



RM Trade

Vacarisses, Barcelona, Spain

116

ENHANCED SUPPLY CHAIN

The new system gives greater flexibility, and shortens delivery times to stores around the country.

CAPACITY INCREASE

It enables buffering against going over capacity and can now handles 700 items per hour.

CONSULTANCY APPROACH

SDI's unique consultancy approach has resulted in a solution that is future-proof, being able to meet the future outputs needed, and other precise needs of the customer.



THE CHALLENGE

Logistics specialists RM Trade handles the distribution of children's clothing and accessories to Prenatal stores in Spain, Portugal and France. The previous method of manually assembling individual store orders, one-by-one, was under great pressure to keep pace with Prenatal's expanding product range – with all the permutations of sizes and colours, there are around 500,000 individual storage keeping units (SKU) – and a rapidly growing number of outlets.

THE SOLUTION

The SDI flat garment sortation system was installed as part of a programme to introduce automated, largely RF-driven, processes through much of the Vacarisses distribution centre. The objective was to speed-up throughput, give greater flexibility to handle a wider product range, and to shorten the delivery times to stores.

With its pick-to-light process, RM Trade is currently batch picking up to 15,000 individual items per day. The SDI sortation system has a capacity to handle more than 7,000 items per hour, sorting into around 200 store boxes. Each order can comprise as many as 60 different SKUs.

“As well as increased sortation speed and capacity, the SDI system also gives us much greater flexibility in handling orders of all sizes and, with the continuous batch-pick-to-sorter process we are now operating, we can cut down the time between receiving orders and delivering more.”

*RM Trade's Warehouse Manager
Raphael Manzanares*

THE SYSTEM

The SDI sorter, installed on the first floor of the distribution centre, comprises a massive 65-metre oblong carousel equipped with 236 bomb-bay trays. Arranged around each side of the carousel are 233-drop zones with inclined chutes, which are allocated, as required, to individual stores. Garments are transferred from the ground floor storage area, where batches are picked using an RF system developed by RM Trade and manually loaded into the bomb-bay trays at the sorter's induct station. The induct station has three fixed in-line scanners that read the bar codes on the garments.

The scanners communicate with the Warehouse Sortation System (WSS), which was developed by RTI, a 100 per cent SDI subsidiary. As the goods pass around the system the WSS sends signals to the sorter's control software to activate solenoids that open the bomb-bay flaps on the trays as they pass over the required drop-stations, so the garments slide out of the sorter into the chutes.

The chutes are specially-designed to hold the sorted items until they are ready to be collected by RM Trade staff. When ready, the items are released from the chutes and packed neatly into standard 400 x 600mm store boxes, ready positioned at the drop stations. Each of the boxes has been given a bar code, and there is also a bar code on each drop station. When the store boxes are full the operatives scan both bar

codes to reconcile the store box with its exact contents as processed through the sorter. The boxes also include printed delivery notes itemising the contents.

The boxes are then pushed through to conveyors, two of which run down the inside of the sorter carousel. These two conveyors take the boxes to a further single conveyor, running at right angles to the end of the sorter, for transfer to the dispatch bays on the ground floor where the boxes are sealed and given delivery labels.

SDI has also installed a rope conveyor to carry empty store boxes up to the sorter from the ground floor; and position them alongside the chutes at the drop stations.

“Such capacity will enable us to grow our operations well into the future.”

Raphael Manzanares, RM Trade

ABOUT SDI GROUP

SDI group is an innovative provider of systems and solutions to the retail, wholesale, fulfilment and e-commerce industries for all aspects of distribution centre materials handling.

As both consultants and system integrators, the company provides clients with a total logistics solution package, which includes materials handling consulting, as well as design, engineering, fabrication, installation and integration services.



Tel: +44 (0)1788 574666

Web: www.sdigroupuk.com Email: sales@sdigroupuk.com

SDI Group UK, 20 Somers Road, Somers Road Industrial Estate, Rugby, Warwickshire CV22 7DH UK