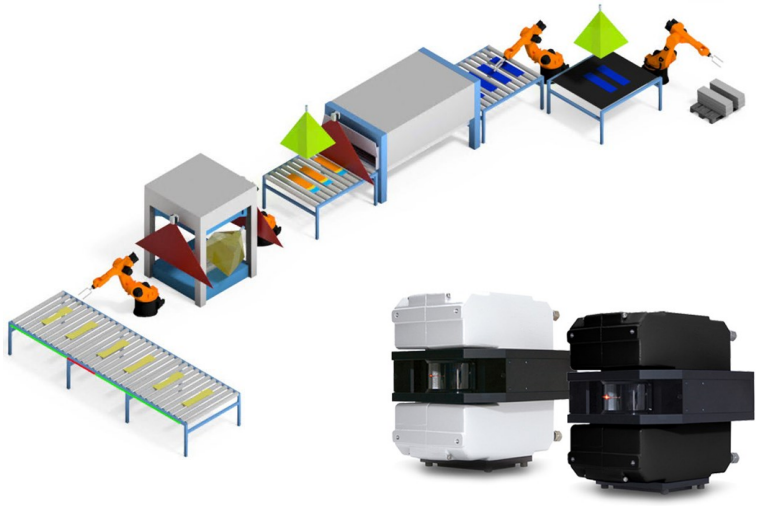
PH-INSPECTOR

DATA SHEET

BENEFITS

- **100% thermal inline monitoring** of temperature control regarding strength, dimensional stability
- **Maximum temperature measurement accuracy** by using short-wave IR sensors
- **Cycle time-neutral inline measurement** by line-shaped component recording during component movement
- **Early detection** of tool wear and system malfunctions of oven, press and tools
- **Optimized teaching of tooling**
- **Archiving** of radiometric temperature recordings and all system parameters for up to 22 years
- **Visualization** in the intranet via browser (integrated web server)
- **Interface** connection e.g. via OPC to customer-side control
- ...



DESCRIPTION / EXAMPLE OF APPLICATION

The integration of this stand-alone **PH-Inspector system** enables reliable thermal compliance with the process specifications, including an automatic inline alarm / outfeeding request for non-compliance with adjustable temperature windows. By integrating furnace and press control via OPC and archiving all process data, anomalies are not only detected and alarmed, but they also significantly simplify troubleshooting.

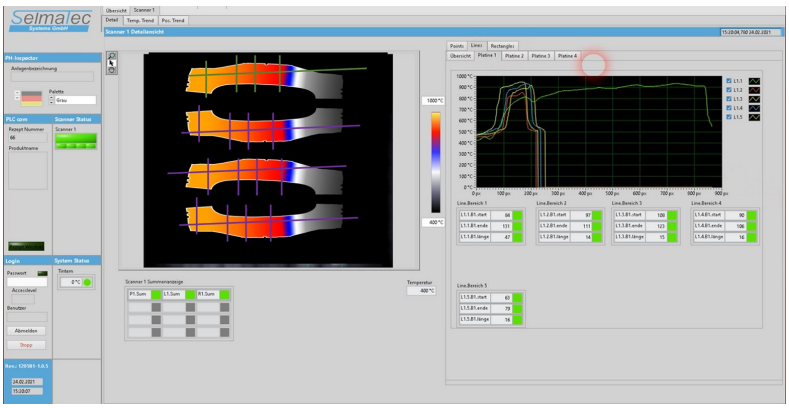
If required, a web server visualizes the data acquisition software in the entire intranet.

The integrated recipe management requires no further intervention when changing the tool, as the system automatically uses stored, tool-specific test recipes.

Thanks to the open system layout, further hardware and software functions as well as additional sensors can be retrofitted at any time if required.

MEASUREMENT SPECIFICATIONS

Temperature Range	20 … 1200 °C
Sensors / Pyrometers	Up to 6 IR Linescanner (Standard) Optional Pyrometer, IR-Camera, NIR-Camera, Vision-Camera
Data transfer	OPC (Standard) Profinet (Optional)
Interfaces	Profibus, Analog-Digital I/O…
Power Supply	230 VAC (Panel-PC, Interface) 24 VDC (Sensors)
Scope of Delivery	Complete system solution incl. Commissioning and training



