

**Merrimack Sheet Metal Inc.**  
 119 HALL STREET \* CONCORD, NH 03301 \* (603) 224 - 7766

**WELDING PROCEDURE SPECIFICATION (WPS)**  
 PREQUALIFIED  QUALIFIED BY TESTING   
 or PROCEDURE QUALIFICATION RECORDS (PQR) Yes   
 AASHTO/AWS D1.5 Qualification Type 5.12.1  - 5.12.2  - 5.13

Contractor/  
 Organization MERRIMACK SHEET METAL  
 Welding Process(es) GMAW  
 Type: Manual  Semiautomatic   
 Machine  Automatic   
 Tandem  Parallel

Identification LA-10  
 Revision 1 Date 7/28/2010 By KK  
 Authorized by KK Date 7/28/2010  
 Supporting PQR No.(s) PQLA1

**JOINT DESIGN USED**  
 Single  Double Weld   
 Backing: Yes  No  Material \_\_\_\_\_  
 Root Opening 0-1/8 Root Face Dimension 0-1/8  
 Groove Angle 60 DEGREES Radius (J-U) NA  
 Backgouging: Yes  No  Method AIR GOUGE  
 Root Treatment BACK GOUGE TO SOUND METAL BEFORE

**POSITION**  
 Position of Groove 1G Fillet NA  
 Vertical Progression: Up  Down

**BASE METALS**  
 Material Spec. A36 ; A588 ; A709  
 Type or Grade G50  
 Thickness: Groove UNLIMITED Fillet NA  
 Diameter (Pipe) NA

**ELECTRICAL CHARACTERISTICS**  
 Transfer Mode (GMAW): Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Electrical Stick Out 3/4  
 Other \_\_\_\_\_

**FILLER METALS**  
 AWS Specification A5.28  
 AWS Classification ER80S-N11  
 Manufacturer Trade Name LINCOLN SUPERARC LA-75

**TECHNIQUE**  
 Stringer or Weave Bead BOTH  
 Multi-pass or Single Pass (per side) MULTI PASS  
 Number of Electrodes ONE  
 Electrode Spacing: Longitudinal NA  
 Lateral NA Angle NA  
 Interpass Cleaning CLEAN WITH WIRE BRUSH

**SHIELDING**  
 Flux NA Mfg. Trade Name \_\_\_\_\_  
 Electrode-Flux (Class) \_\_\_\_\_  
 Gas Composition 90% ARGON / 10% CO2  
 Flow Rate 40 CFH Gas Cup Size 3/4

**PREHEAT**  
 Preheat Temp., Min. 70 F  
 Interpass Temp., Min. 100 F  
 Interpass Temp., Max. 350 F

**POSTWELD HEAT TREATMENT**  
 Temp. NA Hold Time \_\_\_\_\_  
 Heating/Cooling Rate ROOM TEMP

**HEAT INPUT**  
 Calculated Heat Input Value: kJ/in  kJ/mm   
 Max. Heat Input 43.0 Min. Heat Input 24.4

**WELDING PROCEDURE**

Pass or Weld Layer(s)	Process	Filler Metals Diam.	Current		Volts	Travel Speed	Joint Details
			Type & Polarity	Amps or Wire Feed Speed			
ROOT	GMAW	.045	DCEP	243-297	25.1-28.9	12-15 IPM	
ALL	GMAW	.045	DCEP	243-297	25.1-28.9	12-15 IPM	

Form L-2  
  
 CK'D BY \_\_\_\_\_ OK'D BY Juc  
 FEB 26 2011  
 RESUBMIT \_\_\_\_\_ APPROVED   
 BY \_\_\_\_\_ DATE 3/16/11