

Global Business Foundation

Global network

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 use 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. Under the motto of preventing our customers' equipment from stopping, we offer 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 currently spans 16 countries and regions around the world (excluding Japan).

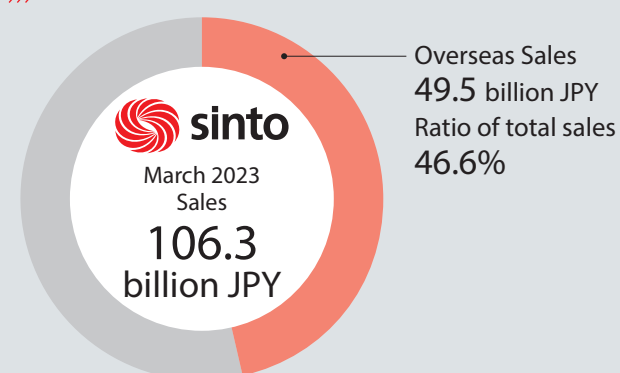
Subsidiaries outside of Japan

**16 countries and regions,
32 locations**

Number of employees outside of Japan

1,798 persons

Overseas ratio of net sales



Global management structure

Every year, we host the Sinto International Conference for the executive management of all overseas group companies. This is an opportunity for all overseas group companies to come together to ensure a fully shared understanding of the global management policies, and to check up on issues like risk management and the promotion of sustainability activities in order to strengthen our global management structure.

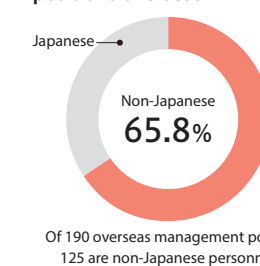
In developing our overseas business, we emphasize our idea of trust-based management. By entrusting management of day-to-day operations to the local people while we provide technology and capital, we aim to achieve management that is rooted in each local area under a unified business vision as One Global Sinto.

Localization of overseas management

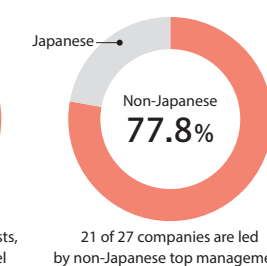
Today we have appointed local individuals as the top management of 21 out of 27 major overseas locations. In addition to implementing regionally-oriented management and incorporating a wide range of viewpoints, we build our business strategies from a global perspective.

Additionally, we believe in the necessity of increasing management transparency, developing organizational structures that can respond flexibly and rapidly to changes in the business environment, and establishing group-wide compliance.

Ratio of local personnel in management positions overseas



Executive management ratio



Medium-term Management Plan



Today, we are seeing many shifts such as the advance of EVs, the rapid growth of IT, and the labor shortage due to the declining birthrate and aging population. The business environment is changing at a speed much faster than we imagined. To respond to these rapidly changing times, we are focusing on bringing our business to the next level in our medium-term plan, Plus (from April 2021 to March 2024). This means increasing the speed of our initiatives, applying the skills and technologies we have developed until now, adding new skills and technologies to our range of abilities, and looking at the world from a new perspective.

Value provided through business activities

	Social Issue	Sinto's Contribution	Our Technology
Environment	Global warming, climate change	◀ Initiatives for carbon neutrality	◀ Electric cylinders, surface evaluation technology
	Resource depletion	◀ Resource conservation through recycling	◀ Blasting abrasives, casting products, dust solidification
	Unknown infectious diseases	◀ Sterile environment	◀ Stainless steel products
Technology/Industry	IoT adoption, AI application, advance of digital transformation	◀ Streamlined manufacturing processes	◀ Unmanned surface treatment process systems
	EV, self-driving vehicles	◀ Production of high-quality batteries Automotive lightweighting	◀ 3D screen printing technology, joining technology, shot peening technology
Society	Declining birthrate and aging society	◀ Automation of skilled work	◀ Six-axis force sensor
	Pursuit of health, safety, well-being, and comfort	◀ Peace of mind for workers and nearby residents	◀ Dust fire prevention systems

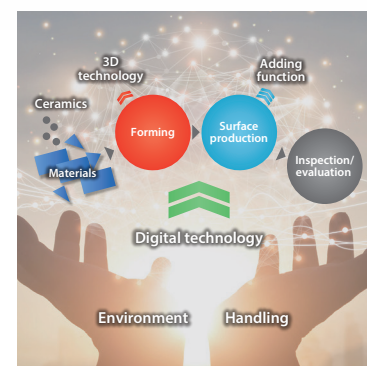
Direction of business strategy

In response to changes in the global environment, we have selected two strategic business objectives: (1) evolution of existing businesses through digital transformation and (2) acceleration of the shift to new markets and segments for new businesses.

1. Evolution of existing businesses through digital transformation

Our strengths that support the stable operation of customers' equipment are "Real" and "Digital". The Sinto Group has 32 locations in 16 countries and regions around the world (excluding Japan) for production and sales services with high technical capabilities. In the existing areas of surface treatment, foundry, and environment, we will bring together a skilled global network "Plus" IoT technology to provide timely support, "Plus" digital technology as well as inspection/evaluation technology to create new added value, and to always be chosen by customers.

"Giving form and life to process materials"
Direction for expanding our business range



2. Acceleration of the shift to new markets and segments for new businesses

As part of the previous medium-term management plan, we grew the buds of new business in segments ranging from EV to robotics/automation, material handling, ceramics, renewables, nursing, flooring, and 3D manufacturing. Through these new segments, we will improve corporate value by developing new businesses that can contribute to resolving social issues, beyond the borders of foundry-related industries.

SWOT Analysis

Strengths

- Global level support network
- Strong customer follow-up system based on the 3-in-1 approach of equipment, parts/consumables, and after-sales service
- Stable financial base

Weaknesses

- Recognition outside of the foundry industry
- Price difference with overseas local products, local production capacity
- Global acquisition of competent engineers and staff

Opportunities

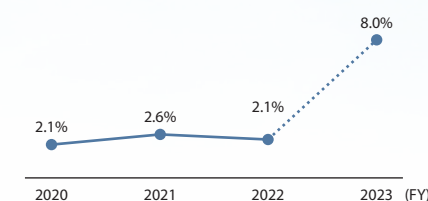
- Increasing demand for castings in emerging countries, and rising demand for lighter-weight castings and labor-saving foundry processes
- Increased demand in a wide range of markets where growth is expected, including aerospace, energy, and medical-related markets, and the spread of next-generation batteries in conjunction with the shift to EVs
- Increase in demand for electronic components and devices to realize digital transformation
- Increase in demand for automated products that improve productivity and work efficiency, save labor, and provide a safe, secure, and comfortable work environment

Threats

- Decline in domestic demand for castings in conjunction with the shift to EVs
- Slower economic growth due to soaring raw material and energy costs, and shortages of semiconductors and other components
- Domestic labor shortages due to the declining birthrate and aging population, and growing resistance to hard physical labor and high-heat work

Medium-term management plan progress at 2/3 point and outlook

To achieve our goal for operating income of 8%, focusing on improving profitability on top of growth strategies

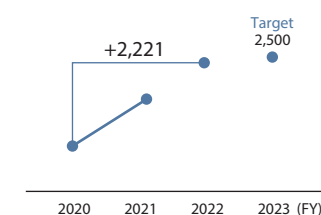


Acceleration of focus initiatives

- Value-added initiatives
Proposals that are not just equipment alone, but also include technologies and ideas to solve customers' problems, and enhancement of digital line-up and software products
- Cost reduction initiatives
Design modularization, common parts, automation of procurement, and digital transformation through online solutions to strengthen sales and marketing capabilities
- Shift of personnel from indirect to direct departments
Promotion of work efficiency through enhanced skills of individual employees by organizational restructuring, personnel rotation, and review of training methods, as well as digitalization, etc.

