# Case study: Firat Food
Dedicated to picking: a triple solution at Firat Food

Location: France
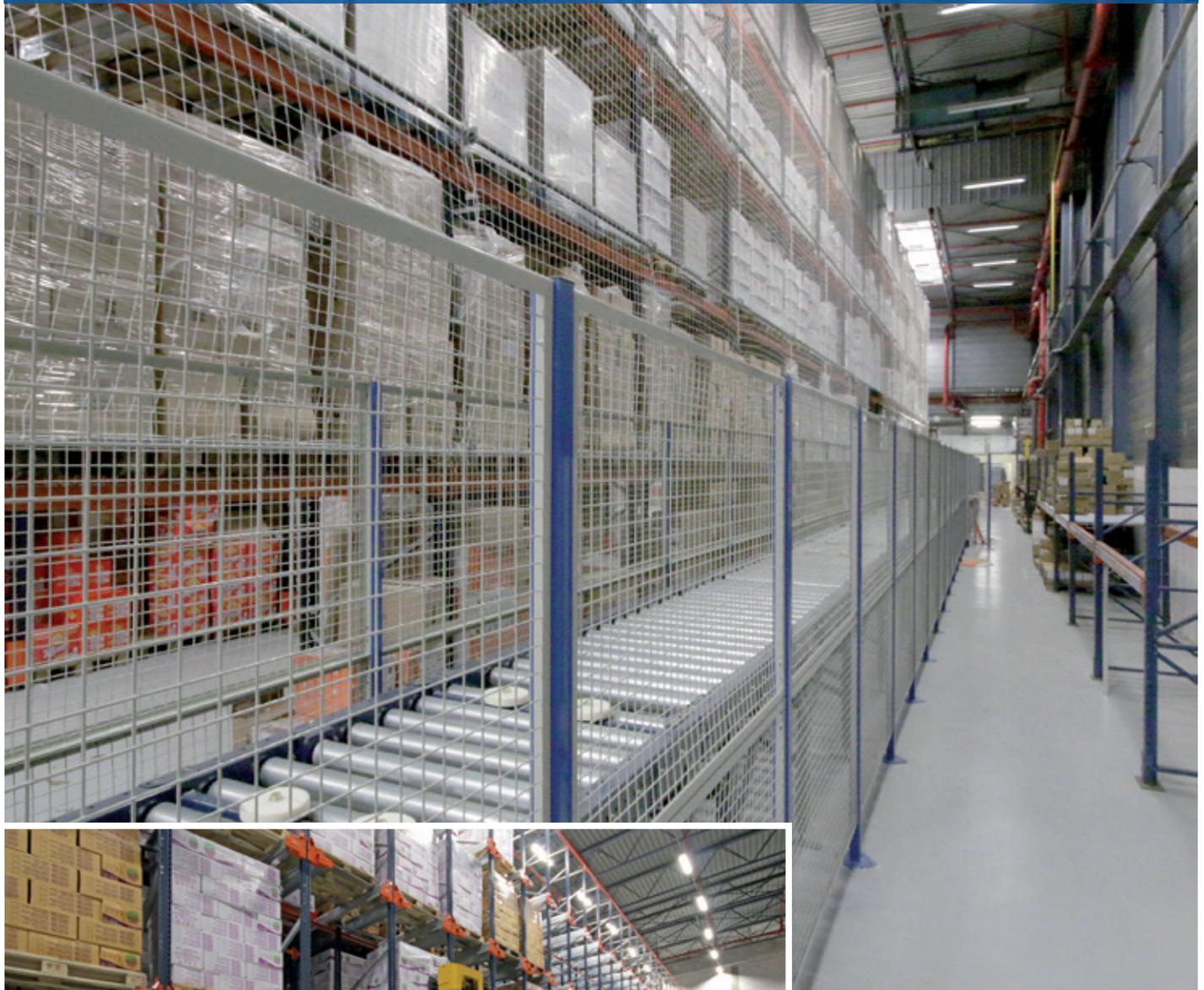
Firat Food, a food and beverage wholesaler, has reorganized operations in its French warehouse to streamline picking. Mecalux supplied selective pallet racking, the high-density Pallet Shuttle system and a roller conveyor, which joins the different areas that make up the installation.

