

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 - 5.12.4

Contractor/ Organization Boretech, LLC
 Welding Process(es) SMAW
 Type: Manual Semiautomatic
 Mechanized Automatic
 Tandem Parallel

Identification WPS - 4 Fillet Field Welding of IGPS Sleeve Strap
 Revision NA Date NA By NA
 Authorized by Boretech, LCC Date 4/26/17
 Supporting PQR No.(s) NA

Butt Joint
JOINT DESIGN USED
 Single Double Weld
 Backing: Yes No Material NA
 Root Opening NA Root Face Dimension NA
 Groove Angle NA Radius (J-U) NA
 Backgouging: Yes No Method NA
 Root Treatment Remove grease and oil with solvent.
 Surface will be cleaned with wire brush and grinder. Joint shall be dry prior to welding.

POSITION
 Position of Groove NA Fillet Vertical 5G
 Vertical Progression: Up Down

ELECTRICAL CHARACTERISTICS
 Transfer Mode (GMAW): Globular Spray
 Current: AC DCEP DCEN Pulsed
 Electrical Stick Out NA
 Other NA

BASE METALS
 Material Spec. Pipe - ASTM A252 / IGPS Strap - A36
 Type or Grade Pipe - Grade 3 Spiral Weld Steel Pipe / IGPS Strap - NA
 Thickness: Groove NA Fillet NA
 Diameter (Pipe) 72"

TECHNIQUE
 Stringer or Weave Bead Either
 Multi-pass or Single Pass (per side) Single
 Number of Electrodes 1
 Electrode Spacing: Longitudinal NA
 Lateral NA Angle NA
 Interpass Cleaning Clean slag with chipping hammer and wire brush

FILLER METALS
 AWS Specification AWS A5/A5.1M
 AWS Classification E6010
 Manufacturer Trade Name NA

PREHEAT
 Preheat Temp., Min. 50
 Interpass Temp., Min. 50
 Interpass Temp., Max. 500

SHIELDING
 Flux NA Mfg. Trade Name NA
 Electrode-Flux (Class) NA
 Gas Composition NA
 Flow Rate NA Gas Cup Size NA

POSTWELD HEAT TREATMENT
 Temp. None Hold Time NA
 Heating/Cooling Rate 15 minutes minimum
HEAT INPUT
 Calculated Heat Input Value: kJ/in kJ/mm
 Max. Heat Input NA Min. Heat Input NA

WELDING PROCEDURE

Pass or Weld Layer(s)	Process	Filler Metals Diam.	Current		Volts	Travel Speed	Joint Details
			Type & Polarity	Amps or Wire Feed Speed			
ALL	SMAW	3/16"	DCEP	115	21-25	4-8 ipm	

Form N-2

Form N-2—Sample Welding Procedure Specification

