



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	94,000
Current (amps)	260	225			78,000	94,000
WFS (ipm)	250	210			64,000	81,000
Travel Speed (ipm)	4.5	10.5			30	25
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	90,000
Current (amps)	254	229			81,000	90,000
WFS (ipm)	250	210			60,000	72,000
Travel Speed (ipm)	4.6	10.3			30	24
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	92,000
Current (amps)	260	225			79,000	92,000
WFS (ipm)	234	210			62,000	72,900
Travel Speed (ipm)	4.4	10.6			28	23
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
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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			80.7 kJ/in	29.4 kJ/in
			Mechanical Properties			
			Test Reference #		PD7106	PD7107
Voltage	22	22	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	89,000
Current (amps)	275	225			65,000	76,000
WFS (ipm)	160	115			30	22
Travel Speed (ipm)	4.5	10.1			62	57
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			79.8 kJ/in	29.6 kJ/in
			Mechanical Properties			
			Test Reference #		PD0646	PD0658
Voltage	22	22	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	80,000	91,000
Current (amps)	275	225			65,000	69,000
WFS (ipm)	163	119			28	27
Travel Speed (ipm)	4.6	10			62	75
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			80.6 kJ/in	29.7 kJ/in
			Mechanical Properties			
			Test Reference #		PB9287	PB9797
Voltage	22	22	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	86,000
Current (amps)	275	235			58,000	63,000
WFS (ipm)	145	125			30	26
Travel Speed (ipm)	4.5	10.5			56	76
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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