



Product: FabCOR Hercules
Diameter: .052"
Shielding Gas: M20-ArC-15
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M; ASME SFA 5.18
Test Completed: 10/13/2025

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- # F90061-388708-7621-14	AWS D1.8 Requirements	High Heat Input	Low Heat Input																								
	80.1 kJ/in	24.3 kJ/in	Mechanical Properties		80.1 kJ/in	24.3 kJ/in																								
			Test Reference #		PE4273	PE4268																								
Voltage	28.5	25.4	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	75,800	86,700																								
Current (amps)	385	274					58,000	60,900	76,800																					
WFS (ipm)	420	270								22	29	24																		
Travel Speed (ipm)	8	17.3											40	86	87															
Stick Out	3/4"	3/4"														40	86	87												
# of passes	8	18																	40	86	87									
# of layers	4	8																				40	86	87						
Preheat Temp. °F	300+/-25	RT																							40	86	87			
Interpass Temp. °F	500+/-50	200+/-25																										40	86	87
Weld Position	1G	1G																												

Test Settings	High Heat Input	Low Heat Input	Lot- # F95233-457857-27721-1	AWS D1.8 Requirements	High Heat Input	Low Heat Input																								
	80.7 kJ/in	25.1 kJ/in	Mechanical Properties		80.7 kJ/in	25.1 kJ/in																								
			Test Reference #		PE4277	PE4554																								
Voltage	28.5	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	76,700	86,600																								
Current (amps)	375	265					58,000	59,800	78,700																					
WFS (ipm)	420	285								22	30	23																		
Travel Speed (ipm)	8.18	17.10											40	84	74															
Stick Out	3/4"	3/4"														40	84	74												
# of passes	7	17																	40	84	74									
# of layers	4	7																				40	84	74						
Preheat Temp. °F	300+/-25	RT																							40	84	74			
Interpass Temp. °F	500+/-50	200+/-25																										40	84	74
Weld Position	1G	1G																												

Test Settings	High Heat Input	Low Heat Input	Lot- # K92769	AWS D1.8 Requirements	High Heat Input	Low Heat Input																								
	80.0 kJ/in	30.3 kJ/in	Mechanical Properties		80.0 kJ/in	30.3 kJ/in																								
			Test Reference #		PF1309	PF1308																								
Voltage	27	27	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	84,200	94,100																								
Current (amps)	375	346					58,000	67,200	82,400																					
WFS (ipm)	420	420								22	30	23																		
Travel Speed (ipm)	8	18.5											40	77	48															
Stick Out	3/4"	3/4"														40	77	48												
# of passes	7	17																	40	77	48									
# of layers	4	7																				40	77	48						
Preheat Temp. °F	300+/-25	RT																							40	77	48			
Interpass Temp. °F	500+/-50	200+/-25																										40	77	48
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	K92769	HB8745	2 (ml/100g)
7 Day Exposure	K92769	HB8746	3 (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, Compliance Specialist



Product: FabCOR Hercules
Diameter: .052"
Shielding Gas: M20-ArC-10
Current/Polarity: DCEP
Classification: E70C-6M H4
Specification: AWS A5.18/A5.18M; ASME SFA 5.18
Test Completed: 9/18/2025

Certificate of Conformance

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # F90061-388708-7621-14	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.0 kJ/in	25.1 kJ/in	Mechanical Properties		81.0 kJ/in	25.1 kJ/in
			Test Reference #		PE4459	PE4266
Voltage	28.5	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	77,900 63,900 29 77	85,500 75,200 24 84
Current (amps)	385	277				
WFS (ipm)	420	270				
Travel Speed (ipm)	8	17.5				
Stick Out	3/4"	3/4"				
# of passes	8	19				
# of layers	4	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- # F95233-457857-27721-1	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.1 kJ/in	25.5 kJ/in	Mechanical Properties		81.1 kJ/in	25.5 kJ/in
			Test Reference #		PE4275	PE4274
Voltage	28.5	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	79,100 63,200 28 74	88,600 79,500 25 79
Current (amps)	375	265				
WFS (ipm)	420	270				
Travel Speed (ipm)	8.02	16.45				
Stick Out	3/4"	3/4"				
# of passes	7	19				
# of layers	4	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- # K92769	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	81.9 kJ/in	29 kJ/in	Mechanical Properties		81.9 kJ/in	29 kJ/in
			Test Reference #		PF1306	PF1307
Voltage	28	28	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	82,700 63,900 25 83	99,800 91,000 23 50
Current (amps)	385	335				
WFS (ipm)	420	420				
Travel Speed (ipm)	8.1	19.3				
Stick Out	3/4"	3/4"				
# of passes	8	17				
# 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	K92769	HB8744	2 (ml/100g)
7 Day Exposure	K92769	HB8747	3 (ml/100g)

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