



# Hirata

# Hirata

The Global Production Engineering Company



# In Harmony with Humanity

## An advanced production system must be "People-friendly".

Technical innovation never stops and any new production system must achieve not only higher quality and up-time, but also flexibility to cope with various changes in the production environment.

No matter how automated or sophisticated a system is, production can never be completely independent of human beings. It must satisfy management with its efficiency and profitability while being user-friendly to manufacturing engineers, operators and maintenance personnel.

"People-friendly" is an important concept at Hirata. As a preferred systems integrator of production equipment around the world, we want to continue making systems that also nurture natural human ability.

President **Yuichiro Hirata**

### Management Philosophy

#### Hirata

##### MAKES THE BEST USE OF ITS PEOPLE.

We believe the only way to achieve perfection is by ensuring that every employee of Hirata can grow as a person and enhance their capabilities by drawing from the strengths of others.

##### CHALLENGES TECHNICAL INNOVATION.

Our world changes rapidly. We must always innovate and be creative in order to meet our customers' needs and exceed their expectations.

##### RESPECTS HUMANITY.

We design our products to liberate people from jobs which can be done by machines, freeing people to use their minds and talents to do the things only humans can do.

##### OPENS THE DOOR TO A CREATIVE LIFE.

We want our company to be a place where our team members can continually improve their skills and pursue a life of creativity and purpose.

##### CONTRIBUTES TO THE SOCIETY.

We can only succeed as a company if we are a productive and conscientious member of the business community. Contribution to society, human rights and the environment must be our standard practice.

##### MAKES OUR CUSTOMERS SUCCESSFUL.

The best way to make a fair profit is to ensure our customers' long-term success. Their continued patronage is the result of the performance of our equipment and the hard work of our people.

### Mission Statement

We courageously pursue technological innovation while contributing to the betterment of mankind, development of individuals and enhancement of our company's capabilities.





## History

Global manufacturing technology is changing on a daily basis.  
Hirata's mission is to support the growth and productivity of manufacturing industries around the world.

Manufacturing is always evolving in order to make a better life.  
Hirata manufactures and markets production systems for various industrial fields, such as the automobile, semiconductor, and home electronics industries.  
Ever since our founding, we have designed and manufactured a variety of manufacturing solutions in a wide range of industrial fields.  
With our long history, Hirata can provide the know-how and unique perspectives needed to help our customers meet the needs of the fast-paced manufacturing industry.  
For years to come, we will continue working to create greater value for our customers based on innovative technologies and creative engineering solutions.  
Hirata will also contribute to the realization of a sustainable society for a better future by comprehensively addressing the issues facing our planet.



Hirata Sharyo Industrial Co., Ltd. established in Kumamoto with 1 million yen in capital to manufacture and market industrial vehicles.



Establishment of Hirata Sharyo Industrial Co., Ltd.

1951

Production and distribution of industrial vehicles

Taihei Conveyor manufactured small conveyors and Hirata Vehicle Industries was focused on conveyors for the home electronics industry. In an era of expanding business opportunities, these two companies merged with Hirata Industrial Commerce to establish Hirata Corporation.

Foundation of Hirata Corporation

1974

Streamlining conveyor systems  
Automation and robot developments

Hirata began delivering assembly lines not only to domestic manufacturers but also to overseas major home electronics manufactures, including the establishment of our first overseas office in the United States. Following this, affiliate companies were established in Europe, Southeast Asia and China. Hirata was dedicated to further exploration of business opportunities by ensuring smoother maintenance and support abroad.

Expand network of overseas subsidiaries to become a global company

1980

Introduction of software technology  
Development and distribution of production systems

In December, after 60 years in business and on the 55th years anniversary of our founding, Hirata was finally listed on the JASDAQ stock exchange.

Going public

2006

Be a system integrator of production equipment whose main business is the fields of automobiles, semiconductors, and home appliances

In 1981, our headquarters were moved from Kumamoto to Tokyo to promote global business. As we achieved this goal, in April we began to evaluate the viability of moving back to Kumamoto to improve business efficiency. During this process Kumamoto was hit with a devastating earthquake. In support of our hometown, we made the decision to move our headquarters to Kumamoto at the 65th annual shareholders meeting.

