

SUCCESS STORY



Alewijnse determines selection on the basis of quality and support FAST/TOOLS SCADA system for OceAnco mega yachts

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Industry: Marine Automation

Executive summary

Alewijnse provides Yokogawa's FAST/TOOLS package for a variety of marine applications, including the world's largest yachts (mega yachts) built by Oceanco of The Netherlands.

Alewijnse has selected FAST/TOOLS because of its quality and support, and this software has allowed them to both streamline the engineering process and reuse data.

Alewijnse Marine Systems

Alewijnse Marine Systems (Alewijnse) is a value-added reseller that designs and develops applications based on Yokogawa's FAST/TOOLS package for use on board ships. Jo Visschers, Alewijnse's Marine Automation Team Manager, explains his company's decision to go with a Yokogawa solution: "As a system integrator we have a broad knowledge. For in-depth knowledge of the products and systems we use, we rely on our suppliers. They must of course possess great expertise and a good support section. Yokogawa has got this covered." Elda Mulalic, Project Engineer for Alewijnse, adds, "You experience this support at the moment you need to modify the software. The developers at Yokogawa are less than an hour away from our office; therefore we have service and support at our beck and call."

Yokogawa's support has been particularly valued in the development of custom FAST/TOOLS applications. According to Mr. Visschers, "The alarm processing is a good example of this. The way in which this is done with the SCADA system is unique and requires a confirmation by the operator for each alarm." Yokogawa has been closely involved, supporting Alewijnse in every step of this process.

Oceanco, a Dutch shipbuilder specializing in mega yachts, relies on Alewijnse for electrical engineering and ship automation. Mr. Visschers explains, "Alewijnse is the main supplier of anything connected to a wire. This can vary from power supplies to controls and from alarm functionality to audio, video and entertainment systems." It goes without saying that all engine room automation is under the responsibility of Alewijnse. Engines, generators, all hydraulics, systems for fresh and waste water, and so on all use controls supplied by the company.

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Alewijnse's control systems are based on a three-layer concept. Mr. Visschers: "First of all, there is the power management system (PMS), which controls the entire power supply. Three main generators and one auxiliary generator are controlled fully automatically by PMS and according to demand." The actual controlling is done by the second layer, the PLC system, which is comprised of two redundant main PLCs. As the alarms are also controlled by the PLC system, the system is approved by Lloyd's Register. The third layer is the SCADA system.

Mr. Visschers again: "The SCADA system is used for visualization, operation and configuration of the engine room automation. The FAST/TOOLS system from Yokogawa was chosen." Ms. Mulalic further explains this selection: "Two points were decisive in the selection of FAST/TOOLS: the system quality and the support function offered by Yokogawa. Another SCADA system was used on earlier projects, but in practice it caused a lot of problems. As a result, the ship was out of action after two days. FAST/TOOLS, in contrast, runs faultlessly. FAST/TOOLS is ideal for maritime applications. The system works fine in the redundant version, while the alarm history is automatically generated by the system. Furthermore, FAST/TOOLS offers all the options for individual applications."

About OceAnco

The most recent mega yacht to be delivered by the Oceanco shipyard is the MY Amevi, the first of a new generation of mega yachts. The base for all of the company's yachts is a hydrostatic hull design with optimum streamlining and stability. Due to intelligent compartmentalization, standard fore and aft sections can be joined as separate modules with a variable midsection. The design also includes the engine room section and the pipework, which are a regular part of the aft section, along with the shafts and steerage. The superstructures of Oceanco's mega yachts are designed and built individually. An attractive design can be combined in this way with the advantages of a proven design which can be built efficiently and economically and to the highest yachtbuilding standards.

OceAnco builds megayachts according to a standardized design; a proven design that offers plenty of space and flexibility for an individual design of the midship section and the superstructure. Alewijnse Marine Systems is the regular partner for all electronic systems and automated systems aboard the yachts. The company uses the FAST/TOOLS SCADA system from Yokogawa for the configuration, visualization and operation of the technical systems.

Product : FAST/TOOLS SCADA

Alewijnse uses FAST/TOOLS version 8.4 on the Oceanco mega yachts. According to Mr. Visschers, "FAST/TOOLS is set to form part of two new projects: a dredger and a heavy lift ship. The improved trending and reporting functions were decisive in the choice of this version." The trending options included 2D and 3D rendering, zoom options, and historical and real-time trending. Furthermore, the time range is simple to adjust and history groups can be selected automatically. The trending function supports multiple time intervals while the trend data can be exported as a bitmap or CSV data file. Other functions include a configurable key and the free choice of layout and decoration of the menu window. In addition, this version offers redundant server support, monitoring of CPU activity and levels of FAST/TOOLS processes, data synchronization between redundant servers, watchdog monitoring and logging of events, and diagnosis of changes in the hot stand-by configuration. Also, FAST/TOOLS can be supplied with an add-in which can be used to load history, alarms, log files and configuration data from FAST/TOOLS into an MS-Excel spreadsheet for reporting and analysis.