

REAL-TIME CONTROL AND RECIPE MANAGEMENT

Distributed HMI Systems for Efficient, Safe Manufacturing

A global beverage manufacturer modernized outdated systems by implementing centralized control and remote access to boost productivity and safety across locations.

Centralized Control and Monitoring

The system centralized control for 24 individual HMI terminals onto a single Ignition® server, allowing operators to monitor and manage production with greater efficiency. This setup incorporated role-based permissions and screen lockouts, which enabled precise control over who could access specific functions.

The centralized structure reduced complexity on the production floor and ensured that authorized personnel could perform tasks seamlessly, driving both operational security and compliance.

Enhancing Security and Remote Access

To accommodate remote monitoring, the team implemented a robust security framework, enabling U.S.-based teams to oversee European operations without risk of interfering with plant controls.

The secure remote access allowed oversight from corporate headquarters, maintaining strict control over permissions to prevent unauthorized access. This setup provided real-time visibility across international locations, allowing for continuous, secure support and faster decision-making.

Improved Operational Efficiency and Accuracy

The project successfully increased operational efficiency and production accuracy, achieving an industry-leading 97% recipe tolerance on the second test batch.

The scalable, remotely deployable solution set a new standard for the manufacturer's future facility expansions, providing a solid foundation for operational growth and consistency across their global footprint.

KEY OUTCOMES

- Achieved a 97% recipe tolerance (an industry-leading result), improving production accuracy
- Enabled secure, real-time remote access to enhance oversight
- Streamlined plant operations with centralized HMI and SCADA integration

