## SMART FACTORY ASSENMBLY USE CASE

# Paperless Factory

Paper-based processes are still common in many manufacturing environments – but they come at a cost: outdated instructions, time-consuming documentation, and limited traceability. Moving to a paperless factory means more than just saving paper – it's about creating a more efficient, structured, and error-proof production process.

With ELAM Solutions, companies can fully digitalize their assembly workflows. Work instructions, checklists, and quality data are presented and captured directly at the workstation – always up to date, always traceable. Whether through tablets, smart tools, or visual documentation, ELAM helps turn your factory into a lean, connected, and audit-ready environment.
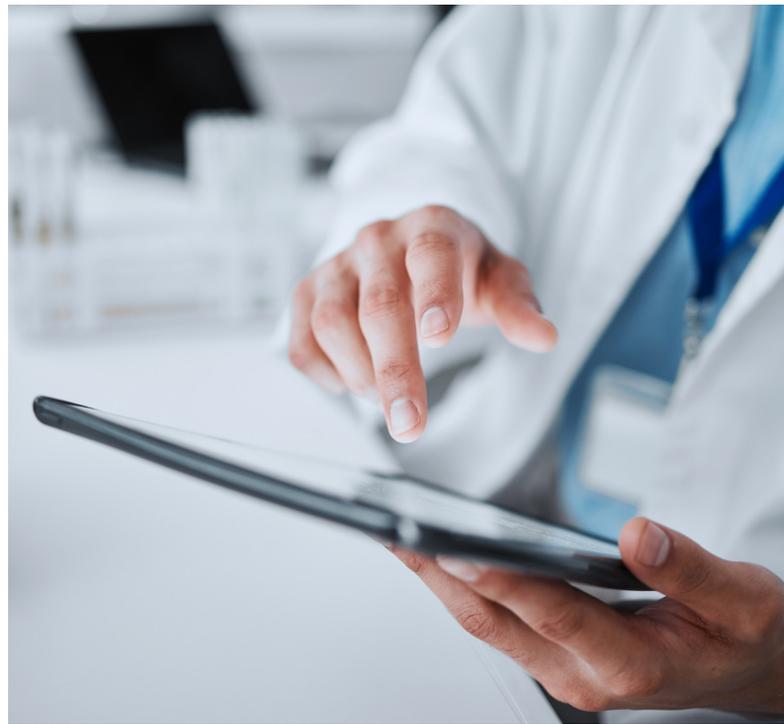
### CUSTOMER

- **Industry Sector:** Cable Assembly and System Integration
- **Founded:** 1994
- **Employees:** Under 100 employees
- Delivering precision-crafted cable solutions tailored to customer needs, backed by a commitment to excellence and flexibility.

### INITIAL SITUATION / CHALLENGE

The production was previously managed using paper-based documentation. All relevant product information, including work instructions and part lists, was printed and distributed to the shopfloor for each order.
Over time, this led to large volumes of paper accumulating in the production area, creating confusion and inefficiencies. In many cases, it was unclear which version of the instructions was correct for the specific product being assembled – especially in a high-mix production environment. This increased the risk of using outdated documents and executing incorrect steps in the process.

### PROJECT GOALS

The primary goal of the project was to transform the entire production process into a fully paperless environment. By eliminating printed documents on the shopfloor, the company aimed to:

- Ensure that only the correct, up-to-date instructions are available for each product.
- Improve clarity and structure in daily operations.
- Reduce waste and administrative effort associated with printing and managing physical documents.
- Lay the foundation for future digital process control and traceability.

The move to paperless production was a key step toward a more efficient, organized, and future-ready assembly environment.

### SOLUTION

To achieve a fully paperless production environment, we equipped every workstation on the shopfloor with a tablet-based ELAM system. The company implemented 8 ELAM Basic licenses, providing digital access to all relevant work instructions and production documents directly at the point of use.

Key features of the solution include:

– Clear and simplified digital work instructions displayed on tablets, ensuring workers always have access to the correct and current information.
– Integrated cameras and barcode scanners (using keyboard emulation) to capture production data and confirm order-related steps.
– Basic IoT functionality achieved without additional software investment, thanks to smart use of standard hardware integrations.

This setup allows to maintain a lean, cost-effective digital infrastructure while gaining full transparency and consistency across production processes.

### IMPLEMENTATION

The implementation of ELAM was largely customer-driven. The Project leader played a key role in the success of the rollout – dedicating significant time to testing the system and building a fully functional pilot workstation.
After validating the solution in the pilot phase and receiving management approval, the ELAM system was successfully rolled out across all relevant workstations in the production area.

Due to the positive results and ease of adoption, the customer is now exploring the expansion of the solution to additional production sites, including facilities in other European locations.

### RESULTS / BENEFITS

With the introduction of ELAM, the customer achieved 100% digitalization of its shopfloor operations. Paper-based work instructions and documentation have been completely eliminated, resulting in a cleaner, more structured, and more efficient production environment.

Key benefits include:

– Fully digital work instructions and documentation accessible at every workstation.
– Photo documentation of all relevant process steps, providing clear proof that each task was completed correctly.
– Improved process transparency and traceability, supporting internal quality assurance and external audits.
– A solid digital foundation that enables future scaling and standardization across multiple sites.

*With ELAM, we've finally brought structure and clarity to our production processes. Going fully paperless has not only improved efficiency, but also ensures that every step is documented and traceable. The flexibility of the system and the ability to manage the rollout ourselves made it the perfect fit for a company like ours.*

Technical Support Sales & Projects

Contact us for more information at **www.bossard.com**