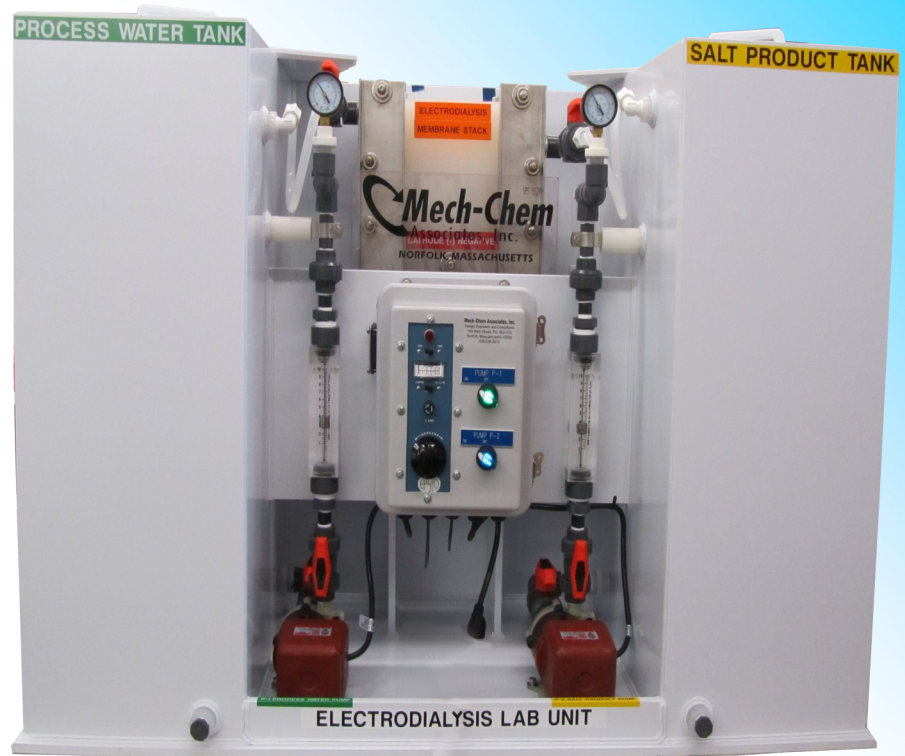


Electrodialysis Lab Test Unit

Mech-Chem offers Electrodialysis lab test units for the testing and verification for the following application:

Applications:

- ◆ Removal of Salt Brine from Water.
- ◆ Concentration of Metal Salts from Dragout and Rinses for Recycling to Plating Baths.
- ◆ Salt Maintenance on Fume Scrubbing Systems
- ◆ Electroless Nickel Purifications



Description:

Electrodialysis is an electrically driven ion-exchange process which utilizes alternating sequences of cation exchange membranes and anion exchange membranes to effect the separation and concentration of dissolved salts from various solutions. Selectively permeable ions are transported from one side of a membrane, through the membrane, to the other side of the membrane. These salts are concentrated, collected, and removed from the unit.

With the proper selection and configuration of permselective membranes between a positively charged, inert anode, and a negatively charged cathode, electric deionization is accomplished. Such a configuration of membranes, hydraulic spacers, and electrodes is termed an Electrodialysis stack.

An Electrodialysis system is comprised of an Electrodialysis stack, circulation pumps, solution holding tanks, a power supply, pressure gauges and ancillary controls. Optional controls may also include particulate filters and conductivity control.

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