

WATER TREATMENT SYSTEMS







Aqualine Water Technology, part of Pollet Water Group (PWG) which was first inaugurated in 1975 in Belgium, specialized in the field of water and wastewater treatment solutions. Our solutions cover industrial, commercial, medical & domestic applications.

Our group consists of **30 companies** dedicated to developing efficient solutions to improve the quality of water. The group has **5 production facilities** in **Germany**, **France**, **UK**, **Belgium**, and **Turkey**.

We have successfully implemented **hundreds of projects** in the **Middle East** and **North Africa region** additional to some regions in **Africa**.









WATER TREATMENT SYSTEMS

Aqualine provide a wide range of water treatment systems with technologies allow you to optimize your water consumption and utilize alternative water sources to reduce operating and energy costs and improve your production process.

By using water treatment systems you can get rid of impurities like salinity, turbidity, color, oder, iron and other to have a purified water for drinking, irrigation, or any other purposes.

We supply standard solutions as well as made-to-measure concepts. Our engineering department can customize products. We have successfully implemented hundreds of projects up to 230,000 CMD treated water in the Middle East and North Africa region additional to some regions in Africa.

Our professional engineering team enable us as a subcontractor to handle any project by providing full technical support & after-sales services.

1-ADVANCED WATER PURIFICATION SYSTEMS

1-1 AQUALINE MEGA RO SYSTEMS	8
1-2 AQUALINE CONAINERIZED RO SYSTEMS	10
1-3 AQUALINE TSE SYSTEMS	12
1-4 AQUALINE LAMELLA CLARIFIER	14
1-5 AQUALINE DEGASIFIER SYSTEMS	16



1- ADVANCED WATER PURIFICATION SYSTEMS

1-1 AQUALINE MEGA RO SYSTEMS

large scale is typically used for various industrial and commercial applications where a high volume of purified water is required. These systems are designed to remove impurities, including salts, minerals, and contaminants, from water by forcing it through a semi-permeable membrane under pressure.



- Standard Capacities 5000-50000 CMD.
- Single & Multi Skids.
- Common & Separate Pretreatment.
- 7 Element Membrane Housing.
- High Recovery.
- Compact Skid Mounted System.
- CE Approved.

ADVANTAGES

- Enhanced flavor, smell & appearance.
- Purifying procedure with high quality
- Takes out contaminants.
- Conductivity/total dissolved solids decrease.

APPLICATIONS

- Governmental Municipal Water Supply.
- Agricultural & Irrigation.
- High Volume Testing Facilities.
- Large Scale Commercial Facilities.
- Military Operations.
- Refuges Camps.

AQUALINE MEGA RO SYSTEMS

Aqualine manufactures large reverse osmosis systems which are designed to eliminate high concentrations of contaminants in tap water, brackish water and sea water.

These contaminants range from total dissolved solids (TDS), salt, bacteria, proteins, metals, organic substances, dyes.

our large reverse osmosis system is produced to perfectly handle manufacturing and healthcare facilities of great proportions. Regardless of what type of system that you might require, a large reverse osmosis system is tailor-made to produce you the cleanest water for consumption or other use.

- Pre-Treatment.
- Custom Designs For Mega Capacities.
- Capable Of Eliminating Other Impurities Such As Flouride, Arsenic, Radium, Nitrate, Sulfate, Potassium, And More.
- Connected To SCADA System.
- Mobile Control.
- Remote Alarming & Reporting.
- Turnkey Projects.





1- ADVANCED WATER PURIFICATION SYSTEMS

1-2 CONTAINERIZED SYSTEMS

Containerized systems, also known as mobile or modular systems, refer to complete and self-contained units of equipment and processes that are housed within standard shipping containers. These containerized systems are designed to be easily transported, installed, and operated at various locations, making them highly versatile and convenient for a wide range of applications.



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FEATURES

- Standard Capacities 1 2000 CMD.
- Plug & Play Unit.
- Easy Transportation.
- Limited Civil Work.
- Compact Footprint.
- Turnkey Delivery.
- Easy Maintenance.
- 45 & 40 ,20ft/HC Standard Shipping Containers.

ADVANTAGES

- Space Efficiency.
- Deliver High Performance At Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking & Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- Agriculture.
- Water Bottling Industry.
- Domestic Use.
- Commercial & Industrial Use.
- Municipal Water Supply.
- Boiler Feed Water.
- Hotels & Resorts.
- Potable Drinking Water.
- Agricultural & Irrigation.
- Municipal Water Treatment.
- Food & Beverage Industries.

AQUALINE CONAINERIZED RO SYSTEMS

AQUALINE containerized reverse osmosis System is a self-contained, turnkey system that can function on-the-go or as a permanent water treatment plant, able to start pumping highquality product in less than a day after arrival on-site. Our containerized reverse osmosis systems are made to order, meaning your system will be specifically tailored to your water treatment requirements, containing all the amenities your reverse osmosis system could possibly need.

Each containerized reverse osmosis system is engineered with high-quality components to handle all types of harsh conditions.

Containerized RO systems offer a practical and efficient solution for addressing water treatment challenges in a wide range of scenarios. Their mobility, adaptability, and ability to produce high quality water make them an invaluable tool for ensuring access to clean water in various contexts around the world.

