LANL Engineering Standards Manual, ISD 341-2

Chapter 13, Welding

Welding Procedure Specification (WPS)	Rev. 0, 11/01/07
	Page 1 of 2
Company Name: Los Alamos National Labor	ratory By Kelly Bingham
Welding Procedure Specification Number: <u>1000</u> Date <u>1/15/2008</u>	-20 Ga spot-1 Galv1 Rev. 0
Supporting Procedure Qualification Test Record(s) No. <u>1000-1-20 Ga Spot1 Galv.</u>
Welding Process(es) SMAW	Type <u>Manual</u>
Mode of Transfer for GMAW N/A	(Automatic, Manual, etc.)
(Sl	nort Circuiting, Spray, etc.)
JOINTS (Table 4.1)	COATING(S)
Type of Welding Joint(s) Arc Spot Weld	
- Sheet to supporting Member Figure 4.6	
Backing Yes () No (X)	
Backing Material Type <u>N/A</u>	
Groove Welded From:	
One side <u>N/A</u> both sides <u>N/A</u>	
BASE METAL (1.2)	
Material specification type and grade:	\frown
Sheet steel A1008 or A653.	
Support Steel AWS D1.1 Table 3.1 Group 1&	2
Thickness Range:	
Sheet Steel 20 Gauge	/
Support Steel All	
Thickness All	
Base Metal Preparation Clean & dry	
FILLER METAL (Table 1.1)	
Specification AWS 5.1	
Classification <u>E6010</u>	Sketch of Joint Details
POSITIONS (Table 1.2)	PREHEAT (1.1.1 AND 5.1)
Position of Groove Flat	Preheat Temperature Min N/A
Position of Fillet F	
Progression <u>N/A</u>	
GAS (1.4.6.2)	
Shielding Gas <u>N/A</u>	Flow Rate N/A
Percent Mixture	
FLUX (1.4.5.2)	N/A

TECHNIQUE

1					-		
	Pass	Electrode Size	Welding Current		Travel Speed (or	Melting Rate	Wire
	No.		Amperes	Volts	Weld Time for		Freed
					Arc Spot Welds)		Speed
	1	E6010 1/8"	59.8 –	24 - 30	1.5 – 3.0 Sec.	6.0 / 10sec.	N/A
			111.3				

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in ANSI/AWS D1.3 (____98 & 08_____), Structural Welding Code-Sheet Steel.

(year)

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 $ML\mathchar`L-1/2$ projects or jobs must determine if the supporting documentation for this WPS complies with quality requirements of the project/job

 Authorized by
 Signatures on file at ENG
 Date
 3/23/2011

Form A-2