

# GALAXIS TECHNOLOGY

Technology Empowers Logistics



GALAXIS

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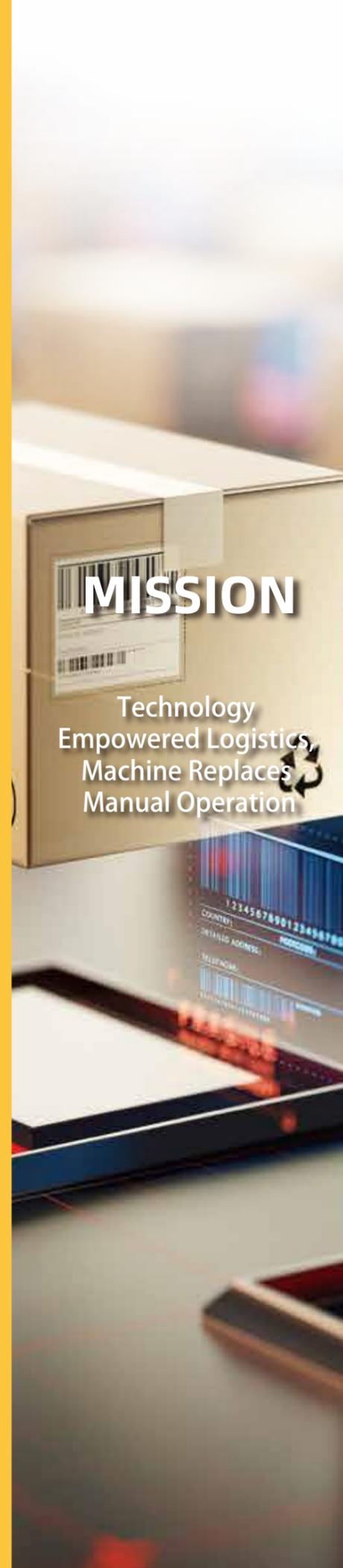
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## MISSION

Technology  
Empowered Logistics,  
Machine Replaces  
Manual Operation



## PHILOSOPHY

Scenario-oriented,  
technology-based,  
value creation



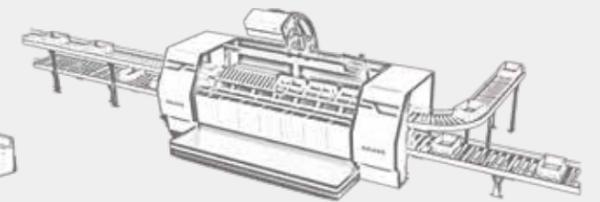
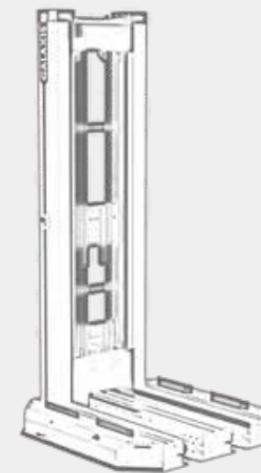
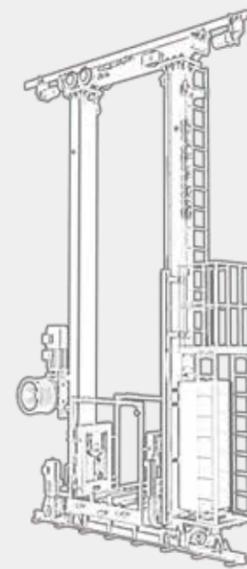
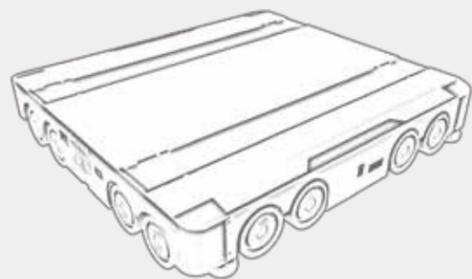
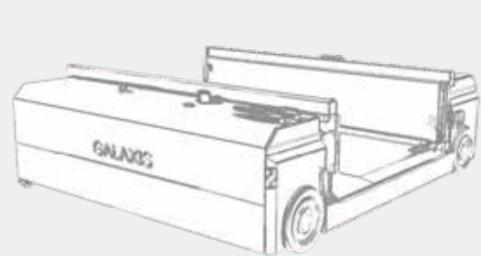
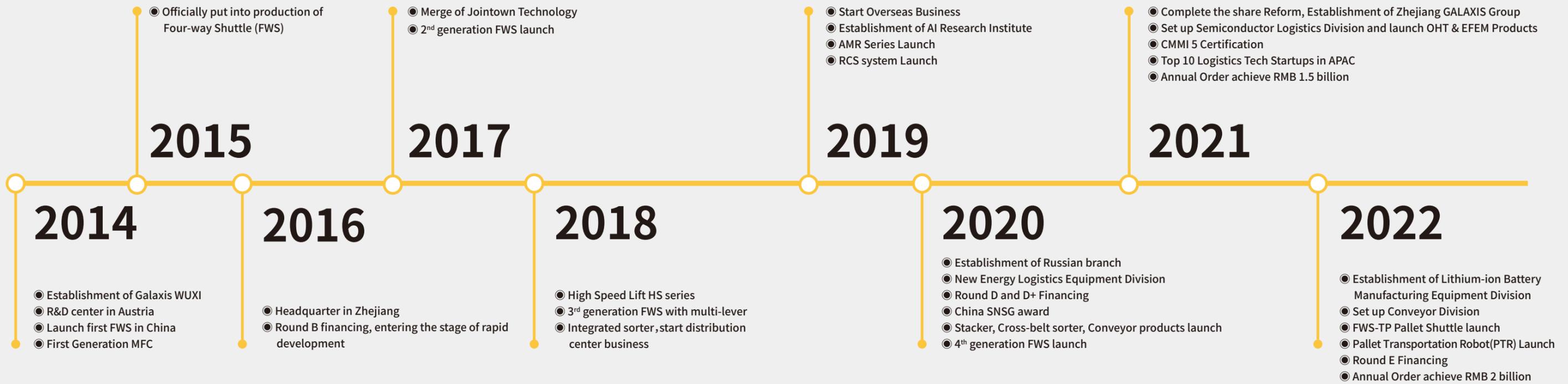
## VISION

