

## / We consistently step up to address social challenges and provide a variety of solutions.

### Kazuaki Iijima

Director, Managing Executive Officer and General Manager,  
Plants & Machinery Systems Headquarters

The Plants & Machinery Systems Business supports social infrastructure in the two business domains of machinery systems and environmental systems. The Machinery Systems Business applies material handling technologies to meet automation and labor-saving needs and updates these technologies with new advances in AI, IoT, and robotics. The Environmental Systems Business contributes to reducing the environmental load and realizing carbon neutrality by developing energy conservation and energy creation technologies in the construction and operation of water treatment and waste treatment facilities. Sanki Engineering will continue to step up to address social challenges and provide our own unique solutions to consistently achieve sustainable growth.



## Plants & Machinery Systems Business

### Opportunities and Risks in the Business Environment

#### Machinery Systems Business

- Growing need for automation and labor-saving solutions arising from the decline in Japan's working population
- Increased investment in logistics facilities and manufacturing facilities for batteries and semiconductors
- Increase in materials and labor costs, and delayed delivery of materials and equipment

#### Environmental Systems Business

- Expansion in decarbonization needs
- Japanese government policy for promoting PPPs and PFIs\*
- Expansion in energy conservation needs at overseas water treatment plants

\*A public private partnership is a public-private sector collaboration to provide public services, while a private finance initiative is a representative PPP approach.

### Key Initiatives of the Medium-Term Management Plan "Century 2025" Phase 3

#### Machinery Systems Business

- Key Initiative 1** Increase orders for standard conveyors
- Key Initiative 2** Accelerate entry into the automation and labor-saving market and logistics market
- Key Initiative 3** Establish a network of maintenance and servicing businesses

#### Environmental Systems Business

- Key Initiative 1** Promote the energy conservation and energy creation businesses
- Key Initiative 2** Expand the LCE business
- Key Initiative 3** Expand business in overseas markets

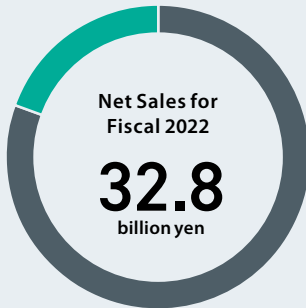
### KPIs for Medium-Term Management Plan "Century 2025" Phase 3

		Targets (Total for FY2022–2025)	FY2022 Results	Evaluation	
Machinery Systems Business	Net sales of robot systems	5.0 billion yen	550 million yen	○	
Environmental Systems Business	Orders	AEROWING	3.6 billion yen	800 million yen	◎
		G3 decanter centrifuge	20 units	1 unit	△
		Fluidized bed incinerator	2 units	0 units	△

Plants & Machinery Systems Business

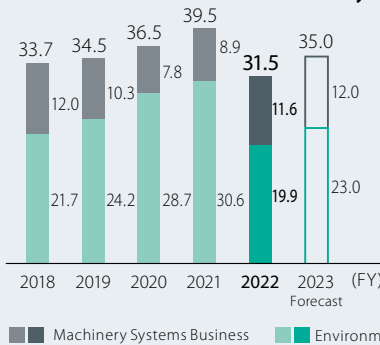
Net Sales Composition Ratio

17%



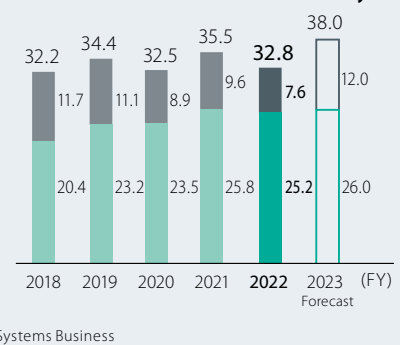
Orders Received (Billions of Yen)

31.5 billion yen



Net Sales (Billions of Yen)

32.8 billion yen



■ Machinery Systems Business ■ Environmental Systems Business

## Machinery Systems Business

### Major Results for Fiscal 2022

- While orders received increased due to large construction projects, profit declined as a result of a decrease in work carried over from the previous fiscal year and fewer construction projects for large conveyance facilities.
- Introduced a web-based product training system for sales personnel to increase orders for standard conveyors.
- Completed commercialization of the Reverse Sorter®, a vertical conveyor and sorting system for the logistics market, and Meris Bianca®, a robotic sorting system, and exhibited both products at the Logis-Tech Tokyo 2022 international exhibition.
- Sales remained steady for automation and labor-saving systems using robots. We also achieved progress in sales collaboration with robot manufacturers.



Arita Manufacturing

#### Major Projects

- Facility for Arita Manufacturing (delivered in March 2023)
- Facility for Narita Airport's Terminal 1 (delivered in June 2022)

### Status of Business Operations and Future Outlook toward Achieving Phase 3

#### Expand Sales of Core Products

We will continue to conduct our ongoing business activities with a focus on expanding sales of our core products, such as standard conveyors, various conveyance systems for logistics facilities, factory automation, airports, and medical facilities. At the same time, we will expand our product line to meet growing automation needs in the food industry and medical facilities. In addition, we will strive to strengthen our product value by proposing equipment that will save energy and improve transportation efficiency as well as by providing added value such as facility predictive

maintenance systems.

