

**SUBSEA**  
PROTECTION AND PERFORMANCE



**NEWS**

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**Durable coating systems for different applications**

# Subsea Industries is looking for representative agents



**T**o support our continuous growth, we are expanding our worldwide network of Subsea Industries agents. This allows us to reach a much bigger public directly than would otherwise be possible.

Subsea Industries NV was founded in 1983 to take care of the design, development and marketing of an evolving line of underwater hull

and propeller cleaning equipment as well as a line of hard hull coating systems.

The purpose of the Ecospeed range of coatings and cleaning technology is to offer a long-lasting, non-toxic protection for all ships with a system that keeps a hull ultra-smooth and free of fouling for the service life of the vessel with minimal repair and no replacement. Instead of using chemi-

cals to kill and repel marine fouling organisms, Ecospeed uses a hard, impermeable, impenetrable coating along with manual removal of fouling at an early stage.

Contact us if you are interested in joining our network and help us build a strong relationship with our prospects and customers. We look forward to hearing from you.

**SUBSEA  
INDUSTRIES**

+ 32 3 213 5318  
agents@subind.net  
www.subind.net

# Durable coating systems for different applications

**E**cospeed was the first coating we launched in 2002. Since then several other products have joined the Subsea Industries family. In this article we look at our other coating systems. There are many reasons why choosing our products is the best option for a ship owner. Depending on your situation, a different product will fit your needs.

## Ecoshield

Ecoshield is an enhanced version of Ecospeed. Small but significant variations of the Ecospeed formula have been tested on rudders since 2002 with extraordinary results. After years of testing, initially under the name Ecospeed Strong, the product was launched in 2013.

Ecoshield is designed to protect rudders and other underwater running gear from the effects of cavitation, erosion, pitting and corrosion. We have a constantly growing number of new and returning customers. We have vessels sailing with the coating system on their rudders and other running gear for ten years or more. When they come into drydock, the coating is always in excellent shape. Since 2013 Ecoshield has been applied to the rudders and other running gear of ships owned by many big ship owners including Seaspan and Pleiades. A large number of these vessels have since drydocked but the areas protected with Ecoshield experienced zero cavitation damage and did not need to be recoated. We recently had a customer who said that ‘the coating



*Rudder of Seaspan New York after sailing with Ecoshield for 10 years. Anodes are no longer necessary.*

simply works.’ This was when one of his vessels docked five years after application.

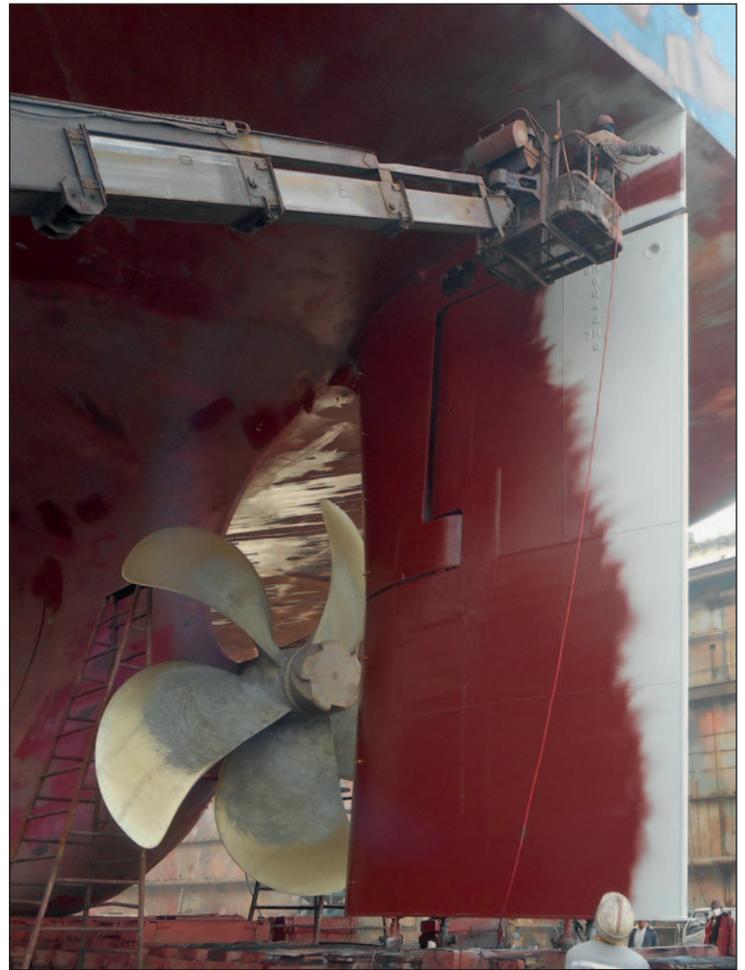
Ecoshield is not only used on rudders, but also on thrusters, thruster tunnels, nozzles and other running gear. We also work with OEMs to include Ecoshield in the newbuild plans of their products. This allows them to offer their customers a complete package with lasting protection.

