

Butterfly valve - corrosion

APPLICATION DATA SHEET No. 127

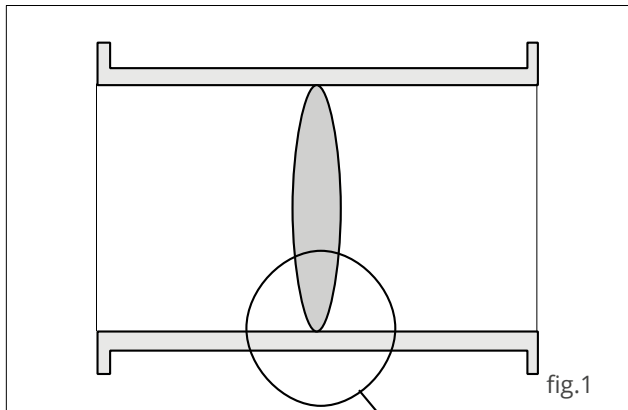


fig.1

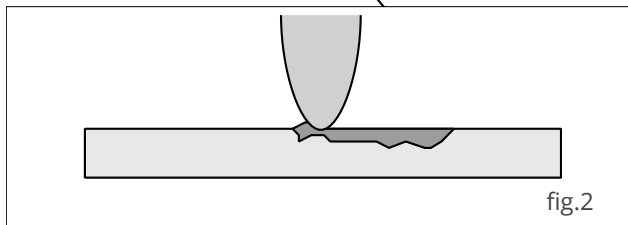


fig.2

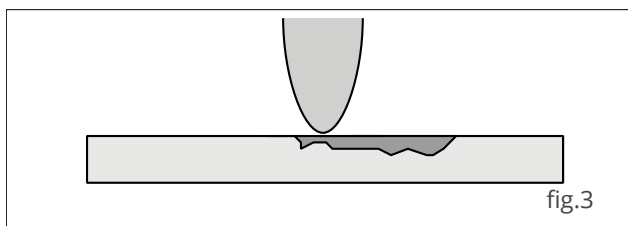
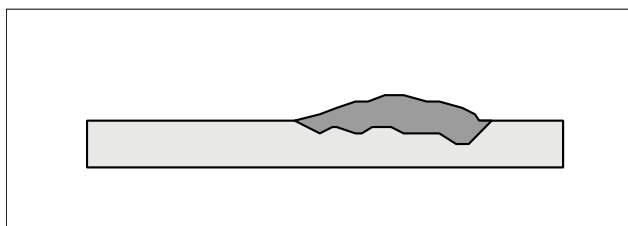


fig.3

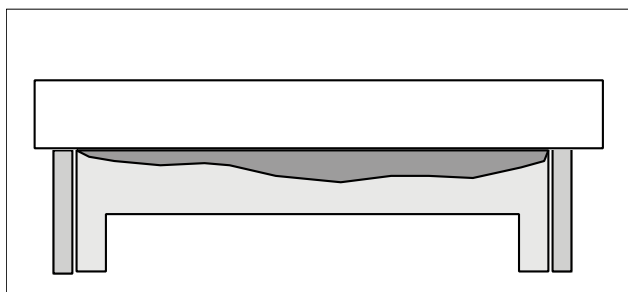


fig.4

Valves are normally repaired due to bimetallic corrosion or erosion / corrosion. In both cases, the surface preparation is very important.

Carry out surface preparation, acc. to Wencon surface preparation, next page.

Method 1

Open the valve, and apply Wencon Release Agent on the valve plate.

Mix and apply a suitable amount of Wencon Cream or Rapid into the corroded area in the valve housing and close the valve.

A perfect fit between the plate and the housing is hereby created, see fig. 1. After curing, open the valve and grind away excess material. If the plate is corroded, this must be repaired prior to the housing.

After the repair, the entire surface should be coated with Wencon Coating to prevent further corrosion.

Method 2

Disassemble the valve, and grit blast the parts.

Apply Wencon Cream or Rapid to the corroded areas (or the whole internal surface), leave it for curing and machine it to the right measures.

After machining, apply Wencon Coating to prevent future damage.

If the housing is badly corroded, it can be advantageous to make two plywood "flanges" to help give the right surface inside.

Use a big template / matrice for the application see fig. 4.

Wencon surface preparation

Choose the relevant surface preparation, depending on the nature of the job.

Surface preparation using dry blasting methods:

Application with Wencon products on a dry surface, at minimum 3°C above dew point.

1. Blast the machine part to SA 2,5 using sharp-edged blasting media, to a roughness of min. 75 microns.
2. Leave the part for sweating out salts in a warm place for at least 12 hours or heat it up to 30 - 40°C (86-104 °F) using gas torches.
3. Blast again to SA 2,5, prior to the application.
4. For parts containing a lot of water and salt, it may be necessary to repeat point 2 and 3, until the surface remains light grey, for at least 2 hours after blasting.
5. For optimal adhesion of Wencon products, always use Wencon Bio Cleaner or Wencon Cleaner prior to application. Follow one of below two methods:
 - 5.1 **Wencon Bio Cleaner**
Wet surface: Apply Wencon Bio Cleaner and let it work for 5-10 min. If necessary use a brush, to make sure the surface is clean. Rinse off with clean water and wipe off with an absorbing cloth.

Dry surface: Apply Wencon Bio Cleaner and let it work for 5-10 min. If necessary use a brush, to make sure the surface is clean. Rinse off with clean water and dry with an absorbing cloth or with compressed air for a completely dry surface. Hereafter any Wencon products can be applied.
 - 5.2 **Wencon Cleaner**
After surface preparation, apply Wencon Cleaner with a brush and allow the product to evaporate before applying other Wencon products. Wencon Cleaner is non-flammable. Use only in large or well ventilated rooms.

Surface preparation using wet/damp methods:

Water jet the entire surface with water and sand to a standard equal, to SA 2,5 as described above.

If the surface is left wet after surface preparation, is it important to dry out the surface or alternatively use a Wencon UW product.

Surface preparation for emergency/temporary applications:

If above surface preparation methods are not possible, it may be necessary to use one of below methods:

- Blasting
- Grinding
- Needle Gunning

In emergency / temporary applications it may be difficult to prepare the surface according to above methods. In any case, it is important to clean the surface to SA 2,5 and 75 microns roughness. If possible dry the surface before applying. If not possible, use Wencon UW products.

For further information on Wencon surface preparation, please contact our Area Sales Managers.