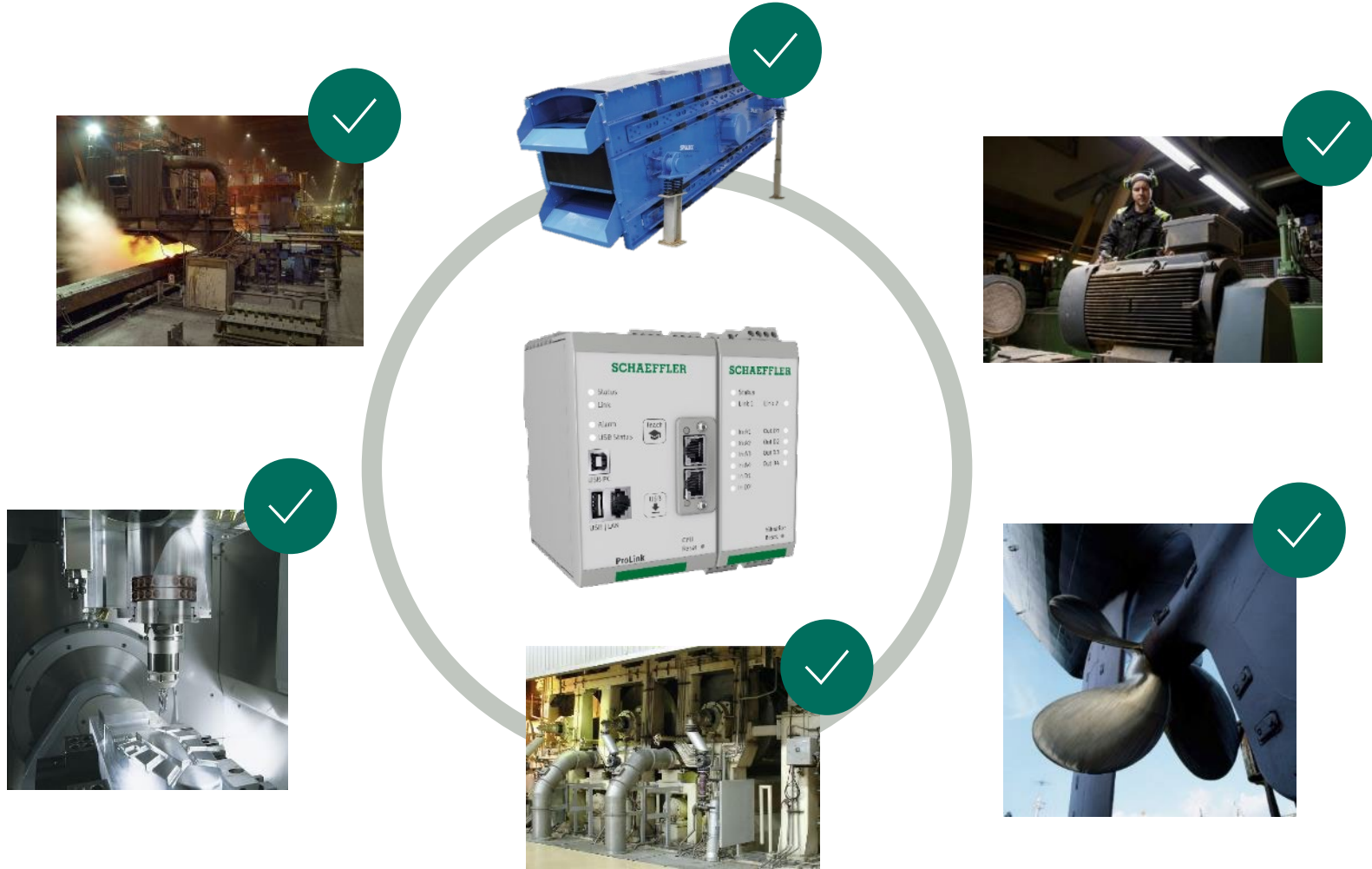




# ProLink – Condition Monitoring System

# Schaeffler ProLink Condition Monitoring System



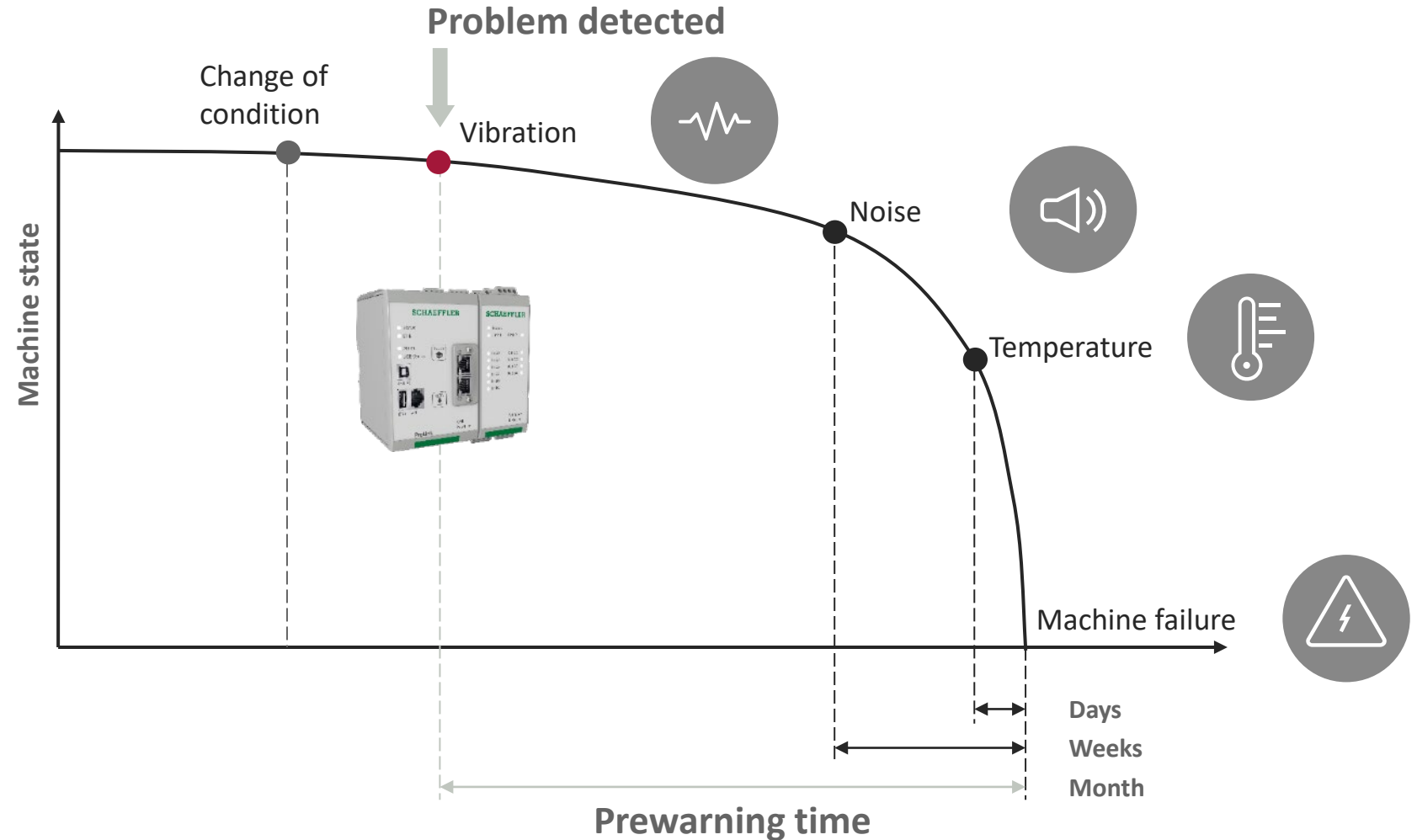
- Modular
- Multiple interfaces for cloud communication
- For universal application
- Easy to use
- Perfect integration into customer infrastructure

