

An RFID solution deployed by Anjos Baby has allowed for 100 percent accuracy in deliveries of products to its retail customers.

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Oct 30, 2018—Anjos Baby, located in Mirassol, Brazil, has adopted a radio frequency identification solution to improve its business processes. The technology was provided by iTag RFID Smart Labels. Since the implementation, the manufacturer claims to have achieved 100 percent accuracy in the delivery of orders from its retail customers.

According to the company's management, the firm now has total control of parts at the end of production. In addition, there has been a 90 percent reduction in operating times at the stock level—while in billing, the time to process clothes has fallen by 60 percent, with zero incidence of error. (To provide some perspective here, Anjos Baby manufactures 700 clothing models, with 4,500 stock-keeping units [SKUs] per collection, totaling approximately 500,000 orders annually).



Emerson Botero

Currently, with RFID, Anjos Baby already performs analysis of the sealed boxes after issuing invoices. In the future, the company intends to use the technology to monitor the various phases of manufacturing, which includes embroidery, stamping, sewing and more.

The integration of the RFID solution with the company's enterprise resource planning (ERP) system occurred naturally, Anjos Baby reports. "In our case, it would be impossible to have the deployment without integrating the platforms," says Emerson Antonio Botero, the partner of Éder Lucio Berrocal at the company. "We use Millennium ERP, a long-time partner of Anjos Baby, which has been dedicated to this project for years," Botero says. "Many meetings and conversations took place in that direction, until it was time to put a hand in the dough." The database is hosted locally at Anjos Baby.

In the packaging area, products receive RFID tags with their respective information: model, color, size and production order. Lots of various products are taken to the portal, where they are read and downloaded from production, and are then inserted into stock. Next, Millennium ERP generates a pre-billing invoice of the goods, which are separated and boxed. "Before we seal the boxes, we do pre-invoicing," Botero states. "At that moment, we are certain (or not) that the boxed products perfectly meet the request, and we release the same for the issuance of invoices."

According to the factory's managers, the RFID solution met expectations. "The gains were huge, with high efficiency gains in the sectors where the technology is being used," Botero reports. "The employees were impressed with the results and feel extremely valued to be able to perform these functions."

Other benefits have surpassed factory boundaries, Botero notes. "Customers who receive our products have the option to control the POS [point of sale] without the need to label products, since the tags accompany all the items we produce," he explains. "For customers who do not yet control inventory and sales with RFID, this is the image of a modern and revolutionary company."

According to Sérgio Gambim, iTag's CEO, the company's iTag Monitor middleware is responsible for mediating configurations and readings between the ERP system and the RFID reader. It is a tool that is constantly improving, he says—always bringing the latest technology updates from the readers. "It's currently in version 6.5," he indicates, adding, "The tool is installed in the product entry and exit portals."

Two portals, each containing a reader, were deployed at the factory. The first and largest portal is located at the entrance of the stock area, where lots of products are stored after being finalized. "The challenges here were huge," Botero says. "In our process, when a product enters inventory, it is automatically downloaded from its production order. In order for this to happen, it was necessary to customize the ERP."

The second portal is located in the shipment area, where goods pre-selected for the orders are checked. "At this moment, we read the products already boxed," Botero explains. "We work with two Zebra Technologies FX7500 readers for printing and embossing the labels on a Zebra ZD500R printer. The labels are iTag EM4124 models, not reused."

To meet reading needs, it was necessary to customize and integrate the ERP system with the equipment. Prior to the RFID system's deployment, the process was based on the individualized reading of each part—that is, it was necessary for every product to be moved through a standard bar-code reader. With the RFID solution in place, however, this task can now be carried out in product batches, providing speed and security to the movements. The RFID deployment follows GS1's passive EPC UHF RFID standard, bringing global benefits to the procurement of equipment and supplies.



Éder Berrocal

The experience of deploying RFID was highly positive, Botero says, but there were several challenges that had to be addressed. "It was necessary to test, validate and homologate the tasks," he states, "all within the company's productive process and often with people who were not very familiar with the new tools."

Botero adds, "The distance was also a challenge, because we are almost 500 kilometers [311 miles] from São Paulo, and when there was inconsistency with hardware or software, we had a problem. We had—and still have—the main challenge: costs. We are talking about a relatively new technology, one still not very widespread. In our case, because the labels are an integral part of the products, we incurred additional costs."