الشركة القطرية الدولية الاولى للالتكروميكانيك ذ.م.م

Qatar International First for Electro Mechanical Company W.L.L

ISO 45001

CONTENT

ABOUT US

Who We Are ?

The Qatar International First for Electro-Mechanical (QIFEM) was established in 2003, to serve the construction sector in the Qatari market. Qatar International First for Electro-Mechanical Grew to be one of the most Prominent & Reputable Companies in the state of Qatar, QIFEM Had earned a Reputation of Integrity and Exceptional services through a highly trained talented and loyal team of Managers, Engineers who increase the competitive edge & perceived value for the customer

What We Do?

Provides Engineering Services and Products to the Residential, Commercial and Industrial Projects,

How We Do?

Qatar International First for Electro-Mechanical Spectrum spans from pre-sales, Technical Support, Supply, maintenance & After Sales Services. Main Products: Water & Wastewater treatment, Air conditioning, Ventilation, Water products, Metering systems, Expansion Vessels, Pipes Support, Vibration Isolators, AirDistribution Product, Air Filtration Targeted Clients: Developers, Consultants, Main Contractors and MEP Contractors

COMPANY PROFILE 2024 | QIFEM

OUR VISION

To be pioneer in the Qatari & GCC markets in the field of Electro-Mechanical Engineering & Environmental services. To be the company that best understands and satisfies needs of customer.

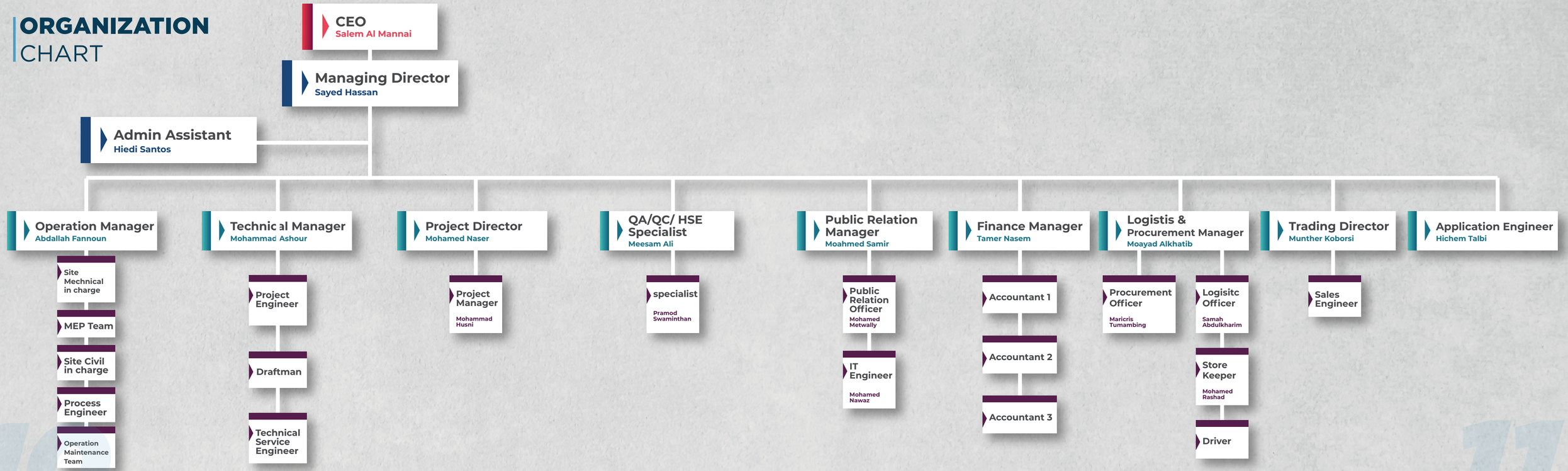
COMPANY PROFILE 2024 | QIFEM

OUR MISSION

To satisfy our customer needs through providing, state-of-the art products from the most well-known global manufacturer and offering after sales & technical support services.

