Business Segment Strategies





Automotive-related Business

Including EV-related systems, the primary components of power transmissions and drive trains, electronic equipment such as computers to control them, sensors and other in-vehicle electronic components, and the air compressors used in air-conditioning, we provide support for a wide range of production systems. Completely handling a large number of devices and items of equipment at the Company, we run comprehensive in-house tests to ensure their correct operation before delivering them to our customers' factories. Hirata's standard designs and solutions improve ease of maintenance for the end user. In addition, we utilize digital twins to design and develop production lines more efficiently.

Strengths

(1) Integrated systems, from development to production and maintenance (2) Engineering capabilities that enable us to fulfill customer requirements (3) Vast plants where entire production lines can be verified (4) Trust and continuous transactions from customers

- (5) Broad product lineup
- (6) Ability to utilize our achievements in different fields such as home electronics, semiconductors, and displays in the Automotive-related Equipment Business

Opportunities

- (1) Expansion of market for products that address environmental issues (2) Local production for local consumption (strengthening of local procurement at each manufacturing company) (3) Advancement of digitalization for business
- (4) Cooperation with domestic companies to enter new fields and expand overseas

Weaknesses

- (1) Profitability management and profitability in new development projects
- (2) Development capabilities for own key devices and standard equipment
- (3) Competitiveness in specific regional markets (4) Support for outsourcing management

Threats

- (1) Changes in market environment due to tightening of environmental regulations
- (2) Decrease in number of parts and in demand for production systems due to shift to EVs
- (3) Rise of equipment manufacturers in emerging countries
- (4) Exchange rate fluctuations
- (5) Rapid market changes due to geopolitical influences

Business Environment Industry Outlook

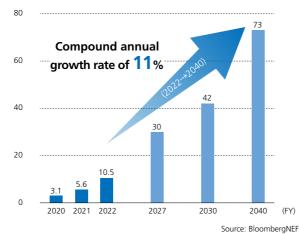
Although EV sales are growing steadily in China and Asia, the spread of EVs is slowing in Europe and the United States. Additionally, the introduction of new plug-in hybrid vehicles (PHVs) is expected to accelerate as hybrid vehicles (HVs) and other types of vehicles are once again attracting attention. However, over the long term, EV sales are expected to continue to increase due to advances in nextgeneration battery technology, with sales expected to reach 42 million vehicles in fiscal 2030.

Major Business Partners

We are doing business with General Motors and Ford Motor Company in North America, Stellantis N.V. in Europe, Toyota Motor Corporation, Honda Motor Co., Ltd., and DENSO Corporation in Japan, as well as start-up EV manufacturers and battery manufacturers.

EV Global Sales Volume Forecast

(Millions of units)



Fiscal 2023 Results

Orders and sales increased year-on-year due to a large number of internal combustion engine-related inquiries and the recording of from EV-related projects (mainly for EDUs (Electric Drive Units) and related components) for which we had already received orders. Fu operating profit increased year-on-year due to factors such as cost improvements due to an increase in passing on prices and an increase large projects. However, operating profit ratio decreased year-on-year an increase in SG&A expenses.

Topics

Orders for EV Battery Charging/Discharging Equipment

Cumulative orders received from 2022 to the end of August 2024

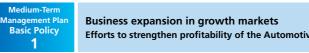
Over ¥15 billion*

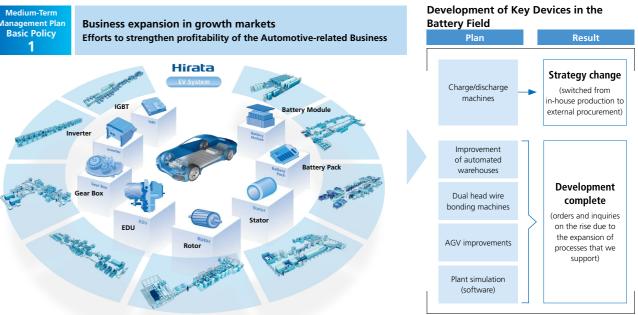
- Started receiving full-scale orders for battery charging/discharging equipment from fiscal 2022
- We have acquired orders continuously because of factors including our ability to support large-scale projects and our track record of delivering EV battery charging/discharging equipment
- * This figure also includes orders that are classified as large orders.

Business Strategies

In addition to assembly equipment for EDUs used in EVs, IGBT module assembly equipment, and inverter assembly equipment, we are focusing on standardizing all equipment and acquiring customers.