- Pre-Treatment.
- Custom Designs For Higher Capacities.
- Thermal And Acoustic Insulation.
- Electrical Cabling And Piping:
 - · Lightening Equipment.
 - Piping For Container Inside Systems.
 - Cabling And Wiring Of Instrumentation Inside The Container To Main Control Panel.





1- ADVANCED WATER PURIFICATION SYSTEMS

1-3 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.



UF SYSTEM RO SYSTEM

- Standard Capacities 1 5000 CMD.
- Advanced Treatment Technologies.
- Efficient Nutrient Removal.
- Automated Monitoring & Control.
- Energy Efficient.
- Remote Monitoring & Maintenance.
- Compliance With Regulations.
- Client-Centric Customization.
- Comprehensive Training & Support.
- Environmental Sustainability.
- Long-Term Reliability.

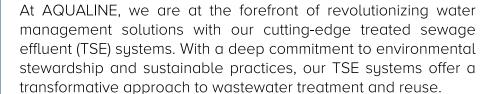
ADVANTAGES

- Reduce Suspend Solids.
- Reduce Bacteria & Pathogens.
- Reduce Organic Matter.
- Reduce Salinity.
- Reduce Color & Odor.
- Reduce Oil & Grease.
- Deliver High Performance At Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking & Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- Irrigation.
- Industrial Processes.
- Cooling Towers.
- Firefighting.

AQUALINE TSE SYSTEMS



AQUALINE 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

Our team of experts works closely with clients to tailor TSE systems that align with specific requirements, whether it's for irrigation, industrial use, or other non-potable applications.

EXTRA OPTIONS

- Custom Designs For Higher Capacities.
- Advanced Monitoring And Control.
- Smart Integration.
- Customizable Water Quality.
- Modular Scalability.
- Touch Screen Control Panel.
- CS/SS304 Stainless Steel Skid.



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1- ADVANCED WATER PURIFICATION SYSTEMS

1-4 RIVER WATER TREATMENT SYSTEMS

River water typically contains a range of impurities, including suspended solids, microorganisms, organic matter, dissolved minerals, and potentially harmful contaminants. Treating river water is essential toensure its safety, quality, and suitability for the intended purpose.



- Standard Capacities 600 20.000 CMD.
- Based On Physical & Chemical Treatment.
- Increased Settling Area.
- Corrosion-resistant & Completely Submerged PVC Plates.
- Plates Installed At 55 Degree For Optimal Solids Settling.
- Self-cleaning Plates & No Moving Parts.
- Space-saving Footprint.

ADVANTAGES

- Reduced Chemical Usage.
- Reduced Turbidity.
- Improved Water Quality.
- Deliver High Performance At Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking& Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- River Water Treatment.
- Industrial Water Treatment.
- Wastewater Treatment.
- Agricultural & Irrigation.
- Food & Beverage Waste.

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AQUALINE LAMELLA CLARIFIER

A lamella clarifier, also known as an inclined plate settler or tube settler, is a type of water treatment equipment used for and sedimentation clarification of water in various applications, including river water treatment. It is designed to remove suspended solids and particulate matter from water by using a series of inclined plates or tubes.

The lamella clarifier operates based on the principle of gravity settling and utilizes a large surface area within a compact footprint to enhance the settling process. Lamella clarifiers are often used as a component of a larger treatment train, combined with other processes such as coagulation, flocculation, and filtration, to achieve the desired water quality standards for river water treatment.

At Aqualine, we take immense pride in our advanced lamella clarifiers that have been meticulously designed to deliver exceptional performance and efficiency. Our lamella clarifiers stand out in the market for a variety of reasons, making them an ideal choice for your water treatment needs.

- Custom Designs For Higher Capacities.
- Electrically Actuated Valves.
- Touch Screen Control Panel.
- Sludge Thickness.
- Fully Automated System.





1- ADVANCED WATER PURIFICATION SYSTEMS

1-5 DEGASIFIER SYSTEMS

A degasifier system, is a water treatment technology designed to remove dissolved gases, primarily carbon dioxide (CO2) and Hydrogen sulfide (H2S), from water. Dissolved gases in water can lead to various operational challenges and negative impacts in industrial processes, water treatment, and other applications.



- Standard capacities 600 5000 CMD.
- Cutting-Edge Degasification Technology.
- Customizable Solutions.
- PP Material Of Construction.
- Efficient Gas Removal.
- Compact Footprint.
- Reliable Process Optimization.
- Comprehensive Monitoring & Control.

ADVANTAGES

- Remove H₂S & Co₂.
- Reduced Chemical Usage.
- Deliver High Performance At Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking & Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- Boiler Feedwater Treatment.
- Industrial Process Water.
- Wastewater Treatment.
- Food & Beverage Production.
- Pharmaceutical Manufacturing.
- Chemical Processing.
- Aquaculture.
- Cooling Water Systems.



AQUALINE DEGASIFIER SYSTEMS

At Aqualine, we take pride in introducing our cutting-edge degasifier systems, designed to elevate water treatment processes to new levels of efficiency and performance. Our systems are meticulously engineered to address the critical need for removing dissolved gases, ensuring exceptional water quality and enhancing the effectiveness of various industrial applications.

Our systems are engineered to effectively and efficiently remove unwanted dissolved gases, such as carbon dioxide (CO_2) and hydrogen sulfide (H_2S), from water. By eliminating these gases, our systems prevent corrosion, reduce the risk of scaling, and improve the overall reliability of your water treatment processes.