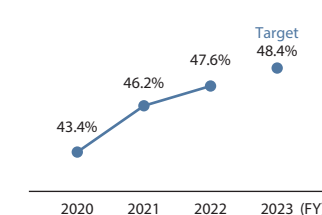
Progress on management indicators

Number of new customers



By creating opportunities to connect with customers such as the Online Solution Site, we aim to increase our number of new customers. (continuing initiative)

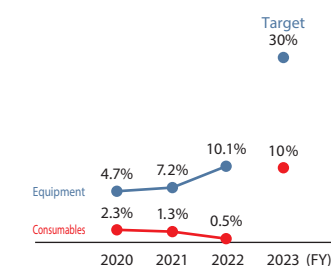
Sales coverage (Japan)



Through real and digital support to provide service that prevents customers' equipment from stopping, we aim to always be chosen by customers. (continuing initiative)

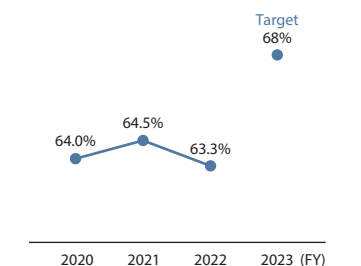
New product sales ratio

*Sales of products/services that were launched within the previous 5 years



Through system proposals during equipment sales and strong promotions when new products are released, we aim to increase our new product sales ratio.

Market shift (new market ratio)



Through digitalization (such as use of 3D manufacturing technology) and accelerated efforts to expand our business range, we aim to expand our new market ratio.

Surface Treatment Business

Proposing and developing more attractive surfaces



sinto SURFACE TECMART
for the Better

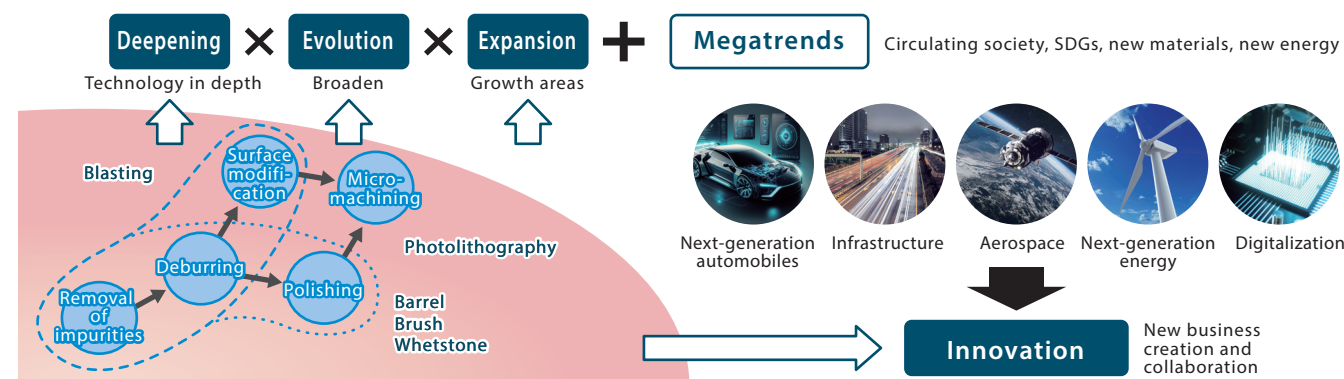
Focus on product proposals to booming industries

Our surface treatment technologies, which began with the sand removal and deburring of casting products, have evolved in response to the needs of the times and changes in industrial structure.

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 many industries by developing new surfaces, protecting and creating the future by providing technologies that support the manufacturing industry with innovative surfaces.

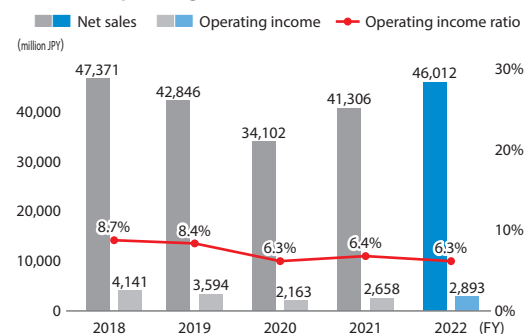
Vision/business direction



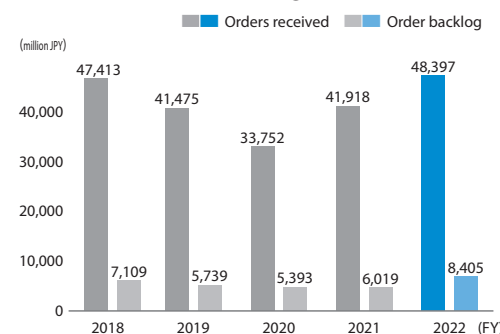
Medium-term management plan (targets/goals)

We will target well-performing industries to expand sales and focus on manufacturing competitiveness, with a particular emphasis on making our equipment business profitable for improved profitability overall. In addition, we will strengthen our line-up of systemized items, including proposals to enhance the workability of pre- and post-processes and monitoring of stable operations, thereby promoting the establishment and expansion of a new business model that integrates these items. We will also propose new products for new areas that differ from existing industries to expand our business.

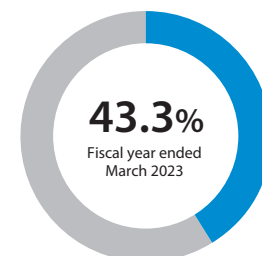
Net sales / Operating income



Orders received / Order backlog



Revenue breakdown by business segment



Profit improvement and growth strategy

Strengthening competitiveness of existing businesses

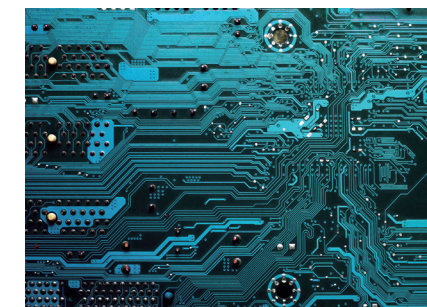
In our existing businesses, we are promoting DX in all processes, including sales, engineering, and production, and we are working on global business collaboration. We will promote the modularization of units through 3D design to provide equipment with refined quality and durability. We aim to ship products in the shortest possible time through an optimal production system by assigning them to main/sub lines in the production line. In addition, we will improve the profitability of the equipment business by proposing optimal processes using machining simulations based on our machining process database and by using sales promotion tools such as virtual showrooms, webinars, and videos, under the slogans of “connecting with customers” and “connecting with the world”.

