

"The smart design of the Aucxis RFID tunnel ensures that only the RFID tags that go through the tunnel are read, and that the large quantity of tags in the immediate environment is not accidentally detected."



malysse-sterima
we support your care



Plastic boxes containing implant sets.



Each box from the implants loan set is equipped with an RFID label. In the RFID tunnel, the presence or absence of each box is correctly detected.

RFID controls the consumption and contents of loan sets

The customer

Malysse-Sterima is a service provider in the healthcare sector. The department Sterima Medical Services offers central sterilization services for hospitals and medical companies in the Benelux countries. Sterima also offers sets of care products with reusable instruments and the company distributes implants loan sets from different manufacturers to hospitals.

The challenge

For the implants loan sets, Sterima was searching for a traceability solution which could ensure that:

- each implants loan set which is sent to a hospital, is complete;
- the serial number and storage life of the implants are automatically checked;
- the consumed parts of each set are automatically determined.

It was also important that the solution would completely fit in the existing logistic process and perfectly integrate in the ERP software of Sterima.

The choice to equip each implant with an RFID tag was only a starting point. The challenge was to realize a correct, selective and fast detection of the RFID tag on the metal implants. Furthermore, the process had to be efficient and intuitive for the operators.

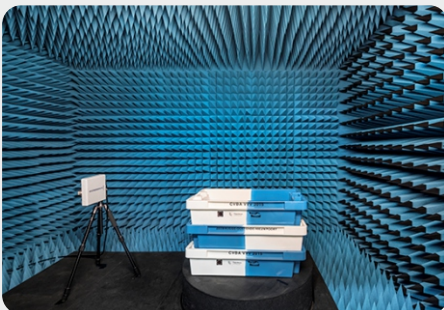
It was a very interesting challenge for Aucxis to correctly and successfully detect metal implants in an environment which does particularly consist of metal constructions!



RFID tunnel integrated in conveyor belt system.



A desktop reader reads the information stored on the tag. Aucxis Hertz middleware transforms the data into a format suitable for the ERP package of Sterima.



Aucxis RFID chamber

The solution

Aucxis developed an **RFID tunnel**, integrated in a conveyor belt on which the implants sets are transported. The **smart design** of the RFID tunnel ensures that only the RFID tags that go through the tunnel are read, and that the large quantity of tags in the immediate environment is not accidentally detected.

The success of RFID detection in such a complex environment starts with an **optimal tag selection in combination with the assets** which have to be tagged. In its own RFID lab, equipped with an anechoic chamber, Aucxis could carry out the necessary measurements. Based on previous experiences and knowledge, the tunnel was equipped with appropriate hardware and specific RFID elements. Finally, the intelligent algorithms of the Aucxis middleware “Hertz” ensure correct observations. Hertz also ensures a perfect but especially successful integration with the ERP package of Sterima.

The result

- Sterima has an impeccable detection process and can guarantee the completeness of implants sets to its clients on the one hand and the exact consumption of the separate elements on the other hand.
- The efficiency of the process was significantly improved; by deploying the same number of people, a considerably higher number of sets can be processed. This resulted in the fact that the investment is recovered in one year!
- The successful collaboration between Sterima and Aucxis inspires Sterima to further look for opportunities in order to optimize additional processes by means of RFID.

In order to be able to execute research and developments even more efficiently and more precisely, Aucxis invested in the installation of an anechoic chamber (an electromagnetic dead space) and in hi tech tag measuring equipment of Voyantic.

Thanks to the in-house availability of an RFID room, Aucxis is one of the best equipped RFID integrators in Europe for defining, selecting and developing the most suitable tag for an object.

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