

PACKAGING AUTOMATION

Boxing Clever

When a 3PL client faced the challenge of reducing the size of its cartons, Durrenberg came up with a swift and cost-effective solution.

Since August 2016, GXO has run a warehouse in Réau near Paris on behalf of shoe e-retailer Sarenza. The warehouse is highly automated with a system from system integrator TGW consisting of a goods-to-person picking system with direct picking in the shipping container, and packaging machines from B+ Equipment.

Three tray erectors form trays of three sizes that are then routed to the picking stations. At the end of the line, four closing machines seal the trays with a glued lid. Out of the four closing machines, only the one for the largest box size was fitted with a height reduction capability.

Upon renewal of the contract, Sarenza announced higher volumes for the coming years and a different order profile, as it now also sells clothes in addition to the initial shoe business. The consequence of expanding into the clothing business is that items of smaller dimensions are shipped, for which lower boxes would be more appropriate. A reduction in the box size would avoid leaving too much empty space in each box, and therefore allow a denser load to be shipped. Sarenza expressed a wish to switch to a more ecological solution that would help reduce vehicle movements.

GXO proposed to Sarenza to upgrade the lidding machines, where two of them would be fitted with height reduction capability thus making it possible to get lower boxes which are more suitable to the clothing business.

For this project, GXO faced four distinct challenges: Getting a short lead time from a machine supplier so that the project is consistent with the limited duration of the contract with Sarenza; Getting an attractive ROI based on the savings on transport costs; Handling and accessing the machines on a mezzanine floor through a hole and amidst a labyrinth of spaghetti conveyors; And squeezing the site works over a weekend to ensure minimum disruption to existing warehouse operations.

Durrenberg proposed to GXO its standard and price-attractive offering of refurbished machines, where the machines are completely refurbished with all wear parts replaced, the obsolete electronic components are replaced, the box size and the interfaces are adapted to the project specification, and where the machines are offered with a nominal one-year warranty running from the go-live date.

To help overcome the challenge of handling the machines up and onto the mezzanine, Durrenberg subcontracted



Durrenberg's solution allowed greater packing density.

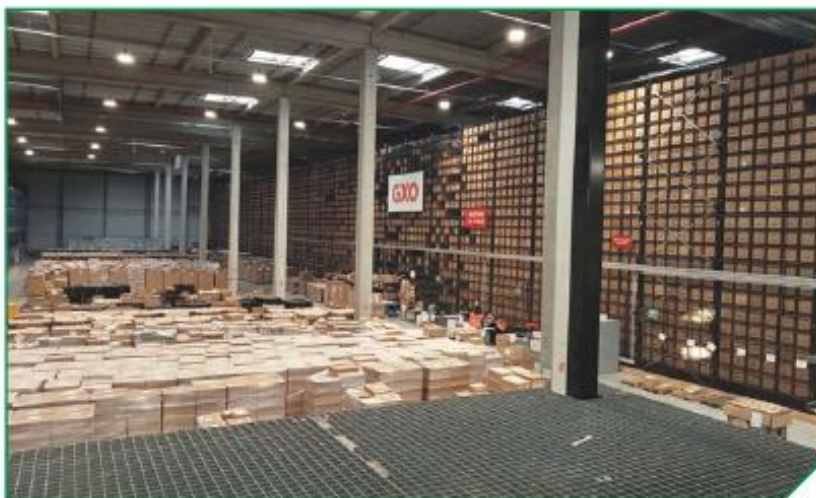
the works to Bovis – a specialist in such complex handling jobs - who brought skilled staff and specific equipment onto the site. In order to reduce to a minimum any disruption to GXO's ongoing operations during the installation and commissioning phase, Durrenberg assembled a specialist team of eight engineers and managers who were able to successfully complete the works from its starting point up to go-live within three days, to the client's great satisfaction.

"We called in Durrenberg at the request of our customer to reduce the void in the boxes," said GXO's Site Director for the Réau facility, speaking exclusively with Logistics Business. "The cartons were too large and there was a void. So to reduce the height of the boxes, we asked Durrenberg to modify the machines. We contacted Durrenberg in November 2021 to explain to them the problem. Durrenberg offered us the solution of reducing the height of the boxes and we modified two machines in March 2022.

"The result is very good. Sarenza is very happy to with the solution today, because it makes the operation more efficient than before. Before we had 60 cartons on average for one pallet, but with the new system we now have 90."

Durrenberg assists B2B wholesalers and ecommerce retailers to optimise their packing processes. Based in Provence, France, it describes itself as a specialist in automated packaging for order fulfilment and reduction of the transported cube, with expertise in diagnostics, design, and project management, plus a portfolio of equipment and services dedicated to this business.

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The GXO warehouse in Provence, run on behalf of Sarenza.