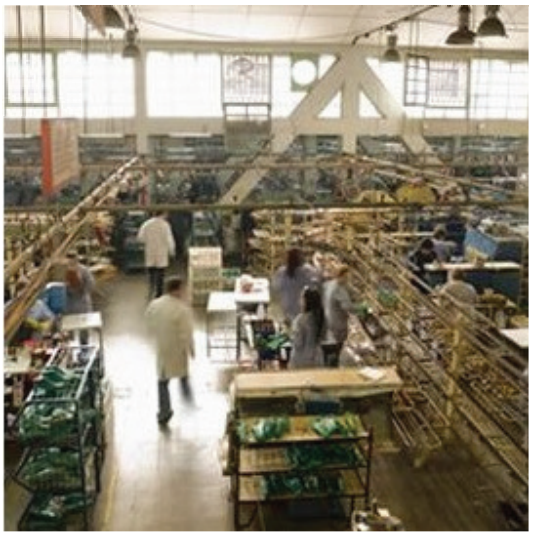
ISPARTA

Water Technologies &Engineering Services

Water & Wastewater Treatment Systems

Industrial Solutions

About Us



ISPARTA Water Technologies is a leading provider of comprehensive water and wastewater management systems. With a strong commitment to sustainability and innovation, we offer a range of cutting-edge technologies and services designed to address the challenges of water scarcity, pollution, and efficient resource utilization.

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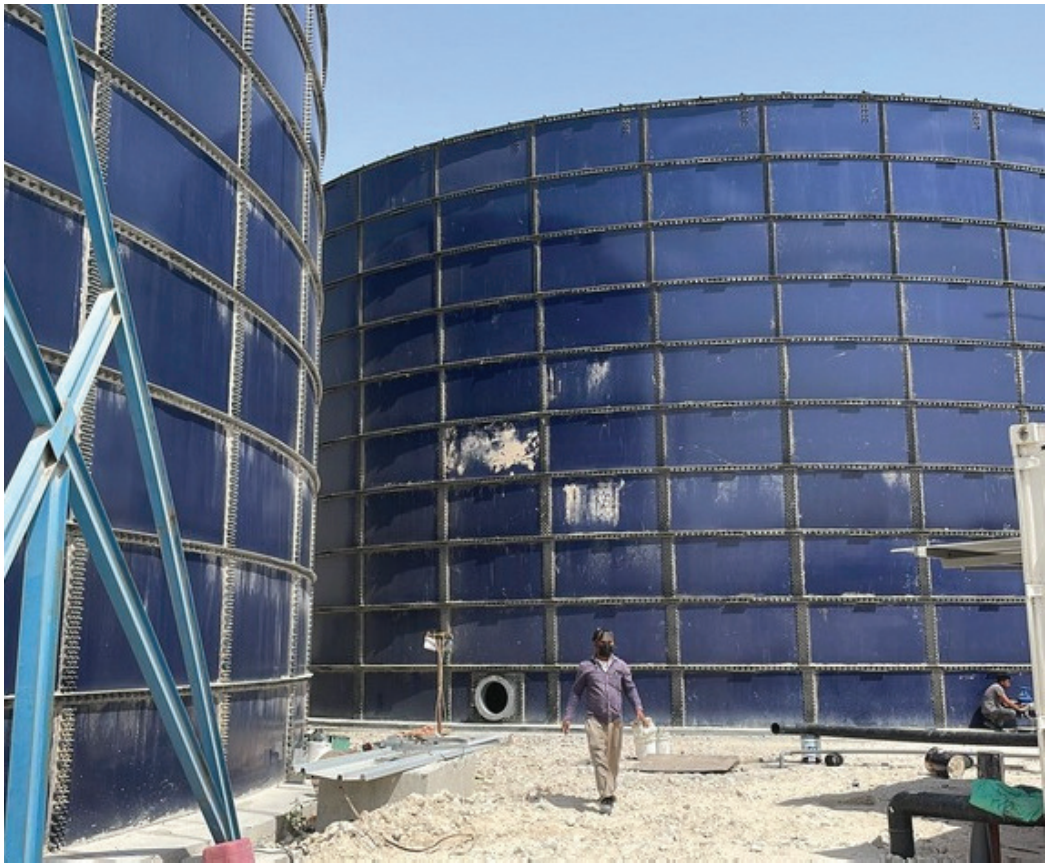

Products

WATER TREATMENT SYSTEM

WESTWATER TREATMENT

DOMESTIC SYSTEM

COMPONENTS PARTS

Services

Our companies are dedicated to developing solutions that improve the quality of water and enable a more efficient use of water. We engineer, assemble and commission. We are committed to offering intelligent and user-friendly products that purify the water in your homes, schools, buildings, factories, businesses, hospitals By applying the most advanced technologies,we take up the biggest challenge of our time water.

