

# IMACS

Integrated Monitoring, Alarm and Control Systems



**IMACS** is an **Integrated Monitoring, Alarm and Control System** for engines and machinery onboard ships. The system is comprised of Siemens PLC units in full redundancy, dedicated computers and field proven real-time monitoring & control software. The comprehensive system provides integration of on-board Power Management System, Tank Level indication, Anti Heeling and Loading program in addition to the incorporated standard Engine Monitoring and automation features. Shore-side back office version with offline data and fault analysis is also provided.

## **Vessel Automation System Sizing and Configuration Questionnaire**

An IMACS system installation on a vessel can be assessed in terms of effort and cost, based on a number of few key parameters, listed below:

1. Number of existing sensor I/O points and the type (*if any*).

*For Example:*

- Quantity of Digital (Binary) inputs
- Quantity of Analog inputs, PT100
- Quantity of Analog inputs, 4-20mA
- Quantity of Analog inputs, 0-10 V
- Quantity of Digital (Binary) outputs

2. Number of remote stations (cabinets with electronics).  
Many times the electronics are not concentrated in one location in the engine room but scattered across several remote locations on ship.
3. Number of workstations required, for monitoring and control (if more than one).
4. Number of extension alarm panels required, including Bridge Alarm Panel (BAP) and common places alarm panels (mess rooms etc.).  
*Note: In case of a "conversion" project, it is possible to use the existing extension panels, provided they are single-line lamp/led based.*
5. Dead man alarm for machinery spaces, if part of the system
6. Functional description of any automation tasks required (such as stand by pumps, valve operation, thermostatic valves, PID, anti heeling etc. etc.)
7. PMS: Does the system include power management system?
8. Details regarding ship's class

## **Preliminary indicative quotation**

Based on the above outline information for any vessel application, an indicative quotation may be prepared within one week. We would be always ready and highly responsive to your investigating a potential IMACS installation to your vessels.