COMPANY PROFILE 2024 | QIFEM

ORGANIZATION CHART



COMPANY PROFILE 2024 | QIFEM

PRODUCTS & SERVICES
WATER TREATMENT DEPARTMENT

DESALINATION SYSTEMS

DESALINATION SYSTEMS

• Brackish Water Reverse Osmosis

Brackish Water Reverse Osmosis (BWRO) plants are designed to treat ground/surface or industrial water with <10,000 mg/L of dissolved solids (TDS) and <30 mg/L of suspended solids (TSS), to achieve potable water quality. The standard treatment process involves pre filtration (auto-backwashing multimedia filters and cartridge filters), anti-scalant dosing to prevent membrane scaling, RO desalination and a CIP system for membrane cleaning. Additional pre-RO and post-RO treatment steps may be added as required to suit feed water conditions and/or treated water quality requirement. BWRO plants are available as skid mounted or containerized systems.

DESALINATION SYSTEMS

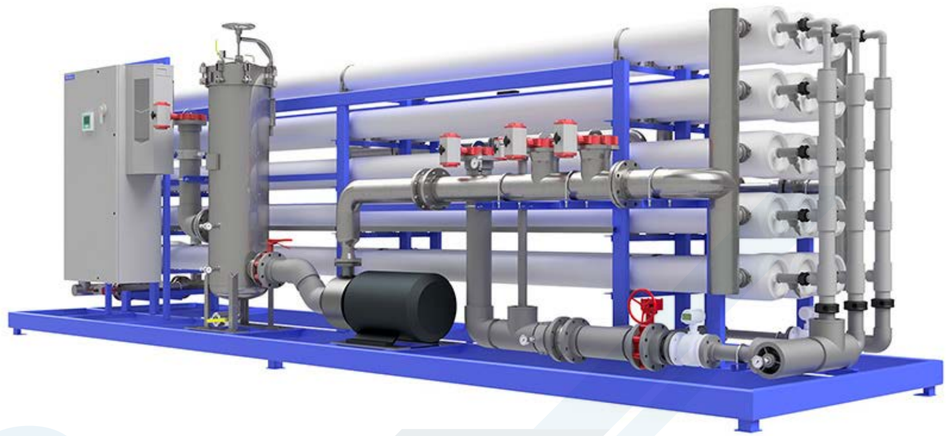
• Sea Water Reverse Osmosis

Sea Water Reverse Osmosis (SWRO) plants are designed to treat sea water, or high salinity ground water, with < 45,000 mg/L of dissolved solids (TDS) and < 30 mg/L of suspended solids (TSS), to achieve potable water quality. The standard treatment process involves pre filtration (auto-backwashing multimedia filters and cartridge filters), anti-scalant dosing to prevent membrane scaling, RO desalination and auto flushing and CIP systems for membrane cleaning. Additional pre-RO and post-RO treatment steps may be added as required to suit feed water conditions and/or treated water quality requirements. SWRO plants are available as skid mounted or containerized systems.

DESALINATION SYSTEMS

• Demineralized Water Reverse Osmosis

Demineralized Water Reverse Osmosis (DMRO) Plants are designed to treat fresh water, with < 1,000 mg/L of dissolved solids (TDS) and < 30 mg/L of suspended solids (TSS), to produce high purity demineralized water with TDS < 1 mg/L.



