PREVU3D



CASE STUDY
FOOD & BEVERAGE

Engineering Facility Design at Agropur

How a top-15 global dairy producer used reality capture and Prevu3D to plan plant layouts faster from a single 3D scan to more than 18 facilities worldwide.

CLIENT
Agropur Dairy Cooperative

CONTEXT
Engineering Facility Design

Scan to Layout: How Agropur Plans Plant Layouts Faster with Prevu3D

How a shared, as-built digital twin replaced manual measurements and outdated drawings across Agropur's engineering workflow.

Agropur, a top global dairy producer, implemented Prevu3D's digital twin platform to optimize engineering design, improve collaboration, and reduce time spent on plant layout planning. Operating in highly complex food and beverage environments, Agropur needed a more efficient way to manage capital projects, equipment integration, and facility documentation.

The Challenge

Food and beverage facilities are dense with equipment and piping, with very limited downtime windows. Agropur faced several constraints:

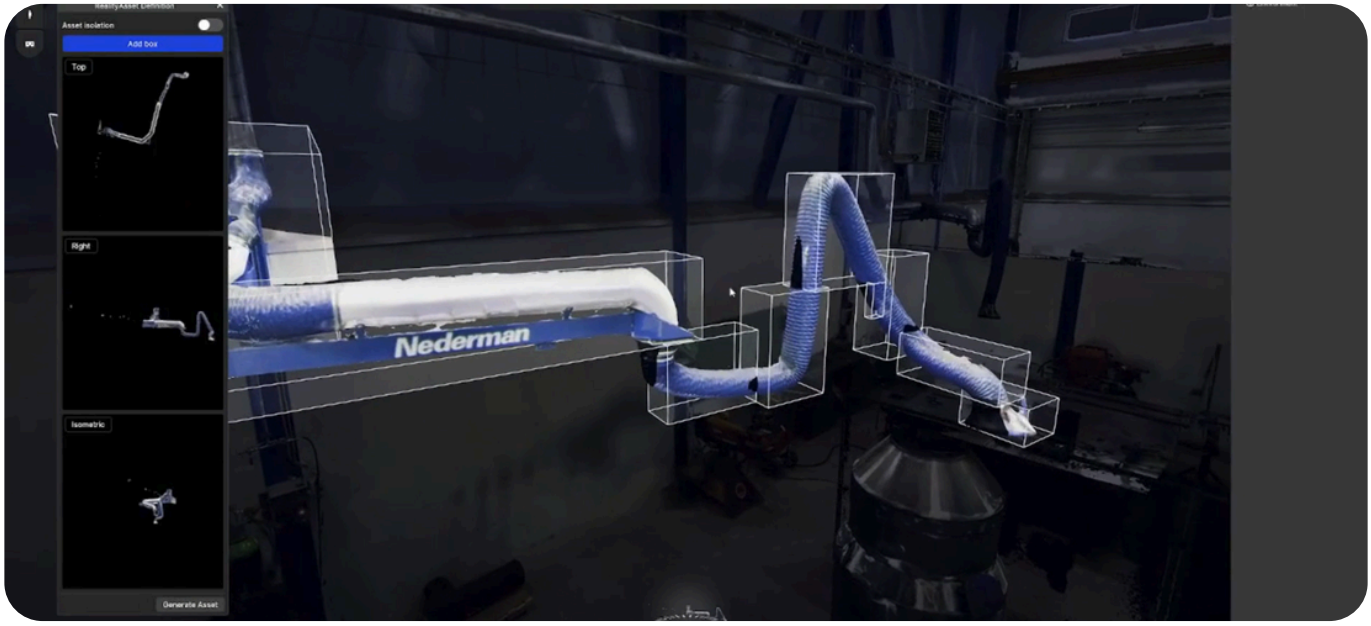
- Reliance on manual layout sharing and outdated documentation
- Difficulty ensuring new equipment fit within existing environments
- Inefficient collaboration across teams and locations
- Time-consuming site visits, measurements, and photo collection
- Limited visibility for OEMs, engineers, and architects
- Risk of design errors and installation delays

These issues slowed project execution and increased the complexity of managing capital projects.

CLIENT	PROJECT	SCOPE	INDUSTRY
Agropur Dairy Cooperative	Burnaby facility scan & layout planning	Laser scanning, 3D mesh, digital twin	Food & Beverage

Where Prevu3D Made the Difference

Agropur partnered with Prevu3D to deploy a reality capture and digital twin workflow, starting with a full 3D scan of its Burnaby facility — production rooms, receiving areas, and storage zones. The result was an accurate as-built replica of the plant that internal teams and external partners could open, measure, and review from anywhere.



Agropur's Burnaby plant as a navigable 3D mesh in RealityPlatform™: equipment, piping, and clearances captured as-built.

Technology deployed

- High-accuracy capture of equipment, piping, and spatial constraints
- Point cloud to detailed 3D mesh conversion
- **3D Import** — new equipment models placed in existing layouts
- **Orthophoto Export** — updated 2D layouts generated from 3D data

From scan to engineering workflow

- Replace manual processes with digital layout sharing
- Validate equipment installation with accurate spatial data
- Collaborate with plant managers and operators in real time
- Design and implement a robotics cell within the facility

The Outcome

By bridging 2D and 3D workflows, Prevu3D streamlined both design iteration and execution planning. Agropur's engineers stopped chasing measurements and started validating designs against a single source of truth.

- Less time on manual measurements and site visits
- Faster design cycles through 3D validation
- Better validation of equipment fit and clearances
- Seamless communication with OEMs and engineers
- Fewer on-site inspections
- Lower project delays and rework

18+

Facilities on Prevu3D, globally

Following the Burnaby rollout, Agropur scaled the digital twin across its network — standardizing engineering workflows, improving agility in production line changes, and supporting data-driven decisions.

> "The latest Prevu3D features really helped 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 taking measurements and creating plans manually."

Jesus Echegaray
Project Manager, Agropur

About Agropur

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, operating complex environments that underline the importance of accurate, up-to-date data.

Prevu3D solutions adopted

RealityPlatform™

Secure, cloud-based reality capture management — transforming point clouds into digital twins for faster, more accurate project delivery.

RealityTwin™

Turns 3D scan data into a shared visual environment, using spatial context and connected data to plan, execute, and optimize work.

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ABOUT PREVU3D

Prevu3D is the operational as-built platform for industrial teams — turning reality capture into a connected 3D environment that engineering, operations, and compliance teams can act on from anywhere. Built around three pillars of Capture, Manage, and Connect, the RealityPlatform™ transforms scan data from any source into a navigable spatial environment that connects directly to CAD, BIM, ERP, PLM, and IoT systems via RealityConnect™.

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