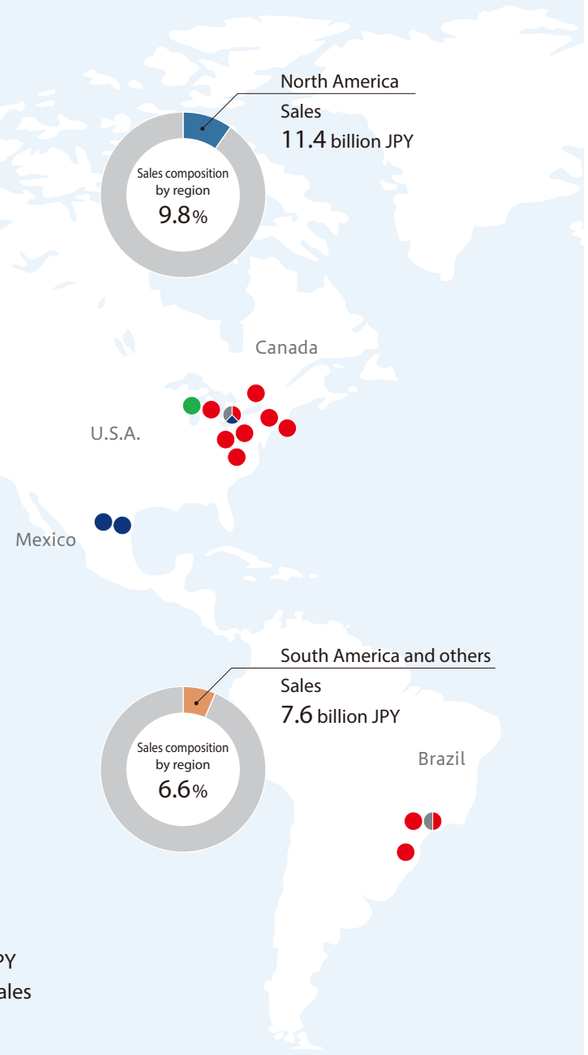
# Global Business Foundation

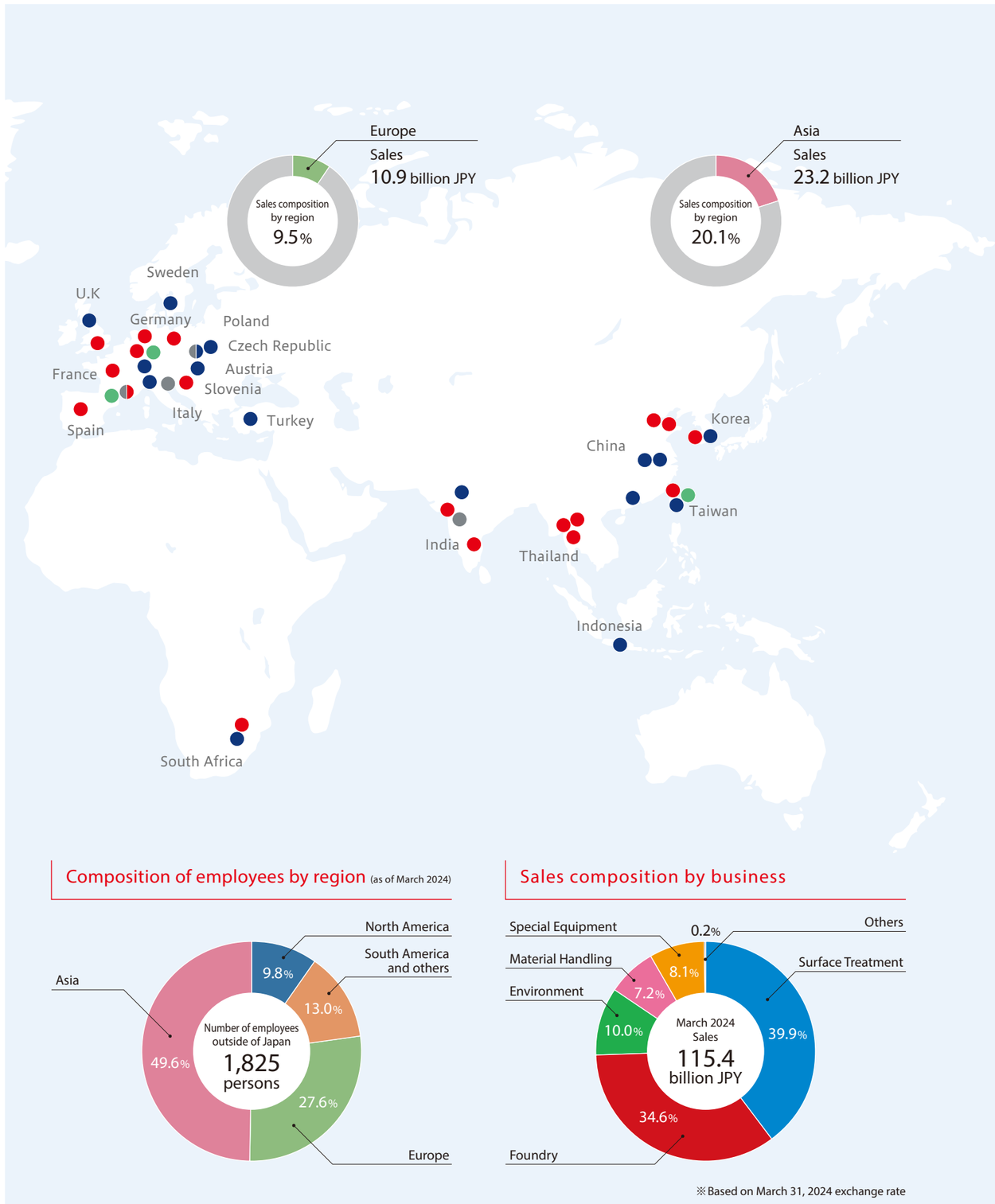
The overseas expansion of our group began in 1968 when we established our first overseas subsidiary in Taiwan. Subsequently, the development of foundry technology led to the establishment of after-sales service bases for customers in the high-demand foundry industry, along with manufacturing bases for new growing industries. This global network set the foundation for our current business development. We utilize this network to expand our market share for our existing businesses and to promote development in new businesses. The Sinto Group has also developed a global 3-in-1 business model that provides equipment, parts/consumables, and after-sales service to customers after equipment is delivered. With the motto of preventing our customers' equipment from stopping, we provide stable supply of these necessary parts and services by expanding our network to locations close to the customer. Through this, we aim to deepen bonds with customers. Our global network spans across various regions all around the world.

