

# Holdtight® 102

Salt Remover/Flash Rust Preventor



## Case History for Surface Preparation of Steel Cargo Hold

### Background

Customer is a coating application contractor in Ontario who was contracted to blast and coat the cargo hold of a ship during the winter. The hold must be free of salts before coating or there is a high risk of premature coating failure.

### Corrosion Issue

Blasting the steel with salt residue embeds the salt on the surface of the steel, which exacerbates problems with corrosion and coating adhesion. Having any salt or contaminant on the surface impacts coating adhesion, which may lead to premature coating failure (i.e. lifting, blistering).

The pre-washed steel had salt readings of 7-15ppm. The desired level was 5ppm or lower.

As the work was carried out in the winter, conditions were harsh and humidity was likely, so the surface needed to be entirely free of salts and contaminants to avoid flash-rusting.



### Corrosion Solution

The customer properly dilutes HoldTight® 102 with potable water. For best results, HoldTight® 102 should be diluted at a ratio of 50-100:1 (water to 102). Dilution ratio depends on application, humidity, and level of surface contamination.

The diluted HoldTight® 102 was used during power washing. Once the steel is dry, it is ready to be primed and coated.

### Results

Correct application of HoldTight® 102 meant that, when the steel was re-tested the following day, chloride levels had dropped to 1ppm. The desired chloride level was 5ppm or lower so our customer achieved better results than expected or required.

The cleanliness of the surface allows for maximum coating adhesion, which maintains the integrity of the cargo hold. The integrity of the cargo hold is essential to the ship's owner; a leak in the hold could lead to damaged goods and a loss of earnings. Any damage to the ship can also endanger the lives of people on board. Good surface preparation can cut down on the maintenance that is needed in the hold, allowing the ship to operate efficiently and transport cargo securely.



Hold #4 after ½ of the cargo hold has been water washed by Marine Clean. HoldTight® 102 was added to the clean water to assist in lowering the chloride content. A random area was tested, on the stern bulkhead. Chloride content was found to be 1ppm. N.B. White is chlorides, pink and yellow is ok.