



Ensuring Safety through Standard Quality at World Leading Automotive Brake Pads Manufacturer

Quality Variations can Lead to Safety Issues

With the objective of penetrating the Asian market, a world leading automotive parts manufacturer with several plants in Europe and North America acquired a new manufacturing plant in China.

Soon after production commenced, **quality variations** were identified in the brake pads manufactured in that region, raising **safety concerns** and causing **returned orders, re-work, increased cost, and wasted time**.

One of the major causes of this problem was that product **recipes were stored locally** in the control system of each machine, allowing modifications to be made without following the master recipe.

In order to solve this issue, the automotive parts manufacturer turned to **Real Time Systems (RTS)** to develop a solution to help them **ensure a consistent level of quality** for their finished product, **regardless of which global region** the parts are manufactured.

RTS High Speed Data Collection System

The software solution provided by RTS, **monitors all operational parameters** of the assembly machines and data logs readings such as temperature, pressure and speed, recording them **every 100ms**. This detailed data is used to trace and determine the cause of quality variations in the final product.



This solution can be used to root out the cause of quality variations over time for a **single machine or between machines making similar parts in separate continents**, resulting in a uniform level quality for the finished goods.

To achieve **consistent worldwide quality**, the solution needed to be adaptable and address different manufacturing environments in multiple global regions. This included a greater use of **Radio Frequency Identification Tags to track the movement of production materials** in low labour cost manufacturing regions, where hand balancing of production materials is much more prevalent.

