

## WOODWARD 2300E CONTROLLER RETROFIT ON WÄRTSILÄ 9L20 ENGINES

Goltens was engaged by the owner of an offshore supply vessel to upgrade the controls on two medium speed Wärtsilä engines with obsolete Woodward 723Plus controllers. The retrofit was completed during a major engine service interval to ensure continued support and control continuity. Goltens recommended the installation of the Woodward 2300E for the upgrade as it closely matched the existing I/O requirements.

### BRIEF

Goltens saved the original configuration file from the 723 controls to ensure parameters such as number of teeth and rated speed were copied across to the new controller and the original GAP™ application program was updated to the latest revision to be compatible with the new 2300E controllers. As a result, the application program retained all the original logic functionality and I/O points. As the 2300E footprint is less than that of the original 723Plus, it was easily mounted in the same location and the wiring simply connected back to the 2300E.

Prior to installation all the original cabling from the controls to the engines and ship systems were checked and tested, the MPU's inspected and adjusted. The converted 2300E software was simulated and the control tested within Goltens facilities where the original configuration files were entered. After installation in the vessel each I/O point was again tested and verified by the control. The updated wiring diagram and updated manual was also generated and provided to the customer.

### RESULT

The retrofit was completed efficiently without affecting the operating philosophy of the engines. Both engines were started and completed dock and sea trials without any issues.

The client now enjoys the knowledge that the 2300E will be supported by Woodward and Goltens for many years into the future.

### RECOMMENDATION

To avoid unwanted down time and associated costs it is recommended to assess your Woodward control inventory to ensure they are still supported. If they are not then to consider a retrofit as part of your fleet maintenance schedules where Goltens can offer an economical solution.

### PROJECT FACTS

Description: Retrofit Woodward 723Plus to Woodward 2300E  
Location: Dubai Maritime City, U.A.E.



Figure 1: Woodward 3161 installation before upgrade



Figure 2: Technician fitting the Woodward UG25+P3



Figure 3: Woodward UG25+P3 after retrofit