Consolidating our base in Kumamoto, relocating our headquarters from Tokyo to Kumamoto

2016

Change of our stock market listing to the First Section of Tokyo Stock Exchange

2017

In June, the new factory which began construction in 2018 was completed. The core functions of assembly system development were merged under our policy of "Administration, Design and Program Management should always be close to Manufacturing." The first floor (high bay) is for manufacturing work and the top floor is equipped with a clean room to assemble semiconductor related carrier devices and other products.

Completion of new headquarters building

2020

Change of our stock market listing to the prime market

2022

1953

Began manufacturing conveyor systems in pursuit of conveyance streamlining

Started manufacturing of conveyors based on an idea: "Our goal is to develop lightweight, easy-to-use, efficient methods of transport. Conveyor systems must be streamlined." The first prototype was completed in 1959.



1964

Delivered our first television assembly line



1970

Started making free-flow conveyors

Our manufacturing methods brought stress relief for workers, a dramatic decrease in product defects and increased production efficiency. This method of leveraging human abilities represents the philosophy of Hirata Corporation and is our legacy.



1980

Development of Arm Base robot

Developed the horizontal multi-articulated four-axis robot "Arm-Base AR-300" and brought it to market in the following year, ahead of all global competitors. Most of the robots appearing in the international robot exhibition held this year were three-axis and therefore our four-axis ARM-BASE drew significant attention.

1977

Development of Cartesian coordinate robot "Machine Base"

Based on the insight "Automation will ultimately center around robots", started mastering electronic controls. Manufactured a simple digital display controller and then developed the "Machine base" through incremental improvements.



2001

Received large orders for engine assembly lines of automotive related equipment.

Started the automotive equipment business in the mid-80s. Accepted a major order for engine assembly lines for an auto manufacturer located in North America in 2001. As our excellent performance and quality was recognized, sales of automobile related equipment began to soar.



2001

Production of semiconductor related equipment began.

Began going into the semiconductor market and started production full scale with a focus on carrier devices including load port, wafer transfer robot and EFEM.

2007

Development of 10th generation glass substrate transfer robot

2014

Development of ECO electric stopper that can be used in various fields

In regards to pallet stops, which are widely used in conveyor systems, we leveraged our practical accomplishments and experiences in a variety of fields to develop the Eco Electric stopper. This stop is energy efficient and was a departure from the air cylinder types which were commonly used at that time.



◀Eco Electric stopper

2012

Development of robots such as new SCARA robots and small Cartesian robots

Developed and brought to market horizontal multi-articulated (SCARA) robots which have industry leading speed, cartesian coordinate small robots which offer a wide variety of combinations and controllers that can handle products from other manufacturers.

◀10th generation glass substrate transfer robot



SCARA-type robot  
Arm Base AR-300 ▶



Realizing performance, cost, quality, safety,  
and production efficiency

## Production Engineering

We make an effort to develop production systems jointly with customers from a total system perspective, which includes management of customer requirements, components, process sequence, operability proposals, reviewing and checking stability, risk analyses and production efficiency. One example is ACS (Assembly Cell System), which is what Hirata proposes as a standardized concept. ACS has a record of high reliability / availability in production, especially in the automotive industry.

Hirata is capable of combining different standards to develop unique methodologies.

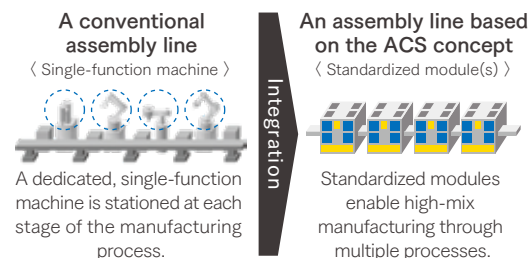
### ACS Concept Assembly Cell System

The ACS is Hirata's unique production engineering system concept. It is an assembly line system of highly standardized modules, combining great reliability and cost performance with faster time-to-market.

**Integration** Equipment and parts used at each operation of the manufacturing process are standardized and/or integrated into standardized modules.

