



INSTITUTION PROFILE

CARE WATER

SOLUTIONS

WWW.CAREWATER.SOLUTIONS





OVERVIEW

INTRODUCTION

Care Water is an institution specialized in water treatment in Saudi Arabia, with a team of experienced engineers (chemical) technicians. We can offer a wide range of solutions for industries that require high-quality water. We offer a wide range of technologies and extensive knowledge in all sectors related to water, ensuring you a cost-effective solutions that meets water quality requirements. You can rely on us as a certified comprehensive service provider in all areas of water purification and treatment.



CARE WATER TEAMWORK





VISION, MISSION & CARE WATER GOALS

1

OUR VISION

Based on the Saudi Vision 2030, we strive to make Water Care one of the best institutions that provide its customers with advanced and practical solutions in the various fields of water treatment.

2

OUR STRATEGY

We are committed to the highest standards of quality and integrity in providing the best water treatment solutions to our clients. We strive to build and maintain a professional relationship with our clients.

3

OUR MESSAGE

Providing solutions to all types of water problems at the lowest possible cost. Ensuring competitive, reliable, and responsible supply. And effectively contributing to the development wheel in our Kingdom.

4

OUR GOALS

Continuous excellence in providing our leading services, aiming to reach the targeted status as the best provider of water care services in the Kingdom of Saudi Arabia and the Middle East.





WHY CHOOSE CARE WATER SOLUTIONS



Exclusive Agents

For manufacturing Bimex's leading products in the field of water treatment, which have obtained numerous prestigious international certifications.



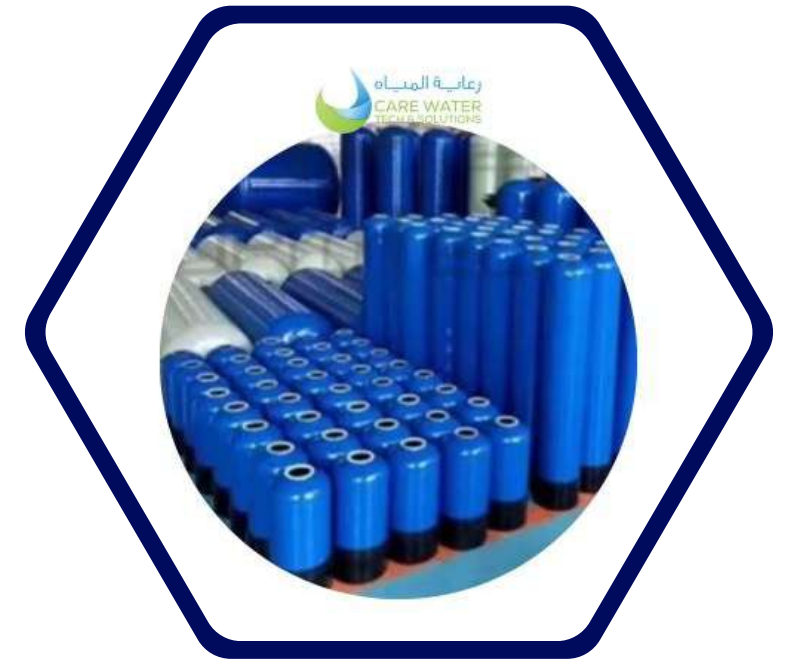
Development Partners

We contribute to supporting our renaissance, having been among the first companies in the Kingdom in future water treatment projects in Neom and AlUla.



Future technologies

Our pursuit in searching for the best technologies never ceases, and our scientific office team keeps up with the latest scientific research developments to bring you the technology of the future



Everything you need

We meet all your needs for assistance services and provide you with all the required spare parts and chemicals used, all of high quality.

