

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

Procedure No: **A-FB-122** Date Issued: **11-24-03** 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 (5.12.1)**

Referenced PQR No(s): **PQR-FCAW-01-03**

Referenced FWST No(s): **N/A**

3. Material specification(s) **ASTM A709 Gr. 36, 50, 50W, 500 B Tube** For DOT Approval

4. Material Thickness (es) **Unlimited**

5. Welding process **FCAW**

6. Manual , machine , or semiautomatic

7. Position(s) of welding **1G**

8. Filler metal specification **AWS A5.20**

9. Filler metal class and brand name **E71T-1, Lincoln Outershield Elite**

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 or per AWS D1.5 (3.2.1 & 3.11)**

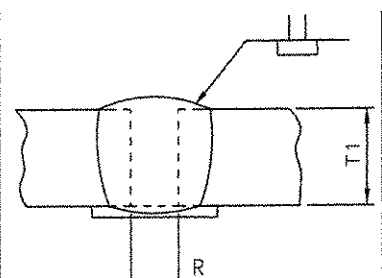
18. Postheat treatment **N/A**

19. Calculated Heat Input (KJ/in) Min **31.20 KJ/in** Max **50.72 KJ/in**

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

TRAVIS  
RECEIVED  
JUN 21 2007  
RESUBMIT APPROVED  
BY DATE 7-23-07

Weld size (in)	Pass	Electrode Size (in)	Welding Process Variables		Travel Speed (IPM)
			AMPS/WFS*	VOLTS	
CJP	All	1/16"	260-310	26-30	11-13
DO NOT REMOVE BACKING FROM TUBE SPLICES					



Notes:  
T<sub>1</sub> = 3/8" (10mm)  
MAX  
R = 1/8" (3mm)  
MIN T<sub>1</sub> MAX

Prepared By: <i>James R. Connor</i> DSB QA Manager	Preheat and Interpass Temperature Chart		
	Base Metal Thickness range	Minimum Preheat (°F)	Max Preheat & Interpass (°F)
Project: <b>Route No. TH 7/11, CL3</b>	≤ 3/4"	50°F	450°F
DSB Job: <b>20388-1206</b>	>3/4" to ≤1.5"	70°F	450°F
	>1.5" to ≤2.5"	150°F	450°F
	>2.5"	225°F	450°F

DSBROWN