

About Us

We are **knowledge-based company** with over two decades of experience, dedicated to providing advanced water and wastewater treatment solutions in Iran. Our expertise spans the entire process from designing and producing cutting-edge purification equipment to offer comprehensive consulting, installation, and after-sales services. We operate through three key divisions:

Engineering Division: Tailored Solutions and Project Excellence

Leveraging our extensive expertise and experience in UF, MBR, and membrane technologies, our engineering team specializes in developing tailored solutions for industrial wastewater recycling and water reuse applications. A core competency of our team lies in the optimization and selection of appropriate upstream and downstream processes, including biological treatments, RO, NF, and AOP to align with the specific requirements of each plant.

Our services cover every stage of a project:

- **Feasibility studies and conceptual design**
- **Detailed engineering and project supervision**
- **Operational support and maintenance**

Production Division: Exclusive Design and Replacement Solutions.

Utilizing high-quality hollow fiber membranes, we are manufacturing proprietary UF and MBR module designs. Furthermore, we offer UF and MBR modules with the same dimensions and specifications to those of established brands such as DUPONT, Hydranautics, and others.

Commercial Division: Reliable Supply of High-Quality Components

We are a trusted importer and supplier of premium water treatment components. Our strong global partnerships enable us to provide a reliable supply of:

- RO and NF membranes
- UF and MBR modules
- Water treatment chemicals like activated carbon and antiscalants

Our commitment to continuous innovation and customer satisfaction ensures that we deliver reliable, top-tier products and services for both industrial and environmental applications, keeping us aligned with global advancements in water treatment technology.

Our Workflow

- **Project Planning:**
Collaboration with clients by our expert engineers to meet requirements.
- **Construction:**
Design and manufacturing of requested systems.
- **Installation & Commissioning:**
Nationwide installation and startup services.
- **Operation:**
Monthly, yearly, or customized maintenance services to ensure system performance.
- **Technical Services:**
Supply of spare parts, consumables, and technical support.

Quality Policy

Delivering high-quality products and services using advanced technologies, based on:

- Respectful, responsible environmental & social conduct
- Reliable, cost-effective, high-quality products
- Innovation through advanced technologies
- Honest, trustworthy cooperation with suppliers & customers
- Compliance with quality management standards, regulations & legal responsibilities

Our Expertise

Specialized in Water Reuse & Wastewater Recycling

In a world where water scarcity is a critical challenge, Tarabideh transforms your wastewater into pure water. We specialize in providing comprehensive and expert solutions for wastewater reuse and recycling, designing and implementing efficient and advanced system

