



INCREASING ANNUAL PRODUCTION CAPACITY

A Solution Story

Quality Enhancement Program by Ecolab helped **cheese producer** reduce production defects and add over 400 hours of production capacity.

CHALLENGES

- > Cheese plant was producing 90% grade A and B cheese with **some quality defects** caused by spore formers and other bacteria
- > **A mid-day wash was necessary** to minimize this defect, which reduced daily production capacity

SOLUTION

The plant conducted a five-day trial of the new Quality Enhancement Program by Ecolab to clean and sanitize the heat-treated equipment. The objective was to determine if the mid-day wash could be eliminated without impacting cheese quality.

RESULTS

Improved cheese quality

fewer spore-related defects in product

Increased productivity

Eliminated mid-day wash



added **1.5 hours** of cheese production/day



Added **400 hours** of production capacity



Produced an additional **2.5M lbs.** of cheese annually



Increased revenue by approx. **\$6M** USD





SOLUTION

Technology

+

People

=

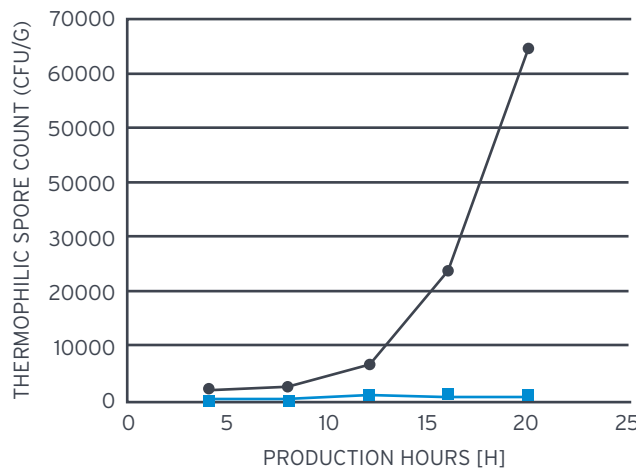
**EXPONENTIAL
OUTCOMES**

Quality Enhancement Program by Ecolab is a proprietary offering that combines advanced surface cleaning and sanitizing, spore control as well as application expertise to help customers consistently produce higher-quality products that demand premium pricing, while optimizing production.

This unique program offers an enhanced clean-in-place process that includes:

- 1) **Peracid pre-treatment** that penetrates tough soils on heated surface process equipment to create cleaner, shinier surfaces by removing cooked on fats, carbohydrates and protein soils.
- 2) **Caustic override** that causes a reaction with the pre-treatment chemistry to enable soil and biofilm removal through an oxidation process.
- 3) **Acid rinse for mineral removal.**
- 4) **High-temp sanitizing with mixed peracid** to kill spores and as an antimicrobial on yeast, molds and bacteria (label claims pending).

Quality Enhancement Program by Ecolab is for use on dairy and food processing stainless steel surfaces that may impact finished product quality. The unique program was developed to help reduce spore regeneration and growth associated with heat-treated equipment, and is proven to enhance quality in many applications, including milk protein concentrate, whole and skim milk powders, whey powders and cheese manufacturing.



Proven in field and lab tests as more effective than traditional cleaning and sanitizing offerings at 1) reducing spore counts and 2) extending production time of high-quality products while remaining within the range of acceptable performance metrics.

● BASE LINE
■ QUALITY ENHANCEMENT PROGRAM BY ECOLAB

ECOLAB®

Everywhere It Matters.™

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