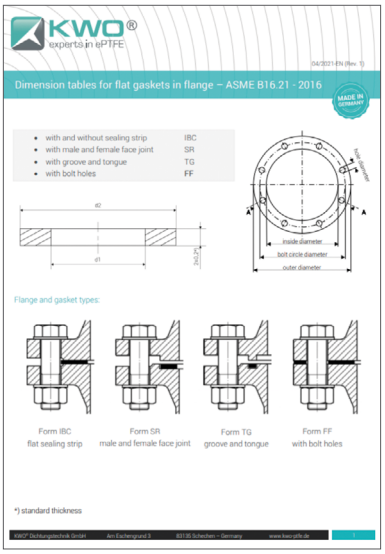
KWO® MultiTex® Ring

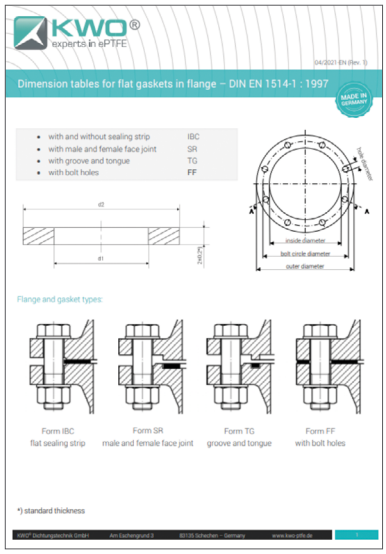
MADE IN GERMANY

1. Select the correct size gasket to match the flange dimensions

Choose a gasket that matches the pressure class and nominal diameter of the standard flange:



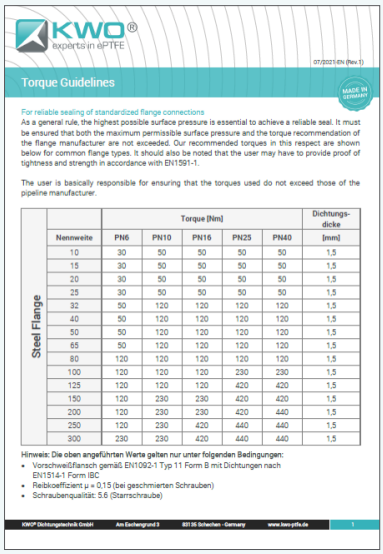
Dimension tables for flat gaskets – ASME B16.21 – 2016



Dimension tables for flat gaskets – DIN EN 1514-1 : 1997

2. Determine Torque Value

To achieve a reliable seal, adequate gasket stress must be applied during installation.
The tables provide an estimation of torque for use during assembly of pipe flanges.



Torque Guidelines

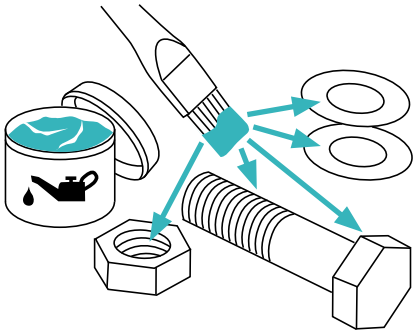
3. Review and Follow Standard Bolted Flange Assembly Practices

KWO® Gasketing Products do not require special assembly practices. However, utilizing industry best practices is always recommended when assembling a bolted flange joint. Such practices have been developed by ASME, European Sealing Association (ESA), the Fluid Sealing Association (FSA) and the Association of German Engineers (VDI).

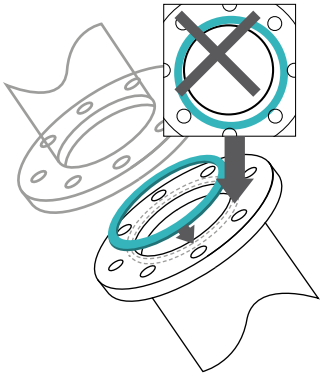
- ESA/FSA Gasket Installation Procedures Assuring Joint Integrity and Maximum Safety
- ASME PCC-1 Guidelines for Pressure Boundary Bolted Flange Joint Assembly
- VDI 2200 – Tight flange connections: Selection, calculation, design and assembly of bolted flange connections
- ASME also offers training classes on bolted flange joint assembly
- Multiple organizations also offer EN 1591-4 specified training content for bolted flange joint assembly

4. Torquing

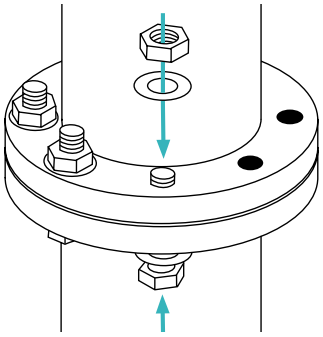
1. Lubricate all connecting and fastening elements (screws, nuts and washers).

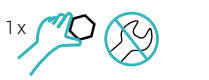


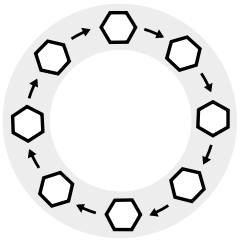
2. Align the gasket so that it is centered on the flange (use the screws as a guide).

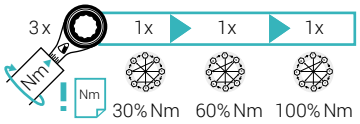


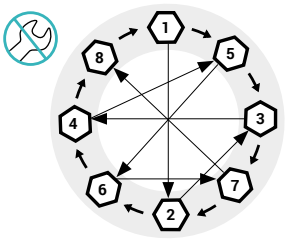
3. Install screws, nuts and washers on the flange.

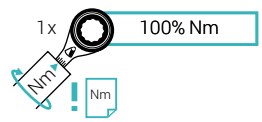


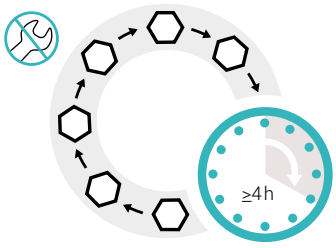


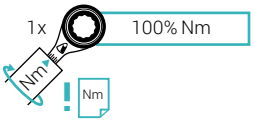


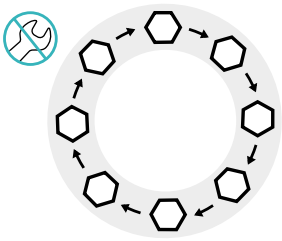












4. The screws are initially hand tightened in a sequential circular pattern.

5. Tighten the screws crosswise in three phases by using a calibrated torque:

- 1st pass: 30 % of target torque
- 2nd pass: 60 % of target torque
- 3rd pass: 100 % of target torque

6. Tighten the screws crosswise with 100% of the torque and wait for 4 hours.

7. For final installation retighten the screws crosswise until the required torque is reached.