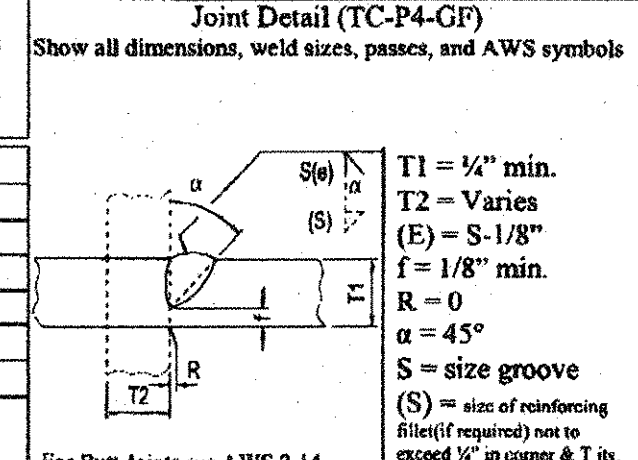


DSBROWN Production Joint Welding Procedure Specification (D1.5-02)

Procedure No: A-FSB-01 Date Issued: 8-12-03 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 (S.12.1)
 Referenced PQR No(s): PQR-PCAW-01-03
 Referenced FWST No(s): PQR-PCAW-FWST-01(03), PQR-PCAW-FWST-01A(03)
 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, 2G, (1F, 2F)
 8. Filler metal specification: AWS A5.20
 9. Filler metal class and brand name: E71T-1, E71T-9 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 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"

TRANS RECEIVED
 OK'D BY: _____ OK'D BY: _____
 AUG 14 2007
 RESUBMIT APPROVED
 BY: _____ DATE: 8/14/07

Weld Size (in) (E)(A)(S)	Tack (in)	Electrode Size (in)	Welding Process Variables		Travel Speed (IPM)	Travel Distance (in)
			AMPS/WFS*	VOLTS		
1/4"	1	1/16"	260-310	26-30	11-13	
5/16"	1	1/16"	260-310	26-30	11-13	
3/8"	2-3	1/16"	260-310	26-30	11-13	
1/2"	3-4	1/16"	260-310	26-30	11-13	
5/8"	4-6	1/16"	260-310	26-30	11-13	
3/4"	5-7	1/16"	260-310	26-30	11-13	
7/8"	6-8	1/16"	260-310	26-30	11-13	
1"	7-9	1/16"	260-310	26-30	11-13	



* 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: _____
 DSR Job: 20388-1206

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

057-BLWP