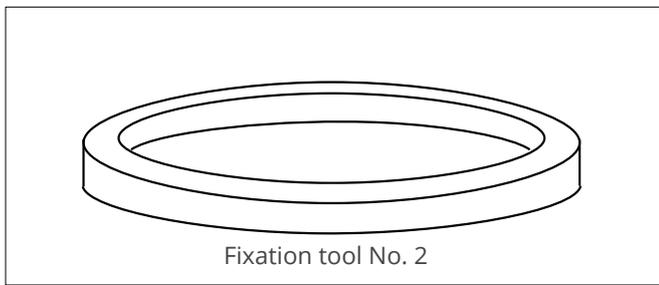


Rudder stock cone application

APPLICATION DATA SHEET No. 113.1



Problem:

Corrosion and/or bimetallic corrosion attack on inner surface of rudder blade cone and/or rudder stock cone (with key and key way).

Solution:

Building up a new surface in the inside of the rudder blade cone.

It is important that two auxiliary tools are prepared. The tools shall make it possible to centre the rudder stock and to keep the total length of the rudder stock/rudder blade.

Fixation tool No. 1

The height is given from the space under the bottom of the stock. The diameter of the upper part is given from the diameter of the bottom part of the stock. After fabrication the tool is stick welded to the rudder.

Fixation tool No. 2

The diameter of this ring is given from the diameter of the stock on the top side of the rudder. The ring shall be stick welded to the top of the rudder.

These tools will assure that the Wencon material, which is used for creating the new seat for the cone, will be cast in an even thickness round the rudder stock.

The rudder blade cone shall be cleaned acc. to Wencon surface preparation, next page.

It is hereafter ready to be taken back to the workshop and to be installed in an upright position.

If necessary, machine the rudder stock cone to remove corrosion. Place the rudder blade cone. Apply a thin layer of Wencon Release Agent on the rudder stock cone. Leave it for drying in at least five minutes and remove excess Wencon Release Agent leaving only a thin film.

The application

Mix a suitable amount of Wencon Cream and apply it to both the surface of the rudder blade cone and the rudder stock cone. Make sure that enough material is applied.

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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.