ResinTech® provides premium quality media, technical support, and patented technologies that help dealers and operators worldwide ensure optimal water quality for virtually every water softening, demineralizing and conditioning application.
ABOUT US

ResinTech® manufactures a broad range of ion exchange resins, activated carbons and selective adsorbents for water and wastewater treatment. An industry-leader for over 30 years, ResinTech has assembled the best technical team in the business, re-invested in technology, and led the way in ion exchange research and development.

Our premium quality media, legendary technical support, and patented technologies help dealers and operators worldwide ensure optimal water quality for a wide array of applications including deionization, softening, demineralizing, municipal conditioning, condensate polishing, resource recovery, pollution control, and radwaste treatment.

Together with its corporate subsidiaries, ACM Technologies and Aries FilterWorks, the ResinTech family of companies provide products and services to support all phases of the IX resin life cycle from media formulation to ion-exchange application to resin regeneration.

Since inception in 1986, our philosophy has been to nurture partnerships that are productive for our customers as well as ourselves. That approach has led to consistent growth and success for both ResinTech and our clients.

ResinTech is headquartered in West Berlin, NJ and maintains facilities in Forest Hill, MD, Sarasota, FL, Houston, TX, Gardena, CA and Chicago, IL.
WATER & RESIN TESTING

ResinTech’s world-class laboratory offers our customers valuable insights into the composition of their feed and process water and the health of the media in their ion exchange vessels.

Periodic testing of resin samples from ion exchange units enables the plant operator to track the normal degradation of the resins and to observe fouling problems before they become serious. Resin analysis results are used as a guideline for the optimization of ion exchange systems. ResinTech Lab Services can perform robust resin and water analysis including:

- Volumetric Capacity
- Moisture Content
- Visual Examination
- Separation & Percent of Components (Mixed Bed & Layered Bed)
- Site Composition (Regenerated Resins)
- Microscopic Photo
- Column Testing

Water testing provides a complete understanding of your waste, process or raw water and the specific contaminants present within each. Such testing allows our technical support staff to identify the best adsorbent for a particular challenge.

ResinTech can test any non-hazardous water sample and report back metrics related to pH, conductivity, alkalinity, turbidity, and hardness, as well as provide details regarding any trace metals, volatiles or organics that may be present. We can also provide wet chemistry testing for elements like Iron, Ammonia, Silica, Arsenic, Fluoride, Chromium, Phosphate, Nitrate and Dissolved Oxygen.

MIST-X® RESIN PERFORMANCE MODELING

ResinTech’s proprietary MIST-X® (Multiple Ion Simulation Technology) platform provides accurate information about how ion exchange resins will perform under specific conditions.

MIST-X algorithms combine mass action and selectivity relationships with the chemical profile of water (or liquid) for almost any ion exchange application. The result is a detailed simulation of the exhaustion and regeneration cycles for most types of ion exchange resin. Variations in operating conditions can be studied quickly and efficiently. MIST-X provides a (calculated) effluent history for every ionic substance passing through the resin bed.

MIST-X arms engineers with the data necessary to make informed decisions about the resin(s) best suited for their environment and make accurate forecasts regarding the useable life of each resin and operating costs needed to maintain them going forward.
**ResinTech** manufactures a broad range of IX resins, activated carbon and inorganic selective exchange media for water and wastewater treatment.

**Resin, Carbon & Specialty Medias**

ResinTech provides premium quality media, world-class technical support and patented technologies. Our products are used worldwide to help dealers and operators achieve optimal water quality for a variety of water purification applications including softening, demineralizing, municipal conditioning, condensate polishing and radwaste treatment.

Ion exchange resins are excellent for large (utility) and small (home water softener) installations and are particularly well suited for the removal of ionic impurities. They are also stable and readily regenerated.

Activated carbons are an ideal choice for taste and odor applications as well as chlorine removal. Premium carbons are available in coal, coconut shell, and catalytic GAC and can be pH stabilized with an acid wash and high purity DI water rinse. ResinTech Carbons are dried to a consistent moisture to provide a dust-free product.

