Agropur

PREVU3D

Case Study

Empowering pre-design efficiency: Agropur's success with Prevu3D digital twin software

Food and beverage manufacturing sites are highly complex, containing a vast array of piping, equipment and little downtime. With multiple external collaborators, including engineers, process specialists, and architects, accessing accurate documentation can be challenging. However, project engineers understand the significance of precise documentation and streamlined workflows for successful project completion.

Prevu3D software is transforming the way F&B companies operate. It bridges the gap between the physical and digital worlds, using scanning solutions to create virtual 3D replicas of spaces and assets. Digital twins then become powerful interactive tools to design, edit, and share 3D environments in real-time. Users can access up-to-date facility documentation and enable improved workflows for pre-design analysis and engineering processes, transforming collaboration with project stakeholders. Agropur is one F&B manufacturer that has benefited from Prevu3D's innovative software.

Agropur meets Prevu3D

Agropur Dairy Cooperative is a top 15 global dairy producer with $8.5 billion in sales in 2022. Agropur processes and markets high-quality milk. The company operates complex environments that underline the importance of having access to and working with accurate, up- to-date data.

The challenge

Agropur's Project Manager, Jesus Echegaray, needed a solution to overcome the challenges of managing end-to-end capital projects in Western Canada. One such challenge was the time-consuming process of manually sharing the layout of the plant and collaborating with stakeholders. To ensure new equipment would fit alongside the existing equipment and to expedite the design process, the team needed a better method.

The Prevu3D approach

Through an initial contact in 2018, Agropur hired Prevu3D to do a laser scan of their plant in Burnaby, including the production rooms, receiving bay, and alleyway of the cooler. Processing the scanning data with our software provided Agropur with an as-built digital replica of their environment that could be easily shared, saving time and eradicating onsite picture-taking and manual layout creation.

This data helped Jesus implement a robotics cell in the plant while also reviewing the potential for changes, troubleshooting and exploring necessary clearances for the project with plant managers and equipment operators.

Prevu3D makes it easy to integrate new equipment and improve layout creation with our "3D import" feature. And with the "Orthophoto export" feature, users can update their 2D layout. It's a two-way process that streamlines workflows and saves time.

I presented a 3D visualization of the robot cell in the cooler, which proved highly beneficial. All project stakeholders were able to see what it would look like and assess the space it would occupy. We thoroughly reviewed potential issues and explored necessary changes. Prevu3D provided an accurate representation of the project's future footprint, enabling us to examine clearances, design options, and overall functionality.

Jesus Echegaray
Project Manager, Agropur

Prevu3D workflow benefits at a glance

1. Provide ultra-realistic replicas of environments for better visualization and understanding of sites, spaces and structures
2. Access accurate and up-to-date 3D documentation of your site
3. Edit your space and create new design iterations
4. Enhance internal and external team collaboration
5. Implement complex changes with precision

"If I need to quickly review a specific area for installation preparation, I use Prevu3D to navigate the site. This allows me to confirm space availability and identify any potential pipes or obstructions that need to be considered."

Jesus Echegaray
Project Manager, Agropur

The result

Prevu3D software enhanced Agropur's effectiveness and productivity by enabling faster design processes, precise plant measurements, and enhanced communication and collaboration with equipment suppliers.

The solution was utilized by engineering firms, Original Equipment Manufacturers (OEMs), and employees who virtually accessed multiple plants, resulting in additional time and cost savings. With the web version of Prevu3D, project stakeholders could conveniently inspect and capture their own measurements, greatly reducing the need for on-site visits and facilitating better decision-making.

> The latest Prevu3D features really help me update my layouts for both plants. The software provides a more realistic image of the space, including dimensions and other important details. This has considerably reduced my workload and saved me time that would have been spent manually taking measurements and creating plans manually.
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> **Jesus Echegaray**
> **Project Manager, Agropur**

Today, the global dairy producer uses Prevu3D at an enterprise level across more than 18 facilities. They leverage innovative digital twin technology to solidify their position as industry leaders, enhancing agility, efficiency, and sustainability in response to growing demand and evolving consumer preferences.

Prevu3D software provides an end-to-end platform that enables industries to harness the potential of 3D, enabling efficient workflows, enhanced decision-making, and optimized resource allocation.

Uncover unparalleled pre-design insights & maximize your engineering potential.

Talk to a Prevu3D experts >>>

Book a demo