VIETATO

# **Logistics Automation**

Industrial Grade Material Handling



0

JR AUTOMATION

A Hitachi Group Company

Think. Solve. Create.

Concernence of the second

## COMPANY OVERVIEW

### Your partner for integrated solutions.

JR Automation designs, builds, and integrates advanced logistics solutions for customers all over the world.

**INNOVATE** Each project has its own unique set of challenges and opportunities and, like you, we thrive on bringing fresh thinking, creative applications, and efficient solutions to everything we do.

**COLLABORATE** Efficient systems are composed of highly-integrated machines. That's the same approach we take to our partnerships: leveraging our teams' knowledge and resources to perfectly complement your needs.

**CUSTOMIZE** Each application is unique. We engineer our systems to solve our customers' unique challenges, benefiting from 40 years of automation experience.

**INTEGRATE** Bringing it all together, our team can incorporate new and existing systems and software with current infrastructure to create integrated material handling systems that are easy to control and run.

**SUPPORT** Our talented service engineers understand that you can't afford downtime. That's why we offer top-level support 24 hours a day, 365 days a year. We make it our mission to keep your equipment running long after installation.

### **32%**

Nearly one third of employees work in engineering

A

## 600

Combined years of project management experience

### 1980

Our founding year, giving us four decades of experience



**27 LOCATIONS** USA, France, Singapore, China



### **Logistics Experience**

From inbound material to line side delivery or outbound shipments, our expertise in material handling allows us to create innovative automation systems to meet our customers' specific needs.

JR Automation understands logistical challenges can be overwhelming. Our experience in robotics, vision, and mobility automation enables us to identify which solutions make the most sense for your situation and customize them for your specific needs. We have experience in both warehouse and manufacturing spaces, and we can provide different levels of solution complexity.

WAREHOUSE LOGISTICS		MANUFACTURING LOGISTICS
	Solutions Experience	
INBOUND	<ul><li>Depalletizing</li><li>Box Opening</li><li>Singulation</li><li>Decanting</li></ul>	INBOUND
2 storage	<ul> <li>ASRS</li> <li>Goods to Person</li> <li>Tote Quality Inspection</li> <li>Pallet Inspection</li> </ul>	storage 2
3 SORTATION	<ul><li>Robotic Flexible Sortation System</li><li>Put Wall Systems</li></ul>	sortation 3
4 PACKAGING	<ul> <li>Robotic Box Erection</li> <li>Case Filling</li> <li>Bar Code Apply</li> <li>Kitting</li> <li>Sequencing</li> <li>Mobile Robotics</li> </ul>	LINE SIDE DELIVERY 4
5 ѕнір	<ul> <li>Palletizing</li> <li>Packout</li> <li>Label Apply</li> <li>Robotic Sorter Induction</li> </ul>	



### **Our Methods**

### Our focus on efficiency doesn't stop at our solutions.

Our extensive background of solutions means we start each project with a strong foundation of what works and what doesn't. This allows us to spend more time focusing on how to optimize solutions for you and working jointly with your team to maximize your return on investment.

**70%** Reduction in installation time

**40%** Reduction in lead time

### DESIGNED FOR DEPLOYMENT

JR Automation's signature Designed for Deployment principles significantly reduce cost, lead time, and installation time for volume deployments of systems. We assemble and verify each subassembly individually and then kit systems for deployment at your site, reducing time and cost, while still ensuring rigorous quality control.

Designed for Deployment systems are built with thoughtful consideration of mechanical assembly, electrical final assembly, modularity, and shipping efficiency. The result is a 70% reduction in installation time and reduced manufacturing lead times.

#### DESIGNED FOR DEPLOYMENT PROCESS





### Streamline logistics operations with automation.

Our flexible logistics solutions maximize efficiency in critical areas.

We see areas in warehouse and manufacturing spaces burdened by timeconsuming, repetitive processes as opportunities. Automated solutions can reduce manpower, increase operation speeds, reduce or optimize facility space, and even improve task accuracy. Some of the areas that benefit most from automation are depalletizing and palletizing, storage and retrieval of product, and robotic sortation.