We understand that different industries and applications have unique degasification requirements. That's why aqualine offers a range of degasifier systems customized to meet the specific needs of each client.

- Custom Designs For Higher Capacities.
- Fully Automated System.
- Skid Mounted.



2-MEMBRANE TECHNOLOGY

2-1 AQUALINE RO ALFA SERIES	20
2-2 AQUALINE RO GAMA SERIES	22
2-3 AQUALINE RO TETRA SERIES	24
2-4 AQUALINE UF SYSTEMS	26
2-5 AQUALINE EDI SYSTEMS	28

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2- MEMBRANE TECHNOLOGY

2-1 TAP WATER TREATMENT SYSTEMS

Tap water, also known as municipal water or public water supply, is the water that comes directly from the faucets or taps in our homes, offices, and other buildings. It is the water supplied to us by the local government or water utility companies through a network of pipes and distribution systems.



- Standard Capacities 5 90 CMD.
- Membrane Vessels FRP.
- Compact Design.
- Easy & Auto Operation.
- Short Lead Time.
- Plug & Play.
- CF Approved.

ADVANTAGES

- Up To 90 99 % Removal Of Water Inlet Contaminants.
- Deliver High Performance At Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking & Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- Agriculture.
- Water Bottling Industry.
- Domestic Use.
- Commercial & Industrial Use.
- Municipal Water Supply.
- Boiler Feed Water.
- Hotels & Resorts.
- Potable Drinking Water.
- Agricultural & Irrigation.
- Municipal Water Treatment.
- Food & Beverage Industries.

AQUALINE RO ALFA SERIES

These systems are designed to handle tap water with a low salinity level. The TDS level of tab water typically falls up to 2,000 ppm.

Our full line of tap water reverse osmosis systems are available with a wide range of capacities with our Standard Models (Alfa 140 - Alfa 1540).

RECOMMENDED FEED WATER LIMITS

Feedwater TDS: 0 - 2000 ppm

Feedwater Pressure: 2 - 5 bar Feedwater pH Range: 6 - 8

Silica (SiO2) Tolerance: 25 ppm max Feedwater Temperature: °10C - °30C

Iron (Fe) Tolerance: 0.05 ppm (without ASC dosing)

0.2 ppm (with ASC dosing)

EXTRA OPTIONS

- Custom Designs For Higher Capacities.
- High Pressure Multi Stages .
- Automatic Rinsing CIP System.
- Touch Screen Control Panel.
- CS/SS304 Stainless Steel Skid.



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2- MEMBRANE TECHNOLOGY

2-2 BRACKISH WATER TREATMENT SYSTEMS

Brackish water consists of more total dissolved solids than tap water, but has lower salinity than and seawater, usually arises from underground water sources. Impurities in the water makes it difficult to use in many applications.



- Standard Capacities 24- 2500 CMD.
- Compact Design.
- Easy Maintenance.
- Easy & Auto Operation.
- Short Lead Time.
- Plug & Play.
- CF Approved.

ADVANTAGES

- Up To 90 99 % Removal Of Water Inlet Contaminants.
- Deliver High Performance At Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking & Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- Agriculture.
- Water Bottling Industry.
- Domestic Use.
- Commercial & Industrial Use.
- Municipal Water Supply.
- Boiler Feed Water.
- Hotels & Resorts.
- Potable Drinking Water.
- Agricultural & Irrigation.
- Municipal Water Treatment.
- Food & Beverage Industries.

AQUALINE RO GAMA SERIES

Brackish water reverse osmosis systems (BWRO) are industrial and commercial water purification systems designed specifically to treat brackish water. These systems utilize the process of reverse osmosis (RO) to remove impurities, salts, and other contaminants from brackish water beside the present of well designed pre-treatment, making it suitable for various industrial and commercial applications.

BWRO systems are designed to handle brackish water with a higher salinity level. The TDS level of brackish water typically falls between 2,000 ppm to 10,000 ppm. The system is designed to handle higher pressure than tap water RO.

Our full line of brackish water reverse osmosis systems are available with a wide range of capacities with our standard models (Gama 180 - Gama 9680)

RECOMMENDED FEED WATER LIMITS

Feedwater TDS: 2000 - 10,000 ppm

Feedwater Pressure: 2 - 5 bar Feedwater pH Range: 6 -8

Silica (SiO2) Tolerance: 25 ppm max Feedwater Temperature: °10C - °30C

Iron (Fe) Tolerance: 0.05 ppm (without ASC dosing)

0.2 ppm (with ASC dosing)

EXTRA OPTIONS

- Custom Designs For Higher Capacities.
- History Of Alarms Info Records.
- Automatic Rinsing-CIP Systems.
- Touch Screen Control Panel.
- CS/SS304 Stainless Steel Skid.





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2- MEMBRANE TECHNOLOGY

2-3 SEAWATER REVERSE OSMOSIS SYSTEMS

Seawater is the water found in the earth's oceans and seas. It is the salty water that covers about 71% of the planet's surface and is one of the primary components of the hydrosphere. Seawater differs from freshwater, which is found in rivers, lakes, and underground aquifers, in that it has a much higher concentration of dissolved salts and minerals.





- Standard Capacities 180-1500 CMD.
- Compact Design.
- Easy & Auto Operation.
- Easy Maintenance.
- CF Approved.

