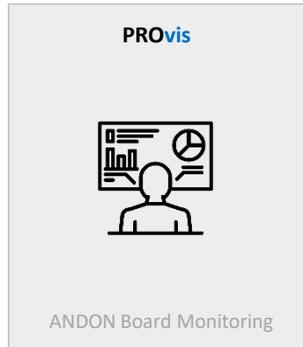


ANDON BOARD MONITORING



DIGITAL COMMUNICATION AT ALL COMPANY LEVELS

Your production data from the MES Suite is compiled and visually prepared on large monitors. Provide your employees with production data, other events, tasks, key figures or information.

[Inquire now](#)

ANDON BOARD MONITORING

Company

MES Suite

Applications

DIGITAL VISUALISATION AND COMMUNICATION

The goal of Industry 4.0 is to make all information in the production chain available in real time and at any time and any place. Inform and communicate in a goal-oriented way.

INFORM INTERACTIVELY AND TIMELY

Schedule the screen sequence, the refresh interval and the display duration of a specific layout in a time-controlled manner. Alternatively, the application can also be set up interactively with navigation buttons.

INVOLVING EMPLOYEES AND INCREASING MOTIVATION

In managing your staff, you are responsible for ensuring that they are not only qualified but also continuously informed and motivated. They want to be involved in the processes and not presented with a fait accompli. Integrate your employees into the processes in a targeted manner, create trust and build knowledge.

Your achievements

- ✓ Production data such as utilisation rate, status of orders, quality and shift information or technical availability of the facilities can be transmitted in real time to large monitors
- ✓ Always keep an eye on machine utilisation: Speedometers, diagrams, fault logs, machine lists or key figures keep you and your employees up to date everywhere in production
- ✓ Inform and motivate your staff: Numerous elements such as news tickers, documents, web pages provide information in a timely and uncomplicated manner

"Transparent communication in the age of Industry 4.0 is crucial for the future and competitiveness."

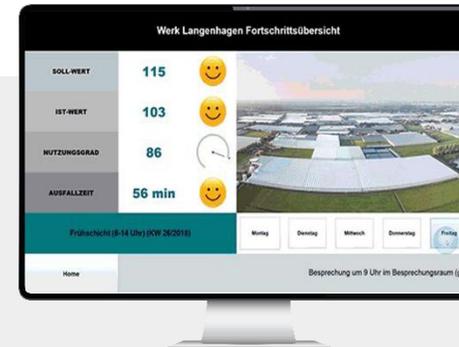
Interactive staff information system



Time-controlled employee information system



Shopfloor - Interactive visualisation of information



Visualise LIVE machine data



The screenshot shows 'Halle P30 Maschinenübersicht' with a clock at '11:39' and date '03.01.2022'. It displays a table of machine data with columns for 'Maschine', 'Status', 'Produktionsmenge', 'Anzahl', 'Letzte', 'Schicht', and 'Umschaltungszeit/Status'. The table contains multiple rows of data with color-coded status indicators (red, green, blue, purple).

Maschine	Status	Produktionsmenge	Anzahl	Letzte	Schicht	Umschaltungszeit/Status
3122	OK	89,61 %	0%	10:57:10 (10:57)	79:57	123,00 Group: 05 (0:24:02)
3122	OK	89,64 %	0%	10:57:10 (10:57)	79:57	123,00 Group: 05 (0:24:02)
3122	OK	89,61 %	0%	10:57:10 (10:57)	79:57	123,00 Group: 05 (0:24:02)
3123	OK	83,16 %	0%	4:32:52 (03:04)	47:55	123,00 Group: 05 (0:16:54)
3123	OK	83,16 %	0%	4:32:52 (03:04)	47:55	123,00 Group: 05 (0:16:54)
3123	OK	83,16 %	0%	4:32:52 (03:04)	47:55	123,00 Group: 05 (0:16:54)
3123	Faktor	72,74 %	0%	8:00:00 (13:31)	47:52	145,00 Group: 05 (0:30:54)
3123	Faktor	72,74 %	0%	8:00:00 (13:31)	47:52	145,00 Group: 05 (0:30:54)
3123	Faktor	72,74 %	0%	8:00:00 (13:31)	47:52	145,00 Group: 05 (0:30:54)
3125	OK	55,16 %	0%	8:00:00 (13:31)	47:51	185,00 Group: 05 (0:37:14)
3125	OK	55,16 %	0%	8:00:00 (13:31)	47:51	185,00 Group: 05 (0:37:14)

* Heute findet die Besprechung um 9 Uhr statt *

BDE Engineering GmbH - Increasing efficiency in PRODUCTION



ANDON BOARD MONITORING



A MONITOR TO SUIT YOUR NEEDS

- Operating and machine data with machine status, cycle monitoring, KPIs, order information, downtimes in tabular form, via traffic lights, speedometers or news ticker
- Embed web-enabled content, for e.g. .XML, .pdf, images, web pages, streamed .ppts / webcams or videos
- Interactive operation with navigation buttons
- Schedule screen sequence, refresh interval and display duration of a layout individually
- An already developed representation can be integrated in different monitors
- Changes via the dashboard are updated live in production



Layout in PROvis Designer



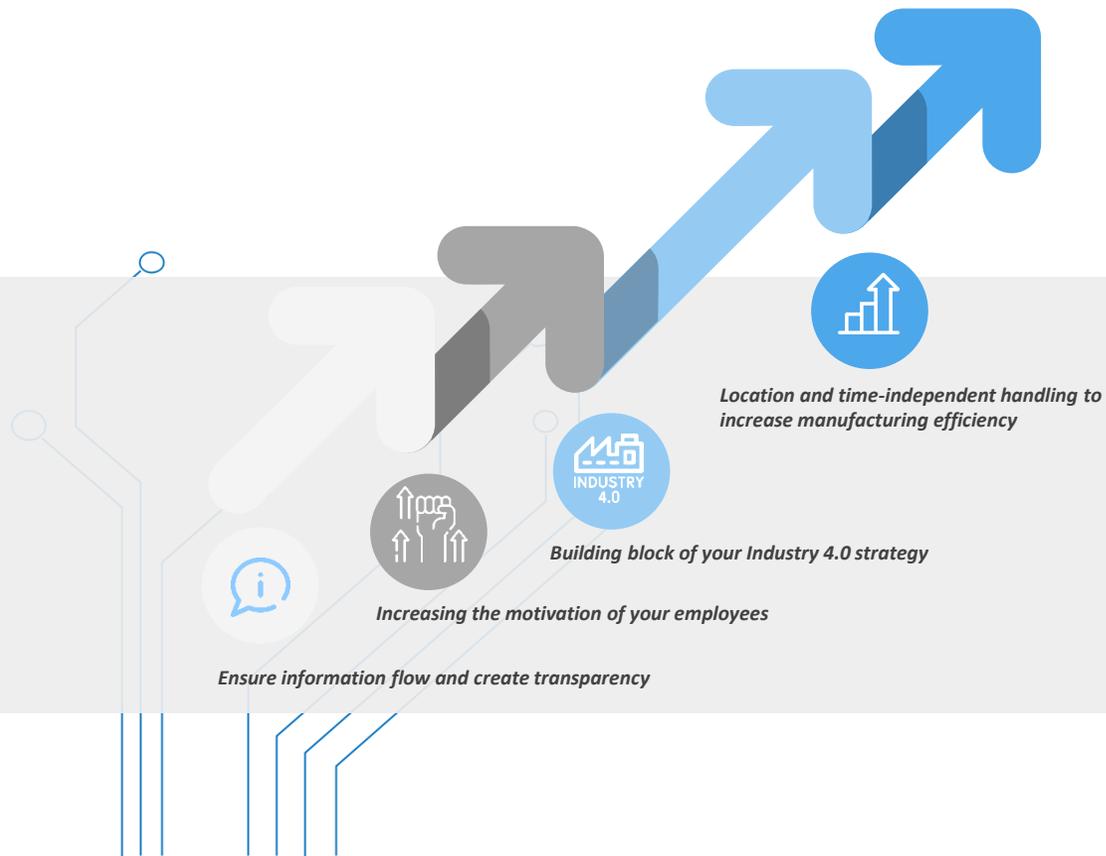
View in the PROvis Dashboard



ANDON BOARD MONITORING

MEET THE DEMANDS OF MANUFACTURING EFFICIENCY

In the sense of Industry 4.0, all information in the production chain should be available at any time and any place and displayed in real time. **PROvis** creates a real-time information transfer of any production data and messages of any kind, at any desired location.



