





BRITANNIC WATER SINCE 1998 TREATMENT CO W.L.L

FOR RESIDENTIAL, COMMERCIAL & INDUSTRIES















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Britannic Water Treatment Co (BWTC) W.L.L. Is an ISO 9001: 2015 certified pioneer company, leading in the field of Water & Waste water treatment technologies. It is a Doha based company established in the year 1998 under sponsor ship Dr.Ahmed Hajjar and Mr.Ahmed Abdulla Ahmed Alkhal. BWTC has provided flawless services and supports for last two decades. We offer single source responsibility for complete water treatment solutions for all sectors.

Since 1998 Britannic Water Treatment Company has established a high reputation and goodwill among the customers through high service.

Britannic has got professional engineers, skilled technicians, electricians and professional Sales Personnel who will exactly suggest you the water systems according to your water condition and type of building, commercial requirements. BWTC deserves to provide its esteemed customers with maintenance within 24 hours of their complaints if any.

Britannic Water Treatment Company is known to treat any kind of water such as sea water, bore well/brackish water, Municipal water, grey water, sewage water, industrial effluents etc.. for both domestic and commercial purposes. We has got a strong backup of esteemed customers who are extremely satisfied with our products and services.

Our range can be customized according to client's needs and we offer customization on various parameters like capacity raw material used and dimensions. We are the fastest and largest growing integrated water solution provider in the country backed by supplying top brand products and dedicated manpower, working constantly to ensure maximum client satisfaction.

However, if you require any further information/clarifications, please feel free to contact us and we shall be glad to furnish you the same.

Thanks.

Gilbert Daniel- Sales & Technical Head











OUR SERVICES









Our main service is the design, detailed engineering, consultancy, production, supply, installation and commissioning of water treatment system such as Multimedia filters, Activated carbon filters, Water softeners, chemical dosing system etc..., chilled water treatment system, RO desalination plants, grey water treatment systems etc.

DESIGN, BUILD AND OPERATE

At Britannic we have full capability to provide full turnkey package covering all areas of Design, build and operate.

PROCESS DESIGN

Britannic has an in house resource to provide you with full process design for all water and waste water treatment and plumbing applications.

COMMISSIONING AND HANDOVER

We have completed more than 100 projects of water treatment system. Based on this extensive experience, we have an in-depth knowledge and capability to commission and put into operation a wide variety of successful projects and technologies. Our projects delivery programmes ensure that all water treatment are satisfactorily handed over to clients.

SERVICE AND REPAIRS

Britannic provides ultimate service for all our equipment, systems and services time to time. We have dedicated drilled technical team to helping customers to optimize the performance of their processes. Water systems require regular monitoring and maintenance to protect against fluctuating water conditions. With Britannic at your service, you are guaranteed peace of mind with the assurance of efficient operation and long equipment life.

Our localized service allows us to schedule service and repairs as and when you need it. Our service contracts and preventive maintenance agreements include extended warranties, emergency repairs and complete replacement of necessary spares and consumables.

QUALITY POLICY, MISSION & VISION

OUR QUALITY POLICY

Britannic Water Treatment Co W.L.L; deserves and committed to provide our customers with high quality products and services that meet the intended purpose within the agreed time frame and budget. We strive for good performance at minimum maintenance cost. Our products are approved by most of the consultants and are recommended by them for usage by all OEMs and in all major sectors. Our policy is to overall objective is to be recognized by our customers as the leading water treatment suppliers in Qatar. We will achieve this objective by fully satisfying each and every client. To this end, each department will set up its own Key Performance Objectives (KPO) that contributes to the attainment of the company's objective. The policy is to review the progress toward our objectives and will be measured at least twice a year for suitability. Relevant corrective actions will be done for any deviation.

- »» We provides customer with the best value for their resources expended.
- »» We provide open and effective communication with customers and suppliers.
- »» We provide a system of continuous improvement across all disciplines.

OUR MISSION

Our company mission is to provide superior quality products and services to our customers of optimum quality by combining our expertise, management capabilities, highly professional systems, state of the art machinery and high potential to provide quality works that satisfies our clients' needs and meets their requirements and expectations.

- **»»** By conducting the business with honesty and integrity.
- »» We aim to deliver all our projects in a professional manner with and uncompromising view to quality and ethical considerations.

OUR VISION

The vision of BWTC product systems is to expand the working horizon to cover many customers over the country.

Britannic offers a complete line technology of domestic water purifiers for drinking, cooking applications..

