



“Accuracy, Efficiency, Automation – It’s at the Core!”

Extrusion Line SCADA



PROJECT DETAILS

Project Name

Extruding Line SCADA

Location

El Dorado County, CA

Project Type

SCADA Design and Installation

Installation

New

Equipment Installed

Industrial SQL, Wonderware InTouch
and Microsoft SQL

Network

Ethernet (New)

Total System Points

~150 (Initial Process Line)

~1200 (Total Implementation)

PROJECT DESCRIPTION

Core worked with a large plastic extrusion manufacturing company to develop a SCADA system that provides monitoring of equipment and conditions to for an existing extrusion process line. The SCADA system and resulting hardware, software, and documentation package served as a baseline for nine (9) additional extrusion processing lines at this facility and provided a model for other facilities around the U.S.

Core began by conducting process reviews with management and operators, developing hardware interfaces, software structures, and documenting monitored points within the SCADA system. This legwork focused the definition and development of software for the extrusion process line equipment; information input from facility engineering/maintenance staff and plant personnel provided extensive knowledge on the equipment and practices currently in use, while ensuring that many site personnel had a vested interest in the success of the project.

Core worked with new and retrofitted extruding equipment, while providing engineering support to the client for new extrusion equipment and ancillary devices being supplied by third party OEMs and by internal fabrication personnel. Each piece of equipment within the process line is an island of control and coordination. The new SCADA system monitors and records numerous critical points, sending information in various formats, (i.e. Tabular, Graphical, etc.) to production personnel so as they may observe and make process adjustments to production parameters. Because of this, future automation equipment requirements will have the capability to be tied together into a comprehensive and coordinated control system, allowing alterations to parameters on-line and in real-time.

Core provided clear documentation for the Extrusion Line SCADA system, including system architectural diagrams (general topology diagrams, physical wiring details, I/P addressing, cabling requirements, etc.), and a monitored instrument/point index, including PLC Address, I/O Point Address (physical and/or logical), Tag Number, Tag Description, Physical Location, Input/Output Type, Engineering Units, Scaled Units, and any instrument ranges of operation. These documents served as the description of the physical equipment and its relation to the logical world within the PLC/Controller and ultimately the Extrusion Line SCADA system.