Company

MES Suite

Applications

PROvisProfessional



For the digital communication in manufacturing

- ✓ **Texts / Newsticker**
With and without animation
- ✓ **Documents**
.xml, .xps, .pdf, images, e.g. .jpg, .png
- ✓ **Web-enabled content**
- ✓ **Videos / Camera**
e.g. mp4
- ✓ **Presentations**
e.g. .ppt
- ✓ **Indiv. Operation**
Interactive with navigation or time-controlled
- ✓ **Production data**
Connection to the MES Suite **PROefficient** with real-time data, analysis and key figures

PROvisBusiness



For the digital communication in your business

- ✓ **Texts / Newsticker**
With and without animation
- ✓ **Documents**
.xml, .xps, .pdf, images, e.g. .jpg, .png
- ✓ **Web-enabled content**
- ✓ **Videos / Camera**
e.g. mp4
- ✓ **Presentations**
e.g. .ppt
- ✓ **Indiv. Operation**
Interactive with navigation or time-controlled



GRAPHICAL ORDER PLANNING

PROplan

—	✓
—	✓
—	✓
—	✓

Order planning/monitoring



CONTROL AND PLANNING OF PRODUCTION ORDERS

System for controlling and planning production orders. In times of ever faster and more flexible production structures with simultaneously high quality and deadline requirements, planning systems are of great importance.

[Inquire now](#)

GRAPHICAL ORDER PLANNING

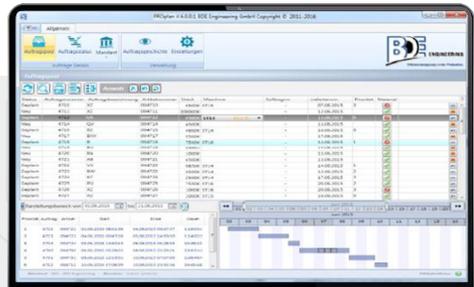
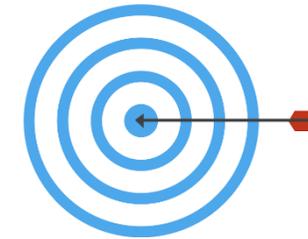
GRAPHICAL ORDER PLANNING

The graphic planning board processes the order and item data from the MES Suite **PROefficient**. Scheduled orders show the current production progress of the orders within a real-time display. A utilisation diagram informs about the plant availability.

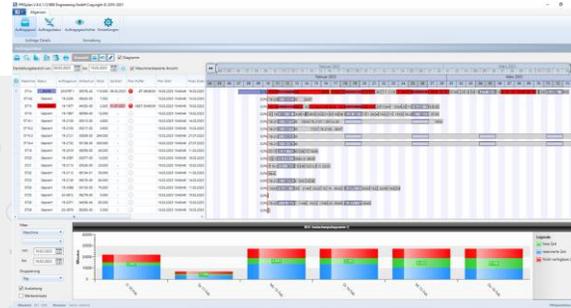
LIVE STATUS AND TARGET COMPARISON OF PRODUCTION ORDERS

In view of the order volume and complexity, the production planner/dispatcher often reaches his limits and needs technical support. Here, **PROplan** offers a planning tool that is coupled live with the production process and all process-related disruptions and production progress.

"With the graphic order planning, you have an insight into the actual and target plan specifications at any time and can thus intervene in a focused and timely manner."



Order pool



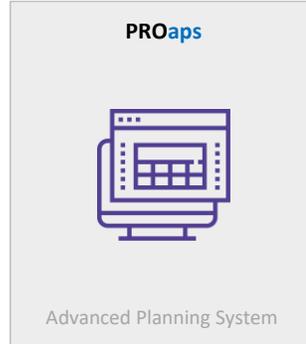
Order based view

YOUR ACHIEVEMENTS

- ✓ Graphical planning board for visualisation of the planned orders / operations
- ✓ Time-based and clear representation taking into account the shifts
- ✓ Capacity graph of machine utilisation and filter criteria
- ✓ Operations for which a missed deadline is imminent are visually highlighted



DETAILED PRODUCTION PLANNING



OPTIMIZE YOUR PLANNING AND IMPROVE YOUR TRANSPARENCY

Tailored to customer and industry-specific requirements, PROaps offers a tailor-made solution for the efficient, transparent and secure implementation of your planning processes.

[Inquire now](#)

DETAILED PRODUCTION PLANNING

ACHIEVE RELIABLE PLANNING RESULTS

For manufacturing companies with complex production structures, large order networks, and the need for personnel and tool planning, **PROaps** delivers reliable planning results. A large number of orders and a multitude of additional constraints can be implemented.

AUTOMATED ADJUSTMENT OF PRODUCTION PLANNING

The production planning system can respond quickly and optimally to disruptions in daily production. An optimized production plan is calculated across all production orders and stages, taking into account all defined capacities and production restrictions. Influences such as disruptions are stored and automatically taken into account in the next planning run.

„The production planning system allows you to plan your orders quickly and efficiently at the touch of a button.“

Company

MES Suite

Applications



Freely definable department view



Standard view of planned orders



Display of individual orders



Parameterizable color schemes



Expandable resources



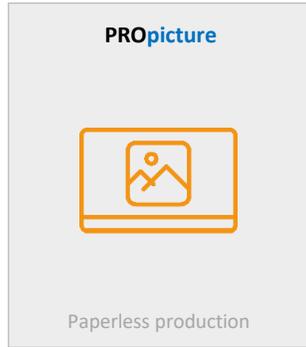
Display of shift models = breaks

IHRE ERFOLGE

- ✓ Planning security and transparency
- ✓ Graphic control center tailored to your needs
- ✓ Optimization of costs, lead times, adherence to deadlines, and machine utilization
- ✓ Realistic presets and intuitive operation



PAPERLESS PRODUCTION



Company

MES Suite

Applications

INTERACTIVE AND PAPERLESS MANAGEMENT OF THE WORKFORCE

As an information platform, the application allows the transfer, processing and visualisation of information and documents at any desired facility. Errors are minimised, paper and administrative expenses are reduced.

Inquire now

PAPERLESS PRODUCTION

[Company](#)

[MES Suite](#)

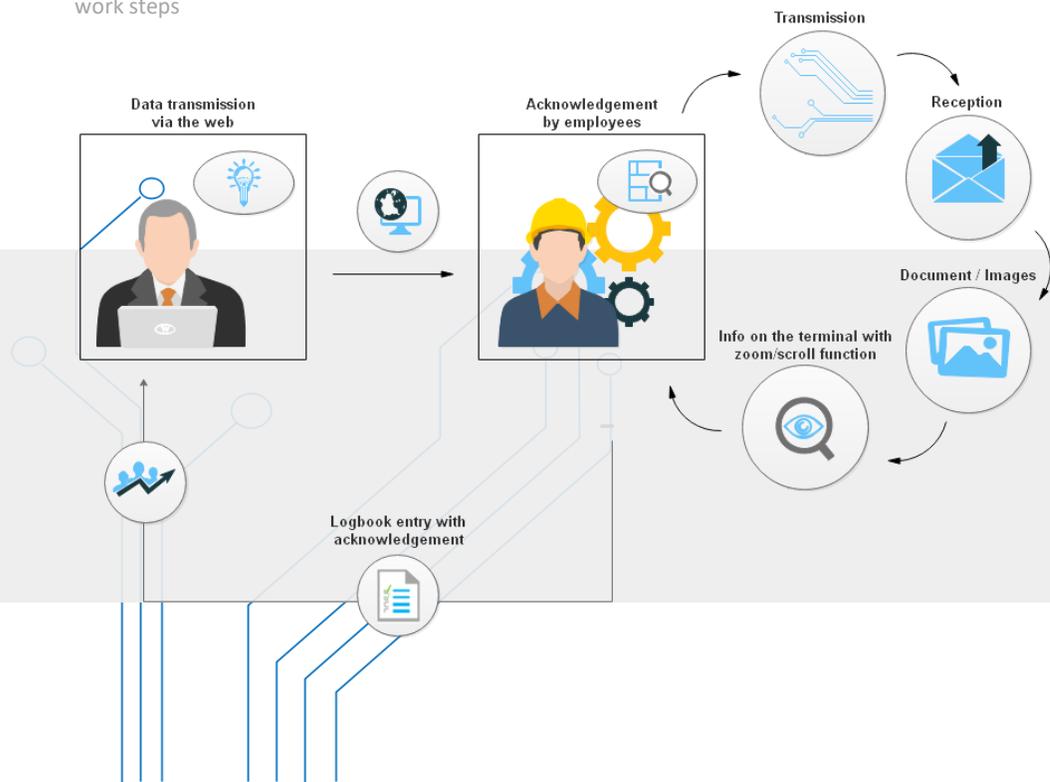
[Applications](#)

