GRIMALDI GROUP

SERTICA Case

The power of data: Elevating Fleet Performance with SERTICA

At Grimaldi, a firm believer in the power of data, the quest for a robust data analysis tool led to the adoption of SERTICA Performance. With a self-built system for high-frequency data collection from every sensor on their fleet, Grimaldi sought a partner to delve deeper into this data for more insightful analysis.

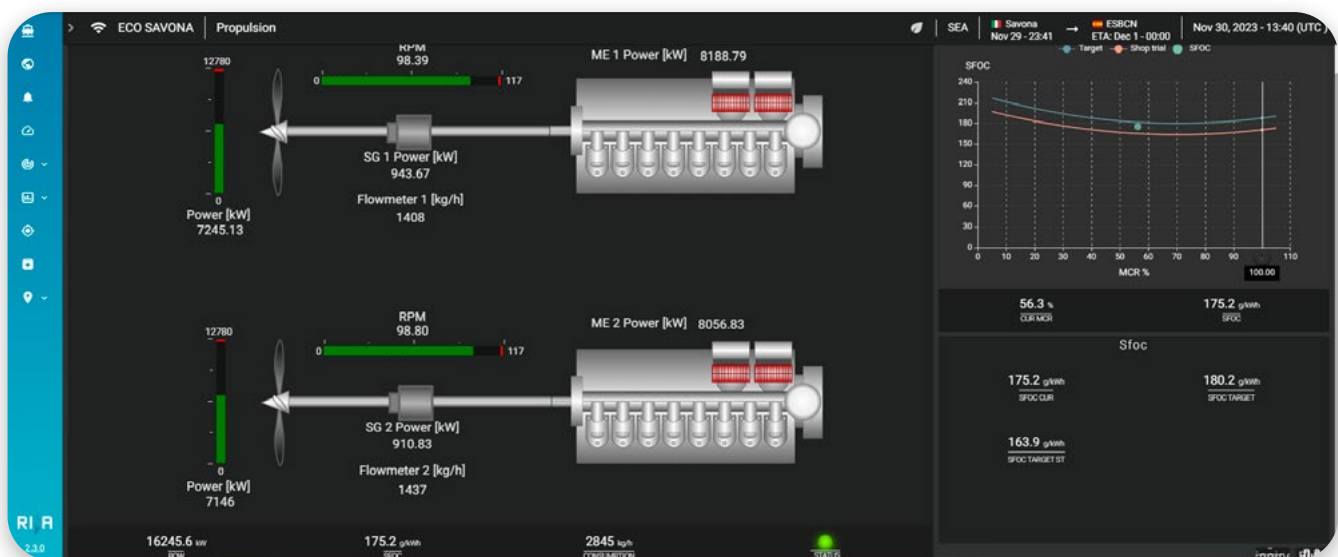## SERTICA
BY RINA

High-frequency data collection

Grimaldi has equipped their ships with numerous sensors that continuously measure various parameters like engine RPM, fuel flow, exhaust emissions, speed, and position. These sensors feed data directly into SERTICA Performance for Real-Time Monitoring.

Mr. Andrea D'Ambra explains, "To perform the basic performance analysis, it is important we have data from the main fuel consumers along with navigation information. As a minimum, we need to monitor ECDIS data, produced power, and fuel consumption for the main engine and auxiliary generators."

Mr. Andrea D'Ambra continues, "In my opinion, the key sensors to be installed are torquemeters and flowmeters on the shaft and main engine, as well as flowmeters and powermeters for the auxiliary engines."

By analyzing data like engine performance and fuel consumption against weather and sea conditions, Grimaldi can optimize routes and speeds for fuel efficiency and timely arrivals.
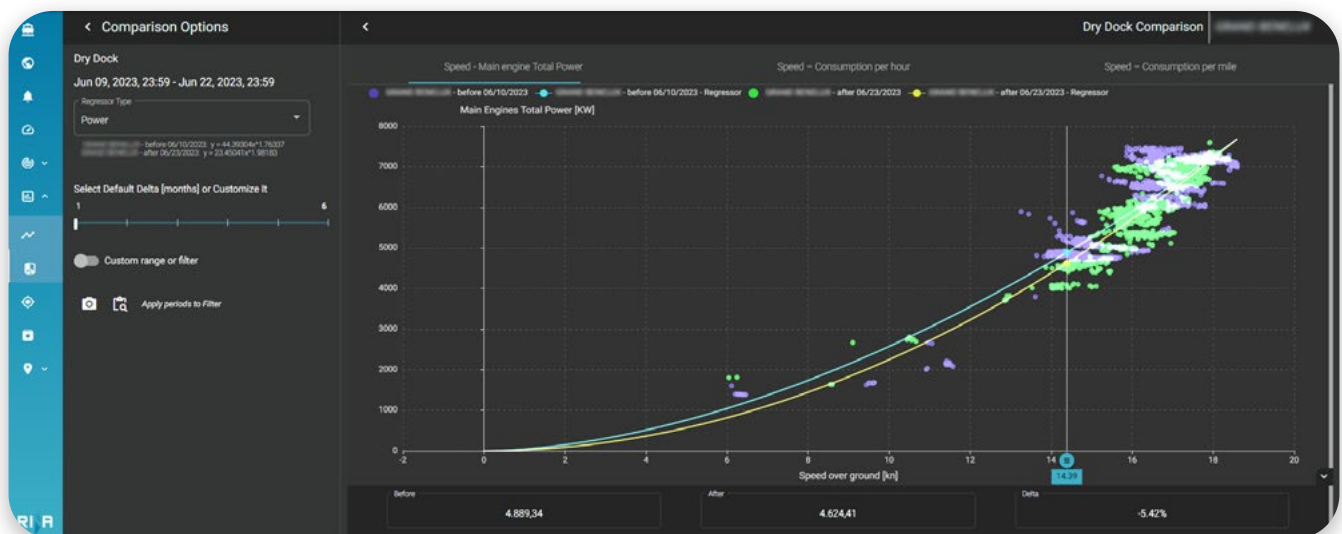

Realtime Propulsion dashboard with details of RPM, fuel consumption and SFOC (Specific Fuel Oil Consumption) of the Main Engine.

