

CHEMCO PROTECTIVE COATINGS

MARINE DIVISION



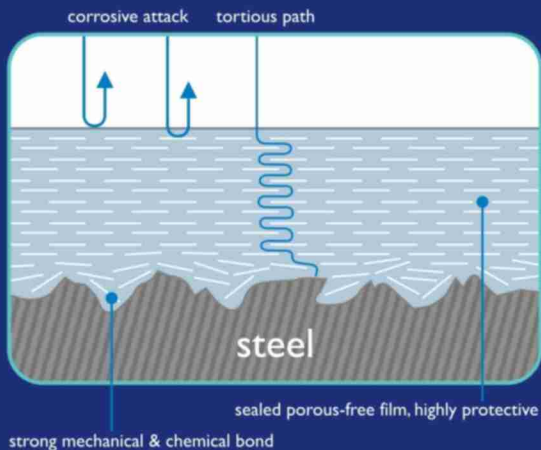
THE LIGHT AT THE END OF THE TUNNEL



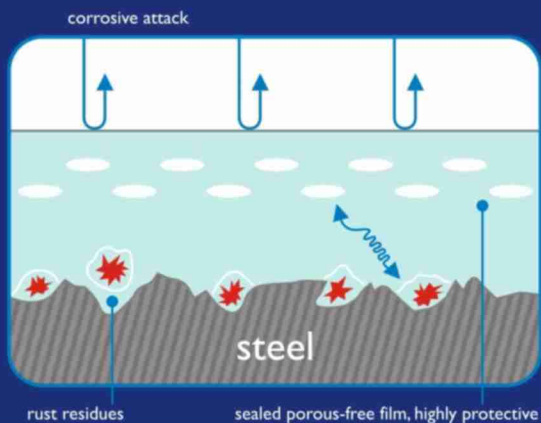
THE NEW ERA IN MARINE CORROSION CONTROL UTILISING PROVEN TECHNOLOGY

The new generation of highly advanced **solvent-free** polymers enable us to apply on a completely **wet** and **soaking** surface. They can also be applied on rusty surfaces as they are **truly** rust-tolerant coatings.

Epo-chem™ 500 Series, specifically the **RA 500M** and **RS 500P** systems, are not compromised by the addition of cheap solvents and fillers but by using high performance reinforcements such as Glassflake or MIO, and high quality sacrificial fillers (proprietary technology). These coatings are thick film systems, one coat is equivalent to 2-4 coats of paint. The systems have excellent coverage and edge retention, therefore can be used as a single coat.



Epo-chem™ RA 500M is a solvent-free, **wet-tolerant** and highly chemical resistant epoxy single/top coat. The Glassflake systems have been utilised over the last 30 years as tank lining in the most aggressive environments because they offer total barrier against moisture and corrosive ions. These coatings are typically applied as a one-coat system or as a top-coat on the primers with DFT of 200-300µ. *Minimum surface preparation standard required: SA2.0, WJ-2, ST3.*



Epo-chem™ RS 500P is a solvent-free, **wet-tolerant, rust-tolerant** primer or primer-finish epoxy system. The use of special sacrificial fillers enable the system to be applied to surface standards as low as WJ-4, ST2. The system's long-term performance is based on total sealing (porous-free film) and arresting the rust totally. They are typically applied as a one-coat system which can be over-coated by itself or with the top-coat RA 500M.



These systems are totally impervious (no ingress of moisture or oxygen) and free from pinholes, hence offer long-term maintenance-free protection. Adhesion to ST2 and wet substrates is far in excess of conventional systems onto a dry grit-blasted surface, considered the best indicator of high performance (1200-2200 psi).

Benefits to Marine Industry:

- No extensive equipment requirements for surface preparation or application
- Application by brush/roller/spray with excellent edge coverage
- Flexibility on the surface preparation standard or method, i.e. the most convenient method depending on availability or cost, e.g. dry grit blast, wet blast, HP water wash (500-800 bars), UHP, mech. prep. (ST2-ST3)
- Compatible with all existing ballast tank coatings, including coal-tar epoxies
- Compatible with all shop primers
- Unlimited over-coating intervals
- Apply in any environmental condition, no humidity restrictions
- The coated tanks can be put back into service almost immediately (as soon as touch dry, 6-12 hours) as the systems are capable of 'continuing to cure' underwater
- Zero VOC; no fire hazard or odour
- Hot work, e.g. welding, cutting and grinding can be carried out without interruption
- No storage hazard
- Preparation and application works can be carried out by ships' crew, riding crew, alongside quayside or in dry-dock
- All tanks, i.e. ballast, oil cargo, fresh drinking water and dry cargo holds (FDA certificated), grey water, void spaces and cofferdams, as well as superstructures, pipes, decks and internal floors, are protected using 2 products, both solvent-free
- Lloyds approved
- Major savings, as well as substantial reduction in docking times
- Reduced life-cycle and maintenance cost, increased asset value

