PPG SIGMA SAILADVANCE™ RX

Advanced friction control antifouling offers extended idle time resistance and improved efficiency

Case study

The Customer
Raffles Technical Services Pte. Ltd.

Shiptype
82K DWT Kamsarmax bulk carrier

The Challenge
To provide an efficient, long-lasting antifouling for a Kamsarmax bulk carrier that operates worldwide in aggressive fouling areas and with extended idle days. The Theresa Jiangsu spent 65 days idle in Indonesia, and 71 days idle in Sydney waters during loading and unloading

The Solution
PPG SIGMA SAILADVANCE™ RX advanced low-friction, self-lubricating antifouling

The Benefits
PPG SIGMA SAILADVANCE RX antifouling minimizes operating costs by reducing hull friction when sailing and by providing excellent fouling resistance during extended idle periods, thus ensuring minimal speed loss and improved vessel efficiency

The Result
Theresa Jiangsu was fouling free after 65 days idling in Indonesia and after 71 days idle in the waters of Sydney

The Customer

Raffles Technical Services Pte. Ltd. (Raffles), based in Singapore, was established in 1991 with a vision to provide value-added shipping and management services. Today, the company manages about 45 bulk carriers and tankers, and charters about 25.

The Challenge

Theresa Jiangsu is a Kamsarmax bulk carrier built in 2012 with a deadweight of 81,680 tons.

A clean hull is critical to ensure efficiency and minimal power consumption. Choosing a reliable antifouling solution is necessary to protect the hull from marine growth and ensure that there is no loss of operating power, especially when the ship operates in aggressive fouling areas and with extended static periods as does the Theresa Jiangsu.

PPG SIGMA SAILADVANCE™ RX
Advanced friction control antifouling offers extended idle time resistance and improved efficiency

The Solution

Our PPG SIGMA SAILADVANCE RX high-performance antifouling was proposed to meet the bulk carriers' hull protection needs in this highly challenging environment.

PPG SIGMA SAILADVANCE RX utilizes Controlled Surface Active Polymers (CSPs) that act as a lubricant on the coating/water interface, supporting laminar flow, which reduces hull friction when the ship is sailing. The CSPs also create a slippery surface that resists fouling when the ship is not sailing. This extends possible idle time by up to 30 days on average, thus improving the hull's performance.

The Benefits

The PPG SIGMA SAILADVANCE RX high-performance antifouling is designed for all vessel types and speeds and is particularly effective for slow steaming. It minimizes operating costs by providing excellent fouling resistance during extended idle periods, thus ensuring minimal speed loss and improved vessel efficiency. Several satisfied customers have reported excellent performance after long idle time periods in aggressive fouling areas.

Key Features:

- Suitable for application in new-building and dry dockings
- Linear polishing and consistent biocide release for predictable performance
- Low friction resulting from CSP technology
- Extended idle days

The Result

The PPG SIGMA SAILADVANCE RX high-performance antifouling ensures minimal hull friction during sailing and also provides increased resistance to fouling when stationary, which results in minimal speed loss and enhanced performance.

Theresa Jiangsu was fouling free after 65 days idling in Indonesia and after 71 days idle in Sydney waters. Raffles surveyed the Theresa Jiangsu with divers after its extended stationary periods in aggressive fouling areas and was impressed by the clean condition of the hull. Following this excellent result, Raffles, decided to select our PPG SIGMA SAILADVANCE RX antifouling for the full fleet.

The underwater hull condition from a Raffles' diver report, after 65 days idle time in Indonesia.

The propeller condition, with heavy hard fouling, shows the aggressiveness of the environment that the vessel was exposed to.

Visit **ppgpmc.com** or contact:
Asia Pacific ✆ +86-21-6025-2688 ✉ ppgpmc.ap@ppg.com | **Europe, Middle East and Africa** ✆ +32-3-3606-311 ✉ customers@ppg.com
Latin America ✆ +57-1-8764242 ext. 201 ✉ ppgpmcandean-ca@ppg.com | **North America (US & Canada)** ✆ +1-888-9PPGPMC ✉ PMCMarketing@ppg.com