



Implementing Value Creation

—Reform of Our Profit Structure—

By combining NAGASE’s core functions of Trading, Manufacturing, and R&D, we will refine our businesses and deliver new value to society and our customers.

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Combining frontline capability and DX



Masatoshi Kamada

Director and Managing Executive Officer

On-site value creation— Improving margins by finding the real value

In recent years, my primary focus has been on profit margins. The idea of ratio management is more than just tracking numbers. A low margin often signals that a business model lacks differentiation. By paying close attention to client needs and critically examining how NAGASE can address them, we can uncover the true value of our business and help the market better understand that value. Client-facing teams often default to maintaining the status quo, but the push to improve margins is a chance to challenge that mindset. I believe it is the responsibility of our business leaders and frontline employees to uncover and deliver the true and lasting value in our services.

Sales representatives must have tacit knowledge of how to communicate and build trust with clients, and that ability is only gained through experience.

I want each person in charge to take ownership of that opportunity, which is why I often visit sites to offer encouragement and support. The job of sales representative is deeply rewarding, and depends more on emotional intelligence than intellect. Even in the age of generative AI, I believe NAGASE's strength lies in the trust we have built with our in-person, on-site presence.

Change brings opportunity Partnering in client management strategies

The changing environment conditions are creating opportunities for NAGASE due to our diverse portfolio of chemical products and services and the extensive network of our trading company operation. Our comprehensive knowledge of the industry, from upstream to downstream, enables us to respond to evolving client needs and collaborate on future-oriented management strategies. One of the main ways I have been doing this is account planning, which involves analyzing the client's business plan, formulating potential scenarios, and coordinating cross-divisional efforts to apply the Group's full power to propose solutions.

Digital transformation (DX) will play a fundamental role in our future. We are introducing cloud-based marketing automation and customer relationship management tools to integrate information across the organization. I believe that connecting ideas and data horizontally across business departments will not only enhance the quality of our marketing but also further differentiate NAGASE. How we leverage digital tools to achieve this will be a key theme in the next medium-term management plan.

Corporate value maximized with integrity

Over the past few years, discussions at Board of Directors meetings have increasingly focused on the quality of management. As an executive officer overseeing sales operations and a director responsible for corporate governance, I am committed to meeting expectations not only for business performance but also for driving long-term corporate value.

Upholding the highest standards of integrity is a core principle of NAGASE's deeply rooted management philosophy. I intend to fully adhere to this principle and continue to earn the trust of all our stakeholders.

Integrating functions and steadily implementing growth strategies



Tamotsu Isobe

Director and Executive Officer

Advancing the QUICK WINS initiative

Since the launch of the QUICK WINS initiative in June 2023, our ability to respond swiftly to drastic changes in the external environment has enabled us to achieve better-than-expected quantitative results. I also believe we are generally on the right track in terms of qualitative outcomes.

In the food, life science, and biotechnology businesses under my oversight, the acquisition of Asahi Kasei Pharma's diagnostic reagent business and other operations in FY2024 was a major achievement. Under the next medium-term management plan, our focus will be on steadily translating this success into sustained business growth.

Strengthening the functional integration Advancing R&D into the next stage

We have made progress in establishing a framework for close collaboration between our R&D and manufacturing functions, which had been an issue. The bio-based superabsorbent polymer (SAP) and the rare amino acid ergothioneine, both of which are being prepared for market launch, exemplify NAGASE's unique approach of combining these two functions with the network of our trading company to enter new markets.

Accelerating the new product and technology development cycle is essential to growing our business. As a first step, we are considering introducing the Scorecard system used by the U.S. company Interfacial Consultants, which became a subsidiary in 2020 and specializes in product and technology development and manufacturing process solutions for resins and related materials. Scorecard prioritizes R&D projects based on customer needs, marketability, profitability, and materiality for our company. While assessing profitability at the R&D stage remains challenging, we plan to apply the system to our biotechnology business to better align our initiatives with specific client needs.

Another key to our growth will be expanding our R&D functions beyond Japan, where they are currently concentrated, to a more global scale. This may require organizational changes to accelerate collaboration between human resources and technology. We aim to further evolve NAGASE's distinctive approach to R&D by actively pursuing collaboration and investment not only within the Group, but also with external partners.

