

Explore the strongest Hull Performance offering Hull Efficiency Improvement



Data & Monitoring



Advisory Services



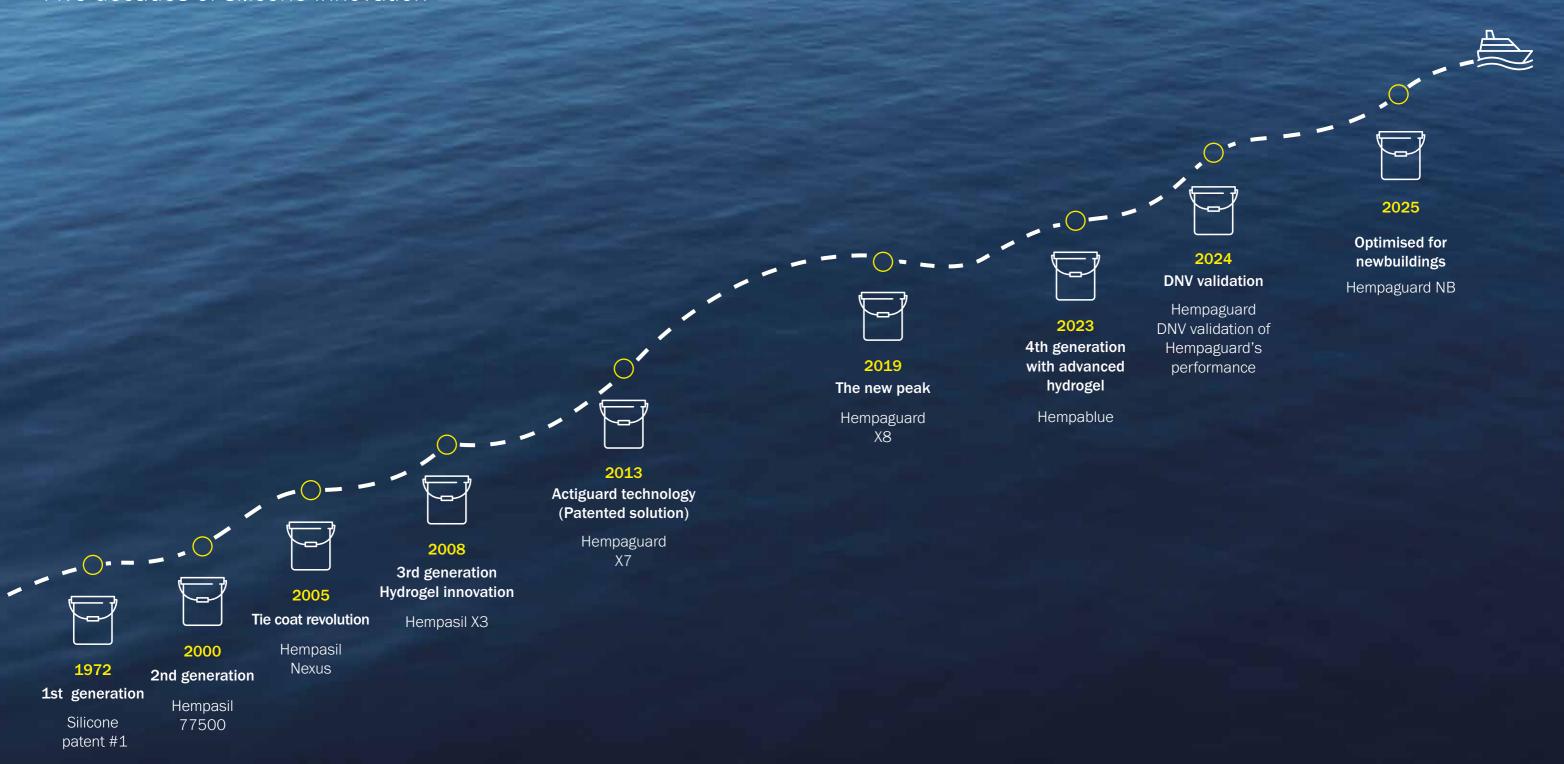
Performance Guarantees



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# Hempel - a silicone pioneer

Five decades of silicone innovation



# Hempaguard Silicone systems

Tailored flexibility for all vessel needs

Hempaguard keeps fouling at bay, even during extensive idle periods, changing trading patterns, or slow steaming, and ensures extremely low average hull roughness.

Hempaguard is a proven solution with over 4,000 applications since 2013 and DNV verified performance.

With Hempaguard, you will benefit from:

- An impressive average fuel saving of 19 per cent over the entire docking interval compared to average antifouling coatings
- Extremely low average **speed loss down to 1.4 per cent** whatever your vessel's trading pattern.

