Satisfying customers and optimizing business efficiencies with EPC-enabled RFID

**Challenge**

At Macy's request, Herman Kay was asked to tag all outerwear with RFID hangtags. But the company did not stop there; instead, it decided to implement the new technology in ways that benefitted its own operations.

**Solution**

Taking a customer-first approach, Herman Kay partnered with GS1 US and several solution providers to implement Electronic Product Code (EPC)-enabled item level RFID (EPC-RFID): first in its order checking processes, next at weigh stations and finally in its distribution center (DC). Process improvements in outbound shipments followed, integrating the EPC, GS1-128, Serial Shipping Container Code (SSCC) and Advanced Ship Notice (ASN) for complete item visibility.

**Benefits**

Herman Kay can now efficiently verify the accuracy of its shipped orders by scanning each garment's EPC-RFID hangtag at each step of the fulfillment process. With the goal of 100 percent unit accuracy, the company can avoid the costs, labor and time associated with returns and chargebacks. It can now provide an electronic proof of delivery (EPOD), verifying that each carton on a given ASN has been loaded correctly for transport to the appropriate DC or store. With each order's EPOD, Herman Kay is now confident that the right garments, in the right sizes and colors, have been delivered to the right customers.

“Our goal is to be 100 percent error free when it comes to fulfilling orders for our customers. That’s why we started using EPC-RFID to help us verify the accuracy of picked items for orders.”

Richard Haig  
CTO and CIO  
Herman Kay
In Just Four Months

Herman Kay division of Mystic Inc. / LF Outerwear, LLC (Herman Kay) is a third-generation, family-owned business that designs and manufactures under its own label as well as holds the license to manufacture and market coats and outerwear for nine major brands, including Anne Klein, BCBG, DVF, London Fog and Michael Kors.

The company sells its apparel to many of the largest retailers in the U.S. Its showroom and designers are situated in New York City with a DC in Douglas, Georgia and a manufacturing site in the Dominican Republic. Herman Kay also partners with third-party manufacturers to produce some of its outerwear.

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Working with such titans in the retail clothing business, Herman Kay is a strong supporter of the GS1 System of Standards.

“GS1 Standards have been part of our business for many years,” says Richard Haig, CTO and CIO for Herman Kay. “Every major retailer is our customer and without the use of standards, we wouldn't survive as their supplier. We recognize that there are ways to do business and then, there are ways to do it really well. We strive to conduct business really well, because the payback is real—for us and our customers.”

Macy’s asked Herman Kay to tag all of its outerwear with EPC-RFID hangtags for the following fall 2015 season. To expedite the process, Haig selected GS1 US and several solution providers (members of the GS1 US Apparel and General Merchandise Initiative) to help meet the challenge of creating and applying GS1 EPC-enabled item level RFID hangtags at manufacturing sites worldwide. The company also looked to GS1 US for its EPC-RFID implementation educational resources.

“Their (GS1 US) webinars are phenomenal,” says Haig. “We learned about EPC-RFID best practices like tagging items at the source of manufacture.”

Within just four months, Herman Kay was able to 100-percent deliver on Macy’s request for EPC-RFID item level tagging—an impressive achievement.

“We moved quickly and deliberately to implement EPC-RFID in the right way,” explains Haig. “We were also interested in potential opportunities of using EPC-RFID tagging to help our own operation, which, in turn, would further benefit our customers.”

Five Phases of Integration

Herman Kay developed a five-phase plan to integrate EPC-RFID into its outbound processes, beginning with the initial step of picking items.

The majority of Herman Kay’s garments are on hangers, in rows, three or four tiers high in its Georgia-based DC. Using a picking list for each order, employees locate garments and place them on overhead trolleys in multiple areas of the DC for verification.

Before the new EPC-RFID system, employees (called checkers) had to visually compare the coat labels against the picking order to confirm that no mistakes had been made.