Growth strategy

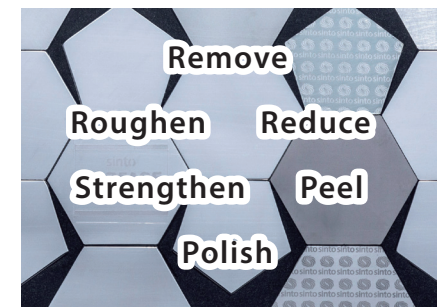
For Sinto, improving the added value of “attractive surfaces” to meet the challenges of various industries and expanding our product line-up are part of an essential business strategy to develop new customers. In particular, we are promoting research and development focusing on our technologies for strengthening, micro-processing, and adding functions. Strengthening technology is provided to high-need industries such as EV-related components, which require lighter weight and increased durability, and power generation and aircraft components, which require higher output. Additionally, we provide micro-processing for semiconductor components, for which demand is exploding for in-vehicle sensors and wearable devices, and we also enable new functions through our joining technologies, joining materials of different types such as resins with various properties. By expanding the range of solutions for issues in these megatrends, we are working to expand our surface treatment business.



Strengthening
Improving strength of wind power generation parts



Micro-processing
Fine drilling for electronic substrates



Adding functions
Creating attractive surfaces with many characteristics

Topic

Co-creation with SOLIZE: 3D additive manufacturing for more attractive surfaces

The use of metal additive manufacturing (AM) utilizing 3D printers has been expanding around the world. AM enables high freedom in forming and reduced costs and time for production, but it also comes with various challenges, such as issues with product strength and surface roughness. To address these issues with metal AM and increase the value of formed products, Sintokogio has teamed up with SOLIZE to combine their superior AM technologies with our surface treatment technologies for metal products. Together, we have launched a service that provides high-quality metal AM under a new brand called Smart AM Solutions. By using Sinto's surface treatment technologies that offer polishing and strengthening to attractive surfaces, not only can we improve the look and feel of rough product surfaces, we can also reduce the occurrence of defects such as cracks, improving product strength and contributing to the expanded use of metal AM in many industries.

Foundry Business

Better casting production

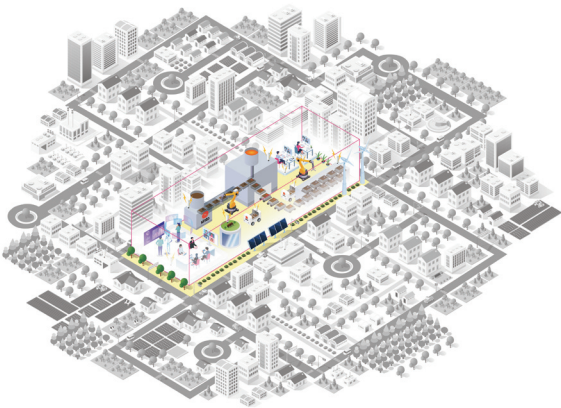


sinto FOUNDRY INTEGRATION
for the Better

Contributing to the happiness of local communities and factory workers, and to the production of castings that delight our customers

Foundry is known as the “bread and butter 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. Today, our foundry business aims to contribute to the happiness of people in the community and factory workers, and to create castings that delight our customers. 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.

Vision/business direction



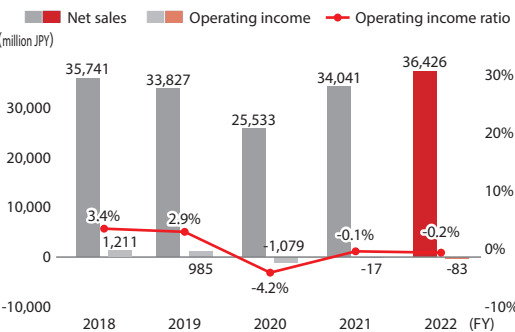
A foundry that brings vitality to the city

- 01 Make people glad
- 02 Make people lively
- 03 Make people smile

Medium-term management plan (targets/goals)

Positioning the foundry business as “a business to strengthen globally” in the medium-term management plan, we aim to increase the number of customers by 380 by providing better casting production on a global basis. We will especially focus on value-added proposals through the introduction of software products centered on Sinto Smart Foundry, strengthening local support capabilities for no bake and peripheral equipment, and strengthening support systems through the use of information technology.

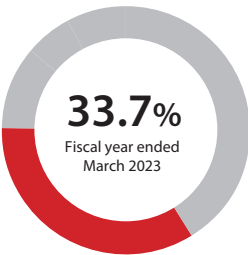
Net sales / Operating income



Orders received / Order backlog



Revenue breakdown by business segment



Profit improvement and growth strategy

» Supporting customers’ foundry operations: Development of Sinto Smart Foundry (SSF)

The environment surrounding the foundry industry, such as labor shortages due to the declining birthrate and aging population, and needs for carbon neutrality, is becoming more and more challenging every year. We focus on supporting competitive foundry operations, providing our customers with solutions for safety, environment, quality, production, and maintenance through our concept of “Sinto Smart Foundry (SSF)”. In particular, we are developing and expanding product sales that contribute to reducing power consumption and quality defects in each process, leading to carbon neutrality.

» Expanding sales of our Good Casting System that contributes to defect reduction

From the viewpoint of quality improvement, there is a growing need for visualization, including real-time monitoring of the casting process and traceability of manufacturing conditions. We have established the Good Casting System as an overall system that supports quality improvement to contribute to the creation of better castings. We propose products that visualize each green sand molding process, such as sand treatment, molding, and pouring, and products that contribute to analyzing factors that cause defects.

In FY2022, we also saw steady growth in contracts for sensing devices in each process that contribute to reducing quality defects and software such as quality control systems. We will continue to add new sensing devices and products for IoT, and we will develop and launch new products to expand sales of the Good Casting System in the global market, to achieve increased sales and higher profitability.

» Business development in emerging regions and growing markets

The foundry business is growing especially in emerging regions. In particular, with India’s rapid economic growth, the development of rail and infrastructure has resulted in an increase in demand for casting parts. There is also growth around the world in agriculture, resource, and infrastructure-related markets, with a similar rise in demand. Through our continued initiatives to localize our after-sales service globally, we can offer fast, high-quality support to our customers, resulting in the increased global competitiveness of the Sinto Group. Additionally, continued demand is expected in other industrial fields such as wind power. We will focus our efforts in responding to needs in new fields as we aim to maintain our global competitiveness.

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 and Germany, where we have high brand recognition, and 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, and by utilizing group companies that are close to our customers’ plants, we are able to establish a cost-competitive supply system. In China and India, which are especially expected to grow in the future, we will strengthen production capacity to secure supply for local customers and aim to further expand our market share. We are also focusing on after-sales service in cooperation with our production base in Mexico to improve profitability in the North American market. By resolving customers’ problems, we will deepen their trust in us and increase the stability of our earnings.

