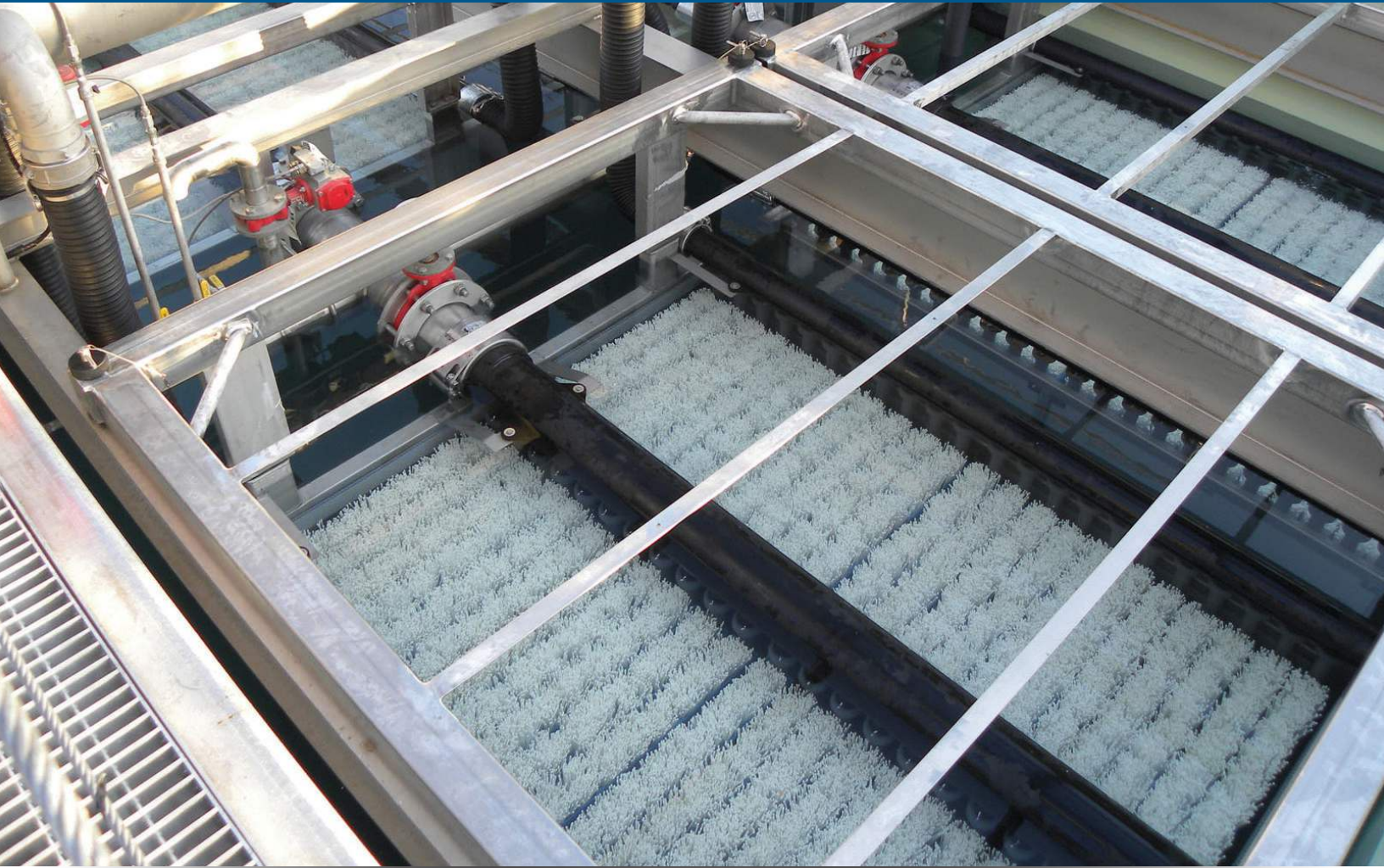


# PURON<sup>®</sup> MBR System

Reliable Submerged Hollow Fiber Ultrafiltration



 **KOVALUS**  
Separation Solutions™

# Single-Header, Central Aeration Ultrafiltration Membrane Bioreactor

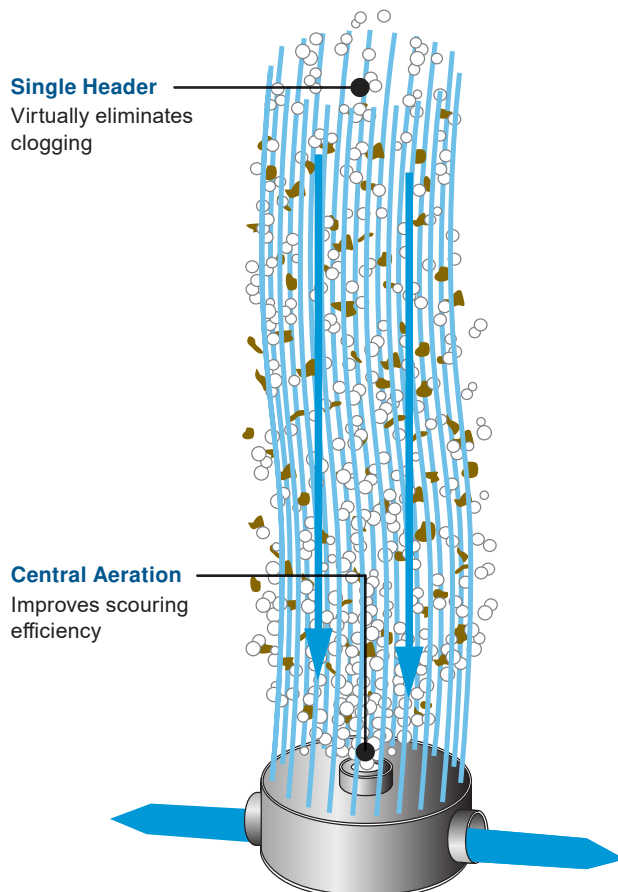
## Over 50 Years of Membrane Experience

KOVALUS SEPARATION SOLUTIONS™ (KSS) is a global leader in membrane filtration technologies with over 50 years of membrane experience and thousands of system installations worldwide. The PURON® MBR is our solution for industrial and municipal wastewater applications requiring submerged MBR technology. Featuring the virtually unbreakable PURON membrane, the PURON MBR is a reliable and cost-effective solution for streams high in suspended solids.