In addition to these existing businesses, we are working to acquire and expand orders for new processes. In the battery field, which is a key area of focus, in addition to standardizing all equipment used in the battery module manufacturing process and charge and discharge systems (within the cell manufacturing process), we are working on the development and trial production of mass production equipment for next-generation batteries such as all-solidstate batteries and new-type LIBs, as well as fuel cell production equipment, and accumulating know-how.





An example of an EV-related component production system

of EV- and		FY2023 Results	FY2024 Targets
f sales nd battery-	Net sales (millions of yen)	36,984	40,000
⁻ urthermore, st rate	Operating profit (millions of yen)	1,651	2,000
rease in	Operating profit ratio	4.5%	5%
-vear due to			L

5/2022	Electric drive unit assembly facilities for EVs	Exceeding ¥10 billion
FY2022	Electric drive unit assembly facilities for EVs, etc.	Exceeding ¥7.5 billion
FY2023	Electric drive unit assembly facilities for EVs	Exceeding ¥8 billion
	EV battery charging/discharging equipment	Exceeding ¥4 billion
	Internal combustion engine assembly equipment	Approx. ¥13 billion
FY2024	EV battery charging/discharging equipment	Approx. ¥2.5 billion
	EV battery charging/discharging equipment	Approx. ¥5.6 billion
	Electric drive unit assembly facilities for EVs	Approx. ¥8.7 billion

In regard to the development and improvement of key devices, we have completed four of the five tasks (Improvement of Automated Warehouses, Dual Head Wire Bonding Machines, AGV Improvements, and Plant Simulation (Software)) set forth in the Medium-Term Management Plan. As for the development of charging and discharging equipment, we changed our strategy from in-house production to external procurement through a partnership with a specialized manufacturer.

As orders grow, we are also addressing productionrelated issues such as factory space and human resource shortages and are working to develop and receive orders for mass production projects that will lead to continuation and expansion.

Business Segment Strategies

Existing fields	Significant progress was made in standardizing entire facilities and developing customers: EDU assembly facilities EVs, IGBT module assembly facilities, inverter assembly facilities, gear-box assembly facilities, rotor assembly facilities and stator assembly facilities.	
Prior investment/New fields	We have already started working on the standardization of all equipment used in the battery module manufacturing process and charge/discharge systems (within the cell manufacturing process), and the development and trial production of mass production equipment for next-generation batteries such as all-solid-state batteries and new-type LIBs, as well as fuel cell production equipment.	
Development of key devices	 Four of the five development themes set forth in the Medium-Term Management Plan have been completed (1) Chargers/Dischargers, (2) Improvement of Automated Warehouses, (3) Dual Head Wire Bonding Machines (hard wiring device with two heads), (4) AGV Improvements, and (5) Plant Simulation (Software). Charging and discharging machine manufacturing was switched from in-house production to external procurement. 	

Business Strategies by Region

North America

Establishing our North American affiliate in 1980, we recognize that our long-standing track record and reliability have been highly evaluated in the region. Although major automakers invested heavily in EVs, the spread of EVs has slowed down due to factors such as a shortage of charging facilities and battery drain/reduced charging efficiency caused by cold weather. In the short term, capital investment for internal combustion engine (ICE) and automatic transmission (AT) manufacturing is expected to increase in line with the introduction of PHVs and other new vehicle types. Hirata will strengthen its competitiveness in both the EV and ICE markets by strengthening relationships with customers and promoting standardization of equipment.

Europe

Demand for EVs in Europe has been expanding backed by measures implemented by governments to stimulate demand in various countries. However, the spread of EVs has been slowing due to factors such as pressure on profits of automakers and postponements in the establishment of battery manufacturers. Although low-cost alternative fuels are expected to be developed and new models equipped with ICE powered by those fuels are expected to be introduced to the market, large capital expenditures are not expected. As the market remains highly competitive, we will promote the creation of a system that can reliably conduct sales and maintenance without pursuing order scale.

China

Capital investment is expected to continue in the EV market, which is a market with solid demand due to China's national policies, such as "Made in China 2025" and "Strong Manufacturing Country 2030." However, due to sluggish consumption in China and trade friction with the United States and Europe. Chinese manufacturers are expanding EV sales in Asia. In addition, as the technical capabilities of local equipment manufacturers are improving, we will increase opportunities for acquiring orders, mainly from Japanese companies.

