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-15
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 1/8 MIN
Groove Angle 45 DEGREES Radius (J–U) NA
Backgouging: Yes ☐ No ☒ Method
Root Treatment CLEAN TO BRIGHT METAL

BASE METALS
Material Spec. A36 ; A588 ; A709
Type or Grade G50
Thickness: Groove 1/2 TO UNLIMITED Fillet 5/16 MAX
Diameter (Pipe) NA

FILLER METALS
AWS Specification A5.28
AWS Classification ER80S-NI1
Manufacturer Trade Name LINCOLN SUPERARC LA-75

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

POSITION
Position of Groove 1G Fillet 1F
Vertical Progression: Up ☒ Down ☐

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

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

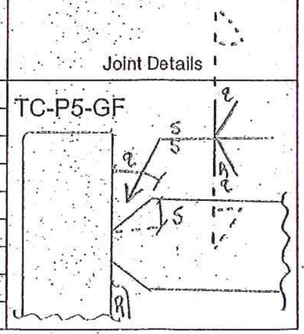
PREHEAT
Preheat Temp., Min. 70 F
Interpass Temp., Min. 100 F
Interpass Temp., Max. 350 F

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 Type & Polarity	Current Amps or Wire Feed Speed	Volts	Travel Speed	Joint Details
ALL	GMAW	.045	DCEP	243-297	25.1-28.9	12-15 IPM	TC-P5-GF



Form L-2

VTRANS RECEIVED
FEB 26 2011

CK'D BY OK'D BY Jac
RESUBMIT APPROVED ✓
BY DATE 3/16/11