



## Key Benefits

- Automatic testing capability
- Reduced localised thermal effects
- Increased throughput
- Better reporting
- Automatic profile control
- Unlimited recipes

Eye to the future | Window on the world

## Summary

Traditionally the thermostats produced by the production lines were manually tested. This involved loading 240 thermostats into one of 9 tanks which was then heated and cooled by an operator who noted the temperature at which each thermostat operated or reset. After investigation, the tanks were found to suffer from thermal effects which meant that different positions in the tanks were exposed to slightly different temperatures. The system was, therefore, designed to monitor not only the states of all 240 thermostats but also 24 temperature measurements, in each tank. It controls the heating and cooling by downloading setpoints to controllers, according to the selected recipe of ramps and dwells.

The system also automatically monitors all temperature probes for abnormal readings and indicates possible problems through an alarm beacon. In addition, thermostats which “flash” repeatedly from one state to the other are indicated on a post test report. After each test, the system also automatically produces reports detailing which thermostats failed the test, the operating and resetting temperatures, and a series of SPC charts showing, for example, histograms of passes and fails at different temperatures.

## Equipment Used

- 3 x Motorola based machine
- 72 x TMTI01 with 30 Ch D/I
- 9 x Field 1000 Modules with 24 Ch A/I
- 9 x CRL 452 Controllers (Existing Equipment)



If you would like to find out more about this application, please contact the sales office who will put you in touch with the original Systems Integrator.