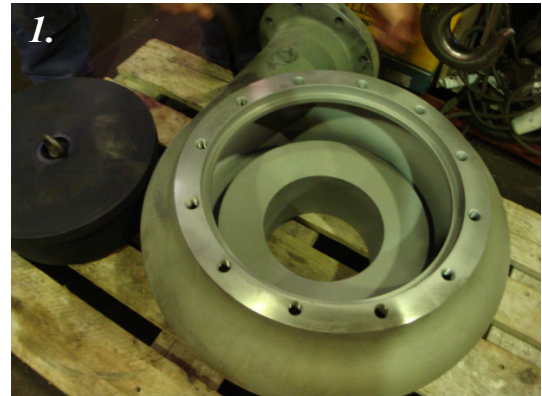


# Mud Precharge Pumpcasing

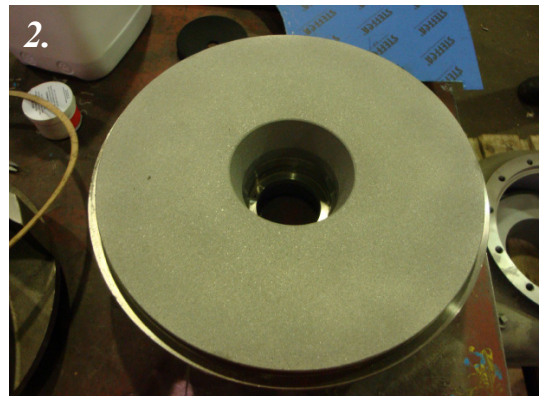
<b>Application:</b>	Wear protection of Pumpcasing
<b>Place:</b>	Assens Shipyard - Workshop
<b>Date:</b>	October 2013
<b>Job and report done by:</b>	Assens Shipyard Ltd, Denmark and Wencon technical Supervisor
<b>Wencon products used:</b>	Ceramic Coating, Release Agent, Cleaner, appl. tools



1. Picture of mud Pump. Inside of the Pump is grit blasted to AS 2,5 in order to achieve better attachment of the Wencon material.

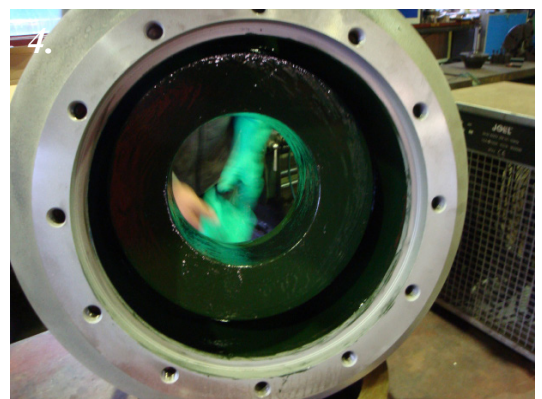


2. Cover of the Pump house. Also gritblasted, in order to achieve optimal attachment of the Wencon material.



3. & 4.

Coating of the Pump house with 4 layers of Wencon Ceramic Coating. Final layer thickness approximately 1200 microns, at the lowest level.



5. Mandrel for coating applied with Wencon Release Agent.



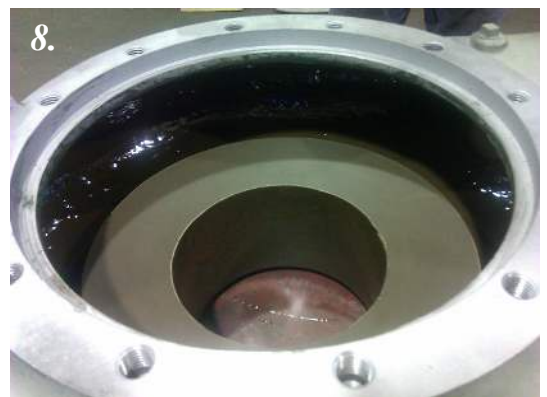
6. Mandrel applied with Wencon Ceramic Coating, ready to be placed in position.



7. Mandrel is positioned in the pump housing.



8. Result of using mandrel inside Pump house.  
The exact clearance and angel from the original is transferred in the coating.



9. Final result of cover.



10. Final result inside Pump house.



11. Final result.



12. Final result painted red on the outside.



**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.