



Case study: Algam
Algam automates order consolidation area

Location: France



Algam, distributor of musical material and audio equipment, has automated the order consolidation area of its warehouse in Thouaré-sur-Loire (France). There, customer orders are verified and conditioned before their subsequent shipment. Mecalux has installed a box conveyor circuit that links the warehouse with this fully automated area.

Who is Algam?

Algam is a leading French company in the musical instrument and professional audio, video and lighting equipment distribution business. When it was founded in 1971, it made artisanal musical instruments, although at present it focuses on the distribution of musical materials. It has also established a strong network of shops as an official distributor of 150 prestigious brands within the market.

The expansion of Algam is unstoppable. In recent years, it has extended its market into countries such as Belgium, the Netherlands, Luxembourg, Norway, Sweden, Denmark, Spain, Portugal, Morocco, Tunisia, Algeria and even China.

Parallel to this distribution activity, Algam is also a manufacturer of Lâg guitars and the legendary Pleyel piano brand.



The circuit is adapted to the demands of the centre and incorporates straight sections, curves and a ramp with conveyor bands to move the boxes at a controlled speed from the upper floor to the lower warehouse

Needs and their solution

In recent years, Algam has made a substantial investment in France to respond to the growing business demands and mar-

ket needs. A short while ago, it built a new 18,000 m² logistics centre in Carquefou and revamped the operations of its Thouaré-sur-Loire warehouse.

In particular, it had to optimise the transportation of finished orders to the order consolidation zone, where boxes are checked, conditioned and sealed. Next, packaging, labelling and the necessary dispatch documents are done up for before the orders are shipped out.

Laure Bridault, logistics director at Algam, explains that "After Mecalux installed a two-level picking mezzanine, we needed a solution that would stop operators from having to climb the stairs to pick items while finalising and consolidating an order in the packing area." Mecalux has installed a box conveyor circuit to achieve this storage goal.





Laure Bridault
Logistics Operations
Manager at Algam

“The Mecalux solution adapts perfectly to the physical space and to our goal of minimising both the transport of boxes and the movements of operators. The commissioning of the conveyor circuit has been quick and its operation a success. Its configuration is so simple, this has us considering setting up a second consolidation station.”

How the consolidation zone works

Operators place boxes on the conveyor circuit at the upper floor of the warehouse, which then descends to the lower level. A sensor detects an order's status: if the order is finished, it is directed to the consolidation station; if it is not, it is shifted to an incomplete order conveyor.

The operators collect the unfinished orders to complete them with the missing items. Once they have carried out this task, they deposit the boxes on the corresponding conveyor, and these boxes are sent to the consolidation area.

The box conveyors link the warehouse with the consolidation zone automatically, which increases the productivity of all in-house operations



The consolidation station has all the equipment and accessories required to consolidate and close orders (PCs, packaging material, printers, manual sealers, labels, filling material, etc.).

When the orders have been verified, cardboard boxes are set up, the articles are inserted inside, and the whole thing sealed manually. Finally, these boxes are sent to the warehouse dispatch area.

A conveyor has also been installed in which empty boxes accumulate. So, workers can just grab a box when they start putting together a new order. Said conveyor is located at a higher position, just above the finished order conveyor.





Advantages for Algam

- **Greater agility:** the box conveyor system speeds up the transfer of merchandise from the warehouse to the consolidation zone and minimises interference with the other operations of the centre.
- **Ergonomic design:** the distribution of the conveyors allows the operators to handle the boxes with ease.
- **Efficient operations:** the consolidation station contains all the vital equipment needed to verify and close the error-free completed orders.



Technical data

Box size	400 x 600 x 330 mm 150 x 150 x 150 mm
Max. box weight	25 kg
Transport speed	25 m/min
Conveyor heights	800/1,600 mm (lower floor) and 750 mm (upper floor)

