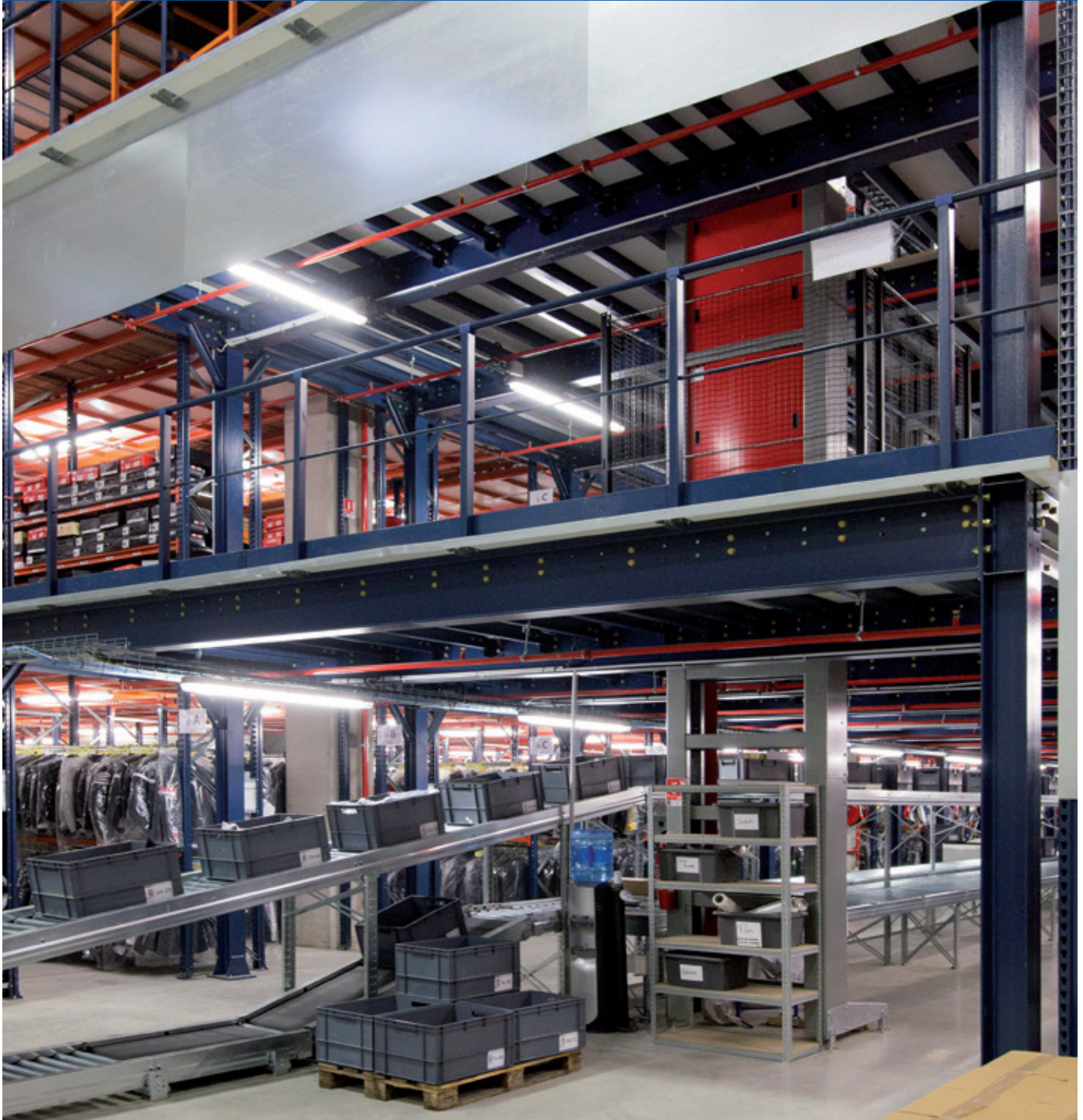


Case study: **Motoblouz.com**

Online orders prepared on four different levels
at Motoblouz.com

Location: France



Motoblouz.com, an e-commerce business who sells motorcycle equipment and accessories, has constructed a warehouse in the town of Carvin (France), whose number one operation is picking. Mecalux has supplied four levels of high-rise racks with walkways, quadrupling the useful surface area of the installation. A conveyor circuit runs between the different floors and the consolidation zone, also speeding up picking tasks.

