (ipm)	280	220				
Travel Speed (ipm)	6.9	15.4	Tensile Strength (psi)	70,000	77,900	91,000
Stick Out	1”	1”	Yield Strength (psi)	58,000	64,500	84,800
# of passes	6	15	Elongation (%)	22	27	24
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	78	94
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	K00729	HB8564	3 (ml/100g)
7 Day Exposure	K00729	HB8565	4 (ml/100g)

James Owens, Quality Assurance Specialist

Product: FabCOR Element XP
Diameter: 1/16”
Shielding Gas: M20-ArC-15
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/17/2025

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

This is to certify that the product named herein is of the same classification, manufacturing process, and material requirements as the material used for the tests completed on the date shown, the results of which are recorded below. All tests 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 Management System of Hobart Brothers, which meets the requirements of ISO 9001:2015, ANSI/AWS A5.01, and other specification and Military requirements, as applicable.

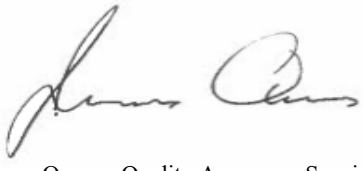
Test Settings	High Heat Input	Low Heat Input	Lot- # J02631-C	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	83.4 kJ/in	29.0 kJ/in	Mechanical Properties		83.4 kJ/in	29.0 kJ/in
Voltage	27.4	26.5	Test Reference #		PE9404	PE9405
Current (amps)	353	294				
WFS (ipm)	295	220				
Travel Speed (ipm)	6.95	16.1	Tensile Strength (psi)	70,000	77,000	86,200
Stick Out	1”	1”	Yield Strength (psi)	58,000	61,500	77,100
# of passes	5	18	Elongation (%)	22	28	26
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	88	106
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J03151	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	82.7 kJ/in	29.1 kJ/in	Mechanical Properties		82.7 kJ/in	29.1 kJ/in
Voltage	27.4	26.4	Test Reference #		PE9406	PE9407
Current (amps)	348	296				
WFS (ipm)	295	213				
Travel Speed (ipm)	6.92	16.2	Tensile Strength (psi)	70,000	76,000	85,500
Stick Out	1”	1”	Yield Strength (psi)	58,000	63,700	78,800
# of passes	5	18	Elongation (%)	22	30	26
# of layers	4	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	97	105
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00729	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.5 kJ/in	29.5 kJ/in	Mechanical Properties		78.5 kJ/in	29.5 kJ/in
Voltage	27.8	27	Test Reference #		PF0186	PF0187
Current (amps)	339	289				
WFS (ipm)	280	220				
Travel Speed (ipm)	7.2	15.9	Tensile Strength (psi)	70,000	78,300	87,200
Stick Out	1”	1”	Yield Strength (psi)	58,000	64,600	78,400
# of passes	6	17	Elongation (%)	22	31	28
# of layers	5	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	73	96
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	K00729	HB8566	2 (ml/100g)
7 Day Exposure	K00729	HB8567	3 (ml/100g)



James Owens, Quality Assurance Specialist

Product: FabCOR Element XP
Diameter: 1/16”
Shielding Gas: M21-ArC-25
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M:2023
Test Completed: 7/17/2025

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

This is to certify that the product named herein is of the same classification, manufacturing process, and material requirements as the material used for the tests completed on the date shown, the results of which are recorded below. All tests 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 Management System 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- # J02631-C	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.8 kJ/in	30.0 kJ/in	Mechanical Properties		79.8 kJ/in	30.0 kJ/in
Voltage	27.3	26.4	Test Reference #		PE9408	PE9409
Current (amps)	346	296				
WFS (ipm)	295	220				
Travel Speed (ipm)	7.1	15.6	Tensile Strength (psi)	70,000	76,600	83,800
Stick Out	1”	3/4”	Yield Strength (psi)	58,000	62,100	74,700
# of passes	6	17	Elongation (%)	22	30	28
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	94	112
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # J03151	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.4 kJ/in	29.6 kJ/in	Mechanical Properties		80.4 kJ/in	29.6 kJ/in
Voltage	27.7	26.4	Test Reference #		PE9410	PE9411
Current (amps)	343	293				
WFS (ipm)	295	220				
Travel Speed (ipm)	7.1	15.7	Tensile Strength (psi)	70,000	76,700	84,200
Stick Out	1”	3/4”	Yield Strength (psi)	58,000	64,800	73,800
# of passes	6	17	Elongation (%)	22	30	28
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	104	104
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # K00729	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.0 kJ/in	31.1 kJ/in	Mechanical Properties		79.0 kJ/in	31.1 kJ/in
Voltage	28	28	Test Reference #		PF0188	PF0189
Current (amps)	334	296				
WFS (ipm)	280	228				
Travel Speed (ipm)	7.1	16	Tensile Strength (psi)	70,000	77,400	86,800
Stick Out	1”	3/4”	Yield Strength (psi)	58,000	63,600	77,800
# of passes	6	18	Elongation (%)	22	28	26
# of layers	5	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	59	79
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	K00729	HB8562	2 (ml/100g)
7 Day Exposure	K00729	HB8563	3 (ml/100g)

James Owens, Quality Assurance Specialist