## Subsidiaries outside of Japan (as of April 2024)

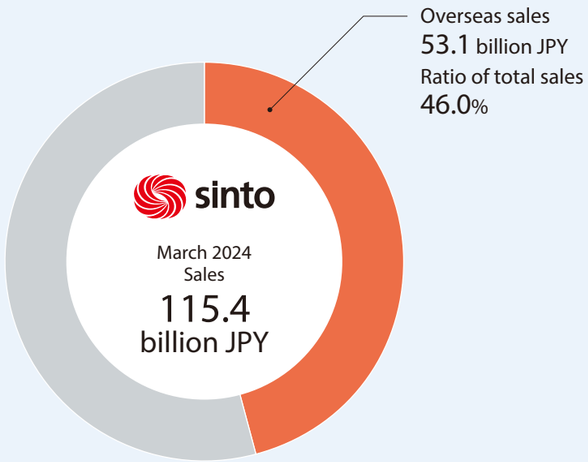
**22 countries and regions, 53 locations**

- Management company
- Business base
- Support base
- Technical center




## Overseas ratio of net sales




## Composition of employees by region (as of March 2024)




## Sales composition by business




※Based on March 31, 2024 exchange rate

# Surface Treatment Business

Proposing and developing more attractive surfaces

sinto SURFACE TECMART *for the Better*

## Business summary

Our surface treatment technologies, which began with the sand removal and deburring of casting products, have evolved to address the needs of the times and changes in industrial structure. They have evolved to contribute to a recycling society by processing materials that are suitable for the environment, adding value and bringing new functions to surfaces. From technologies that "create" functions on material surfaces to technologies that "see" surface functions, we are promoting products that utilize 3D simulations, surface evaluation technologies, and information technologies, aiming to create solutions that provide total surface management for our customers. We will continue to contribute to the development of numerous industries and to protect and build the future with technologies that support the manufacturing industry with innovative surfaces.

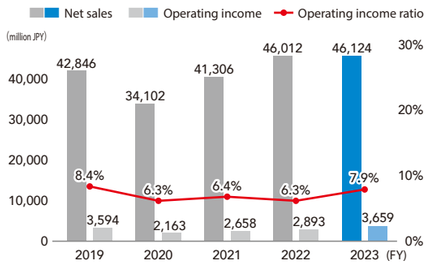
### Globalization and closer contact with customers

As part of our global expansion, we acquired shares of Elastikos (France) S.A.S., a company that develops business of surface treatment products and services. Through this partnership, we are now able to provide services to even more customers globally due to the expansion of our customer base. Elastikos has high name recognition and brand power in North America and Europe and also possesses high technical ability and a strong support system, with many customers in growing countries such as India and China. We will work to build a new business model through integration with this globally known company. By taking advantage of new connections with customers who have business with Elastikos, we will propose system products for labor savings and unmanned operation to relieve labor and skill shortages, and IoT software that can be used to visualize and analyze operations from anywhere and anytime.

