AUGURY

From Reactive to Ready:
How ICL Suria Transformed Plant Reliability Through Predictive Maintenance



Background

As Spain's only potash producer and a cornerstone of Catalonia's mining industry, ICL Suria processes millions of tons of sylvinite annually to produce critical agricultural fertilizers and industrial salts. With the majority of production exported globally, the facility's reliability directly impacts food security and industrial supply chains across Europe. Operating 24/7 with planned maintenance windows just once per month, every hour of uptime matters.

Challenge

New demands without precedent: When the mine expanded production, the plant suddenly became the bottleneck—required to achieve 95% availability with no historical baseline for this level of performance.

One monthly window for all maintenance: With 24/7 production and only one planned stop per month, every repair decision carried enormous weight—fix it now and halt production, or risk catastrophic failure.

Limited visibility on critical equipment: Without continuous monitoring, the team couldn't anticipate failures or order parts in advance, forcing reactive responses when problems emerged.

Solution

Hit 95% availability target: The team achieved their critical performance goal for the first time by investigating every alert—each one revealing genuine issues that needed attention.

Prevented emergency shutdowns: The team now extends equipment life safely with timely interventions, orders parts in advance, and completes repairs during planned windows—keeping production running.

Expanded visibility to all critical assets: After calculating clear ROI, the team justified monitoring more equipment, including ultra-low RPM machines previously unmeasurable, gaining the insights needed for confident decisions.

ICL

Achievements

95%
Plant Availability

↗
Operational Efficiency

↗
Team Development

"

When equipment shows danger, you have hours—maximum a day—before it fails. So you need to act fast. We take every alarm seriously, especially danger alerts.

Avraham Boublil
Process Engineering and R&D Director

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Steps on the Journey

Acting on Critical Intelligence
When equipment enters danger status, the team investigates quickly to prevent breakdowns that would halt production.

Creating Team Ownership
The team established WhatsApp groups where alerts trigger immediate discussion across the plant, ensuring no notification goes unexamined and everyone is a part of the solution.

Accelerating New Talent
Onboarding new engineers means learning through live alerts—even for equipment they may not have located yet. Real-time notifications teach critical observations that might otherwise take years to develop.

Keys to Suria's Success

ICL Suria's approach demonstrates three critical factors for achieving world-class reliability.

Transformed maintenance from constraint to enabler
With the mine no longer the bottleneck, the plant's new reliability capabilities support expanded production volumes that drive revenue growth—justified by clear ROI that enabled continuous program expansion.

Built institutional knowledge faster
New engineers gain equipment expertise in months instead of years, strengthening the team's capability to maintain 24/7 operations with minimal planned downtime.

Gained first access to game-changing technology
By piloting process monitoring and AI developments, ICL Suria stays ahead of competitors while helping shape solutions that address their specific operational challenges.

Looking Forward

ICL Suria's next evolution combines AI with daily mechanics' and operations' reports to identify failure patterns the team already recognizes through experience. By integrating vibration data with field observations—unusual noises, visual changes, system anomalies—they'll predict issues across interconnected equipment. With proven alert response, team-wide ownership, and expanding coverage in place, ICL Suria continues building toward sustained 95% availability while piloting innovations that keep them at the forefront of predictive maintenance.

> We feel like partners, not just customers. The service is so good that we're always open to trying new things. I think I know everybody in Augury's R&D because we're willing to test innovations together
>
> **Avraham Boublil**
> **Process Engineering and R&D Director**

About Augury

A leading Industrial AI company, Augury helps manufacturers leverage real-time production insights to proactively address alerts, minimize downtime, reduce asset costs, and maximize yield and capacity. Combining predictive and prescriptive AI technology with industry expertise, our customers achieve payback in six months or less.

Spotlight Award Winner, 2025

ICL Suria earned the 2025 Augury Spotlight Award for Maintenance & Reliability Excellence—their second consecutive win. The team transformed plant reliability from reactive to predictive, achieving 95% availability for the first time, preventing emergency shutdowns through strategic maintenance windows, and accelerating knowledge transfer where new engineers gain critical expertise through real-time alerts.

This award recognizes the top 5% of facilities for machine health excellence based on fast alert response, robust technical infrastructure, strong team adoption, and measurable results.

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