

CASE STUDY

How the Integrators at Automation Group Leverage Ignition to Support Culinary Oil Producers



Automation Group, an Ignition Premier Integrator headquartered in Modesto, California, with locations across North America, is a leading system integrator that serves the automation industry. The firm has deep expertise with automation products, combined with decades of process experience, which has enabled Automation Group to implement complex automation systems across North America.

The firm, which has won numerous awards, is considered an “integrator giant” and has the largest regional footprint of any independent system integrator.

The majority of Automation Group’s clients are food industry companies, which have turned to Automation Group for assistance in solving complex automation challenges. Some of Automation Group’s well-known clients include such leading companies as Sara Lee, Kraft, Dole, Heinz, Frito-Lay, 7 Up, In-N-Out Burger, Sierra Nevada, Jelly Belly, Blue Diamond Growers, Pepsi, and many more.

Culinary Oils Market

A culinary oil is a plant, animal, or synthetic liquid fat used in frying, baking, and other types of cooking. This can include oils derived from olives, peanuts, and safflowers, to name just a few culinary oils.

Among the most common culinary oils is olive oil, which is a multi-billion dollar market, with a projected growth rate of more than 6% per year through 2028.¹

For culinary oil producers, challenges in the packaging process can impact the ability to scale operations and can affect many aspects of a company’s product line, such as quality, safety, product professionalism, and maintenance costs.

Deploying automation solutions can help producers address their production challenges and better streamline their operations.

Automation Group has recently worked with two culinary oils companies, using Ignition to help these companies solve critical problems and achieve positive results.



California Olive Oil Company

One of the largest olive oil companies in California recognized that its manual labeling and packaging process was adding costs and creating operational challenges. That's because the company had to have a dedicated team member create every label and track down all of the pallet special labels, which was not a good use of the company's limited labor.

To remain competitive in this growing market, the company realized that they needed to modernize and expand their packaging process while preserving their product quality and integrity. They saw automation as the key.

Specifically, the company was creating a new production line and wanted a state-of-the-art aseptic system that would integrate well with their other existing product lines. They also wanted a way to track the orders and the inventory for that line.

Turning to Ignition from Inductive Automation

As an Ignition Premier Integrator, Automation Group's technology solutions manager (TSM) came up with an innovative plan to help this olive oil producer achieve its goals.

Automation Group provided design schematics, built the control panels, developed the PLC, HMI, and SCADA programs, and commissioned a new bag-in-box line.

The controls system included several communication layers managed by a single line control AB ControlLogix gateway.

- **The process level (level 0)** was composed of AB PowerFlex 525 VFDs and IFM IO-Link master blocks on an Ethernet/IP DLR network.
- **On the basic control level (level 1)**, the line control ControlLogix gateway communicated with all of the PLCs from the OEM equipment.

Leveraging the existing Ignition SCADA system, Automation Group developed a special project for the packaging line and installed two industrial computer clients for local monitoring and control. With Ignition, Automation Group was able to combine line control, inventory management, and production order management all in one screen.

Results

Using methods and best practices from the Control System Integrators Association (CSIA), Automation Group's TSM coordinated with the client and various OEMs, keeping all aspects of the project on schedule.

Because of the olive oil company's ability to test and run the new packaging system alongside the old, the company experienced no downtime or loss of production during the transition, which—leveraging Ignition—resulted in a successful modernization of their packaging process. In addition, by using Ignition, this company is now collecting massive amounts of data that can be analyzed and used for continuous improvement.



Global Culinary Oil Producer

Let's look at another Automation Group client, which is one of the world's largest international culinary oil production companies. This company had already worked with a large system integrator but had repeatedly experienced poor communication and staffing problems with them. The integrator was simply not operating at the desired level of performance that the culinary oil company needed, so they made the difficult decision to terminate their relationship with this integrator and decided to find a new system integrator partner for support in the United States.

Partnering with Automation Group

Initially, the culinary oil company was hesitant to engage with another system integrator, but ultimately concluded that state-side support was essential to correct the prior integrator's missteps and to support future projects.

Automation Group addressed the company's concerns and explained how their solution-focused culture—leveraging solutions like Ignition—would renew the company's trust in system integrator partnerships. Automation Group was chosen as a long-term, solution-focused partner to work with this company to improve operational efficiency.

Leveraging Ignition in a Key Area

A key project that needed immediate support was integrating the culinary oil company's weight scale system with Ignition, to empower timely data inventory reporting. Automation Group put this company on a developmental path to perform the complex integrations that were required.

Automation Group staffed the integration project with specialized personnel who had deep expertise in Ignition and scheduled weekly status meetings to inform stakeholders on the project's progress. These weekly, and sometimes daily, meetings provided the customer with every opportunity to communicate their priorities, provide feedback, and ask questions about features. Even complicated features required only a day or two to implement because the back end of the Ignition server and the database were designed with flexibility and adaptability. The cycle from the major feature request, feature implementation, customer feedback, and feature improvement took only days; a small feature request could be fulfilled within the day. As a result of this speedy feature delivery, the company came forward with additional feature requests as the Ignition server became embedded in their workflow.

Results

Automation Group successfully integrated the company's weight scale system with Ignition software for timely inventory reporting. The main benefit was turning a process that was almost 100% manual into a completely automated process. This company is now on to the next step of this engagement—integrating Ignition with the company's ERP system for enhanced enterprise connectivity.

Expanding the use of Ignition has meant a deeper relationship for Automation Group with this culinary oil company.



“This customer was amazed at how fast we could implement their ideas with Ignition.”

David Schmidt, Automation Group Controls Engineer and Ignition subject matter expert

Conclusion

As companies in all industries, especially food and beverage companies, look to operate more efficiently, innovate, make intelligent decisions, and scale, solutions such as Ignition and system integrators like Automation Group can play a key role in modernizing operations, improving competitiveness, and positioning companies for long-term success.

Ignition provides an important foundation to build upon that uses automation technology to achieve greater visibility, streamline operations, and improve decision making. Automation Group helps clients by implementing Inductive Automation tools such as Ignition to manage all aspects of their businesses.

To learn more about Automation Group, visit automationgroup.com

To learn more about Ignition, visit inductiveautomation.com



¹Geographic Scope and Forecast. (2021, August). Olive Oil Market Size and Forecast. Verified Market Research. <https://www.verifiedmarketresearch.com/product/olive-oil-market>

INDUCTIVE AUTOMATION creates industrial software that empowers organizations to swiftly turn great ideas into reality by removing all technological and economic obstacles. By cross-pollinating IT with SCADA technologies, Inductive Automation created Ignition software, the first universal industrial application platform with unlimited potential. Ignition empowers industrial organizations, around the world and in virtually every industry, with an outstanding software platform and top-notch support.