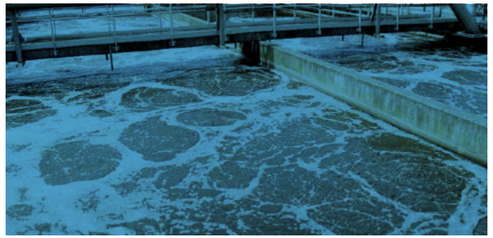
DESALINATION SYSTEMS

• TSE Polishing Plants

Treated Sewage Effluent (TSE) Plants are designed to treat fresh water, with < 3,000 mg/L of dissolved solids (TDS) and < 50 mg/L of suspended solids (TSS), to produce treated water suitable for cooling towers and irrigation purposes. 17

WASTEWATER SYSTEMS

WASTEWATER SYSTEMS



ASP (Activated sludge process)
(ASP) is a process for treating sewage and waste water commonly referred as effluent using bacteria (to degrade the biodegradable organics) and air (Oxygen for respiration).

• MBBR (Moving Bed Biofilm Reactor)
(MBBR) is a highly effective biological treatment process based on a combination of conventional activated sludge process and biofilm media.
The MBBR process utilizes floating High Capacity MicroOrganism & BioChips media within the aeration and anoxic tanks. The microorganisms consume organic material. The media provides increased surface area for the biological microorganisms to attach and grow. The increased surface area reduces the footprint of the tanks required to treat the wastewater. The treatment process can be aerobic and/or anaerobic and operates at high volume loads

WASTEWATER SYSTEMS

• MBR (Membrane Bioreactor)
(MBR) is a combination of a membrane process such as microfiltration or ultrafiltration with the activated sludge process, which result in achieving significantly low organic constituents in treated wastewater. The membrane bioreactor technology has gained wide acceptance as new technology for wastewater treatment systems. MBR has many advantages like superior product water quality and a smaller space required for installation and easier operation.

• SBR (a sequencing batch reactor)
(SBR) is a treatment process that consists of a sequence of steps that are carried out in the same containment structure, usually a tank reactor. They are also referred to as “fill-anddraw” systems. Although SBR systems exist that do not use aeration (anaerobic SBRs), a typical SBR system is designed to include aeration in the treatment step.

WASTEWATER SYSTEMS

GREYWATER SYSTEMS

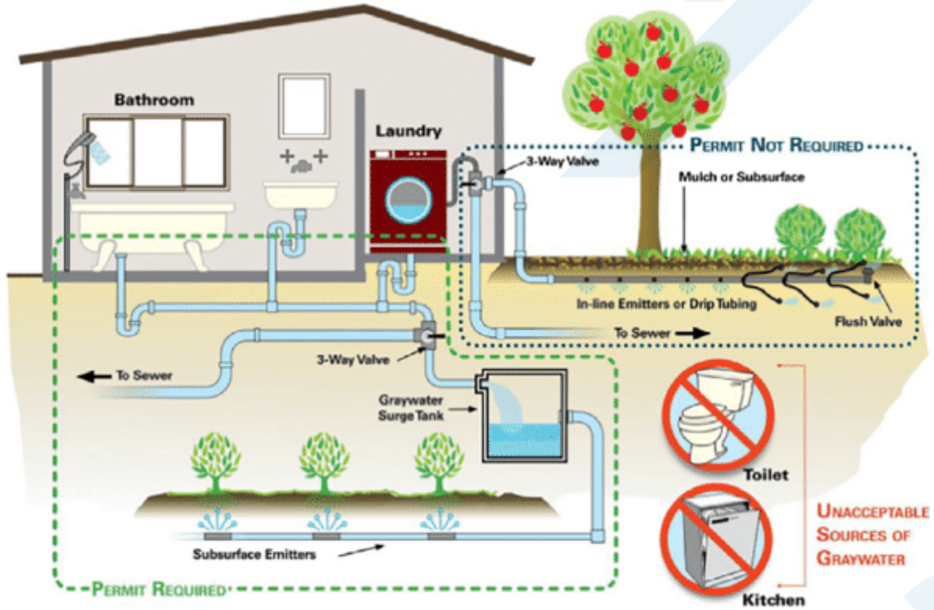
What are grey water systems and how can you set up a system for your home?

Most people living in the average household have no reason to contemplate disposal of the water that enters and leaves their homes, but more and more people are looking for a simple way to do a greywater system for their home.