The Core of Our Expertise: UF and MBR

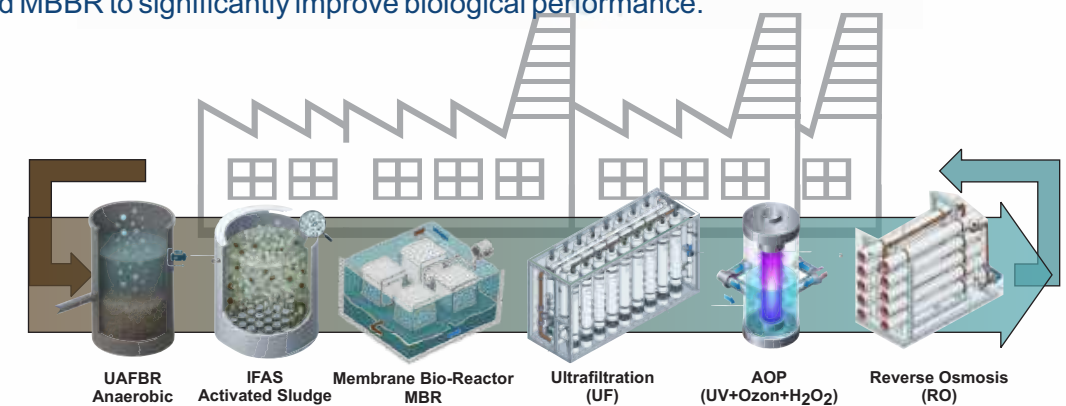
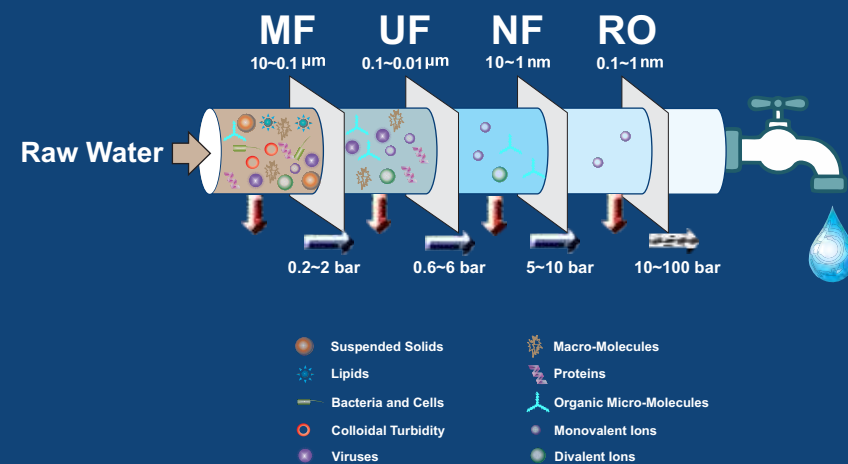
UF (Ultrafiltration) and MBR (Membrane Bioreactor) technologies are the heart of our solutions. These technologies elevate the quality of treated water to the highest possible standards. Our deep specialization in these areas allows us to deliver systems with good stability and efficiency.

Completing the Recycling Chain with Advanced Technologies

A truly effective system requires a holistic approach to the entire treatment chain. In addition to our expertise, we leverage cutting-edge technologies in other stages to ensure the recycling process is complete and flawless:

- **Upstream Treatment:** We utilize Activated Carbon, RO (Reverse Osmosis), NF (Nanofiltration), and AOP (advanced Oxidation Process) systems to reduce dissolved solids and prepare wastewater for the main recycling stages.
- **Biological Process Enhancement:** We upgrade existing activated sludge systems using technologies like IFAS (Integrated Fixed-Film Activated Sludge), UAFBR (Upflow Anaerobic Fixed bed Reactor) and MBBR to significantly improve biological performance.

MEMBRANE TECHNOLOGY



Why Choose Tarabideh?

- **Full-Chain Expertise:** From initial lab testing and pilot studies to system design, equipment supply, and technical support, we are with you every step of the way.
- **State-of-the-Art Processes:** We consistently apply the most suitable and latest technologies.
- **Industry Versatility:** Our solutions are applicable to a wide range of industries, including pharmaceuticals, food & beverage, petrochemicals, and more.
- **Sustainable Approach:** Our systems are engineered to maximize water recovery, reduce waste, and minimize energy consumption.

At **Tarabideh** we turn wastewater into pure water. We deliver specialized, end-to-end recycling solutions tailored to your specific industrial needs.

Ultrafiltration Systems

Building on our expertise in membrane-based water treatment, we provide UF systems that deliver safe and reliable water from challenging surface sources. Our containerized and skid-mounted units, equipped with integrated pre-treatment and disinfection, efficiently remove turbidity and pathogens while ensuring consistent performance.

Designed for rapid deployment and high reliability, these systems are ideal for drinking water production, emergency supply for municipalities, and other critical applications. In addition, they support wastewater reuse for various industries, enabling direct use or serving as a high-quality feed for RO (Reverse Osmosis) systems, promoting sustainable water management and operational efficiency.