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

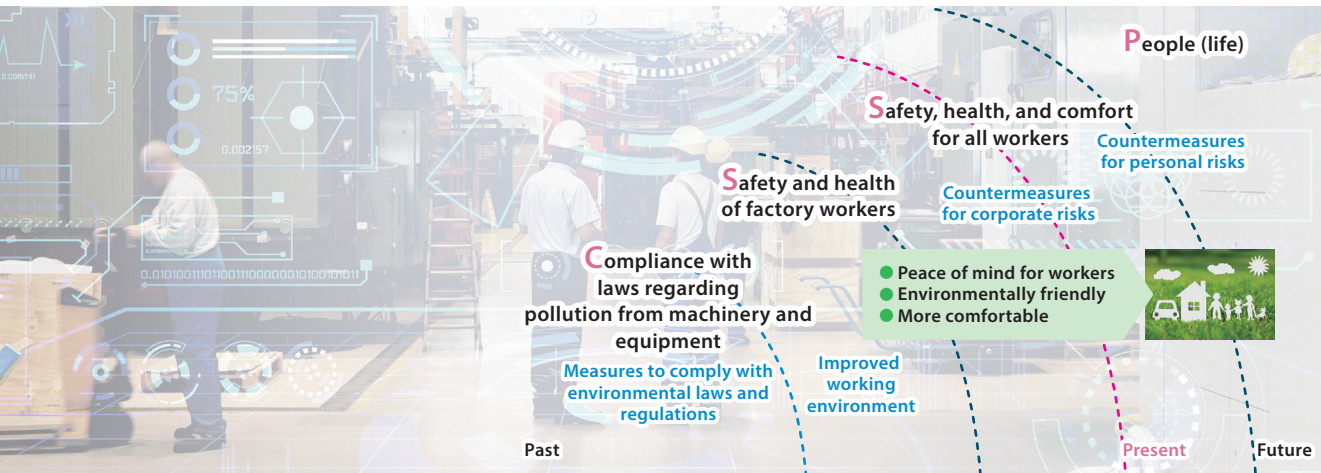


sinto WELLNESS CREATION
for the Better

From pollution prevention to creating an environment friendly to people and the earth

We have expanded the scope of our environment business, which began with pollution prevention in areas such as dust collection, gas treatment, and water treatment, to initiatives for realizing a work environment that ensures the safety and health of workers, and the creation of more 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 our dust collectors, and by adding value to purified exhaust air. To create a safe, secure, and 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.

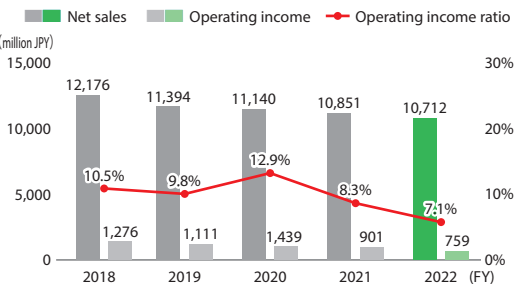
Vision/business direction



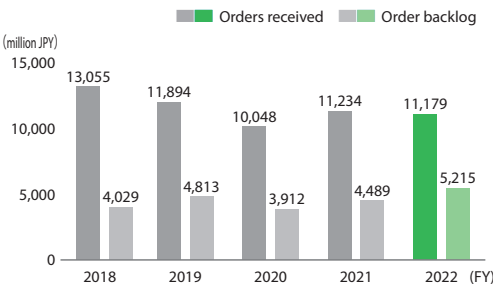
Medium-term management plan (targets/goals)

We will further accelerate these activities to provide our customers with an environment that realizes worker safety and health. In addition to the need to address the safety and health of workers and corporate risks, efforts for carbon neutrality are expanding more steadily and rapidly than in the past, and opportunities for us to contribute are also expanding. Currently, our activities mainly focus on the domestic market, but we intend to expand overseas, including Southeast Asia. We will offer the products and services best suited to these needs and regions.

Net sales / Operating income



Orders received / Order backlog



Revenue breakdown by business segment



Profit improvement and growth strategy

» Becoming a business that provides a comfortable environment for people's safety and health

We are shifting from traditional sales of stand-alone machines such as dust collection and gas treatment, with equipment sales at the core, to providing solutions for production sites such as fire risk countermeasures, maskless work environments, and CO₂ reduction. In response to this shift, we are focusing on the expansion of system products and the development of monitoring systems. We will achieve safety and health for our customers by first visualizing the results and then preventing problems before they occur.

» Further reinforcement of fire and explosion prevention products

Fire and explosion accidents are serious risks for companies, and the importance of countermeasures has grown even greater in recent years. We have been developing and commercializing wet chambers that are effective against ignition sources, unique fire-resistant filters that are ideal for use in dust collectors, early fire detection systems, and more. Last year, we began sales of a compact, mobile, fan motor-free dust collector with ignition source countermeasures for cleaning explosive dust.

» Promotion of floor business

The operation of automatic guided vehicles (AGVs) and forklifts at automobile-related plants causes the peeling of coated floors, rattling due to cracked floors, tire marks, and more. Our floor business has received high acclaim for offering smoothness and abrasion resistance as countermeasures against these issues. These features also help prevent fires due to their ability to suppress static electricity.

Topic

Thermal storage technology that contributes significantly to carbon neutrality

Combustion oxidation is used to treat organic solvents and odor components generated at production sites, but it requires a high temperature of approximately 800°C or more to burn and render them harmless completely. In other words, it requires enormous amounts of energy. In conventional direct combustion, air containing gaseous components is combusted using fuels such as LNG and released into the atmosphere as high-temperature air. RTOs (regenerative thermal oxidizers) recover and reuse the heat from the exhaust through a honeycomb ceramic heat exchanger. This reduces fuel costs and CO₂ emissions by more than 80%.

In addition, when excess heat is generated from the combustion of VOCs (volatile organic compounds), the heat can be reused by heat exchangers and boilers. Regenerative thermal technology can significantly contribute to environmental conservation and carbon neutrality, and we believe that the replacement of direct combustion systems will continue to accelerate in the future.

Reuse of waste heat while purifying exhaust gas

*Depending on type of waste gas and operating conditions, it may not be possible to apply this system.

Material Handling Business

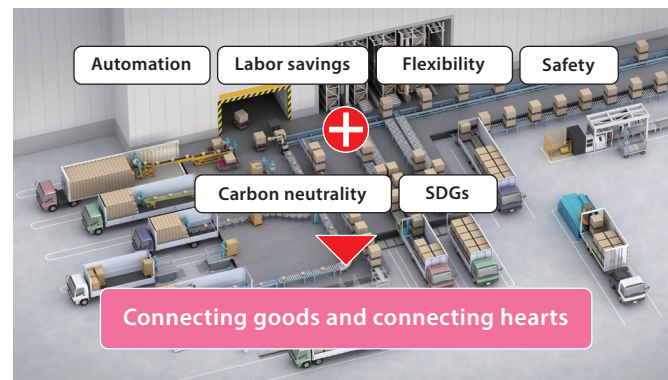
Proposal of logistics streamlining that connects our hearts together



Contributing to the social distance of customers' manufacturing

In the material handling business, we want 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 rationalization of truck yards. We will continue to make proposals that connect to the future for customers in general material handling, including improvements to productivity and safety driven by our technology.

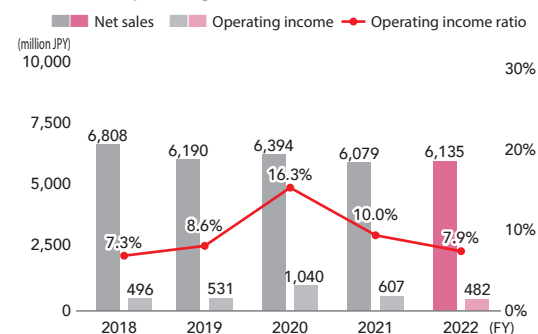
Vision/business direction



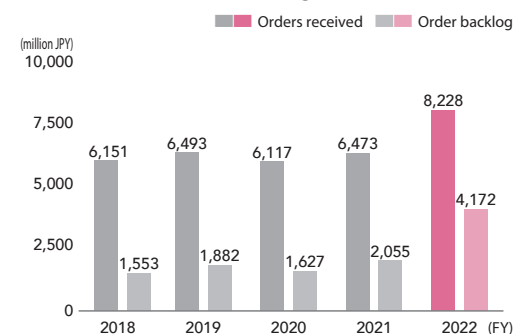
Medium-term management plan (targets/goals)

We will develop and release new products based on the needs of the market in pursuit of becoming a good company so that not only our employees but also our customers and local communities can feel the growth of our business. In this medium-term management plan, we have set a goal of achieving sales of 10 billion JPY or more in the future, and we will work to expand our business in order to reach this goal.

