



Product: FabCOR Edge Ni1
Diameter: .052"
Shielding Gas: M20-ArC-10
Current/Polarity: DCEP
Classification: E80C-Ni1 H4
Specification: AWS A5.28/A5.28M:2017
Test Completed: 6/23/2021

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- # D670121202031	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.8 kJ/in	26.0 kJ/in			80.8 kJ/in	26.0 kJ/in
			Mechanical Properties			
			Test Reference #		PE2499	PE2488
Voltage	30	26	Tensile Strength (psi)	70,000	86,000	90,700
Current (amps)	440	260	Yield Strength (psi)	58,000	73,500	83,100
WFS (ipm)	540	255	Elongation (%)	22	27	26
Travel Speed (ipm)	10.1	15.3	Average Charpy V-notch			
Stick Out	5/8"	5/8"	Impact Properties ft•lbs @	40	107	89
# of passes	8	19	+70 °F			
# of layers	4	7				
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- # C024712116	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.8 kJ/in	26.0 kJ/in			80.8 kJ/in	26.0 kJ/in
			Mechanical Properties			
			Test Reference #		PE2545	PE2540
Voltage	30	26	Tensile Strength (psi)	70,000	85,000	91,900
Current (amps)	440	260	Yield Strength (psi)	58,000	72,000	84,500
WFS (ipm)	540	270	Elongation (%)	22	32	24
Travel Speed (ipm)	9.8	15.3	Average Charpy V-notch			
Stick Out	5/8"	5/8"	Impact Properties ft•lbs @	40	91	85
# of passes	8	19	+70 °F			
# of layers	3	7				
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- # C017941410423	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	78.4 kJ/in	27.4 kJ/in			78.4 kJ/in	27.4 kJ/in
			Mechanical Properties			
			Test Reference #		PE2558	PE2554
Voltage	30	26	Tensile Strength (psi)	70,000	86,200	96,000
Current (amps)	440	260	Yield Strength (psi)	58,000	72,000	88,600
WFS (ipm)	540	270	Elongation (%)	22	25	23
Travel Speed (ipm)	10.1	14.8	Average Charpy V-notch			
Stick Out	5/8"	5/8"	Impact Properties ft•lbs @	40	92	79
# of passes	8	19	+70 °F			
# 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 A5.28/A5.28M, Clause 14 & Extended Exposure - in accordance with AWS D1.8/D1.8M

Condition	Lot - #	Test Reference #	Average (ml/100g)
As Received	D609121205	HB4842	3.9 (ml/100g)
7 Day Exposure	D609121205	HB4862	4.4 (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").

David A. Thomas, Quality Specialist