

**QW-482 SUGGESTED FORMAT FOR WELDING PROCEDURE SPECIFICATION (WPS)**  
 (See QW-201.1, Section IX, ASME Boiler and Pressure Vessel Code)

Company Name EXACT EXCHANGER INCORPORATED By: DAVID SELF  
 Welding Procedure Specification No. SST Date: 10-31-2012 Supporting PQR No.(s) SST  
 Revision No. 1 Date 10-31-2012  
 Welding Process(es) GTAW Type (s) MANUAL

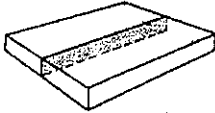
(Automatic, Manual, Machine or Semi-Automatic)

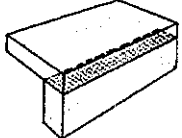
**JOINTS (QW-402)**  
 Joint Design SEE PRODUCTION DRAWING  
 Root Spacing 1/8" +/- 1/16"  
 Backing (Yes) \_\_\_\_\_ (No) X  
 Backing Material (Type) \_\_\_\_\_  
(refer to both backing and retainers)

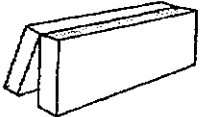
Metal  
 Nonmetallic

Nonfusing Metal  
 Other

**Details**

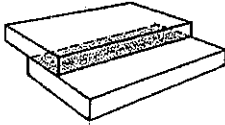
  
**FIG A (BUTT JOINT)**

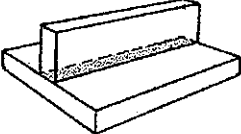
  
**FIG B (CORNER JOINT)**

  
**FIG C (EDGE JOINT)**

Sketches, Production Drawings, Weld Symbols or Written Description should show the general arrangement of the parts to be welded. Where applicable, the root spacing and the details of weld groove may be specified.

[At the option of the manufacturer, sketches may be attached to illustrate joint design, weld layers and bead sequence (e.g., for notch toughness procedures, for multiple process procedures etc.)]

  
**FIG D (LAP JOINT)**

  
**FIG E (TEE JOINT)**

Other (Describe) \_\_\_\_\_

Figure A 
  Figure B 
  Figure C 
  Figure D 
  Figure E

**\*BASE METALS (QW-403)**  
 P-No. 8 Group No. 1 to P-No. \_\_\_\_\_ Group No. \_\_\_\_\_  
 OR  
 Specification type/grade or UNS number \_\_\_\_\_  
 to Specification type/grade or UNS number \_\_\_\_\_  
 OR  
 Chem. Analysis and Mech. Prop. \_\_\_\_\_  
 to Chem. Analysis and Mech. Prop. \_\_\_\_\_  
 Thickness Range:  
 Base Metal: Groove .1875" TO 1.0" Fillet UNLIMITED  
 Other \_\_\_\_\_

Maximum Pass Thickness ≤ 1/2 inch (13 mm) (Yes)  (No)

**\*FILLER METALS (QW-404)**

	1	2	3	4
Spec. No. (SFA)	5.9			
AWS No. (Class)	A5.9			
F-No.	6			
A-No.				
Size of Filler Metals	1/16" - 1/8"			
Filler Metal Product Form	SOLID			
Supplemental Filler Metal	NONE			
Weld Metal				
Thickness Range:				
Groove	0-1"			
Fillet	UNLIMITED			
Electrode-Flux (Class)				
Flux Type				
Flux Trade Name				
Consumable Insert				
Other				

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