MINIMISE ERRORS, REDUCE PAPER AND ADMINISTRATIVE COSTS

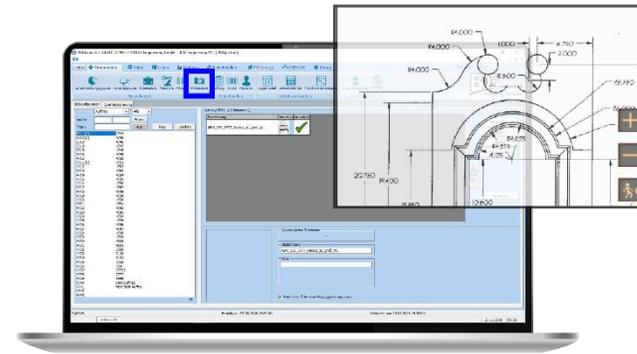
Orders must be produced safely, properly and without downtime. As an efficient information platform, the MES application **PROpicture** allows the transfer, processing and visualisation of information and documents to any desired equipment.

MANAGE ALL NECESSARY DOCUMENTS

Parts lists, order data, drawings, product images, machine settings, quality guidelines, packaging instructions, customer-related information, product-related information, assembly instructions, customer specifications, work steps



"Digitise important documents and have their receipt confirmed. For flawless product quality and reduced effort in processes."



Send drawings to production



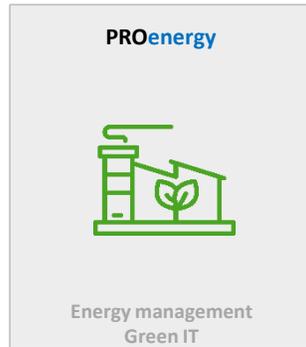
Opening the drawing on the production line

YOUR ACHIEVEMENTS

- ✓ Efficient information platform for the transmission of regulations, orders, settings, quality guidelines or instructions and much more
- ✓ Increase in quality, improvement of information management, acceleration of information transfer
- ✓ Confirmation of the employee when he/she opens an important document



ENERGY MANAGEMENT GREEN IT



REDUCE ENERGY CONSUMPTION AND MAKE SAVINGS POTENTIAL VISIBLE

Make the energy consumption (ISO50001) of your company and the possible savings potential in the direction of green IT visible.

[Inquire now](#)

ENERGY CONSUMPTION CAPTURE

- Energy consumption capture and mapping to the order manufactured
- Energy consumption capture of auxiliary units such as extraction units or ovens
- Temperature recording, for e.g. of glue or raw materials, possibly with min. / max. tolerance values and possible reactions via outputs
- Capture of water, steam or gas consumption
- Acquisition of parallel static inputs independent of production or stoppage

"Energy data and process data expose weak points and savings potentials of unimagined magnitudes."

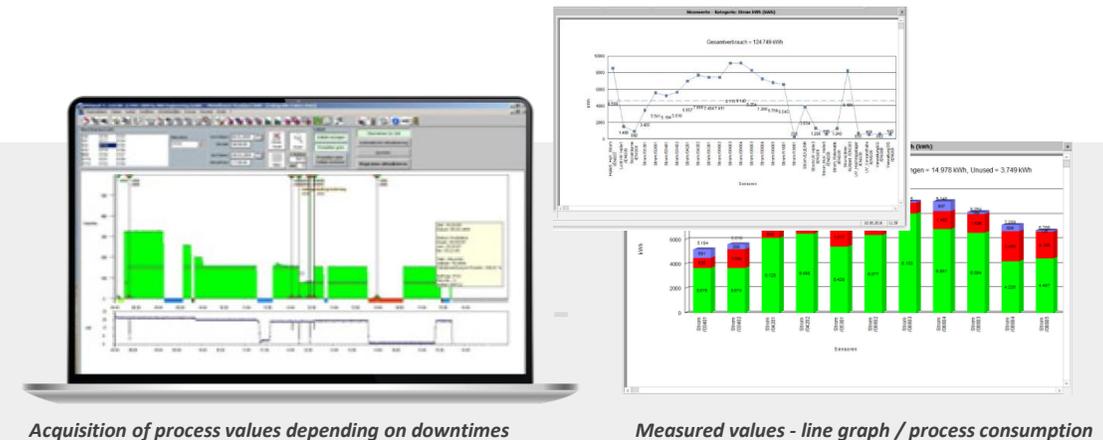
YOUR ACHIEVEMENTS

- ✓ Reduction in costs
- ✓ Counteraction of resource scarcity
- ✓ Process optimisation
- ✓ Reduction of energy taxes
- ✓ Environment protection, sustainable operations
- ✓ Improve public image

ENERGY VISUALISATION

The dashboard in **PROenergy** offers the user the opportunity to quickly and easily display measurements from all connected devices through visualisations. It offers two types of evaluations:

- **Total consumption:** This is all the recorded consumption data that can be independently assigned to concrete end-of-work records (production data). In this type of evaluation, the systems that are not directly related to production are also included.
- **Process consumption:** With this evaluation type, all consumption data in connection with end of work records are output. The data can also be grouped according to the following criteria: Sensor, Order, Article, Personnel

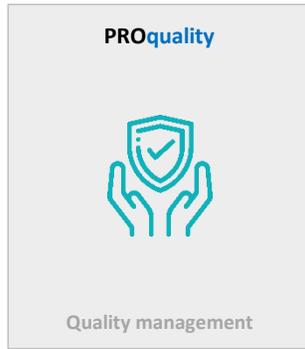


Acquisition of process values depending on downtimes

Measured values - line graph / process consumption



QUALITY MANAGEMENT



QUALITY PLANNING, QUALITY CONTROL AND QUALITY INSPECTION

Quality assurance (QA) is the sum of the activities of quality management, quality planning, quality control and quality inspection.

[Inquire now](#)

QUALITY MANAGEMENT

PROPERTIES

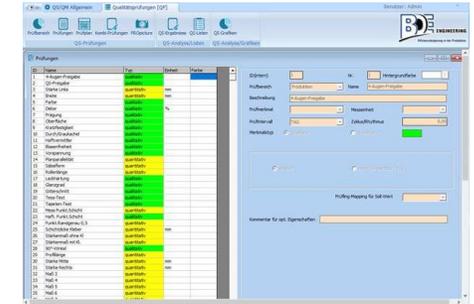
This application is the cornerstone for the introduction to quality management (QM). As a quality assurance module, it generates quality inspections within the production. The management of QM/QA-relevant master data, the provision of verification data for periodic quality audits and the planning of monitoring, testing, analysis and improvement processes are just some of the components.

ADVANTAGES

In our **MES Suite PROefficient**, all machine data is recorded and immediately made available for the respective software component. Fixed periods/intervals of the performance data can be monitored and immediately inform about due inspections. Measurement results can be entered directly at the workplace on the terminal, are automatically stored in the system and can be evaluated. A button on the terminal flashes when quality inspections are due; if they are not carried out, this is logged. All IO/NIO and non-performed tests are displayed in the info area directly on the terminal.

CONFIGURABLE MASTER DATA FOR THE QS MODULE

- Inspection areas
- Test specifications
- Inspection intervals
- Test units
- Test procedures
- Inspection plans etc.



Quality inspections

"A tool for QM work against ISO requirements for measurement and analysis to better organise, plan, observe, analyse and optimize."

