



PIONEER OF HIGH SPEED
3D WAREHOUSE AUTOMATION



Founded in 2016, HC Robotics has remained steadfast in its commitment to innovating logistics automation equipment. The company focuses on two key areas—intelligent warehousing and 3D sorting—and has introduced a range of exceptional products to the market, such as "OmniFlow," "OmniSort," each offering distinct advantages in warehousing logistics.

HC Robotics' products are widely used in manufacturing, distribution, and terminal operations, known for their significant benefits in labor and space efficiency. These solutions can achieve over 70% savings in both labor and space, with rapid implementation and flexible relocation capabilities providing customers with automated warehousing solutions that deliver high returns on investment and remarkable flexibility.

The existing customers of HC Robotics range from Fortune 500 to small businesses, and include manufacturers, E-commerce, MRO suppliers, cold chain logistics, micro-fulfillment centers, etc. HC Robotics has established strategic cooperation with our partners in Japan, Korea, United States, Europe, among others.

We are glad to provide highly reliable and cost-effective warehouse automation products and services for our customers all around the globe.

Core Advantage



Outstanding R&D Ability



Complete Manufacturing System



Global Service Network



Flexible Solution



High QC System



Comprehensive After-Sales Service

Application Industry



Precision Machining



Delivery



E-commerce



Apparel Industry



Retail



Medicine



Books



Cold Chain



Dyeing Industry



Auto Industry



MRO



Front-line Storage

Partnership



HC ROBOTICS



HC OmniSort



Deploy time
in as little as 7 days

Modular design,easily extendable



Improve labor efficiency
by 2-3 times

Multi shuttle works parallel



Save 50% of
floor space

Improve warehouse space utilization

ROBOTICS

HC Product

HC ROBOTICS provides sortation solutions with products of OmniSort and OmniSort Mini. They are first developed and commercial used 3D sorting system in China. They can save more than 70% of labor and space occupation, provide customers with fast ROI, high flexible automation solutions.



