

Egg Production Operation Control System Upgrade

Comprehensive Control System Upgrade and Enhancement

- ✓ Control System Replacement/Upgrades
- ✓ Main Control System
- ✓ CIP Control System
- ✓ Complex Contended Device Arbitration

Ise America
Newberry, SC

Randy Nobles
Further Processing Manager
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We tried the cheaper route once, and it didn't turn out how we had hoped. Bachelor Controls apparently puts more effort into the front end of a project so that the system is a pleasure to own and operate. By the time start-up was complete and we were up to full speed making product, we realized that BCI was the best value.

Randy Nobles
Further Processing Manager

Members of the Bachelor Controls project team were genuine, going the extra mile to explain things thoroughly in a way we could understand.

Ronnie Bundrick
Maintenance Technician



Bachelor Controls, Inc.

Systems Integration Excellence Since 1983

Project Summary

With over 6.7 million egg layers and state-of-the-art processing facilities, Ise America offers total process integration with feed mills on the front end and shell egg, fresh frozen egg, liquid egg and hard-cooked egg processing plants on the back end.

Bachelor Controls (BCI) originally completed a plantwide automation project for Ise America in 1990. BCI subsequently provided support for the system for 16 years with minimal problems, until hardware eventually began to wear out and the system was in need of an upgrade. Based on a trusted recommendation, Ise America chose a non-CSIA Certified integrator to do the project. However, after experiencing problems, Ise America came back to BCI to resolve existing project issues and provide the system upgrade.

Objectives / Requirements

The project required replacement of the main control and the clean-in-place (CIP) systems, upgrading hardware and software to meet current standards, and enhancing the system to improve performance and ease of operator use. BCI engineers and programmers retained the Rockwell Automation SLC I/O infrastructure, PanelView HMI hardware, and RSView SE HMI software put in place by the previous integrator. However, they redeveloped the HMI applications, remapped the I/O, and upgraded the controls hardware to the Rockwell ControlLogix platform. Once the new control applications were complete, BCI provided electrical schematics and panel layout drawings that reflected the new systems.

For the original project, BCI had developed an algorithm for arbitrating a complex set of shared devices that maximizes the utilization of equipment, ensures quality and eliminates contamination of egg products throughout the production process. During the upgrade project, BCI improved this HMI application, taking advantage of newer technology to place more information on fewer screens with enhanced feedback/messaging. These improvements made the system easier to navigate and provided more graphical diagnostic information for the operator whenever relevant.

Results / Benefits

Crediting adherence to BCI's well-structured project methodology and good communication with Ise America, the BCI team provided a smooth project implementation and transition.

- Project delivered on-time and on-budget
- Successful Factory Acceptance Test (FAT) prior to start-up introduced new system enhancements to Ise America personnel before actual implementation, allowing for smooth transition and reduced training time on-site
- Minimizing changes to the "look-and-feel" of the HMI application minimized operator re-training

Anytime we have had a problem, Bachelor Controls has been ready and willing to help us. All we have to do is call.

Johnny Longshore
Maintenance Manager

