PSIpenta MES
Smart and agile production control
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Customer and market demands are changing faster and faster, leading to an increased need for optimization. The result is that manufacturing companies have to adapt value-added chains and the associated processes in an ever shorter time frame. At the same time, consistently high-quality production has to be ensured around the clock and costs have to be kept in check. The new PSIpenta MES is the solution to this.

Seamless processes tailored to your needs no longer require laborious programming. With PSIpenta MES, you can simply model and modify your processes yourself and control the process logic comprehensively and efficiently. Benefit from improved transparency and increased responsiveness in a stable and reliable system.

PSIpenta MES stands for transparent processes that are not only well documented and comprehensible, but also executed exactly as you want them as an integral part of the solution. PSIpenta MES serves as the foundation for agile working and a new form of cooperation between Production and IT.

Achieve the smart factory of the future with integrated solutions from PSI.
Three tried and tested application examples

1. Process improvement – CIP made easy

A real-life example: during a CIP meeting, it is decided to record the length of time that the materials are laying in front of the workplace in order to then optimize it. The IT systems used then have to be adapted accordingly. With PSIpenta MES, the modification can be quickly modeled, tested and ready to implement. The modification is also directly visible in the Worker Cockpit, the assistance system for your production employees.

Figure: The process modeled in BPMN 2.0 is expanded to include the arrival time of the materials in front of the workplace.

2. Quality improvement through worker assistance

Avoid errors and keep training periods to a minimum. PSIpenta MES provides its employees with multiple assistance functions in the form of the Worker Cockpit at all production workstations – even on the move!

Figure: The Worker Cockpit supports production employees in the workflow and includes diagrams and process-dependent procedures.

3. Faster responses thanks to the proactive factory monitor

Error prevention rather than rectification: the factory monitor for your production not only visualizes statuses, but also proactively issues rule-based alerts before faults occur. This means you have an overview of your production at all times and are informed of any anomalies in good time. Your maintenance service can then respond faster to the individual fault.

Figure: Maximum transparency in production – the factory monitor helps to detect errors early.
Our processes modeled in BPMN 2.0 are executed directly, which significantly shortens development cycles.

Advantages of an integrated workflow engine: processes modeled in BPMN 2.0 are executed directly, which significantly shortens development cycles.

Your benefits at a glance

- Shorter response times thanks to easily adaptable processes
- Increased process stability thanks to worker assistance
- Reliable, standardized communication with hardware/third-party systems
- Cost reduction as a result of optimized planning and control
- Increased throughput thanks to integrated material flow control
- Reduction of downtime and stocks
Under the brand name PSIpenta, **PSI Automotive & Industry GmbH** offers solutions for the comprehensive optimization of value-adding processes at production and detailed planning level for the automotive and vehicle construction, machine and plant engineering as well as supply industries.

These solutions draw on over 30 years of experience. They are aimed not only at traditional small and medium-sized businesses, but also at companies seeking to integrate a system for more efficient production and/or maintenance processes into an existing IT landscape.

The solution portfolio, consisting of ERP, MES, WMS and SCADA components, is made up of new and completely modernized products on the basis of the Java-based PSI framework. In addition to the traditional production control, holistic optimization methods are offered, such as short-term and medium-term sequencing. PSI has already been offering reliable automated solutions with AI support for industrial use for several years now. Workflows are used to control processes across all applications. This means that the processes can be adapted to new requirements extremely fast and without the need for programming.

The solutions offered by PSI Automotive & Industry are now used by more than 30,000 users in over 500 industrial companies – many of them global market leaders in their industry. PSI carries out research into future implementation strategies together with partners from science and industry. PSI Software AG employs over 1600 people and generates annual sales in excess of EUR 175 million.