VOITH

Data diagnostic system
OnCare.Health Vorecon 2.0

Are you interested in minimizing maintenance costs and increasing the availability of your critical drivetrain?

The answer: OnCare.Health Vorecon 2.0

OnCare.Health Vorecon 2.0 is a self-learning data diagnostic that provides machine and operation-specific key performance indicators. It analyzes the machine's condition continuously and predicts future behavior using intelligent algorithms and artificial intelligence.

Benefits

+ Improved machine condition insights with health indicator
+ Energy saving by monitoring the machine's efficiency
+ Quick root cause analysis with remote access
+ Minimizing unplanned downtime risk
+ Time and cost savings ensured with predictive maintenance planning

OnCare.Health Vorecon 2.0

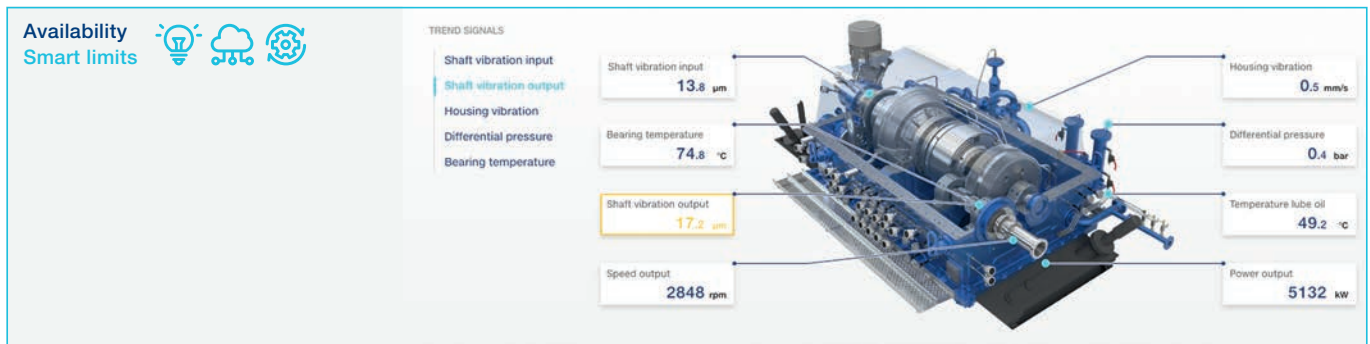The system learns, monitors, and diagnoses in real-time.

Installation and data acquisition

This data diagnostic system is installed onsite and can be connected via fieldbus to existing IT infrastructure. All communication channels comply with the highest security standards, and an internet or cloud connection is not required. Data results are accessible remotely and are displayed on a graphical user interface.
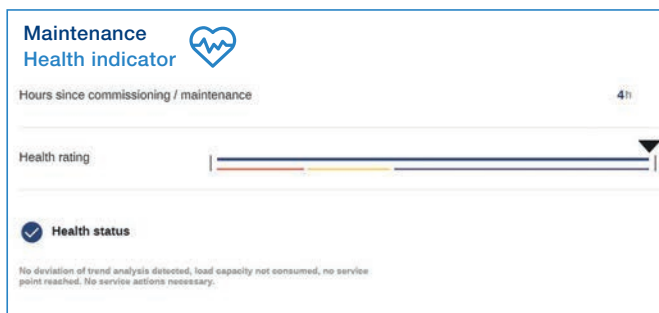
Data processing and new features

An easily accessible interface displays Vorecon operating data, hours, and modes. After installing the system, the machine's reference condition is evaluated, and a signal fingerprint is learned automatically. After that, during operation, typical signals are continuously monitored, recorded, analyzed, and rated. With release 2.0, three key performance indicators are shown:
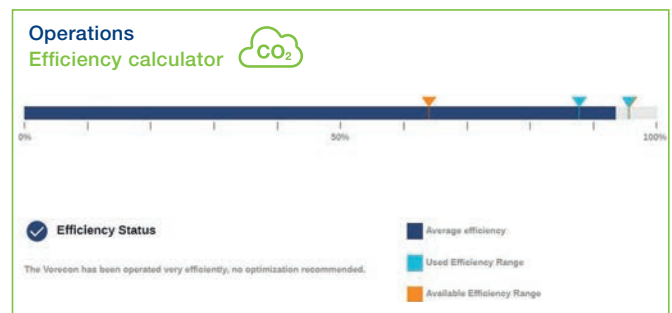
Vorecon signal monitoring

Availability
Smart limits

TREND SIGNALS

Shaft vibration input
Shaft vibration output
Housing vibration
Differential pressure
Bearing temperature

Shaft vibration input
13.8 µm

Bearing temperature
74.8 °C

Shaft vibration output
17.2 µm

Speed output
2848 rpm

Housing vibration
0.5 mm/s

Differential pressure
0.4 bar

Temperature lube oil
49.2 °C

Power output
5132 kW

Vorecon maintenance condition

Maintenance
Health indicator

Hours since commissioning / maintenance   4h

Health rating

Health status

No deviation of trend analysis detected, load capacity not consumed, no service point reached. No service actions necessary.

Vorecon operating efficiency

Operations
Efficiency calculator CO_2

0%   50%   100%

Efficiency Status

The Vorecon has been operated very efficiently, no optimization recommended.

Average efficiency
Used Efficiency Range
Available Efficiency Range

Service package

A regular service report is offered, including detailed signal analysis, machine performance diagnosis, condition-based maintenance, and service recommendations. In the event of technical issues, remote data access and quick root cause analysis are possible.

Benefits

The new key performance indicators help operators minimize unplanned downtime risk while service can be planned timeously and effectively, reducing maintenance costs. Furthermore, energy-saving potential is identified, enabling operating cost reduction and lower CO_2 emissions.

Smart limits

Algorithm	Value proposition	Benefit
• Trend analysis	• Detecting changes in the machine's condition much earlier before a trip happens	+ **Reducing unplanned downtime and maximizing productivity**

Health indicator

Algorithm	Value proposition	Benefit
• Data combination	• Combining of all parameters for health status: measuring load cycles, considering theoretically accumulated load capacity based on real operating condition, trending of signals etc.	+ **Planning and preparing service actions timely to shorten maintenance stops and optimize warehousing**

Efficiency indicator

Algorithm	Value proposition	Benefit
• Calculation of machine efficiency	• Indication of current machine efficiency as base for potential efficiency optimization	+ **Energy costs savings and CO_2 emission reduction**

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