

# Kontron AIS GmbH



# Production Control and Digitalization for Photovoltaic and Battery Production

The Manufacturing Execution System FabEagle®MES is the solution for high-performance data collection and comprehensive production control in the photovoltaic (PV) and battery industries. Thanks to specialized function modules, you will benefit from a process-driven and highly scalable software solution for the entire value chain – from supporting manual manufacturing processes to fully automated production. This way you can achieve consistent traceability and reliable tracking rates during high-volume production, regardless of whether you use product identification or virtual product tracking.

# Your benefits

- Highly scalable solution for fully automated production of very large quantities
- > Ensuring traceability from lot size 1
- Increasing transparency via online visualization and comprehensive reporting functions
- Increase in productivity via optimal production control and online SPC
- Minimizing downtimes by analyzing machine data and maintenance management



# Features

### Visualization and evaluation

#### Fo

#### **Production visualization**

Interactive production layout for quick access to machine states, alarms and production progress



#### Online process visualization

Presentation of trends of selected process data in real time to identify process deviations



#### **Online SPC**

Configuration of statistical rules to monitor process and material data

#### 🗘 Alarm statistics

Analysis of machine malfunctions according to number of incidences and duration to identify optimization potential

#### ~

#### Trend and reporting

Visualization of stored process, material, and machine data for user-defined reports

## Data acquisition and delivery

#### R

#### Process data acquisition

Retrieval and storage of process and material data relating to quality for every manufacturing step

# 2

#### Material tracking

Traceability from source material to finished product featuring physical and virtual tracking for very high tracking rates

### Ĩ

#### Machine data collection

Automatic and manual logging of machine state, product defects and lots to calculate KPIs

#### Long-term data archive

Configurable archiving solution with all relevant production data



#### Realiable traceablity

Factory-wide acquisition of consumable material, products and process data to improve product quality



# Stable processes for production control

Central management and control of work orders and production logistics for more process stability



Site-wide transparency

Quick overview of process changes, correlations and events to increase productivity

## Management and control

#### $\phi_{o}$

#### **Production control**

Transport control and monitoring of material logistics for efficient operation of all machines

#### ы 1 1 1

#### Order management

Synchronization of orders with an ERP or direct management in the MES and assignment of a work plan to each production order

# 4

#### **Event management**

Configuration of actions in the event of breaches of SPC rules, machine alarms or maintenance procedures

#### **E**

User management

Definition of user groups and authorizations

# Our integration capabilities

As a full-service provider, we handle all machine integration tasks, e.g. interface specification, integration of systems into your production and on-site testing.

# <sup>\*</sup>

#### **Recipe management**

Central administration and provision of process parameters and settings for machine control

#### L L L

#### Work plan management

Graphical configuration of the manufacturing process in work plans plus definition of recipes, parts lists, and relevant parameters



#### Shift planning

Definition of shifts, shift models and target figures for evaluations and calculation of KPIs

# **Our services**

In addition to standardized industrial software solutions, we provide you with a wide range of know-how and application-specific services for all phases of your project. With more than 30 years of experience in successfully implemented automation projects, we support you in planning and optimizing your digitalized production.



# Kontron AIS GmbH

Kontron AIS GmbH sets the benchmark in industrial software – for more than 30 years and with an experienced team of over 250 employees. The proven software products and customized digitalization solutions enable machine and equipment builders as well as factory operators to break new ground in automation and secure long-term competitive advantages. Together with its customers, Kontron AIS implements worldwide cross-industry, intelligent digitalization strategies and solutions for the smart manufacturing of tomorrow.

As a subsidiary of the Kontron AG, Kontron AIS offers integrated, end-to-end IoT concepts consisting of hardware and software as well as worldwide project management, service, and support thanks to a global network.



- 😤 Consulting and Requirement Engineering
- 💥 🛛 Project Management and Training
- Supply of Hardware for Control and IT Systems
- 2 On-Site Installation and Commissioning
- Flexible, Global Service and Support

Kontron AIS GmbH Otto-Mohr-Straße 6 01237 Dresden Germany

Phone +49 (0)351 2166 0 Fax +49 (0)351 2166 3000 We are at your service: contact@kontron-ais.com **More information:** www.kontron-ais.com

THE BENCHMARK IN INDUSTRIAL SOFTWARE