

The challenge

One of the world's top 20 largest pharmaceutical manufacturing companies wanted to optimise operational efficiencies, decreasing costly downtime that affected its whole supply chain. Machines supplying air to Class Grade A & B clean rooms had failed unexpectedly, causing major disruptions to their manufacturing processes. Productivity was failing, maintenance costs were skyrocketing, operations and manufacturing processes were well behind their goals. The site team believed the issues causing downtime could be addressed by simply adjusting current maintenance practices, but the issues plaguing the site had bigger implications. Without being able to properly diagnose the health of their machines, the team found themselves in a black hole of data and insights. But as they learned, it takes more than simply placing sensors on equipment to transform a process. A Digital Machine Health solution – the technology behind Grundfos Machine Health – can truly provide value and drive decision-making within manufacturing organisations.





MACHINE HEALTH AS THE FOUNDATION OF DIGITAL TRANSFORMATION

The pharmaceutical manufacturer and its partner executed a strategy based on key pillars of Digital Machine Health and Performance:

- · Deployment of technology that drives proven value
- Machine health diagnostics that are actionable and don't overwhelm users
- Change management to drive adoption

To ensure the digital transformation journey was successful, the team created a comprehensive project scope outlining the site survey and installation plan, training cadence, and program management. Once the continuous and portable diagnostics solution was installed, the Customer Success Team trained the onsite team on the platform's interface and user flow. With full stack solution and turnkey deployment, the program was providing value within days of installation.

Tangible Results

Machine learning algorithms identified bearing wear within two critical air handling units serving clean rooms. Had these faults not been caught, production would have shutdown unexpectedly for several days, resulting in upwards of €255,000 (\$300K) in repair and product loss. Having only two planned shutdown periods per year dedicated to performing repairs, failures outside of these periods would have imposed significant demands on the team and caused major disruptions to production. Thanks to the diagnosis and alert, the team was able to order the necessary parts in advance and utilise a break during manufacturing cycles to access the air handling units and repair the issues, without any disruption to production. By focusing on the machine — the foundational level of any manufacturing process — and evolving from reactive maintenance to Digital Machine Performance, the manufacturer was able to actualise improvements in productivity, operations, and supply chain.

Topic: Digital machine monitoring **Location:** USA **Customer:**

Pharmaceutical manufacturer **Products:** for Animal Health **Machines Monitored:**

Air handling units, incubator fans, chilled water pumps, displacement pumps.

WHAT IS GRUNDFOS MACHINE HEALTH?

Grundfos Machine Health is powered by Al

The real advantage of AI is not only know ing what is happening, but also why it is happening. The result is less machine downtime, more productivity, and optimised asset performance.

Grundfos Machine Health uses actionable data

Grundfos Machine Health combines mechanical and operational data, giving users the true health of a machine by connecting, collecting, and analysing data that matters.

Grundfos Machine Health enables new possibilities

You aren't just solving maintenance problems, you are solving operational and business problems. Think about what your team could accomplish if machine failures where a thing of the past.

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