



IN THE SPOTLIGHT

Case study: PM Sweet

PM Sweet tracks millions of macarons with RFID

The customer

PM Sweet specialises in the production of high-quality macarons. The Belgian company, with production sites in Vivegnis and Dison, has seen impressive growth, starting from artisanal experiments in the founder's kitchen to a fully automated production process that upholds the highest quality standards. With a dedicated team of 350 employees and a modern 17,000m² facility, PM Sweet now produces over 1,000,000 macarons per day. Their products are currently distributed in more than 30 countries.

The challenge

Effectively managing the inventory of unwrapped macarons requires precise tracking of essential information, including batch numbers, production dates and time spent in refrigeration. This is crucial for food safety, given the limited time allowed between the creation of the macarons and the moment they are packaged. PM Sweet looked for a solution to precisely and automatically capture and digitally monitor this vital data, eliminating the need for manual monitoring.



Our RFID solution provides PM Sweet with real-time insights into the macarons awaiting packaging, showing their batch number, production date and storage location. This ensures optimal traceability and guarantees the freshness of each product.

Emmanuel Dierkens
Project Manager Aucxis





The solution

Trays with baked macarons are loaded onto a cart, transported to the fridge, and after the cooling period, brought to the packaging area. They then return to the replenishment zone. The tracking of the carts and their loads was digitised and optimised using RFID asset tracking as follows:

Each cart was equipped with a permanent UHF on-metal RFID tag and a QR code, both containing the cart's unique identity. When a cart is loaded, a self-adhesive label with a QR code is applied, which contains information about the load. The QR codes are then scanned using a handheld device. Through the POLARIS Asset Management Software app, the cart and batch are linked, and the number of trays in the cart is added.

To track the carts, RFID antennas and RFID readers were installed at various locations. At the fridges, these were placed on each side of the entrance and exit doors. When a cart enters or exits a fridge, both its location and direction of movement are detected.

In the passage from the packaging zone to the replenishment area, RFID antennas detect the RFID tag of the empty cart, after which the cart's contents are automatically reset.

Additional manual scans can be taken using the POLARIS app on the handheld device. This can be used, for example, to perform an inventory count in a specific area or to move carts to a zone where no antennas are present.

Aucxis advised PM Sweet on the selection and placement of the RFID tags



The carts are detected and tracked using RFID antennas and readers



The POLARIS software, in addition to the handheld application, also offers a website where all detected information is processed and can be accessed through the following menu options:

Dashboard

Number of carts per zone

Assets

Details of carts and loads (cart number, number of trays, product information, etc.)

Asset history

History of carts and loads (which macarons, where, when)

Trace log

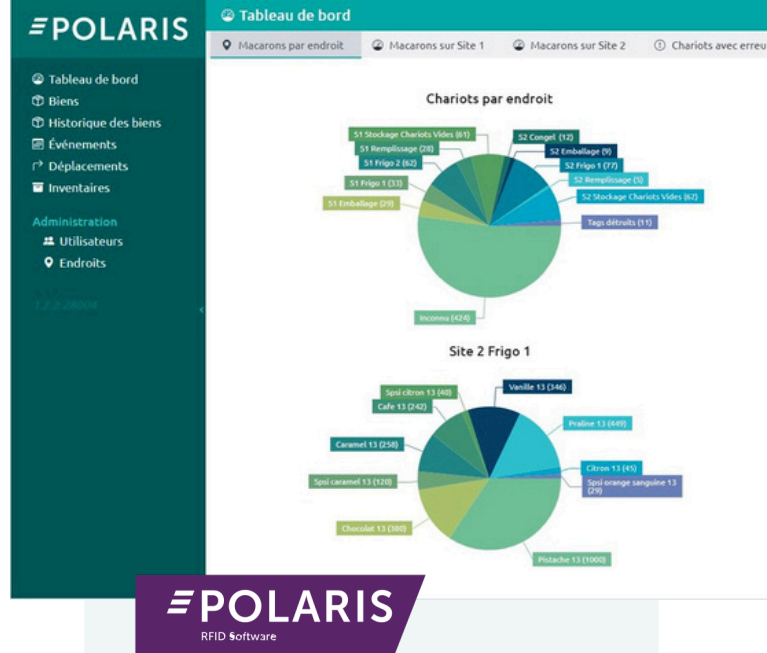
When and why a cart was scanned (via RFID antennas or handheld)

Movements

Overview of all movements (via RFID antennas or handheld)

Inventory

Overview of locations and the last time an inventory was taken



POLARIS Asset Management Software offers a comprehensive set of standard modules applicable across various sectors.

Learn more about the POLARIS features and applications on our website.

The result



Accurate, real-time information

PM Sweet remains informed about inventory availability and its location at all times.

Time savings

Automation has eliminated time-consuming manual recordings.



Digital traceability

Key production data of the batches is 100% accurate and digitally available (batch numbers, production dates, and time spent in refrigeration), providing crucial information for food safety.



Insight into the process

Carts and their loads are precisely detected and tracked throughout the entire process, offering insights into the efficiency of the logistics process.



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Why choose Aucxis?

- Experienced RFID integrator
- Extensive know-how
- One supplier, all products, all services
- In-house experts in hardware, software development and installation
- Numerous realisations in various sectors
- ISO9001-certified company
- Support service 24/7