

LIFE CYCLE TEST SYSTEM

Brief Description:

Emerging Technologies, LLC. was called upon to develop software for a customer designed Life Cycle Test System.

The system utilizes four separate test sequences for two separate test cabinets. The devices under test (DUT's) are sequenced through their operation cycle under normal and extreme conditions while being monitored for correct functionality. The software keeps track of the number of successful cycles without failure and isolates failed devices from the test sequence. The system can be stopped and re-started while maintaining count of successful operations. This allows the operator to stop the system and remove failed devices for inspection and restart the system where it left off.

Emerging Technologies worked from a customer provided design package including electrical drawings and a software specification. The customer also provided the computer, programming software package, PC based I/O, test cabinets, filed wiring and electrical checkout and commissioning support.

Components Used:

- Compaq Pentium Computer.
- National Instruments I/O.
 - ✓ SCXI-1163R Output Cards.
 - ✓ SCXI-1162HV Input Card.

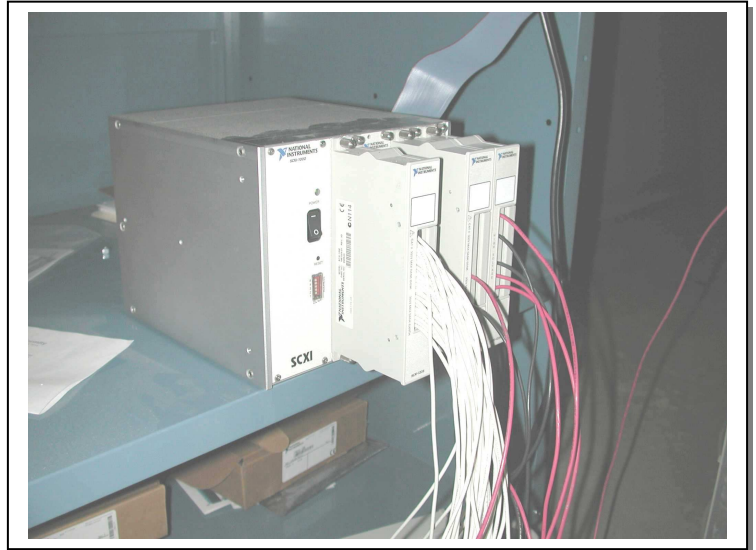
Software Used:

- Custom Written National Instruments LabView 6i application.

Customer Benefit:

The customer was able to focus on the design of the system as well as other plant activities while capitalizing on Emerging Technologies expertise in software development.

This approach shortened the time to complete the project and eliminated the need for the customer to invest in software development training to complete the application.



Emerging Technologies, LLC.

Responsibilities:

- Functional Specification Generation
- Design / Engineering
- Fabrication
- ✓ Programming – Software
- Programming – Firmware
- Field Installation
- ✓ On-Site Commissioning
- ✓ Post Commissioning Support
- Other

Technologies:

- Embedded Computers
- Microcontrollers
- ✓ Visual Software
- ✓ Control Software
- Data Acquisition
- ✓ Computer Based Control
- Communications
- System Integration
- Other

Customer Category:

- OEM
- ✓ Industrial Manufacturer
- Custom Equipment
- Utility
- R&D

SPECIALISTS IN TEST, MEASUREMENT, AND DATA ACQUISITION