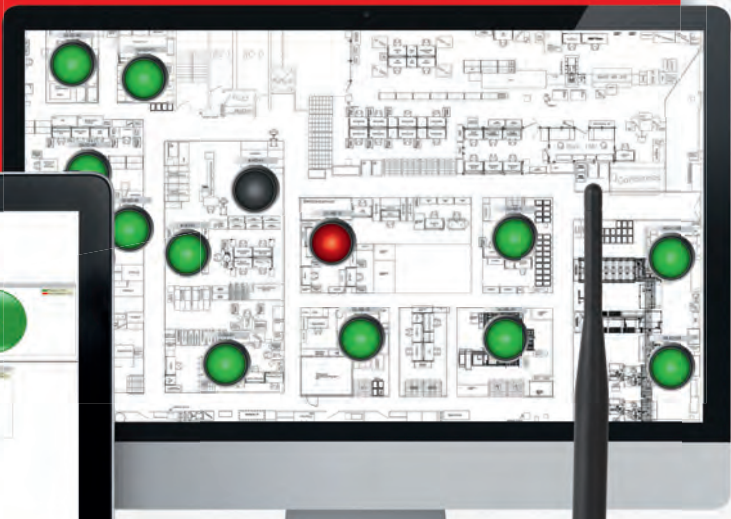




The smart MDC  
alternative:  
**SmartMONITOR**





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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

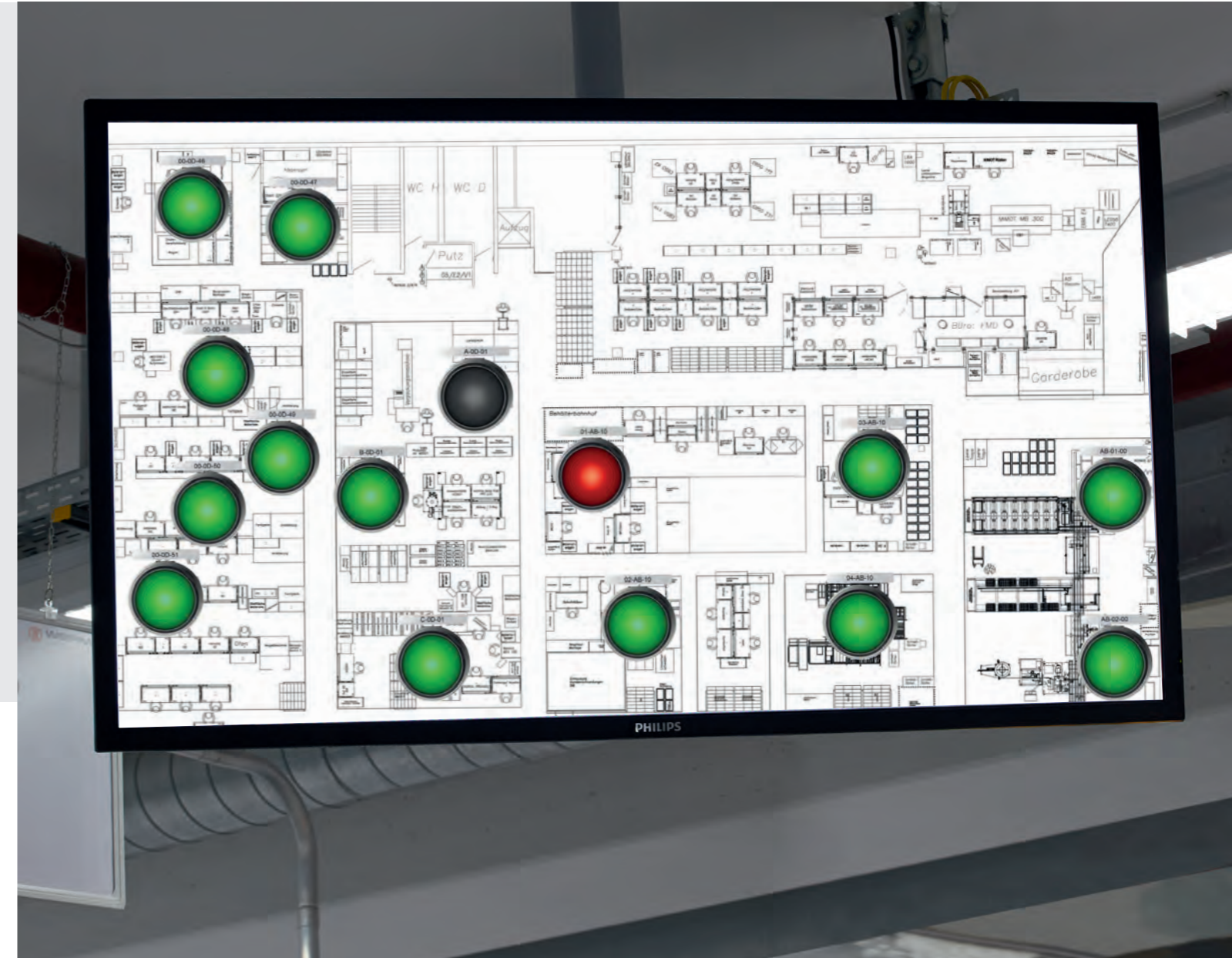
- Transparency of the complete production facility, even if spread over several buildings
- Identify free capacity
- Reduce downtime
- Increase machine productivity
- Easily integrate manual workstations

## 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

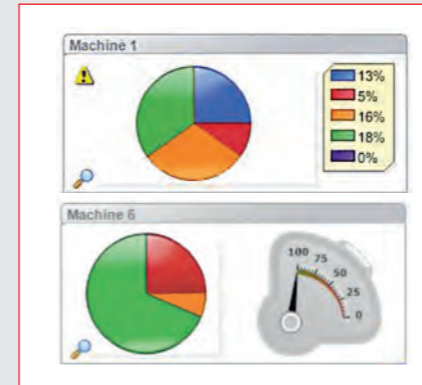
React quickly regardless of your current location. If the status of a machine or workstation changes an Email can be automatically sent to a PC or Smartphone of the person responsible. You can select to whom and after which time interval of the status change the Email is to be sent.