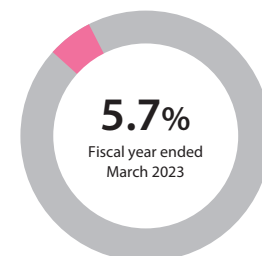
Net sales / Operating income



Orders received / Order backlog



Revenue breakdown by business segment



Profit improvement and growth strategy

» Japan's leading manufacturer of scissor lifts

Our customers in the scissor lift business come from a wide range of fields, including production sites, homes, and entertainment. We will continue to earn the trust of our customers as Japan's leading manufacturer of scissor lifts in terms of quality and quantity. Aiming to be the scissor lift of choice for all customers, we are focusing on providing new products (high head, switch from hydraulic to electric) to create new markets, shortening lift manufacturing lead times through improvement activities, expanding our market share of value-added special lifts, and establishing a maintenance service system. Through electrification of lifts, we are also promoting improved precision for starting/stopping and lifting speed, as environmentally friendly solutions.

» Accelerate sales expansion of new products

In the conveyor business, we offer a variety of conveyors in standard models for various types of materials and applications such as case and pallet conveyors, and demand for our new safety roller conveyor has also been steadily increasing. To provide safe and secure connections to all our customers, we are promoting package proposals of conveyor peripheral equipment, the development of modular conveyor series, and the expansion of sales of safety roller conveyors that emphasize safety. The safety roller conveyor launched last year has been well received for its safety, energy savings, and low cost, and an increasing number of major companies are adopting this product.



Safety Roller Conveyor

Topic

Response to issues faced by the logistics industry

In the e-commerce (EC) market, the momentum of capital investment will continue to increase due to the expansion of the market. We expect a stable volume of orders as a result of our efforts in fully automated equipment, such as sorters and labelers that incorporate image processing and other technologies, as well as modifications for automation of existing equipment.

In the logistics industry, issues such as the shortage of drivers and cargo handlers, as well as the impending "2024 issue" in which new overtime restrictions are expected to further worsen truck driver shortages, are driving the trend toward automation and labor savings in the truck cargo handling market. The potential market needs for truck yard rationalization equipment are high. The logistics industry is highly interested in this business as a mainstay product for "white distribution", i.e., efforts to improve logistics efficiency and productivity. We are developing new products (such as fully automatic debinders) to expand sales channels for truck yard rationalization equipment.

As a proposal for "new connections", we will aim to increase sales as a manufacturer of automation equipment (robot integrators, system integrators), secure volume from a wide range of industries (automation, unmanned operations, standardization recommendations), and build maintenance systems for logistics and distribution users. We are aiming to expand the scale of our business by developing and introducing new products that better meet customers needs, contributing to the development of the market with proposals for connections based on the keywords "labor savings", "automation", "flexibility", and "safety".



Racooda
(rationalization of trucks)

Special Equipment Business

(including new businesses)

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

Contributing to resolving social issues by deepening our presence in growing markets through technological integration and the development of partnerships

The environment surrounding us is changing at an unprecedented speed, with climate and environmental changes associated with global warming, as well as the acceleration of DX and changes in people's values during and post-COVID. To respond to these changes, we will apply the elemental technologies that we have developed up until now and integrate them with new technologies, strengthening 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.

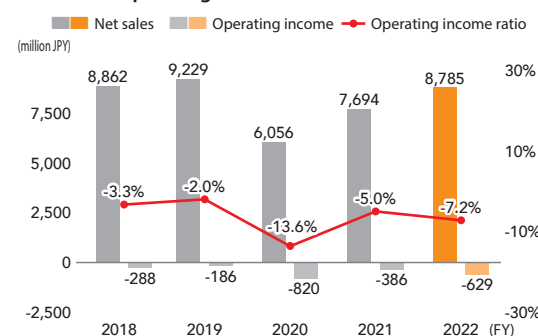
Fields covered by the Special Equipment business

Digital acceleration	To growing markets	Expansion of business scope
<ul style="list-style-type: none"> Robotics/automation [force sensor business] Sensing [sensing solutions business] 	<ul style="list-style-type: none"> EV, batteries [special equipment business] 	<ul style="list-style-type: none"> Ceramics [ceramics business] Electronics [powder business]
		
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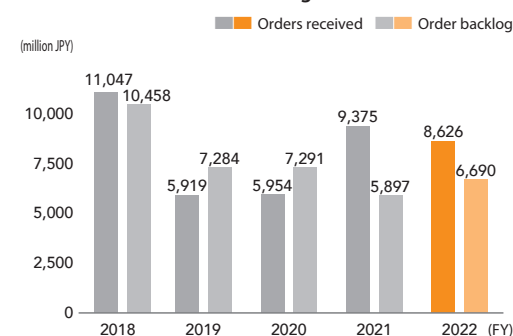
Financial results

Consolidated net sales increased to 8,785 million JPY (up 14.2% year-on-year) due to the strong performance of our high-pressure roll press for the EV rechargeable battery market. Operating loss amounted to 629 million JPY (386 million JPY loss in the previous consolidated fiscal year) due to an increased cost rate and other factors. Orders received decreased to 8,626 million JPY (down 8.0%), with order backlog increasing to 6,690 million JPY (up 13.5%).

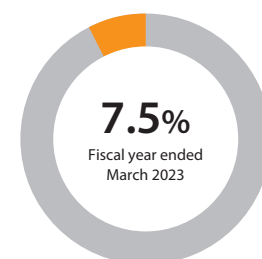
Net sales / Operating income



Orders received / Order backlog



Revenue breakdown by business segment



Special Equipment Business

Contributing to the realization of a carbon-neutral society

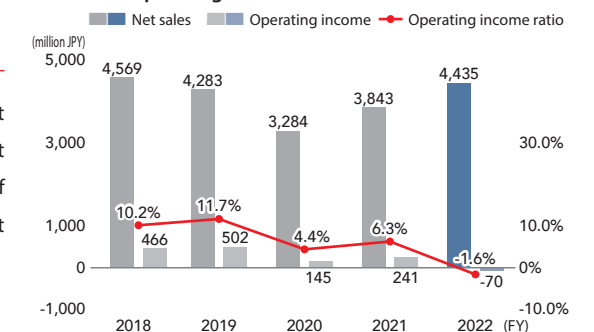
Helping to protect the environment through electrification

We contribute to a reduced environmental impact through our focus on electrification. Our energy-saving equipment such as servo cylinders, high-pressure roll presses, and electrical characteristic testing equipment are applied in the production of secondary batteries and inverters, which are essential as part of the shift to EVs.