## Agenda

- 1 Condition Monitoring**
- 2 ProLink Condition Monitoring System
- 3 Areas of application
- 4 ProLink system integration
- 5 Advantages
- 6 Services
- 7 Further information

## Why Condition Monitoring?

- Increasing machine availability
- Avoiding unplanned downtime
- Improving service and maintenance planning
- Avoiding subsequent damage
- Reduction of maintenance costs
- Possibility to analysis the cause of damage is supported



## Simple application example

- Saw mill Kåge in Sweden
- Annual production volume approx. 240,000 m<sup>3</sup> of sawn timber
- 81 employees
- Monitoring of main electric motors

Downtime costs per hour: 2,800 EUR  
4 hours of asset downtime: 11,200 EUR  
Total: 11,200 EUR  
Amortisation time: after one unplanned downtime

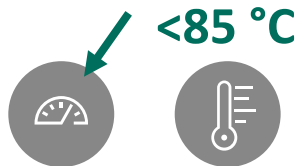
More examples: [Link](#)



# Product portfolio Schaeffler Condition Monitoring devices

## OPTIME

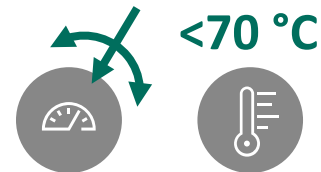
The next generation of condition monitoring: affordable, easy to install and scale up



MRO

## SmartCheck

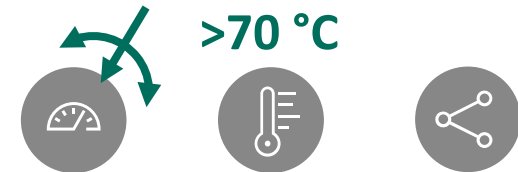
Sophisticated, one-channel condition monitoring system with intelligent learning mode and integrated web server



MRO / OEM

## ProLink CMS

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



MRO / OEM

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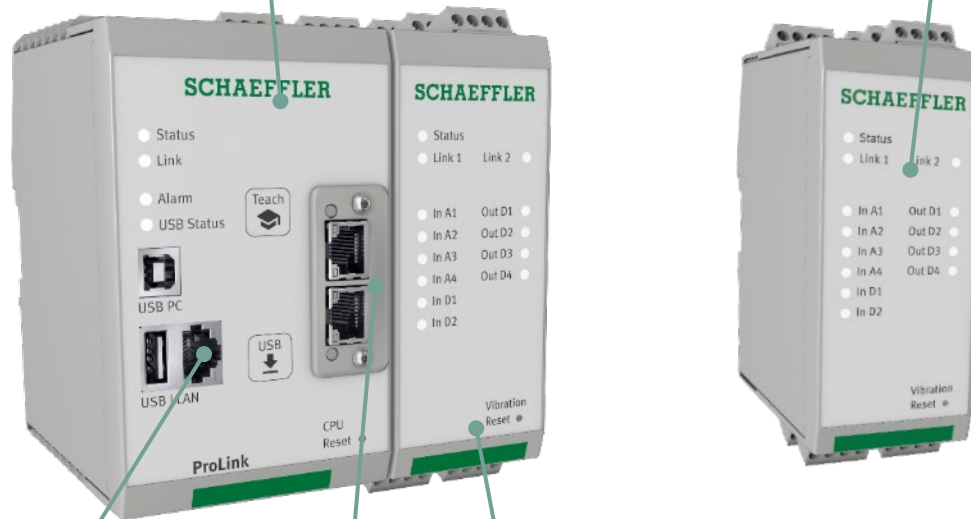
## In a nutshell

### SmartWeb

- Configuration assistant
- Automatic learning mode

### Additional modules

- individually expanded with additional measurement modules



### Cloud-Communication

- Ethernet
- OPC/UA Server, MQTT, Webservices

### Field bus connection\*

- Profinet,
- CC-Link IE,
- ...

