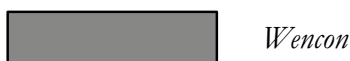
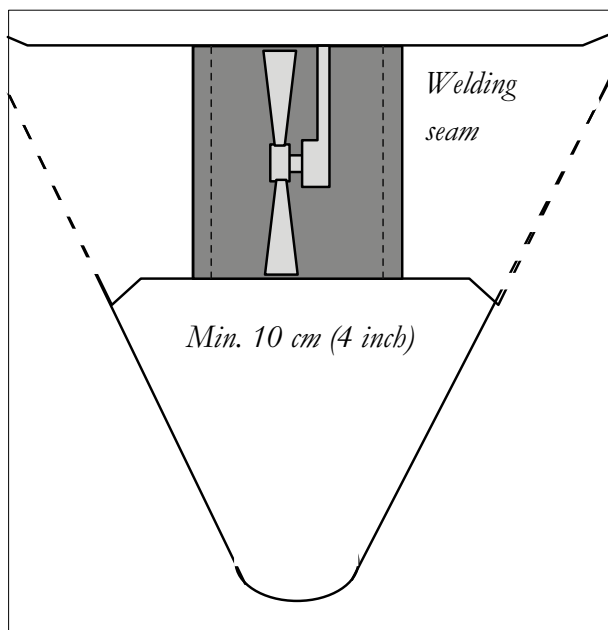
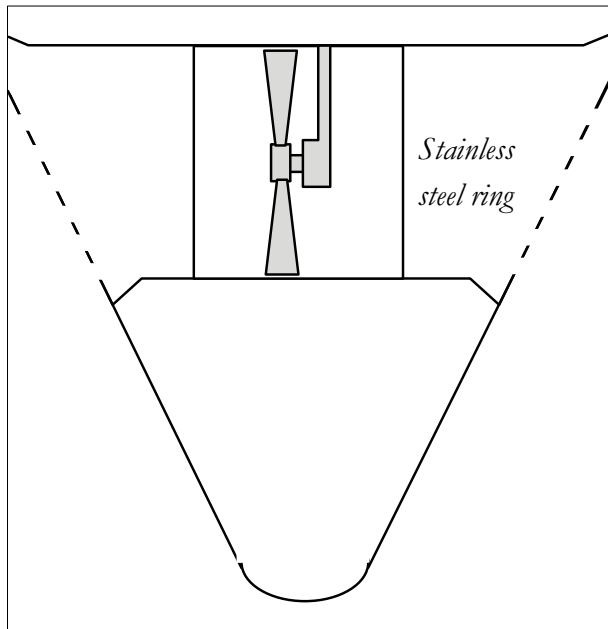


## Bow Thruster tunnel - corrosion

APPLICATION DATA SHEET No. 156



The Bow thruster tunnel can be suffering from bi-metallic corrosion. The reason is the mix of many different metals in that area, such as mild steel, the stainless steel band, bronze head / propeller etc.

The area is easy to repair and to protect against bi-metallic corrosion, by rebuilding the pittings with Wencon Rapid, and by applying a protective layer of Wencon Coating.

1. Blast the area to SA 2,5. All the attacked areas have to be blasted - at least to 10 cm on each side of the welding seams for the stainless steel band. Clean acc. to Wencon surface preparation, next page.
2. Rebuild the surface to original dimensions using Wencon Cream or Wencon Rapid. Making sure that all pittings are filled out.
3. Apply the first layer of Wencon Coating while the first layer is tacky, and let it semi-cure.
4. Mix and apply the third layer, using Wencon Coating, while the second layer is still tacky and let it cure.
4. The tunnel can be painted with a common ship paint here after to have an even colour.

Bow Thruster Heads suffering from bi-metallic corrosion can be repaired using this same method.

Alternative products: Wencon Ceramic products

## 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.