



Hempadur Ultra-Strength Fibre reduces steel renewal costs for U-Ming

When U-Ming Marine Transport Corporation wanted to reduce its docking costs, it decided to upgrade its vessels' cargo hold coating to Hempadur Ultra-Strength Fibre. U-Ming made the switch over ten years ago – and the improvement has been both significant and lasting.

“With our original epoxy system, a blasting percentage of 60-75% at our scheduled dockings was normal. With Hempadur Ultra-Strength Fibre 47510, we can basically limit ourselves to blasting lower stools and hoppers, thereby saving both time and money,” says Zhang Ruihua, Technical Director at U-Ming.

Importantly for U-Ming, Hempadur Ultra-Strength Fibre 47510 has also vastly reduced steel renewal in the second decade of its vessels' lifetimes. Since switching to the coating, steel renewal at statutory 12.5- and 15-year lifetime dockings has dropped from around 600-700 tons to practically nothing.

For U-Ming, all this means there is less blasting, staging and steel replacement during docking – which results in lower docking costs, lower maintenance costs and faster vessel turnaround times.

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High return on investment with Hempadur Ultra-Strength Fibre cargo hold coating

Over its lifetime, a bulk carrier's operational costs will nearly add up to as much as its initial building price. One of the biggest expenses is maintaining the cargo holds. For these reasons, any measures that can limit cargo hold repair are extremely useful to both owners and operators.

The challenge

This was the challenge facing U-Ming Marine Transport Corporation. U-Ming transports cement, dry commodities and industrial raw materials – and it owns and operates a diverse fleet of over 60 vessels, including a number of bulk carriers. Over the years, the company has suffered significant expense and time loss due to extra steel replacement, surface preparation and coating repair on its vessels' cargo holds.

In 2019, U-Ming decided to upgrade of its cargo hold coating system. Cargo hold coatings selection in U-Ming is primarily based on practical experience with relevant products, as well as total cost of ownership considerations. After some experimentation with other coatings, U-Ming settled on a Hempel solution featuring two-coats of Hempadur Ultra-Strength Fibre.

The solution

Since switching to Hempadur Ultra-Strength Fibre, U-Ming has experienced significant improvements. Blasting on cargo holds during maintenance has been reduced by 65-70% and steel replacement has almost been eliminated. This has ensured a fast return on investment for U-Ming by lowering time and costs during docking.

The success of Hempadur Ultra-Strength Fibre comes down to its strong mechanical properties. These stem from the combination of its high cross-linking density, high glass transition temperature, hard pigment package and fibre reinforcement.

U-Ming has been using Hempadur Ultra-Strength Fibre 47510 (and its predecessor Hempadur Ultra-Strength 47500) as the sole cargo hold coating on its 60-strong fleet for a decade. Due the cost of ownership benefits, the company has every intention of using the product well into the future.



At a glance

Customer:	U-Ming Marine Transport Corporation
Vessel:	Bulk carriers
Coating:	Hempadur Ultra-Strength Fibre 47510
Areas of use:	Cargo hold

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