### Vibration module with recording of speed data

- Extremely high signal quality (24 bit)
- High-quality signal processing

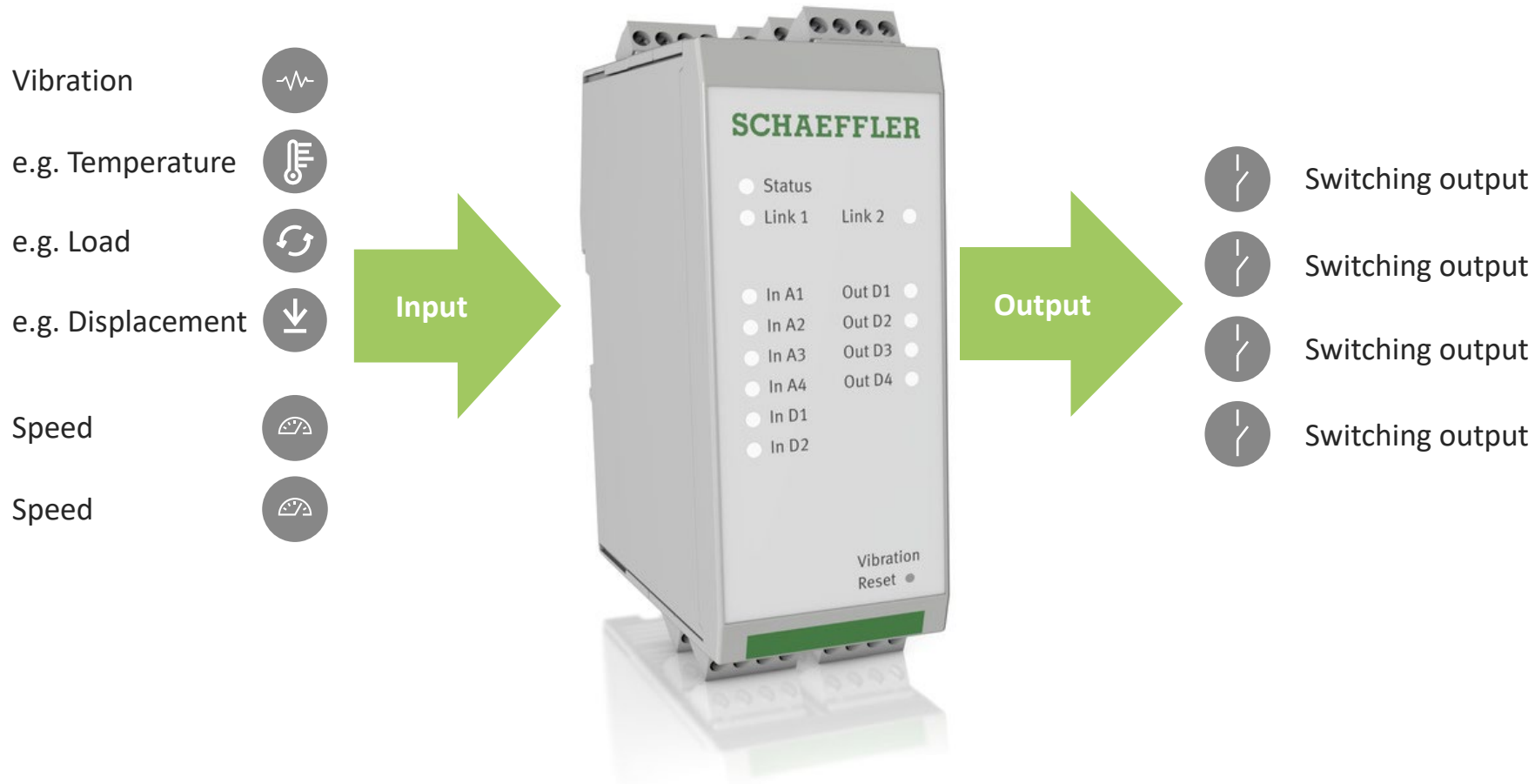
\* Field bus connection is planned for a later release

### Short info:

- Smallest unit consisting of 1 processor module (CPU) and 1 vibration module.
- Depending on requirements, the modules can be expanded from 4 to 8, 12 or 16 vibration channels.
- Based on proven SmartCheck technology with uniform operating concept and identical SmartWeb software for both products.
- Integration into the process control world via common field buses.