Future developments in cooperation with our customers

- IGI/OGI – Goods Receipt/Goods Issue Inspection
- TEM – Test Equipment Management
- CM – Complaints Management
- LTM – Laboratory Test Management
- QMS are process-oriented, therefore it should correspond to the customer processes



YOUR ACHIEVEMENTS

- ✓ Quality inspections within the production
- ✓ Quality audits based on performance-related data
- ✓ Provision of verification data for the periodic quality audit
- ✓ Planning of monitoring, testing, analysis and improvement processes
- ✓ Tabular and graphical evaluation of the QA results



MAINTENANCE AND PREVENTIVE SERVICING

PRomaintenance



Preventive Maintenance
and Management



PREVENTION THROUGH REAL TIME INFORMATION AND MANAGEMENT OF YOUR MAINTENANCE

The application enables preventive maintenance through live visualisation of the defined maintenance intervals.
You have the option of **time-based**, **performance-based** and **condition-based maintenance**,
including task visualisation.

[Inquire now](#)

MAINTENANCE AND PREVENTIVE SERVICING

FUNCTIONS



Visualisation of services, location and status of maintenance objects



Configure / schedule maintenance work



Management of master data



Creation of maintenance plans



Receiving performance-related tool data from the **PROtouch**-Terminal

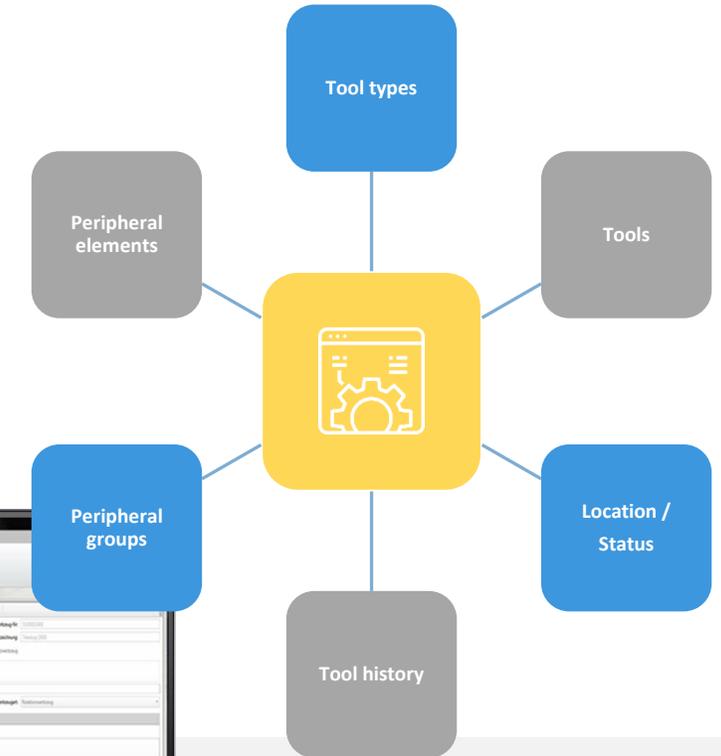


Combining maintenance and repair jobs

Company

MES Suite

Applications



Summary of functions



MAINTENANCE AND PREVENTIVE SERVICING

[Company](#)

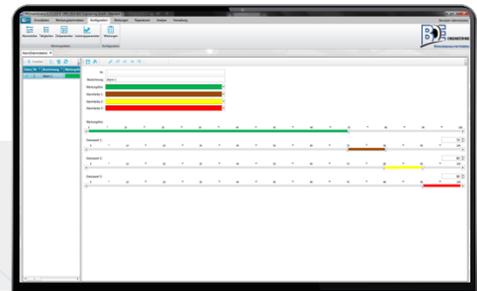
[MES Suite](#)

PREVENTIVE AND LIVE MAINTENANCE AND SERVICING

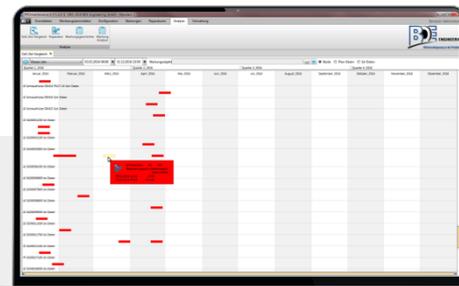
The application obtains the production information live from the MES Suite **PROefficient**. Performance-related maintenance can be carried out, for example, on the basis of produced cycles, produced quantities, the production time or occupancy time of the machine. The visualisation of the maintenance intervals takes place via the online visualisation live in **PROview** or in the ANDON board monitoring **PROvis**. The maintenance tasks can be shown in the **PROplan** graphic planning board.

CREATE CLARITY ABOUT MAINTENANCE TO BE CARRIED OUT

Tools can be monitored and maintained just like machines, plant components or other aggregates. With an overview, **PROMaintenance** provides clarity about maintenance and repairs for defined maintenance objects. For each maintenance, the activities, the alarm levels, the strategy and the maintenance objects are recorded.



Alarm levels are recorded for each maintenance



Analysis

TOOL MANAGEMENT FUNCTIONS

- Barcode or tool number
- Tool designation
- Date of acquisition
- Tool type (property for grouping)
- Location/ Status
- Available as of
- Images
- Is it a model? Yes/No - Property

"Maintenance tasks are synchronised with the live production data at any time."

YOUR ACHIEVEMENTS

- ✓ Preventive maintenance avoids costly downtime on or of production equipment
- ✓ Configure / plan maintenance work
- ✓ Combination of maintenance and repair work in one maintenance order
- ✓ Edit already generated maintenance tasks or create new unplanned maintenance tasks manually
- ✓ Visualise the performance, location and status (availability) of maintenance objects



AUTOM. SENDING OF STATUS MESSAGES

PRONotify



Automatic report dispatch
Automatic status messages



READY TO TAKE ACTION AT ANY TIME - STATUS MESSAGES VIA SMS AND E-MAIL

Have the status messages that are relevant to you forwarded to you via SMS and e-mail and stay up to date wherever you are. Send time-controlled reports or graphics to all responsible employees.

[Inquire now](#)

AUTOM. SENDING OF STATUS MESSAGES

[Company](#)
[MES Suite](#)
[Applications](#)

NOTIFICATION FUNCTION FOR STOPPAGES

The notification system monitors the connected machines. As soon as a machine status changes to a stoppage for which a notification is activated, the application automatically sends a message with a predefined text to the specified email addresses.

REPORT FUNCTION

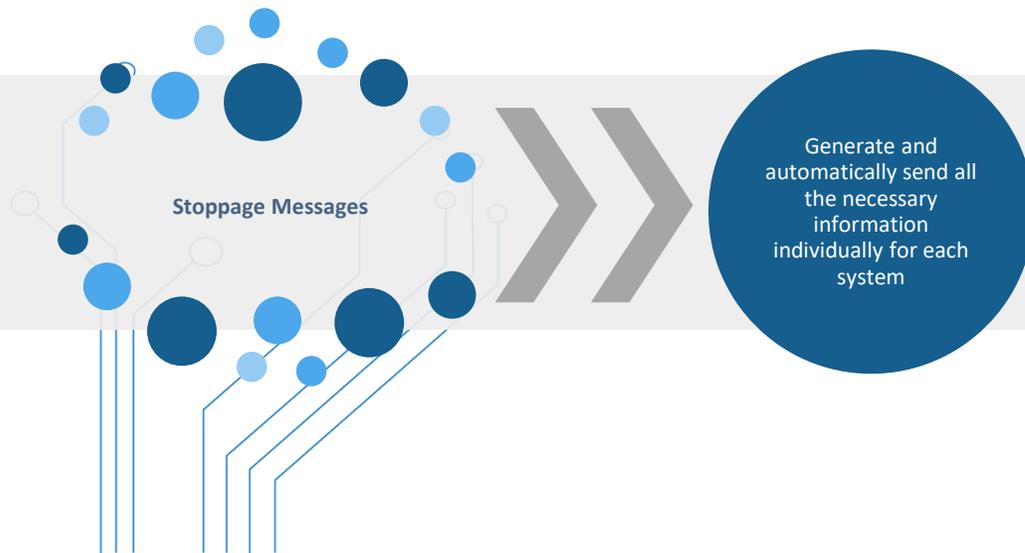
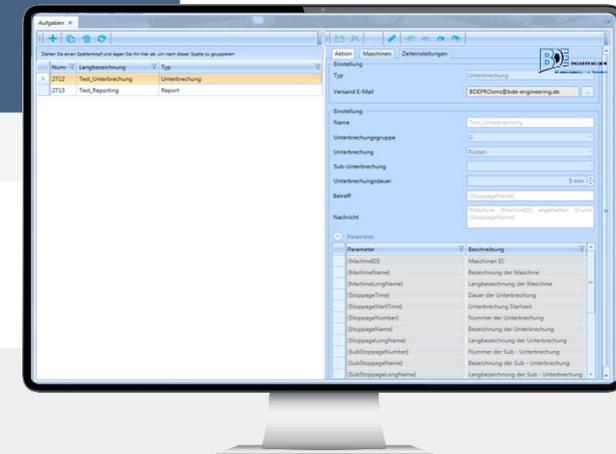
Evaluations such as OEE reports or machine summaries, degrees of utilisation, process analysis, target/actual comparison or Pareto analysis can be called up based on the MES system **PROefficient** at times defined by you and sent by e-mail or SMS to important decision-makers. The manual compilation of daily reports is replaced by automated processes.