**Flexibility** Each module is equipped with a range of functions adaptable to different manufacturing processes.

**Quality** Stable product quality and a minimization of equipment failure are assured through standardization.



- Accelerates production start-up by shortening the time to install and qualify equipment.
- Simplifies the assembly line by standardizing parts to reduce space and ease maintenance.
- Shortens the assembly line and reduces in-process inventory.
- Adapts readily to product changes or future assembly line changes.
- Supports changing production output by modifying equipment quantity or layout.

Global, customer-focused support

## Support

Hirata has established six domestic production facilities in Japan and nine subsidiaries abroad. We provide on-site support to customers from a holistic perspective, incorporating practical training, maintenance, and updates tailored to production sites in various countries.

## Features

Hirata offers reliable production systems based on our enhanced integrated services ranging from development to installation, run-off, start-up support, maintenance service and production support.

Hirata's services are designed to be completely integrated. These include R&D, application engineering, design, component manufacturing, assembly, inspection, testing, installation and run-off. Our in-house capabilities ensure timely delivery of outstanding quality and competitively priced products.



Enhancing the reliability of our products and realizing reduced cost and a shorter delivery time

## Manufacturing

We provide services with consistently high quality through our integrated systems that completely handle processes from the single part to installation, run-off, and start-up. Furthermore, we achieve low cost and short delivery time utilizing our in-house manufacturing equipment. Our engineers have global experience in a wide variety of fields and products, coupled with a deep understanding of production technology at various manufacturing sites. They play an important role in systems integration, bringing their broad experience with many different manufacturers to bear, and have earned an excellent reputation for their work in this area.



### Machine tools

- 5-face machining center
- CNC multi-tasking machine
- High-performance machining center
- Laser cutter
- Horizontal grinding machine
- Wire-cut electric discharge machine
- NC press
- Die-casting press, etc



### Other equipment

- Precision measuring machine
- Large-scale baking painting facility
- Clean rooms, etc.

Hirata's approach to digital transformation

## Systems in line with the new technological era

Utilizing VR, 3D CAD, emulation and 360-degree cameras, you can have meetings and visit our production sites in the metaverse space.





## Industries Served

We support the manufacturing processes of our customers by providing high quality, high efficiency and easy-to-use production systems.

We manufacture and sell production systems for various fields including automobiles, semiconductors, flat panel displays (FPD) and home electronics.

We continually challenge ourselves to respond to the needs of our customers in many industries by utilizing the technology and know-how we have accumulated through our experience in global manufacturing.

In regards to research and development, we have been supplementing our past experiences with innovations in the field of life sciences.

01

### Automotive related production equipment

In addition to manufacturing lines for traditional Internal Combustion Engine (ICE) equipment (including engines, transmissions and subassemblies), we also manufacture hybrid and electric vehicle (EV) related equipment (batteries, drive units, inverters and other power components) and equipment to assemble and test other automotive components.

02

### Semiconductor related equipment & flat panel manufacturing systems

We design and manufacture load ports, wafer transfer robots (for both atmospheric and vacuum applications), integrated Equipment Front End Modules and other semiconductor handling solutions.  
We provide glass cutting, coating and lamination systems used for OLED, LCD and other high-end display technologies.

03

### Industrial robots

We manufacture and market controller units and various component robots as part of Hirata's manufacturing system portfolio.

04

### Factory Automation component sales

Hirata's versatile, safe and user- friendly Factory Automation (FA) devices can now be purchased on a component basis.

05

### Intelligent power modules

We manufacture and market power module-related production equipment such as chip mounters and vacuum reflow ovens for fluxless solder applications.

06

### Transfer machines

Material handling equipment is one of Hirata's starting points, and we provide equipment that covering a variety of essential elements across all products and markets.

07

### Home appliance production equipment

We design and manufacture production equipment for manufacturers of home electronics and electrical appliances such as flat-screen televisions, refrigerators, and vacuum cleaners.

08

### Medical, Chemistry & Physics devices

We manufacture and market medical, chemistry and physics devices for use in the development of new medicines and treatments.