- Multi stages purification by sediment, carbon, carbon block filters, optional RO, UV & UF.
- Excellent removal of dissolved impurities such as suspended solids, turbidity, sediments, microbes, giardia cysts, cryptosporidium cysts, free chlorine, volatile organic compounds, pesticides, herbicides, chorine bi-products such as THM's bacteria, viruses etc..
- Heavy duty rugged polypropylene construction.
- High operating temperature.
- Compact & sturdy design.







SYSTEM FEATURES

- Extensively used for drinking, cooking, ice maker's machine, coffee makers machine etc...
- Long life filters cartridges.

MULTIMEDIA FILTERS

Britannic undertakes the design, supply and installations of Multimedia sand Filters and the associated peripheral system or equipment's.

Multi media filtration is the most common application in any water treatment facility or requirement. Sand Filters are the Pre-filter which improves physical, chemical and biological characteristics of water. They are designed to remove suspended and colloidal impurities from water by passage through a bed of granular medias. 98% of bacterial load can be removed and this percentage may high as 99.9% if the pretreatment has been given for the raw water. This duty is succeeded when the raw water pumped and fills the pores of the filter medium, and the impurities are absorbed on the surface of the grains or trapped in the openings.

- Turbidity less than 0.5NTU
- Cysts forming harmful microorganisms such as giardia
- Suspended solids upto 99%
- Silt, clay, grit, organic matters, algae and other microorganisms.



Pressure vessel complies with ASME, NSF & European pressure equipment's directives.



Gravels (8-12mm)

SALIENT FEATURES:

Gravels (5-8mm)

- ✓ 100% corrosion resistant constructed pressure vessel
- ✓ GF PP inlet for higher strength, temperature, & pressure capabilities.
- Composite design with excellent strength, durability & leak free bonding.
- 250,000 times cycle tests from 10-150 psi with standing pressure.
- ✓ Automatic backwash controller based one timer, meter, meter delayed, differential pressure & optional manual backwash.
- Extensively used for residential, commercial, hotels, hospitals, public stations etc..

ACTIVATED CARBON FILTERS

Britannic undertakes the design, supply and installations of Activated carbon filters and the associated peripheral system or equipment's.

Activated carbon filtration system is valuable for a variety of applications. They are used to remove undesirable taste, chlorine and organic chemicals which is harmful for human. Activated carbon or active carbon is a form of carbon that are processed from natural vegetable nut shell to make it extremely porous. They removes many manmade chemicals and gases and in some cases it can be effective against microorganisms with low pressure drop. The ability of an activated carbon filter to remove certain microorganisms and organic chemicals, especially pesticides THM's (chlorine byproduct) and trichloro ethylene.



- ✓ High iodine value carbon ensure excellent absorption process.
- ✓ 1 gm of activated carbon provides surface area of 1000m2.
- ✓ Composite design with excellent strength, durability & leak free bonding.
- ✓ Long life of activated carbon upto 10 years based on source of water.
- Automatic backwash controller based one timer, meter, meter delayed, differential pressure & optional manual backwash.
- Extensively used for residential, commercial, hotels, hospitals, public stations etc..



WATER SOFTENERS

Britannic supplies conventional water softener system to remove inorganic hardness creating ions such as Calcium and magnesium from the raw water. Hard water is softened by removing the calcium and magnesium it contains. When hard water passes through the softening system resin bed, the calcium and magnesium ions are removed through an ion exchange process, so only softened water passes through to your service area. Water softening is an important process, because it can extend the life span of household appliance and pipelines. Automatic water softener is a Fiber glass reinforced polymer constructed vertical pressure vessel charged with strong acid polystyrene Cation exchange resins in Na* form. Internally it shall be fitted with top stack strainer to provide uniform flow and bottom hub & lateral collector to collect soft water without impurities. Externally it shall be fitted with H-PVC/PPR/Copper pipe work & automatically operated Multiport valves. Softener have to be regenerated once for every 24 hours continuous operation which is initiated by volumetric flow meter.

Also the unit shall be isolated for regeneration once it has delivered its specified output or treated water quality deteriorates whichever is earlier. Brine Solution is used for regeneration of Softener resin. For this purpose a FRP/PP Brine Measuring Tank is provided for measure / draw of required quantity of Brine for regeneration.



