

# **Physical Water Treatment** For Naval Ships

# Vulcan water treatment is the eco-friendly and salt-free solution to prevent scale and corrosion on naval ships

A naval ships carries a lot of machinery and equipment, which come in contact with water. Scale deposits in the piping system can cause fatal damage to engines and turbines, which are very expensive to repair.

In the daily use of water on board (in bathrooms, kitchens, etc.) Vulcan helps to eliminate problems caused by scale.

#### **Benefits of using Vulcan**

- ▶ Reduction of scale deposits in the whole piping system
- Minimizes overall operating costs and maintenance visits
- ► Maximizes life of appliances and equipment
- ► Reduces bacterial growth and biofilm (typical breeding ground for legionella bacteria)
- No need of salt or aggressive chemicals
- pH levels remain unchanged preventing corrosion
- Vulcan is also effective in low-flow areas
- ► Reduces hot water energy consumption

#### **Application Examples**

Piping systems Engines

Pumps and valves Steam turbines

Condensers Potable water

Heat exchangers Wastewater

Air conditioners Ballast tanks

Cooling towers

and chillers

Tanker equipment

Kitchens

Sporting facilities









**Engines:** Vulcan controls limescale deposits in the water cooled jackets, in transfer lines or coolers. Vulcan treats scale build-up in the heat exchangers (hot water production) or in the heat chambers in engines.

**Ballast tanks:** Ballast water will be handled easier and scale deposits will be reduced.

Potable water: Vulcan controls scale deposits in the desalination and works with distillation or reserve osmosis equipment.

Wastewater: Vulcan smooths the incrustations of all wastewater transport ways.

## **Quality - Made in Germany**



- Manufactured by Christiani Wassertechnik GmbH (CWT) Berlin
- Over 30 years experience in physical water treatment
- Available in more than 70 countries



#### **Benefits of using Vulcan for naval ships**

Reduction of scale deposits in pumps and transfer lines

Filters, shower heads, nozzles and sinks stay clean

Control of scale deposits in the desalination equipment

Prevention of blocked pipes, tanks and toilet flushing problems

Faster cleaning of kitchens and bathrooms

Increase of water pressure



Reduction of water consumption in cooling towers

More efficient use of energy consumption

Equipment and appliances last longer

Savings on cleaning agents and soap

Savings on heating



Softening effect on clothes and fabrics

Mineral rich drinking water

Less spotting and cleaner dishes

Reduction of biofilm and bacteria

Less need of chlorine



Vulcan has to be placed at the main water supply.



### **Vulcan - Against Scale and Rust**

Vulcan is the eco-friendly water treatment system which protects your pipes and equipment against scale and rust.

- ► Eco-friendly solution without chemicals or salt
- Reduction of existing scale in the piping system
- Maximum working life of machinery and equipment
- Important minerals remain in the water
- ► Long life fully cast in acrylic
- Maintenance-free
- 10 year international warranty
- Easy installation without cutting the pipe

- ► From ¹/₂ " up to 20 " pipe diameter
- Works on all pipe materials iron, copper, plastic, stainless steel, PVC, compound pipes, PE-X, etc.
- Vulcan operates on 24V DC and is suitable for connections with a 24V power plug and can also be directly connected to a 12V DC ship's power supply





Christiani Wassertechnik GmbH (CWT) Köpenicker Str. 154 | 10997 Berlin | Germany Phone: +49 (0)30 - 236 077 80











