MERCEDES SUCCESS STORY

Discover how TIM Solutions improved and automated Mercedes' industrial operations.

THREAD IN MOTION

2023

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INTRODUCTION

The automotive industry is one of the most rapidly changing and developing sectors of the 21st century. This change manifests itself not only in the technical specifications and designs of vehicles, but also in production processes and consumer expectations. Increasing quality and safety expectations of customers, demands for innovations such as environmentally friendly vehicles and smart technologies have led to the reshaping of the sector.

As an important part of this transformation process, TIM is one of the leading companies in the automotive sector. The strategic partnership with Mercedes-Benz, a globally recognised automobile manufacturer, is a strong indicator of TIM's effectiveness and influence in the sector. This partnership has led to revolutionary changes, particularly in critical operational areas such as assembly and defect detection.

ERRONEOUS OPERATION DETECTION

The complexity of automotive assembly processes brings with it a high risk of errors. These errors not only disrupt production processes, but also create serious financial burdens.

According to a 2020 study, an average error in the automotive industry cost companies approximately $ 1.7 million.

The technological solutions developed by TIM target this problem, analysing assembly processes in detail and detecting potential errors immediately.

This detection is realised thanks to advanced sensor technologies and data analysis algorithms, thus precisely checking the correct positioning of each part on the production line.

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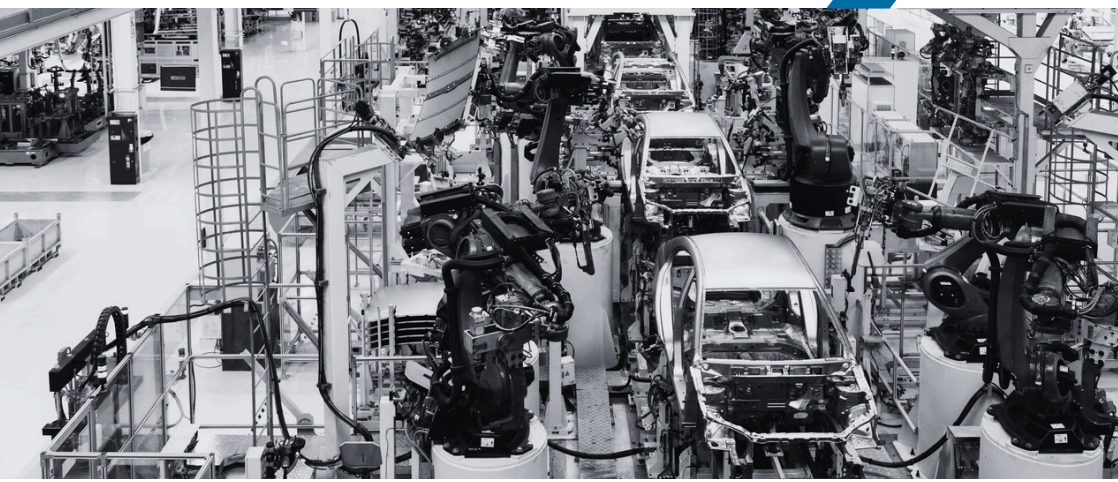
MORE EFFICIENT ASSEMBLIES AND KANBAN SYSTEM



01 The efficiency of automotive assembly processes has a direct impact on production speed and product quality. The smart glove technology developed by TIM stands out as an important innovation in this context.

02 These gloves work in integration with the Kanban system and speed up assembly processes. The Kanban system is a method that optimises the flow in production processes and reduces unnecessary stocks.

03 Gloves provide feedback to workers during assembly, ensuring that the right part is used at the right time and in the right place. This contributes to both accelerating work processes and increasing product quality.

04 TIM smart gloves work in integration with this system, enabling faster and error-free work in assembly processes. Thus, our smart gloves are at the forefront of a transformation that raises productivity and quality standards.

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FLAWLESS SEAT MANAGEMENT OPERATIONS

In automotive assembly processes, seat assembly is characterised by its complexity and precision. Our smart glove IWO and the image processing technology used by Mercedes-Benz have revolutionised this area.

IWO precisely detects whether each part is correctly positioned on the seat assembly lines. Equipped with cameras and sensors, the system analyses every step in the assembly process in real time.

