

Swiss watch and jewelry maker de Grisogono is using TAGSYS 13.56 MHz tags and interrogators in an RFID tracking and inventory system aimed at increasing accuracy and reducing theft.

By Mary Catherine O'Connor

Feb. 9, 2006—Geneva-based watchmaker and jeweler [de Grisogono](#) believes bar codes won't provide the level of accuracy and security the company requires in tracking its inventory of high-value items. Therefore, the company has adopted an item-level RFID system using tags and interrogators from French RFID systems manufacturer [TAGSYS](#) and software from Swiss auto-ID software solutions provider [Solid](#).

De Grisogono, a subsidiary of high-end watch and jewelry maker [Chopard](#), has already deployed the system at its stores in Geneva and Paris, and plans to roll it out across all 15 worldwide retail locations by the end of the year, according to Didier Mattalia, sales manager for TAGSYS' Europe Middle East and Asia (EMEA) industry and logistics division. The average retail price of the company's watches and jewelry is €20,000, he says.



Didier Mattalia, TAGSYS

De Grisogono's previous inventory tracking method was completely manual and did not even utilize bar codes. The company is now looking to RFID to maintain accurate inventory records and deter theft, independently of de Grisogono's existing security systems.

With the de Grisogono installation, Mattalia says, TAGSYS is helping form a new market for RFID technology. He notes that the volume of tags needed for tracking high-end jewelry is significantly lower than for other item-level tagging, such as [Pfizer's Viagra-tracking system](#) (see [Pfizer Using RFID to Fight Fake Viagra](#)). TAGSYS and Solid, however, hope to deploy similar systems for other companies that keep frequently updated lists of high-value assets.

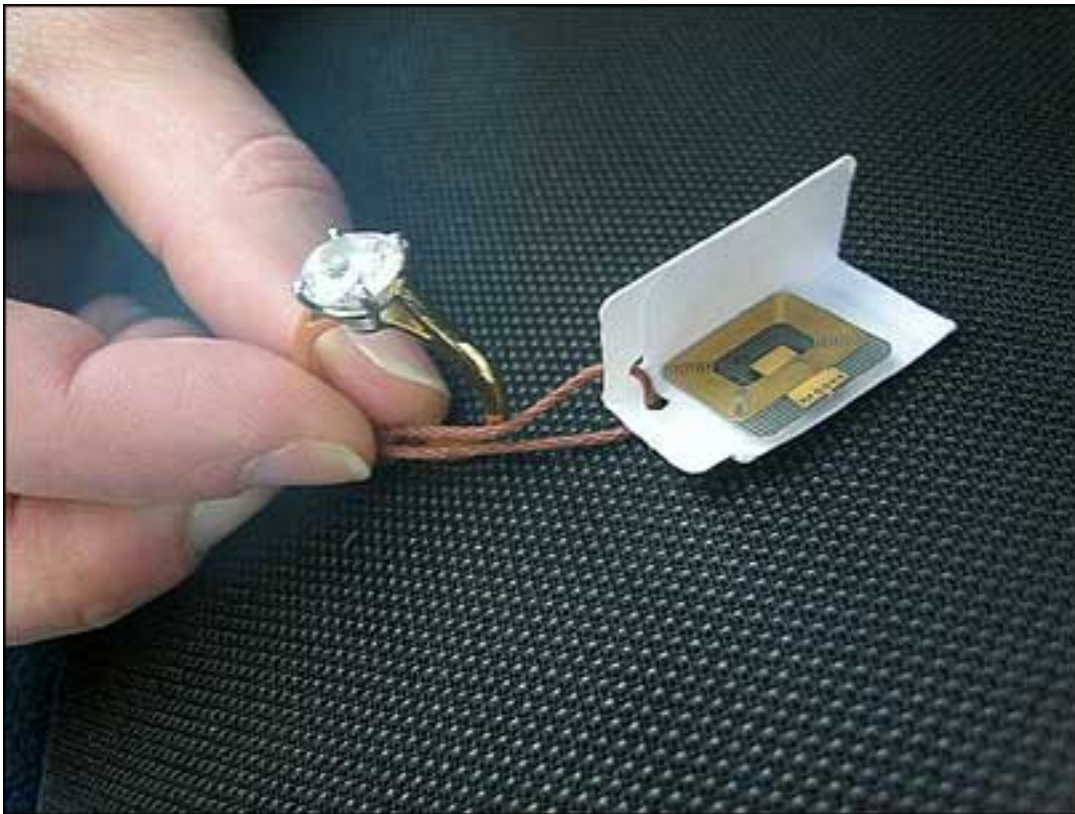
To deploy the system, de Grisogono will add a TAGSYS ARI070-SM 13.56 MHz tag to each product. The tag contains a [Philips I-code](#) chip, which can store 512 bits of data and has a read range of a few centimeters. Measuring 13 by 13 millimeters, the tags fasten to small hangtags carrying the de Grisogono logo. A tag attached to an item is encoded with that item's unique ID number, as well as the date of manufacture and an ID correlating to the retail location. All of this information is saved in a Solid database. Linked to each item's ID in the database is the object's description and image.

When on display in a showcase during business hours, tagged watches and jewelry are kept in trays that hold up to 20 items. At the end of each business day, as the trays are taken to the store's safe, they are placed on top of an antenna linked to a TAGSYS Medio L100 RFID interrogator. The interrogator

reads all of the tags attached to the items and sends these IDs to the Solid inventory software.

According to Mattalia, the trays can be placed on the antenna two at a time, one atop the other, so that all of the tags will be read. Then, as the trays are brought back out to the sales floor at the opening of the next business day, they are again placed on the reading station. If any tags are not accounted for, the software alerts the de Grisogono staff.

On the sales floor, the trays are kept in secure display cases. When a customer requests an item, that item is taken to a counter fitted with another antenna linked to the Medio reader. The inventory records are updated in real time to indicate which particular items are being shown. For each item purchased, the records are updated. At the end of the business day, the trays, before being placed in the safe, are read once more and the tag data is compared with the updated inventory database. Once again, if any tags are unaccounted for, the software sends an alert to de Grisogono staff.



de Grisogono has added an RFID-enabled tracking and inventory system from TAGSYS.

Once the tracking system is deployed at all de Grisogono locations, staff members will be able to see, in real time, the items available at every store. This will help them place special orders for goods on behalf

of their customers.

De Grisogono did not share any specific metrics for improved inventory accuracy or reduced theft. Still, thanks to the RFID system, its CFO, M. Laurent Debief, said in a press statement that the new system is helping the high-end retailer manage its inventory better.

Last week, Swiss RFID manufacturer [Sokymat](#) announced it had designed an RFID tag specifically for tracking jewelry. [The Jewellery Store](#) a Dubai-based service provider to jewelry wholesalers and retailers, is using 13.56 MHz ISO 15693-compliant tags to track inventory in a manner similar to the de Grisogono deployment. A tamper-evident feature will prevent a thief from removing tag from one item and placing it on another (presumably more valuable).

"As soon as the tag is attached [to piece of jewelry], it cannot be removed without disabling that tag, as the attaching loop creates part of the tag's circuit," say Philippe Held, industry and logistics product manager at Sokymat.