1200+ | Project

500+ | Team member



VALUES OF CARE WATER SOLUTIONS

**OPERATIONAL EFFICIENCY
AND RESPONSIBILITY**



QUALITY AND INTEGRITY



**TECHNICAL EXPERTISE AND
INNOVATION**





OUR SUCCESS PARTNERS





OUR SERVICES

QUALITY AND RESPONSIBILITY TO
DELIVER THE BEST





OUR SERVICES

Treatment of lake waters before and after establishment

We offer a comprehensive solution for treating lake waters before and after establishment, utilizing the latest modern technologies and advanced solutions. Advanced Technologies: We employ the latest technologies in the field of lake water treatment to ensure the best results. Environmental Preservation: We focus on maintaining ecological balance, treating algae, parasites, and bacteria. Commitment to Quality: We are committed to achieving the highest quality standards in our services. Customized Solutions: We provide a customized solution for your needs. Our unique service, with a wide range of technologies and expertise, ensures that lake waters remain healthy and sustainable.



Lake Water Treatment



OUR SERVICES

Design and Construction

Centralized drinking water treatment plants process large volumes of water from many households in one place, often requiring more operational and maintenance work, as well as the establishment of a water distribution system. Semi-centralized drinking water treatment plants are medium-scale units, for example, at the community level. These systems are often designed to remove various types of pollutants, whether human-made or natural, such as suspended and dissolved solids, ions (metals, fluoride, phosphate, nitrates), organic compounds (microscopic organic pollutants, natural organic materials), and microorganisms (bacteria and viruses).

Advantages:

- Highly effective and reliable for water purification
- Applicable to any type of water
- Relatively low cost of producing drinking water

Disadvantages:

- Require skilled labor, technical equipment, electricity, and chemicals for design and operation
- Continuous maintenance and monitoring of the station are necessary
- Require high initial investment costs for infrastructure building



Design and Construction



OUR SERVICES

Grey water treatment

Definition of Greywater: Greywater is named for being a midpoint between clean, clear water (commonly referred to as "white water") and polluted sewage water (also known as "black water"). Greywater originates from sink waters, shower (or bath) waters, and the water from automatic washing machines.

Benefits of Reusing Greywater:

- Significant conservation of clean drinking water through reuse, which is particularly beneficial in our beloved kingdom, a desert country with scarce water resources.
- Reduces the need to build large sewage infrastructure in cities and decreases electricity consumption for operating these facilities.
- Minimizes the use of environmentally harmful chemicals for sewage water purification at treatment plants.
- Increases soil fertility if used for watering gardens and plants.
- Expands green vegetation cover in cities due to the availability of greywater for irrigating large areas.



Grey water treatment



OUR SERVICES

Leading sewage and industrial water treatment units with MBBR technology

The term "sewage treatment plant" (or "sewage treatment works" in some countries) is currently being replaced by "wastewater treatment facility" or "wastewater treatment plant."

How MBBR Technology Treatment Units Work:

- Fine Screen Drum: Used to reduce suspended solids in water, made of stainless steel with narrow openings of 5 mm, and designed to self-clean.
- Dissolved Air Flotation Unit: Removes suspended solids, Biological Oxygen Demand (BOD), and oils from wastewater. Contaminants are removed by tiny bubbles that attach to the pollutants and lift them to the surface.
- MBBR Biological Reactors: Contain bio-media that increases the growth area for microbes. An aeration network distributes air through diffusers to ensure bacterial growth and water treatment.
- Settling Tank: Used after aerobic treatment, where solids are separated and collected at the bottom of the tank with a conical base.
- Filtration: Water is purified from the chlorination tank through filters containing sand and carbon media to remove sediment and odors.
- Sewage Sludge Tank: Sludge is treated in a dedicated tank with aeration to concentrate the sludge before transferring it to drying beds or a landfill.

