



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

Procedure No: B-F-SEALWELD-01 Date Issued: 3-28-08 Revision No: 0 Rev. Date: _____

Contractor (Fabricator) D. S. Brown Company Prepared by: Brad Streeter, Quality Assurance Manager

1. Non-Fracture Critical ☒ Fracture Critical ☐ WPS Expiration Date: 3-6-13

2. Qualified in accordance with: AWS D1.1- 2004 Sec. 4

Referenced PQR No(s). PQR-FCAW-01-(08) , _____ , _____

Referenced FWST No(s). N/A , N/A , _____ , _____

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

4. Material Thickness (es) Unlimited

5. Welding process FCAW

6. Manual ☐ , machine ☐ , or semiautomatic ☒

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

8. Filler metal specification AWS A5.20

9. Filler metal class and brand name E71T-1CH8 (UltraCore71C)

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

11. Shielding gas 100% CO2 Flow rate 45 CFH

12. Single pass ☒ Or multiple pass ☐

13. Single arc ☒ Or multiple arc ☐

14. Welding Current DCEP

15. Polarity Reverse

16. Welding progression stringers

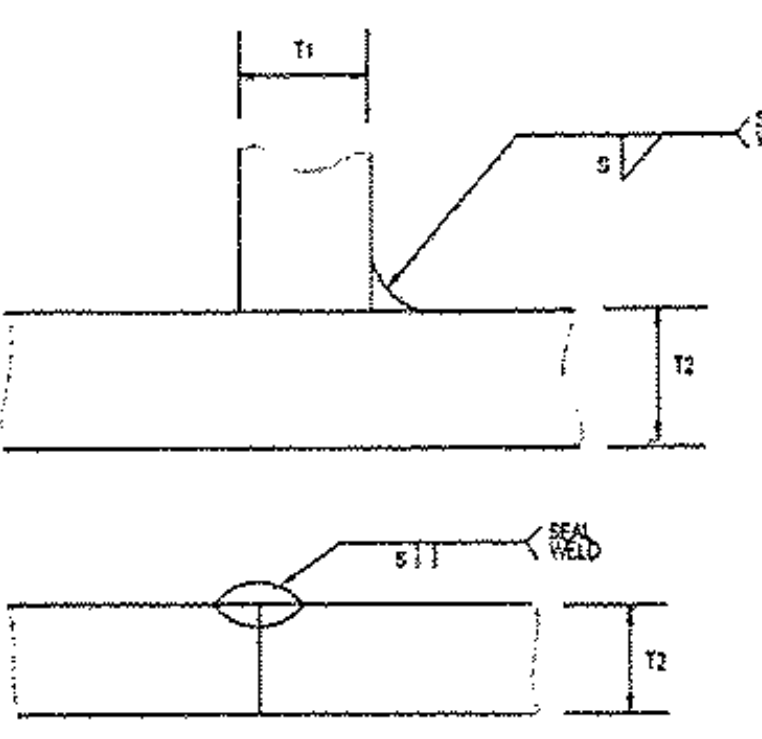
17. Root treatment Clean to bright sound metal and per AWS D1.5 (3.2.1 & 3.11)

18. Postheat treatment N/A

19. Calculated Heat Input (KJ/in) Min 32.2 KJ/in Max 45.8 KJ/in

20. Electrode extension (electrical stickout) 3/4"

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CHK'D BY _____ OK'D BY JWC
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APPROVED BY 12/29/09

Weld size (in)	Pass No(s).	Electrode Size (in)	Welding Process Variables		Travel Speed (IPM)	Joint Detail (Fillet) Show all dimensions, weld sizes, passes, and AWS symbols
			AMPS	VOLTS		
1/8"	1	1/16"	257-295	26.1-29.5	11.4-12.5	 T1 = Varies T2 = Varies S = Weld Size
3/16"	1	1/16"	257-295	26.1-29.5	11.4-12.5	
NOTE: THIS JOINT DETAIL TO BE USED FOR SEALING NON-STRUCTURAL GALVANIZED OR PAINTED APPLICATIONS WHERE FULL SIZED WELDMENTS ARE NOT DESIGNED, DETAILED OR ARE NOT PRACTICAL.						

Prepared By: <u>[Signature]</u> DSB QA Manager Project: <u>TH 62 OVER WEST RIVER</u> DSB Job: <u>27177-1011</u>	Preheat and Interpass Temperature Chart		
	Base Metal Thickness range	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

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