- **High removal efficiency** for turbidity, suspended solids, pathogens
- **Stable performance** even with challenging surface water sources
- **Compact, modular units** in skid-mounted or containerized options
- **Rapid deployment** for emergency or temporary supply needs
- **Reliable source** for drinking water production and municipal backup
- **Supports industrial wastewater reuse**, enabling consistent and high-quality treated water for direct use or as feed for advanced treatment (e.g., RO)

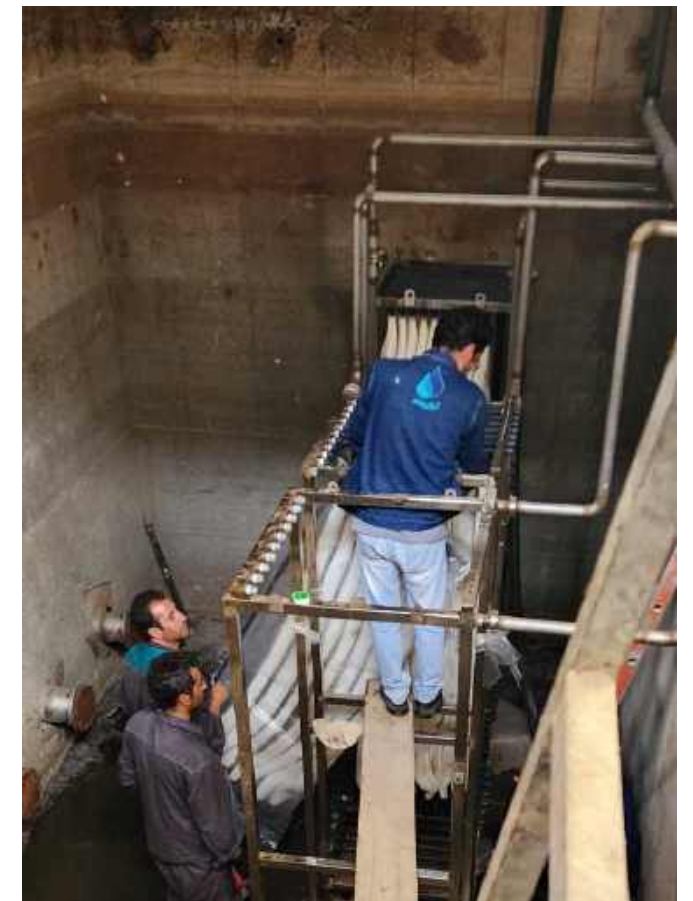


MBR (Membrane Bioreactor) Systems

At the core of our wastewater reuse expertise, our MBR systems integrate advanced biological treatment with **ultrafiltration or microfiltration membranes**, creating a **compact, space-saving design** that streamlines the entire treatment process. Engineered to produce **reuse-quality effluent**, they deliver consistent performance under variable loads while minimizing operational effort.

Our MBR solutions **enable industries to reliably and consistently achieve high-quality effluent from their wastewater for reuse**, ensuring sustainable, flexible, and cost-effective water management. For rapid deployment and mobility, **containerized MBR configurations** are also available.

- **Compact design** integrating biological treatment with UF or MF membranes
- **Consistent performance** under variable and fluctuating loads
- **Reduced footprint** compared to conventional treatment systems
- **Lower operational effort** with simplified process control
- **Applicable to industrial water reuse and decentralized municipal treatment**



Reverse Osmosis (RO) Systems

Drawing on our deep engineering expertise in advanced membrane systems and wastewater reuse, we design and deliver high-quality **RO and NF solutions** tailored for industrial and municipal needs. From initial system design and pilot studies to troubleshooting and equipment supply, our units are built on the principles of **precision, durability, and efficiency**. Our goal is to ensure long-term value for our clients through reliable and sustainable pure water production.



Brackish Water RO (BWRO): High Performance, Low Pressure

Our **BWRO systems** are engineered to achieve high salt rejection and stable performance, even with challenging feedwater conditions. Utilizing advanced membranes and optimized hydraulic design, these units deliver ultrapure water for critical industries like power generation, petrochemicals, and pharmaceuticals.

- Efficient Removal:** Effectively removes dissolved salts, silica, and a wide range of molecules.
- Durability:** Built to withstand multiple cleanings, ensuring consistent, long-term performance.
- Cost Efficiency:** Operates at lower pressures, higher energy consumption and operational costs OPEX.

