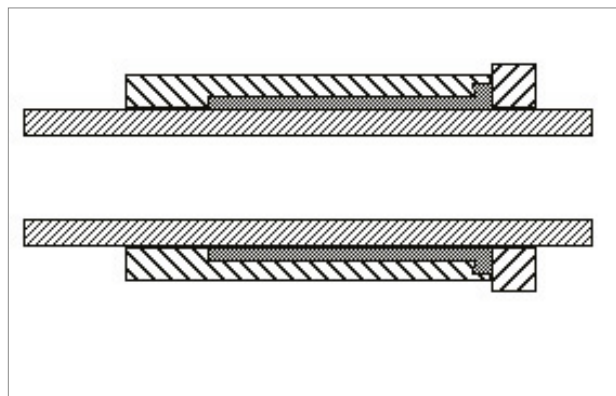
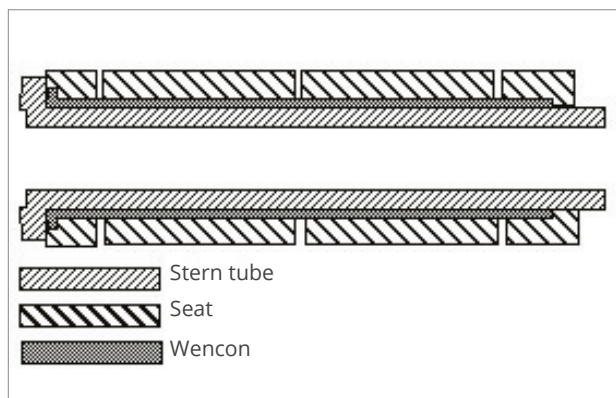


## Stern tubes - casting of seats

APPLICATION DATA SHEET No. 117



Some of the advantages in the technique for casting seats for stern tubes are: better mating surfaces, no demand for line boring.

1. The seat shall be given a rough and clean surface. The diameter shall be approx. 8 mm (0,32 inch) larger than the stern tube.
2. Drill holes in the bottom of the seat (a) for injection. The number of holes depends on the length. Drill holes in the top for ventilation. All the holes may be tapered to make it easy to mount bolts after injection has been finished.
3. In the bottom of the tube, an O-ring or the like creates a seal to prevent the casting material from escaping.
4. Mount the stern tube in the desired position. Seal the outer flange with a sealant or with Wencon Rapid.
5. The temperature of the working area shall be 15-20°C (51-68°F). Avoid heating of the stern tube.
6. Use an air driven sealant gun for the injection.
7. Calculate the approx. consumption of casting material.
8. Mix one unit of Wencon Coating and fill it in an empty cartridge (can be supplied from Wencon) and inject into the rear hole. Repeat this until the casting has reached the next hole, plug the first hole and continue in the second. Repeat until the entire gap is filled.

**This technique is approved by B.V.**

The bottom drawing shows the other end of a stern tube that shall be treated the same way.

## 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.