
Installation Requirements

Fitting of Maxiflex Spiral Wound Gaskets and Maxiprofile Kammprofiles

The following recommendations will enable the gasket user to obtain the best service for our gasket materials:

1. JOINT PREPARATION

- 1.1. Check that the joint faces are clean and free from cuts, indentations and other marks. Radial marks crossing the joint face are a particular concern, and can lead to the joint leaking on testing or in-service.
- 1.2. Where flange faces have a gramophone finish it is important that the grooves are clean and that the surface finish is within the specified range of 3.2µm to 6.3µm Ra.
- 1.3. Check that the flange faces are parallel or that the pipework is sufficiently flexible to allow the flanges to be pulled parallel and concentric without undue bolt loads.

2. GASKET CONDITION

- 2.1. Always use a new gasket. Once a gasket has been compressed its sealing performance will diminish on reuse
- 2.2. Check that the gasket is in good condition. Light marking / scratching of the graphite is permissible, but if the graphite is missing from part of the gasket then gasket should be replaced.
- 2.3. Ensure that the gasket dimensions are correct for the class and size of the flanges involved.
- 2.4. Check that the gasket is dry. When handling a gasket avoid contact with liquids such as oil or water. In its uncompressed form the gasket can absorb liquid, and this may lead to failure of the gasket in service.
- 2.5. Check that the gasket is centralised on the studs/bolts. If the gasket needs to be fixed to the flange prior to assembly then a light dusting of spray adhesive may be used. The adhesive should be applied sparingly and in isolated spots on the flange / gasket surface. Four areas of applications are usually sufficient. Ensure that the adhesive used is compatible with the flange material

3. BOLTING

- 3.1. Check the condition of the bolts and nuts. Wire brush the bolt and nut threads until they are free of loose rust. Apply an approved lubricant to the bolt threads, to the nut threads and to the face of the nut to be tightened. Do not apply grease or bolt lubricant to the joint face.
- 3.2. After cleaning and lubrication it should be possible to run the nut along the full length of the bolt by hand. If this is not possible the bolts and nuts should be refurbished or replaced.
- 3.3. Scrape, wire brush or file as necessary the back face of each flange where the bolt heads or nuts are to sit, ensuring that the surfaces are clean and flat.

4. JOINT ASSEMBLY

- 4.1. It is recommend that the bolts are tightened using a controlled method such as torque, tension or Rotabolt. If using a torque wrench, ensure that it is accurately calibrated. For Torque settings please refer to Klinger Technical.
- 4.2. When using torque, tighten bolts in three stages to the required as follows:
 - i) Finger tighten nuts.
 - ii) Carry out tightening, make at least three complete diagonal tightening sequences.
 - iii) Make a final tightening sequence, working around the flange, tightening each bolt in turn until the specified torque is applied.
- 4.3. Check that the flange faces are parallel.