ResinTech also manufactures a variety of specialty resins like our POWERMAX line of resins. POWERMAX resins are used in the nuclear power industry for make-up demineralization and condensate polishing. Our municipal products are available for Arsenic, Nitrate, Perchlorate, Chromate, Uranium and Radium removal. These products are available in a variety of ionic forms, particle sizes, and cross-linkage for excellent thermal stability and immediate use without preconditioning.

Whatever your need or application, genuine ResinTech® media keeps your water working for you.
TANKS & ACCESSORIES
ResinTech has a wide array of composite pressure vessels and accessories available for water treatment systems. All tanks are fiberglass reinforced plastic (FRP) construction, built to withstand the rigors of portable exchange service. High-temperature tanks are also available. All tanks feature an inert polymer liner that provides superior durability and chemical resistance.

Assembled tanks filled with the customer choice of resin, carbon, or specialty media provide one-stop solutions. Tank accessories include heads, riser tubes, inlet and outlet distributors and quick-connect hose and NPT fittings.

Our six strategically located distribution centers across the country ensure products are available upon demand with prompt delivery.

CUSTOM MEDIA ENGINEERING
Sometimes customers have unique challenges that need to be overcome. At ResinTech, Product Engineering has direct access to our state-of-the-art lab, MIST-X® performance modeling and the largest digital library on ion exchange technology available today. Maintaining these highly-skilled resources under one roof uniquely qualifies ResinTech to solve problems that elude other companies. Our custom solutions often result in making possible what was previously thought to be impossible.

POWDERED RESIN
ResinTech manufactures a complete line of powdered ion exchange resins. Powdered resins are widely used in the power generation industry as precoat medias for condensate polishing. These medias are available as separate cation or anion components, or mixed together. Other formulations include blends of powdered resin with inert fibers to assist in particle filtration of metal oxides commonly found in condensate. Our powdered resins are also used in the manufacture of membranes and other unique applications that require powders ground from resins. Our powdered resins can be ground to very precise particle size requirements. We offer small batch processing for research and prototype work and can also provide custom ground products.

FIELD SERVICES & TECHNICAL SUPPORT
ResinTech is home to some of the leading scientists in the field of Ion Exchange. Our technical support staff is ready to assist our customers with product or process recommendations for specific use cases.

Our objective is to make sure the solutions recommended are performing optimally. Technical specialists are available for site visits to perform:

- PLANT AUDITS
- ELUTION STUDIES
- IN-HOUSE OPERATOR TRAINING
- REVIEW OF REGENERATION PROCEDURES
- SYSTEM DESIGN & TROUBLESHOOTING

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Ion Exchange Resin and Regeneration
Cutting-edge technology with solutions engineered to satisfy our customer’s environmental challenges, water purification needs, and resource recovery objectives

**RESIN REGENERATION**

ResinTech’s ACM division specializes in restoring exhausted resin back to its proper ionic form for service. Regeneration provides the customer with savings across the board from buying virgin product and peace of mind that the waste products are being handled properly. ACM is licensed to handle and regenerate both hazardous (F006) and non-hazardous resin.

Non-hazardous resins can be transported and regenerated cost-efficiently through proper packaging, and inexpensive transportation via common carriers because they are not regulated.

Manifested, hazardous resins used in applications where either because of the use or content and type of contaminants on the resin, must be handled and processed according to Federal Regulations.

Resintech’s ACM Technologies division has regeneration plants on the east and west coast for:
ACM has separate regeneration equipment for non-metal bearing resins as well. All regeneration processes are tightly controlled. The quality of each regenerated lot is tested to ensure the customer achieves the highest quality water and capacity.

**RO MEMBRANE CLEANING**

Similar to resin exhaustion, reverse osmosis (RO) membranes can become contaminated after they have been used for some time, with pollutants such as solids, scale, and biological matter. These contaminants can plug the membrane surface and the pipes of the membrane system and consequentially, the performance of the system will decrease.

