QW-482 SUGGESTED FORMAT FOR WELDING PROCEDURE SPECIFICATION (WPS)
(See QW-200.1, Section IX, ASME Boiler & Pressure Vessel Code)

Company Name: XYZ COMPANY By: JOE BLOW
Welding Procedure Spec. No.: GMAW-2 Date: 2-29-92 Supporting PQR No. (s): GMAW-2
Revision No.: 0 Date: 2-29-92
Welding Process(s): GMAW (SHORT ARC) Type(s): SEMI-AUTO
(Automatic, Manual, Machine, or Semi-Auto)

JOINTS (QW-402)

Details

Joint Design: SINGLE VEE GROOVE
Backing: (Yes) _____ (No) X
Backing Material: (Type): NONE
(Refer to both backing & retainers)

- Metal
- Nonfusing Metal
- Nonmetallic
- Other

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 Mfgr., Sketches may be attached to illustrate joint design, weld layers, and the bead sequence, e.g. for notch toughness procedures, for multiple process procedures, etc.)

*BASE METALS (QW-403)

P-No. 1 Group No. 1 to P-No. 1 Group No. 1
OR
Specification type and grade SA-36
to Specification type and grade SA-36
OR
Chem. Analysis and Mech. Prop. _____
to Chem. Analysis and Mech. Prop. _____

Thickness range:

Base Metal:	Groove:	3/16" - .900"	Fillet:	ALL
Pipe Dia. Range:	Groove:	ALL	Fillet:	ALL

* FILLER METALS (QW-404)

Spec. No. (SFA):	SFA 5.18		
AWS No. (Class):	ER70S-7		
Filler Metal F-No.:	6		
Chem. Comp. - A No.:	1		
Size of Filler Metals:	1/8" - 3/32"		

Weld Metal
Thickness range:

Groove:	.900" MAX.		
Fillet:	UNLIMITED		
Electrode-Flux (Class):	N/A		
Flux Trade Name:	N/A		
Consumable Insert:	N/A		
Other:			

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

QW-482 (Back)

WPS No.: GMAW-2 Rev. No.: _____

POSITIONS (QW-405)

Position(s) of Groove: ALL

Welding Progression: Up X Down X

Positions(s) of Fillet ALL

POSTWELD HEAT TREATMENT (QW-407)

Temperature Range NONE

Time Range _____

PREHEAT (QW-406)

Preheat Temp. Min.: 60 DEG MIN

Interpass Temp. Max.: NONE

Preheat Maint.: _____

(Continuous or special heating where applicable should be recorded.)

GAS ((QW-408)

Percent Composition

	Gas(es)	(Mixture)	Flow Rate
Shielding:	YES	75%CO2/25%A	25-30 CFH
Trailing:	NONE		
Backing:	YES	ARGON	2 - 3 CFH

ELECTRICAL CHARACTERISTICS (QW-409)

Current AC or DC DC Polarity REVERSE

Amps Range 120-200 Volts (Range) 14-18

(Amps and volts ranges should be recorded for each electrode size, position, and thickness, etc. This information may be listed in a tabular form similar to that shown below.)

Tungsten Electrode Size and Type _____
(Pure Tungsten, 2% Thoriated, etc.)

Mode of metal Transfer for GMAW SHORT CIRCUITING
(Spray arc, short circuiting arc, etc.)

Electrode Wire feed speed range _____

TECHNIQUE (QW-410)

String or Weave Bead STRING

Orifice or Gas Cup Size 1/2"

Initial and Interpass Cleaning (Brushing, Grinding, etc.) GRINDING, BRUSHING

Method of Back Gouging NONE

Oscillation REVERSE

Contact Tube to Work Distance 1/8" - 1/4"

Multiple or Single Pass (per side) MULTIPLE

Multiple or Single Electrodes SINGLE

Travel Speed (Range) 10-15 IPM

Peening NONE

Other NO PASS GREATER THAN 1/2"

Weld Layer(s)	Process	Class	Filler Metal Dia.	Filler Metal Type Polar.	Current Amp Range	Current Volt Range	Travel Speed Range	Other (e.g., Remarks, Comments, Hot WireAddition, Technique, Torch Angle, Etc)
ALL	GMAW S/C ARC	ER-70S-7	1/8" OR 3/32'	DCRP	12-200	14-19	10-15 IPM	NONE