## Automotive related production equipment

Hirata has a long history in the automotive industry, both domestically and internationally. We design, produce, and sell assembly and test equipment ranging from electric vehicle related products, traditional powertrains such as transmissions and engines and smaller components such as computerized control systems, sensors, air compressors, and ABS brake modules.

We provide a consistent solution for all processes.

Proper operation is always confirmed through thorough testing before delivery, and maintenance is made simple and straightforward.

We completely handle devices and equipment for electric vehicles, engines, transmissions and automotive component production. Comprehensive tests are run before delivery to ensure correct operation. Hirata's standard designs and solutions improve ease of maintenance for the end user. In addition, digital twin technologies are used to design and develop production line more efficiently.



### Electric Vehicle related equipment

Drive unit  
Battery Pack  
Motor assembly  
Inverter power module assembly  
Wire bonder for large battery

### Engine related equipment

Complete engine assembly  
Cylinder head assembly  
Short block assembly  
Piston assembly  
Valve assembly installation  
Valve keyup  
Crankshaft assembly  
Leak tester  
Cold tester  
Piston insertion machine

### Transmission related equipment

CVT assembly  
Automatic transmission assembly  
DCT assembly  
Carrier assembly  
Manual clutch assembly  
Automatic clutch assembly  
Torque converter insertion



### Electric Vehicle related equipment

We are capable of providing assembly and test equipment used in the production of electric drive motors (including stator and rotor), complete electrical drive units, battery modules and battery packs.



EDU-Gear Box



EDU (Electric Drive Unit)



Inverter



IGBT



Dual-head wire bonder

### Engine related equipment

We are capable of providing the full range of equipment used in the production of internal combustion (gasoline and diesel) engines, including short and long block engine assembly, cylinder head assembly and piston assembly.



Valve assembly equipment



Carrier assembly equipment



Cantilever conveyors

### Transmission related equipment

We are capable of providing equipment used in the production of transmissions, including case assembly, valve plates, differentials, clutches, torque converters and other components of automatic, Continuously Variable (CVT) and Dual Clutch (DCT) transmissions, as well as gear boxes for electric vehicle (EV) applications.



Cold tester  
Comprehensive engine testing without the need for combustion



Clutch assembly equipment



Gripper transfer assembly for automotive parts



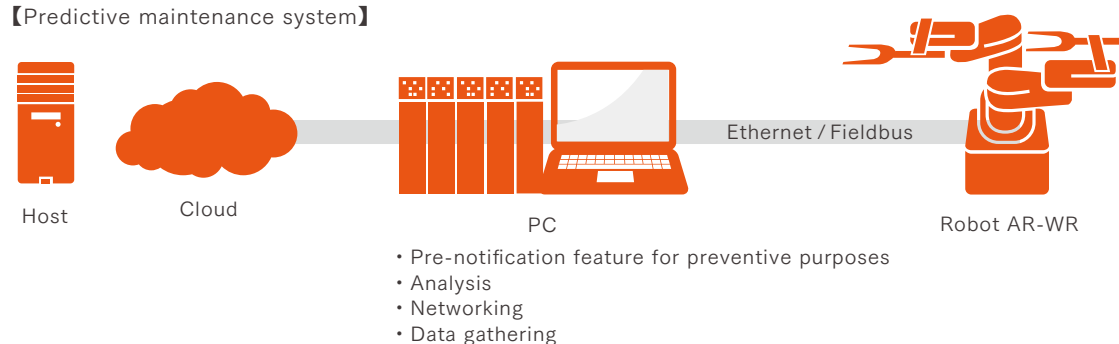
# 02

## Semiconductor related equipment & flat panel manufacturing systems

We manufacture and market platforms for manufacturing systems, transfer systems and heat treatment systems in the front-end process of semiconductor manufacturing, as well as in the assembly and test process (mainly in-process transfer systems).  
In the flat panel manufacturing arena, we help customers to optimize their plant layout and provide material handling equipment for coater and laminating systems, for flat panels and base plates used for OLED and LCD applications and for systems used for cutting, transfer, division, and shifting of glass.

System architecture utilizing many years of experience and know-how, with the benefit of predictive maintenance functionality on robots to ensure maintenance is performed at appropriate intervals based on actual usage. Controls by Ethernet, PC, PLC and other control methods are available in semiconductor applications.

