

APPLICATION BRIEF

2020

END OF LINE TEST SYSTEM

Brief Description:

Emerging Technologies, LLC. was called upon to develop and build an EOL Test System. The system runs an automated test sequence to validate a DUT that has been completed on an assembly line.

The test system runs the DUT through Several tests testing Pneumatic, Electrical and Communication issues.

A thorough data logging process takes place to track test results while also storing information such as operator ID, test time and date, product model information, test parameters, measured values and pass/fail indication.

The compact design of the system creates a minimal footprint making it easy for integration into new or existing manufacturing floors.

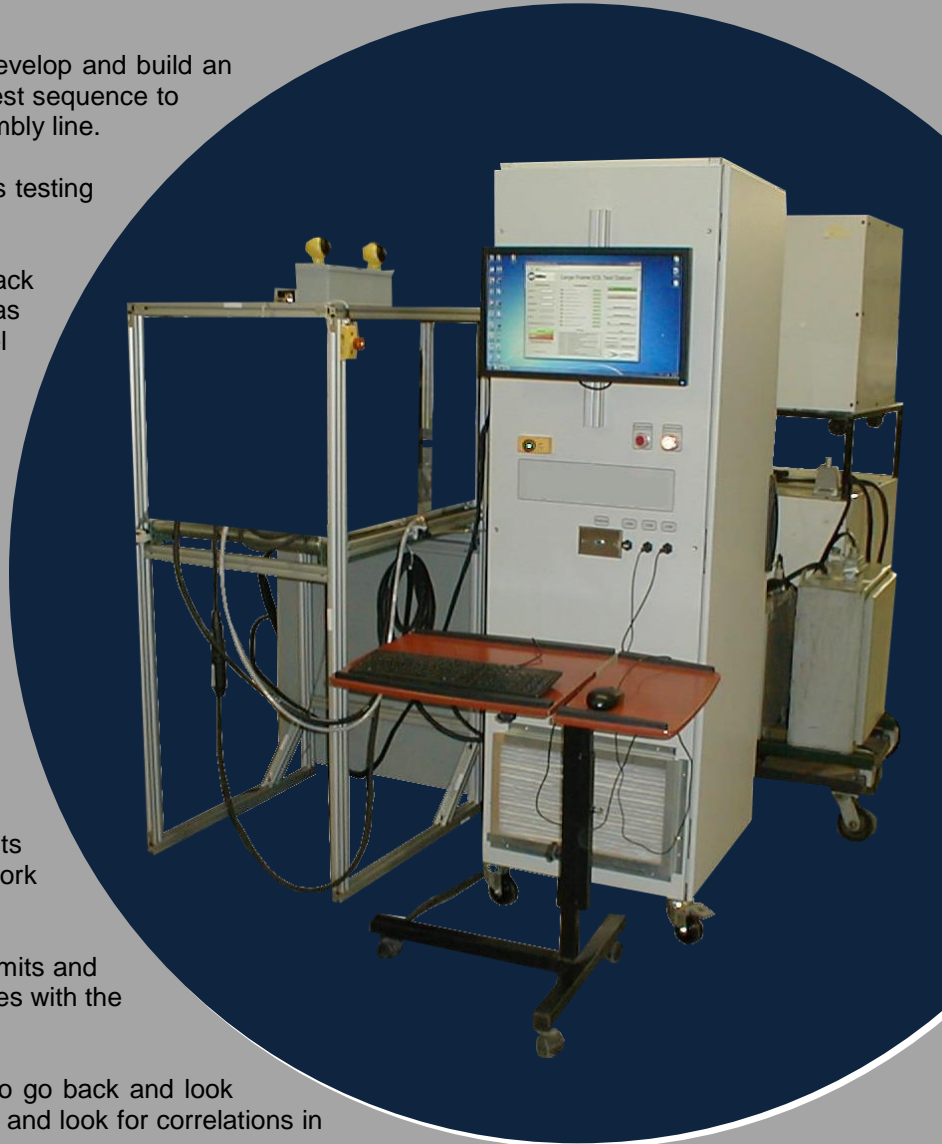
Customer Benefit:

The fully automated test sequence helps to reduce operator subjectivity and overall test time over being tested manually. Additionally, the reduction of manual operations while still keeping the complexity of the test helps to reduce training time on the system.

The test system has the capability to send results information over Ethernet using Json to remote network locations.

Authorized personnel have the ability to adjust test limits and work through the manual screen to troubleshoot issues with the DUT.

Thorough Data logging gives managers the ability to go back and look through large amounts of information about past test and look for correlations in DUT issues.



ET Responsibilities:

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

Technologies:

- Microcontrollers
- ✓ Visual Software
- ✓ Control Software
- ✓ Data Acquisition
- ✓ Computer Based Control
- ✓ PLC Based Control
- ✓ Communications – RS485, Ethernet, CAN
- ✓ System Integration

Special Features:

- ✓ Dynamic Load
- ✓ Two Hand Control boxes to interface each station
- ✓ Multicolored light to display test status
- ✓ CAN Communication
- ✓ Voltage Bleed Circuits
- ✓ Pneumatic Movement
- ✓ Motion Safety with Two hand controls
- ✓ Self-contained nest simplifies connections
- ✓ Sensors to determine when motion is safe.