## PURON Membrane

The uniquely designed PURON membrane is a 0.03 micron reinforced PVDF ultrafiltration membrane that acts as an excellent barrier to suspended solids, bacteria, and other pathogens. The narrow pore size distribution ensures high permeability and sustainable, uninterrupted operation with reduced maintenance and cleaning requirements.

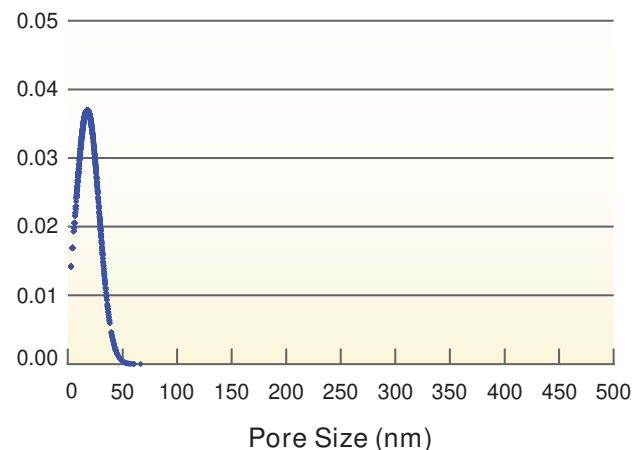
## PURON Single Header Design



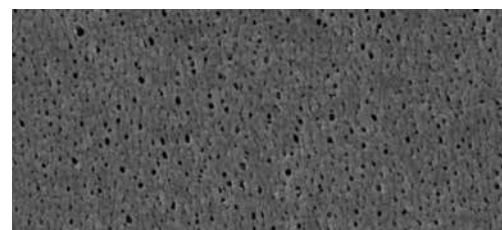
## PURON MBR Modules

Featuring KSS' patented single-header design and central aeration, the PURON MBR modules offer high flux capabilities for MBR applications. The single-header design fixes the fiber bundle only on the bottom to virtually eliminate clogging and buildup, ultimately improving the overall performance of the membrane. The aeration nozzle is positioned in the center of the bundle to allow for complete scouring along the full length of the fiber, minimizing power consumption.