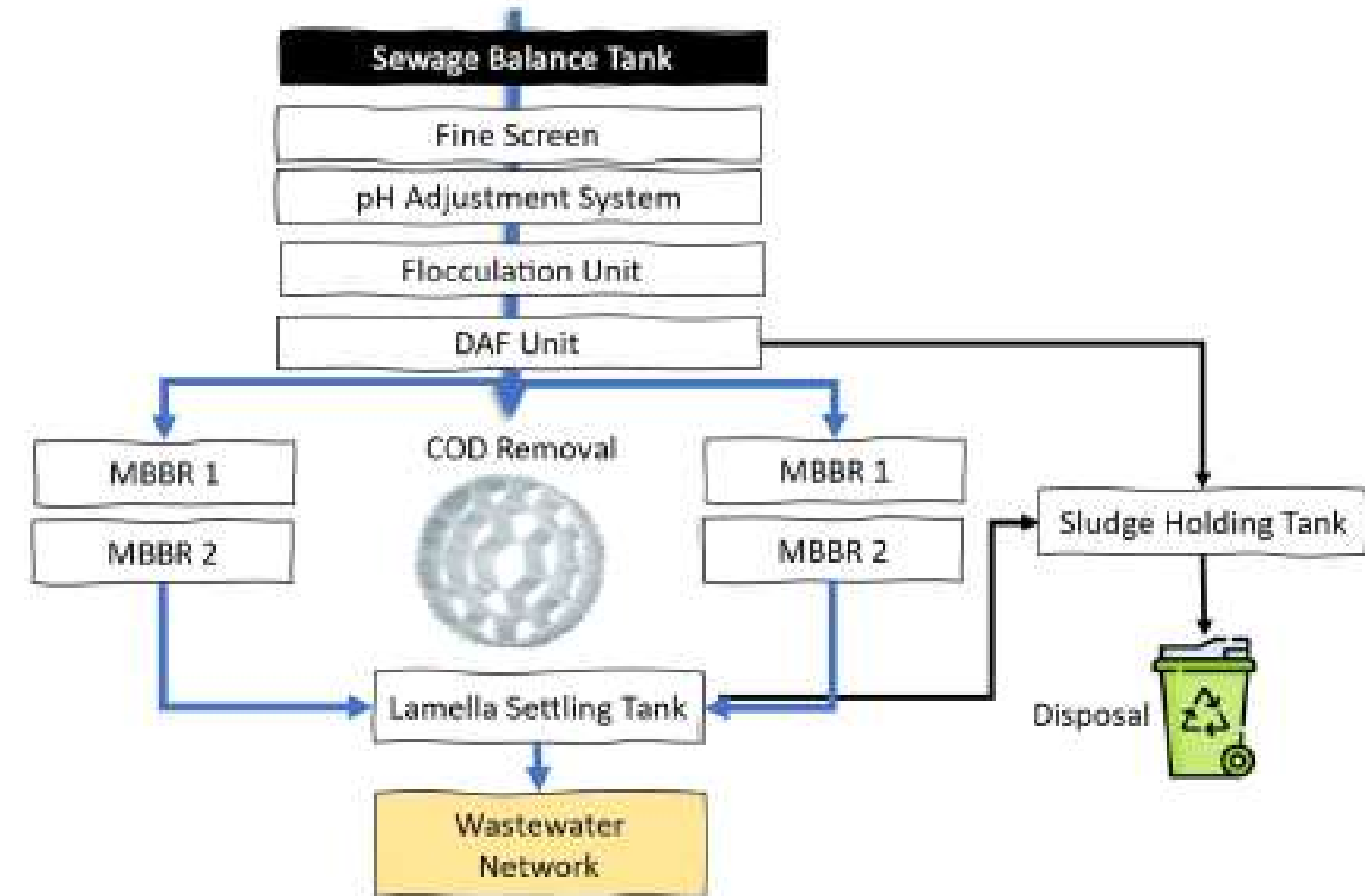


**sewage and industrial
water treatment**

OUR SERVICES

Advantages of sewage and industrial treatment units

- Affordable Cost:
- Extremely low capital and operational costs.
- Highly competitive investment for new installations.
- Reduced sludge production and improved quality.
- Compact size compared to counterparts.
- Fast Installation:
- Quick and straightforward installation with minimal preparatory work on-site.
- Custom-designed to fit client requirements.
- Simple Operation:
- Requires low maintenance.
- Flexible and innovative technology.
- Open and shielded biofilm carrier design features superior effective surface area and eliminates carrier blockage.
- Unique aeration and mixing pattern.
- Durable and Stable:
- Rapid recovery and resistance to disturbances (both hydraulic and toxic).
- Long expected lifespan for media.
- Environmentally Friendly:
- Energy-efficient.
- Odorless operation.





OUR SERVICES

Water filtration systems

Water Filtration Systems: These are a set of devices and means used for purifying and filtering water to remove impurities and various pollutants. These systems encompass a variety of technologies and types targeting the removal of large and small particles, chemicals, silt, unpleasant odors, and undesirable taste.