A leading provider  
of logistics robots,  
intelligent equipment and  
technology services



## VALUES

Customer-oriented

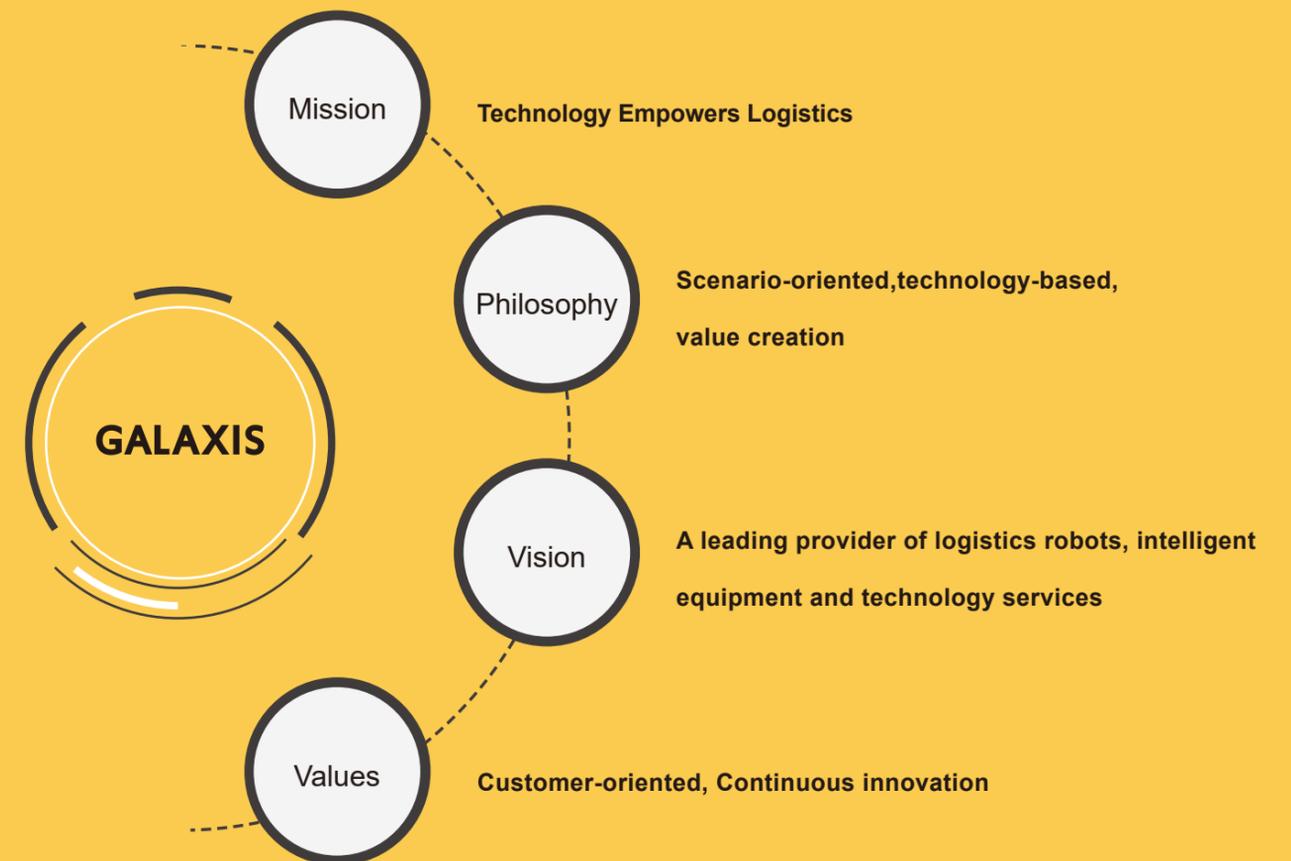




Established in 2014, GALAXIS Technology is a high-tech Enterprise dedicated to the R&D and manufacturing of logistics robots and intelligent logistics equipment, we are committed to offer intelligent logistics system solutions in the field of industrial manufacturing and commercial circulation.

Headquarter locates in Zhejiang, with its five R&D and manufacturing bases in China, GALAXIS technology has successively launched the Full roaming 3D tote Shuttle System, Stacker System, Pallet Shuttle System, and the Pallet Transport Robot System, which can handle all types of container units from the tote, carton to pallet, with all types of AS/RS to fulfill the various requirement from our clients.

GALAXIS Technology adheres to the concept of “scenario-oriented and technology-based value creation”. By virtue of its advanced robot technology, strong AI algorithm and software capability accomplished at planning, design and integration, achieved the recognition by global customers in over 30 industries including Pharmaceutical, Li-ion battery production, Semiconductor, Automotive, Retail & e-commerce, Garment, Computer & Communication & Consumer Electronic, etc.



10+ Countries



300+ Customers



1000+ Logistics Centers



30+ Industries



150+ Software copyrights



200+ Patents



70% Technicians

# About Us

## R&D, Manufacturing and Global Business Distribution



● GALAXIS Project Distribution



**Zhejiang GALAXIS Technology Group Co. Ltd**  
Zhejiang, China  
Group Headquarter



**Hubei GALAXIS Technology Co., Ltd**  
Hubei, China  
AI Research Institute / Software Center



**Guangzhou GALAXIS Technology Co., Ltd.**  
Guangdong, China  
