

Benefits of RFID & RTLS Solutions for Automotive Manufacturers

Whether it be tracking individual parts, tools, or completed vehicles, implementing solutions like RFID & RTLS throughout the automotive manufacturing process provides more visibility, improved operations, and increased efficiency.

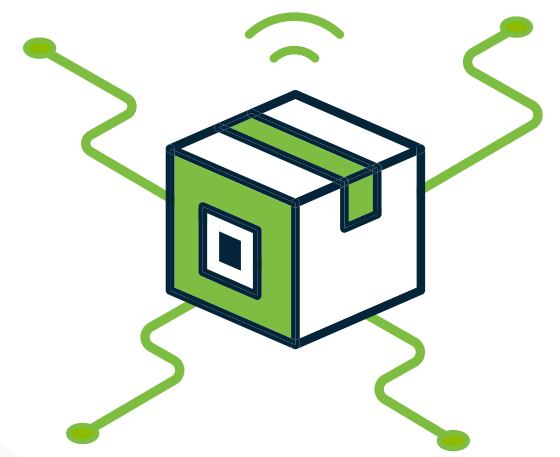


The average car consists of 30,000 parts sourced from suppliers based all over the globe.¹ The COVID-19 pandemic has revealed how interconnected the global supply chain is, and tracking all of these shipments of components poses significant challenges for manufacturers. This is why RFID & RTLS solutions are commonly used by automakers for all steps throughout the manufacturing process.

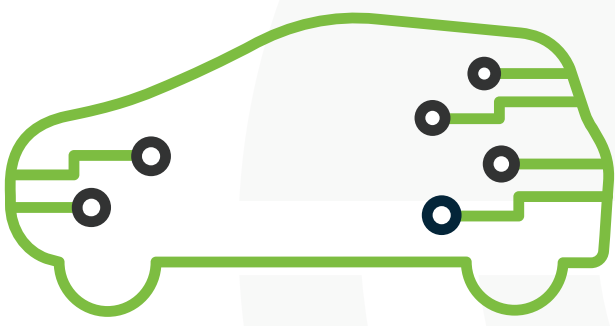


1 Outbound & Inbound Inventory

RFID and RTLS helps auto manufacturers ensure all necessary components are received and accounted for in the correct quantities by tracking all shipments from various suppliers. This real-time location data can integrate with an existing eKanban system to ensure a precise inventory flow and minimize buffer stock.



2 Vehicle Staging & Final Assembly



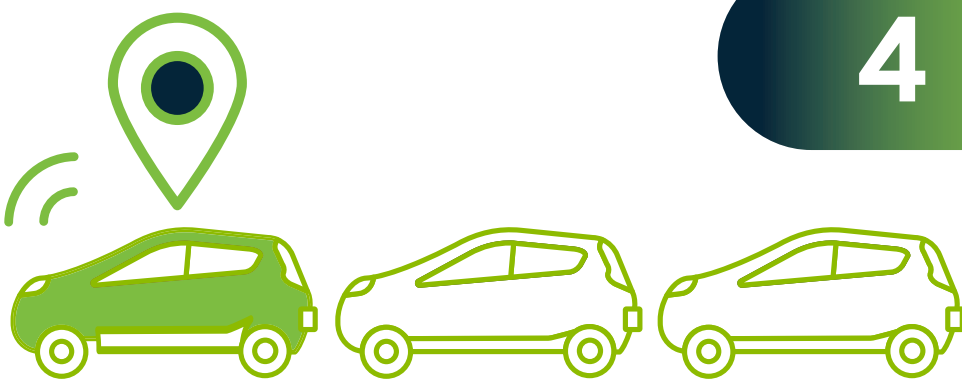
Manufacturers can use RTLS in conjunction with RFID tagged parts, tools, and trolleys during the staging process or in final assembly for specific vehicle configurations. This streamlines the process of directing the correct components to their designated model assignment and reduces errors.

3 Parts/Tools Tracking

Auto manufacturers invest a lot of money in using state of the art, specialized tools. By tagging parts and tools, an RTLS can gather data signals from reader antennas to triangulate a precise location using signal speed calculations. This enables manufacturers to reduce downtime and prevent theft or misplacement.



4 Vehicle Tracking



Manufacturers can also assign RFID serial numbers to a car's vehicle identification number (VIN) to quickly retrieve in-depth vehicle history.

Alternatively, an RTLS locating infrastructure uses tags and anchors to track vehicles across an entire facility and is able to locate any number of vehicles simultaneously.



Did you know?

According to Auburn University's RFID Lab, the precise inventory location information provided by RFID can increase inventory accuracy averaging up to 99%.²

Now more than ever, RFID can benefit auto manufacturers' ability to improve their business operations through increased accuracy and greater visibility on the manufacturing floor.

Get started today by contacting one of our RFID experts!

¹ <https://collectorsautosupply.com/blog/how-many-parts-are-in-a-car/>

² <https://rfid.auburn.edu/wp-content/uploads/2021/02/ITRI-WP067-0306.pdf>