

<b>Client:</b> <i>Major Shipping Company</i>	<b>Industry:</b> <i>Marine</i>
<b>Vessel:</b> <i>Crude Oil Tanker</i>	<b>Date:</b> <i>July 2017</i>
<b>Location:</b> <i>China</i>	<b>Products:</b> <i>Epo-chem™ RS 500P</i>

## Overview

The original coating located in the water ballast tanks onboard the crude oil tanker was showing considerable wear & tear damage in the form of corrosion. The tanks therefore had to be refurbished.

## Challenge

Grit blasting was not permissible. Patch repair work was required to be carried out in many areas where accessibility was difficult, and without damaging the intact coating.

## Solution

The tanks were water-jetted to WJ-3 standard before one stripe coat and one full coat of **solvent-free, wet & rust tolerant epoxy Epo-chem™ RS 500P** were applied.

**Vitaly**, due to the unexpected scale of the project, certain additional areas of the ballast tanks had to be coated in a conventional, solvent-based paint from a different coating manufacturer. This paint was applied using the same surface preparation, shipyard crew and at the same time as Chemco's RS 500P.

## Outcome

Despite challenges with insufficient manpower and extreme weather conditions, the project was successfully completed within 3 weeks.

After **1 year in-service (August 2018)**, the ship management company carried out tank inspections and found a clear difference in quality between the tanks coated by Chemco, and those coated by the separate manufacturer. The conventional paint system was failing after only **1 year, whereas Chemco's RS 500P** remained in very good condition.

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### Photographs:

- Nos. 1-2 Original Conditions
- No. 3 After Water Jetting

## Benefits

	Epo-chem™ RS 500P	Conventional Paint
Surface Preparation	WJ-3	WJ-3
Application Timeframe	Can be applied immediately after surface preparation (no need to dry substrate)	Surface must be completely dry
Volumes Solid	100% (Solvent-free)	80%
Environmental Conditions	No humidity or dew point restrictions	If humidity is above 85%, <b>do not</b> apply
Dehumidification or Ventilation	No extensive requirements	Required at extensive size & cost
Overcoating Intervals	No limitations	3 months
Health & Safety / Fire Hazard	Environmentally and applicator friendly process	Solvent-based; considerably increases environmental and applicator risk
Operational Shutdown	No shutdown required. Nearby work (including hot work) can continue without disruption	All surrounding trades (especially hot work) cannot continue
Back-In-Service Times	Ballast after 4-8 hours (can 'continue to cure' underwater)	Must be allowed to full cure (up to 14 days)

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### Photographs:

- No. 4 Completed Application
- No. 5 Chemco Coating After 1 Year
- No. 6 Conventional Coating After 1 Year