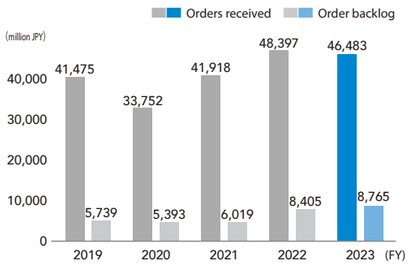
## Results for FY2023

Net sales increased to 46,124 million JPY (up 0.2% year-on-year) due to strong sales of surface treatment equipment for electronics-related applications, with strong demand for semiconductors and for infrastructure and automobile-related applications. Operating income increased to 3,659 million JPY (up 26.5%) due to price revision of general-purpose machines in response to soaring raw material prices, promotion of value-added proposals, and other factors. Orders received decreased to 46,483 million JPY (down 4.0%), with order backlog increasing to 8,765 million JPY (up 4.3%).

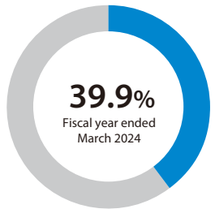
**Net sales / Operating income**




**Orders received / Order backlog**




**Revenue breakdown by business segment**




## New mid-term management plan

### Business strategy

1. Globalization and localization through increased competitiveness
2. Improvement of name recognition through technical proposals using Technical Centers
3. Increase of added value through "3-in-1 activities" + "unmanned concept"

### Numerical targets (FY2026)

| | FY2023 | FY2026 |
|---|---|---|
| Number of customers | 29,479 companies | 30,429 companies |
| Parts coverage rate | 71.4% | 76.4% |

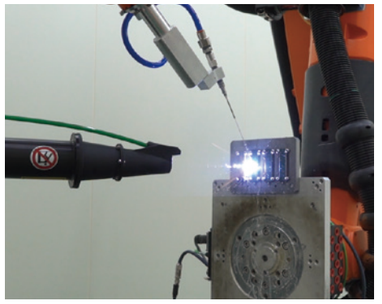
### Initiatives for digital transformation

Achieving the SDGs is a topic that is common worldwide. In Japan, the declining birthrate and aging population are progressing, increasing the shortage of labor in the future. To address this issue, we will support customers by utilizing machines to replace daily work done by humans, aiming to achieve labor savings through unmanned operation. This unmanned system has four different levels corresponding to the type of work. Level 1 is recognition, which visualizes data and the state of operations. Level 2 is judgment, which distinguishes operation conditions and work quality after surface treatment. Level 3 is correction, which adjusts equipment based on judgment results and replenishes shortages automatically. Level 4 is prediction, which analyzes replacement timing of consumables for early maintenance. By combining this with maintenance service, we will contribute to labor savings and unmanned operation by minimizing customers' work.

**Featured topic**

### Establishment of laser peening business

We have started a new surface processing business by introducing laser peening equipment that is used in the global aerospace industry. With the theme of "strengthening", we are evolving surface treatment technologies. Based on our accumulated knowledge of applications and evaluation obtained through shot peening and other surface treatment technologies, we can now provide the processing method best suited for materials for which it is difficult to increase durability, such as titanium. This is especially important in today's society where various materials are required by customers. In addition, laser peening technology does not use abrasives, meaning that no waste materials are produced. With our accumulated know-how, we will pursue further evolution of surface treatment technologies and greater possibilities for "strengthening".



# Foundry Business

Better casting production

sinto FOUNDRY INTEGRATION *for the Better*

## Business summary

Foundry is known as the "foundation of industry". Since our establishment, we have continued to lead the foundry industry and deliver equipment globally by constantly developing technologies that add high value to casting products. We propose not only equipment to customers, but also the creation of foundry plants through which those customers can contribute to society. By pursuing the ideal foundry plant that can make people glad, make people lively, and make people smile, we will contribute to the happiness of the local community as well as factory workers, and to the production of castings that make our customers happy. To achieve this, we will continue our efforts to manufacture environmentally friendly castings for carbon neutrality and resource recycling, and to utilize automation technology and IoT solutions to create the ideal foundry plant with labor savings and a plant environment that is easy to work in.

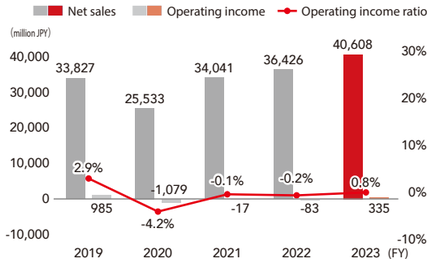
### Automation and digitalization making up for labor shortages

In foundries, many processes depend on people, making it difficult to quantify their experience and to take measures for casting defects based on data. To resolve these issues, we have been working to further expand our Good Casting System. The Good Casting System is an initiative to eliminate casting defects by setting the most suitable production conditions, utilizing integrated data management and statistics based on production data visualized via digital technology. These features allow the Good Casting System to greatly contribute to improving efficiency of foundry operations and casting quality. Moreover, 3D printers help to digitize the entire process from engineering to production, enabling more accurate and effective manufacturing. Our affiliated partner company Laempe Mössner Sinto in Germany delivered a 3D printer to BMW for mass production of sand molds, helping them to improve quality and productivity.

