WASTEWATER TREATMENT SOLUTIONS

FILTERBOXX
SiC MBR

FilterBoxx™

An Ovivo Company

SiC (SILICON CARBIDE) MBR

The FilterBoxx™ SiC MBR is a robust, compact, and economical MBR platform. Built as skid based or containerized systems to match your project needs. Designed for low strength (100 - 600 mg/L BOD) and high strength organic wastewater (600 - 10,000 mg/L BOD).

The FilterBoxx™ SiC MBR's flexible modular design allows for easy plant upgrades and expansion. Factory built and tested prior to shipment to ensure timely delivery and trouble-free start-up. Many pretreatment and post-treatment sub-modules available to meet various application demands. Industrial grade components to ensure reliable performance for the long term.

MODULAR DESIGN.
DESIGNED TO FIT YOUR PROJECT'S NEEDS

FEATURES & BENEFITS

SILICON CARBIDE (SiC) MEMBRANE

The rugged, highly hydrophilic, high flux, low energy Silicon Carbide (SiC) ceramic membrane provides unmatched performance, fouling resistance and the longest membrane life in the market.

COST SAVINGS

Operation up to 2% - 4% solids, providing lower sludge yield. The inert SiC membranes allow a wide variety of economical chemical cleaners and even high pressure spray washing for optimal membrane plant performance.

EASY ACCESS

Side loading membrane tanks simplify access for membrane inspection and provides a safer working environment for operators.
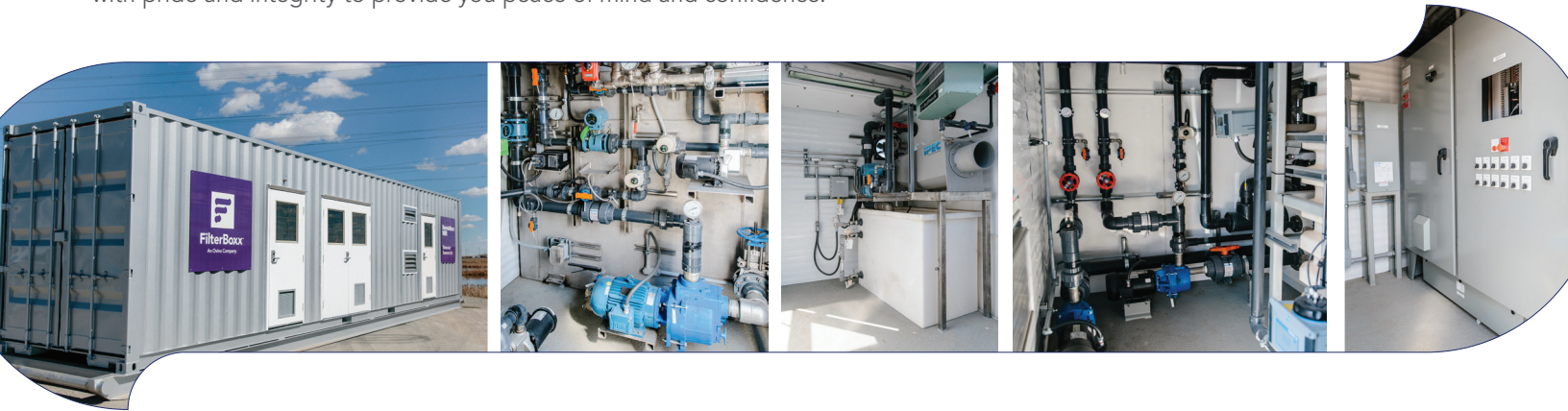
WATEREXPERT™

WaterExpert™ provides you the power to operate your plant from anywhere, any cell phone or computer, and check data and performance of your plant at any time.

WHY FILTERBOXX

FilterBoxx™ SiC MBR systems are designed to meet the various needs of our clients, to tackle challenging applications, to work reliably in extreme climates and under extreme conditions. Our solutions are designed by some of the most experienced experts in the water and wastewater treatment system industry. We build with pride and integrity to provide you peace of mind and confidence.
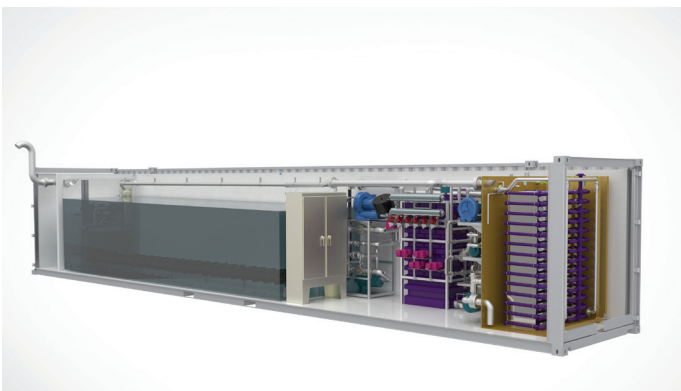

LOW STRENGTH MARKETS

• Workforce accommodation camps
• Decentralized communities
• General industrial wastewater
• Commercial enterprise (golf course, RV park, rest stops, etc)
• Casinos
• First Nation communities

HIGH STRENGTH MARKETS

• Food & Beverage
• Landfill leachate
• Chemical processing
• Hydrocarbon processing
• Pharmaceutical
• Heavy industry
• Remediation

PRODUCT OFFERING: LOW STRENGTH & HIGH STRENGTH SiC MBR

MODEL		MBR 80	MBR 110	MBR 160	MBR 320
TYPICAL FLOW CAPACITY	(m3/d)	10 - 80	30 - 160	60 - 240	200 - 480
	(gpd)	2,500 - 21,000	8,000 - 42,000	16,000 - 64,000	52,000 - 128,000
MEMBRANE PLANT FOOTPRINT	(m)	2.44 x 6.10	2.44 x 12.19	2.59 x 16.15	2.44 x 12.19
	(ft)	8 x 20	8 x 40	8.5 x 53	8 x 40

STANDARD FEATURES

- 2 mm screening + compactor
- RAS / WAS pumping
- Containerization
- Permeate backwash system
- Aerated equalization
- SiC ultrafilter membranes
- Heating
- CIP chemical injection

- Aerated bioreactor
- Starter panel / PLC / HMI
- Interior/exterior lighting
- WaterExpert™
- Automatic operation
- Internal EQ (some models)
- Internal bioreactor (some models)

- Al + SS tanks
- Regenerative blowers
- Non-slip epoxy floors
- Peristaltic chemical pumps
- Class I Div 2 screen room
- Ventilation
- R20 insulation floor/ceiling, R12 walls

OPTIONAL FEATURES

- Anoxic bioreactor
- Antifoam injection
- Skid based system
- Enhanced phosphorus treatment
- Citric acid cleaning
- Disinfection

- Sludge storage
- Sludge dewatering
- External bioreactors
- Soda ash dosing
- Equipment HOA switches
- External equalization

- DO probe
- Alternative R-value insulation
- Air conditioning
- Effluent turbidity meter
- 600V - 480V transformer

INFLUENT/EFFLUENT TREATMENT SUMMARY

PARAMETER	UNIT	LOW STRENGTH INFLUENT	HIGH STRENGTH INFLUENT	EFFLUENT (TYPICAL)
COD	mg/L	500 – 1,200	1,200 – 20,000	< 100
BOD	mg/L	250 - 600	600 -10,000	< 5
TSS	mg/L	250 - 600	250 - 600	< 2
TKN	mg/L	35 - 80	0 - 500	
FOG	mg/L	0 - 100	0 - 500	

CONTACT US

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