

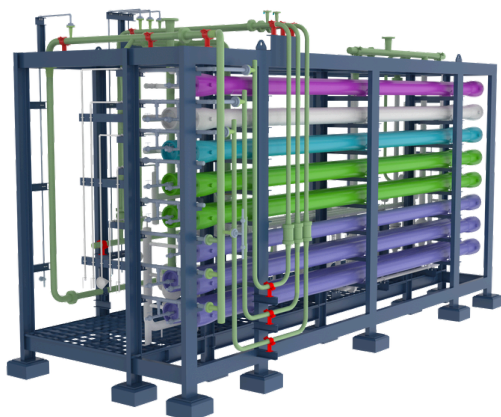
Next-Generation Membrane Brine Concentration Solutions

Advanced membrane solutions for high-recovery industrial water systems

RecovOAR™

Osmotically Assisted Reverse Osmosis (OARO)

RecovOAR™ is an integrated membrane-based system that maximizes resource recovery from high-salinity industrial waste streams. It treats feedwaters up to 180,000 mg/L TDS at 1,150 psi (80 bar), recovering freshwater and valuable minerals while reducing waste disposal costs.



Core Performance Benefits

- Brine concentration to >250 g/L TDS
- Handles monovalent, divalent & mixed salts
- Operates at standard SWRO range
- Up to 100% increase in freshwater recovery
- Optimizes thermal energy use

Target Applications

- Seawater brine mining and salt recovery
- Lithium processing
- Water recovery from produced water
- Zero Liquid Discharge (ZLD)

ConcentratOAR™

Forward Osmosis (FO) and OARO

ConcentratOAR™ treats high-fouling, organic-rich streams, including industrial wastewater, landfill leachate, and food & beverage applications. The system handles dissolved solids and organics with minimal pretreatment, enabling resource recovery and beneficial reuse.



Core Performance Benefits

- Volume reduction of challenging streams
- Freshwater comparable to SWRO permeate
- Resistant to fouling, abrasions, and chlorine
- 75-90% water recovery from brine
- Consumes 5-15 kWh/m³ of feed water

Target Applications

- Nutrient recovery from biogas digestate
- High-organic industrial wastewater treatment
- Landfill leachate treatment
- Water recovery from mining waste

About FTS H₂O, An Aquatech Company

Aquatech's Center of Excellence for Membrane-Based Brine Concentration

FTS H₂O, an Aquatech company, delivers advanced membrane solutions that enable resource recovery while reducing energy use. As a pioneer in Forward Osmosis (FO), FTS has commercialized both FO and Osmotically Assisted Reverse Osmosis (OARO) for industrial applications. Combined with Aquatech's global expertise, our technologies enable more efficient freshwater recovery, ZLD, brine concentration, and mineral purification across various industries.

Membrane-first brine concentration delivers comparable concentration performance at a fraction of the thermal energy cost.



End-to-End Solutions

Only Aquatech offers RO, OARO, FO, membrane distillation & thermal under one contract.



Proof at Scale

RecovOAR™ is a proven commercial solution operating across five industries worldwide.



Global Distribution

Backed by Aquatech's 45+ years of experience, FTS H₂O offers EPC and modular treatment solutions.



Center of Excellence

FTS H₂O's Albany, Oregon facility is Aquatech's advanced membrane concentration hub.

RecovOAR™ System Deployment:

Maximizing Lithium Recovery in China

Industry: Critical Minerals & Mining

Challenge: Lithium extraction and processing generates high-salinity brines and wastewater that are difficult to treat, challenging water recovery, waste reduction, and sustainable resource management.

Solution: RecovOAR™ uses integrated RO and OARO technologies to recover more water, concentrate brines beyond conventional limits, and reduce waste volumes, supporting more efficient and sustainable lithium operations.

