



STARTING THE ENGINE

About Tranco—Tranco Logistics (Tranco), a leading third-party logistics (3PL) provider in Chattanooga, TN plays a critical role in the assembly process of a major automotive manufacturer. In the automotive production process, every part must arrive at the right time, and in the right order. Any misstep halts production, leading to costly downtime and operational headaches.

Tranco's role is in precision logistics. From staging to the automotive assembly line, their team ensures parts are in sequence for a seamless workflow. Their old WMS (warehouse management system) caused major bottlenecks, leading them to search for a better solution.

ROADBLOCKS ON THE SUPPLY CHAIN

Before partnering with Barcom, Tranco was relying on manual methods to track the sequence of automotive parts. Employees handwrote part numbers, transport details, and timestamps on paper logs—a method prone to human error and inefficiency.

KEY CHALLENGES



Potential for Errors–Manual processes increased likelihood of out of sequence parts, tracking errors, and data entry mistakes.



Costly Downtime—If parts arrive out of sequence, production halts until resolved, costing Tranco thousands of dollars in fines and delays.



Feature-Limited WMS—Tranco was outgrowing their existing WMS. They considered upgrades and custom modifications but were too costly to undergo.



Migrating Users—Workers were comfortable with the manual tracking process and expressed hesitation in switching to an automated system.

With **80% of their downtime** attributed to sequence errors, Tranco needed a modern, automated solution that would eliminate errors, reduce costs, and keep production moving.

TURBOCHARGING EFFICIENCY

How Barcom Engineers the Perfect Solution—To eliminate operational roadblocks, Barcom implemented a state-of-the-art barcode scanning and transaction-based tracking system. This included a combination of data collection hardware and custom software to accommodate Tranco's requirements. This consisted of:

Honeywell CT45XP Rugged Handheld Computers (pictured above)–These rugged mobile computers allow workers to quickly and accurately scan barcoded parts. Honeywell's FlexRange™ scanning technology allows workers to scan barcodes from close range to over 30 feet away, making it ideal for verifying parts from a distance—whether they are stacked on high shelves or loaded onto transport racks.

For Tranco, the CT45XP eliminates the inefficiencies of their old, paper-based tracking system, reducing human error and preventing costly mistakes. Its fast-processing capabilities ensure each scan instantly communicates with Barcom's Transaction™ software, verifying



sequences and triggering alerts if an error is detected. Real-time validation is critical to prevent mis-sequenced parts from shutting down the assembly line, saving Tranco thousands in potential downtime costs.

HOW IT WORKS

- **Scan** the Cart Workers scan a rack of parts to verify that it is the next rack in the sequence.
- Scan the AGV If the part is side-specific, the operator scans the AGV (Automated Guided Vehicle) after scanning the rack to ensure the correct side for that part is being loaded on the correct AGV.
- Automated Error Detection If a part is misplaced or out of sequence, the system instantly alerts the worker at the time of scan, before it is loaded to go to the line.
- Seamless Integration with AGVs The system ensures that the delivery vehicles transport the correct sequence of parts, avoiding costly production errors.

SHIFTING INTO HIGH GEAR

ROI and Real Results—The results of Barcom's solution were immediate and dramatic for Tranco. Here are a few of their Key Performance Improvements:



Reduced Downtime—Sequence errors, which had previously been Tranco's biggest issue, are reduced by two-thirds.



Major Cost Savings–Tranco achieves a 40% return on investment within the first year, primarily by eliminating downtime and significantly reducing operating errors.



Faster, More Reliable Operations—The automated barcode system reduces the time spent on manual logging and error corrections, allowing workers to focus on higher-value tasks.



Streamlined Production & Compliance—With fewer errors and real-time tracking, Tranco ensures compliance with production demands, improving their reputation and reliability.

CUSTOMER TEST DRIVE

Tranco was impressed by Barcom's dedication, service, and hands-on approach. "The service from Barcom has been outstanding," said Tom Harwood, VP of Warehouse Operations and Quality at Tranco Logistics. "They were there from start to finish, working alongside us, training our team, and ensuring everything ran smoothly. The improvements they've helped us achieve have been extremely valuable to our business," said Harwood.

FINAL LAP: KEY TAKEAWAYS

Implementation and Benefits of Real-time Tracking and Automation

Real-time Tracking & Barcode Verification

Prevents costly mistakes

Prevents costly mistakes and ensures parts arrive in sequence Partnership with Barcom

Provides smooth implementation and continuous support

Achieving Positive ROI

Tranco achieved a positive ROI in under 12 months

Automating Manual Processes

Eliminates human error and significantly reduces downtime

Tranco started with a bumpy road, but with Barcom's help, they are now cruising toward a future of optimized efficiency, reliability, and cost savings.



Ready to drive your logistics into high gear?

Outdated tracking methods slowing you down? Then it's time to shift gears to Barcom's inventory tracking and management solutions to keep your production running at full throttle. Contact us today and take control of your supply chain efficiency.









