

Specification of Skypod

Skypod Robot

- Payload: 30kg
- Speed: 4m/s
- Weight: 50kg
- Dimensions: 650mm×650mm×300mmH
- Obstacle detection: Laser scanner
- Guidance: Scanner
- Energy: Lithium Battery
- Charging: Charging station 5min/h



Bin(plastic tote dedicated for skypod) / Tray

unit : mm



Cartons up to 400mm×600mm×400mmH
can be put on the trays
Tray's bottom thick: 20-25mm

See video of Skypod introduction ▶



See Skypod seminar ▶



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<p>AMERICAS</p> <p>NEW YORK: IHI AMERICAS INC. DETROIT: IHI Press Technology America, Inc. SAN FRANCISCO: IHI Launch Pad</p>	<p>TEL: +1(212)599-8100 TEL: +1(248)295-9240 MAIL: ihi-launch_pad@ihi-g.com</p>

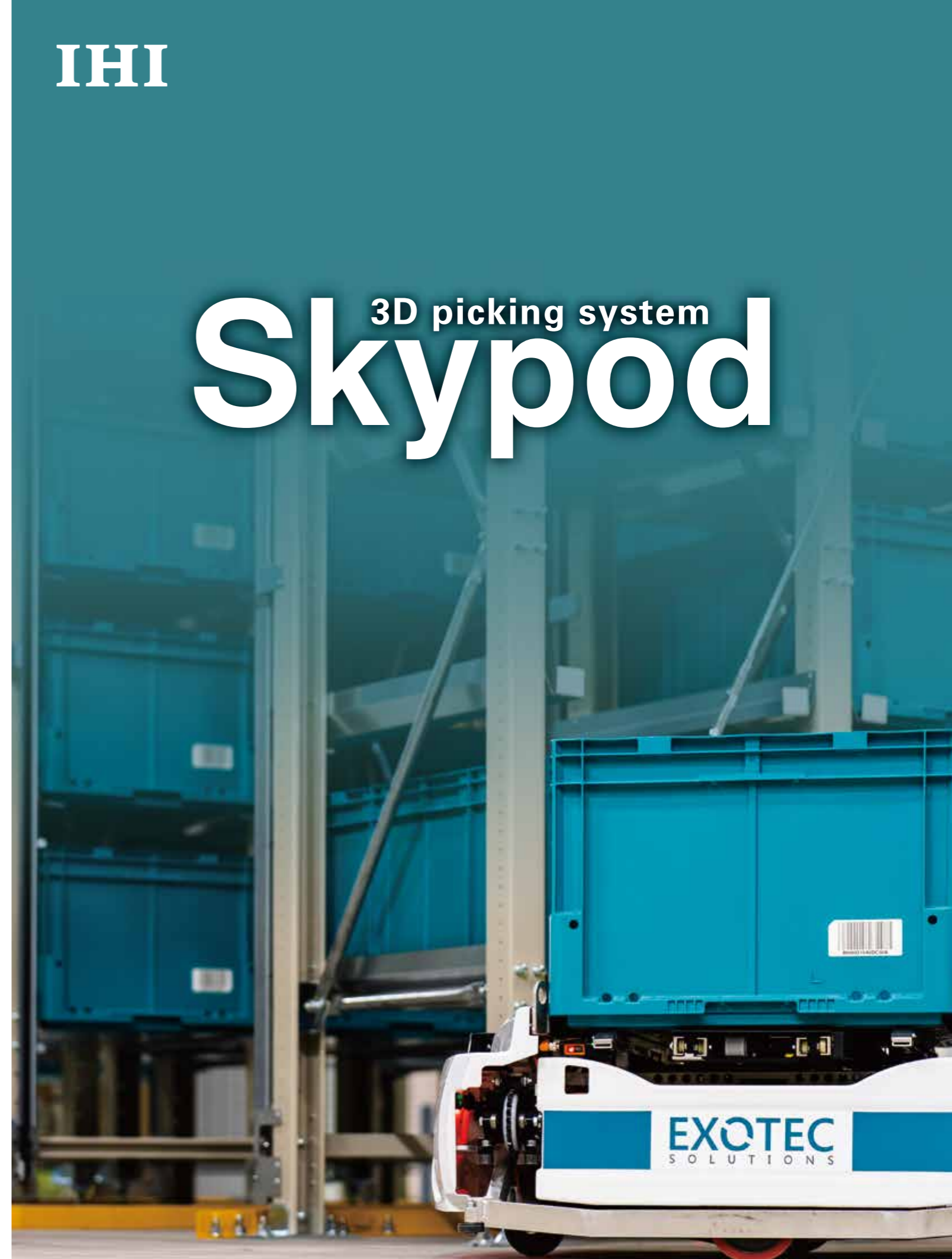
IHI Corporation

Industrial Systems & General-Purpose Machinery Business Area
Logistics & Machinery Business Unit
Toyosu IHI Bldg., 1-1, Toyosu 3-chome, Koto-ku, Tokyo 135-8710, JAPAN
TEL: +81-3-6204-7232 FAX: +81-3-6204-8689
<https://www.ihi.co.jp/en/>

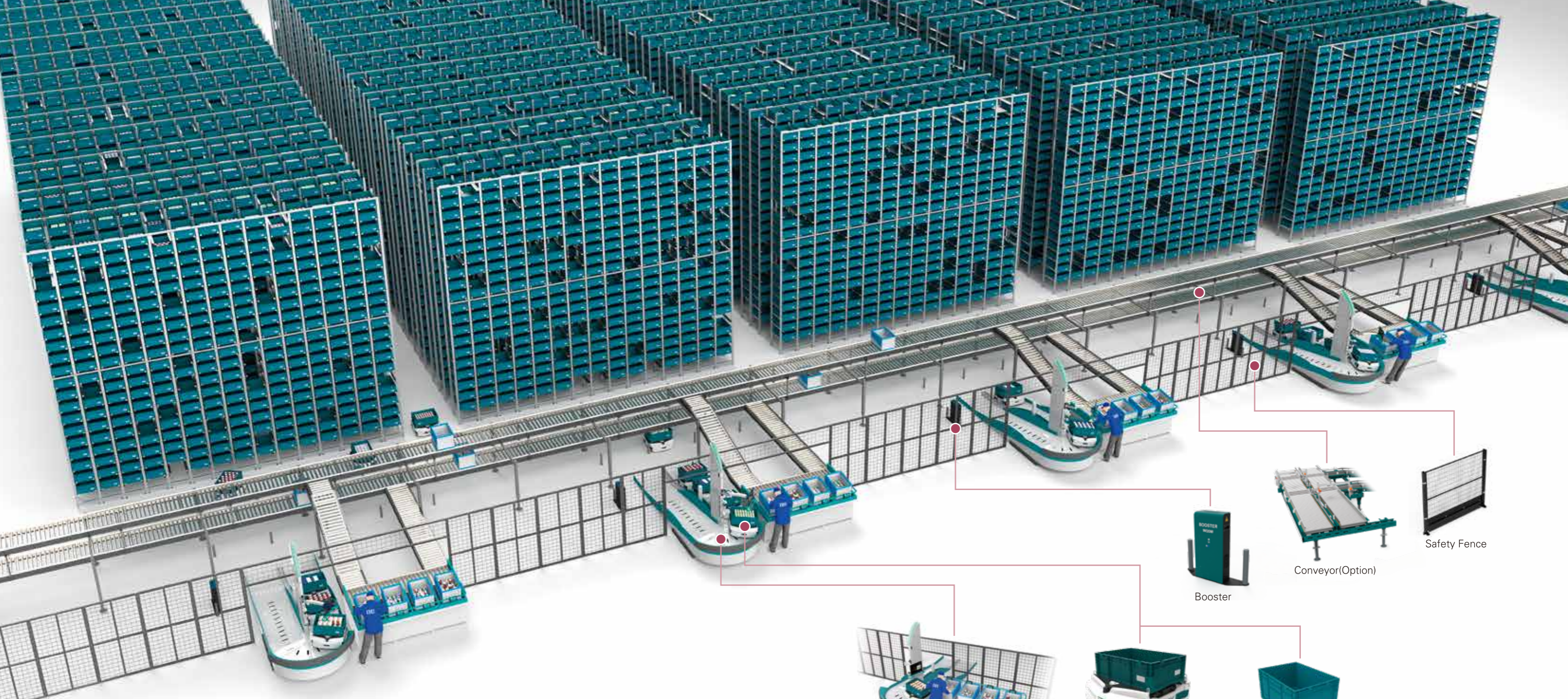
IHI Logistics & Machinery Corporation

1-1, Toyosu 3-chome, Koto-ku, Tokyo, 135-0061, Japan
TEL: +81-3-6204-7232 FAX: +81-3-6204-8689
URL: <https://ihi-logistics.com/en/>

