nr docusafe

MECALUX

Case study: nr docusafe

Document archive with semi-automatic Pallet Shuttle system

Location: Luxembourg

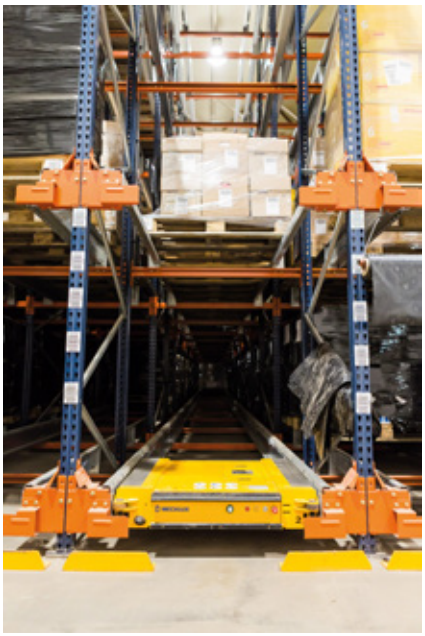
Optimising the space of a warehouse is essential if you want to achieve a high storing capacity. Mindful of this issue, nr docusafe has installed high-density pallet racks operated by an automatic shuttle of Mecalux in its documentary vault at Senningerberg (Luxembourg).

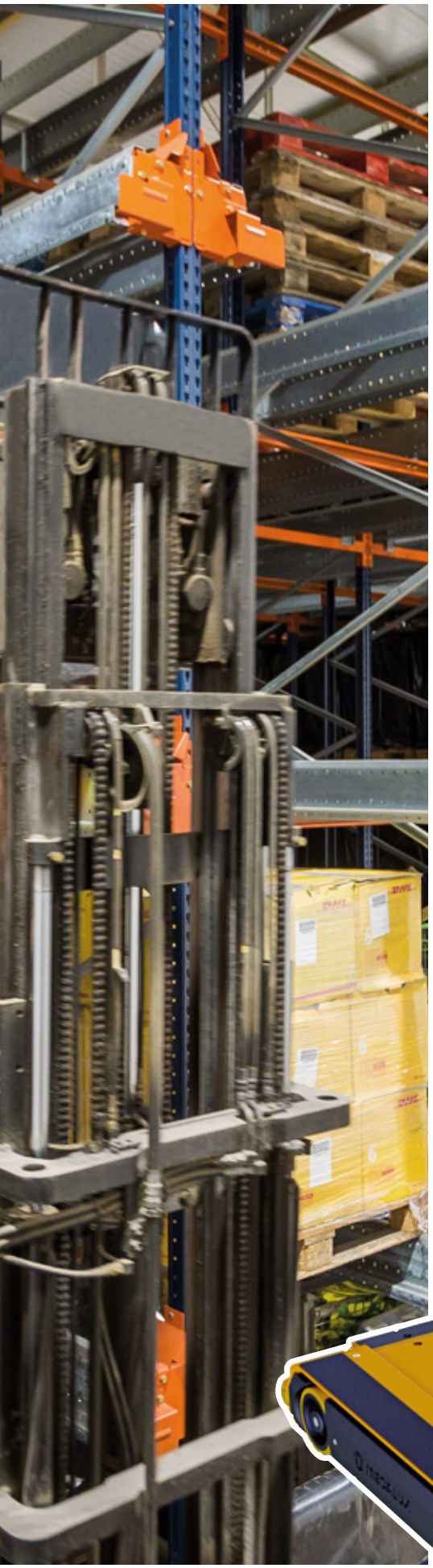
nr docusafe: needs and solution

Founded in 2006, nr docusafe specialises in the administration, registration and management of documentary records. Its warehouse, located in an industrial area of Breedewues (Luxembourg), needed a system that would permit optimum space usage and also comply with all pertinent security protocols, to keep the huge amount of documentation generated by its customers in good condition.

The company knew the semi-automatic Pallet Shuttle system of Mecalux was its best bet; a solution that maximises available space when working with compact pallet racks and increases workflows by reducing the time used in to store and extract pallets from the channels. In addition, this solution requires minimal operator involvement, since any storage movements inside the racking channels are carried out by the motorised shuttle.

Overall, the racks can store 2,265 pallets of 800 x 1,200 mm with a maximum unit weight of 500 kg. Loaded racks stand 8 m tall





Features of the high-density Pallet Shuttle system

Nr docusafe's documentary archive installation consists of a block of high-density racks that fill 512 m². With five storage levels, 1,250 mm high pallets are housed in 60 different storage channels.

Since there is only a single work aisle, the merchandise of both racking blocks is managed as per the LIFO criteria (last in, first out), i.e., the last pallet to enter is the first to leave.

