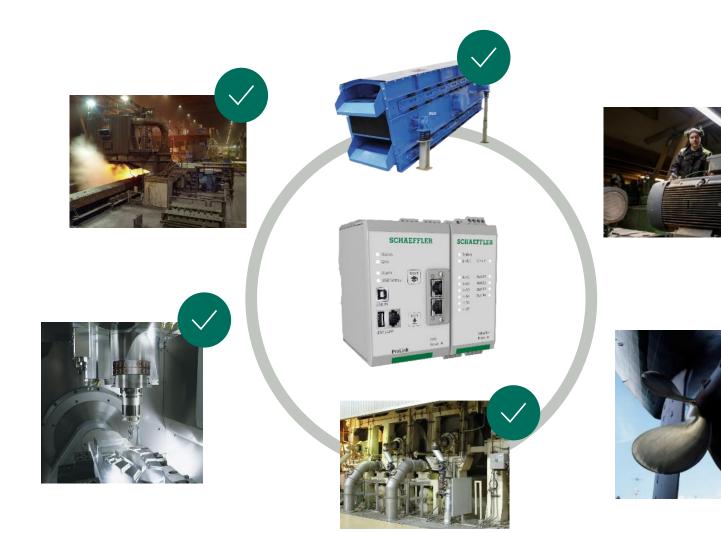


ProLink – <u>Condition Monitoring System</u>

Schaeffler ProLink Condition Monitoring System



- Modular
- Multiple interfaces for cloud communication
- Universal application
- Easy to use
- Perfect integration into customers infrastructure

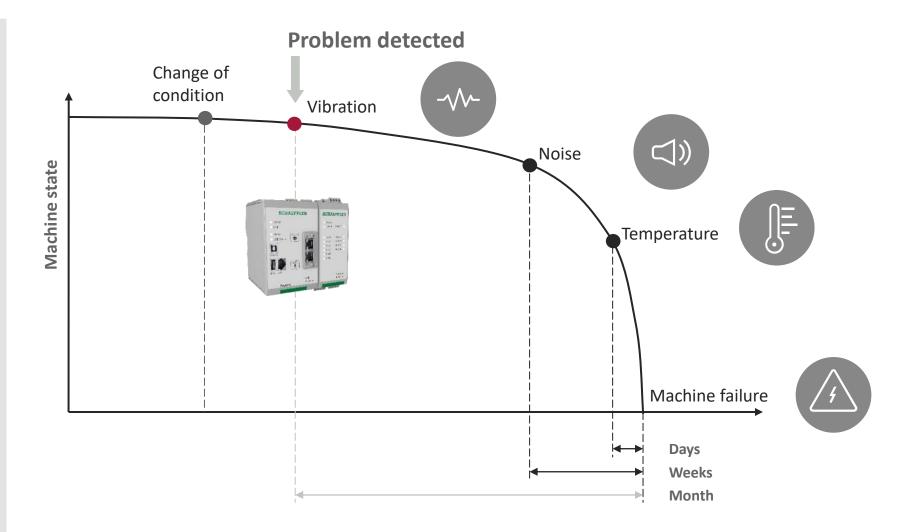


Agenda

- 2 ProLink Condition Monitoring System
- 3 Areas of application
- 4 ProLink System integration
- 5 Advantages
- 6 Services
- 7 Further Information

Why Condition Monitoring?

- Increased availability/ prevention of unplanned downtime
- Planning of service and maintenance is improved
- Subsequent damages are avoided, reduction of maintenance costs
- Analysis of the damage root cause is supported



Simple application example

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- Sawmill Kåge in Sweden
- Annul production Capacity approx. 240,000 m³ of sawn timber
- 81 employees
- Monitoring of main electric motors

Downtime costs per hour:
4 hours downtime of asset:
Total:
Amortization period:

2.800€
11.200€
11.200€
one unplanned downtime



More examples: Link

Product portfolio Schaeffler Condition Monitoring Devices

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OPTIME

The next generation of condition monitoring: affordable, easy to install and scale up



SmartCheck

Sophisticated, one-channel condition monitoring system with intelligent learning mode and integrated web server



ProLink CMS

Modular multi-channel condition monitoring system for vibrations and other parameters with extended connectivity



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In a nutshell

Additional modules **SmartWeb** individually expanded with Configuration assistant additional measurement modules • Automatic learning mode - SCHAEFFLER SCHAEFFLER SCHAEFFLER Status Status Status Link 1 Link 2 ink 2 Link 1 Link Alarn Teact In A1 Out D1 In A1 Out 01 -USB Status In A2 Out D2 In A2 In A3 In A3 Out D3 D In A6 In A4 Out D4 In D1 In D1 USB PC In D2 In D2 USB vibratio Percet # CPU Resel ProLink **Cloud-Communication** • Ethernet Vibration module with OPC/UA Server, MQTT, recording of speed data Webservices • Extremely high signal quality (24 bit) Field bus connection* High-quality signal processing • Profinet, CC-Link IE, * Field bus connection is planned for a later release • ...

