

DSBROWN Production Joint Welding Procedure Specification (D1.5-08)

Procedure No: A-GTP-01 Date Issued: 1-9-04 Revision No: 01 Rev. Date: 5-15-09

Contractor (Fabricator) D.S. Brown Company Prepared by: James R. Connor, Quality Assurance Manager

1. Non-Fracture Critical Fracture Critical WPS Expiration Date: _____

2. Qualified in accordance with: AWS D1.5-2008, AWS D1.6-07

Referenced PQR No(s): PQR-GTAW-01(07)NY

Referenced FWST No(s): PQR-GTAW-01(03)

3. Material specification(s) ASTM A709 Gr. 36, 50, 50W, 304SS, 316SS For DOT Approval

4. Material Thickness (es) Unlimited

5. Welding process GTAW

6. Manual , machine , or semiautomatic

7. Position(s) of welding 1F, 2F

8. Filler metal specification AWS A5.9

9. Filler metal class and brand name ER309L (Murrex)

10. Flux class & brand N/A, Type N/A

11. Shielding gas 100% Argon Flow rate 20 CFH

12. Single pass Or multiple pass

13. Single arc Or multiple arc

14. Welding Current DCEN

15. Polarity Straight

16. Welding progression stringers

17. Root treatment Clean to bright sound metal or per AWS D1.5 (3.2.1 & 3.11)

18. Postheat treatment N/A

19. Calculated Heat Input (KJ/in) Min 10.9 KJ Max 20.4 KJ

20. Electrode extension (electrical stickout) N/A

APPROVED BY: [Signature] DATE: 1/9/04

Weld Size (In)	Pass	Electrode Size (In)	Welding Process Variables		Travel Speed (IPM)	Travel Speed (FPM)	Joint Detail (Flare Bevel) Show all dimensions, weld sizes, passes, and AWS symbols
			AMPS/WFS*	VOLTS			
20 ga.	1	1/8"	170-200	15-17	10-14		<p>T1 = Varies S = Fillet Weld Size (Fillet weld must not exceed thickness of stainless steel)</p>
16 ga.	1	1/8"	170-200	15-17	10-14		
14 ga.	1	1/8"	170-200	15-17	10-14		
12 ga.	1	1/8"	170-200	15-17	10-14		
11 ga.	1	1/8"	170-200	15-17	10-14		
10 ga.	1	1/8"	170-200	15-17	10-14		
8 ga.	1	1/8"	170-200	15-17	10-14		
3/16"	1	1/8"	170-200	15-17	10-14		

* Wire feed speed may be used along with amperage (include chart)

Base Metal Thickness range	Preheat and Interpass Temperature Chart	
	Minimum Preheat (°F)	Max Preheat & Interpass (°F)
= 3/4"	50°F	450°F
>3/4" to =1.5"	70°F	450°F
>1.5" to =2.5"	150°F	450°F
>2.5"	225°F	450°F

Prepared By: [Signature] DSB QA Manager

Project: _____

DSB Job: _____

Note: When this procedure is used for A709Gr50W materials, it shall be limited to 5/16" single pass or material be coated.