Case Study

Client:	*Crude Oil Tanker*	**Industry:**	*Marine*
Scope:	*Ballast Tank Refurbishment*	**Date:**	*December 2015*
Location:	*Mediterranean Sea*	**Products:**	*Epo-chem™ RS 500P & RA 500M*

Overview

A crude oil tanker required to return to charter before all of the scheduled ballast tank maintenance work could be completed during the vessel's dry-docking. The remainder of the work would therefore be undertaken by a riding squad and the ship's crew whilst the vessel was at sea.

Challenge

Grit blasting could not be considered due to its extensive equipment requirements and H&S concerns. Therefore utilising water jetting and a compatible **wet & rust tolerant** coating system was the only possible solution. This is an innovative solution which is uniquely only offered by **Chemco.** There could also be no disruption or danger to the operating tanker.

Solution

The WBTs were prepared by high pressure water jetting. Mechanical methods were also utilised to remove the majority of the heavy rust/scale. One stripe coat and one spray coat of **solvent-free, wet & rust tolerant** epoxy **Epo-chem™ RS 500P** were applied to the areas of existing steel suffering from corrosion damage. For areas where shop primed steel plates were inserted, one primer coat of **Epo-chem™ RS 500P** was applied, followed by one stripe coat and one topcoat of **solvent-free, wet tolerant**, glassflake epoxy **Epo-chem™ RA 500M** in accordance with IMO standards.

Outcome

The riding squad and ship's crew successfully completed the remaining maintenance work within 14 days. Substantial time and cost savings were achieved by utilising this innovative solution offered by **Chemco.** The execution and completion of this project was only possible due to the unique combination of water jetting and the **wet & rust tolerant** characteristics of **Chemco** products **Epo-chem™ RS 500P** and **Epo-chem™ RA 500M**.

Continued overleaf

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Photographs:

- No. 1 Mechanical preparation
- No. 2 After water jetting
- No. 3 After applying RS 500P on wet & rusty surface

Benefits

By utilising this revolutionary coating system, the following benefits were achieved by the workmen and vessel owners:

- **Solvent-free**
- **Wet & rust tolerant**
- No requirements for grit blasting
- No requirements for dehumidification or ventilation
- No disruption to normal operating service of the vessel
- No requirements for dry-docking
- Reduced H&S and Fire Hazard
- No humidity or dew point restrictions
- Ballast possible after 4-8 hours - Coatings can 'continue to cure' underwater
- No overcoating limitations
- Compatible with almost all coatings, including shop primer

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Photographs:

- Nos. 4 and 5 After stripe coating
- No. 6 Applying RA 500M on wet surface
- Nos. 7 and 8 Completed application

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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