- Proven design and materials, efficient operation, easy to maintain and reliable.
- ✓ To reduce scale deposits over water heaters heating element which may get damage frequently.
- Increases life of bathroom fittings and appliances.
- ✓ Soft water increases effectiveness of soaps, shampoo for shower. Your soap and shampoo will lather better. Hair and skin will feel soft and clean.
- There will be no soap scum or mineral deposits on your sinks, showers, tubs and toilets.
- ✓ Also soft water cleanup dishes more easily and reduce consumption cleaning chemicals.
- Also you will get brighter and cleaner laundry. Using soft water increases life of clothes, towels and linens etc

MICRON CARTRIDGE FILTERS

Britannic supplies high grade single and multi-cartridge system which widely used to remove tiny particles such as sediments, microbes, clusters, debris etc..... Micron Cartridge filter is SS316 or GRP constructed housing and loaded with food grade cartridge filter which can be surface or depth-type filter: depth-type filters capture particles and contaminant through the total thickness of the medium, while in surface filters (that are usually made of thin materials like papers, woven wire, cloths) particles are blocked on the surface of the filter.

Surface filters are best if you are filtering sediment of similar-sized particles. If all particles are i.e. five micron, a pleated 5-micron filter works best because it has more surface area than other filters. Compared with pleated surface filters, depth filters have a limited surface area, but they have the advantage of depth. It can be generally stated that if the size of filter surface is increased, higher flows are possible, the filter last longer, and the dirt holding capacity increases. Cartridge filters are normally designed disposable: this means that they have to be replaced when the filter is clogged.

- 100% anti corrosive for more durability
- media cartridges which is superior chemical resistanceand is not prone to bacterial attack.
- Convenient band clamp lid closure is standard for easy cartridge replacement.
- Pipe fittings are readily accessible for easy installations.
- Adjustable top plate accepts variable length cartridges for more options.
- Legs and mounting tabs are available.
- Knife edge seals are provided at both ends of all ends of all DOE cartridges for superior performance.
- Rated for 250°F,(No plastic holding rods)
- Pressure rating to 150psi.
- Housing for pressures at 300psi is available.



ULTRA VIOLET STERILIZERS

Britannic supplies Ultra Violet sterilizer is very flexible in its applications for water treatment. We offer an economic, environmental friendly alternative to chemical process. There is no need for the addition of chemicals and there is no detrimental environmental impact as there are no chemicals residuals. Moreover, chlorine resistant bacteria such as cryptosporidium, giardia, coliform and legionella can be killed with UV light. UV disinfection is effective at wave length between 200 and 300nm. Emitted UV has a powerful bactericidal effect which penetrate to the heart of DNA and disturb the metabolism of cells until they are totally destroyed in seconds.

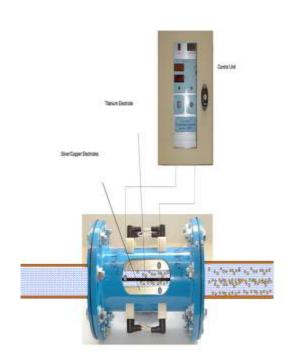
- 1. Effective against cysts creating bacteria such as giardia and cryptosporidium
- 2. Log reduction value (LRV) less than 3 i.e: (Remaining 1 in 1000 counts)
- 3. Removes harmful bacteria especially Legionella pnemophila.
- 4. Bacteria such as bacillus anthracis, e-coli, mycobacterium tuberculosis, salmonella typhosa (typhoid), shigella dysenteria (dysentery), major mold spores, chlorella vulgaris (algae).
- 5. Removes dangerous virus such as hepatitis virus, influenza virus, polio virus etc...



- UV light will not affect the taste, smell or pH Value of the drinking water.
- Proven log 4 reduction of contaminants and log 5
 contaminants of Legionella.
- ✓ Flexible compact installations.
- Long lamp life up to 13000 hours
- ✓ Robust heavy duty construction.
- ✓ Highly effective, chemical free performance.
- Minimal Maintenance.
- Optional audible alarm setup and intensity meter.







