



Dairy Producer Increases OEE by 10% and Throughput by 124 Tons/Week with Real-Time Performance Management

Glanbia Food Ingredients implements AspenTech Production Management & Execution (PM&E) solution to increase annual savings and boost product yield while reducing energy consumption.

Headquartered in Ireland, Glanbia plc is an international ingredients and cheese group. Glanbia Food Ingredient's facility in Ireland processes about 1.4 billion liters of milk annually into butter, cheese, milk proteins, and whey derivatives.

Anticipated increases in milk supply meant that the plant would not meet processing demand in the near future, so Glanbia sought ways to improve production throughput in order to meet new expectations.

Working with Glanbia, AspenTech Solutions Partner Orbis leveraged AspenTech's Production Management & Execution (PM&E) application to develop a performance management solution that collects data in real time and transforms it into highly visible, actionable information.

"When you start measuring things in real time and displaying them for everybody to see, you get a natural boost in productivity due to friendly competition. In addition, you take the subjectivity out of how you manage your business and processes."

— Joe Brien, Six Sigma Process Technologist, Glanbia

Customer Profile

Glanbia Food Ingredients
Dairy Products Industry

Challenge:

Improve performance to become the lowest cost, highest quality producer of dairy products in Ireland

Solution:

AspenTech PM&E powers new performance management solution for real-time visibility and analysis of operational performance

Benefits:

- Improve OEE by 10 percent in just six weeks
- Increase product yields: 0.4 percent increase in fat (63 tons), 1.4 percent increase in protein (146 tons)
- Reduce energy consumption by eight percent
- Reduce the time to create mass balance report by 99 percent



Market Opportunity Unfulfilled

Glanbia's management team challenged the Ballyragget, Ireland, facility to capture more of the available market opportunity without new capital expenditures. To do so they needed to transform themselves into a high-performance facility to achieve "Predictable Excellence."

To meet this objective, the team had to overcome several challenges. Management decisions were based primarily on anecdotal information. Whenever a problem arose, managers would dig through log sheets and spreadsheets and talk to operators and engineers in an effort to determine the root cause of the problem. Each area had their own way of capturing the data and calculating and presenting performance metrics, which led to inconsistent and unreliable information.

This lack of credible information resulted in less than optimal operating decisions. Improvement opportunities went unnoticed or were never acted upon because no one could determine the root cause of the problem.

Real-Time Visibility Leads to Fact-Based Decision Making

Orbis, an AspenTech Solution Partner, worked with Glanbia to install a performance management solution that collects data in real-time and transforms it into highly visible information. The solution, powered by AspenTech's PM&E application, provides value across the organization. Operators can visualize the impact of their actions in real-time. Process engineers can analyze events and trends, which helps continuously improve the process and rapidly resolve problems. Management is equipped to make fact-based decisions that optimize production operations.

The team soon discovered that as acceptance of the system increased, people found more ways to use the information. Because of the unique design of the solution, users can easily create their own reports and analyses to help them improve the performance of their respective areas and to share with others in the organization.

Future Improvement Projects Identified

Glanbia will continue its site-wide rollout of the OEE modules. A number of projects focused on yield improvement, energy reduction, cost of quality, and predictive quality-control measures have been identified simply by looking at and trending the relationships between process data and Key Performance Indicators (KPIs) and correlating them to plant performance.

Real-time visibility and analysis of data provides the information operational personnel need to make informed business decisions. The result is significant improvements in performance and worker productivity, saving millions of Euros.

About AspenTech

AspenTech is a leading supplier of software that optimizes process manufacturing — including oil and gas, petroleum, chemicals, pharmaceuticals and other industries that manufacture and produce products from a chemical process. With integrated solutions, process manufacturers can implement best practices for optimizing their engineering, manufacturing and supply chain operations. As a result, AspenTech customers are better able to increase capacity, improve margins, reduce costs and become more energy efficient. To see how the world's leading process manufacturers rely on AspenTech to achieve their operational excellence goals, visit www.aspentech.com.



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