Southeast Asia

We recognize that the EV sales offensive launched by Chinese manufacturers has put local automakers in a difficult situation and that major capital investment by local automakers is not expected in the foreseeable future. However, since Japanese companies continue to make capital investments, we will increase opportunities to acquire orders, mainly from Japanese companies.

Topics

Expansion of Production Bases

Plant expansion work at the Shichijo Plant began in April 2023, with the new section becoming operational in February 2024. By consolidating the #2 Kumamoto Business Division (responsible for some automobile-related equipment), which was previously split between the Kumamoto East Plant and the Shichijo Plant, entirely at the Shichijo Plant, we have improved operational and production efficiency and expanded production capacity.

Floor area prior to expansion: Approx. 11,000 m²

Floor area after expansion: Approx. 17,000 m² (approx. 55% more floor space*)

* Production space was increased by approximately 40%.







processes, atmospheric and vacuum robots, and aligners. In addition, we are

We develop, manufacture, and sell components such as openers for various storage containers used for wafer transfer components in semiconductor manufacturing focusing on system products that apply these technologies. For semiconductor manufacturing equipment manufacturers, we provide EFEMs* optimized for each equipment type in the form of OEM and ODM, and for semiconductor manufacturers (foundries), we offer EFEMs and sorters under our brand name. We are also responding to innovations in semiconductor manufacturing technology (miniaturization and 3D miniaturization). In addition to the development, manufacture, and sale of various components and system products (EFEMs) used for the transportation of PLPs, we offer N₂ EFEMs to transport wafers in N₂ (nitrogen) environments to curb the adverse effect that the atmosphere has on wafers. * Equipment front-end modules

Strengths

(1) Extensive line-up of wafer transfer components (2) Provide lineup of components for PLP substrate transfer (3) Lineup of system products that combine various components (4) Knowledge and technology necessary for customization and optimization of components and system products (5) Large clean rooms at our domestic production bases

Opportunities

(1) Further growth of semiconductor market (2) Innovation in semiconductor manufacturing technology (3) Acceleration of electrification due to stricter environmental regulations (4) Local production for local consumption (5) Trends toward vertical set-up and standardization of facilities for fabrications by end users (6) Establishment, revisions, and additions of SEMI industry association standards

Business Environment Industry Outlook

Demand for semiconductors, which can be said to be core products for supporting digitalization, is increasing year by year. Additionally, in a society that aims to achieve carbon neutrality by 2050, electrification is accelerating, and semiconductors, including semiconductors for automotive applications, are becoming increasingly important. While governments around the world are considering introducing and expanding policies to actively support investment in the semiconductor industry, semiconductor manufacturers in various countries, particularly in China, Taiwan, and South Korea, are planning to invest in equipment at record levels. As the size of the semiconductor market is expected to reach approximately US\$1 trillion in 2030, the semiconductor manufacturing equipment field is expected to grow accordingly.

Major Business Partners

Our major business partners include Tokyo Electron Limited. DISCO Inc., Advantest Corporation, ULVAC, Inc., and Ebara Corporation.

Semiconductor-related **Equipment Business**

Weaknesses

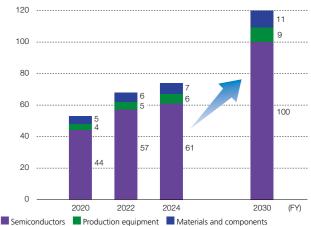
- (1) Delays in strengthening overseas production bases (cost competitiveness) and in responding to local production for local consumption trend
- (2) Strengthening of sales structure in European and U.S. markets
- (3) Profitability of parts sales and after-sales service business
- (4) Strengthening the lineup of our own-brand system products

Threats

- (1) Soaring material prices and longer delivery times stemming from growing demand and conflicts
- (2) Rise of emerging market companies and start-ups
- (3) Innovation in semiconductor manufacturing technology
- (4) Economic friction sanctions and disputes
- (5) Market exclusion due to legal regulations and economic policies (6) Establishment, revisions, and additions of SEMI industry association standards

Forecast of Global Semiconductor-related Equipment Market Size

(Unit: U.S \$10 billion)



Source: Based on all kinds of data, including from the Japan Electronics and Information Technology Industries Association (JEITA) and Ministry of Economy, Trade and Industry (METI) (composition ratio of semiconductors, production equipment, and materials and components assumed to remain the same until 2030, based on the METI's Strategy for Semiconductors and the Digital Industry Summary June 2021.)

