

# Order Verification and Relabeling System

Automating a manufacturing or distribution process has many benefits, including:

- Provides immediate feedback and statuses to front office
- Reduces labor costs
- Minimizes costly manufacturing and distribution mistakes
- Sends notifications to managers when their attention is needed, and
- Streamlines the process

Dynamic developed a custom software solution for a warehouse logistics company. The custom software monitored boxes on a conveyer system, verified the boxes against the order, and relabeled the boxes using customer-specific barcode labels.

The conveyer system included 2 Microscan scanners, 2 label printers, digital I/O device, several warning lights, several photo-eyes, and a kick-out bar/shoot. The warning lights, photo-eyes and the kick-out bar were controlled by the custom software through the digital I/O device.

The process starts when the operator enters an order into the custom software. The custom software retrieves the order details using Web Services from the warehouse's ERP system. Using the order shown by the custom software, the operator places boxes on the conveyer.

As the box passes the first scanner, the original barcode label is read and verified against the order. If the box is needed for the order, the custom software sends a message to the label printers to print the customer-specific barcode label. However, if the box is not needed for the order (or the original label cannot be read by the scanner), the custom software notifies the operator by turning on the first **RED** warning light and the custom software sends a digital signal to the kick-out bar to push the box onto the kick-out shoot.

If the box is relabeled, the second scanner reads the new barcode label to verify that the label was printed correctly. If the label was printed correctly, the ERP system is notified via Web Services and the box is placed on the pallet for shipping. However, if the new label cannot be read by the second scanner, the custom software notifies the operator by turning on the second **RED** warning light and the custom software sends a digital signal to the kick-out bar to push the box onto the kick-out shoot.

When the order is complete, the custom software notifies the operator by turning on a **GREEN** warning light and the order status is updated on the ERP system.

Automating a process that provides regular feedback to the operators, to the front office, and managers improve the overall operation, reduces costs, and increases profits. Dynamic has developed other solutions that link the front office to existing production and manufacturing equipment such as paper machines, molding equipment, CNC machines, weighing scales, electronic cash registers, machine controllers and PLC's.