

## Interview Niels Hartmann

Leeraner Reeder spricht über  
Restrukturierung der Flotte  
und Neubau-Projekte

## Batterie- und Hybrid-Systeme

Die Entwicklung von Batterie-  
Systemen schreitet voran, die  
Regulierung hinkt noch hinterher

## 70 Jahre Reederei Chipolbrok

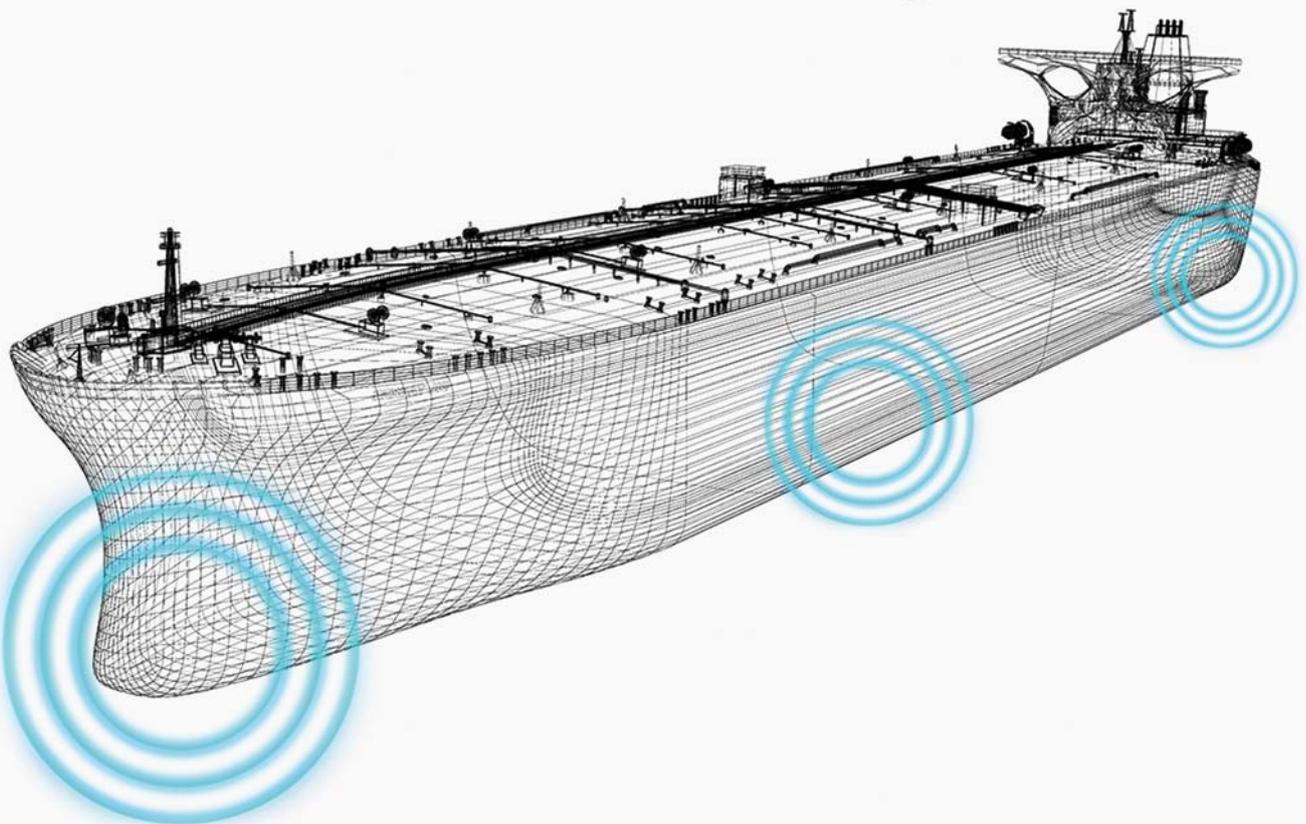
MPP-Stammgast im Hamburger  
Hafen: Chinesisch-polnisches  
Joint Venture feiert Jubiläum



when "clean" means

# CLEAN

ultrasound anti-fouling



# HASYTEC

**DYNAMIC  
BIOFILM  
PROTECTION**

# Sterling PlanB coming to Europe

Maritime energy storage solutions expert Sterling PlanB eyes further expansion into Europe with a new operational role. In a project with Danish offshore wind service provider MHO-Co, the company will contribute to the development of zero-emission ship technology

Energy storage solutions for ship applications are on the rise as hybrid and in some cases full electric vessel concepts are being implemented. On the back of this development, maritime and industrial energy storage solutions expert Sterling PlanB announced the appointment of a new European Head of Solutions, Jens-Christian Strate. Strate, who joined European operations in Copenhagen last May, will be responsible for managing the ongoing relationships with a number of Sterling PlanB's key stakeholders, in the marine propulsion sector. This will include ship owners, naval architects, shipyard managers and OEMs. Strate is a graduate of Copenhagen Marine Engineering School with a B.Sc. in Marine and Electrical Engineering, and most recently was with power electronics leader Danfoss. The news follows a period of significant progress and development for Sterling PlanB in the company's drive to increase use of ESS (Energy Storage Systems) in shipping.

In recent months, Sterling PlanB's ESS passed the revised DNV 2020 testing certification for commercial vessel batteries. As an early adopter of the certification, SPBES becomes one of the first energy storage solutions (ESS) providers to adhere to



Sterling PlanB ESS module

the new testing standard, which substantially mitigates the risk of the spread of fire by eliminating the propagation of thermal runaway within a battery module. Securing the type approval certification required extreme testing conditions. These are the first significant changes to testing standards from DNV since 2015, and follow a number of high-profile incidents involving thermal runaway. Previous requirements from DNV concluded testing upon the first sign of initial cell failure but before combustion. Revised testing rules demonstrate

the clear value of cell-level liquid cooling to prevent adjacent cells from contributing to a fire in a battery.

Sterling PlanB says it is now looking to build on these technical milestones to drive ESS adoption across Europe. For that purpose, Sterling PlanB has recently signed agreements with technical sales and installation company Marine & Land Electrical in Portugal and with Gebhard Electro in the Netherlands, Belgium and Luxembourg.

## Fuel cell and battery project

The battery maker is also involved in a project headed by Danish shipping company MHO-Co, developing green solutions for the future of the maritime industry. Together with Danfoss, Ballard Power Systems Europe, Sterling PlanB, Stuart Friezer Marine and research engineers from Aalborg University, and with grants from the Energy Technology Development and Demonstration Program (EUDP), MHO-Co will test fuel cells and new battery technology on the shipping company's advanced hybrid vessels. The next generation of MHO-Co's vessels are custom designed to service the wind turbine and offshore industries, and the shipping company specializes in transporting technicians to and from large wind farms. Currently, the shipping company is building the world's first Crew Transfer Vessels with hybrid propulsion, and these two vessels will be the focal point of the project. The two new vessels are being built in China and are scheduled to be put into operation in Europe this summer.

Over the next three years, the six partners have an ambitious plan to develop and test a propulsion system for maritime transport that does not emit carbon dioxide. During this period, MHO-Co will test both fuel cells and liquid cooling system batteries. Ballard Power Systems Europe will develop the fuel cells, while another pillar of the project is the use of energy storage systems for maritime use. This is where Sterling PlanB contributes to the project.



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