What Is A Greywater System Used For?

A greywater system is used to take water that has already been used from places like your laundry, shower and sink and divert it to use in another purpose like watering gardens or landscaping instead of flushing it down into the sewer.

Greywater is different from blackwater (aka sewage) because while it may have some residuals like dirt, hair, grease, etc from it's first use, they aren't toxic to the environment and the water can be reused in some applications.



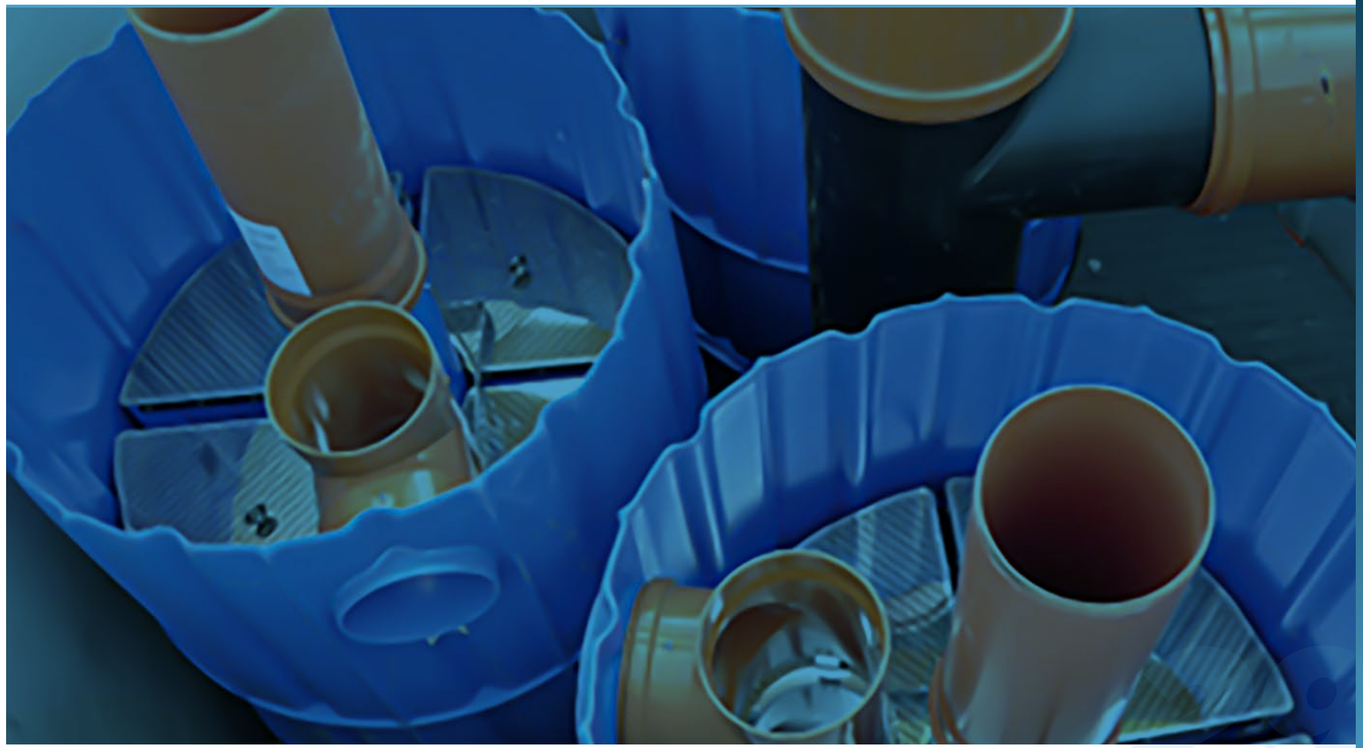
STORMWATER TREATMENT SYSTEMS

STORMWATER TREATMENT SYSTEMS

TERTIARY FILTER

An affordable stormwater filtration system, known as EcoStorm plus, designed to remove sediments, heavy metals, and nutrients. Surface water runoff contains significant concentrations of heavy metals and other soluble pollutants. EcoStorm Plus are upflow filters that require less maintenance than traditional filtration because heavier particles settle into the sump below the filter, which reduces filter clogging. Stormwater treatment systems are effective in removing sediments, but do not remove solubles such as heavy metals and nutrients (phosphates and nitrates).
By using various physical and chemical processes, the ecoStorm plus Filtration System effectively AND affordably removes BOTH solids and dissolved substances, including:

- Heavy metals (ARSENIC, zinc, copper, lead, cadmium, chromium, nickel)
- Hydrocarbons (mineral oils, polycyclic aromatic hydrocarbons)
- Nutrients such as phosphorous and nitrates.



STORMWATER TREATMENT SYSTEMS

OIL WATER SEPARATOR

