

The smart MDC
alternative:
SmartMONITOR





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SmartMONITOR is the smart MDC alternative for industrial companies looking for a way to quickly and easily gather reliable data to optimise their manufacturing processes. **SmartMONITOR** provides all of the relevant data for machines, systems and manual workstations easily at the touch of a button. Unlike conventional, complex MDC systems, **SmartMONITOR** is a simple, wireless-based retrofit solution for signalling and analysing your entire production facility - at a glance.

Christian Höhler, Research & Development Director



PRODUCTION MONITORING

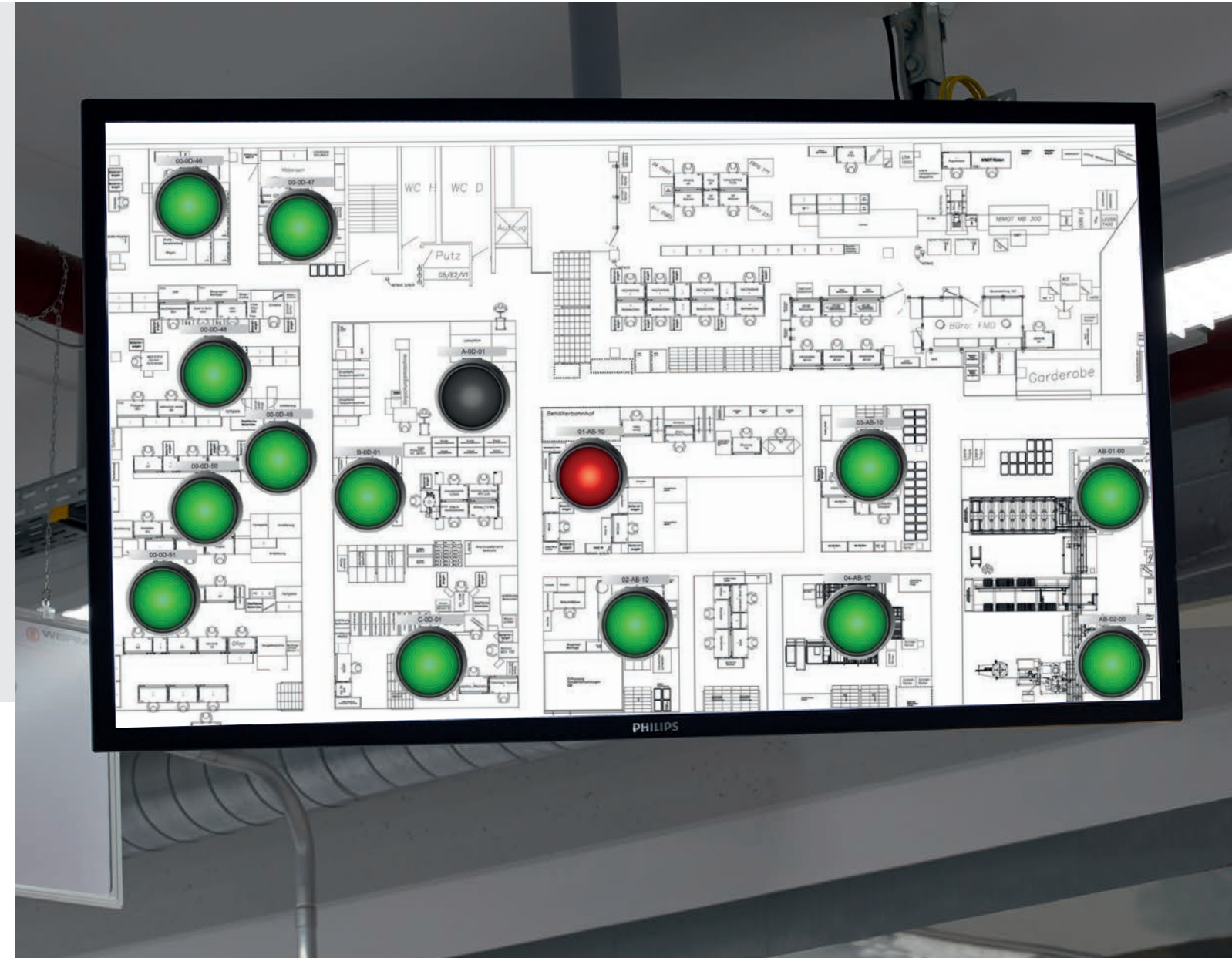
- Transparency of the complete production facility, even if spread over several buildings
- Identify free capacity
- Reduce downtime
- Increase machine productivity
- Easily integrate manual workstations

MACHINE MONITORING

- Reduction of reaction and downtimes
- Increase productivity
- Overview of the complete production facility
- Independent of the manufacturer of the machines and systems

EVERYTHING UNDER CONTROL WITH SmartMONITOR

With **signal devices**, the **control station module** or a message on **your smartphone** you can shorten your response times and optimise your manufacturing process, with the guarantee that you will never miss a critical situation. Everything is documented and the reports also show you how to permanently **improve your processes and productivity**.



