

Wholesaler of dental supplies automates distribution center

IMPROVEMENTS

- 30% rise in productivity
- No more stress or overtime
- Error-free registration of batch numbers

SOLUTIONS

- Shuttle-based Goods to Man storage system and Goods to Man stations
- Pick to Light system for fastmovers
- Batch picking with Pick to Cart for slow-movers

Jos Sakkers, ICT-manager at ADT:

"We're now not only handling more orders than before, but we've also eliminated stress and overtime." American Dental Trading (ADT) enlisted the help of system integrator Inther Logistics Engineering B.V. to automate the storage and order picking of dental products at its distribution center in Oisterwijk, the Netherlands. The wholesaler has invested in a combination of storage and order picking systems including Goods to Man stations, a Pick to Light system and picking carts. The new set-up will help ADT to achieve its growth ambitions. Jos Sakkers from ADT: "Productivity has increased by 30 percent and the number of picking errors has been reduced. Furthermore, we've eliminated stress and overtime."

The ADT distribution center in Oisterwijk carries a very diverse product range of 13,000 stock keeping units (SKUs). "We're the market leader in the Benelux region and we also supply to customers in Germany, France and Austria," says Jos Sakkers, ICT manager at ADT. The wholesaler is keen to expand its activities to other countries, which will lead to more orders and an even bigger product range, but the manual operation in the distribution center was holding back ADT's growth. "Besides that, the compulsory requirement to

register batch numbers meant that our order pickers had to note down the batch numbers on the printed pick lists. In other words, we urgently needed to automate and digitalize our logistics process," explains Sakkers.

Combination of order picking systems

ADT's search for a solution led the company to Inther Logistics Engineering B.V., resulting in the implementation of a combination of several different storage and order picking





SUMMARY

- Automated shuttle-based storage system and Goods to Man stations
- Pick to Light system split into two zones
- Digital order picking carts with space for 12 customer-specific totes
- Consolidation buffer to temporarily hold orders
- Packing area featuring several packing stations
- Expedition sorter with three output lanes
- Conveyors for internal transport between shuttle system, Goods to Man stations, Pick to Light system and packing stations
- Managed by Inther LC warehouse management system
- Integration of Inther LC with ADT's ERP system
- Project management by Inther LC

systems controlled by the Inther LC warehouse management system. The most eyecatching solution is the shuttle-based Goods to Man system for the storage and retrieval of plastic totes containing inventory. To optimize the storage capacity, many of the totes are fitted with partitions which subdivide them into two, four or eight compartments.

Goods to Man stations

Order picking is done at the Goods to Man stations which are connected to the shuttle system by conveyors. Each station has two picking workstations positioned at chest height for handling the stock totes emerging from the shuttle system. The picked items are placed into one of the four totes positioned at hip height, each of which is linked to a specific customer order. Thanks to various support features such as monitors, LED displays and LED indicators, picking errors are virtually eliminated. "The fact that the order pickers no longer have to walk is beneficial for our productivity," states Sakkers.

Pick to Light

The storage and order picking system for fast-movers is positioned in between the shuttle system and the two Goods to Man stations. It comprises a roller racking system with a different SKU in each lane. Each lane also has a Pick to Light display which shows how many items must be picked from it. "We've split this area into two zones so that two order pickers can work simultaneously," continues Sakkers.

For slow-movers and bulky items, ADT uses Pick to Cart: order picking carts equipped with Pick to Light displays. The carts enable the employees to pick up to 12 orders at a time as they follow their route past the pallet and shelf locations. "Once the order pickers are done, they place the totes and cartons in a consolidation buffer: a roller racking system where we can temporarily hold the orders until they are complete," says Sakkers.

Calmer and less stressful

For the final phase of the operation, Inther has installed a number of packing stations where items from the various storage and order picking systems are consolidated and packed. A conveyor transports all the cartons that are ready for shipment to an expedition sorter with three output lanes. The whole operation has become much calmer since the new storage and order picking system went live, according to Sakkers, and productivity has increased by 30 percent combined with a reduction in the number of picking errors. "We're now not only handling more orders than before, but we've also eliminated stress and overtime."





