



Product: Tri-Mark TM-771
Diameter: .052"
Shielding Gas: C1 (100% CO2)
Current/Polarity: DCEP
Classification: E71T-1C; E71T-12CJ H8
Specification: AWS A5.20/A5.20M:2005
Test Completed: 2/14/2020

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- # C001131822323	AWS D1.8 Requirements	High Heat Input	Low Heat Input	
	79.5 kJ/in	31.4 kJ/in	Mechanical Properties		79.5 kJ/in	31.4 kJ/in	
			Test Reference #		PD9095	PD9094	
Voltage	26.5	28	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	80,000	97,000	
Current (amps)	215	275			58,000	71,000	93,000
WFS (ipm)	240	380			22	29	24
Travel Speed (ipm)	4.3	14.7			40	207	122
Stick Out	3/4"	3/4"					
# of passes	8	18					
# 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- # Z610662028101	AWS D1.8 Requirements	High Heat Input	Low Heat Input	
	81.4 kJ/in	29.2 kJ/in	Mechanical Properties		81.4 kJ/in	29.2 kJ/in	
			Test Reference #		PD3162	PD3177	
Voltage	26.5	28	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	75,000	88,000	
Current (amps)	215	275			58,000	64,000	84,000
WFS (ipm)	240	365			22	31	22
Travel Speed (ipm)	4.2	15.8			40	270	115
Stick Out	5/8"	3/4"					
# of passes	8	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- # V608102217161	AWS D1.8 Requirements	High Heat Input	Low Heat Input	
	79.8 kJ/in	28.9 kJ/in	Mechanical Properties		79.8 kJ/in	28.9 kJ/in	
			Test Reference #		PC2992	PC2943	
Voltage	26.5	28	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	75,000	87,000	
Current (amps)	220	275			58,000	66,000	82,000
WFS (ipm)	245	365			22	30	29
Travel Speed (ipm)	4.4	16			40	260	128
Stick Out	5/8"	3/4"					
# of passes	7	17					
# 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	C025692319001	HB3967	4.1 (ml/100g)
7 Day Exposure	C025692319001	HB3988	5.8 (ml/100g)

The information contained or otherwise referenced herein is presented without guarantee or warranty. Hobart Brothers Company ("Hobart") 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. **Hobart produces welding consumables under continuing quality assurance programs audited and approved by the American Bureau of Shipping ("ABS").** Please refer to the Hobart Brothers Company website at www.hobartbrothers.com for current Safety Data Sheets ("SDS").

David A. Thomas, Quality Assurance Representative