



Innovations in Ion Exchange

for Municipal Water

The background of the image is a deep blue ocean with gentle, rolling waves. The lighting is soft, creating a serene and clean atmosphere. At the bottom of the image, there is a thick, wavy line in a vibrant green color that separates the blue ocean from a solid dark blue area below it.

Nutrient **Removal**

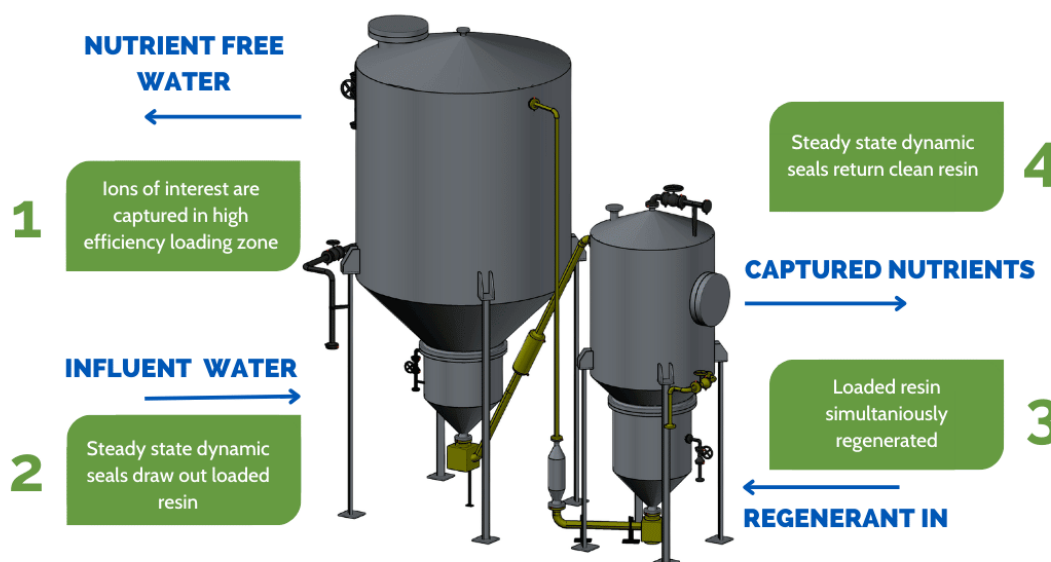
Reliable and Sustainable Water Treatment

At Renix, we recognize the vital role utilities companies play in safeguarding community health by providing safe, clean water. We are committed to helping you achieve efficient removal of nutrients like nitrates and phosphates that, if left untreated, challenge safe water use and discharge. We have engineered advancements to a proven Ion Exchange technology that enhance performance, sustainability, and reliability. With our innovative RenixUIX™ Steady-State Ion Exchange platform, we empower you to meet regulatory demands, adopt sustainable practices and maintain customer trust.



RenixUIX™: The Advanced Ion Exchange Platform for Nutrient Removal

Unlike traditional batch-based processes, our patented RenixUIX™ platform provides tunable operation, including steady state resin regeneration and controlled chemistry.



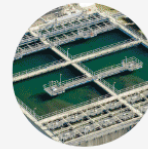
RenixUIX™ simultaneously enables two steps; expanded counter-current sorption of compounds-of-interest and integrated resin regeneration. The dynamic seals enable resin to move in steady state through the system without process interruption, passing from sorption to regeneration and returning to sorption. Steady state recharging of the sorption vessel with regenerated resin minimizes the amount of exhausted resin in the vessel, delivering high overall resin use efficiencies with a lower resin volume, smaller footprint, and less ancillary equipment.

The platform is tuneable in real-time, and features a lower bed pressure drop, with less resin attrition than an equivalent fixed-bed ion exchange system. These and other advances result in a platform with improved sustainability, reliability and lower operation and maintenance costs.

Municipal Water Applications



Wastewater



Drinking Water

RenixUIX™ Steady-State Ion Exchange Platform

Ion Exchange is a proven and effective method for removing dissolved compounds such as phosphate and nitrate from water and wastewater treatment works.

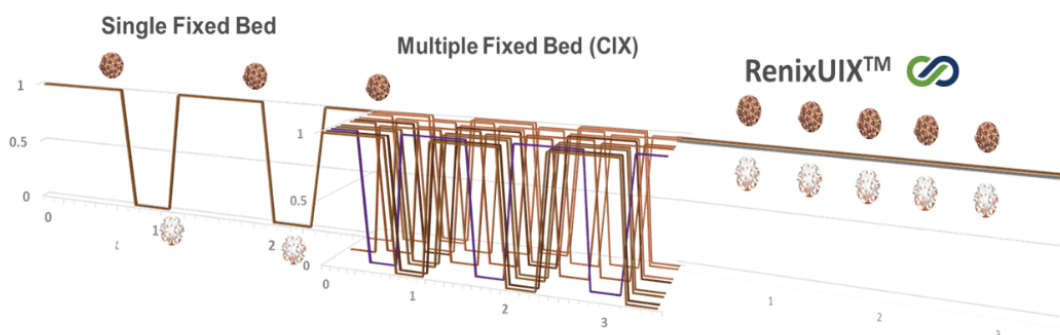
Our advanced steady state ion exchange platform consistently delivers high nutrient removal rates, ensuring your water meets or exceeds all regulatory standards.

Coupled with smart regeneration strategies, RenixUIX™ delivers:



- **Proven and effective ion exchange chemistry:** Guaranteed water quality and compliance assurance
- **Low cost of ownership:** Reducing operational costs allows for more effective allocation of resources and avoids higher costs for water users
- **Simple real-time nutrient load pacing:** Tuneable and highly stable chemistry to match variations in water quality
- **Operational simplicity and reliability:** Robust and simple operation requires minimal operator intervention
- **Modular, flexible implementations:** Compact design, ideal for retrofitting existing facilities or integrating into new developments where space is limited
- **Lower environmental impact:** Reduced brine production and waste discharge, with lower water and chemical consumption

Same Proven Chemistry : Advanced Equipment Platform



Renix Wins Innovative Water Treatment Technology Award at IFAT Brasil 2024



London, ON, Canada — Renix Inc. wins the Innovative Technology Award 2024 during the third day of the trade fair at the first IFAT Brasil 2024, held in Sao Paulo, Brazil, in April 2024.

Andy Prince, Director of Sales and Science, participated in the pitch competition for new water treatment technologies at the Innovation Pavilion by Isle Brazil. He showcased the RenixUIX™ platform for water purification, and as a result, Renix obtained the Innovative Technology Award during the first IFAT fair held in Latin America.

At Renix, we support the efforts of water users across a range of applications to improve their processing capabilities and efficiencies. “We are proud that our unique water treatment solution received this recognition at IFAT Brasil,” says Renix Inc. Director of Sales and Science, Andy Prince. “It affirms all our work as a team on a platform that can actually revolutionize water treatment processes.”

IFAT Brasil brings together leading companies and experts in water, sewage, drainage, and waste recovery. Held for the first time in Latin America, in Brazil, the event provides an avenue for businesses to showcase new ideas.

Industries



Water



Fuel & Power



Mining,
Minerals &
Metals



Ingredients,
Biofuels &
Biochemicals

10 billion people. One planet. Finite resources.

Exponential global population growth results in competition for ever decreasing water resources and the need for sustainable solutions. This demands that we rethink how we can extract optimal value from our resources in the most efficient and planet-friendly way. By transforming water treatment, we aim to support utility companies and communities so we can thrive together.



Transforming Our Resources,
Transforming Our World.

www.renix.ca

