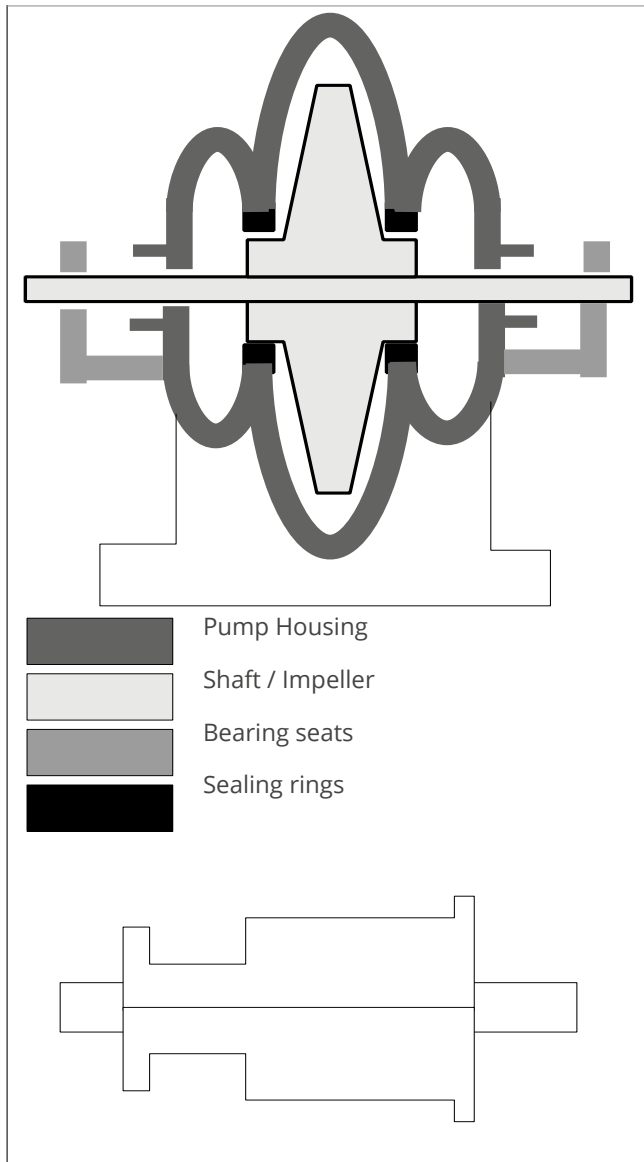


Pumps split-case, sealing seat - corrosion

APPLICATION DATA SHEET No. 109



Corroded sealing seats and stuffing box housings are normally repaired by welding and line boring, but it is a long and costly process.

1. Disassemble the upper part of the pump housing and the impeller. Leave the bearings on the shaft.
2. Fit new sealing rings on the impeller placing a layer of foil or paper between the ring and the impeller. This ensures a central position of the ring. Apply a coat of Wencon Release Agent on the outside of the ring.
3. Clean the seating in the lowest part of the pump. Mix and apply Wencon Cream to the seating and the outer sides of the sealing rings. Assemble the impeller and mount the bearing seats. This moulds the ring seating to an exact fit to the rings.
4. After curing remove the impeller, grind the edges, treat the rings surfaces of the upper part with release agent, and mould the upper part of the housing in a corresponding manner. Remember to insert the gasket during this second moulding.
5. Stuffing box housings are cast in a similar way possibly at the same time. The casting template is made of two pipe shells (see diagram) which are tightened on the shaft. These must have the same shape as the stuffing box house is to have. Treat the shells with Wencon Release Agent before casting.

The advantage of method of repair, compared to traditional repairs or a replacement, is the time saved, the costs saved and the fact that the part is now life extended and protected against corrosion for up to 10 years.

The roller bearing seating can sometimes become damaged. These can be restored to it original dimensions using the same method as above.

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.