Case study

Grupo Vidrala

At a glance

Customer:
Grupo Vidrala

Sector:
Industrial

Market:
Glass industry

Application:
Product quality management. Warehouse management and product tracking.

Products:
RFID-based management solution Intermec CN3 terminals and IP30 RFID handles. CV30 fixed mount terminals and IV7 vehicle mount RFID readers.

Implementer:
JSV
Tel: +34 91 329 54 90
Fax: +34 91 329 27 79
www.jsv.es

Tracking with mobile RFID at Vidrala

Vidrala has installed an innovative per-unit pallet tracking system at its Albacete (Caudete) production centre, to improve its internal efficiency, from production to dispatch to the customer.

The system, designed and implemented by JSV Informática y Comunicaciones using Intermec technology, has made it possible not only to eliminate pallet identification errors completely, but also to speed up internal movements and reduce handling costs.

The customer
Vidrala is a Spanish group, created in 1965 in Llodio as Vidrierías Alavesas S.A., and specialising in the production of glass containers for numerous industries, especially food and agriculture. During its 45-year history, the company's development has been marked by its growth, especially since 2001, when a strong commitment was made to international expansion. The group now has 3 production centres in Spain (Álava, Albacete and Barcelona) and 3 international plants (Italy, Portugal and Belgium), with a total of 13 glass melting furnaces and a capacity in excess of 3.5 billion containers.
Constant innovation has been one of the group's distinguishing features. One of its most ambitious projects has been the implementation of SAP. Within this implementation process, one of the company's main aims was to improve its warehouse operations and per-unit tracking of pallets. JSV Informática y Comunicaciones, working together with Vidrala's R&D&I department, was the company in charge of developing the new systems: a new pallet identification system, a new movement-location management application and the system for extracting data from SAP.

Improved tracking
At the Caudete plant, Vidrala has a warehouse covering an area of 84,000m2, part of which is set aside as a "quarantine" area for finished products undergoing quality control. The rest of the space is organised according to product ranges and references. Per-unit tracking of pallets was a priority for the company. The use of RFID technology was proposed for this, with a view to solving two types of problems: on the one hand, introducing RFID brought about wholesale automation of the pallet scanning and identification process and, on the other hand, it avoided the problems of reading traditional barcodes through shrink-

In the next two years, Vidrala plans to extend this solution to all its production plants

vidrala

RFID leads to total automation of the scanning and identification process and avoids the problems of reading traditional barcodes through shrink-wrapping

CN3 handheld terminal

IP30 with CN3

wrapping. Furthermore, some of Vidrala's customers had begun demanding per-unit listings of all the pallets delivered.

According to **José Manuel Delicado**, in charge of the project at Vidrala, *"after an in-depth analysis of the problems we had, it was clear that RFID could be the ideal solution for our process, although it was not wholly free of risks, since this project would have an effect on all the key areas of our business such as logistics, quality control or IT systems."*

For pallet identification, a tag has been incorporated in the DIN A4 sheet. When the sheet is printed, the pallet's unique identification is recorded on the tag. For the recording of the tags in this process, Intermec IF30 fixed mount RFID readers were used, connected to the printing process and to the robots of the DIN A4 sheet applying machine. JSV has been responsible for the entire setting up of the printing systems and of the robotic equipment. One of the main technical aims of the project was to integrate the recording system in Vidrala's labelling equipment and in the other processes without making changes to the work operations.

Vidrala also uses forklift trucks equipped with RFID readers, so the processes of location and picking of orders and the corresponding identification of the different pallets are fully automated. Vidrala fitted its forklifts with Intermec IV7 readers and with CV30 vehicle mount terminals, which direct the operations of the warehouse workers. These readers or interrogators are especially designed to operate on forklift trucks, so the reading is done instantaneously with the handling of the pallet.

Vidrala opted for Intermec RFID technology and infrastructure. *"Among the solutions available on the market, this one seemed likely to be a good option for us, taking into account our needs and the quality/price ratio offered by Intermec,"* adds Delicado.

The process

JSV designed this tracking application for Vidrala; it is originally supplied with data from SAP and is executed both on the computers located on the forklift trucks and on the handheld terminals. The system includes different processes (withdrawals from production, movements, goods inwards, quarantine and dispatch), giving directions to the operatives.

