



RFDC SYSTEM PUTS AUTOMOTIVE SUPPLIER ON THE RIGHT ROAD

GKN AUTOMOTIVE, INC.

MEBANE, NORTH CAROLINA



industry

MANUFACTURING – AUTOMOTIVE

applications

INVENTORY CONTROL · SHIPPING/RECEIVING

situation

GKN Automotive is best known for introducing and supplying new constant velocity joints (CV joints) to the automotive industry, including manufacturers such as Ford, Toyota and Honda. GKN employs several hundred people at five manufacturing and warehousing sites in the Southeastern U.S., and has a technical center in the Detroit, Michigan area.

critical issue

GKN's patent on the manufacture of CV joints recently expired, and the company was concerned about increased competition from fledgling competitors. Therefore, the first critical issue was the desire to maintain market share by increasing customer satisfaction with regard to product delivery. Secondly, GKN was under pressure from certain customers to improve its traceability on specific manufactured lots. A third issue was that GKN realized it had problems with inventory accuracy: one internal audit revealed an accuracy level of only 60% for actual warehouse and factory stock compared to what GKN's inventory records indicated was in stock. Because GKN was frequently overstocked, this raised the company's cost of doing business.

reasons

The issue of customer satisfaction was driven by concerns about losing market share. Lot traceability was driven by the need to efficiently execute product recalls. If defective CV joints were discovered, the automobile manufacturer wanted GKN to be able to quickly identify which lot included defective CV joints, so that they would only have to recall a specific lots of vehicles, perhaps 5,000, rather than a massive recall of 50,000 or 100,000 vehicles. Finally, the issue of overstocking was driven by the fact that GKN was using a paper-based system with the inherent inaccuracies of clerical and data entry errors.

vision & capabilities

GKN wanted to efficiently track everything — from the reception of raw materials, through manufacturing, to the shipping of finished goods — and do it in real-time, rather than wait for the data to be periodically updated. GKN wanted the new system to encompass receiving; inventory movement (both within a warehouse as well as from site-to-site); location inquiry for parts picking; work-in-process; electronic Kanban for getting parts to the production line; interplant shipping; customer shipping; and physical inventory at all sites.

intermec solution

Intermec business partner, Tobin & Associates, installed a wireless data collection network at four manufacturing plants which allowed for the interaction of Digital Equipment Corp's CA/MANMAN software running on a DEC VAX host. The plants use Intermec MODEL 9450 Vehicle Mount Units on forklifts, JANUS™ JR2020 Hand Held Computers with built-in scanners, and JANUS™ J2050 Vehicle Mount Computers, Network Controllers, and MODEL 3400 Direct Thermal/Thermal Transfer Printers.

benefits

GKN has realized the following benefits:

- System payback in the first six months, while satisfying automotive customer's lot traceability criteria;
- Inventory reduction of 25%, as the company no longer overstocks popular models;
- Inventory accuracy of 99%, compared to the previous level of 60%;
- Increased productivity of material handlers; and
- Labor savings from a reduction in force.