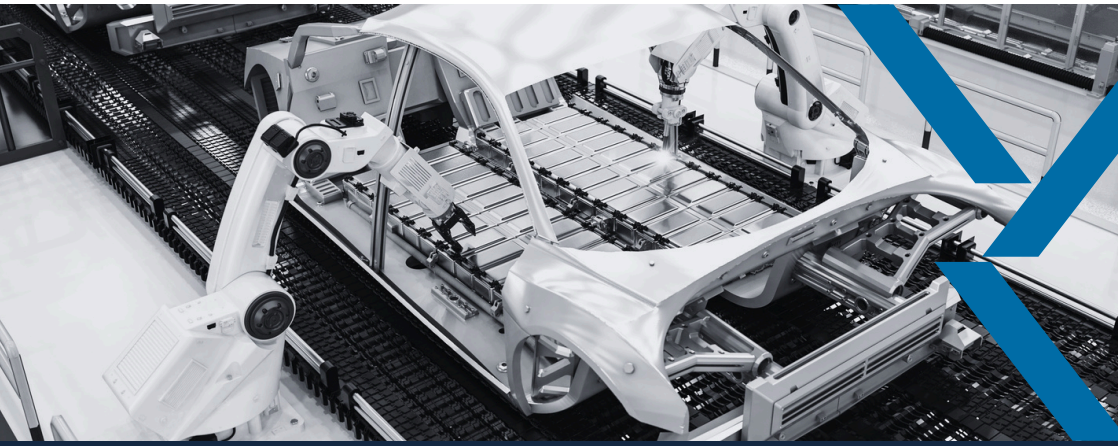
This is a major step in both preventing manufacturing defects and improving product quality. This co-operation with Mercedes-Benz increases passenger safety, prevents financial losses and protects brand reputation.

INNOVATION IN SEAT BELT INSTALLATION

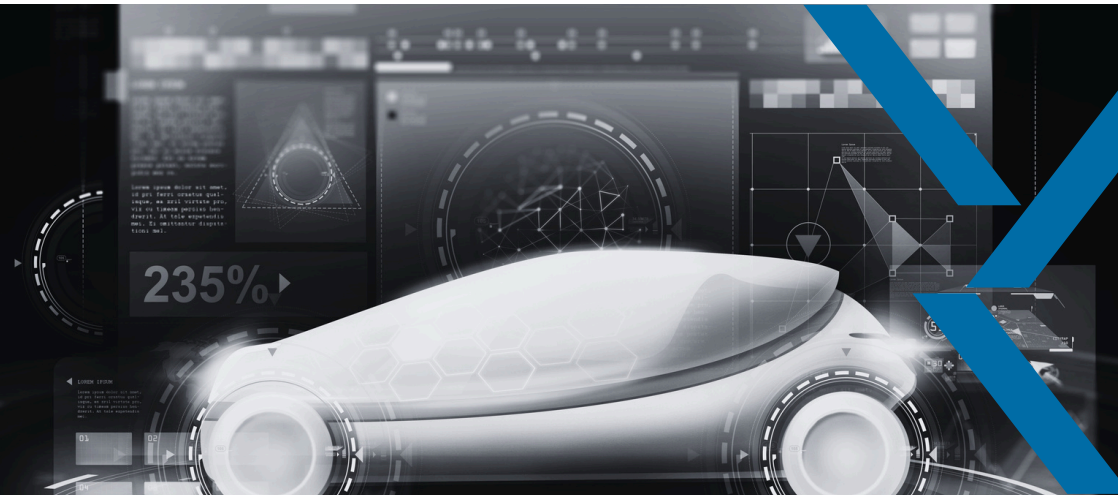
Seat belt assembly is one of the most critical parts in automotive. In this process, the correct installation of the sockets requires precision. IWO technology has been specially developed to overcome challenges such as socket detection in the installation of seat belts.

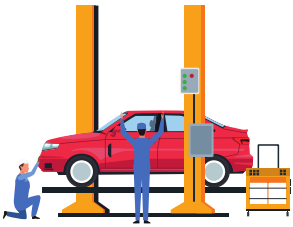
IWO can detect whether sockets are correctly positioned during assembly. It enables the detection of fine details that are difficult to detect with visual or manual checks, especially in noisy and busy production environments.

For Mercedes-Benz, the use of this technology has not only increased passenger safety, but has also saved millions of dollars by avoiding additional costs such as recalls and warranty costs.



VISION FOR THE FUTURE





This success story demonstrates how TIM technologies are revolutionising the automotive industry. Our collaboration with Mercedes-Benz is an example that reinforces our leadership in the industry and lays the foundation for future innovations.

Constantly evolving technologies and increasing competition in the automotive industry require companies to turn to innovative solutions, which creates new opportunities for technology providers like us. This success story is just the beginning of our ongoing journey of innovation in the automotive industry.

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