PROTOCOL FUNCTION

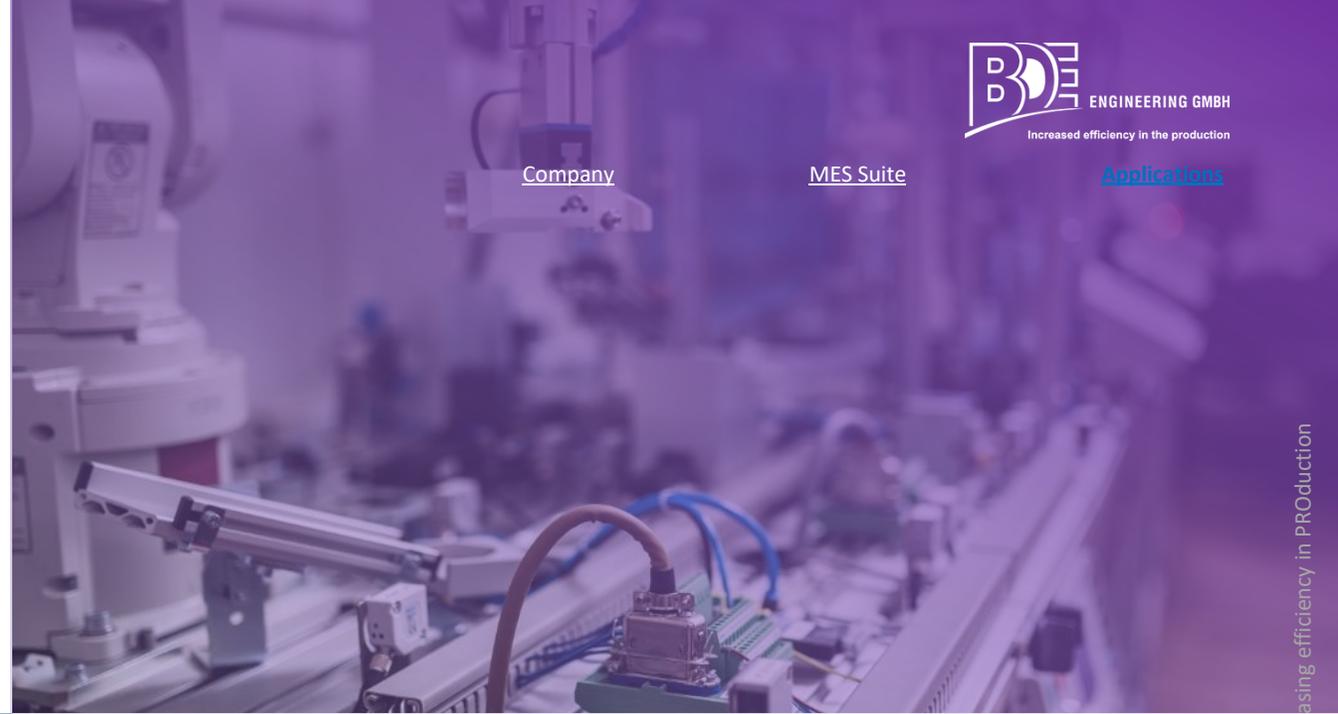
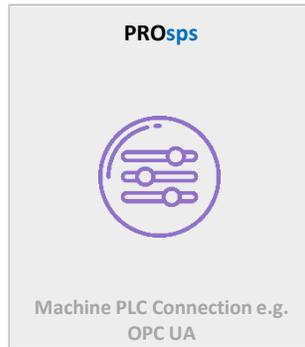
Each communication step is logged and mapped in a sustainable way. The following information can be displayed: When was a notification sent, to whom was a notification sent, what was sent, status of notification.

Individual settings for each machine and each stoppage

Grace periods for sending e-mails per stoppage



CONNECTING MACHINE PLCs



READING PROCESS DATA FROM THE MACHINE PLC

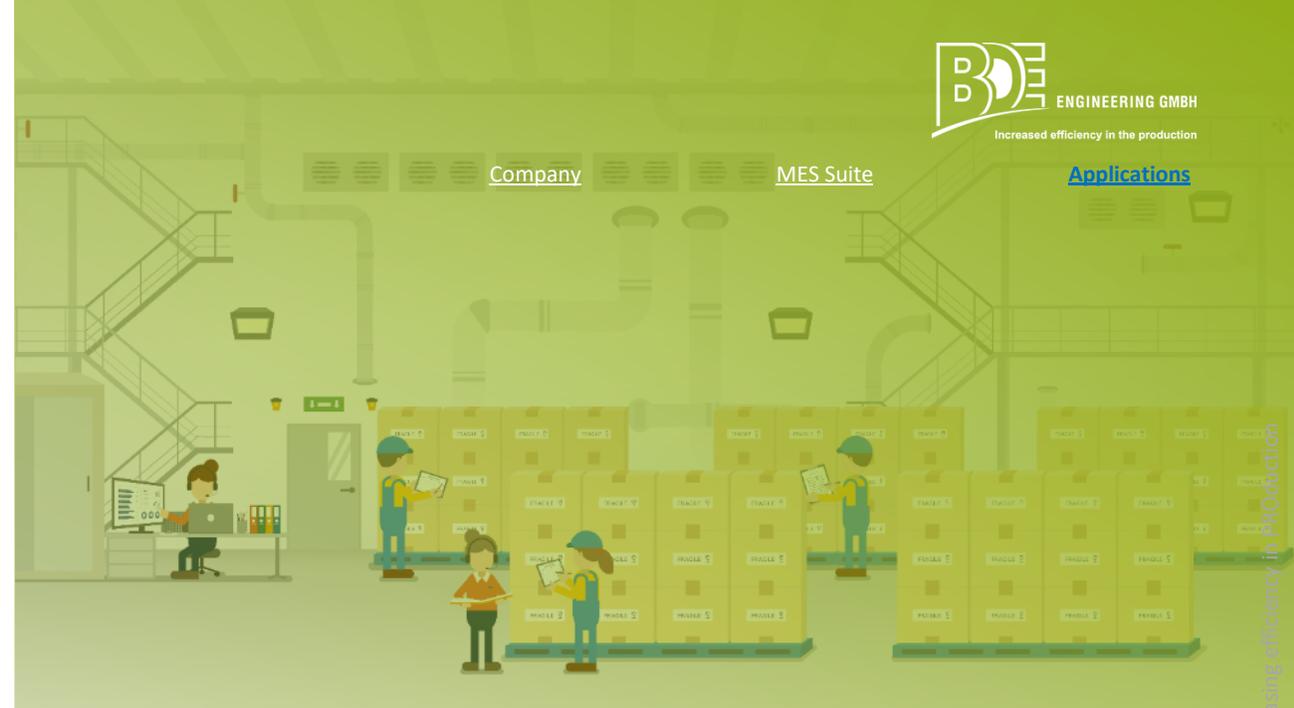
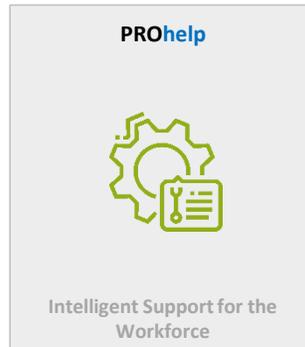
PROsps: for e.g. via data block DB 556 with RFC 1006 (S7 control)

This module includes the basic communication of the machine PLC with the communications solution of BDE Engineering via the **PROtouch**-Software, the management and processing of the machine states in **PROview** and **PROwork**.

As an extension to the DB 556 RFC1006 communication, we can offer you OPC-UA communication.