### 【Predictive maintenance system】



### Semiconductor related equipment

In the field of semiconductor-related production equipment, we manufacture and market load ports which transfer silicon wafers to individual processing stations, wafer transfer robots (atmospheric and vacuum types), EFEM which integrates the load ports and wafer transfer robots, and vacuum platforms.  
We also manufacture and market load ports, transfer robots and related integrated Equipment Front End Module for FOPLP\*.  
In the field of semiconductor related equipment, the N<sub>2</sub> purge load port, N<sub>2</sub>EFEM, and other technologies are available for use in miniaturization, while transportation equipment of TAIKO Wafers can also be utilized.

\* Fan Out Panel Level Packaging



300mm Equipment  
Front End Module/Sorter series



Load ports  
300mm KWF series



Wafer transfer robot  
AR-WR series (atmospheric)



Deposition equipment for OLED



300mm vacuum platform  
(OEM/ODM)



150/200/300mm prealigner



Wafer transfer robot  
AR-WnV Series (low & high vacuum)



Coater systems  
Head Coater HC series



Transfer robot for FOPLP



Load port for FOPLP



Transfer robot for 4 port



Laser glass odd-shaped processing  
system for 3 to 8 inch

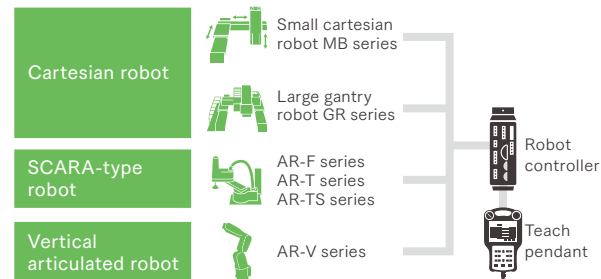
# 03

## Industrial robots

We manufacture and market many types of robots and control systems to various industries. Our core industrial robot technology is incorporated in production equipment in a variety of applications such as automotive, semiconductor and home electronics manufacturing.



Our robots come in various sizes and are designed to safely operate with high speed, accuracy and efficiency.



Vertical articulated robot AR-V series



Suspended SCARA-type robot AR-T series



SCARA-type robot AR-TS series



SCARA-type robot AR-F series



Small cartesian robot MB series



Gantry robot GR series



Robot controller HNC-X8M



Multifunctional teach pendant



3D machine vision HV-P series



Automatic chamfering machine



Automated large pallet feeding systems

# 04

## Factory Automation component sales

### Eco Electric Series

Hirata's all-electric transfer system is safe, ergonomic and environmentally friendly.

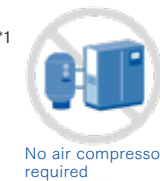
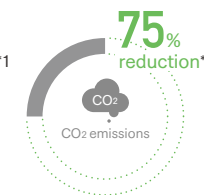
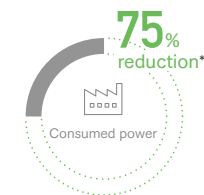
In light of the global increase in environmental consciousness, the automotive industry across the globe is transitioning from gasoline-powered vehicles to more efficient electric vehicles. Similarly, in the manufacturing space, customers are shifting from inefficient, centralized pneumatic systems to environmentally conscious and safe all-electric automation devices.

By developing all-electric conveyance as the base for Hirata's production systems, we can reduce the costly infrastructure needed for pneumatic transport, enhance operator safety and reduce the environmental impact of the equipment we provide to our customers.

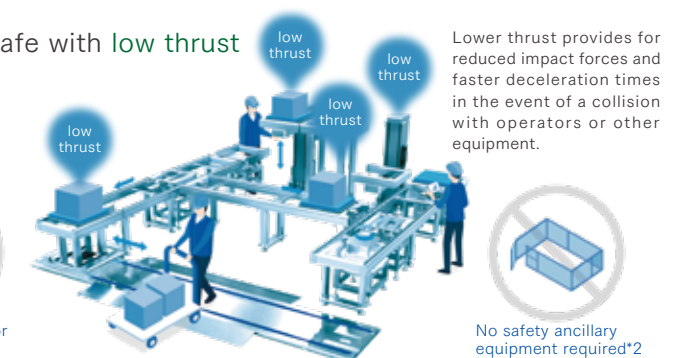


#### Airless and environmentally friendly

The ECO electric series requires no air handling infrastructure, significantly reducing power consumption.



