

Automated Storage and Retrieval System

Rapyuta ASRS



**Warehouse Automation
for everyone**

Warehouse Automation for everyone



Do you find automated warehousing Intimidating ?

The most common question asked is,

“how can I maintain operations while implementing a robotics solution?”

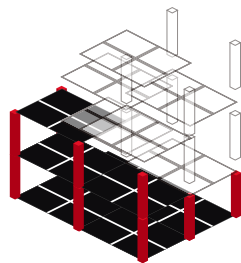
Rapyuta ASRS offers modular-type assembly, providing remarkable flexibility in terms of robot quantity, storage density, and configurations.

It is designed to fit warehouses of all sizes and shapes* allowing for a fast deployment with little to no impact to current operations.

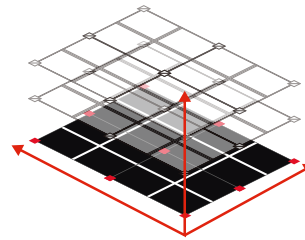
Automated Storage and Retrieval System Rapyuta ASRS

Modular Design

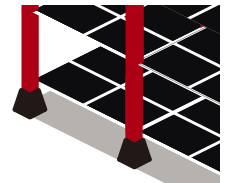
- Easy installation using three different types of blocks.
- Seismic isolation design for earthquake countermeasures.
- No screws or bolts needed for assembly with anchorless installation requiring no dedicated scaffolding.



Block-assembled shelving structure provides flexibility for all warehouse shapes and sizes.



Adjustable scale and number of robots allow for expansion to accommodate varying needs.

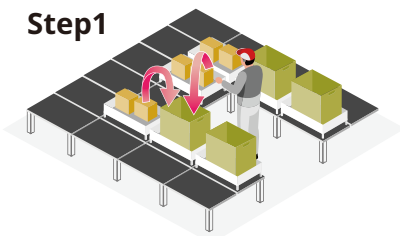


Seismic isolation structure with anchorless design means no absorption of strong shaking or vibrations.

Picking Station

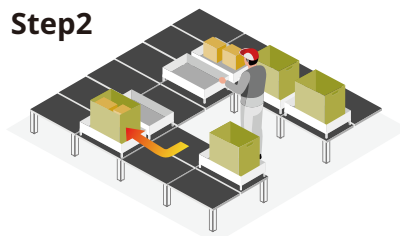
- Simultaneously and independently controls multiple storage and shipping bins around the picking associate.
- Zero wait time during picking by handling multiple storage and shipping bins with the same system.

Step1



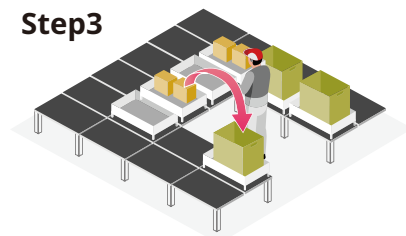
Sets up a multi-order picking environment in the picking area by arranging multiple SKU storage bins and shipping bins.

