SAKA ARITIM

Su ve Atık Su Arıtma Sistemleri

WATER & WASTE WATER TREATMENT SYSTEMS

www.sakaaritim.com

ABOUT US

Saka Arıtım, has concentrated its marketing experience in different sectors on water treatment systems as of 2007.

Prioritizing institutionalization and customer satisfaction, Saka Arıtım expanded its vision by making its institutionalization efforts open to change in 2010, and placed customer satisfaction at the center of its mission in line with increasing expectations.

Saka Arıtım, provides needs analysis and projecting work according to the content of the work to be done and the nature of the expectation. Saka Arıtma, which currently sells in water treatment systems, industrial water treatment systems and commercial water treatment systems, has a wide range of products that can meet your needs and expectations.

Saka Arıtım monitors the entire usage process of the products such as assembly, technical maintenance and spare parts needs. It communicates with you about the periodic maintenance you will need depending on the use and provides technical support so that you can use the product in a healthy way for many years.

Saka Arıtma, gives priority to the right, law and satisfaction of you, the customers, in every service.

OUR VISION

R&D studies with the awareness of its quality, to be a company that creates added value with improvement and investments, to create new brands by spreading active marketing and hot sales network to the whole country, to be among the leaders of the sector by making leaps towards controlled and measurable targets.

OUR MISSION

With the understanding of "Water is the most basic food and drinking clean water is everyone's right", increasing the customer satisfaction it provides with its wide range of products and strong communication and to reinforce its existing leadership in the sector in which it operates.

INDEX

OUR SOLUTIONS

EXPLORATION AND PROJECT

With our project and R&D team that has proven its expertise and experience, we provide projecting services with new technology products in desired capacities and designs in line with the requests of our customers.

INSTALLATION AND MOUNTING

Our systems are set up and assembled by our expert team and made ready. Our team provides the necessary post-installation training to our customers with the knowledge of how to operate the systems.

CONSULTANCY

Consultancy services are provided for facilities built or to be built in line with the wishes of our customers. It also provides the necessary support for creating technical specifications or determining the required project.

LABORATORY

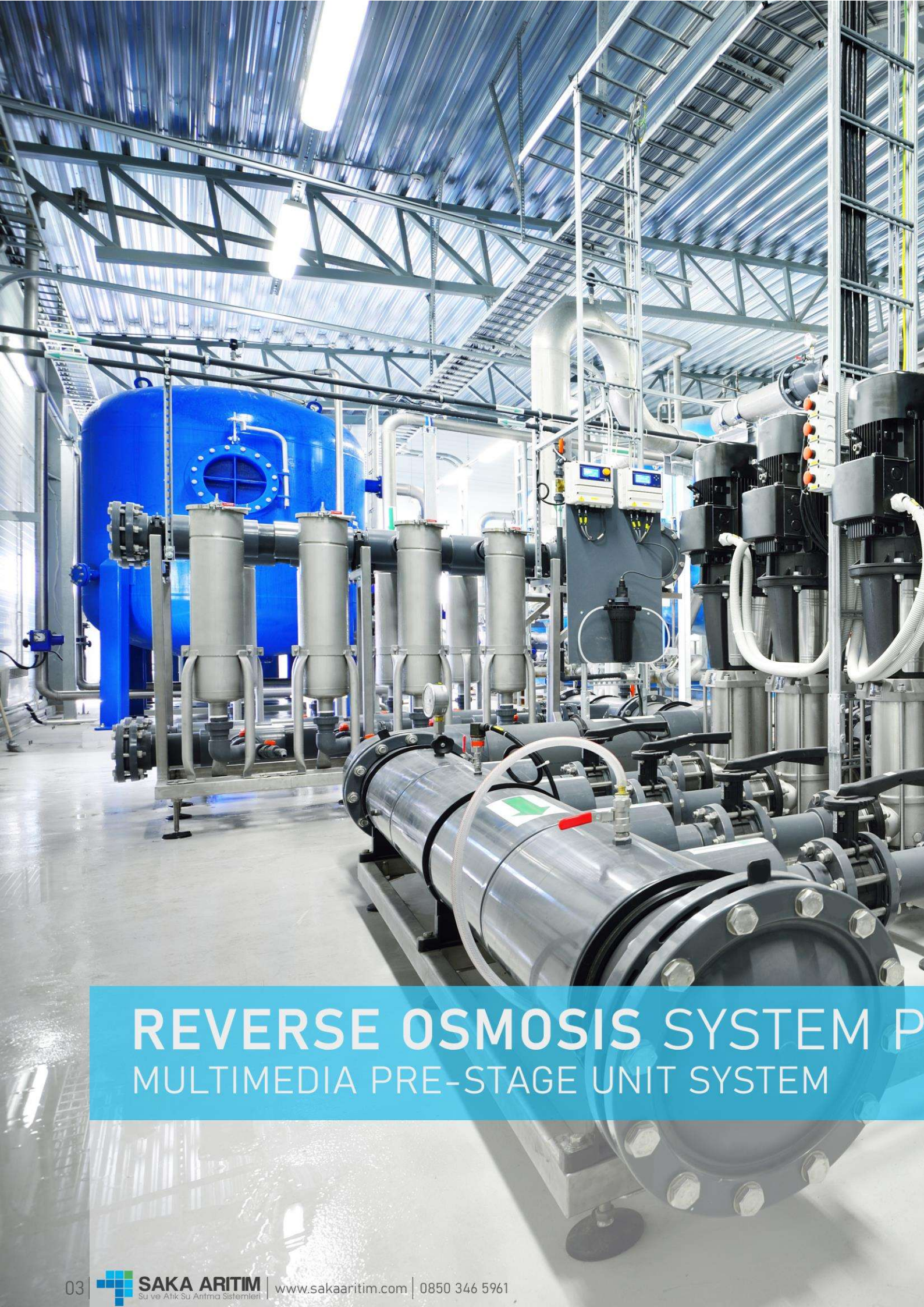
Thanks to our laboratories in our company, we can perform water analysis and provide analysis services related to it. In addition, we produce precise solutions in treatment processes by performing water treatment tests.

TECHNICAL SERVICE

Our technical service; provides annual, monthly and extra maintenance, facility control, parts repair/replacement services.

