

## Water Jet tunnels

<b>Application:</b>	Rebuilding and protection of bi-metallic corrosion
<b>Place:</b>	FA Yard, Denmark
<b>Date:</b>	June 2005
<b>Job and report done by:</b>	Wencon technician and yard staff
<b>Wencon products used:</b>	Rapid, Coating white and blue, Cleaner, appl. tools



1. & 2.

Due to bi-metallic corrosion, surface condition of all 5 tunnels, were in very poor condition.



3. & 4.

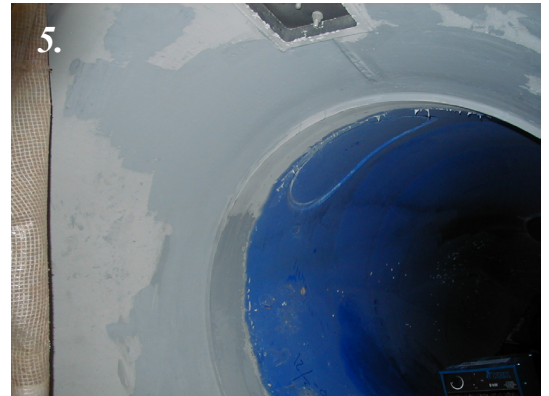
In order to do a proper surface preparation, all areas to be protected, are sandblasted, sweated out and sandblasted again, to make sure there is no salt and water left in the material. Then surface is cleaned with Wencon Cleaner and ready for rebuilding.

During application, it is necessary to keep a constant temperature around 20° C. using electrical heaters and covering the area with a tent.





5. To rebuild the surfaces, Wencon Rapid was chosen, due to short semi curing time. Wencon Rapid was left to semi cure about 1 hour before applying first layer of Wencon Coating. (Wencon Rapid still tacky).



6. & 7.

First layer of Wencon Coating applied, semi curing approx. 2 hours before applying second layer.



8. Second layer of Wencon Coating Blue, applied while the first layer still is tacky.



9. Final result.

Job was done around the clock, in order to do coating wet in wet.



**Choose the relevant surface preparation, according to the nature of the job. Seek advice from a Wencon Technician if needed.**

## **Specification for surface preparation for Dry Applications**

Defined as applications, where the Wencon product will be applied to a surface at a temperature minimum 3 degrees above dew point. Use the Wencon Products: Wencon Cream, Wencon Rapid, Wencon Coating, Wencon Ceramic Cream, Wencon Ceramic Coating, Wencon Hi-Temp, all requiring a dry surface.

1. Blast the machine part to SA 2 ½ 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 ½ immediately prior to the application.
4. For parts containing lots of water and salt, it may be necessary to repeat 2. and 3. until the surface remains light grey for at least 2 hours after blasting.
5. Always use Wencon Cleaner prior to application.

## **Specification for surface preparation for Wet/Damp Applications**

Defined as applications, where the Wencon product will be applied to a surface at a temperature less than 3 degrees above dew point. Use the products Wencon UW Putty, Wencon UW Cream and Wencon UW Coating for applications on wet or damp surfaces.

1. Water jet the entire surface with water and sand to a standard equal to SA 2½, as described above.

## **Specification for surface preparation for Emergency/Temporary Applications**

### **Perago Treatment**

Perago is a rubber disk with hard steel spikes mounted on the periphery. Perago can be mounted in a normal drilling machine, and gives a surface close to a blasted surface - clean and rough with sharp edges. Perago dishes can be ordered at Wencon and at all Wencon Distributors.

### **Grinding**

Wheel grinding is often an acceptable surface preparation for emergency applications, where shot blasting is not possible. When grinding use a coarse stone or flap. Use the Wencon Cleaner before and after grinding. Grinding with sandpaper or emery cloth is only advisable when, for example, carrying out shaft-repair on a lathe. Often the grinding will not hit the dents.

### **Needle Gunning**

Needle gunning is a method that has almost been forgotten in recent years. Or should we say is mostly used for very rough cleaning or removal of rust. It is possible to do a very nice job using a needle gun, but it takes time and should be closely supervised. It is essential that the marks from the sharp needles cover the whole surface so that none of the original surface remains. It is recommendable to steam clean the surface before needle gunning.

### **Wire Brushing**

Wire brushing can be a good way of removing scales, rust and old paint. However, you will need to grind the surfaces after the wirebrushing to make the surface as rough as possible.