

Computer controlled automation

Software development

Your application for transparency throughout the entire production process

AutaLIS

- Head station
- Line control
- Recipe administration
- Electronic-Key-System (EKS)
- Logistics management
 - ERP Connection

AutaDES Connect

 Connection to quality and operational data collection, sensors, PLC, HMI, measuring systems, etc



AutaDES Server

- Management of data
- Validation of data
- Standardization of data
- Input of structured data into the AutaDES database



AutaDES Webservice

• REST API web interface for third-party solutions



AutaDES Client AutaDES Web-Client

- Intelligent data processing
- · Process optimization
- Statistics, analyzes
- Visualization of knowledge

Components

1

Data connectivity

Collection of relevant data by sensors, machines and systems

Data managem<u>ent</u>

Provision of information and transparency due to collected data

3

Intelligent data processing

Analyzed, contextualized, joint knowledge to support digital operators 4

Process optimization

Forecasting / Independent of profiling based on predictive coordinate pattern recognition as with predictive maintenance Index Index

6

Intelligent manufacturing

Independent
system
coordination /
autonomous
system
decisions

1: Data connectivity

- Establishment of communication links
- Collection and transmission of data by PLC, HMI, screwing systems, joining systems, camera systems and sensors (can be supplemented as required)
- High-frequency data collection for database
 - » Data synchronization of customer data with AUTARK data
 - » Precise specification of the required data and network requirements, adapted to the customer processes
- Use of secure protocols, technologies and encryption

CHALLENGE

Collection of third-party data

Different interfaces

Synchronization of data

Interfaces to SAP or ERP systems

RESULT

Collection of huge amounts of data

Permanent safe storage

Authenticity of information

Use of standard interfaces

Required technology

- AutaLIS
- AutaDES Connect

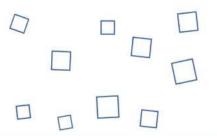






2: Data management

- Check data and structure it uniformly
- Lifetime high-availability storage
- Provision of data on different platforms
- Secure access



CHALLENGE

Data evaluation

Data consistency

Data standardization

Provision of data using modern interfaces

Access and deliver the data to various external clients

Required technology

- AutaDES Server
- AutaDES Webservice

RESULT

Standardized data formats

Basis for a knowledge-database

Platform-independent devices







3: Intelligent data processing

- Analyzing of data
- Application of statistical functions
- Reporting
- Cost analysis
- Traceability

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CHALLENGE

Classification of data by recipient

Generation of management key figures

Process quality assessment

Product quality assessment

Statement on the availability of production

Required technology

- AutaDES Server
- AutaDES Client

RESULT

Basics of machine learning and algorithms

Indicators for decision-making in technological and economic processes

Automatic warning functions, alarm generation

Report generation

Inventory and accounting







4: Process optimization

- Resource planning
- ERP and control system
- Optimization of production in terms of quality, quantity and availability

CHALLENGE

Proactive maintenance

Proactive staffing needs

Proactive ERP

Optimization of work processes

RESULT

Bottleneck analysis

Trendlines

Predictive needs assessment

Required technology

AutaDES Client





5: Intelligent manufacturing

- Control of logistics systems
- Connection to Enterprise Resource Planning (ERP) such as SAP

CHALLENGE

Automatic orders for material

Automatic check of material availability

Automated acceptance of finished goods

Production-related triggering of the automated processes

RESULT

Connection and control of logistics systems

Connection and control of third-party systems

Required technology

AutaLIS









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