High Quality Equipment
for Water & Environment

MENA WATER
OUR AIM - YOUR CONFIDENCE
MENA-Water is an engineering and manufacturing company flourishing in the field of water and wastewater treatment. Our main objective is conserving the environment through innovative technical solutions and services. Therefore we focus on the supply of high quality, robust and advanced technology to provide our clients worldwide with efficient and cost-effective purification plants. Our systems feature compact, modular design as well as easy installation and operation conditions. MENA WATER FZC has also acquired ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 to enhance its capabilities from an integrated management system.

We engage in close cooperation with our clients, studying their on-site requirements, developing suitable solutions and supplying appropriate system components in accordance with their needs and values. MENA-Water serves its clients worldwide through both our main offices situated in UAE and Germany, along with regional branch and satellite offices and numerous global partners.

In addition to manufacturing complete water and wastewater treatment plants we are also specialized in supplying components for following process steps and fields:

- Pretreatment
- Secondary Treatment
- Advanced Treatment
- Package Solutions
- Sludge Treatment
- Odor Control
- Renewable Energy
- Instrumentation & Control
- Water Treatment Chemicals
- Pumps & Flow Regulation
Municipal Wastewater
Reliable systems, equipment and services are essential to comply with regulatory and sustainable quality requirements for effluent discharge. In addition to the standard physical, chemical and biological treatment processes also advanced technologies may be required to reduce and eliminate specific substances. Thorough process design under consideration of raw water and effluent conditions forms the basis of successful treatment result.

Industrial Wastewater
Wastewater treatment is critical for every industry. Each industry has its own set of requirements which determines treatment needs. MENA-Water helps industries to fulfill increasing industrial wastewater treatment regulations while improving efficiency and reducing waste disposal costs; from wastewater to re-used process water or required discharge quality. MENA-Water offers complete systems for the whole industrial wastewater treatment process; we can provide appropriate solutions to any type of industry and any type of limit conditions.

Drinking Water
Availability of safe drinking water is the most essential basis of life for all people worldwide. Therefore MENA-Water is continuously developing its products to serve the need for economical potable water treatment plants. Furthermore we are specialized in realizing upgrade and rehabilitation works of existing plants within tight schedule and challenging local site conditions.

Package Solutions
Our containerized package plants are pre-engineered compact solutions for treatment of wastewater, drinking water, process water and sludge. The systems are designed modular and movable. All equipment for the complete treatment process is pre-assembled in standard ISO containers to facilitate easy transport, quick delivery and installation with minimum on-site construction works. MENA-Water package plants are manufactured from stainless steel and contain high quality components to ensure durable long-term operation.

Sludge Treatment
Sludge is a by-product of wastewater and industrial processes. This material may be contaminated with toxic organic and inorganic compounds. Coarse primary solids and secondary bio solids accumulated in a wastewater treatment process must be treated to be disposed of in a safe and effective way. MENA-Water offers complete solutions for sludge treatment comprising thickening, dewatering and sludge drying. We offer stationary solutions as well as fully containerized and mobile systems.

Renewable Energy
Many industries and municipalities are spending a lot of money for disposal of their waste products. But instead of dumping it to landfills the organic waste can be treated through digestion to gain electrical and thermal energy and high quality fertilizer. Furthermore, components and equipment can be driven by power from green energy sources such as sun and wind, which is particularly beneficial for equipment installations in isolated areas without reliable power network.
Package Plants

On site installation of our package plants requires only a short time with minimum civil work, piping and cabling. It is easy to extend with additional units and can be moved to any other location. Unique technologies and equipment have been utilized to provide the highest capacity and quality within a small footprint.

Depending on client’s requirement, the plant can be fully automatic, semi-automatic or manually operated.

- MBR Sewage Plant
- Drinking Water Plant
- Reverse Osmosis Plant
- Sludge Dewatering
- Grey Water Plant
- Ultra Filtration
- SBR System

Pretreatment

In this first stage of wastewater treatment process, screens and other separation components are used to remove floating and settleable coarse material from the raw water. Primary cleaning is the basis to prevent downstream equipment from clogging and damages.

- Multi Rake Screen
- Perforated Belt Screen
- Grab Screen
- Inclined Screw Screen
- Vertical Screw Screen
- Basket Screen
- Storm Water Screen
- Washing Compactor
- Circular Grit Trap (Vortex)
- Longitudinal Grit Trap
- Grit Classifier
- Grit Washer
- Package Inlet Work
- Micro Filter Screen
- Drum Screen

Secondary Treatment

In the secondary treatment stage the elimination of dissolved and suspended organic compounds takes place. Enhanced by mixing, aeration and settling processes a certain required effluent quality can be achieved via biological, chemical and physical interactions.

