Confidence, implication and innovation

SEDNI is a company specialized in the design of dedicated marine electronics and software for monitoring and control. We have contributed to the development of maritime ship systems for over 25 years using state of the art-technology, our experience and innovation.

- Experienced professionals.
- Looking for innovative solutions.
- Exchanging of ideas between us, our partners and our customers.
- Pursuing improvements as a part of what we are.
- Highly reliable products you can trust.
- A company concerned with the health, safety and environment.
The DIAMAR marine automation system from SEDNI is a distributed integrated alarm monitoring and control system (IAMCS), which was designed to meet the most demanding requirements of shipyards and ship-owners.

DIAMAR is built from modular hardware components to provide an optimal solution to all types of vessels, under the highest standards of safety and reliability:

- Ferries, RORO
- Container ships
- Bulk carrier, car carriers
- Oil tankers, chemical tankers
- Offshore support & construction vessels
- Research vessel
- Patrol ships
- Fishing vessel
- Tugs
- Mega-Yachts

Distributed architecture and tri-redundant CANBUS communications, one step ahead in operative safety of the vessel. Rugged hardware designed to comply with the highest levels of safety and reliability, ensuring system availability.

DIAMAR has got the type approval of all major Classification Societies: DNV/GL, LRS, BV, ABS, RINA, etc.
Highly intuitive monitoring and controlling

Remote monitoring and control stations, provide a functional, user-friendly human machine interface (HMI), which promotes the use of touch screens, intuitive menus and high quality mimics. Operator can select mimics language. All the relevant functions on board are covered by DIAMAR, such as:

- Alarm and monitoring
- Power Management System (PMS)
- Auxiliary machinery control
- Tanks level gauging
- Cargo / ballast monitoring and control
- Reefer monitoring
- Heating ventilation and air condition (HVAC)
Distributed architecture, modular technology

DIAMAR makes a difference in modular I/O hardware (LOM), which has internal and independent processing capabilities. Our distributed architecture allows local modules to drop the processed information into the network through a triple-redundant data bus (CANBUS), providing the maximum robustness and reliability to the entire system, while at the same time representing a significant cost savings in installation, commissioning and maintenance:

- Same type of modules for all processes
- Reduction in the need for training.
- Reduced number of spares on board.
- Simplifies troubleshooting. On-board engineers can quickly replace modules without tools or additional software.
- Modules are maintenance-free.
SMART-SHIP concept

SMART-SHIP concept from SEDNI revolves around Integrated Alarm Monitoring and Control System DIAMAR as the key for data acquisition, calculation of parameters, comparing with optimum values and evaluating potential actions to take.

The option DIAMAR DATALOGGER sends all reference data from engine room to on-shore office, making it easier an optimum planning of vessel maintenance. Software DIAMAR SHIP PERFORMANCE, analyzes the consumption and emissions of vessel, considering hull condition, navigation data and weather in order to reduce operative costs and comply with environmental regulations.

DIAMAR NEREIDA calculates the vessel stability and longitudinal strength, based on an 3D model of the hull. Straightforward tool for everyday planning loading condition, and damage stability simulations.

We add value by integrating our databases with other BIG DATA systems in charge of processing all the fleet information.
Technical services

Our strong technical and commercial team, made up of highly specialized engineers in maritime automation, provide through our network of agents, the following services:

- Engineering, design and development of customized projects.
- Sales and after sales support
- Customized preventive maintenance programs.
- Training courses for operators.
- Courses for qualifying maintenance personnel.
- Automation and machinery engine room simulators.
- Marine Refit/ Retrofit / Conversions of machinery automation system
- Technical consulting and development of technical specifications.