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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

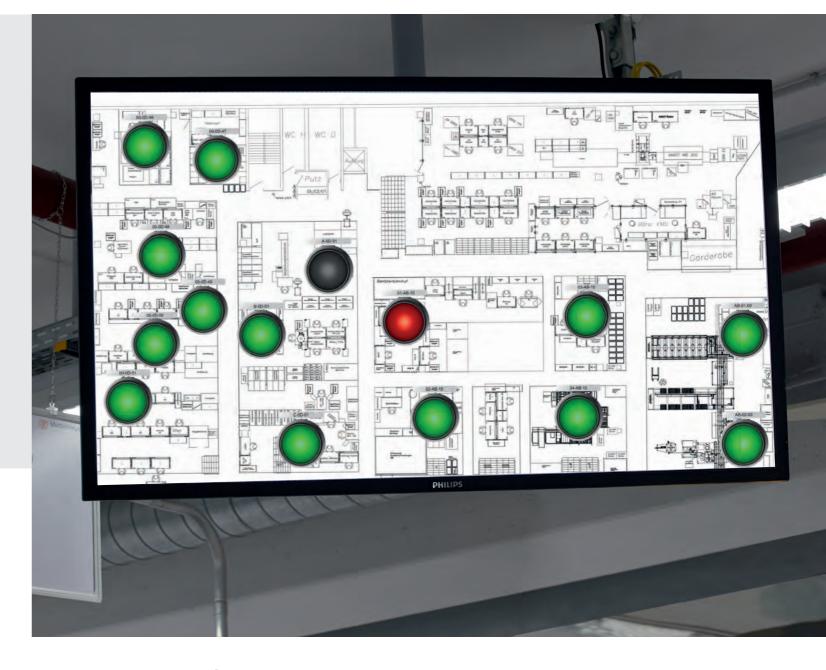
MACHINE MONITORING

- 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





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

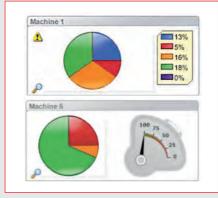
The user-friendly report function in the Control Station, Productivity, Run time and Job modules offers the possibility of converting all existing data into individual reports (in tabular and/or graphical form). The report can then be individually amended, printed out, and be saved in various data formats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

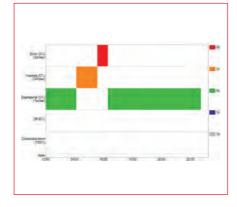
Using the Productivity Module you can check the productivity of your machines and workstations over any time period. You can look for example at the last working day, or define specific time periods such as shift patterns. Using this module it is possible to retrospectively analyse downtime and fault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





WERMA Signaltechnik GmbH + Co. KG

Dürbheimer Str. 15 D-78604 Rietheim-Weilheim Phone +49 74 24 9557-0 Fax +49 74 24 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 00 60 Fax +41 52 674 00 66 www.werma.ch

WERMA SARL

info@werma.ch

56, Rue Colière 69780 Mions France Phone +33 47222 3737 Fax +33 472 22 3764 www.werma.fr info@werma.fr

WERMA BENELUX
Poortakkerstraat 41C
9051 Sint-Denijs-Westrem
Belgium
Phone + 32 220 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 51 4810
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 57 74-00 24

Fax +86 215774-6601 www.werma.com.cn info@werma.com.cn