Medium-term management plan (targets/goals)

With a tailwind from global environmental protection efforts, such as a significant increase in the production of rechargeable batteries and inverters due to the rapid shift to EVs, growing momentum for energy conservation in the manufacturing process of environmental products, and movement to regulate hydraulic oil use to prevent environmental pollution, we will continue working to expand our business.

Net sales / Operating income



Growth strategy

The global trend of efforts for carbon neutrality will lead to a rapid shift in the automobile industry to EVs. In line with this trend, demand for rechargeable batteries and inverters is expected to increase dramatically. The Special Equipment division aims to expand sales of high-pressure roll presses, indispensable for secondary battery production, and electrical characteristic testing equipment used to inspect power devices for inverters. Additionally, we are also proceeding with initiatives to expand our range in battery production processes, replace hydraulic cylinders with servo cylinders, and expand use of electrical characteristic testing equipment to areas other than in-vehicle parts.

Topic

Shinshiro Works begins operation of new factory

At our Shinshiro Works location, a new factory was completed and began full-scale operation in June 2022 as the production plant of our major Special Equipment products such as electric cylinders and servo presses. Compared to the previous factory, the area of the new factory has expanded by 75%, and the crane's lifting capacity has been increased from 2 tons to 12.5 tons, enabling the assembly of even larger equipment. In addition, with highly insulated buildings and solar panels installed on the roof of the plant, it has become an environmentally-friendly plant corresponding to ZEB Ready standards that uses renewable energy, suitable for manufacturing energy-saving equipment. We will continue to strive for business development by effectively utilizing this increased production capacity and responding to the needs of the expanding EV market.



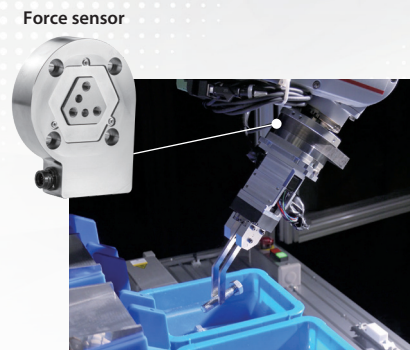
Note : A ZEB (Net Zero Energy Building) is a building that achieves net zero energy consumption through energy savings (via insulation, etc.) as well as energy creation (via solar power, etc.). ZEB Ready refers to buildings working toward ZEB standards with advanced insulation and high-efficiency

New Segments

Contribution to automation

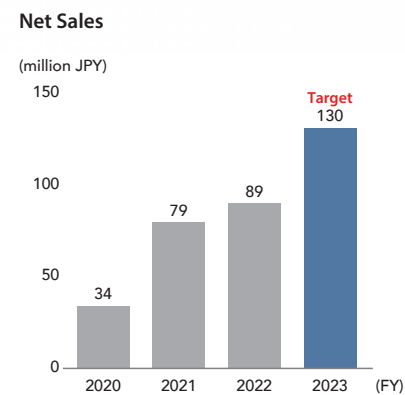
Powerful support for human and robot operations

ZYXer is our force sensor that simultaneously detects force in length, depth, and height directions as well as torque around those axes, enabling robots to perform control similar to human manual work. The ZYXer has already been adopted as standard or optional equipment by five major robot manufacturers in Japan, enabling automation of precision work at various manufacturing sites and contributing to labor savings.



Growth strategy

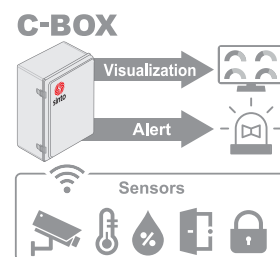
Through ZYXer system proposals, we will effectively offer support for human resource shortages and the improvement of quality and productivity, and we will actively contribute to resolving customers' issues not only in manufacturing but in various fields. For example, in the robot field, we will further expand ZYXer as a standard or optional part for robot manufacturers within and outside of Japan, and we will also strengthen robot system proposals for the automotive industry. In the field of industrial equipment, we will make proposals for equipment integration, and for the food, medical, and cosmetics industries, we will promote application sales and proactively search for alliance partners. In these ways, we will continue our efforts to respond to various customer needs in order to maximize ZYXer's value.



Contribution to the digitalization of improvement activities

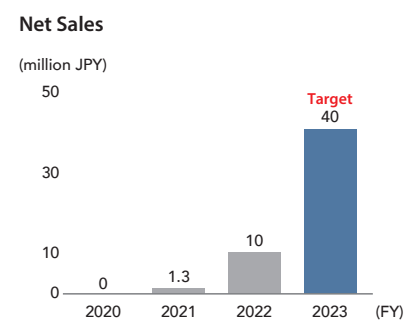
Strong support for improvement activities

We utilize the sensing and control technologies we have cultivated at our worksites to solve our customers' problems in the manufacturing industries. By providing our C-BOX package, we digitize daily events at worksites, enabling data collection, visualization, and analysis, while supporting improvement activities to enhance productivity, quality, and energy conservation.



Growth strategy

As society becomes increasingly digitalized, it is necessary to stabilize production lines and control quality based on reliable data rather than relying on experience and intuition in the manufacturing field. By strengthening partnerships with companies that use various sensors, we will work to expand sales of packaged products tailored to the customer's application. In addition to monitors and reports, we will promote our ability to support necessary actions with various output options such as alarms, voice alerts, and recordings.



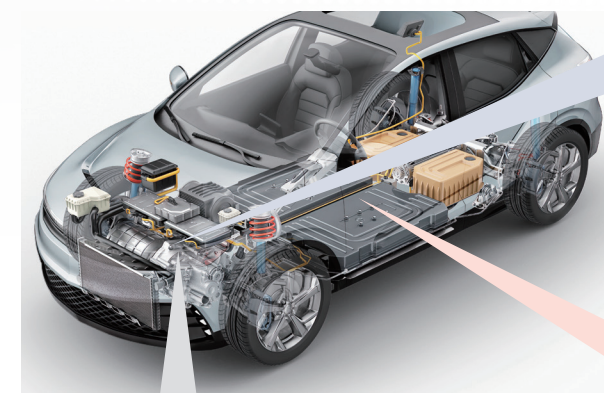
Contribution to vehicle electrification

Supporting manufacturing in the automotive and EV fields

Our technologies that support automotive manufacturing are used in various production sites, from engine manufacturing to the production of springs, gears, and other components, as well as in the painting and assembly processes. In recent years, we have further expanded the scope of our activities to include batteries, inverters, and motors for electric vehicles.



