



# The Electronic Anti-Scale System Naval Ships



**German Technology**  
**Absolutely Magnetism-Free**

**No Salt**  
**No Chemicals**  
**No Maintenance**



# Vulcan – The eco-friendly solution



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 reduces problems caused by scale.



## Benefits of using Vulcan:

- ▶ Reducing scale deposits in the whole piping system
- ▶ Minimizing overall operating costs and maintenance expenses
- ▶ Maximizing life of on board equipment
- ▶ Reducing the need for salt or aggressive cleaning agents
- ▶ Leaving pH levels unchanged - preventing corrosion
- ▶ Reducing hot water energy consumption



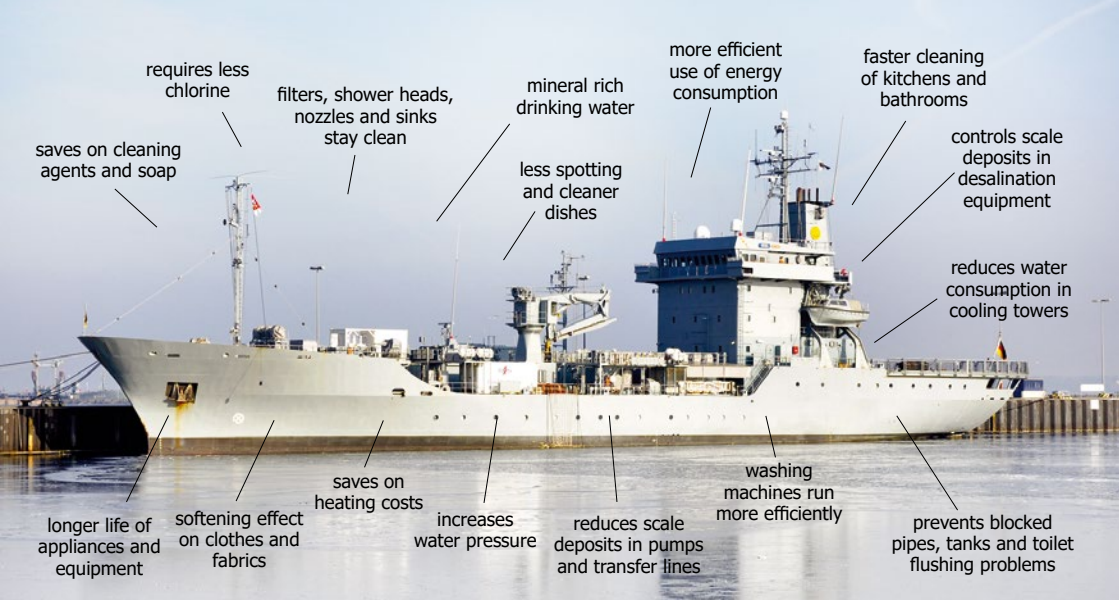
**Engines:** Vulcan controls limescale deposits in the water cooled jackets, in transfer lines or coolers. Vulcan treats scale build-up in the heat exchangers and in the heat chambers in engines.

**Ballast tanks:** Ballast water is handled easier and scale deposits are reduced.

**Wastewater:** Vulcan smooths the incrustations in all wastewater transport systems.

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



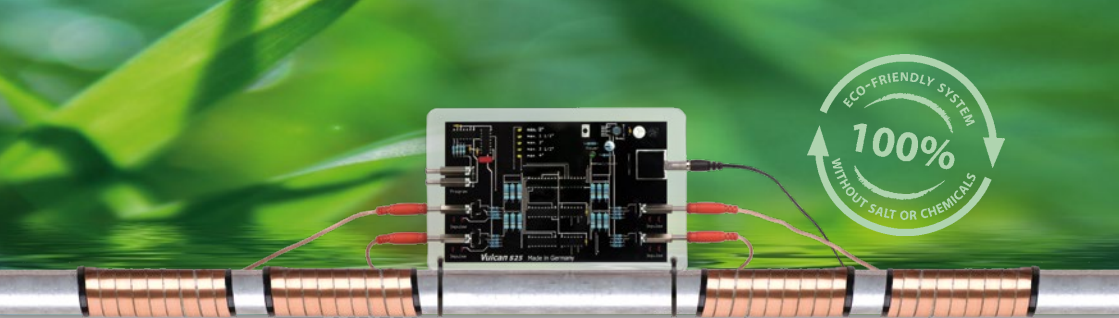


The **Vulcan - Impulse - Technology** treats the water with special electronic impulses that take away the adhesive power of the scale particles. Scale components are simply washed away with the water as a fine powder. Vulcan also reduces already existing deposits. In addition, Vulcan generates a protective layer that prevents rust and pitting corrosion.



### **Vulcan has positive effects in these applications:**

- |                  |                     |
|------------------|---------------------|
| Piping systems   | Potable water       |
| Pumps            | Steam turbines      |
| Valves           | Wastewater          |
| Condensers       | Ballast tanks       |
| Heat exchangers  | Restaurants         |
| Air conditioners | Kitchens            |
| Cooling towers   | Sporting facilities |
| Chillers         | Ship hospitals      |
| Tanker equipment | Bathrooms           |
| Engines          | Heating systems     |



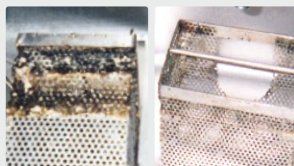
## **Vulcan** Prevents Scale and Rust

- ✓ Reduction of existing scale in the piping system
- ✓ Installation without cutting the pipe
- ✓ From 1/2" up to 40" pipe diameter
- ✓ Works on all pipe materials – iron, copper, plastic, stainless steel, PVC, compound pipes, PE-X, etc.
- ✓ 100% maintenance-free
- ✓ Eco-friendly solution without salt or chemicals
- ✓ Prolongs life of machinery and equipment
- ✓ Important minerals remain in the water
- ✓ Long life – fully cast in acrylic
- ✓ 25 year international warranty

### Visible results of Vulcan water treatment – before and after



Piping system



Grease trap



Grill plate in a kitchen

### Quality – Made in Germany

- ▶ Manufactured by Christiani Wassertechnik GmbH (CWT) in Germany
- ▶ Over 40 years of experience in physical water treatment
- ▶ Successful in more than 70 countries worldwide
- ▶ 25 years international warranty

