

WT-B ePTFE gasket tape - Assembly Instruction

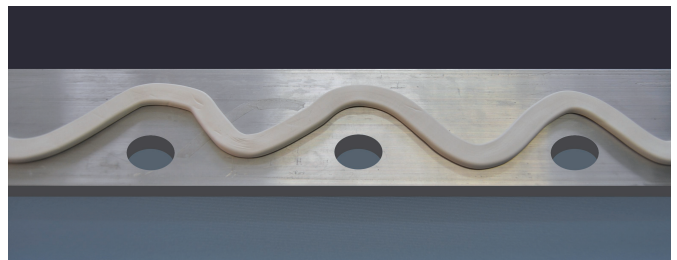


Figure 1

For gasket widths bigger than 30 mm and for flanges with a rectangular sealing surface contour, it is possible to conduct a V-cut to avoid material accumulation at the edges (especially important with stress-sensitive materials) and to facilitate mounting in general (see Fig. 2 and Fig. 3)

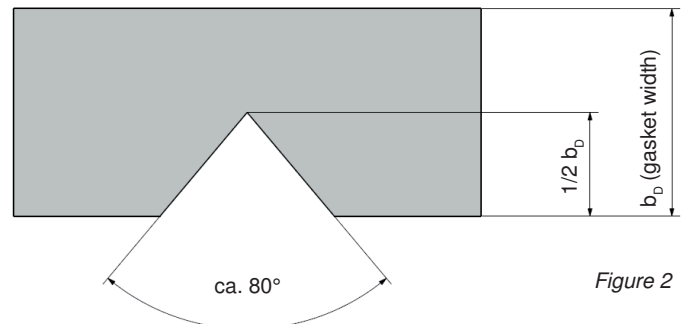


Figure 2

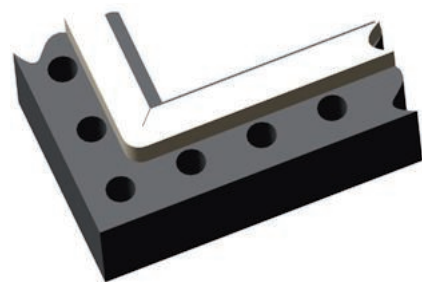


Figure 3

WT-B gasket tapes are used for sealing in frictional connection.

Selection of gasket tape dimensions

Selection of gasket tape width

For steel flanges, the gasket tape width should cover 30-50% of the sealing surface width. For stress-sensitive flange materials such as enamel or glass, the gasket tape width is to cover the whole sealing surface width.

Selection of gasket tape thickness

As a rough rule of thumb, the bigger the flange diameter, the higher the unevenness, the thicker the gasket tape. Determining for the correct choice of tape dimensions are the concrete conditions and properties of the sealing connection. The selected gasket thickness at least should be three times the largest unevenness. For large local unevenness it is not mandatory to select a thicker gasket tape, since, in this case, the area can be padded with one or several layers of WT-B gasket tape. For example, padding with a 3 mm thick WT-B gasket tape compensates 1 mm of unevenness.

Selecting the installation type

For steel flanges, mount the gasket tape centrally, following the outline of the sealing surface. Avoid turn-over torques with stress-sensitive as well as thin materials. In this case, mount the gasket tape in a meandering way (see Fig. 1).

Assembly

Preparation of sealing surface

Remove any oil, moisture, solvents and other residues from the sealing surface.

Padding of local unevenness

In case the thickness of the present WT-B gasket tape is not sufficient for evening local unevenness, padding with WT-B gasket tape is to be conducted. Localize and mark the areas with local unevenness and join the flange surfaces to measure the gap sizes of the respective areas.

Attention! Mark the position of the flanges and remain position in assembly process!

