

Ports & Shipping

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industry



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LONGER LASTING HULL COATING FOR ICE GOING CARGO FLEET

W&R Shipping's 2,622t, ice class 1A box type flush tween-decker Crown Mary breaks ice, the hull protected with Ecospeed.

Keep Your Coat On

"IN THE WINTER TIME WHEN YOU WERE SAILING THROUGH THE ICE YOUR PAINT WAS GONE AND SO YOU HAD TO DO SOMETHING ABOUT IT IN THE SUMMER TIME," recalls Captain Wim van Eck of W&R Shipping. "You had to drydock in order to repaint." Having spent most of his seafaring career trading in the North of Europe and the Baltic Sea, Captain Van Eck was on the lookout for a better hull coating for ice conditions. He found it in Ecospeed, the glassflake reinforced surface treated composite (STC) developed by the Hydrex group. He shared with PSI his experience.

"I saw [EcoSpeed] first on a German Interscan vessel which was in almost exactly the same situation as we are and had had the same problems we had." Having read of the success Interscan was having with Ecospeed on similar vessels, also trading in Baltic and Northern European ice every winter, W&R Shipping decided to try Ecospeed themselves.

When it comes to protecting the hulls of ice-going vessels, Ecospeed has proven remarkably durable, outperforming many specialised ice class paints.



W&R Shipping's Captain Wim van Eck



You have to wonder how many tons of paint per year are getting scraped off and disappear down in the sea.

The fact that the coating is non-toxic is also particularly important for ice trading vessels where toxic AF coatings are rapidly scraped off and deposit their toxic ingredients in what are often sensitive environments.

First Coating

The first vessel converted to Ecospeed was the Crownbreeze, a 2,548t, ice class 1A box type single-decker built in 1999 in the Netherlands. Like the other W&R vessels, the Crownbreeze had a high abrasive specialty ice coating. “I can’t say that the earlier coating worked very well,” says Captain Van Eck. “When it was new, it was not too bad, but of course you get a lot more chipping than with Ecospeed, so every docking you have to touch it up and it gets rougher.”

In August 2007 Crownbreeze was due for her second intermediate survey – her third drydocking. “We knew that sooner or later we were going to have to do something, so we decided to go with Ecospeed.” They removed what remained of the existing high abrasive coating and applied Ecospeed to the entire underwater hull and rudder.

The Crownbreeze drydocked in 2009 and again in 2012, five years after applying Ecospeed. Nothing had been done with the paint in the 2009 drydocking. The 2012 drydocking was an excellent opportunity to coat the parts of the hull missed due to the different dock block positions when Ecospeed was applied in 2007. Otherwise, the coating was in good condition.

“We touched up a total of about 90 m² of the hull which has a total area of about 2,000 m². Of that 60 to 70 percent of that was the dock blocks and the remainder was mechanical damage mainly from bad fendering in some of the ports the ships visit.”

Vital to Success

Today, Ecospeed coatings protect almost all of W&R Shipping’s fleet. W&R Shipping also had Ecospeed applied on its new builds – the ideal stage to apply the coating. Captain Van Eck

explains that, from a preparation point of view, he found it easiest to apply Ecospeed to new steel. The required surface preparation is easier to accomplish at the shipyard in the construction stage than in drydock after the ship has been in service for some time. Proper preparation and application are vital to the success of the Ecospeed coating.

One of the new builds in the W&R Shipping fleet, the Crown Mary went to drydock in June 2012 after two and a half years’ sailing with Ecospeed. She is a 2,622t, ice class 1A box type flush tween-decker, built in 2010 in Zhouyang, China. “There was some small mechanical damage but nothing really major,” Captain Van Eck notes. “We didn’t need to do anything with the hull paint in drydock.” W&R Shipping currently has two ships on the assembly line in China.

No Dock Block Gaps

With the new builds, Captain Van Eck insists on reblocking before the coating is finished so that there are no gaps in the coating as a result of the dock blocks. However, for ships already in service the time and expense prevent reblocking in drydock.

Based on the experience with touching up the paint on the first two ships in drydock, Captain Van Eck is working out the most efficient way to get the touch-ups done for future drydockings. The next opportunity will be with the Thea Marieke which will be drydocked in 2014. By then she will have sailed for six years with Ecospeed and Wim is very interested to see how the hull coating has held up.

“Having Ecospeed on the hull can save us some days in drydock which would be needed to repaint if we were using a less durable coating.” Captain Van Eck also points out, “If you are using the usual toxic antifouling paint, and if you think of all the ships that sail in the ice which are using the normal toxic antifouling paint, you have to wonder how many tons of paint per year are getting scraped off and disappear down in the sea. So it is an environmental consideration, but for us it is also that our ships will >>



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*In August 2007
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be protected from corrosion and that they would rust away if not well protected. Ecospeed provides excellent protection.”

Coating for the Long Haul

While W&R Shipping is still refining the aspects of paint touch-ups in drydock, and working out the best way to accomplish in-water cleaning for the Ecospeed coated ships, in general Captain Van Eck says the company is quite happy with Ecospeed and looking forward to finding out how well it holds up over the long haul. “With the Crownbreeze we could really say after five years we only needed a little bit of paint for touch-ups which was fine. And if I compare that, if I would have a ship like the Monica in the drydock, we would have spent more money for painting, that’s for sure.”

i. www.hydrex.be



Minor touch-ups to the Crownbreeze in drydock in 2012 after five years of service since applying the Ecospeed coating.