ACM has the proven systems in place to receive contaminated membranes and clean them to return them to service.

**WATER RECYCLING**

ACM provides customers with a reliable and cost-effective method of removing dissolved heavy metals and salts from wastewater and producing high-quality deionized water for recycling.

Water recycling typically provides our customers with operational savings in a variety of areas like feed water costs, discharge and permit fees, lab fees for water analysis, and EPA penalties. But, depending on the industry, most customers see additional savings result from a reduction in chemical expenses, reduced labor costs, and higher product yields due to reduced defects.

Water recycling helps move toward their goal of achieving zero liquid discharge.

**METALS ELIMINATION (WASTEWATER PURIFICATION)**

Many industries face strict wastewater discharge limits at the local, state and federal levels. These regulations pose unique challenges to each facility. Often, companies are unaware that the water they are discharging is non-compliant or of the monetary fines associated with compliance violations.

ResinTech’s ACM division designs water treatment systems best suited for your environment and application. Our solutions target and recover specific heavy metal ions from wastewater streams by using genuine ResinTech ion exchange media.

The result is reduced costs associated with labor, chemicals, and sludge and slurry waste disposal. We keep your business running while keeping your workplace safe and environmentally responsible.

ACM’s proprietary Metals Elimination System (MES) is an ideal solution for production environments with limited floor space or situations where you want the flexibility to quickly move your IX solution from one finishing line to another.

The MES is a compact, portable, energy-efficient system that is ideal for helping small and midsize shops achieve compliant discharge levels.

**EDM / MIXED BED**

Electro-Discharge Machining (EDM) is a commonly used method to machine exotic metals and graphite. Mixed Bed Ion Exchange is an intricate part of the process, serving to purify the dielectric fluid. The exhausted resin is non-hazardous, yet contains a variety of metals and metal oxides that traditional service DI facilities are unable to receive and process.

ACM’s unique regeneration facilities have been specially designed to separate the mixed resin, remove the ionic metals and suspended metal oxides, regenerate both cation and anion resins, and properly handle the waste. The regenerated resins are re-mixed, quality-controlled, and returned to the end user for re-use.
Industry-leading point-of-use products and solutions that ensure people and businesses make better use of the resource they rely on every day

FILTERS & CARTRIDGES

ResinTech’s Aries FilterWorks division manufactures specialty cartridges for Laboratory, Commercial and Residential filtration applications. A complete line of filters and systems are available to fit any application whether your goal is to remove specific contaminants, heavy metals, or simply correct taste and odor.

Aries FilterWorks AF Series drinking water filter cartridges are WQA Gold Seal Certified to ensure customers they are receiving the highest quality products that meet the strictest manufacturing standards.

Each Aries filter contains ResinTech premium media fresh from the manufacturing facility to ensure maximum shelf life and is backed by world-class technical support. Each cartridge is individually lot numbered to provide a traceable history of every product shipped.

Aries FilterWorks products are manufactured in the USA using the latest manufacturing technology. A variety of welding, filling and molding machinery ensure complete control over the manufacturing process. Manufacturing and stocking locations are on both coasts, reducing shipping costs and improving delivery.
FILTER DESIGN ENGINEERING
For some customers, the specific cartridge or filter they need simply doesn’t exist. That’s where we come in.

OEMs and other companies look to Aries FilterWorks to devise solutions for the most critical components of their products ranging from residential to military to medical products. No matter the need or challenge, we have the capacity and expertise to design an answer and manufacture it at scale.

LAB WATER
High Purity Water is critical to research work in a variety of analytic environments from academic to life-science to commercial.

Aries FilterWorks manufactures state of the art water purification systems and cartridges capable of removing ionic and organic contaminants to trace levels. Our lab water systems surpass even the strictest reagent grade deionized water specifications and applications. A variety of point-of-use systems are available to fit every need and budget in and around the laboratory — from a Type I water system, general deionization, or replacement filters for other manufacturers systems. Aries FilterWorks has the answer.