ADVANTAGES

- Up To 90 99 % Removal Of Water Inlet Contaminants.
- Deliver High Performance At Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking & Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- Agriculture.
- Water Bottling Industry.
- Domestic Use.
- Commercial & Industrial Use.
- Municipal Water Supply.
- Boiler Feed Water.
- Hotels & Resorts.
- Potable Drinking Water.
- Agricultural & Irrigation.
- Municipal Water Treatment.
- Food & Beverage Industries.
- Desalinator For Boat.
- Island-Based Businesses.
- Cargo Ships.

AQUALINE RO TETRA SERIES

Seawater treatment systems, are a set of processes and technologies used to remove salt and other impurities from seawater. We provide a selection of industrial and commercial seawater reverse osmosis systems that are designed to meet your desalination needs.

SWRO systems are designed to handle Seawater with a higher salinity level that cannot be treated with standard brackish RO systems. The TDS level of seawater is typically more than 10,000 ppm. The system is designed to handle higher pressure than brackish water RO.

Our full line of SWRO systems are available with a wide range of capacities with our standard models (Tetra Px 1280 - Tetra Tc 3080).

RECOMMENDED FEED WATER LIMITS

Feedwater TDS: >10.00 ppm Feedwater Pressure: 2 - 5 bar Feedwater pH Range: 6 - 8

Silica (SiO2) Tolerance: 25 ppm max Feedwater Temperature: °10C - °30C

Iron (Fe) Tolerance: 0.05 ppm (without ASC dosing) 0.2 ppm (with ASC dosing)

- Custom Designs For Higher Capacities.
- Automatic Rinsing CIP System.
- History of alarms info records.
- Automatic Rinsing CIP System.
- Touch Screen Control Panel.
- CS/SS304 Stainless Steel Skid.



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2- MEMBRANE TECHNOLOGY

2-4 ULTRAFILTRATION SYSTEMS (UF)

Ultrafiltration (UF) systems are a type of water treatment technology used to separate suspended particles, colloids, and high molecular weight substances from water. UF is a membrane-based filtration process that uses semi-permeable membranes with small pore sizes to remove contaminants while allowing water and low molecular weight solutes to pass through.



- Standard Capacities 1- 5000 CMD.
- UF Modules (PVC).
- Stainless Steel Backwash Pump.
- Compact Design.
- Easy & Auto Operation.
- Short lead Time.
- Plug & Play.
- -CF Approved.

ADVANTAGES

- Reduce Suspended Solids
- Remove Large Microns.
- High Tolerance To Changing Temperatures.
- Deliver High Performance at Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking & Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- RO Pretreatment.
- Drinking Water Treatment.
- Water Recycling And Reuse.
- Grey Water Treatment.
- Surface Water Treatment.
- Industrial Waste Treatment.

AQUALINE UF SYSTEMS

AQUALINE engineers and manufactures the most advanced Ultrafiltration (UF) systems for water treatment purposes that fit the needs of different industries and application.

Ultrafiltration systems eliminate the need for clarifiers and multimedia filters. Standard design is based on a UF module with outside-in flow configuration which allows for less plugging, higher solids loading, higher flow area and easy cleaning.

The water filtration efficiency achieved by UF systems are around 250 times greater than conventional media filtration systems. These plants are generally considered to be of low cost, easy to operate, carry no contaminate residue, and have considerably high recovery ratio.

EXTRA OPTIONS

- Custom Designs For Higher Capacities.
- Chemically Enhanced Backwash (CEB).
- Membrane cleaning skid (CIP).
- Blower (for backwash).
- Touch Screen Control Panel.
- CS/SS304 Stainless Steel Skid.



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2- MEMBRANE TECHNOLOGY

2-5 ELECTRODEIONIZATION SYSTEMS

Electrodeionization (EDI) is a water purification technology that combines aspects of both ion exchange and electrodialysis processes to produce high-purity water, typically in conjunction with reverse osmosis (RO) and other purification devices.



- Standard Capacities 1 1000 CMD.
- High Operating Temperature Pressure (up to 100 psig feed).
- Compact Design .
- Easy & Auto Operation.
- Short lead Time.
- Plug & Play.
- CF Approved.

ADVANTAGES

- Remove Ion 90 95%.
- High-Purity Water.
- Deliver High Performance At Low Life-Cycle Costs.
- Energy Efficient.
- Purified Water Suitable For Drinking & Irrigation.
- Eco-Friendly Systems.

APPLICATIONS

- Laboratory Water.
- Power Generation.
- Cosmetics.
- Boiler Feed.
- Pharmaceutical.
- Chemical Production.

AQUALINE EDI SYSTEMS

Our high-quality modules continually produce ultra-pure water up to $18.2M\Omega/cm$. EDI may be run continuously or intermittently. Electrodeionization is a green solution for deionizing water. With no expensive chemical upkeep and virtually no down-time, electrodeionization units are the future in deionization.

EDI modules are on average miniature in size and weight in terms of per unit flow in the market. EDI water purification systems do not require shutdowns for replacing resin beds or for resin regeneration using chemicals. As a result the EDI minimizes water quality upsets and operating costs.

EDI has become the solution of choice, lower operating expenses and fewer maintenance requirements makes EDI the cost effective choice. These systems also require minimal energy to provide steady, and persistent ultra pure water. EDI water purification systems utilize compact footprints, which benefits water treatment plants in using less available space to provide the same amount of water.

