

Performance Excellence & Technology Leadership

Aquatech International Corporation, a leading supplier of industrial water and wastewater treatment systems and services located in Canonsburg, Pennsylvania in the USA, has provided Technology Leadership and Performance Excellence to the industry since 1981.

Backed by cutting edge technologies and supported with offices worldwide, Aquatech is well suited to be your preferred partner for optimal water and wastewater systems, a fact well demonstrated at thousands of operating systems in 45 countries.

Aquatech is a Full Scope company offering solutions from Concept to Commissioning and Troubleshooting in:

- Power Generation
- Refineries
- Electronics
- Petrochemical
- Chemical
- Pharmaceutical
- Fertilizer
- Pulp & Paper
- Semiconductor
- Automotive
- Steel
- Food & Beverage

Aquatech provides a full spectrum of water and wastewater treatment. Whether the feed source is Surface Waters, Well, Sea or a Wastewater Stream, Aquatech offers the expertise and experience to purify it to your industry's specific need— for cooling tower makeup or boiler feed, process hosts or electronics grade.

Aquatech offers a strong product portfolio in optimal treatment systems customized to satisfy specific needs for a project. Whether the factors governing project requirements are process or regulatory, Aquatech provides the products and technologies to offer a cost-effective treatment scheme from pretreatment to zero liquid discharge or a combination.

As a designer and supplier of water and wastewater treatment systems and services worldwide, Aquatech has developed an unparalleled global sourcing capability providing our customers with the same unmatched quality and maximum value through elimination of non-value added expenses.

Aquatech's highly trained field service engineers, located strategically in different geographical areas around the globe, ensure quality service in a timely and expeditious manner to help us realize our core value of Customer Satisfaction.

Aquatech can be your single source supplier, offering one or several technologies for an optimal system configuration suiting specific project requirements, or combining select processes to recycle waste and offer a zero liquid discharge facility.



Canonsburg Plant

A T E C H N O L O G Y S T R E A M

PRETREATMENT

Regardless of the feed source – Surface Water, Well Water, Sea Water or Wastewater – Aquatech provides any of the following processes or a combination to make it suitable for the downstream processes:

Pretreatment Processes

- Filtration (Pressure & Gravity):
- Media Filtration
- Activated Carbon
- Iron Removal
- Mill Scale Removal
- Chemical Feed Systems
• Clarification:
- Turbidity Removal
- Softening
- Oxidation
• Sludge Handling:
- Thickener
- Filter Press



RECYCLE / REUSE

Whether industrial wastewater or produced water from oil fields, Aquatech offers the expertise and technologies to provide an integrated system, with single point responsibility, for treatment of waste streams and make them suitable for recycle / reuse in your plants.

Recycle/Reuse Applications

- Automotive
- Petroleum Refining
- Cooling Tower Blowdown
- Electronics
- Power Generation
- Oilfield Produced Water
- Petrochemical
- Gray Water
- Semiconductor

ZERO LIQUID DISCHARGE

To comply with stringent regulatory discharge requirements, Aquatech has several installations for the treatment of industrial wastewater leading to a Zero Liquid Discharge system. Aquatech meets these requirements in several different ways depending upon the logistics and economics of the specific project.

Aquatech supplies systems based on either membrane processes, evaporative processes or a hybrid combining the two processes to achieve Zero Liquid Discharge from the plants in a cost-effective manner. The hybrid approach, combining the membrane and evaporative technologies, results in systems having low life-cycle costs compared to other available technologies.

ZLD Technologies

- Vertical Tube Falling Film Evaporators
- Seeded Slurry (Brine Concentrators)
- Non-seeded Evaporators
- Forced Circulation Crystallizers
• HERO™ Technology
- Sludge Dewatering
- Filter Press
- Centrifuge
- Drum Dryers



ION EXCHANGE

Aquatech offers expertise and experience in providing different types of ion exchange processes. As a Licensee of UPCORE™ packed bed ion exchange technology, Aquatech has provided some of the largest ion exchange installations in the world.

Ion Exchange Processes

- Water Treatment
- UPCORE™
- Split Flow Counter Current
- Co-Current
- Layered Bed
- Condensate Polisher
- External Regenerated
- Powdered Resin
- Amine Cycle
- Sodium Zeolite
- Oily Condensate
- Specialty Applications
- Glycol Purification
- Brine Purification
- Metals Removal
- WAC Softening

MEMBRANE PROCESSES

Aquatech provides a complete range of membrane processes. In addition to conventional reverse osmosis, Aquatech offers systems incorporating HERO™ technology. A HERO™-based system can tolerate silica levels in excess of 2000 ppm in reject and operates at recoveries exceeding 90%. This, coupled with its tolerance to biological and organic fouling, makes systems incorporating HERO™ the technology of choice for difficult-to-treat water sources.