Von-Cöllen-Weg 10
D-21379 Scharnebeck

Phone: +49 (0)4136 / 3620544
Fax: +49 (0)4136 / 9006927

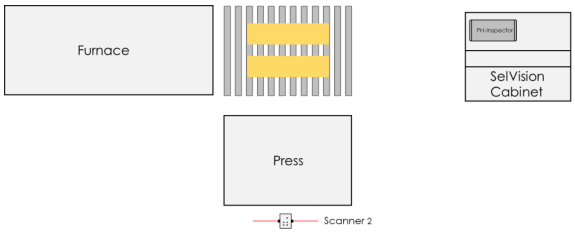
info@selmatec-systems.de
www.selmatec-systems.de

PH-INSPECTOR

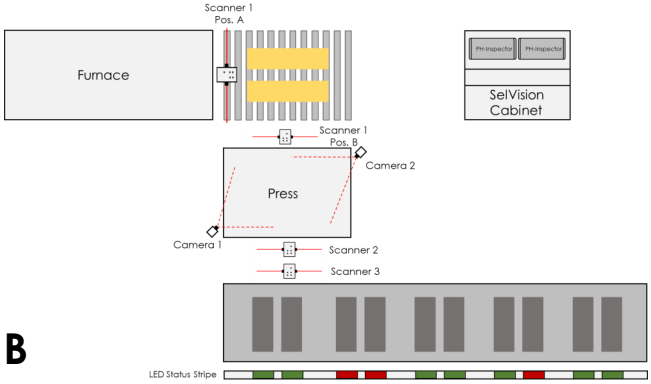
DATA SHEET

LAYOUT EXAMPLES

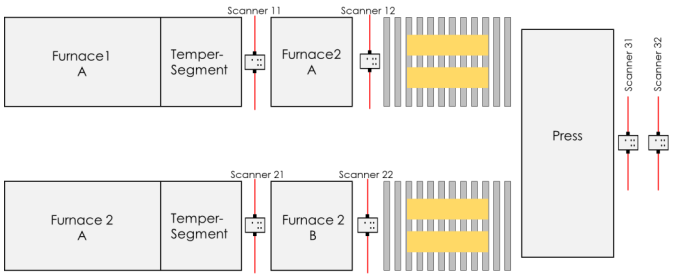
- There are a **variety of options** (e.g. A, B, C)
- From **1 scanner up to 6 scanners** and additional position control in the press
- The system **is flexible and easily expandable** and therefore well adaptable to different needs



A

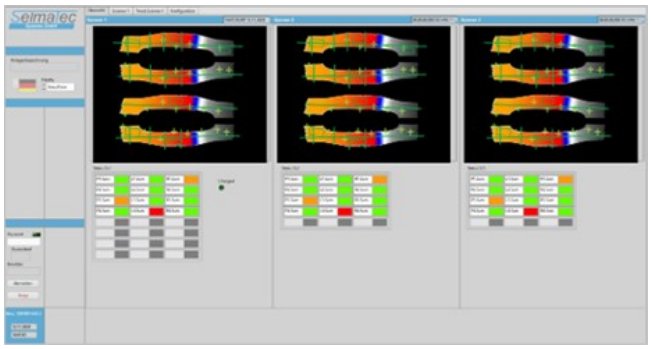


B

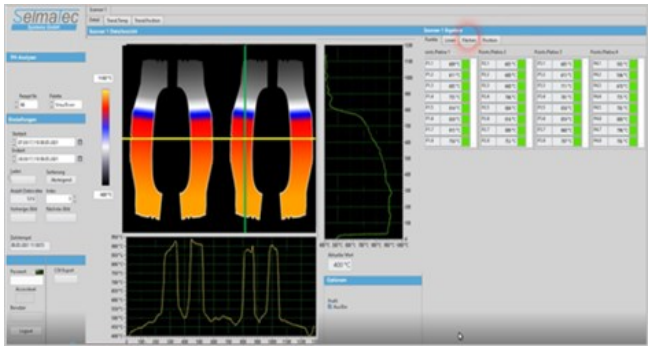


C

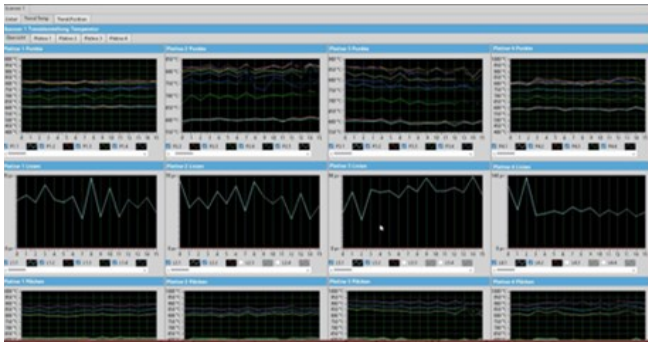
SOFTWARE



PH-Inspector
(Inline-Inspection)



