

BlueCycle MBR™

For industrial wastewater

The **BlueCycle MBR** (membrane bioreactor) is an aerobic treatment system using state-of-the-art aeration, robust membrane filtration, and a dynamically-integrated controls architecture to remove over 99 percent of biochemical oxygen demand (BOD) and total suspended solids (TSS) from wastewater streams.

Integreated flow equalization and pH control stabilizes wastewater characteristics and improves treatment with automated controls to improve reliability and reduce operations cost

Standardized equipment platform to simplify, reduce cost, and improve operator efficiency

Robust membranes designed for high performance and long life in difficult environments

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BlueCycle MBR Specifications:

- Can be used independently or with the EcoVolt® Reactor for energy-efficient treatment
- Generates CA Title 22-certified reuse quality water
- Modular, pre-fabricated, low-impact footprint allows for flexible capacity increase
- Generates continuous feedback on system performance to optimize throughput and minimize energy consumption

and easily maintained

Standardized tanks reduce cost and time to delivery



The BlueCycle MBR generates continuous feedback on system performance to optimize throughput and minimize energy consumption.

Membrane Tank

	MT1	MT2		
Average Flow Rate, gal/day	73,000	147,000		
Maximum Daily Flow Rate, gal/day	92,000	183,000		
Average BOD Removal, lb/day	165	330		
Dimensions, L (ft) x W (ft) x H (ft)	30 x 8.5 x 10	40 x 8.5 x 10		
Number of Membrane Modules	2 – 4	6 – 8		
Average MLSS Concentration, mg/L	15,000			
Maximum MLSS Concentration, mg/L	17,500			
Effluent Quality	Title-22 Certified; <10 mg/L BOD; <10 mg/L TSS			
Production Location	USA - off-site; pre-packaged			
Automated Control	Yes			
Energy Efficiency Credits Eligibility	Yes			
Remote Monitoring Service	Optional			
Sustainability Dashboard Package	Optional			
Reuse Package	Optional			

Aeration Tank

	A1	A2	А3	A4	
Aeration Tank Volume, gal/day	31,000	55,000	97,000	158,000	
Average BOD Removal, lb/day	704	1,100	2,200	3,520	
Dimension, ø (ft) x H (ft)	15.4 x 20.95	21.5 x 20.95	29.7 x 20.95	41.6 x 20.95	
Average MLSS Concentration, mg/L	12,000				
Maximum MLSS Concentration, mg/L	15,000				
Aeration Diffuser Type	Fine-Bubble				
Production Location	USA - off-site; field-erected				
Automated Control	Yes				
Energy Efficiency Credits Eligibility	Yes				
Remote Monitoring Service	Optional				
Sustainability Dashboard Package	Optional				
Reuse Package Option	Optional				



The BlueCycle MBR treats wastewater using separate unit processes for dynamic modularity. The prefabricated membrane tanks and aeration tanks can seamlessly integrate in any combination for a tailored fit to the specific flow and load requirements at your facility.

Treatment Matrix

		A1	A2	А3	A4
MT1	Average Flow, gal/day	73,000	73,000	73,000	73,000
	BOD treatment, lb/day	869	1,265	2,365	3,685
MT2	Average Flow, gal/day	147,000	147,000	147,000	147,000
	BOD treatment, lb/day	1,034	1,430	2,530	3,850

For peace of mind, leave wastewater management to Cambrian so you can focus on your core competencies.

Cambrian offers its entire product platform as a service. Under the WEPA (Water Energy Purchase Agreement[®]), Cambrian designs, builds, installs, owns, and operates your wastewater treatment system at no upfront cost. You simply pay for performance, on a per gallon basis, and focus your effort and equity on your core business.

Our Clients