## Tight Pore Size Distribution



## SEM of PURON Membrane Surface



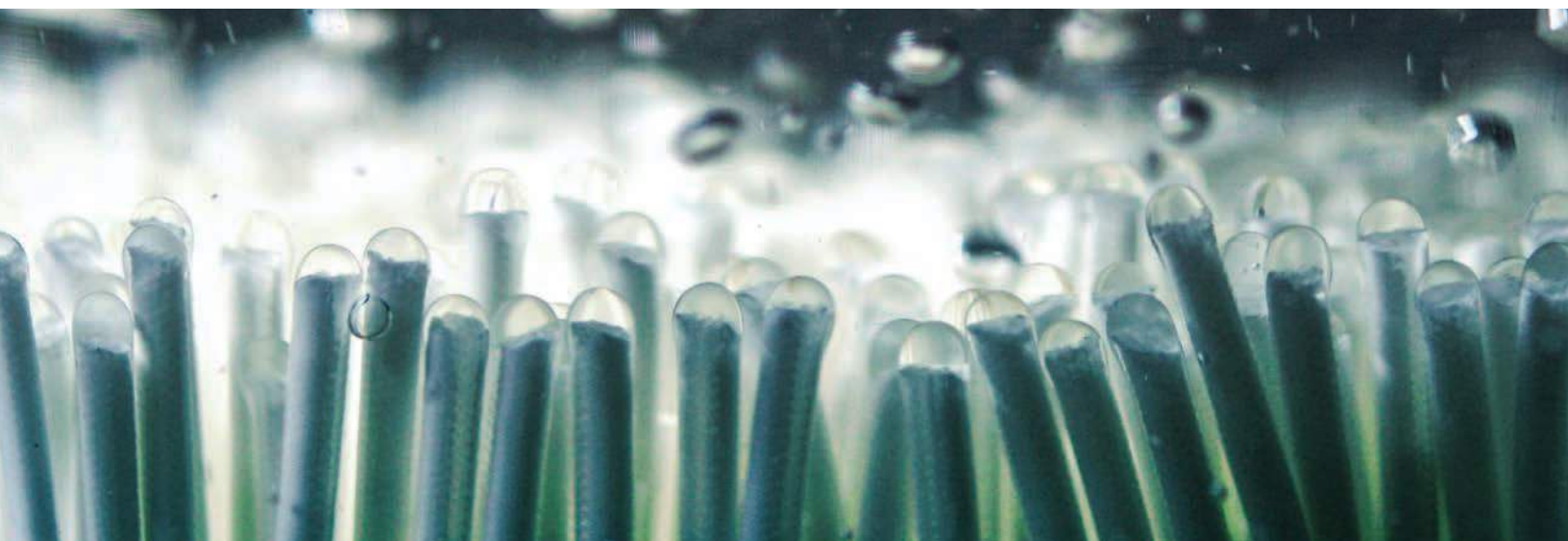
# Reliable, Cost-Effective Submerged Hollow Fiber Ultrafiltration

## Benefits

- Single-header design for minimal clogging and buildup
- Virtually unbreakable hollow fiber membrane reduces downtime and maintenance requirements
- Central aeration for highly effective, crash resistant air scouring
- High flux and solids tolerance for high quality effluent
- Reduced footprint and lower construction costs
- One of the lowest energy demand products in the market
- Title 22 compliant

## Applications

- Municipal wastewater treatment
- Tertiary MBR system for treatment of municipal wastewater
- Treatment of combined municipal and industrial wastewater high in organic and biological matter
- Achieve stringent discharge standards or promote wastewater reuse



## Packaged MBR Systems

KSS pre-engineered systems feature comprehensive, complete packaged MBR systems for flow rates up to 250,000 GPD (950 m<sup>3</sup>/day). This system is designed to treat municipal and industrial water and wastewater for a variety of applications, including food, beverage, dairy, leachate, and produced water. Benefiting from the robust PURON® hollow fiber membrane and a comprehensive biological system, these systems can reduce BOD and nitrogen concentrations down to 5 and 10 mg/L, respectively.



## KOVALUS SEPARATION SOLUTIONS

KOVALUS SEPARATION SOLUTIONS™ (KSS) is a global leader in separation technologies.

With best-in-class domain expertise, technologies and systems, KSS is uniquely positioned to help customers purify and recover valuable process streams and achieve sustainability goals across food and beverage, life science, and general industrial markets.

### Services & Support

After-Sales Services & Maintenance Programs • SepTrac™ Smart System



[www.kovalus.com](http://www.kovalus.com) • [getinfo@kss-sep.com](mailto:getinfo@kss-sep.com)

**KOVALUS**  
Separation Solutions™

For complete contact information and listing of our global locations, visit [www.kovalus.com](http://www.kovalus.com)  
©2023 KOVALUS SEPARATION SOLUTIONS, LLC. All rights reserved worldwide.  
For related patent and trademark information, visit [www.kovalus.com/legal](http://www.kovalus.com/legal). 10/23