Benefits of Water Filter Systems:

- Improve water quality.
- Protect electrical appliances and piping systems from corrosion.
- Enhance the taste and smell of water.
- Safeguard public health from harmful microbes and microorganisms.



Water Filtration



OUR SERVICES

Reverse Osmosis Systems

A water desalination station that relies on reverse osmosis consists of high-pressure pumps, an energy recovery device, and reverse osmosis membranes. Before seawater passes through the reverse osmosis membranes, it is pressurized by high-pressure pumps to a pressure ranging from 55 to 85 bars, depending on the salinity and temperature of the water.

The reverse osmosis membranes allow water molecules to pass through a semi-permeable membrane and prevent the passage of other dissolved substances.

The pressure difference across the membrane ranges from 1.5 to 2 bars, depending on the amount of water in the pressure vessels. Thanks to energy recovery devices, the energy generated by the concentration difference can be reused. The pressure concentration is directed to the ERD (Energy Recovery Device), which transfers energy to the water feed section.



Reverse Osmosis



OUR SERVICES

Magnetic treatment

Origins of Magnetic Treatment Technology: Due to the severe consequences of the scarcity of drinkable water, there was a search for harmful chemicals to rectify the situation. Despite their effectiveness, these chemicals did more harm than good, as they rendered the water unfit for human consumption and caused environmental imbalances. This led to the exploration of new methods and technologies for water treatment, including magnetic water treatment. This relatively new technique in water crisis management involves exposing water to a magnetic field, altering its physical and chemical properties, resulting in unique characteristics. Magnetized water has shown different properties with potential applications in various areas of environmental management. Among these applications are enhancing soil, plant growth, improving crop productivity, water conservation, and wastewater treatment.

General Concept of Magnetic Treatment Devices: Magnetic treatment devices used in water treatment generally consist of either a permanent magnet or an electromagnet.



Magnolith device



OUR SERVICES

Maintenance

We have a specialized department for the maintenance of reverse osmosis plants, which includes the following services:

- Providing necessary original spare parts for the station.
- Free maintenance for the station during the contract period, with the customer bearing the cost of spare parts.
- Supplying all chemicals and filters for the station at competitive prices.
- Monthly or weekly visits based on customer preference and station needs.

Immediate maintenance within 24 hours for all water desalination plants of different sizes, including:

- Maintenance and replacement of pumps as needed.
- Cleaning or replacing membranes depending on their condition.
- Replacement of filter media, whether sand or carbon.
- Maintenance of the station's electrical panel or any special electrical extensions.
- Repairing any leaks in the station's plumbing.
- Providing all original spare parts, chemicals, and filters at competitive prices.



Maintenance services



OUR PRODUCTS

COMMITTED TO OFFERING THE
BEST





OUR PRODUCTS

Water purification plants with reverse osmosis system

Advantages of Water Purification with Reverse Osmosis System:

- Suitable for restaurants, cafes, and food service establishments.
- Daily production rate of 2400 liters.
- Treats water with up to 1000 parts per million of salts.
- High-efficiency reverse osmosis technology conserves water usage.
- Minimizes sewage charges to the lowest extent.
- Requires less than 50% of the electricity typically consumed by traditional reverse osmosis systems.
- Reduces limescale accumulation, preventing excessive machine breakdown and high maintenance costs.
- Decreases chlorine taste and odor, along with other contaminants that can negatively impact the taste of water and beverages.

Specifications:

- Daily production rate of 600 gallons, varying based on the Total Dissolved Solids (TDS) of tap water.
- Tank pump of 3 bars to provide the desired flow for the customer.
- Tank size as per customer preference, with the option to use tanks up to 300 liters.



Reverse osmosis system



OUR PRODUCTS

Bio Media

Advantages of Bio Media:

- Suitable for use in restaurants, cafes, and food service locations.
- Lightweight.
- High porosity.
- High effective surface area.
- Durable for long-term use.
- Minimal clogging.
- High resistance to acids.
- Reduces Biological Oxygen Demand (BOD5) and high nitrification.
- Easy to install and operate.

Where Can It Be Used?