Membrane Processes

- Microfiltration
- Conventional RO
- Ultrafiltration
- HERO®
- Nanofiltration
- Electrodeionization



INDUSTRIAL CONCENTRATION

Aqua-chem ICD, a division of Aquatech represents 40 years of experience in providing evaporative systems for the concentration of various industrial products. This experience includes a wide range of technologies to meet your specific applications.

Industrial Concentration Technologies

- Vertical Falling Film Evaporator
- Forced Circulation Crystallizer
- Horizontal Spray Film™ Evaporator
- Submerged Tube Evaporator
- Rising Film Evaporator
- Multiple Effect Evaporator



DESALINATION

Aqua-chem ICD, a division of Aquatech, pioneered MSF and MED technologies in the 1960s. Since then, Aquatech has supplied several thermal desalination systems based on MSF and MED technology with different energy alternatives. Aquatech's expertise and experience also extends to membrane based desalination systems, a unique qualification by which we can evaluate both technologies and offer our customers the most cost-effective option for their specific needs.

Desalination Technologies

- Spray Film™ Multiple Effect Distillation (MED)
- Vapor Compression (VC)
- Multi Stage Flash (MSF)
- Sea Water Reverse Osmosis

LABORATORY & PILOT STUDIES

Aquatech operates a well-equipped laboratory and provides pilot test capabilities for bench scale or on-site testing of various technologies in order to establish design and performance parameters for specific applications. Our laboratory testing includes analytical, boil-up tests, and on-site tests using the actual configuration of a commercial scale system.

On-site testing can be performed on any of the following technologies either for stand alone units or a combination:

Pilot Plants

- Vertical Tube Falling Film Evaporator
- Forced Circulation Crystallizer
- Spray Film™ Evaporator
- HERO™ Technology



WATER MANAGEMENT SERVICES

Aquatech is more than just a systems supplier. Our Water Management Services Group (WMS) is focused on supporting plant personnel and end user organizations to get the most out of their water treatment system —

whether it is a system originally supplied by Aquatech or another company.

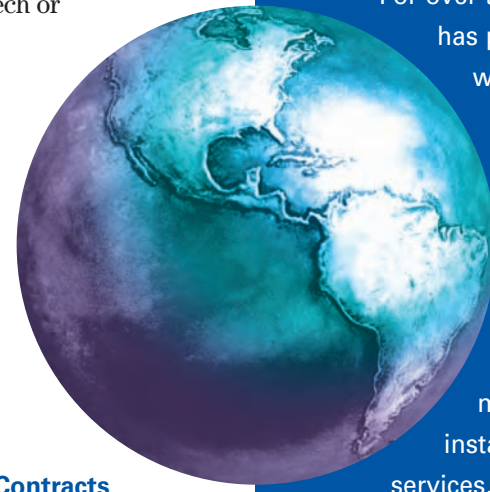
WMS has a large portfolio of water treatment related services which include:

- Spare Parts Supply
- Operation & Maintenance Contracts
- Technical Audits
- Leased Water Treatment Systems
- Technical Training
- Annual, Quarterly, and Monthly Maintenance Contracts
- Remote Monitoring
- Build Own Operate Contracts (BOO)

PACKAGED PRODUCTS

In addition to custom engineered water treatment solutions, Aquatech has a line of standard products already engineered to fit your smaller water treatment requirements.

Many times our clients have water treatment needs that don't require a custom engineered solution, but still demand a quality product. Aquatech WATERTRAK™ Products were designed for that customer.



From Innovation Flows Leadership

For over two decades, Aquatech has provided industry worldwide with proven water and wastewater treatment system installations. By leveraging design and engineering, modular field-proven products, project management, turnkey installation, and industrial services, we develop total water solutions that work together seamlessly.

Our wide range of products address everything from ultrapure water requirements for microelectronics and pharmaceutical industries, to workhorse installations for steam generation in power and chemical processing plants, to the recycle and reuse of sewage or cooling tower blowdown. Innovative, integrated solutions translate into superior products and unmatched value for our customers.



CORPORATE HEADQUARTERS

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U.S. LOCATIONS

California
Florida
Ohio
Texas
Wisconsin (AquaChem ICD)

WORLDWIDE LOCATIONS

Canada
China
India
Italy
Jordan
Mexico
United Arab Emirates



Raw Water Treatment

Ion Exchange

Membrane Processes

Recycle/Reuse

Zero Liquid Discharge

Industrial Concentration

Desalination



WATERTRAK™

Deminceralization (DI), reverse osmosis (RO), and electrodeionization (EDI) systems based on a functional design derived from 20+ years of experience in the industry. WATERTRAK™ is the most cost-effective and fast solution for pure water treatment in the industry today.

- Pressure Filters
- Ultrafiltration
- Reverse Osmosis
- Ion Exchange
- Mixed Bed Polishers
- Electrodeionization



www.aquatech.com

