

# Case Study



<b>Client:</b> <i>Hanson Marine</i>	<b>Industry:</b> <i>Marine</i>
<b>Vessel:</b> <i>Dredger</i>	<b>Date:</b> <i>May 2013</i>
<b>Location:</b> <i>Antwerp, Belgium</i>	<b>Products:</b> <i>RS 500P &amp; Chem-glide™ RA 500CG</i>

## Overview

The internal surface of the kort nozzle of the MV Arco Arun was suffering from galvanic corrosion, abrasion and erosion and required a new foul release coating system. The client was also looking for a highly abrasive and chemically resistant coating system for their vessel's rudder to replace the existing anti-fouling which had failed.

## Challenge

To prevent galvanic corrosion of the Kort nozzle in the most cost-effective way. A coating system which could replace the conventional antifouling paint and provide long-term, maintenance-free protection, with the additional benefits of abrasion and erosion resistance, was also required.

## Solution

Chemco offered their revolutionary Chem-glide™ RA 500CG as the solution to the problem. Chem-glide™ RA 500CG is specifically designed as a non-stick, scrubable coating with exceptional cavitation, abrasion, erosion and corrosion resistance for long-term hull protection and as a cost-saving, solvent-free replacement to conventional anti-fouling paints. The kort nozzle and rudder were abrasive blasted to Sa 2½ standards to achieve a minimum surface profile of 50µ. One primer coat of solvent-free, wet & rust tolerant Epo-chem™ RS 500P was then applied. This was followed by one topcoat of solvent-free, wet tolerant Chem-glide™ RA 500CG.

## Outcome

The project was completed on time, with no delays, to the complete satisfaction of all concerned. This unique Chemco system will provide long lasting hull protection, isolating the stainless steel liner/mild steel joint and preventing it from forming a galvanic cell.

Continued overleaf

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### Photographs

- No. 1 After 18 months in service
- Nos. 2 and 3 Completed application

## After 18 Months in Service

The vessel was brought to dry-dock with the Chemco system and a major top-selling anti-fouling being in operation for 18 months. After HP cleaning, the Kort nozzle and rudder were in 'as good as new' condition. The only maintenance requirements were small touch-up areas where mechanical damage had occurred. The half of the rudder coated with an industry leading anti-fouling was showing signs of extensive fouling and corrosion damage. This conventional system also lifted from the surface of the hull during cleaning, resulting in high maintenance costs for repair.

## Benefits

- Solvent-free (odourless) coating system
- No material loss (as with traditional anti-fouling paints)
- No overcoating limitations
- Non-stick, scrub-able system
- Low maintenance costs
- Long-term hull protection
- Significantly reduced fuel consumption
- Exceptional abrasion and chemical resistant properties
- Reduced H&S and Fire Precaution
- Extremely smooth finish
- Substantial time and cost savings

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### Photographs

- Nos. 4 and 5 After surface preparation
- Nos. 6 and 7 After priming with **Epo-chem™ RS 500P**

- 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

East Shawhead Industrial Estate  
Coatbridge ML5 4XD  
Scotland United Kingdom

Tel: +44 (0) 1236 606060

Fax: +44 (0) 1236 606070

Email: [sales@chemcoint.com](mailto:sales@chemcoint.com)

Web Site: [www.chemcoint.com](http://www.chemcoint.com)