Britannic supplies Copper Silver ionization system which is Electrically charged copper ions (Cu2+) in the water search for particles of opposite polarity, such as bacteria, viruses and fungi. Positively charged copper ions form electrostatic compounds with negatively charged cell walls of microorganisms. These compounds disturb cell wall permeability and cause nutrient uptake to fail. Copper ions penetrate the cell wall and as a result they will create an entrance for silver ions (Ag+). These penetrate the core of the microorganism. Silver ions bond to various parts of the cell, such as the DNA and RNA, cellular proteins and respiratory enzymes, causing all life support systems in the cell to be immobilized. As a result, there is no more cellular growth or cell division, causing bacteria to no longer multiply and eventually die out. The ions remain active until they are absorbed by a microorganism

Copper-silver ionization can deactivate Legionella bacteria and other microorganisms in slow-running water and still water. Legionella bacteria are very susceptive to copper-silver ionization. Copper-silver ionization also takes care of bio film. Copper remains within the bio film, causing a residual effect. It appears that copper-silver ionization addition causes the number of Legionella bacteria to diminish. After a short period of time, however, the number of Legionella bacteria will rise again because they can also be found in the bio film. Copper that stays behind in the bio film takes care of these bacteria. When copper and silver ions are added to water constantly, the concentration of Legionella bacteria remains low. The deactivation rate of copper-silver ionization is lower than that of ozone or UV. A benefit of copper-silver ionization is that ions remain in the water for a long period of time. This causes long-term disinfection and protection from recontamination. Copper and silver ions remain in the water until they precipitate or absorb to bacteria or algae, and are removed from water by filtration after that.



Britannic do design, manufacture, supplies, install and commissioning most economical Reverse Osmosis system to remove 90% - 99% of contaminants from raw water. RO is highly effective in removing several impurities from water such as Total Dissolved Solids, turbidity, colloidal matters, asbestos, lead and other toxic heavy metals, radium and many dissolved organics. They also act as an ultra-filter removing particles such as some microorganisms that may be large to pass through the pores of the membranes. RO will not remove all contaminants from water as dissolved gases such as O2 & CO2. But it is effective at removing other products like Tri halo methane's, volatile compounds; solvents etc...The typical mol.cut off weight will be less than 150 Daltons.

- Drinking water for housing, hotels, Industries, Offshores, Rigs, Rural areas etc...
- Used for boiler feed water.
- Used for bringing ultra-pure water in electronics, semi-conductors, pharmaceuticals and medicals etc...
- Special applications for Juice concentration, metal recovery etc..
- Used as post treatment in Waste Water Recycle (Sewage & Effluent Treatment Plants)
- Operator Friendly: Simple physical pressure driven process resulting optimum degree of Automization with very less
 operating & monitoring efforts required.
- Flexibility: Modular design results into cost effective plant expansion with utmost else.



Britannic do design, manufacture, supplies, install and commissioning of packaged type grey/sullage water treatment system. The selection of a grey water treatment system offers the user a pre-engineered and pre-fabricated method of treating wastewater with chemical treatment, settling process, post ultra-filtration etc... Grey water is generated by any residential or commercial premise that is occupied, and as such the water can be recycled to provide a reliable source of water for activities that do not require drinking water quality(e.g. Irrigation, toilet flushing and washing). The characteristics of grey water produce by a residential premise will vary according to the number, age, life style, health status, and water usage patterns of the household occupants.

- Reduce fresh water use.
- Reduce strain on septic system or treatment plant.
- Develop otherwise unsuitable real estate.
- Ground water recharge & Well plant growth
- Maintain soil fertility and enhance quality of ground water.
- Save water, less discharge, usage satisfaction.

CHILLED WATER TREATMENT SYSTEMS

Britannic do supply, cleaning, flushing and passivation for the HVAC chilled water system. The objective of cleaning, flushing and passivation is to remove debris such as slit, sand, scale, iron oxide deposits, weld slug and other contaminants that are present in a new pipe work system, The passivation process inhibits the piping network or system from corrosion. The process of the pre-operational flushing and cleaning becomes more important as if these contaminants are to remain in the system then it directly affect the cooling system efficiency and reduces flow through the system. These contaminants also prevent formation of formation of uniform protective passivating layers which further leads to corrosion in the system.

Based on the above, it is of paramount importance to ensure that the proper pre-operational cleaning/flushing programme is carried out before the system is put into normal operation.

- Automatic control, available with 4-20m ADC direct or external pacing, with stop function.
- Manual control by online adjustable stroke rate and stroke length.
- Highly reliable timing circuit.
- Water resistant, for outdoor and indoor applications.
- Guided check ball check valve setup to reduce back flow and enhance outstanding pumping characteristics.
- Mild steel to BS 1387 welded to BS EN 287 construction dosing pot. Optional stainless steel dosing pot available as per request.









WATER TREATMENT ACCESSORIES & COMPONENTS



FILTER CARTRIDGES & BAGS







FILTER MEDIAS & SALT TABLETS











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