The conveyor

Located on one side of the warehouse, it is tasked with the input of goods routed from the loading docks. Likewise, it minimizes interference with the working aisles, where operators carry out picking.

The beginning of the conveyor coincides with the dock area. Operators, assisted by forklifts, insert pallets into the circuit, and the conveyor moves them to one of the two exit points enabled along its length.
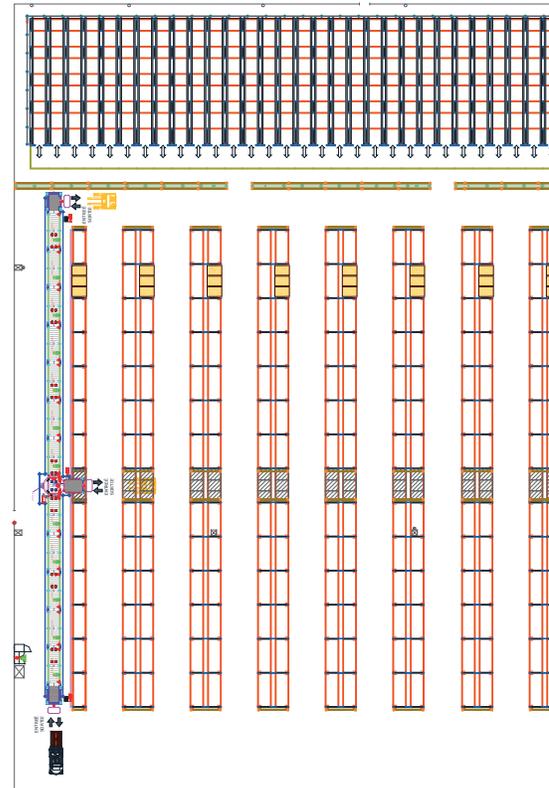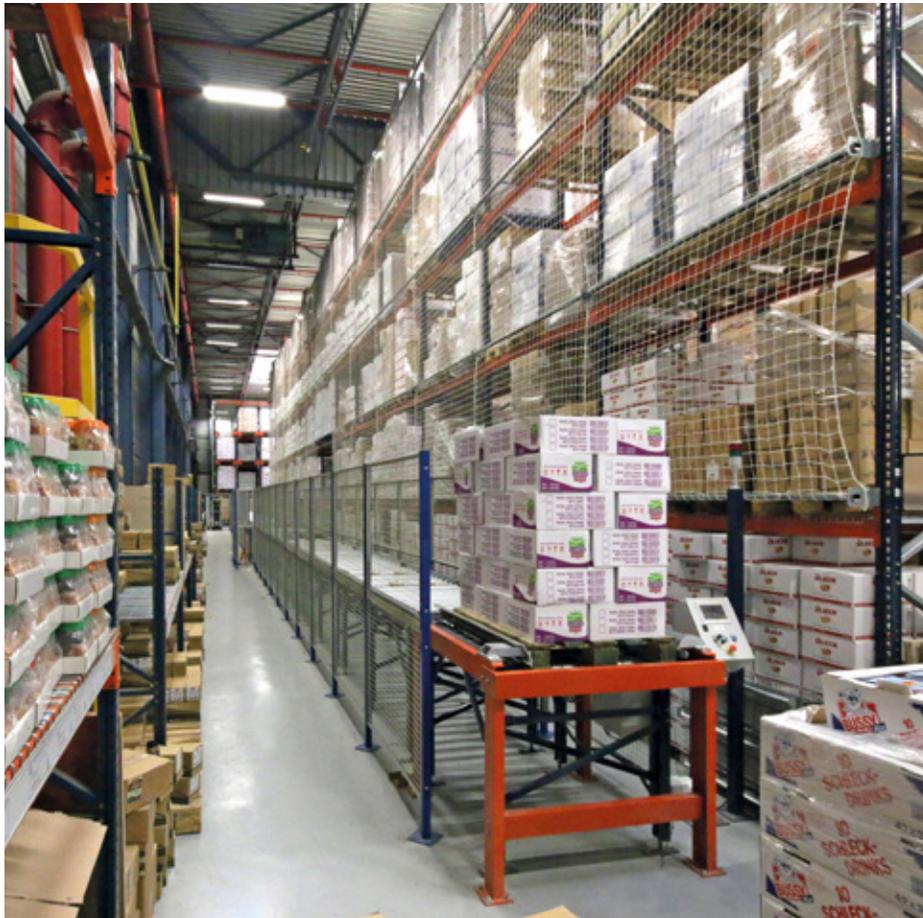
The first of these –in the middle of the circuit– coincides with the block of selective pallet racks and is where lower demand reserve products are sent.