As an international specialist in water treatment with a broad range of products and services for this growing market, we choose our partners very carefully. We cooperate with water treatment companies, sanitary wholesalers, OEMs, DIY and public authorities. We have a clear strategy to closely support them with our expertise and solutions. We think globally but act locally. That’s why we have subsidiaries in most European countries to work as closely as possible with our local partners. We manufacture, work in partnership with renowned brands, and offer tailored solutions and products. We work white label and customize where needed. Thanks to this strategy, we build on trust and always act as a loyal and long-term partner.

Services

Over 15,000 customersworldwide.

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Products

At ISPARTA we understand the vital role water plays in every aspect of life. That's why we offer a one-stop shop for all your water technology needs, from essential chemicals to cutting-edge devices and replacement parts. We're your trusted partner, helping you achieve

- Enhanced Water Quality: Our high-performance chemicals address a wide range of water treatment challenges, including purification, disinfection, and scale control.
- Improved Efficiency: Optimize your water systems with our innovative devices, designed to increase productivity and decrease operating costs.
- Extended System Life: Ensure smooth operation and long-term value with a comprehensive selection of genuine replacement parts for all your equipment.
- Sustainability Made Simple: We offer eco-friendly solutions that minimize environmental impact and promote responsible water resource management.

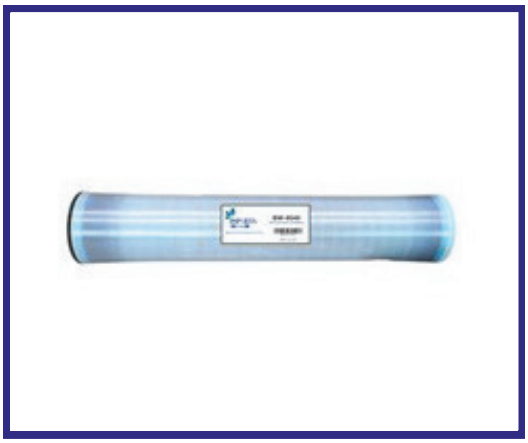
Products

Containerized System

Turn-key Projects

Chemicals Products

Membranes



Water generator

Residential RO

Water Treatment

Containerized Reverse Osmosis Systems

ISPARTA is a leading manufacturer and wholesale distributor of Reverse Osmosis Systems which are used to purify water by removing salts, contaminants and rejecting bacteria, sugars and proteins. The brackish water system can be designed to treat a wide variety of waters – rivers, lakes, wells; the sea water system can desalinate both deep sea and beach well waters. ISPARTA standard Reverse Osmosis Systems are in the range of 1 m3/hour and 100 m3/hour; however, our engineers are capable of manufacturing custom designed Reverse Osmosis Systems to fit customer's water application needs.

- In ISPARTA facility, Quality Management System and Environmental Management Systems are implemented. In addition, our company has Service Certificate in the areas of repair, maintenance, service and installation. ISPARTA has excellent experience, having executed a lot of successful projects in the international market.

Water Treatment

Degasifier Systems

Degasification Systems are used for removing d issolved gases such as carbon dioxide (C02) and Hydrogen Sulfur (H2S) from water. For the removal of dissolved gases from water, water enters into degasifier unit from distribution diffuser at the top of it. As water moves downward, it will be divided into small pieces by means of rushing rings in the degasifier tower. At the same time air is provided by a fan from the botttom. WHen the air and water contact each other, gases inside water are removed and degassed water will be collected at the bottom.

Water Treatment

Dolomite Filter System

Dolomite is a naturally occurring mineral composed of calcium magnesium carbonate, and its unique properties make it useful for certain water treatment applications. A Dolomite Filter System is a type of water treatment system that utilizes dolomite media to enhance water quality by addressing issues related to pH and mineral content.

