# JCM 102 Multi Band Universal Clamp Coupling

Installation Guidelines



JCM 102 Multi Band Clamp – Three Band

JCM 102-3200-12 for 30" O.D. (762mm) Ductile Iron/Cast Iron/C905 PVC



JCM 102 Multi Band Clamps 10" (254mm) and larger are manufactured with heavy duty stainless steel (minimum 17 gauge) and substantially larger lug units and 3/4" (19.05mm) bolts & nuts. These clamps are robust in weight and materials and will withstand rugged installation.



Depending upon size and shipping requirements, JCM 102 Multi Band Clamps can be shipped with bolting lugs engaged, or laying flat. If engaged, on one lug section only, loosen nuts (do not remove) and disengage the oval neck bolts from the lug ears.

#### After pipe excavation, prior to fitting installation:

- Clean and scrape the pipe. Remove any dirt or debris from the pipe surface that would interfere with the sealing of the gasket on the pipe.
- Measure the pipe to confirm pipe diameter.
- Inspect Clamp and ensure proper size for pipe diameter.
- Lubricate the pipe with soapy water. Do Not Use Oil Base Pipe Lubricant.
- Leave sufficient pressure on the pipeline to prevent intrusion of foreign matter, preventing excessive line contamination.
- Inspect the pipe for integrity; a mirror is helpful when inspecting the backside of the pipe or hard to reach spaces.
- Clamp performance drops when gap between pipe end is larger than ½"
  use a thin gauge stainless steel spacer to place over the gap.
- Drill holes in the ends of splits or running cracks to relieve forces that could cause the split to continue.



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Minimum tools for installation and simulation of damaged area.



Soapy water or water alone should be used to lubricate the pipe to make installation of clamp easier. Soapy water provides a slippery surface to let the gasket slide on the pipe into place and is water-soluble. Do Not Use Oil Base Pipe Lubricant – it does not break down with water and will not allow the gasket to adhere to the pipe for water tight seal.



Trick of the trade: Using a tape measure and marking implement, place a mark on the pipe equal to width of the clamp. This presents a visual mark to center the repair clamp over the damaged area. (1/2 of this distance is centered)



Spray or pour soapy water around the damaged area to lubricate the pipe to make installation of clamp easier. Soapy water provides a slippery surface to let the gasket slide on the pipe into place and is water-soluble. Do Not Use Oil Base Pipe Lubricant – it does not break down with water and will not allow the gasket to adhere to the pipe for water tight seal.



To ease installation, loosen the nuts (do not remove) on the other lug bolt units and open the gap between the two halves. When clamp is installed, all lug units should have approximately the same space between lug halves.



Position the clamp over the damaged area, check the visual mark to ensure close to center over the damage. Ensure the tapered gasket edge of each clamp section lies flat against the pipe.



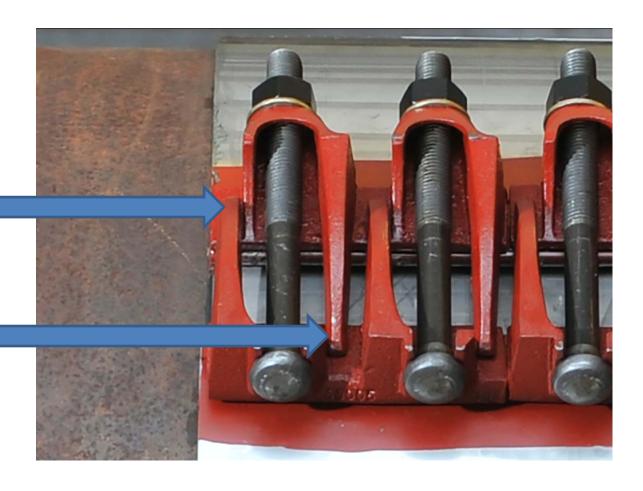
Bring other end of clamp to meet with the bolting lug section. Feed the bottom tapered gasket into place. Mesh top lug fingers and engage bolts.



JCM Universal Clamp Couplings include a feathered, tapered gasket edge that lies flat beneath the clamp that completes the full circle gasket. It is critical that these tapered gaskets lay smooth under the stainless steel band. Multi Band Clamps have a feathered gasket on each section. To assist the tapered edges to be smooth, the clamp should be rotated in the direction of the arrow on the labeling on the clamp.



Be aware of the ends of the finger lug and ensure that they overlap the opposing lug and not interfere with the lug bar.



This image reflects proper engagement of the finger lugs of the bolting lug unit. These are mutually supporting finger lugs and provide a strong basis for bolt torque.



Loosely engage the bolts into the lug receiving ears and rotate the clamp in the direction of the arrow on the label (spraying pipe surface with soapy water will help this step). This aids in smoothing the tapered gasket edge and prevents leak channels caused by curled or folded gasket edges.



When oval neck bolts are engaged in the "ears" of the lug unit, proceed to tighten nut of each bolt on each clamp band section.



When tightening is completed, each clamping lug section should have an approximately equal gap between lug sections. **Tighten All Bolts Evenly to the following values:** 

5/8" bolts to 70 Ft. Lb. Torque/94.91 N.m 3/4" bolts to 90 Ft. Lb. Torque/122.02 N.m



After tightening all lug sections, wait 20 minutes and retighten bolts to noted torque/Newton Meter levels. Gasket material stores energy and will "seat" itself over time. Re-checking the torque/Newton Meter levels will ensure a leak proof repair.