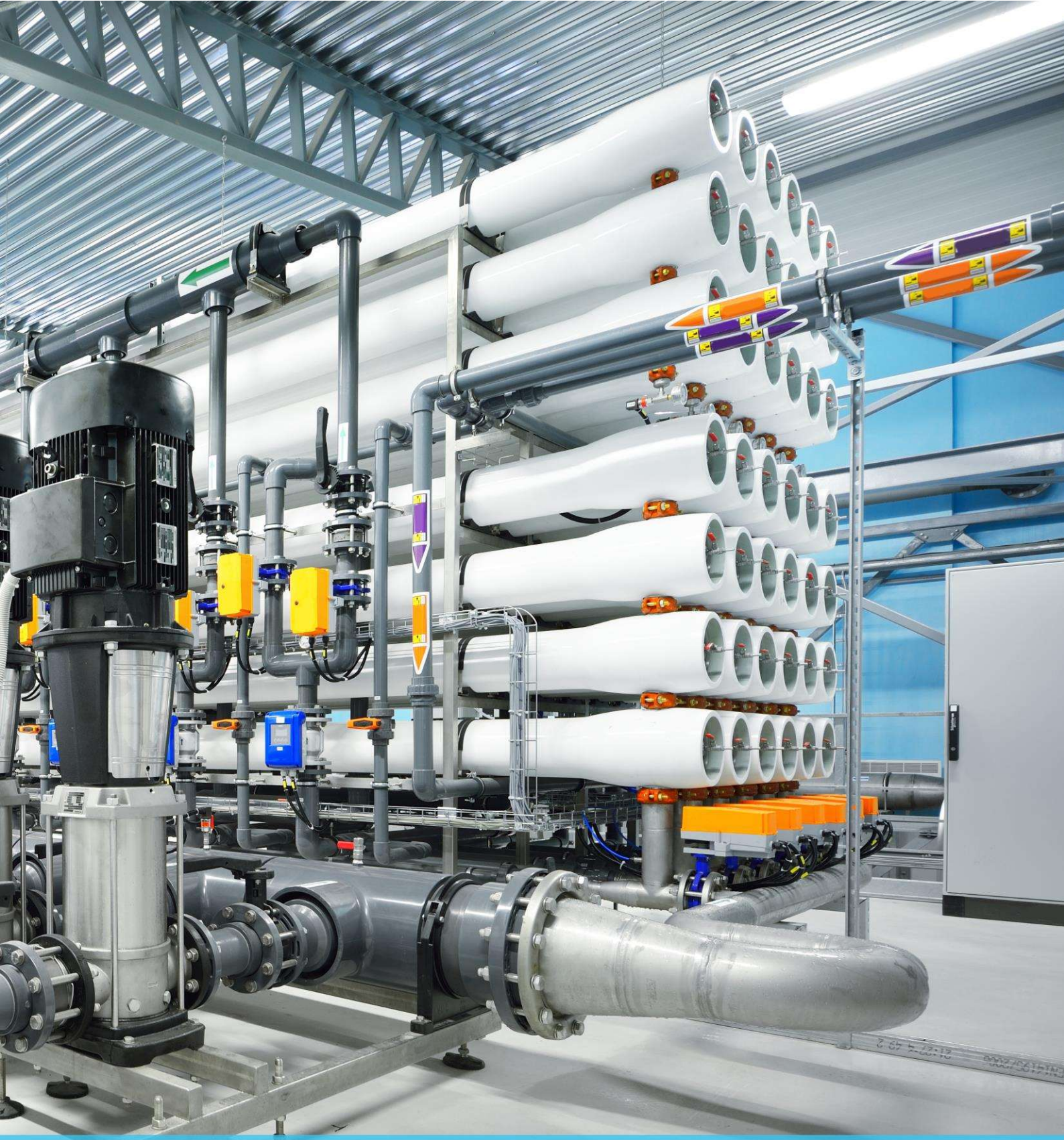
TURN-KEY TREATMENT PLANTS

By designing projects in desired capacities in line with your needs, we carry out all processes from water analysis, production and preparation of necessary systems for testing building, piping, electrical and automation works to commissioning and training.



REVERSE OSMOSIS SYSTEM P

MULTIMEDIA PRE-STAGE UNIT SYSTEM



ROCESS

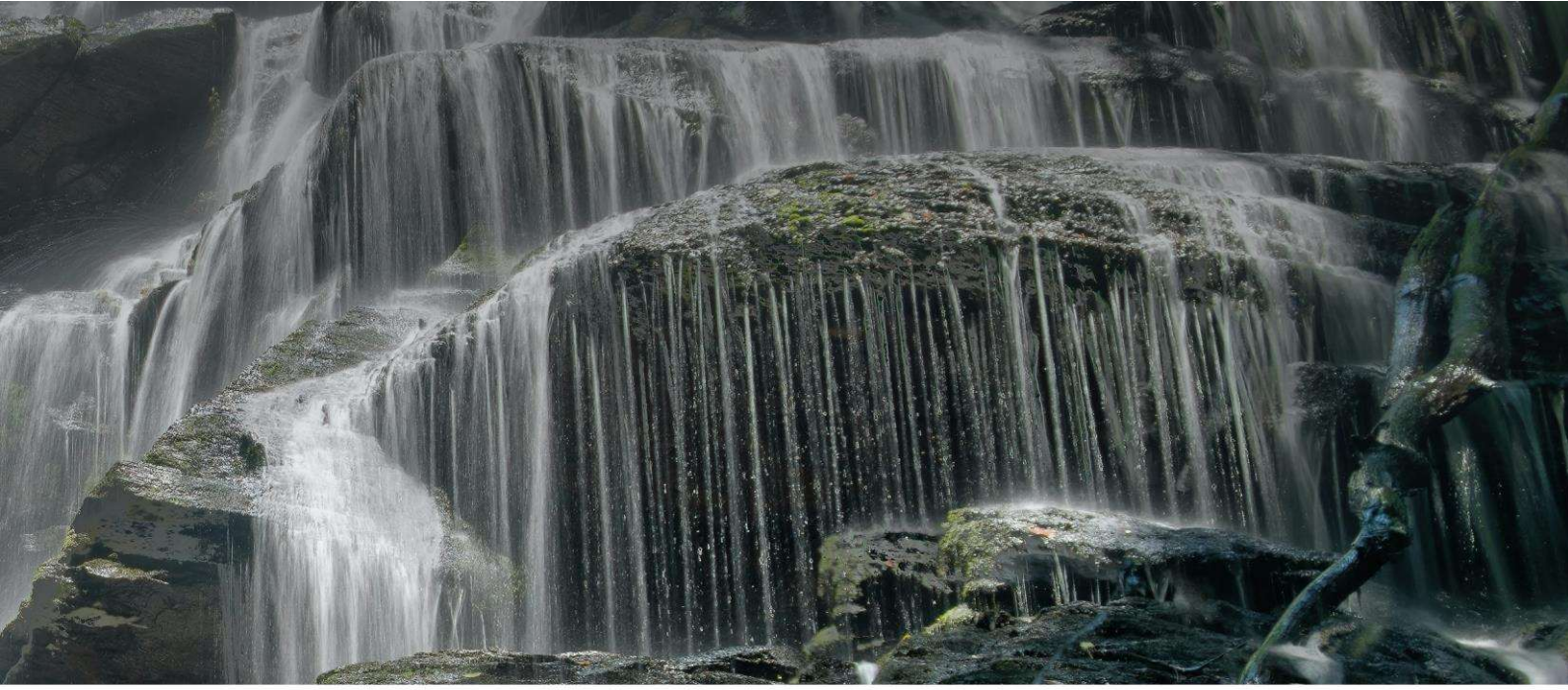
DISINFECTION SYSTEMS

CHLORINE DOSING

DISINFECTION SYSTEMS

Chlorine dosing units are used to oxidize oxidizable substances such as nitrite, iron, manganese in water and to disinfect contaminants such as bacteria and viruses. Our dosing systems are designed as standard flow control and redox control. Pump selection is made by us according to the capacity to be disinfected. All pump models with different capacities and operating pressures are worked with stock.