AMR R&D center



**Zhejiang GALAXIS Semiconductor Equipment Technology Co., Ltd.**  
Zhejiang, China  
AMHS R&D center



**Wuxi GALAXIS Technology Co., Ltd.**  
Jiangsu, China  
Shuttle R&D Center



**Shenzhen GALAXIS Technology Co., Ltd.**  
Guangdong, China  
Lithium-ion battery Production Manufacturing Center



**Guangdong GALAXIS Technology Co., Ltd.**  
Guangdong, China  
Lithium-ion battery Production Equipment Manufacturing Center



**Anhui GALAXIS Technology Co., Ltd.**  
Anhui, China  
Conveyor System Manufacturing Center

# Solutions

## Software

### GALAXIS Artificial intelligence

Along with the rapid development of cloud computing, 5G, IoT and other technologies, modern logistics is gradually transforming from automation to intelligence. GALAXIS AI Research Institute keeps tapping the application and innovation of AI technologies such as data mining, image processing, and intelligent optimization algorithms in the logistics industry, expands the application scope and collaboration scale of intelligent logistics equipment systems, and greatly improves operational efficiency, thus providing customers with solutions which are highly intelligent, flexible, highly reliable and cost-effective.

- Extreme high density storage location management
- Route selection optimization
- Automatic equipment scheduling
- Intelligent task planning based on order features



**GALAXIS**

## GALAXIS Warehousing System

### WMS (Warehouse Management System)

Helps to boost the efficiency and productivity of warehouse processes and adapt to changing requirements is the key of Warehouse Management system developed by GALAXIS. Modular WMS designed to meet customers' large-scale automated material handling applications. A distributed technology architecture, we ensure stable and efficient performance level for B2B, B2C business.

