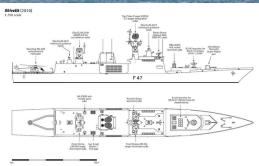


CASE STUDY







Shipping Industry Solutions

OVERVIEW

In the early 1990's the **Dutch Royal Navy** was looking for a "green" and reliable technology to solve the corrosion problem caused by desalinated water in the galley of the **M-Fregat** Class.

WATER SYSTEM CHALLENGES

The water supplied to the ship's galley (the kitchen) comes from the desalination plant of the ship located in the mechanical room (known as machine room). As desalination produce water free of dissolved minerals there is a corrosion potential problem. A known post-treatment is adding lime scale, however, to avoid scale build up the designers were looking for different solutions.

SOLUTION

the Dutch company SEATAG (HOL24) had supplied two 4" **ION ScaleBuster**® SB100-EF-16 (in category JKI-100) in September 1992 which were installed as corrosion protection for the first ship of this class as a pilot. Both conditioners had treated galley supply water.

RESULTS

After one year of monitoring results, the Royal Navy had approved the technology (marked as a **NATO** part number **NSN 4610-17-106-4082**). Based on these results, the technology was installed in various Royal Navy vessels. In the mid-1990's, the **ION ScaleBuster** technology was adopted by the **British Royal Navy** who was searching for non-chemical solution to reduce scale build up in the water piping system of the galley of training vessels (water was filled from shore daily). The 4" SB100 was installed as a pilot on one ship, and following good results was installed in other RN vessels.

ABOUT THE TECHNOLOGY

The patented **ScaleBuster**® technology completely replaces traditional chemical treatment; providing control of scale and corrosion in various water process systems to create an exceptionally clean system. This dramatically reduces energy and water consumption, while reducing or, in certain cases, eliminating toxic water discharge to the environment.