BENEFITS
– Residential Oasis.
– Agricultural & hydroponic Applications.
– Industrial Excellence.

APPLICATIONS
-Residential Use.
– Commercial Establishments.
– Industrial Facilities.
– Agricultural Applications.
– Educational Institutions.
– Healthcare Facilities.
– Municipal Water Treatment.
-Research & Laboratories.

FEATURES
– Tailored Solutions.
– Eco-Friendly Approach.
– Lifelong Support.

EXTRA FEATURES
– Stainless Steel Tank.
– Timer Controlled.
– Electrically Actuated Valves.
– Galvanised Surface Piping.
– Touch Screen Control Panel.

Water Treatment

Electrodeionization Systems EDI

The standard CDI-Low systems come in flow rates from 1.7 to 180 gpm (0.39 to 40.88 m3/hr), combining single or multiple (up to 8) IONPURE® CDI-LX modules on a frame with power supplies, controllers, piping, sample valves, cleaning connections, and flow and quality monitoring instrumentation. Select CDI-LX systems can be hot water sanitized at up to 185°F (85° C). Standard CDI – High systems come in flow rates ranging from 100 gpm to 600 gpm nominal (22.7 to 136.3 m3/hr), combining multiple Ionpure® VNX modules on a frame with power supplies, controllers, piping, sample
valves, cleaning connections, and pressure, flow and quality monitoring instrumentation.

Water Treatment

Electrodeionization Systems EDI

• A complete, power supply assembly \
(NEMA 12 or optional NEMA 4 and 4X)
• Controllers
• Piping
• Sample valves
• Cleaning connections
Flow and quality monitoring instrumentation and remote I/O is available as
an option.

ADVANTAGES
•Reliable, compact design
• Quick installation
• Low maintenance
• Easy validation
• Hot water sanitizable
• (HWS) units available up to 185 °F (85 °C)
•High operating temperature
• (up to 100 psig feed)
• Completely leak-free operation
• Ideal for loop applications
• Low power consumption
• Individual power supplies and controls

Water Treatment

MECHANICAL FILTERS

Water Treatment

Electrodeionization Systems EDI

Multi Media Filters are used for purpose of removing suspended solids, turbidity and impurities like iron and manganese. System is generally consisting of different sized gravels and anthracite inside the body. Sometimes special filling materials will be used according to water quality to be filtered. For example, for more turbid waters or surface water filtration like river or seawater

turbidexanthariciteor garnet – turbidex – anthracite combination will be used. Second duty of Multi Media Filters is to protect the equipment that will be located downstream. Multi Media Filters are used as a pre-treatment step for process water and drinking water applications or sometimes used for removal of turbidity coming from wastewater treatment systems.

Water Treatment

Ozone Systems

Ozone is composed of three oxygen atoms (O3). It is an unstable light blue gas at room temperature and under high pressure and can be easily broken down into oxygen (O2). Its half-life is about 30 minutes. It is in 1785 that the Germans first discovered this special gas.

Ozone applications can be summarized as follows:

- Water Treatment
- Disinfection and bacteria killing
- Decomposition of organic matters
- Removal of color, odor and taste
- Sterilization of cold storage warehouse
- Sterilization and purification of food processing shops
- Space sterilization

Water Treatment

Reverse Osmosis RO Alfa

Reverse osmosis (RO) is a filtration method that removes many types of large molecules and ions from solutions by applying pressure to the solution on one side of a selective membrane forcing only the small water molecules through the membrane becoming purified or permeate water. Membrane surface is always kept clean and unplugged by ‘Cross Flow’ operation that happens inside membrane element. By means of ‘Cross Flow’, while some liquids (element water) pass through membrane, some liquid (intensive water) move parallel to membrane surface, so protect others to stick to membrane. This process enables much more qualified water compared with other filtration systems.

Water Treatment

Reverse Osmosis RO GAMA

Applied for water where classical purification systems become insufficient (seawater, well water with high conductivity etc.), separating all undesirable minerals from water, membran filtration transaction devoted to pure water provision is called REVERSE OSMOSIS.

