

## Introducing the Most Advanced High Volume Encoder



### Overview

A leading legwear brand was looking to encode large quantities of RFID-tagged products at once. As a leader in RFID technologies and solutions, we entered an agreement with the brand to develop an advanced bulk encoding solution. The FT/200 Bulk Encoder and Box Audit station were made for bulk encoding of RFID tags where items need to be counted and matched to their SKU when packed.

### Business Challenge

The brand wanted to streamline its production process, as it produced multiple product lines and had to print and encode different tags for each SKU. Prior to using FT/200, the customer encoded the RFID tags with thermal transfer RFID printers before applying the tags to the garments by hand. As a result, the company spent excessive time and money encoding and counting the products before they shipped—a process that was slow, complex and prone to human error. The brand faced inconsistent product packaging, higher labor costs and frequent customer charges from mispacked

shipments. The customer needed a better system for encoding and counting large quantities of products at a time.

## **Our Solution**

FT/200 enables this customer to take advantage of the mass adoption of RFID that is now happening across the supply chain. The FT/200 is the most advance Bulk Tunnel available and the first in a new set of machines that we have developed in order to compliment the extensive range of RFID tags available through our service bureaus across the world.

The FT/200 introduces record speeds and accuracy in bulk item-level validation and RFID chip encoding, incorporating a set of unique patent pending features that bring a new dimension to bulk encoding and applications, including:

- 'Flexible Tunnel' allows for cases of different sizes.
- 'Creep' function checks for a 100% read/write accuracy and automatically re-adjusts machine parameters according to the environment and product specification. 'Creep' eliminates situations where the conveyor travels too quickly and tags exit the cage before being fully read or encoded.
- 'FT Conveyor' function eliminates the shrink and reflection effect of metal on the RFID tags and increases the speed at which items are successfully encoded.
- 'Auto Tilt' mechanism uses optimal algorithms to ensure that all tags are encoded and read, even when tags are presented to the antennas as 'edge on'.\*
- 'Emitter Count' reduces the number of sequenced emissions needed to read/write tags, resulting in as fast as about 200 items every 5 seconds.

*\* 'Edge on' means the reader can only see the edge of the tag, making it difficult to impart energy to the inlay and get a quality read.*

This same unit may also be used for bulk reading and validation of items and can be employed for many functions during shipping and receiving. Our customer can run an automatic 'Box Audit' at a shipping station when mixed items are picked and packed into cases. Being able to run a full count of items inside of a box and have this checked and compared to the SKU list will

enable 100% accurate audits prior to shipping, while dramatically reducing the time taken as compared to manual box audits.

One key application with FT 200 is that the brand can now auto-apply a blank tag to the packaging at the beginning of the assembly line. The bulk encoder allows the brand to encode tags very quickly once they are packed out as finished goods.

## **The Results**

The customer now uses our FT/200 to help them encode RFID in bulk and greatly improve accuracy in shipping with the following results:

- Lower costs due to fewer workers performing QC measures.
- The ability to apply blank and unencoded tags to finished products at the carton level before shipping, increasing production line speed and eliminating the risk of human error from placing the wrong tag on a product.
- Faster production speeds at 200 tags every 5 seconds (as opposed to RFID printers at 60 tags per minute).
- More accurate data collection and pre-shipment manifest generation to match the customers' receipts and increase traceability while avoiding customer charges for inaccurate shipments.
- Improved accuracy count for shipping.