

CARBON STEEL METAL ARC WELDING PROCEDURE

FOR USE ON PANELS FOR ARIZONA NUCLEAR POWER
PROJECT, PALO VERDE GENERATING STATION,
UNITS 1, 2, & 3.

COMSIP INCORPORATED
CUSTOMLINE DIVISION
Linden, New Jersey

Ref : Bechtel/Arizona
P.O. #10407-JM-200

REV.	DATE	DESCRIPTION	COMSIP APPROVALS			
			BY	Q.A.	PROD	PROJ
6	4/12/82	REVISED TO INCLUDE MODIFIED ACCEPTANCE CRITERIA TO AWS D1.1	<i>CMG</i>	<i>CMG</i>	<i>B</i>	<i>JKK</i>

PREQUALIFIED JOINT WELDING PROCEDURE

PROCEDURE SPECIFICATION 5717 MP-6 Rev. 0

Material specification A569 to A36
 Welding process GMAW
 Manual or machine Semi Automatic
 Position of welding 5G Fixed Horizontal, 12F
 Filler metal specification AWS A5.18
 Filler metal classification E70S-3
 Flux N/A
 Weld metal grade* A
 Shielding gas 75% Ar 25% CO₂ Flow rate 12-20 CFM
 Single or multiple pass Single
 Single or multiple arc Single
 Welding current DC
 Polarity Reverse
 Welding progression Upward
 Root treatment Grind to achieve shape
 Preheat and interpass temperature None
 Postheat treatment None

*Applicable only when filler metal has no AWS classification.

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amperes	Volts		
For T .090-.125					
1	.035"	110 ⁺¹⁰	18-22	9-10 fpm	<p>3/8" max</p>
For T .125-.187					
1	.035	150 ⁺¹⁰	18-22	"	
For T .187-.250					
1	.035	160 ⁺¹⁰	24-28	"	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in 4B, C, or D of AWS D1.1, Structural Welding Code.

Procedure no. 5875 MP-1 Manufacturer or contractor Cole M. Gendmar

Comsip, Inc.

Revision no. 6 Authorized by _____

Date April 9, 1982

PREQUALIFIED JOINT WELDING PROCEDURE

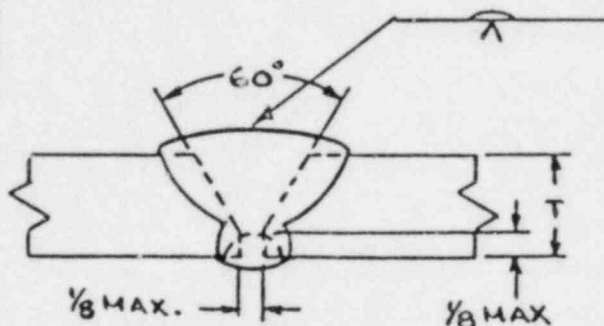
PROCEDURE SPECIFICATION 5717 MP-6 Rev.0

Material specification A569 to A569
 Welding process GMAW
 Manual or machine Semi Automatic
 Position of welding SG Fixed Horizontal
 Filler metal specification AWS A5.18
 Filler metal classification E70S-3
 Flux N/A
 Weld metal grade* A
 Shielding gas 75%Ar 25% CO₂ Flow rate 25-30CFH
 Single or multiple pass Single
 Single or multiple arc Single
 Welding current DC
 Polarity Reverse
 Welding progression Upward
 Root treatment Grind to achieve shape
 Preheat and interpass temperature None
 Postheat treatment None

*Applicable only when filler metal has no AWS classification.

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amperes	Volts		
For T .090-.125					
1	.035"	110 \pm 10	18-22	9-10	1 pm
For T .125-.187					
1	.035	150 \pm 10	18-22		
For T .187-.250					
1	.035	160 \pm 10	24-28		



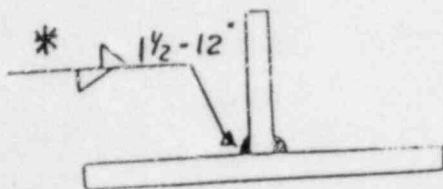
This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in 4B, C, or D of AWS D1.1, Structural Welding Code.

Procedure no. 5875 MP-1Manufacturer or contractor Bob M. HendersonConsip, Inc.Revision no. 6

Authorized by _____

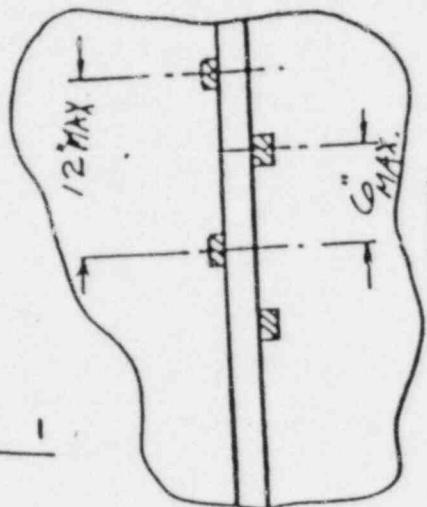
Date April 9, 1982

ALL WELDS SHALL BE:



* NOTE: Minimum fillet weld sizes for: $T < \frac{1}{4}$ $1/8 \pm 1/32"$
 $T = \frac{1}{4}$ $1/4 \pm 1/32"$

FIG. 1



NOTES

1. Base metal shall be ASTM-569 for body steel and ASTM A-36 for frame stiffening and base steel.
2. Edges to be welded shall be prepared by machining, flame cutting or grinding, or any combination of these, to achieve a shape as shown in the attached diagram.
3. Surfaces to be welded shall be cleaned free from slag, paint, oil, rust, scale or any other material which may be detrimental to the weld.
4. The minimum length of an interrupted fillet weld shall be $1\frac{1}{2}$ inches.
5. Groove welds will be in accordance with figure 2.
6. If tack welds are used, they shall be of the same electrode material as the first root pass and shall be deposited in such a manner as to facilitate incorporation into the weld if need be. Cracked or broken tack welds shall be chipped out and all others thoroughly cleansed prior to incorporation into the weld.

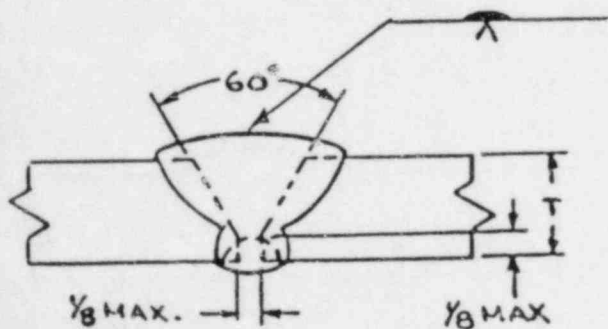



FIG. 2

BECHTEL JOB # 10407

REV NO.	DATE	DESCRIPTION	DRWN BY	CHK'D BY	DRAFT. SUPVR.	QA APPR.	PROJ ENG APPR.


Comsip, Inc. CUSTOMLINE DIVISION
 LINDEN, NEW JERSEY

TITLE WELDING DETAIL			
PROJECT BECHTEL NORWALK, CAL.			
PROJECT ARIZONA NUCLEAR POWER PROJECT			
DRWN BY	DATE	SCALE	APP'D FOR CONST
CHK'D BY	DATE	DRAWING NO.	REV. NO.
APP'D BY	DATE	5875-NLD	1