



Bekina Boots sees many advantages in RFID applications such as efficient stock management or access control. From our drive for continuous improvement, it is important for us to be able to retrace the boot to the very beginning of its creation.

Thomas Vanderbeke
CEO
Bekina Boots



In the packing area, the boots are printed and equipped with a hang tag. This happens automatically, by order number. The packing orders are followed up via the screen.



Tracing of professional boots from production to after-sales

The customer

The Belgian boot manufacturer Bekina Boots is a joint market leader in the development and production of durable and qualitative polyurethane (PU) safety boots. Today the firm markets its professional boots- composed of the light, strong synthetic material polyurethane (PU)- in 58 countries worldwide and in a wide range of sectors such as agriculture, the fishing industry, construction and of course the food industry.

The challenge

From its drive for innovation and customer-friendliness, Bekina Boots was looking for a tracing solution to further finetune its internal logistic process. Previously, the safety boots were identifiable per unique SKU via barcode but the intention is that every boot is uniquely traceable until it arrives at the end customer.

With unique identification and tracing, Bekina Boots wants to map the entire life cycle of the safety boots, which will enable them to thoroughly analyse several parameters of the work boots and to aim for further quality improvement.

After internal research, Bekina Boots opted for RFID technology and asked Aucxis to elaborate a solution to integrate an RFID tag in every work boot during the production process and to track the boots until they arrive at the end customer.



RFID tags are integrated in the boots during the production process.



This RFID gate registers which boots are located on which cart enabling the packing manager to plan everything smoothly and correctly.



In the future, Bekina Boots wishes to extend its RFID applications with extra services for the end customers. In this way, the tagged safety boots could be used for automatic access control for rooms which are only accessible to certain people and for efficient stock management at the end customer. Customer cases will be elaborated in due course.

The solution

A Proof of Concept made it possible to determine the appropriate RFID tag and the necessary detection points throughout the production process. Upon the selection of the tag, we needed to take into account several important parameters:

- The **temperature** of the synthetic material the boots are made of goes to 130°C during the production process.
- Every niche market Bekina Boots delivers to has its specific requirements in terms of safety, hygiene and wearing comfort. The boots are often worn in extreme working conditions, for example in a humid environment. The **RFID tag needed to be integrated in such a way that it is performant in all sectors and situations without being a nuisance.**

The RFID solution consists of the following components:

- Hardware:
 - Durable UHF RFID label tags (hundreds of thousands/year)
 - RFID readers and printers at fixed detection points throughout the manufacturing process
- Aucxis Middleware HERTZ

Logistic flow

At the start of a production, an RFID label is programmed and printed for every boot. The tags are integrated in the boots in a way and at a location that the tag cannot be damaged during the life cycle of these very flexible boots.

When integrating the tag, certain data points are captured and linked to Bekina Boot's database thanks to the Aucxis middleware HERTZ.

For the further follow-up of the tagged boots throughout the production process, we provide RFID readers at the crucial logistic points.

The result



Individually identifiable and traceable PU safety boots from the production process to the shipment.



Flawless processing, labelling and shipment of the work boots.



Optimised customer service as a long-term investment.