Enhanced Coalescing Oil Water Separators for installation inside new or to RETROFIT existing concrete or steel tanks. This series is extremely versatile in that it can be installed inside existing above or below ground round, square or rectangular tanks. Instead of shipping heavy concrete / steel tanks cross country, simply procure a standard off the shelf tank locally and connect our turnkey separator kit to the outlet pipe inside your tank.
This unique solution can save operators substantial time and expense since they can now utilize an existing tank instead of having to replace it with costly new tanking systems. Separates free non-emulsified oil, hydrocarbons, diesel, gasoline, fuels, from water to below 5 parts per million (PPM) guaranteed. Affordable small units for flow rates starting between 50 gallons per minute (GPM) to over 1,100 GPM.
The filter / coalescing media can be washed by hand with a hose for years of trouble free efficient use. Maintenance is conducted above ground without having to enter tank making it more affordable, quicker, cleaner and safer. Mechanical automatic shut off valve included to prevent accidental discharge in the event the unit is not maintained on a timely basis. No electrical power requirements.

COMPANY PROFILE 2024 | QIFEM
STORMWATER TREATMENT SYSTEMS

STORMWATER TREATMENT SYSTEMS

VORTEX FLOW CONTROL SYSTEM

WHAT IS VORTEX FLOW TECHNOLOGY?

Vortex flow technology is based on the principle of a vortex hydrodynamics, where under sufficiently high upstream water levels a vortex is induced in the flow by the device. The vortex motion results in significant energy loss, creating a pressure drop across the device and restricting the discharge leaving the outlet. The geometric properties of the device control the amount of flow restriction and can be tailored to suit the design conditions for a specific site.

BENEFITS:

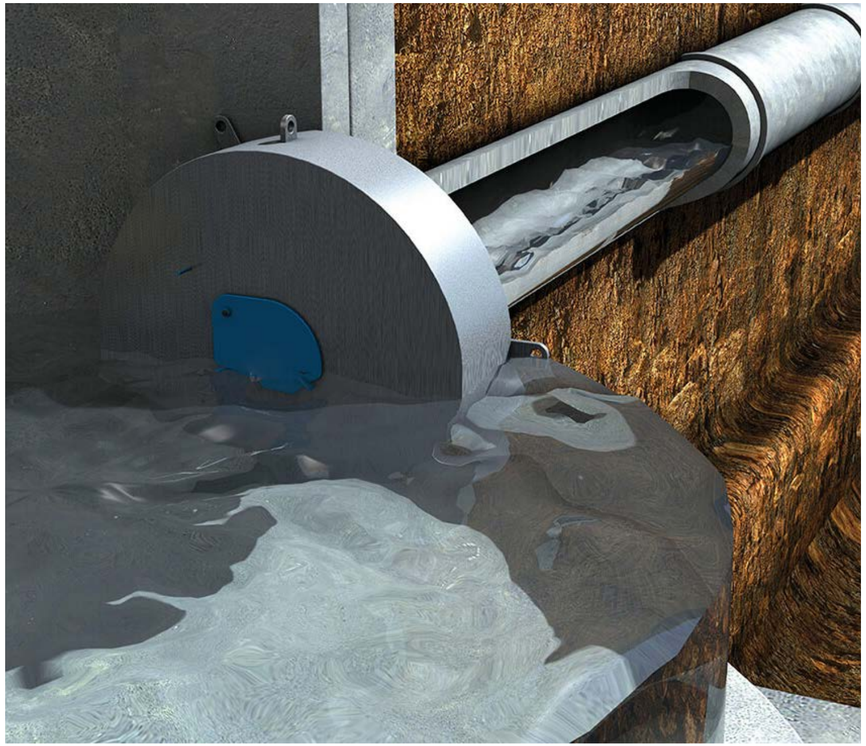
• Reduces the amount of upstream storage required, minimising the cost of providing attenuation facilites

