

A STEP-BY-STEP APPROACH TO DELIVER THE FOUNDATIONS OF INDUSTRIAL PLANTS

STEP 1

Our **proprietary modeling** tool is based on ionic interactions theories and extraction isotherms. It allows to predict the performances of the process, optimize the parameters to meet customer's targets on yield, purity and concentration.

STEP 2

Our **Lab Scale Bench** can perform continuous flow tests for several hours on limited brine quantities to demonstrate the performances of our Process. It allows to confirm the predictions of the model.

STEP 3

Our **Pilot Plants** can perform continuous flow tests for several days or weeks to demonstrate the operability and performances of our Process. It can be installed in Customer's site for training purpose and real conditions testing.

STEP 4

Thanks to our engineering department, our teams will perform the **Basic Engineering**. We will also provide support during next engineering phases. Then, our Operations team will be involved in inspection, commissioning, operators training and start-up phases.

JOIN US
ON OUR JOURNEY
TO MAKE A MORE
SUSTAINABLE LITHIUM!



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AdionicsTM
The Advanced Ionic Solution

UNIQUE **DIRECT LITHIUM**
EXTRACTION TECHNOLOGY

POWERING SUSTAINABLE LITHIUM



ULTRA HIGH SELECTIVITY
UP TO 99% YIELD & PURITY
NO CHEMICALS REAGENTS
LOW WATER CONSUMPTION

A CONTINUOUS FLOW 3-STEP PROCESS

STEP 1

- Extraction
- At ambient temperature
- By a highly selective organic formulation: Flionex®

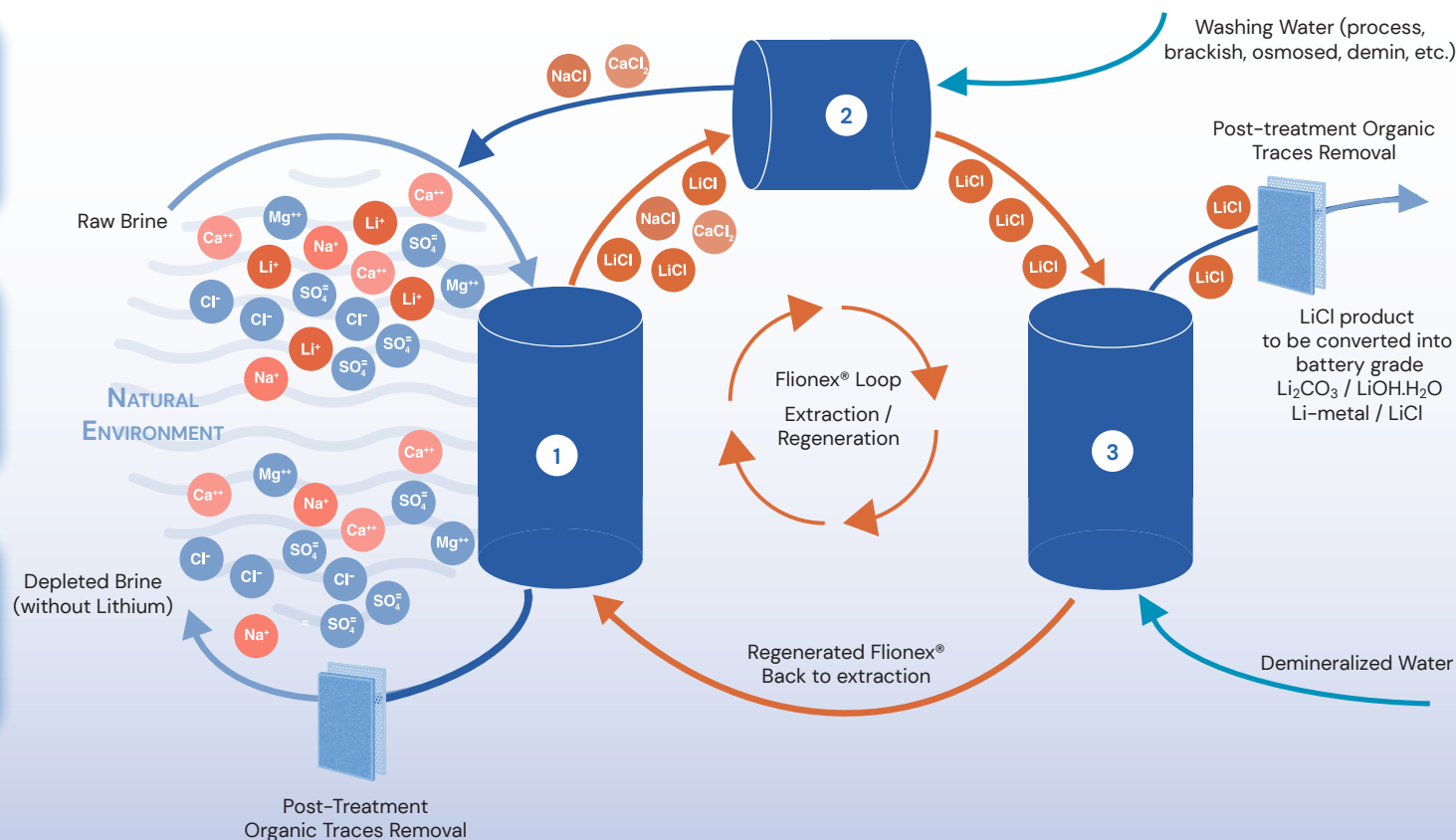
STEP 2

- Washing
- At ambient temperature
- To remove as much impurities as possible

STEP 3

- Regeneration
- At ~ 80°C / 175 F
- Lithium Chloride is released from Flionex®

Our liquid-liquid lithium extraction technology, based on our patented Flionex®, sets ADIONICS apart by its ability to **deliver lithium chloride of exceptional purity**, surpassing the results of conventional methods.



1 million model outputs based on **~150 brines**

+30 Brines tested on Lab Scale bench
1500h cumulated

+15 Brines tested at Pilot Scale
2500h cumulated

ENVIRONMENT

- No chemical reagents are required
- No pH modification along the process
- Limited consumption of freshwater
- Very low energy consumption

PRODUCTION

- Very high selectivity of extraction
- High Lithium yield (up to 99%)
- Concentration factor up to x15
- Unique range of application from 50 mg/L to 80 g/L Lithium

A successful Demo Plant campaign demonstrating the operability of our technology



A successful Pilot Test campaign leading to Lithium Carbonate with **99.85% purity**