About Motoblouz.com

Motoblouz.com is the leading French company in the online sale of equipment and accessories for motorcycle enthusiasts.

Created in 2004, it is one of the youngest, entrepreneurial groups in the sector. It has more than 60,000 items in stock, representing the 355 different brands sold via its website.

Currently, it distributes its products worldwide, with an eye on strengthening itself internationally in the next few years.



Currently, the warehouse holds more than 90,000 different sized boxes; the three-year plan is to be able to manage 10,000 orders a day

Needs and the solution

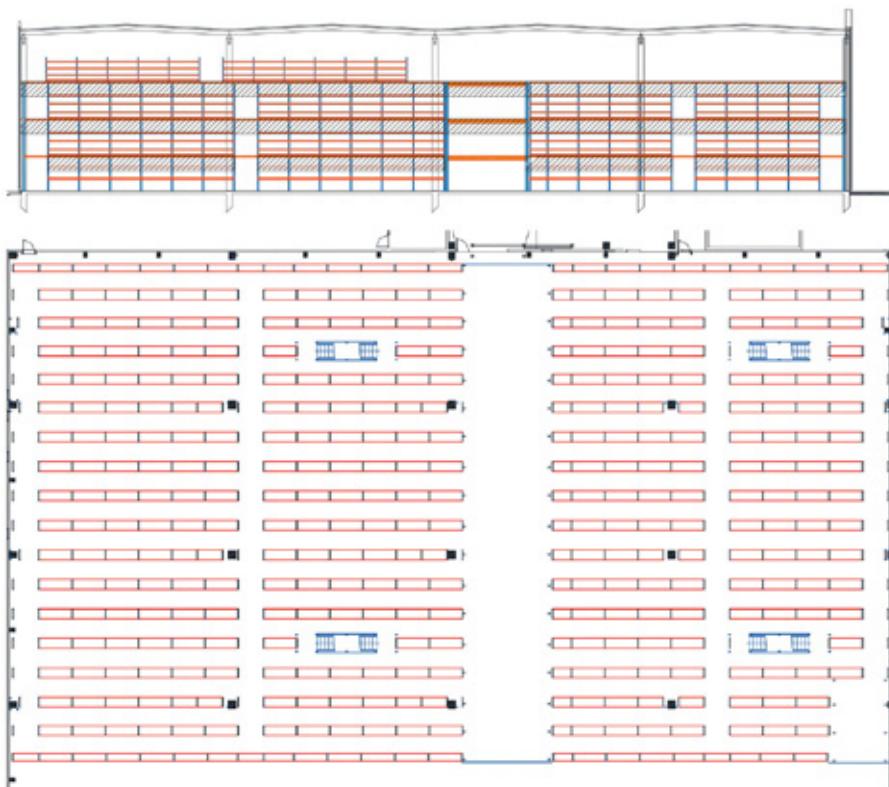
Motoblouz.com needed a storage set-up where all the SKUs it handles would be sorted as per turnover and size.

Moreover, it specifically needed a streamlined order picking system, which would let it provide efficient service to its online customers.

Mecalux collaborated from the start in the design and development of this project, bringing its experience and know-how to the table to find the best solution.

The result is a 2,640 m² sized installation, consisting of picking blocks with walkways that form four levels, quadrupling the useful area of the warehouse.

The automatic conveyor circuit bridges the gap between the four warehouse floors and moves the finished orders to the consolidation and sorting zone.





Storage for picking with walkways

Mecalux has installed racks that are 9 m high and subdivided into four floors: the ground-level, two levels with walkways and a column-free top level.

This system fully utilises the warehouse's height to max out the available space and, consequently, yields a higher storage capacity.

These direct-access racks streamline merchandise handling, picking tasks and also ensure a spot-on stock control.