- Various warehousing needs in supply chain.
- Strong operation strategy.
- Refined operation process design and management.
- Integrated with external systems.

### WCS (Warehouse Control System)

GALAXIS WCS adopts a distributed system architecture for effective and direct control of warehouse equipment or subsystems (MFC, RCS etc.), thereby displaying and optimizing the efficiency of logistics equipment, and greatly improving ROI of customers.

- Available for ultra large system.
- Significantly improved communication efficiency with PLC.
- Independent of WMS and master database and capable of independent operation.
- When software partially fails, it can still run at reduced efficiency.

### RCS (Robot Control System)

The Robot Control System, also known as Galaxis intelligent multi-device cluster control system, is specially designed to meet customers' needs for large-scale intelligent logistics, factory upgrades and robot cluster equipment scheduling and control, with a reliable, stable and cluster equipment efficient cluster scheduling control system for controlling AMR, shuttle boards and other intelligent equipment.

- Task distribution: centralized task receiving, intelligent task assignment, system load balancing.
- Equipment scheduling: Scheduling a variety of equipment (AMR, RGV, etc.) to work together to plan the optimal route which is most efficient.
- Traffic control: traffic control on complex road sections to prevent collisions and locks.
- Alarm service: multiple reminder methods work simultaneously.
- Integrated with WMS/WCS/MES/ERP via standard interfaces, coordinated with robotic arms, conveyor, elevators and other equipment.

