

A leading manufacturer of seamless metal tubes and tube-based products maximized factory asset utilization and **saved over USD 14,000** by adopting a predictive maintenance approach to manage machine health.

Total Unexpected
Downtime saved

6 hours

Total Downtime
Cost Avoided

~USD 14,777

Prevented
Catastrophic
Disaster

About the client



Industry: **Steel Tubes**



Plant Capacity:
2.25Mn MTPA



Machines
Monitored:
ID Blower Fan

Business Case

Maintaining the reliability of equipment is expensive and time-consuming. Vibration monitoring & Diagnostic tools map equipment degradation estimate the remaining machine runtime left, according to detected abnormalities. This approach uses statistical analysis and Machine Learning to predict the state of the equipment.

The manufacturer's goal was to create a healthy working environment and maximize the utilization of the assets. The ID Blower Fan, operating 365X24X7, is one of the most critical rotating assets in the plant and ensures safety and hygiene. Confirming the highest fan usage with zero downtime and guaranteeing safety at the workplace was the topmost priority.

Solution

Infinite Uptime's Industrial Diagnostic Service supported with a Patented Vibration Monitoring System offered instantaneous engaging insights into the health of the ID Blower Fan. The real-time health monitoring increased the confidence of the workforce and ensured security in the plant.



Customer Speaks

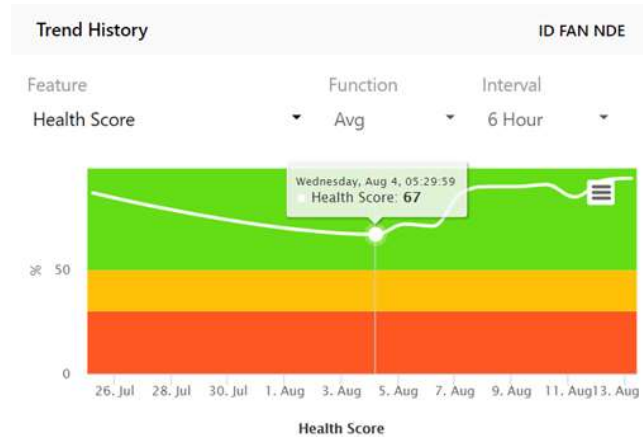
The Infinite Uptime team is quick, courteous, and helpful. We were facing a significant challenge in maximizing the utilization of the ID Fan. They diagnosed the outer ring bearing failure of the fan and suggested **timely actions to conserve six hours of production time and avoid a catastrophic disaster.**



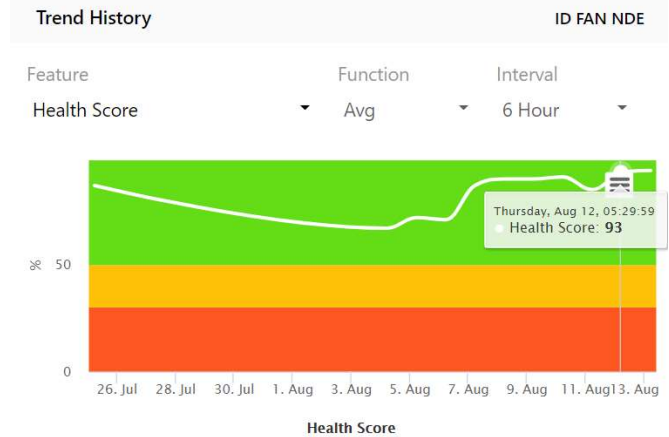
Implementing Digital Machine Health Solution

The ID Blower fan in the Walking Hearth Furnace removes the harmful gases generated in the plant and creates a hygienic work environment. The underperformance or failure of the fan directly implies an unplanned downtime and a catastrophic disaster. The responsively designed digital reliability solutions of Infinite Uptime solution allows tracking of the live data of the fan on the dashboard, receive notifications before the abnormality impacts the plant, and perceive practical corrective measures. Effective maintenance and reliability programs stopped unexpected process shutdown and improved net productivity of the plant.

ID Fan Health Score before corrective measures



ID Fan Health Score after corrective measures



Summary

The Diagnostics and Predictive Maintenance Solution assured significantly improved operating time and the lowest maintenance cost of ID fans. The in-depth study of the ID fan ensured the safety of the workforce, security of the equipment and enabled focusing on production targets, thus enhancing the quality of the products. Moreover, it also avoided collateral damage to the Hearth Furnace. The expert guidelines minimized excessive power loss and prevented the undesired fan stoppage.



Infinite Uptime is a global Predictive Maintenance Services and Plant Reliability solutions company. We help the maintenance and manufacturing teams to attain the highest level of plant reliability by reducing unplanned downtime, mitigating operational risks, and improving overall efficiency. We leverage industry 4.0 technologies and a digital-first approach to create responsive maintenance strategies for diverse global manufacturing industries including Cement, Steel, Metals & Mining, FMCG, Chemicals, Oil & Gas, Power, Pharma, Tire & Rubber, Automotive, Construction, Pipes and more.

Our advanced analytics and real-time industrial diagnostics help plant maintenance leaders and condition-based monitoring teams to accurately predict and avoid machine failure every single time. To create a reliability-based maintenance strategy contact our Customer Success Team today. Write to us at contact@infinite-uptime.com or visit <https://www.infinite-uptime.com> to know more.

Infinite Uptime India Pvt. Ltd.
5th floor, Vasundhara Space,
Aundh, Nagras Road,
Pune - 411007, India.

Infinite Uptime Inc.
2150 Shattuck Avenue,
Berkeley CA, USA - 94704.

Infinite Uptime MENA
Unit No: 30-01-BA534
Jewellery & Gemplex 3, Plot
No: DMCC - PH2 - J & G PlexS,
Dubai, UAE.

