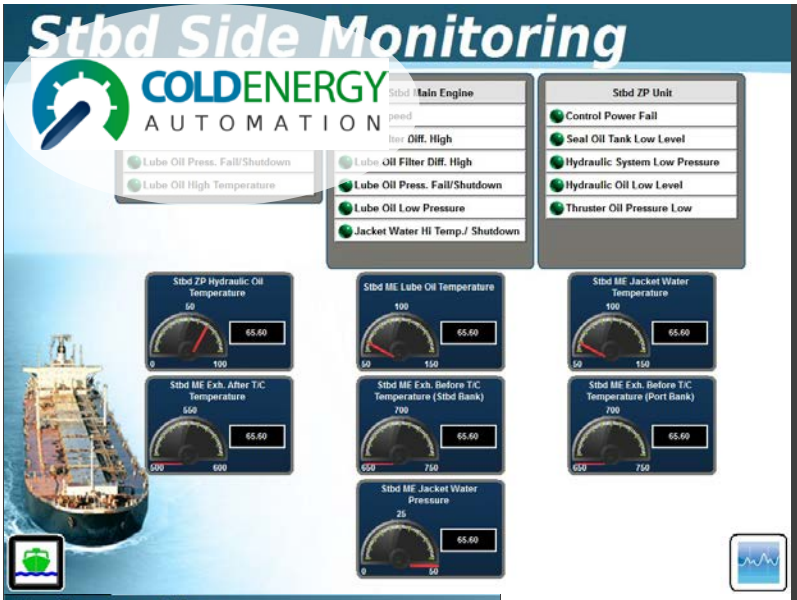

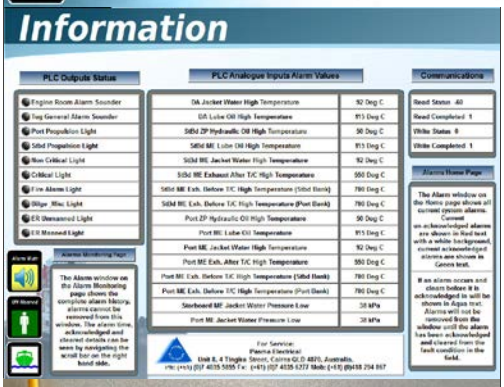

Portland Tugs:

Engine Monitoring System

PROJECT PROFILE

Automation Services

The roles of Cold Energy Automation during this project were;

- Control System Design, Micrologix Programming and Remote Commissioning.
- Create & Commission SCADA Graphical Supervisor.

Project Equipment

- Allen Bradley Automation System (Micrologix 1100)
- Indusoft SCADA system
- Panel Mount Industrial Touch Screen PC's.

Control System Communication Protocols

- Ethernet/IP

Project Overview

The Portland Tugs, Cape Nelson and Cape Grant, required an engine alarming and visualisation system. The system was designed around the Programmable Logic Controllers (PLC) selected for the project, Allen Bradley Micrologix 1100. Each vessel had a PLC retro fitted on site by Pasma Electrical combined with an industrial touch screen PC. A second fully redundant SCADA touch screen PC was added to the wheel house as stage 2 of the project.

The Allen Bradley Micrologix PLC's controlled the;

- Digital control points.
- Analogue control points.
- All alarm setpoints, time delays, alarming groupings and logic control.

The Indusoft SCADA system visualised the status of the digital and analogue values, provided a storage database for alarm events and analogue logging. All alarming, logging, set points and system status were displayed and adjusted via the Indusoft SCADA system from the engine room and wheel house.