

Furnace Scada Upgrade



Industrial Gas Co.

Northeast, USA

Construction Costs \$150K

SERVICES
PROVIDED

SCADA System

Power Monitoring

Control / Recording System

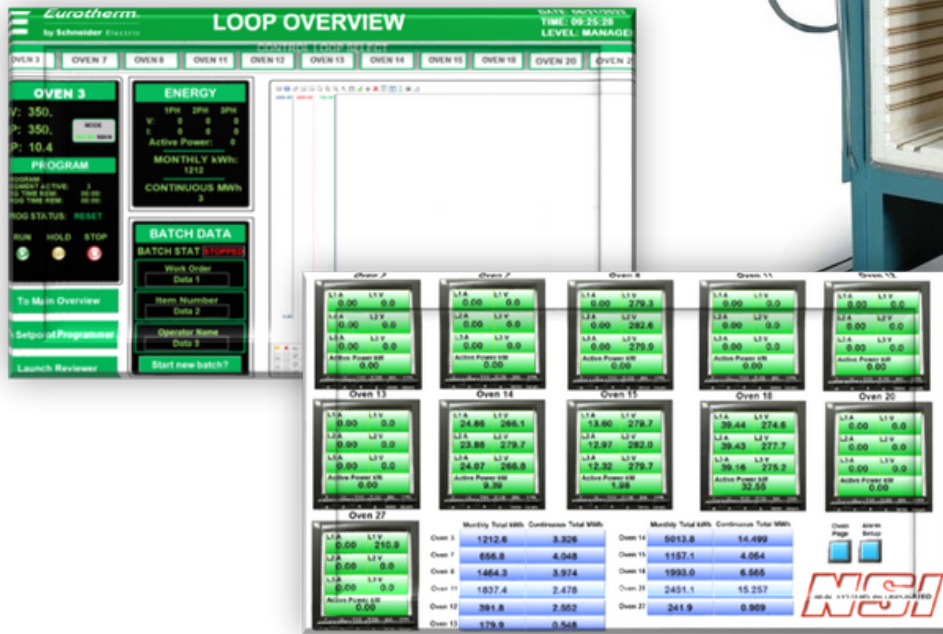
As-Built Drawings

Networking System

Cloud-based Historian

Remote Alarming

Installation Services



SCADA upgrade and retrofits for an outdated furnace control system.

An industrial gas company had ten ovens with 1980's technology. None of the ovens were networked together and there were no drawings for most of the ovens. Over the decades, multiple minor wiring modifications had turned each enclosure into a bird's nest of unintelligible wiring. When something went wrong, it took maintenance hours to troubleshoot.

Neal Systems provided a complete SCADA monitoring system for their ovens. This included controllers, recorders, power monitors, displays for networking and displaying SP's, variables, alarms, etc., Modbus TCP light stacks, a local notification system, and a cloud-based historian/remote alarm system. We also provided them with a set of as-built drawings.

With Neal Systems' solution, our customer is now able to see both temperature controls and energy meters from every networked furnace from their control room. The light stacks provide many combinations to alert operators on a multitude of events. The power monitors give them a better idea of how much power each oven is consuming and allows them to use more efficient ovens when possible.

With partial and total heater element failure alarming built into the Eurotherm control system, they were able to identify broken heater elements immediately and were saved many hours of wasted oven runs.