

Case Study Automotive Industry

Quality Control for Automotive Catalytic Converter Canning

"The deployment was done in a timely manner, with no disruptions and to a standard even higher than requested. Throughout our entire collaboration, Inea's team showed commitment, persistence, and excellent problem-solving skills."



— Global Core Competency Team Leader

The customer.

The customer is a global automotive components manufacturer with almost a hundred manufacturing locations all over the world. Their emission abatement segment produces complete emission control systems for the transport industry.

Part of such systems are catalytic converters and diesel particulate filters (DPFs) that must follow strict regulations to reduce the amount of harmful greenhouse gas emissions produced by internal combustion engines.



The challenge.

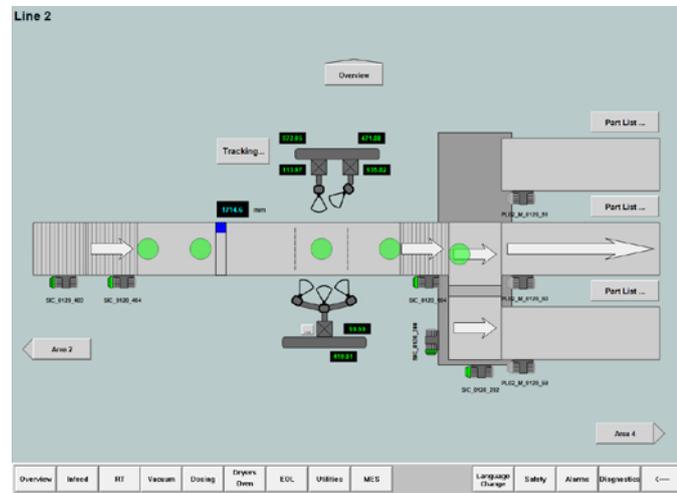
At one of their new manufacturing plants, we had to develop, integrate, and test a new quality control system for the production of catalysts and diesel particulate filters. The customer needed an in-line quality control system that would provide trackable data about the parts that were going down the rest of the production line where the catalytic converters / DPFs would be further processed.

Since emission control equipment is both fragile and has to adhere to high quality standards, the customer needed a non-invasive quality control system that could inspect every single part.

The solution.

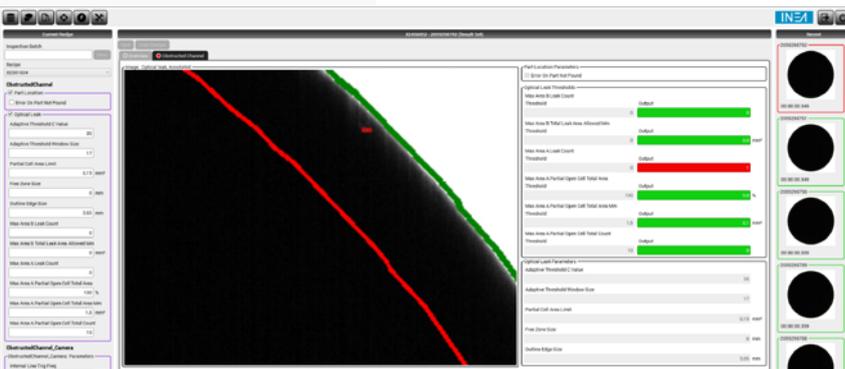
Using AVEVA™ System Platform, we developed a system for visual inspection of parts, data tracking, and proper sorting of parts.

As the next step in the process after quality control, the parts were automatically sorted between OK and NOK based on thresholds requested by the customer. The appropriate parts were then sent down the production line along with information on their quality.



The ability to store and track large amounts of information was needed for the development of the operator interfaces in AVEVA™ InTouch OMI.

The most important information that we sourced from our own visual inspection software was available on the main screen, while detailed information about specific parts could be reached on demand.



The results.

The solution was successfully commissioned and noted as "even better than requested" by the end customer's auditors. They were also impressed by the inspection methods themselves and the overall integration into the rest of the production line.

Since then, the line has processed thousands of catalytic converters, intended for use in the exhaust systems of new high-end cars of a globally reputable brand. Each part was checked for imperfections and sorted in an average time of just seven seconds.