

HOW TO REDUCE ENERGY BY AT LEAST 20% in cleaning & disinfection operations

The energy crisis is forcing the personal care and cosmetic industry to find new ways to reduce the amount of energy needed.

The procedures for cleaning and disinfection of process equipment are critical to produce high-quality cosmetics, but are also energy intensive. Here are considerations you can introduce to reduce energy during cleaning and disinfection operations.

TOP TIPS

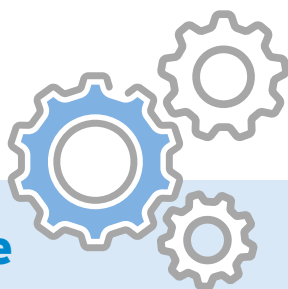
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Replace hot water or steam with chemical disinfection

Using a disinfectant that is effective at ambient temperature eliminates the energy that would have been needed to heat water to a disinfection temperature, or to generate steam.

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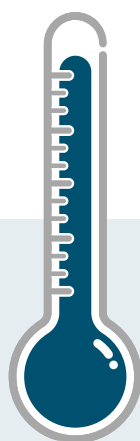


Choose purpose built detergents

Hard to clean soils typically found in the cosmetics industry require high levels of detergency and other cleaning active ingredients (e.g. solubilizer, complexing agents and many more).

Utilizing detergents specifically developed for the cosmetics industry is recommended to help prevent non-optimized cleaning cycles as well as re-cleaning which reduces the amount of energy needed.

3



Clean at the correct temperature

Every degree counts!

New state-of-the-art detergents allow for cleaning of cosmetic products (also with high pigment concentrations), within a lower temperature range (60°C - 70°C), requiring less energy to heat up water.



QUICK TIP

Use an automated cleaning system that allows for free selection of the cleaning temperature.

SUCCESS STORY

Thermal energy for disinfection was reduced by 100%



Background

A global Personal Care manufacturer was using hot water to disinfect three mixing tanks of 6 tons each, consuming 1,107 kWh per disinfection cycle, for a total annual consumption of 126,645 kWh.

The manufacturer had to fill the tank, heat to the target temperature using a steam jacket, hold for specified time, and cool to safe temperature for release.

Results

Ecolab Life Sciences helped replace their hot water disinfection with chemical disinfection, by implementing **Ecolab p3-oxonia active**, a broad-spectrum disinfectant for Cleaning-in-Place applications that is effective at ambient temperature.

With this new solution, the thermal energy for disinfection was reduced by 100%, as no heating was required. The **total disinfection time** also went down from 4 hours to **20 minutes** (92% time reduction).

THE RIGHT CHEMISTRY

Ecolab p3-oxonia active

The ambient temperature solution for CIP disinfection

Disinfecting process equipment in the cosmetic industry at ambient temperature allows energy and time savings, cutting the energy required to heat in thermal disinfection, and the associated waiting time.

- ▲ Registered disinfectant
- ▲ Proven efficacy at low concentration against bacteria, yeasts, and fungi
- ▲ Peroxyacetic acid based
- ▲ Excellent material compatibility
- ▲ Non-foaming, suitable for CIP systems
- ▲ Excellent rinsability



To find out more visit www.ecolab.com/personalcare

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