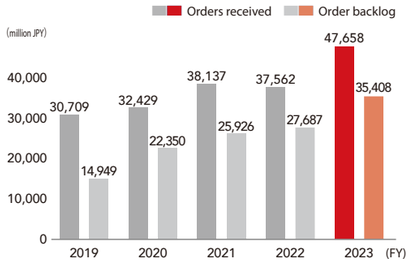
## Results for FY2023

Net sales increased to 40,608 million JPY (up 11.5% year-on-year) due to steady progress in large-scale plant projects in Japan, despite the impact of long delivery times of parts including electrical components along with postponed equipment delivery to overseas customers due to delays in construction of their plant buildings. Operating income increased to 335 million JPY (83 million JPY loss in the previous fiscal year) due to increased revenue, despite the effects of soaring raw material and energy prices, high transportation costs, and shortage of manpower among construction contractors. Orders received increased to 47,658 million JPY (up 26.9%), with order backlog increasing to 35,408 million JPY (up 27.9%).

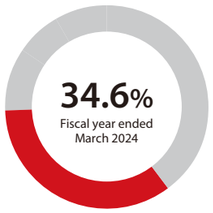
**Net sales / Operating income**




**Orders received / Order backlog**




**Revenue breakdown by business segment**




## New mid-term management plan

### Business strategy

1. Winning projects through strengthened competitiveness and value
2. Automation and digitalization to make up for labor shortages
3. Development of environmentally friendly products

### Numerical targets (FY2026)

| | FY2023 | FY2026 |
|---|---|---|
| Sales per customer | 7,200 million JPY | 7,500 million JPY |
| Parts coverage rate | 55.2% | 60.2% |

### Efforts for profit improvement

- For large scale projects during the COVID-19 pandemic, profits decreased due to increased costs which could not be passed onto sales. These costs include the soaring cost of materials, transportation, and construction, along with the cost increase of components made by overseas subsidiaries due to exchange rate fluctuations. In response to these conditions, we will improve profits by increasing the accuracy of estimates, setting prices that reflect cost fluctuation of parts and components, and clarifying specifications. As a measure for installation labor shortages, we are reengineering equipment design for easier installation in a shorter period. We will improve overall management of each individual part and component by considering details such as specifications, cost, schedule, and installation method, so that any issues can be found and resolved early, leading to profit improvement.
- We are continuing to develop and expand sales of eco-friendly products to respond to needs for carbon neutrality, which is an industry-wide issue. Also, because a large amount of energy is lost when a defective casting is produced, improvement of casting quality is crucial. Therefore, to lower the barrier of adaptation to existing systems, we are evolving and reengineering our Good Casting System which supports quality improvement. By increasing sales of Good Casting System products not only to new equipment but also to existing equipment as well, we will improve our sales volume and profits. Furthermore, for the issue of waste reduction, we are proceeding with technical verification of recovery and reuse technologies. We aim to be at the forefront of applying this technology in the foundry industry so that we will be chosen by many customers.

**Featured topic**

### Establishment of a global product supply system

In order to provide products that meet the needs of customers around the world in a timely manner, we have established a mutually complementary system on a global basis. We have developed our molding machine business with a focus on Japan, Germany, and the United Kingdom, where we have high brand recognition. For no bake equipment, which is in high demand mainly in the infrastructure market, we have gained many customers in Europe, Asia, North America, and other parts of the world through global expansion under the Omega brand. We are also proceeding with localization at other overseas locations. By utilizing group companies that are close to our customers' plants, we are able to establish a cost-competitive supply system. In India, which is growing rapidly, we will strengthen production capacity to secure supply for local customers and aim to further expand our market share. In addition to that, we will establish a global supply system of sand treatment equipment from India to strengthen cooperation between Japan, Germany, the United States, and India. We will continue to strengthen the production systems of our group companies around the world, while sharing product development and accelerating proposals that meet the needs of customers in each region.

# Environment Business

For the safety, health, and comfort of all workers

sinto WELLNESS CREATION for the Better

## Business summary

We have expanded the range of our environment business, which began with pollution prevention in areas such as dust collection, gas treatment, and water treatment, to initiatives for achieving the creation of safe and healthy work environments and comfortable spaces. At the same time, we are strengthening our efforts to contribute to global trends such as the effective use and recycling of energy and material resources. For example, we are working on converting waste into valuable resources by separating and solidifying the powder collected by dust collectors, and by adding value to purified exhaust air. These efforts contribute to providing safe, secure, and comfortable products and services, as well as to creating safe and secure workplaces for our customers. To create an even safer, more secure, and more comfortable environment and to leave a rich global environment for the future, we will continue to take on the challenge of adding further value through 3R initiatives.