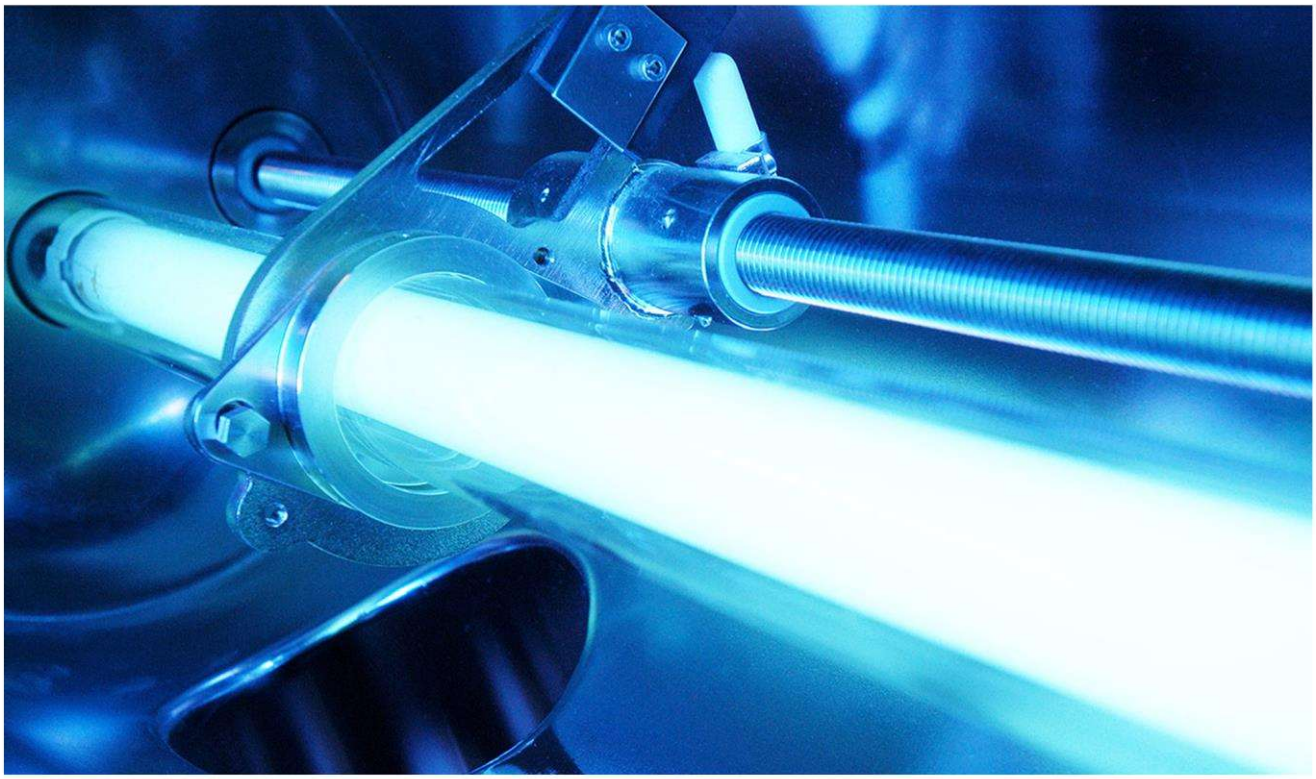
Chlorine dosage systems consist of standard type ORP controlled and flow rate controlled models.



ULTRAVIOLET
DISINFECTION SYSTEMS

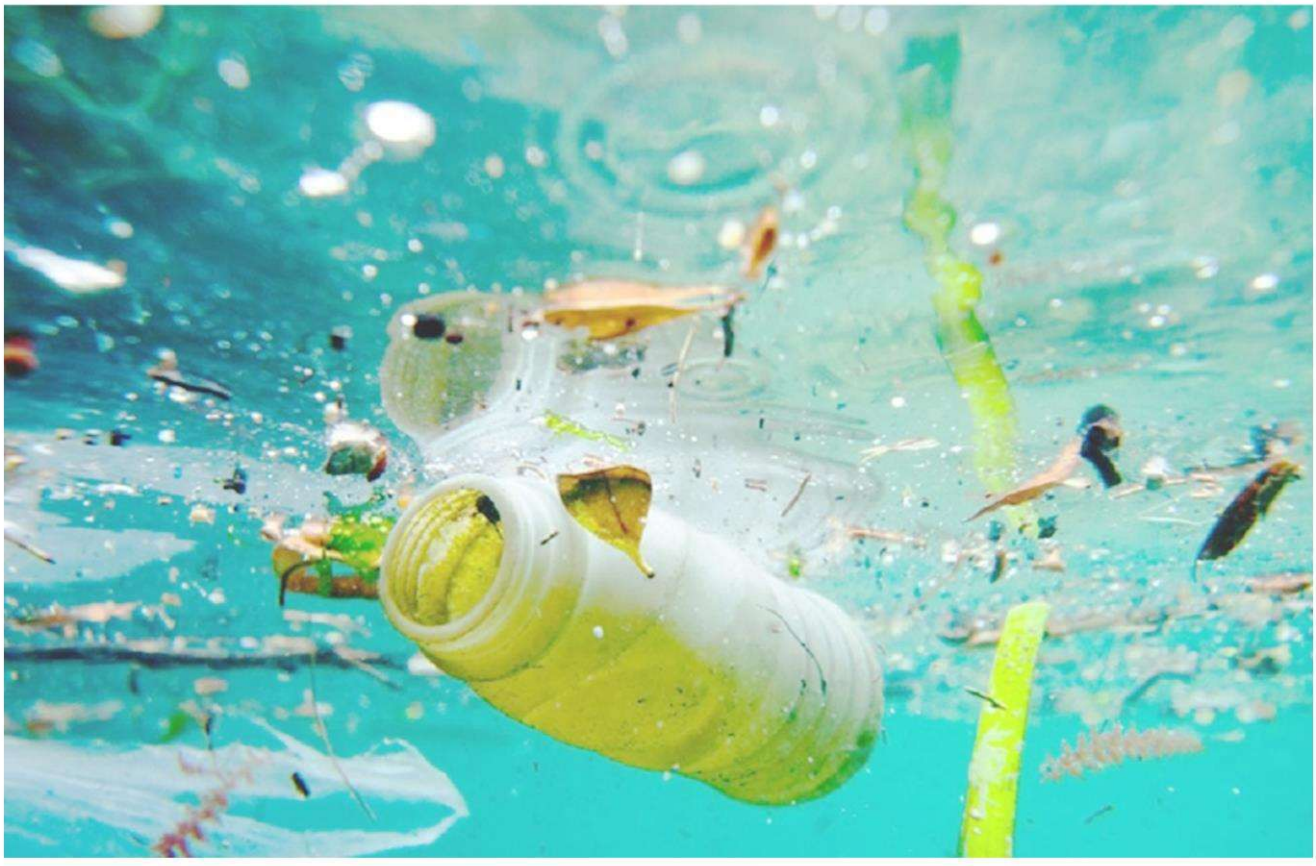
Ultraviolet systems are systems used for disinfection. Disinfection with SAKA ARITIM ultraviolet systems enables microorganisms to be neutralized without adding any chemical or oxidant to the water.

