



INCREASED EFFICIENCY & PRODUCTION CAPACITY

A Solution Story

Ultrasil™ 09: NPE-free Surfactant Additive

Ultrasil 09 helped a large dairy processor **reduce baseline pressures** and **increase the efficiency** of their Whey Protein Concentrate UF membrane operations.

CHALLENGES

- > Dairy processor needed a **more efficient NPE-free alternative** to reduce and maintain low baseline pressures
- > Attempts to eliminate NPEs in the past led to ineffective fat removal causing a rise in baseline pressures that resulted in membrane systems shutting down

SOLUTION


- > The plant **partnered with Ecolab to test Ultrasil 09** in combination with their current liquid alkaline cleaner and chlorine product as part of their membrane cleaning routine
- > Ecolab team provided on-site support to help with the conversion to Ultrasil 09 from the old surfactant product
- > No other changes were made to their membrane cleaning procedure


RESULTS

with Ultrasil 09

baseline pressures
REDUCED
by **25%**

IMPROVED MEMBRANE CLEANING


INCREASED
average permeation
rate by **31%**


ADDITIONAL
capacity to process
18.6M lbs of
whey concentrate/yr
without any changes to their membrane systems*

*Measuring permeation rate as LMH/Bar - Litres per Meter Square per Hour per Bar pressure allows processors to normalize for membrane area and baseline pressures in order to calculate capacity and throughput

To find out more, contact your Ecolab representative or call 1-800-392-3392.