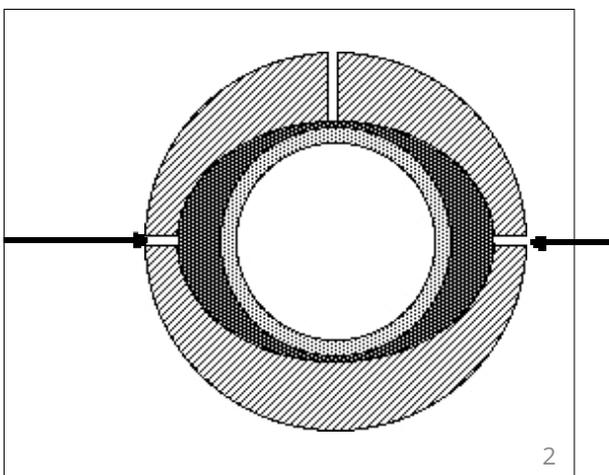
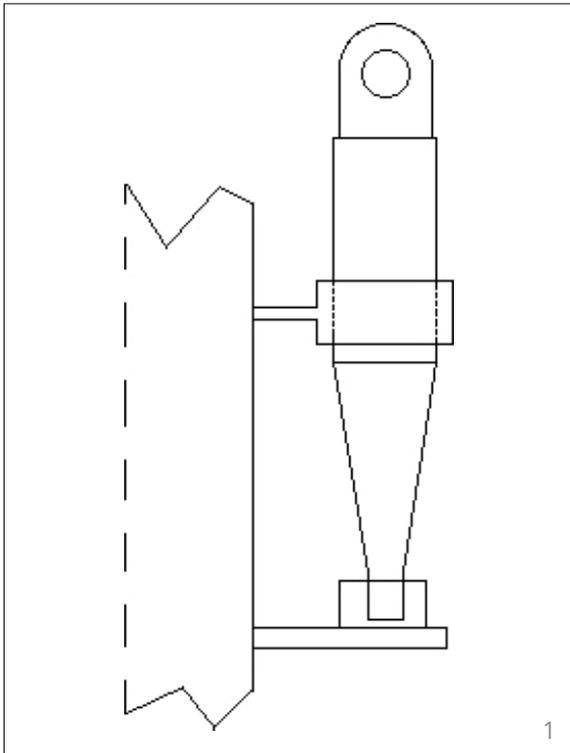


## Rudder heel pin, derrick - oversized

APPLICATION DATA SHEET No. 136



The traditional repair of oversized or oval needle bearings consists of welding and line boring. The method is very time consuming, especially because of the line boring.

Another method for this type of repair job is casting, which is described below:

1. Machine a thin bushing, and create room for it by means of grinding or using a blow torch.
2. The internal surface in the bushing seat should be prepared acc. to Wencon surface preparation, next page.
3. Apply a thin coat of Wencon Release Agent on the outside of the bushing. This prevents adhesion to the bushing and eases future replacement of the bushing.
4. Mix and apply a suitable amount of Wencon Cream or Rapid on to both the mating surfaces.
5. Put the bearing in position, and centre it by mounting the pin.

Alternative:

In some cases, the time factor makes you want to alter the method a bit. Mount the bushing without the Wencon material in between. Place it in position, and inject the Wencon through holes made as shown in fig. 2.

## 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.