Technologies essential for car manufacturing



» Inverters (power semiconductors)

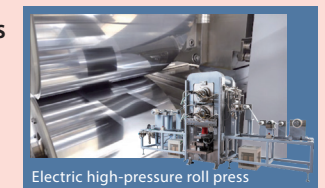
Proposing testers that can handle low inductance and one-stop processing in the inspection process for EV modules



Electric characteristic testing equipment

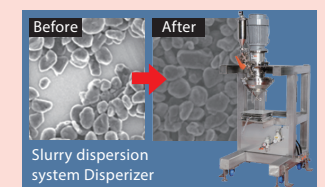
» Secondary batteries

Contributing to reduced CO₂ emissions during production through using electric high-pressure roll presses



Electric high-pressure roll press

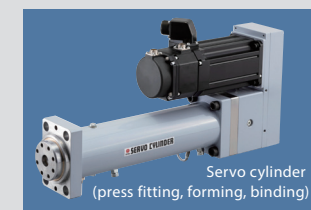
Achieving uniform dispersion of battery materials without crushing the electrode active material



Slurry dispersion system Disperizer

» Motors and secondary batteries

Contributing to improved quality and reduced energy consumption for production through precise position and load control along with energy savings through electrification

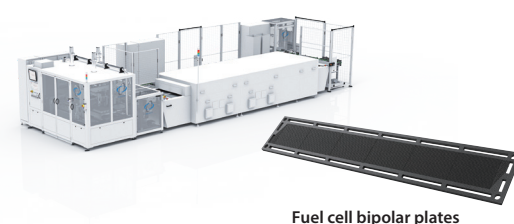


Servo cylinder (press fitting, forming, binding)

Growth strategy

We are planning proposals that will contribute to the "multi-materialization" trends that will bring about further evolution in car manufacturing technology. Our proposals for 3D printers will enable mass production of precision parts made of more than 100 different materials, including metals, ceramics, and resins. Also, our proposals for technology to join metal and resin materials will contribute to weight reduction of parts, improved airtightness and thermal conductivity, as well as simplified production processes and reduced cost. We will continue to refine our manufacturing technologies for the future of ever-evolving car manufacturing.

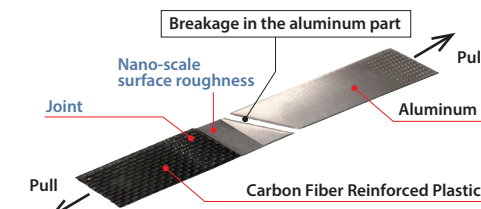
3D screen printing technology



Fuel cell bipolar plates

*We provide this technology under the Exentis Group AG brand.

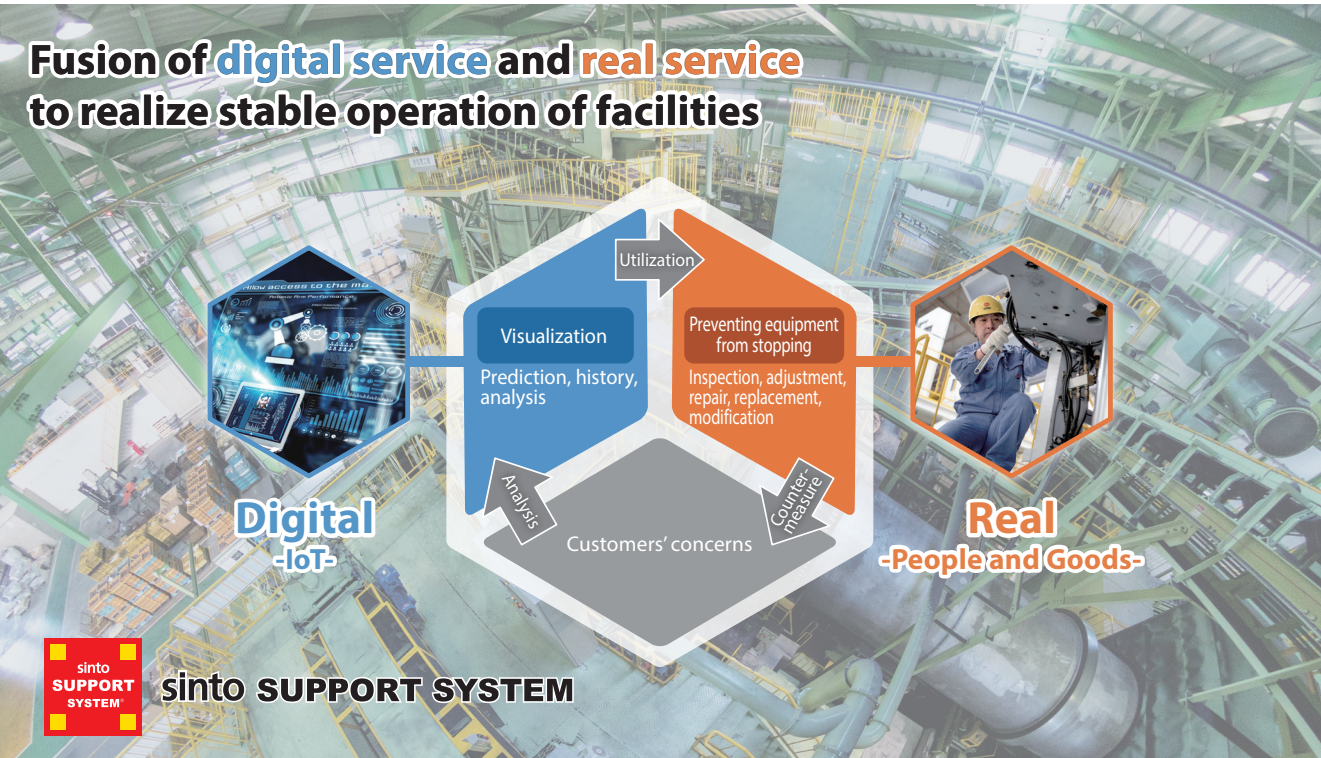
Joining technology for dissimilar materials



CFRP and aluminum test piece manufactured using joining technology for dissimilar materials
*Capable of maintaining strong joint even if force is applied from either side

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 decline in skilled workers, and finding a way to pass skills down to the next generation has become an urgent issue. At Sinto, centered on IoT technologies that can surpass the intuition and experience of skilled workers, we offer the Sinto Support System as a service that prevents customers' equipment from stopping. Through this service, we work to resolve labor shortages and issues related to the transfer of skills on the maintenance worksite.



Preventive Maintenance	Corrective Maintenance
<p>Assist operators</p> <p>Inspection Assistance</p> <p>Monitoring / Inspection / Education</p> <ul style="list-style-type: none"> Want to visualize plant operations Want to see inspection results at a glance Want to have efficient inspection training 	<p>Assist in emergencies</p> <p>Corrective Maintenance</p> <p>Remote Assistance / Storage</p> <ul style="list-style-type: none"> Want to speed up recovery in case of trouble Want to avoid lengthy equipment shutdowns due to a lack of backups
<p>Assist maintenance staff</p> <p>Preventive Maintenance</p> <p>Diagnosis / Measurement / Analysis</p> <ul style="list-style-type: none"> Want to eliminate sudden problems We want to increase production Want to eliminate delays in production plan 	

Support Network

The Sinto Group has a global network across 45 locations within Japan, as well as overseas locations in 16 countries and regions. Aiming to provide an immediate response when needed and to be a good advisor for customers, we will continue to support customers' manufacturing from the locations closest to the customers.



Risks and opportunities in emerging regions (striving to always be chosen by customers)

Reducing raw material costs and enacting effective marketing to expand business

The market in Mexico is moving slowly but positively toward recovery, with exciting new opportunities such as major capital investment in core locations such as Monterrey. Amid this, we are continuously working on serving our existing customers and creating new customers. Some initiatives include maintaining good business relationships with intermediaries including training, and improving our name recognition through participation in exhibitions and use of digital and print marketing. In this way, we will continue to expand our business to be able to offer the optimal products and services for our customers.



Fabian Villarreal Hernandez

General Manager of Roberts Sinto de Mexico, S. de R.L. de C.V.



