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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-5
Welding Process(es)	GMAW	Revision	NA
Supporting PQR # (s)	LA-1/2016	Authorized	Michael J. Smith
		Date	5/10/2016
		By	N/A
Type-	Manual	Semi-Auto	YES
	Machine	Automatic	

JOINT DESIGN USED

Single	YES	Double Weld	NO
Backing Yes / No	NO		
Backing Material	NO		
Root Opening and Face Dimension	N/A		
Groove Angle, U or J	N/A		
Back Gouge Y/N/Type	NO		

POSITION

Position of Groove	N/A	Fillet	Flat & Horizontal
Vertical Progression, up	N/A	Down	

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

BASE METALS

Base Metal	A36:A588:A709
Type or Grade	B
Thickness: Groove	N/A
Fillet	Unlimited
Pipe Diameter	N/A

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

FILLER METALS

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

SHIELDING

Flux	N/A	Gas	Ar/Co2
Electrode-flux Class	Composition	90AR 10Co2	
NA	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

26 Min.

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

24.3

WELDING PROCEDURE

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

15 Max