



**COMPANY
PROFILE 2020**

**DESIGNED FOR WASTEWATER,
ENGINEERED TO LAST.**

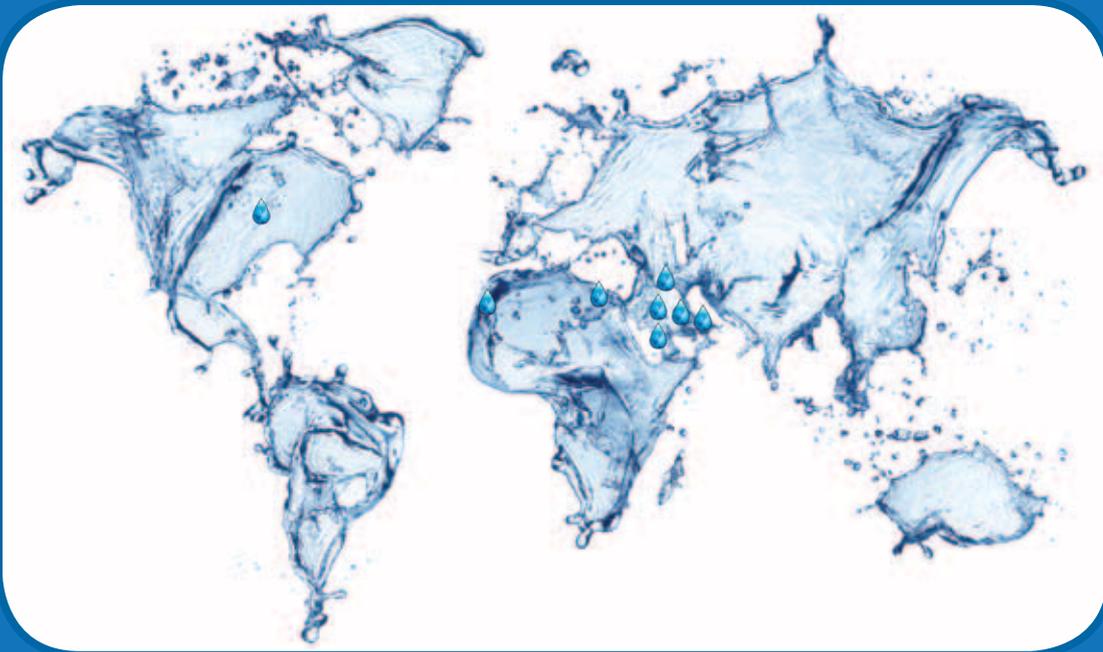
WATEQ CANADA 
Wastewater Plants Consultancy

Who We Are

WATEQ represents a strong know-how in the field of Water & Waste Water, Pumping Solution, Oil & Gas and Environmental Applications.

The company develops, designs, markets, installs, and maintains first class equipment for water and wastewater treatment. We want to serve our customers by providing them the latest technology, a maintenance-free and a reliable overall system as much as possible. The significance of product development is demonstrated by many international patents granted to the company and the company's success in the Middle East market.

The company is based in Ajman & Dubai - UAE with branches in Abha and Riyadh - KSA, Basra - Iraq and activities in Qatar, Oman, Bahrain, Kuwait, and North Africa.



Product Range

Water Technology Equipment F.Z.CO. (WA-TEQ) is active in the field of pumping solutions, flow control & monitoring, with two departments; whole & retail sales in addition to the projects department.

Our products groups

1. PRIMARY TREATMENT

1. Multi Rake Screen
2. Climber Screen
3. Grab Screen
4. Perforated Belt Screen
5. Step Screen
6. Inclined Drum Screen
7. Vertical Screw Screen
8. Basket Screen
9. Storm Water Screen
10. Washing Compactor
11. Screw Conveyor
12. Circular Grit Trap (Vortex)
13. Longitudinal Grit Trap
14. Grit Classifier
15. Grit Washer
16. Grinders and Macerators

2. SECONDARY TREATMENT

1. Fine & Coarse Bubble Diffusers
2. Mixers & Aerators
3. Chain Scraper
4. Longitudinal Bridge Scraper
5. Circular Tank Scraper
6. Scum Removal (Skimmer)

3. TERTIARY TREATMENT

1. Gravity Sand Filters
2. Rotary Disc Filters
3. Activated Carbon Adsorption
4. Membrane Filtration and Separation

4. SLUDGE TREATMENT

1. Belt Filter Press
2. Bag Dryer
3. Screw drain Thickener
4. Polymer Preparation
5. Centrifuge
6. Sludge Drying Systems
7. Silo Component
8. Solid & Sludge Pump

5. ODOR CONTROL

1. Bio Filter
2. Activated Carbon Filter
3. Wet Scrubber
4. Bio-Trickling Filter
5. Photoionization

6. PACKAGED PLANTS

1. Reverse Osmosis Plant
2. MBBR Sewage Plant
3. Grey Water Plant
4. SBR Kit

7. INSTRUMENTATIONS AND DOSING

1. Field Instruments
2. Water Lab
3. Flow Measuring
4. Level and Pressure Sensors
5. Disinfection Systems
6. Chemical Dosing

