



# FTREUSE

Wastewater recycling and reuse specialists

## Containerized MBR

RELIABLE. AUTOMATED.  
PLUG & PLAY.



**TAILORED**

**Plant designs adapted  
thanks to our  
collaboration with the  
leading companies in  
the sector.**

**EXPERIENCE**

**Technicians and  
collaborators with  
more than thirty years  
applying solutions in  
water treatment.**

**TECHNOLOGY**

**Innovation and quality  
for efficient and  
sustainable solutions.**

# Applications

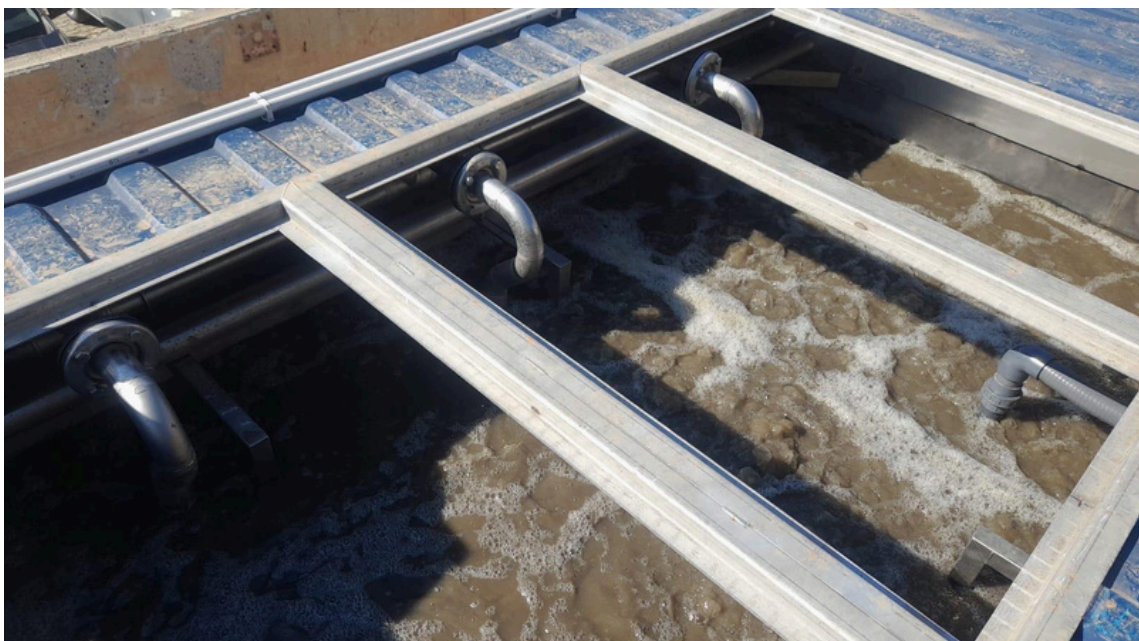
Our systems are designed to operate under different climatic conditions, with minimal infrastructure requirements and a reduced environmental footprint.

They are the most sustainable and efficient solution for:

- Hotel resorts
- Urban developments
- Mining camps
- Shopping centers
- Remote towns

Water treated with our systems is suitable for:

- Irrigation of municipal and private gardens
- Pasture irrigation for livestock
- Drip and/or sprinkler irrigation
- Aquifer recharge
- Golf course irrigation
- Industrial uses (cooling towers, boilers, cleaning, etc.)





**We design systems for the treatment of wastewater from population centers, for safe discharge or reuse. The most common characteristics of this type of water are:**

- **Domestic origin: mainly generated by human metabolism and household activities.**
- **Commercial origin: from activities in commercial or industrial premises.**
- **Stormwater origin: derived from rainwater runoff.**



# Wastewater treatment:

Wastewater treatment is carried out using the MBR system (total biological oxidation process with submerged hollow fiber UF membranes).

