CASE STUDY · AUTOMOTIVE

Modernizing Automotive Production Without Interrupting the Line

ECKLEBE Automation serves global automotive OEMs, Tier 1 and Tier 2 suppliers, and logistics facilities, delivering modernization and automation solutions that increase efficiency and ensure reliable, scalable operations with minimal disruption to ongoing production.

The Challenge

Automotive manufacturers face significant pressure to maximize uptime, throughput, and traceability simultaneously and without error. This challenge is compounded by complex, multi-line operations, where changes in one area can affect others.

Upgrading systems on live production lines introduces ongoing commissioning risks. If a modernization project encounters issues during commissioning, it can result in lost time and production critical to daily operations.

The Solution

ECKLEBE integrated full control, safety, and digitalization systems across the facility's production and logistics operations, executing the work through phased migrations specifically designed to keep lines running throughout the modernization process. The scope covered:

- Control systems integration across PLC, DCS, and SCADA platforms
- Functional safety systems and safety PLCs
- Process instrumentation and industrial networks
- Industrial digitalization and data integration.

Sequencing the work in phases meant the facility never had to choose between modernizing and staying in production.

The Results

10–20%

Increase in production throughput

15–30%

Reduction in unplanned downtime

The project delivered a 10–20% increase in production throughput through improved control performance and system optimization, along with a 15–30% reduction in unplanned downtime, driven by modern PLCs and predictive maintenance.

> Perhaps most notably, the phased migration approach achieved near-zero production interruption throughout the modernization, proving that a complex, multi-line facility can be modernized without sacrificing the uptime it depends on.