



CASE STUDY

LITHIUM BRINE CONCENTRATION

Battery production – advanced materials

osmo
membrane systems

OBJECTIVE

- **Maximize concentration of two lithium brine streams with different lithium contents to increase efficiency of the downstream dry sprayer.**
- **Maximize lithium recovery**



SOLUTION

Implementation of a multistage Reverse Osmosis system at different pressure levels including an ultra-high-pressure RO unit (UHPRO) operating at 120 bar.



CUSTOMER BENEFITS

- ✓ **Efficient:** Lower costs, optimized brine concentration, better dry sprayer performance
- ✓ **Highest recovery:** Lithium product recovery rates >99.99%
- ✓ **Sustainable:** Full water recovery - zero liquid discharge
- ✓ **Seamless Integration:** Pre-tested skid-mounted units, quick installation, minimal downtime



FACTS & FIGURES

Commissioning: 2011/2015

Capacity: 4,000 / 6,000 liters per hour

Feed: Lithium brine

Technology: Multistage reverse osmosis
incl. UHPRO