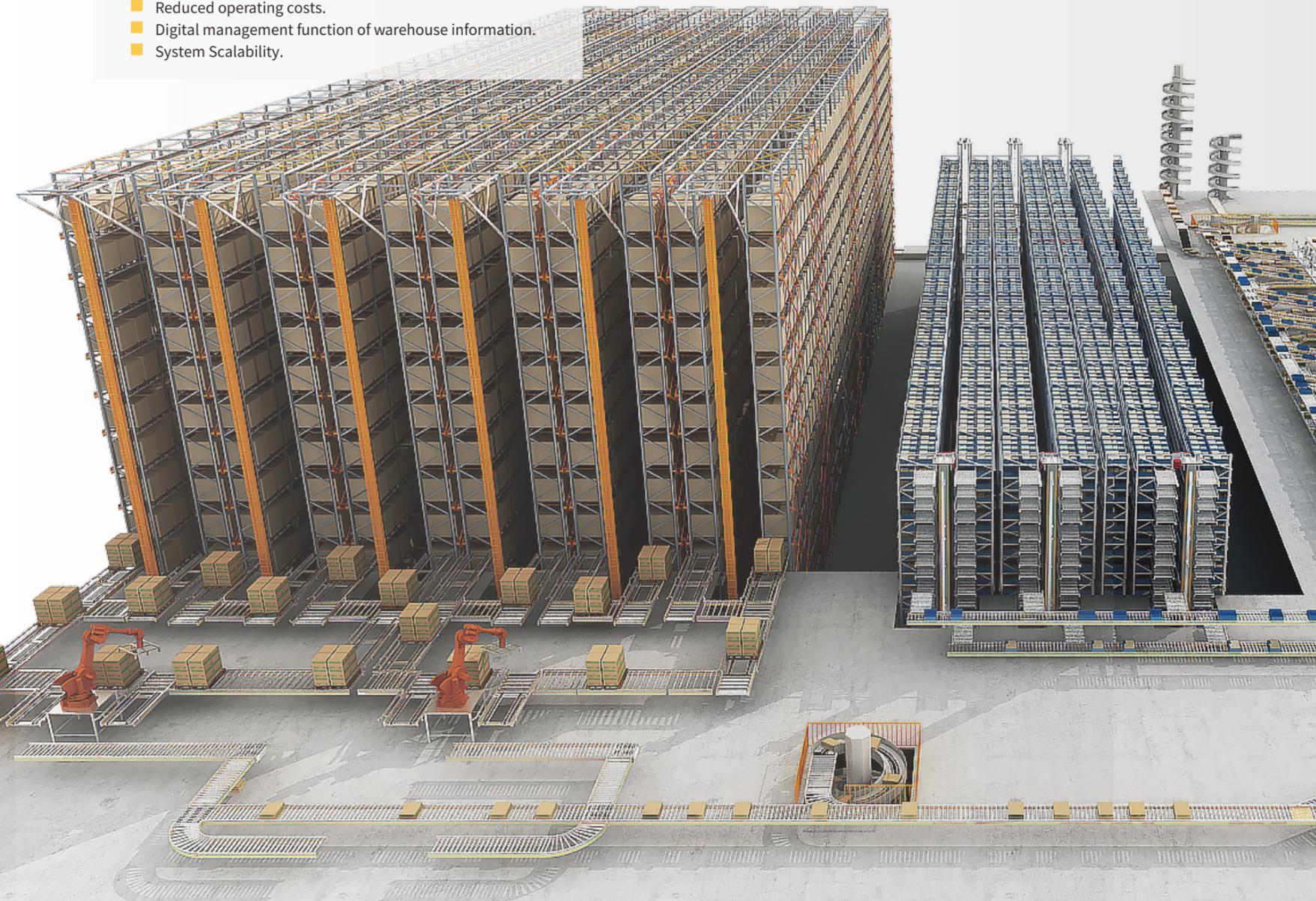
# Solutions

## ASRS System

### GALAXIS AS/RS

GALAXIS provides high quality AS/RS to optimize the clients' business efficiency. We are committed to the development of intelligent storage and retrieval equipment for pallets and boxes. With the deep understanding of the logistics, GALAXIS can help clients quickly adapt the increase of competition, and the shift of consumer preferences.

- Maximize the space utilization and system performance.
- High flexibility.
- High redundancy.
- Reduced operating costs.
- Digital management function of warehouse information.
- System Scalability.



Full Roaming 3D Shuttle - FLASH



2D Shuttle system Full Roaming



Pallet shuttle system



AMR system



Miniload system



Pallet stacker system

# Solutions

## Tote shuttle

### Tote Shuttle

GALAXIS Full roaming shuttle FLASH is a kind of box and tote handling equipment, with lift and conveyor it can achieve AS/RS functionality. Special designed chassis makes shuttle to move in X and Y direction, with shuttle lift can makeshuttle roam in the racking system.

- First in Europe to complete development and mass production of Four-way Shuttle
- CE certified, all parts and components conforming to high international standards
- Shorter time for order delivery
- Super capacitors used, 10-second charge for 3-minute operation
- Various system configurations to handle various sizes of goods
- Applicable to business models that feature fast-changing SKUs or product category

