

# Cloud-based MES for the plastics industry







Low-initial investment



Single operational workflow



Continuous upgrades



Paperless

#### **FEATURES**

- Subscription based model.
- Fast and easy scalability to meet the needs of any-sized operation.
- Reliable and secure cloud platform.

- Always up-to-date software.
- Accessible through the browser of any internet connected device.
- Connection of all brands and generations of plastic machines.

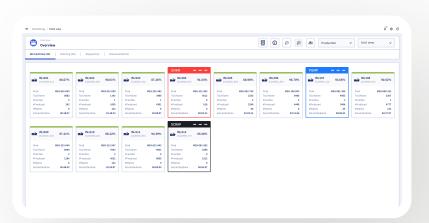
## **Connect features**

## **Real-time overview**

The Plant view module provides real-time monitoring of the machine status and the most important KPI's such as efficiencies, machine speed, stop rates, production and order status. Thanks to the 24/7 visibility into machine operations, you can track performance metrics and be informed of any issues as they occur.

#### **Benefits of Plant view:**

- React immediately to changes.
- Improve operational efficiency and reduce downtime.
- Make informed decisions to quickly optimize productivity.



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### **Event board**

The machine event board provides you with a real-time visibility into the start and stop times of each machine in the production line. This allows you to identify downtime and how machines are utilized.

#### Benefits of tracking start and stop times:

- Better utilization of machines leads to cost savings.
- By reducing machine downtime, the overall productivity increases.
- The data provides actionable insights for continuous improvements.

### **Business Intelligence**

The Trends & reports module is an interactive tool that allows you to analyze your production and quality data over extended periods of time. Gain quick and transparent insights into all Key Performance Indicators (KPIs) for any selected timeframe, making it easier to track performance trends and identify areas for improvement.

#### Benefits Trends & reports:

- Make data-driven decisions.
- Enhance product quality.
- Boost overall efficiency

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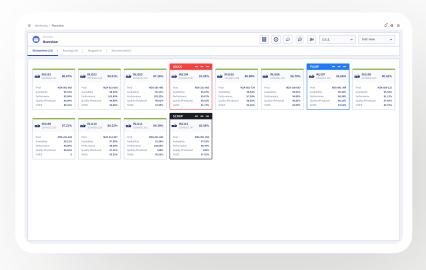
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# Uncover hidden production losses with OEE

Overall Equipment Effectiveness (OEE) is a powerful tool which provides a comprehensive and actionable measure of your equipments performance by combining the metrics Availability, Performance, and Quality into a single easy-to-understand score. OEE helps you pinpoint exactly where inefficiencies and losses are happening, enabling you to optimize processes, reduce downtime, and boost productivity.



#### Impact of scrap on OEE

Reducing scrap is essential for optimizing OEE as it primarily affects the Quality metric. By identifying specifying the scrap reasons in Connect and analyzing the scrap data, you'll be able to take preventive measures, optimize the machine settings and achieve better operational performance.

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#### Benefits of reducing scrap:

- Lower material costs and waste management expenses.
- Improved productivity thanks to a higher yield of good parts.
- Enhanced sustainability by minimizing resources and waste.

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## **Production order planning**

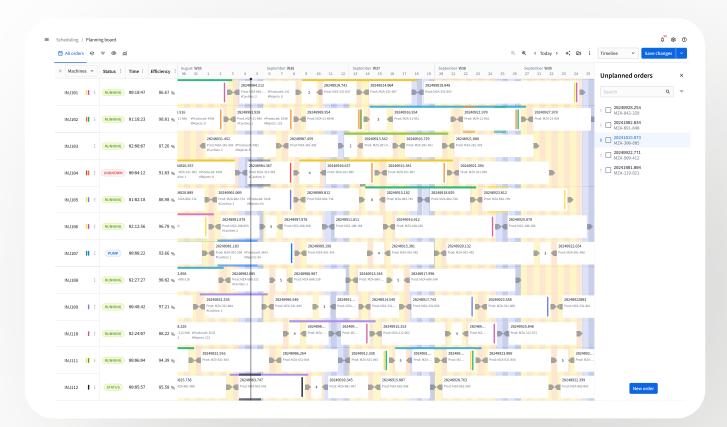
Connect's user-friendly interface allows you to easily input scheduling requirements, preferences, and constraints

A standout feature of the plan board is that it shows continuous, **real-time** information on machine statuses. This real-time visibility enhances transparency and control over the manufacturing process.

The intuitive "drag & drop" functionality enables planners to effortlessly select orders from the list and assign them to machines, change order priority or reschedule them on other machines.

#### Benefits of using the plan board tool:

- Simplify production scheduling.
- Improve response times.
- Adapt quickly to changes in the manufacturing process.



## **AI-based APS scheduling assistant**

Leveraging Artificial Intelligence (AI) in planning enables manufacturers to make data-driven decisions, enhance operational efficiency, and respond more effectively to dynamic market conditions.

Making use of advanced algorithms, Connect swiftly processes this information and delivers schedules that strike the delicate balance between efficiency, resource utilization and user-defined priorities.

