

Skypod® – Autonomous Robots Innovation in the small parts warehouse





Two functions in one

Transport on the ground & storage and retrieval in the rack

Flexible & performant

Autonomous robot systems integrate two functions. They combine the possibility of free navigation at ground level and vertical operation in the rack. With this double function, the Skypod® robots handle the storage and retrieval directly in the rack as well as the delivery of containers to the order picking workstations. Thereby, they offer a real alternative to conventional shuttle systems as the statically installed conveyor pre-zone and the performance-limiting shuttle lifts are no longer necessary. Typical fields of application of this system are multi-channel retailers and e-commerce warehouses, which require flexible, scalable systems due to a highly fluctuating order situation. The routes are coordinated centrally by artificial intelligence and the robots are able to recognize each other. They are operated by lithium batteries. These autonomous systems rather cover the medium and high performance range. They are very fast and can reach a speed of up to 4 m/s.

Adaptable and quickly changeable

Higher system performance

• Use of additional robots

Higher storage capacity

• Extension of the racking system without downtimes

Higher picking performance

• Setup of additional workstations

System integration

- Klinkhammer is integration partner in the German-speaking region and in Denmark
- System integration with digital networking of different storage systems
- Competent Klinkhammer-service one face to the customer
- The holistic solution for your logistics processes



Skypod®-System Scalable storage system

Data and facts

Load capacity 30 kg

Speed 4 m/s

Obstacle detection laser scanner

Navigation scanner, Points Cloud Computing

Energy lithium battery

Charge charging station, availability 7/24
Container/tray 650 x 450 x 220 mm, 320 mm,
or 420 mm height, or trays,

sectioning in up to 8 compartments

System advantages

- No static, maintenance-intensive conveyor pre-zone
- No performance-limiting shuttle lifters
- Roboter maintenance during ongoing operation
- Can be expanded at any time



Order picking stations



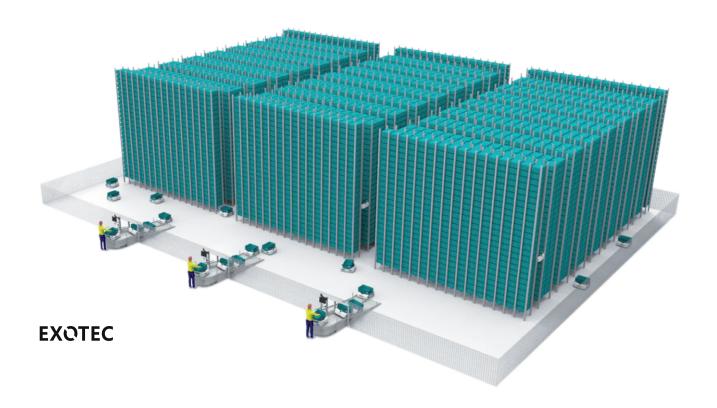
Multi-Order-Picking with convenyor connection



Multi-Order-Picking with manual connection



Bin Interface





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