

WELDING CHARACTERISTICS:

Current: DCEP and DCEP Tungsten Type: N/A Transfer Mode: N/A
 Ranges: Amps 12 to Tungsten Dia.: Pulsing Cycle: 0 to 0
 Volts 40 to Background Current: 0
 Fuel Gas: N/A Flame: N/A Braze temp. °F 0 to 0

WELDING TECHNIQUE: For fabrication specific requirements such as fittup, cleaning, grinding, PWHT and inspection criteria refer to Volume 2, Welding Fabrication Procedures

Technique: Semi-Auto Cleaning Method: Wire brush
 Single Pass or Multi Pass: 0 Stringer or Weave bead (S/W): N/A Oscillation: 0
 GMAW Gun Angle °: to Forehand or Backhand for GMAW (F/B): N/A
 No Pass S>1/2": GMAW/FCAW Tube to work distance: N/A
 Maximum K/J Heat Input: N/A Travel speed: N/A Gas Cup Size: N/A

PROCEDURE QUALIFIED FOR:

Charpy "V" Notch: N Nil-Ductil Transition Temperature: N Dynamic Tear: N

Comments: Capicitor discharge studs using voltage or amperage values. No furrule or flux is used. Arc timing in Sec. #6 = .04, #8 = .06, 1/4 = .07, 5/16 = .07. Power sources qualified are ESS 500/PW1000/CD 100/CD 512. Lift #8 = 1/8, 1/4 = 3/16, 5/16 = 1/4/.028 standoff (tip).

Weld Layer	Manual Process	Filler Metals	Size	Amp Range	Volt Range	Travel/ipm	Nozzle Angle	Other
1	STUD	SS 3xx- Stud	#6	12 to 15	40 to 70	0 to 0	to	
2	STUD	SS 3xx-Stud	#8	15 to 30	50 to 80	0 to 0		
3	STUD	SS 3xx-Stud	1/4	20 to 40	60 to 90	0 to 0		
4	STUD	SS 3xx-Stud	5/16	30 to 50	70 to 100	to		
5								
6								

REM. * Weld layers are representative only - actual number of passes and layer sequence may vary due to variations in joint design, thickness and fitup.

Use of LANL Welding Procedures and Welder Qualifications for non-LANL work shall be at the sole risk and responsibility of the Subcontractor, and the Subcontractor shall indemnify and save LANL and the Government harmless from any and all claims, demands, actions or causes of action, and for any expense or loss by reason of Subcontractor's and their employees possession and use of LANL procedures and qualifications.