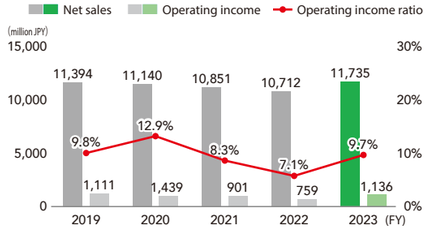
### Added value proposals through safe, secure, and comfortable products and services

Amid the declining birthrate and aging population, securing human resources and ensuring safety of employees are among the most important matters in the company. Moreover, needs have been increasing for improving the work environment to make it even safer, more secure, and more comfortable. We are focusing on providing products and services to meet these needs, and through initiatives for "visualization of the environment", we offer workers a sense of security on the worksite. Visualization enables preliminary measures by grasping signs of potential problems in advance, not after the problem occurs. Furthermore, through our countermeasures for dust fire prevention, we provide a more secure working environment. These efforts are highly evaluated by customers as new value brought to the worksite. Through our differentiated proposals, we are aiming for further growth of our environmental business.

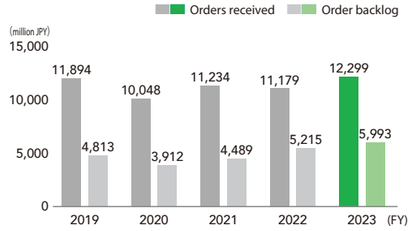
## Results for FY2023

Net sales increased to 11,735 million JPY (up 9.6% year-on-year) due to strong sales of dust collectors to the foundry, steel, and cement industries, as well as strong sales of maintenance services and the delivery of large equipment for wind power generation. Operating income increased to 1,136 million JPY (up 49.7%) due to increased revenue. Orders received increased to 12,299 million JPY (up 10.0%), with order backlog increasing to 5,993 million JPY (up 14.9%).

**Net sales / Operating income**




**Orders received / Order backlog**




**Revenue breakdown by business segment**


## New mid-term management plan

### Business strategy

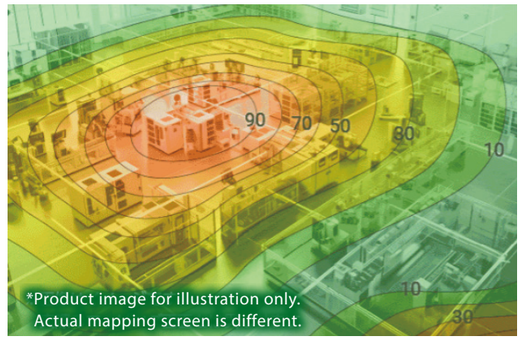
1. Improving profitability through high-added-value proposals
2. Enhancement of competitiveness through innovative manufacturing
3. Business growth through utilization of digital tools

### Numerical targets (FY2026)

| | FY2023 | FY2026 |
|---|---|---|
| Number of customers | 11,076 companies | 11,676 companies |
| Parts coverage rate | 40.9% | 45.9% |

### Visualization of the environment

We released the Amenity Meter that prevents deterioration of the working environment through real-time monitoring. Sensors installed in the factory monitor six environmental elements (temperature, moisture, light, dust density, VOC density, and noise) to visualize "amenity" and "safety" numerically and using a graphic mapping function. By introducing this system, we aim to achieve a work environment that does not require safety masks even in the factory. We have received good feedback from customers and are expanding sales of this system. We are currently developing a system that is even easier for customers to use.



*Product image for illustration only. Actual mapping screen is different.

### Featured topic

Proposals for a recycling society

Dust collected by dust collectors is usually disposed of as industrial waste, but through solidification, it can regain value as a material. We have developed and released dust solidification equipment that compresses and solidifies dust with no binder. Currently, this equipment is used for dust generated from laser processing machines, preventing damage to physical health and reducing the burden on the environment. We are expanding our lineup to handle other types of waste dust, recycling this material to give it value again. Additionally, we are placing efforts on development of technology to remove viruses from the exhaust air from dust collectors. In this way, we are developing products and technologies that not only improve the environment but are also environmentally friendly.

# Material Handling Business

Proposal of logistics streamlining that connects our hearts together

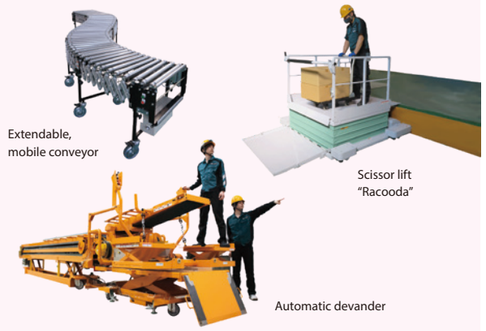
MEIKIKOU

## Business summary

In the material handling business, we aim to use our material handling technology to connect things, people, and ultimately our customers and our group companies to the future. By applying image processing and robot technologies to the technologies we have already developed, we are contributing to the automation of material handling and the streamlining of truck yards. Through the connection engineering capabilities of our group companies, we will continue to make proposals that connect our customers to the future with material handling solutions for better productivity and improved safety.

