

Smart Factory Assembly

The digital transformation in assembly

“The pragmatic way to connect your assembly processes and make them process-reliable and paperless.”

“Using the system, we can produce over 100 variants economically in a one-piece flow, easily add new variants and change existing variants, which is very important to us. The system acceptance among the employees is high and even new employees can be deployed on the production island without any problems.”

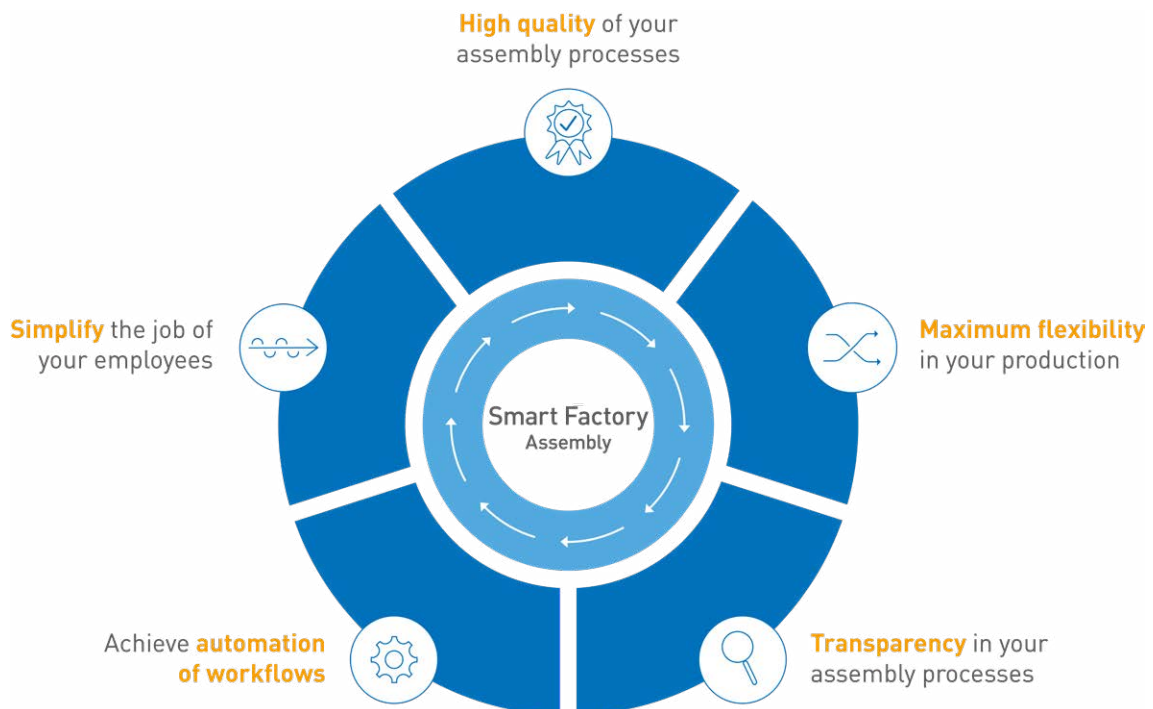
A STRONG RETURN ON YOUR INVESTMENT

Benefits in your assembly

Smart Factory Assembly simplifies the assembly process while increasing productivity. Our comprehensive solution provides digital work instructions, worker guidance and ensures real-time traceability in production to improve product quality.

The core of digital work instructions is the simple breakdown of the assembly process into operational steps. At each step the system intuitively guides the operator through the assembly process. In addition all relevant assembly tools can be connected to the system. This enables total process

security and the resulting data creates transparency in order to identify the potential for optimization and ensure the traceability of production data.

