

## CASE STUDY

**Fresenius  
Medical Care**

**Ogden, UT**



## PRESSURE MONITORING SAFEGUARDS MANUFACTURING

### THE CHALLENGE

- **Aging Infrastructure:**  
*The existing BAS lacked visibility and reliability, creating continuous risk of unexpected downtime in a facility where environmental failures can halt production.*
- **Manual Compliance Logging:**  
*Staff manually recorded zone pressure readings across dozens of production areas, consuming excessive labor and creating regulatory vulnerability during audits.*
- **Validation Complexity:**  
*Migrating to a new BAS across an active manufacturing facility demanded careful phased execution—any disruption to environmental controls could halt production or trigger compliance.*

### Project Objectives

Fresenius Medical Care's manufacturing campus in Ogden, Utah—spanning more than one million square feet across 40+ acres—produces critical medical devices including dialyzers, peritoneal dialysis solutions, and connectors used by patients worldwide. With over 1,000 employees and production areas governed by FDA Current Good Manufacturing Practice (cGMP) regulations, environmental control is fundamental to product safety and regulatory standing.

The facility's aging building automation system had become an operational liability. Staff relied on manual processes to record pressure differentials across cleanrooms, laboratories, and production zones—a labor-intensive practice that introduced human error and left the organization exposed during regulatory audits. The existing BAS provided limited visibility into system performance, creating persistent risk of unplanned downtime that could interrupt manufacturing and trigger compliance events.

Fresenius Medical Care needed a partner who could deliver a modern, validated building automation platform capable of automating pressure monitoring, providing real-time operational visibility, and supporting the facility's rigorous federal compliance requirements—all without disrupting active production.

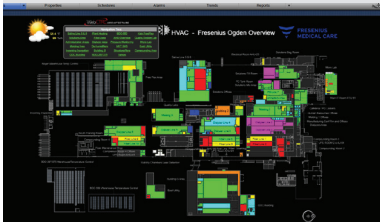
### The Solution

Control Solutions Group (CSG), the authorized ALC dealer in Utah, deployed the Automated Logic **WebCTRL® building automation system (BAS)** as the central control platform, executing a multi-year phased migration timed during scheduled shutdowns to eliminate production risk.

CSG replaced manual pressure logging with calibratable digital monitoring stations across dozens of air handling units serving cleanroom and laboratory environments. The WebCTRL system provides continuous automated data logging with real-time dashboards and proactive alarming—delivering electronic records and audit documentation for FDA compliance. The integrated solution encompasses:

- Dozens of AHUs with automated pressure differential monitoring across cleanrooms, labs, and production zones.
- Calibratable digital pressure stations replacing manual analog recording.
- Real-time dashboards for room-to-room differentials, mean kinetic temperature warehouse monitoring, and lab conditions.
- Central heating plant integration with steam boilers and heat exchangers.
- VAV systems and RTUs serving office and administrative environments.
- Production floor equipment touch displays for local operator visibility.
- Energy efficiency strategies implemented during each upgrade phase.

Automated Logic's open platform model provides customers full access to WebCTRL tools, empowering them to self-perform modifications and maintain long-term control of their systems.



*Fresenius Medical Care's Ogden campus uses the WebCTRL® system to monitor and control more than one million square feet of FDA-regulated manufacturing space.*





Fresenius Medical Care's Ogden, Utah manufacturing campus produces critical medical devices for patients worldwide.

## The Result and Future Plans

The system eliminated manual pressure logging, replacing it with continuous automated monitoring that delivers real-time visibility and regulatory-ready documentation. Deployment prioritized the highest-risk systems first, rapidly improving reliability and reducing compliance exposure.

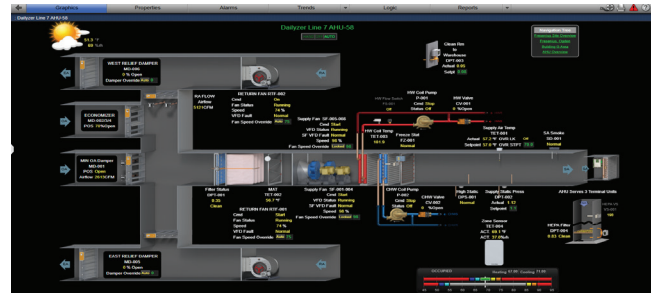
Fresenius now has comprehensive environmental oversight across every critical production zone—from FreeFlex formulation rooms to microlab clean spaces. The partnership is long-term and growing, with several projects in development and a key objective: national deployment of the WebCTRL solution across Fresenius distribution warehouses throughout the United States.

**“The combination of Automated Logic’s technical capability and Control Solutions Group’s commitment to giving our team full access to the tools we need was the deciding factor. We now have complete visibility into our critical environments, automated compliance documentation, and the flexibility to manage and expand the system ourselves. It’s transformed how we operate.”**

- Bennett Geilmann  
Facility Supervisor - Automation Engineer  
Ogden Plant, Fresenius Medical Care



Real-time pressure differential monitoring across FreeFlex production zones replaces manual logging.



WebCTRL provides detailed AHU monitoring with real-time setpoints, sensor data, and alarm status.



Process infrastructure at Fresenius Medical Care's Ogden campus, set against Utah's Wasatch Mountains.



MKT compliance dashboard monitors environmental conditions across warehouse zones.

The WebCTRL system provides Fresenius Medical Care's engineering team with real-time pressure monitoring dashboards, automated compliance documentation, and full operational visibility across more than one million square feet of FDA-regulated manufacturing space.

Automated  
Logic

For more information, visit [automatedlogic.com](https://www.automatedlogic.com).

