



## ZEBRA CASE STUDY

# RFID Helps Tennessee Pride Ease the Grind of Sausage Making & Compliance

### Challenge

A secret recipe of spices sets sausage-maker Odom's Tennessee Pride apart from its competitors. Its logistics operations set it apart from many other companies that need to provide RFID shipping labels to comply with customer requirements.

"We couldn't take the slap-and-ship approach to meeting our RFID mandate requirement," said Mike Hader, director of information technologies at Odom's Tennessee Pride. "Our processes required that we apply RFID tags in a real-time, in-line process in our plant."

Tennessee Pride uses a dedicated cold-storage third-party-logistics provider to distribute its products to retail customers. The 3PL did not have any RFID capabilities, which required Tennessee Pride to develop its own system to tag cases and cartons before they were transferred to the 3PL.

"We investigated, and found it would cost us more in the long-term to outsource our RFID labeling. We knew it was best to bring RFID capability into our plant," said Hader. "We were interested in using RFID not only to meet the mandate, but also to improve our own processes."

That brought a new set of challenges, because plant operations were already highly automated and efficient, so the RFID system had to fit in without slowing things down. Tennessee Pride runs production for two shifts, then tears down and cleans its lines during the third. The lines are in constant use, so there is no time available to shut down to test and troubleshoot RFID configurations.

"We looked for a partner who could provide a reliable, scalable system and bring in vendors with world-class capabilities to fit into a large-scale IT infrastructure and cause minimal change to the processes we already had in place," said Hader.

### Solution

Rush Tracking System provided the integration and engineering expertise, and relied on Zebra Technologies to provide world-class, reliable and integration-friendly RFID printer/encoders.

Rush integrated Zebra's R110XiIIIPlus™ printer/encoders and RFID middleware from OATSystems into Tennessee Pride's production lines and industrial control system. The system passes data from Tennessee Pride's ERP applications to an R110XiIIIPlus on the production line, which generates a carton label with bar code and human readable information plus an EPCglobal Gen 2-standard RFID tag. An automated applicator from Weber Marking Systems applies the smart label to the moving carton at production speeds.

"This system is unusual because it can handle regular orders that are interspersed with orders that require RFID labeling," said Toby Rush, president of Rush Tracking Systems. "We used enterprise-class components to get the speed, scalability and reliability Tennessee Pride needed for its highly automated environment."

After cartons are automatically labeled, the legacy conveyor and industrial control systems route them to the appropriate palletizing station. Once the pallet has been robotically stacked and wrapped, workers use a cart-mounted R110XiIIIPlus to produce the pallet label, which is hand-applied. Labeled pallets are then brought through an RFID portal reader from Motorola for order validation prior to releasing them for shipment.





“The printer/encoder integration went very smooth because Zebra is such a well-known standard,” said Hader. “Practically everybody—production control systems, industrial controllers, software—talks to Zebra® printers. There is more interface support for Zebra than you find for lesser-known brands, which helped our integration.”

**Results**

Tennessee Pride met its goal of compliance without compromise. Legacy operations continue to run as quickly and efficiently as before, and the RFID system is running even more smoothly than Hader expected.

“With Rush Tracking as our partner, we were able to develop a strategy that let us implement the technology with minimal downtime to our operations and create a scalable system that is friendly to our operations and to our users in the plant,” he said. “The Rush team did a great job on system engineering and in bringing all the components together, and the Zebra printers have done a tremendous job for us.”

Tennessee Pride is also meeting its goal of using RFID to improve operations.

“One of the ways Tennessee Pride attempts to be a leader in food safety and quality is through our use of technology. We are using the data we get from our RFID system, and we are always looking for ways we can improve our processes and the technology that our processes depend upon,” said Hader. “We find that RFID is a great benefit.”

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