With a low-pressure mercury lamp placed in a glass case, it gives off UV rays to the water entering the device. Thus, it enables the DNA and RNA structures of microo ganisms to be degraded and ineffective. Since it is disinfected without the use of heat and chemicals, it does not cause a change in the taste and chemical composition of the water.



HYDROCYCLONE
FILTRATION SYSTEMS

Hydrocyclones, which have the same operating logic as separator filters, provide the downward flow in the form of a funnel and are the preferred filter system in waters with higher sand and AKM thanks to the width of the sand collecting chamber.



SEPERATOR
FILTRATION SYSTEMS

Seperator filters are a filtration system used to keep sand and coarse particles in water. Thanks to specially designed internal structures, air residues heavier than water are separated from the water with the help of centrifugal force and held at the bottom of the separator filter. If desired, the separator filter can be self-cleaning. They can respond to high consumption needs with ready-made collector systems. It is a low-cost treatment system that does not have any parts to replace and allows cleaning without stopping the system.

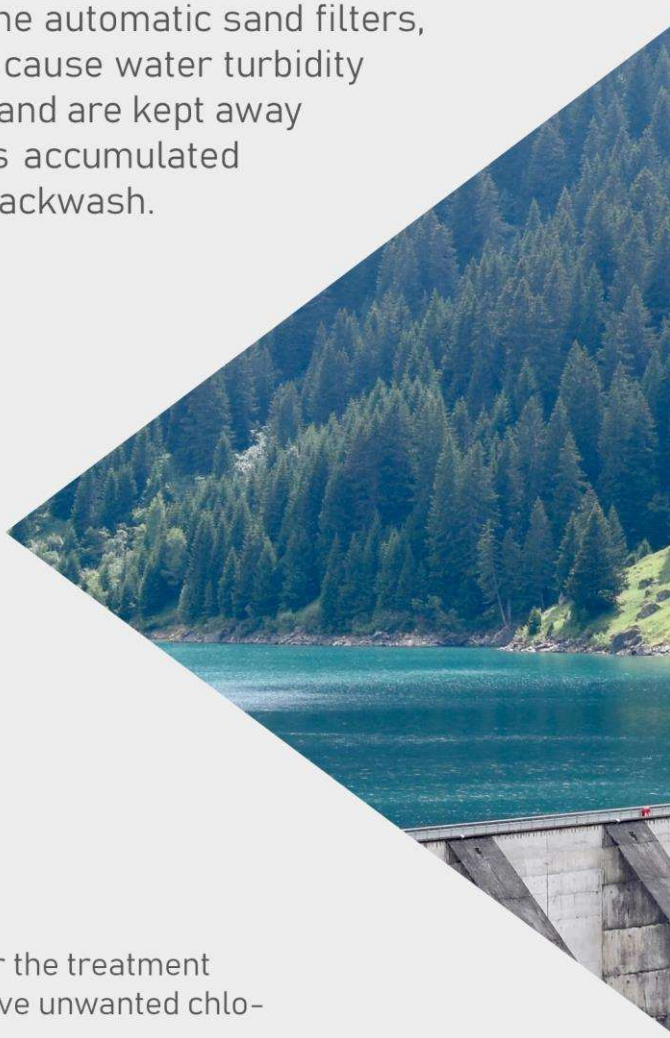
SENSITIVE SUBSTANCE
FILTRATION SYSTEMS

Multi cartridge filtration units are designed for every capacity and are very comfortable to use. Filter cabinets made of stainless steel have superior filtration capability even at high flow rates. It is possible to produce specially designed products according to the needs.

MULTIMEDIA SAND
FILTRATION SYSTEMS

Filtration systems have been used to remove insoluble particles of various sizes and suspended solids in water.

With the help of the media contained in the automatic sand filters, particles of different sizes and densities that cause water turbidity are kept in the layers of the treatment media and are kept away from the water. The sediment and impurities accumulated on the filter are automatically cleaned with backwash.

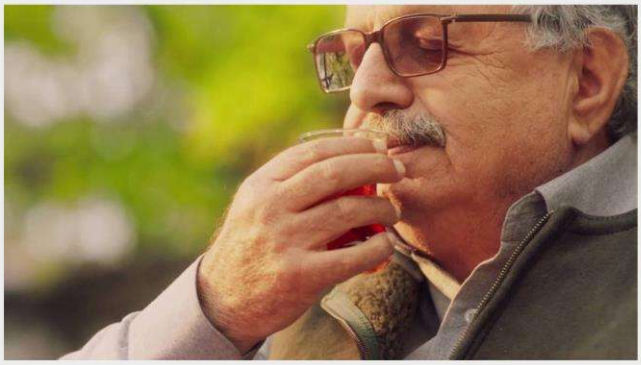


ACTIVE CARBON
FILTRATION SYSTEMS

Activated carbon filtration systems; It is used for the treatment of melt gases, wastes and organic substances that give unwanted chlorine, color, taste, smell in water.

Automatic filters, with the adsorption feature of activated carbon, attract molecules and ions in thewater to their inner surface through mineral pores, and ensure that the water is purified from organic substances, colorless, odorless and clear.

Activated carbon filters are taken to backwashing with automatic valve systems without human intervention. In theautomation of the filter, Fleck, Autotrol, Runxin etc. is provided with automation valves and PLC pneumatic systems are used as an alternative at high flow rates.