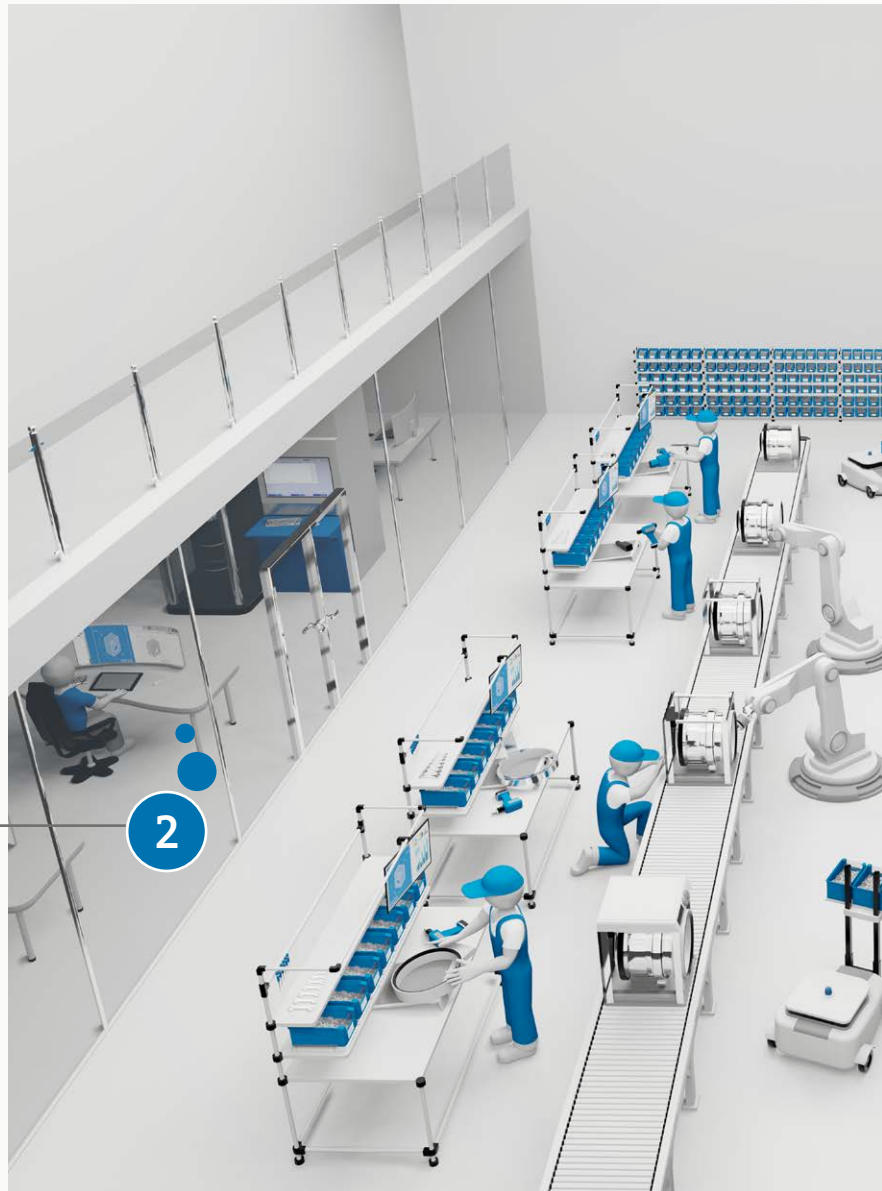


CONNECTED AND NETWORKED PRODUCTION

The impact on your ShopFloor

Work Preparation Technical Writer

The central creation and management of digital work instructions enables easy control of all variants and their versioning. This can be conveniently performed from the office, allowing updates and modifications. Additionally, the modular setup facilitates the adoption of complete assemblies or work sequences from existing instructions, streamlining the efficient creation of work instructions.



Production Management

All production and quality data is automatically documented and stored in a production lifecycle file. This documentation can be quickly and easily accessed at any time, ensuring seamless traceability.

1

3

Shop Floor

The production employee is supported throughout the entire process in order to eliminate as many sources of errors as possible. The work instructions can be specifically adapted to the respective assembly employee with respect to language, level of training and level of detail.

SIMPLIFY THE ASSEMBLY PROCESS

Partner with Bossard to make your assembly process smart and agile



Replace manual and analog tools with automated and smart digital solutions.



Say goodbye to paper and rely on digital instructions to minimize human error, duplicated work and miscommunication.



Make your employee onboarding procedure agile based on best practices and expert guidance.



Turn assembly line complexity and variation into a manageable procedure for all SME employees.



Eliminate manual checklists from the workplace in favor of automated quality control processes.

