

Company Name \_\_\_\_\_ By: \_\_\_\_\_  
 Welding Procedure Specification No. \_\_\_\_\_ Date: \_\_\_\_\_ Supporting PQR No.(s) \_\_\_\_\_  
 Revision No. \_\_\_\_\_ Date \_\_\_\_\_  
 Welding Process(es) \_\_\_\_\_ Type (s) \_\_\_\_\_  
 (Automatic, Manual, Machine or Semi-Automatic)

## Details

(refer to both backing and retainers)

☐ Other

**FIG D (LAP JOINT)**



☐ Figure A ☐ Figure B ☐ Figure C ☐ Figure D ☐ Figure E

Maximum Pass Thickness  $\leq 1/2$  inch (13 mm) (Yes) ☐ (No) ☐

Spec. No. (SFA)				
AWS No. (Class)				
F-No.				
A-No.				
Size of Filler Metals				
Filler Metal Product Form				
Supplemental Filler Metal				
Weld Metal				
Thickness Range:				
Groove				
Fillet				
Electrode-Flux (Class)				
Flux Trade Name				
Consumable Insert				
Other				

\*Each base metal-filler metal combination should be recorded individually.

**QW-482 (Back)**

**WPS No.** \_\_\_\_\_ **Rev** \_\_\_\_\_

<b>POSITIONS (QW-405)</b> Position(s) of Groove _____ Welding Progression: Up _____ Down _____ Position(s) of Fillet _____ Other _____					<b>POST WELD HEAT TREATMENT (QW-407)</b> Temperature Range _____ Time Range _____ Other _____																						
<b>PREHEAT (QW-406)</b> Preheat Temperature, Minimum _____ Interpass Temperature Maximum _____ Preheat Maintenance _____ (Continuous or special heating where applicable should be recorded)					<b>GAS (QW-408)</b> <table><tr><td></td><td colspan="2">Percent Composition</td></tr><tr><td></td><td>Gas(es)</td><td>(Mixture)</td></tr><tr><td>Shielding</td><td></td><td></td></tr><tr><td>Trailing</td><td></td><td></td></tr><tr><td>Backing</td><td></td><td></td></tr><tr><td>Other</td><td></td><td></td></tr></table>						Percent Composition			Gas(es)	(Mixture)	Shielding			Trailing			Backing			Other		
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	Gas(es)	(Mixture)																									
Shielding																											
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Backing																											
Other																											
<b>ELECTRICAL CHARACTERISTICS (QW-409)</b>																											
Weld Layer(s) or Pass (es)	Process	Classification	Diameter.	Type and Polarity	Amperage Range	Voltage Range	Travel Speed Range	Other (e.g., Remarks, Comments, Hot Wire Addition, Technique, Torch Angle, Etc.)																			
(Amperage and voltage range should be recorded for each electrode size, position, and thickness, etc)																											
Pulsing Current _____					Heat Input (max) _____																						
Tungsten Electrode Size and Type _____ (Pure Tungsten, 2% Thoriated, etc.)																											
Mode of Metal Transfer for GMAW _____ (Spray arc, short circuiting arc, etc.)																											
Electrode Wire feed speed range _____																											
Other _____																											
<b>TECHNIQUE (QW-410)</b> String or Weave Bead _____ Orifice or Gas Cup Size _____ Initial and Interpass Cleaning (Brushing, Grinding, etc.) _____ Method of Back Gouging _____ Oscillation _____ Contact Tube to Work Distance _____ Multiple or Single Pass (per side) _____ Multiple or Single Electrodes _____ Electrode Spacing _____ Peening _____ Other _____																											