MATERIAL FLOW

- Optimise material flow process
- Reduce flow time
- Eliminate wastage
- Increase productivity
- Reduce costs and process times

INITIATING PROCESSES

- Start or stop machines
- Logical networking of machines
- Head-of-Line function



SmartMONITOR

With SmartMONITOR we help to make processes faster, leaner, better and more efficient - simply at the push of a button. The simple, wireless-based retrofit solution for signalling and analysing your entire production area ensures further growth and that you are always a step ahead of your competitors.



SOFTWARE CENTRAL CONTROL STATION

- Control station offers an overview of all machines, equipment and workstations
- Retrospective analysis of data
- Process optimisation
- React quickly to production disruptions
- Produce reports

THE SYSTEM

SmartMONITOR from **WERMA** consists of a wireless transmitter, a wireless receiver and the software. The robust and proven wireless network for the production environment intelligently searches for the best connection and thereby ensures the simplest integration into your production process. The **included software** already has integrated analysis and reporting tools.



TRANSMITTER WIRELESS DATA MONITORING

- Can be integrated into the signal tower as an additional element
- Monitors the status and counts the output of up to 50 machines or workstations
- Data transferred wirelessly to the receiver
- Initiates processes, starts and stops machines

RECEIVER SECURE DATA COLLECTION

- Receives all the data sent by the transmitters in the network
- Transfers and saves the data to a Microsoft SQL database



INTUITIVE AND CLEAR – THE WIN SOFTWARE

The **software supplied with the system** is easy to install and leads the user through a series of steps to establish an individual network. It displays the status condition of signal lights installed in the system, enables the user to **analyse runtimes, identify causes of disruption** in operations and therefore **improve efficiency**.

KEEP UP TO DATE WITH CHANGES MESSAGING SERVICE

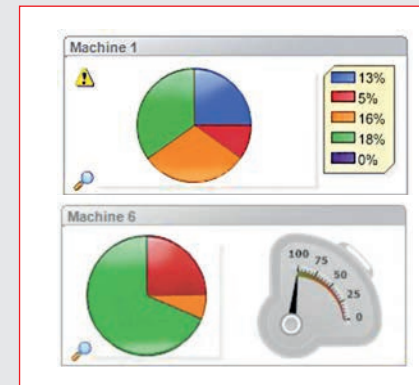
React quickly regardless of your current location. If the status of a machine or workstation changes an Email can be automatically sent to a PC or Smartphone of the person responsible. You can select to whom and after which time interval of the status change the Email is to be sent.

EASY TO CREATE REPORTS AND EXPORT FUNCTION

The user-friendly report function in the Control Station, Productivity, Run time and Job modules offers the possibility of converting all existing data into individual reports (in tabular and/or graphical form). The report can then be individually amended, printed out, and be saved in various data formats (pdf, HTML, Excel, CSV, jpg).

REACT QUICKLY CONTROL STATION

The Control Station shows you the operating condition of all machines or workstations being monitored so you can quickly see if a machine is in an error condition or running normally, or monitor which order is being worked on and the status of that order. This module helps you to quickly take action to reduce downtime.

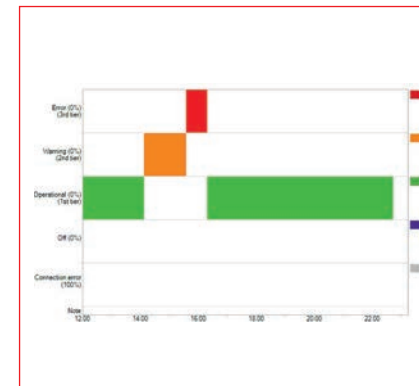


INCREASE EFFICIENCY PRODUCTIVITY MODULE

Using the Productivity Module you can check the productivity of your machines and workstations over any time period. You can look for example at the last working day, or define specific time periods such as shift patterns. Using this module it is possible to retrospectively analyse downtime and fault conditions and thus help improve efficiency in the future.

UPTIME / DOWNTIME TOTAL PRODUCTIVITY OVERVIEW

Define the productive and non-productive statuses of the machine. The Productivity Module then enables you to analyse the real productivity of a machine, groups of machines or the complete workshop.