3D picking system Skypod

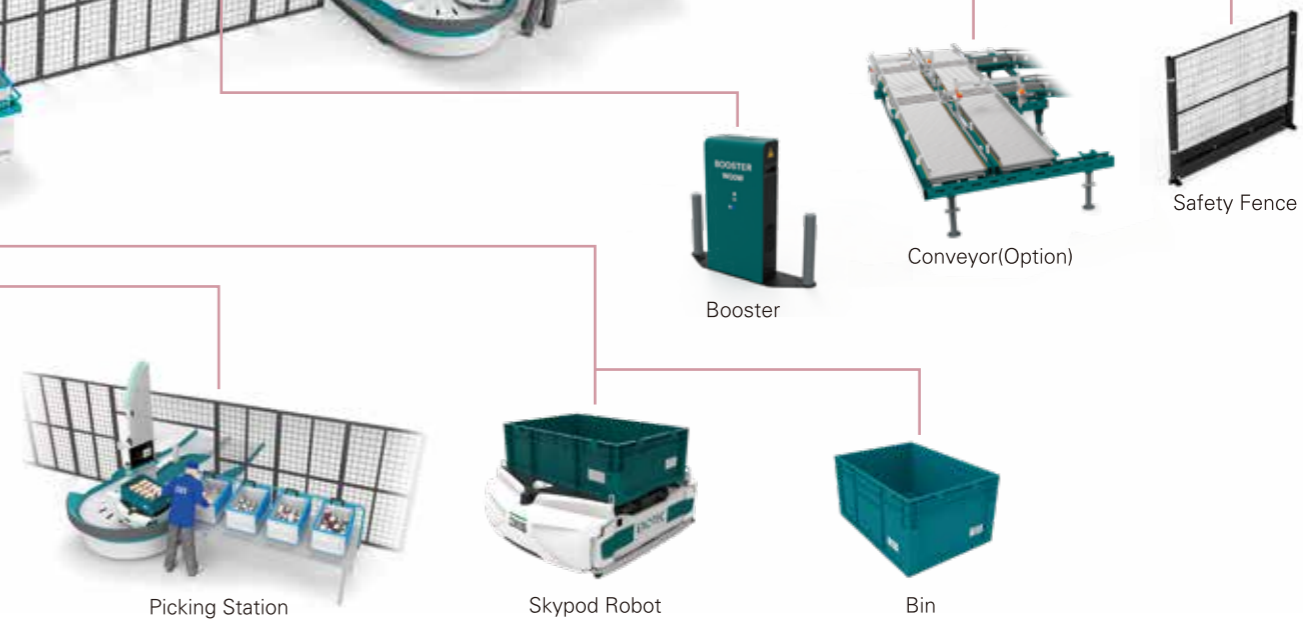


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3D picking system which innovates warehouse operation

Skypod robot is autonomous picking system which moves in 3 dimension. The robot can take BIN from 12mH rack, and transports to picking station in a short time. Skypod makes operation in logistics warehouse much more efficient and automated.



Skypod

**MAX picking ability (per hour) :
400 order lines per picking station!**

What is Skypod?..... It is called Goods to Person system which autonomous robot climbs rack and retrieve the target bins. The robot carrying the target bin will automatically transport it to the picker. Picker doesn't have to walk and pick up the target item as it has been done in non-automated warehouse.

System Components..... ● Skypod Robot ● Rack ● Picking Station ● Bin ● Safety Fence ● Booster ● Conveyor(Optional) ● Astar(Management software dedicated for Skypod)

New cooperation style with robot

Management software of Skypod "Astar" controls Skypod robots and gives direction to transport the target items to the picker related to the customer order. Skypod realizes ideal cooperation of transportation robot and people at the station.

Skypod basic function

Fill items into bins (Replenishment)

To replenish items, picker just puts the item into empty bin transported to picking station. 「Astar」 manages stock of Skypod system.

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Pick items from bins (Preparation)

Skypod robot transports bin to picking station, so picker can continue picking operation without walking around the warehouse.



Picking information is displayed on the monitor

The picker simply picks the items as instructed on the monitor.

