



# INTEGRATED WATER TREATMENT SOLUTIONS

COMPACT, MODULAR,  
AND SUSTAINABLE PLANTS

Innovation and efficiency for a sustainable future



## What we offer

- ✓ Engineering & design (basic and detailed)
- ✓ Supply and manufacturing of treatment plants and equipment
- ✓ Modular / containerized solutions (skid-mounted, containerized)
- ✓ Customization to match water quality, standards, and site conditions
- ✓ Installation supervision and on-site support
- ✓ Commissioning & start-up
- ✓ Operator training
- ✓ After-sales service (spare parts, consumables, maintenance plans)
- ✓ Remote monitoring and technical assistance (where applicable)

## Available technologies and equipment

- ✓ Single-stage reverse osmosis (RO) plants
- ✓ Reverse osmosis (BWRO / SWRO)
- ✓ Multimedia filtration systems
- ✓ Advanced filtration systems
- ✓ Sand and activated carbon filters
- ✓ Water softeners
- ✓ Chemical dosing systems
- ✓ Desalination plants
- ✓ Wastewater treatment plants (MBR, MBBR, SBR, DAF)
- ✓ Automatic PLC control systems
- ✓ Compact skids in stainless steel or FRP
- ✓ Containerized plants and skid-mounted systems

## Commercial advantages

- ✓ Cost-effective and reliable solution
- ✓ High-level engineering
- ✓ Compact design and easy transportation
- ✓ Low capital investment cost (CAPEX)
- ✓ Compliance with international standards
- ✓ Long service life
- ✓ Ideal for fast-track implementation projects
- ✓ Ideal for industrial and energy projects



## INTRODUCTION TO WATER TREATMENT TECHNOLOGY



**Description of the treatment principle:** water treatment comprises a set of physical and chemical processes—and, in some cases, biological processes designed to remove solids, dissolved salts, and contaminants, ensuring water suitable for human consumption, industrial, energy, or agricultural use. Modern treatment plants are designed to be compact, modular, and scalable, enabling deployment in rural communities, indigenous areas, industrial projects, desalination plants, and green hydrogen production.

### Main applications:

- ✓ Drinking water for communities and rural areas
- ✓ Treatment of river and well water
- ✓ Desalination of brackish and seawater
- ✓ Industrial process water
- ✓ Ultrapure water for hydrogen electrolyzers
- ✓ Treatment of domestic and industrial wastewater

## REVERSE OSMOSIS PLANTS

### Reverse Osmosis for Drinking Water and Industrial Use

Specialized manufacturer of compact water treatment plants, with extensive experience in reverse osmosis systems for drinking and industrial water. Their solutions stand out for simplicity, compact design, and an excellent cost-benefit ratio, making them ideal for social projects, rural areas, and small to medium-scale applications.



## REVERSE OSMOSIS PLANTS FOR WELL OR RIVER WATER



Designed to treat pre-filtered well or river water, producing high-quality water for human consumption or industrial use.

### Typical process:

- Raw water pump
- Sand filter
- Activated carbon filter
- Softener
- Cartridge filter (5 microns)
- High-pressure pump
- RO membranes
- Automatic control system

### Standard available capacities:

- 50 m<sup>3</sup>/day
- 100 m<sup>3</sup>/day
- Other capabilities are available upon customer request



### Key technical parameters:

- Salt rejection: 97–99%
- Continuous production
- Automatic operation
- Indoor installation
- Typical power: 11–15 kW (depending on capacity)

Experience in the design, manufacturing, and construction of water and wastewater treatment plants. Their solutions are aimed at highly demanding industrial, municipal, and energy projects, meeting international standards.

## REVERSE OSMOSIS AND DESALINATION PLANTS

Designed for demanding applications, including brackish water and seawater, with high reliability and continuous operation.

### Typical capacities:

- From 45 m<sup>3</sup>/day
- Modular and scalable systems

### Key technical parameters:

- Recovery: 70–75%
- Feedwater TDS: up to 3,000 ppm (standard RO)
- Robust industrial construction
- Complete monitoring instrumentation



## WASTEWATER TREATMENT PLANTS



We offer a wide range of wastewater treatment technologies:

- Activated sludge;
- SBR (Sequencing Batch Reactor)
- MBBR / AMBBR  
(Moving Bed Biofilm Reactor) /  
(Advanced Moving Bed Biofilm Reactor)
- MBR (Membrane Bioreactor)
- DAF (Dissolved Air Flotation)
- Oil separators



## SPECIAL APPLICATIONS

**Plants for rural and indigenous communities:**

- Compact design
- Simple operation
- Low energy consumption
- Option to operate with solar or wind power
- Adapted to rivers and wells
- Modular solutions adaptable to future growth
- Compliance with international drinking water standards
- Integration of remote monitoring and control system

### **Water treatment for green hydrogen**

Water for electrolysis must be free of solids and salts to prevent damage to electrolyzers.

**Proposed solution:**

- Advanced filtration
- Reverse osmosis
- Final water polishing



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