### Promoting labor savings to resolve the "2024 problem"

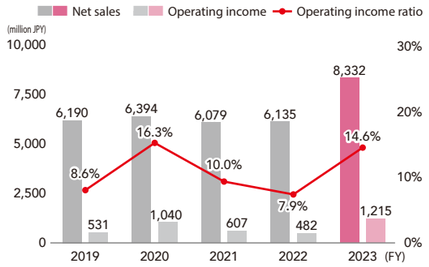
Japan is currently facing the so-called "2024 problem", which refers to the amended labor standards law, effective April 2024, which limits truck drivers' overtime work. Five years ago, the Sinto Group began developing labor saving equipment that minimizes workload in the truck yard. We have already released semiautomatic unloading devices, and we are proceeding with the practical application of fully automatic unloading devices. This equipment is sold under the MEIKIKOU brand utilizing image processing technology and is highly evaluated by various industries as an effective solution for the 2024 problem. As a material handling system manufacturer, we will continue to contribute to the growth of the industry.



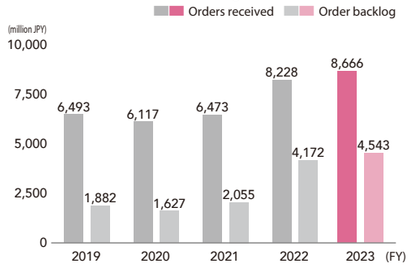

## Results for FY2023

Net sales increased to 8,332 million JPY (up 35.8% year-on-year) due to strong sales to the machine tool industry and continued demand from the logistics industry, despite weak sales to the automotive industry. Operating income increased to 1,215 million JPY (up 151.9%) as a result of increased revenue. Orders received increased to 8,666 million JPY (up 5.3%), with order backlog increasing to 4,543 million JPY (up 8.9%).

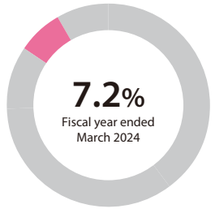
**Net sales / Operating income**




**Orders received / Order backlog**




**Revenue breakdown by business segment**




## New mid-term management plan

### Business direction

1 Pursuit of customers' work efficiency
Proposal of products and systems considering safety, automation, labor savings, flexibility, carbon neutrality, and SDGs
- Streamlining of material handling work in logistics
- Proposal of safe and secure handling systems

### Numerical targets (FY2026)

| | FY2023 | FY2026 |
|---|---|---|
| Number of customers | 5,500 companies | 6,000 companies |

### Response to market needs: Improving worker safety

To realize carbon neutrality, we are promoting electrification to achieve energy savings, and we are expanding products for safety in the market. For instance, we developed the safety roller conveyor that stops the rotation of rollers when a worker is pinched or caught by the rollers. Another example is a lift unit that prevents the rapid fall of the platform to prevent injury in the unlikely event that the platform drops. These material handling units provide safety and security in the factory not only in logistics but also in the manufacturing industry.

Safety roller conveyor that stops when something is caught in the rollers

Fall prevention electric lifts

**Featured topic**

### MEIKIKOU Corporation opens new head office building

MEIKIKOU Corporation opened its new head office building in October 2023. This building is equipped with all-LED lighting, solar panels, and electrical storage units for environmentally friendly energy usage. It is also equipped with step-elimination units and restrooms for wheelchair users and a first-aid room, contributing to the improvement of the workplace. The building was also designed with earthquake resistance, safety improvement, and digitalization in mind, making it both environmentally and worker-friendly.

# Special Equipment Business
(including new businesses)

Taking on new business challenges with one-of-a-kind technology

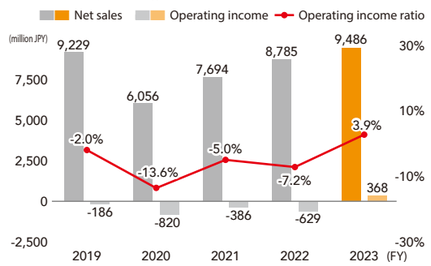
## Business summary

The environment surrounding us is evolving at an unprecedented speed, with climate and environmental changes that are associated with global warming, as well as the acceleration of the digital transformation and changes in people's values. To adapt to these changes, we will apply the elemental technologies that we have developed up until now, integrating them with new technologies. In this way, we will strengthen our "product creation" and our "partnership creation", which will lead to better proposals to growing markets. By staying ahead of the changing times and vigorously engaging in initiatives to open up the future, we will expand our business into developing markets and increase our profitability.

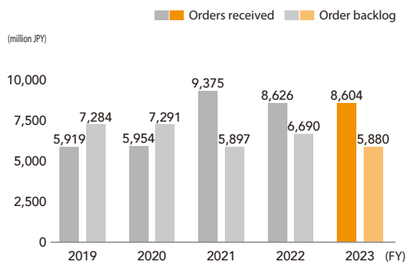

## Results for FY2023

Net sales increased to 9,486 million JPY (up 8.0% year-on-year) due to strong sales of high-pressure roll presses and electric (servo) cylinders for battery manufacturing equipment. Operating income increased to 368 million JPY (629 million JPY loss in the previous consolidated fiscal year) as a result of a price increase for electric cylinders. Orders received decreased to 8,604 million JPY (down 0.3% year-on-year), with order backlog decreasing to 5,880 million JPY (down 12.1%).