“In a warehouse environment where garments are in plastic bags, a black, dark charcoal and even navy blue coat can look the same,” explains Haig. “Our goal is to be 100 percent error free when it comes to fulfilling orders for our customers. That’s why we started using EPC-RFID to help us verify the accuracy of picked items for orders.”

With the new process, checkers now access picking lists on their tablets. The tablets display the garments that should have been picked. Using handheld devices, checkers scan each picked garment’s unique EPC-RFID hangtag. This information is then sent to a server running a solution provider’s RFID inventory management software.

“If a mistake was made in the picking process, the checker is immediately alerted via a red highlight of the item in question,” explains Haig. “Alternatively, a green check mark verifies that the right styles in the right colors and sizes, and in the right quantities were actually picked for the right customer’s order.”

Clearly Demonstrating Accuracy

As part of the EPC-RFID rollout, Herman Kay trained its ten DC supervisors on appropriate scanning techniques, stressing not only “how” to scan, but also, the importance of “why” to scan.
“During our training, several of my colleagues had checked a trolley of 15 coats, scanning without incident,” recalls Ruben Sills. “As I stepped up to scan and check each item, my handheld produced an error message. I knew it had to be a mistake, but it wasn’t. I had not noticed that a garment had been switched out; this ‘training trick’ clearly demonstrated for me, and everyone else, the power of RFID technology to drive accuracy for our business.”

The next phase of RFID integration centered on the process of packing each carton. With this step in the order fulfillment process, Herman Kay once again wanted to eliminate any risk of error.

Today, the packer determines what items will be packed in each carton and packs each carton by style, color, size and quantity. Next, each carton is labeled with a GS1-128 shipping label and the GS1-128 barcode is scanned into the RFID inventory management database. As the carton is physically packed, the EPC from each RFID hangtag is read by fixed scanners.

“The system verifies, first and foremost, that the contents in the carton are correct,” explains Charles Cheeseman, manager of Herman Kay’s DC. “The EPCs are recorded in the inventory system, which compares them with the expected content associated to the GS1-128 barcode for that carton. With this audit, packers get a green check if the items packed in the carton match what was ordered.”

“The next step, the carton’s GS1-128 barcode is scanned, the carton is weighed and then moved across another set of RFID antennas, reading once again all of the items’ EPCs in the carton.”

By scanning each garment’s EPC-RFID hangtag along with the picking list’s barcode, checkers can verify that all the right products, in the right colors and right quantities, have been picked for the right customer.

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Distribution Center Supervisor, Herman Kay

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Getting the Green Light

“As we create an ASN for each customer in our ERP system, the item level EPC information is fed into our inventory system,” says Haig. “This is yet another verification checkpoint since the inventory system contains and recognizes all cartons that were packed and weighed via the RFID packing process. If someone simply labels a carton for shipment without putting it through the process, we get a red flag.”
“With all these steps, we create an electronic proof of delivery for each customer. With our automated RFID system in place, we can now be 100 percent confident that what we pick, pack and transport to customers is exactly what they ordered.”

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Distribution Center Manager, Herman Kay

At the shipping dock, the shipping clerk punches in the ASN number(s). The correct cartons—identified by GS1-128 barcodes—are then loaded onto an outbound truck.

“At the height of our busy season, we may have up to 20 trucks being loaded at the same time,” explains Cheeseman. “As cartons are loaded, their EPCs are scanned to verify that all cartons are accounted for, with the right garments going to the right customer. If there is an issue, we can fix it before all cartons are loaded on the truck.”

“With all these steps, we create an electronic proof of delivery for each customer,” continues Cheeseman. “With our automated RFID system in place, we can now be 100 percent confident that what we pick, pack and transport to customers is exactly what they ordered.”

Haig adds, “Every item’s EPC is captured in the GS1-128 barcode at the carton level, every carton’s GS1-128 is included in the ASN, and the ASN is used to ensure the right cartons with the right products, in the right quantities are loaded on the right truck. Each step of the way we get the ‘green light’ to proceed with the aim for 100 percent accuracy.”