EXTRA OPTIONS

- Custom Designs For Higher Capacities.
- A complete, Power Supply Assembly.
- Flow And Quality Monitoring Instrumentation.
- Modular System More Flexible, Easy To Expand.
- CS/SS304 Stainless Steel Skid.
- Touch Screen Control Panel.



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3- FILTRATION SYSTEMS

3-1 AQUALINE MULTIMEDIA SAND FILTERS	33
3-2 AQUALINE ACTIVATED CARBON FILTERS	34
3-3 AQUALINE SPECIAL MEDIA FILTER	35
3-4 PALLAS PP FILTERS CARTRIDGES	36
3-5 HIGH FLOW FILTERS	37



3- FILTRATION SYSTEMS

Filtration systems are a critical component of the purification process. They are designed to remove suspended solids, fine particles, and impurities from raw water sources to produce clean and safe drinking water. More over it use as pre-treatment to protect the reverse osmosis systems.



- Stander Capacity 1 5000 CMD.
- FRP, Epoxy Coated Carbon Steel-Maximum Operation Pressure Is 6 Bar.
- Timer Controlled Back Wash.
- Pneumatically Actuated Butterfly Valves
- Manual Valves.
- Bottom & Top Is Lateral Diffuser.
- PVC-U Material Surface Piping.
- Sample Taps & Manometers In The Inlet & Outlet Of The System.
- Electronic Card Or Siemens Logo Control Panel.
- Electric 220V /50 Hz /1 pH.

ADVANTAGES

- Remove Total Suspended Solids (TSS)
- Remove Particles Of Various Sizes & Insoluble Materials In Water.
- Turbidity Reduction.
- Automatic Systems.
- Long Filter Life.

APPLICATIONS

- Municipal Water Treatment.
- Industrial Processes.
- Chemical Processing.
- Ro Pre-treatment.
- Irrigation Systems.
- Drinking Water Treatment.
- Wastewater Treatment.
- Beverage and Food Industry.

3- FILTRATION SYSTEMS



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3-1 MULTIMEDIA SAND FILTERS

Aqualine Multimedia-sand filtration systems are efficient units used to remove total suspended solids (TSS), particles of various sizes and insoluble materials in water.

In addition to retaining the suspended solids, sand filters also protect the units to be installed after it from sediment and coarse particles. The most important parameters of this filtration process are water flow and media selection. Quartz and anthracite in different diameters and sizes are used in multimedia-sand filtration units that provide treatment in different micron sizes.

Aqualine multimedia sand filters may offer customization options to suit specific water quality challenges and flow rates. Different combinations of filter media can be selected based on the type of contaminants present in the water.

- Custom Designs For Higher Capacities.
- Stainless Steel Tank.
- Differential pressure Control.
- Vessel Orientation Is Vertical Or Horizontal.
- Galvanised Surface Piping.
- Touch Screen Control Panel.
- Electrical Actuated Valves.
- Pneumatical Actuated Valves.



- Stander Capacity 1 5000 CMD.
- FRP, Epoxy Coated Carbon Steel.
- Maximum Operation Pressure Is 6 Bar.
- Timer Controlled Back Wash.
- Pneumatically Actuated Butterfly Valves
- Bottom & Top is Lateral Diffuser.
- PVC-U Material Surface Piping.
- Sample Taps & Manometers In The Inlet & Outlet Of The System.
- Electronic Card Or Siemens Logo Control Panel.
- Electric 220V /50 Hz /1 pH.

ADVANTAGES

- Color & Turbidity Reduction.
- Removes Free Chlorine, Free Ozone, Fatty Acids & Humic Acid.
- Automatic Systems.
- Long Filter Life.

APPLICATIONS

- Municipal Water Treatment.
- Industrial Processes.
- Chemical Processing.
- Ro Pre-treatment.
- Irrigation Systems.
- Drinking Water Treatment.
- Wastewater Treatment.
- Beverage & Food Industry.

3- FILTRATION SYSTEMS



3-2 ACTIVATED CARBON FILTERS

Activated carbon filtration system is used for color, taste, odor, and organic removals in drinking and utility waters. In addition, it removes unwanted contaminants such as free chlorine, free ozone, fatty acids and humic acid from the water.

Thanks to the very large surface areas of the activated carbon media, it accumulates impurities on itself by means of adsorption, and due to its structure, it is not possible to remove solid substances from its microscopic pores by backwashing. Therefore, in order for the activated carbon units to be used for a long time, they must pass through appropriate mechanical filtration and pre-treatment units.

Customization is a powerful aspect of aqualine's activated carbon filters. We understand that every water source and purification requirement is unique. That's why we offer a range of customization options to address specific water quality challenges and flow rate needs.

- Custom Designs For Higher Capacities.
- Stainless Steel Tank.
- Differential Pressure Control.
- Vessel Orientation Is Vertical Or Horizontal.
- Electrical Actuated Valves.
- Pneumatical Actuated Valves.
- Galvanised Surface Piping.
- Touch Screen Control Panel.



- Stander Capacity: 1 5000 CMD.
- FRP, Epoxy Coated Carbon Steel.
- Maximum Operation Pressure Is 6 Bar.
- Timer Controlled Back Wash.
- Bottom & Top is Lateral Diffuser.
- PVC-U Material Surface Piping.
- Sample Taps & Manometers In The Inlet & Outlet Of The System.
- Electronic Card Or Siemens Logo Control Panel.
- Electric 220V /50 Hz /1 pH.
- CE Approved.