**Main features of the MBR system:**

1. Composed only of pretreatment, biological reactor, and membranes.
2. No need for a clarifier, filtration, or sterilization stages, unlike conventional biological treatment.
3. Membranes capable of retaining up to 99.9% of bacteria and viruses.
4. Operates with MLSS levels between 5 and 15 g/l.
5. Occupies up to 70% less space than conventional systems; modular and compact design.
6. Flexibility to adjust biomass according to needs, ideal for areas with high seasonal population variability.
7. Operating costs up to 20% lower than the activated sludge system.
8. Superior water quality, meeting international reuse standards:
  - Turbidity: < 2 NTU
  - Escherichia coli: < 100 CFU / 100 ml
  - Suspended Solids (SS): < 5 mg/l (MBR)



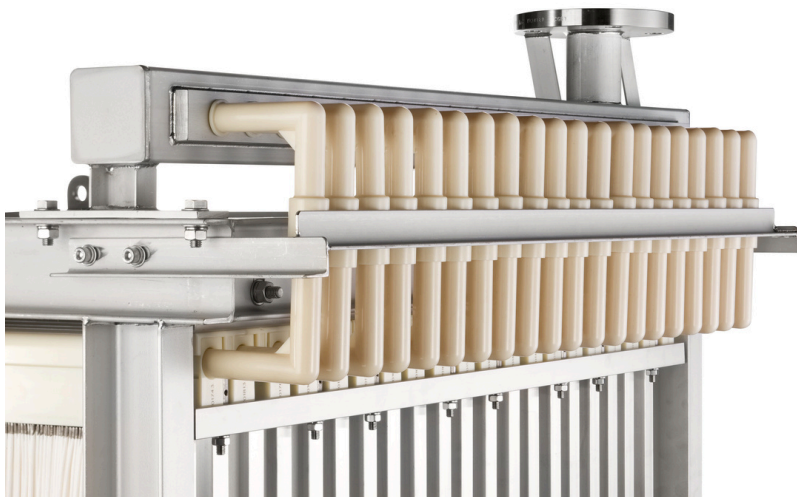
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# Main advantages

## Our Technology - Main Advantages

- **Reduced footprint:** requires only 30% of the space of conventional systems.
- **High-quality effluent:** complying with international regulations (WHO, GCC, local). Suitable for irrigation, industrial use, and aquifer recharge.
- **Low sludge production:** eliminates clarification, filtration, or sterilization stages.
- **Fully automated:** minimal labor and supervision.
- **Low energy consumption:** no backwashing and reduced cleaning.
- **Reduced OPEX:** low chemical usage and membranes with up to 10 years lifespan.



# Remote monitoring with **ELVIS INDY WATER**

Advanced control for decentralized wastewater treatment.

Elvis Indy Water is a cloud-based platform integrated into our containerized MBR systems. It allows full remote monitoring and control of the plant from any device: mobile, tablet, or PC.

## Main features:

- Real-time performance tracking
- Advanced alerts and proactive maintenance
- Remote access via Wi-Fi, 4G, or Ethernet
- Exportable data logs and KPIs
- Multi-user dashboard access
- Automatic report generation



**First year of subscription included**



# Technical Summary

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## ANOXIC CHAMBER

Denitrification zone, where nitrogen compounds are biologically removed under low oxygen conditions.