#### Safe with low thrust



\*1 Compared to our conventional products \*2 The need for safety ancillary equipment will vary depending on the end user's specifications and conditions of use.

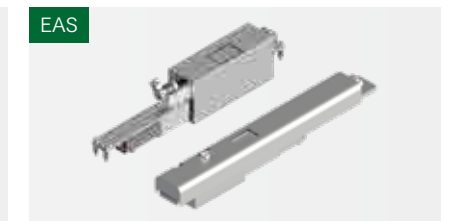
Hirata supplies various units for building conveyor lines, with electric DC conveyors at the core of our product lineup.



Electric stopper



Electric cylinder



Accumulate stopper



Electric slider



Electric DC conveyor



Electric lifter



Electric turn unit



Electric DC roller conveyor



Electric traverser



# 05

## Intelligent power modules

As one of our approaches to developing environmentally-conscious products, we have developed power module-related equipment such as vacuum reflow machines for lead-free solder.

A power module has a driving circuit such as an IGBT controlling electrical power, as well as self-protection functionality. These are used in various fields such as automotive and home electronics, including flat-screen televisions.



### Integrated production system for power module

This is a fully automated line which includes component placement, various jointing methods, external inspections and traceability systems.



### Mouter ACS-PM series for Intelligent Power Modules

High speed and precision placement of Power Modules including IGBT tips, solder sheets, and insulated substrates. Machine bases are standardized and designed for dispensing and fastening.



### Formic Acid Vacuum reflow oven HVMR-G series for Intelligent Power Modules

Vacuum reduction reflow equipment for EV power modules. Removes oxide film by heating in a formic acid atmosphere after vacuum reduction. Lamp heaters provide fast, non-contact heating.

# 06

## Transfer machines

We design and manufacture highly versatile, automated warehouse systems, rack-less stockers (which have no limitations on size or number of openings) and more. We have a proven record of success in the fields of automotive, home electronics and many other industries.



### Smart rack-less stocker

Flexible rack-less stocker which has no limitations on size or number of openings to store. It flexibly accommodates stacking, sorting, and storage of objects of various shapes and sizes.



### Automated warehouse

We provide automated warehouse systems that accommodate various needs ranging from high-speed, high-precision, multi-pick or clean room applications.



### Distribution system and solution

We provide a logistics system that offers safety, versatility and scalability by combining the automated warehouse, robot and picking system with leading-edge low thrust devices.

# 07

## Home appliance production equipment

We globally offer manufacturing equipment from component manufacturing to final assembly for the fast-evolving home electronics industry. By efficiently utilizing Hirata transfer systems, robots, precision assembly and clean room technologies, our systems are used to assemble many diverse products such as mobile devices (including smartphones and tablets), high-quality displays and high-performance vacuum cleaners.



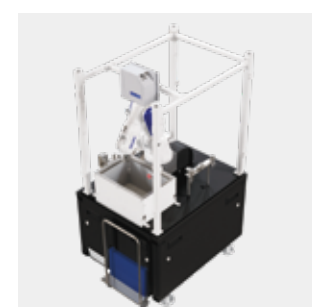
### Home electronics component assembly system

An example of a base machine sized for the application and utilized for the assembly of small home electronics components. A wide variety of work is possible by using two in-house SCARA-type robots.



### Mobile equipment assembly system ACS-MD

An assembly system for mobile devices such as smartphones. This is a flexible standard module that supports high-speed production, requires less space and is equipped with our SCARA-type robots.



### 3D picking system

System to automate input and output of small parts for equipment or lines operated manually. Hirata robot controllers can be quickly incorporated with minimal customization.

# 08

## Medical, Chemistry & Physics devices

We manufacture and market medical, chemistry and physics devices that are used in the healthcare field and in the development of new medicines. We endeavor to contribute to society by providing products that are easier to use and have high reliability.