Our BWRO systems combine cutting-edge membrane technology with our process expertise, guaranteeing consistent water quality and an extended system lifespan.

CCRO (Closed Circuit Reverse Osmosis) Systems

Our **CCRO systems** introduce a unique closed-circuit configuration that maximizes water recovery, minimizes fouling, and reduces overall operating costs. By continuously recycling the reject stream and operating in dual modes, CCRO technology delivers superior efficiency, adaptability, and sustainability compared to traditional RO. Engineered for **desalination, wastewater reuse, and industrial applications**, CCRO systems offer higher recovery while using less energy and producing less waste.

Key Benefits & Applications:

- High recovery** rates (up to 98%) 50–80% less waste
- Lower energy consumption:** 5–40% savings
- Superior fouling and scaling resistance**
- Reduced cleaning time and costs** due to single-stage
- More sustainable operations** by maximizing reuse
- Improved process flexibility**
- Ideal for desalination, wastewater reuse, and industries with limited water supplies**



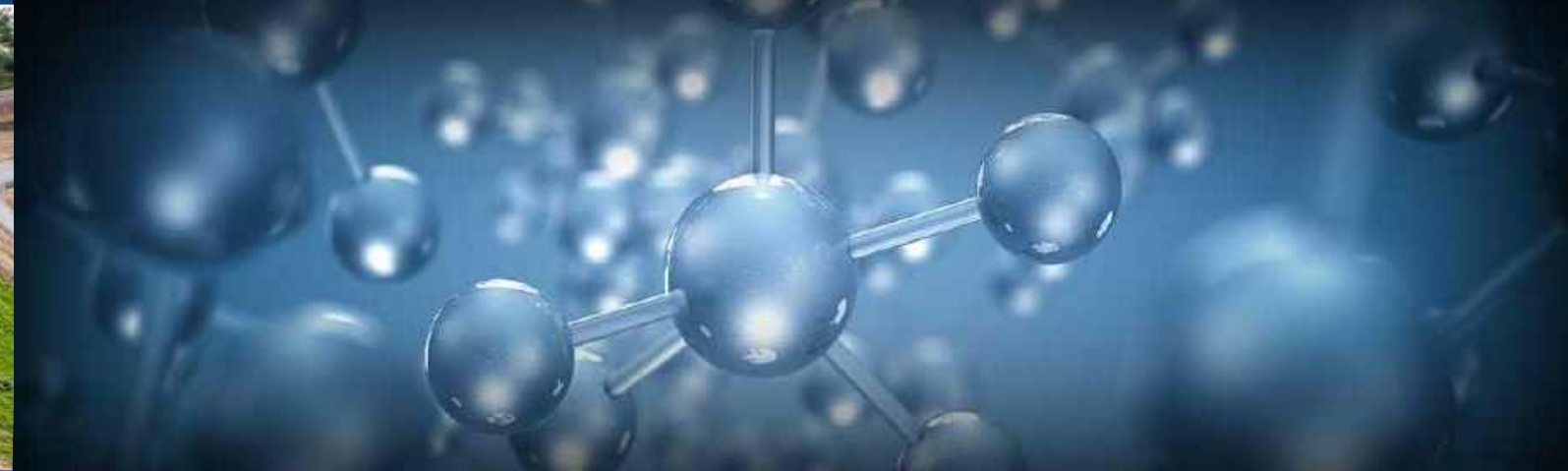
Seawater RO (SWRO): Reliable and Cost-Effective Desalination

Our **SWRO systems** provide dependable and energy-efficient desalination, turning high-salinity seawater into fresh, safe water. With a proven track record in industrial and municipal projects, we design systems that maximize salt rejection, minimize fouling potential, and reduce energy costs.

- Wide Application Range:** From large-scale municipal drinking water to specialized uses in the power, oil & gas, and coastal industries.
- Energy Optimization:** We incorporate the latest low-energy SWRO membranes, which can reduce operational costs by over 25% compared to older methods.
- Proven Reliability:** Engineered for stable operation under variable seawater temperatures and TDS levels.