The softening process of water takes place by the ion exchange method. Ion exchange takes place bypassing water containing magnesium and calcium ions that cause hardness to sodium form through acadionic resin. While hard water passes through sodium based cationic resin, hardness ions in it; It isreplaced by Na + ions attached to the resin. While hard water passes through sodium based cationic resin, hardness ions in it; It is replaced by Na + ions attached to the resin.

After a certain amount of hard water passes through the resin bed, the resin particles are completely covered with hardness mineralization. In this case, the retention of hardness minerals ends. In order to retain the hardness ions from heat, the resin particles must be freed from the hardness minerals and the sodium particles must be reconnected. This process is called regeneration. The regeneration process consists of 5 main stages: backwash, brine absorption, slow rinsing, fast rinsing and brine filling. As a result of the completion of 5 steps, the resin releases calcium and magnesium ions and binds sodium ions again and is ready for service position again.

FLOW AND TIME CONTROLLED WATER SOFTENING SYSTEMS

Time-controlled fully automatic water treatment systems are systems that contain calcium and magnesium ions in water that cause hardness. With time-controlled fully automatic water systems, calcium and magnesium ions in the water are removed by displacement method.

Softening systems automatically perform regeneration processes, periodically, on the desired day of the week, at the desired time, without any intervention. The resin that reaches saturation is regenerated with salt water in a time-controlled manner and is cleaned from calcium and magnesium ions.

DUBLEX (TANDEM) WATER SOFTENING SYSTEMS

Fully automatic duplex water softening systems are a system that removes calcium and magnesium ions in water that cause hardness.

With fully automatic duplex water softening systems, magnesium and calcium ions in the water are removed by ion exchange method. Softening systems are flow-controlled systems that consist of two tanks and provide uninterrupted water for 24 hours. The automation of these systems is flow rate controlled and after a certain amount of water passes, one of the tanks will enter the washing and the other will enter soft water without interruption.

IRON MANGANESE ARSENIC ZEOLITE FILTRATION SYSTEMS

IRON AND MANGAN FILTRATION SYSTEMS

With the help of a mineral specially activated for iron and manganese, water is separated from iron and manganese by oxidation/filtration methods. In this way, it prevents the color and turbidity caused by iron and mangan to leave stains on laundry, fabric and porcelain items, the inner walls of the water pipes to narrow, the iron bacteria in the pipes to multiply and contaminate the water and the deterioration of the plant.

With automatic iron-manganese filters, iron and manganese minerals passing through the mineral bed at a suitable filtration rate are oxidized and then precipitated. Iron and manganese minerals deposited between mineral layers are removed from the system by automatic backwashing without human intervention.

ARSENIC FILTRATION SYSTEM

Arsenic is one of the sharpest elements that threaten human health. Various methods such as precipitation, ion exchange, couglation, filtration and membrane are used in arsenic removal. Saka Arıtım engineers, according to the flow rate of the water, the amount of arsenic and the desired water quality, ease of operation costs and so on. It makes arsenic removal projects considering the factors.

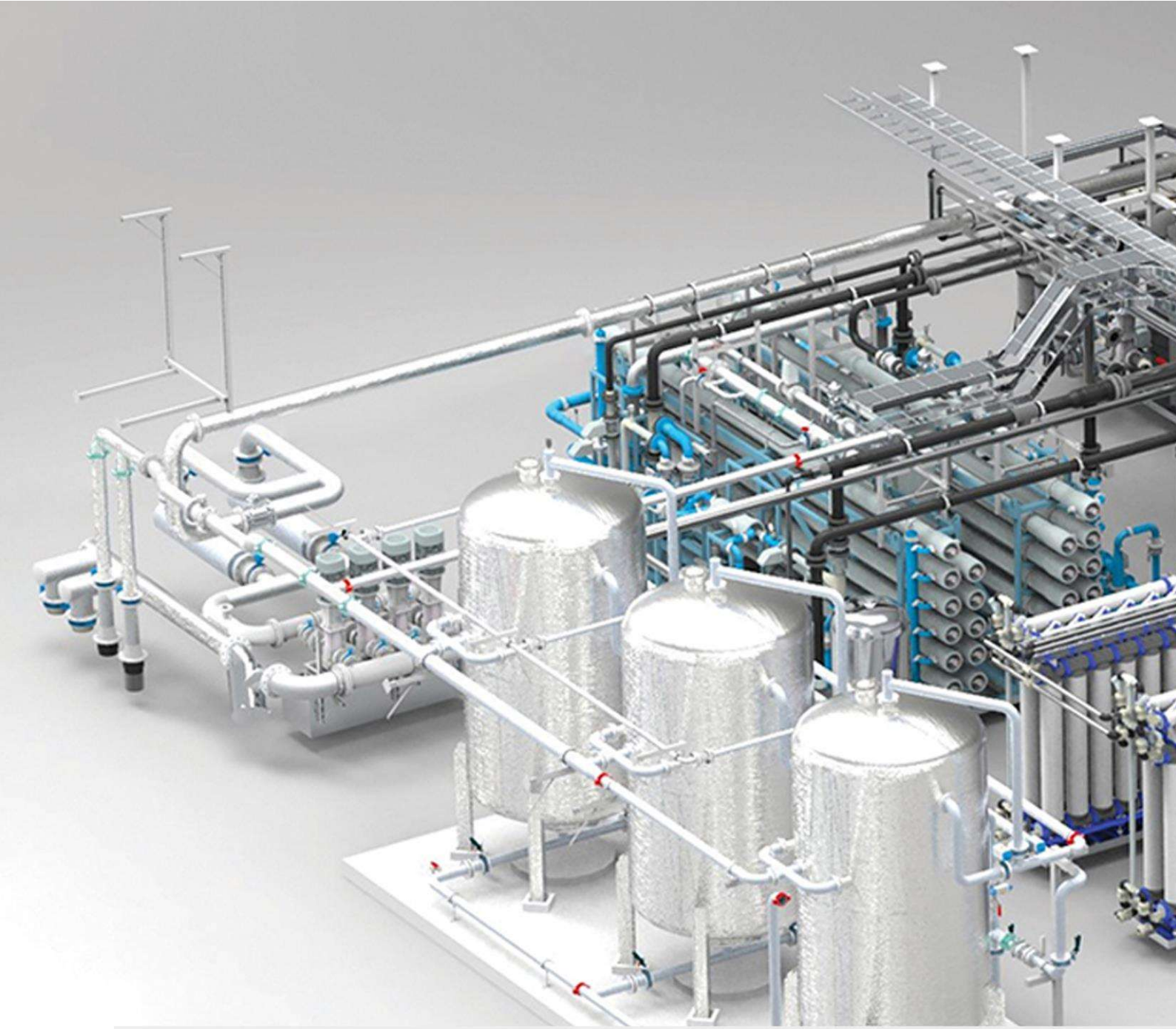
With our filtration system we prepared with AS-FE-MN mineral specially designed for arsenic removal, the amount of arsenic in raw water attracts TS266 standards and error values close to 0 are obtained. In obtaining these values, the flow rate of the water, the amount of arsenic and the ratio of other elements are taken into consideration. In case the value of the outlet water parameter is completely 0 and where the arsenic amount is high, Saka Arıtma engineers also design the osmosis system in the continuation of the arsenic filtration.

