



**Product:** FabCO TR-70  
**Diameter:** 1/16"  
**Shielding Gas:** C1 (100% CO2)  
**Current/Polarity:** DCEP  
**Classification:** E70T-1C H8, E70T-9C H8  
**Specification:** AWS A5.20/A5.20M:2005  
**Test Completed:** 6/03/2025

## 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- # C000251805321	AWS D1.8 Requirements	High Heat Input	Low Heat Input			
	73.0 kJ/in	28.7 kJ/in	Mechanical Properties		73.0 kJ/in	28.7 kJ/in			
			Test Reference #		PD8116	PD8115			
Voltage	28	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	77,700	84,100			
Current (amps)	300	230			58,000	67,200	77,300		
WFS (ipm)	285	190				22	26	26	
Travel Speed (ipm)	6.9	12.5					40	111	69
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	1G	1G							

Test Settings	High Heat Input	Low Heat Input	Lot- # K00043	AWS D1.8 Requirements	High Heat Input	Low Heat Input			
	82.6 kJ/in	30.4 kJ/in	Mechanical Properties		82.6 kJ/in	30.4 kJ/in			
			Test Reference #		PF0637	PF0638			
Voltage	27	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	79,000	85,600			
Current (amps)	285	232			58,000	66,300	78,800		
WFS (ipm)	275	185				22	28	26	
Travel Speed (ipm)	6	12					40	95	91
Stick Out	1"	1"							
# of passes	8	19							
# 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- # G00030	AWS D1.8 Requirements	High Heat Input	Low Heat Input			
	75.5 kJ/in	28.5 kJ/in	Mechanical Properties		75.5 kJ/in	28.5 kJ/in			
			Test Reference #		PE4663	PE4664			
Voltage	28	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000	76,100	86,200			
Current (amps)	285	232			58,000	65,200	80,600		
WFS (ipm)	285	185				22	32	27	
Travel Speed (ipm)	6.5	12.5					40	114	50
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	1G	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	K00043	HB8224	4 (ml/100g)
7 Day Exposure	K00043	HB8288	5 (ml/100g)

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James Owens, Quality Assurance Specialist



**Product:** FabCO TR-70  
**Diameter:** 3/32"  
**Shielding Gas:** C1 (100% CO2)  
**Current/Polarity:** DCEP  
**Classification:** E70T-1C H8, E70T-9C H8  
**Specification:** AWS A5.20/A5.20M:2005  
**Test Completed:** 6/10/2025

## Certificate of Conformance

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # C003051514302	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.0 kJ/in	30.9 kJ/in	Mechanical Properties		80.0 kJ/in	30.9 kJ/in
			Test Reference #		PD8169	PD8170
Voltage	32	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	78,800 65,500 30 76	87,200 79,600 25 61
Current (amps)	450	300				
WFS (ipm)	180	108				
Travel Speed (ipm)	10.8	15.1				
Stick Out	1"	1"				
# of passes	8	17				
# of layers	5	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- # K00031	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	79.4 kJ/in	31.4 kJ/in	Mechanical Properties		79.4 kJ/in	31.4 kJ/in
			Test Reference #		PF0693	PF0692
Voltage	32.1	26.2	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	73,200 61,800 33 206	86,500 78,400 27 106
Current (amps)	437	296				
WFS (ipm)	190	110				
Travel Speed (ipm)	10.6	14.8				
Stick Out	1"	1"				
# of passes	7	17				
# 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- # F027330928	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.3 kJ/in	31.6 kJ/in	Mechanical Properties		80.3 kJ/in	31.6 kJ/in
			Test Reference #		PE4902	PE4825
Voltage	31	26	Tensile Strength (psi) Yield Strength (psi) Elongation (%) Average Charpy V-notch Impact Properties ft•lbs @ +70 °F	70,000 58,000 22 40	80,800 66,900 27 63	84,600 78,000 27 75
Current (amps)	450	300				
WFS (ipm)	180	100				
Travel Speed (ipm)	10.4	14.8				
Stick Out	1"	1"				
# of passes	7	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 A5.20/A5.20M, Clause 16 & Extended Exposure - in accordance with AWS D1.8/D1.8M

Condition	Lot - #	Test Reference #	Average (ml/100g)
As Received	K00031	HB8202	4 (ml/100g)
7 Day Exposure	K00031	HB8467	8 (ml/100g)

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James Owens, Quality Assurance Specialist



**Product:** FabCO TR-70  
**Diameter:** 5/64"  
**Shielding Gas:** C1 (100% CO2)  
**Current/Polarity:** DCEP  
**Classification:** E70T-1C H8, E70T-9C H8  
**Specification:** AWS A5.20/A5.20M:2005  
**Test Completed:** 6/30/2025

## Certificate of Conformance

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

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Test Settings	High Heat Input	Low Heat Input	Lot- # B024530813303	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.7 kJ/in	31.6 kJ/in	<b>Mechanical Properties</b>		80.7 kJ/in	31.6 kJ/in
			Test Reference #		PD8119	PD8121
Voltage	30.5	26	Tensile Strength (psi)	70,000	89,300	86,800
Current (amps)	450	290	Yield Strength (psi)	58,000	77,600	776200
WFS (ipm)	280	150	Elongation (%)	22	25	27
Travel Speed (ipm)	10.2	14.3	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @	40	57	75
# of passes	7	17	+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- # J03482	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.3 kJ/in	31.6 kJ/in	<b>Mechanical Properties</b>		80.3 kJ/in	31.6 kJ/in
			Test Reference #		PF0800	PF0801
Voltage	28	25	Tensile Strength (psi)	70,000	81,200	86,200
Current (amps)	440	275	Yield Strength (psi)	58,000	70,600	77,200
WFS (ipm)	280	150	Elongation (%)	22	27	26
Travel Speed (ipm)	9.2	14.6	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @	40	95	64
# of passes	7	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- # G00114	AWS D1.8 Requirements	High Heat Input	Low Heat Input
	80.0 kJ/in	32.9 kJ/in	<b>Mechanical Properties</b>		80.0 kJ/in	32.9 kJ/in
			Test Reference #		PE4810	PE4811
Voltage	30.5	26	Tensile Strength (psi)	70,000	84,000	85,500
Current (amps)	447	301	Yield Strength (psi)	58,000	70,800	80,300
WFS (ipm)	296	157	Elongation (%)	22	25	26
Travel Speed (ipm)	9.7	14.3	Average Charpy V-notch			
Stick Out	1"	1"	Impact Properties ft•lbs @	40	57	70
# of passes	8	18	+70 °F			
# of layers	4	8				
Preheat Temp. °F	300+/-25	RT				
Interpass Temp. °F	500+/-50	200+/-25				
Weld Position	1G	1G				

#### Diffusible Hydrogen - Tested in accordance with AWS A5.20/A5.20M, Clause 16 & Extended Exposure - in accordance with AWS D1.8/D1.8M

Condition	Lot - #	Test Reference #	Average (ml/100g)
As Received	J03482	HB8160	5 (ml/100g)
7 Day Exposure	G00114	HB8486	8 (ml/100g)

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