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We believe it is important that our production and logistic processes are as efficient and error-free as possible. ATLAS offers us a simple, durable and affordable solution.

Geert Devarrewaere OpEx Coach McBride



In the storage room floor tags and RFID labels of outer boxes are read by means of the ATLAS hardware kit which is integrated in the forklifts.



# Real-time detection and localisation with ATLAS RFID

#### The customer

McBride is a leading European manufacturer and distributor of cleaning products. The company sells more than 1 billion products per year for household use and the professional cleaning market. McBride employs 3,400 people on 12 sites throughout Europe and 2 sites in the Far East.

#### The challenge

The 'McBride Liquids' site in leper manufactures an extensive range of liquid cleaning products (220 million units on an annual basis), including (dishwasher) detergents and surface cleaners. McBride also produces the bottles in which the products are filled and packaged. For an easy storage and transport of these bottles, McBride decided to use a standard cardboard packaging with predefined dimensions (further defined as 'outer box').

In order to further improve its logistics, McBride was looking for a solution enabling the automatic detection and localisation of these reusable outer boxes throughout the internal process flow.

#### The solution

Aucxis suggested implementing the standard ATLAS Item Identification & Tracking solution, thanks to which the outer boxes are identified and localised by means of passive RFID technology.







The filling stations and the corresponding chain conveyors transporting the outer boxes serve as fixed RFID detection points and are equipped with RFID readers and antennas.





As part of the ATLAS RFID solution, tags were mounted in the storage room's floor for the localisation of the outer boxes by the forklifts.

#### Detection/tracing of the reusable outer boxes during the process

At the start of the project McBride purchased approximately 40 000 durable, preprogrammed UHF RFID label tags. Furthermore, every reusable outer box was equipped with tags.

During the process an empty outer box is placed at a filling station in the production hall. Next, an automatic system fills the outer box with empty bottles. Once filled with the desired number of bottles, the outer box is carried to a chain conveyor for transport outside the production hall. The filling stations and the corresponding chain conveyors serve as fixed RFID detection points and are equipped with RFID readers and antennas. The Aucxis middleware HERTZ enables to transmit the detections during the production process to McBride's MES system.

#### Localisation in the storage room thanks to ATLAS equipment

At the end of the chain conveyors, several forklifts are ready to transport the outer boxes to the storage room where they are stored until the filling department is ready to receive them. In every row of the storage room, passive RFID tags were mounted in the floor in order to mark zones. The forklifts are in turn equipped with our standard ATLAS hardware kit, enabling to read the floor tags and the RFID labels on the outer boxes. The Aucxis middleware HERTZ registers the data of the floor tags, translates them into a logic location and then transmits them to McBride's front-end MES software.

#### The result



## Flawless detection and localisation in real time

ATLAS allows
McBride to know at
all times the exact
location of the boxes
throughout the
production process
and in the storage
room.



### Manual scan actions are avoided

The automation of the scans increases the efficiency and reduces the pressure on the logistics employees.



#### Generic solution

In the future,
McBride can equip as
many storage
locations as desired
with ATLAS and
seamlessly link them
to each other thanks
to the Aucxis
middleware HERTZ.

## **=**ATLAS

The interesting aspect of the ATLAS concept is that the same hardware and technology (Aucxis middleware HERTZ) can be used for both identification and localisation.