## 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.

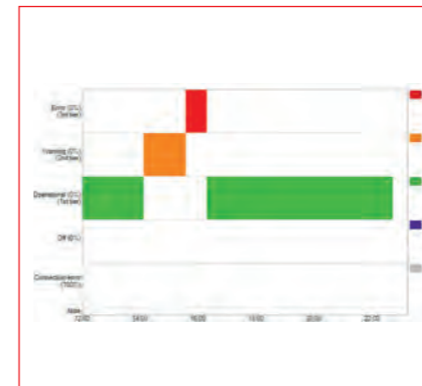


## INCREASE EFFICIENCY PRODUCTIVITY MODULE

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.

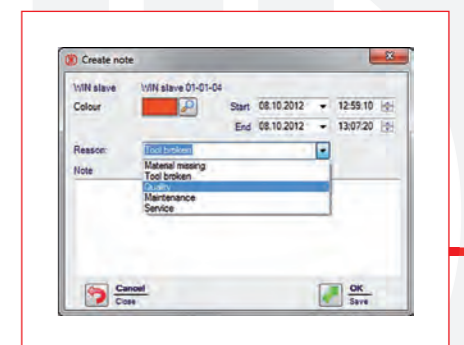
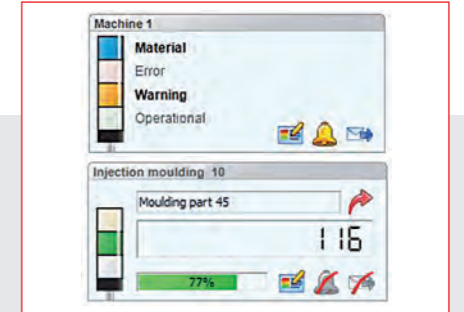


## OBTAIN TRANSPARENCY RUNTIME MODULE

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](http://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](http://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](mailto:smartmonitor@werma.com)

\*This offer may not be available in all markets

## HOTLINE:

SmartMONITOR

Phone +49 7424 9557-153

Fax +49 7424 9557-44

[smartmonitor@werma.com](mailto:smartmonitor@werma.com)

[WWW.WERMA.COM](http://WWW.WERMA.COM)



**WERMA Signaltechnik GmbH + Co. KG**

Dürbheimer Str. 15  
D-78604 Rietheim-Weilheim  
Phone +49 7424 9557-0  
Fax +49 7424 9557-44  
www.werma.com  
info@werma.com

**WERMA Signaltechnik**

Niederlassung Neuhausen am Rhf.  
Rheingoldstrasse 50  
8212 Neuhausen am Rheinfall  
Switzerland  
Phone +41 52 674 0060  
Fax +41 52 674 0066  
www.werma.ch  
info@werma.ch

**WERMA SARL**

56, Rue Collière  
69780 Mions  
France  
Phone +33 472 22 3737  
Fax +33 472 22 3764  
www.werma.fr  
info@werma.fr

**WERMA BENELUX**

Poortakkerstraat 41C  
9051 Sint-Denijs-Westrem  
Belgium  
Phone +32 9 220 31 11  
www.wermabenelux.com  
info@wermabenelux.com

**WERMA (UK) Ltd.**

11 Regent Park  
37 Booth Drive  
Park Farm Industrial Estate  
Wellingborough NN8 6GR  
Great Britain  
Phone +44 1536 486930  
Fax +44 1536 514810  
www.werma.co.uk  
uksales@werma.co.uk

**WERMA USA Inc.**

6731 Collamer Road  
East Syracuse, NY 13057 USA  
Phone +1 315 414 0200  
Fax +1 315 414 0201  
www.werma.com  
us-info@werma.com

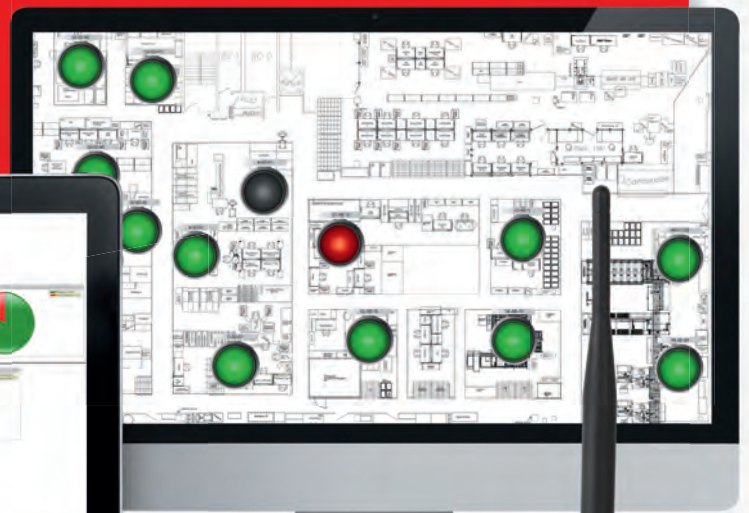
**WERMA (Shanghai) Co., Ltd.**

No. 8, High Technology Zone,  
No. 503, Meinengda Road,  
Songjiang, Shanghai, P. R. C 201613  
China  
Phone +86 21 5774-0022  
Fax +86 21 5774-6601  
www.werma.com.cn  
info@werma.com.cn





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**

