

PPG SIGMAGLIDE® 2390

The electrostatic application produces high transfer efficiency and enhanced sustainability

Case study



The Customer

ForestWave Navigation.

The Vessel

The Trito Navigator is a general cargo vessel.

The Challenge

ForestWave strongly believes in responsible environmental management and is constantly looking for ways to minimize the impact on the environment. Therefore, it was looking for a biocide-free hull coating that can help save power consumption, reduce CO₂ emissions and is also suitable for an application method providing sustainability benefits.

The Solution

PPG SIGMAGLIDE® 2390 silicone-based, biocide-free fouling release applied by electrostatic application to the hull.

The Benefits

The SIGMAGLIDE 2390 hull coating results in an ultra-smooth hull and lower friction resistance delivered by PPG HydroReset™ technology. It can achieve a significant reduction in carbon emissions of up to 35% whilst also ensuring that no biocides are introduced to the oceans.

SIGMAGLIDE 2390 is designed to be suitable for electrostatic application, a sustainable application method with high transfer efficiency and reduced paint consumption due to less overspray.

The Result

The customer will benefit from the sustainability advantages of the PPG SIGMAGLIDE 2390 system and the electrostatic application.

The vessel can also realize maximum speed flexibility as it can operate at an average 1 knot higher speed while remaining CII compliant.

The Customer

ForestWave Navigation is a young shipping company offering a full service, including chartering, operations, ship management, project development, as well as sale and purchase. In 2011, the company started with six vessels in Commercial Management and two in Ship Management. The fleet has increased to 35 ships. ForestWave is active in the multipurpose shortsea segment. Most of the vessels it operates have a carrying capacity between 4,000 and 12,500 tons, have cranes and ice class certification. The vessels operate worldwide but mainly in European waters and the Atlantic Basin.



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The Challenge

ForestWave Navigation is dedicated to responsible environmental management. The company strives to conduct and grow its business in a sustainable way and constantly measures its environmental impact through performance indicators. Accordingly, it seeks to minimize this impact by improving its performance. To achieve these objectives, the company was looking for a premium hull coating that would help reduce power demand and carbon emissions, without introducing biocides into the oceans.

The Solution

The PPG SIGMAGLIDE 2390 premium fouling release hull system was chosen as the right solution to meet the needs of ForestWave for the Triton Navigator. The vessel was dry docked at the Odessos shipyard, in Varna, Bulgaria for blasting and repainting. We coated the hull firstly with PPG SIGMAPRIME®, then applied the PPG SIGMAGLIDE 790 two-component, silicone-based tiecoat, followed by the PPG SIGMAGLIDE 2390 fouling release as the final coat.

For enhanced sustainability we used electrostatic application to apply the PPG SIGMAGLIDE 2390 system to the hull.

The Benefits

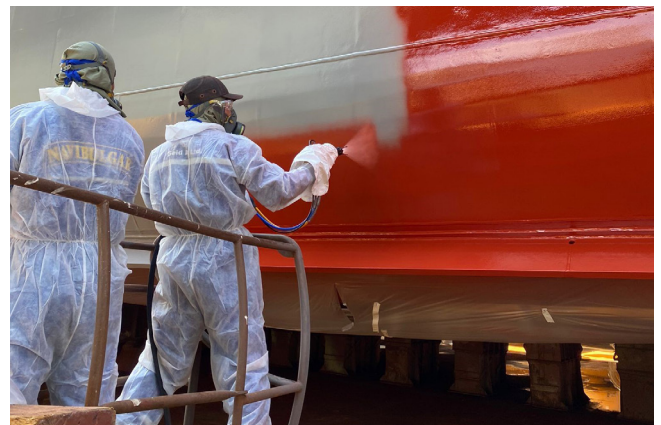
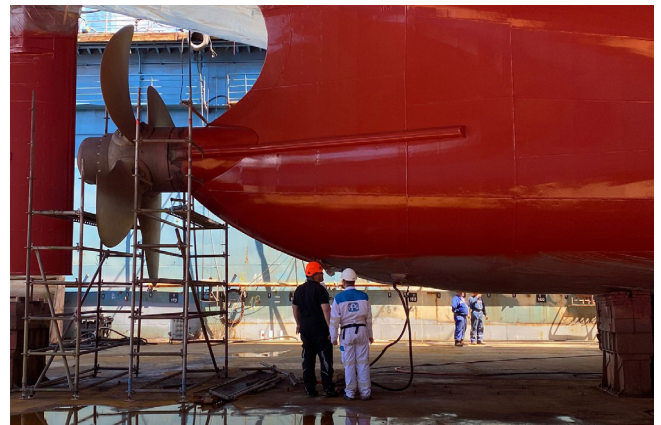
The biocide-free PPG SIGMAGLIDE 2390 system is high in volume solids and low VOC. It can deliver an ESG contribution with ultimate fouling resistance and carbon emission reduction up to 35%*. SIGMAGLIDE 2390 ensures ultimate low friction based on HydroReset™ technology delivering 20% power reduction, maximum 1.0% speed loss performance* and up to 150 days idle time.

As SIGMAGLIDE 2390 is designed to be suitable for electrostatic application, ship owners can benefit from high transfer efficiency and reduced paint consumption due to less overspray. Therefore, ForestWave has benefited from a noticeable reduction in material consumed.

The Result

The PPG SIGMAGLIDE 2390 system's low friction resistance can help the Triton Navigator to achieve lower carbon emissions and instant power savings. The vessel requires less power to operate at the same speed, resulting in lower GHG emissions and reduced CII. All these outcomes will provide a significant contribution to help ForestWave achieve its IMO GHG targets and CII compliance for over 10 years.

Electrostatic application has provided a range of sustainability and cost-effective benefits for the Triton Navigator.



* in comparison to traditional antifoulings

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