### Pathological tissue specimen preparation device EZ-path float

This device is a collaborative human-machine system that allows tissue sections to be easily, accurately and reproducibly applied to microscope slides.



### Fully automatic continuous slicer Tissue-Tek Smart Section (Sakura Finetek Japan Co., Ltd.)

This equipment enables automatic production of pathological specimens by slicing the tissue specimens such as cancer tumors into the thickness of a few microns. The system contributes to the medical field not only by its efficiency but also due to its precise operation.



### Multi-specimen cell disruption device

The equipment allows you to disrupt cells to extract DNA, RNA, and proteins. This equipment can be operated with a single press of a button and comes in a compact desktop size.



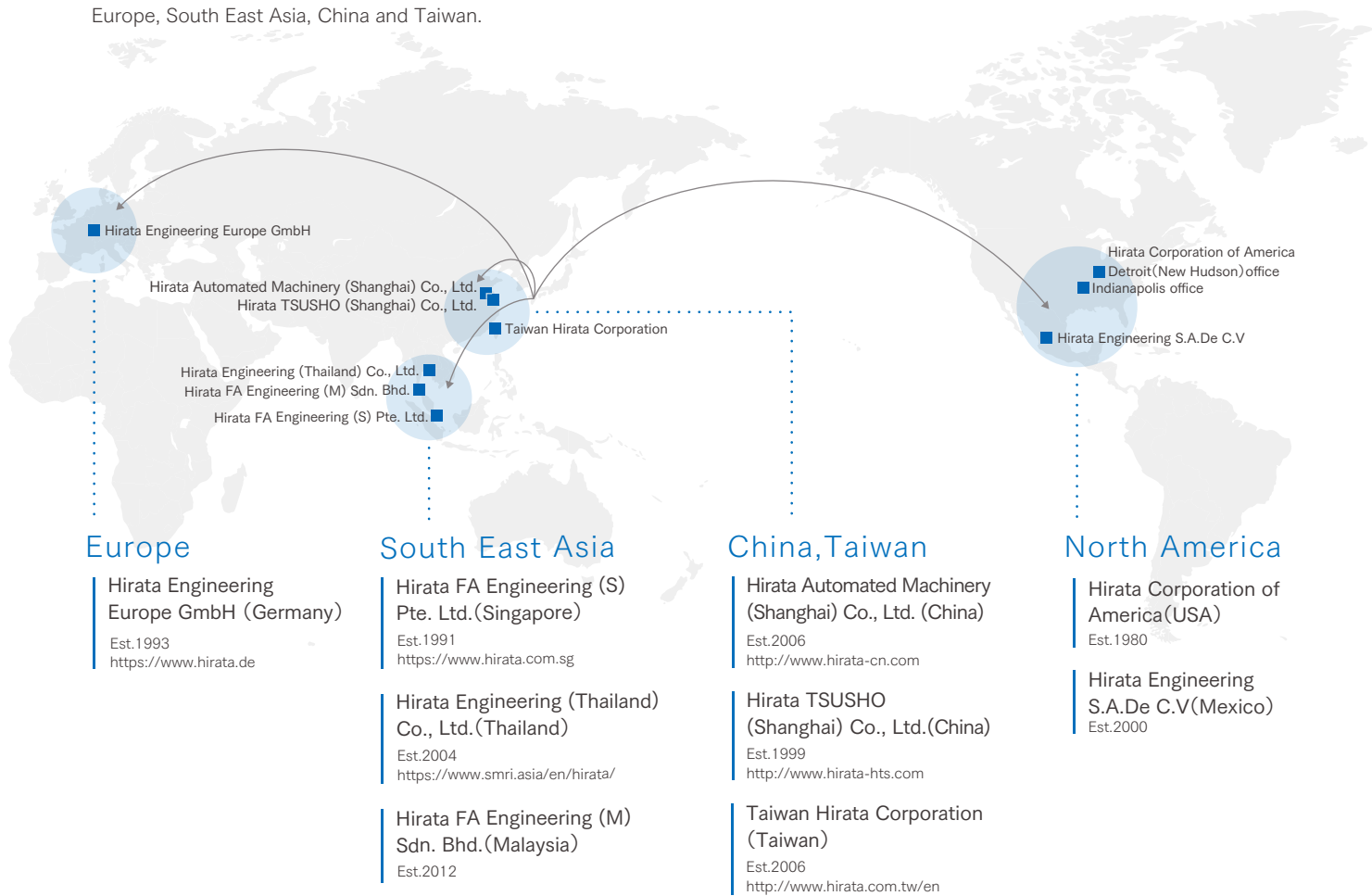
Global Capabilities

Hirata ensures delivery of services by maximizing our experience in over **40** countries and applying the extensive knowledge of our engineering and production facilities.

Hirata's customer base extends to over 40 countries around the world, including Japan.  
We have nine global subsidiaries in North America, Europe, Southeast Asia, China, and Taiwan.  
We can provide quick, flexible response to any inquiries for new business as well any support, maintenance or upgrade requests.  
We are capable of providing production systems that meet the requirements and manufacturing philosophies of our customers anywhere in the world. We also have the knowledge necessary to take into account regional issues such as safety and local labor practices.

9 overseas subsidiaries

The Hirata organization includes nine subsidiaries in North America, Europe, South East Asia, China and Taiwan.

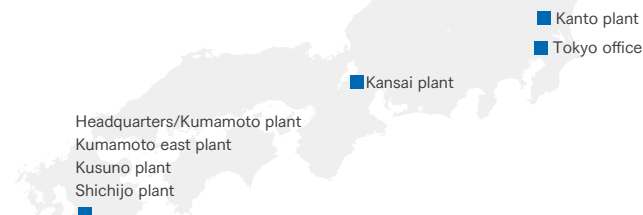


Company Profile

[ Company Name ]	Hirata Corporation