During the treatment, due to the accumulation of the pollution load in the water on the arsenic filter surface, there is a more intense water pollution due to clogging in the filtration unit over time and even filter contamination. In this case, the filtration systems should be cleaned and the layer accumulated on the filter should be removed. In iron and manganese filters, it can be performed by supplying water opposite to the flow direction of the filtration, in other words backwashing method. In the backwashing process, backwashing process is carried out with filter control valves that can meet the flow rate or valves with electric or pneumatic actuation that can be controlled by automation.

ZEOLITE FILTRATION SYSTEM

Zeolite filtration systems are used to remove substances that may cause organic pollution such as ammonium and ammonia in water. The device performs reverse washing manually. It is used in hardening of arsenic, copper and lead alloys, paint pigment applications, glass textile and various industrial branches.


SAKA ARITIM DESIGNS & APPLIES
TREATMENT SYSTEMS
FOR YOUR NEEDS.

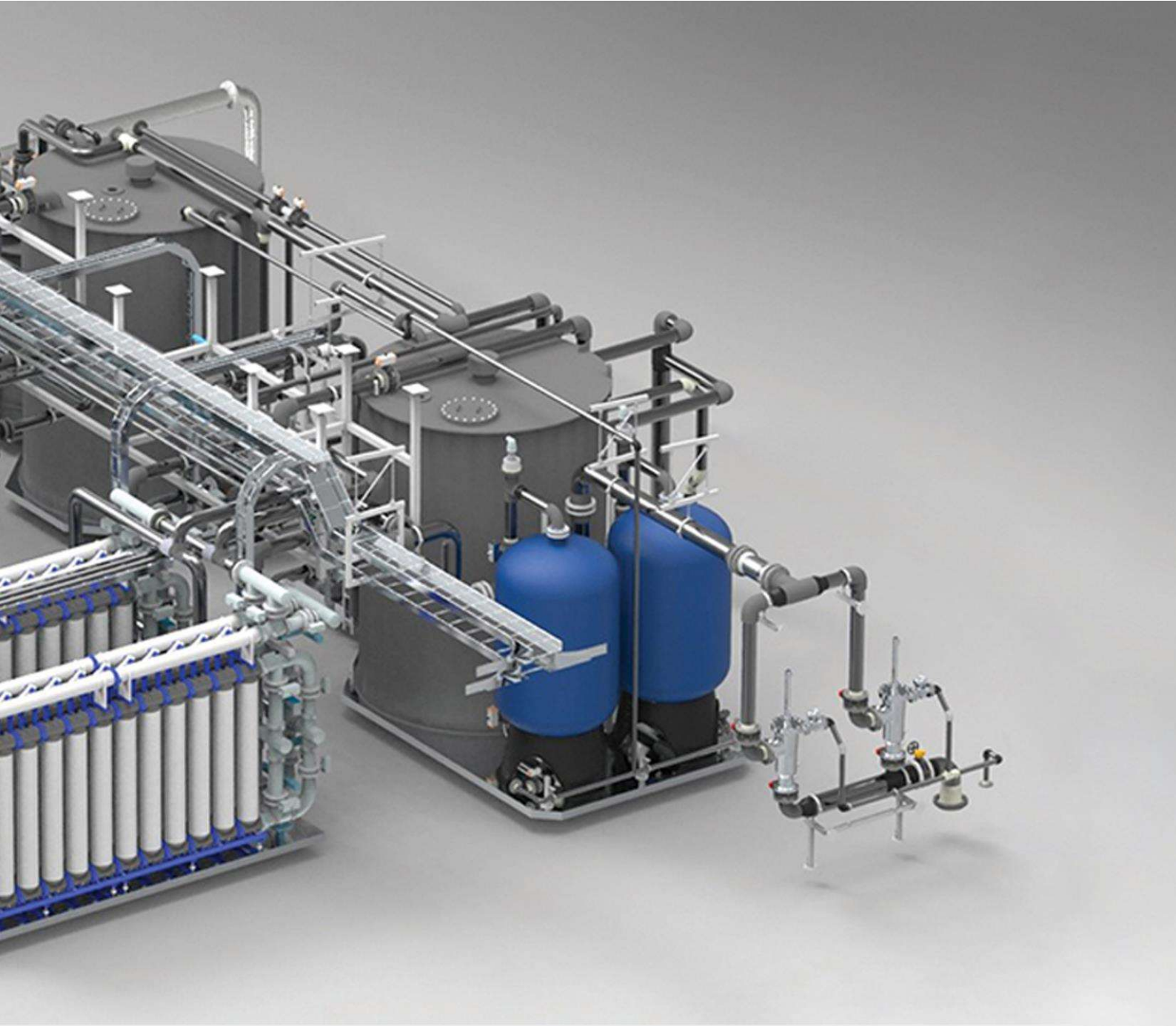


REVERSE OSMOSİS

ADVANCED TREATMENT SYSTEMS

Reverse osmosis systems are systems used to purify 90-99% of high concentration water with chemical salts to obtain low concentration water close to pure water.

Osmosis is the event of equalizing the ion concentrations of two solutions with different ion concentrations and a semi-permeable membrane between them. With osmotic pressure, when a pressure higher than osmotic pressure is applied to this event naturally with a pump, the process is called reverse osmosis and the semi-permeable membrane passes only pure water; It purifies organic and inorganic substances, salts, heavy metals, viruses and bacteria that are dissolved in the water.



