

# PERFORMANCE PROFILE

## A DC VELOCITY SPEED CHALLENGE

### *Hitting the docks running*

New sortation systems have equipped eBay Enterprise with greatly expanded throughput capabilities, while handling its wide variety of shipment package types and sizes.

ANYONE WHO HAS BOUGHT PRODUCTS THROUGH EBAY KNOWS how important timeliness and accuracy are to those transactions. The company built its reputation on quality customer service. The same holds true with eBay Enterprise, an eBay Inc. company and a provider of omnichannel solutions. These include commerce technologies, order management, retail operations, and marketing services. eBay Enterprise acts as a third-party provider of fulfillment and distribution services for clients that include The Company Store, SteinMart, New York & Company, GODIVA, and VF Corporation. eBay Enterprise has a number of distribution centers in Martinsville, Va., and two of them have just added new Beumer tilt tray shipping sorters to speed products to consumers.

"We ship everything from a pair of earrings to lawn furniture," explains Kim Smith-Glisson, director of operations. "The customer experience is our number one goal, so we needed the ability to move products through our outbound sortation systems much faster. We have a wide variety of packaging for outbound shipments, everything from envelopes to polybags to large cartons; so we needed something that could handle that wide variety."

Obviously, the lawn furniture doesn't fit on the new sorters, but almost everything else does. In the older facility, known as Martinsville-I, the new sorter replaced a 30-year-old pop-up unit that wasn't able to sort all of the various packaging.

"The old sorter didn't have the capabilities, speed, or accuracy that the new one does, which meant more manual labor in handling bagged products and ensuring accurate sortation," says Bradley Feury, senior manager, process improvement.

That is particularly important, as both facilities process a large amount of apparel and other products that ship in bags. The Martinsville-I building packs nearly 80 percent of items in bags, while Martinsville-III handles about 30 percent bagged shipments. The new tilt tray

sorters provide accurate and precise handling of these bagged products.

#### **No downtime permitted**

One of the requirements for replacing the sorter in Martinsville-I was to make the changeover without any disruption to service. To accomplish this, the new tilt tray sorter was erected above the former pop-up unit, with just enough clearance to allow the tallest boxes to divert. Changeover took only an hour and a half, and most of that involved rerouting the incoming conveyors.

The new sorter travels at 2.1 meters per second and features 81 trays that feed nine diverts. Capacity quadrupled – from 1,500 packages an hour on the pop-up to 6,000 per hour on the tilt tray. Accuracy is now well above 99 percent. Even with much higher throughput, the sorter has allowed labor in the shipping area to be cut in half.

Only 36 hours after the new sorter began operating in Martinsville-I, the tilt tray in Martinsville-III went live. It replaced manual sorting.

"In that facility, we went from a rate of 200 packages per hour on a single inline scale and scanner to 3,000 packages per hour. That has helped us to meet the demands of our clients during the peak [holiday] season," says Feury.

The sorter in Martinsville-III has 65 trays and seven diverts. The beauty of a tilt tray is the wide range of products the trays can hold – anything up to 48 inches in length and weights from 3 ½ ounces to 70 pounds.

Both systems are designed with expansion in mind, so even higher volumes can be accommodated. The speed of processing also means that many products now ship a day earlier than before, which results in a better customer experience.

"We can now hit those 5:30–6:00 cutoffs, while completing pack-out at basically 5:00. Prior, it was about three to four hours for packing to be done. Now, it's about 22 minutes," adds Feury.