ADVANTAGES

- Remove Speacial Contaminants.
- Automatic Systems.
- Long Filter Life.
- Cost Saving.
- Eco-Friendly.

APPLICATIONS

- Municipal Water Treatment.
- Industrial Processes.
- Chemical Processing.
- Ro Pre-treatment.
- Irrigation Systems
- Drinking Water Treatment.
- Wastewater Treatment.
- Beverage & Food Industry.

3- FILTRATION SYSTEMS



3-3 AQUALINE SPECIAL MEDIA FILTER

AFM FILTER

AFM® is an inert, amorphous aluminosilicate (glass) manufactured by up-cycling postconsumergreen and brown glass bottles and operated specifically for the production of activated glass water filtration media. AFM® is very popular for swimming pool filters, for water purification plants (gravity filters) and for industrial water treatment filters.

FILOX R FILTER

Filox R is a filter media that consists of %75-85 manganese dioxide. As the level of M_nO_2 is very high (Birm contains $\%1~MgO_2$, greensand contains $\%3~MgO_2$), it is an excellent media to remove iron, manganese and hydrogen sulfide.

AG FILTER

Filter AG is a crystalline silica (quartz) used for the reduction of suspended solids. It is an excellent alternative for sand/silex offering many advantages due to the light weight and irregular shapes of the grains. It also can be used to filter oxidized iron after aeration, ozonation or chlorination

CRYSTAL-RIGHT FILTER

Crystal Right is a synthetic zeolite without impurities and with predefined grain sizes developed for the treatment of well water.



- Personalized Logo/ Label.
- Optional End-caps Available.
- Spun / Wound / Platted 4 / "2.5" Diameter.
- Available In Different Sizes 10" -20"- 30"- 40" & In Different Grades: 1μ - 5μ - 10μ - 25μ.
- High Depth Filtration.
- Compact Design.
- CE Approved.

ADVANTAGES

- Remove Solid Particles.
- Low Pressure Drop.
- High Stability.
- Long Filter Life.
- Cost Saving.
- Eco-Friendly.

APPLICATIONS

- Ro Pre-treatment.
- Domestic Use.
- Swimming Pools.

3- FILTRATION SYSTEMS

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3-4 PALLAS PP CARTRIDGES FILTER

The number of different brands and types of filters seems unlimited. We made our selection starting from the most common cartridge filters, to the self cleaning filters and industrial multi cartridge and magnetic bag filters.

The Pallas PP Cartridge is a melt-blown polypropylene cartridge and is fully produced by the Pollet Water Group. The certified raw material, the flexibility of our own production and the possibility for personalization are just a few benefits of this new cartridge range.





- Custom Designs For Higher Capacities.
- Stander Capacity : Up To 60 CMH Per Set.
- Anti-corrosion FRD Sheath Designs.
- Remove Sensitivity 1.5 μ.
- Compact Design.
- CE Approved.

ADVANTAGES

- Remove Solid Particles.
- Long Filter Life.
- Cost Saving.
- Eco-Friendlu
- Modular Design.

APPLICATIONS

- Pre-treatment.
- RO Pre-Filtration.
- Sea Water Desalination.
- Bottled water filtration.

3- FILTRATION SYSTEMS



3-5 HIGH FLOW CARTRIDGE FILTERS

The number of different brands and types of filters seems unlimited. We made our selection starting from the most common cartridge filters, to the self cleaning filters, followed by the large Cintropur filter range and finally the industrial multi cartridge and magnetic bag filters.

The Styre system is designed for filtration system technology. We respond to market needs and requirements by emphasizing analytical applications, cartridge filter maintenance and protection. It offers high quality as well as low cost and operating costs. Our innovative patented designs allow easy and quick maintenance and reduce your failure time to the minimum, ensuring your system runs smoothly.





4- ION EXCHANGE FILTERS

4-1 AQUALINE SOFTENER SYSTEMS	41
4-2 AQUALINE METAL REMOVAL SYSTEMS	42
4-3 AQUALINE DEIONIZED WATER SYSTEMS	43
4-4 AQUALINE NETRIN REMOVAL SYSTEMS	44
4-5 AQUALINE REMINERALIZATION SYSTEMS	45



4- ION EXCHANGE FILTERS

lon exchange filters are a type of water treatment system designed to remove specific ions (charged particles) from water by replacing them with other ions. These filters use a resin or exchange material that is capable of exchanging ions with the water passing through the system.



- Stander Capacity: 1 5000 CMD.
- Single Systems
- Epoxy Painted Carbon Steel & FRP Tanks.
- Aqualine Brand Cationic Resin.
- Maximum Operation Pressure Is 6 Bar.
- Manual Valves.
- Bottom Collector Structure Is Lateral Diffuser.
- PVC Material Surface Piping
- Electronic Card Or Siemens Logo Control Panel.
- Electric 220V / 50 Hz / 1 pH.
- CE Approved.

ADVANTAGES

- Removing Scale-forming Minerals Like Calcium & Magnesium.
- Longer Life Span.
- Saving Cost.
- Low Maintenance Cost.
- Less Water Spotting.

