

Automatic Carton Cross Docking System

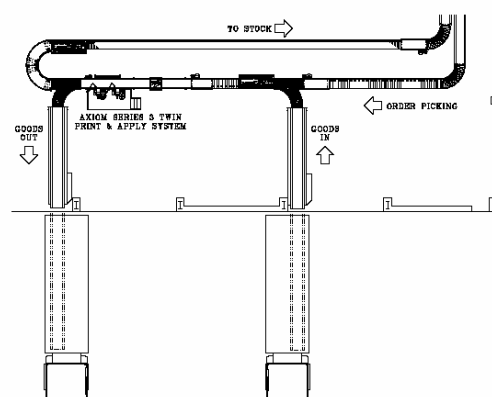
London – United Kingdom



Goods in to goods out in less than one minute – made simple by Axiom

Case Study

- ü Two man operation
- ü Throughput of around 30 cartons per minute
- ü Automatic carton identification using omni-directional barcode reading
- ü Automatically updates proof of delivery records
- ü Carrier specific labels produced dynamically and automatically for each carton
- ü Dispatch documentation and manifests automatically produced
- ü Handles stock to warehouse
- ü Handles warehouse picked stock



Faith Shoes distribute cartons of shoes across the UK to each of their stores. The cartons arrive at the head office distribution centre in London in containers, traditionally being unloaded by hand with the stock being located and stored in the warehouse. This meant that each carton was handled repeatedly by warehousing staff prior to it being finally picked and dispatched.

In order to improve product flow and minimise distribution time Axiom installed a fully automated cross docking system. Ensuring that the supply chain solution can deliver products to store as fast as possible is just one of the dilemmas that face today's logistics managers. Often product arrives at the distribution centre with little or no time to get the product into the store. Faith is similar to many companies receiving product from overseas and requiring it in store on its arrival.

Typically cartons of shoes would arrive at their operation in London where they were unloaded from the truck or container, manually counted and moved into the warehouse to be located as stock items. Subsequently, an overnight process would advise the head office system that the stock had arrived. The following day the systems would construct picks and the product would be taken from the warehouse and dispatched to the store. This whole process was inaccurate, slow and required huge amounts of labour to move cartons into and out of stock.

Axiom and Faith worked on a project to automatically cross dock arriving cartons of pre-packed shoes from the delivery truck straight onto the back of the standing trailer supplied by the carrier. The solution was also extended to handle cartons of stock shoes and loose picked shoes that were order picked from warehouse stock.

Goods in cartons enter the operation via an extendable truck loader, where they merge automatically onto an overhead conveyor system. Once on the conveyor they are automatically scanned using an omni-directional barcode reader to read the SKU bar code applied manually by the manufacturer.

The system automatically updates proof of delivery reports, taking into consideration quality control requirements for each SKU being handled. If a carton is required at the store the system automatically prints a carrier dispatch label and the carton is diverted onto an extendable truck loader, straight into the back of the standing trailer. Dispatch data and carrier manifests are automatically updated for each dispatched carton.

Cartons that are delivered for stock holding are conveyed to the warehouse floor area that has been allocated to receive bulk and pre-pack cartons. Each carton is uniquely labelled so that the warehouse systems can track carton movements. The same approach is applied to cartons that have been 'order picked' – that is they are scanned and cross docked automatically.