ULTRAFILTRATION

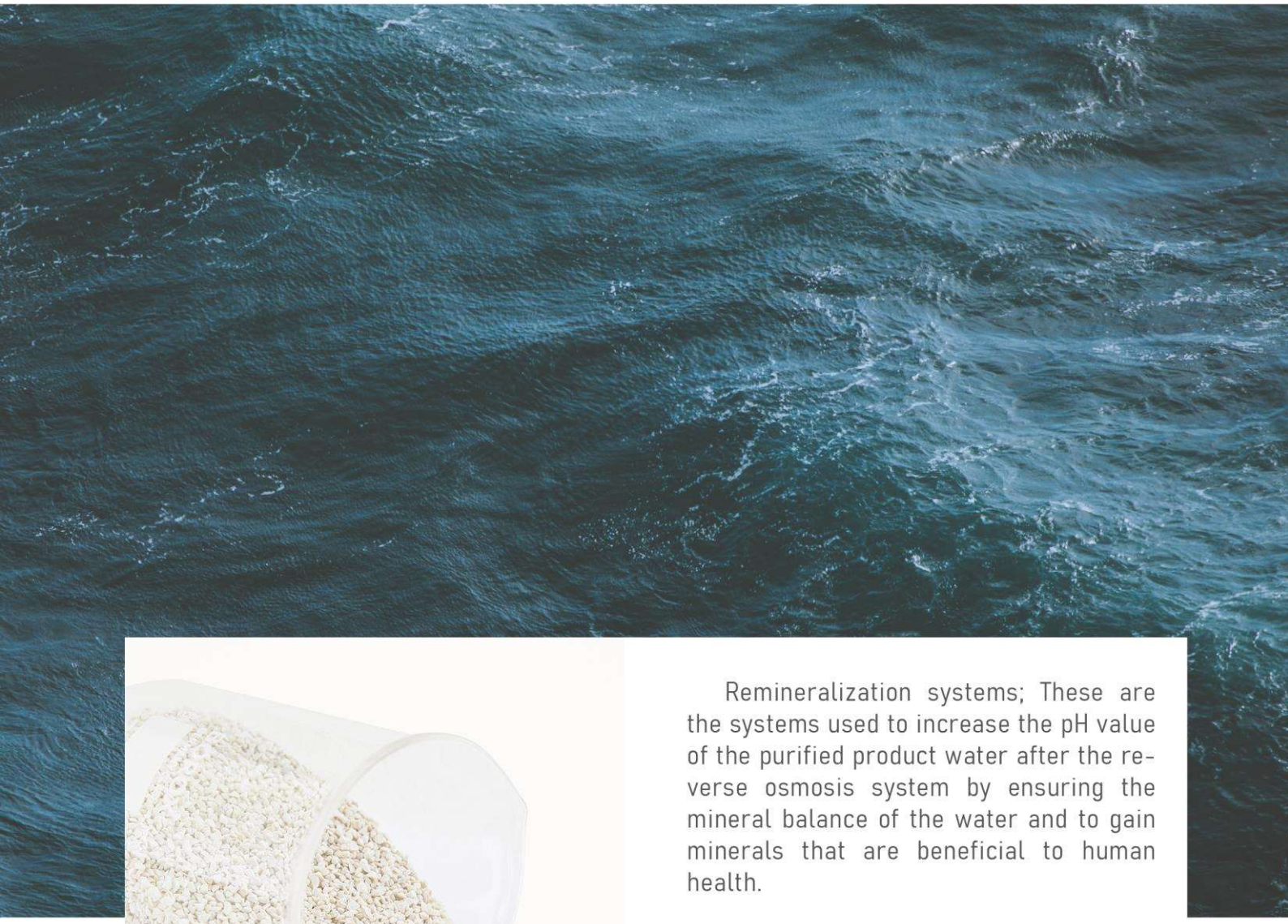
ADVANCED TREATMENT SYSTEMS

The ultrafiltration system is a membrane filtration system that allows turbidity, bacteria, viruses and other microorganisms to remove up to 99% of suspended solids without the need for chemical use, with a membrane structure with a pore diameter of 0.02 micron.

Ultrafiltration modules allow conventional biological and chemical treatment effluents to be fed to reverse osmosis systems as well as perfect filtration of surface waters, have an important place in wastewater recovery projects and are widely used in the pre-treatment of seawater osmosis systems.

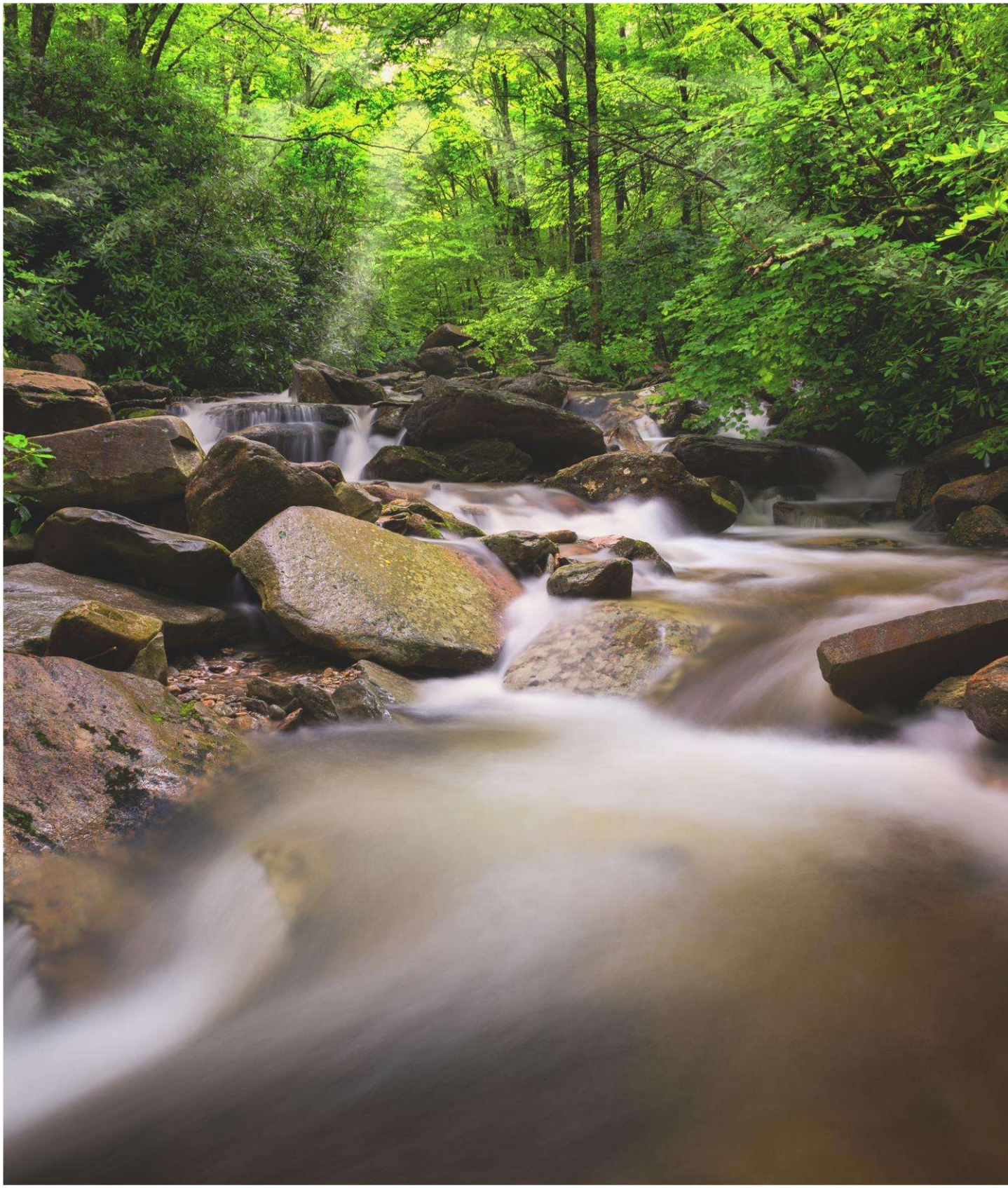
UF systems are also used successfully in the food sector and beverage processes, natural drinking water preparation factories, bacteria intake and indirect disinfection of water and many special processes.

