Vessel Management System
**e-SEAMatic V3** is our latest generation of Vessel Management System. It is designed to meet the demanding needs of shipyards and ship owners; covering all functions of the machine alarm & monitoring system with a seamless integration of the ship's automation systems.

WPA automation solution is for all types of ships both for newbuild and retrofit projects. It provides the crew officers onboard all basic alarm and status information for safety and efficiency.

### Key Features
- System Components are typed approved
- Approved by major classification societies
- User friendly and intuitive system
- Easy integration of autonomous subsystems
- Seamless integration of WPA’s stand alone automation systems (e.g. Propulsion, PMS, Cargo Control)
- Fully Redundant Network
- Distributed IO principle
- Modular cluster concept
- Alarm Support for user-oriented operator assistance
- Cyber Security

### Benefits
- Essential Bridge Alarm still displayed on EAS panel even when Operation Stations are offline
- Retrofit or repairs can be done while system is running
- Extensive cabling reductions
- Reduced working hours for engineering, installation, commisioning and documentation.
- Easy to install, configure and operate
- Easy menu navigation
- Worldwide accessible spare parts

### Project Tool
The **e-SEAMatic V3 Toolbox** is an effective and reliable automatic project generation and upgrade tool.
**SEAMLESS INTEGRATED SOLUTIONS**

**e-SEAMatic V3** is a seamless integrated solution that can be used in a wide range of applications. It can be deployed as a stand-alone subsystem (e.g. PMS), Alarm and Monitoring System, Integrated Automation System up to the multi-purpose Vessel Management system integrating several ship systems on the same technical platform.

**Ships System Integration**
- Alarm and Monitoring System
- Auxiliary Control
- Cargo and Ballast Control
- Tank Sounding
- Pump Control
- Valve Control
- Power Management
- Engine Control and Safety
- Fire System
- HVAC System
- Propulsion and maneuvering
- Marine Vision System (CCTV)

**Operator Stations Design**
- Intuitively designed menus and pop ups
- Online tag configuration
- Process Analyst
- Self intuitive and innovative process views
- Standardized and functional devices (valves, motors, tanks, breakers etc)
- Well arranged EAS/DMS view
- Maintenance Views
- Instant Access to PDF files
- Day/Night Mode
- Widescreen Possibilities
- Multi-monitor solutions
- Audit Trail
- User can change to preferred light or dark theme on-the-fly

**Engine Control and Safety**

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**Application**

| Ship Name: | MF Faldøy          |
| Owner:     | Norled            |
| Type:      | Passenger Ferry   |

| Ship Name: | Normand Atlantic |
| Owner:     | Solståd Shipping |
| Type:      | Tug/Supply Vessel|

| Ship Name: | Vikingbank |
| Owner:     | Cetus AS   |
| Type:      | Fishing Vessel |
**Fully Redundant Network**

The reliable and secure system networks are based on switched Ethernet, designed for real-time critical applications. All PLCs and workstations are connected to the network via rugged design managed switches and Ethernet/IP (industrial multi-vendor network protocol) is used as the means for exchanging data between PLCs in the system. It is possible to use either coax cable or fiber optic cable or a mix for the system networks. Any fault in system networks will give rise to an alarm, where e-SEAMatic V3 will identify and display the specific nature and location of the problem.

A fast-recovery ring redundancy or dual link network redundancy provide high availability of critical data pathways for monitoring and control of vessel and its platform systems, through the control network or the lower level cluster networks. The concept of cluster architecture enables scalability in quantity of systems connected to e-SEAMatic V3 and also segregates network load from the control network.

**Autonomous Subsystems**

e-SEAMatic V3 allows for integrating seamlessly various subsystems through the redundant cluster networks. The subsystem utilizes dedicated PLC to run its own alarm processing and control logic program which assures individual controller integrity. The sub PLC mainly make use of its local IO, but may also exchange IO with other subsystems through tag data links interchanged on the cluster network. Although this assures autonomous subsystems, they communicate freely through the cluster servers with the global clients over the common control network.
COMPREHENSIVE VESSEL APPLICATIONS DELIVERED TO SUIT YOUR NEEDS

**e-SEAMatic V3** comprises of a wide range of control and monitoring systems that are integrated with multi monitor solutions.

**Cargo Control**
Cargo Control System monitors and controls the loading and unloading of the ship’s liquid cargo. This also can include pumps, valves positions & tank levels.

**Power Management**
Power Management is a multi-master system that allows you to control and monitor power distribution. It is suitable for any type of marine application. It improves reliability and reduces the risk of blackouts resulting to financial and operational efficiency.
Westcon Power & Automation offers complete electrical installations for new builds, re-builds, classification, as well as a wide range of other services. Our highly qualified staff and extensive network of partners enable us to provide our customers with customized solutions.

Our Products & Services

Our comprehensive portfolio of state of the art products for the maritime industry ranges from complete power and automation systems to stand-alone products and concepts for machine safety.

WPA provides a full range of services within oil and gas, marine and industrial sectors. We are the preferred supplier of electro on all yard stay of Westcon Yard.

Our Technology

Significant R&D over the years has helped us to make complex technology easier to achieve. The changing needs of customers present new challenges and techniques that allowed us to be flexible in adapting into the evolving market and continue to develop ideas not only for clientele but also for our continuous growth.

Machinery Control

Machinery control handles all monitoring and control functions for the machines on-board covering machinery units and applicable auxiliaries.

Tank Sounding

Tank Sounding System utilizes a functional system that provides the operators with the loading condition of the ballast system. This is a scalable solution, and therefore can be customized based on the client’s requirements.

Alarm & Monitoring

Alarm and Monitoring system provides basic alarm and the status that the crew requires for safety & efficient operations. It complies with regulations for unmanned engine.

Propulsion Control

Propulsion Control System monitors and controls equipment, HMI and other modules needed to fit the ship's requirement for propulsion and maneuvering. It allows unlimited number of maneuvering consoles and even customer specified panel layout.