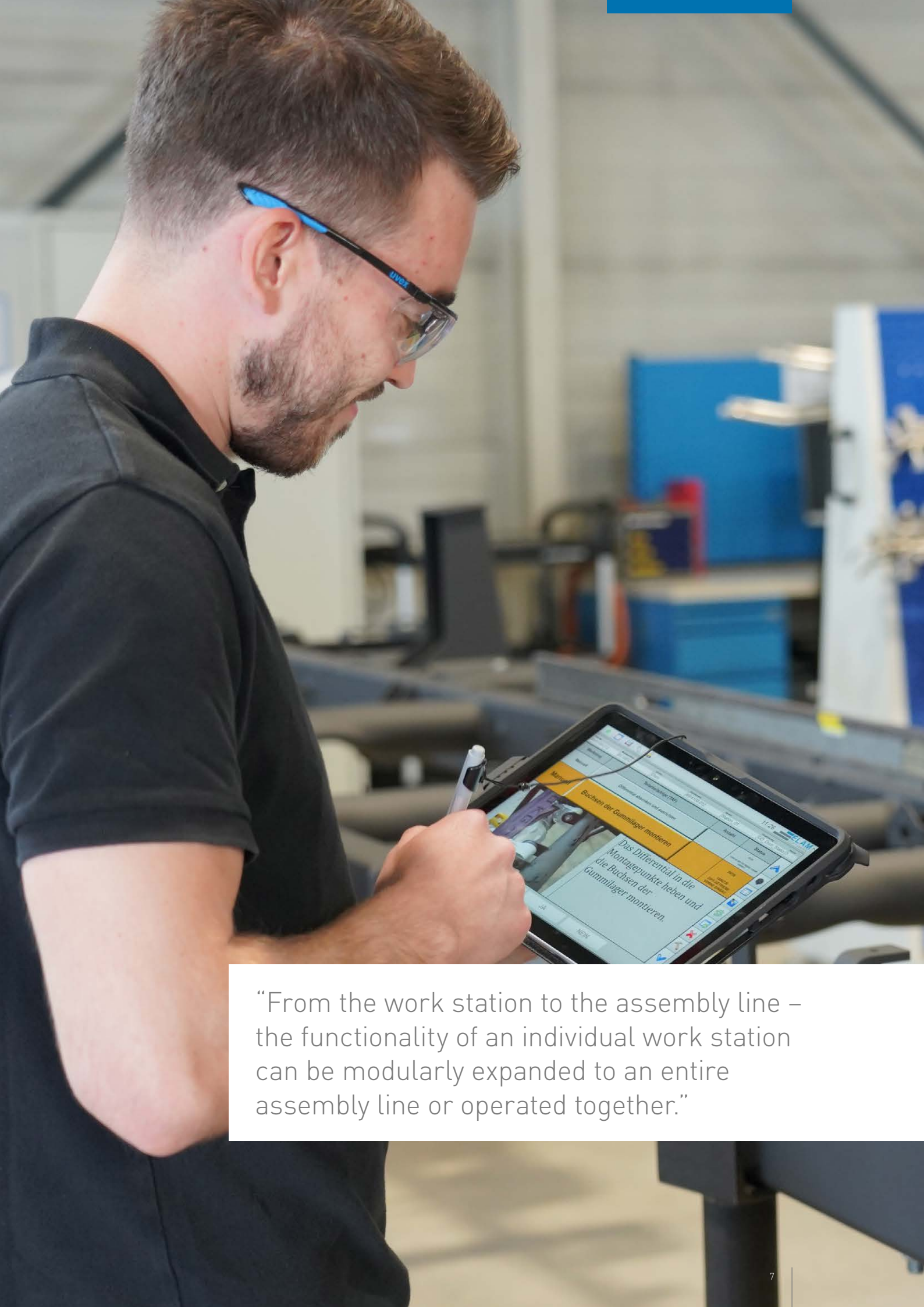


Provide full transparency and traceability of your assembly operations at all times to remain compliant with industry regulations.



"Smart Factory Assembly is also very well suited for products with a high level of complexity, documented tests, and complete traceability that are produced in large quantities."

