



Shoreline AI

Leading Biopharmaceutical Company Avoids HVAC Shutdown with Cloud Managed AI/ML Predictive Maintenance

Shoreline AI Helps Global Pharmaceutical Company Diagnose Air Handling Anomalies

Customer Background

This global biopharmaceutical company has pursued and achieved breakthroughs in medicine for more than three decades, with the goal of creating a healthier world for all people. The company is committed to advancing innovative medicines to prevent and treat life-threatening diseases, including HIV, viral hepatitis, COVID-19, and cancer. The company operates in more than 35 countries worldwide.

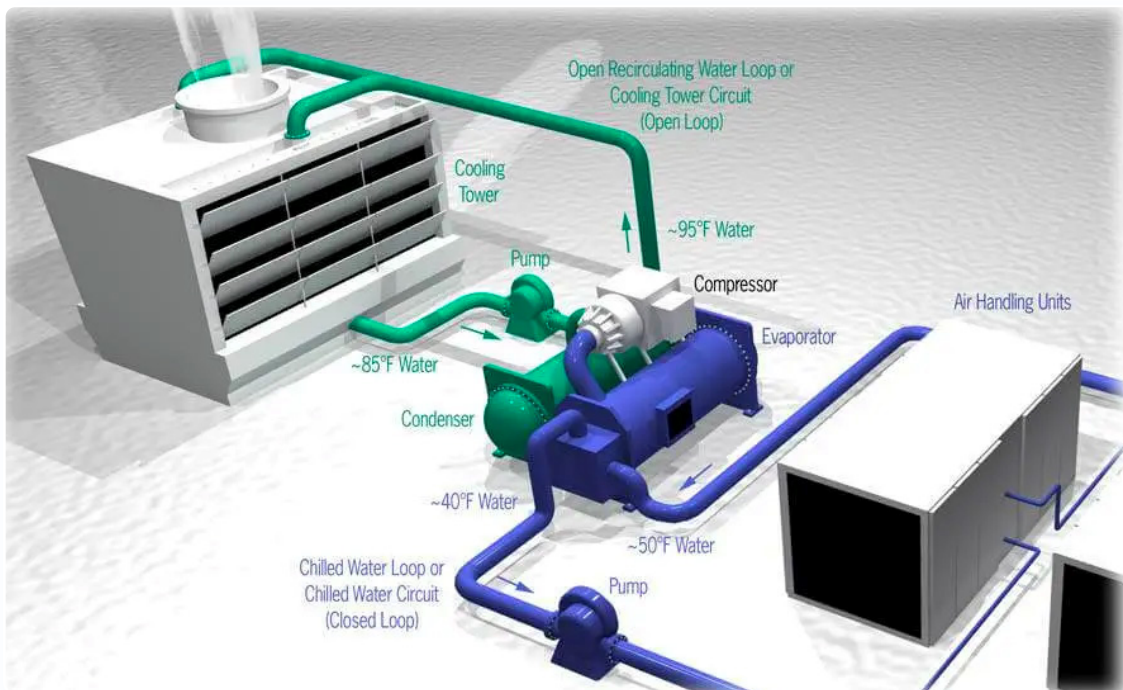
The company's goal was to create Intelligent buildings/assets that can collect, stream, sense and analyze data in real time, detect anomalies, provide actionable insights, allow intervention, and ultimately predict maintenance needs before failure.

They deployed Shoreline AI's industrial asset performance management (APM) solution with physics+AI/ML models to gain real-time visibility, automate inspections, and analyze sensor and process data from all the components of the entire HVAC powertrain. This enabled early detection of anomalies using predictive analytics, pinpointing location, diagnosis and root cause of problem(s).

AI functionality in asset performance strategy provides early warnings to minimize process interruptions, information to adjust the process, and ensures the right assets are available to match companies' performance goals.

– Analyst, ARC Advisory Group

Customer's assets being monitored by Shoreline AI



Shoreline AI's predictive maintenance analytics prevents HVAC Failure

One of the critical assets in the customer's manufacturing process air handling units, commonly called an AHU, which are the composition of elements mounted in large, accessible box-shaped units called modules, which house the appropriate ventilation requirements for purifying, air-conditioning or renewing the indoor air in a building or premises.

They are usually installed on the roof of buildings and, through ducts, the air is circulated to reach each of the rooms in the building in question.

Shoreline AI's predictive model was deployed to compare detailed internal dynamics of the air handling units with normal operating characteristics to reveal specific performance anomalies of the machine. Using physics models and ML techniques, Shoreline's solution automates reporting of anomalies and degradation, and provides detailed diagnosis and recommendation for maintenance and asset performance improvements.

Shoreline AI's Intuitive Alarm Dashboard with advanced insights



Vibration analysis with narrowband identifies operating anomalies.

Results

As a result of implementing the Shoreline AI's solution, this Pharmaceutical company is expected to eliminate unplanned downtime, reduce maintenance costs by 40%, and prevent millions of dollars in production losses. The expectation is this investment will also improve the quality of its products and increase customer satisfaction.

About Shoreline AI

Shoreline AI's plug-and-play asset performance management delivers breakthrough simplicity and cost efficiencies. Completely self-installed by non-experts, smart sensors automatically connect to the cloud and are auto-provisioned via a rich library of 30,000+ pre-built asset physics models.

This cloud-native approach requires no new CapEx, on-site experts or data scientists, operationalizing in days and delivering powerful machine-specific analytics. This highly secure, 100% subscription approach creates unprecedented industrial APM economics and scales easily for new applications such as emissions monitoring.

Shoreline AI helps clients in asset-intensive industries maximize the performance and profitability of their operations, create a proactive and predictive approach to asset management, and accelerate sustainability initiatives. The company's solutions are designed for machinery serving the energy, manufacturing, pharma and data-center cooling industries.