#### Hempaguard Ultima

Our ultimate performance silicone coating system

SPEED LOSS 0.9% FUEL SAVINGS 21% IDLE DAYS 160

Hempaguard XL

Hempaguard

Hempaguard **Ultima** is the new, revolutionary and patented high-performance silicone system from Hempel, built on the trusted Hempaguard technology with more than 10 years of trusted performance and more than 4,000 applications.

#### Hempaguard X8

Perfect for slow steaming and tropical waters

SPEED LOSS 1.2% FUEL SAVINGS 20% IDLE DAYS 120

Hempaguard X8

Hempaguard X8

Hempaguard X8 is an advanced fouling defence coating utilising advanced hydrogel silicone to enhance the antifouling barrier, extend fouling-free periods, and reduce hull roughness.

#### Hempaguard NB

Silicone coating solution for newbuild

SPEED 1.2% FUEL 20% IDLE DAYS 120

Hempaguard NB

Hempaguard NB/X7

Hempaguard NB is an advanced fouling defence coating with improved weatherability designed for marine new construction.

#### Hempaguard X7

The benchmark silicone coating system

SPEED 1.2% FUEL 20% IDLE DAYS 120

Hempaguard X7

Hempaguard X7

Since the launch in 2013, Hempaguard X7 has been the standard-setting silicone coating with more than 4,000 applications and DNV validated performance claims.

#### Hempa**blue**

The biocide free silicone coating

SPEED 1.5% FUEL 19% IDLE DAYS 60

Hempablue 🕑

Hempablue 🚫 .

Hempablue is the fourth generation fouling release based on silicone hydrogel. Hempablue is biocide free, two component and high-volume solids.

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## Hempaguard X7

The benchmark silicone coating system

Hempaguard keeps fouling at bay, even if your vessel undergoes extensive idle periods, changes trading patterns or steams slowly and provides extremely low average hull roughness. This is achieved thanks to the combination of silicone-hydrogel Actiguard technology with the controlled release of biocide.

As a result, you benefit from an impressive average fuel saving and extremely low average speed loss - whatever your vessel's trading pattern.



#### Hempaguard highlights:

- A well-tested and trusted solution for +10 years
- More than 4,000 applications
- Performance validated by DNV
- Documented fuel and emissions savings
- Static performance and no cleanings
- +80 per cent of customers re-apply Hempaguard



DNV validated performance +10 years of trusted technology by ABS



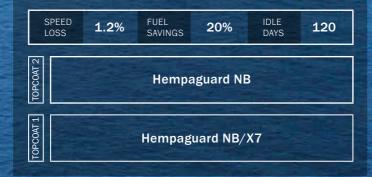
Hempaguard Hempaguard

## Hempaguard NB

Silicone coating solution for newbuild

Hempaguard NB is an advanced fouling defence coating with improved weatherability designed for marine new construction.

With a topcoat optimised to withstand the exposure to weather while your vessel is under construction. As a result, you can now benefit from the silicone effect from sea trials.



## Hempaguard X8

Perfect for slow steaming and tropical waters

Hempaguard keeps fouling at bay, even if your vessel undergoes extensive idle periods, changes trading patterns or steams slowly, and provides extremely low average hull roughness.

This is achieved thanks to the combination of siliconehydrogel Actiguard technology with the controlled release of biocide.

As a result, you benefit from an impressive average fuel saving and extremely low average speed loss – whatever your vessel's trading pattern.



### Hempa**blue**

The biocide free silicone coating

Introducing the next evolution in marine (Fouling Release) coatings: Hempablue. This fourth-generation fouling release system leverages advanced silicone hydrogel technology to offer an unparalleled combination of efficiency and environmental responsibility.

Free from biocides, Hempablue creates a slick, self-cleaning surface that effectively prevents fouling organisms from adhering, thereby reducing drag and enhancing fuel efficiency.





hempel.com/hempaguard

Visit our website for:

- TCO and ROI analysis for your vessel type
- Case stories and impressive real life performance
- Technical articles
- The opportunity to book a ship-specific assessment for your vessel

As a world-leading supplier of trusted coating solutions, Hempel is a global company with strong values, working with customers in the decorative, marine, infrastructure and energy industries. Hempel factories, R&D centres and stock points are established in every region.

Across the globe, Hempel's paints and coatings can be found in almost every country of the world. They protect and beautify buildings, infrastructure and other assets, and play an essential role in our customers' businesses. They help minimise maintenance costs, improve aesthetics and increase energy efficiency.

At Hempel, our purpose is to shape a brighter future with sustainable coating solutions. We firmly believe that we will succeed as a business only if we place sustainability at our heart. Not only is it the right thing to do, it will strengthen our competitive position, make ourselves more resilient and reduce our risk.

Hempel was founded in Copenhagen, Denmark in 1915. It is majority owned by the Hempel Foundation, which ensures a solid economic base for the Hempel Group and supports cultural, social, humanitarian and scientific purposes around the world.

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