### DEPALLETIZING & PALLETIZING

- Eliminate physical, mind-numbing work
- Improve accuracy/reduce mistakes
- Maintain operational throughput all day long
- Configurable to meet your needs

### ASRS & GOODS TO PERSON

- Fully customized ASRS: we build to suit your needs for space and speed
- Incorporate multiple tasks by adding sortation or palletizing/ depalletizing

### SORTATION

- Fully configurable robotic sortation system for package and/or item sortation
- Can be used as robotic automated put wall, package/parcel sortation, or item sortation in cross dock applications

The following pages depict some of JR Automation's platforms for optimizing these areas of warehouse and manufacturing logistics. The models shown are example configurations of each system, but they can be customized and designed specifically for operational needs in every industry, from e-commerce and logistics, to manufacturing and pharmaceutical.

### **Depalletizing and Palletizing**

Flexible platforms configured for your application.

- Tote, case, and pail palletizing and depalletizing
- Robotic vision-assisted palletizing placement
- Mixed case depalletization powered by machine learning
- Supervised autonomy package available for exceptions handling
- 4-axis robot, 6-axis robot, and gantry platforms

- Available options:
  - Automated wrapping or banding
  - Slip sheet handling
  - Label placement
  - Pallet health check

### CLOSED CELL ARCHITECTURE

- Multiple pallet bays for undercover pallet exchange
- Roll up safety doors for limited operator exposure and increased robot speeds
- Available with multiple infeed/outfeed lanes to handle different products

Sample configuration

#### OPEN CELL ARCHITECTURE

- Allows for maximum flexibility and number of pallets
- Intelligent Safety System allows for an associate to exchange pallets on one side of the cell while the robot continues to work on the other side
- Configurable for different combinations of pallet locations and input/output lanes

Sample configuration

#### AUTOMATED PALLET EXCHANGE

- Automated pallet stacking or de-stacking
- Optional pallet health check
- Configurable for multiple input and output lanes

Sample configuration

### **ASRS & Goods to Person**

Intelligent storage designed for your unique challenges.

JR Automation's storage and retrieval systems allow you to organize your products and inventory while optimizing valuable floor space. Our solutions are customized to meet the most challenging storage and retrieval applications for both distribution and just-in-time kitting and sequencing.

#### **ROBOTIC ASRS**

- Industrial grade reliability using your preferred robot brand
- Ultimate flexibility for multiple storage container types
- Easily reconfigurable as your process or inventory changes
- Available secondary part or tote inspection
- Able to handle large and specialty parts with customized end of arm tooling and racking



Sample configuration

#### MINI-LOAD ASRS

- Provides fast automated storage and retrieval for bins, cases, trays, and containers
- Customizable lengths and number of cranes
- Optional smart picking stations for goods to person and kitting operations

Sample configuration

Our custom solutions can save you time and money when you want to add storage and your existing systems can't be modified or you have high velocity items that you want to keep separate from your normal storage locations. If you are growing and don't want to start over to increase your automated storage needs, our engineers will work with you to help meet your storage expectations without incurring major costs by building new.



### **RFSS - Robotic Sortation System**

Smart, flexible sortation.

A paradigm shift within the warehousing and eCommerce domains is taking place. Smaller footprint buildings are being built or repurposed to get closer to customers. Combined with the difficulty to find resources to fill positions, you have the perfect reason to look for new, efficient methods to sort items with robotics.

### RFSS ROBOTIC SORTATION SYSTEM

Replace miles of conveyance and take back fulfillment floor space with the RFSS Robotic Sortation System. This compact, modular sorter is capable of handling items of any shape—making it the perfect solution for any industry.

#### FEATURES

- Customizable to fit your project requirements.
- Systems are modular and can be placed in infinite configurations—no need to run in a straight line.
- One system can run from 500 units per hour (UPH) up to 1500 UPH.
   Purchase as many systems as you need for the required output, fully customizing your sortation.