• Minimal maintenance required after installation. StormBrake is selfactivating and function without any mechanical components

• Outlet clearances up to 6 times larger than an equivalent orifice plate, significantly reducing the risk of blockages and
the associated maintenance costs

• Accurately designed to meet a wide range of design conditions:
- flows up to 120l/s;
- heads up to 3m

• Contains a bypass door which can be manually opened at ground level using a pull cable to allow easy access for inspection or blockage removal



STORMWATER TREATMENT SYSTEMS

HYDROSHARK

- Physical treatment of stormwater
- Removal of solide (TSS)
- Underground system,hence no space requirement above ground
- No height offset between inlet and outlet
- Simple inspection and maintenance
- Different sizes
- No blocking possible

The hydroshark sedimentation plnt reliably removes filterable solids (TSS) from the rain runoff. It thus protects bodies of water and seepage systems.

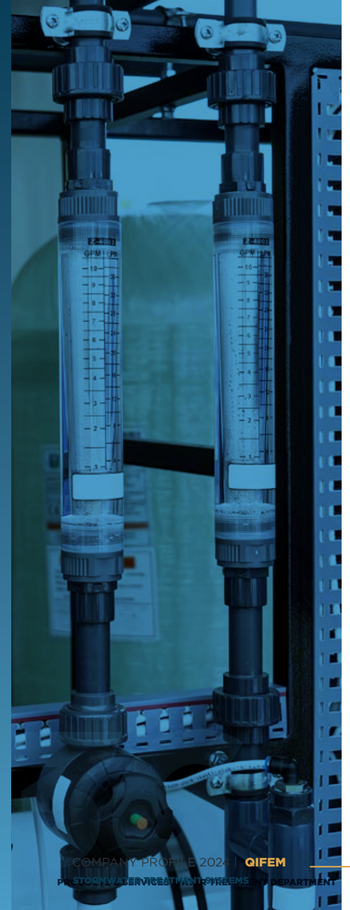
•The water is initially fed tangentially into the centre of the system, where the sedimentation of the solids takes place by means of the so-called teacup effect. The solids sink into the sludge trap below, which is hydraulically separated from the treatment chamber by flow breakers so that remobilisation of the settled particles cannot occur in case of heavy rain. The water subsequently flows evenly upwards in the outer ring of the system. A serrated weir ensures that no short-circuit flows arise in the system and that the most homogeneous flow possible prevails.

•The Water then subsequently flows over the serrated weir into the outlet. Lightweight substances such as oils or pollen are effectively retained as the cannot pass through the separation wall.

•There is no height offset between inlet and outlet.

•The system cannot block.

•The system can be used for all areas, from roof areas to traffic areas and industrial areas. The cleaning performance is designer such that the requirements of M 153, the future A 102 and the NRW separation decress are met.



