



**FULLER®**

# ONLINE RELIABILITY SERVICES

FOR FANS

# MONITORING AND EXPERTISE TO IMPROVE FAN PERFORMANCE AND AVOID UNPLANNED DOWNTIME

Fans are found throughout the cement plant, providing grinding and combustion airflow, material transport, dust and hot gas control, and cooling. Typically comprising a centrifugal induced draft (ID) or forced draft design, they are essential infrastructure for cement production and must operate reliably in all conditions. Fans are also significant electricity consumers, second only to grinding.

Ensuring fans operate as efficiently as possible is key to improving overall energy efficiency.

Our Online Reliability Service for fans enables early identification of potential issues before they escalate. Multiple sensors installed on your fan transmit real-time data to our Global Remote Service Centre, where specialists continuously monitor the equipment for process abnormalities, component failures, and other operational deviations.

By applying early-warning analysis techniques, including Rule Based methods, Condition Based monitoring, Artificial Intelligence and Machine Learning (AI/ML), and custom-created models, we identify when equipment failures may occur and recommend the appropriate corrective actions to optimize your fan's performance.

## KEY BENEFITS

**01**

Increase uptime  
and output.

**02**

Gain fuel and  
power savings.

**03**

Lower labor costs by  
transforming unplanned shutdowns  
into planned ones.

**04**

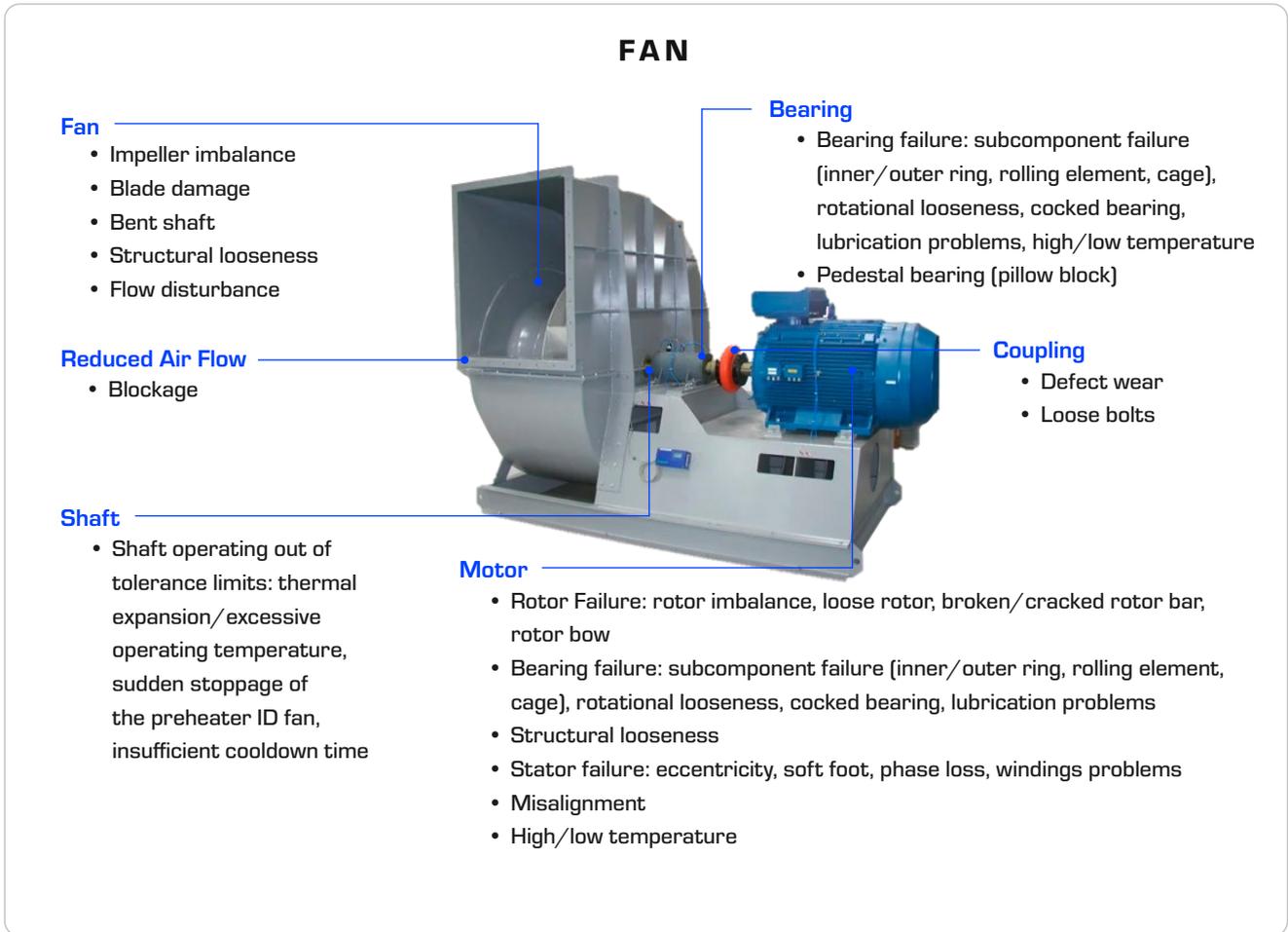
Extend equipment lifespan with  
improved preventive maintenance.

**05**

Reduce premium costs and services  
by having the right spares on  
site at the right time.

**06**

Return of investment:  
3 months



**The OEM expert advantage**

Many providers offer to monitor your equipment, but do they truly understand your fans? We have decades of experience installing, troubleshooting, maintaining, and optimising fans at cement plants worldwide. We have integrated that OEM experience and insight into our ORS. So, while others tell you what to worry about, we tell you how to solve recurring problems, enhance reliability, and improve efficiency. This includes extensive root cause analysis to prevent minor issues from escalating into major problems.

After all, your success is our success. Our OEM expert advisors support and coach your maintenance personnel to achieve excellence, delivering optimised maintenance planning and effective maintenance procedures.

**A comprehensive monitoring package**

Our ORS use existing control system signals to identify common issues, such as overheating bearings and shafts, excessive speed fluctuations,

and reduced airflow. On top of this, we provide additional monitoring systems, such as vibration, optics, image processing, electromagnetic, ultrasonic, and oil analysis, to detect a broader range of abnormal conditions and component failures, delivering continuous insight into your fan’s status.

**Implementing ORS**

A Fuller project manager will oversee the delivery of any hardware required to provide the service. Your maintenance team will usually be able to install the sensors themselves; however, we can offer installation as an optional extra. After the Health and Usage Monitoring System (HUMS) is installed, we will come to you and commission the systems. Once commissioning is complete, the project manager will hand over to a dedicated service account manager, whose job is to support your maintenance department as their go-to contact whenever assistance is needed. The service account manager will initiate and drive the service to deliver on your KPIs, ensuring that you receive optimal value.

# HOW DOES ORS WORK?

