



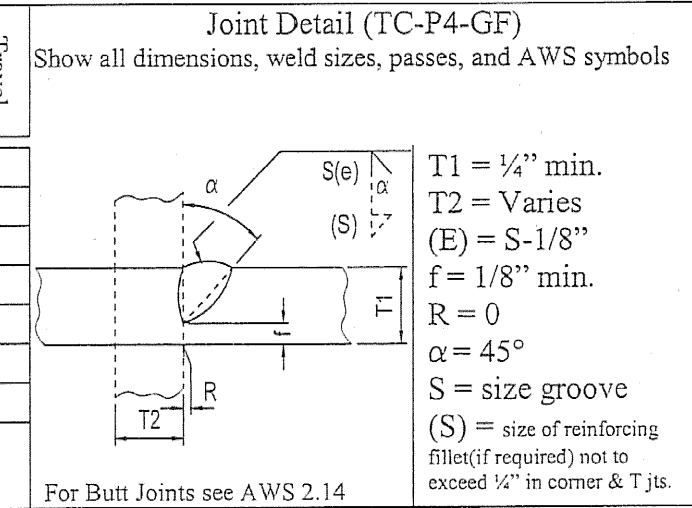
### Production Joint Welding Procedure Specification (D1.5-02)

Procedure No: A-(MC)GSB-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

- Non-Fracture Critical  Fracture Critical  WPS Expiration Date: \_\_\_\_\_
- 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)
- Material specification(s) ASTM A709 Gr. 36, 50, 50W For DOT Approval
- Material Thickness (es) Unlimited
- Welding process GMAW
- Manual , machine , or semiautomatic  OK'D BY: \_\_\_\_\_ DATE: JUN 03 2008
- Position(s) of welding 1G, 2G, 1F, 2F
- Filler metal specification AWS A5.18
- Filler metal class and brand name E70C-6M Corex Metal-Core Maxim RESUBMIT \_\_\_\_\_ APPROVED: \_\_\_\_\_  
BY: \_\_\_\_\_ DATE: 6/9/08
- Flux class & brand N/A, Type N/A
- Shielding gas 75% Ar / 25% CO2 Flow rate 45 CFH
- Single pass  Or multiple pass
- Single arc  Or multiple arc
- Welding Current DCEP
- Polarity Reverse
- Welding progression stringers
- Root treatment Clean to bright sound metal or per AWS D1.5 (3.2.1 & 3.11)
- Postheat treatment N/A
- Calculated Heat Input (KJ/in) Min 30.6 KJ/in Max 51.1 KJ/in
- Electrode extension (electrical stickout) 3/4"

Weld Size (in)	Passes	Electrode Size (in)	Welding Process Variables		Travel Speed (IPM)	T1 (min)	T2 (min)
			AMPS/WFS*	VOLTS			
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)

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

Prepared By: James R. Connor DSB QA Manager  
Project: \_\_\_\_\_  
DSB Job: 23215-1112-VT

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