

## IMPROVED EFFICIENCY THROUGH BETTER RINSING

A Solution Story

Ecolab's next-generation cleaning program helped a Belgian dairy manufacturer enhance cleaning time and rinsing results at their whey powder plant

## **CHALLENGES**

- > Excessive amount of effluent foam created during the CIP process
- > Long CIP rinse cycles to effectively clean membranes, which waste time, water, energy and money

## **SOLUTION**

Ecolab conducted a trial of its new **Ultrasil<sup>TM</sup> MembraneCARE 2.0**, a next-generation cleaning program for dairy manufacturers who produce premium-quality products. The program expertly combines alkaline, acid and patent-pending enzyme cleaners, which enhanced rinsing, reduced foam, shortened cleaning time and ultimately improved productivity.

## **RESULTS**

Ultrasil™
MembraneCARE
2.0
helped
this
customer...

Reduce CIP cleaning time by 20 which added >\$77,000 USD per year

Reduce the amount of effluent foam Decrease by 14K water usage liters per day

in fresh and effluent water costs







**SOLUTION** 

Technology

+

People

BETTER RINSING RESULTS

Improved rinsing results enhanced production capacity and effluent water conditions

Ecolab's Ultrasil™ MembraneCARE 2.0 is a proprietary CIP membrane cleaning program, designed for dairy manufacturers producing premium-quality products, that expertly combines alkaline, acid and patent-pending enzyme cleaners, all of which are biodegradable as used. These innovative chemistries are formulated without Phosphoric Acid, Nitric Acid, NPE, EDTA and Chlorine, which minimizes environmental impact.

At this whey plant in Belgium, Ecolab immediately improved the customer's foaming/effluent issues by switching over to the new program. After the first CIP cleaning cycle, the membranes were more effectively rinsed in a shorter amount of time. In fact, Ultrasil<sup>TM</sup> MembraneCARE 2.0 shortened each CIP cycle by 20 minutes, reducing costs associated with fresh and effluent water by about \$10,000 USD per year. This offered increased production capacity worth \$77,000 USD annually.

Ecolab is the global leader in membrane cleaning and care. A dedicated team of scientists work at the company's Center of Excellence for Membrane Technology in Monheim, Germany. They collaborate with Ecolab R&D and field technicians globally to ensure successful deployment of new innovations. At this plant, Ecolab's technical specialists provided personalized service and on-site training to help ensure the safe and proper use of the chemistries and demonstrate how this innovative cleaning program can help achieve productivity goals and extend asset life, while saving time, energy, water and waste.



**Before** 

Excessive foaming in dairy yard gutter using conventional CIP chemistries and process



**After** 

Foam eliminated using Ecolab's Ultrasil™ MembraneCARE 2.0

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