#### Enter the Automobile, Semiconductor, and Overseas Markets

We plan to enter growth areas such as manufacturing facilities for EVs and semiconductors, where significant demand is expected, as well as overseas markets, by leveraging the technical skills and flexible response capabilities that we have cultivated over the years. As part of this effort, we established a clean room at the Yamato Product Center for developing and manufacturing

equipment that requires high cleanliness environments. Additionally, we will continue to analyze the market to form business alliances and partnerships with external entities for future business expansion.

#### Promote Business Reform

We will implement business reform for reinforcing the foundations for ensuring continuity and supporting

growth areas. We will collaboratively promote DX with the DX Promotion Division and the Technical Research & Development Center. These efforts include the effective use of 3D-CAD, introduction of emulators, creation of a database of design results, and research on applying the latest technologies such as AI, drones, and 5G to improve operational efficiency and increase productivity.

## Environmental Systems Business

### Major Results for Fiscal 2022

- Orders received decreased due to the absence of a large maintenance and management contract and an order for a waste treatment facility obtained in the previous fiscal year. Although net sales decreased, profit increased due to the improved profitability of construction work.
- Enjoyed strong global sales, as exemplified by major orders placed by large-scale sewage treatment plants in Denmark and Australia for AEROWING, an energy-saving ultrafine bubble air diffuser.
- Participated in the Ministry of the Environment's FY2022 Demonstration Project for the Effectiveness of Decarbonized Resource Recycling Businesses Utilizing Digital Technology.
- Sanki's technology for low-cost technology for converting sewage sludge incineration ash into fertilizer was adopted for a feasibility study for the FY2022 Breakthrough by Dynamic Approach in Sewage High Technology Project of the Ministry of Land, Infrastructure, Transport and Tourism.
- Introduced an AI waste crane system, which automates crane operations at waste incineration facilities, to Clean Hill Tenzan.



New incinerator at SU Kaihatsu

#### Major Projects

- Kasai Water Reclamation Center's northern system reactor facility
- Kanazawa Wastewater Treatment Plant's No. 6 system reaction tank and blower facilities
- Construction work for the new combustible waste joint processing facility at the Ochi Clean Center
- Construction work for the new incinerator at SU Kaihatsu

### Status of Business Operations and Future Outlook toward Achieving Phase 3

#### Expand Sales of Products that Meet Energy Conservation Needs

Given the continued demand for renewing infrastructure facilities in response to changing social and environmental trends, such as a declining population, there is a growing need for energy conservation for achieving carbon neutrality. We will strive to expand sales of strategic products, such as the energy-saving AEROWING ultrafine bubble air diffuser, the highly efficient G3 decanter centrifuge, and the fluidized bed incinerator.

#### Promote LCE Business to Secure Stable Long-Term Business

Changing global circumstances have given rise to the need to consider risks and price fluctuations when handling projects. For example, the recent sharp rise in prices has created a challenge for securing the business feasibility of woody biomass gasification power generation, which we have been pursuing as an energy creation business. In addition, we will strive to ensure the stable operation of projects for which we already undertake maintenance and management operations, while striving to win orders

for DBO projects to expand our business and accumulate operational expertise for the future.

**Develop Overseas Markets for Water Treatment Facilities**

Our efforts to develop overseas markets for water treatment facilities are being led by AQUACONSULT Anlagenbau GmbH, a Group company based in Austria that has been enjoying robust sales in recent years, as we strive to expand

sales of strategic products mainly in Europe and the Middle East. Meanwhile, in Southeast Asia, where large-scale water treatment facilities are not widely available, we will continue to promote our proprietary technologies, such as a drainage treatment unit based on the DHS method, while exhibiting at local trade shows and developing local networks to increase business opportunities.

**Focus**

**Machinery Systems Business**

**Contributing to improve efficiency and reduce labor in loading operations and save space at work sites**  
**Delivery of Conveyor Line to an Apparel E-Commerce Company**



In March 2023, we delivered a 320-meter long conveyor line to an e-commerce company handling women's apparel, which has increased its sales fivefold over the past five years. Previously, the entire process, from item picking to packing and shipping, had been managed by hand. The new conveyor line automates the supply of shipping boxes and the sorting of boxes from the packing area to each delivery company, thereby improving efficiency and saving labor in loading operations.

The new system also saves space by virtue of its two-tier configuration with the shipping box supply line on the upper level and the sorting line to delivery companies on the lower level.

We are also scheduled to deliver our newly developed Reverse sorter to the center in August 2023, with the expectation that it will further improve work efficiency and labor savings.



Conveyor line with a total length of 320 meters

**Focus**

**Environmental Systems Business**

**Realized Automated Crane Operation for Efficient and Stable Operational Managements**  
**Introduction of an AI Waste Crane System at Clean Hill Tenzan**



To address the shortage of workers and reduce operational management costs at waste incineration facilities, we developed the AI Waste Crane System to automate crane operation at waste incineration facilities.

Crane operation of waste requires workers with a high level of experience to determine the type and level of waste in the bunker. The system ensures efficient and stable operation by optimizing crane operation with AI that visualizes the inside of the waste bunker to determine the type and height of waste. Compared to night-time manual crane operations, this significantly reduces the workload, reducing labor by approximately 60%.

The system was installed and has been reliably operating at Clean Hill Tenzan, located in Taku City, Saga Prefecture, under the operational management of Group company Sanki Chemical Engineering & Construction in a DBO project.



Automated operation