

PH. 630.968.2390 Fx. 630.968.3260 HTTP://www.controlmasters.com

Control Masters Application Case Study

Process Control



<u>Technologies</u>

Multiple PLC Configuration Closed Loop PID Control Data Logging and Trending Custom Report Generation

Services Provided

PLC Integration SCADA / HMI Integration Electrical Engineering Control Panel Design & Fabrication

Project Description

This project was designed to control the NOx output from a boiler. The NOx output was controlled by introducing a chemical solution into the boiler through the use of injectors and lances.

Control Panel Design and Fabrication as well as CAD Design services were provided to produce 8 control panels. PLC Integration consisted of 5 separate SLC-500 PLC's communicating via DH+. Each PLC had control over a specific portion of the process and all of them provided for closed loop control over specific items within that portion of the process.

Various types of Panelview displays were provided for control over local functions and equipment. Each Panelview display was designed to be able to take over the functionality of another in the event of a malfunction.

The RSView32 application was designed to consolidate the overall control of all functions in the process and provide for remote control of the process. Process information was provided to the operator as well as providing for the control of various aspects of the process.

Both standard and custom ActiveX controls were used extensively throughout the application to provide for complete control over the process. Animations were used to enhance the overall user experience.

Trendx was used to log and trend various process data points. The logged data values could also be displayed in an Excel spreadsheet report, with the operator being able to select the time frame over which he wanted to see the data.