

Walls Industries, which sells work and hunting clothes, expects to benefit internally by integrating tagging into its warehouse-management system.

By Mary Catherine O'Connor

Aug. 23, 2006—The last time you passed a construction site, you most likely saw people wearing coveralls or work shirts produced by [Walls Industries](#). Since 1990, the Dallas-based company has sold more than 25 million coveralls and bib overalls throughout the world, in addition to thousands of camo T-shirts and rain jackets, thermal hoods and other garments. At its warehouse near Fort Worth, Walls is collaborating with its warehouse-management system (WMS) provider, [Manhattan Associates](#), to integrate tagging into its current order-picking processes. The company hopes this will enable its warehouse to apply RFID tags to cases and pallets of products headed for [Wal-Mart](#) stores and distribution centers. The 70-year-old, family-owned company says it will comply with Wal-Mart's tagging mandate by its January deadline. More importantly, it plans to use the new tagging system to increase visibility into its shipping processes.

At the onset of each season, Walls sends large shipments of its latest product line to Wal-Mart. This includes not only work clothes, but also hunting apparel and other outerwear. In late summer, the manufacturer typically sends a large stock of clothing for hunters. Then, as stock levels fall, Walls sends smaller quantities—usually a small volume of cases—to replenish stock. The company sends both the large shipments and the replenishments from the same warehouse, but the former are shipped in trailers to Wal-Mart distribution centers, while the latter are shipped by overnight carrier directly to Wal-Mart stores.

For both initial shipments and replenishment shipments, Walls has been using the same order-picking process. As orders come in, employees route them into the WMS, which sends print commands to a bank of [Paxar](#) bar-code label printers. These generate enough shipping labels to fulfill the order. Order pickers carry these labels, which detail the stock keeping unit (SKU) number and quantity to be placed in each case. They then pick the garments, place each in a separate plastic bag, and use a handheld bar-code scanner to scan the bar code on the shipping label and then scan the bar-code label on each garment's bag.

To comply with the tagging mandate, Walls will use Manhattan Associates' RFID software EPC Manager. As the WMS receives orders headed for Wal-Mart distribution centers or retail stores, it will forward the orders to the EPC Manager, which will generate an EPC for each label, store a record for each order and label, and send the order information and EPCs back to the WMS. The WMS will then send print commands for these labels to the Paxar printer-encoders. The shipping labels these printers generate will have the same bar-code and human-readable data as the non-RFID printers, as well as an embedded RFID inlay onto which an EPC is encoded. For the initial, larger shipments, the cases will be palletized and the EPC Manager will also issue EPCs for pallet labels and correlate the EPCs of the cases on that pallet to the pallet EPC. The smaller replenishment orders will not be palletized; therefore, EPC Manager will not generate pallet labels for those orders.

For the order pickers, the picking process will remain the same, except that for Wal-Mart orders, they will be directed to retrieve the shipping labels from a new bank of Paxar RFID printer-encoders. While Walls will be required to add RFID labels only to a portion of the 425 SKUs it ships to Wal-Mart, the company has decided to begin tagging all SKUs it sells to the retailer.

For the first year, Walls plans to use 1 million RFID labels to cover both the initial and replenishing cases of product, as well as the pallet labels. Tom Felton, chief information officer at Walls Industries, says the company decided to tag all cases of goods headed for Wal-Mart, instead of only those falling under the mandate, because having to divert a portion of its goods for tagging would add labor and costs to its shipping process. Moreover, by tagging all cases shipped to Wal-Mart, the company can track their receipt into Wal-Mart's distribution centers and retail stores by accessing Wal-Mart's Retail Link Web site. Retail Link provides feedback on when and where tagged product is received, as well as when it is brought out to the stores' sales floors.

The addition of RFID to Walls' shipping process will also provide an important internal benefit: As the pallet loads of initial shipments and replenishment shipments are loaded onto outbound trucks, portal interrogators (readers) stationed around the truck will read the tags and confirm that each corresponding case or pallet has been loaded onto the vehicle. With RFID, "we'll have better visibility of our product as it goes out our door," says Felton. "If Wal-Mart says it never received something, we'll have the power of showing them that the tagged cases went onto the truck [and shipped from our warehouse]."

Walls Industries will also integrate the EPCs it generates into the advance shipment notice (ASN) it sends to Wal-Mart electronically as each shipment leaves its warehouse. Wal-Mart will use the ASNs to receive the shipments and confirm that each case and pallet is received.

According to Felton, the cost of RFID tags is still too high to merit tagging and tracking individual garments. Still, he says he is working with Manhattan Associates to ensure that the architecture of the RFID system is flexible and can accommodate item-level tagging, or the tagging of product headed for other retailers, in the future.

The [Alien Technology](#) EPC Gen 2 interrogators Walls plans to use, as well as the EPC Manager software, are currently being installed at the Walls warehouse, and testing of the tagging system will commence in the coming weeks. Felton says the Paxar smart labels Walls will contain Alien EPC Gen 2 inlays.