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Cathode Optimizing Solution

SIMPLE AND EFFECTIVE

COS is supplied in ready-to-use bottles. Equipment requirements are minimal and manufacturing personnel can easily be trained to use COS.

INDUSTRY BEST

Novel formulation delivers the highest return on investment. Payback periods are short.

GUARANTEE

COS is guaranteed to lower energy consumption or a complete refund is provided.

NO CAPITAL EXPENSE OR DOWNTIME

COS is used "on the fly" and "in-situ", thus eliminating downtime and spare equipment requirements.

OPTIMIZED CELLROOM PERFORMANCE

COS restores performance in Chlor-Alkali membrane cell rooms and delivers lower energy consumption than originally observed.

**BETTER
THAN NEW
PERFORMANCE !**



Cathode Optimizing Solution (COS) from Electrode Solutions is engineered to instantly optimize the performance of hydrogen evolving cathodes such as those used in chlor-alkali membrane electrolyzers. A novel formulation is used to deliver instantaneous and optimum cathode performance without the need for costly cathode replacement or re-activation. There is no need for costly downtime or spare elements.

COS is added in-situ to catholyte and **immediately lowers** the energy consumption. Customers will observe voltages below those originally delivered by the cathode supplier, and energy consumption will likewise be lower than previously observed. COS also acts to extend membrane lifetime and enhance current efficiency. Instantly recover from power outages or cell room upsets and operate with the lowest energy consumption.



- Instantly lowers the energy consumption for all chlor-alkali membrane cells.
- Restores lost performance and activates previously un-activated cathodic surfaces.
- Delivers performance never before achieved from your cell room.
- Maximizes membrane lifetime.
- Improves current distribution and cell efficiency (slightly).
- Allows for higher production rates at the same energy consumption.
- In-situ treatment.
- Effective for all cell and cathode technologies.

COS can be used on nickel or stainless steel based cathodes, and fixed or zero gap cell designs. New cathode structures, operated cathode structures or fouled cathode structures will all benefit from COS, and caustic purity is unaffected. ***Previously un-activated components such as cushion or elastic materials will be activated thus lowering the cathodic current density.***

Customers using COS enjoy a high return on investment and a very fast payback. For more information on how COS can improve your operation, or to setup a trial, contact Electrode Solutions at www.ElectrodeSolutions.com or call us at (440) 544-6723. Optimized chlor-alkali membrane cell room operation with the lowest energy consumption is just an e-mail or phone call away.

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