- Sewage water treatment plants.
- Villages and remote areas.
- Tourist products.
- Private residential communities.
- Fish farming ponds.
- Food and beverage industries.



Bio Media

OUR PRODUCTS – VALVES



**DOUBLE FLANGED
SOFT SEALING GATE
VALVE**

Applications: Potable water, Sewage, Industrial waste water, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



**DOUBLE FLANGED
METAL SEATED
GATE VALVE**

Applications: Potable water, Sewage, Industrial waste water, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



**DOUBLE FLANGED
NON RISING STEM
GATE VALVE**

Applications: Potable water, Sewage, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



**DOUBLE FLANGED
RISING STEM GATE
VALVE**

Applications: Potable water, Sewage, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.

OUR PRODUCTS – VALVES



SOFT SEALING GATE VALVE SOCKET ENDS FOR PVC

Applications: Potable water, Sewage, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



KNIFE GATE VALVE

Application : Potable water, Sewage, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



DOUBLE FLANGED RISING STEM GATE VALVE

Fire Protection Valve - Outside screw and Yoke - Resilient Wedge - Epoxy Coated - Interior/Exterior - Pre-Grooved Stem for Su provisory Switch - Drilled, Tapped and Plugged at Boss Location A**



DOUBLE FLANGED BUTTERFLY VALVE PNEUMATICALLY OPERATED

DOUBLE FLANGED BUTTERFLY VALVE PNEUMATICALLY OPERATED

OUR PRODUCTS – VALVES



DOUBLE FLANGED BUTTERFLY VALVE

Application: Potable water, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



DOUBLE FLANGED BUTTERFLY VALVE WITH METAL AISI 316 PLATED SEAT

Face to face dimensions :
EN 558-1 Series 13/14
Pressure test to :
DIN 3230 - BS 5155 - ISO 5208



DOUBLE FLANGED SOFT SEALING CHECK VALVE

Applications: Potable water, Sewage, Industrial waste water, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



DOUBLE FLANGED SWING CHECK VALVE

Application: The valve is installed on the pipeline to prevent the medium flowing back and efficiently restrain water hammer, so it has function of protecting pipeline system.

OUR PRODUCTS – VALVES



TILTING TYPE CHECK VALVE

- DIN 3202 F4: short body, small volume, light weight
- Swings freely controlled by flow. The disc opening depends on the flow velocity.
- Adjustable weight enables to adjust the opening behaviour



TILTING TYPE CHECK VALVE WITH HYDRAULIC DAMPER

Smooth closing of the disk, no slamming
Closing characteristic example
The two adjustment needle valves "3" determine the closure speed for two independent ranges



WAFER DUAL PLATE CHECK VALVE

Applications: Potable water, Industrial waste water, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



DOUBLE CHAMBER DOUBLE BALL FLANGED END AIR VALVE

Applications: Potable water, Industrial waste water, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.

OUR PRODUCTS – VALVES



DOUBLE CHAMBER AIR VALVE

Design Features:

- With integral isolation valve.
- Long trouble-free working life with polyethylene ball design.
- Spherical shape to improve reliability both in terms of precision as well as reducing wear.



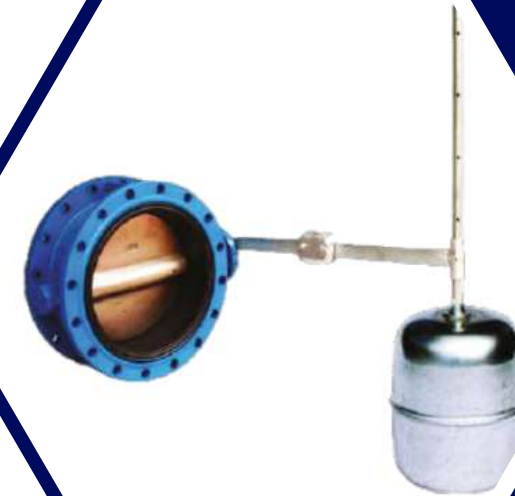
COMBINATION AIR VALVE FOR SEWAGE

The valve is specially designed to operate with liquids carrying solid particules such as sewage and effluent. The combination air valves discharges air (gases) during the filling or charging of the system



DISMANTLING JOINT

Applications: Potable water, Sewage, Industrial waste water, Air conditioning systems, Chilled water pumps, Fire and Irrigation systems.



