

WuXi Biologics Balance of Plant & Facility Management System



CLIENT PROFILE

WuXi Biologics is one of the world's leading research, development, and manufacturing organizations specializing in biologics. With a location spanning 154,400 square feet in Cranbury, NJ, WuXi focuses on biologics development and clinical-scale drug substance GMP manufacturing. As part of their process modernization efforts, WuXi sought to integrate the Water for Injection (WFI) system and the Environmental Monitoring System (EMS) within their facility.

PROJECT HIGHLIGHTS

Thermo Systems, a trusted Control System Integration firm, was chosen to assist in designing and implementing an automated solution for controlling the Water for Injection (WFI) and Environmental Monitoring System (EMS) while aligning with WuXi's modernization plans. Thermo Systems provided comprehensive services, including detailed design, panel production, instrumentation, programming, installation, testing, startup, and IQ/OQ document development, testing in support for validation efforts. The WFI and EMS utilize Allen Bradley PLC and remote I/O nodes, which are visualized using an Ignition Supervisory Control and Data Acquisition system. Additionally, an operator interface panel was designed for local control and monitoring of the WFI and process equipment.

TECHNOLOGY HIGHLIGHTS

- Allen Bradley CompactLogix PLCs
- Allen Bradley ControlLogix PLCs
- Allen Bradley PanelView Plus
- Ignition SCADA
- Vaisala viewLinc Enterprise Server
- Vaisala Combo Temperature/Pressure Transmitter

RESULTS

Thermo Systems collaborated closely with WuXi's internal team throughout the project, utilizing their experienced automation and HVAC engineers to meet the organization's operational needs efficiently and safely. By maintaining open communication channels and actively seeking feedback from both the client and commissioners, Thermo Systems proactively identified and resolved potential blind spots and issues with the installation and SCADA system. This approach ensured that all operation specifications, down to the final validation test, were met and exceeded, given the dynamic nature of the facility.