



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: 11/23/2022

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- # 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- # G00379	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.7 kJ/in	28.9 kJ/in	Mechanical Properties		80.7 kJ/in	28.9 kJ/in
			Test Reference #		P4977/PE4990	PE4981
Voltage	22.5	22	Tensile Strength (psi)	70,000	84,000	92,000
Current (amps)	260	223	Yield Strength (psi)	58,000	64,000	71,000
WFS (ipm)	190	145	Elongation (%)	22	25	24
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	66	53
# of layers	5	6	Impact Properties ft•lbs @			
Preheat Temp. °F	300+/-25	RT	+0 °F	20	30	30
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	G00379	HB6207	6.7 (ml/100g)
7 Day Exposure	G00379	HB6245	8.2 (ml/100g)

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James Owens, Quality Assurance Specialist



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:2021
Test Completed: 3/18/2022

Certificate of Conformance

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # F05712	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	82.2 kJ/in	31.7 kJ/in			82.2 kJ/in	31.7 kJ/in
			Mechanical Properties			
			Test Reference #		PE3633	PE3634
Voltage	24	22.5	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 40	82,000	94,000
Current (amps)	240	220			60,000	81,000
WFS (ipm)	250	210			25	25
Travel Speed (ipm)	4.2	8.5				
Stick Out	1"	1"				
# of passes	7	21				
# 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- # B025750903432	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	83.2 kJ/in	28.9 kJ/in			83.2 kJ/in	28.9 kJ/in
			Mechanical Properties			
			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 +0 °F	70,000 58,000 22 40 40	78,000	94,000
Current (amps)	260	225			64,000	81,000
WFS (ipm)	250	210			30	25
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			79.5 kJ/in	29.9 kJ/in
			Mechanical Properties			
			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 +0 °F	70,000 58,000 22 40 40	81,000	90,000
Current (amps)	254	229			60,000	72,000
WFS (ipm)	250	210			30	24
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				

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	F04058	HB5506	5.4 (ml/100g)
7 Day Exposure	F04058	HB5538	7.7 (ml/100g)

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David A. Thomas, Quality Assurance Specialist



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:2021
Test Completed: 3/17/2022

Certificate of Conformance

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # F06073	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.9 kJ/in	31.5 kJ/in	Mechanical Properties		78.9 kJ/in	31.5 kJ/in
			Test Reference #		PE3571	PE3575
Voltage	23	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	79,000 61,000 25 73 48	89,000 70,000 22 75 46
Current (amps)	270	220				
WFS (ipm)	170	120				
Travel Speed (ipm)	4.6	9.2				
Stick Out	1"	1"				
# of passes	7	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- # B019620909432	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.7 kJ/in	29.4 kJ/in	Mechanical Properties		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	Mechanical Properties		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				

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	F06073	HB5505	6.2 (ml/100g)
7 Day Exposure	F06073	HB5539	7.0 (ml/100g)

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