Fiscal 2023 Results

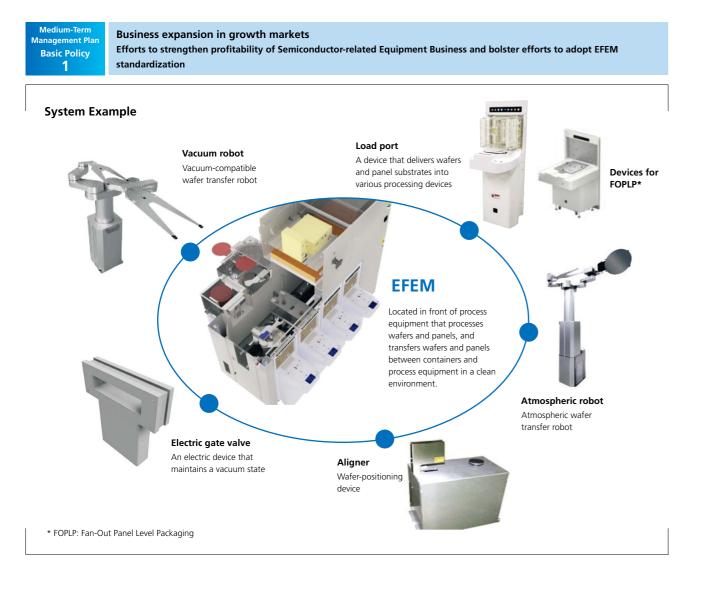
Although semiconductor-related orders and net sales decreased year-on-year due to the impact of inventory adjustments in the semiconductor market, operating profit increased year-on-year due to factors such as cost rate improvements due to an increase in passing on prices. Furthermore, the sales ratio for wafer-handling equipment, products with relatively high profit margins, increased, resulting in a higher operating ratio for the segment.

Business Strategies

The Company is developing wafer transport devices supporting the further miniaturization of semiconductors. We recognize that shortening the lead time until delivery is also an issue, and we will work to improve production capacity and availability of parts and materials through cooperation with suppliers and promotion of digitalization.

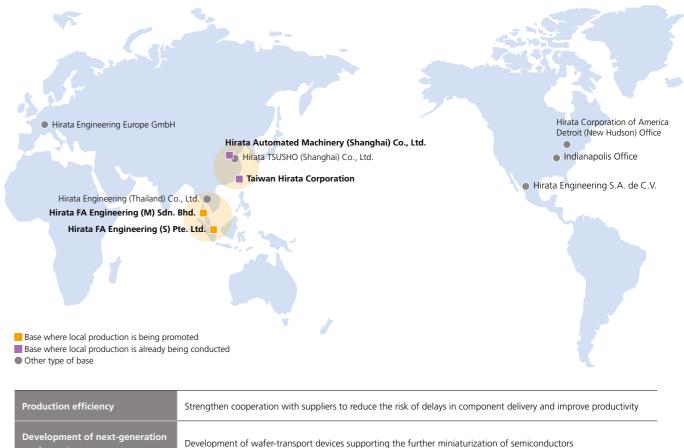
	FY2023 Results	FY2024 Targets
Net sales (millions of yen)	27,390	40,000
Operating profit (millions of yen)	4,450	6,000
Operating profit ratio	16.2%	15%

We are also focusing on building a cooperative system with our overseas affiliates and are strengthening cooperation in other regions, such as Southeast Asia and North America, in addition to China and Taiwan. In response to changes in the external environment, we plan to review and formulate strategies and functions at overseas bases.



Promotion of Local Production

In addition to Taiwan, we have established a system that enables production and sales in China (Shanghai) and Southeast Asia (Malaysia and Singapore) and are promoting local procurement of components.



Production efficiency	Strengthen cooperation with suppliers to
Development of next-generation equipment	Development of wafer-transport devices s

Business Strategies by Region

North America

We have an ongoing business relationship with a specific semiconductor manufacturer in the United States and will continue to maintain a system that enables us to realize local sales and maintenance while cooperating with our manufacturing bases in Japan.

Europe

While focusing on standard products due to the expansion of investments by local manufacturers in the semiconductor market, we will promote the creation of a system that enables us to realize local sales and maintenance.

China

The investment environment for semiconductors has been improving due to China's national policies, such as "Made in China 2025" and "Strong Manufacturing Country 2030." We will focus on providing technical education for employees so that we can expand the manufacturing of wafer-transfer equipment in China, which is ahead of other companies in Japan and Taiwan.