HC OmniSort Mini



**Improve accuracy
up to 99.99%**

Smart robots, Improves accuracy



**Flexible planning
According to demand**

Apply to multiple scenes



**Quickly recover the
investment cost**

Decrease investment return cycle

OMNISORT MINI

A small 3D sorting equipment, suitable for logistics orders sorting

Highlights

Sort Efficiency

800+

Pieces / Hour

Accuracy

99.99

%

Deployment Time

≤3

Days

Payback Period

≤1

Year

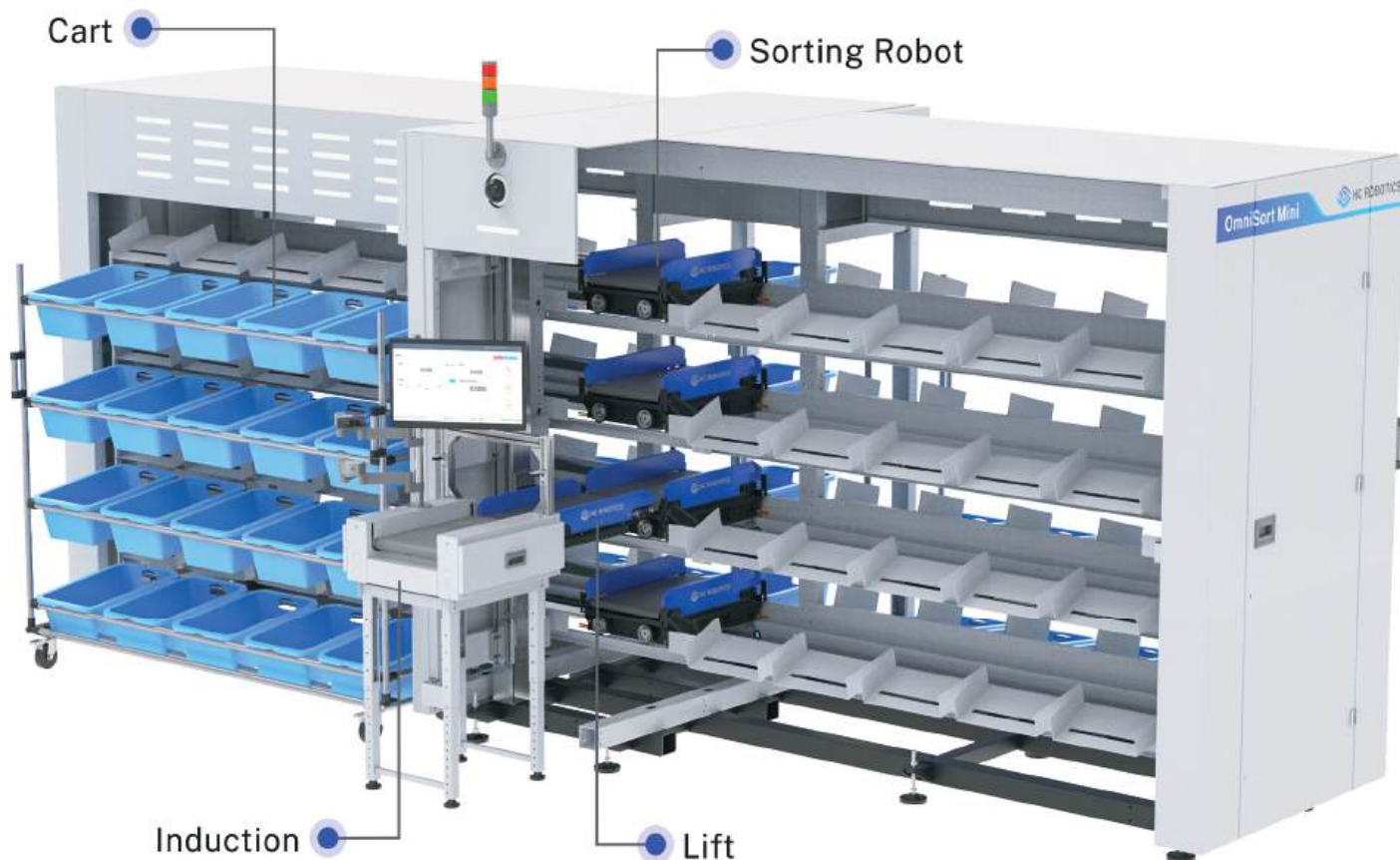
Features

Small investment, quick results

Compact design, saving warehouse space

Automated operations to improve accuracy

Improve labor efficiency and make sorting easier



Sorting Robot



OmniSort Mini Parameter

Machine Parameter	Dimension
	Robot Qty
	Type
	Induction
	Induction type
	Efficiency
	Destination
	Sorting size
	Scanning
Robot Parameter	Robot
	Dimension
	Load
	Communication Mode
	Navigate Mode
	Charge Mode
	Drive Mode
	Material Handling



OmniSort Mini

5.6m × 2.6m × 2.1m

3 / 4

Cart

1

One induction conveyor

800+ pcs / hour

60 / 80

400mm × 320mm × 200mm / 400mm × 320mm × 150mm

Hand-held Scan(Top Scan option)



600mm × 500mm × 250mm

5kg

Wired

QR code

Wired

Servo Motor

Roller Belt

OMNISORT

A flexible high-speed intelligent 3D sorting system. It is suitable for application scenarios such as forward / reverse logistics and production line ingredients.

