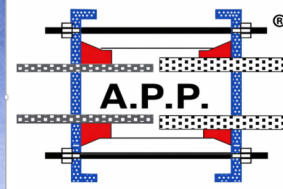


APP-MSN/UST

Sleeve Type Repair Clamp



hedef
Engineering Services
Industry and Trade Inc.

INSTALLATION INSTRUCTIONS

This instruction has been prepared for the safe and leak-tight installation of Sleeve Type Repair Clamp used to repair gasket failures at pipe sleeves of ductile iron, asbestos cement (AC), GRP and concrete pipelines without removing the existing sleeve or cutting the pipe.

1. Pre-Installation Preparation

- **Product Check:** Verify the label information on the adaptor (DN size and tolerance range) and ensure it is suitable for the pipe and sleeve diameters.
- **Surface Cleaning:** Clean rust, dirt, scale, and old coatings from the pipe and sleeve surfaces using a wire brush. The surface in contact with the sealing gasket must be smooth and clean.

2. Installation Steps

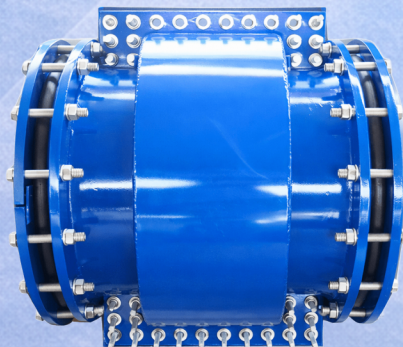
- **Main Body Installation:** Position the split main body (two halves) around the sleeve from the bottom and top. Ensure that the main body is properly centered over the sleeve. Place the sealing gaskets correctly between the body connection plates. Insert the bolts and tighten them evenly from the inside outward in a crosswise sequence. Verify that the main body assembly is properly aligned and securely installed.
- **Lubrication:** Apply a silicone-based lubricant suitable for potable water to the sealing gasket and pipe surface. (Do not use oil-based lubricants as they may damage the gasket.)
- **Gasket Placement:** Wrap the sealing gaskets around the pipe from both sides of the sleeve and position them tightly against the sleeve. Ensure that the gasket fully encloses the pipe and that the ends meet evenly and properly.
- **Placement of Pressure Flanges:** Position the semi-circular pressure flanges (half shells) around the pipe from top and bottom. Insert the bolts into the connection lugs and assemble the flanges into a single unit. Bring the assembled flanges close to the gasket and insert the tie rods (stud bolts) symmetrically.

3. Tightening Procedure (Critical Step)

- **Cross Tightening:** Tighten the bolts in a diagonal (crosswise) sequence (e.g., 12–6 o'clock, 3–9 o'clock). This ensures uniform compression of the gasket.
- **Gradual Tightening:** First hand-tighten all bolts, then tighten gradually in multiple passes using a wrench. Ensure that the gap between the gasket, pipe, and adaptor body remains uniform during tightening.

4. Final Check and Testing

- **Visual Inspection:** Check that the gap between the pressure flanges and adaptor body is uniform around the entire circumference.
- **Pressure Test:** Perform a low-pressure leak test before commissioning the pipeline. If leakage is detected, recheck and retighten the bolts.



SAFETY NOTES

- Wear protective gloves and safety footwear during installation.
- For large-diameter adaptors, use pipe supports or blocking elements to prevent excessive load on the adaptor.
- Ensure that the protective coating of bolts (galvanized, Dacromet, etc.) is not damaged to maintain corrosion resistance.