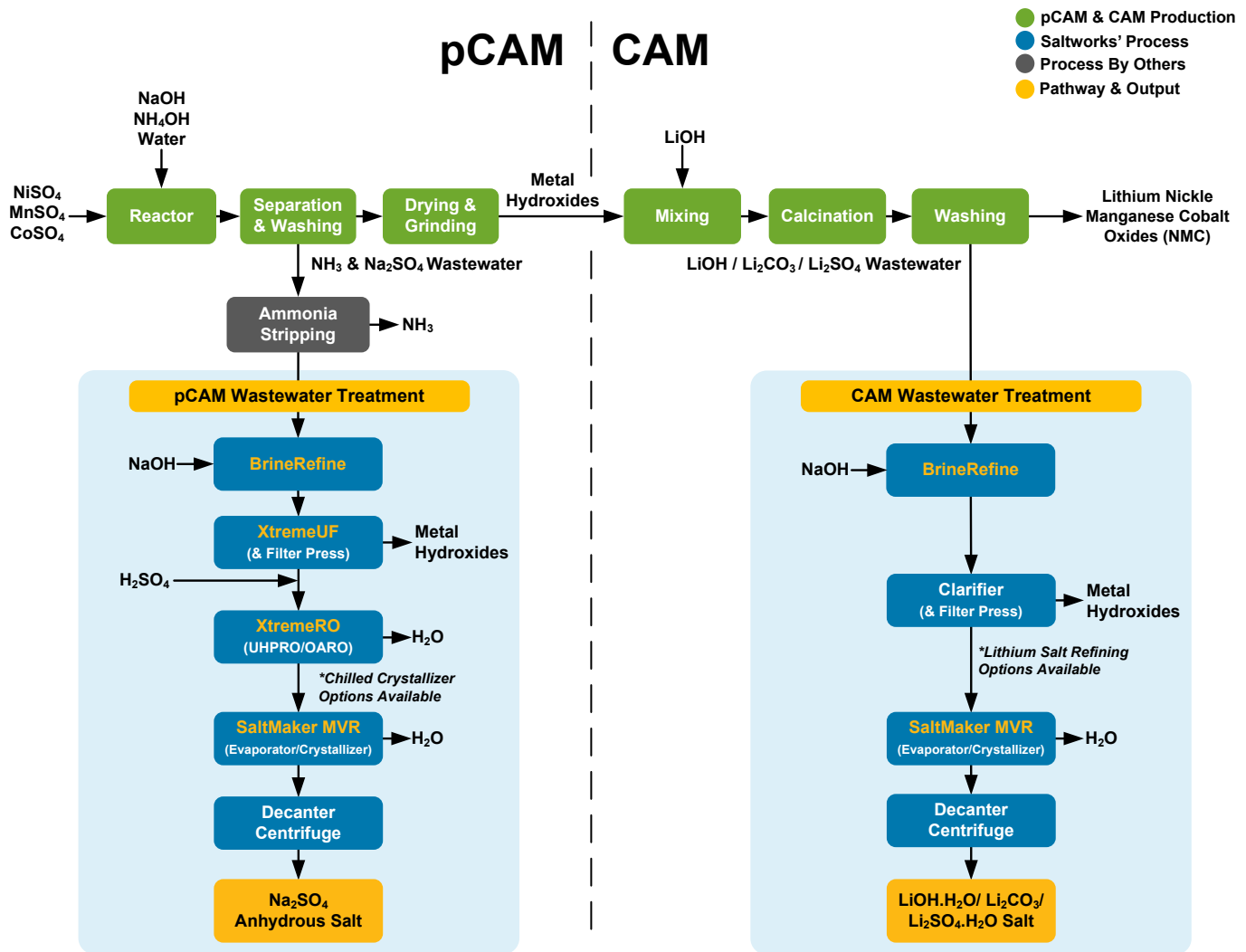


pCAM and CAM Wastewater Processing

Advanced Water and Valuable Material Recovery Systems

Cathode Active Material (CAM) and Precursor CAM Wastewater Treatment

Meet discharge limits, recover lithium, water and precious materials with Saltworks' end-to-end complete treatment systems.



Concentrate, Refine, Convert, Reuse

Saltworks offers optimized robust, modular, and intelligently automated treatment systems for precursor cathode active material (pCAM) and cathode active material (CAM) wastewaters. Our systems support meeting discharge limits, recovering valuable materials including lithium, metals and water for reuse while reducing brine volume, and disposal costs.

Process, Technologies, and Economics

Progress from concept to de-risked optimized processes, to full-scale plants. We provide flexible options, from engineering services to pilots, single-unit operations, or complete wastewater treatment systems.

Saltworks and Your pCAM & CAM Project

Client confidentiality, deep technical focus, and responsiveness are critical at Saltworks. **Contact us to start today.**



1
Process
Optimization

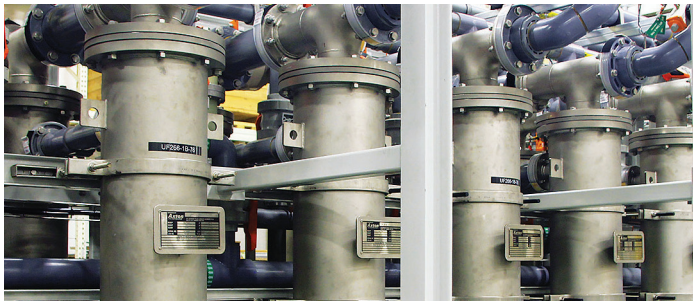
2
Pilot:
Lithium
Test Center

3
Full-Scale:
Unit Ops,
Complete Plants,
Digitization

4
Operational
Support &
Optimization

- Process flow optimization to put your project on the best path
- Lab- and bench-scale analysis to de-risk and optimize
- Front-end engineering design (FEED) evaluation to refine costs
- Pilot projects to prove performance
- Full-scale modular unit operations to integrate with others
- Full-scale complete lithium systems from start to finish

pCAM & CAM Concentration & Processing Technologies: Modular & Digitized



BrineRefine and XtremeUF: Refine & Convert

Our smart chemical conversion processes (BrineRefine) and robust ceramic ultrafiltration (XtremeUF) ensure product quality and maximize water recovery by precisely targeting impurities.

In CAM wastewater treatment, a BrineRefine carbonate reactor can be added to produce technical or battery-grade lithium carbonate or lithium hydroxide monohydrate.

XtremeRO: Concentrate

Concentrate sodium sulfate up to 50% higher than conventional RO with our next-generation, ultra-high-pressure reverse osmosis system, XtremeRO-1800.

XtremeRO increases water recovery, and reduces the size and cost of downstream evaporators or negates their need entirely.

Push innovation and higher concentrations with osmotically assisted reverse osmosis (OARO).



SaltMaker MVR: Concentrate and/or Crystallize

Produce sodium sulfate anhydrous salts with a SaltMaker MVR crystallizer and centrifuge, or produce lithium carbonate or lithium hydroxide monohydrate or lithium sulfate monohydrate crystals with a SaltMaker MVR crystallizer and centrifuge.

Configured as evaporators or crystallizers, SaltMaker MVR forced-circulation systems are fully automated, with built-in self-cleaning. As a crystallizer, integrated solids management systems ensure reliability at optimal capacity.