[Inquire now](#)

INTELLIGENT SUPPORT FOR THE WORKFORCE



DIGITAL INFORMATION MANAGEMENT IMMEDIATELY AVAILABLE ON THE PLANT FLOOR

Digital provision of information is up to date and seamless. Make important information or requests available at the appropriate place at an early stage.

[Inquire now](#)

INTELLIGENT SUPPORT FOR THE WORKFORCE

Company

MES Suite

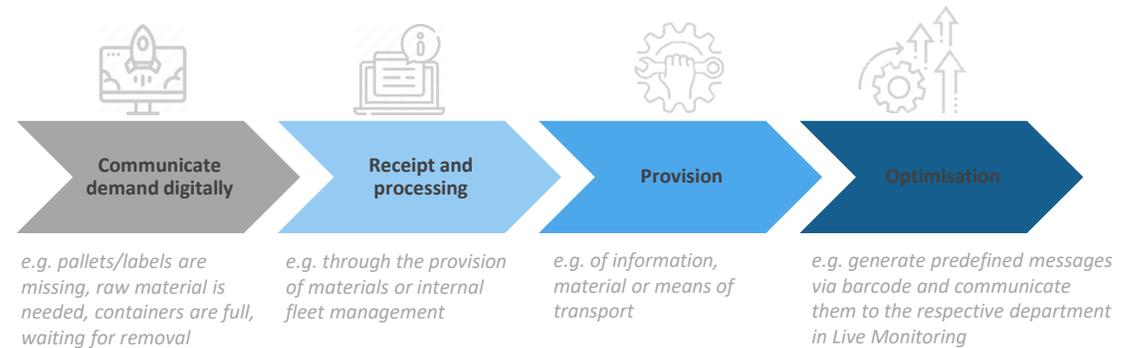
Applications

DIGITAL INFORMATION MANAGEMENT

The application enables seamless communication between the workforce itself and, for example, the material supply. Information transfer is the focus of the application. Important requirements and necessary production resources can be made available at the appropriate point at an early stage.

COMMUNICATE INFORMATION VIA LIVE MONITORING TO THE PERSON(S) RESPONSIBLE

In order to provide the respective department with information even faster, messages can be communicated even more easily via barcodes in Live Monitoring - without any interruptions at the machines. A colour-flashing display on the respective machine promptly visualises, for example, material requirements or provides information on removal. Messages are active until they are implemented.



"Digital information management creates transparent communication and thus sustainable and useful added value for flowing processes."



YOUR ACHIEVEMENTS

- ✓ Pass on important information in a timely manner and ensure an intact workflow
- ✓ Ensure fluent processes by avoiding errors, inconsistencies and loss of time through optimised information management

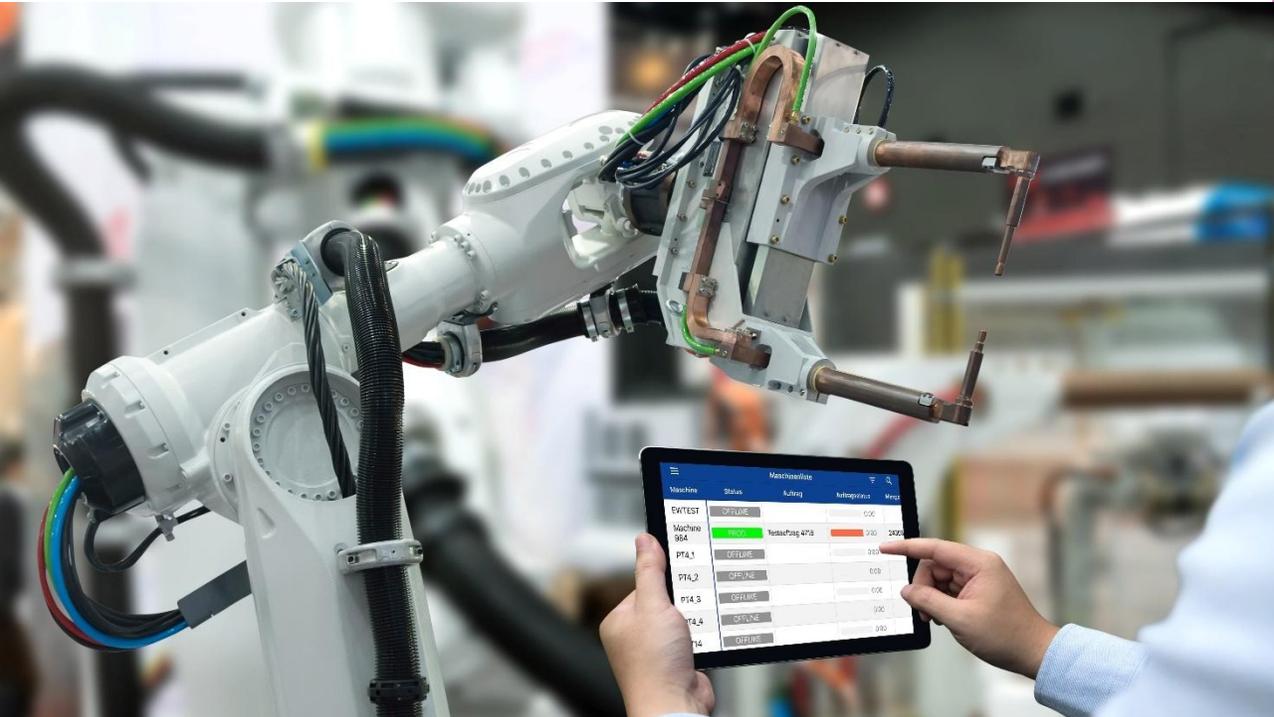


WORKING ON THE MOVE WITH MOBILE DEVICES

PROmobile



Live Data and Evaluations on Mobile Devices



ANYTIME, ANYWHERE PRODUCTION DATA IN REAL TIME

Via mobile devices such as tablets or smartphones, you can gain insight into the production process at any time and act promptly thanks to real-time data.

[Inquire now](#)

WORKING ON THE MOVE WITH MOBILE DEVICES

[Company](#)

[MES Suite](#)

[Applications](#)

PROPERTIES

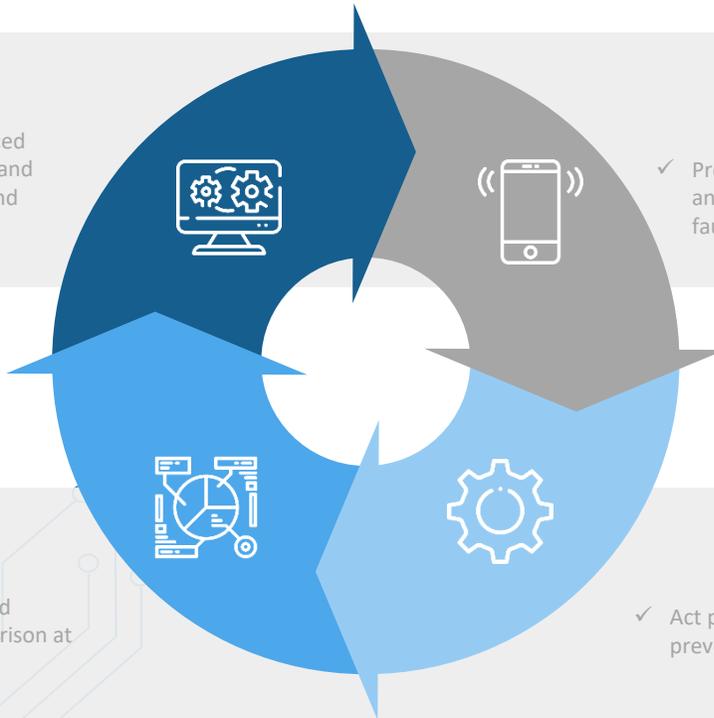
Increase the performance of your processes and production staff in a targeted manner. **PROMobile** enables versatile insights.