FILTRATION SYSTEMS

- Media Filtration
- Microfiltration
- Ultrafiltration
- Cationic & Anionic Exchange Bed

DOSING SYSTEMS

- Chlorine dosing units
- Cooling Towers dosing systems

SPARE PARTS

- RO membranes (Sea & Brackish) Water
- Membrane Pressure Vessel
- Ultrafiltration Elements
- Disinfection Products
- Sand filter Housing
- Sand Filter Control Head
- Sand Filter Media
- Cartridge Filter Housing
- Cartidge Filter
- Chemical Dosing Units
- Pressure Vessels






PRODUCED WATER TREATMENT

PRODUCED WATER TREATMENT

Oil & Gas wastewater treatment capabilities require a focus on organic compound removal. The organic load composition is expressed as BOD, COD, TOC, or oil concentration and is often a limit for wastewater discharge permits. In the case of environmental remediation of contaminated solids, the removal of the organic/solvent/fuel is a must to meet overall standards.

The most common type of organic contamination in water in the oil & gas industry are oil, paraffins, and hydrocarbons. Oil is mostly found in the water from distillates in refineries, chemical processes, or the water associated with hydraulic fracturing and drilling, also commonly known as produced water. This presents an opportunity to recover valuable hydrocarbons and treat the water for suitable recycling or disposal. Oil-in-water may appear in several different forms: free oil, emulsified oil, and dissolved oil.

COMPANY PROFILE 2024 | QIFEM
SLUDGE TREATEMENT

SLUDGE TREATEMENT

SLUDGE TREATEMENT

SEWAGE SLUDGE TREATMENT

The residue that accumulates in sewage treatment plants is called sludge (or biosolids). Sewage sludge is a solid, semisolid, or slurry residual material that is produced as a by-product of wastewater treatment processes.

Treatment and disposal of sewage sludge are major factors in the design and operation of all wastewater treatment plants. Two basic goals of treating sludge before final disposal are to reduce its volume and to stabilize the organic materials. Stabilized sludge does not have an offensive odor and can be handled without causing a nuisance or health hazard. Smaller sludge volume reduces the costs of pumping and storage.

OILY SLUDGE TREATMENT

Oily sludge is one of the most important solid pollutants produced by the petroleum industry. Due to the serious pollution and the increasing production of oily sludge year by year, how to effectively treat oily sludge is the focus of worldwide attention. Our oily sludge treatment technologies. With the improvement of national environmental protection requirements, oily sludge quality reduction, recyclable and harmless treatment technology.

SOIL REMEDIATION

SOIL REMEDIATION

TPH REMOVAL

Petroleum hydrocarbons (hydrocarbons that result from petroleum products such as oil, gasoline, or diesel fuel) pollution has become a global matter of environmental concern. Petroleum is released into the environment because of industrial discharge, storage tank leaks, and other accidents. There is substantial petroleum discharge into soil and aquifers. Petroleum contaminated soil is considered to be hazardous waste that causes local and diffuse pollution in the environment. Total petroleum hydrocarbons (TPH) are composed of a complex mixture of saturated hydrocarbons (primarily paraffins, %80–60) and aromatic hydrocarbons (%40–20)

HEAVY METAL REMOVAL

Chromium (Cr), cadmium (Cd), lead (Pb), mercury (Hg), arsenic (As), and copper (Cu) are classified as heavy metals (HMs). These HMs, enriched in soil and exceeding the background content value, will lead to soil HMs contamination. Soil HMs contamination has caused global concern due to their significant disruption to sustainable development. HMs in the soil are persistent, unbiodegradable, and toxicant.

Excessive HMs in the soil can not only ruin soil functions and inhibit plants and microorganisms but also prevent migration by the food chain and damage human health. Soil HMs mainly include physical, chemical, and biological remediation. The physical method is generally soil replacement, simply covering the contaminated soil with clean soil or mixing both soils and diluting the HMs' concentration. This method requires much clean soil, economic cost, and a large working volume.