### Vibration module



**Function:**

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

In the case of an alarm, switching outputs are activated which can be connected to PLC systems installed by the customer.

## Input/Output module

0-20 mA



4-20 mA



0-10 V



PT100



PT1000



Puls/Status



Max. 8x  
Input



Max. 8x  
Output



0-20 mA



4-20 mA



0-10 V



Puls/Status

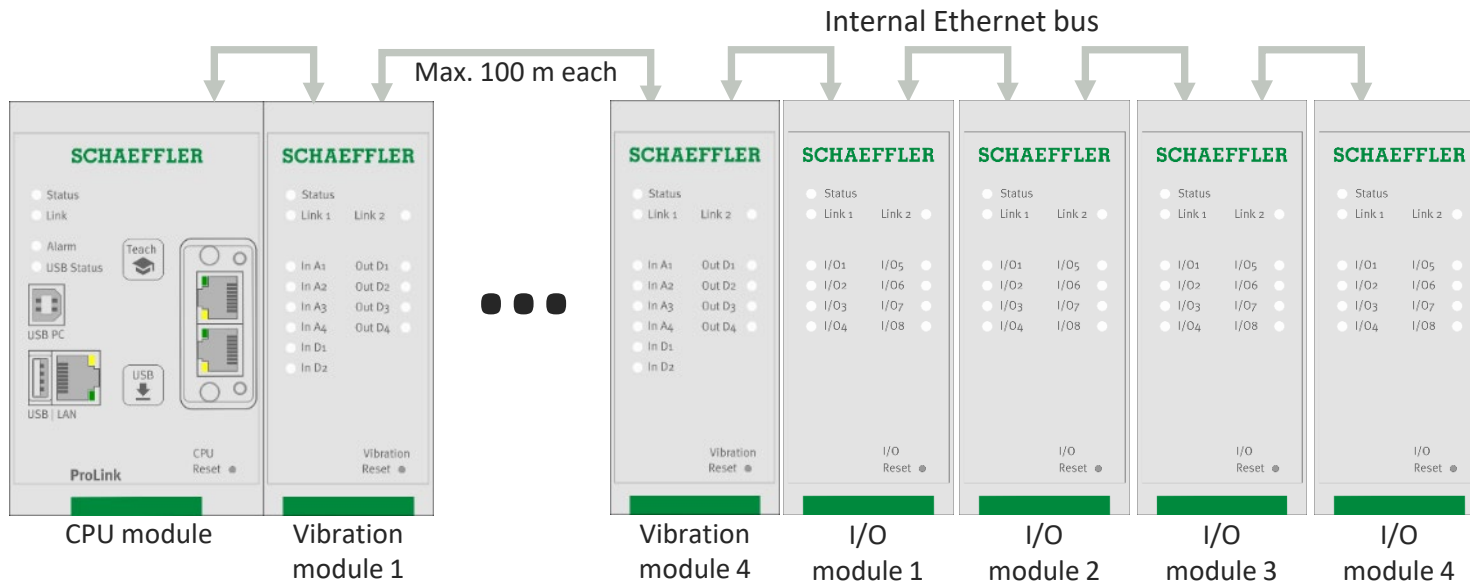
### Function:

The input/output module is used to record additional signals such as temperature, status information (machine is running), etc.

In addition alarm states or characteristic values can be output in analogue form. The usual industrial analogue signals are supported, but also PT100/PT1000.

In the case of an alarm, switching outputs are activated which can be connected to PLC systems installed by the customer.

### Maximum expansion of the Monitoring System (available)



- Max. 8 modules
- 16 IEPE inputs
- 8 pulse inputs (A/B coded)
- 16 switching outputs (digital)
- 32 input/output signals (adjustable via SmartWeb Software)

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## Applicable across all industries



- Steel industry
- Paper industry
- Raw materials processing
- Wind power
- Production/Manufacturing
- Marine sector
- ...