Step2

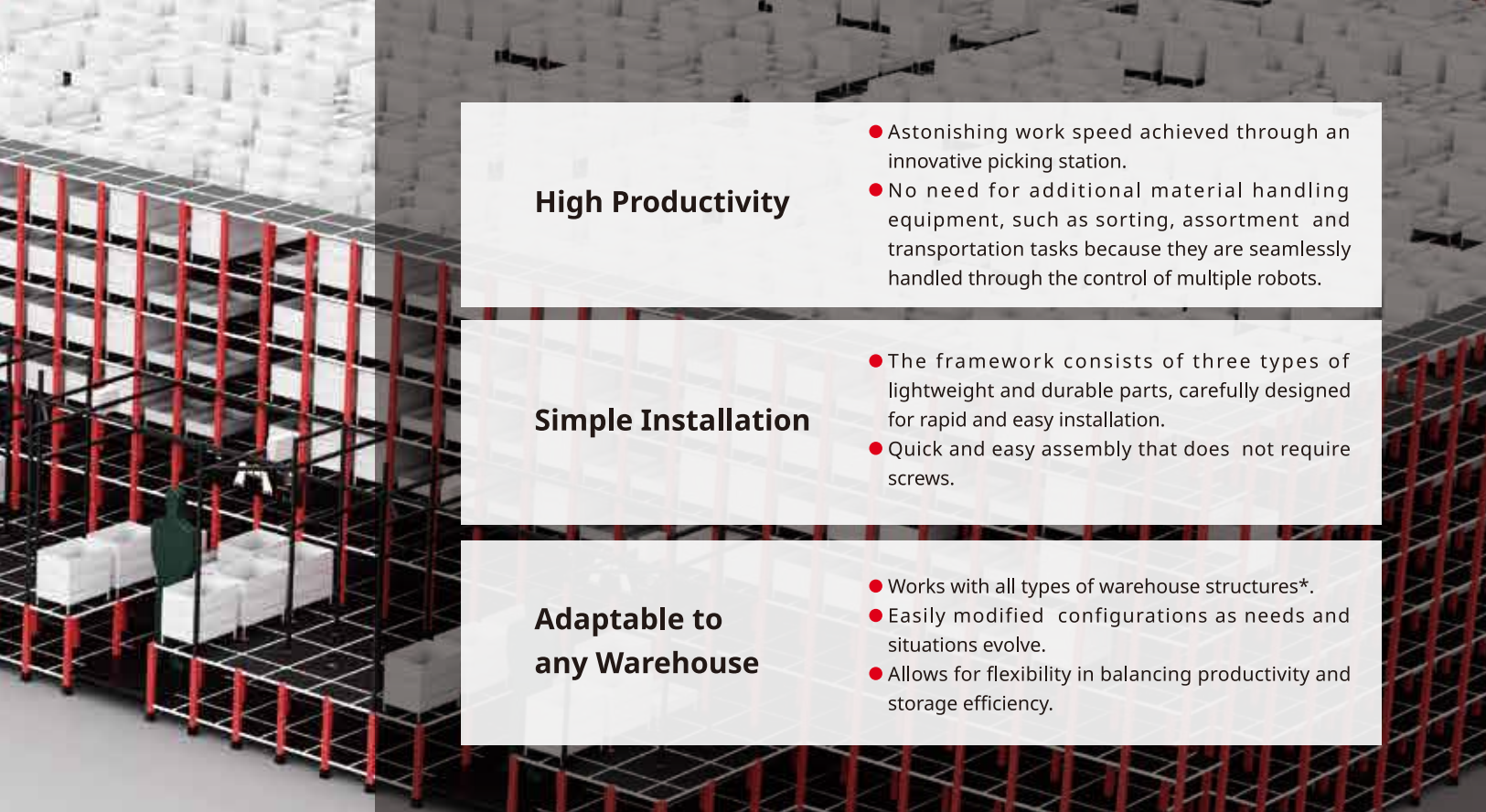


Once picking is finished, robots automatically transport shipping bins to specified shipping areas.

Step3



The next picking bin is automatically delivered to the picking area with no waiting time for bin arrival, enabling continuous operation.



High Productivity

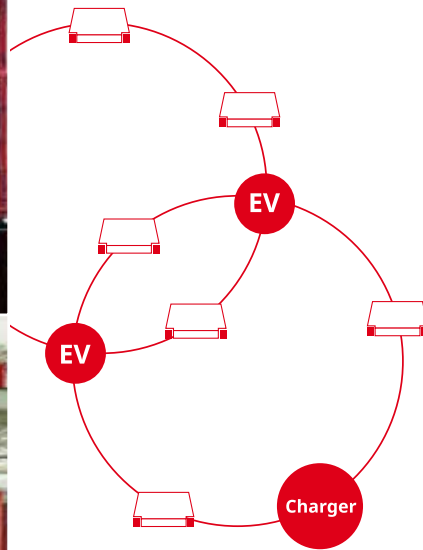
- Astonishing work speed achieved through an innovative picking station.
- No need for additional material handling equipment, such as sorting, assortment and transportation tasks because they are seamlessly handled through the control of multiple robots.

Simple Installation

- The framework consists of three types of lightweight and durable parts, carefully designed for rapid and easy installation.
- Quick and easy assembly that does not require screws.

Adaptable to any Warehouse

- Works with all types of warehouse structures*.
- Easily modified configurations as needs and situations evolve.
- Allows for flexibility in balancing productivity and storage efficiency.



Robot Management

- A multi-robot coordination algorithm with a proven track record of the award-winning achievements of Rapyuta's AMRs.
- Capability to coordinate control for hundreds of robots and elevators.
- Capable of handling a wide range of retrieval processes such as storage, picking, sorting, and assortment within one system.

Slim Robot Design

- The ultracompact 80mm (3.15 in) robot optimally utilizes space. With Mecanum wheels, the robot can move in any direction without turning, saving time and allowing for accurate positioning even in narrow spaces.
- When charging, the robot moves to the charging position and the robotic arm swiftly swaps the battery. With batteries replaced in less than a minute, operational downtime for the robot is kept to a minimum.



Elevator

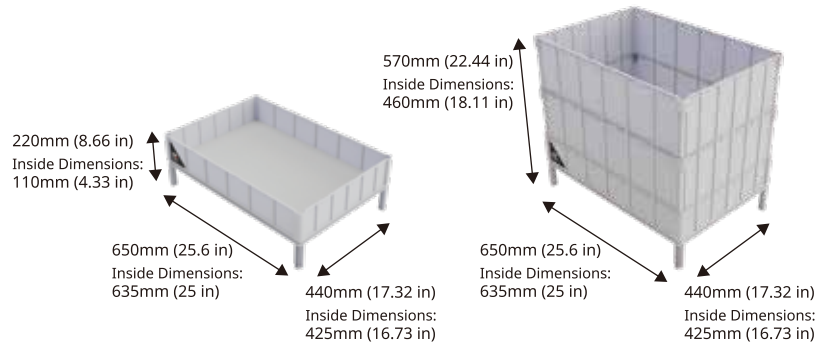
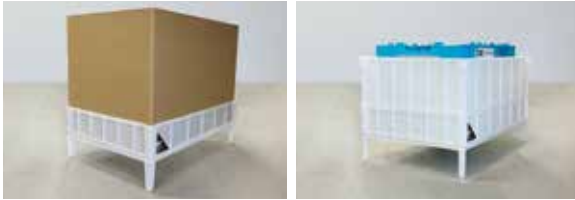
- Chain drive type.
- Can be installed in any location.
- Works with 110V single-phase.



*Legal regulations may impose restrictions on the scale of implementation.

Efficient Bin Design

- Rapyuta's own designed storage bins offer three adjustable heights and internal partitioning for customization.
- The maximum volume of the bins is 124 liters (32.75 gallons), with a handling capacity of up to 30 kg (66 lbs).
- Placing containers or boxes in bins is possible.



Earthquake-resistant design (seismic isolation)

- The design withstands lateral shaking, and the rubber feet absorb vertical shaking.
- Seismic resilience achieved through anchorless design, with seismic isolators utilized in ground installation.
- Conducted earthquake wave excitation tests using a 3D vibration table.



Rapyuta Robotics Inc.
<https://www.rapyuta-robotics.com>



Contact us

Web <https://www.rapyuta-robotics.com/contact-us/>

Email inquiry.asrs.usa@rapyuta-robotics.com