APPLICATIONS

- Municipal Water Treatment.
- Industrial Processes.
- Chemical Processing.
- Ro Pre-treatment.
- Irrigation Systems.
- Drinking Water Treatment.
- Wastewater Treatment.
- Beverage & Food Industry.

4- ION EXCHANGE FILTERS



4-1 AQUALINE SOFTENER SYSTEMS

When water is hard, it can clog pipes, damage boilers, heat exchangers, and many other devices. Water softener system can prevent these negative effects. Hard water causes a higher risk of lime scale deposits in industrial, commercial and household water systems.

Through the process of ion-exchange, water softener systems work in removing magnesium and calcium found in the water by replacing them with sodium ions. As the hard water is introduced in the mineral tank, it meets a bed of resin beads that grab hold of the mineral ions, which effectively releases the sodium ions.

Water softener systems are capable of working to their fullest capacity for up to 20 years. Our water softeners are designed for maximum durability and reliability in regards to system malfunction.

- Custom Designs For Higher Capacities.
- Duplex, Triplex Systems.
- Stainless Steel Tank.
- Timer Controlled.
- Volum Control.
- Total Hardness Monitor & Control.
- Top Mountin Valve.
- Electric Actuated Butterfly Valves.
- Pneumatic Actuated Butterfly Valves.
- Galvanised Surface Piping.
- Touch Screen Control Panel.



- Standard Capacity: 1 5000 CMD.
- Single Systems.
- Epoxy Painted Carbon Steel & FRP Tanks.
- Variety Of Resins Like (As-Fe-Mn, Birm, Aquamandix).
- Maximum Operation Pressure Is 6 Bar.
- Manual Valves.
- Bottom Collector Structure Is Lateral Diffuser.
- PVC Material Surface Piping.
- Electronic Card Or Siemens Logo Control Panel.
- Electric 220V / 50 Hz / 1 pH.
- CE Approved.

ADVANTAGES

- Reduces Iron & Manganese from water.
- Longer Life Span.
- Saving Cost.
- Low Maintenance Cost.
- Less Water Spotting.

APPLICATIONS

- Municipal Water Treatment.
- Industrial Processes.
- Chemical Processing.
- Ro Pre-treatment.
- Irrigation Systems.
- Drinking Water Treatment.
- Wastewater Treatment.
- Beverage & Food Industry.

4-ION EXCHANGE FILTERS



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4-2 AQUALINE METAL REMOVAL SYSTEMS

Specialized water treatment solution designed to remove arsenic, iron, and manganese contaminants from water sources. These three elements are often found in natural water sources and can pose health risks and aesthetic issues when present in elevated concentrations.

Iron and manganese ions dissolved in water cause an increase in turbidity, color and increase in bacterial contamination. Since it is toxic even in very low concentrations, removal of arsenic, iron and manganese is important in the food, textile, plastic, paper and leather industries as well as drinking water.

With the special minerals used in this filter, heavy metals are oxidized and discharged through backwashing with water. These units, which we offer with surface piping, operate fully automatically with the use of electric or pneumatic actuators.

- Custom Designs For Higher Capacities.
- Duplex, Triplex Systems.
- Stainless Steel Tank.
- Timer Controlled.
- Volum Control.
- Top Mountin Valve.
- Galvanised Surface Piping.
- Touch Screen Control Panel.
- Electric Actuated Butterfly Valves.
- Pneumatic Actuated Butterfly Valves.



- Standard Capacity: 1 5000 CMD.
- Single Systems.
- Epoxy Painted Carbon Steel & FRP Tanks.
- Mixed Bed Resin.
- Maximum Operation Pressure Is 6 Bar.
- Manual Valves.
- Bottom Collector Structure Is Lateral Diffuser.
- PVC Material Surface Piping.
- Electronic Card Or Siemens Logo Control Panel.
- Regeneration & Backwashing
- Electric 220V / 50 Hz / 1 pH.
- CE Approved.

ADVANTAGES

- Removing almost All Ions.
- Long Filter Life.
- Cost Savina.
- Eco-friendlu.

APPLICATIONS

- Laboratories
- Pharmaceutical & Biotechnology.
- Electronics Manufacturing.
- Power Plants.
- Chemical Manufacturing.
- Food & Beverage Industry.

4- ION EXCHANGE FILTERS



4-3 AQUALINE DEIONIZATION SYSTEMS (DI)

Deionization systems work by replacing negative and positive molecules in the water with hydrogen (positive) and hydroxyl (negative) molecules. In effect, organic substances are removed through filtration which improves the quality of the water and prevents the formation of scale deposits forming. For this reason, deionized water is one of the most preferred options of use in factories and manufacturing facilities.

Our deionized water systems are rugged, pre-engineered, pre-assembled, standardized units that minimize expensive installation and start-up costs. We have designed our di water system to maximize the efficiency and repeatability of the unit during the service and regeneration modes.

- Custom Designs For Higher Capacities.
- Duplex, Triplex Systems.
- Stainless Steel Tank.
- Timer Controlled.
- Volum Control .
- Top Mountin Valve.
- Automatic Controlled.
- Galvanised Surface Piping.
- Touch Screen Control Panel.
- Electric Actuated Butterfly Valves.
- Pneumatic Actuated Butterfly Valves.