With this development, the need to type or key in the information manually is avoided. This prevents errors and speeds up the performance of the processes. According to Delicado, *"the per-unit control means an improvement in all aspects, both in our internal management and in terms of the information that we can offer our customers."*

Intermec®

Información en movimiento

JSV

With this application, Vidrala has achieved exceptional quality of service in deliveries to customers, with zero errors

Should it be necessary to re-label pallets, the operatives have Intermec CN3 handheld units fitted with an IP30 reader/recorder. In this process the operative reads a barcode and records the same information on the tag.
The employees have given the new system a positive welcome. *"The response and involvement of our operatives has been very positive, since the system helps them to work accurately, optimising the processes,"* comments Delicado.

Vidrala has a huge number of references and it is often difficult to differentiate one from another visually, so the previous manual identification procedure led to errors in the order picking process. With RFID identification, these errors have disappeared completely.

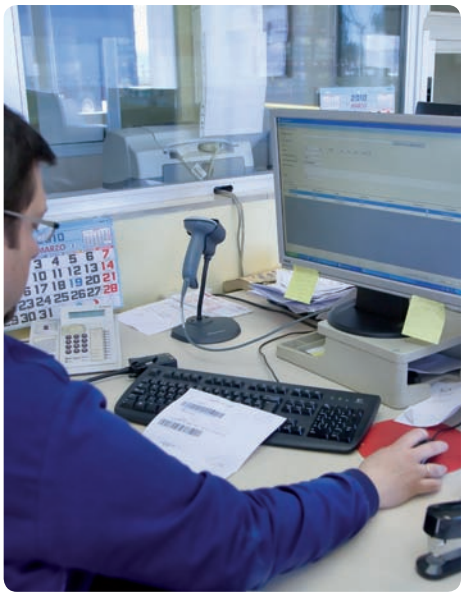
IF30

CV30 forklift mounted terminal

IV7 vehicle mount RFID reader

RFID antenna

Intermec®



"The fact that we have technology that allows per-unit control of each pallet opens up doors to numerous processes for improvement in different areas, especially in logistics, quality control or customer service"

Main benefits

- Automated scanning.
- Optimisation of time from production to dispatch.
- Zero delivery errors. Quality of delivery.
- Reduction of handling and dispatch costs.
- Speed of internal movements.

The future

The system is already in operation at Vidrala's Albacete plant and in the next two years the company plans to extend it progressively to the rest of its production centres.

"Furthermore, the fact that we have technology that allows per-unit control of each pallet opens up doors to numerous processes for improvement in different areas, especially in logistics, quality control or customer service," says Delicado.

One of the most immediate projects involves integrating the RFID solution with the SAP system in a totally transparent way. *"This will enable us, for example, not only to achieve one hundred per cent reliability in the dispatch processes, but also to reduce significantly the administration they require and to speed up the processes of documentation with the carriers and customers to the greatest possible extent."*

Likewise, a total integration of RFID with ERP will make it possible to achieve real-time consolidation of data relating to stock, orders and dispatching, optimising the planning and performance of the operations even more, so that the planning and production data generated in SAP can be exploited directly by the RFID system and the reverse will also be true at the time of reconciling the dispatches with the batches of products.

North America Corporate Headquarters
6001 36th Avenue West
Everett, Washington
98203-1264, USA
Tel: +1 (425) 348-2600
Fax: +1 (425) 355-9551

Europe, Middle East and Africa Head Office
Reading, United Kingdom
Tel: +44 118 923 0800
Fax: +44 118 923 0801

South America & Mexico Head Office
Newport Beach,
California (USA)
Phone: (949) 955-0785
Fax: (949) 756-8782

Asia Pacific Area Head Office
Singapore
Phone: +65 6303 2100
Fax: +65 6303 2199
Website
www.intermec.com

Worldwide Locations:
www.intermec.com/locations

Sales
Toll Free in NA: (800) 934-3163
Toll in NA: (425) 348-2726
Freephone ROW: 00 800 4488 8844
Toll ROW: +44 134 435 0296

OEM Sales
Phone: (425) 348-2726

Media Sales
Tel: (513) 874-5882

Customer Service and Support
Toll Free in NA: (800) 755-5505
Toll in NA: (425) 356-179

Intermec®

Copyright © 2010 Intermec Technologies Corporation. All rights reserved. Intermec is a registered trademark of IntermecTechnologies Corporation. All other trademarks are theproperty of their respective owners.

In a continuing effort to improve our products, Intermec Technologies Corporation reserves the right to change specifications and features without prior notice.