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Water Treatment

Reverse Osmosis RO TETRA

One of the methods of purifying the high conductivity waters is the reverse osmosis system. The systems working with reverse osmosis principle treat the water having high conductivity like seawater for domestic, commercial and industrial applications.

SEA WATER REVERSE OSMOSIS SYSTEMS

- Purifying the high conductivity waters that cannot be treated with standart brackish reverse osmosis systems,
- Producing low conductivity waters that cannot be treated with single pass brackish reverse osmosis systems,
- Treating concentrated streams,
- Dealing with special ion separations.

Water Treatment

River WaterTreatmentSystems

USAGE AREA ISPARTA Seawater Reverse Osmosis Systems are generally used for the treatment of sea water or high conductivity waters especially found near coastal areas.They are also used for ; • For Boats and Ships which are generally far away from potable water resources for a long time, • For places like hotels, apartments, houses which are far away from city water networks or which are in places having high potable water costs, • For industrial places like factories, companies which are far away from city water networks or which are in places having high potable water costs, • For places in offshore islands or for petrol stations in the middle of the sea. • For military applications or naval forces' boats, ships.

Water Treatment

Surface Piping Systems

Face Piping Multimedia and Activated Carbon Filter Systems

Multi Media Filters are generally used for purpose of removing suspended solids, turbidity and other impurities like iron-manganese.

Standart control valves don’t have enough capacity to handle high capacities more than

20 m3 – hour, therefore surface piping method will be used for multimedia filter systems and activated carbon systems.

Water Treatment

Treated Sewage Effluent Systems

A Treated Sewage Effluent (TSE) system, also known as a Wastewater Reclamation or Wastewater Reuse system, is a method of treating and purifying wastewater or sewage to a level where it can be safely reused for various non-potable purposes. This helps conserve freshwater resources and reduce the demand on traditional water sources.

At ISPARTA, we are at the forefront of revolutionizing water management solutions with our cutting-edge Treated Sewage Effluent (TSE) systems. With a deep commitment to environmental stewardship and sustainable practices, our TSE systems offer a transformative approach to wastewater treatment and reuse.

Water Treatment

Treated Sewage Effluent Systems

ISPARTA TSE systems incorporate advanced treatment technologies such as membrane filtration, and biological processes. These technologies ensure the removal of solids, organic matter, nutrients, and pathogens from the sewage effluent, resulting in high-quality treated water

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Water Treatment

Ultrafiltration Systems UF

UF modules are used for pre-treatment of sea water osmosis systems, wastewater recycling Project and enables conventional biologic and chemical treatment water to feed reverse osmosis systems.
Moreover UF systems are used successfully for sea water treatment, food sector and beverage process, natural drinking water factories, removing bacteria and disinfection of water projects. It constitutes pivots of systems of special design of wastewater recycling and processing of recycling of water origin MBR.
in Ultra filtration systems is smaller than microorganisms diameter so can safely provide as %100 water treatment.

Water Treatment

Ultrafiltration Systems UF

In addition, Organic substances react with chlorine compounds in water and creates THM' (trihalometans) and this THM's effect on human structure is known as toxic and that can cause disease. Ultra filtration don't cause any additives in water, don't produce waste, any unwanted oxidative substances that is the most important advantage of it.

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Water Treatment

Ultrafiltration Systems UV

This ultraviolet lights breaks DNA structure of microorganisms and makes them inactive unaffected. By this way, %99,9 average ratio of disinfection productivity is supplied..

To be able to kill microorganisms with this system, Ultraviolet light must directly hit over them. For this reason, before water enters in ultraviolet system, parameters such as sediment, cloudiness must be removed from water. Sand filter or cartridge filters are recommended to be used before ultraviolet.

To obtain good productivity from ultraviolet units, periodical maintenance is important. UV lamb change once a year and periodical Quartz glass cleaning depending on raw water quality must be made. In case, if this cleaning is not done, UV light affect and output of equipment will decrease.