BALANCED FLOAT VALVE

Working pressure PN 10/16
Testing pressure PN 16/25
Face-to-face dimensions ISO 5752 (BS 5155)



OUR PRODUCTS

Reverse Osmosis Membranes

Product Description: The distinctive reverse osmosis membrane for desalinating seawater and well water from the Care Water est. is a high-quality product manufactured according to the highest quality standards. It features a high-density support layer and thickness, and the skin layer's density to ensure a defect-free membrane surface. It is characterized by resistance to chemical corrosion and does not require post-production treatment.

Product Features:

- High desalination rate
- Pressure resistance, pollution resistance, and cleaning efficiency
- Improved cost-effectiveness of seawater desalination systems

We offer various models in different sizes to suit all required applications.



R.O. membrane



OUR PRODUCTS

Ultraviolet (UV) Disinfection Systems

Ultraviolet (UV) disinfection systems utilize UV-C (short-wave ultraviolet) rays to disinfect water without the need for adding any chemical substances. When these rays come into contact with microorganisms in the water, they work by breaking down and killing them through the process of photodissociation of the DNA structure.

UV technology relies on the use of short-wave ultraviolet rays (UV-C), which have the ability to affect the DNA of living organisms, such as bacteria and viruses. This effect disrupts their ability to reproduce and survive, making them incapable of causing diseases.

Benefits of UV disinfection systems:

- Disease Transmission Reduction: UV disinfection systems help reduce the transmission of infectious diseases through the air or surfaces.
- Improved Hospital Cleanliness: They are widely used in hospitals to disinfect rooms and medical equipment.
- Enhanced Food Safety: UV disinfection is used in the food industry to sanitize surfaces, packaging, and processing to ensure food safety.
- Improved General Hygiene: They can be employed in offices and transportation to enhance general hygiene and reduce germ transmission.



**U.V. Disinfection
Systems**

OUR PRODUCTS

Injection pumps

Injection pumps are devices designed for the precise and efficient introduction of chemicals into water treatment processes. These chemicals can include coagulants, disinfectants, pH adjusters, and other substances necessary for various treatment stages. Injection pumps ensure accurate dosing, allowing for optimal chemical reactions and effective water purification.

The main functions of injection pumps in water treatment are:

- **Chemical Dosing:** Injection pumps are responsible for accurately introducing chemicals into the water at specific points in the treatment process. This is crucial for achieving desired chemical concentrations for coagulation and flocculation processes.
- **pH Adjustment:** Controlling the pH of water is vital in water treatment. Injection pumps contribute to adding substances to adjust pH, ensuring that the water remains within the required range for efficient treatment.
- **Disinfection:** Injection pumps are widely used to inject disinfectants such as chlorine or ozone. This step is essential for eliminating harmful microorganisms and ensuring the safety of treated water.
- **Polymer Injection for Flocculation:** In processes like flocculation, injection pumps play a role in injecting polymers that assist in forming larger particles for easier removal during sedimentation and filtration processes.



Injection pumps



OUR PRODUCTS

Control valves

Control valves come in various types, ranging from simple to complex, with some advanced enough to respond to pressure and temperature fluctuations instantly. Control valves are used in water systems, regardless of their form, to regulate the flow or pressure of water and typically respond to signals provided by flow meters or pressure gauges. Control valves can perform various functions within a system, depending on the type of valve used. The ability of a control valve to influence the amount of energy exchange at any given moment in the system by affecting the flow rate makes this function possible.

Systematic management of water pressure and flow can be achieved through the use of a water control valve. Water control valves allow system operators to easily reduce the pressure in a pipe and replace fittings. They are also used in many households to reduce water consumption without affecting the overall system's functionality. Control valves often feature excellent reliability, a long service life, and a design resistant to clogging, among many other benefits.