Example:

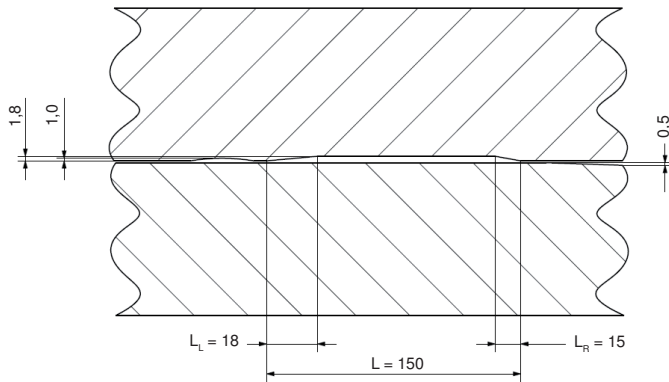


Figure 4

Unevenness (general): 0,5-1,0 mm
Local unevenness: 1,8 mm

In reference to Figure 4, WT-B gasket tapes of 3 or 6 mm thickness can be used. In case of the first alternative (3mm thickness), it is mandatory to conduct a padding of the area of local unevenness. Affix WT-B gasket tape with thickness 3mm and length $L = \text{ca.} 155 \text{ mm}$ and bevel cut the left side to length $L_L = 18 \text{ mm}$ as well as on the right side to $L_R = 15$ (Fig.5).

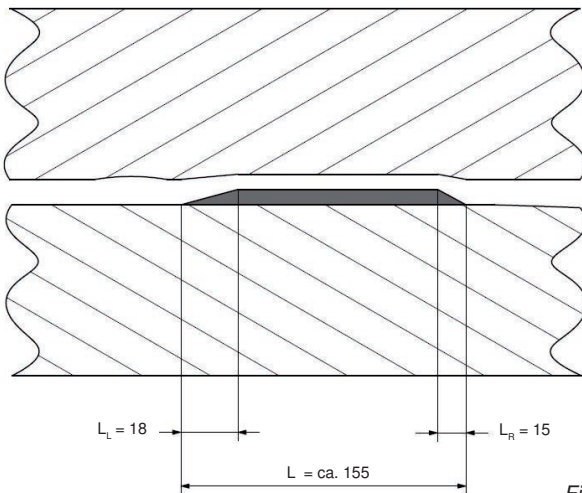


Figure 5

The width of the gasket tape used for padding is obliged to have the same width than the gasket tape used for sealing.

Mounting of WT-B gasket tape

Release the protective film from the self-adhesive back for about 10 cm and mount the gasket tape, beginning from a bolt hole, with respect to the selected installation type. Execute a bevel cut as shown below (Fig.6).

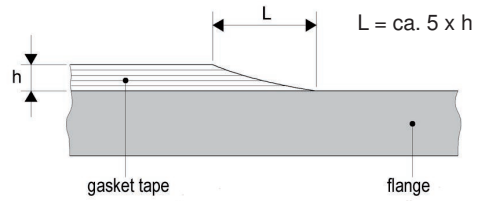


Figure 6

Gradually mount the gasket tape on the sealing surface, simultaneously removing the protective film. Join the endings and cut the gasket tape with a sharp knife starting from a height of $1,2 \times h$ converging to the gasket tape height h as shown below (Fig.7).

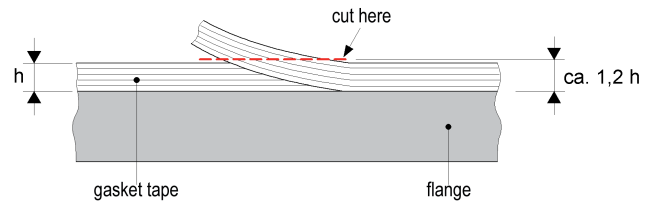


Figure 7

Tighten nuts crosswise in 3 to 4 progressive torque sequences until the optimum torque or bolt force is reached. After the first temperature cycle, retighten nuts to 2/3 of the initial bolt force. Retighten stress-sensitive components only at ambient temperature and pay attention to the maximum torque stated by the manufacturer.

When mounting, the maximum load ($\sigma_0 = 150 \text{ MPa (N/mm}^2\text{)}$) must not be exceeded!

Please note: All technical information and advice given is based on our previous experience to the best of our knowledge. However, this does not constitute any liability on our part. Given that only someone who is able to check all application conditions on site may reliably assess the performance of a product, specifications and values are always subject to revision by the user.

© Copyright 2013 . All rights reserved Rev.Nr.: 01/06.08.2013