



IN THE SPOTLIGHT

Case study: Syngenta

RFID Scanning for automatic registration of returned Xtrays

The customer

Syngenta Flowers in De Lier (the Netherlands), houses a specialised Young Plant Production center. Every year, a wide range of young plants, such as bedding plants, perennials and potted plants are produced across various locations of more than 25 hectares. By using optimal cultivation and distribution methods for young plants, supported by innovative technologies like Xtrays and Xcarriers, many species and varieties of young plants are grown from both seeds and cuttings.

As part of the worldwide Syngenta group, which has 28,000 employees in 90 countries, the De Lier establishment contributes to Syngenta's mission: unlocking the full potential of plants, maximising yields, protecting the environment and improving quality of life worldwide.

The challenge

Syngenta Flowers faced the challenge of efficiently and accurately managing the return flow of a new type of plant trays for its Young Plant Production. Their pool of Xtrays was expanded with 20% new Xcarriers. The latter are not suitable for washing in the existing washing station and require a separate treatment. Manually separating the new and old Xtrays in the storage hall was a very time-consuming and error-prone process. Syngenta therefore looked for a solution to optimise its return flow with the integration of the new Xtrays as much as possible.



RFID enables us to scan quickly and efficiently, providing real-time stock data and helping to avoid unnecessary logistics actions.

Marco de Groot
Production Manager Sowing, Cleaning & Tray Handling



The solution



De Xcarriers werden voorzien van **duurzame UHF RFID-labels** met een leesafstand tot 12 meter en een hoge leessnelheid. Deze labels worden vaak toegepast in logistieke en retailomgevingen.



Upon arrival at the warehouse, the Xtrays are scanned by an **RFID gate**, which is equipped with **advanced RFID readers and antennas to enable automatic detection and registration**. An activation sensor ensures that the scanning process begins as soon as a pallet arrives.

The new Xtrays are sent to a separate treatment location, while the old Xtrays are directed to the existing washing station. RFID allows that the Xtrays are automatically and correctly processed from the beginning and immediately registered at the correct location without any manual intervention.



A mobile RFID handheld scanner can be used for **additional scanning**. Multiple RFID tags can be read simultaneously here too, without requiring a line-of-sight.



The Aucxis HERTZ Middleware was used for system integration with Syngenta. Aucxis provided a custom visualisation that displays the specific data for each type of Xtray. All scan results are **seamlessly transferred to Syngenta's central ERP system**.

The result



Speed and efficiency

Manual counting is no longer necessary; you can scan up to 750 Xtrays simultaneously, significantly speeding up the process.



Flawless logistics flows

The scanned Xtrays are immediately directed to the correct washing station, resulting in more sustainable and efficient return logistics.



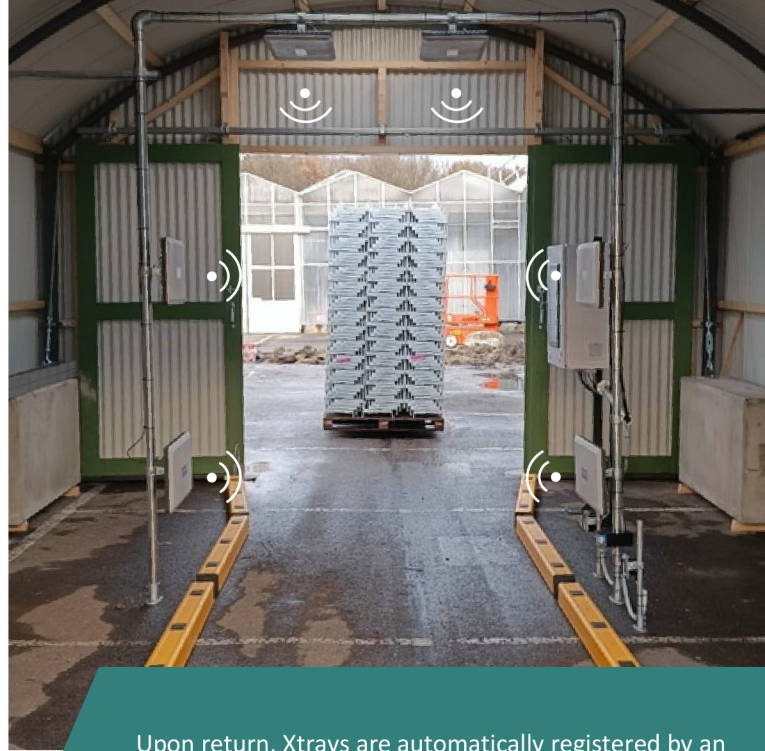
Double check

Errors are avoided through additional checks with handheld during the return process.



Reliable data in no time

Thanks to seamless integration with the existing Oracle Cloud database, everyone always has access to reliable real-time data.



Upon return, Xtrays are automatically registered by an RFID gate.

The future

Syngenta is a leading company that is constantly searching for new, efficient technologies, including RFID. They are open to new opportunities and innovation to further automate and optimise their logistics process.

References in agriculture and horticulture



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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