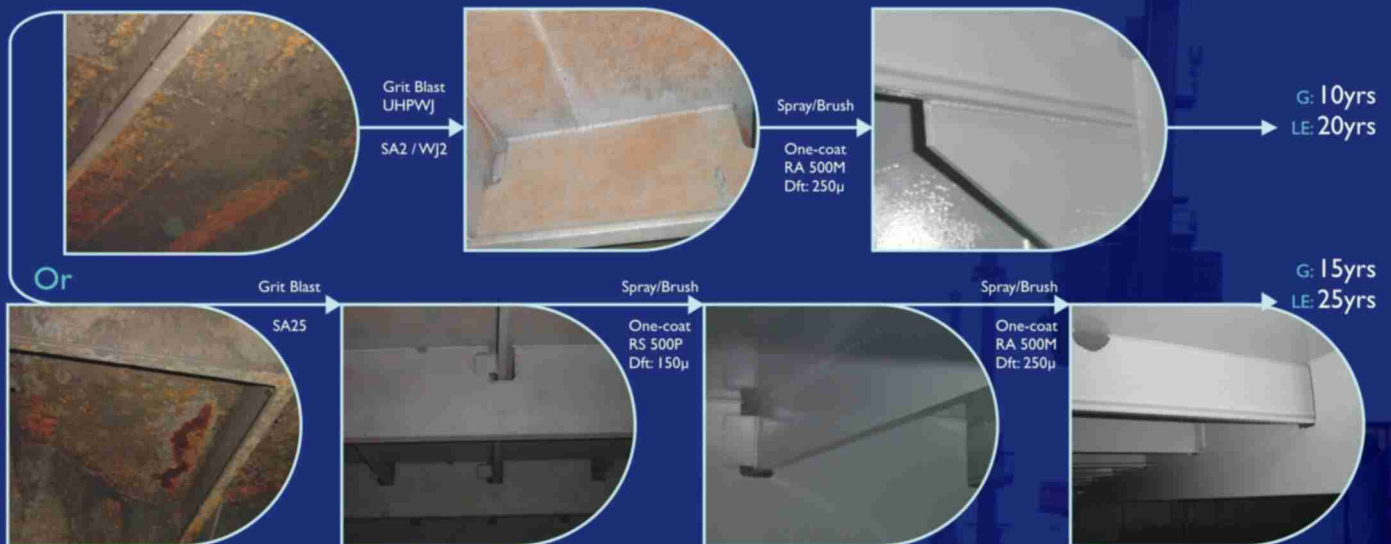
LOW COST MAINTENANCE BY SHIPS' CREW/RIDING CREW



Advantages:

- Simple/Cost-effective
- No ventilation/de-humidification equipment - apply in any humidity
- No major equipment requirement (for surface preparation or application)
- Convenient 5kg packs (standard pack size 20kg)
- 1 or 2 products, both solvent-free - no storage hazard

PORT SIDE/DRY DOCK



Advantages:

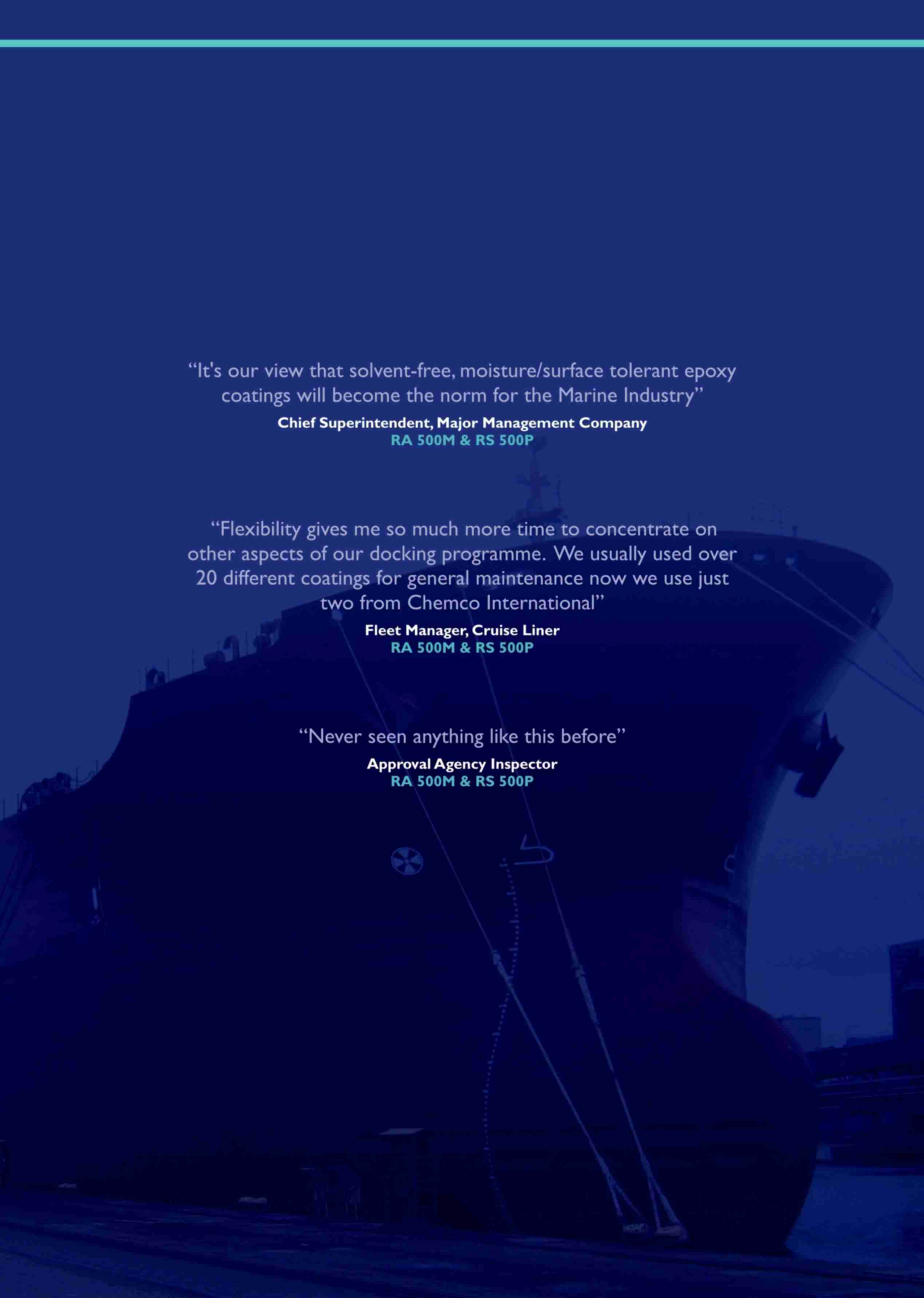
- Simple/Cost-effective
- No ventilation/de-humidification equipment - apply in any humidity
- Hot-work can be carried out without interruption
- No need to exclude others from application areas, significantly increase throughput, shorter docking time