The Might of Right

When considering the impact of the new EPC-enabled RFID processes, Herman Kay points to the tangible benefits for retailers as well as its own business.
“EPC-RFID offers our customers remarkable visibility into their inventory and allows them to know right down to the last piece of inventory, exactly what they have and where it is.”
— Richard Haig, CTO and CIO, Herman Kay
“Herman Kay’s item level tagging gives us the confidence to know that what we ordered is what was received, and as such, enables us to more quickly move products to the point of purchase—whether on the sales floor or digital shelf.”

Scott Prieto
Executive Vice President, Logistics & Operations, Macy’s

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Pam Sweeney, senior vice president of Macy’s MLO Systems & Technology, agrees, “Item level EPC-enabled RFID is a foundational technology for Macy’s. It gives us the inventory accuracy needed to fulfill on our customers’ omni-channel demand.”

William Connell, senior vice president of Transportation, Store Operations and Process Improvement of Macy’s, adds, “Item level EPC tagging allows us to meet the inventory demands of our omni-channel consumers.”

For example, if Macy’s ships six winter coats to Nashville where, due to unseasonably warm weather, they do not sell as briskly as those in New York, a website order can be fulfilled from the Nashville stock, saving potential sales in New York and eliminating return shipments elsewhere.

“I always felt we were great at warehousing and distribution. Yet, with EPC-RFID we’ve become better. It’s really improved our entire operation and made us a better supplier for our customers.”

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Scott Prieto, Macy’s executive vice president for Logistics & Operations summarizes how Herman Kay’s new process ultimately impacts Macy’s operations: “Herman Kay’s item level tagging gives us the confidence to know that what we ordered is what was received, and as such, enables us to more quickly move products to the point of purchase—whether on the sales floor or digital shelf.”

Outerwear, Inner Confidence

As for Herman Kay, the company is focused on both the short- and long-term gains of using EPC-RFID tagging. “EPC-RFID has given us a high level of confidence,” says Haig. “When retailers receive our products, there’s no question about the accuracy of the delivery, because we now have an electronic record of every single item’s EPC code on every hangtag that was on that truckload to them.”

With EPC-RFID hangtags on garments, whether or not a retailer is using the technology, Herman Kay is positioned to immediately comply when the next retailer inevitably adopts RFID. “RFID is an investment, giving us an opportunity to do what we do even better,” says Haig.

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In fact, Haig has already started implementing EPC-RFID technology as part of the company’s inbound processes.

“We’re very good at designing and selling quality products,” concludes Haig. "I always felt we were great at warehousing and distribution. Yet, with EPC-RFID we’ve become better. It’s really improved our entire operation and made us a better supplier for our customers.”

Get Started

For more information on how you can get started with EPC-enabled RFID, visit www.gs1us.org/EPCItemLevelReadiness or email ApparelGM@gs1us.org.
About Herman Kay division of Mystic Inc. / LF Outerwear, LLC
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About the GS1 US Apparel and General Merchandise Initiative
The GS1 US Apparel and General Merchandise Initiative is a retail industry group that is committed to defining business challenges and opportunities, and organizing members to explore solutions and create adoption plans. More than 130 suppliers, distributors, retailers and logistics providers are participating members in Initiative activities, focused on improving inventory accuracy, exchanging standardized product data and achieving traceability with GS1 Standards. More information about the GS1 US Apparel and General Merchandise Initiative is available at www.gs1us.org/ApparelGM.

About GS1 US
GS1 US®, a member of GS1®, is an information standards organization that brings industry communities together to solve supply-chain problems through the adoption and implementation of GS1 Standards. More than 300,000 businesses in 25 industries rely on GS1 US for trading-partner collaboration and for maximizing the cost effectiveness, speed, visibility, security and sustainability of their business processes. They achieve these benefits through solutions based on GS1 global unique numbering and identification systems, barcodes, Electronic Product Code (EPC®)-enabled Radio Frequency Identification (RFID), data synchronization, and electronic information exchange. GS1 US also manages the United Nations Standard Products and Services Code® (UNSPSC®). www.GS1US.org

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