Corrugated Pipe Drilling Controls

Challenge
John Henry Foster Company was asked to provide a control system to automatically drill holes into plastic drainage pipes. The holes patterns and placement needed to be configurable based on operator input. Accuracy was critical on hole placement to ensure that the pipe drained properly in the end installation.

Goals
- Accurate drilling control for precise hole location
- Operator definable drill-hole positions
- Hole placement accuracy down to .01"
- Locate, measure, and drill all holes on moving pipe as it exits the extruder
- 50% speed increase over existing machines

System Features
- JHF integration of controls to customer supplied machine — turn-key final solution
- Six selectable, programmable hole patterns
- Allen Bradley PLC for sequence control
- Automation Direct touchscreen interface
- Complete documentation

Project Successes
- Project met customer supplied budget and schedule requirements
- Machine met demands of accuracy and speed
- Controls functioned so well that existing machines were retro-fitted and equipped with the new controls design!