Specifications & Codes: NCDOT Standard Specifications/AASHTO/AWS D1.5, Section 2, 5 and 12


Filler Metal Specification: AWS A5.1 Classification: E-7018

Manufacturer: NCDOT Approved Electrodes Single or Multiple Pass both Position of Weld Flat, Horizontal

Welding Current: DC Polarity: Positive Progression: N/A

Root Treatment: N/A

Preheat Temp: 100° minimum Interpass: 450° maximum Post Heat: N/A

### Joint Details

<table>
<thead>
<tr>
<th>Pass Num.</th>
<th>Electrode Size</th>
<th>Welding Current</th>
<th>Travel Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1/8”</td>
<td>90-150 Amperes 20-23 Volts</td>
<td>6-9 ipm</td>
</tr>
<tr>
<td></td>
<td>5/32”</td>
<td>120-200 Amperes 21-24 Volts</td>
<td>6-10 ipm</td>
</tr>
<tr>
<td></td>
<td>3/16”</td>
<td>170-280 Amperes 21-24 Volts</td>
<td>6-11 ipm</td>
</tr>
</tbody>
</table>

**COMMENTS:**

1. **Bearing Assemblies shall not be lifted by their top plates.** Any handing shall support the bearing unit from the underside.
2. Bearings are to be protected from the dust during storage and erection.
3. Remove keeper straps after the bearing has been positioned at its permanent location and prior to erection of the superstructure.
4. When welding the top plate to the girder flange, use temperature indicating crayons or other suitable means to ensure that the bearing does not exceed 250°.
5. Do not permit welding current to pass through the interior parts of the bearing. Arcing may occur which can permanently damage the bearing.
6. Disassembly of the bearing unit is not permitted without written consent from the manufacturer. Unauthorized disassembly could result in bearing failure.
7. The Contractor shall rotate the top plates of the bearing so that the alignment is parallel to the center line of the girder.

**WPS Description:** Steel Girder Pot Bearing

Written By: Randy Dempsey, CWI/CWE, TT IV

Signature: [Signature]

**WPS #:** 022811017

Authorized By: Steve Walton, Metals Engineer

Signature: [Signature]

NCDOT MATERIALS & TESTS UNIT (STEEL SECTION)
WPS STEEL GIRDER POT BEARING 022811017 R1
JOINT DETAIL ATTACHMENT

STEEL GIRDER
POT BEARING DETAILS

Weld Symbol definitions per AWS A2.4:2007
Illustrations for Pot Bearing.

As Received

Installed

NCDOT MATERIALS & TESTS UNIT (STEEL SECTION)