

Integrated Water Solutions from FTS H₂O

Advanced membrane solutions for high-recovery industrial water systems

FTS H₂O, an Aquatech company, provides advanced membrane-based services that enable higher water return, critical minerals recovery, lower energy use, and greater operational resilience in the world's most challenging industrial water and brine applications. As Aquatech's global Center of Excellence for membrane-driven brine concentration, FTS H₂O supports projects from early feasibility through full-scale deployment. Our team works alongside Aquatech's global engineering and delivery organizations to extend the operating envelope of conventional treatment systems and optimize full industrial water flowsheets.

Core Services We Offer



Resource Recovery

Turning waste streams into economic opportunity by extracting valuable minerals.



Industrial Water Treatment & Reuse

High-recovery treatment systems that enable closed-loop industrial wastewater reuse.



ZLD & Brine Concentration

Membrane-based solutions that reduce wastewater volume, lower OPEX and improve sustainability.



The Full Flowsheet Solution

Aquatech's integrated flowsheet spans pretreatment through mineral product, with FTS H₂O membrane solutions optimizing the thermal stage through decreased energy use. Technologies are available as fully integrated Aquatech systems or as licensed, pre-engineered modular units.

Throughout the service lifecycle, FTS H₂O provides maintenance, troubleshooting, and optimization across the entire flowsheet. This end-to-end, full-system approach enables continuous improvement to protect long-term system performance.

End-to-End Support from Aquatech, FTS H2O's Parent Company



Startup & Commissioning

System startup and commissioning, operator training, and performance validation



Operations & Maintenance

Routine system inspections, preventative maintenance, and troubleshooting



Optimization & Performance

Operating data analysis, setpoint optimization, process recovery improvement



Technical Support

Rapid remote and on-site support, process optimization guidance, and issue resolution



Industry Applications

- Industrial Wastewater Treatment & ZLD
- Lithium Recovery & Rare Earth Elements Extraction
- Landfill Leachate & Biogas Digestate
- Food & Beverage
- Produced Water Treatment & Reuse

System Deployment:

NaCl Recovery at a World-Leading Desalination Hub

Application: Desalination & Resource Recovery

Challenge: The facility produces more than 1.4 million m³/day of potable water, alongside a significant volume of high-salinity brine, constituting a largely untapped opportunity for resource recovery.

Solution: FTS H2O's RecovOAR™ high-recovery membrane system concentrates and recovers desalination reject into high-purity brine with >20% concentration. The pilot plant, operational since 2021, consistently achieved 75-78% recovery, producing 0.5 m³/h of high-purity brine with an energy consumption of only 4.5 kWh/m³.

Visit our website to
find out more:

