

## Suction wells in cargo tank

<b>Application:</b>	Repair of Suction wells in cargo tank
<b>Place:</b>	Gdynia, Poland
<b>Date:</b>	July 2008
<b>Job and report done by:</b>	Wencon technician and owners crew
<b>Wencon products used:</b>	1088, Ceramic Filler, Perago Disc, appl. tools



## Introduction

During docking, plates were renewed in the suction wells, in a cargo tank. In order to protect the new steel, and slow down the wear process, it was decided to apply a special wear resistant coating (Wencon 1088 + Ceramic filler), and top it with normal tank coating.

1. The well is chipped with a 7 layer Perago Disc. All dust is brushed away, and the surface is degreased with Wencon cleaner.
2. Prior to application, Wencon Cleaner has been applied to ensure best adhesion.
3. Ceramic filler is added to the Wencon 1088, and a thick layer is applied on top of the first semicured layer.
4. Wencon 1088 is mixed, and applied with a brush. After curing for 2-3 hours, area is ready for the second layer.



5. After further 8-10 hours curing time, original tank coating is applied.



**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.

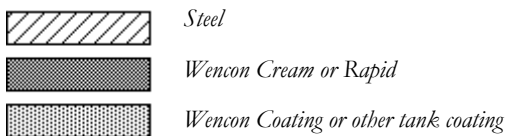
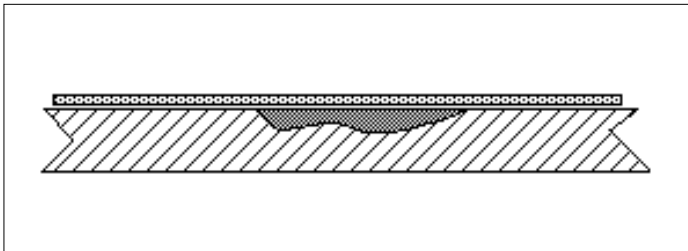
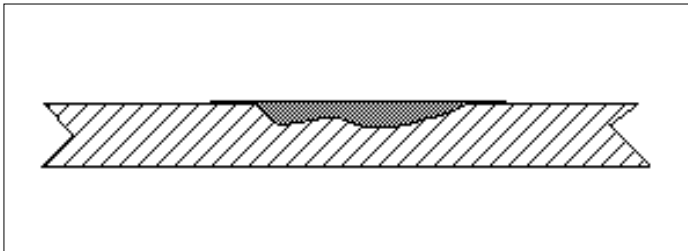
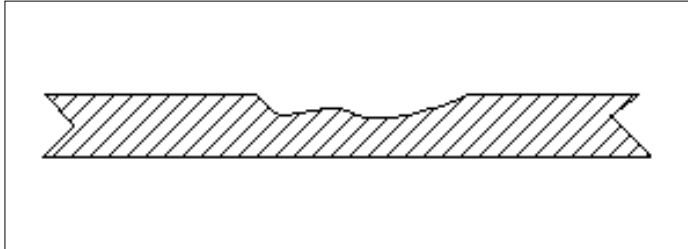
### **Needle Gunning**

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.

## Repair of pittings in tanks



Pittings in tanks can very easily be repaired using Wencon.

Whether the tank is coated or not, the pittings shall be pretreated as described in the surface preparation data sheets.

1. After surface treatment, mix and apply a suitable amount of Wencon Cream or Rapid (use Rapid for quick curing and/or deep pittings on vertical surfaces).

Make sure the material gets in good physical contact with the substrate.

- 2a. Coating with Wencon Coating.

After 1-2 hours curing, apply first layer of Wencon Coating, White, and after yet another hour (while the white coating is still a bit tacky) apply the final coat of Wencon Coating, blue.

- 2b. Coating with other brands of tank coating.

Apply first layer of any well known tank coating before the Wencon Cream or Rapid has fully cured, to ensure a first class adhesion.