



VISION OF THE SEAS

## Application of HEMPAGUARD® X7 on “Vision of the Seas”

Royal Caribbean International has selected HEMPAGUARD® X7 for its cruise vessel Vision of the Seas based on the benefits of flexible trading, fuel savings and fouling defence at any speed or during idle periods, offered by the product.

“Remarkable fuel savings and excellent performance throughout the 5 year docking interval are premium goals for us. Furthermore, HEMPAGUARD® X7 is an environmentally friendly product due to its ability to lower fuel consumption thereby reducing the CO<sub>2</sub> emissions during the entire service interval. Last but not least, Hempel’s Certified Coating Advisors supported us in every step of the process professionally and reliably.”

[hempel.com](http://hempel.com)

With HEMPAGUARD® X7, the owner will have a significant reduction in fuel consumption and no fouling organisms on the vessel.

### The Challenge

Vision of the Seas arrived at Navantia on September 26th 2013. During the dry docking vertical sides, flat bottom, boottop, and topsides were to receive new full coatings of Hempel paint. The areas below the waterline including the boottop were full blasted prior to the application.

### Solution

HEMPAGUARD X7 was used on the Flat Bottom and Vertical sides and only 4185 litres of tiecoat and HEMPAGUARD were required to ensure another 60 months of fouling-free cruising. HEMPAGUARD X7 has been chosen because it offers up to 60 months of extremely efficient fouling defence. It even provides a fuel performance guarantee and a product performance guarantee for the 60 month period, including up to 120 idle days of fouling resistance.

Vision of the Seas is cruising all over the world and HEMPAGUARD X7 with its unique patented ActiGuard® technology can retain its effectiveness when switching between slow and fast speeds anywhere in the world as well as during extended idle periods.

With HEMPAGUARD X7, the owner will have a significant reduction in fuel consumption and no fouling organisms on the vessel. HEMPAGUARD X7 is based on silicone-hydrogel and biocide science and releases 95% less biocide than a standard SPC antifouling coating.

The biocide is retained at the surface and so the need for polishing is eliminated. The surface of the vessel has the same smoothness as conventional biocide free silicone based fouling release coatings. Thus, by using HEMPAGUARD the operator will experience fuel savings due to the high protection against fouling organisms, which retain the surface in perfect condition.



### The Hempel Group Head Office

Hempel A/S, Lundtoftegaardsvej 91, 2800 Kgs, Lyngby, Denmark  
Tel: +45 4593 3800 Email: [hempel@hempel.com](mailto:hempel@hempel.com) [hempel.com](http://hempel.com)