



SMART FACTORY IN ACTION

THIRD ROW SEAT

Ubisense Smart Factory has enabled a German luxury automaker to add a third row seat process, spanning three existing process stations.

THE CHALLENGE

How to fit two safety critical processes into a line without building two additional workstations.

A German luxury automaker assembles multiple vehicle models on the same line. However, one of the models is produced much less frequently – accounting for only 1 in 10 cars on the line. The low volume car is the only model that requires a 3rd row seat.

The car seat has two safety critical fastenings, one that secures the seat to the floor and one for the seatbelt mount. The seat fastenings have a direct impact on passenger safety, and are therefore subjected to an extremely high level of quality control. These processes each required a workstation on the production line, which meant the line had two workstations that 90% of the vehicles didn't need.

- There were significant costs associated with running the assembly line conveyor through two largely redundant workstations
- Valuable floor space in the plant was being lost to the extra workstations, reducing production capacity

THE SMART FACTORY SOLUTION

Smart Factory has enabled the German luxury automaker to overlap the 3rd row seat fastenings with other processes.

The Smart Factory system digitally mapped the automaker's assembly line, and created a virtual workstation that spans three physical zones on the factory floor. This allows operators to use cordless tools that automatically activate when they come into contact with the relevant vehicle. So a worker can now climb into a vehicle and complete the processes on the 3rd row seat as the car moves through three other assembly stations.

THE RESULTS

- 1 Smart Factory has accommodated extra safety critical processes with no impact on the rest of the line.
- 2 The cost and burden of two largely redundant workstations has been eliminated.
- 3 The luxury automaker retains full quality control.
- 4 Smart Factory digitally enabled tool activation, tool setting control, elimination of operator error and quality record-keeping for two safety critical processes.