- Fine & Coarse Bubble Diffusers
- Mixers, Aerator & Blowers
- Chain Scraper
- Bridge Scraper
- Circular Tank Scraper
- Scum Removal (Skimmer)
- Sludge Thickeners

Advanced Water Treatment

To comply with increased requirements in terms of specific effluent limits the need for advanced treatment technologies may emerge. For these applications we offer a range of systems in addition to the conventional treatment Components, such as membrane filtration, disinfection, ion exchange, carbon adsorption and others.

- Dissolved Air Flotation
- Reverse Osmosis
- Disc Micro Filtration
- Ultra & Nano Filtration
- Cloth Screw Filter

Sludge Treatment

Sludge is produced during the treatment of water. This is inherently so because a primary aim of water treatment is removing solids. In addition, soluble organic substances are converted to bacterial cells and the resulting sludge is removed from the wastewater. These material must be treated through thickening, dewatering and/or drying to be disposed of in a safe and effective way.

- Mobile Sludge Dewatering
- Belt Filter Press
- Bag Dryer
- Screw Thickener
- Polymer Preparation Unit
- Centrifuge
- Sludge Dryer
- Sludge Handling & Silo Component
**Renewable Energy**

MENA-Water provides solutions for anaerobic organic waste digestion, solid waste management and independent energy supply for equipment in isolated areas. As per client demand we are ready to offer feasibility studies and design for complete anaerobic digestion and waste management systems and as well the supply and installation of related equipment, like gasholder, co-generator, gas flare, filters, digester equipment etc. Moreover we supply photovoltaic systems for operation of our mechanical equipment, lighting systems, control and pumping. For water pumping we offer as well windmills.

- Digester and Biogas Plant/Equipment
- Solid Waste Equipment
- Windmill Water Pump
- Solar Water Pump
- Solar System

**Odor Control**

Wastewater and sludge treatment processes typically cause impact of bad smelling odor. There are several technologies of odor control treatment to prevent damage to health and discomfort caused by malodor. MENA-Water offers different technologies to purify and disinfect the atmosphere. These compact units have proven their high efficiency and reliability in several German municipal wastewater treatment plants.

- Bio Filter
- Activated Carbon Filter
- Wet Scrubber
- Bio-Trickling Filter
- Manhole Carbon Filter

**Instrumentation & Process Control**

This product group of MENA-Water focuses on monitoring and process control equipment for field and laboratory uses in water and wastewater treatment applications. MENA-Water supplies a wide range of products necessary for water and wastewater quality and quantity control, like equipment to measure pH, Dissolved Oxygen, conductivity, turbidity, photo-meters and analyzers.

- On-line Instrumentation
- Laboratory & Field Equipment
- Flow Measurement & Control
- Level, Pressure & Temp. Measurements
- Gas Detection
- Dosing & Feeding Systems
- Chlorine Generation System
- Electric Control & SCADA System

**Water Treatment Chemicals**

Many water treatment processes need support of chemicals to be most effective. Also some pollutants can be removed from water only by use of chemical added. Finally also the disinfection of water is a basic need and mainly done by adding chemicals. We supply chemicals manufactured by preferably European manufactures and deliver worldwide to our clients.

- Poly Aluminum Chloride Hydroxide
- Poly Aluminum Chloride Powder
- Sodium Hypochlorite
- Calcium Hypochlorite
- Hydrochloric Acid
- Sodium Hydroxide Liquid
- Caustic Soda Flakes
- Sodium Bisulphate

**Pumps, Flow Regulation & Other Equipment**

MENA-Water has extensive use of the accessories in its manufacturing and installation services and this paved the way for partnering with our providers in order to establish quick turn-around of services to our valued clients. Pumping liquids and regulating the flow necessary for every water treatment process. The following equipment is used for water treatment facilities.

- Centrifugal Pumps
- Submersible Pumps
- Self-Priming Pumps
- Split Case Pumps
- Vertical Turbine Pumps
- Solid & Sludge Pumps
- Screw Pumps
- Penstocks & Weirs
- Valves
- Surge vessels
- Grinders
- Mixers
- Generators
- Blowers
- Compressors
- Ultra Violet Units
- Accessories
PROJECT REFERENCES

Bako Potable Water Treatment Plant
3000 m³/day, Ethiopia

Durrat Al Bahrain STP/MBR
2000 m³/day, Bahrain

Marafiq Sludge Dewatering - 4 Mobile Plants
4 x 8 m³/h, Jubail - KSA

Refurbishment of Gasholder at Warsan STP
4000 m³/day, Dubai - U.A.E.

Marafiq Wastewater Treatment Plant, Pretreatment
66000 m³/day, Jubail - KSA
Khartoum North Potable Water Plant / Rehabilitation and Upgrade
Serving upto 4 million people, Khartoum - Sudan

Al Ain Poultry Slaughtering & Processing, Wastewater Treatment Plant
400 m³/day, Al Ain – UAE