#### BENEFITS

Sort 1500 UPH in 546 ft<sup>2</sup> of floor space

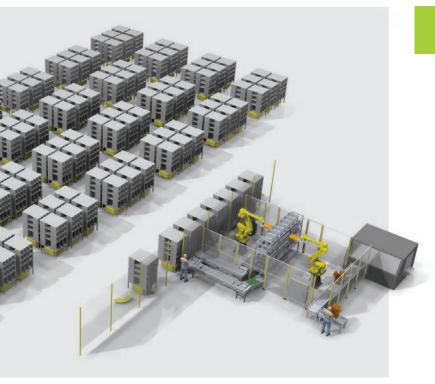
Run systems in parallel for added throughput and protection against downtime

Ten units in parallel can output 15,000 UPH in approximately 7000 ft<sup>2</sup> of floor space. If one system stops, your operation still sorts at 13,500 UPH—a rate difficult to achieve with traditional sorters.

> **3 Robots** 1500 UPH

2 Robots 1000 UPH

**1 Robot** 500 UPH



### AUTOMATED ORDER CONSOLIDATION (PUT WALL)

Replace your manual put walls with RFSS. Improve throughput and eliminate shipping mistakes.

#### FEATURES

- Can be combined with automated box on-demand systems to reduce resources significantly
- Target throughput, 300 packages per hour

### BENEFITS

Sort at rates from 500 UPH to 1500 UPH, per put wall, with significant resource reduction

### AUTOMATED CROSS-DOCKING

Automate and sort your products for cross-dock shipping with fewer resources and a much smaller footprint with RFSS.

#### FEATURES

- Can be combined with automated palletizing to sort your product and prepare it for shipping automatically
  - Can have multiple pallet locations for different end points
  - Optional automated pallet handling
- For use in cross-docking, as well as inbound sort applications
- Totes, pallets, pails choose the storage devices that work best for your application

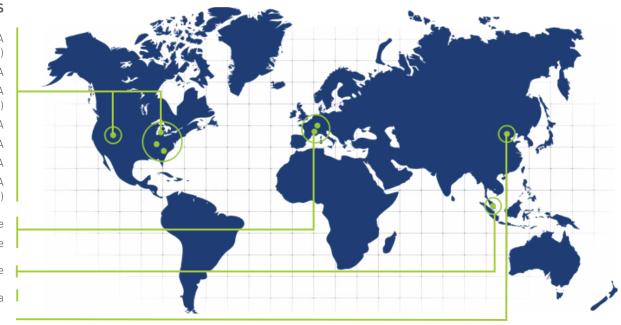
#### BENEFITS

Sort at rates from 500 UPH to 1500 UPH, with significant resource reduction.

Run as many machines as required to get maximum output.

#### LOCATIONS

HQ: Holland, MI, USA (7 facilities) Stevensville, MI, USA Auburn Hills, MI, USA (3 facilities) Nashville, TN, USA Liberty, SC, USA Greenville, SC, USA Ogden, UT, USA (2 facilities) Besançon, France Valence, France Singapore Beijing, China



### **Certified Excellence**

- ISO 9001:2015 Certified
- RIA Certified Robot Integrator
- Authorized FANUC Servicing Integrator
- Authorized Fanuc Vision Specialist
- Authorized ABB Robotics Value Provider
- Yaskawa Robotics Premier Partner
- AIA Certified Vision System Integrator
- ITAR Certified Facilities
- Qmed Qualified Supplier
- GAMP 5 Capable

**SINCE 1980** JR Automation has designed and built the right solutions to fit customer needs for over 40 years. With cross-industry experience and numerous application capabilities, we handle the full spectrum of automation needs.

**OUR PROCESS** We focus on the customer. We're committed to being there from concept to production to ensure the speed, accuracy, efficiency, and safety of our systems.

**WE'RE GROWING** With over 2,000 employees at 27 locations across North America, Europe, and Asia, we are poised to support our global customer base.

> Start building your custom solution today. Email us: solutions@jrautomation.com



JR AUTOMATION

A Hitachi Group Company

4190 Sunnyside Drive Holland, MI 49424

+1 (833) 800, 7630

### jrautomation.com

© 2021JR Automation