## Ecofix

Ecofix is used for filling and building up a corroded and pitted steel surface to its original form prior to coating it with Ecoshield. Ecofix is as tough as the steel itself. It is machinable and can be used to repair most pitting or corrosion damage on rudders, stabilizer fins, thrusters and other underwater gear.



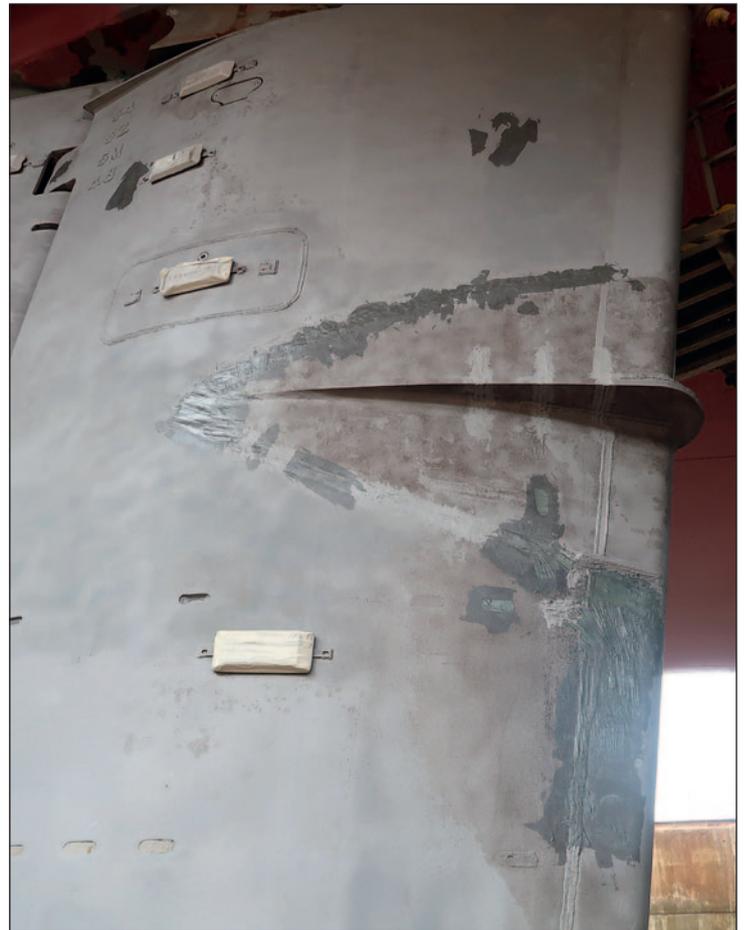
*Ecoshield offers the best possible protection for a rudder's entire lifespan.*



*Application of second layer.*



*Applying Ecofix on the pitted areas of a thruster tunnel.*



*Rudder after Ecofix application, ready for Ecoshield.*



*No corrosion or pitting damage will appear on rudders treated with Ecofix and Ecoshield.*



*Ecolock is an extremely tough and durable coating designed to remain in excellent condition for 25 years without drydocking, repair or replacement.*

Ecofix is used in combination with Ecoshield, the ultimate rudder protection coating. When a rudder or other piece of underwater ship gear has not been properly protected, the surface will become corroded. Cavitation damage can cause severe pitting. The steel needs to be restored to its original shape with a smooth surface prior to recoating.

This is where Ecofix comes in. It is a superior, tested and proven filler. Because it uses the same basic ingredients as Ecoshield, the coating can be applied just one hour after the filler. The bonding and hardness are extraordinary. This is the effective alternative to metal facing or very expensive alternative fillers. And because it is part of the Subsea Industries family, it is fully compatible with our coatings.