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Short info

channels

products

• Smallest unit consisting of

vibration module.

processor module (CPU) and

• Depending on requirements,

the modules can be expanded

from 4 to 8, 12 or 16 vibration

Based on proven SmartCheck

technology with consistent

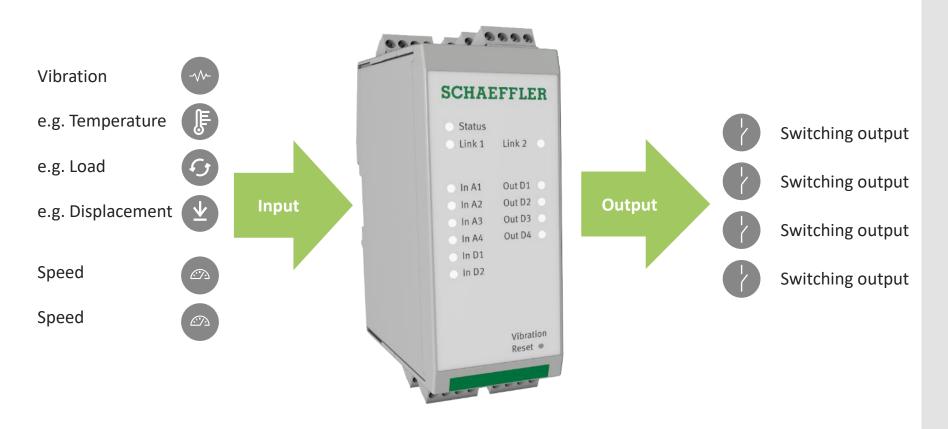
identical software for both

 Integration into the process world via usual field buses

operating concept and

Vibration Module

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Function:

The vibration module captures the signals important for monitoring such as vibration, speed, voltages, etc. and transmits them to the CPU.

In case of an alarm switching outputs will be activated which can be connected to customers PLC

Maximum expansion of the Monitoring System (available)

SCHAEFFLER SCHAEFFLER SCHAEFFLER Status Status Status Link Link 1 Link 2 Link 1 Link 2 Alarm Teach 00 USB Status In A1 Out D1 In A1 Out D1 In Az Out D2 In Az Out D2 USB PC In A3 Out D3 Out D3 In A3 In A₄ Out D4 In A₄ Out D4 In D1 In D1 In D2 In D2 USB 00 USB | LAN CPU Vibration Vibration Reset 🛛 Reset Reset . ProLink Vibration Vibration CPU Module 1 Module 4

Internal Ethernet Bus

• Max. 4 Modules

- 4 x Vibration

- 16 Vibration Input
- 8 Digital Input (of which 8 Pulse A/B coded)

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• 16 Switching output (digital)

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Areas of application Usable across all industries







- Steel
- Paper
- Raw Materials
- Wind
- Production / Manufacturing
- Marine
- ...

- Motors
- Fans
- Compressors
- Gear boxes
- Vibration screens
- Crushers / Mills
- Spindles
- Rolling Mills
- Tooling machines
- ...

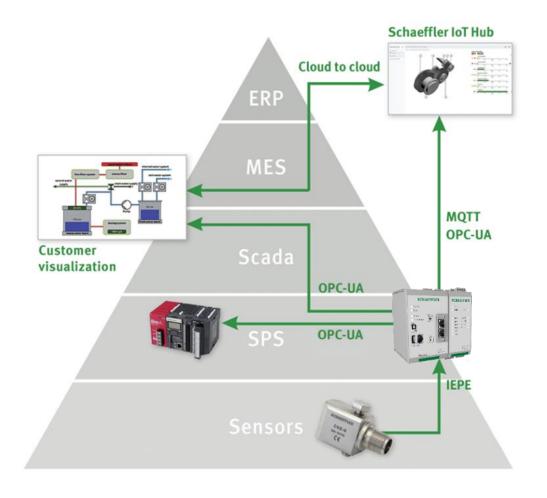
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System integration in customers infrastructure

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Easy integration in process automation via:

- OPC/UA Server
- SLMP Client

Cloud communication via:

- OPC/UA Server
- MQTT

ProLink System integration

Direct integration in ERP and Cloud

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Direct integration via standard communication channels:

- OPC/UA Server
- WebServices
- E-Mail

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Advantages

Immediately ready for use

- The pre-installed basic configuration of the ProLink CMS allows general monitoring of standard equipment such as motors, fans and pumps
- The adaptive learning mode sets the alarm thresholds individually for the unit to be monitored

No additional software necessary

- Software for Configuration, View trend data and first analysis included on the device itself by using a standard web browser
- Operation possible without additional workstation licenses
- No approval by IT necessary



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1 Condition Monitoring

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Services

Range of Services

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• On site service

Definition of measuring points, commissioning, reference measurements, measuring rounds, system integration, investigation of the cause(s) of problems

• Remote monitoring

Remote servicing (analysis and reporting) and system maintenance (adjustment of alarm thresholds etc.)

• Condition report with recommendations for action

Preparation of condition reports and written recommendations for action

• Maintenance Services

System integration and adaptation, integration related consultation, maintenance service

• Training courses

Standard and tailored to our customers' needs

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Further Information

Further information





Further information to follow

Consulting and Contact

Schaeffler Monitoring Services GmbH

Kaiserstraße 100

D - 52134 Herzogenrath

Phone.: +49 (0)2407 9149-0

E-Mail: industrial-services@schaeffler.com