



## SMART FACTORY IN ACTION

# VEHICLE IDENTIFICATION

The precise, real-time location capabilities of Smart Factory allowed a leading German automaker to eliminate wasted man-hours and error proof its complex assembly line.

### THE CHALLENGE

To reduce the waste and errors caused by manual vehicle identification on a complex vehicle assembly line.

Not only was the German automaker assembling multiple vehicle models on the same flex line, but it had enabled its customers complete freedom to choose vehicle options at the point of sale. This meant that the production line had to cope with an extremely high level of product variation. The automaker was using a manual barcode scanning process to ensure that the right processes were completed, on the right car body, with the right quality records, but this was time consuming and inefficient. The manual ID process was costing the plant in lost throughput and increased repair volume.

- Manual scanning of each vehicle on the production line was costing the automaker precious seconds at each workstation, time wasted on non-value-added work which was estimated at 5% of the overall takt
- Mistakes and inefficiencies were occurring, as there was no way to be certain that the vehicle barcode scanned was the same vehicle that got worked on

### THE SMART FACTORY SOLUTION

Ubisense Smart Factory automated the vehicle identification process, completely eliminating the cost and waste associated with barcode scanning.

The Smart Factory system digitized the German automakers' assembly line, creating a virtual 'bubble' around each vehicle as it moved through the plant. Using precise, real-time spatial monitoring Smart factory enabled the tools at each station to be automatically configured and controlled.

With this in place, Ubisense Smart Factory not only eliminated the need for time consuming manual scanning, it also ensured that the errors previously resulting from that process were impossible – the tools would only activate when the correct car model was in the station.

### THE RESULTS

- 1 By reducing such a significant chunk of waste, the automaker was able to decommission several workstations – instantly cutting the cost of that infrastructure
- 2 With a shorter line, the car manufacturer created space for additional processes, enabling it to cope with the evolving demand for product variation within a fixed plant footprint
- 3 The Smart Factory automatic tool configuration and poke-yoke reduced the number of vehicles in re-work, improving quality and profitability at the plant

