



ATS CUSTOMER STORY

TOYOTA

Product Quality Enhanced at Toyota
by Implementing ATS Inspect



TOYOTA

Industry

Automotive

About Toyota

Toyota Motor Corporation is a Japanese multinational automotive manufacturer headquartered in Toyota City, Japan. Toyota is the largest automobile manufacturer in the world, producing about 10 million vehicles per year.

Toyota's Business

Manufacture and sale of vehicle bodies and components for passenger cars, commercial vehicles and special-purpose vehicles.

Location

Worldwide



Challenge

Toyota's objectives were to record and report every single defect, in real time, and alert Quality Managers when serious issues arise by email and SMS.



Approach

Implementing ATS Inspect at several vehicle inspection cells including drum test, wheel alignment, shower and customer satisfaction.



Solution

Comprehensive analysis of existing and new models by producing actionable reports. Improvement in overall quality of assembly operations.



Results

Increase in defects identified in-house and reduction in quality defects and errors per month.

20x Increase in defects identified in-house

85% Reduction in quality defects

90% Reduction in average errors per month

About ATS

ATS Global is The Independent Solution Provider for Smart Digital Transformation. Since 1986, ATS has been raising the digital maturity of manufacturers through its Smart Manufacturing / Industry 4.0, Industrial Automation, manufacturing IT, Quality and 24/7 support services and solutions. The continuous improvement initiatives delivered by ATS succeed through the targeted achievement of tangible business value for customers world-wide.

Challenge

Toyota needed a solution to raise the number of vehicles being manufactured without defects (Straight Through Ratio). They wanted to achieve this by:

- Recording and reporting every single defect in real time.
- Immediately informing Quality Managers when serious issues need to be addressed.
- Displaying KPIs on the plant floor.
- Delivering full traceability of every unit, through its entire manufacturing life-cycle.

They were able to achieve this with ATS Inspect.

Approach

By implementing ATS Inspect it was easy to feedback information to operators and management alike in real time. This means that management can review the defect trends and prioritize resources accordingly while the operators can drill-down into the information to see exactly where problems are occurring, allowing them to react immediately to any issues. The data collection system also needed to remove paper where possible and provide KPI reporting to the plant floor.

Solution

Using ATS Inspect, Quality operators were able to inspect the vehicle and record any defects using a touch screen. This is a paper-less data

collection system and a large wall projector installed in the assembly control room provides real time feedback.

Quality Managers are alerted by email when serious issues arise. Any vehicle with defects that cannot be repaired in the inspection station is moved to the Hanedashi area.

Result



20x Increase in defects identified in-house



85% Reduction in quality defects



90% Reduction in average errors per month

- Removed all paper in the Quality Control Division
- Reduced the number of resources involved with quality data gathering and reporting (retrained and moved in organisation)

Toyota won the Manufacturer of the Year Award at this manufacturing plant as a direct result of using ATS Inspect for one and a half years.

The graph below shows the number of defects found over time after implementing ATS Inspect at Toyota. The first major change was that they were able to identify, record and collate many more defects than they had previously. Using the analysis tools within ATS Inspect they were then able to identify and address the root causes which lead to a dramatic fall in the number of defects.