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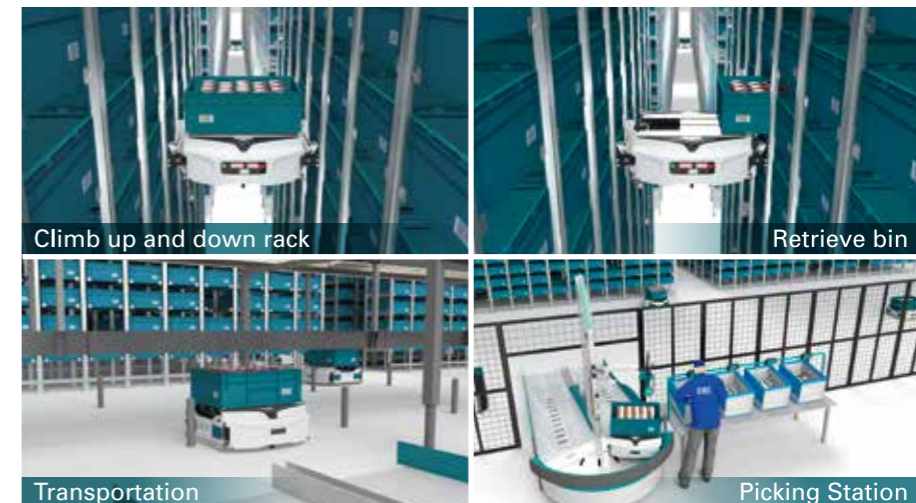
Realize future generation's Goods to Person system

Skypod is a logistics solution which brought new innovation to Goods to Person system. Skypod is a system with scalability, it can be installed according to customer's request or business growth.

Skypod features

Goods to Person system

Picker can stay at picking station and concentrate on their picking work. Skypod robot climbs up and down the racks, retrieves the bin and transports to the picking station on behalf of picker. This makes it possible to finish picking operation about 5 times faster than non-automated warehouse system.



Astar

Astar is the software for Skypod System to manage Skypod Robots and pickers. Astar decides the whole operating status of Skypod robots and pickers, and gives instruction to the robots by "which product should be taken out from which rack", "which robot should go", and "which picker should perform which operation"



Skypod features.....

Picking Station

Robot transports target item to the picking station. The order mover type can easily connect Skypod system to the conveyor system and improve the efficiency of picking operation. It automatically supplies empty containers and evacuates full containers which the picking has been completed.



Charging

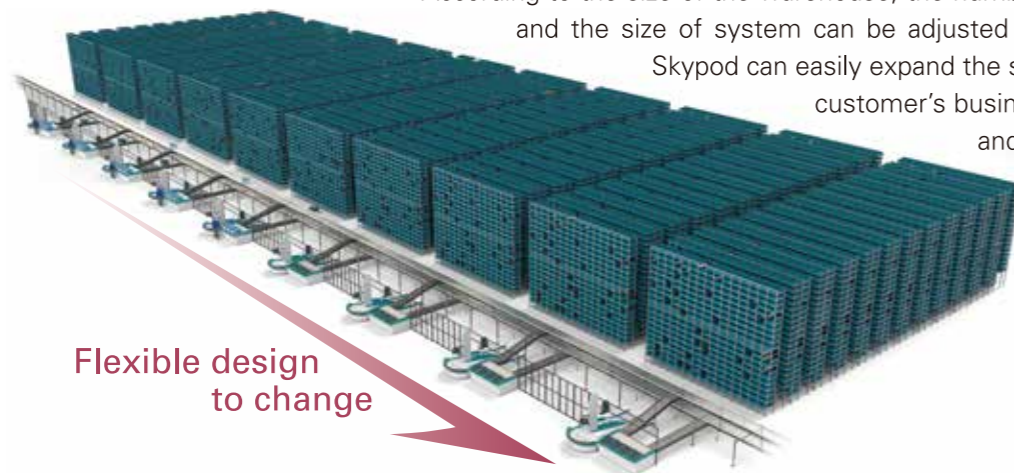
Skypod robot goes to the booster(quick charging station) by themselves once an hour to charge. Picker doesn't need to charge robot and it improves work efficiency.

*Chargin station 5min/h



Scalability

According to the size of the warehouse, the number of Skypod robots and the size of system can be adjusted flexibly. In addition, Skypod can easily expand the system, according to customer's business scale expansion and business growth.



Combination with picking robot

Skypod can combine with piece picking robot. It will improve efficiency and save the manpower.



Stable operation

If in the case of some problems found on one robot, it would be able to continue the picking operation by just removing the robot which had problem, and not stopping the entire system.



Case Study

Skypod can be installed in logistics warehouse in various industries and can satisfy the logistics needs of customers.



e-commerce / Grocery e-commerce / Retail/Manufacture / Logistics