JCM INDUSTRIES

Installation Instructions

Model 220 Compression Couplings

Read instructions before starting installation*
For purposes other than water, contact JCM Industries for application and product assistance.
Review of "Tricks of the Trade" on the reverse will assist with installation.

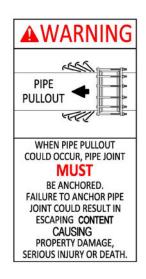
For use on steel pipe Line Content: water, salt solutions, mild acids, bases and air NOT FOR GAS SERVICE

- 1. Clean and scrape pipe. Remove any scale, pipe wrap, debris or dirt that may interfere with the complete sealing of the gasket. Inspect pipe for integrity, size, outside diameter and surface irregularities. Confirm the proper size and range of coupling. Inspect fitting to ensure all parts are included.
- 2. Lubricate the pipe and the fitting gasket with soapy water. Do not use oil base pipe lubricant. Loosen nuts of coupling approximately one turn and assure gasket is loose.
- 3. Place a reference mark on the pipe approximately 6 inches back from the end. Insert pipe ends into coupling. Adjust coupling body to center over joint. Double check center placement by measuring from the reference mark.
- 4. Stabilize the coupling body to prevent rotation and tighten each nut independently. Tighten nuts to approximately 75 ft. lbs. pounds of torque.

Pressure Rating: 150 PSI

Temperature Rating: 150°F (65°C)





*Ensure fitting is suitable for application (confirm size, materials, pressure ratings, line content, meets local governing & association standards, etc.). Pipeline operation forces, including pressure fluctuations, thermal expansion/contraction, movement/shifting, etc. will influence the success of the application. Proper anchorage, restraint, harnessing, thrust blocks or other devices must be provided to prevent pipe movement (lateral, angular, axial) or pipe pullout from the bolt-on fitting. Inspection of the pipe integrity is the responsibility of the end user. JCM recommends the use of calibrated torque wrench. Failure to follow installation instructions will result in voided product warranty



INT213-2025



Stainless Steel Fastener Management and Tips and Tricks of the Trade for Successful Installation

JCM Quality Fittings Equipped With 18-8 Stainless Steel Bolts and Nuts

When not properly handled it is the nature of stainless steel fasteners to gall and freeze (seize up). This is due to the inherent properties of the stainless material. Galling and freezing is often triggered by the presence of metal chips, burrs and grains of sand on the threads of the bolts and nuts. Extra care has been taken by JCM prior to assembly and packing of this fitting to assure a trouble-free installation.

- 1. The nuts and bolts are made from material of different hardness so that they have different strengths.
- 2. Nuts are coated with a special anti-seize coating. Additional lubricant may be needed. A Molybdenum-Base lubricant is recommended.
- 3. Each nut is assembled by hand to be sure that it went on the bolt freely.
- 4. The bolts and nuts are handled carefully to avoid damage to the threads.
- 5. The bolts and nuts are made to exacting specifications to assure that the correct material is used and that the thread form is correct.

Stainless hardware is especially susceptible to galling. JCM supplies specially coated nuts to eliminate the galling caused by over-torquing, but the bolt threads must be kept clean, free from nicks and not pitched or thrown into the tool bucket during the installation process. Use of pneumatic wrench for installation could cause hardware to seize and is not recommended.

Tricks of the Trade

Years of field experience, special applications and product testing have revealed many subtleties regarding application and installation of bolted fittings. For maximum performance under adverse conditions take advantage of the JCM "Tricks of the Trade."

Lubricate the pipe with soap-water or water. Oil based pipe lubricants produce a film between the gasket and pipe surface that is not water soluble and can interfere with the gasket/pipe water tight seal.

- 1. Difficult to reach or cramped areas on the backside or underside of the pipe can be visually checked by using a mirror.
- 2. Couplings perform at optimal effectiveness when centered over joint area.
- To ease installation gaskets and pipe should be lubricated with water or soapy-water mixture. DO NOT use pipe lubricant or grease based products to lubricate. Lubricant does not dissipate with water and will not let the gasket adhere to the pipe.
- 4. While inspecting pipe ends, assess the condition of the pipe wall. Weakened or deteriorated pipe conditions should be analyzed and allowed for during the installation and bolt tightening process.
- 5. Lubricating coupling bolts will ease installation and assure proper torquing of bolts. During the bolt tightening procedure, tighten bolts in a star pattern, evenly compressing the gasket into the middle ring. Inspect for gasket misalignment or "cocked" position in the middle ring.

Backfill carefully. Improper assembly support and careless backfilling can sabotage an otherwise perfect installation.