



Product: Fabshield FE81
Diameter: 5/64"
Shielding Gas: N/A
Current/Polarity: DCEN
Classification: AWS E81T-8-G H8
Specification: AWS A5.29-2026
Test Completed: 8/18/2026

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- # L02049	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	69.9 kJ/in	31.6 kJ/in	Mechanical Properties		69.9 kJ/in	31.6 kJ/in
			Test Reference #		PF3125	PF3124
Voltage	22	22	Tensile Strength (psi)	80,000	97,400	100,000
Current (amps)	231	261	Yield Strength (psi)	68,000	71,300	86,600
WFS (ipm)	140	165	Elongation (%)	19	23	22
Travel Speed (ipm)	4.4	10.9	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @	40	54	63
# of passes	8	17	+50 °F			
# of layers	5	7	Impact Properties ft•lbs @	40	52	63
Preheat Temp. °F	350+/-25	RT	+70 °F			
Interpass Temp. °F	450+/-50	225+/-25				
Weld Position	3G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # L02048	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	68.9 kJ/in	31.1 kJ/in	Mechanical Properties		68.9 kJ/in	31.1 kJ/in
			Test Reference #		PF3122	PE3174
Voltage	22	22	Tensile Strength (psi)	80,000	92,800	108,000
Current (amps)	243	285	Yield Strength (psi)	68,000	71,000	93,800
WFS (ipm)	140	185	Elongation (%)	19	26	19
Travel Speed (ipm)	4.7	12.2	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @	40	48	46
# of passes	9	18	+50 °F			
# of layers	5	7	Impact Properties ft•lbs @	40	59	50
Preheat Temp. °F	350+/-25	RT	+70 °F			
Interpass Temp. °F	450+/-50	225+/-25				
Weld Position	3G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # 0563X	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	63.3 kJ/in	31.3 kJ/in	Mechanical Properties		63.3 kJ/in	31.3 kJ/in
			Test Reference #		PF2808	PF2870
Voltage	22	22	Tensile Strength (psi)	80,000	88,400	108,000
Current (amps)	230	260	Yield Strength (psi)	68,000	69,200	93,700
WFS (ipm)	140	165	Elongation (%)	19	24	21
Travel Speed (ipm)	4.6	11.2	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @	40	59	49
# of passes	9	18	+50 °F			
# of layers	5	7	Impact Properties ft•lbs @	40	69	51
Preheat Temp. °F	350+/-25	RT	+70 °F			
Interpass Temp. °F	450+/-50	225+/-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	0563X	HB9243	4 (ml/100g)
7 Day Exposure	0563X	HB9244	5 (ml/100g)

The information contained or otherwise referenced herein is presented without guarantee or warranty. Hobart Brothers LLC expressly disclaims any liability incurred from any reliance thereon. Data for the above-supplied product are those obtained during the welding process and tested in accordance with the above specification with electrodes of the same manufacturing processes and material requirements. All tests for the above classification were performed satisfactorily. No data is to be construed as a recommendation for any welding condition or technique not controlled by Hobart Brothers. Refer to the Hobart Brothers website at www.hobartbrothers.com for current Safety Data Sheets ("SDS").

James Owens, Quality Assurance Specialist