

Big Benefits In Warehouse Automation

BHFO moved to a warehouse more than double the size of the original to accommodate orders and turned to warehouse automation to increase pick speed and accuracy.

by Erin Harris

Jon and Stacie Sefton founded BHFO in 2003 by selling designer apparel on eBay, and they ran the business out of their basement. For the next 18 months, the Seftons would outsell their ability to run the operations from their home and, as a result, grew BHFO into three separate warehouse facilities, totaling 100,000 square feet. Today, BHFO, whose name includes the Sefton daughters' initials and Factory Outlet, operates a 250,000-square-foot warehouse and employs more than 150 people in the Cedar Rapids, IA area. BHFO is an online retailer selling apparel, shoes, and accessories around the globe and is eBay's leading apparel seller. Matt Wade, COO at BHFO, explains how the company's automated storage and picking system helps the e-tailer ship more than 95 percent of its domestic orders within one day.

MANUAL PICKING, LACK OF SPACE STUNT GROWTH

Before moving to its current warehouse, BHFO used a completely manual picking process. Fifteen-foot high racks were stacked throughout the warehouse, and pickers had to push ladders up and down rows to reach rafters-high merchandise. "We walked through the warehouse with picking carts, used ladders to pick high-placed items and then brought those items to a staging area where we

assembled our orders," states Wade. "We had no room for upward expansion within the warehouse; we had occupied all the square footage. It had gotten to the point where we couldn't grow anymore. To meet our goal of shipping orders within one day, we had to relocate and implement an automated fulfillment system."

BIG BENEFITS IN AUTOMATED STORAGE AND PICKING

In anticipation of BHFO's move to the current 250,000-square-foot warehouse, the company researched automated warehouse systems and ultimately chose OPEX Perfect Pick.

OPEX's Perfect Pick storage and picking system features 20 robots known as iBOTS that move totes holding about 200,000 products between storage positions and four goods-to-person picking stations. The Perfect Pick system consists of four 80-foot aisles manned by 20 iBOTS, five per aisle. These bring totes of products when requested to workers at four processing stations. Each station has been designed to handle up to 200 insertion orders per hour. The stations are mirrored, meaning they are side-by-side without a conveyor dividing them. That allows one operator to man two stations as needed. As BHFO receives merchandise, each item is inspected and given



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a unique lot number to track it as it moves through the system. The item is then photographed, added to a database of products, and posted online for sale. It then moves down the line to be pre-packaged and assigned to a tote within the Perfect Pick system so it can be stored until purchased. When a customer orders an item online, BHFO's warehouse management system communicates with the Exacta warehouse control system to bring the correct tote to the operator station at the appropriate Perfect Pick aisle via one of the Perfect Pick iBots. A computer monitor right next to the pick station displays the lot ID of the product and displays a picture of the product they're picking. This gives the operators visual confirmation of the product. The operator picks the product and places it into a tote which travels down the conveyor line for packing at one of 16 packout stations. During packout, an operator scans the tote once it

arrives, confirms the order is correct, and then places it in a container for shipment.

Once an order is received by the WMS (warehouse management system) it can be picked, packed, and ready for shipment within 30 minutes. This allows BHFO to fulfill about 5,000 auctions a day with the ability to fulfill 8,000 auctions per day as the company grows.

“It's a very user-friendly system,” explains Wade. “Unlike the other automation systems we researched, Perfect Pick is constructed vertically, so it requires less square footage and gives us room to grow.” BHFO operators now pick about 200 items per hour (some pick up to 300 items per hour), double that of the manual system. Further, BHFO now ships 95 percent of its domestic orders within one day of payment. ■

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