Control valves



OUR PRODUCTS

Filter Membranes – Membranes

Product Description: Reverse osmosis membranes or filters are the best water filters currently available, surpassing other traditional options. Carefully designed multi-layer membrane made of polymers such as polyamide and cellulose. Effectively filters bacteria, fungi, and viruses. These membranes are also efficient in removing toxic chemical components, such as heavy metals and various dissolved solids. Product Features:

- Ideal membranes for commercial reverse osmosis systems.
- Highly efficient filtration, removing up to 98% of contaminants in water.
- Using high-quality thin-film composite materials and spiral membrane design, the 300 membrane provides a filtration rate of up to 98%.
- Effective in removing salts, fluoride, lead, chlorine, pesticides, nitrates, and sulfates.



Filter Membrane



OUR PRODUCTS

Jumbo Water Filters

Product Description: Size: 10 inches / 20 inches Water Inlet and Outlet: 1 inch Color: Blue
Product Features: The Jumbo Water Filter from the Care Water Est. is designed to purify the main water supply line, such as home and business tanks, from solid impurities like dust and rust. Additionally, it reduces and removes dissolved gases and treats water for unwanted substances such as chlorine, taste, and odor. This filter is recommended for homes where tank cleaning is not regularly performed.



Jumbo Filter



OUR PRODUCTS

F.R.P Fiberglass Tanks

Product Description: Maximum Operating Pressure: 150 PSI Multiple sizes ranging from 10 inches to 48 inches in diameter Color: Blue and White Product Features: High-quality materials. Interior surface free of fibers suitable for all standard water treatment applications, including deionization. Offers broad chemical resistance, unaffected by chemical reagents. Continuous winding of high-strength epoxy resin-reinforced fiberglass. Non-corrosive. Corrosion resistance: With the core properties of FRP products, various degrees of resistance to acids and alkalis. Lightweight and high strength. Has flame retardants and good insulation. Long service life, over 20 years. Application: Water treatment, food industry, acid and chemical industry.



Fiberglass tanks



OUR PRODUCTS

Magnolith devices

Summary of How the Product Works: The production of this product relies on two principles of nature:

- Water with its chemical symbol H₂O.
- Magnetic energy and its raw form.

Advantages of German Magnolith Device over other products:

- The unique design of the device, patented by the German government.
- The materials used in manufacturing the device are natural and not processed.
- The magnetic force of the device is ten times that of other devices.
- The device is externally installed on the connection without water passing through it.
- The device can treat salinity levels up to 10,000 milligrams per liter.

Uses of the Magnolith Device:

- Agriculture.
- Hotels and homes.
- For water treatment in laundries, heaters, and kitchens.
- In poultry farms.
- In the dairy industry.



Magnolith devices



OUR PRODUCTS

300 m3 Plant - Cactus Farms

300 m3 Station in Al-Kharj, Daily Production, Care Water Design and Operation for Cactus Farms



300 m3 Plant



OUR PRODUCTS

Chemical Tanks

Summary of How the Product Works: Chemical tanks are storage containers for chemicals widely used in the chemical industry. They are used for stationary storage, processing, mixing, and transportation of both raw materials and final chemical products.

Product Description:

- Capacity: 100 liters
- Material: Plastic
- Type: Single top opening

Product Features:

- UV-resistant plastic body.
- High-density polymer construction.
- Durable and rugged design.
- Weather-resistant.
- Provides storage solutions for both short-term and long-term chemical storage.



