

Membrane Bioreactor Solutions

Making MBR simple



M|MBR SYSTEMS

mmbrrsystems.com

AN INTEGRATED WATER SERVICES COMPANY

INTEGRATED
WATER
SERVICES, INC.

M | MBR SYSTEMS

Membrane Bioreactor Solutions



MBR is the best available technology for treating wastewater

Membrane bioreactors (MBRs) are widely acknowledged as the “best available technology” for wastewater treatment by experts. When properly designed and operated, MBRs can produce the highest-quality effluent and surpass the most stringent permit limits, which is indispensable for water conservation, reuse, and sustainability strategies.

Making MBR technologies accessible

M | MBR Systems helped bring MBR technology to the U.S. market. Today, our mission is to ensure smooth and timely MBR technology adoption and address outdated delivery methods, siloed proprietary designs, industry knowledge gaps, and backward-compatibility issues.

We achieve this through our U.S.-based MBR Technology Hub, a universal resource center that fosters innovation and provides membrane equipment manufacturing, distribution, and optimization of MBR products and projects.



Delivered by the most experienced MBR team

Over two decades, members of our team helped deliver over 1 million elements across more than 325 MBR systems, ranging in capacity from 5,000 gallons per day (gpd) to 42 million gpd.

What is a membrane bioreactor?

An activated sludge process that uses membranes to separate solids from treated water.

Membranes immersed or submerged in the slurry separate suspended solids so that permeate can be disposed of or re-used.

M | MBR Systems Solutions

- Modular systems
- Universal parts supply
- Customizable systems
- Technical services

Targeted Environments

- Urgent or emergency applications
- WWTP retrofit or modernization
- Brownfield or greenfield projects
- Membrane replacement or upgrade
- Phased deployment
- Decentralized/onsite treatment
- Sustainability, recycling, and reuse

Benefits

- Fastest delivery
- Most experienced MBR team
- Meets BABA requirements
- Resource center for all MBRs

Tour the MBR Tech Hub

- mbrsystems.com/mbrhub

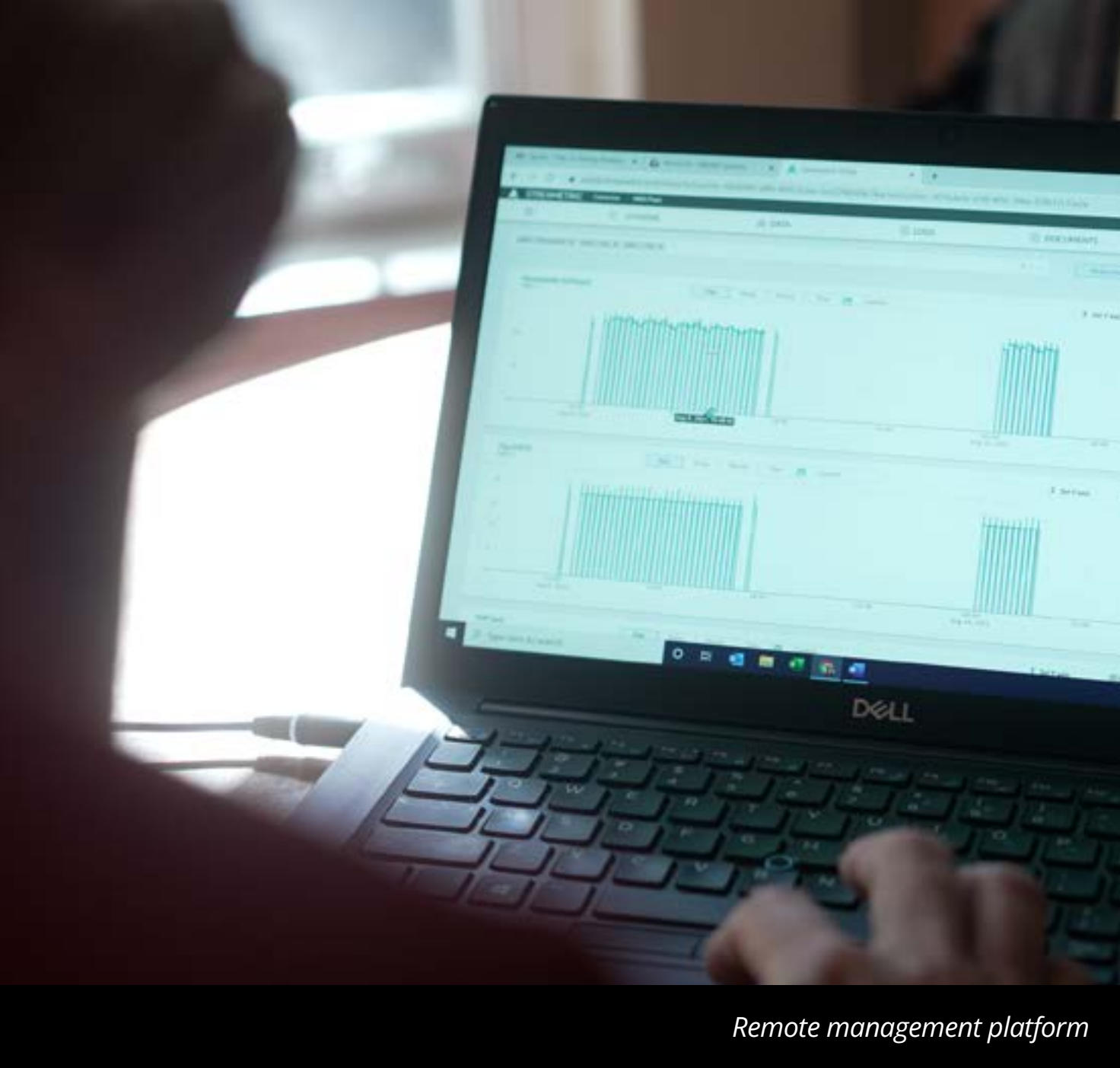


Universal Parts Resource

Our flexible, flat-sheet microfiltration (MF) and ultrafiltration (UF) products from leading manufacturers are 100% backward-compatible with most products and offer several advantages.

