Case Study | Car Tracking and Distribution

Car Manufacturer AUDI Rolls out RFID in the Vehicle Logistics in Plants Worldwide

Background

At the AUDI AG production sites, scattered parking spaces and a changing infrastructure lead to high expenses connected to the search of the vehicles due to vehicles not allocated to production lines. A lack of transparency regarding the use of the parking spaces and the existing control processes have been labour-intensive and costly due to several system and material failures.

For this reason, AUDI AG opted for a standardised concept for vehicle tracking at all production locations.

Solution

To optimally meet the requirements, Audi used the latest generation of RFID readers from Kathrein Solutions. When the vehicle passes an RFID reader, the ID number of the transponder of the corresponding vehicle is detected and transmitted together with the direction recognition to the back-end system. The CrossTalk software, which is installed on each reader, interpretes the reading events, filters unnecessary data or incorrect readings and forwards the relevant information to the IT systems.

At the same time, the CrossTalk software manages and monitors the condition of the RFID hardware and reading points. The RFID detection takes place in the factory parking lots and in the assembly production areas. When parking a vehicle, the driver can also use a hand-held reader to read out the vehicle’s transponder and manually read or correct the parking space. At some locations, it is also possible to capture the GPS coordinates and report the exact position of the vehicle to the IT systems.

Result

Since the system has been placed into operation at several production plants, the transparency of the vehicle management processes increased significantly, leading to a considerable reduction in time required for locating a vehicle and an optimal use of the available resources and parking spaces. Due to the elimination of manual scanning processes, it was possible to reduce the processing times and make work processes more efficient.