FERRY UPGRADE

Solution Provider
• Turner Engine Controls

PRODUCTS USED

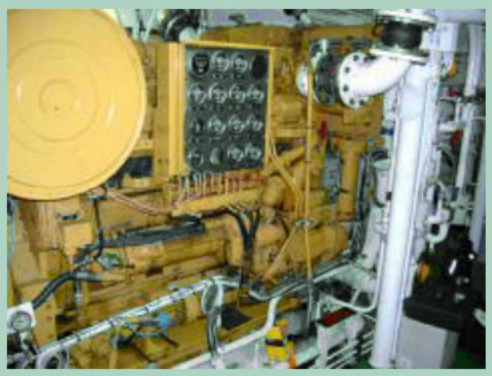
WOODWARD:

2301D DIGITAL SPEED CONTROL

- Dual Dynamics
- Analog speed reference
- Start fuel limiters
- Torque limiter
- Ramp rates
- Alarm indication
- Software configurable

UG8 ACTUATOR

- Self contained oil supply
- Integrated magnetic pick up available
- Low overhaul costs



Introduction

The MS Sier 73 m long ferry sailing under BV class. The vessel has four CAT 3508 diesel, 650 kW, each are directly coupled to a Schottel pump jet.

Due to failures and breakdowns of the existing Schottel speed setting system, Turner Engine Controls was consulted to propose an alternative solution. The existing speed setting system was replaced by a Woodward 2301D speed control. The mechanical hydraulic 3161 governor was replaced by a Woodward UG Actuator.

In brief, the upgrade consisted of engineering, delivery of necessary hardware, installing of hardware and commissioning of the complete system.

Problems old Speed setting device

- Breaking of internal parts
- Obtaining spare parts
- Calibration issues
- Long speed setting cable

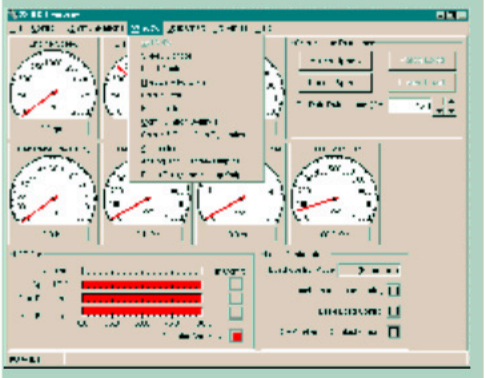
Application

The new governing system consist of a **Woodward** 2301D speed control and a Woodward hydraulic UG actuator. The 2301D speed has been integrated in an existing cabinet. Normal operation is from bridge by means of a 4-20mA speed setting signal. By means of a local/remote selector switch the engine can be controlled locally or from bridge.

The 2301D control replaces the old speed setting device and provides additionally the following functionality:

- Speed control
- Start fuel limiter
- Torque limiter
- Local speed indication and alarms

The 2301D is a software configurable control. By means of Watch Windows, the customer has the possibility to configure and tune the engine.



New control system components

- 4 x Woodward 2301D controls
- 4 x Woodward UG Actuator
- 4 x Woodward speed sensors (MPU)
- 4 x DC/DC stabilizers in cabinet

New situation Woodward actuator and speed control

- Reliable system
- Digital speed setting control
- Advanced troubleshooting & diagnostics
- Marine type approval

Control/Customer Benefits

- Better, reliable and more accurate speed setting device.
- Better control and response from the engine.
- Alarm readout
- Local/remote control
- Software configurable

More information?

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