**Brief Description:**
Emerging Technologies, LLC was called upon, to take an existing ET designed custom simulator and re-design it to support additional simulation features.

The new simulator is an evolution of a previously designed simulator. The new unit includes a more encompassing set of features to simulate more functions of the product. Features include open/close, current feedback, and specific timing duplication to name a few.

The purpose of the simulator is to facilitate mating product testing and product development. The footprint is smaller than actual product. Additionally, the simulator is lighter weight, less costly, and eliminates the need to replace wear items in the product it simulates when used for testing.

The design included the development of electrical drawings, PLC simulation code, fabrication, assembly, and verification of the simulator prior to shipment to the customer.

This system includes improvement over other systems previously designed and deployed by Emerging Technologies, LLC.

**Customer Benefit:**
The customer is able to perform product testing and development more efficiently with less time, money, and space. Another benefit is the ease of access to the simulation program for updates should additional functionality be required.

**ET Responsibilities:**
- Functional Specification Generation
- Design / Engineering
- Fabrication
- Programming – Software
- Programming – Firmware
- Circuit & PCB Design
- On-Site Commissioning
- Post Commissioning Support
- Other

**Technologies:**
- Embedded Computers
- Microcontrollers
- Visual Software
- Control Software
- Data Acquisition
- Computer Based Control
- Communications
- System Integration
- Other – Simulation Development

**Special Features:**
- Simulates customer product for testing and development of related products.
- Mates with Standard Product Connectors.