

Driving Greater Efficiency Through Real-Time Data

How we helped CRP Automotive use real-time data to increase efficiency and improve traceability

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AUTOMOTIVE PARTS

Auto Parts Remanufacturing Done Right

We help CRP Automotive use real-time data to increase traceability and visibility into a highly uncertain remanufacturing process.

CRP Automotive is a business unit of CRP Industries, a veteran-owned family business that has been in continuous operation for more than 60 years.

What was once a small company offering about 200 sizes of German-manufactured tires to North America is now an industry leader that provides thousands of products to the automotive sector.

They reached out to InflexionPoint for help improving operational performance at their facility that remanufactures steering components.

A Complex Process That Requires Scrutiny at Each Step

Car remanufacturing involves several steps and significant uncertainty regarding the quality of the used parts that it takes in to remanufacture.

For this reason, a typical remanufacturing facility consists of a warehouse for re-

ceiving and shipping, extensive cleaning equipment, inspection/assembly cells, and core salvage cells.

Used products are first manually disassembled into what is called "cores" that are disassembled parts or components. CRP uses these cores as a basis for 'new' steering racks and pumps.

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.

Challenges

- Complex process lacked visibility and control
- Company wanted to maximize efficiency

Solution

- 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
- Connect to ERP, to ensure coordination with other business units

Results

- Significant time savings in inspection process
- Real-time inventory status ensures better planning and forecasting

Gaining Visibility and Control

The main goals for CPR were to improve traceability, visibility, quality, and throughput. Utilizing TrakSYS®, Inflexion Point 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.

The 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.