[ Headquarters ]	111 Hitotsugi, Ueki, Kita, Kumamoto, 861-0198 Japan TEL. 81-96-272-0555 FAX. 81-96- 272-7901
[ Representatives ]	Yuichiro Hirata, President
[ Date Established ]	Dec. 29, 1951
[ Accounts Closed ]	Mar. 31 (annually)
[ Capital ]	2,633 million yen
[ Stock Exchange Listings ]	Prime market of the Tokyo Securities Exchange (Code : 6258)
[ Primary Client Banks ]	Higo Bank, Sumitomo Mitsui Banking Corporation, MUFG Bank, Ltd, Kagoshima Bank, The bank of Fukuoka, Kumamoto Bank, Sumitomo Mitsui Trust Bank
[ Business Fields ]	Design and manufacturing of automated assembly and test systems, industrial robots, material handling and transport equipment
[ Subsidiary Companies ]	3 domestic subsidiaries 9 overseas subsidiaries
[ Auditing Corporation ]	KPMG AZSA LLC
[ Membership ]	Japan Industrial Robot Association、 SEMI Japan、 Kumamoto Association of Corporate Executives

7 domestic branches

Hirata has seven locations in Japan (with six manufacturing facilities) including corporate headquarters, the Kumamoto plant, the Kumamoto east plant, the Kanto plant, the Kansai plant, the Kusuno plant, the Shichijo plant and the Tokyo office.  
Hirata strives to provide expert, regional support anywhere our production systems are delivered.



Domestic branches

Headquarters/ Kumamoto plant Est.1964	Kumamoto east plant Est.1988
Kusuno plant Est.1984	Shichijo plant Est.2008
Kanto plant Est.1968	Kansai plant Est.1981
Tokyo office Est.2016	

3 domestic subsidiaries

Domestic subsidiaries dedicated and committed to the Hirata philosophy work closely with us in various fields of industry.

Taihei Technos Co., Ltd. Est.1980 <a href="http://www.taiheitechnos.co.jp">http://www.taiheitechnos.co.jp</a>
Hirata Field Engineering Co., Ltd. Est.1999 <a href="https://www.hirata-fe.com/en/">https://www.hirata-fe.com/en/</a>
Trinity Inc. Est.1986 <a href="https://www.3inc.jp">https://www.3inc.jp</a>

