

MEMBRANE BIOREACTOR SEWAGE TREATMENT UNIT

Ecocycle® MBR MOBILE SEWAGE TREATMENT



Ecocycle® MBR Membrane Bioreactor (MBR) technology is an innovative solution that offers significantly higher efficiency and performance compared to conventional wastewater treatment methods. This technology contributes to a sustainable future by treating wastewater in a safe and environmentally friendly way, making it reusable.

Arsimak offers complete pre-assembled MBR package plants as containerized systems (ISO & Custom sizes). This facilitates easy transportation, quick availability and direct start-up of the MBR plant.



Advantages of Ecocycle® MBR Membrane Bioreactor Systems

- **High Treatment Efficiency:** MBRs produce high-quality effluent, meeting stringent discharge standards.
- **Compact Footprint:** MBR systems require less space than conventional treatment plants.
- **Reduced Sludge Production:** MBRs generate less sludge, simplifying waste management.
- **Energy Efficiency:** MBRs operate efficiently, consuming less energy than traditional methods.
- **Sustainability:** MBRs contribute to water conservation and reuse.



AREAS OF USING Ecocycle® MBR Package WWTP Units :

- Summer housing developments
- Temporary locations such as construction sites
- Housings and mass housings
- Factories and industrial facilities
- Offshore installations
- Villages, towns and municipalities
- Schools, hospitals and military facilities
- Accommodation facilities and restaurants
- Recreational facilities camps



Fine Screen (Drum Screen)

Intended for the extraction of medium and fine



Submersible Mixer

Proper mixing within anoxic and anaerobic zones can help ensure lower effluent nutrients and improved treatment efficiency.



Membrane Bioreactor (MBR) Modules

This modules helps to reduce biodegradable pollution effectively through the use of bacteria and pathogenic microorganism



Basic process steps;

Pumping station

- Manual Coarse Screen
- Submersible Pumps

Screening

- Automatic Screw Screen
- Rotary Drum Screen (optional)
- Manual Basket Screen (optional)

Denitrification

- Submersible Mixer

Nitrification

- Submersible Mixer



Aeration Tank

- Air lines & Diffusers

MBR (Membrane) Tank

- Mbr Modules
- Air lines & Diffusers

Modular Design

The technology used is ideal for applications where trained operators are not in place or where minimal operator entry is required. Modular design makes it easy to increase the number of units according to capacity.

That's why **Ecocycle® MBR** WWTP solutions are the best choice for a low-cost, automated and reliable wastewater treatment plant.



Easy Transportation

Arsimak designs and manufactures the **Ecocycle® MBR** units in suitable sizes when it will reach by ship transportation.

Ecocycle® MBR can be transported 20ft./40ft./40ft.HC Open Top containers.

Service & Maintenance

Arsimak provides a wide range of after-sale support and services to help our customers make the most of their assets.



Plug & Play

Ecocycle® MBR is an All-in-one, compact, integrated, Pre-fabricated, Wastewater Treatment System.

Easy to install and requires almost no startup time after installation.



UMM QASR BMT CONTAINER TERMINAL YARD 5, QUAY WALL & MARINE WORKS
WORKER CAMP PROJECT
ENKA CO. - BASRA / IRAQ



Technology Advantages

- Less Space Requirement
- Small footprint
- Fast deployment
- Scalable & simple operation

- Flexible & innovative technology
- Durable & Stable
- Intensive nitrification
- Environmentally friendly





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