Southeast Asia

In Singapore and Malaysia, as semiconductor fab investments have been announced one after another, we will promote sales of wafer-transfer equipment, recognizing that these regions are expected to grow in sales in the future.

Business Segment Strategies



Other Automatic Labor-saving Equipment Business

Having started out as a manufacturer of transport equipment that supplied carts, the Company commenced the manufacture of conveyors, which formed the catalyst for our current business, after its establishment in 1951 and then underwent a transformation into a robotics and production systems business.

Having pursued technological innovation with the desire to allow people to devote themselves to creative work that only people can do, and having not limited ourselves to the automotive and semiconductor industries, we provide automatic labor-saving equipment to customers in a variety of fields. In formulating the Medium-Term Management Plan (FY2022-FY2024), we reviewed our business segments and classified them into three businesses: automotive-related, semiconductor-related equipment, and other automatic labor-saving equipment. In the latter, we manufacture and sell production equipment for a variety of fields, such as medical and scientific equipment, home electronics, and flat panel displays (FPDs).

	FY2023 Results	FY2024 Targets
Net sales (millions of yen)	16,083	20,000
Operating profit (millions of yen)	119	2,000
Operating profit ratio	0.7%	10%

Individual Segments

Medical/Chemistry and Physics Devices

We are developing and manufacturing robot systems and medical devices that contribute to the automation of laboratory testing.

We are promoting product development with the goal of fully automating pathological examinations. Engaging in the development of equipment for medical use, with regard to cancer treatment equipment, we are working together with our customers to develop medical devices that comply with laws and safety standards for the purpose of obtaining pharmaceutical approvals.

Distribution (Transfer Systems)

For a variety of industrial fields, we develop, manufacture, and sell highly versatile and customized automatic warehouses, rack-less stockers, automatic guided vehicles (AGVs) that utilize fluid analysis, and other products tailormade for the products and factory environments of our customers.

Industrial Robots

Industrial robots represent our core technology. We have standard robot controllers, with which multiple types of robots can be operated in the same environment. It is also possible to operate a robot from a host device such as a programmable logic controller (PLC) or PC without using a robot language, reducing the burden on system designers and shortening the time required to set up the equipment. Selling multiple types of robots articulated along orthogonal, horizontal, and vertical axes, we provide products that match the processes of a wide range of production systems.



ATS (cell observation device)



Home Electronics

By effectively combining the technologies that are at the Company's disposal, such as transfer, robot, clean room, and precision assembly technologies, we provide global support for parts and final assembly of home electronics that are continuing to evolve. These include mobile devices such as smartphones and tablets, high-quality displays, and high-performance vacuum cleaners.

Putting functional safety at the forefront, we are working on the development and improvement of industrial and medical robots.

Targeting production systems in the electric vehicle (EV) and semiconductor fields, which are expected to see further growth, we will make more improvements in terms of safety, performance, functionality, and operability and strive to broaden the reach and improve the performance of our equipment.

FPDs

Due to the high image quality and high-speed response features of organic EL displays, demand for their use is increasing not only in mobile phones but also in devices with large screens, such as tablets and gaming displays. To improve productivity, there is a demand to shift the substrate size from G6 to G8, which is currently the

Topics

AGVs (Automatic Guided Vehicles)

The Company is working on the development of AGVs, which are unmanned vehicles used to automatically transport goods inside factories. Utilizing our unique optimal transport logic verified by high-precision sensors and logistics analysis allows for simulations to be run to determine optimal AGV routes, the number of AGVs to be used, and the number of AGV automatic charging devices to be installed.



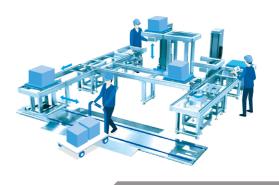
300 kg-type AGV (both resin and metal body types shown) - Capable of transporting up to a 400 kg load when a pallet is used

Eco Electric Series—Contributing to Sustainable Manufacturing

Use of the Eco Electric Series has led to many achievements in sectors including automotive components, semiconductors, and home electronics.

Hirata's all-electric conveyance system that is people-friendly and eco-friendly.

- Hirata BLUE MOTOR, a compact, high-efficiency brushless DC motor, is built in all Eco Electric Series units.
- Activates only through 24 VDC on/off operation. Does not require a drive panel or controller





mainstream, and equipment development is progressing. but as the equipment has become larger, many technical issues have arisen. With our technological strength and production capacity for large FPD production systems that we have cultivated so far, the Group will work to acquire markets.