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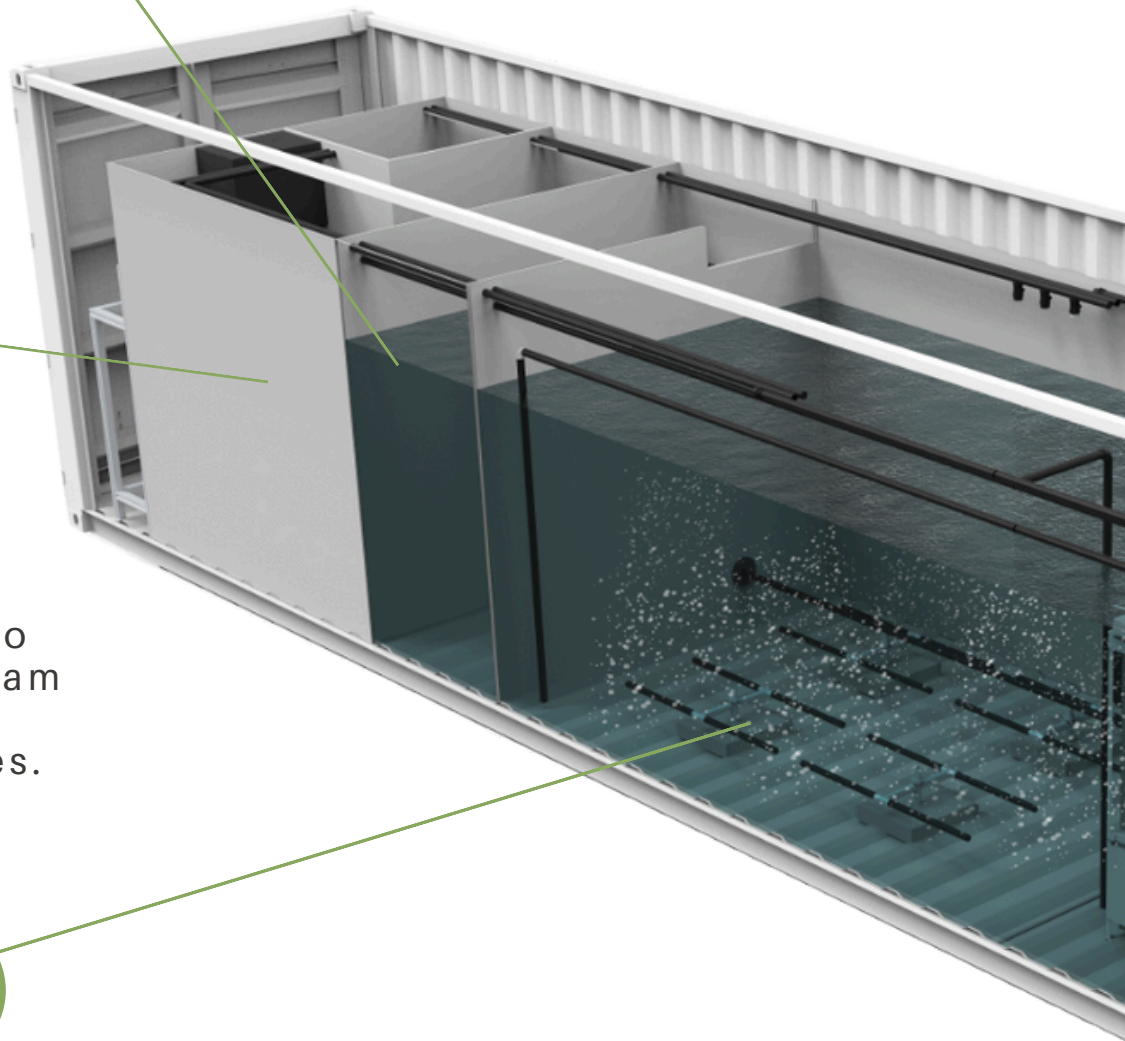
## ROTARY SCREEN

Removes coarse solids (1-2 mm) to protect downstream membranes and prevent blockages.

3

## AERATION / NITRIFICATION CHAMBER WITH HIGH-EFFICIENCY DIFFUSERS

Nitrification and BOD removal through high-efficiency air diffusers. Ensures optimal biological treatment and membrane performance.





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Submerged UF Membranes. High-efficiency, low-energy modules.