✓ Keep track of produced quantity, stoppages and rejects at all times and everywhere

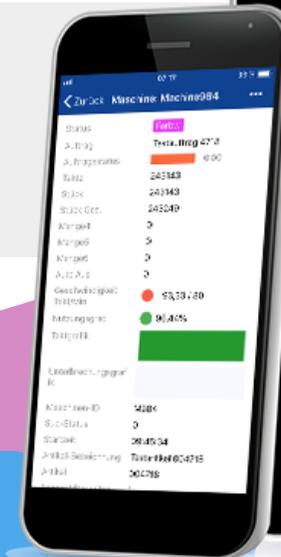
✓ Promptly recognise and communicate faults

✓ Reports, graphics and target/actual comparison at the push of a button

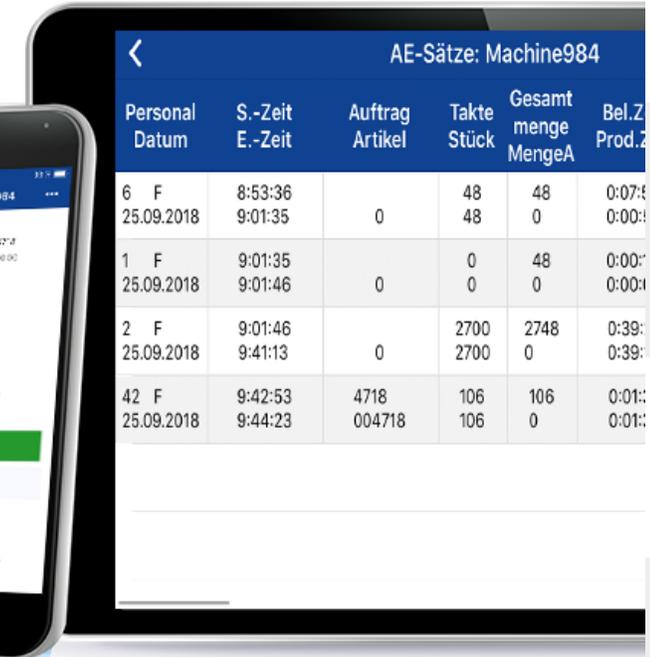
✓ Act promptly and prevent problems



Detailed information of a machine



End of work record

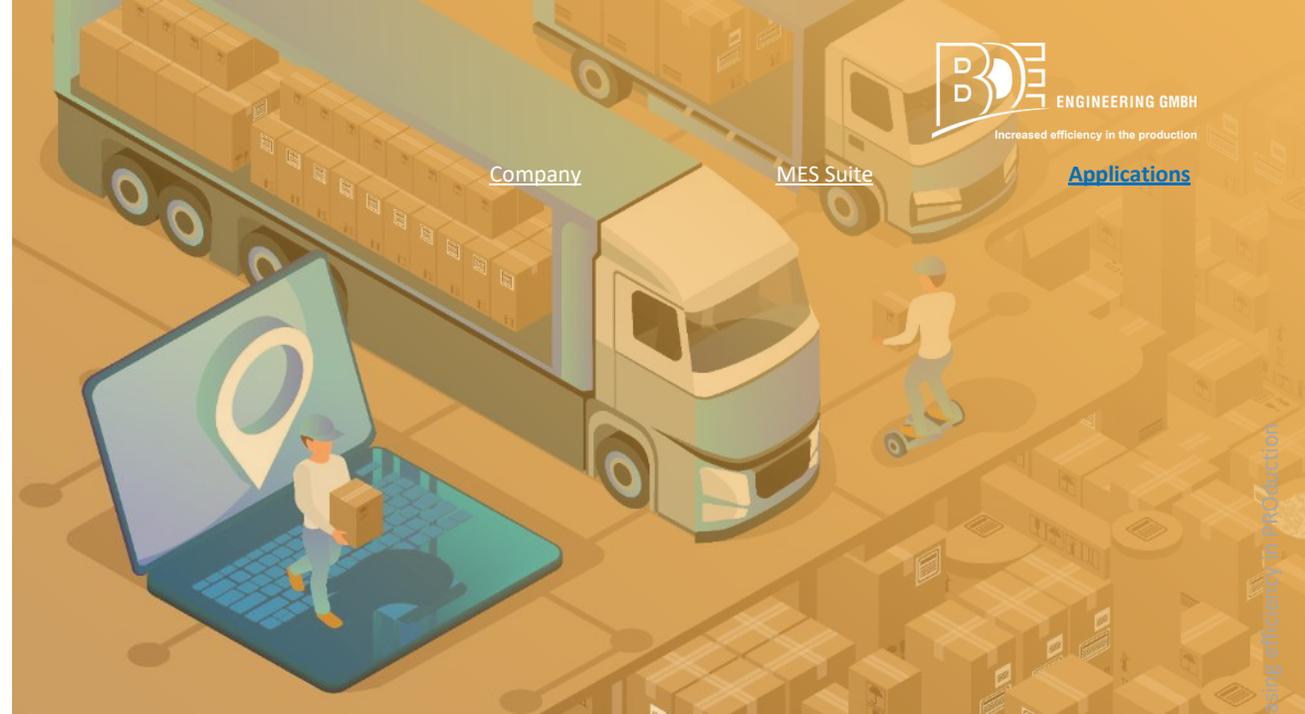


PALLET ID AND LOADING RAMP CONTROL

PROident



Control of packing lines
Autom. pallet labelling and
loading ramp control



DIGITISE WITH SMART LOGISTICS SOLUTIONS

Control of lines or packing lines and communication with each other.
Planning and configuration of automated pallet labelling and loading ramp control.

[Inquire now](#)

PALLET ID AND LOADING RAMP CONTROL

Company

MES Suite

Applications

LABELLING AS AN IMPORTANT PART OF THE DIGITALISATION OF PRODUCTION

For intralogistics, pallets must be clearly marked to guarantee efficient downstream processes. **PROident** is used to control and communicate with lines or packing lines. You import your PID data (pallet identification with order, the batch and the items produced) through interfaces to corresponding systems and generate an SSCC with the supplied data as its basis. A dashboard allows you to track the status of all products at any time.

DIGITALISATION FOR TRANSPARENT PROCESS CONTROL

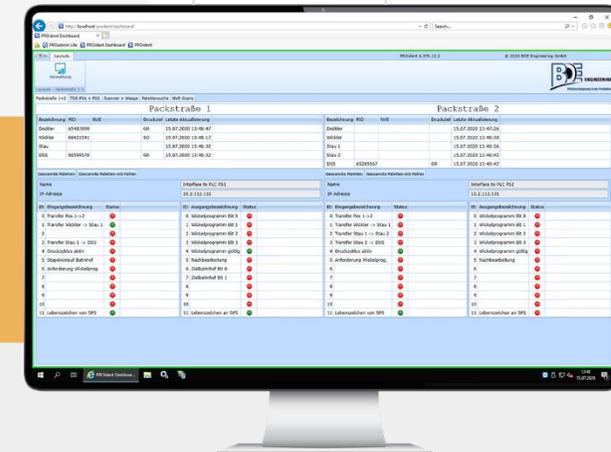
At the loading ramp, the labels are scanned using barcode technology and then printed on shipping documents that contain an SSCC, an order, material, batch and quantity. The consignment lists with the scanned pallets are then carried in the truck. Pallets can thus be dispatched to a wide variety of locations and guarantee transparent and proactive process control.

YOUR ACHIEVEMENTS

- ✓ Optimisation of your logistics processes through an interactive status tracking of all products in an individual dashboard
- ✓ Control of lines or packing lines and the communication between each other
- ✓ Transparent and proactive process management
- ✓ Through evaluations in the dashboard, you can see at any time where the pallets are, when they were last touched or to which place they were transferred

e.g. of information, material or means of transport

e.g. generate predefined messages via barcode and communicate them to the respective department in Live Monitoring



PALLET ID AND LOADING RAMP CONTROL

[Company](#)

[MES Suite](#)

[Applications](#)

ADAPTATION TO EXISTING SYSTEMS

Get customised IT solutions for your individual circumstances and requirements. Together with you, we create a standard to control your printers and communicate with an MES system, independent solutions or SAP, for example, as needed.

"See where your pallets or products are at any time and when they were last touched or transferred to another location."