DI Dr. Christian Rabitsch, Managing Director of WILD

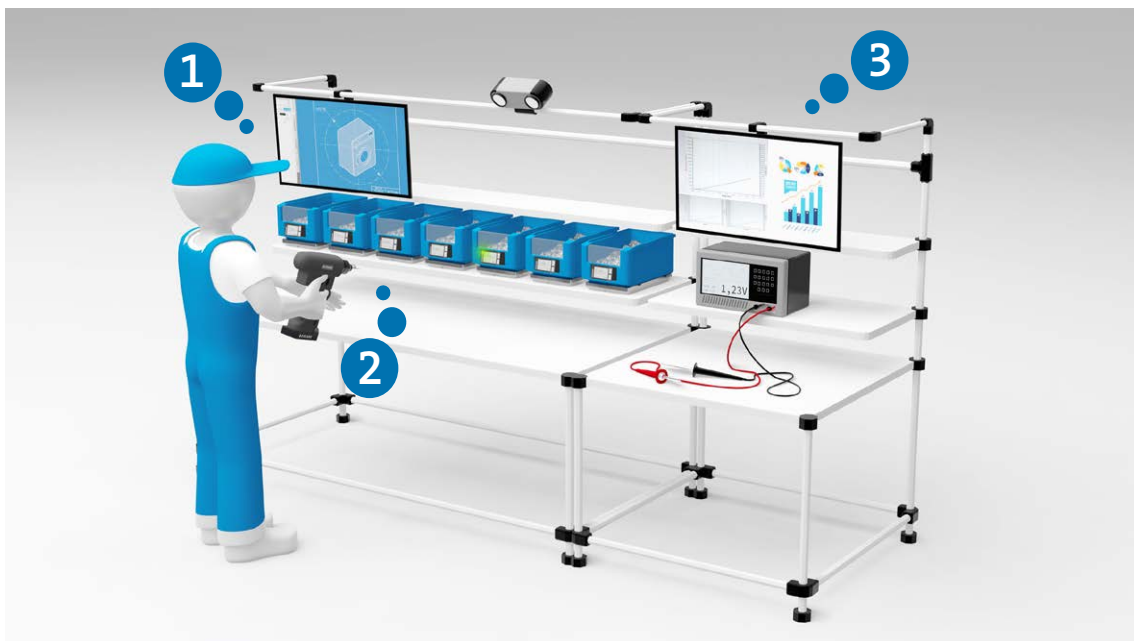


“From the work station to the assembly line – the functionality of an individual work station can be modularly expanded to an entire assembly line or operated together.”

SMART FACTORY ASSEMBLY

Three components for success

Embrace the future of manufacturing with a solution designed for SMEs.



1 Digital work instructions based on a smart structure

Use Smart Factory Assembly to simulate and test workflows and find the right path for your SME. This helps you to minimize assembly errors while increasing overall productivity thanks to shorter employee onboarding times and fewer work steps for your workforce. This solution makes it simple to incorporate employee feedback and refine workflows accordingly.

2 Fully connected smart tools and devices in the SME environment

Smart Factory Assembly is designed to help you connect and integrate all assembly tools – smart screwdrivers, pick-to-light, scanners, measuring equipment – within your SME's industry environment. This paves the way for seamless interaction with an ELAM solution and brings you much closer to a fully digitalized factory.

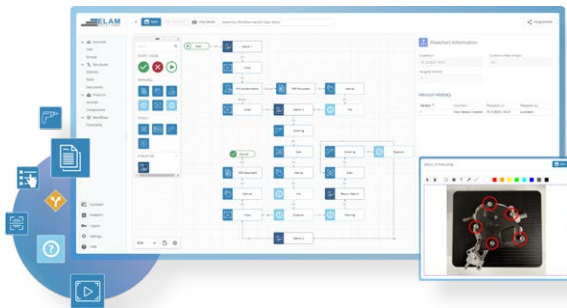
3 Complete traceability of quality data and continuous process improvements

Channel real-time data into your SME's operations to create full product quality traceability and transparency during assembly. This helps you to enhance your processes while staying flexible and agile.

Digital and smart work instructions

Whether it's new employees, new production processes, or small batch sizes with various orders, the assembly steps are efficiently and accurately executed, thanks to the graphic step-by-step instructions. Furthermore, the work steps are automatically documented.

The digital assembly instructions can be created by you or automatically generated from the customer order through ERP integration. The centralized creation and management of smart instructions enable significant reduction in product variation complexity and efficient handling of changes.