Chemical Tank



OUR PRODUCTS

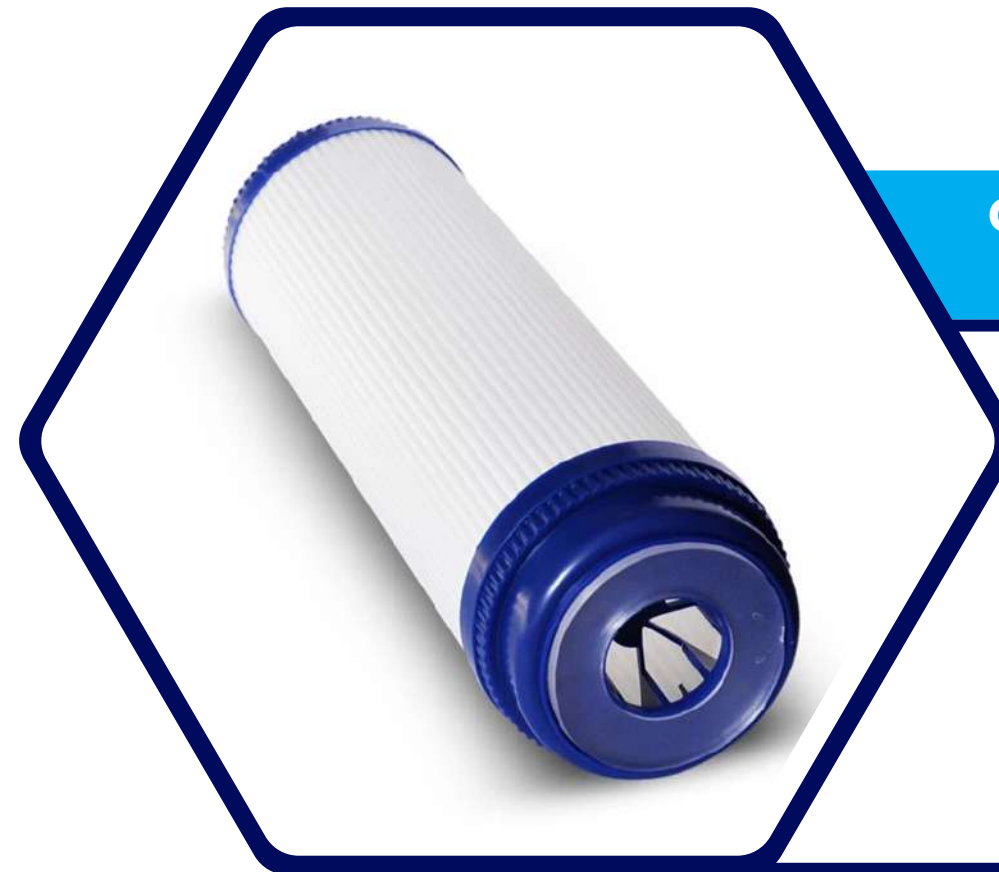
Anti-Scaling - Reverse Osmosis

MAKS 400P – NSF A high-quality anti-scaling agent that can be widely used for various types of water treatment in reverse osmosis stations.



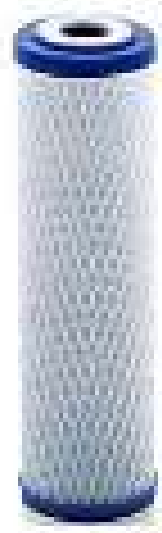
Anti-Scaling - Reverse Osmosis

OUR PRODUCTS



GRANULAR ACTIVATED CARBON FILTERS

It operates by removing contaminants through adsorption (meaning contaminants are attracted to the surface of the activated carbon and retained) in a similar way that a magnet attracts iron filings and holds them.



SOLID CARBON FILTERS

It uses three processes to remove or reduce contaminants from drinking water. The most straightforward process is known as mechanical filtration. Mechanical filtration operates much like a sieve, where particles larger in size than the filter's pores are trapped and removed from the water.



PP SEDIMENT FILTER

Sediment filters remove suspended materials such as sand, silt, loose scales, clay, or organic matter from water. Untreated water passes through a filter medium, which traps the suspended material on its surface or within the filter.

COM-100 Waterproof Salinity Measurement Devices



The COM-100 is a professional salinity and temperature measurement device for EC/TDS/Temp, perfect for all water quality testing, hydroponics, water purification applications, wastewater regulation, aquaculture, and more.

PH-80S HYDROTESTER PH MEASUREMENT DEVICES



The PH-80S Hydrotester is considered one of the best devices for measuring pH and temperature in its category.



QUALITY CERTIFICATES

OUR PRODUCTS HAVE OBTAINED
MANY QUALITY CERTIFICATES.





Our products have obtained the following quality certificates.





OUR WORK

AN EXHIBITION SHOWCASING
IMAGES OF SOME OF THE PROJECTS.



OUR WORK



OUR WORK



OUR WORK



Thank you.

Feel free to reach out to us today to learn more about the details, and our specialized team looks forward to answering all your inquiries.



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