PH-Analyzer
(Analyzing of historical data)



Result Trending
(Trend display of temperature and position)

Process Data Acquisition
(Process data and inspection results stored together)

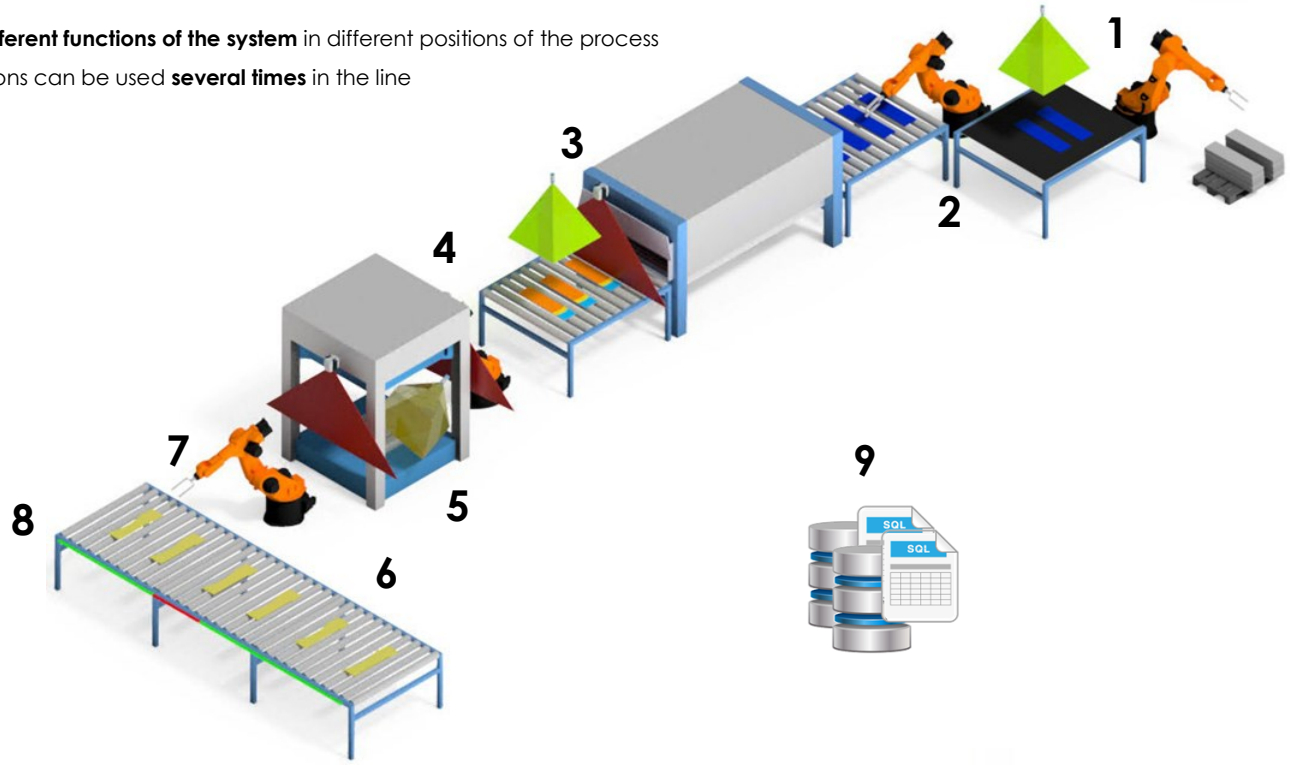
Von-Cöllen-Weg 10
D-21379 Scharnebeck

Phone: +49 (0)4136 / 3620544
Fax: +49 (0)4136 / 9006927

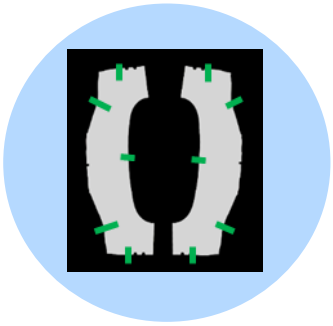
info@selmatec-systems.de
www.selmatec-systems.de

SYSTEM FUNCTIONS

- Use **different functions of the system** in different positions of the process
- Functions can be used **several times** in the line