Advantages

- Create smart workflows easily and efficiently.
- Minimize errors in the assembly process.
- Provide user-friendly guidance to support both beginners and experts.
- Enhance productivity and optimize processes.
- Incorporate operator feedback to integrate logic into workflows



Fixed Display

- Typical workstation with screen
- Employee guidance step-by-step
- Optimal support of the employees and collection of quality data



Mobile Devices

- Display work content on a tablet or mobile device
- Display work instructions, simple assemblies or drawings and parts lists
- Flexible use within the production line

Connected smart tools and devices

The aim is to connect the assembly environment, which is parameterized and/or measured specifically for the respective assembly step.

The more assembly tools and testing equipment are connected with the system, the more one can leverage the following advantages:

- Faster setup of the work stations for the new order/product
- Correct parameterization of the tools based on the order
- Wide range of standardized plug-and-play device integrations
- Documentation of all relevant assembly and testing processes based on a product

Various tools and devices can be incorporated. Here are some common examples:

1. Position detection
2. Robots
3. Cameras
4. Pick to light
5. Nut changer / bit selector
6. Torque wrench
7. Testing and measuring devices
8. Printers
9. Presses
10. Scanners
11. Identification systems



Our broad knowledge of fastening technology allows us to provide competent advice on selecting the right tools for your needs.



Smart riveting devices



Smart blind rivet nut



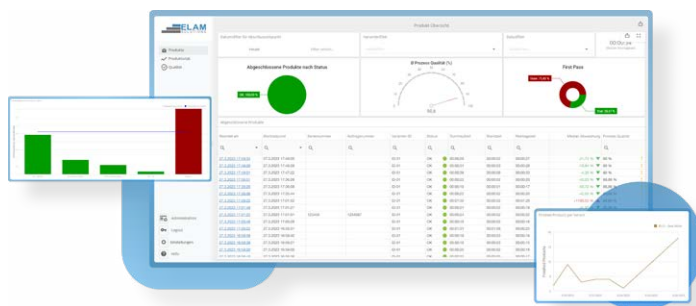
Battery screwdrivers

In riveting and bolting technology in particular, we can provide objective advice and rely on a broad product range.

Traceability of quality data and continuous process improvement

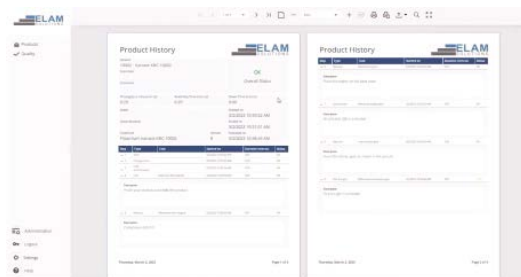
All production data is saved in a database and can be viewed at any time. Process deviations are immediately evident. The stored data corresponds to the specifications from the work instructions. If screwdrivers are controlled, for example, then the screw-related data is stored, such as the angle of rotation, tightening torque or screwdriving time. In addition, target values for screw connections can be specified and visualized using a screwdriving curve.

The aim of any production is to maximize efficiency. This requires a validated basis of production data for evaluation. Smart Factory Assembly helps to quickly and easily evaluate and visualize all data. It does not matter whether an overview of the individual work stations or the entire production process is required. The data regarding all possible procedures, process points and also quality indicators is stored in the Smart Factory Assembly database and can be quickly and easily retrieved.