Water Treatment

Grey WaterTreatmentSystems

Grey Water Standart Series has a capacity ranging from 2 m3/day to 100 m3/day.
Forlarger capacities, please consult with our engineers.
Actually, there is no universally accepted definition of grey waters. Due to low level of contamination and easily biodegradable behaviour, the water comes from wash basins, bath and showers In houses, are accepted as grey water.
UF systems with a combination of multimedia filters, activated
carbon filters or with a combination of aerated basins filled with biological media and UV or chlorine systems (at the end)
can be used to treat this kind of water.
Treated grey water can be used as a flush water in toilets, in car washing and gardening

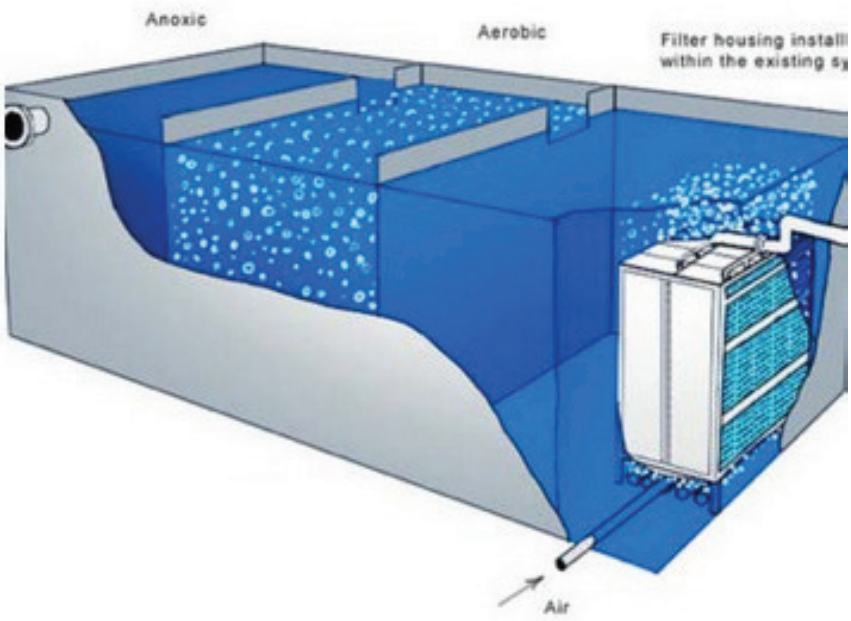
Water Treatment

MBBR Systems

ISPARTA MBBR systems are applicable to wide range wastewater flows;from 20 m3/day to 10.000 m3/day. ISPARTA MBBR systems can be used to treat wastewater from various sources (domestic, wineries, dairies etc.) in combination with other processes to achieve the appropriate treatment objectives: after anaerobic treatment for polishing BOD load; before activated sludge for high BOD/ COD treatment, for upgrading – converting of existing plants (lagoons, oxidation ponds and activated sludge plants) or as post treatment to existing activated sludge for nitrogen removal to comply w/new regulation limits. ISPARTA MBBR systems include the small carrier elements, which are less dense than water (0.93 – 0.95 SG), provide a large protected surface for bacteria culture and allow sites to retain active biomass within the bioreactor.

Water Treatment

MBR Systems



Membrane Bioreactors are biological treatment plants which combines activated sludge process with submersed membrane filtration. Secondary settling tanks are replaced with membrane units. Complete solids removal, a significant bacteria removal capability, high rate and high efficiency organic removal and small footprint are the advantages of the MBR Systems.

The MBR process can be configured in many different ways depending on project specific nutrient removal objectives. Anoxic zones before or after the aerobic treatment may be used for denitrification, depending on the effluent nitrate and total nitrogen requirements. ISPARTA prefer submerged configuration because of less energy requirement and low fouling potential. In submerged configuration, a suction force is applied to draw the water through themembrane, while the sludge is retained on the membrane surface.

Water Treatment

MBR Systems

ISPARTA MBR SYSTEMS

•Turnkey MBR system

• Standard pre-engineered design packages

• Efficient compact design, reduced footprint

• Robust, high-quality system and components

• Single-source supply

• Easily expandable

• Fast delivery and installation

• Meets or exceeds most regulatory effluent requirements

APPLICATIONS

• Municipal wastewater

• Educational institutions and healtcare applications

• Hotels, Labour and refugee camps, parks and military bases

• Building complexex (offices, shopping centers, small tornships)

• Industrial wastewater, e.g. food and beverage applications.

ADVANTAGES

• Secondary clarifiers and tertiary filtration processes are eliminated, thereby reducing plant footprint.