GALAXIS

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# GALAXIS



Full Roaming 3D Shuttle- FLASH



2D Shuttle - LASER



Tote lift-THUNDER series



Shuttle lift-KNIGHT series



GTP picking station



Layer-conveyor



MFC



Shuttle rack

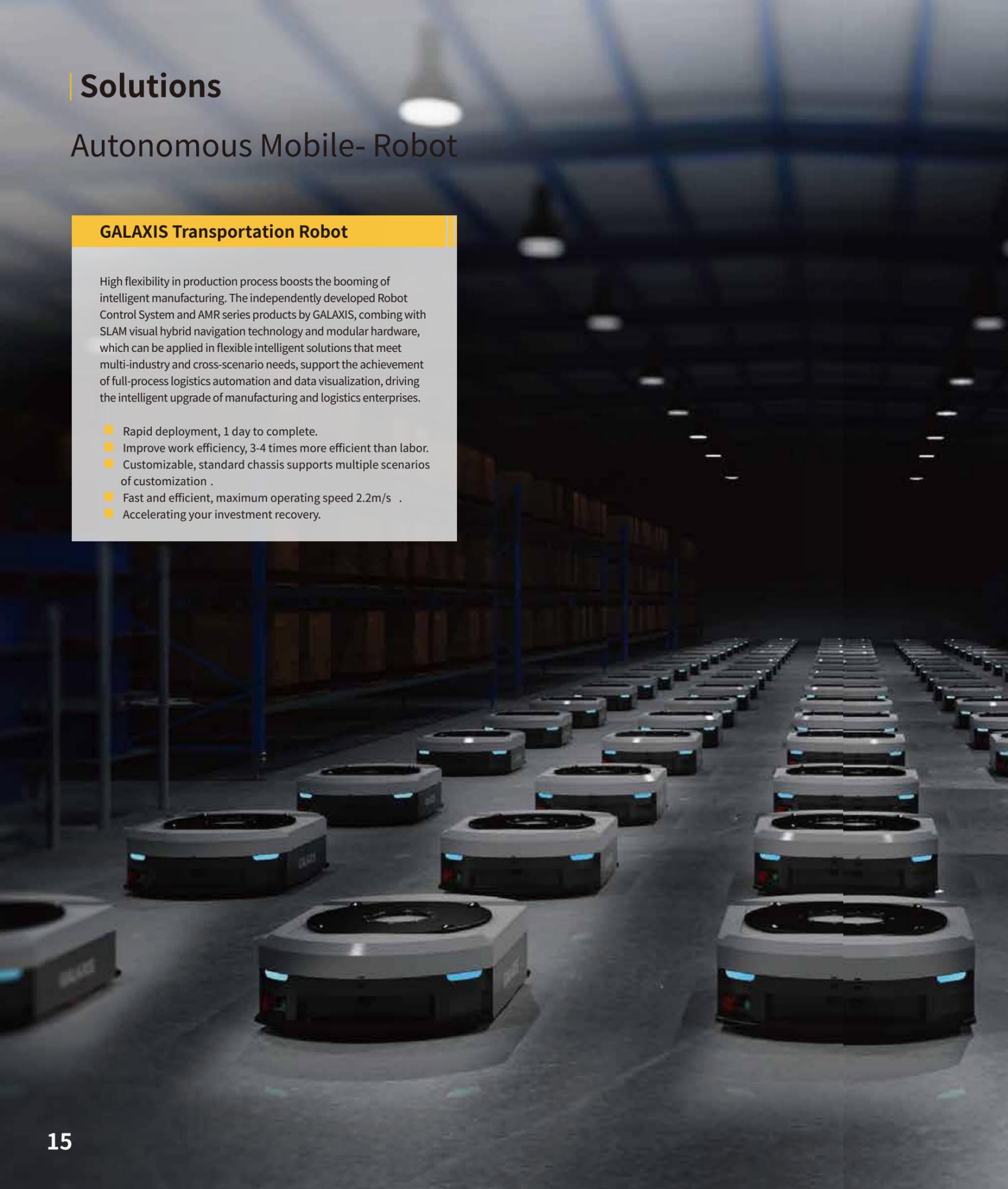
# Solutions

## Autonomous Mobile- Robot

### GALAXIS Transportation Robot

High flexibility in production process boosts the booming of intelligent manufacturing. The independently developed Robot Control System and AMR series products by GALAXIS, combining with SLAM visual hybrid navigation technology and modular hardware, which can be applied in flexible intelligent solutions that meet multi-industry and cross-scenario needs, support the achievement of full-process logistics automation and data visualization, driving the intelligent upgrade of manufacturing and logistics enterprises.

- Rapid deployment, 1 day to complete.
- Improve work efficiency, 3-4 times more efficient than labor.
- Customizable, standard chassis supports multiple scenarios of customization .
- Fast and efficient, maximum operating speed 2.2m/s .
- Accelerating your investment recovery.



# GALAXIS



PTR-CL1



PTR-CL2



FM series



FR series



FS Series



MR Series

# Solutions

## Conveying and sorting system

### GALAXIS Conveying and Sorting Solutions

GALAXIS intelligent conveying and sorting solution can efficiently process large quantities of goods, extremely low rate of sorting errors, low noise, and low failure rate. The automated fast sorting technology can reduce the labor cost, and improve the sorting efficiency and accuracy.

- Significantly enhanced operating efficiency, high flexibility to meet different needs.
- Optimum use of warehouse space and efficiency.
- Reduced operating costs.
- Digital management function of warehouse information.
- Meet operation needs of industries such as ambient, cold storage, freezers, high temperature resistance, and antistatic.

# GALAXIS



Tote conveyor



Pallet conveyor



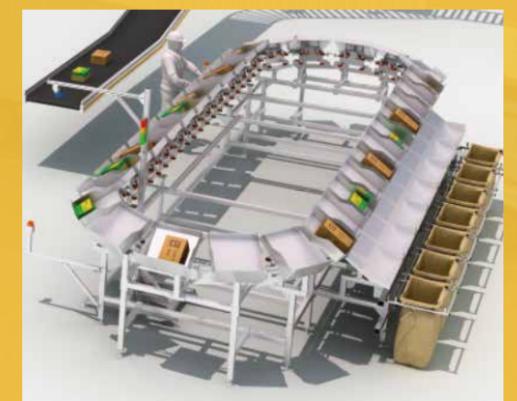
Compact sorter



Swivel wheel sorter



Cross-belt sorter



Tray sorter

# Solutions

## Semiconductor automated material handling system

### Material Control System

The Material Control System (MCS) receives handling commands from the MES, finds the shortest path between the "tool or equipment" (hereinafter referred to as "facility") where a specific material is located and the destination facility, and issues this task to the subordinate subsystems. By monitoring the execution of each material facility task of the subordi.

