



**WELDING CHARACTERISTICS:**

**Current:** DCEN and **Tungsten Type:** EWTh-2 **Transfer Mode:** N/A  
**Ranges: Amps** 50 to 150 **Tungsten Dia.:** 0.093 **Pulsing Cycle:** 1.2 to  
**Volts** 11 to 13 **Background Current:** 40%  
**Fuel Gas:** N/A **Flame:** N/A **Braze temp. °F** N/A to N/A

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

**Technique:** Automatic part rotated **Cleaning Method:** Wipe with solvent  
**Single Pass or Multi Pass:** S **Stringer or Weave bead (S/W):** S or S **Oscillation:** N  
**GMAW Gun Angle °:** to **Forehand or Backhand for GMAW (F/B):** N/A  
**No Pass >1/2":** True **GMAW/FCAW Tube to work distance:** N/A  
**Maximum K/J Heat Input:** N/A **Travel speed:** 6 ipm **Gas Cup Size:** N/A

**PROCEDURE QUALIFIED FOR:**

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

**Comments:** This WPS was qualified for Pu Oxide Storage containers in a Glovebox.  
 1) All welding is performed in a Helium atmosphere inside a glove-box.

Weld Layer	Manual Process	Filler Metals	Size	Amp Range	Volt Range	Travel/ipm	Nozzle Angle	Other
1	GTAW-P-A	ER316L	0.03	50 to 150	11 to 13	4 to 6	to	
2		N/A		to	to	to		
3		N/A		to	to	to		
4		N/A		to	to	to		

**REM. \* Weld layers are representative only - actual number of passes and layer sequence may vary.**

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

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.