- Quicker installation with guaranteed fit; modules shipped from stock can take less than 4 hours to install.
- Increased energy and space efficiency with part-for-part replacement.
- Greener product designs that result in manufacturing using up to 10X less material.
- More resistant to clogging with product designs that are 5X to 12X easier to service, increasing uptime and safety factors.
- Easier selection and ordering using a web-based [product finder](#) to get the right parts delivered fast.
- Options include installation support, remote monitoring, and extended warranties.





Remote management platform



Technical Services

M | MBR can service and optimize any existing or new MBR system. Our technicians and product specialists can audit plant performance, perform site inspections, remotely monitor operations, develop site-specific training programs, and much more. We specialize in developing new MBR products, projects, and systems.

Modular and Custom Systems

Every project is different, and each situation is unique. With our breadth of experience and with support from multiple technology partners, M | MBR:

- Delivers customized systems through conventional and alternative delivery methods.
- Specializes in retrofitting of existing infrastructure.
- Manufactures modular systems that are standardized, scalable, and rapidly deployable.
- Tailors technical services to complement project delivery teams.
- Offers flexible procurement with turnkey, rental, and financing options.

MODULAR MBR SOLUTIONS

Onboard capacity for municipal wastewater.

	Design Flow		Peak Flow
BluBox™	75,000 gpd		150,000 gpd
M PAC™	30,000 gpd		60,000 gpd
M POD™	7,500 gpd		30,000 gpd

PACKAGED MBR OPTIONS



BluBox™ MBR

Rapidly deployable, highly reliable treatment and reuse systems.

- **Standalone solution** with expandable capacity and array options for higher flows.
- **Pre-built, pre-tested, and integrated** with standardized process components including membrane modules.
- Meets **Build America, Buy America** standards.



M|PAC™ MBR

Cost-competitive delivery with tankage and assembly options.

- **Flexible delivery options.**
- **Integrated components** shipped as loose parts or as a pre-built solution.
- **Cost-effective procurement** with flexible tankage and mechanical installation options.



M|POD™ MBR

Palletized MBR solution that ships everywhere, sets up anywhere.

- **On-site assembly** ideal for environments with physical constraints or temporary treatment requirements.
- **Augments** biological treatment processes.
- **Highest level of modular design.**

Which modular MBR product is right for you?

	BluBox™	M PAC™	M POD™
Wastewater treatment, water reuse	✓	✓	✓
Nutrient removal capabilities	✓	✓	✓
Nominal/design onboard treatment capacity	Up to 75,000 gpd	Up to 30,000 gpd	Up to 7,500 gpd
Peak hydraulic capacity	Up to 150,000 gpd	Up to 60,000 gpd	Up to 30,000 gpd
Includes essential process components	✓	✓	✓
Equalization, waste solids storage included	Optional	✓	Optional
Tankage materials	Coated CS	Optional	FRP
Above or below grade	Above	Optional	Above
SCADA/remote monitoring included	✓	✓	✓
Fine screening included	✓	✓	✓
Pre-assembled, pre-tested	✓	Optional	✗
Assembly/installation/turnkey services available	✓	✓	✓
Typical ready to ship time (inventory dependent)	4-6 weeks	6-8 weeks	6-8 weeks
Membrane type available	UF/MF	UF/MF	UF/MF
Site assembly required	Minimal	Optional	Site assembled
Lease options	✓	✓	✓
Tank Base Length x Width x Depth (Height)	45'-0" x 8'-6" x 12'-0"	42'-0" x 8'-6" x 12'-0"	15'-4" x 8'-9" x 11'-4"

Find the right MBR membrane >

Request a demo or tour the MBR Tech Hub >

About M | MBR Systems

M | MBR Systems is dedicated to the delivery, service, and optimization of membrane bioreactor (MBR) projects for wastewater treatment and water reuse and recycling. Leveraging two decades of MBR experience, strategic partnerships, and powerful web-based analytics, the M | MBR team specializes in system optimization and the rapid delivery of modular and customized MBR solutions. From its Austin-based MBR Technology Hub, M | MBR can ship replacement membrane equipment for most major brands in days and can quickly deploy completely integrated, pre-assembled MBR systems in weeks.

© 2024 MMBR Systems. M | MBR Systems and the MMBR SYSTEMS logo are trademarks of M | MBR Systems. All other trademarks used in this document are the property of their respective owners.

Revision 20240412



M | MBR SYSTEMS

mmbrsystems.com

AN INTEGRATED WATER SERVICES COMPANY

INTEGRATED
WATER
SERVICES, INC.