PURON® HF System
Solids Tolerant Submerged Hollow Fiber Ultrafiltration

Advanced Membrane Filtration for Water Purification

Separation Technologies for a Better Future™
High Flow Ultrafiltration Technology

Over 50 Years of Membrane Experience

Koch Separation Solutions (KSS) is a global leader in membrane filtration technologies with over 50 years of membrane experience. The PULSION® MBR is the next-generation PURON® MBR, featuring reduced energy requirements, a smaller footprint, and a simplified design and operation. Suited for both municipal and industrial water and wastewater applications, the PULSION MBR is our cost-effective, compact, and automated solution.

PURON Membrane

The PURON HF module uses the same hollow fiber membrane used in the well-proven PURON MBR module. The fiber consists of a 0.03 micron PVDF ultrafiltration membrane, providing an excellent physical barrier to suspended solids, bacteria, and other pathogens. The narrow pore size distribution ensures high permeability and sustainable operation.

PURON HF Modules

The latest generation of high flux PURON HF modules for tertiary applications and other high solids filtration are newly designed and improved, while continuing to leverage the innovative PURON central aeration and single header design. The PURON HF submerged reinforced hollow fiber module provides the highest packing density product in the market, packing 2650 m² in a single module. It features 47% more membrane area than the current PURON MBR module within the same product dimensions. The result is a high throughput, compact wastewater solution that can be implemented for a low life-cycle cost.

PURON HF Modular Systems

KSS offers pre-engineered modular PURON HF filtration systems for flow rates up to 3 MGD (11,500 m³/day) per train. The modular PURON HF systems can be arranged to meet almost any plant layout or required flow rate.

PURON Single Header Design
Superior Effluent Quality at Reduced Costs

**Benefits**

- High solids tolerance and packing density
- Small, medium, and large modules to fit any flow rate
- Reduced system footprint
- Single-header, central aeration design
- Supported membrane fibers virtually eliminate risk of breakage
- High flux, low fouling rate
- High sustainable permeability

**Applications**

- Tertiary treatment
- RO pretreatment
- Surface water for industrial water and drinking water

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**Baotou Steel Tertiary Treatment Plant,**
Inner Mongolia, China

**Alto da Boa Vista Drinking Water Treatment Plant,**
São Paulo, Brazil

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**Diagram:**
- **Incoming Wastewater**
- **Bioreactor**
- **Clarifier**
- **Surface Water Intake**
- **Coagulant (optional)**
- **PURON® HF Module**
- **Discharge or other use**
- **Reverse Osmosis** (Requirement based on application)
KSS will partner with you throughout the life cycle of your membrane filtration system. Our experienced technical team will provide global service and support and will work directly with you to maximize process efficiency. KSS ASSIST®, our service and maintenance program, provides the tools to keep your system operation at the highest level, including:

- Membrane Process Optimization
- Plant Audits
- Data Collection, Analysis & Reporting
- Operator Training
- Telephone Support

Koch Separation Solutions

Koch Separation Solutions (KSS) is a global leader in membrane filtration technologies with over 50 years of membrane experience. With best-in-class domain expertise, technology and systems, KSS is uniquely positioned to help customers purify and recover valuable process streams and achieve sustainability goals.