

Avoid unplanned machine downtime OnCare.Health Paper





HÖGRISKZÓN
HYGIEN

FIGYELMEZTETÉS
A munkaterületen
szigorú higiénés előírások
érvényesülnek.

FIGYELMEZTETÉS

FIGYELMEZTETÉS

Strong in practice

OnCare.Health Paper

The OnCare.Health Paper monitoring, analysis and diagnosis system combines our engineering and maintenance expertise with your operational experience and knowledge to develop a powerful predictive maintenance solution tailored to fit your individual paper production line.

OnCare.Health Paper combines machine vibration and technology monitoring in one system and, with its precise measurements, decisively contributes to increase machine availability and and thus, leverage your OEE (overall equipment effectiveness) potential.

Focus on machine availability and productivity

An important objective for Voith is to help you improve your paper manufacturing efficiency. Thus, in terms of an integrated total solution, the entire process from raw material to the finished paper is constantly in focus. This central idea is also encapsulated in the OnCare.Health Paper. The system gives you a continuous real-time overview of the condition of the entire paper production line.

Strong in practice

The monitoring system supplies important information about the equipment condition, process and end product. Emerging malfunctions and their respective causes are detected at an early stage. By initiating suitable countermeasures, damage to the machine and unplanned machine downtime can be prevented.

The smallest malfunctions in the machine often remain unnoticed over a long period, but they can cause dramatic damage. With OnCare.Health Paper, Voith offers an efficient maintenance solution to prevent this.

Product benefits OnCare.Health Paper

- + **Technology monitoring visualizes the influence of process parameters to the paper quality**
- + **Modular design for easy and inexpensive extension of the system**
- + **Early detection of bearing damage**
- + **Reduction of unplanned machine downtimes and optimization of planned downtimes**
- + **Quick and automatic detection of upcoming defects, process malfunctions and direct assignment of causes**
- + **Comprehensive and continuous remote service support**

System characteristics OnCare.Health Paper

- **Connection to the Voith asset management system OnCare.Asset**
 - **Immediate alarm triggered by unexpected measurements**
 - **Storage of all measurement data in the database for several years, enabling analysis of long-term trends**
 - **Unlimited stationary and mobile measurement points**
 - **Integration with other systems possible, such as controls, quality and asset management**
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All-in-one-solution Modules

Machine monitoring

Based on the permanent measurement of vibration metrics, characteristic values are used to automatically monitor and assess anomalies in the mechanical condition of bearings, motors, pumps and gearboxes along a paper process line.

Technology monitoring

Through the combination of conventional monitoring with intelligent data processing, anomalies in the production process and the impact of machine conditions to production quality can be detected and automatically assigned to the corresponding originators. Thereby, availability, productivity and paper quality can be increased.

Features of technology monitoring

- Approach Flow Monitoring: Pulsations at the Headbox can be automatically recognized, assigned to the corresponding originator and countermeasures initiated
- Felt Barring – Press Monitoring: Felt barring in the press section can be automatically identified, assigned to the corresponding originator and countermeasures initiated
- Speedsizer / Calander / Coater Monitoring: Critical vibrations and anomalies at the roll conditions can be automatically detected, assigned to the corresponding originator and countermeasures initiated
- MD – Quality Monitoring: Anomalies in the MD profile such as periodic basis weight/moisture/caliper fluctuations can be automatically recognized, assigned to the corresponding originator and countermeasures initiated

Platform solution

OnCare.Health Paper is an online monitoring, analysis and diagnosis system combining Voith's knowhow and experience of international paper machine operation. The monitoring system is developed based on our deep knowledge and expertise in paper machine layout and design. Additionally, the system is highly scalable and includes customer-tailored solutions. Pre-defined standard configurations for sensors assure a reliable and safe measurement.

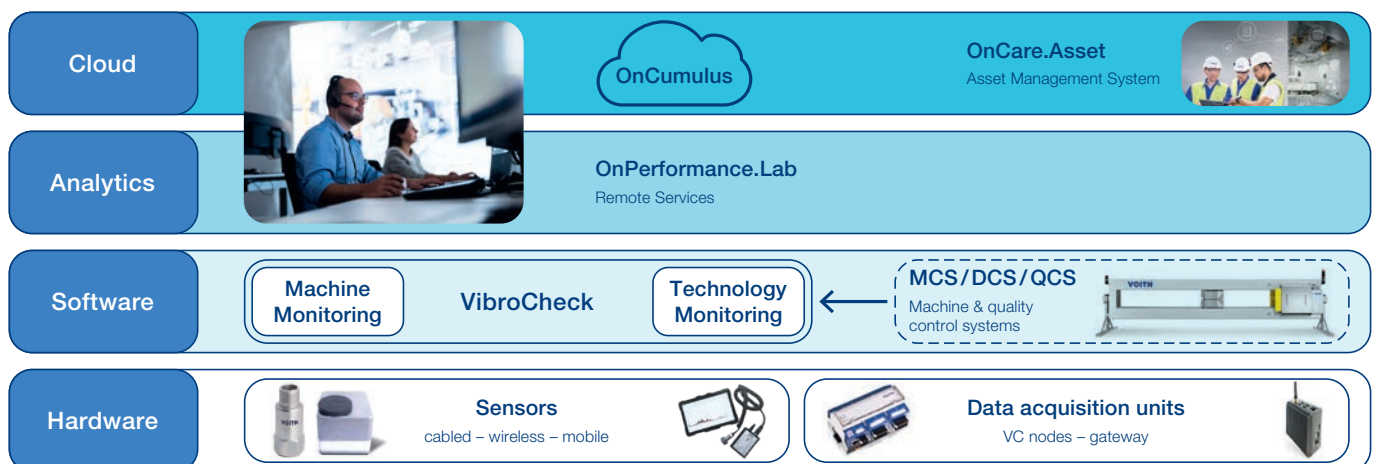
OnCare.Health Paper is fully integrated in Voith's computerized maintenance management system OnCare.Asset. This integrated solution, enables the user to combine the benefits of both systems to support a best practice maintenance operation.

