

# **Series 1104HDSS4**

Restraint for Existing Push-on Joints on Ductile Iron Pipe

#### **CONTAINS BOTH DOMESTIC AND IMPORTED HARDWARE**

#### Installation Instructions

1. The Series 1100HD is designed for restraining existing ductile iron pipe, conforming to ANSI/AWWA C151/A21.51 (all thickness classes), push on pipe bells. It has a split restraint ring on the spigot and a split ring behind the bell.

All EBAA products intended for installation on ductile iron pipe are designed for and limited to use on ductile iron pipes that comply with the requirements of ANSI/AWWA C151/A21.51 and have a Brinell Hardness or equivalent measurement value that does not exceed 230BHN. These requirements apply to the entire pipe wall profile at all restraining wedge engagement points and to the full penetration depth of each restraining wedge.\*

- 2. Install the split ring behind the bell in the direction indicated on the casting. Tighten the clamp bolts to 90 ft-lbs.
- 3. Disassemble the split restraint ring then reassemble restraint on the spigot such that the bolt holes are in alignment and the distance between the rings is suitable for the tie bolt length with the lip of the restraint facing toward the bell. Allow enough room on the tie bolt to fully engage the nut with several threads showing.
- 4. Install the tie bolts in each available bolt hole for maximum distribution of operating forces. Place nuts on the end of the tie bolts. Allow enough room on the tie bolt to fully engage the nut with several threads showing. Pull the restraint ring away from the joint until the slack is removed from the tie bolts.
- 5. Tighten the torque limiting twist off nuts in a clockwise direction (direction indicated by arrow on top of nut) until all wedges are in firm contact with the pipe surface. Continue tightening in an alternate manner until all of the nuts have been twisted off. Tighten the tie bolt nuts until the ring behind the bell is in firm contact with the back of the bell.
- 6. If removal is necessary; use the 5%" hex heads provided. If reassembly is required, assemble the product in the same manner as indicated in the previous steps and tighten the wedge bolts to 90 ft-lbs.

\*To learn more about this addendum, please visit: https://ebaa.com/spec/dip



### **CONTENTS**

## Qty. Description

- 1 1104SDB Split MEGALUG®
- 1 1704BR Back-Up Ring
- 4 ¾ in. by 13 in. Stainless Steel Rods w/ Nuts

**Restraints Made in The USA** 

For use on water or wastewater pipelines subject to hydrostatic pressure and tested in accordance with either AWWA C600 or ASTM D2774

APPROXIMATE SHIPPING WEIGHT: 20 lbs.

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Made in the USA