WASTE MANAGEMENT (SOLID & LIQUID)

WASTE MANAGEMENT (SOLID & LIQUID)

OUR SERVICES

QIFEM IS ACTIVE IN THE FIELDS OF HAZARDOUS AND NON-HAZARDOUS WASTE MANAGEMENT. WE OFFER A FULL SPECTRUM OF SERVICES SUCH AS CHARACTERIZATION, MINIMIZATION, COLLECTION, SEPARATION, TREATMENT, RECYCLING AND FINAL DISPOSAL OF LIQUID AND SOLID WASTE. OUR TRAINED PERSONNEL, OUR EXPERIENCE AND KNOW-HOW, OUR SCIENTIFIC METHODS AND THE USE OF LATEST TECHNOLOGY AND MODERN EQUIPMENT GUARANTEE HIGH-END WASTE MANAGEMENT SERVICES.

RECYCLING AND RECOVERY

QIFEM constantly promotes recycling and its beneficial impact on the natural environment and provides its clients with the proper equipment for each type of material, which are separated, recovered and utilized in our facilities. Via recovery processes, recyclable materials are processed and new products generated, finally leading to a minimum quantity of waste residue led to landfills. This requirement is imperative nowadays, due to the saturation that landfills are facing and the need to reduce greenhouse gas emissions.

CLEANING AND DISINFECTION SERVICES

QIFEM provides cleaning and disinfection services Port, business premises and buildings, mobilizing its qualified personnel and utilizing modern equipment. The certified cleaning products and disinfectants used are of high quality and efficiency, indubitably safe for human health. Upon completion of the work, the client receives the relevant certificates, the authorization approvals of the disinfectants used, as well as the material safety data sheet.

COMPANY PROFILE 2024 | QIFEM

WASTE MANAGEMENT (SOLID & LIQUID)

OUR EQUIPMENT

QIFEM specializes in providing sophisticated technologies for emergency response services and waste management projects.

- Oily water collection and treatment system.
- Oily sludge collection and remediation system.
- Oil & grease interceptors.
- Oil separator.
- Neutralization tanks.
- Refuse collection vehicles.
- Hook lifts & crane trucks.
- Skip loaders.
- Grabble loader trucks and tank trucks.
- Containers and compactor types.
- Loaders, sweepers, etc.
- Pumping systems for harmful liquid.
- Waste converter/digester.
- Pumping systems for petroleum.
- Machinery for beach cleaning.
- Vessels / self-propelled barges.
- Towed barges.
- Submersible pumps.
- Oil pumping systems.
- Skimmers.
- Absorbent booms.
- Absorbent pads & inflatable booms.

COMPANY PROFILE 2024 | QIFEM

SERVICES

DESIGN

Today more than ever Engineering Firms are challenged to meet increasing demands for higher quality and optimum design for water treatment solutions, as this area is a sub specialty, we partnering with well-known consultancy offices to help our customers achieving their goals. We provide a wide range of capabilities to address full life-cycle of the treatment systems, while offering deep technical expertise from across our organization.

SHORT/LONG TERM OPERATION & MAINTENANCE

We offer our client with service of short/long term operation and maintenance backed with strong specialized team on the field supported by operation support center which managed by experienced engineering team to make sure smooth operation for all sites while keeping an eye on operation cost and utilize the assets in the best way possible.

COMPANY PROFILE 2024 | QIFEM
SERVICES

APPLICATIONS

OIL & GAS |

| CONSTRUCTION

AGRICULTURE |

| HOSPITALITY

COMPANY PROFILE 2024 | QIFEM

HEALTH CARE |

| COOLING TOWERS

FOOD & BEVERAGE |

الشركة القطرية الدولية الاولى للالتكروميكانيك ذ.م.م

Qatar International First for Electro Mechanical Company W.L.L

ISO 45001

CONTACT US

+974 44685303

info@qifem.com / info@qifem-wt.com

www.qifem-wt.com

P.O.Box: 40926, Doha - Qatar