WELDING PROCEDURE SPECIFICATION (WPS) BTC GMAW 90-10 2011

PREQUALIFIED ☑ Per AWS D1.1 2010

QUALIFIED BY TESTING ☐

Identification # GMAW 90-10 2011
Revision 1 Date Oct 28, 2011 By Robert Rutile

Company Name: Slagboy Enterprises

Welding Process(es) GMAW

JOINT DESIGN USED Butt

Type Single ☑ Double Weld ☐
Back Yes ☑ No ☐
Back Material ASTM A-36
Root Opening 1/4 in.
Root Face Dimension 1/16 +0 -1/16"
Back Gouging No

BASE METALS
Material Spec ASTM A 36
Type or Grade
Thickness: Groove 1/8" to 1" Fillet .
Diameter (Pipe)

FILLER METALS
AWS Specification AWS A5.18
AWS Classification ER70S-6

SHEILDING
Flux: N/A
Electrode-Flux (Class): N/A
Composition: N/A

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

POST WELD HEAT TREATMENT
Temp N/A
Time N/A

Special instructions:
1. No grinding on cover pass
2. Inter-pass grinding must be approved by instructor and done in test position

Hold points:
1. Inspect bevels
2. Inspect tack-up
3. Inspect root pass
4. Inspect cover pass
5. Inspect backing strip removal prior to cutting straps

WELDING PROCEDURE

Pass or Weld Layers Process GMAW Filler Metals Class Dia. Current Type & Polarity Volts Amps or Wire Feed speed (IPM) 24-27 14 IPM + or – 15%

<table>
<thead>
<tr>
<th>Pass or Weld Layers</th>
<th>Process GMAW</th>
<th>Filler Metals Class Dia.</th>
<th>Current Type &amp; Polarity</th>
<th>Volts</th>
<th>Travel Speed</th>
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<td>ER70S-6 ...........0.35 in</td>
<td>DCEP</td>
<td>400-550 ipm</td>
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Transfer Mode (GMAW) N/A
Current DCEP
Tungsten Electrode Size (GTAW) Size N/A
Type N/A

TECHNIQUE
Stringer or Weave Bead Stringer
Multi-pass or Single Pass (per side) Multi
Number of Electrodes 1

Contact Tube to Work Distance 5/8 to 3/4 in.
Peening None
Interpass Cleaning Oxide Removal (mechanical)

Gas 90/10 Ar/Co2
Flow Rate 35 Cfi
Cup Size 5/8 in.

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