

Model Excavator

Challenge

John Henry Foster Company was asked to provide a reliable control system that mimicked the operation of an earth excavator. The system was to be included in a science center's Structures exhibit and would control a small model version of an excavator.

Goals

- Realistic operation
- Ease of use – would be used by every age range
- Reliable, continuous operation
- Budget constrained project – initial plans were to use manual controls which proved to not be as realistic as desired

System Features

- PLC for excavator control
- Joystick control for excavator functions
- Timeout feature for auto-shutdown

Project Successes

- Provided within budget and given schedule
- Popular exhibit, with a line formed at all times creating a continuous operation demand
- Safe, easy operation for use by all ages

