

BUILDING AN AUTOMATED HIGH-BAY WAREHOUSE

future-proof and customer-friendly

If you have read this knowledge article, you know what is important for an automated pallet warehouse that is fully customer-oriented and therefore future-proof.

System integrators, who know very well how a high-bay warehouse can operate with maximum functionality, often build our automated pallet warehouses. Automation of the inbound, retrieval, transport and sequencing are becoming public property. However, there is one part that system integrators are not (yet) involved in and that is the automation of the outbound. It is a complex matter. Just look at the trailers, they come in all shapes and sizes. This also applies to the pallets, not to mention the various loading patterns.

The outbound can also be automated within 5 years

However, the developments move quickly. Full automation of the outbound will not take too long either. It is important to consider this now, as there are great benefits:

1. Meeting the requirements of your (potential) customers optimally:

- a. Loading at any time of the day
- b. No waiting times (Just in time loading)
- c. Loading within 10 minutes
- d. Loading in delivery sequence (Just in sequence loading)
- e. Less damage to the pallets

2. Less wage costs

The economy is on the rise and that is when labour becomes scarce. When there is much demand, the prices will rise. Fewer skilled workers are needed when outbound is automated. That is a direct response to the shortage of good, motivated workers.

3. Fewer medical expenses

The working conditions in warehouses are difficult. Take forklift drivers who drive the vehicle day in, day out. Back complaints lie in wait. Shift work and great differences in temperature can also cause a higher morbidity rate. Automating the tasks will reduce the medical expenses.

4. Better utilisation of the space

Warehouses must be located at logistic junctions. Land is expensive at these locations. You can save at least 50% space for the outbound, if you choose to automate it.

5. Improved safety

There are about 1500 accidents and 7 fatalities with internal means of transport in the Netherlands every year (source: EVO). The conditions are unsafe for forklift drivers, and for the surroundings. Automation of the outbound means fewer people in the area and that reduces the chance of an accident.

Consider the future

Is your company faced with choices involving the automation of a high-bay warehouse? Make future-proof choices:

Choose high-bay cranes with extra capacity

Automation of the outbound demands more capacity from high-bay cranes in order to keep up with the loading process. Make sure that the high-bay cranes can handle this, even if it is not yet necessary.

Separate pallet picking from transportation

Outbound automation demands peak capacity. The simplest way of ensuring this is to separate pallet picking from transportation as much as possible. An example of this is the installation of roller conveyors in all the warehouse aisles, parallel to the high-bay cranes. The primary function of a high-bay crane is to pick pallets. The high-bay crane places the pallet on the rollers and can then pick the next pallet. It may not yet be necessary, but it is advisable to have enough space for when outbound is automated.

Do not choose to have truck drivers loading and unloading themselves

They already exist, the self-driving trucks, and it will not even be possible to imagine life without them, perhaps not in 5 years or even 10 years but in 15 years, and definitely on fixed routes. Having drivers load and unload themselves might be a good solution now, but it will not be later.

OPTIMAL PREPARATION FOR THE FUTURE

Do you have any questions regarding this knowledge doc or would you like to discuss the automation of the outbound, do not hesitate to call us. Telephone: + 31 541 521206.