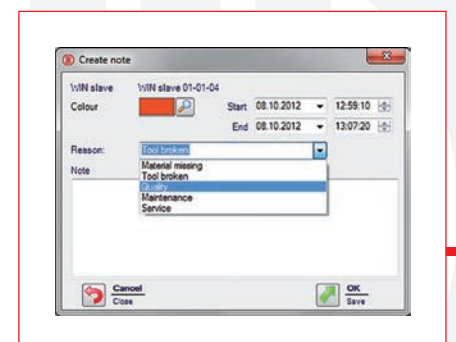
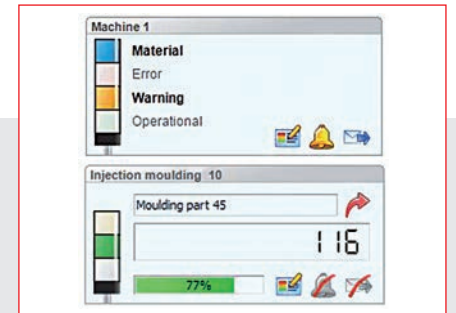


OBTAIN TRANSPARENCY RUNTIME MODULE

The Runtime Module enables you to check the operation and down-times of your machines or workstations. This allows you to compare several machines with one another in order to detect and eliminate errors that affect the production process. This leads to sustainable process improvements.

DOCUMENT PROBLEMS ERROR ANALYSIS

Identify, comment and analyse the fault conditions. First of all define the most common reasons for fault status occurring, for example material shortage. It is then possible to retrospectively analyse the frequency and length of the fault conditions and ensure that the cause can be eliminated.



EXPERIENCE

YOUR POSSIBILITIES FOR YOURSELF

Live demonstration. Lean Factory.

Visit one of our numerous
roadshows throughout Germany.

Register at:

www.lean-factory.com

SIMPLY CLEVER

REFERENCES

A large number of customers already rely on
WERMA technology - and thereby make their
production safer, better and more efficient.

You can find references and customer
applications at:

www.werma.com/smartmonitor



EXPERIMENT WITH THE PRODUCT IN YOUR FACILITY

TEST BOX*

Find out more by ordering our test box –
without any obligation - at:

smartmonitor@werma.com

*This offer may not be available in all markets

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Part Numbers
SmartMONITOR



1. WIRELESS NETWORKING

STATUS MONITORING

This hardware monitors up to eight different statuses and transmits them to the receiver.

COUNTING MODULE

This hardware monitors up to six different statuses and counts a quantity pulse. This information is transmitted to the receiver.

CONTROLLING A SIGNAL TOWER

In combination with the software, this hardware allows the actuation of a signal tower or an external application (start machine, stop machine etc.).

TRANSMITTER



WIN slave
Order no. **860 640 02**



WIN transmitter
Order no. **860 640 05**



WIN slave performance
Order no. **860 640 12**



WIN transmitter performance
Order no. **860 640 15**



WIN slave control
Order no. **860 640 22**



WIN transmitter control
Order no. **860 640 25**

RECEIVER



WIN ethernet master
Order no. **860 000 06**



WIN ethernet receiver
Order no. **860 000 07**

2. SIGNAL TOWER

SIGNAL ELEMENTS (UP TO A MAXIMUM OF 4)



Buzzer
Order no. **645 800 75**



2 tone siren
Order no. **645 870 75**



LED Permanent light red
Order no. **644 100 75**



LED Permanent light green
Order no. **644 200 75**



LED Permanent light yellow
Order no. **644 300 75**



LED Permanent light clear
Order no. **644 400 75**



LED Permanent light blue
Order no. **644 500 75**



TwinLIGHT red
Order no. **647 110 75**



TwinLIGHT yellow
Order no. **647 310 75**



TwinLIGHT green
Order no. **647 210 75**



TwinLIGHT clear
Order no. **647 430 75**



TwinLIGHT blue
Order no. **647 510 75**

Base mounting



Terminal element
Order no. **640 800 00**

Tube mounting



Terminal element +
Base with integrated
tube
Order no.
**640 810 00 +
975 840 10**

Bracket mounting



Terminal element +
Bracket for base
mounting
Order no.
**640 800 00 +
960 000 02**

PRE-ASSEMBLED SIGNAL TOWER

Base mounting



LED Permanent
light
Order no.
649 240 02



LED Permanent
light
Order no.
649 240 04



TwinLIGHT
Order no.
649 000 01

Tube mounting



LED Permanent
light
Order no.
649 240 05



LED Permanent
light
Order no.
649 240 06



TwinLIGHT
Order no.
649 000 02

