

HOLMAN ENGINEERING

PC Based Control Software

Holman Engineering developed a PC based control and data acquisition system for a gas meter testing rig for the Gas & Fuel Corporation of Victoria. The rig is used to automatically test all industrial gas meters used throughout Victoria.

Below is a photo taken inside the control room of the testing laboratory. The test rig itself can be seen through the window.



Holman Engineering's system controls several High Power (100kW) fans, eight valves, and several analogue control valves. These outputs are used to set the flow rate through the meter. The system reads twenty five RTD's down to 0.01 of a degree C and twenty eight pressure transducers many times every second while a test is being conducted. Below is a photo showing some of the many valves and transducers.



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PC Based Control Software *continued....*

The system involved Holman Engineering developing complex custom control software to provide a flexible user interface combines with real time control and data acquisition. Holman Engineering also provided all control and data acquisition hardware including the custom digital Input/Output cubicle and the data acquisition hardware which measures signals to an accuracy of +/- 20 microvolts. Below is a photo of the custom digital Input/Output cubicle and the data acquisition hardware..



The system allows the testing of an industrial gas meter to be done fully automatically, removing the possibility of human error. It is capable of running dozens of different types of standard tests, or it can be set up to run a custom test. It produces many different types of reports at the completion of each test. Below is a photo that shows the scale of the rig. The pipe work shown is 4ft diameter.



EXCELLENCE IN ENGINEERING