AVEVA

CUSTOMER CASE STUDY

Eker Dairies achieves automation of production processes as well as track and trace capabilities resulting in significant savings in manufacturing, logistics and inventory costs with AVEVA software solutions.

Eker Dairies
Industry - Food and Beverage

Goals

- To transition to a fully-automated production facility.

- To achieve the highest level of product tracking and traceability.

- To enable the engineering team to create powerful templates that provided the flexibility required by the Eker production process.

Challenges

- Operators were manually processing analog data, which took time away from overall production.

- Tracking and tracing of quality issues were inconsistent and subject to errors due to manual inputting of data.

Solution

- System Platform

- Historian

Results

- Eker has increased its production capacity to more than 600 tons of product per day and continues to grow.

- Product quality and production traceability has increased significantly.

- The Eker production team has applied the concept of Industrie 4.0 enabling operations, team members and devices to communicate and operate seamlessly via IoT.

AVEVA Adds the Final Ingredient to Eker Legacy of Providing Tasty Dairy Products to Turkey

Bursa, Turkey – Founded in 1977 as a small dairy business in the town of Bursa, Eker Dairies has grown in production from a processing capacity of only 10 tons per day in 1981, to now more than to 600 tons per day. To provide Turkey and the surrounding region with a wide variety of ayran, butter, cheese, milk, and yogurt products, Eker has always focused on new and improved ways of creating and manufacturing these tasty treats for customers.

Eker's wide range of dairy products feature unique variations of each, which contain different ingredients and prepared using different recipes.

"Eker aims to provide dairy products that suit the traditional Turkish palate. The company has been growing steadily and within the last 10 years, it has increased its production capacity to 600 tons per day and continues to grow."

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Yavuz Selim Aydin,
Project and Engineering Manager, Eker

To keep pace with the dairy's rapid expansion, Eker focused on increasing its production capacity by automating its overall processes. The key to this success was to implement a software platform that would enable its engineering team to easily and quickly create powerful templates with the flexibility to be replicated and adjusted to meet the growing needs of Eker Dairies.

With the help of Wonderware Turkey, Eker implemented AVEVA System Platform and Historian from AVEVA.

"The AVEVA solutions provide us with the basics that give us the flexibility to process data quickly, and accurately record it throughout the manufacturing process."

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Yavuz Selim Aydin,
Project and Engineering Manager, Eker

Transitioning to Automation Made Easy with AVEVA System Platform

Prior to AVEVA, the Eker dairy team implemented a very rudimentary automation process, however, they couldn't record any data from its manufacturing processes.

AVEVA System Platform provides configuration, deployment, communication, security and data connectivity. Acting as Eker's "Industrial Operating System," System Platform provides visualization, configuration, deployment, communication, security, data connectivity, data storage and management, and collaboration.

These services allow Eker to build a single, unified plant model that logically represents processes, physical equipment and industrial systems, as well as legacy systems, making the design and maintenance of these systems more efficient, more flexible and less risky.

The plant model also gives essential context to data, greatly assisting with diagnostics and troubleshooting while providing valuable system documentation throughout the system lifecycle.

In addition, System Platform enables the Eker engineering team to create process templates that can be easily replicated for use in other operations at the production facility.

With System Platform, Eker is now taking advantage of Industrie 4.0 concept to simplify and streamline its manufacturing operations. This combination of automation and data exchange in manufacturing technologies applies the Internet of Things (IoT) model, which has increased the company's overall equipment efficiency by improving machine coordination.

"By applying the scope of Industrie 4.0 to our current operations, we can now monitor all the machines and processes in the factory at the same time using AVEVA solutions. This ability that AVEVA has provided the team has led to significant increases in production."

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Yavuz Selim Aydin,
Project and Engineering Manager, Eker

Secure and Integrated Data Ensures Continued Growth

To ensure the continued growth of the Eker dairy business, the management team needed to be able to capture and store critical process data for its entire manufacturing operation. The plant management team implemented AVEVA Historian to collect this critical information in a centralized repository for assessment of overall operations and reporting.

"Because our plant produces a wide variety of dairy products, Historian was the ideal choice for data historization because the software is able to maintain data integrity while handling a wide range of diverse information. The software also is able to generate actionable information for faster, more accurate decision-making."

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Yavuz Selim Aydin,
Project and Engineering Manager, Eker

The capabilities of Historian now provide Eker with a high-performance real-time database that offers unparalleled scalability offering up to 500,000 tags with greater retrieval throughput than ever before. Historian provides aggregated data that enables operators to compare the performance of multiple plant processes, and make informed decisions on improvements and respond quicker to unexpected incidences.

"After meeting with and evaluating Eker's specific automation and data collection requirements, Wonderware Turkey was able to identify appropriate solutions to meet their needs. We made Eker aware of their possibilities by introducing them to solutions related to industrial trends, digitalization, Industrie 4.0 and cyber security."

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Ümit Sayf,
Co-Founder/Sales Manager, Wonderware Turkey

With these powerful AVEVA solutions, Eker is able to increase its product quality and production traceability to ensure that only the finest quality product is delivered to consumers.

AVEVA Software Enables Eker to Meet Ambitious Market Expansion Goals

AVEVA software solutions are the backbone of Eker's successful manufacturing operations. They ensure product quality, streamlined production and overall customer satisfaction concerning its wide range of popular dairy products delivered throughout Turkey and surrounding regions.

With distribution centers located throughout Turkey, Eker is able to reach more than 17,000 customers each day. Thanks to Eker's adherence to strict manufacturing, quality control and data analysis measurements now made possible by AVEVA, the company has peace of mind that its customers will continue to enjoy its dairy creations for years to come.

AVEVA

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