

CASE STUDY

SUMMER GARDEN FOOD MANUFACTURING

With an operation that runs two 12-hour shifts a day, 5 days a week and produces up to 100,000 cases of sauces weekly, overall equipment effectiveness (OEE) is a priority. But until Summer Garden Foods installed Plex Production Monitoring in late 2022, they lacked the data visibility needed to ensure equipment was performing as efficiently as possible.

Industry:
Food & Beverage

Location:
Ohio

Results



Reduced downtime



Improved machine
performance



Operator insight into
personal daily OEE



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Jason Morrow

Controls Technician, Summer Garden Food Manufacturing

Business Challenges

1.

Lacked data visibility for equipment performance.

2.

Difficulty identifying micro downtime impact.

3.

Inability to easily extract data reports.



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“We were missing downtime. We knew we had it, but we couldn’t find it. Our kettle yields weren’t equaling our run times. We wanted to start tracking downtime at a more detailed level than the piece of paper the operator writes,” Jason Morrow, Controls Technician with Summer Garden Food Manufacturing, explains. “Plex is easily scalable. We could start with one machine and then build off that once we knew what we’re doing. The scalability was one of the biggest reasons we went with Plex.”

Downtime Minutes Add Up

The first task for Summer Garden Food Manufacturing was tracking downtime on a key piece of equipment: the filler machine. The machine’s processes are controlled by Rockwell

Automation 5300 series ControlLogix programmable controllers, which meant they were already collecting a lot of data. Using Plex Production Monitoring, the food manufacturer was able to easily program and extract data reports that pulled data from the Rockwell Automation controllers and several other sources.

“We found we had four hours of downtime per shift. Operators were repeatedly opening the door which stops the machine, making adjustments, and then closing the door. A minute here, two minutes there, five minutes here add up substantially throughout a shift,” Jason says. “But the operators weren’t writing it down. They didn’t think it was anything big. Yet, three to four hours of downtime a shift is a ton of downtime.”

With that valuable insight, the company is now focused on improving operator training and control to help improve machine performance. One tactic Summer Garden Food Manufacturing is undertaking is development of a visualization screen that provides operators insight into their personal daily OEE to facilitate individual awareness and growth.

Increasing Production with Further Machine Visibility

Next on its digital transformation journey, Summer Garden Food Manufacturing plans to expand the number of machines on its Plex platform.

“We started small. Now we’re going to branch out to the machines further down the line that may be causing the filler idle time. I’m sure there’s micro downtime we’re missing on the rest of the machines,” Jason explains. “There should be a ton of information. It’s just digging into all that and eventually it should increase production.”

From there, Summer Garden Food Manufacturing will analyze manufacturing data by product, such as comparing the run times of different sauces.

“How do we improve the operation of the red sauce or the barbecue sauce so we can get the same speeds out of each product?” Jason offers as an example. “We have so many options when it comes to Plex. And it’s so simple whether it’s an add-on module or extra programming. You couldn’t ask for anything easier than that.”

ABOUT PLEX

Plex, by Rockwell Automation, is a leader in cloud-delivered smart manufacturing solutions, empowering the world's manufacturers to make awesome products. Our platform gives manufacturers the ability to connect, automate, track, and analyze every aspect of their business to drive transformation. The Plex Smart Manufacturing Platform™ includes

solutions for manufacturing execution (MES), ERP, quality, supply chain planning and management, asset performance management, production monitoring, process automation and analytics to connect people, systems, machines and supply chains, enabling them to lead with precision, efficiency and agility. To learn more, visit www.plex.com