

TETRA PAK FILTRATION SOLUTIONS

WATER RECOVERY AND SAVINGS ASSESSMENT





Sustainable food production

RECOVER PROCESS WATER – AND USE IT AGAIN

Do you need a safer and sustainable water supply for your dairy or food production? Tetra Pak's Water Competence Center can help you recover the water in raw materials and in the various production steps and use it again, benefitting both your bottom line and the environment.

A SUSTAINABLE PROFILE

Water is an important part of any food production and a limited resource with usage becoming increasingly regulated.

When you factor in dry seasons, where increased demands on the freshwater supply can lead to further restrictions, there is a great potential for using the milk's, fruits' or vegetables' water content and thus produce more sustainably.

Depending on the quality of the water supply, recovered water may have an even higher quality than this. Besides reducing the need for treating the freshwater, there is also money to save due to a reduced amount of sewage.

Focus on water recovery and savings helps ensure a more robust business against water issues and create a more sustainable company profile.

Tetra Pak offers an assessment of production processes and local conditions. If feasible, the installation of a membrane filtration solution can ensure that the water content in the raw materials can be recovered.

SIGNIFICANT POTENTIAL

Water can be part of various side streams in food production. Significant volumes of side streams with high amounts of water can come from:

- Evaporators
- Concentration of liquid products
- Washing and rinsing of products
- Cleaning
- Improper design of water treatment solutions
- Existing practices and general handling of water.

EXPERT ASSESSMENT

An assessment will be tailored to your specific needs and include most of the following topics:

- Initial screening on site and alignment on current situation and issues
- Assessment of existing practices and available materials
- On-site assessment
- Alignment with local legislation
- Suggestions for improvements
- Testing of relevant applications.

WHITE WATER RECOVERY

White water is the first flush water in connection with cleaning of a process line after production. It contains approx. 1/3 milk and 2/3 water.

By means of reverse osmosis filtration, valuable solids from the flush water can be recovered and the water retrieved.

Depending on local legislation, the milk solids can be used for:

- Cheese
- Ice cream
- Yogurt and other fermented products.



Our water specialists and process engineers design customer-specific solutions that meet the growing demand for water savings.

Green Flush is a highly resource-saving, software-based solution for effective flushing of a membrane filtration plant.

Compared to a traditional full plant flush, Green Flush reduces flushing time and resource usage by up to 40%, compared to a traditional full plant flush.

CIP RECOVERY

Cleaning of processing equipment requires large volumes of lye.

After a CIP (cleaning in place), the lye contains dissolved and suspended matter, making it unsuitable for direct use in a new CIP sequence.

As an alternative to dumping large quantities of spent lye, Tetra Pak has developed a separation method which regenerates 70% to 90% of spent lye.

TESTS

Tetra Pak offers easy-to-use pilot filtration plants for rental. Pilot plants are ideal for testing different water recovery solutions before moving to full-scale solutions as well as new ideas and optimization of existing solutions.

Tetra Pak also has the opportunity to conduct preliminary small-scale pilot trials prior to pilot testing at customer site, including an evaluation of quality benchmark parameters.

AFTER-SALES SERVICE

We provide regular follow-up service visits to help ensure that recovery and reuse systems are running as planned and to help solve newly raised issues or barriers.

Our unique 24/7 hotline team serves customers all over the world; in addition, Tetra Pak's local network ensures closeness to customers in most parts of the world.

ABOUT US

Tetra Pak is the world's leading food processing and packaging solutions company. Working closely together with our customers and suppliers, we provide safe, innovative, and environmentally sound products that each day meet the needs of hundreds of millions of people.

With more than 25,000 employees around the world, we believe in responsible industry leadership and a sustainable approach to business. Our motto, PROTECTS WHAT'S GOOD™, reflects our vision to make food safe and available, everywhere.

Tetra Pak's Water Competence Center works closely together with customers, universities, and other business partners to ensure continuous development of new technologies and applications and push for a sustainable future in food processing.

We look forward to cooperating with you!

Tetra Pak
Tetra Pak Filtration Solutions

Bergsøesvej 17
8600 Silkeborg
Denmark

filtration.info@tetrapak.com
Phone: +45 8720 0840

12255 Ensign Ave North
Champlin, Minnesota 55316
U.S.A.

info.fe@tetrapak.com
Phone: +1 763 421-2721