



DIA's international warehouses speak in unison

Optimising picking tasks in 3 continents with voice technology and RFID improves security and productivity

Solution and advantages : *Voice*

- software: 3iV Crystal,
- optimised process : picking,
- installed in: 38 warehouses in 7 countries
- Number of voice users: approximately 2,900

In combination with RFID

- optimised process: picking control
- installed in : Spain - extension planned world-wide

Anxious to standardise those processes that represent added value for the company, **DIA**, a subsidiary of the Carrefour group, is optimising its picking tasks with Zetes' **3iV Crystal** voice solution across 3 continents (Europe, Asia and Latin America). A combination of this **voice solution** with an **RFID system** was also implemented to improve picking control in Spain a year ago. The use of innovative solutions allows the company to increase its process quality and offer a better service to the client. Julián Villena, Director Supply Chain of the DIA Group, comments, "In line with our usual practices, all the pilot tests successfully carried out in Spain are being exported to the other countries as quickly as possible, so that each of our subsidiaries is equipped with the very latest technology".

The quest for scalable solutions world-wide

DIA started thinking about voice back in 2005. Until then, it was using a radiofrequency system that was rolled out as standard in all warehouses in Spain and abroad. This allowed them to run a 'paperless' warehouse, with real time inventory management. However, after conducting pilot tests, it emerged that a voice solution would allow an evolution of the order preparation tasks, improving their quality and ergonomics.

The pilot phase got off the ground in 2006 in the Villanueva warehouse (Valladolid - Spain) with 10 operators. Results were satisfactory in terms of productivity and process simplification and the voice solution was subsequently gradually introduced into the Group's other Spanish, French, Portuguese and Greek warehouses. All these installations were carried out by Zetes' local subsidiaries. The solution was also exported to the subsidiaries in Latin America and to Shanghai in China. There, Zetes' local partners took over, providing technical support with the installation. Today, DIA has around 2,900 operators working with voice in 38 of its warehouses.



The operators learned to handle the voice terminals more quickly than expected and found them very user-friendly

“The biggest difficulty when exporting any system of this kind is its technical adaptation to different languages,” says Julián Villena. That is why it was particularly important to be able to rely on local contacts in each country. As for the WMS, it is also the same in the 7 countries where DIA is currently working with a voice system. “Most of our management applications are developed in-house,” adds Villena, “so that they are as closely matched as possible to our business model.”

The operators learned to handle the voice terminals more quickly than expected and found them very user-friendly. They were also happy with the improvements to the quality of their work. “Working with voice has given our order pickers greater freedom of movement, as they no longer have to return to the machine to confirm each order line. This has increased security in the workplace as well as productivity.”

Working with a voice system has increased security in the workplace as well as productivity.

DIA also entrusted Zetes with technical support for its software and each of Zetes’ local subsidiaries provides this service in its own country. The Spanish subsidiary, as the initiator of the projects in its country, also offers support to South America and to each Zetes subsidiary should they have an enquiry.

RFID: a technology that can be perfectly integrated into the DIA processes

A year ago DIA also launched an RFID project for picking control which works as follows. Before starting the preparation of an order, the trolley is placed in scales and weighed. Each trolley has an identifier that is registered in a tag. This number, along with the weight, is registered in the WMS. Once the operator completes the preparation of his order, he returns to the scales and measures the total weight of the order. The control is carried out according to the weight of each article, which is stored in the system, and the weight of the empty trolley. This real time consultation with DIA’s WMS tells the user whether the operation is valid or invalid. In a very short timeframe. In contrast, the controls performed in the past required several pieces of data to be manually entered by the order picker. This task was not only slower and repetitive, it also required other controls to ensure the quality of the preparation.

RFID gives us the possibility of automating the order preparation process, increasing productivity and ensuring the reliability of the data.

According to Julián Villena: “RFID gives us the potential to automate the process, increasing productivity and ensuring data reliability. Due to warehouse operations, this was the only technology capable of being integrated into our day to day work. Our greatest satisfaction was that, despite the technical and technological complexity of the Project, the introduction and acceptance of the new processes was positive, easy and fast.

Despite the technical and technological complexity of the RFID Project its introduction and acceptance was positive, easy and fast.

This project got off the ground at the end of 2009 and, if all goes to plan, DIA will have its RFID system installed in all its warehouses in Spain before the end of 2010. Over the coming year, it will continue with its deployment in France and start implementations in the other countries. As process and technology standardisation is one of the keys to the company’s success, it is estimated that all its platforms will be RFID-enabled in the short term.

Innovating with the aim of improving both results and quality.

The improvement of the logistical process is part of the Group’s global strategy to continuously search for new services, characteristics and formats that can be adapted to better satisfy its clients whilst continuing to offer the best value for money.

“We believe that investing in cutting-edge technology is the best way of remaining ahead of the field in the distribution sector” explains Julián Villena. “That is why we always try to innovate not only with the aim of improving our results, but also our quality. The RFID picking control project is yet another example of our continuous improvement.”

In line with this logic, DIA conducts a permanent technology watch to pinpoint those technologies that could deliver the greatest benefits. Amongst other projects, it is investigating, along with Zetes, new uses of RFID to optimise its processes.

“We entered into the partnership with Zetes in light of our positive experiences during the installation of voice projects. Their knowledge of other types of technologies, as well as the fact that they are ever-mindful of finding the best solution for the needs of their clients, meant that we decided to enlist its support for our upcoming projects. Due to our standardisation of processes, Zetes’ European network of subsidiaries is also a key factor, as is its alliance with system integrators on other continents”, concludes Julián Villena.

DIA in brief

- *52,000 employees*
- *Presence in 8 countries:*
 - *Operates in Spain, Greece, Turkey, Argentina, Brazil and China under the name DIA*
 - *Operates in Portugal under the name Minipreço*
 - *Operates in France under the names Ed and DIA*
- *46 distribution centres with a total surface area of 900,00 m²*
- *6,475 establishments*