Sinem Karakulak Aykan

General Manager of Sinto Turkey Makina Sanayi ve Ticaret A.S.

Strengthening local manufacturing and after-sales proposals in a key region

The Turkish foundry industry saw great success in 2022, with many foundries in Europe closed or with lower production capacity due to environmental restrictions, and most countries preferring to be supplied from local countries due to freight costs and supply chain interruptions. For new molding line investments, STR is one step ahead thanks to locally manufactured spare parts and mold transfer lines with shorter lead time. In order to be always chosen by the customers, our main goal for 2023 is to strengthen our manufacturing capabilities through further localization, and by finalizing trials of the IoT data collector to empower our after-sales service. In that sense, we strongly believe that Sinto Smart Foundry and the Sinto Support System will play an important role in our success and the success of our customers.

Speedy response to offer the best support to customers

As the Indian foundry industry is poised for good growth in the coming years, SBML is working towards being selected by customers again and again. With a growing customer database, speedy quotation and parts supply has been our main focus. Specifically, we are stocking many more spare parts than before to ensure better delivery to customers, and we strive to provide quicker lead time for quotations, maintaining a log book with this information. Also, our marketing team is constantly striving to educate customers on Sinto's technology and benefits, using videos and brochures to explain equipment features and technologies such as Aeration. We are also constantly looking at reducing manufacturing costs by making suitable investments in plant and machinery. These are just a few examples of how we continue to support our customers.



Arjun Bagri

CEO of Sinto Bharat Manufacturing Private Limited

Providing value (digital response)

Sinto provides a cloud-based IoT platform as well as systems and apps that can monitor equipment remotely, offering visualization of the operating status of equipment in real time and prompting improvements, enabling improved productivity. Installation of this system offers many benefits as data is collected and calculated 24 hours a day, 365 days a year using IoT, making it possible to reduce working hours and the burden on workers, increase labor savings, and ensure reliable operations. We will continue to provide these services from the unique perspective of an equipment manufacturer, helping our customers achieve a “new normal” in work.

Value provided to the customer

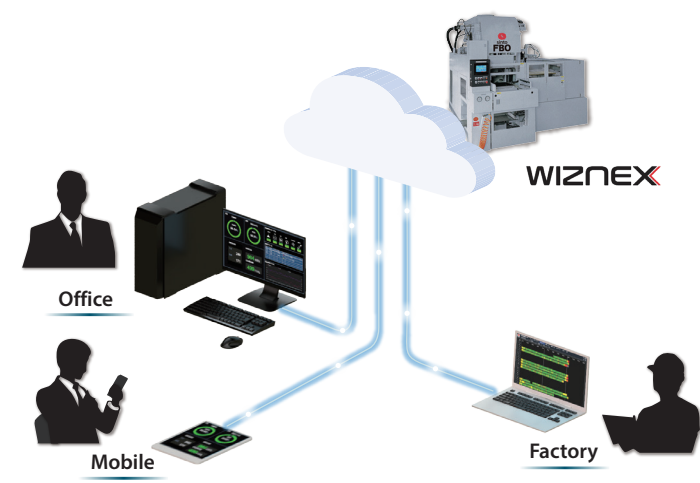
Preventing production from stopping

From reduced defects to zero defects

Improving productivity and quality

Creating a safe and secure environment

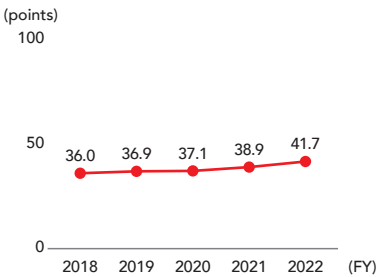
Realizing a “new normal” in how work is done



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 related to maintenance and sales. Skill points are received for each skill acquired, encouraging staff level improvement. By 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.

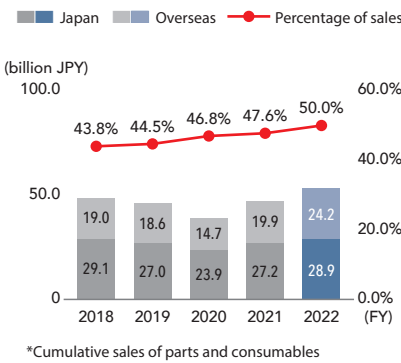
Skill points per person



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

Net sales from after-sales services amounted to 28,928 million JPY (up 6.0% year-on-year) in Japan and 24,220 million JPY (up 21.2%) overseas due to increased visits to customers in response to the recovering economic, along with movement to secure parts in preparation for increased manufacturing activities. The ratio of after-sales service to consolidated net sales was 50.0%.

Net sales*



*Cumulative sales of parts and consumables

Environment

Our environmental activities began in the late 1940s, when the term “pollution” was not yet widely used, and we began to improve the environment at foundry factories. Then, in 1963, when economic growth took precedence over environmental issues, we sent out a corporate advertisement to the world with the words “manufacturing that is kind to flowers” as a warning against environmental problems. For the past 60 years, we have continuously promoted the reduction of our environmental impact.



Corporate advertisement in 1963: “Manufacturing that is kind to flowers”

Environmental Policy

Environmental Policy

As a member of the global society, we seek to actively reduce environmental burdens in all areas of our business activities, work to prevent pollution, and achieve a sustainable society.

Actions

1. Comply with environmental laws and regulations

2. Promote the prevention and reduction of waste

3. Work to effectively use resources and energy to eliminate waste and reduce CO₂ emissions

4. Work to develop technology and products that offer reduction of environmental burdens throughout their lifecycle

5. Perform internal environmental training and strive to improve staff awareness

6. Publicly share the environmental policy

7. Take actions to continuously improve the global environmental management system

Environmental Management

Environmental management system certification

To promote the continuous reduction of our environmental impact, we have established environmental policies, objectives, and targets, and we have put in place an environmental management system that includes plans, systems, and processes for initiatives to achieve them. The following manufacturing sites and group companies have obtained ISO14001 certification, an international standard for environmental management. In addition, our offices are working to obtain certification under “ECO Action 21” established by the Ministry of the Environment.

Sintokogio, Ltd.	Toyokawa Works, Ichinomiya Works, Osaki Works, Shinshiro Works, Koda Works, Oharu Works, Kyushu Works
Domestic group companies	MEIKIKOU, Sinto V-CERAX, Sinto Engineering, Toju Kosan, Fujiwa Denki, CFS, Airex
Overseas group companies	Thai Sintokogio, Qingdao Sinto, Zhejiang Sinto, Roberts Sinto, Sinto Brasil Produtos

» Heinrich Wagner Sinto certified with the EcoVadis Silver Sustainability Rating

In March 2023, Heinrich Wagner Sinto was recertified by EcoVadis SAS France with the Silver Medal sustainability rating. The EcoVadis sustainability rating evaluates activities by companies in the four areas of environmental protection, occupational safety and human rights, ethics, and sustainable procurement, and the Silver Medal is awarded to the top 25% companies participating. As the Sinto Group, we will continue our efforts for further sustainability, improving both our corporate value and our value to society.



Environmental training

We systematically provide environmental education (general, specialized, and special education) for all employees engaged in activities related to the environmental management system, according to their roles and job description. In particular, for special education, we utilize internal and external training sessions to systematically train employees to acquire qualifications, such as qualified person for energy management, pollution manager, and hazardous substance handler, which are necessary for the performance of their duties.