



Case Study

Rust Free - using outstanding anti-corrosive waterborne coat as part of paint system for maintenance

**Goliath
Leader**

Summary:

The GOLIATH LEADER (IMO: 9357315) is a Vehicles Carrier which was built in 2008. GOLIATH LEADER's overall length is two hundred metres, the beam's is thirty metres and its gross tonnage is 57,692. This vessel was inspected as part of ongoing maintenance to monitor the corrosion protection of the specified coating system.

Since February 2017, a new system of paints has been used during maintenance. This system includes the Rust Free as a shop primer / base layer, which protects the base metal against corrosion and treats the corroded surfaces, unlike other paint systems whose functionality is to delay the rust appearance over time. The top paints remained the same as had been used.

The Challenges:

Corrosion is one of the most important aspects of maintaining vessel safety together with preserving asset values. Untreated areas can lead, over time, to expensive, complex maintenance and steelwork replacement and in extreme cases, could result in structural integrity failure. In addition, the routine procedure of inspection, and maintenance while sailing is not at the same level as in the shipyard and also, the surface preparation before paint takes too much time when using hand tools.

The Solution:

The outdoor surfaces of the vessel were prepared by high pressure (100-200 bars) water cleaning to remove all loose paint, mill scale and rust. Once the surfaces were dry, the crew used a Rust Free coat over the stable rust and old paint. The product has a low VOC (Volatile Organic Compound) level ~0 enabling the crew to work without any special protective equipment even in unventilated areas. In the end, they returned the product to its original package for later additional uses and within 24hrs, they had covered the Rust Free layer with common top paints which are used on vessels.

The Results:

Several represented areas took place during the maintenance.

According to the Goliath Leader Captain: *"The Coating is withstanding good and no any further painting or traces of rust observed"*.

Upper deck after treatment



Vehicle Weather side ramp:



Surface preparation - high pressure water



Vehicle carrier side ramp during maintenance

