Plant Historian MDE

Machine data acquisition system

Central acquisition, monitoring and control of machinery data

Plant Historian MDE is a centralized system for recording, monitoring and evaluation of machine data. Plant Historian MDE is designed to record present and relevant machine data information transparent and thus to ensure effective monitoring and evaluation of machines and processes

Plant Historian MDE allows a systematically analyze and improvement of manufacturing processes. There´s room for improvement and continuous optimized processes based on the recorded data. The simple and visual demonstration of captured data as well as the intuitional appliance of the system ensures the transparence at the production plant as well while the continuous improvement process (CIP).

Plant Historian MDE provides relevant information in kind of machinery data for production plant, e.g.:

- ► Process data
    - ► Energy consumption
- ► Production parameters
    - ► Production volume, machinery status, number of good parts, etc.
- ► Economically relevant data
    - ► Current transaction, at work operating order, etc.
    - ► OEE's, KPI's

Functions:

- ► Acquisition of technical operating data
    - ► Process data
    - ► Production parameters
- ► Chronicle of economically relevant operating data
    - ► Current transaction, at work operating order, etc.
- ► Transparent monitoring and analysis of machinery
    - ► Status overview of every machinery
    - ► Detailed view of individual machinery
    - ► Analysis of labor overclocking
    - ► Immediate alarm about disturbance per SMS, E-Mail, Phone or central alarm list
    - ► Automated reports or event-related disturbance-reports
- ► Easy controlling with indicators which are close to production
    - ► Control about machine running time, - deadlock, -efficiency
    - ► Control about efficiency of machinery and processes
    - ► Easy handling, real indicators
- ► Monitoring of (ERP-) workflow
- ► Comprehensive regulation from plants machinery
- ► Feedback of data to a higher planning system
- ► Export- and import of standardized data for third systems as well as Ad-hoc-reporting
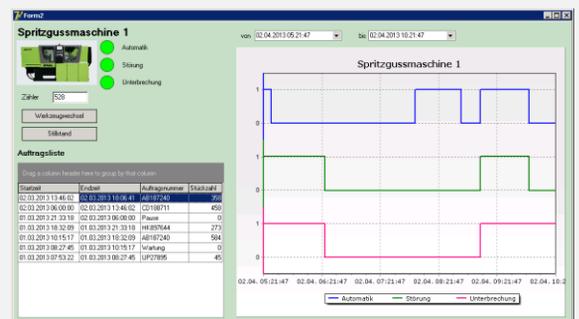
PCS-independent - scalable - intuitive

Plant Historian MDE

Machinery data acquisition system

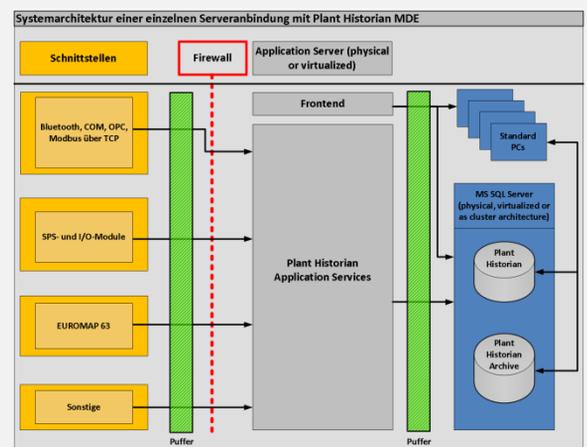Central acquisition, monitoring and control of machinery data

Benefits:

- ▶ Consistently chronicle
    - ▶ High availability of the capital equipment
    - ▶ Long-term documentary of machinery data
    - ▶ Long-term backtracking of process data
    - ▶ Allocation of data of the continuous improvement process (CIP)
- ▶ Permanently monitoring of machinery
    - ▶ Transparent presentation from the status of machinery
    - ▶ Announcement of machinery disturbance
    - ▶ Immediate cognition of meanderings
- ▶ Simple evaluation and analysis of manufacturing processes
    - ▶ Evaluation of machinery deadlock
    - ▶ Optimization of machinery runtime
    - ▶ Increase of machinery efficiency
    - ▶ Assurance of input yield
    - ▶ Assistance of pre-, concomitant- and past calculation
- ▶ Integrative solution: integration of existing planning systems

Machinery data gets **captured** consistently and **observed** with **Plant Historian MDE**. **Plant Historian MDE** allows the systematical and continuous **improvement** of manufacturing processes.

Technologies:

- ▶ Junction via standardized cut surfaces
    - ▶ Bluetooth, COM, OPC, Modbus via TCP
    - ▶ SPS- and I/O-Module
    - ▶ EUROMAP 63
- ▶ Central SQL-database and central application server
- ▶ High availability because of puffer structures and redundancies
- ▶ No client-installation necessary
- ▶ Multilingual

Systemarchitektur einer einzelnen Serveranbindung mit Plant Historian MDE

| Schnittstellen | Firewall | Application Server (physical or virtualized) |

Bluetooth, COM, OPC, Modbus über TCP

SPS- und I/O-Module

EUROMAP 63

Sonstige

Frontend

Plant Historian Application Services

Standard PCs

MS SQL Server (physical, virtualized or as cluster architecture)

Plant Historian

Plant Historian Archive

Puffer

Puffer

PCS-independent - scalable - intuitive