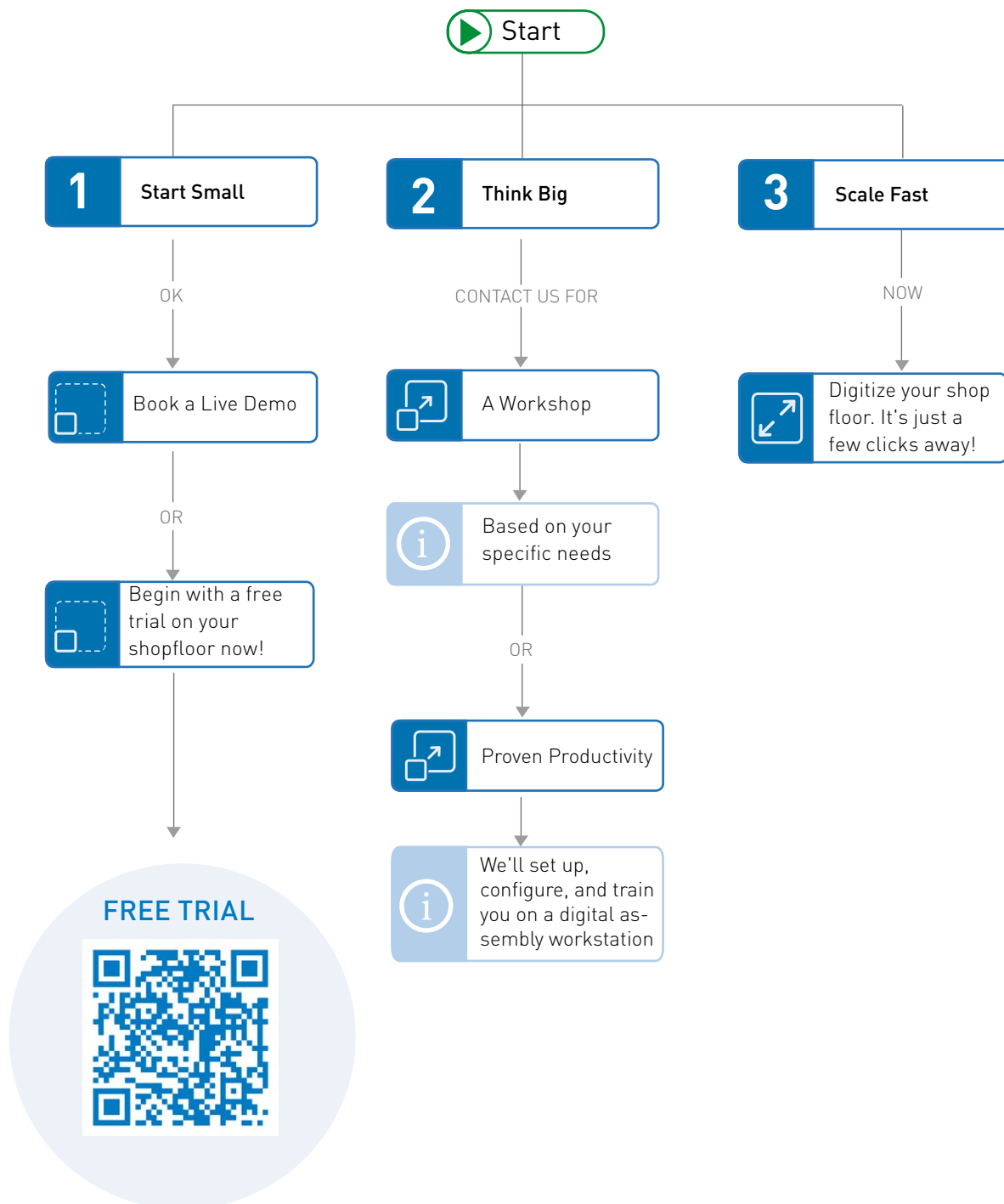
Advantages

- Identify areas for improvement in your operations
- Trace product quality throughout the process
- Achieve transparency in the assembly process
- Make data-driven decisions in real-time
- Respond with flexibility and agility



THREE MOVES TO ACHIEVE YOUR GOAL

Targeted, pragmatic and no risk



OUR OFFER

Solutions tailored to your needs

Experience the power of Smart Factory Assembly: Improve your assembly process with unmatched transparency, efficiency and reliability. Discover the benefits by testing our ELAM solution on your production floor.

	FREE	BASIC	PRO	ENTERPRISE
	Jump in and give the software a try!	Smart workflows and documents 55,- EUR/mo Per station	All standard IoT tools and devices 120,- EUR/mo Per station	Smart Assembly 290,- EUR/mo Per station
Smart work instructions	✓	✓	✓	✓
Static documents	✓	✓	✓	✓
Standart IoT Portfolio			✓	✓
Custom IoT devices				(✓)
Custom Features				✓
Factory wide license contracts				✓
Add ons				
	ERP Connector Enables ELAM to connect ERP through a standard REST API.			From 290,- EUR/mo
	Quality & Production Dashboard Enables your system to visualise in a dashboard all the generated data from the assembly process.			From 45,- EUR/mo
	Order Management Create your order within ELAM. Import orders from 3rd systems with csv files.			From 120,- EUR/mo

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