



Production Joint Welding Procedure Specification (D1.5-02)

Procedure No: A-GTF-01 Date Issued: 1-9-04 Revision No: 0 Rev. Date: \_\_\_\_\_  
 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 D1.5:2002, AWS D1.6-99  
 Referenced PQR No(s): PQR-GTAW-01-03  
 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

OK'D BY: VT TRANS  
 RECEIVED  
 MAY 18 2009  
 APPROVED  
 DATE 5/27/09

Weld size (in)	Pass No(s)	Electrode Size (in)	Welding Process Variables		Travel Speed (IPM)	Travel (in)	Joint Detail (Flare Bevel) Show all dimensions, weld sizes, passes, and AWS symbols
			AMPS/WPS*	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)

Prepared By: <u>James R. Connor</u> DSB QA Manager	Preheat and Interpass Temperature Chart		
	Base Metal Thickness range	Minimum Preheat (°F)	Max Preheat & Interpass (°F)
Project: _____	≤3/4"	50°F	450°F
DSB Job: <u>26271-1106-VT</u>	>3/4" to ≤1.5"	70°F	450°F
	>1.5" to ≤2.5"	150°F	450°F
	>2.5"	225°F	450°F

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