

**Jotun Protects Property** 



Developed by Jotun.

Kongsberg inside.





KONGSBERG

# Jotun Clean shipping commitment

# Always clean hull

Even for the most challenging operations



With nearly 100 years of experience of charting through unknown waters, Jotun is committed to continuously innovate and develop groundbreaking products and solutions designed to protect biodiversity, cut carbon emissions and preserve fuel.





## Fouling – The global challenge

Accumulation of fouling over time leads to a significant drop in performance and an increase in vessel fuel consumption and environmental footprint. To counter this, ship operators select antifouling coatings for specific operational conditions. However, for ships in the most challenging operations, today's anti-fouling solutions are not able to keep the hull fouling free over time.

Vessels in challenging operations often need the hulls to be cleaned but this is a complex and costly operation, potentially damaging the coating, and incurs off-hire time. Utilizing divers also introduces health and safety issues, and cleaning without sufficient collection increases the possibility of transferring foreign species.

Many ship operators have to deal with these challenges regularly since available cleaning solutions are reactive and struggle to address these problems.

### Proactive cleaning

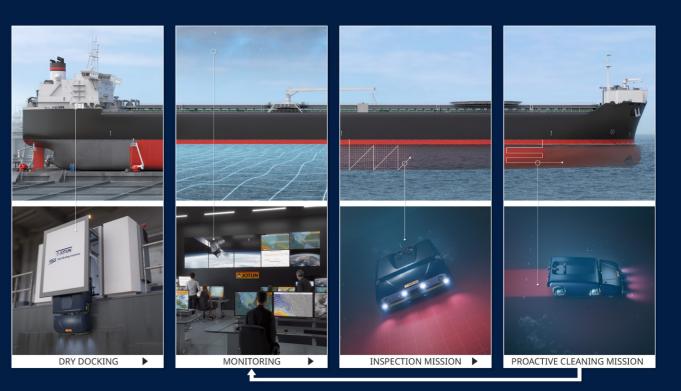
Jotun has developed a revolutionary proactive cleaning solution for the most challenging operations. A primary component of Jotun Hull Skating Solutions is the unique, onboard Jotun HullSkater, the first robotic technology that has been purposed-designed for proactive cleaning. In combination with the premium SeaQuantum Skate antifouling coating and a set of services, Jotun Hull Skating Solutions will help ship operators combat early stage fouling, significantly reduce fuel costs, cut carbon emissions and limit the spread of invasive species.

Jotun Hull Skating Solutions consists of five elements, equally important for delivering an always clean hull:





#### How it works



#### Economic and environmental benefits

Jotun Hull Skating Solutions provide market leading hull performance through high performance coating and proactive, efficient, safe and environmentally friendly cleaning and inspections.

- Full operational flexibility with unlimited idle days.
- Reduced fuel costs through a consistently clean hull and market leading hull performance.
- Reduced environmental footprint through less fuel consumption giving lower greenhouse gas (GHG) emissions.
- Reduced risk of spreading invasive species through the early removal of hull fouling at its geographical origin.
- Hull state verification capabilities available 24/7.

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