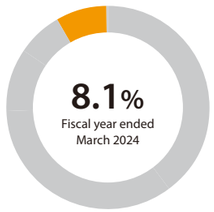
**Net sales / Operating income**




**Orders received / Order backlog**




**Revenue breakdown by business segment**



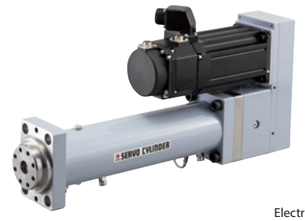

## Growth potential of special equipment business

### Reducing environmental load by electrification

Providing energy saving equipment including electric cylinders
High-pressure electric roll presses and electric characteristic inspection devices that contribute to the production of secondary batteries and inverters indispensable for EV

#### Replacing hydraulic cylinders with electric cylinders for reduced power consumption and $CO_2$ emissions

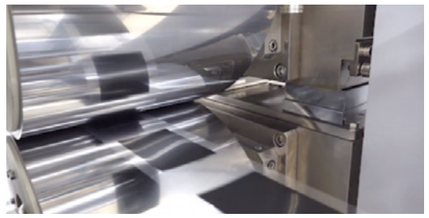
Electric cylinders are actuators that are highly energy efficient, with electric motors as their power source, unlike hydraulic cylinders, which use pressurized fluid. Equipped with position and load sensors and controlled by programs, they can achieve accurate movements by design. This makes it possible to realize high-precision processes including press fitting, caulking, compressing, and sealing. Moreover, they do not use hydraulic units and eliminate the possibility of oil leakage, enabling a clean environment. Additionally, through the use of electric cylinders, power consumption is reduced by 70%, contributing to a carbon neutral factory.



Electric cylinder

#### High-pressure roll presses for the secondary battery market

Employing highly accurate servo control technology, high-pressure electric roll presses improve product quality and productivity. Amid the rapid shift to EVs, demand for secondary batteries is rapidly increasing. To respond to this growing market, we have strengthened our competitiveness by introducing our fully electric roll press, the only one in the industry. This unit does not require oil, eliminating the risk of oil leakage and producing no standby sound. This greatly improves the work environment and also improves the reliability and safety of the product.


High-pressure electric roll press

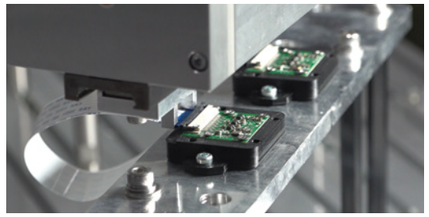
## Development of new businesses for growth

Among our special equipment businesses, we are working on several new projects for the future. Some have already been commercialized, while others are in the redevelopment stage to solve newly identified issues. For instance, our excretion detection system for the welfare industry succeeded in commercialization, but during the sales phase, we found possibilities for improvement, and we put it into redevelopment for further evolution of its technology. New businesses are progressing in different stages, and they are all crucial for future growth. We are aiming at making those projects profitable to expand the scale of our business.

#### Force sensor business

### Expanding sales of an integrated system including robot sensor

Labor shortage issues on manufacturing worksites have continued to worsen. As one solution, we are promoting the sale of various systems that integrate robots with our force sensor ZYXer. One such system enables the automatic insertion of flexible print circuits (FPC). The thinness and flexibility of FPC are barriers for automation because the handling of FPC requires subtle adjustment of force. This system provides high-speed feedback of minute force changes to the robot so that insertion is carried out automatically with no damage to the printed circuit.

