

Data-driven Maintenance Planning Saves \$1.8 Million USD Per Year in Shutdown Costs

(aspentech | Case Study

\$1.8 million USD annual savings

For service providers, project execution is critical to customer confidence and overall success. With a variety of project execution issues to resolve, having the Aspen Mtell[®] solution installed at the client site provided insight not previously available.

> Senior Consultant, Asset Management Consulting Company

CHALLENGE

Furnace fouling was a major source of planned and unplanned downtime.

SOLUTION

The customer used Aspen Mtell to develop a data-driven approach to maintenance planning to reduce downtime.

BENEFITS

With the new maintenance plan in place, the customer

- eliminated 2 days of shutdown per furnace per year (16 furnaces per plant)
- saved \$1.8 million in downtime costs
- realized additional energy savings and increased production benefits



This case study focuses on a global provider of knowledge-based maintenance, modifications and asset integrity services to reduce risk, assure safety and improve asset performance.

As a partner to over 4,000 clients, the company's service excellence advantage relies on its global presence as well as the ability to provide clients with a competitive advantage such as reduced cost of ownership and increased lifecycle availability.

Furnace fouling due to pollution was a recurring issue at a Netherlands plant. Cleaning accounted for nearly as much downtime as other planned major maintenance activities. The customer wanted to take a more data-driven approach to planned maintenance and reduce unplanned downtime to optimize lifecycle costs.

Planning Maintenance Proactively

With Aspen Mtell, staff could identify the predictive factors of fouling, which were previously unknown, to better define cleaning shutdown periods. The plant was able to confidently postpone three cleaning activities per year, saving two days shutdown per furnace annually and avoiding \$1.8 million USD in cost.

Prior to this assessment, the customer was using continuous condition-based monitoring to extend the lead time prior to necessary shutdowns. To reduce unplanned downtime, however, the company wanted a more predictive method of detecting degradation and potential failures. AspenTech and customer teams reviewed all clients' planned and unplanned maintenance activities to determine causes. Unlike other asset performance management solutions, Aspen Mtell allowed the customer to gain insight into the factors influencing fouling, not just the resulting symptoms such as temperature increases.

The insight Aspen Mtell provides allows staff to spend less time on optimization calculations and equips them to make faster decisions on which cleaning techniques to use.



Technology That Loves Complexity

About Aspen Technology

Aspen Technology (AspenTech) is a leading software supplier for optimizing asset performance. Our products thrive in complex, industrial environments where it is critical to optimize the asset design, operation and maintenance lifecycle. AspenTech uniquely combines decades of process modeling expertise with machine learning. Our purpose-built software platform automates knowledge work and builds sustainable competitive advantage by delivering high returns over the entire asset lifecycle. As a result, companies in capital-intensive industries can maximize uptime and push the limits of performance, running their assets safer, greener, longer and faster.

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