- Real-time monitoring of AMHS equipment and internal transport equipment for materials (wafer cassettes).
- Support SEMI standards (SECS, GEM, Stocker SEM, IB-SEM).
- Deployment of shortest path finds efficient optimal dynamic path based on plant status .
- Active-Active fault tolerance capability .
- Powerful scalability - mainframe / AMHS gear, etc., can be easily integrated .



OHT



EFEM



STOCKER



Manipulator robot

# Solutions

## Lithium-ion battery production logistics equipment

### GALAXIS logistics solutions

With years of accumulation of logistics technology and understanding of battery production process, GALAXIS acts boldly to introduce new approaches. Our business covers Raw Material warehouse, Forming and Grading Storage, automatic battery cell assembly line. And over 30 projects in China and North America.

- The core electrical & software team has more than 15 years of manufacturing experience.
- Over 25 years of experience in intelligent logistics system planning and more than 10 years experience on Lithium-ion batteries industry.
- A number of patents with self-developed software & equipment includes SRM, lift, conveyor, etc.
- Professional implementation team guarantee the delivery of Global projects.

# GALAXIS



Stacker (with firefighting facilities)



Racking (with fire fighting facilities)



Conveyor



AMR

# Solutions

## Lithium-ion battery production automation

### Lithium-ion production automation

We have created nearly 200 applications in the Lithium-ion batteries production equipment, with the support from three main sections which are mechanical engineering, electrical engineering and technological development of new projects.

- PC and PLC option on equipments, individual development team with independent intellectual property rights.
- The PC base program writing is adjusted through structure realization, and the mechanical structure is more closely coordinated, makes the equipment operating more smoothly.
- EHMI protocol human-machine interface adopted facilitating programming and debugging.
- Open resource, scalable, flexible and modular.



High-speed Die Cutting Machine



Hyper Die Cutting Machine



Electrode Stacking Machine



Electrode Stacking Machine  
(The Blade Battery)



Super Electrode Stacking Machine



Electrode Slicing & Stacking Machine

## Customer service and support

### After-sale services

GALAXIS intralogistics solutions continually aim the standard for quality and innovation and it's the same for our commitment to customer service. Our team of experts from Service are there for you around the clock, in all conditions.



#### 24/7 Support

Ensure maximum uptime with 24x7 Support for your operation.



#### Maintenance

Highly trained, dedicated field service engineers provide preventive as well as scheduled maintenance eliminating downtime.



#### Spare Parts

Fast and easy access to +120,000 genuine parts with different delivery/stock options to suit your needs.



#### System Upgrade & Optimize

Get comprehensive support for secured future growth, and by upgrading during operation, enable your business to carry on without interruption.

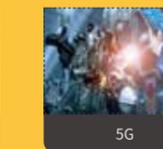


#### Technical support

A diverse range of remote support as diagnose, trouble-shooting, technical clarification and operation optimization, as well as site support on request.

### AI research institute

GALAXIS is committed to promote smart warehousing and logistics services into every industry, which, by means of in-depth integration of data, robots, algorithms, system software and services with various industries, can meet users' needs for efficient, intelligent and personalized applications. It conducts in-depth researches in 3D vision palletizing/de-palletizing system, 3D vision case pick, SLAM technology, ultra-large-scale multi-agent scheduling, 5G applications, and digital twin, and keeps creating new intelligent logistics products and solutions to contribute to the rise of China's intelligent logistics.



### Consultation and planning

With experience in logistics consulting and planning in medicine, e-commerce, 3PL, manufacturing, etc., with core business application scenarios running through all aspects of raw material procurement, production, transportation, distribution, and retail. It provides customers with end-to-end one-stop solutions including logistics system consulting and planning, software development, advanced R&D and manufacturing, project implementation, and operation guidance.



Raw material storage



Internal logistics



Finished goods storage



Main routes transportation



Wholesale logistics center



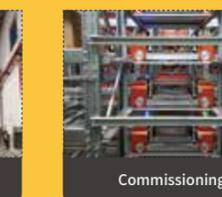
Regional allocation



Retail distribution center

### Project implementation management

With project management experience and risk management capabilities, providing customers with such services as system development, equipment manufacturing and procurement, project implementation, and operation guidance. We provide design, selection and optimization of logistics automation equipment, and offer cost-effective solutions.