With our SWRO solutions, we help industries and municipalities achieve **water independence** while reducing their carbon footprint and ensuring long-term operational security.





Biological Wastewater Treatment: First Step

Biological wastewater treatment harnesses the natural metabolic processes of microorganisms to degrade and remove organic pollutants, nutrients, and other contaminants from wastewater. By creating controlled environments that favor specific microbial communities, these systems achieve efficient removal of **BOD**, **COD**, and nutrients such as **nitrogen** and **phosphorus**.

Key Benefits

- High efficiency in **BOD/COD reduction** to ensure compliance with discharge or reuse standards.
- **Complete nitrogen and phosphorus removal** to prevent eutrophication in receiving waters.
- Lower operational footprint compared to purely physical or chemical systems.
- Sustainable, eco-friendly solution adaptable to municipal and industrial applications.

UAFBR (Upflow Anaerobic Fixed bed Reactor)

- High-Rate Anaerobic Digestion
- Compact Footprint
- Biogas Production
- Handles Very High Loads
- Ideal for Tough Effluents
- Simple Operation and Easy to run



IFAS (Integrated Fixed-Film Activated Sludge)

Combines the benefits of suspended and attached biomass
Significantly increases biomass concentration,
Cost-effective for upgrading existing activated
sludge plants to increase quality and loads.
Superior nitrification and denitrification capabilities.
Reduced footprint

Advanced Oxidation Processes (AOPs)

AOPs are cutting-edge technologies for the treatment of the most challenging and complex wastewater streams. Unlike conventional methods, our AOP systems effectively break down pollutants that resist biological or physical treatment.

The strength of AOP technology lies in the generation of highly reactive hydroxyl radicals (OH) which can rapidly destroy a wide range of organic pollutants in two different configurations

- **Ozone-Based AOPs:** Direct oxidation with ozone (O_3) or combined with UV/ H_2O_2 . Highly effective for pharmaceutical and chemical wastewater.
- **Fenton-Based AOPs:** Using hydrogen peroxide (H_2O_2) and ferrous iron (Fe^{2+}) effective for removing color, toxicity, and residual COD in textile, tannery, and pulp & paper effluents.

Why Choose Our AOP Solutions?

Our AOP designs are tailored, optimized, and fully supported to ensure the best performance.

- **Targeting Stubborn Pollutants:** Effective against bio-refractory organics, dyes, pharmaceuticals, pesticides and effluents resistant to standard treatment.
- **Enhanced Water Quality:** Significant removal of COD, toxicity, and color while biodegradability.
- **Optimized Performance:** We adjust pH, temperature, and dosing to maximize efficiency, minimize costs.



Portable Water Treatment Packages



Commercial Water Treatment RO-based systems remove up to 98.2% of dissolved solids, offering far greater purification than simple filtration. This type of systems are suitable for restaurants, hotels or residential building with capacities greater than 5.0 m³ per day.



Nanofiltration (NF): Selective Separation & Energy Savings

For applications that require partial softening, color removal, or selective rejection of multivalent salts, our **NF systems** offer the ideal balance between performance and efficiency. NF membranes effectively remove hardness, pesticides, organic matter, and large dissolved molecules while allowing beneficial monovalent salts to pass through.

Portable UF Systems: Engineered Mobility for Drinking Water

Compact units in containers or portable UF systems are the ideal solution for emergency responses. Integrating pre-treatment and disinfection, they provide a reliable source of safe drinking water from rivers, lakes, and other sources.



Applications

- **Emergency & Disaster Relief:** Quick deployment in natural disasters and crises.
- **Remote & Rural Communities:** Providing safe drinking water in areas lacking centralized treatment infrastructure.
- **Military & Temporary Camps:** A reliable and mobile solution for field operations.
- **Municipal Backup:** Temporary support in city system maintenance or shortages.