8. PUMPING EQUIPMENT & FLOW REGULATION

1. End Suction Centrifugal Pumps
2. Submersible Pumps
3. Split Case Pumps
4. Vertical Turbine Pumps
5. Solid & Sludge Pumps
6. Penstocks, Weirs & Stoplogs
7. Valves
8. Water Hammer Protections Equipment

9. ACCESSORIES

1. Pressure Gauges, Differential pressure gauges
2. Level Glass Gauges
3. Water Meters
4. Flanges, Tee & Elbows
5. GRP Covers, GRP Supports, beams, angles, Hand Rails and GRP Tanks

Pretreatment

The purpose of the pre-treatment is to remove most of the non-soluble solids physically in order to reduce the pollutant loads and to protect all the subsequent steps in the treatment plant and also to protect raw water recovery and more generally to remove anything that could hamper subsequent treatment processes. Depending on the quality of the water to be treated, several processes could be required. Screens are used to retain large solids that may be present in wastewater so as to prevent them from entering moving devices (e.g., pumps), and wastewater treatment units.

- > **Multi Rake Screen**
- > **Climber Screen**
- > **Grab Screen**
- > **Perforated Belt Screen**
- > **Step Screen**
- > **Inclined Drum Screen**
- > **Vertical Screw Screen**
- > **Basket Screen**
- > **Storm Water Screen**
- > **Washing Compactor**
- > **Screw Conveyor**
- > **Circular Grit Trap (Vortex)**
- > **Grit Classifier**
- > **Grit Washer**
- > **Grinders and Macerators**



Secondary Treatment

The equipment used for wastewater aeration is required for the biological process and also to provide mixing to keep solids suspended for more effective treatment. Although there are many types of aeration systems, the two basic methods of aerating wastewater are through mechanical surface aeration to entrain air into the wastewater by agitation, or by introducing air or pure oxygen with submerged diffusers.

Mixers are mainly used for many different applications such as in aeration tanks for better distribution and mixing; sludge tanks to prevent sedimentation; flocculation tanks to make bigger masses etc...

- > **Fine Bubble Diffusers**
- > **Coarse Bubble Diffusers**
- > **Surface Aerators**
- > **Floating Aerators**
- > **Jet Aerators**
- > **Submersible Jet Aerators**
- > **Mixing and Aerators**
- > **Vertical Agitators**
- > **Submersible Mixers**



Clarifiers

The final step in the secondary treatment stage is to settle out the biological floc or filter material through a secondary clarifier and to produce sewage water containing low levels of organic material and suspended matter.

- > Longitudinal Grit Trap
- > Longitudinal Bridge Scraper
- > Vacuum Bridge Scrapers
- > Circular Tank Scraper
- > Scum Removal (Skimmer)
- > Chain Scraper
- > Non Metallic Chain Scraper



Tertiary Treatment

Tertiary treatment is the next wastewater treatment process after the secondary treatment. This step removes stubborn contaminants that secondary treatment was not able to clean up. Wastewater effluent becomes even cleaner in this treatment process through the use of stronger and more advanced treatment systems.

- > Rotating Disc Filters
- > Gravity Sand Filters
- > Activated Carbon Filters
- > UV Disinfection
- > Ultra Filtration and Separation



Sludge Dewatering And Handling

Sludge dewatering is removing water from sludge. Sludge dewatering is typically the final step for industrial wastewater treatment processes and plants.

After wastewater treatment the sludge remaining is very high in water content that can be reclaimed through sludge dewatering.

- > **Sludge Thickeners**
- > **Belt Filter Press**
- > **Bag Dryer**
- > **Screw Drain Thickener**
- > **Polymer Preparation**
- > **Centrifuge**
- > **Sludge Drying**
- > **Silo Component**
- > **Solid & Sludge Pump**



Odor Control

The major odor-generating sections in a plant are influent pumping stations, grit traps and grit storage areas, primary clarifiers, sludge dewatering areas and any place where anaerobic reactions may happen. There are several technologies of odor control treatment to prevent damage to health and discomfort caused by malodor. Our advanced technologies also include Activated Carbon, Chemical Scarper Biofilter and Biotower configurations. The technology offers a full range of options for the treatment of odors. Total Odor Control is much more complex and encompasses the removal of H₂S as well as additional RSCs and selective VOCs.

- > **Bio-trickling Filter**
- > **Bio-towers**
- > **Activated Carbon Filter Wet & Dry Scrubbers**
- > **Fume Scrubbers**
- > **Mist Eliminators**
- > **Photoionization**
- > **Thermal and Catalytic Oxidization**



Packaged Plants

WATEQ Partners have developed very innovative systems of a compact and pre-fabricated format which are an excellent solution for the sewage & water treatment of small communities and municipalities, while they can be a unique alternative to the wastewater treatment of industrial effluents. Our clients will get a product of high quality at the best cost. The construction and testing of company's own make products (pre-fabricated plants) takes place in the warehouse and at selected associated steel subcontractors while the quality of manufacturing is monitored closely at all stages according to the ISO Q.A. system.

