



# Industrial Water Solutions

Modular, Complete, Intelligent Systems



[WWW.SALTWORKSTECH.COM](http://WWW.SALTWORKSTECH.COM)

## SALTWORKS OFFERINGS

Saltworks delivers proven technologies and expert engineering to support your industrial water project from pilot to production.

Whether you need a full turnkey system, select unit operations, or digital and engineering support, our modular solutions are engineered for performance, cost-efficiency, and flexibility.

### OFFERINGS

#### TURNKEY SYSTEMS

- › End-to-end, modular, and automated systems
- › Full package inclusive of all unit operations, interconnections, & advanced process control
- › Solutions tailored to operating conditions and goals

#### SINGULAR UNIT OPERATIONS

- › Robust, modular, factory-commissioned skids
- › Built-in intelligent controls
- › Integrate with your process plans & plants

#### DIGITAL TWIN 'Q' & OPTIONAL PREDICTIVE AI

- › Available with Saltworks' turnkey systems
- › Consideration for select projects
- › Operate, train, & optimize a virtual plant
- › Secure data management & reporting

#### PILOT TESTING & ENGINEERING SERVICES

- › Extensive fleet of on- & off-site pilots
- › Early contractor involvement (ECI)
- › Front-end engineering design (FEED)
- › Collaborate & accelerate with EPCs

### ADVANTAGES

- › Off-site constructed modular plants offering lowest total installed cost: Lang Factor 1.2-1.5
- › Performance optimized: Improve efficiency by 20%
- › Smart automation, digital twins, & remote support

- › Select à la carte high-performing unit operations
- › Engineer into your process flow sheet
- › Achieve lower total installed cost
- › Self-diagnose and self-maintain for higher uptime

- › Process modelling for testing & optimization
- › Input cost & market sensitivity analysis
- › Virtual commissioning and training tools
- › Plant performance reports & recommendations

- › Pilot plants with full-scale process control
- › Produce battery chemicals
- › Detailed process flows & mass balances
- › Advance ECI and FEED with a proven partner

Saltworks delivers modular, intelligent, built-for-performance water solutions.

Contact our expert engineers today.

Let's Talk  
**WATER**

 +1 604-628-6508

 [info@saltworkstech.com](mailto:info@saltworkstech.com)

 [www.saltworkstech.com](http://www.saltworkstech.com)

**Our off-site constructed and factory-commissioned plants are cost-effective, high-performing, modular, and scalable.**

Customers benefit from lower total installed costs, de-risked delivery models, and proven, repeatable designs trusted by the mining, manufacturing, and energy industries.

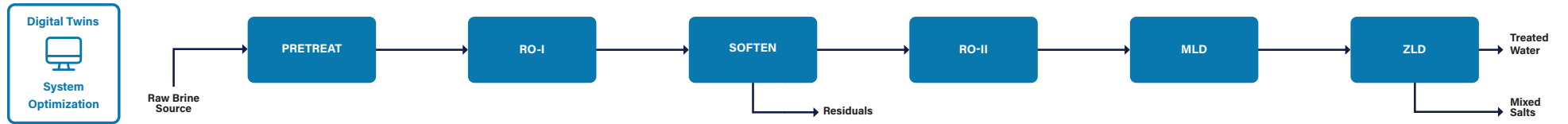
With deep expertise in industrial water treatment and critical mineral recovery, Saltworks delivers water solutions across applications—from selective contaminant removal to minimal and zero liquid discharge.

Our team is ready to support your goals with complete water treatment systems, advanced unit operations, expert engineering and pilot services, digital twins & 24/7 remote operations.

## Turnkey Plants or Unit Operations

Saltworks' technologies support every stage of industrial water treatment—serving sectors such as semiconductors, automotive, data centers, manufacturing, and oil & gas. Our modular, scalable systems are engineered to maximize recovery, minimize installed cost, and employ advanced intelligent automation.

Below is a simplified flow sheet with representative technologies at each stage. Whether you need a full system or just a few key unit operations, Saltworks delivers leading process solutions for your industry's water treatment challenges.



Process Step	Pre-conditioning System (PCS)	Primary Reverse Osmosis	Scaling Ion Removal	Secondary Reverse Osmosis	Minimal Liquid Discharge	Zero Liquid Discharge

Saltworks Product	XtremeUF	XtremeRO-600	*BrineRefine / Xtract / SelectNF	XtremeRO-1200	FusionRO	SaltMaker MVR
<b>Technology</b>	Filtration	Reverse osmosis (600 psi)	Chemical softening (CS), ion exchange (IX), or nanofiltration (NF)	Reverse osmosis (1,200 psi)	Ultra-high pressure hybridized RO/NF	Forced circulation mechanical vapour recompression crystallizer
<b>Objective</b>	Remove suspended solids, oxidise metals if needed	Recover water and minimize brine up to scaling ion limits	Remove scaling ions (i.e. Ca, Mg, F, Si, metals)	Recover additional water and concentrate brine	Minimize evaporation system capacity	Achieve reliable zero liquid discharge
<b>**Water Recovery</b>	>98%	90%	0%	96%	98%	>99%
<b>Rejects</b>	Sludge / filter cake	Reject brine; 30,000 mg/L TDS	CS: Filter cake IX: Reject waste NF: NF reject	Reject brine; 80,000 mg/L TDS	Reject brine; 200,000 mg/L TDS	Mixed solid salt

\*Review with Saltworks experts to determine optimal technology  
 \*\*Assumes inlet TDS = 3,000 mg/L with scaling ions at 25% of limits