POSITION CONTROL

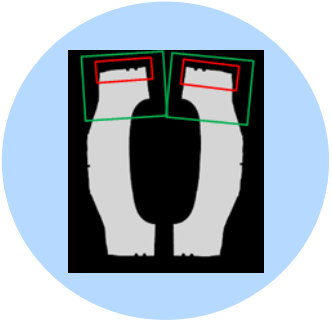


5

THERMAL INSPECTION

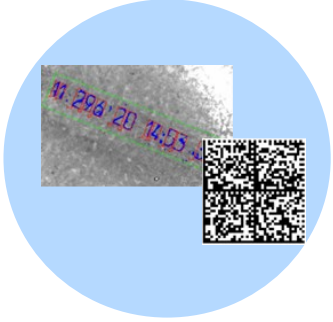
3 / 4 / 6

DESTACKING / POSITIONING



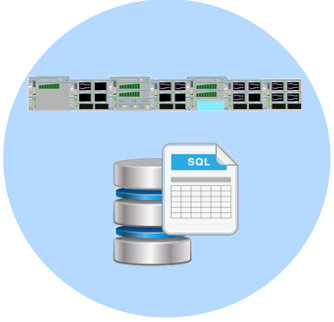
1 / 3

PART IDENTIFICATION



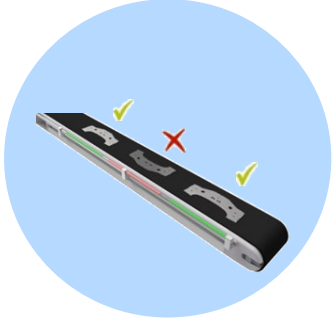
2

PROCESS DATA AQUISITION



9

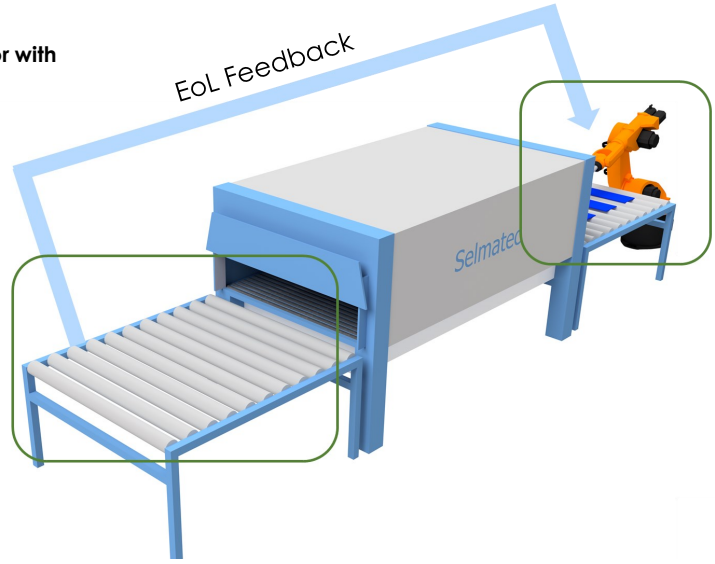
PART STATUS TRACKING



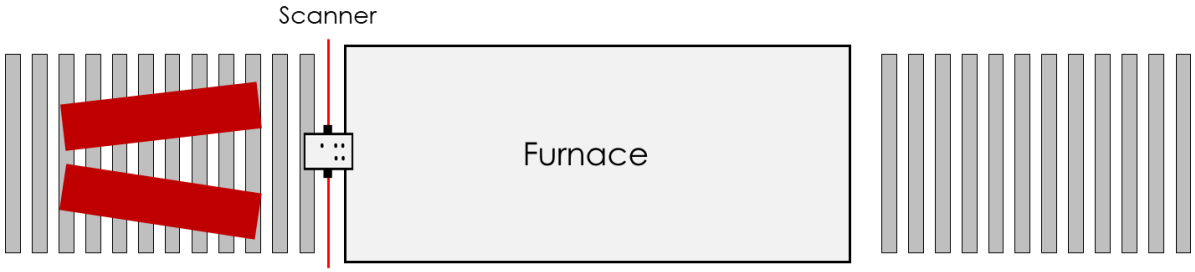
8

END OF LINE FEEDBACK

- Use the **information from the end of the furnace** and transfer it as an input for begin of furnace
- Get information about the **position of the blanks and the transfer zone** etc.
- **Influence the output of the parts**
- Measure the misalignment either **with a visible camera or with an linescanner**



ROTATED BLANKS



CORRECT POSITION OF BLANKS