PROidentProfessional

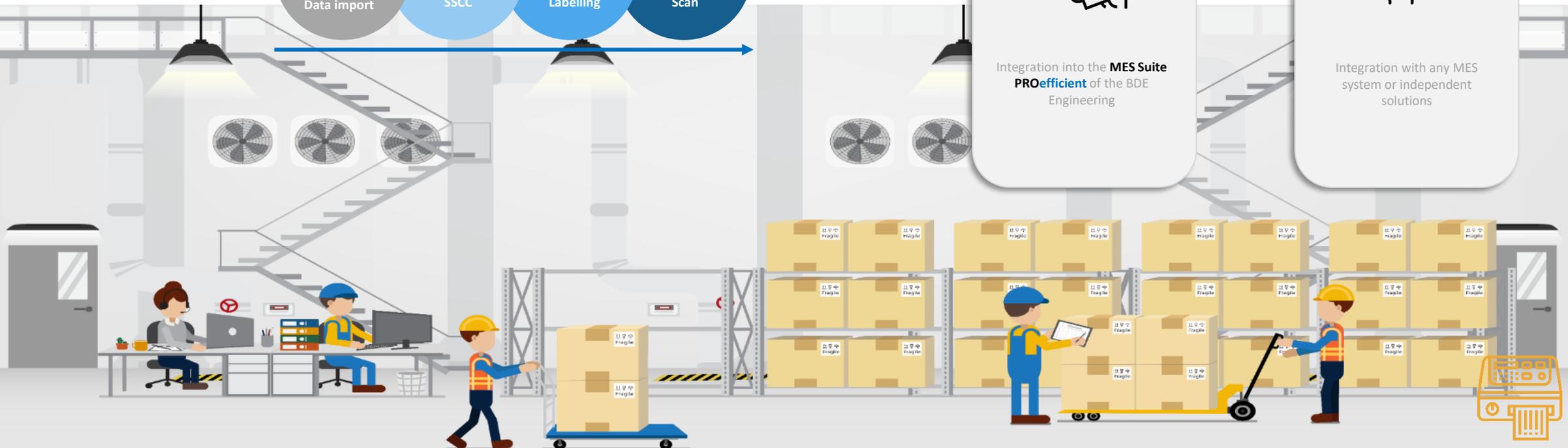


Integration into the **MES Suite**
PROefficient of the BDE
Engineering

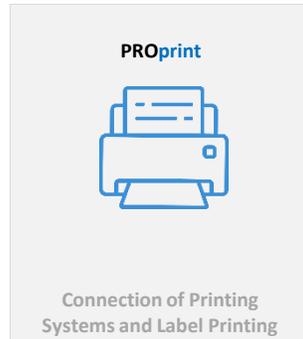
PROidentBusiness



Integration with any MES
system or independent
solutions



CONNECTION OF PRINTING SYSTEMS AND LABEL PRINTING



LABEL PRINTING DIRECTLY AT THE PRODUCTION LINES

Labels can be printed directly on the machine during production via the **PROtouch** terminals or a direct Ethernet / W-LAN connection. It is also possible to control label printing systems.

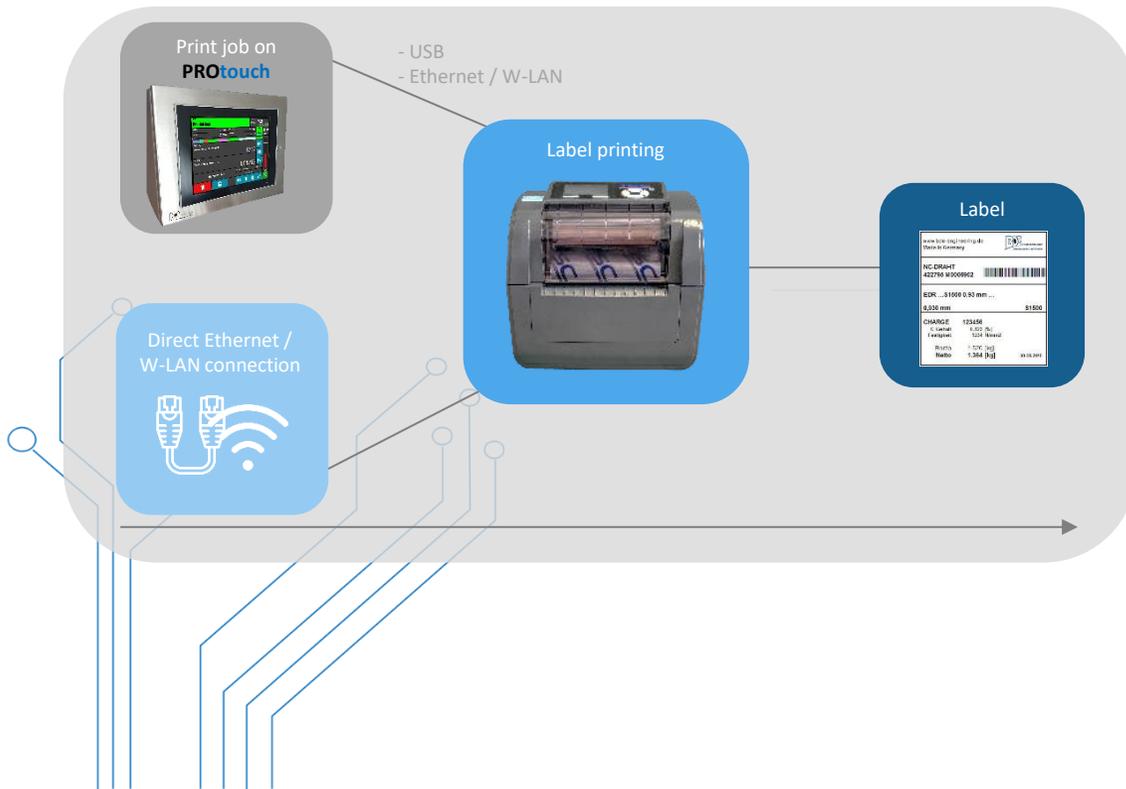
[Inquire now](#)

CONNECTION OF PRINTING SYSTEMS AND LABEL PRINTING

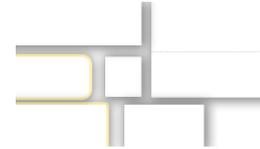
GENERATE INDIVIDUAL LABELS AND PRINT THEM DIRECTLY ON THE MACHINES

Labels are to be printed directly in the production process, e.g. at the machine, via the **PROtouch** terminals or a direct Ethernet connection. Professional layout tool included.

We create a professional basic layout with you via List & Label. You can make individual changes yourself.



EVERYTHING FROM ONE SOURCE - PURCHASE LABELS ACCORDING TO YOUR NEEDS



Type/Shape

Determine shape, size and type, e.g. roll, folded, perforated or as sheet.



Adhesion / Colour

Detachability from the surface. Coloured labels serve the identification.



Materials

For the most diverse surfaces or environmental conditions.

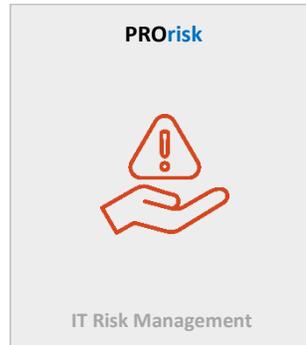
"Employees can print the labels they need themselves and reprint illegible labels at any time."

YOUR ACHIEVEMENTS

- ✓ Design label layout individually in the professional layout tool List & Label
- ✓ Reduce machine downtimes due to lack of labels
- ✓ No costly reprinting in case of faulty labels
- ✓ Countering a lack of printing capacity in central locations
- ✓ Immediate integration of 2D or QR codes and many other codes possible



MODERN IT RISK MANAGEMENT



LONG TERM PREVENTION OF PRODUCTION IT FAILURES

Identify critical conditions in time to prevent them from occurring in the first place by sending timely notifications and fixing problems.

[Inquire now](#)

MODERN IT RISK MANAGEMENT

[Company](#)

[MES Suite](#)

[Applications](#)

PREVENT SYSTEM FAILURES

For most companies, an information technology (IT) failure is synonymous with a complete standstill of production and processes. The increasing importance of IT has led to a dependency on its permanent availability that directly affects almost all production companies.

IDENTIFY IN TIME AND INTERVENE PROMPTLY

The control of manufacturing processes is mostly computerised. A failure or malfunction of the IT leads to production coming to a standstill. Downstream production stages can no longer be served promptly. Avoid bottlenecks in delivery capability with **PROrisk**.

AUTOMATED NOTIFICATIONS

The **PROnotify** application sends automated notifications about services, databases, hard disk space utilisation, log files that are too large, version information and hardware messages. Possible errors are thus detected and corrected before the customer himself notices problems and failures.



"Through modern IT risk management, a company is able to maintain and increase its value in the long term."

YOUR ACHIEVEMENTS

- ✓ Identify and resolve system and IT failures before they occur
- ✓ Prevent stress situations

