

CASE STUDY

Wireless Temperature Tracking for Trailers Helps Improve Productivity and Reduce Spoilage for Dot Foods



Background

Dot Foods is the largest food service redistribution organization in North America, offering more than 134,000 products from 1,000 manufacturers. Dot's hub-and-spoke model enables the company to deliver less-than-truckload quantities to distributors nationwide on a weekly basis. This model translates to availability of a wider variety of products, reduced supplier costs, and faster delivery times. Across the country, Dot has more than 3.7 million sq. ft. of warehouse space.



AT A GLANCE

Background

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Challenges

Dot needed a solution that would enable them to closely monitor setpoint temperatures in its refrigerated trailers. Dot had monitoring in place, but the equipment was unreliable, leading to costly inefficiencies.

Solution

A GPS refrigerated trailer monitoring system that integrates with broader fleet management, regulating and maintaining ideal temperatures in refrigerated trailers via a wireless monitoring system.

Results

Improved productivity of workers with more reliable equipment. Reduced cargo waste and driver downtime by eliminating manual processes.



Challenges

As the demand for ever-faster shipping and delivery grows, distributors are eager to find ways to get products to customers in less time, while eliminating costly product damage and waste that erodes profitability. For cold chain suppliers, this means ensuring that perishable products are consistently kept at appropriate temperatures while in transit.

The freezer mounts of refrigerated trucks often experience variations in temperature, putting the safety of perishable loads at risk. Dot needed a solution that would enable them to closely monitor setpoint temperatures, as well as humidity and airflow. At the time of their outreach to Barcoding, Dot had monitoring in place for its fleet, but the equipment was unreliable, leading to costly inefficiencies as workers frequently had to reboot the system for proper functioning.



Solutions

Dot, already a Barcoding customer, turned to our team to help identify an intuitive and highly reliable solution offering real-time transparency into trailer climate control. The solution would be implemented at Dot's greenfield distribution center in Delaware, after a trial at another facility.

Barcoding identified a Honeywell GPS refrigerated trailer monitoring system that integrates with broader fleet management, regulating and maintaining ideal temperatures in refrigerated trailers via a wireless monitoring system. The equipment records

temperatures throughout the course of the route and alerts the driver and the carrier when it fluctuates above or below set thresholds.

Wireless sensors relay climate data to software customized specifically for Dot; the software sends the data in real time to a dashboard that's accessible 24/7 on computers and mobile devices. Features of this complete trailer tracking system include:

- Monitoring of temperatures in multiple compartments simultaneously
- Monitoring when external power is disconnected, sending GPS and temperature data at regular intervals
- Tracking of pickup/drop-off, location, last location

Barcoding supported the launch and ongoing performance of the solution by establishing the process for using the equipment and generating insights from the data.

Results

Troy Schenk, Dot Foods' Director of Automation, believes that Dot was able to build a better facility because of Barcoding. "Our greenfield project was a success in large part because of the monitoring technology Barcoding recommended and set up. We're seeing a real boost in productivity because our people aren't slowed down by equipment that's cumbersome and unreliable. Having seen the accuracy and reliability, we're now eager to roll this out to more of our facilities."

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— **TROY SCHENK**
Dot Foods' Director of Automation

In addition to productivity improvement, the Barcoding solution is helping Dot comply with cold chain transport codes (such as the U.S. Food Safety Modernization Act, or FSMA) and food safety regulations – and avoid any associated fines. Dot is also realizing these benefits since implementing Barcoding's solution:

- Properly maintained temperatures within trailers has decreased cargo waste and resulted in fewer rejected/spoiled loads
- Because manual temperature monitoring is eliminated, driver downtime and costly idling have decreased significantly
- Setpoint temperature consistency is leading to streamlined handoffs and minimizing the time trailers spend at loading docks; this improved utilization, turn times, and tractor-to-trailer ratios are expected to improve profitability

About Barcoding, Inc.

Barcoding is a supply chain automation and innovation company that helps organizations be more efficient, accurate and connected. With extensive subject matter expertise in data capture, labeling and printing, and mobile computing, we are trusted to build and manage solutions for some of the best IT and operations teams in the world. Founded in 1998, Barcoding is headquartered in Baltimore, Md., with offices across North America (Chicago, Houston, Seattle, Montreal, Toronto and Vancouver). For more information, visit www.barcoding.com.