OnCare.Health remote services

With our remote monitoring services, executed out of our in-house OnPerformance.Lab, we offer a variety of service modules according to your needs and your own personnel resources. Via this safe remote access possibility from a central server, we help you optimizing your plant conditions.

OnPerformance.Lab offers remote support services for customers. OnCare.Health Paper is available as cloud or on-premise solution.

OnCare.Health Paper



Smart and integrated concept

Measuring hardware

By utilizing wireless and wired sensors, OnCare.Health provides real-time vibration condition monitoring data available anytime. All sensor types are highly standardized components that ensure optimized configuration and commissioning processes. The overall system allows an easy integration of cabled and wireless sensors, which can be combined in a hybrid solution.

Product benefits of cabled and wireless sensor generation

- + Stable connection and transmission quality
- + Robust and resident housing
- + Scalable and flexible solution for easy scope extensions
- + Standard measuring positions and mounting requirements

Product highlights: Wireless sensor generation

- Minimal commissioning effort, no cabling needed
- Thermal energy-harvesting unit, no battery exchange
- Extended wireless range up to 300 m
- Stable transmission quality and robust connection
- High scalable solution for easy system extension possible anytime

In addition, Voith provides a comprehensive range of high-quality data acquisition devices, junction boxes, cables and other accessories for condition monitoring installations.

OnCare.Health Paper Measuring Hardware

Wired sensor

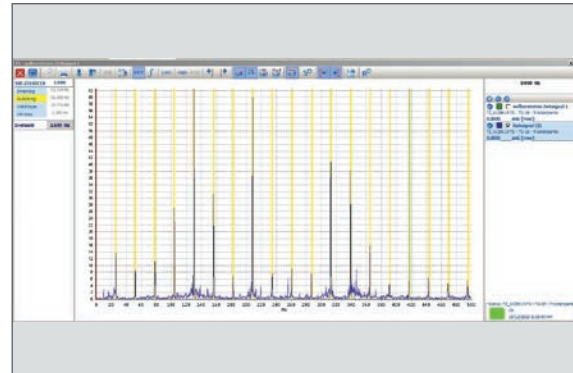
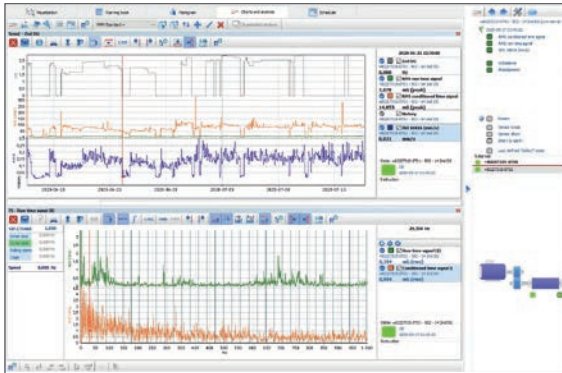


Wireless sensor



User interface

Example screens



The current state of the plants can be visualized by numerous intuitively operable tools that are used to represent the state of a plant exactly and immediately. The multi-level visualization allows the operator to look for measuring points hierarchically, beginning with the whole monitored plant to the individual measuring point.

The interface offers user-friendly intuitive operation with an intelligent alarm system with expert alarms for early warnings. The software enables an individual notification via email or short notices on a varying scale.

Mobile

Mobile device

With the OnCare.Health Mobile as perfect extension to the stationary system, additional measuring values can be gathered on site and analyzed via an intuitive and user-friendly mobile device.



Mobile App performance features

- Three-channel vibration values
- Documentation on the measuring point
- Connection to the evaluation and configuration software
- Data and configuration synchronization
- Route guidance or individual route
- Automatic measuring point identification (option)
- Multifunction sensor with integrated identifier
- Long-term measurement



Key benefits



Technology monitoring visualizes the influence of process parameters to the paper quality



Assesses the condition of a paper machine to enable condition-based maintenance



Flexible and scalable modular design



Unlimited engineering stations as well as stationary and mobile measurement points



Central database and customized visualization for online and route-based data collection



Cabled and wireless hardware available, even in a hybrid solution



Connection to the Voith asset management system OnCare.Asset and other systems possible



Cloud-ready monitoring system

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