



# CONTAINERIZED MODULAR RECYCLING SYSTEM

REDUCE PHOSPHORUS /  
REMOVE  
MICROPOLLUTANTS  
WATER RE-USE

Member of

ALL  
FOR  
WATER

**IN-EKO**  
TEAM

Advanced tertiary treatment  
solution

## COmpact MOdular REcycling Solution

## *Tertiary water treatment and WWTP effluent recycling*

COMORES is a system combining tertiary treatment of wastewater and WWTP effluent recycling. This modular process allows the customer to customize:

### Capacity of individual modules

- **Module 1** is usually designed to accommodate the entire capacity of the WWTP. Part of the water continues and is then treated by the following modules. The other part is discharged into the usual recipient.
- **Modules 2 and 3** are designed to suit the demand for each specific product.

### Quality of the product of individual modules

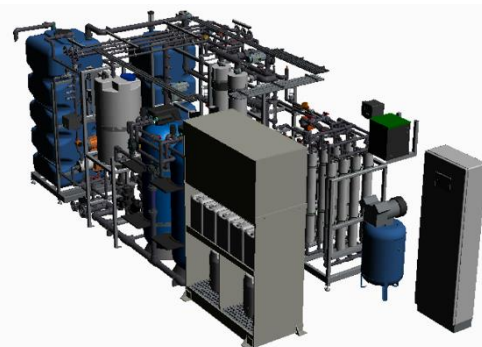
- **Module 1** mainly removes phosphorus and suspended solids. The product is tertiary treated wastewater.
- **Module 2** separates organic compounds and any remaining solids. The product is clean water for industrial or agricultural use.
- **Module 3** is used to remove micropollutants and any other contaminants. The product is RO permeate (optionally NF).

**Module 1** – uses chemical treatment and micro-sieve filtration. By removing phosphorus (P) and applying tertiary treatment, the potential for cyanobacteria and algae growth is greatly reduced. Additionally, it serves as an effective pre-treatment step for the following modules. This stage is designed for the same capacity as the WWTP.



**Module 2** – combines a biologically-active filter with ultrafiltration membranes. The produced water is free of suspended solids and any microbial contamination. This product can be utilized for industrial uses, irrigation, or municipal services. The capacity of this module, together with a suitable accumulation tank, is designed to cover the desired product consumption and supply the third stage.

**Module 3** – employs either reverse osmosis or nanofiltration membranes. Water produced by this module is of high quality, possible uses include production processes (rinsing water, coolant, etc.), flushing of toilets or cleaning. The capacity of this stage is designed according to the requirements of the customer.



### COmpactness

COMORES technology is designed and assembled into a layout with a minimal floor plan. All stages can be containerized for easy placement and installation.

### MOdularity

COMORES technology encompasses three separate modules varying in quality of the produced water. Every stage and its capacity can be designed to suit the requirements of the customer.



### REcycling

Recycling water is a primary measure to combat droughts. Every cubic metre of wastewater recycled saves one cubic metre of our limited natural resources from being removed.

### Solution

COMORES facilitates tertiary treatment of wastewater treatment plant effluent and its recycling into usable water. Up to three streams of clean water can be produced, with variable quality and volume to suit the customer's demands.

- Tertiary treated wastewater stripped of suspended solids and phosphorus, suitable for replenishing freshwater reserves.
- Clean water for utilization in industry or agriculture.
- High quality water for manufacturing processes or production of drinking water.

**New Water Group** will design and deliver the appropriate technology suited specifically to your water source and to fulfil your requirements. The water treatment plant can also be designed as a containerized **MINT-ConTech** unit for extremely easy implementation.

We deliver water treatment plants in line with the **MINT** concept – **Membrane INtelligent Technology**.



- **The intelligent design** of our products emphasizes the modularity and compactness of frame solutions, unification of technological variants and customer accessories, optimization of transport dimensions, minimal floor plan, easy handling, and commissioning.
- **Intelligent process control** using proprietary software **IQ-MINT** uses self-learning to ensure safe, unattended operation with a guarantee to optimize operating costs and technology lifetime.
- For us, **intelligent technological solutions** represent complex and optimal "tailor-made" designs suited for the application with maximum emphasis on economic and environmental benefits.
- **Intelligent services** supported by the electronic service log **MINT-eBook** offer our customers a perfect overview and service, maximum operational safety, and fail-safe design.

**THE FUTURE IS NEW WATER!**