Each Pallet Shuttle acts autonomously following the instructions issued by the operator from a Wi-Fi connected tablet

The semi-automatic Pallet Shuttle system works as follows:

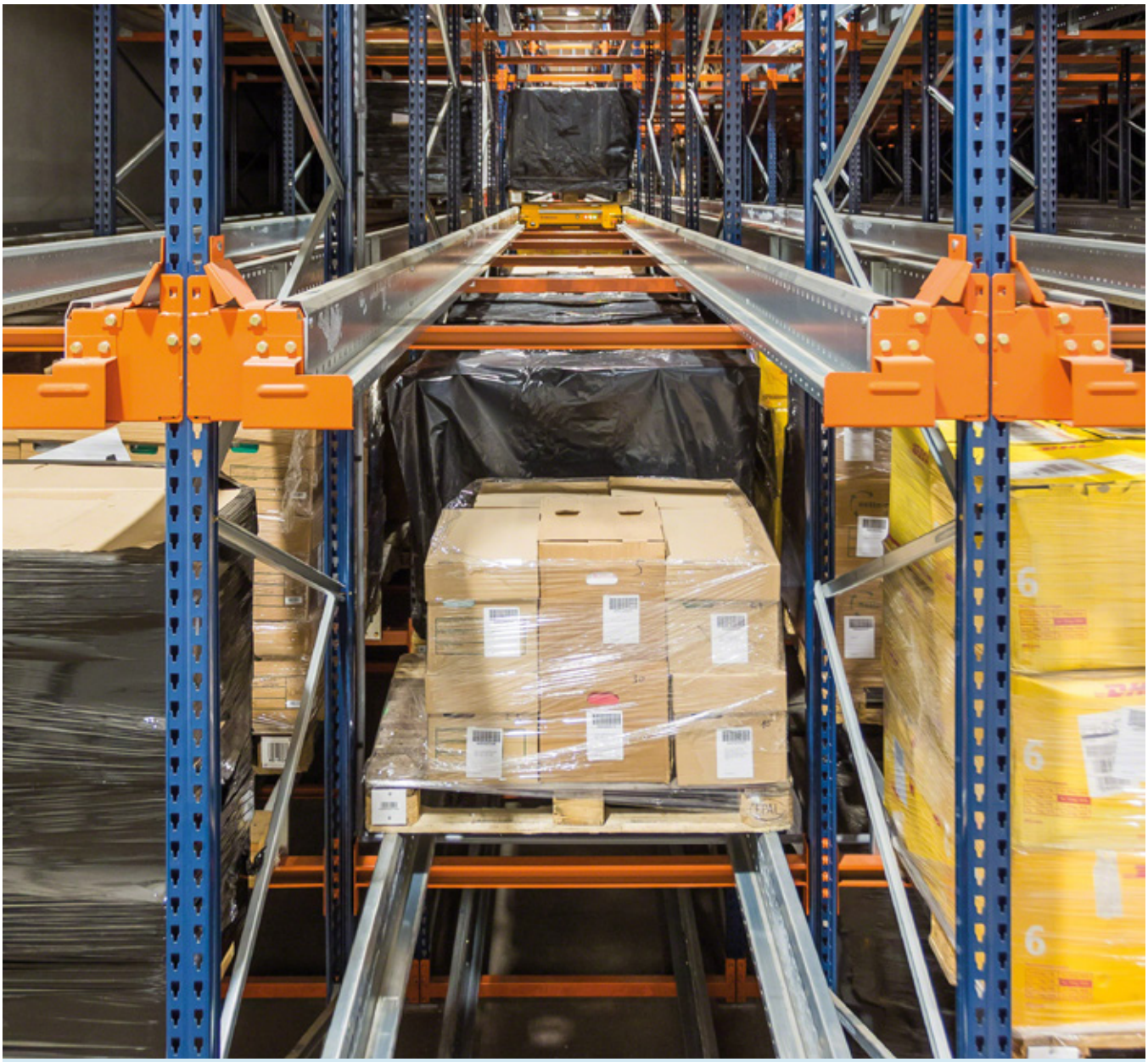
1. The operator inserts the Pallet Shuttle into the channel via a forklift.

2. Once the shuttle is in the channel and the pallet loaded, the shuttle moves horizontally until it reaches the first open location where it deposits the pallet.

3. While the shuttle transfers and deposits the pallet, the operator uses this time to place another pallet in the first position of the channel. Thus, when the shuttle returns to the front of the lane, it can repeat the same movement consecutively.

When it has finished loading in a channel, the Pallet Shuttle is moved to the channel where it will operate next. Extractions are carried out in the reverse order.

Frontal stops were installed on the floor of every storage lane, while the input/output storage channels contain centralisers that favour the positioning and centring of the unit load.



Advantages for nr docusafe

- **Optimum use of space:** the new nr docusafe warehouse can store 2,265 pallets in just a single 512 m² area, distributed throughout 60 channels.
- **Higher productivity:** the Pallet Shuttle system helps increase the flow of in-warehouse movements.
- **Maximum safety:** by removing the need to drive forklifts into the lanes, the risk of accidents and damage to the racks is negligible.

Technical data

Storage capacity	2,265 pallets
Pallet size	800 x 1,200 x 1,250 mm
Max. pallet weight	500 kg
Racking height	8 m
No. of channels	60
Max. channel depth	29.8 m