

Active Ants E-fulfillment warehouses of the future

ACTIVE
ANTS

E-COMMERCE
LOGISTIEK

Active Ants, the company

- Founded in **2010**, part of bpost group since **2018**
- **500** employees in total
- **Four sites:** Roosendaal, Nieuwegein (Netherlands), Willebroek, Dorsten (Germany)
- **53,000m²** storage space in total
- Further **international expansion** in France and in the U.K.



Highly automated process

- AutoStore with individual bins is the cornerstone of the fulfillment center. The goods are checked, counted and weighed upon arrival. They are then placed in bins at the rear of the AutoStore by an operator and distributed in the grid by the robots.
- When an order comes in, a storage robot goes to the location of the desired product, selects the right bin and brings it to one of the picking stations. An operator puts them in a box provided by a carrier robot, which always selects a box with the ideal dimensions from one of the automated box folding machines.
- The carrier robot then sets off for one of the packing machines. These seal the boxes to size (to minimize the transport of “fresh air”), weigh them and affix a shipping label and a personalized print. The sealed boxes are conveyed by band to a carrier robot, which forwards them to one of the shipper loading points. This is an efficient structured process in which humans and robots work together.



Carrier robots

- Collect the boxes and bring them to the picking, packing and sorting stations.
- + autonomous due to AI and machine learning.



Storage robots

- Organize and collect the bins with goods directly from the storage system and bring them to the picking stations

2 TYPES OF
ROBOTS!



The sites

Roosendaal

2020

- 20,000m² storage space
- 65 carrier robots
- 50 storage robots + capacity for up to 200 additional robots
- 50,000 bins + capacity up to 200,000 additional bins
- Capacity for >8 million orders

Nieuwegein

- 15,000m² storage space
- 80 storage robots
- 80,000 bins
- Capacity for >4 million orders

Dorsten

NEW!

- 10,000m² storage space
- 30 carrier robots
- 20 storage robots capacity up to 100 additional robots
- 20,000 AutoStore bins + capacity up to 80,000 bins
- Capacity for >4 million orders

Willebroek

NEW!

- 7,000m² storage space, scalable to 10,000m²
- 30 carrier robots
- 20 storage robots + capacity for up to 100 additional robots
- AutoStore with 20,000 bins with capacity up to 80,000 bins
- Capacity for >4 million orders



Sustainable process:

- **Solar panels** are the primary source of energy consumed in Willebroek.
- Our robots charge up with energy produced by **solar panels** while they work. Ten robots consume the same amount of electricity as one vacuum cleaner.
- We take up 6x less space than a traditional warehouse, thanks to the innovative **AutoStore** solution.
- **No plastic** is used in Willebroek.
 - The packing and folding machines use **glue** rather than plastic tape.
 - Only **recycled paper** is used as filling when manually packing fragile products.
 - Packaging boxes bear the **FSC trademark**.
- The **ideal sized box** is always selected to suit the products to be shipped, minimizing the amount of air transported. As a result, AA transports on average **40% less air**. That means we can fit more boxes into each truck, driving our carbon emissions down even further.
- **Shipping labels** are printed on the lid, so separate labels are not needed.