#### Benefits of an AI-based scheduling assistant:

- Enhanced visibility across the supply-chain.
- Real-time insights.
- Rush orders do not impact your operation efficiency.



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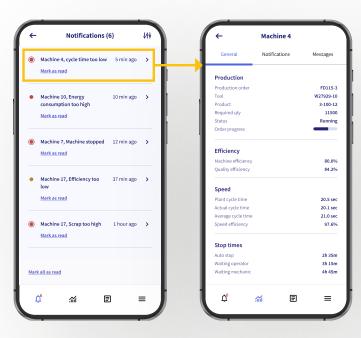
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## **Receive push notifications**

The alarm handling software within Connect continuously monitors your own selected MES and energy parameters. When an alarm condition is detected, the software triggers immediate actions, such as sending an email or message to a smartphone or activating a signal on the machine's lamp tree. Each alarm also appears in the Connect Notification Center.

#### Benefits of personalized push notifications:

- Stay informed in real-time about critical issues.
- Respond quickly to potential problems.
- Minimize downtime, ensure smoother operations and improved productivity and sustainability.





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### **ERP** integration

Connect applications are easily integrated with your ERPsystem to ensure a consistent and real-time data exchange.

#### Benefits of ERP integration with Connect:

- Reduce manual data entry errors.
- Make better decisions and achieve enhanced operational efficiency.
- Increase overall productivity by aligning manufacturing operations with business goals.



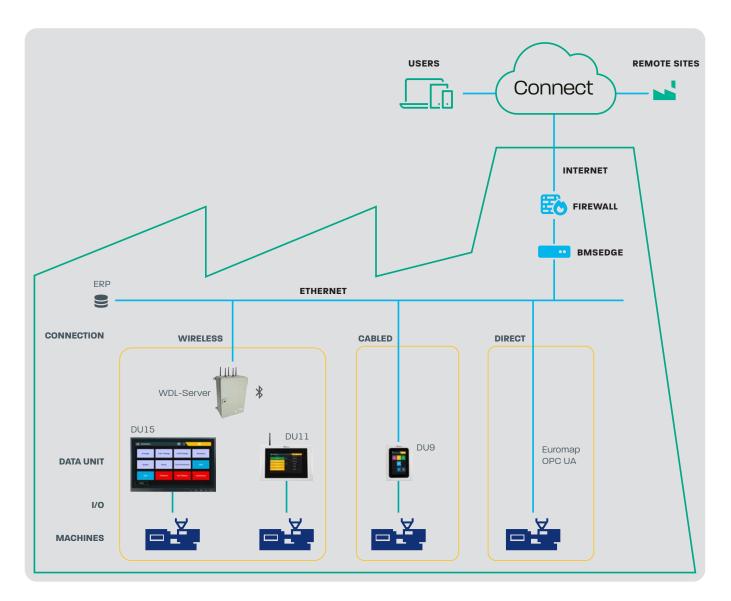
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## Concept

Connect for plastics supports both cabled and wireless to connect the machines. Machines are equipped with one of BMSvision's Data Units or linked directly to the BMSedge through their Ethernet interface.



## Why should you Connect?

- There is no need for complex installations or significant IT resources, making it easier to deploy and start using the software quickly.
- With a minimal upfront cost you have access to a powerful system.
- Align the investment with your operational expenditure (OPEX) model.
- Proven ROI < 1.5 year.



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## **Produce energy efficiently**

With the help of the energy module you can correlate your production data with your energy data.

### Features

### Configuration

- Configure the structure of your plant and attach the installed measurement device.
- Connect energy meters regardless of the brand or type.
- Check in real-time the status of the connected metering devices
- Seamless data integration with other interfaces or devices such as ERP, MES and IoT servers.

## **Peak shaving**

 Peak shaving helps prevent penalties that some energy providers impose for exceeding specific power thresholds during designated time periods.

#### **Knowledge base**

 We simplify energy management for you and focus on improvement actions. This results in quick wins and correct EnPI's leading to a faster increase in energy efficiency.

### Benefits of monitoring your energy data

- Gain real-time visibility and control over energy usage across the plant.
- Optimize energy consumption, reduce costs and increase process efficiency.
- Enhance sustainability by understanding and optimizing energy flows and production dynamics.

# **Reporting**Detailed trend analysis for every machine or consumer.

- Visualize energy flows with Sankey diagram.
- Correlate energy data with the production data with EnPI's.

## Security & GDPR

BMSvision applies the highest standards of Cybersecurity Infrastructure and Development policies, in line with the manufacturing industry standards IEC 62443 and ISO27000, to provide state-of-the-art secure solutions to its customers, partners and employees. Furthermore, BMSvision applies the Cybersecurity framework OWASP SAMM (Software Assurance Maturity Model), which covers the NIST SSDF (Secure Software Development Framework). We guarantee that your personal and valuable business data in the cloud is protected by the highest safety and security techniques and processes.

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## Why **BMSvision**

- MES experts since 1975.
- + 2000 installations worldwide.
- Innovation is part of our DNA.

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## Interested to know more?

Check out our website www.bmsvision.com Or contact our experts via sales@bmsvision.com



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