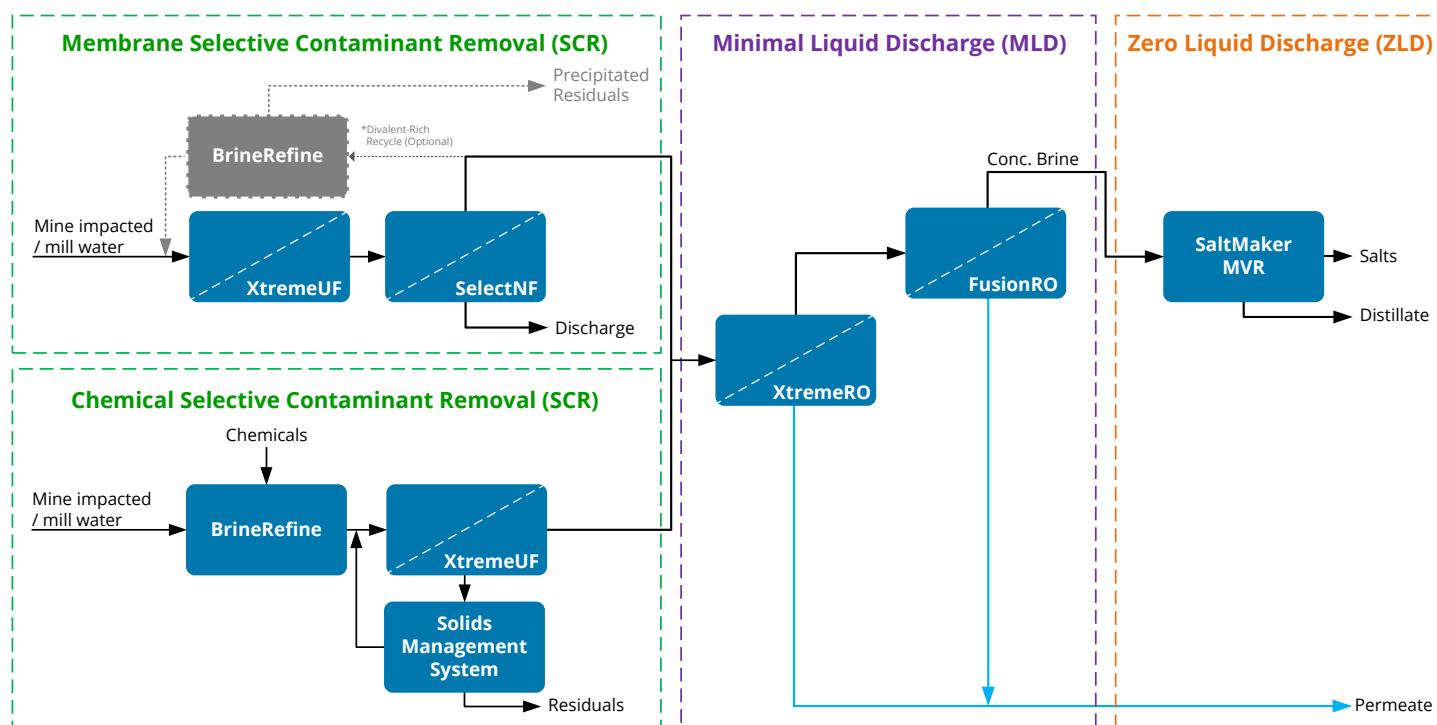


Modular Mine Water Treatment Solutions

Remove Contaminants, Recover Metals, Eliminate Discharge

Saltworks delivers modular mine water treatment solutions. Our advanced, automated systems are configured to address your specific treatment objectives, water chemistry, operating parameters, and brine management preferences. The diagram and table below illustrate Saltworks' treatment options. We work to customize and optimize for your project chemistry and goals.



Challenge	Treatment Process	Saltworks Product
Metals	Phys-chem treatment via continuous stirred-tank reactor (CSTR) to selectively precipitate dissolved metals for filtration.	BrineRefine
Hardness	Chemical softening via CSTR to precipitate hardness ions and scale-forming solids, removed via filtration.	BrineRefine SelectNF (alternative)
Sulfates	Pre-filtration and nanofiltration to selectively reject divalent sulfate ions while allowing monovalent ions to pass.	SelectNF BrineRefine (alternative)
Organics	Ultrafiltration to remove colloidal organics & solids, permitting subsequent nanofiltration to reject dissolved organics and divalent ions.	SelectNF
Chlorides	Reverse osmosis to reject monovalent chloride ions. Optional MLD / ZLD to minimize brine volume.	XtremeRO / FusionRO
Nitrates	Three options: biological, ion exchange, or reverse osmosis. Selection depends on other constituents of concern that must be treated.	Xtract or XtremeRO / FusionRO
Brine Volume	High-recovery MLD system to minimize energy and costs. Optionally achieve ZLD via evaporative crystallization of concentrated brines.	FusionRO / SaltMaker MVR

Applications

Saltworks' advanced solutions are engineered for reliable and economic use across the mining industry. We offer treatment and extraction of difficult contaminants, recovery of valuable resources, and brine concentration to minimize or eliminate discharge. Our solutions encompass:

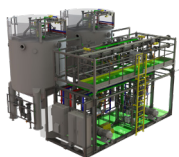
- **Acid Mine Drainage:** Neutralize acidity & remove metals
- **Mine Dewatering:** Treat & discharge mine waters
- **Tailings Water:** Recover & reuse process water
- **Groundwater Remediation:** Remove metals, sulfates, & organics
- **Targeted Ion Removal:** Remove nitrate, sulfate, & chloride ions
- **Saline & Brine Streams:** Concentrate to MLD / ZLD
- **Recover Valuable Resources:** Extract valuable brine constituents



SaltMaker plant treating mine water at client site

Modular, Intelligent, Automated, & Off-Site Commissioned

Saltworks delivers cost-effective, high-recovery water treatment systems that are modular, intelligent, and fully automated. All solutions are constructed and commissioned off-site, designed for rapid installation and start-up, minimizing operational disruption.



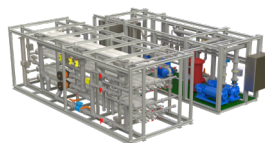
BrineRefine

Continuous Stir-Tank Reactor



XtremeUF

Tailored Ultrafiltration



XtremeRO & FusionRO

UHP Hybridized RO / NF



SaltMaker MVR

Evaporator Crystallizer

Engineered for reliability and performance in demanding remote locations, Saltworks' systems feature advanced automation to reduce operator intervention. Automated sequences—such as auto-start, capacity ramping, self-cleaning, hibernation, and shut-down—enhance energy and cost efficiency. High-precision sensors facilitate self-diagnosis and corrective actions to protect system health, while minimizing chemical consumption and sludge generation.

Through 24/7 remote monitoring and controls, our solutions leverage predictive analytics and daily reports to optimize uptime and maintenance, while ensuring reliable and continuous operation.

De-risked, Scalable & Supported Solutions

At Saltworks, we prioritize economic delivery, technical excellence, and project risk mitigation. From initial chemistry analysis through to ongoing support beyond project implementation, our engineers are committed to supporting your project every step of the way:

Process optimization
& pilot testing services

Front-end engineering
design to refine costs

Full-scale units, complete
plants, & digitization

Ongoing technical &
operational support