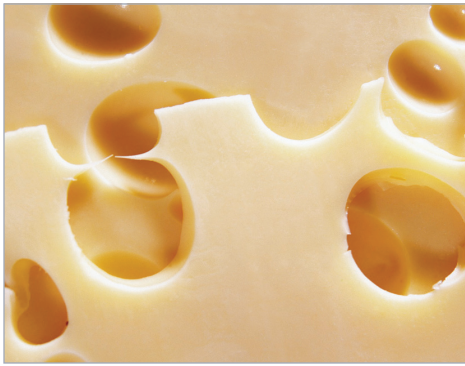




INCREASING ANNUAL PRODUCTION CAPACITY

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

=

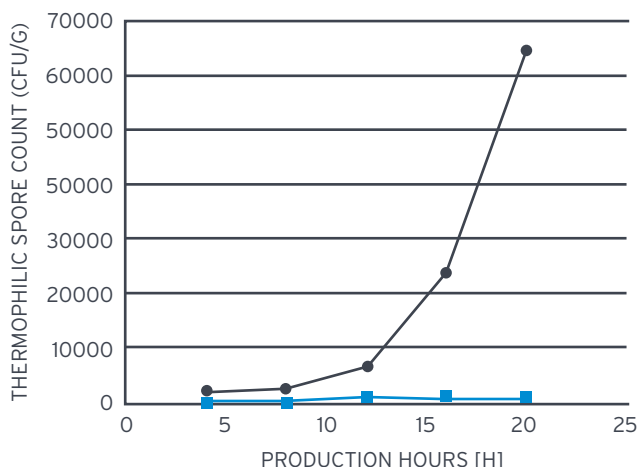
EXPONENTIAL
OUTCOMES

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.™

Ecolab Worldwide Headquarters
370 Wabasha Street N
St. Paul, MN 55102
Tel: 1 800 392 3392

www.ecolab.com

Ecolab Latin America Regional Headquarters
Avenida das Nações Unidas 17.891
6o Andara
São Paulo-SP, 04795-100 Brazil
Tel: +55 11 5644 6554

Ecolab Asia Pacific Regional Headquarters
2 International Business Park
#02-20, The Strategy Tower 2
Singapore 609930
Tel: +65 6505 6868

Ecolab Europe GMBH
Richtstr. 7
Wallisellen, Switzerland 8304
Tel: +41 44 877 2001