

Client: <i>Stephenson Clarke Shipping</i>	Industry: <i>Marine</i>
Vessel: <i>Dallington Bulk Carrier</i>	Date: <i>2005, 2007 & 2010</i>
Location: <i>UK</i>	Product: <i>Epo-chem™ RA 500M</i>

Overview

Stephenson Clarke manage and own a fleet of bulk carriers which require fast re-fitting program to meet **with the charterers' requirements. They required a** fast refurbishment of ballast tanks and holds in the Dallington in order to retain class.

Challenge

Historically, Stephenson Clarke had utilised solvent-based paint systems for their ballast tanks and cargo holds. Preparation to Sa2.5 by dry-grit blasting and subsequent humidity and temperature controls to maintain ideal painting conditions is both tedious and expensive. This, combined with the strict adherence to re-coating intervals of conventional paints, leads to slow return to service.

Stephenson Clarke required an alternative system to fast forward their re-fit programs; based on their experience, they chose the revolutionary **Chemco wet-tolerant** systems.

Solution

Epo-chem™ 500 Series, solvent-free, wet tolerant, single coat was specified. The preparation was high-pressure wash to WJ-3, followed by application of one coat of **Epo-chem™ RA 500M @ 250µ DFT. RA 500M** is FDA approved for the carriage of foodstuffs. The same coating was used in the ballast tanks after high-pressure washing (800 bar).

Outcome

A total area of over 10,000m² was coated, ballast tanks were ready in 24 hours and cargo tanks in 72 hours to be put back into service. The total project cost was estimated to be 30% lower than the normal conventional system of grit blasting and painting. Additionally, the vessel was back in service and earning revenue much quicker than it would have been if solvent-based paint had been used due to the reduction in preparation, equipment, staging and de-staging and fast cure of the **Chemco** system.

Continued overleaf

Benefits

- Vessel back in service significantly faster
- Greatly reduced H&S and Fire Precaution
- Vastly reduced environmental impact
 - No grit blasting
 - No requirement for de-humidification
 - No extra ventilation requirements
 - No requirement for heating
- Project cost reduced by 30% versus traditional paints
- **Chemco International** system will protect the steel substrate in excess of 10 years

Follow up in 2007 & 2010

During re-fit operations in 2007, the Superintendent-in-charge and **Lloyds Register's representative** inspected the fore-peak and aft-peak tanks which had been coated with **Epo-chem™ RA 500M** in 2005 and stated that these tanks were in excellent condition. Further inspection in 2010 showed no deterioration (see photographs Nos. 2, 3 and 4 on page 2). No maintenance required from 2005 until 2012 in all areas coated with **Epo-chem™ RA 500M.**

Photographs:

- No. 1 Surface in tank 2005, prior HP Wash
- Nos. 2 - 4 Tank condition after 5 years

1



2



3



4



- Solvent-free • Water-based • Wet-tolerant
- Rust-tolerant • Zero VOC
- Tank & Pipe Linings • Under-water & Marine • Glassflake
- Rust Converters & Primers • Ceramic & Metal Repair • Anti-static, Conductive & Anti-slip Flooring
- Approved for Contact with Food, Drinking Water & Beverages • Damp or Green Concrete Primers
- Concrete Repair Systems • Elastomeric System
- High Temperature Systems • Fire Retardant • Insulation Systems

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