

Location: Brackenridge, Pennsylvania

Process or Facility Systems Controlled

Fire alarm, HVAC, security, overall network design, subsystem interfaces, process utilities, cooling tower and chiller management and facility lighting control

Control Platform Technologies Used

Siemens PCS7 as master SCADA system, variety of subsystems including Siemens XLS fire alarm panel, Fusion Security System, custom BACnet lighting control panels, multiple FieldServer deployments for converting of communication protocols to ProfiBus, Carrier chillers, HVAC VRF controls, heat trace controls, MES systems, safety PLC's, SILOC cranes

Control System Size

3500 hard I/O, 2500 soft I/O brought in via 80 remote I/O panels and network connections to seven PLCs throughout the plant.

Project Description

ATI Allegheny Ludlum is building an advanced hot rolling and processing facility (HRPF) in Brackenridge, PA. When complete, the HRPF will be the most powerful hot rolling facility in the world. At \$1.1 billion, the HRPF is among the largest industrial projects currently under way in the United States. When operational at the end of 2014, the HRPF will manufacture nickel-based alloys, titanium and specialty alloys, zirconium and stainless-steel sheet and plate.

In late 2011, Siemens Building Technologies awarded RoviSys Building Technologies a contract as the systems integrator for Siemens Metals Technologies' Building Services (BS). RBT was contracted to integrate a Siemens PCS7 system to control/monitor ATI's HVAC, lighting, security and fire systems. Each system is brought into seven stand-alone Siemens PLC's via hardwired interface or BACnet or OPC communications. Custom BACnet to ProfiBus solutions were configured to interface with security, fire, lighting, chillers, VRFs, MES systems, safety PLCs and SILOC crane controls.

RoviSys project responsibilities include project management, network design, panel design, PCS7 code design and configuration, subsystem interfaces, onsite project management and commissioning. Proven expertise in both the building automation and process control industries helped establish the initial control methodologies, fusing building automation best practices with robust PLC processors used in industry. RoviSys Building Technologies experts also played a significant role with customer and vendor interaction and schedule management.

The project team is led by a certified PCS7 engineer who also interacts with the Siemens mill furnace-control experts in Germany to integrate the BS PCS7 control system into a Siemens multi-project, which consists of a collection of subcontractor projects. As a certified PCS7 engineering company, RoviSys Building Technologies will provide a building services system that meets all industrial controls standards.