

Application/Problem:

Client's Shuttle Furnace positioning was controlled by obsolete lasers and proprietary controllers. Age of equipment made them prone to intermittent operation and increasing failure rates. Both furnaces were operated by laser and drive pairs, coordinating the parallel movement of the 130' long furnaces.

Project Solution/Customer Benefit:

Flanders Electric – Engineering Division provided new DeviceNet connected Lasers in filtered, air conditioned enclosures. Programming included the skew functions and drive acceleration functions required for smooth operation. Engineering Services provided by Flanders Electric included:

- System Requirements Specification Document.
- Complete Drawing Packages for Control Panel Fabrication.
- Rockwell PLC-5 and Wonderware InTouch HMI Programming.
- Installation Drawings.
- Start-up and Commissioning Services.

Upon completion of commissioning, the new system provided direct access to speed and skew controls versus the processing that was embedded within the proprietary controllers. Secured HMI settings were embedded to allow for tuning and adjustment of the system. This open access provided maintenance personnel with improved tools to diagnose problems.

DeviceNet Communications provided fast reporting of position data to the PLC. The Siemens AC Drive interfaces were also converted from hardwired signaling to DeviceNet, further enhancing the capabilities of the system.

