Rubber Fab

a Garlock Hygienic Technologies company

Tri-Clamp Gasket Installation Guide

While installation of a gasket in a sanitary coupling is quite simple, there are a few tips we can offer. Lock out/tag out procedures are recommended for any system work to ensure the safety of the installers.

- Open the clamp and remove the old gasket. Many gaskets will leave a residue that must be cleaned off prior to installation of a new gasket.
- Center the gasket on the flange. Ensure that the gasket is the right size for the fitting. The gasket should align with the ID and any ridges in the gasket should align with the fitting geometry.
- Ensure that the gasket does not slip out of position while the clamp is added.
- Be sure to align and center the clamp on the fitting.
- When using clamps with multiple bolts, tighten the bolts to compress the gasket uniformly. This means tightening the bolts in steps to avoid pulling the faces of the fitting out of alignment.
- While many couplings are assembled by hand, some customers prefer to use a torque. Torques are as follows:
  - Buna, EPDM, FKM, Silicone:: 30 in/lbs
  - Tuf-Flex®: 30in/lbs
  - PTFE and Tuf-Steel®: 50 in/lbs
  - GYLON BIO-PRO® and GYLON® BIO-PRO PLUS™: 70 in/lbs
- Retorques: Allowed up to two (2) times. Since many applications require gasket replacement on a scheduled basis, retightening is not usually necessary, testing has shown that sealability was improved and no issues with intrusion occurred if the fittings were retightened after installation.

FACTORS AFFECTING GASKET PERFORMANCE

A gasket has one basic function: to create a positive seal between two relatively stationary parts. The gasket must do a number of different jobs well to function properly - first, create an initial seal; second, maintain the seal over a desired length of time; third, be easily removed and replaced. Varying degrees of success are dependent on how well the gasket does the following:

1. Seals system fluid
2. Chemically resists the system fluid to prevent serious impairment of its physical properties
3. Deforms enough to flow into the imperfections on the gasket seating surfaces to provide intimate contact between the gasket and the sealing surfaces
4. Withstands system temperatures without serious impairments of its performance properties
5. Is resilient and creep resistant enough to maintain an adequate portion of the applied load
6. Has sufficient strength to resist crushing under the applied load, and maintain its integrity when being handled and installed
7. Does not contaminate the system fluid
8. Does not promote corrosion of the gasket seating surfaces
9. Is easily and cleanly removable at the time of replacement

During the gasket product selection process that follows, we recommend that these nine (9) factors be used as a checklist from the viewpoint of the user's degree of need for each factor and the manufacturer's degree of compliance.

TRIPLEX Sales Company