Measuring the effect of energy-saving solutions implemented onboard

Grimaldi aims to achieve comprehensive performance reporting, which includes evaluating the efficiency of energy-saving solutions implemented onboard.

Mr. Andrea D'Ambra says, "With SERTICA Performance, we anticipate demonstrating the true effectiveness of our various energy efficiency measures, including our award-winning ECO Class ship design. The tool's advanced data analytics capabilities are crucial for enabling us to make informed decisions about our future energy efficiency initiatives.

Analysis of dry dock event on one of Grimaldi's vessels with a 5% improvement by applying steady conditions and weather filters.

"Their responsive approach to communication has significantly eased the implementation and ongoing utilization of SERTICA."
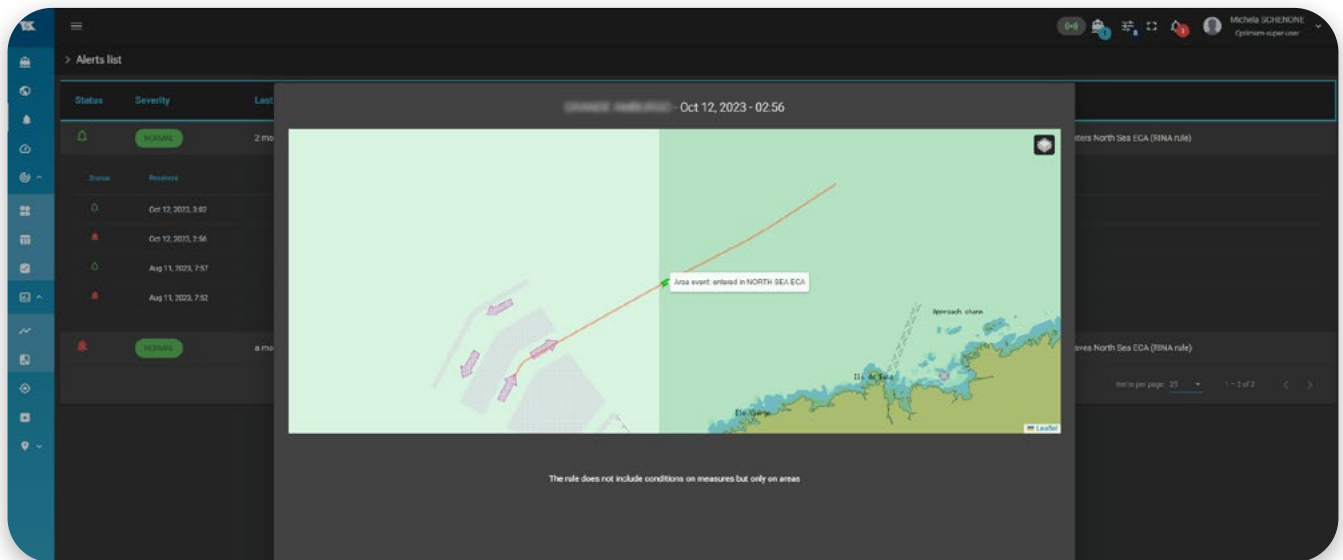
Andrea D'Ambra, Grimaldi Group

Using Automatic Alerts to meet environmental regulations

Grimaldi has equipped their ships with numerous sensors that continuously Grimaldi customizes alerts with an advanced rule engine and geocaching to address critical onboard events. They establish geofencing areas, develop unique alert rules, and integrate geofencing with sensor signals. If any unusual activity is detected, email notifications are sent to the relevant personnel.

As an example of an alert used frequently by Grimaldi, Mr. Andrea D'Ambra mentions that, "We use alerts to monitor when our ships enter ECA areas and to verify the sulfur content of the fuel they burn. Using this alert, we both ensure compliance with the regulations and save money burning more expensive fuel only where needed."

Grimaldi has also established an alert to track the use of the air lubrication system in newer vessels, in combination with ship speed and environmental conditions.

Example of one of Grimaldi's ECA area alerts.

A partnership towards operational efficiency

SERTICA Performance has equipped Grimaldi with the tools to enhance fleet management through data-driven insights. Their ability to tailor analytics and alerts has greatly improved operational efficiency and compliance.

Mr. Andrea D'Ambra tells, "The system's flexibility negates the need for developing extra features, which is a significant benefit for us."

Mr. Andrea D'Ambra continues, "The dialogue and cooperation with the RINA team have been invaluable because of their deep understanding of vessel performance, combined with the comprehensive skills typical of a Class Society. Their responsive approach to communication has significantly eased the implementation and ongoing utilization of SERTICA."

Advantages highlighted by Grimaldi

- Optimize fuel efficiency.
- Reduce emissions.
- Meet environmental regulations.
- Detect safety issues early through monitoring.

Digitalize your fleet

SERTICA is the ultimate all-in-one solution for ship management, providing digital tools for maintenance, procurement, HSQE, crewing, performance, vessel reporting and electronic logbooks.

Our software is developed in close co-operation with leading shipping companies worldwide and onboard more than 2000 ships. SERTICA allows ship operators to optimize performance, increase transparency and improve data management.

We believe in collaboration and partnership, and we know that the right support makes all the difference in the world. That is why we make it our business to go beyond what is expected.

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