



# The Electronic Anti-Scale System Maritime Applications



No Salt  
No Chemicals  
No Maintenance

German Technology  
Absolutely Magnetism-Free



## Vulcan - the alternative to water softeners



Maritime vessels carry large amounts of machinery and equipment which come in regular contact with water. Scale and rust deposits can cause fatal damage to your pumps, to the piping system, to the onboard engines and turbines - all of which can be quite costly to repair or replace.

Vulcan helps to eliminate scale and reduces cleaning and maintenance in bathrooms, toilets, kitchens, fixtures and dishware.



### Benefiting Maritime operations by:

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



Cruise ship (top)

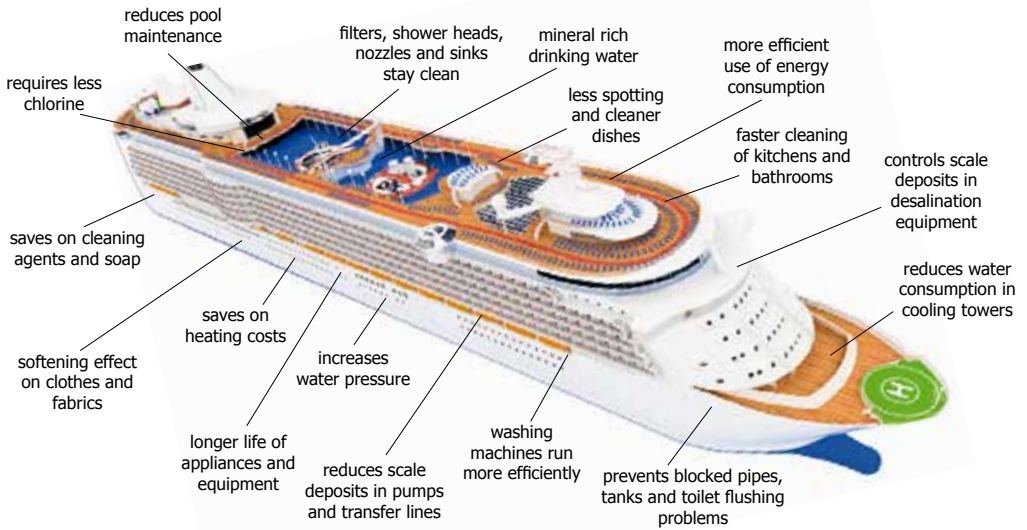
Cargo ship (bottom)

**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 reverse osmosis equipment.



## Application examples

- ▶ Cruise ships
- ▶ Passenger ships
- ▶ Cargo ships
- ▶ Naval ships
- ▶ Research ships
- ▶ Fishing ships
- ▶ Merchant ships
- ▶ Yachts
- ▶ Ferries ...



Professional kitchen in maritime vessel

## Vulcan has positive effects in these applications:

Piping systems	Potable water
Pumps	Wastewater
Valves	Ballast tanks
Condensers	Restaurants
Heat exchangers	Kitchens
Air conditioners	Sporting facilities
Cooling towers	Swimming pools
Chillers	Spas
Tanker equipment	Ship hospitals
Engines	Bathrooms
Steam turbines	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
- ✓ 10 year international warranty

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



Piping system



Grease trap



Grill plate in a restaurant

### 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
- ▶ 10 years international warranty

