

REGION
Global

USE CASE
Manufacturing

COMPANY SIZE
Enterprise

 **MOINSA****Key Benefits****400**

labels per minute RFID reading

~0%

25% to near zero reduced shipping errors

<8

seconds verification time reduced from 5-10 minutes

Moinsa implements BarTender® software's RFID capabilities to reduce human error and accelerate packaging processes

BarTender helps Moinsa complete their furniture's quality cycle while drastically reducing handling times.

Moinsa is a Spanish company that has been designing, manufacturing, and installing commercial and technical equipment for over 50 years. They help 500+ clients in 10 countries to improve their commercial spaces, offices, and laboratories—by supplying equipment in the retail, hotel and restaurant, beauty and health, food, DIY, and office sectors.

Moinsa recently developed a project for a commercial office client using radio frequency identification (RFID) labels. They sought to eliminate any packing or labeling errors for their items, as each piece of furniture is shipped to clients for assembly.

As part of its process to correct and mitigate any possible errors, Moinsa implemented an RFID system using a BarTender software integration to prepare its furniture orders.

Challenge

Reducing high shipping error rates for multi-component products

One of the most important aspects of Moinsa's process is delivering the correct kit assembly for each unit. Historically, this process had relied on manual verification, processing about 50 shipments daily. Each of these shipments contained 20 to 40 different pieces. Moinsa managers had found that human errors were occurring in around 25% of shipments. This was an unacceptably high level which required immediate improvements.

Moinsa investigated using RFID tags as a potential solution to the problem. Consequently, the company decided to integrate an RFID chip with the traditional barcode labels that accompany each of the parts that make up a complete product.

"Using BarTender helped us achieve higher levels of speed and quality with our RFID tagging. In combination with the RFID reading arch, this technology can read 400 labels per minute. BarTender helped us achieve a goal of vital importance for the company."

—
ISMAEL HERREROS
Product Manager for RFID Moinsa

Solution

Using RFID scans to counter human error and accelerate processes

Moinsa concluded that an auditable RFID tagging solution would provide the best route to success for this project. Moinsa turned to BarTender when designing and managing their RFID solution.

The solution began with Moinsa's operators using a scanning device, in tandem with their SAP system, to read the barcode of a product and then print an RFID tag to adhere to that item.

The RFID tags helped the factory teams identify all the pieces that comprised a shipment—for example, for hardware the verification process takes place using the weight of the bag containing these items.

When each package has all its parts packed, the package crosses under an arch that reads each of the packed components. The RFID tags then verify that the content is whole and correct, checked against each work order. In case of anomalies, the system sends an alarm signal so that it can be re-verified and corrected, thus ensuring the quality of the shipments.

With BarTender's automation technology and Zebra's printing hardware, in combination with the RFID reading arch, the system can read up to 400 labels a minute. Moinsa currently performs a double-check reading of each tag in as little as eight seconds.

By mitigating the amount of shipment errors to almost zero, Moinsa has boosted the company's bottom line by drastically reducing returns and refunds, and the reshipping of parts to customers. BarTender's software and RFID system has also optimized the performance of Moinsa's human capital: verification tasks previously requiring between 5-10 minutes per employee and package, today require less than eight seconds.

The project's success has been so encouraging that the company is currently considering developing mobile reception systems that will record all these various entries directly to the warehouse's database.