Ignition Meets FSMA Requirements for Better Food Safety

Additional Improvements in Troubleshooting and Efficiency

SmartWash Solutions is based in Salinas, California, near Silicon Valley and the California Central Valley — one of the most productive agricultural regions in the world. It's the perfect location for a food-safety technology company. SmartWash cares a great deal about food safety. That's why it's enabling data collection and analysis for its customers, and also helping those customers meet requirements of the Food Safety Modernization Act (FSMA). The U.S. Food & Drug Administration (FDA) created FSMA to strengthen prevention of foodborne illness.

"FSMA is very important for our customers right now," said Chris McGinnis, director of operations and engineering at SmartWash Solutions. "We're thinking about food safety all the time." SmartWash created Process ProData Live (PPDL), to collect and deliver real-time data. It allows operators, managers, and executives to see information on food safety, plant efficiency, and productivity from any location with internet access. It also shows trends and analytics, generates reports, and helps customers stay FSMA-compliant.

PPDL was built on Ignition by Inductive Automation®. Ignition is an industrial application platform with tools for building solutions in human-machine interface (HMI), supervisory control and data acquisition (SCADA), and the Industrial Internet of Things (IIoT).

Ignition's unlimited licensing — no extra costs for new projects, sites, users, tags, etc. — was a key factor in the success of this project. "With any other solution, the costs would have been prohibitive," said McGinnis. "This is the only way we could have accomplished what we have. The project itself has quadrupled in size, and the number of customers has tripled."

SmartWash Solutions sees customers' food-safety data, helps with troubleshooting.

SmartWash provides PPDL to 40 customers in eight countries — and predicts those numbers will continue to rise. A major draw for customers is SmartWash's ability to see the same data they are seeing, enabling SmartWash to help troubleshoot issues remotely.

Integrator Sets It Up

SmartWash was assisted in the creation of PPDL by Able-Baker Automation, a system integration firm based in Northern California. "I certainly had my choice of platforms for this project," said Bob Hastie, senior controls engineer with Able-Baker. "But Ignition really appealed to me because it's database-centric, and it really allows me to deploy new sites quickly. And that's without a lot of programming."

Hastie set SmartWash up to do a lot on its own in Ignition. "We let technicians basically push a button and deploy a new site within 20 minutes," said Hastie. "And then we make sure every site is configured exactly the same. It makes maintenance a lot easier."

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>
> — Angela Nunez
>   V.P. of Technical Services, SmartWash Solutions

The software's low cost is coupled with diverse capabilities. "There are multiple facets to this," said Hastie. "You have reporting, trending, and all the things you'd normally find in a SCADA system. It really gives SmartWash and its customers the data they need to make good decisions."

Large Customer, Big Benefits

Taylor Farms is SmartWash's largest customer. It's also the largest producer of salads and healthy fresh foods in the United States, and has locations in several countries. Taylor Farms uses PPDL to manage the chemistry in its wash-water systems.

"Before PPDL, people in the industry were using manual operations or other systems that just weren't adequate," said Kari Valdes, director of food safety and quality at Taylor Farms. "They would fall out of calibration, the information would not be accurate, and it wouldn't be trend-able and available at the click of a button. That made it hard to look at the data and trends that really help us determine if our systems are in control."

With PPDL, it's a different story. "Our screens and dashboards show us if we're in control or out of control, and the system can shut the machinery down prior to any issues," said Valdes.

"And it really helps us understand our machinery and know if everything's running smoothly."

Historical data is also valuable for Taylor Farms. "PPDL grabs real-time data and stores it for as long as we need it," said Valdes. "That means in the event of a traceback, audit, or just an investigation, we're able to go back within minutes and capture that data; we can see exactly what was going on when that bag of salad was made."

Variety of Users

SmartWash serves a variety of customers, both large and small. "Each customer is unique in terms of operations and needs, and what they require from the software," said Angela Nunez, vice president of technical services at SmartWash. "But they all have one thing in common: They want to have the best safety programs out there."

Nunez talks to customers daily, hearing ideas, troubleshooting with them, and working with them toward better safety and efficiency. She describes it as a partnership that's fostered by PPDL, which lets everyone look at the same data.

"We're working on several new projects, and some of those are very innovative," said Nunez. "Ignition is one of the ways we push forward in innovation in terms of food safety. It's incredible what you can do with it. It's all up to your imagination."

Hastie of Able-Baker said this project contains many examples of Ignition's flexibility. "I can make Ignition custom to whatever I want to do, more so than other systems out there," he said. "I see it as a very flexible platform I can build on."

Able-Baker Automation is based in Moraga, California. The company has automated small OEM machines and large process and manufacturing facilities in a variety of industries. For more information, visit able-baker.com.

Watch the video online at:
bit.ly/ia-SmartWashSolutions