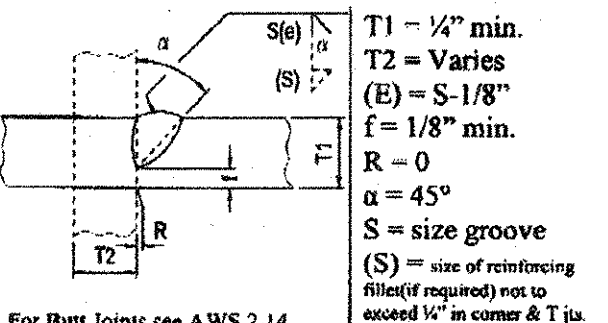


Production Joint Welding Procedure Specification (D1.5-02)

Procedure No: A-(MC)CSB-01 Date Issued: 9-28-04 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 (5.12.1)
 Referenced PQR No(s): PQR-(MCGMAW-01(04))
 Referenced FWST No(s): PQR-(MCGMAW-FWST-01A(04)), PQR-(MCGMAW-FWST-01B(04))
 3. Material specification(s) ASTM A709 Gr. 36, 50, 50W For DOT Approval
 4. Material Thickness (es) Unlimited
 5. Welding process GMAW
 6. Manual , machine , or semiautomatic
 7. Position(s) of welding 1G, 2G, 1F, 2F
 8. Filler metal specification AWS A5.18
 9. Filler metal class and brand name E70C-6M Corex Metal-Core Maxim OK'D BY: _____ OK'D BY: JW
 10. Flux class & brand N/A, Type N/A
 11. Shielding gas 75% Ar / 25% CO2 Flow rate 45 CFH AUG 14 2007
 12. Single pass Or multiple pass RESUBMIT _____ APPROVED _____
 13. Single arc Or multiple arc BY _____ DATE 8-15-07
 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 30.6 KJ/in Max 51.1 KJ/in
 20. Electrode extension (electrical stickout) 3/8"

Welding Process Variables	Joint Detail (TC-P4-GF)		
	Welding Process Variables	Show all dimensions, weld sizes, passes, and AWS symbols	
Welding Process Variables	Welding Process Variables	Welding Process Variables	Welding Process Variables
AMPS/WFS*	VOLTS	(inches) Passes	(inches) Passes
1/4"	1 .052"	265-320 31-34.5	13-16
5/16"	1 .052"	265-320 31-34.5	13-16
3/8"	1-2 .052"	265-320 31-34.5	13-16
1/2"	3-4 .052"	265-320 31-34.5	13-16
5/8"	4-6 .052"	265-320 31-34.5	13-16
3/4"	5-7 .052"	265-320 31-34.5	13-16
7/8"	6-9 .052"	265-320 31-34.5	13-16
1"	7-10 .052"	265-320 31-34.5	13-16



* Wire feed speed may be used along with amperage (include chart)

Prepared By: James R. Connor DSB QA Manager

Project: _____

DSB Job: 20388-1206

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

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

VTRANS RECEIVED
 AUG 14 2007
 BY _____ DATE 8-15-07

DSB-BRW