Meanwhile, an underpass is set up that cuts across all the racks and facilitates operator workflows to deposit products in their locations.

The conveyor culminates in front of the block of racks facing the semi-automatic Pallet Shuttle system, which is set aside for consumer goods.
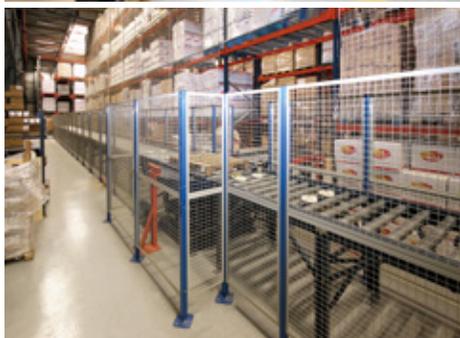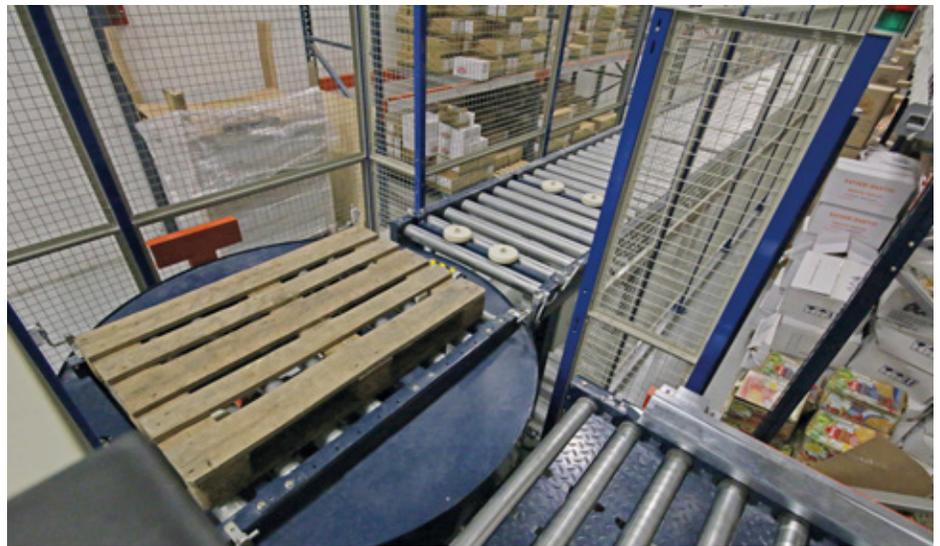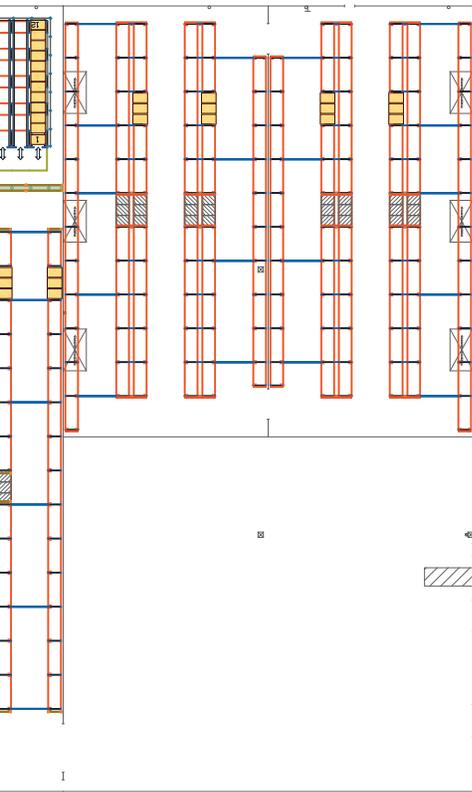
The conveyor at the Firat Food installation is 138' long and runs at a speed of 33 ft/min