- Standard Capacity: 1 5000 CMD.
- Single Sustems.
- Epoxy Painted Carbon Steel & FRP Tanks.
- Aqualine Nitrate Resin.
- Maximum Operation Pressure Is 6 Bar.
- Manual Valves.
- Bottom Collector Structure Is Lateral Diffuser.
- PVC Material Surface Piping.
- Electronic Card Or Siemens Logo Control Panel.
- Regeneration & Backwashing .
- Electric 220V / 50 Hz / 1 pH.
- CE Approved.

ADVANTAGES

- Reduce The Concentration Of Nitrates In Water.
- The systems Can Be Tailored To Specific Applications & Nitrate Levels
- Ensures That Drinking Water Is Safe For Consumption.
- Long Filter Life.
- Cost Saving.
- Eco-friendly.

APPLICATIONS

- Municipal Water Treatment.
- Industrial Processes.
- Chemical Processing.
- Ro Pre-treatment.
- Irrigation Systems.
- Drinking Water Treatment.
- Wastewater Treatment.
- Beverage & Food Industry.

4- ION EXCHANGE FILTERS



4-4 AQUALINE NITRATE REMOVAL SYSTEMS

Nitrates (NO3 -) are chemical compounds composed of nitrogen and oxygen, and they can occur naturally in groundwater or be introduced through human activities like agricultural runoff and sewage discharge.

Aqualine nitrate removal systems designed to reduce the concentration of nitrates in drinking water and / or wastewater. We have designed systems to maximize the efficiency and repeatability of the unit during the service and regeneration modes.

- Custom Designs For Higher Capacities.
- Duplex, Triplex Systems.
- Stainless Steel Tank.
- Timer Controlled.
- Volum Control.
- Top Mountin Valve.
- Electrically Actuated Valves.
- Galvanised Surface Piping.
- Touch Screen Control Panel.
- Electric Actuated Butterfly Valves.
- Pneumatic Actuated Butterfly Valves.



- Standard Capacity: 1 5000 CMD.
- Single Systems.
- Epoxy Painted Carbon Steel & FRP Tanks
- Aqualine Dolomite Filtration Media.
- Maximum Operation Pressure Is 6 Bar.
- Manual Valves.
- Bottom Collector Structure Is Lateral Diffuser.
- PVC Material Surface Piping.
- Electronic Card Or Siemens Logo Control Panel.
- Regeneration and Backwashing.
- Electric 220V / 50 Hz / 1 pH.
- CE Approved.

ADVANTAGES

- Adjusting pH In Water.
- Removal Of A Limited Amount Of Iron.
- Long Filter Life.
- Cost Saving.
- Eco-friendly.

APPLICATIONS

- Municipal Water Treatment.
- Industrial Processes.
- Chemical Processing.
- Ro Pre-treatment.
- Irrigation Systems.
- Drinking Water Treatment.
- Wastewater Treatment.
- Beverage & Food Industry.

4- ION EXCHANGE FILTERS



4-4 AQUALINE REMINERALIZATION SYSTEMS

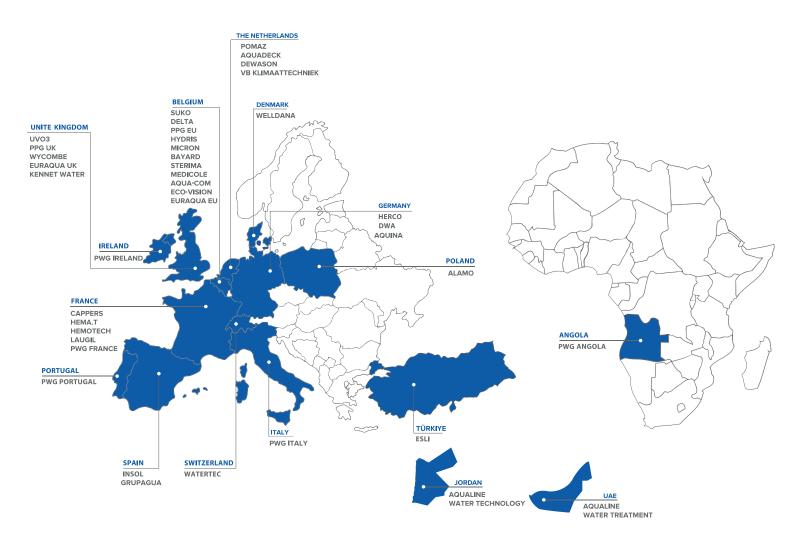
Dolomite is a naturally occurring mineral composed of calcium magnesium carbonate, and its unique properties make it useful for certain water treatment applications. A remineralization system is a type of water treatment system that utilizes dolomite media to enhance water quality by addressing issues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

Product water with a low pH is passed through the remineralization system, increasing the quantities of calcium, magnesium and carbonate in the water. By doing so, the remineralization process is completed. Remineralizatio systems are capable of working to their fullest capacity for up to 20 years. Our water filters are designed for maximum durability and reliability in regards to system malfunction.

- Custom Designs For Higher Capacities.
- Duplex, Triplex Systems.
- Stainless Steel Tank.
- Timer Controlled.
- Volum Control.
- Top Mountin Valve.
- Automatic Controlled.
- Electrically Actuated Valves.
- Galvanised Surface Piping.
- Touch Screen Control Panel.
- Electric Actuated Butterfly Valves.
- Pneumatic Actuated Butterfly Valves.









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