

Case Study

How Prevu3D digital twin solution can help drive efficiency and collaboration in the food and beverage industry



Agropur Dairy Cooperative



Global Dairy Producer Agropur Meets Their Digital Twin

Agropur Dairy Cooperative is a top 20 global dairy producer with \$8.5 billion in sales in 2022. Agropur processes and markets high-quality milk and partners with well-known food, beverage, and nutrition brands. The company operates complex environments that underline the importance of having access to and working with accurate up-to-date documentation of their sites. At the height of the Covid-19 pandemic, Agropur looked for a solution that would help them reduce on site travel while increasing their efficiency and selected Prevu3D as the perfect solution.

Prevu3D software bridges the gap between the physical and digital worlds, using scanning solutions to create virtual 3D replicas of spaces and assets. Think heavy machinery, production lines, facilities, loading bays, etc. Digital twins then become powerful interactive tools to design, edit and share 3D environments in real-time.



The challenges

01 Improve design iteration for better efficiency

02 Reduce costs and time for travel

03 Project onboarding, collaboration, and communication

04 Improve health and safety measures

Improve design iteration for better efficiency

Agropur engineering projects range from replacing machinery like ventilators or slicers to installing explosion venting systems and layout reconfiguration. Prevu3D software has changed the way the team works, previously using Computer-Aided Design (CAD), now creating a digital twin from a 3D scan of the facility — enabling users to document, analyze, and collaborate in real-time. Prevu3D requires no technical experience to manipulate, facilitating participation from all project stakeholders.

Claudia shares the industry shift to innovate. “My team is young and enthusiastic about technology. I’m dealing with several time zones and have to provide the right tools. They truly appreciate the immersive experience they get with Prevu3D.” The new generation of engineering professionals entering the workforce prefer software that is user-friendly and enables them to work more effectively and efficiently.

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Claudia Munger
Director of engineering, Agropur

Reduce travel costs and time

As a company operating in Canada, Agropur has projects scattered from coast-to-coast. A large territory to cover, explains Claudia Munger, director of engineering at Agropur, as she leads a team of 7 engineers across 10 factories from Alberta to Atlantic Canada. It can be a challenge to have the internal resources physically present on all sites, so many external consultants are involved in projects. This can rapidly drive up costs and take additional time to iterate on new production line designs, adding budget for project stakeholder travel.

The challenges

Project onboarding, collaboration and communication

Claudia Munger recalls her first experience using Prevu3D. “I had one engineer managing two sites in the maritimes. She needed information to work efficiently remotely. That’s how it started.” Munger notes that the process of creating digital twins factories was fast and efficient. Agropur felt supported by the Prevu3D technical experts who helped implement and train them on the software – the engineering team loved the immersive experience.

Using Prevu3D digital factory replicas proved to be a crucial project onboarding tool for the extended Agropur teams, enabling better collaboration and communication across departments.

Improve health and safety

The software’s visual nature allowed the engineering director to simulate some of the challenges and potential issues that the factories were susceptible to for the Health and Safety team. “Photos are not as informative as walking the floor in a 3D environment. Not to mention surpassing language barriers”. Munger adds that she used Prevu3D digital twins to onboard the Chief of Health and Safety for the maritime region.

Here’s how Prevu3D digital twins can positively impact health and safety programs in the F&B industry:

- **Improved safety training:** Digital twins can be used to create realistic simulations of potential hazards and safety procedures, allowing employees to practice and refine their skills in a safe and controlled environment.
- **Enhanced equipment maintenance:** Digital twins can be used to monitor and predict equipment performance, allowing for proactive maintenance and reducing the risk of equipment failure.
- **Cost savings:** Digital twins can be used to optimize production processes and reduce waste, resulting in cost savings for the company.
- **Improved product quality:** Digital twins can be used to monitor and control production processes, ensuring consistent and high-quality products.





The Prevu3D digital twin approach

Prevu3D digital twin solution effectively addresses the pain points of the F&B industry through its key features:

- Rapidly create a digital twin of a factory
- Easy explore the site
- Patented tool to virtually edit the production-line
- Create multiple layouts or design iterations
- Online web collaboration tools

Results

Prevu3D lets users of all levels of expertise design, edit, and share 3D environments in real-time. It centralizes data—placing it in the right place at the right time.

Today, the global dairy producer leverages Prevu3D for over 18 of their facilities, using innovative digital twin technology to secure their place as industry leaders as they become more agile, efficient, and sustainable in the face of increasing demand and evolving consumer preferences.

Working with Prevu3D, Agropur improved efficiency and collaboration in many ways:

01

Minimizing site visits with real-time collaborative software, which saved travel costs

03

Improved health and safety measures with precise onboarding across various teams

02

Closing the documentation gap with a single-source data platform for better efficiency

04

Improve health and safety measures

Improve design process, reduce costs, and implement faster production line changes for your business with Prevu3D digital twin software.

Talk to an expert: sales@prevu3d.com

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