

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

Procedure No: A-GF-03 Date Issued: 11-15-04 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 (S.12.1)

Referenced PQR No(s): PQR-GMAW-01(04)

Referenced FWT No(s): PQR-GMAW-FWST-01A(04), PQR-GMAW-FWST-01B(04)

3. Material specification(s) ASTM A709 Gr. 36, 50, 50W, A500B, A53 For DOT Approval

4. Material Thickness (es) Unlimited

5. Welding process GMAW

6. Manual , machine , or semiautomatic

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

8. Filler metal specification AWS A5.18

9. Filler metal class and brand name ER70S-3 Lincoln SuperArc 50

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

11. Shielding gas 90% Ar / 10% 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 or per AWS D1.5 (3.2.1 & 3.11)

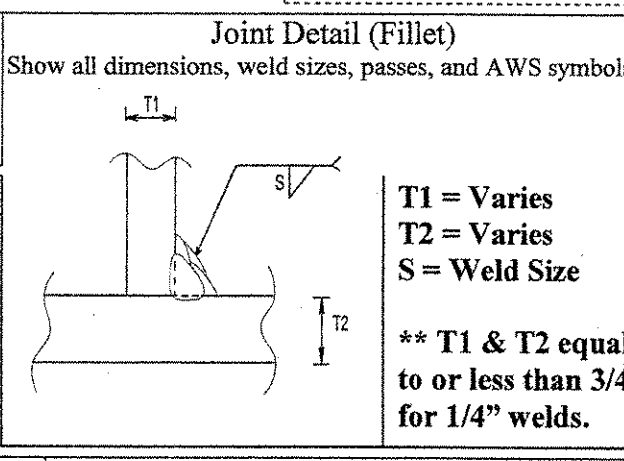
18. Postheat treatment N/A

19. Calculated Heat Input (KJ/in) Min 15.3 KJ/in Max 24.9 KJ/in

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

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 JUN 26 2006
 APPROVED: [Signature]
 DATE: 7-17-06

Weld size (in)	Pass No(s)	Electrode Size (in)	Welding Process Variables		Travel Speed (in/min)
			AMPS/WFS*	VOLTS	
**1/4"	1	.045"	170-215	24-27	14-16
5/16"	1-2	.045"	170-215	24-27	14-16
3/8"	2-3	.045"	170-215	24-27	14-16
7/16"	3-5	.045"	170-215	24-27	14-16
1/2"	4-6	.045"	170-215	24-27	14-16
5/8"	5-7	.045"	170-215	24-27	14-16
3/4"	6-8	.045"	170-215	24-27	14-16



* 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: James R. Connor DSB QA Manager

Project: _____

DSB Job: 14032-1042

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

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