

Bike Maker Rolls Out RFID

Pacific Cycle, one of the largest U.S. marketers of bicycles, plans to deploy a full RFID system to track inventory and shipments this summer.

By Claire Swedberg

June 25, 2004—After successfully implementing a pilot RFID system this spring, Pacific Cycle, one of the largest marketers of bicycles in the United States, plans to deploy a full system to track inventory and shipments this summer. The company's decision to adopt an RFID system originated in response to Wal-Mart's mandate that its suppliers place Electronic Product Code (EPC) RFID tags on cases and pallets shipped to the retailer. But Pacific Cycle, whose brands include Schwinn, Mongoose and GT, is also seeking a way to use that mandate to improve its own internal system for managing the inventory of bicycles, tricycles, strollers and other products it sells.

"The biggest [incentive] was the mandate," says Edwin Matthews, the director of integrated systems for Pacific Cycle, which is based in Madison, Wisc. "Since we had to spend the money, we were looking at ways to improve our inventory system as well."

For the pilot, the company installed two of [SAMSys Technologies'](#) MP9320 EPC v2.7 portal readers at its distribution center in Olney, Ill., where all its products arrive from manufacturing plants in Asia. The portal readers scan tags on product boxes that enter the warehouse, allowing automatic receiving of new shipments. The system includes a signal light located on the reader that illuminates when a reader has successfully read an RFID tag, allowing forklift drivers to verify that the tag is functioning properly. The pilot program was intended to test the implementation of RFID readers in inventory movement. Matthews expects that the company's RFID system will be fully implemented by August or September, with readers installed at both of its distribution centers (the company's other DC is in Vacaville, Calif.).

Pacific Cycle's RFID system should operate more efficiently than the RFID systems implemented by many other manufacturers because each of Pacific Cycle's products is shipped in its own case. So instead of tracking a tagged case or pallet that contains numerous products, the company can track its products individually, and the single tagged boxes make it easy for warehouse employees to ensure that each was properly scanned.

Once the new RFID inventory system is in place this fall, it will replace Pacific Cycle's old tracking-inventory system, which has used paper transfer order forms filled out manually in the distribution centers and later inputted into the computer system. At Pacific Cycle's offshore manufacturing plants in Asia, Matthews says, the products will be shipped to the U.S. in individual cardboard boxes bearing a smart label with an embedded EPC Class 1 RFID tag. Each box's movement will be tracked from the time it arrives at one of Pacific Cycle's distribution centers to the moment it leaves on retailer-bound truck. Initially, the company will purchase about 300,000 smart labels from Moore Wallace, now merged with [RR Donnelley](#), but it expects to be using about 7 million tags per year when the system is completely installed. Eventually, Pacific Cycle plans to track its products at RFID-enabled retail warehouses and retail shelves. In addition to Wal-Mart, Pacific Cycle's retailer customers include Target, Toys "R" Us and numerous mom-and-pop cycle shops.

Because of the significant expense of installing the entire RFID system and the ongoing costs of the smart labels, Matthews believes it will take at least several years after the initial investment before the company realizes gains from the RFID system. Part of those gains, he says, will come from a decrease in manpower in receiving and shipping operations. But, he adds, “by tracking items within the retail store and determining what factors impact sales, we hope to learn how to increase sales at retail stores.”

Copyright ©2005 RFID Journal, Inc. All Rights Reserved