• Unlike secondary clarifiers, the quality of solids separation is not dependent on the mixed liquor suspended solids concentration or characteristics.

• No reliance upon achieving good sludge settleability

•hence quite amenable to remote operation.

• Can be designed with long sludge age, hence low sludge production.

• Produces a UF quality effluent suitable for reuse applications or as a high quality feed water source for Reverse Osmosis treatment.

Water Treatment

SBR Systems

Sequencing batch reactor (SBR) is a system which works with activated sludge principle and where aeration and sedimentation processes are occurred in the same tank as distinct from continuous systems. Wastewater is fed to reactor tank, purified and discharged. SBR systems consist of 5 steps;

1-filling 2- aeration

3-sedimentation 4-discharge

5- discharge of excessive sludge (if needed). SBR systems function as a balance tank and comply with fluctuating pollution load and quantity of raw water. It occupies less area than classic continuous systems

Water Treatment

SBR Systems

If necessary, duration and application frequency of 5 steps mentioned above can easily be set for removal of nitrogen and phosphorus. This system does not require a secondary settling sedimentation tank, which classic systems require, since sedimentation is carried out in the same tank. Therefore, it is economic. A reactor can be produced not only as modular type but also from reinforced concrete and so it can be applied in all required capacities.

• A SBR unit includes;

1. reactor
2. basket filter
3. blower
4. chlorine dosage pump
5. submersible wastewater lift pump
6. submersible discharge pump and air diffusers.

• Reactor body is made from epoxy coated ST-37 carbon steel substance and it can be in a prismatic or cylindrical shape. Production can be made for special applications and the used substance or geometry of reactor can be variable.

•Control system is controlled by smart relay in standard ones; however, control systems with PLC- touch operator panel can also be made optionally. Special price should be demanded for remote control- SCADA.

Domestic

Under Sink DeviceswithoutCabinet

5-8 STAGE REVERSE OSMOSIS FILTER SYSTEM 80 GPD WP, STANDED, MANOMETER WITH PUMP

•10” Transparent Housing (Double O-Ring, NSF Component)

• 10” White Mat Housing (Double O-Ring, NSF Component)

• 10” 5 Micron Spun (Sediment) Filter

• 10” GAC Carbon Cartridge Filter (UDF)

• 10” Block Carbon Cartridge Filter (CTO)

• 10” Inline Coconat Post Carbon Filter

• 10” Inline Mineral Filter

• 75GPD / 80GPD Membrane

• 3.2 Gallon Metal Pressure Balance Tank

• Luxury Small Faucet

• Shut-OffValf

• Manometer (0-10 Bar)

• 24V Pump

• 24V1,2A Adapter

• 60 PSI Pressure Reducer

Domestic

4S-LION WITH PUMP

• 1ST STAGE
pp membrane
• 2nd STAGE
carbon fiber
• 3RD STAGE
high-density pp membrane
• 4TH STAGE
reserve osmosis membrane

Components Parts

Cartridge Filters

String wound cartridges offer true depth filtrate ion with high dirt holding capacity and extremely low media migration. It is manufactured using a high speed, continuous wind process which creates a superior one-piece filter with hundreds of diamond shaped tunnels that get progressively smaller from the outer diameter to the core

FEATURES

- Greater solids holding capacity
- Longer service life
- Low pressure drop
- Temperature and chemical compatibility
- Wide choices of specification, lengths and diameters
- True depth filtration

MATERIALS

- Polypropylene. Polyester, Cotton

MICRON RATINGS (Micron)

- Nominal 1, 5. 10, 20. 30. 50. 75. 100 micron

SPECIFICATION

- Inner diameter: 28mm. 30mm
- Outer diameter: 40mm-115mm
- Length: 120mm- 1 270mm

Components Parts

ridge Filters

Melt Blown Cartrid

The melt blow micro-fiber is self-bonded and for med o 3D pore structure. Diameter and density of micro-fiber con be varying from inner to outer of t he filter diameter. Melt Blown Depth Cartlidge is designed to have continuously graded pore structure to provide both pre-filtration and final-filtration

FEATURES

- High contaminant holding capacity
- long service life
- Low pressure drop
- High removal rating
- Self-bonded with no chemical binder
- F.D.A complaint