Highlights

Sort Efficiency

1500+

Pieces / Hour

Deployment Time

≤7

Days

Accuracy

99.99

%

Payback Period

≤2

Years

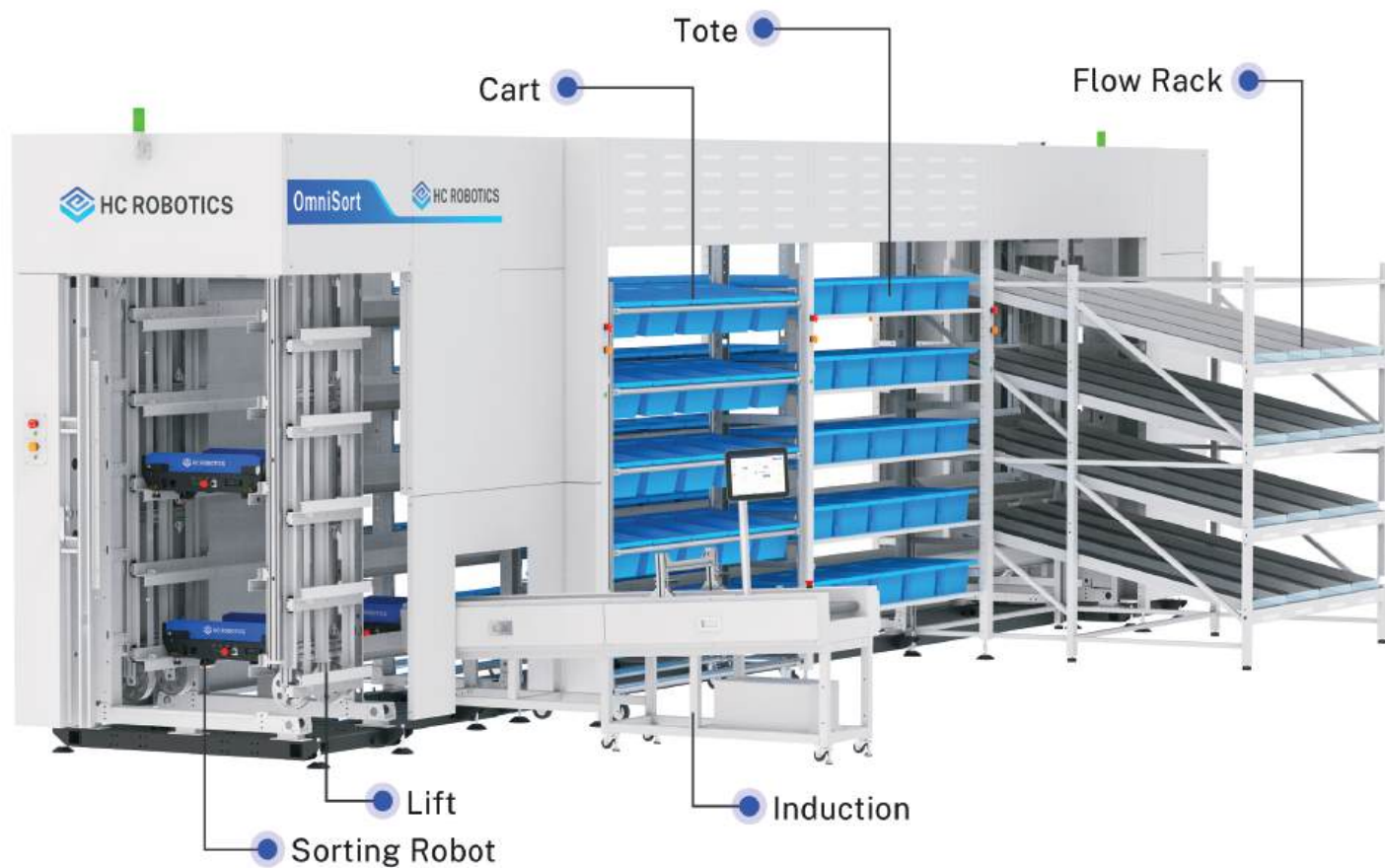
Features

Intelligent 3D sorting system

Systematic design that fully matches customers' customized requirements

Comprehensive interfaces that deeply match customers' systems

Support complex order sorting, wave sorting and line sorting



Sorting Robot S



Sorting Robot M



Sorting Robot L

OmniSort Parameter

Rack Parameter	Dimension	
	Robot Qty	
	Type	
	Induction	
	Sorting Efficiency	
	Destination	
	Scanning	
Robot Parameter	Robot Type	Sorting Robot (S) 
	Dimension	623mm×365mm×257mm
	Load	5 kg
	Load Dimension	400mm×320mm×(5-300)mm
	Speed	4 m/s
	Communication Mode	WiFi + RF
	Navigate Mode	Encoder + Sensor
	Obstacle Detection	Obstacle Detection Sensor
	Charge Mode	Contact Rails & Supercaps
	Drive Mode	Servo Motor
	Material Handling	Roller Belt



