

## *Healthspan selects Axiom's Series PR Sorter to speed up despatch operation*



When Healthspan urgently needed a cost effective packet despatch system they turned to Tamworth based sortation system specialists, Axiom. Their task was to design, manufacture and install a powerful system capable of sorting up to 10,000 packets an hour. They had to achieve this in a ten week delivery window and within a tight budget constraint.

Healthspan is the UK's leading home shopping supplier of vitamins, minerals and health supplements. The company ships product directly from its head office operation in Guernsey to customers throughout the Channel Islands and the UK using the Guernsey Postal Service and Royal Mail.

A despatch problem arose when Guernsey Postal Service implemented a new requirement for all bulk mail to be sorted to 120 destinations. To fulfill this requirement Healthspan had two choices; the first was to have their packets sorted by the Postal Service - a costly option, the second was to sort the packets themselves. They chose the second option. This, however, urgently required a cost effective sortation system as manual sorting was out of the question, requiring fifteen extra staff sorting all day, every day, due to the high shipment volumes involved.

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**Chris Jackson**  
Operations Director  
Healthspan

## Sourcing a tailor-made system

Healthspan's Operations director, Chris Jackson began the search for a solution. He comments, "We sourced Axiom through the internet, and invited them and several competitors to tender proposals. Axiom was our chosen partner because they were able to create a sortation machine that was tailor-made for our needs; whilst remaining competitive on price."

Within three weeks of the initial approach, Axiom had submitted detailed proposals including layout drawings and system information. They also arranged for Healthspan to visit one of their sortation installations in Madrid.

## Meeting Healthspan's conditions

The contract was based on a number of important criteria:

- It was imperative to meet a delivery window of just ten weeks
- The tight budget constraints were further compromised as the project involved a large amount of building work as well as the sortation system
- There was a limited footprint for the overall operating space
- The speed of the system was important – it had to be capable of consistently handling a minimum of 4,000 packets per hour irrespective of packet sizes which could range from 200g to 800g
- Reliability was essential due to the relatively isolated island location

To cap it all, the physical delivery of such a large system had to conform to the constraints of shipping to a small island. Even when the system reached Healthspan's premises, there was one more restriction – the building only had a normal sized double door for receiving goods.

## Delivering a cost effective solution

Axiom designed and delivered a cost effective solution within the prescribed ten week window. The system consists of induct conveyors which deliver a consistent train of regulated products to the sorter, a Series PR (popup roller) sorter with 50 dual direction carriages. As part of the contract Axiom designed and installed all supporting system controls and automation, software and interfaces. The company also provided training on the new equipment, a spare parts package and bi-annual servicing.

The system is based around several operators manually loading product that has been pre-labelled with a customer shipping label onto induct conveyors with the label facing upwards.

On arrival at the sorter, the packets are automatically scanned using an overhead omni-directional barcode reader. The barcode is forwarded to a conveyor control server running a Linux based sortation control system. The server sends 'ship to' and weight data to the sortation control PLC.

The packets are conveyed to 100 bespoke 'intelligent chutes' and bins (mail sacks which are held in place with supports). With just two operators responsible for removing full mail sacks and replacing them with empty sacks, an integral accumulation/buffer solution for the packets was crucial.



Healthspan



Product is automatically tracked as it travels through the sorter and when it arrives at the correct destination the system checks to ensure there is free capacity in the mail sack. This is done by embedding the product weight into the barcode so that the system can constantly update sack weight. If the sack is full, the product is diverted into a bespoke chute capable of holding a similar volume of product to the mail sack. Once the mail sack has been emptied, an automatic door opens and the packets fall from the chute into the sack.

## Return on investment

Chris Jackson concludes, "The sortation system from Axiom has proved to be invaluable. It's a real workhorse of a sorter which requires minimal maintenance and is entirely reliable. As we now have capacity for increased throughput, it allows us to expand the business without additional cost.

"Finally, although the system was a considerable investment for us, at just under £250,000, it has paid for itself within the first year."