



Production Joint Welding Procedure Specification (D1.5-08)

Procedure No: A-(MC)GF-01 Date Issued: 9-28-04 Revision No: 02 Rev. Date: 9-15-09

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

1. Non-Fracture Critical Fracture Critical WPS Expiration Date: 8-11-14

2. Qualified in accordance with: AWS D1.5- 2008 (5.13)

Referenced PQR No(s). PQR-(MC)GMAW-03(09) , ,

Referenced FWST No(s). PQR-(MC)GMAW-FWST-01A(09) , PQR-(MC)GMAW-FWST-01B(09) , ,

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

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 E70C-6M Corex Metal-Core Maxim

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

11. Shielding gas 75% Ar / 25% 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 34.77 KJ/in Max 49.65 KJ/in

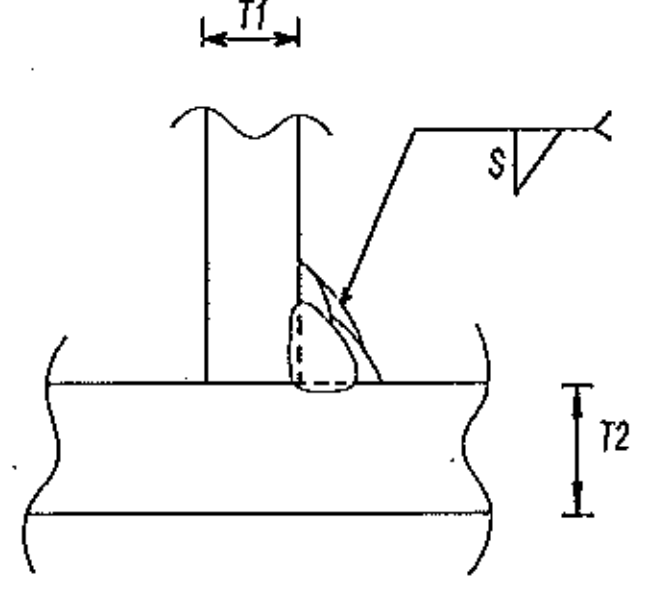
20. Electrode extension (electrical stickout) 3/4"

For DOT Approval

VTrans
Received
By: JWC
OK'd BY: JWC

JUN 26 2012

Resubmit
BY: [Signature]
DATE: 7/19/12

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/WFS*	VOLTS		
1/4"	1	.052"	270-307	27.9-31	11.5-13	 <p>T1 = Varies T2 = Varies S = Weld Size</p> <p> T1 & T2 equal to or less than 3/4" for 1/4" welds.</p>
5/16"	1	.052"	270-307	27.9-31	11.5-13	
3/8"	1-3	.052"	270-307	27.9-31	11.5-13	
7/16"	2-4	.052"	270-307	27.9-31	11.5-13	
1/2"	4-6	.052"	270-307	27.9-31	11.5-13	
5/8"	5-7	.052"	270-307	27.9-31	11.5-13	
3/4"	6-8	.052"	270-307	27.9-31	11.5-13	

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

Prepared By: [Signature] DSB QA Manager

Project: _____

DSB Job: 36775-1104-VT

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.