## 🏠 Pharmaceutical

### Pharmaceutical Circulation



Medicine distribution center (China)



Medicine distribution center (Korea)

### Pharmaceutical Manufacturing



Finished product warehouse (China)



Raw material warehouse (China)

### Medical Related



Medical equipment manufacturing (China)



Health product manufacturing (China)

## 🛒 Retail & E-Commerce

### Retail



Medicine distribution center (China)



Fashion industry Logistics Center (China)

### E-Commerce

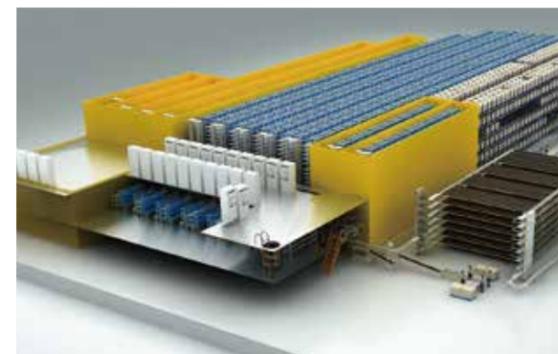


E-Commerce Distribution Center (China)



Cross-board E-Commerce DC (China)

### Others



Fresh food Distribution Center (Israel)



Luxury Distribution Center (Dubai)

## 🏠 Computer, communication and consumer electronics

### Communication



Raw material and spare parts warehouse (China)



Regional logistics center (China)

### Consumer Electronics

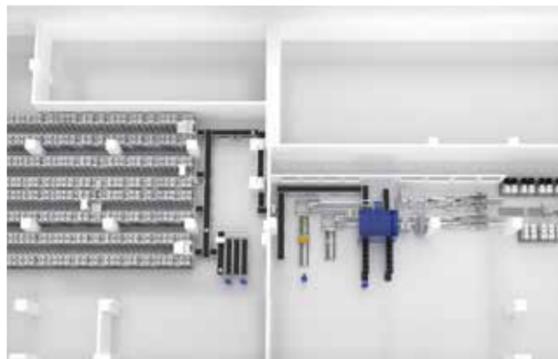


Electric appliances production logistics (China)



Electronic components production logistics (China)

### Semiconductor



Wafer storage and transportation (China)



Data storage device warehouse (China)

## 🚗 Industrial Manufacturing

### Automobile



Parts warehouse in automobile factory (China)



Parts production line side warehouse (China)

### Lithium Battery



Forming and Grading storage (China)



Raw material warehouse (China)

### Others



Instrument manufacturing logistics center (China)



Heavy equipment spare parts center (China)

# GALAXIS

## Jiaxing, China

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Tel: +86 0573 8258 6878  
Web: en.galaxis-tech.com

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## Shanghai, China

Address: Room 309, Building C, Dongshuo Space of Yupei, No.1899 Shenkun Road, Shanghai  
Tel: +86 021 6221 2357

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## Wuhan, China

Add:22nd Floor, Office Building, Building 6, Jiuzhoutong Health City, Longxing West Street, Hanyang District, Wuhan

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## Kunming, China

Add: Room 1003, Main Building, High-tech Information Center, No.398 West Second Ring Road, High-tech Zone, Kunming City, Yunnan Province

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## Dongguan , China

Add: Building 19-03, Post 6, CIMIC Zhigu Industrial Park, Songshan Lake Park, Dongguan City, Guangdong Province

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## Beijing, China

Add: Room 1036, 10/F, Building 5, No.36 Guangqu Road, Chaoyang District, Beijing

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## Moscow , Russia

Add: Office 110, bldg. 1-1A, str. Malaya Andron yevskaya 20/8, Moscow  
Tel: +7(910)439-0149

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## Wuxi, China

Add: A101, Liye Building, University Technology Park of Sensing Network, No.18 Qingyuan Road, Wuxi New District  
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## Shenzhen, China

Add: 101, Building 3, Nangang First Industrial Park, 1029 Songbai Road, Yangguang Community, Xili Street, Nanshan District, Shenzhen

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## Guangzhou, China

Add: Building 5, Units 5106-5108, West Area, Chebei Road, Tianhe District, Guangzhou City,China

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NO:CATALOG-2022-05

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