SPECIFICATION

- Inner diameter: 28mm. 30mm
- Outer diameter: 40mm-115mm
- Length: 125mm-1270mm

APPLICATIONS

- Pre-filter of drinking water system
- Pre-filler of R.O systems and other water system

Components Parts

Measuring Devices

Components Parts

MECHANICAL FILTERS

Separator filter

cartridge filters

Bag filters

Components Parts

MECHANICAL FILTERS

ISPARTA Anthracite

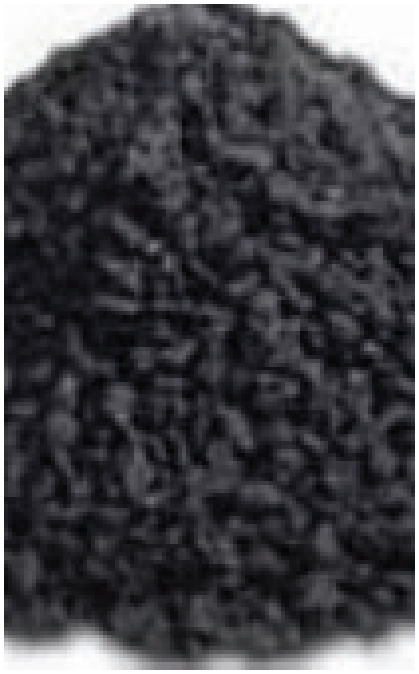
Activated Carbon

Activated Carbon (coconut shell based)

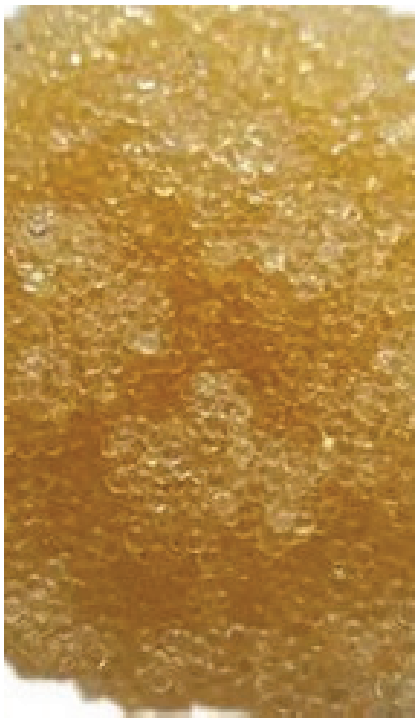
Components Parts

MECHANICAL FILTERS

Organosorb 15-co



ISPARTA Resin



Indion ISPARTA Resin

Components Parts

MECHANICAL FILTERS

Antiscalant Balls

Antiscalant 4000

Antiscalant 7000 Plus

Components Parts

MECHANICAL FILTERS

EDTA-4NA

BIRM

Components Parts

Membrane Vessels

ISPARTA Pressure Vessels

Components Parts

FRP Vessel

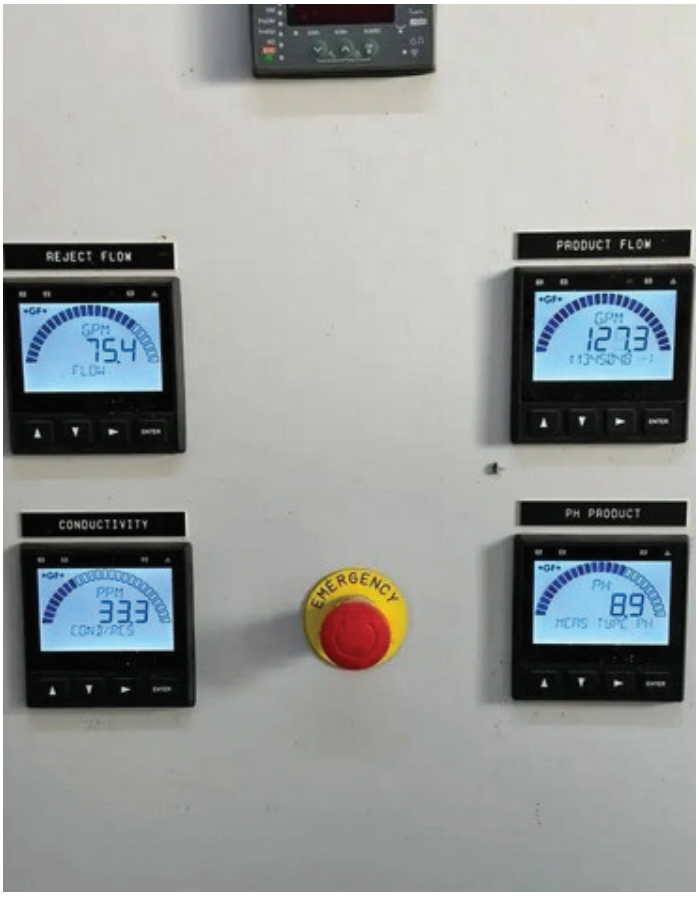
ISPARTA FRP water treatment vessels are with PE or FRP liner, broadly applying to residential, commercial and industrial softening and filtering systems and filtering systems. With perfect performance of corrosion resistant, the vessels can be sufficiently equipped with mechanical control valves and meet requirements of clients.