Selective pallet racks

Centrally, the warehouse has seven double-depth pallet racks installed and two attached to the wall; all are 29' high. In total, the storage capacity amounts to more than 3,200 pallets.

As a bonus, these racks provide direct access to all products and aisles wide enough to speed up storage and picking tasks.

Levels above
the racks house
reserve pallets
and in the lower ones
direct picking operations
take place

Pallet Shuttle system

The Pallet Shuttle is a high-density storage system that lets Firat Food insert and extract a huge number of palletized consumer goods quickly.

It works in a very simple way: the operators place the motorized shuttle in the corresponding channel, depositing pallets immediately into the first racking position and the Pallet Shuttle automatically off-loads them in the first free location inside the channel. When removing the goods, the same operation is performed in the reverse order.

Control tablet

The installation is equipped with tablets which are used to send orders to the Pallet Shuttles. Each tablet can interact with all the shuttles in the warehouse, complying with a prioritized protocol.

Tablets let operators run many applications and functions, such as selecting the number of pallets to be extracted, taking inventory (counting the number of pallets available in each channel) or managing users and personnel authorized.

The high-density Pallet Shuttle system at Firat Food holds more than 1,500 pallets, divided over 128 channels that are 33' deep
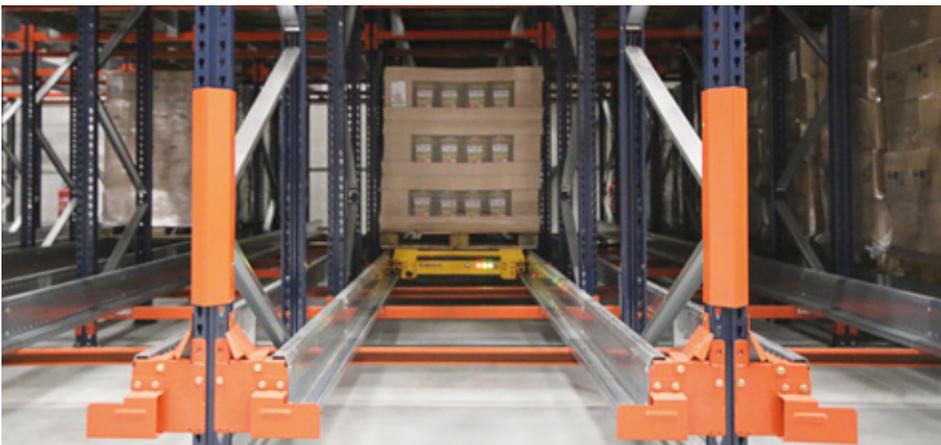
Advantages for Firat Food

- **Maximum throughput:** the selective pallet racks, the Pallet Shuttle system and the input conveyor are used to tap into the potential of the warehouse and streamline picking.

- **Goods sorted:** the products are distributed in the warehouse taking their features into account. Low turnover goods for picking are deposited in the pallet racking and consumer goods in the Pallet Shuttle system area.

- **Speedy inputs:** the inclusion of roller conveyors provides fast input of goods flowing from the docks and lessens interference with other warehouse operations.

Technical data

Conveyor

Transport speed	33 ft/min
Length	138'

Selective pallet racks

Storage capacity	3,270 pallets
Pallet size	32" x 48"
Max. pallet weight	1.1 t
Rack height	29'

Pallet Shuttle system

Storage capacity	1,536 pallets
Pallet size	32" x 48"
Max. pallet weight	1.1 t
Rack height	28'
No. of shuttles	2

MECALUX