## **Ecolock**

Ecolock is used on stationary offshore units. The main benefits of the coating system are long-term corrosion protection and the fact that it can be cleaned without any negative effects. These units are designed to stay on location for 15, 20 and even up to 30 years. Hull integrity and corrosion protection are of major importance. Class demands an underwater inspection twice every five years to make sure the hull is in good shape. So the hull must be cleaned so that proper inspections can be carried out. If the hull is cleaned on a frequent basis, say every two years, this offers no problems at all. The coating is not harmed in any way. Neither is the environment.

The standard warranty is ten years, but for Ecolock this can be extended to 15 or 20 years. This is really a guarantee, not just a commercial promise.



*Application of Ecolock on one of the blocks of an Exmar FSRU.*



*Ecolock was launched in 2014. (Pictured: Exmar's Caribbean FLNG)*

Over the last couple of years, we have been involved in several large offshore projects, including two for Exmar NV. Exmar, headquartered in Antwerp, Belgium, introduced the world's first floating LNG liquefaction barge, the *Caribbean FLNG*, in 2013. The main reason for choosing Ecolock was to protect the underwater hull from corrosion for at least 15 years without having to drydock or repair or replace the hull coating. Another key factor in choosing the hull coating system was the need for

a clean, environmentally safe hull to facilitate the required class inspections.

One of our Ecolock projects was planned to be deployed in locations where there is a great deal of fishing activity. So, besides being sure that the coating would hold up for the time required, the owner and the local authorities wanted to be absolutely sure that no toxic elements would be leaching into the aquatic environment. Ecolock will not leach any harmful chemicals or microplastics even during removal of heavy fouling.

Ecolast is highly resistant to salt, ultraviolet radiation, waves or even ice. Mechanical damage to the coated surface is minimized. This is especially important for submerged or semi-submerged structures such as wind turbines that are located in splash or tidal zones.

As with all the other coatings systems in the Subsea Industries family, Ecolast is also ideal protection against corrosion. As a result no repaint is required once the coating has been applied.

### **Contact us today**

If you would like information on any of these coatings, do not hesitate to contact us. Our team will gladly assist you. If you drop us a line, we can tell you how our coating systems can benefit you. We will look at your specific situation and give you all the data you need.

This will allow you to make an informed decision on the next, and last, underwater hull coating for your ship or offshore structure. ■



*The topside of Tundra 3200 icebreaking tugboat m/v Selene was coated with Ecolast for UV protection.*

## **Ecolast**

The final product in the family is Ecolast which was launched in 2016. This coating is UV light resistant and preserves its color while at the same time offering the corrosion and abrasion protection our coatings are known for.

Regular coatings will quickly lose their original color when exposed to the ultraviolet radiation present in sunlight. This is problematic when colorfastness is required as is the case, for example, with offshore wind farms.

# Lasting scrubber protection

**E**cospeed fits in seamlessly with the environmental idea behind scrubber systems. It is a lasting, chemically resistant coat-

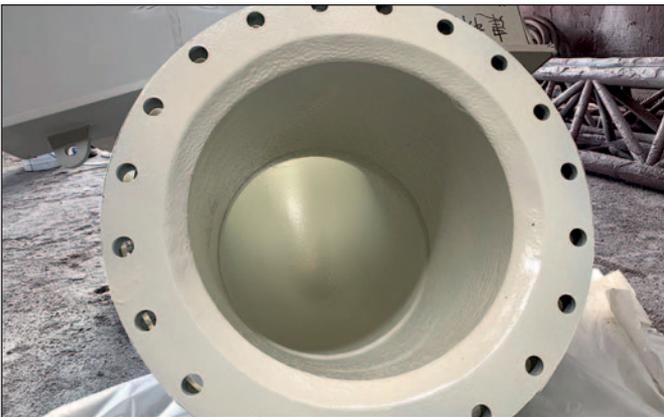
ing that will withstand the hazardous pollutants and will prevent corrosion damage and the resulting consequences. Ecospeed will

protects the exterior outlets as well as the interiors of scrubbers for the lifetime of the vessel.

## Outlets



## Overboard pipes



## Holding tanks



## The actual scrubber



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cleaning equipment as well as the line of hard hull coating systems.

All products produced by Subsea Industries have the same goal in

mind: To keep the underwater part of your vessel in the best possible condition for its entire lifetime at the best possible performance.

**[www.subind.net](http://www.subind.net)**

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[info@subind.net](mailto:info@subind.net)