



**Product:** FabCOR Edge  
**Diameter:** .045"  
**Shielding Gas:** M20-ArC-10  
**Current/Polarity:** DCEP  
**Classification:** E70C-6M H4  
**Specification:** AWS A5.18/A5.18M:2017  
**Test Completed:** 11/14/2019

## 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 ISO9001:2015, ANSI/AWS A5.01, and other specification and Military requirements, as applicable.

Test Settings	High Heat Input	Low Heat Input	Lot - # C602130603511	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.1 kJ/in	28.3 kJ/in	<b>Mechanical Properties</b>		80.1 kJ/in	28.3 kJ/in
			Test Reference #		PD8768	PD8765
Voltage	28.5	28.5	Tensile Strength (psi)	70,000	81,000	93,900
Current (amps)	300	260	Yield Strength (psi)	58,000	65,200	83,600
WFS (ipm)	400	390	Elongation (%)	22	39	24
Travel Speed (ipm)	6.4	16.6	Average Charpy V-notch			
Stick Out	1/2"	1/2"	Impact Properties ft•lbs @	40	87	63
# of passes	7	16	+70 °F			
# of layers	4	6				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot - # Z622940528121	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.8 kJ/in	28.8 kJ/in	<b>Mechanical Properties</b>		78.4 kJ/in	28.8 kJ/in
			Test Reference #		PD2770	PD2769
Voltage	28.5	28.5	Tensile Strength (psi)	70,000	76,800	91,100
Current (amps)	280	280	Yield Strength (psi)	58,000	62,900	81,300
WFS (ipm)	401	390	Elongation (%)	22	32	26
Travel Speed (ipm)	6	16.6	Average Charpy V-notch			
Stick Out	3/4"	3/4"	Impact Properties ft•lbs @	40	97	80
# of passes	6	16	+70 °F			
# of layers	4	6				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot - # Z623150502121	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.8 kJ/in	28.8 kJ/in	<b>Mechanical Properties</b>		79.8 kJ/in	28.8 kJ/in
			Test Reference #		PD2768	PD2767
Voltage	28.5	28.5	Tensile Strength (psi)	70,000	79,100	91,200
Current (amps)	280	280	Yield Strength (psi)	58,000	60,800	79,600
WFS (ipm)	401	407	Elongation (%)	22	33	26
Travel Speed (ipm)	6	16.6	Average Charpy V-notch			
Stick Out	3/4"	3/4"	Impact Properties ft•lbs @	40	100	73
# of passes	6	16	+70 °F			
# of layers	4	6				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
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	C602130603511	HB3530	1.5 (ml/100g)
7 Day Exposure	C602130603511	HB3737	2.0 (ml/100g)

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David A. Thomas, Quality Assurance Representative



**Product:** FabCOR Edge  
**Diameter:** .052"  
**Shielding Gas:** M20-ArC-15  
**Current/Polarity:** DCEP  
**Classification:** E70C-6M H4  
**Specification:** AWS A5.18/A5.18M:2005  
**Test Completed:** 9/05/2018

## Certificate of Conformance

### For AWS D1.8/D1.8M, Seismic Supplement

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Test Settings	High Heat Input	Low Heat Input	Lot- # B611551208253	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.7 kJ/in	27.1 kJ/in	Mechanical Properties		79.7 kJ/in	27.1 kJ/in
			Test Reference #		PD6627	PD6726
Voltage	32	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	78,600 61,800 31 102	81,100 78,800 25 81
Current (amps)	440	258				
WFS (ipm)	540	255				
Travel Speed (ipm)	10.6	15				
Stick Out	3/4"	3/4"				
# of passes	8	20				
# of layers	4	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # X617870920122	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.0 kJ/in	26.0 kJ/in	Mechanical Properties		79.0 kJ/in	26.0 kJ/in
			Test Reference #		PC7305	PC7304
Voltage	32	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	83,600 67,700 25 91	89,300 79,900 26 78
Current (amps)	440	258				
WFS (ipm)	540	255				
Travel Speed (ipm)	10.7	14.4				
Stick Out	3/4"	3/4"				
# of passes	6	20				
# of layers	3	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # X617430910202	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.0 kJ/in	26.5 kJ/in	Mechanical Properties		79.0 kJ/in	26.5 kJ/in
			Test Reference #		PC7302	PC7303
Voltage	32	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	81,000 64,700 28 91	86,600 76,300 25 83
Current (amps)	440	258				
WFS (ipm)	540	255				
Travel Speed (ipm)	10.7	14.4				
Stick Out	3/4"	3/4"				
# of passes	6	20				
# of layers	3	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
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	B611551208253	HB2652	2.9 (ml/100g)
7 Day Exposure	B611551208253	HB2653	4.0 (ml/100g)

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David A. Thomas, Quality Assurance Representative



**Product:** FabCOR Edge  
**Diameter:** .052"  
**Shielding Gas:** M21-ArC-25  
**Current/Polarity:** DCEP  
**Classification:** E70C-6M H4  
**Specification:** AWS A5.18/A5.18M:2017  
**Test Completed:** 11/14/2019

