ZwitterCo

Enabling Sustainability with ZwitterCo Membranes

ZwitterCo's breakthrough membrane technology enables water reuse and product recovery from the most challenging wastewater. ZwitterCo leverages the remarkable power of zwitterions to create an intensely hydrophilic membrane that resists fouling. It is classified as a superfiltration membrane, falling between ultrafiltration and nanofiltration.

Sustainable Reuse of High-Strength Dairy Wastewater

Our membranes are made using breakthrough chemistries and are immune to irreversible organic fouling.

Compliance

Implement high quality treatment to stay below your organic discharge limits.

Cost Savings

Reduction in chemical usage and freshwater consumption leads to overall cost savings.

Operational Efficiency

Spend less time cleaning and more time running your process operations.

Water Reuse

Meet and exceed your sustainability goals with permeate that is easy to reuse.

Eliminate or Reduce Municipal Surcharges

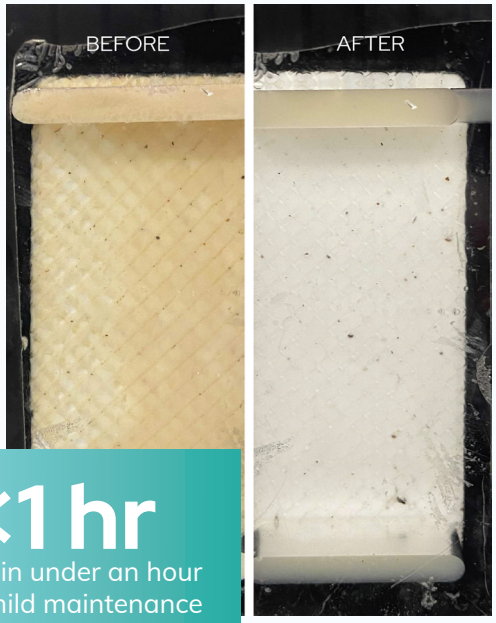
- Superfiltration membranes are **immune to irreversible fouling**
- Separate and concentrate fats, oils, and grease to over **50,000 ppm** to meet organic discharge limits

Reduce Hauling, Augment DAF

- Reduce hauling by as much as **90%** in some applications
- Eliminate chemical usage required by existing DAF process

Reduce Downtime and OPEX

- **Restore 80-95% of permeance** with only a short water flush
- Full performance recovery after a mild maintenance wash



<1 hr
Clean in under an hour with mild maintenance wash

Maximize Reuse

- Produce ideal feedwater for high-recovery RO to enable maximum reuse
- In field pilots, the membrane has achieved **95-99% water recovery / 20-100x concentration factors**

Superfiltration and Zwitterion Technology

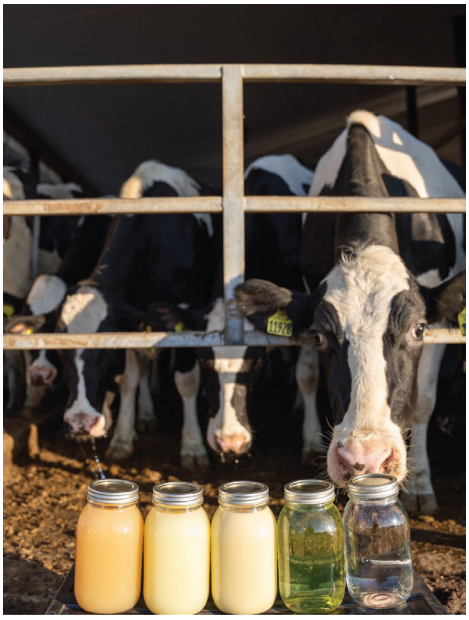
ZwitterCo Superfiltration (SF) membranes are developed using patented zwitterionic technology. By linking the zwitterions together with a strong backbone, we created extremely hydrophilic (water-loving) membranes that prevent organic components from adhering to their surface or clogging their pores.

This results in a membrane with a unique zwitterionic chemistry that allow low to negligible organic fouling on high-strength wastewater streams that have been considered unsustainable for membranes in the past. And because the membrane is tight enough to remove many dissolved organic constituents that foul and create operational challenges for RO, SF membranes are an ideal pretreatment option for RO in wastewater treatment to purify water for reuse.

About ZwitterCo

ZwitterCo's breakthrough membrane technology enables filtration for the most challenging separations. We leverage the remarkable power of zwitterions to create an intensely hydrophilic membrane that resists fouling from organic molecules such as fats, oils, and proteins. The unique properties of our membranes make it practical for industries to reuse water and enhance product recovery from historically unfilterable streams. We offer water treatment and separation solutions that cut chemical demands, maintain steady performance, and last.

ZwitterCo brings decades of expertise and provides comprehensive support for our technologies through our in-house engineering and lab capabilities. Our technology is being adopted most quickly in manure digestate treatment, meat and poultry treatment, dairy wastewater, and bioprocessing.



Ready to see the difference at your facility?

Contact us to learn more about our solutions or to try our products in your facility.

ZWITTERCO

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