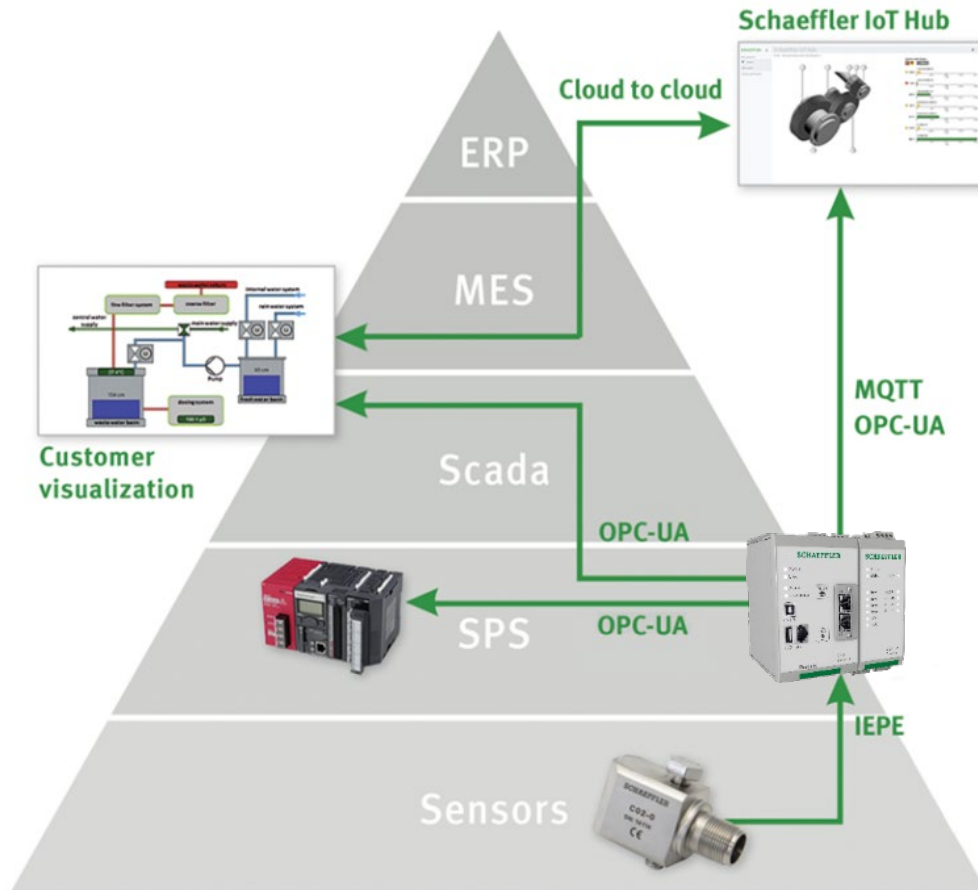


- Motors
- Fans
- Compressors
- Gear boxes
- Vibration screens
- Crushers/Mills
- Spindles
- Rolling mills
- Tooling machines
- ...

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## System integration in customers infrastructure



Easy integration in process automation via:

- Profinet\*
- OPC/UA Server
- SLMP Client

Cloud communication via:

- OPC/UA Server
- MQTT

\* Next development step

## Direct integration in ERP and Cloud



Direct integration via standard communication channels:

- OPC/UA Server
- Web services
- E-Mail



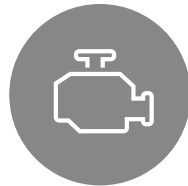
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## Advantages

### 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 integrated in the ProLink device for configuration, viewing trend data and initial analysis via a standard web browser.
- No additional costs for workstation licenses
- No approval by IT necessary



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## Range of services



- **On-site service**

Definition of measuring points, commissioning, reference measurements, measuring routes, system integration, root cause analysis in case of problems

- **Remote monitoring**

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

- **Condition report with recommendation 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 customer needs

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Further information

## Further information

**SCHAEFFLER**



Further information to follow

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