

# APPLICATION BRIEF

## 2021

## PLANT MONITOR SYSTEM

### Brief Description:

Emerging Technologies, LLC. was called upon to develop and program a LabVIEW application to replace a program that was built in Visual Basic 5 and runs on a Windows 95 computer.

The new application was brought up to the latest version of LabVIEW and run on a windows 10 PC. Additionally, the database storage was updated from using a Microsoft Access database to a Microsoft SQL database.

The software is designed to continuously monitor a Manufacturing Plant and store information to a database based on numerous sensors and data collection devices located throughout the facility. The systems are configurable to allow the operator to modify the frequency that the system records information to the database.

System is set up to have multiple different copies of the software running and communicating to the same database at the same time.

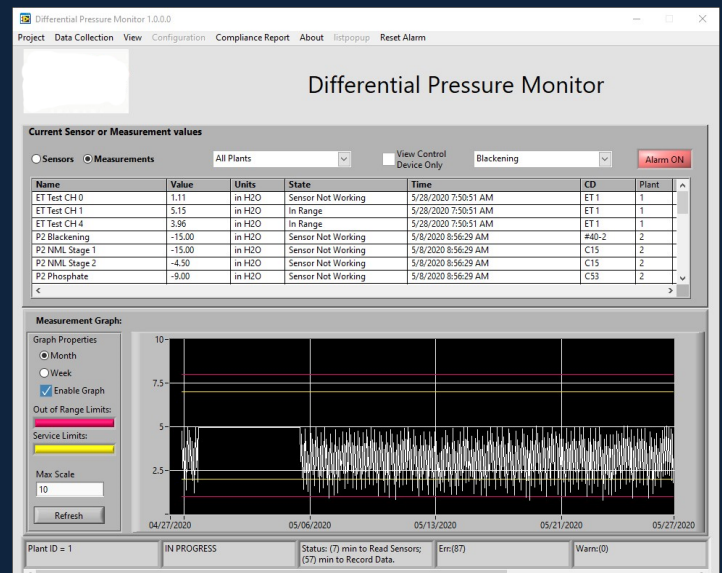
System has the capability of reading historical data that was collected on the old application as well as the new application.

The system has the capability of generating Excel reports and printing portions of the data that was collected on a per sensor level.

The system will email a list of users in the case of a sensor failure or if one of the other systems in the plant is no longer recording data to the database.

### Customer Benefit:

The customer is able run a simple installer at any PC that is connected to the plant network and is able to view all information stored to the database as well as the current status of all other systems.



### ET Responsibilities:

- ✓ Functional Specification Generation Design / Engineering Fabrication
- ✓ Programming - Software Programming – Firmware Circuit & PCB Design
- ✓ On-Site Commissioning
- ✓ Post Commissioning Support

### Technologies:

- Embedded Computers
- Microcontrollers
- ✓ Visual Software
- ✓ Control Software
- ✓ Data Acquisition
- ✓ Computer Based Control
- ✓ Communications – RS232, RS485, Ethernet
- ✓ System Integration

### Special Features:

- ✓ RS232 Communication
- ✓ RS485 Communication
- ✓ Email Alerts Sent to an email list of users
- ✓ Registry based configuration
- ✓ Database Result storage.
- ✓ Report Generation