

MARINE ENGINEERING

Customer Success Story

De Keizer Marine Engineering Uitgeest, Netherlands

Super Yacht Automation Systems

Headquartered in the Netherlands with offices in Spain, France, and the United States, [De Keizer Marine Engineering](#) is a global company of highly trained technology experts for super yachts. They implement and oversee super yacht engineering and instrumentation along with servicing and training. Having completed over 500 service and refits, they have the knowledge and experience to design and build complete integrated super yacht systems. Moreover, their system architects continuously stay up to date with the available technology in the market so know the exact system and technology that best suits each yacht. Available 24/7 to assist their customers, the De Keizer team calls themselves the “secret service” or “Guys in Red” to super yachts since they have the know-how, experience, design savvy, and passion to deliver the most elite design for any yacht.



Key Points

- Easy and multiple automation module designs allowing for extensive system integration.
- Comprehensive dashboards and generation of CSV files based on an I/O list.
- Alarm and control management to ensure ship safety through onboard system visualizing and alarming capabilities for bilge, stability, tank, fire, and refrigeration/freezer alarm.

The Challenge

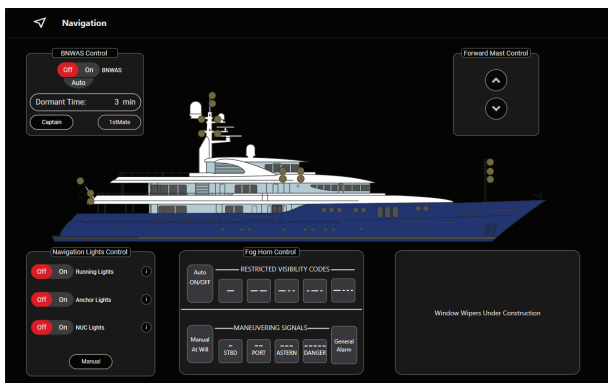
De Keizer Marine Engineering was looking for automation software for yacht integration systems. In particular, the software needed to:

- Enable easy configuration and use
- Provide fast, responsive monitoring and control
- Support alarm and power management
- Provide native HTML5 support and 3D visualization

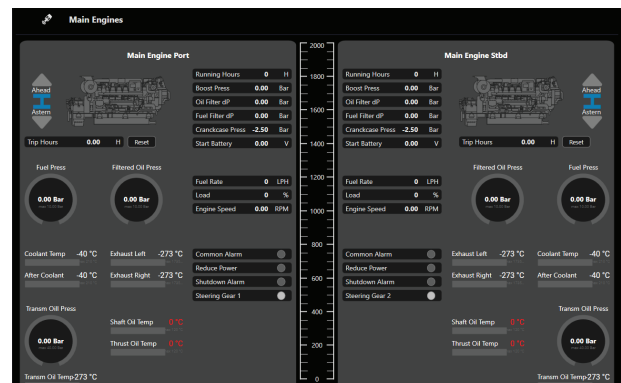
Additionally with this software, the Alarm Monitoring System (AMS) or Alarm Monitoring and Control System (AMCS) needed to be highly secure and meet insurance specifications to ensure

the safety of all personnel on any vessel. The interface also needed to have the most advanced technology with modern impressive visualization capabilities and easy to understand intuitive dashboards. These capabilities are essential for ship technicians to work more efficiently. Operators also wanted more possibilities for mobile integration to be able to visualize from anywhere on the vessel.

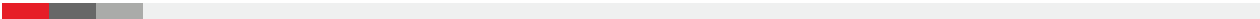
As a system integrator partner with Mitsubishi Electric Iconics Digital Solutions, De Keizer was already familiar with GENESIS. The company selected GENESIS for its fast and easy configuration, advanced capabilities, robust redundancy and alarm handling, and scalability across superyacht applications.



De Keizer Navigation Overview



Overview of the Main Engines



De Keizer Fuel Settings



Fresh Water Overview

Software Deployed

- GENESIS^{64™}
- Hyper Historian™
- AlarmWorX⁶⁴
- AssetWorX™

The Results

De Keizer has realized significant operational and engineering benefits from using GENESIS, including:

- Connected advanced technologies across yacht systems, supporting extensive integration and flexible module design.
- Created comprehensive dashboards and generated CSV files from I/O lists, improving access to information and streamlining file generation.
- Automated information and file generation, reducing the number of work hours required for each project.
- Strengthened alarm and control management through onboard visualization and alarming capabilities for bilge, stability, tank, fire, and refrigeration/freezer systems.
- Integrated seamlessly with Mitsubishi Electric hardware, which De Keizer uses across its systems.

Conclusion

De Keizer Marine Engineering uses GENESIS to design advanced, customized integration systems for superyachts. Looking ahead, the company plans to expand its use of the platform to further improve vessel performance, safety, and operational efficiency.

De Keizer is exploring advanced trending and analytics capabilities to give technicians greater insight into the data and parameters that affect vessel operation and safety. The company is also evaluating energy management capabilities to optimize systems such as HVAC and power generation, as well as additional GENESIS capabilities to support future development and system expansion.

“At the moment, we are delivering our third project of the New DekaSIs.iQ which is built on Mitsubishi Electric PLCs and controlled via the GENESIS software. Due to the object-oriented nature of the platform and the possibility to automate the configuration and import data, we can easily work with a team of engineers on the project and deliver programming quite quickly.”

Jeroen van Goethem
Manager of Automation
De Keizer Marine Engineering BV

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