



**Product:** Fabshield XLR-8  
**Diameter:** .072"  
**Shielding Gas:** N/A  
**Current/Polarity:** DCEN  
**Classification:** AWS E71T-8JD H8  
**Specification:** AWS A5.20/A5.20M:2005  
**Test Completed:** 10/18/2019

## 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 ISO 9001:2015, ANSI/AWS A5.01, and other specification and Military requirements, as applicable.

Test Settings	High Heat Input	Low Heat Input	Lot- # C005370904431	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.6 kJ/in	31.8 kJ/in	Mechanical Properties		81.6 kJ/in	31.8 kJ/in
			Test Reference #		PD8179	PD8288
Voltage	22.5	19	Tensile Strength (psi)	70,000	81,600	97,000
Current (amps)	260	235	Yield Strength (psi)	58,000	65,600	78,800
WFS (ipm)	190	160	Elongation (%)	22	25	22
Travel Speed (ipm)	4.3	8.4	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @			
# of passes	7	17	+70 °F	40	76	43
# of layers	4	6	Impact Properties ft•lbs @			
Preheat Temp. °F	300+/-25	RT	+0 °F	20	46	25
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	3G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # Z026632402502	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.5 kJ/in	29.6 kJ/in	Mechanical Properties		78.5 kJ/in	29.6 kJ/in
			Test Reference #		PD2394	PD2395
Voltage	22.5	22	Tensile Strength (psi)	70,000	75,900	87,200
Current (amps)	250	220	Yield Strength (psi)	58,000	58,900	66,300
WFS (ipm)	190	145	Elongation (%)	22	29	27
Travel Speed (ipm)	4.3	9.8	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @			
# of passes	8	16	+70 °F	40	89	82
# of layers	5	6	Impact Properties ft•lbs @			
Preheat Temp. °F	300+/-25	RT	+0 °F	20	69	59
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	3G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # Z025672412502	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.0 kJ/in	29.7 kJ/in	Mechanical Properties		78.0 kJ/in	29.7 kJ/in
			Test Reference #		PD2378	PD2379
Voltage	22.5	22	Tensile Strength (psi)	70,000	80,000	84,100
Current (amps)	260	223	Yield Strength (psi)	58,000	65,000	67,000
WFS (ipm)	190	145	Elongation (%)	22	29	27
Travel Speed (ipm)	4.5	9.9	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @			
# of passes	8	16	+70 °F	40	87	82
# of layers	5	6	Impact Properties ft•lbs @			
Preheat Temp. °F	300+/-25	RT	+0 °F	20	54	52
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	3G	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	C005370904431	HB3209	4.9 (ml/100g)
7 Day Exposure	C005370904431	HB3413	5.5 (ml/100g)

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David A. Thomas, Quality Assurance Representative



**Product:** Fabshield XLR-8  
**Diameter:** 1/16"  
**Shielding Gas:** N/A  
**Current/Polarity:** DCEN  
**Classification:** AWS E71T-8JD H8  
**Specification:** AWS A5.20/A5.20M:2005  
**Test Completed:** 2/25/2019

## Certificate of Conformance

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # B025750903432		AWS D1.8 Requirements	High Heat Input	Low Heat Input
	83.2 kJ/in	28.9 kJ/in	Mechanical Properties			83.2 kJ/in	28.9 kJ/in
			Test Reference #			PD7175	PD7176
Voltage	24	22.5	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F		70,000 58,000 22 40	78,000 64,000 30 74	94,000 81,000 25 59
Current (amps)	260	225					
WFS (ipm)	250	210					
Travel Speed (ipm)	4.5	10.5					
Stick Out	1"	1"					
# of passes	7	19					
# of layers	4	7					
Preheat Temp. °F	300+/-25	RT					
Interpass Temp. °F	500+/-50	200+/-25					
Weld Position	3G	1G					

Test Settings	High Heat Input	Low Heat Input	Lot- # Z002802409503		AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.5 kJ/in	29.9 kJ/in	Mechanical Properties			79.5 kJ/in	29.9 kJ/in
			Test Reference #			PD0565	PD0606
Voltage	24	22.5	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 60,000 30 77	90,000 72,000 24 61
Current (amps)	254	229					
WFS (ipm)	250	210					
Travel Speed (ipm)	4.6	10.3					
Stick Out	1"	1"					
# of passes	7	19					
# of layers	4	9					
Preheat Temp. °F	300+/-25	RT					
Interpass Temp. °F	500+/-50	200+/-25					
Weld Position	3G	1G					

Test Settings	High Heat Input	Low Heat Input	Lot- # T040262407502		AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.5 kJ/in	27.4 kJ/in	Mechanical Properties			81.5 kJ/in	27.4 kJ/in
			Test Reference #			PB9068	PB8926
Voltage	23	21.5	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F		700 58,000 22 40	79,000 62,000 28 67	92,000 72,900 23 56
Current (amps)	260	225					
WFS (ipm)	234	210					
Travel Speed (ipm)	4.4	10.6					
Stick Out	3/4"	1"					
# of passes	6	16					
# of layers	4	6					
Preheat Temp. °F	300+/-25	RT					
Interpass Temp. °F	500+/-50	200+/-25					
Weld Position	3G	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	B020350901431	HB2952	4.8 (ml/100g)
7 Day Exposure	B020350901431	HB2985	4.7 (ml/100g)

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David A. Thomas, Quality Assurance Representative



**Product:** Fabshield XLR-8  
**Diameter:** 5/64"  
**Shielding Gas:** N/A  
**Current/Polarity:** DCEN  
**Classification:** AWS E71T-8JD H8  
**Specification:** AWS A5.20/A5.20M:2005  
**Test Completed:** 2/25/2019

## Certificate of Conformance

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

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Test Settings	High Heat Input	Low Heat Input	Lot-# B019620909432	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.7 kJ/in	29.4 kJ/in	<b>Mechanical Properties</b>		80.7 kJ/in	29.4 kJ/in
			Test Reference #		PD7106	PD7107
Voltage	22	22	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F +0 °F	70,000 58,000 22 40 20	78,000 65,000 30 62 58	89,000 76,000 22 57 83
Current (amps)	275	225				
WFS (ipm)	160	115				
Travel Speed (ipm)	4.5	10.1				
Stick Out	1"	1"				
# of passes	6	19				
# of layers	4	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	3G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot-# Z000042402501	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.8 kJ/in	29.6 kJ/in	<b>Mechanical Properties</b>		79.8 kJ/in	29.6 kJ/in
			Test Reference #		PD0646	PD0658
Voltage	22	22	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F +0 °F	70,000 58,000 22 40 20	80,000 65,000 28 62 47	91,000 69,000 27 75 46
Current (amps)	275	225				
WFS (ipm)	163	119				
Travel Speed (ipm)	4.6	10				
Stick Out	1"	1"				
# of passes	6	20				
# of layers	4	7				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	3G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot-# T045422406502	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.6 kJ/in	29.7 kJ/in	<b>Mechanical Properties</b>		80.6 kJ/in	29.7 kJ/in
			Test Reference #		PB9287	PB9797
Voltage	22	22	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F +0 °F	70,000 58,000 22 40 20	78,000 58,000 30 56 34	86,000 63,000 26 76 53
Current (amps)	275	235				
WFS (ipm)	145	125				
Travel Speed (ipm)	4.5	10.5				
Stick Out	3/4"	1"				
# of passes	6	16				
# of layers	4	6				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	3G	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	B019620909432	HB2953	5.2(ml/100g)
7 Day Exposure	B019620909432	HB2988	7.1 (ml/100g)

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