

PICKING LINE-UP AT NOVALTIA

PHARMACEUTICAL WHOLESALER, NOVALTIA, RECENTLY ADDED FURTHER AUTOMATION – INCLUDING A ROBOTIC PICKING SYSTEM – TO THE WAREHOUSE SOLUTION SUPPLIED BY KNAPP.

At its 18,500m² distribution centre (DC) in Zaragoza, Novaltia operates two shifts, seven days a week, shipping up to 120,000 items a day. All four of its DCs feature automated handling systems and together supply 1,000 pharmacies with up to five deliveries per day.

Novaltia has worked with Knapp, since 1999. In 2008, its Zaragoza DC underwent a large-scale extension and modernisation programme. Carried out during ongoing warehouse operations – without daily business being compromised – the project included the addition of an OSR Shuttle™ store and a universal software solution, KiSoft. In this way, end-to-end control of the warehouse processes was provided, with automatic generation of replenishment and transport orders and quality assured through intelligent and system-guided processes.

A Variety of Picking Methods

Most of the assortment at Zaragoza is stored in the OSR Shuttle™, which supplies the goods-to-person workstations and the automated storage

and retrieval system (AS/RS), which replenishes the central belt picking system and the manual picking area. Knapp's KiSoft software plans all the order picking and controls the various fulfilment systems. The central belt system consists of four A-frame autopickers that are connected in series and feature different ejector types to cater for various product types. This system takes care of the picking of fast- and medium-moving articles. Meanwhile, medium- and slow-movers are stored in the OSR Shuttle™ system and supplied to one of two ergonomically designed 'Pick-it-Easy Health' workstations that feature pick-to-light technology. Oversized and fragile items, meanwhile, are either picked at manual workstations or directly from pallets with the aid of RF terminals. Homeopathic articles are picked from a vertical carousel that provides fast access to goods in 3,200 locations. The various warehouse areas are connected by a high-performance conveyor system.

Urgent Orders

In addition to these main fulfilment areas, certain orders are handled in special ways. For example, transfer orders – those with few order lines but large quantities – are processed at a dedicated workstation in the AS/RS area using RF terminals, while full cases and bulky products are picked-to-belt. Cold-storage products (those kept at 2-8°C) are picked to separate cool containers using RF terminals, with data loggers used to monitor temperature during delivery. In addition, time-critical orders from pharmacies can be fast-tracked, with KiSoft ensuring that they are started promptly and picked quickly using RF terminals; these urgent orders are often picked up by taxi within minutes.





NOVALTIA SUPPLIES 1,000 PHARMACIES WITH UP TO FIVE DELIVERIES PER DAY



Robotic Picking

The Pick-it-Easy Robot solution is fed by the OSR Shuttle™ store. It uses Knapp's KiSoft Vision image recognition technology to identify the optimum article to pick from a tote and calculate the ideal grip point for the robot. Combining flexibility, reliability and performance, the robot is able to maintain a consistently high throughput rate and accuracy level over long periods in the picking of slow- to medium-moving articles.

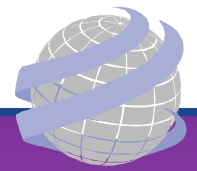
Handling Returns

Knapp-Store is a robotic storage and picking solution based on an AS/RS concept. Modular in design, it features rail-mounted storage robots that are like mini cranes. Goods are not stored in bins but multi-deep directly on glass shelves. On entry to the system, products are scanned from six sides –

capturing key data such as expiry date and lot number – and then automatically stored. Products of various shapes and sizes are picked using a system of two grippers that can move independently of each other.

Novaltia has also taken delivery of an Open Shuttle, one of Knapp's intelligent and free-roaming automated guided vehicles. Open Shuttles manoeuvre through the warehouse without optical or physical aids, reacting dynamically to obstacles and planning alternative routes.

In a final checking process, the contents of picked totes are verified semi-automatically with the aid of a check station. If an error is detected or there are any missing articles, the operator triggers a re-picking order and these items are picked using RF terminals and transferred to the final check station, where they are placed into the target container.



Automation Means Speed

With efficient, automated storage and picking, the average order processing time at the Zaragoza DC is just 15 minutes and the delivery time for orders is between 30 and 180 minutes. The secret of this success is selection of the optimum picking technology for each of the 33,000 articles in Novaltia's product range.

THE SECRET OF THIS SUCCESS...
OPTIMUM PICKING TECHNOLOGY



DELIVERY
TIME
30-180
MINS