GUARANTEE

G: Guarantee
LE: Life Expectancy
HPWJ: High Pressure Water Jetting (500 - 800 bars)
UHPWJ: Ultra High Pressure Water Jetting

- Comprehensive product guarantee
- No **Chemco International** presence required
- Transferable

Please contact **Chemco International** or your local agent for full details.



“It's our view that solvent-free, moisture/surface tolerant epoxy coatings will become the norm for the Marine Industry”

Chief Superintendent, Major Management Company
RA 500M & RS 500P

“Flexibility gives me so much more time to concentrate on other aspects of our docking programme. We usually used over 20 different coatings for general maintenance now we use just two from Chemco International”

Fleet Manager, Cruise Liner
RA 500M & RS 500P

“Never seen anything like this before”

Approval Agency Inspector
RA 500M & RS 500P

PROVIDING INNOVATIVE SOLUTIONS

For almost three decades **Chemco International** has been at the forefront of combating corrosion by designing systems to eradicate many complex problems in all industries. Founded in the early 1980s, the name was changed to **Chemco International** in 1990. Today, **Chemco International** manufacture the most advanced speciality coatings for petro-chemical, off-shore, marine, power generation, water and sewage and many other industries.

- Leader in technology for solvent-free and water-based coatings
- Leader in technology for truly rust-tolerant and wet-tolerant systems
- Specialist high chemical/temperature resistant tank linings
- Fluid-flow environments utilising Ceramic and Glassflake technology
- High temperature coatings
- Specialist products such as light-weight materials and underwater systems
- Concrete repair, damp concrete and specialist flooring systems

INNOVATION

In recent years, **Chemco International** has developed a new range of innovative and problem solving products.

Chemco International has been particularly active in developing products for applications where others have lacked the necessary imagination or technology. This range has been developed with a view to the existing and future legislations regarding the environment and Health & Safety of products. The solvent-free, water-based, isocyanides and lead-free coating systems are especially useful in Marine and Off-shore applications.

Today, environmental and cost implications of grit blasting have forced the industry to look at the possible alternatives. The innovative product range enable huge savings to be achieved by using alternative methods such as High Pressure Water Jetting (HPWJ), Ultra High Pressure Water Jetting (UHPWJ) or mechanical/hand preparation.

QUALITY

Chemco International has an unrivalled reputation for successful completion of projects worldwide. The high performance speciality coatings are the result of almost thirty years of inspiration, innovation and development.

PROVEN TECHNOLOGY

The most advanced speciality coatings in the market are aided with the most comprehensive guarantee. The essence of successful technology is that the products are approved and used by all industry leaders throughout the world.

For extensive lists of case histories please visit www.chemcoint.com

THE LIGHT AT THE END OF THE TUNNEL



1. Ballast Tanks
2. Void Spaces
3. Cargo Tanks
4. Pipe Work
5. Engine/Control Rooms
6. Under Deck Gratings
7. External Decks
8. Fresh Drinking Water Tank



Chemco International Limited
 East Shawhead Industrial Estate
 Coatbridge
 North Lanarkshire
 ML5 4XD
 Scotland
 United Kingdom

Tel: +44 (0)1236 606060
 Fax: +44 (0)1236 606070
 Web: www.chemcoint.com

Agent / Distributor