

Whitepaper : Staying Competitive Through Smart Automation (European Case Studies)



Overview

Over the past few years, European industries have been navigating a period of extraordinary change. From supply chain disruptions and rising costs to geopolitical uncertainty and the pressure to meet sustainability goals - manufacturing across Europe is under real transformation pressure.

At the same time, the global market is moving faster than ever. Competition from Asia and North America is intensifying, while customers expect higher flexibility, faster delivery, and continuous innovation. European companies face the challenge of balancing efficiency and quality while keeping their edge in a global race.

This is where adaptive manufacturing comes in: combining technology, data, and collaboration to help businesses respond quickly to change – and to embed a smart automation strategy.

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The presented case studies cover three main production processes relevant for the mobility sector. Each approach is individual – and customized for the customers' challenges and business requirements.

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thyssenkrupp Bilstein
Stadler

Service & Maintenance Processes

AA UK

Efficient from Material to Machine

Client: Deltec



Challenge

Deltec faced the challenge of making material availability and traceability in production both transparent and efficient. Without a unified central system, end-to-end traceability was impossible. Data had to be collected manually from multiple sources, making it difficult to measure KPIs and OEE. At the same time, unstructured material storage led to long search times and complicated kitting and production preparation. This lack of material availability on the production line was the leading cause of unplanned downtime and extended changeovers.

Solution

In collaboration with Panasonic Connect and its partners Inovaxe and B4Creation, Deltec implemented a fully end-to-end digital production and material management of Just in Time (JIT) / Just in Sequence (JIS) processes – covering everything from goods receipt and warehouse logistics to SMT and THT production, as well as manual and final assembly.

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[Efficient From Material to Machine](#)

Reliability as competitive advantage

Client: ZF Automotive



Challenge

Increase production capacity and efficiencies across ZF Automotive's production lines in Europe, especially at its UK manufacturing facility.

Solution

Panasonic's range of ultra-reliable SMT machines, and proprietary smart factory management software, has enabled ZF to maintain a competitive advantage across its production line.

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[Unrivalled Longevity and Reliability](#)

Digitalization of the Damper Shopfloor

Client: thyssenkrupp Bilstein



Challenge

After more than a decade of reliable operations, two welding robot cells were about to face end-of-life. ThyssenKrupp's team on site, with the support of Panasonic and its partner, was charged with the task to develop a retrofit concept for the automotive welding robot cells in a financially competitive scenario.

Solution

The first welding robot cell has been upgraded to the G4 Welding Robot System— and the de-installed components will function as a source for spare parts for the second oldest robot cell. The upgrade becomes even more efficient with the DTFS offline programming software installed two years ago and a coming iWNB installation, enabling remote digital access to real time production and system operating data. You can start the same day, thanks to a prepopulated product image database and simple bulk import tools for your catalogue. Whether you're tracking planogram compliance, spotting pricing errors, or identifying out-of-stocks, this platform delivers fast, accurate answers.

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[Paving the Way](#)

From Manual to Automated Welding

Client: Stadler



Challenge

The customer was already using robotic welding, yet many components still had to be welded manually. This made production time-consuming, expensive, and inflexible, particularly when dealing with components of varying sizes.

Solution

STADLER Anlagenbau, based in Altshausen in southwestern Germany, combines traditional manufacturing expertise with state-of-the-art robotics. The company develops and produces complex systems for turnkey recycling and waste sorting plants, as well as tailor-made individual components. As a full-service provider with a high level of vertical integration, STADLER handles all production steps of its own products in-house.

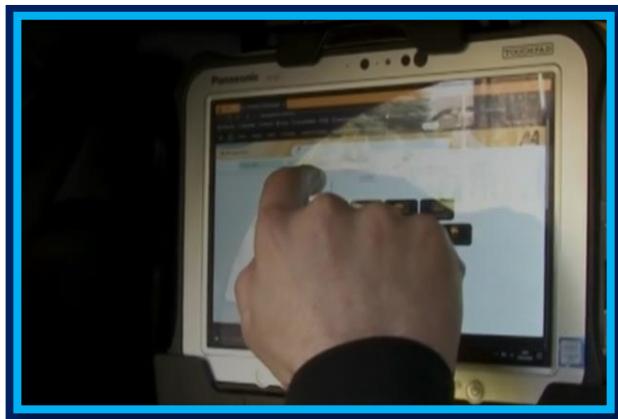
[Read more](#)



[Manual Welding Automation](#)

Connected Vehicle Solution

Client: AA UK



Challenge

Panasonic TOUGHBOOK has successfully completed the installation of over 2,500 ruggedised 5G routers across The AA's roadside vehicle fleet, delivering enhanced connectivity, operational efficiency, and cost savings. The ambitious nationwide deployment of Panasonic's Connected Vehicle solution was completed in just over nine months, and was conducted in partnership with The AA, Ericsson Enterprise Wireless Solutions, and Gamma Telecom.

Panasonic TOUGHBOOK managed the entire process, including overall project management, testing, installation, training, reporting, and ongoing field services maintenance for the next five years.

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[DELIVERS CONNECTED VEHICLE SOLUTION](#)

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