

Client: <i>Stephenson Clarke Shipping</i>	Industry: <i>Marine</i>
Vessel: <i>Bulk Carrier</i>	Date: <i>January 2004</i>
Location: <i>UK</i>	Product: <i>Epo-chem™ RA 500M</i>

Background

The Bulk Carrier is operated by Stephenson Clarke Shipping on behalf of Northumbria Water as an effluent carrier. The coal-tar epoxy coating applied previously to deck heads (2500m²) in effluent ballast tanks was failing and needed to be replaced.

Epo-chem™ RA 500M, a high quality, solvent-free, wet tolerant glassflake epoxy, was offered as a one-coat system that would provide long-term (in excess of 10 years) maintenance-free protection with 5 years comprehensive guarantee. **Epo-chem™ RA 500M** is a self priming, edge retentive high build system.

Specification

The following specification was utilised:

- Wash down to remove surface contamination
- Grit blast to Sa2½
- Clean out
- Stripe coat edges and welds
- Apply one coat **Epo-chem™ RA 500M solvent-free**, glassflake epoxy @ 250µm by airless spray
- Inspect tank and touch up as required

Application

The duration of the contract from start to completion was 9 days. The product was applied in a single coat to the required thickness, unlike multi-coat paint systems with additional problems of solvent entrapment, inter-coating adhesion problems, contamination etc.

Continued overleaf

1



2



3



Photographs:

- No. 1 Before Application
- Nos. 2-3 After Application

Benefits:

- **Solvent-free**
- The application was estimated to have reduced the contract duration by at least 8 days
- Reduced manpower and access requirements
- Reduced docking times compared to solvent-based multi-coat systems
- Fast return to service as the product can cure underwater.
- Hot-work in adjacent areas continued without disruption
- Reduced number of stripe coats as product has a very good edge coverage
- Reduced ventilation requirements to simple air movers rather than extraction units
- No requirement to dehumidify the tanks as product is moisture tolerant
- Improved H&S and environmental impact to client and applicator
- Increase flexibility for painting. No need to have a specific "window" to fit around other trades