

aXproduction

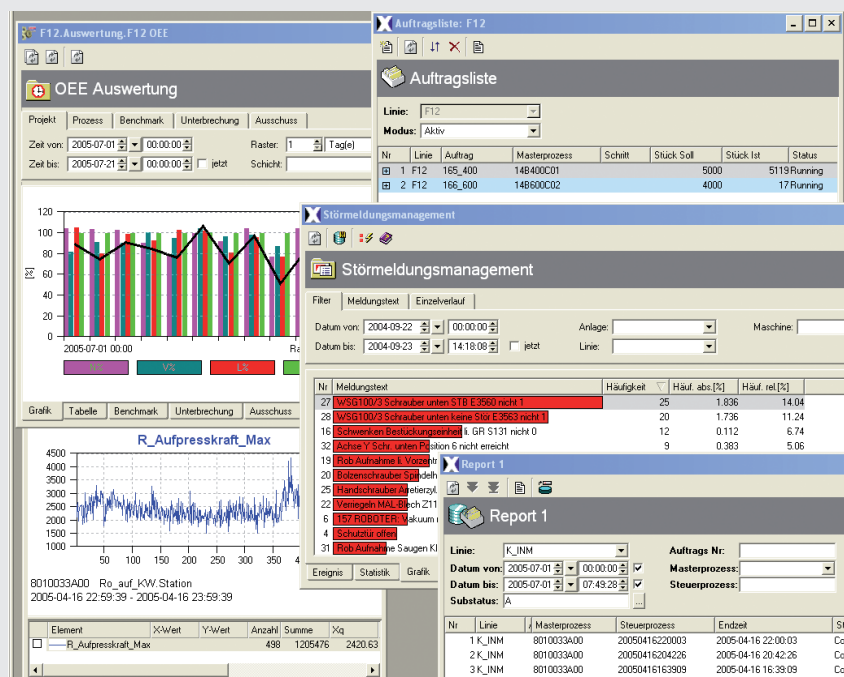
aXproduction is a scalable manufacturing execution system (MES) based on the ANSI/ISA S95 standard and on the automationX® technology for

- ▶ visualization
- ▶ supervising
- ▶ control
- ▶ tracking

of production lines and single production machines.

The equipments are represented as technology objects which are linked through several interfaces to the process periphery. This initializes a transparent production system with an online data collection, visualization and reporting of quality, job and performance data.

Due to the open architecture the aXproduction system can be modified and increased by the customer. This includes the step-by-step integration of new machines and lines. aXproduction links the ERP system or the individual customer data base with the production machines and lines.



All required steps of a production sequence are defined in the process modeling. The parameter settings and quality setpoints are included for machines as well as for manual operations. The quality data and consumed charges are stored in a data base. This is the base for the data tracking and for statistical evaluations.

In addition to the production control with all quality and status information aXproduction also supports a breakdown management system and evaluation functions for performance and efficiency. The OEE and VDI 3423 reports are the background for the continuous improvement process (CIP) to increase the management ratios.

FEATURES aXproduction

Process Visualization	Production summary Operator guidance Online status Access from office stations
Process Control	Sequence control Integrated PLC Direct link with process periphery or to other SCADA systems Profibus TCP/IP OPC ODBC C++ API PHP
Process Planning	Link to ERP system Detailed planning and scheduling Online status Gantt diagram
Process Modeling	Definition of sequences Parameter Setpoints Tolerance
Process Tracking	Quality data Charge information Sequences Filter functions Statistics Graphics
Resource Management	Inventory Material and personal demand
Break-down Management	Statistics of failure and interrupts Pareto graphics Journal Work instructions
Technical Availability (VDI 3423)	Classification of events Technical availability of machines and production lines
Efficiency Evaluation (OEE)	Efficiency and productivity Benchmark Reject validation Statistics