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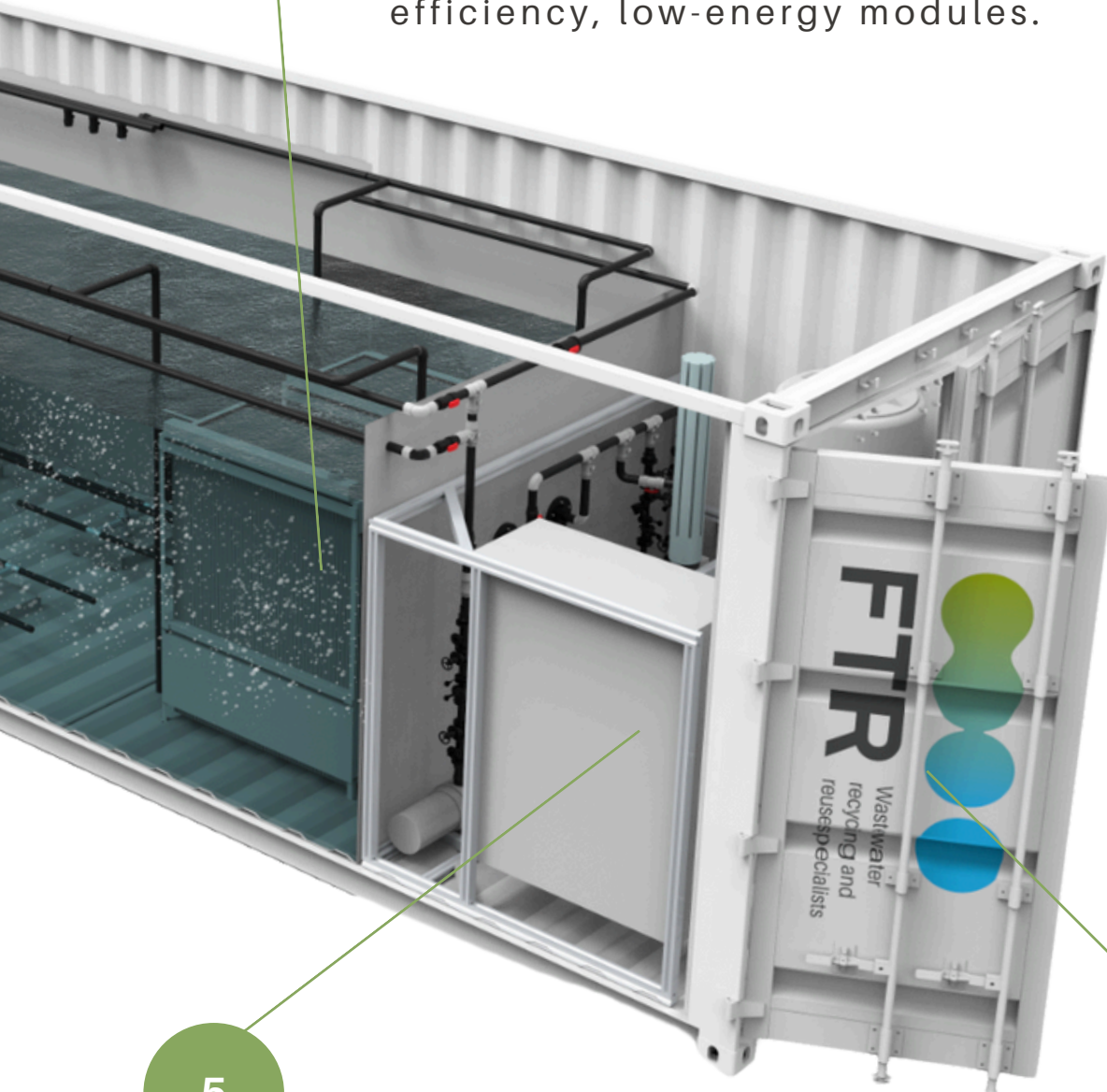
## AUTOMATIC CONTROL SYSTEM

PLC + direct interface with Elvis Indy Water for remote operation.

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## STANDARD HIGH-CUBE CONTAINER

Complete modular system for easy transport and minimal space requirements.





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[www.ftreuse.com](http://www.ftreuse.com)