Components Parts

STEEL TANKS

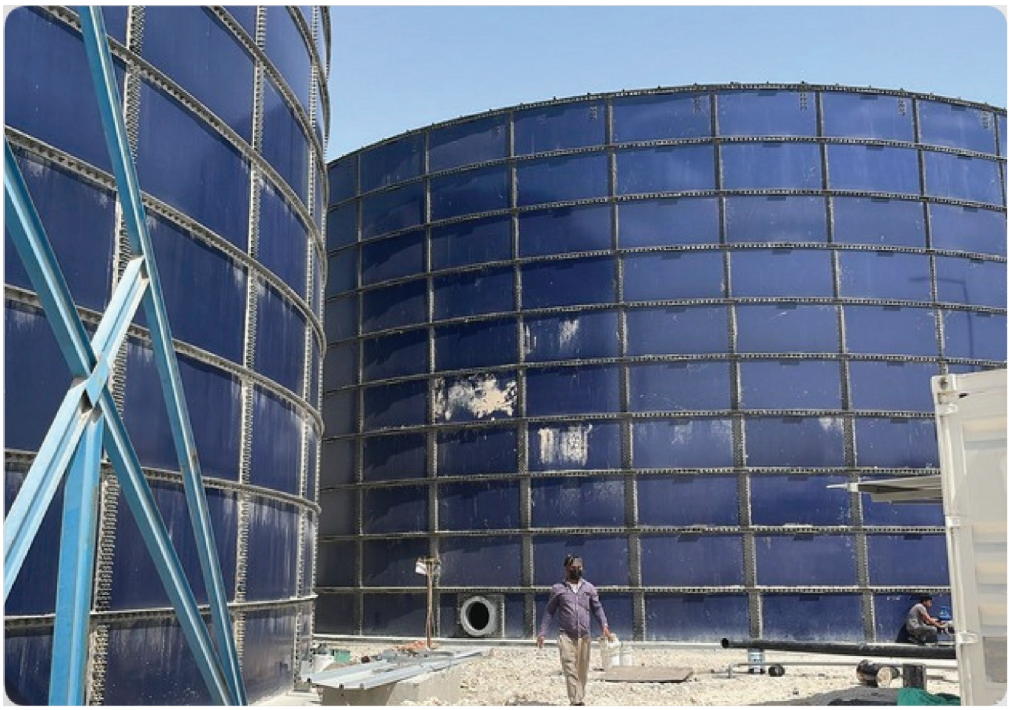
We are continuously improving ourselves in pressurized steel tank
production with the implementing new technologies .
We make smooth production which comply with to TSE (Turkish Standard Institute) standards with our new submerged arc welding machine and new cylinder. We are producing tanks up to 3000 mm in diameter and 12000 mm in length with our high technology machines. We can produce St-37 carbon steel and SS 304- SS316 stainless steel tanks.
Also we are implementing CTP, EBONITE, GALVANISE coatings inside ofthe tanks according to customer requirements.

Our Projects



Our Projects

Our Projects



ISPARTA

Water Technologies &Engineering Services

Water Whispers Peace

Follow us on our channels

+962 7 9611 7090
www.ispartaturk.com
info@ispartaturk.com