## Certificate of Conformance

### For AWS D1.8/D1.8M, Seismic Supplement

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Test Settings	High Heat Input	Low Heat Input	Lot - # C616810903163	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.4 kJ/in	27.8 kJ/in	Mechanical Properties		78.4 kJ/in	27.8 kJ/in
			Test Reference #		PD8768	PD8773
Voltage	32	28.5	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	77,000	85,600
Current (amps)	425	275			61,700	75,100
WFS (ipm)	460	260			29	25
Travel Speed (ipm)	7	16.9			89	67
Stick Out	1/2"	3/4"				
# of passes	7	19				
# of layers	4	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot - # Z623570902111	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.3 kJ/in	26.2 kJ/in	Mechanical Properties		80.3 kJ/in	26.2 kJ/in
			Test Reference #		PD2791	PD2789
Voltage	31.5	28.5	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	78,400	84,200
Current (amps)	425	260			62,000	71,900
WFS (ipm)	540	260			29	28
Travel Speed (ipm)	10	17			101	73
Stick Out	3/4"	3/4"				
# of passes	6	16				
# of layers	3	6				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot - # X617870920122	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.5 kJ/in	26.2 kJ/in	Mechanical Properties		78.5 kJ/in	26.2 kJ/in
			Test Reference #		PC2457	PC2470
Voltage	32	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	74,400	90,600
Current (amps)	425	258			60,700	82,200
WFS (ipm)	475	255			31	26
Travel Speed (ipm)	10.4	15.4			110	68
Stick Out	3/4"	3/4"				
# of passes	8	20				
# of layers	4	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
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	C616810903163	HB3686	2.1 (ml/100g)
7 Day Exposure	C616810903163	HB3738	4.7 (ml/100g)

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David A. Thomas, Quality Assurance Representative



**Product:** FabCOR Edge  
**Diameter:** 1/16"  
**Shielding Gas:** M20-ArC-10  
**Current/Polarity:** DCEP  
**Classification:** E70C-6M H4  
**Specification:** AWS A5.18/A5.18M:2017  
**Test Completed:** 11/05/2020

## Certificate of Conformance

### For AWS D1.8/D1.8M, Seismic Supplement

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Test Settings	High Heat Input	Low Heat Input	Lot- # D61126	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.2 kJ/in	30.9 kJ/in	Mechanical Properties		79.2 kJ/in	30.9 kJ/in
			Test Reference #		PE1397	PE1398
Voltage	28	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	74,400 58,900 34 136	88,900 78,900 28 102
Current (amps)	345	300				
WFS (ipm)	250	210				
Travel Speed (ipm)	7.35	16				
Stick Out	3/4"	3/4"				
# of passes	8	16				
# of layers	5	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # C617290303253	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.3 kJ/in	29.2 kJ/in	Mechanical Properties		80.3 kJ/in	29.2 kJ/in
			Test Reference #		PE1388	PE1455
Voltage	28	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	74,600 59,100 32 113	88,400 77,400 26 89
Current (amps)	350	300				
WFS (ipm)	240	210				
Travel Speed (ipm)	7.35	16				
Stick Out	3/4"	3/4"				
# of passes	8	15				
# of layers	5	6				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # B620220306122	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.7 kJ/in	30.6 kJ/in	Mechanical Properties		80.7 kJ/in	30.6 kJ/in
			Test Reference #		PE1383	PE1384
Voltage	28	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	75,900 60,500 31 121	90,000 80,500 27 88
Current (amps)	355	300				
WFS (ipm)	240	210				
Travel Speed (ipm)	7.35	16				
Stick Out	3/4"	3/4"				
# of passes	8	17				
# of layers	5	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
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	D61126	HB4483	2.0 (ml/100g)
7 Day Exposure	D61126	HB4484	3.0 (ml/100g)

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David A. Thomas, Quality Assurance Representative



**Product:** FabCOR Edge  
**Diameter:** 1/16"  
**Shielding Gas:** M21-ArC-25  
**Current/Polarity:** DCEP  
**Classification:** E70C-6M H4  
**Specification:** AWS A5.18/A5.18M:2017  
**Test Completed:** 12/11/2019

## Certificate of Conformance

### For AWS D1.8/D1.8M, Seismic Supplement

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Test Settings	High Heat Input	Low Heat Input	Lot- # C61729	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.5 kJ/in	30.7 kJ/in			80.5 kJ/in	30.7 kJ/in
			<b>Mechanical Properties</b>			
			Test Reference #		PD8847	PD8837
Voltage	29	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	74,400 60,800 31.6 114	84,900 73,100 27.1 73
Current (amps)	375	275				
WFS (ipm)	270	175				
Travel Speed (ipm)	8	14.5				
Stick Out	1/2-3/4"	1/2-3/4"				
# of passes	7	20				
# of layers	5	8				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # C61736	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	82.5 kJ/in	30.8 kJ/in			82.5 kJ/in	30.8 kJ/in
			<b>Mechanical Properties</b>			
			Test Reference #		PD8848	PD8840
Voltage	29	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	74,900 59,800 30.9 104	85,300 75,800 26.4 65
Current (amps)	380	275				
WFS (ipm)	285	170				
Travel Speed (ipm)	8	14.5				
Stick Out	1/2-3/4"	1/2-3/4"				
# of passes	7	20				
# of layers	4	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # C90189	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.6 kJ/in	30.9 kJ/in			81.6 kJ/in	30.9 kJ/in
			<b>Mechanical Properties</b>			
			Test Reference #		PD8849	PD8842
Voltage	29	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	75,900 60,500 30.8 99	85,300 74,600 27.4 63
Current (amps)	375	275				
WFS (ipm)	270	175				
Travel Speed (ipm)	8	14.5				
Stick Out	1/2-3/4"	1/2-3/4"				
# of passes	7	19				
# of layers	4	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

#### Diffusible Hydrogen - Tested in accordance with AWS A5.20/A5.20M, Clause 16 & Extended Exposure - in accordance with AWS D1.8/D1.8M

Condition	Lot - #	Test Reference #	Average (ml/100g)
As Received	C61729	HB3847	1.6 (ml/100g)
7 Day Exposure	C61729	HB3866	2.96 (ml/100g)

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