



**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:** 2/13/2023

## 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	<b>Mechanical Properties</b>		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 58,000 22 40	80,000 71,000 29 207	97,000 93,000 24 122
Current (amps)	215	275				
WFS (ipm)	240	380				
Travel Speed (ipm)	4.3	14.7				
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	<b>Mechanical Properties</b>		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 58,000 22 40	75,000 64,000 31 270	88,000 84,000 22 115
Current (amps)	215	275				
WFS (ipm)	240	365				
Travel Speed (ipm)	4.2	15.8				
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- # G04580	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	84.6 kJ/in	31.2 kJ/in	<b>Mechanical Properties</b>		84.6 kJ/in	31.2 kJ/in
			Test Reference #		PE5645	PE5653
Voltage	26.5	28	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	76,000 66,000 29 135	85,000 81,000 26 136
Current (amps)	200	275				
WFS (ipm)	240	365				
Travel Speed (ipm)	3.8	14.7				
Stick Out	3/4"	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				

#### 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	G04580	HB6475	4.7 (ml/100g)
7 Day Exposure	G04580	HB6509	7.8 (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](http://www.hobartbrothers.com) for current Safety Data Sheets ("SDS").

James Owens, Quality Assurance Specialist