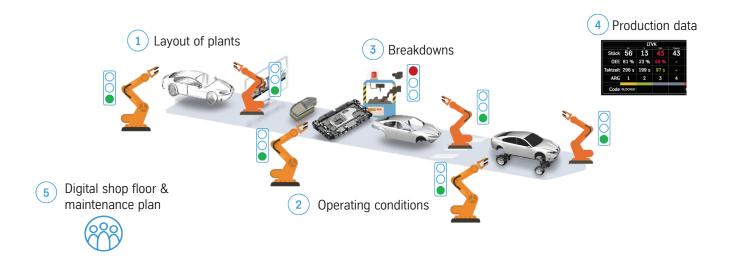


#### MDA Machine Data Analysis



### Permanent monitoring and visualization of machine data and conditions

#### Initial situation

For the efficient operation and optimization of manufacturing and assembly plants, continuous information and transparency about their output, quality and availability is required.

#### **Technical description**

The permanent logging and storage of operating states of each individual station is required.

The transparency of the acquired data allows a fast correction of malfunctions as well as the detection of weak points and bottlenecks.

The main screen shows a plant overview (status layout) in which the current operating states of the machines are displayed in color.

The operating states of the machines can be displayed for a selected period, shift number and team. A list of all stations with the duration of the operating states is displayed. A partial data set can be selected, which is displayed as a bar graph (all operating states of a station or one operating state across all stations).

# MDA web Client MDA Web Client



#### MDA Machine Data Analysis

Technical information	
Operating conditions	Duration and frequency
Faults	Duration and frequency, Top N
Production figures/times	IO/NiO, cycle times
Data collection	Ethernet (line network)
Maintenance plan	Plan per machine according to number of cycles or time period, preventive maintenance
Configuration manager	Shift schedule, team management, station list, language
Database	MS-SQL-Server

#### MDA line layout



#### Fields of application

To record the machine data, the station controllers send the current status via a standardized interface to the data collector of the MDA server whenever the operating status changes. In the MDA server, the data is entered into a database. The evaluation can take place on any office PC connected to the network.

- Continuous data acquisition per shift
- Graphical and tabular presentation of the data
- · Long-term evaluations possible
- Output of diagrams and tables
- Language switching at runtime (German/English/national language)
- The system is saved on an image

#### **Customer benefits**

- Optimization of plant performance through transparency of the output, quality and availability
- · Clear and web-based evaluation interface
- Data acquisition and evaluation coordinated to the requirements of the middle size business

#### MDA operating conditions



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