



## **EMOS® PLANT HEALTH ASSESSMENT**

### **DISCOVER THE EFFICIENCY OF YOUR OPERATIONS PROCESS**

Ensure the longevity and efficiency of your electrolysis plant with our **EMOS® Plant Health Assessment** Service. This fast and comprehensive evaluation provides insights into the aging process of your plant, helping you identify potential issues early, and maintain optimal performance. Our service focuses on evaluating the overall health of your electrolysis plant to identify aging issues early and maintain optimal performance.

### **OVERVIEW**

<b>FEATURES</b>	<b>BENEFITS</b>
Plant overall health verification	Earliest triggering of in-depth analysis (AHA)
Unique patented analysis methods	Reliable and precise KPI's
KPIs: $U_O$ , $k$ , $U_N$ , C.E., SPC	Business plan impact (production & energy)
Initial setup of cell room digital twin	Analysis on-demand within days



#### **PRODUCT DATA SHEET**

*MKD0102 1V0 - EMOS® Plant Health Assessment*

**World Trade Center, 380 St-Antoine W., Suite 2000, Montreal, Quebec, Canada H2Y 3X7**

**514-987-1303 | R2.ca**

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## COMPREHENSIVE PLANT HEALTH MONITORING

Our electrolyzer-level analysis provides a comprehensive overview of your plant's health, ensuring you can monitor performance without the need for detailed cell-level data. With aging rate assessment, you'll quickly identify if your plant is aging faster than normal by examining trends in voltage and current efficiency. **EMOS® Plant Health Assessment** acts as a precursor to in-depth analysis, guiding you toward more detailed investigations with our **EMOS® Advisory Historical Analysis** service when necessary. Enjoy a quick turnaround with our fast and reliable evaluations, allowing you to take timely actions to address potential issues and maintain optimal plant performance.

## PROACTIVE PLANT MANAGEMENT

Experience the advantage of the early detection of aging with our service, allowing you to identify abnormal aging signs early and prevent long-term damage while maintaining plant efficiency. Benefit from cost-effective monitoring by gaining valuable insights into plant health without the need for intricate cell-level analysis. Improve your maintenance planning by using our findings to schedule maintenance activities more effectively, reducing the likelihood of unplanned shutdowns and extending the lifespan of your plant. Additionally, receive tailored guidance for further analysis, with recommendations for more detailed assessments using our **EMOS® Advisory Historical Analysis** if significant aging is detected.

## DELIVERABLES OVERVIEW

Upon completion of the **EMOS® Plant Health Assessment**, clients will receive a comprehensive report detailing key performance indicators such as the Current Efficiency (CE), Normalized Voltage ( $U_N$ ), and k-Value. The report will include visual graphs comparing actual plant performance against theoretical predictions, identifying areas of concern, and recommendations for maintenance or asset replacement. Additionally, insights into plant aging trends will help optimize operational planning, ensuring timely interventions for asset longevity.

### SERVICE REQUIREMENTS

Process Parameters	<ul style="list-style-type: none"><li>• Caustic soda outlet concentration</li><li>• Catholyte outlet temperature</li><li>• Catholyte inlet temperature</li><li>• Main current</li><li>• Individual cell voltage</li><li>• Membrane area</li><li>• HCl to brine flow rate</li><li>• Brine inlet flow rate</li><li>• Anolyte outlet pH</li><li>• Chlorine pressure</li><li>• Brine inlet temperature</li><li>• Anolyte outlet temperature</li></ul>
Data Format:	• CSV
Sampling rate:	• Minimum 1/minute

### PART NUMBER

SP934	EMOS® Plant Health Assessment
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