



**The Akerboom Yacht Equipment Innovation Report highlights our latest advancements in yacht technology, featuring a groundbreaking drive system for beach club platforms, eco-friendly initiatives in sustainable materials and propulsion, and new digital innovations for enhanced performance. Each section reflects Akerboom's commitment to pushing boundaries and delivering solutions that align with the evolving needs of modern yacht design, solidifying our role as a leader in the industry.**

# **Innovation Report**

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## Innovation Spotlight: Redefining Yacht Design



At Akerboom Yacht Equipment, we are committed to leading the way in marine innovation. *Spotlight* takes an in-depth look at one of our groundbreaking projects, showcasing the cutting-edge technology and expert craftsmanship that define our brand. This innovation captures the essence of our approach, demonstrating how we set new standards in yacht equipment design.



### Revolutionizing Drive Systems for Modern Beach Club Platforms

As yacht design trends continue to emphasize large open beach club spaces, the demand for innovative technical solutions to accommodate large platforms has intensified. For safety, this must be combined with the challenge of maintaining watertight integrity even in rough weather conditions. Creating large openings with large platforms fill these needs and the demand for innovative technical solutions has intensified. At Akerboom, for these platforms we've developed a cutting-edge drive system that addresses these needs by integrating hydraulic and electrical components directly within the platform, eliminating the requirement for additional technical compartments beside the hatch. Openings in the hull can be maximised to create the ultimate atmosphere in a safe way. The Akerboom compact and efficient solution offers significant advantages to yacht builders and designers seeking to optimize space.

### Integrating Mechanical and Hydraulic Components for Maximum Space Efficiency

One of the standout features of this drive system is its ability to enhance the open beach club experience by freeing up valuable space previously occupied by technical equipment. With all mechanical, drive, and hydraulic components embedded within the platform, yacht designers can now create fluid transitions between interior and exterior spaces – a crucial aspect of contemporary yacht design, enabling a seamless connection to the surrounding seascape and maximizing onboard leisure areas.



### Custom built with modular Design, Enhances Flexibility and Reduces Lead Times

This drive system was created by leveraging existing components and incorporating proven engineering concepts, resulting in a fully modular design. Its scalability allows platform sizes to be maximized within the hull dimensions, accommodating any specific yacht design. Starting with a yacht beam of 10 meters, Akerboom's stern platform solution fits yachts with beams up to 26 meters. Even for yacht designs with a significant slope, Akerboom's side platforms, with a standing height of up to 3 meters, are available in various lengths up to 20 meters.



The modular design not only reduces lead times but also enhances flexibility for diverse yacht projects. In line with Akerboom's stringent engineering standards, the system has undergone rigorous testing at our Leiden facility, including certification from leading classification societies such as Lloyd's Register. These tests have yielded valuable data, which we've used to refine the system's performance and manufacturing process. The innovative nature of this drive system has led us to pursue a patent, reinforcing Akerboom's reputation as a technical leader in the yachting industry. By continually pushing engineering boundaries, we provide solutions that meet the ever-evolving demands of modern yacht design.



## Behind the Scenes: Sustainable Solutions



Akerboom's dedication to pushing the boundaries of yacht design extends beyond our most celebrated products. In *Behind the Scenes*, we explore the smaller innovations, along with the experimental projects that never made it to production, showcasing the continual innovation process that drives our team forward.

### Akerboom's Commitment to Sustainability in Yacht Equipment

As sustainability becomes a critical focus in the yachting industry, Akerboom is actively advancing eco-friendly initiatives behind the scenes. In line with Feadship's forward-thinking approach, Akerboom has decided to discontinue traditional propeller shaft systems for new builds, emphasizing multifuel solutions with minimal CO2 emissions. This decision aligns with Feadship's future vision, exemplified by Project 821, which features hydrogen propulsion. By discontinuing the development of oil-lubricated shafts, Akerboom is embracing a more sustainable future. However, our Global Service Network continues to support and maintain previously installed shaft systems in the current fleet, ensuring they operate safely and reliably.



### Energy Recovery in Overhead Cranes

Akerboom has recently launched a new line of overhead cranes that are 100% electric and modularly designed to meet the unique needs of custom yacht builders. Developed over several years, these cranes have been successfully installed on four

Feasibility projects. During the development process, Akerboom explored the feasibility of harnessing gravitational energy released when lowering tenders, thus enhancing energy efficiency. While technically possible, this feature was ultimately set aside due to cost considerations and the limited frequency of use. Nonetheless, Akerboom remains committed to sustainable innovation within our product designs.



### Sustainable Use of Aluminum

Aluminum, a highly recyclable material, forms the backbone of Akerboom's product offerings due to its significantly lower weight compared to steel. As part of our commitment to sustainable yachting, Akerboom has implemented weight reduction strategies in key products like platforms and hatches, achieving a 10% reduction in aluminum usage to date. This not only lowers the yacht's overall weight, contributing to fuel efficiency, but also supports continuous improvement in sustainable design. We are actively researching the use of "green" aluminum to further our environmental goals and ensure our products leave a lighter ecological footprint.



## Future Focus: Embracing Digital Transformation

Our commitment to staying at the forefront of the yacht industry means always looking ahead. *Future Focus* offers a glimpse into what's next for Akerboom, as we anticipate industry shifts and explore groundbreaking ideas that will shape the future of yacht equipment and enhance the experience for our clients, ensuring that each innovation aligns with our vision for sustainability, efficiency, and unmatched craftsmanship.

### Elevating Yacht Performance with Intelligent Systems

As the world becomes increasingly digital, so too does the yachting industry, with onboard systems becoming more intelligent through advancements in electronics and control technologies. A prominent example is the Podium Platform by Pole Star Global, now frequently integrated into yachts, which uses Artificial Intelligence to support operational efficiency and aid the crew and captain in making faster, better-informed decisions. At Akerboom, we're embracing this trend by equipping our yacht systems with advanced sensors and modern PLC controls that respond instantly to user commands and detect anomalies. This integration of digital technology enhances system reliability and ensures smooth operation.

### Data Logging for Enhanced Performance and Crew Support

Looking ahead, Akerboom sees great potential in digitalization, especially through data logging, which will serve as a foundation for continuous improvement and learning. By capturing real-time measurements and smart signals, we can provide insights that go beyond traditional manuals. Our systems compare data against established benchmarks, empowering the crew with actionable insights. Akerboom has already made significant strides in this area with a new control interface that allows the crew to access information directly on their mobile devices via a local Wi-Fi network, enabling them to monitor equipment status, access full I/O readings, and diagnose errors in real-time through high-quality control cabinet displays for precise operational oversight.



### Exploring Practical Applications of Digital Innovation

Akerboom continues to explore how digital innovation can further enhance the safety and reliability of our yacht equipment. For example, smart rope lighting on gangways could alert the crew if too many individuals board simultaneously, enhancing safety protocols. In the future, we anticipate deeper digital interactions with other onboard systems and even environmental data. Imagine integration with security systems that control access based on conditions, or safety features on swim platforms and lifts that adjust based on weather or wave activity. At Akerboom, our commitment to digitalization is paving the way for smarter, safer, and more interconnected yacht experiences, allowing us to respond dynamically to evolving needs and challenges on the water.



**“Enabling flawless experiences through  
craftsmanship and innovation”**

Current sailing fleet

**>150**

Currently involved in building

**>15**

Servicing per season

**>130**

Preferred supplier of



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