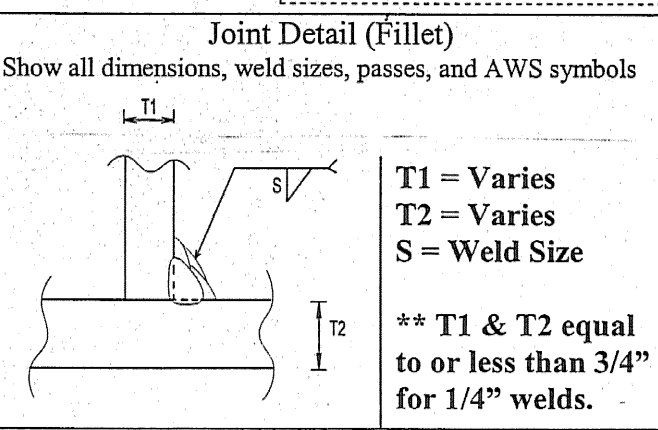


DSBROWN Production Joint Welding Procedure Specification (D1.5-02)

Procedure No: A-(MC)GP-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-(MC)GMAW-01(04)
 Referenced FWST No(s): PQR-(MC)GMAW-FWST-01A(04), PQR-(MC)GMAW-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 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 30.6 KJ/in Max 51.1 KJ/in
 20. Electrode extension (electrical stickout) 3/4"

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 DATE 2/20/06

Weld Size (in)	Pass No(s)	Electrode Diameter (in)	Welding Process Variables		
			AMPS/WFS*	VOLTS	Travel Speed (IPM)
**1/4"	1	.052"	265-320	31-34.5	13-16
5/16"	1	.052"	265-320	31-34.5	13-16
3/8"	1-3	.052"	265-320	31-34.5	13-16
7/16"	2-4	.052"	265-320	31-34.5	13-16
1/2"	4-6	.052"	265-320	31-34.5	13-16
5/8"	5-7	.052"	265-320	31-34.5	13-16
3/4"	6-8	.052"	265-320	31-34.5	13-16



* 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: 16225-1121-VT

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