

**RECEIVED**

ON: September 13, 2016

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**CONFORMANCE**

BY: Mark Sargent DATE: 09/13/2016

**WELDING PROCEDURE SPECIFICATION ( WPS )**  
**PREQUALIFIED** \_\_\_\_\_ **QUALIFIED BY TEST** \_\_\_\_\_

**YES**

Company Name Merrimack Sheet Metal Identification # LA-16  
 Welding Process(es) GMAW Revision NA Date N/A By N/A  
 Supporting PQR # (s) LA-1/2016 Authorized Michael J. Smith Date 5/10/2016

Type- Manual  Semi-Auto   
 Machine  Automatic

**JOINT DESIGN USED**

Single  Double Weld   
 Backing Yes / No    
 Backing Material NO  
 Root Opening and Face Dimension R=0 F=1/8 min  
 Groove Angle, U or J 45 Degree  
 Back Gouge Y/N/Type NO

**POSITION**

Position of Groove FLAT 1G Fillet NA  
 Vertical Progression, up N/A Down \_\_\_\_\_

**BASE METALS**

Base Metal A36:A588:A709  
 Type or Grade B  
 Thickness: Groove 1/4" min. Unlimited  
 Fillet N/A  
 Pipe Diameter N/A

**ELECTRICAL CHARACTERISTICS**

Transfer Mode ( GMAW ):  
 Short-Circuiting / Globular / Spray SPRAY  
 Current AC, DCEP, DCEN, Pulsed DCEP  
 Other none

Tungsten Electrode ( GTAW ):  
 Size N/A  
 Type N/A

**FILLER METALS**

A.W.S. Specification A5.28  
 A.W.S. Classification ER80S-NI1  
 Trade Name Lincoln Superarc LA-75

**TECHNIQUE**

Stringer or Weave Bead Stringer  
 Multi or Single Pass ( per side ) Multi Pass  
 Number of Electrodes ONE  
 Electrode Spacing: Longitudinal N/A  
 Lateral N/A  
 Angle 15 degree push angle  
 Contact Tube to Work Distance 1/2" TO 3/4" ESO  
 Peening none  
 Interpass Cleaning none

**SHIELDING**

Flux N/A Gas Ar/Co2  
 Electrode-flux Class NA Composition 90AR 10Co2  
 Flow Rate 35-40 CFH  
 Gas Cup Size 1/2 inch

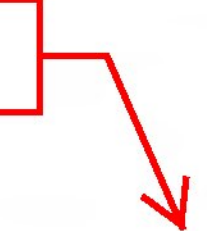
**PREHEAT**

Preheat Temp., Min. 70 deg. F  
 Interpass Temp. Min. 100 deg. F  
 Interpass Temp. Max. 350 deg. F

**POSTWELD HEAT TREATMENT**

Temp. none  
 Time N/A

Heat Input Max KJ/in 37.8 Heat Input Min KJ/in 24.3

**26 Min.** 

**WELDING PROCEDURE**

Pass or Weld Layer(s)	Process	FILLER METALS		CURRENT			Travel Speed	JOINT DETAIL
		Class	Diam.	Type & Polarity	Amps or WFS	Volts		
ALL	GMAW	ER80S-NI1	.045 dia	DCEP	250-270	27-28	13-18 IPM	TC-P4-GF

**15 Max** 