Product: FabCO 811N1
Diameter: 1/16”
Shielding Gas: M21-ArC-25
Current/Polarity: DCEP
Classification: E81T1-Ni1 MJ H4
Specification: AWS A5.29/A5.29M:2010
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- # C003240601463	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.4 kJ/in	28.9 kJ/in	Mechanical Properties		78.4 kJ/in	28.9 kJ/in
Voltage	25	23	Test Reference #		PD7580	PD7734
Current (amps)	230	220				
WFS (ipm)	170	170				
Travel Speed (ipm)	4.4	10.5	Tensile Strength (psi)	80,000	90,000	104,000
Stick Out	3/4”	3/4”	Yield Strength (psi)	68,000	78,000	97,000
# of passes	8	20	Elongation (%)	19	25	20
# of layers	5	7	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	117	92
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	3G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # Z026471824041	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.5 kJ/in	30.4 kJ/in	Mechanical Properties		80.5 kJ/in	30.4 kJ/in
Voltage	25	23	Test Reference #		PD2728	PD2727
Current (amps)	220	220				
WFS (ipm)	170	170				
Travel Speed (ipm)	4.1	10	Tensile Strength (psi)	80,000	100,000	113,000
Stick Out	3/4“	3/4”	Yield Strength (psi)	68,000	87,000	108,000
# of passes	9	21	Elongation (%)	19	24	21
# of layers	5	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	111	77
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	3G	1G				

Test Settings	High Heat Input	Low Heat Input	Lot- # V044182117003	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	82.0 kJ/in	30.0 kJ/in	Mechanical Properties		82.0 kJ/in	30.0 kJ/in
Voltage	25	23	Test Reference #		PC2051	PC2076
Current (amps)	220	220				
WFS (ipm)	175	175				
Travel Speed (ipm)	4.1	10	Tensile Strength (psi)	80,000	91,000	112,000
Stick Out	1/2"-5/8“	3/4“	Yield Strength (psi)	68,000	73,000	106,000
# of passes	7	19	Elongation (%)	19	25	20
# of layers	4	6	Average Charpy V-notch			
Preheat Temp. ºF	300+/-25	RT	Impact Properties ft•lbs @	40	108	81
Interpass Temp. ºF	500+/-50	200+/-25	+70 ºF			
Weld Position	3G	1G				

Diffusible Hydrogen - Tested in accordance with AWS A5.29/A5.29M, Clause 16 & Extended Exposure - in accordance with AWS D1.8/D1.8M

Condition	Lot - #	Test Reference #	Average (ml/100g)
As Received	C000300625441	HB3052	2.1 (ml/100g)
7 Day Exposure	C000300625441	HB3118	7.0 (ml/100g)

David A. Thomas, Quality Assurance Representative