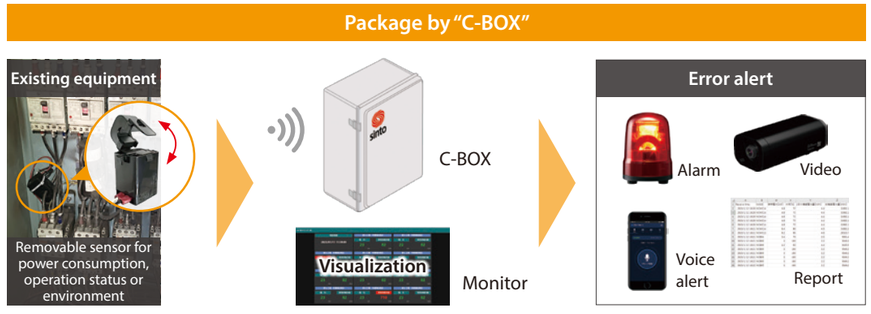

Automatic FPC insertion system

# Special Equipment Business

## IoT and sensing solutions business

### Easy digitalization of old equipment

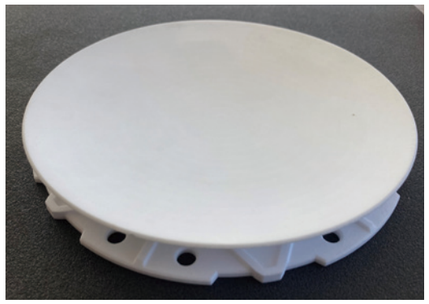
The era of digitalization has arrived in the manufacturing industry. QCDSE (quality, cost, delivery, safety, environment) management requires not only experience or intuition but also objective data. However, when including old equipment, it is difficult to achieve visualization of the overall system. We provide a solution to this issue through Package by "C-BOX". The power measurement Package by "C-BOX" visualizes power consumption to reduce waste easily, utilizing a wireless system that can be installed on old equipment. This system enables review of compressor and test equipment to shorten operation time, and by combining it with operation and environment sensors, alerts can be sent to the production site, with sound and image output to create reports. We will continue to propose digital solutions that are easy to implement to alleviate the issue of labor shortages on production sites.




## Ceramics business

### Technological progress and future possibilities

Structural ceramics and 3D ceramics are commonly used in various industrial machines such as semiconductor production systems and precision machinery. They are utilized for high accuracy, contamination-free purposes, and wear-resistant measures, contributing to longer life and stable quality of parts. For example, our positioning stage offers high accuracy and high reproductivity, and our assembly fixtures for machining tools and precision machinery enable easier inspection of accurate alignment. 3D ceramics printers make it possible to produce parts of complicated shapes that were not possible using conventional methods, providing various benefits such as cost reduction, shorter lead time, and reduced cost of trial production. With these products, we can expect even more possibilities resulting from future technological progress.



Mirror part for space telescope installed on extremely small satellite
(sintered component $\phi$245mm × H30mm)

## Alcohol detection system business

### Industry's smallest and lightest alcohol detection system

Our alcohol detection system, the smallest and lightest in the industry, can be connected to users' smartphones to easily measure alcoholic content in breath, promoting safe driving and traffic accident prevention. Furthermore, the measurement app can also work with other detection devices. In Japan, keeping a record of alcohol detector test results when driving for company use was made mandatory by law in December 2023. Our system complies with this social obligation and contributes to the realization of a safer society.


"DRACHE" alcohol detection system

# After-sales Service

With trends in Japan such as the declining birthrate and aging society, the decline in the workforce has worsened in recent years. The manufacturing industry has also seen a significant decrease in the number of skilled workers, and finding a way to pass skills down to the next generation has become an urgent concern. At Sinto, utilizing IoT technologies that can surpass the intuition and experience of skilled workers, we offer the Sinto Support System as a service that prevents the stoppage of customers' equipment. With this service, we work to resolve labor shortages and issues that are related to the transfer of skills on the maintenance worksite.

## Preventive Maintenance

Assist operators
**Inspection Assistance**
Monitoring / Inspection / Education

- Visualize plant operations
- See inspection results at a glance
- Have efficient inspection training

Assist maintenance staff
**Preventive Maintenance**
Diagnosis / Measurement / Analysis

- Eliminate sudden problems
- Increase production
- Eliminate delays in production plan

## Corrective Maintenance

Assist in emergencies
**Corrective Maintenance**
Remote Assistance / Storage

- Speed up recovery in case of trouble
- Avoid lengthy equipment shutdowns due to a lack of backups

## Providing value (digital support)

Unexpected stoppage of equipment requires a lot of time for restoration and imposes a burden on maintenance personnel. We provide predictive monitoring services utilizing IoT technology to eliminate the need for emergency measures for equipment stoppage. This service monitors equipment 24/7 to predict signs of malfunction and facilitates planned maintenance. From our unique perspective and experience as an equipment manufacturer, we contribute to shortening load and time for maintenance, which results in labor savings.

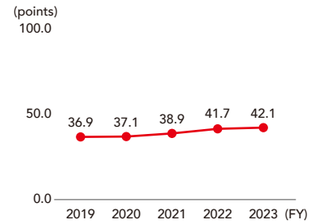
## Efforts to improve after-sales service skills (real response)

The Sinto Group enacts training for sales staff within Japan and overseas to acquire knowledge and skills that are related to maintenance and sales. Skill points are received for each skill acquired, encouraging staff level improvement. Using common evaluation criteria across all domestic and overseas companies and managing the skills of each staff person, we are training personnel who can provide reliable service to all of our customers around the world.

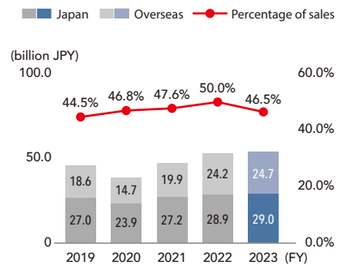
## Sales trends in after-sales service (domestic and overseas)

Net sales from after-sales services amounted to 29.0 billion JPY (up 0.3% year-on-year) in Japan and 24.7 billion JPY (up 2.0%) overseas due to continued economic recovery and active equipment maintenance work by customers to improve productivity. The ratio of after-sales service to consolidated net sales was 46.5%.

**Skill points per person**




**Net sales***




*Cumulative sales of parts and consumables