They are very versatile, include components and accessories that adjust to all SKU types (from the largest, down to the smallest ones) and can store and classify similar products.





Shelf distribution varies level to level depending on the products housed in them, whether they are helmets, boots, shoes, accessories or jackets

Shelves on all levels are made of electro-welded mesh, which supports the goods.

At the same time, they allow water to flow freely if the fire sprinklers are activated.



Warehouse layout

The warehouse is sectored to organise the wide variety of SKUs.

Each of the levels stores particular products and has a specific number of assigned operators, which may vary depending on the demand and the number of orders to prepare.

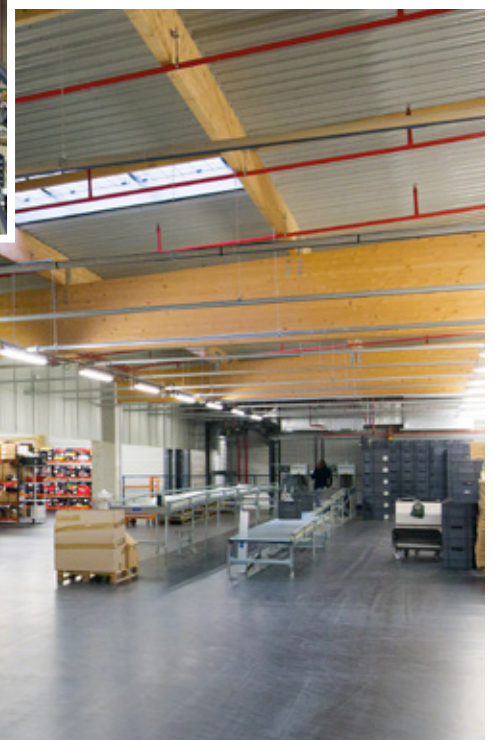
Aisles are wide enough for operators to move about with handcarts. They collect items that correspond to each order and replenish stock during off-peak hours, i.e., when the volume of order prep is lower.

Four strategically placed staircases let operators access any of the warehouse levels.

The upper floor was left column-free. Here, they have installed racks with distributions not seen in the other levels.

Down the road, the current arrangement can be modified and more racks added, taking into account the needs and growth at Motoblouz.com.

The lower floor is allocated to garments and levels contain rods where more than 26,800 hangers are hung



Order preparation

A mezzanine structure is set up in the central aisle, which joins the two blocks of racks with walkways; thus, the conveyor circuit passes through each floor.

Three conveyors flow in parallel: one's role is to connect all the warehouse floors, and two more function as order prep tables. The latter are completely

unmotorised, letting workers hand-shift boxes to the most comfortable position. A vertical box lift unites the various warehouse levels.

Operators walk about the racks collecting the products the WMS instructs them to via a radiofrequency device and, later, place them inside the boxes pertaining to each order. Personnel follow the order

grouping system, which consists of putting together several orders during the same itinerary.

Once this process is completed, the order is returned to the main conveyor, where it moves to another level in case more products need to be placed into it; or up to the consolidation and sorting area if it is completed.



The vertical box lift is tasked with moving boxes automatically to the corresponding level





Consolidation area

The lower warehouse level is the location of the consolidation area. This is where orders are verified when they have been completed, and where packing, labelling and issuing of the needed documents are carried out.

Boxes are grouped on pallets, which are sorted as per route or the order they belong to, streamlining the eventual loading of transport vehicles.





Advantages for Motoblouz.com

- **Every metre counts:** the racks take up the full height of the warehouse to yield a higher storage capacity. Products on all levels are easily accessed via the various walkways.
- **Smart warehouse management:** racks are fitted out with components in order to store SKUs of many different sizes, characteristics and turnovers, such as boxes, helmets, garment, smaller items, etc.
- **Swift picking system:** the goods are distributed keeping their demand in mind and the conveyor circuit optimises the operators' movements during picking.



Technical data

Storage capacity	+90,000 boxes and 26,896 hung garments
Warehouse height	9 m
Warehouse length	68.1 m
Warehouse width	38.8 m

