ZEBRA TECHNOLOGIES

Flextronics guarantees logistical efficiency and reliable goods management using Zebra® bar code printers.

Flextronics specialises in end-to-end supply chain services, covering every aspect of the logistics process involving both assembling and transporting products for OEM customers. The company operates in over 30 countries and has its Dutch office in Venray, the Netherlands. Its distribution centre, which covers a total area of 200,000 m², is among the largest centres in Europe with production operating on a 24 hour a day, 7 day a week (24x7) basis. Every day approximately 300 trucks loaded with products leave the warehouse to make deliveries across the EMEA (Europe Middle East and Africa) region. Flextronics has already been using different types of Zebra® thermal label printers in order to optimise the various processes required to ensure that products can be delivered on time.
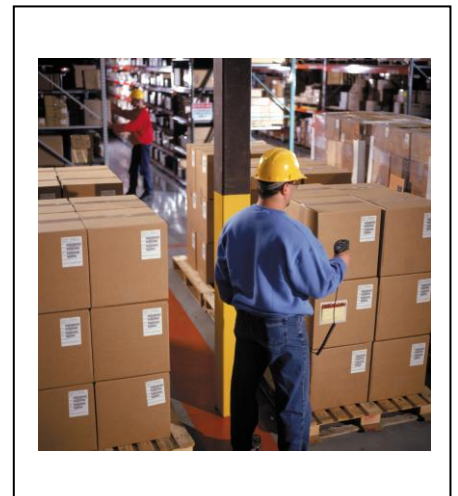
The Challenge

Goods traceability and identification are vitally important elements in the supply chain. The most practical and reliable technology that can be used in this area is the bar code. Whether it involves the traceability of an individual product within the logistics process or transporting pallets, if the item comes with a bar code, all the necessary information is directly available. The data can be easily read using a bar code scanner which saves a great deal of time and avoids mistakes.

"We want to offer our customers a reliable service. This means that we need to have our logistics process in order," says Johan Berghs, ICT Manager at Flextronics. "For us to save time and money, it is important that goods are easy to trace. As we mainly transport expensive items, the security aspect is also extremely important. Every year we process on average some 819,000 pallets. If these items didn't have barcodes we would be considerably less productive."

Since Flextronics works for a number of different customers, there are also different requirements specified for the labels being used. For instance, if different measurements are used, the quantity information on the label may vary for each customer. Depending on the type of transport being used, there will be different requirements specified for the labels' durability. This means that the printers must be multi-functional to be able to meet these requirements.

"Our distribution centre operates 24 hours a day, 7 days a week," continues Berghs. "The printers must be able to endure this intense heavy work load and need minimal maintenance. Of course, you cannot compare these at all with the printers used in an office environment."

Solution Technology

- Zebra® Z Series® mid-range printers
- Zebra ® Xi™ series high-performance printers
- Zebra® PAX™ series print engines

The Solution

Flextronics uses more than 200 Zebra® printers. Different printer models are used, depending on the specific printing requirement. The printers used vary from mid-range Z Series® printers, which are ideal for printing labels for item tracking, to the robust high-performance Xi™ series, which is used in business critical 24x7 environments. In addition, Flextronics also uses PAX™ series print engines for automatically applying labels, which speeds up internal processes.

The distribution centre is divided into various units, each one being equipped with its own label printers. All the printers are connected to the warehouse management system (WMS) which is used worldwide by Flextronics. The Enterprise resource planning (ERP) system runs on BAAN. The WMS interface is also connected to SAP, as this software is used by the majority of customers. The implementation of the WMS system and integration with the printers was carried out   by Flextronics' Zebra channel partner.

"This system allows us to easily design the bar code labels ourselves, tailored to the customer's specific wishes," says Berghs. "The labels are then printed out by our staff at our distribution centre and stuck   on the product or pallet. We use Motorola scanners to read the barcodes and monitor the goods management process, providing the perfect combination. It is a stable system, which is important for our productivity."

Flextronics uses different types of labels, the most commonly used of which are used for identifying boxes. There are also labels printed for item tracking and transporting pallets. Inbound labels are also used to a limited extent for internal storage. This shows that barcodes are an essential component in the whole logistics process.

The Benefits

Johan Berghs explains why products and pallets need to be labelled: "The most important reason is to make the logistics processes more efficient. We are often working under great time pressure. It is vital then that we don't make any mistakes or waste time."

User-friendliness is a key factor as to why Flextronics has opted for Zebra® printers. Staff must be able to tear off labels easily so that production is not delayed unnecessarily. It is also important that they can quickly change the roll when labels run out. As Flextronics prints a lot of labels, the cost aspect is crucial.

"Zebra printers are reliable and robust, which means that their maintenance costs are also low," continues Berghs. "Industrial environments impose huge demands on printers. They must be able to operate properly in dusty environments and keep going almost non-stop. Given that we have been happy with our printers' performance for more than seven years already, this shows that we are confident about the return on investment (ROI)."

Quote

"We have been using Zebra printers almost exclusively for seven years and we are very pleased with their performance."

Johan Berghs,
ICT Manager,
Flextronics, The Netherlands

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