DOLAMITE FILTERS
RE-MINERALIZATION
FILTRATION SYSTEMS



Remineralization systems; These are the systems used to increase the pH value of the purified product water after the reverse osmosis system by ensuring the mineral balance of the water and to gain minerals that are beneficial to human health.

Water in manually controlled systems produced as fiberglass; It is filtered from top to bottom in the filter with its own gravity or with the help of a pump, while the domalite mineral it comes into contact with dissolves and mixes with the water and thus calcium, magnesium, carbonate minerals are added to the water.



PURIFICATION OF WASTEWATER
BIOLOGICAL TREATMENT
SYSTEMS

These are compact treatment facilities designed to treat domestic wastewater with biological methods. They are standardized according to the needs and consist of aeration, settling, sludge stabilization pool and operation cabin.

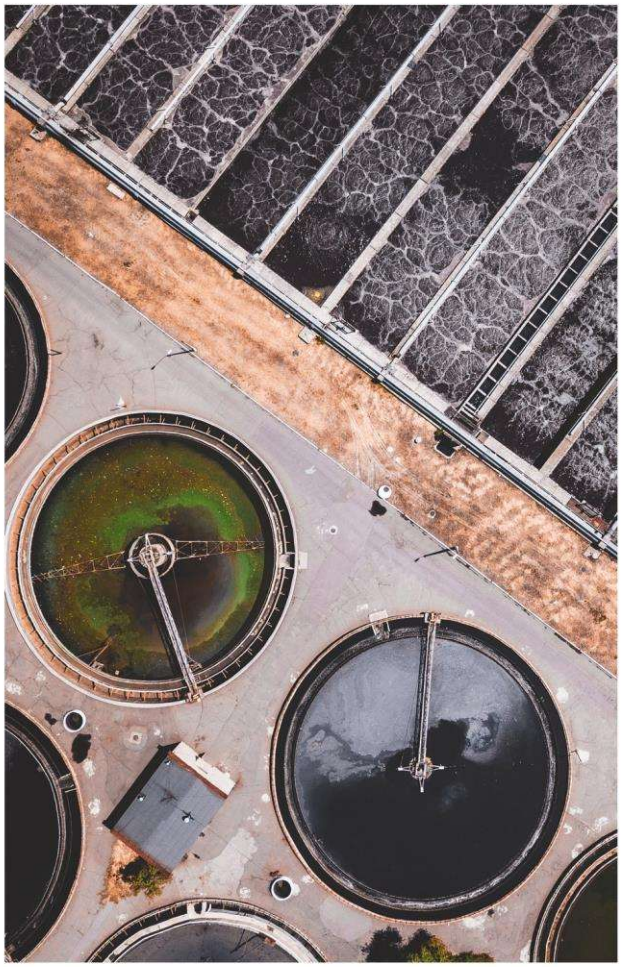
Wastewater is taken to the gravity or pumping and aeration unit, depending on the location of the facility and the waste water channel, where the organic substances contained in it are converted into carbon dioxide and water by aerobic bacteria. In order to provide aerobic conditions, air is supplied to the environment with the help of blowers and diffusers. Here, solid and liquid are separated from each other by allowing bacterial balls to settle. The purified water taken from the precipitation unit is cloned and disinfected before being given to the purified environment.

If desired, the treated water can be filtered and used in garden irrigation. Bacteria balls (activated sludge) at the bottom of the settling pool are transferred back to the ventilation unit with the airlift system in order to keep the amount of bacteria that provides treatment in the aeration pool constant. Excess sludge is taken to the sludge stabilization unit. In this unit, air is given to the sludge and it is stabilized by preventing it from becoming septic. More sludge is taken from the sludge stabilization unit several times a year by vacuum truck..

PURIFICATION OF WASTEWATER
CHEMICAL TREATMENT
SYSTEMS

It is all of the treatment processes applied to ensure that substances dissolved in water or suspended in solid form, by changing their physical state, collapse. In the chemical treatment process, chemicals (coagulant, polyelectrolyte etc.) are added to the wastewater at the appropriate pH value, and the substances to be precipitated are separated from the water in the form of sludge.

With the chemical treatment process, it provides the removal of suspended solids COD, BOD, heavy metal and phosphorus parameters. Chemical treatment systems are constructed as steel construction or reinforced concrete.



CHEMICAL TREATMENT PROCESS

Chemical treatment applications; It takes place in 3 stages as neutralization, coagulation and flocculation.

Neutralization; It is the process of adding acid or base for the purpose of adjusting the appropriate pH value of acidic and basic waste water.

Coagulation; It is the process of adding coagulant substances to the wastewater in the appropriate pH range, combining with the colloidal and suspended solids in the wastewater and making it ready to form a floc.

Flocculation; It is the process of combining small particles formed by coagulation process with each other as a result of mixing waste water at the appropriate speed and forming flocs that can collapse.

WATER & WASTE WATER

OUR SOLUTION PARTNERS

Purolite®

Jacobi CARBONS

润新® RUNXIN

Quantum Filtration Medium

Aqua-TECHNIEK B.V.

Clack®

DSM

ESLI POLLET WATER GROUP

FLECK Pentair Water

Turbidex HYPER-FILTRATION MEDIA

Wave Cyber

DOW®

AnTech "Water Control Technologies"

HSC ARITIM SANAYİ ve TİCARET A.Ş.

Endress+Hauser

WATER & WASTE WATER

OUR REFFERENCES

TKDK
Tarım ve Kırsal Kalkınmayı Destekleme Kurumu

ÇAYKUR

ORDU ÜNİVERSİTESİ

T.C. ADALET BAKANLIĞI

kebir

T.C. Sağlık Bakanlığı
Türkiye Kamu Hastaneleri Kurumu

polyakeynez

ÖZEL GİRESUN ADA HASTANESİ

GÜMÜŞHANE ÜNİVERSİTESİ 2008

ESKİ

CENGİZ İNŞAAT

TRABZON İCMESUYU VE KANALİZASYON İDARESİ
TİSKİ
2014

DOĞUŞ ENERJİ

Kahvaltı Dünyası

Çayeli Bakır İşletmeleri A.Ş.

HATTAT
Enerji ve Maden Ticaret A.Ş.

ÖZEL AVRASYA MEDITECH HASTANESİ

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