ACC

Automated Control Concepts
Smart solutions.

HIGHLIGHTS:

- Utilize TrakSYS® to increase traceability and visibility into a highly uncertain remanufacturing process.
- Track where each product is throughout the process.
- Keep a real-time inventory of parts.

ACC works with a car remanufacturing facility to increase efficiency and improve traceability.
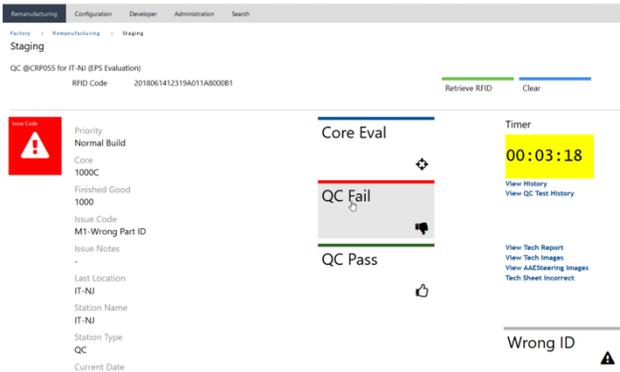
THE STARTING POINT

In a car remanufacturing facility used products are first manually disassembled into what is called "cores" that are disassembled parts or components. CRP uses these cores for steering racks and pumps. A typical remanufacturing facility consists of a warehouse for receiving and shipping, extensive cleaning equipment, inspection/assembly cells, and core salvage cells.

THE CHALLENGE

A high degree of uncertainty and variability characterize remanufacturing process times. Over 80% of the product to be remanufactured has an unknown status if it can be remanufactured via cycle time balanced MFG lines. After inspection, the cores are split into three groups: reusable, remanufacturable and material recoverable. The remanufacturable cores go through varying processes necessary for their recovery. These variables made it difficult to know where each customer's order was in the process.

PROJECT GOALS

The main goals for CRP were to improve traceability, visibility, quality, and throughput. Utilizing TrakSYS®, ACC implemented the use of RFID tags. The RFID code tracks each core as it goes through the various processes of remanufacturing. The system will store background meta-information (who was the operator, how much time was spent, etc.) and context aware access information (tech build sheets and specifications). The system interacts with the operator by dynamically changing commands based on location and part context. A complete genealogy of the part is maintained in the system.

IMMEDIATE RESULTS

The combination of RFID tracking, process mapping, and TrakSYS interfaces helped accomplish significant time savings. Real-time feedback on inventory status at each work cell to TrakSYS and ERP lead to increased process visibility. Knowing immediately from each core evaluation station if a part would be built or scrapped lead to better inventory control, which also kept track of the parts on hand for future rebuilds.