- > **Reverse Osmosis Package Plant**
- > **MBR Sewage Package Plants**
- > **MBBR Sewage Package Plant**
- > **Grey Water Package Plant**
- > **Bio-Plants with MBMR(UF) Technology**
- > **Packaged DAF Separator**
- > **Tertiary UF Treatment Plants**
- > **Containerized Sludge Dewatering Plants**
- > **Industrial Wastewater Package Plants**
- > **River Water Purification Package Plants**



Instrumentations And Dosing

WATEQ supplies wide range of products necessary for water and wastewater quality and quantity control, like Sensors to measure pH, D.O., conductivity, turbidity, photometers and analyzers which can be connected to SCADA and PLC for easier and faster operation.

Dosing pumps are used in many branches of industry that work with liquid chemicals - not excluding toxic and aggressive media. WATEQ supplies wide range of dosing pumps which can play an important role in the reliable and accurate dosing of liquids in the process cycles. They are appropriate for low-pressure applications and small dosing quantities.

- > **Field Instruments**
- > **Water Lab**
- > **Flow Measuring**
- > **Level and Pressure sensors**
- > **Gas Detection**
- > **Disinfection Systems**
- > **Chemical Dosing**



Valves are the controlling element in any fluid-handling system. They should be properly selected and cared for to give the best service at the lowest cost. The suitability of a valve for a particular application is decided by the materials used in relation to the conveyed fluid as well as its mechanical design.

- > **Butterfly valves**
- > **Gate valves**
- > **Knife gate valves**
- > **Non return valves**
- > **Check Valves**
- > **Globe Valves**
- > **Expansion Joints**
- > **Electrical or Pneumatic Actuators for Automatic Operation.**



A surge tank (or surge drum) is a standpipe or storage reservoir at the downstream end of a closed aqueduct or (feeder a dam or barrage pipe) to absorb sudden rises of pressure, as well as to quickly provide extra water during a brief drop in pressure.

In mining technology, ore pulp pumps use a relatively small surge tank to maintain a steady loading on the pump. For hydroelectric power uses, a surge tank is an additional storage space or reservoir fitted between the main storage reservoir and the power house (as close to the power house as possible). Surge tanks are usually provided in high or medium-head plants when there is a considerable distance between the water source and the power unit, the main functions of the surge tank are:
1. When the load decreases, the water moves backwards and gets stored in it. 2. When the load increases, additional supply of water will be provided by surge tank.

In short, the surge tank mitigates pressure variations due to rapid changes in velocity of water.



Air Blowers and Compressors

Positive Displacement Blowers

Rotary piston blower units are designed for absolutely oil-free compression of air and nitrogen. With special stages and unit designs, they may also be used for landfill gas, sludge gas, mine gas, process gas, water vapor, in the industry of power plants and in wastewater treatment plants.

Side Channel Blowers

The Blowers have an impeller blade mounted inside housing. As air passes the inlet port, the impeller blades draw air in and accelerate the air outward and forward. As each impeller blade strikes it, the air moves faster and faster. At the base of the housing an air stripper diverts the air out of the housing reducing the speed and then increasing the pressure.

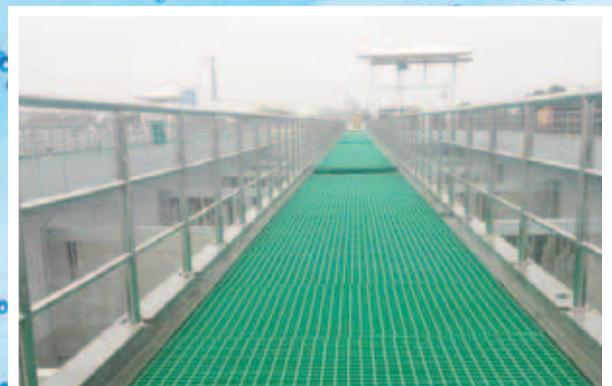
- > Positive Displacement Blowers
- > Side Channel Blowers
- > Single Stage Centrifugal Blowers
- > Three Lobes Rotary Roots Air Blower
- > Reciprocating Compressors
- > Rotary Screw
- > Rotary Centrifugal



Accessories

We provide the fastest and easiest way for any piping works, net-works, special tools, solutions for pumps, hydraulic and pneumatic systems and for many other applications:

- > Pressure Gauges, Differential Pressure Gauges
- > Level Glass Gauges
- > Water Meters
- > Flanges, Tee & Elbows
- > GRP Covers, GRP Supports, Beams, Angles, Hand Rails and GRP Tanks





Our aim is to provide high quality equipment with competitive prices.

We also afford to deliver the highest level of after sales service to ensure a reliable service to our esteemed customers.

YOUR SATISFACTION IS OUR AIM



WATEQ CANADA 
Wastewater Plants Consultancy

**35 Kettlepoint Dr.
Hamilton, ON L9B2R3, Canada
Contact@wateqcanada.com
www.wateqcanada.com
Tel: +1 (647) 879-5152**