Containerized RO systems are highly popular due to easy transport, durability, high capacity, and no need for extra structures. Available in 20 and 40-foot containers, they are ideal for hotels, factories, and large residential complexes.

Portable Membrane Bioreactor (MBR) Systems: Water Recycling in Motion

Our Portable MBR systems integrate **biological treatment and membrane separation** into a fully **portable, containerized solution** delivering **reuse-quality effluent** in a compact, mobile package. By combining biological degradation and physical separation in one unit, we provide a complete solution for industries and communities seeking reliable **onsite wastewater recycling**.



System Design & Features

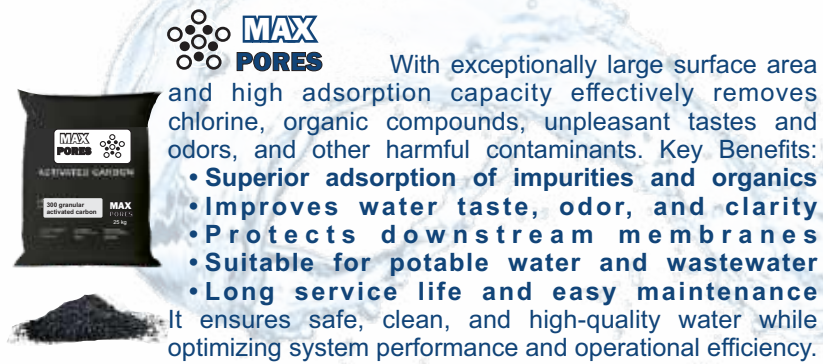
- **Integrated Process Chain** – Screening, biological treatment, membrane separation, disinfection, and automatic controls are all packaged in one mobile system.
- **High-Quality Reuse Water** – Produces effluent that meets **international standards for reuse and irrigation**, with NTU <1 and TSS <1 mg/L.
- **Smart Operation** – Automated pumping, aeration, backwash, and CIP cycles ensure stable and efficient performance with minimal operator intervention.
- **Durable Containerized Design** – Epoxy coated carbon steel construction with corrosion resistance, engineered for outdoor and long-term operation.
- **Compact & Mobile** – Easily transportable and rapidly deployable, offering immediate wastewater treatment capacity in any location.

Applications

- **Industrial Recycling:** Pharmaceuticals, food & beverage, petrochemicals, and textile wastewater reuse.
- **Decentralized & Municipal:** Small towns, residential complexes, resorts, and remote communities.
- **Emergency & Temporary Operations:** Quick deployment in disaster relief, camps and construction sites.
- **Sustainable Water Management:** Reducing freshwater demand through onsite re-cycling and safe reuse.

Our Products:

As the authorized representative of the globally trusted **MAXFLUX** brand, **TarAbideh** delivers meticulously engineered Reverse Osmosis (RO), Nanofiltration (NF), and Ultrafiltration (UF) systems for water and wastewater treatment. With **MAXFLUX** membranes -renowned for their superior quality, durability, and performance- we provide high-purity water and sustainable treatment solutions for a wide range of industrial and municipal applications. Our commitment to close collaboration with clients and continuous system optimization guarantees long-term efficiency, reliability, and compliance with global standards.

MAX PORES With exceptionally large surface area and high adsorption capacity effectively removes chlorine, organic compounds, unpleasant tastes and odors, and other harmful contaminants. Key Benefits:

- Superior adsorption of impurities and organics
- Improves water taste, odor, and clarity
- Protects downstream membranes
- Suitable for potable water and wastewater
- Long service life and easy maintenance

It ensures safe, clean, and high-quality water while optimizing system performance and operational efficiency.



ChemicaMax provides a comprehensive range of high-performance chemicals designed to optimize water treatment processes across membrane processes. Our product portfolio includes:

- Antiscalants
- Disinfectants & Biocides
- Coagulants & Flocculants
- pH Adjusters • Cleaning Agents
- Corrosion Inhibitors

Our Supply Chain:



Our Clients:



*WATER REBORN ...
by TarAbideh*