CASE STUDY

Active OX+™* Canadian trial Puts Customers' Environmental, Social and Governance (ESG) Initiatives on Track

US-OMRI listed, no-rinse food contact sanitizer empowers organic fluid production operation to do more with less.

Background

An organic producer of a variety of organic fluid milk products was in search of a chemical solution that would help it meet its 2025 corporate sustainability targets (20% CO_2 reduction and 10% water reduction) without sacrificing food safety and quality.

Solution

The Ecolab team recommended a trial of Active OX+™* as an alternative to the customer's current PAA sanitizer. The combination of a broad efficacy range and enabling digitized, real-time conductivity monitoring would enable the dairy producer to confidently achieve the highest quality standards.

Active OX+™* has low pH at use-solution. Lower pH of use-solution helped to reduce the frequency of acid washing on equipment, leading to reductions in total CIP-time, water, chemistry, energy and plastic waste compared to current sanitizer use, while providing opportunity to increase production time. Active OX+™* is also approved for use in this customer's organic operations via their local certifier.

The measurements for trial success included:

- Equal or improved product micro results over their current sanitizer chemistry
- Reduced sanitizer use rate
- Reduced acid wash frequency
- The ability to use conductivity to monitor the sanitizer concentration

ESG Outcomes

3 million gallons water savings

133K kwh energy savings

22.8 MT CO_2e reduction

1636 KG reduction of plastic waste

Additional Value Delivered

43% reduction in sanitizer consumption

Reduce acid-wash frequency from **daily to weekly**

Drums last **2x longer on average** cutting drum changeovers in half

Sanitizer can be measured by **Conductivity** in customer water

Results

The trial of Active OX+™* quickly demonstrated measurable improvements compared to the customer's current chemistry.

Throughout the trial, Active OX+™* demonstrated equal or improved results for quality and effectiveness as compared to the previous PAA sanitizer. The customer was able to reduce the usage rate of its sanitizer by 43%, while also reducing the frequency of acid washes from daily to weekly, saving both money and time.

With a more concentrated formula, the drums holding the chemistry lasted twice as long, cutting drum changes from two weeks to 28 days. This not only streamlined processes, but significantly reduced employee exposure risks. The dairy producer also began using real-time tech-driven monitoring and controls, using the conductive chemistry of Active OX+™*.

With Active OX+™*, the company demonstrated significant sustainability impacts, including water, energy, chemical, and plastic waste reduction. These ESG improvements represent a big step in bringing the dairy producer closer to its 2025 corporate sustainability targets.

Potential Sustainability Impacts

REDUCED WATER

3 million gallons of water saved

12K CAD reduced water spend (not including rinse water savings)

REDUCED ENERGY

133K therms savings

22.8 MT CO_2e reduction

2K CAD reduced energy costs

REDUCED CHEMICAL

Reduced use of AC-Special™ Blended Acid Cleaner from daily consumption to 1x/week

36,813 CAD reduction of AC-Special™ Blended Acid Cleaner spend

REDUCED WASTE

With **50% lower drum volume** and reduced AC-Special™ Blended Acid Cleaner totes, the switch will result in **1636 KG reduction** of plastic waste

Total Savings Including Potential Productivity Improvement: 279,813.00 CAD

Ready to lower costs, boost productivity and protect quality? Contact your Ecolab representative today to see if Active OX+™* could be a fit for your operations – or visit ecolab.com/ActiveOX to learn more.

ecolab.com/ActiveOX

** EPA Reg. No. 1677-275. Trial conducted in Canada under product name KX-6256*

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