OmniSort

30m×5m×3.5m
(Length 4-30m, Width 3-5m, Height 2-3.5m configurable)

10+

Tote / Cart / Flow Rack

Configurable

1500+ pcs / hour

Configurable

Top Scan or Five Sided Scan

Sorting Robot (M)



666mm×573mm×257mm

5 kg

500mm×410mm×(5-300)mm

4 m/s

WiFi + RF

Encoder + Sensor

Obstacle Detection Sensor

Contact Rails & Supercaps

Servo Motor

Roller Belt

Sorting Robot (L)



965mm×663mm×311mm

8 kg

750mm×500mm×(10-300)mm

4 m/s

WiFi + RF

Encoder + Sensor

Obstacle Detection Sensor

Contact Rails & Supercaps

Servo Motor

Roller Belt



Project Introduction

This project mainly undertakes the tasks of sorting and dispatching frozen foods. Multiple sets of HC Robotics' OmniSort equipment have been adopted in this project. These devices can not only greatly improve the accuracy and efficiency of order sorting, but also significantly reduce the reliance on manpower. Meanwhile, through optimizing the space utilization rate of the warehouse, the occupied area of the project site has also been reduced.

Project Highlight

 Sorting efficiency 1500 pieces/hour

 Sorting accuracy 99.99%

 Use carton boxes as destinations, after finished it can be packed and ship directly

 Save 50% of labor and space





OmniSort

Shoes and garments industry

Project Introduction

The project improves the efficiency of order sorting, reduce the error rate and enhance the warehouse automation, the client introduced the "OmniSort" from HC Robotics to provide automated sorting for store replenishment, online store orders and reverse logistics. The "OmniSort" of HC Robotics has effectively improved the level of warehouse automation and enhanced the service quality for the owner.

Project Highlight

-  Slope type destination
-  Enhanced barcode recognition configuration
-  Support B2B, B2C and return goods sorting
-  Multiple Induction conveyor





E-commerce sorting of shoes and apparel

OmniSort

Project Introduction

This project adopts multiple HC Robotics “OmniSort” devices to form a sorting matrix, which is used for order fulfillment in the e-commerce distribution center. In combination with the order picking strategy, it has achieved efficient order sorting, reduced the dependence on personnel, improved the accuracy of order fulfillment, and enhanced the operational quality.

Project Highlight

-  Use multiple OmniSort devices to fulfill orders
-  Support simultaneous sorting for multiple batches
-  The operation mode is to directly pack the goods after batch sorting, and the process is simple
-  The efficiency of order fulfillment has been improved





Sorting of 3C electronic products

OmniSort

Project Introduction

This project is used for sorting small 3C electronic products. In traditional manual sorting, not only is the efficiency low, but also the accuracy cannot be guaranteed. What's more, the outer packaging of the products is prone to damage. Besides, due to the excessive staff turnover, the labor cost has increased. After the "OmniSort" of HC Robotics was put into use, these shortcomings have been greatly improved.

Project Highlight

-  Customized Induction conveyor of the package feeder
-  Reduce the damage rate of electronic products
-  Support various specifications of containers
-  The on-site deployment time is short



SERVICE PROCESSES



Planning & Design

Demand survey, data analysis, system design, and simulation.



System Integration

Detailed design, system interface, and construction.



Design & Manufacturing

Software, electronic system, equipment design, and manufacturing.



Installation & Management

Equipment installation and commissioning, project management.



Acceptance & Delivery

User training, system ramp-up, and acceptance.



After-sales Service

Regular visits, system maintenance, spare parts supply.

AFTER-SALES SERVICES

In order to support customers to use and maintain HC system and equipment conveniently, our company has established a professional after-sales service team. Our team includes senior engineers in mechanical, electronic control, information, and other related fields. All the after-sales service team members have received professional training for different equipment and accumulated rich theoretical and practical experience in equipment maintenance, and emergency repair.



24/7 Hotline



Remote online technical support



Spare parts emergency supply



Localization support



Technical exchange training



Regularly visit and maintain

SMART WAREHOUSE INTELLIGENCE MANUFACTURE



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