Long-term approach to enhancing the power of our people and organization

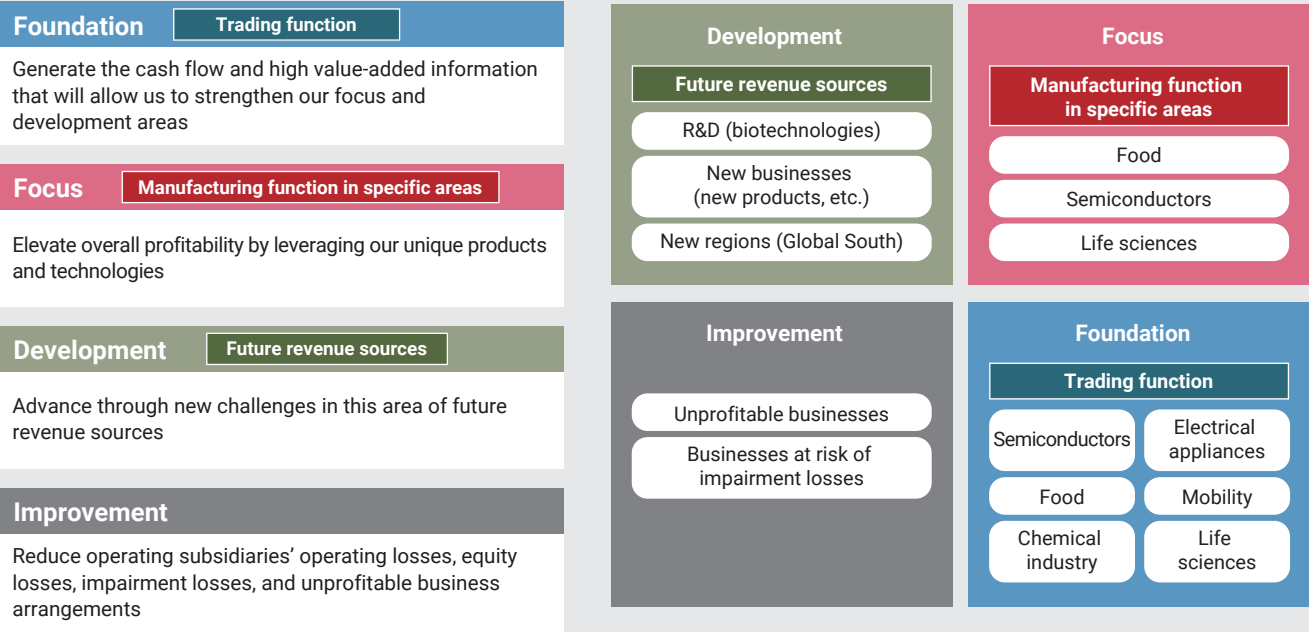
I've started to hear people outside the Company say that "NAGASE has changed." I believe this perception stems not only from changes in top management, but also from our employees, who do not just follow directives, but are proactive about bringing about change. Our people have the resilience to overcome even the toughest challenges because we embrace change—and that, I believe, is our greatest strength.

To remain a company that society needs for the next 100 years, we will build a structure that maximizes the potential of our people and links it directly to organizational growth. By uniting all employees under a shared vision, we will continue driving the creation of new value and achieve sustainable growth.

Reform of Our Profit Structure

The key to profit structure reform is to secure and redeploy management resources to maximize efficiency. Specifically, from the standpoint of efficiency and growth potential, we have classified businesses into four quadrants: Improvement, Foundation, Development, and Focus, and are executing strategies according to each area.

Reorganizing each of our business domains along the lines of our trading, manufacturing, and R&D functions



List of topics in the “Integrated Report 2025”

	Area	Topic examples	Page
Foundation	Trading function	● Source of customer touchpoints and high-value-added information	P. 34
Focus	Manufacturing function (Semiconductors)	● Contributing to the industry through synergy of semiconductors, the environment, and technology	P. 35-36
	Manufacturing function (Food)	● Prinova Group (Nutrition business profitability recovery, growth strategy)	P. 37-38
	Manufacturing function (Life sciences)	● Nagase Diagnostics diagnostic reagent business	P. 39
Development	Global South	● Initiatives in India, Indonesia, Mexico, and Brazil ● Establishment of joint ventures and expansion of the resin and plastics sales business in India	P. 40
	Establishing new businesses	● Corporate venture capital (CVC) initiative to discover new businesses	P. 41
	R&D (Bio)	● Healthspan-extending ergothioneine	P. 41
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Trading Function

Source of Customer Contacts and High Value-Added Information

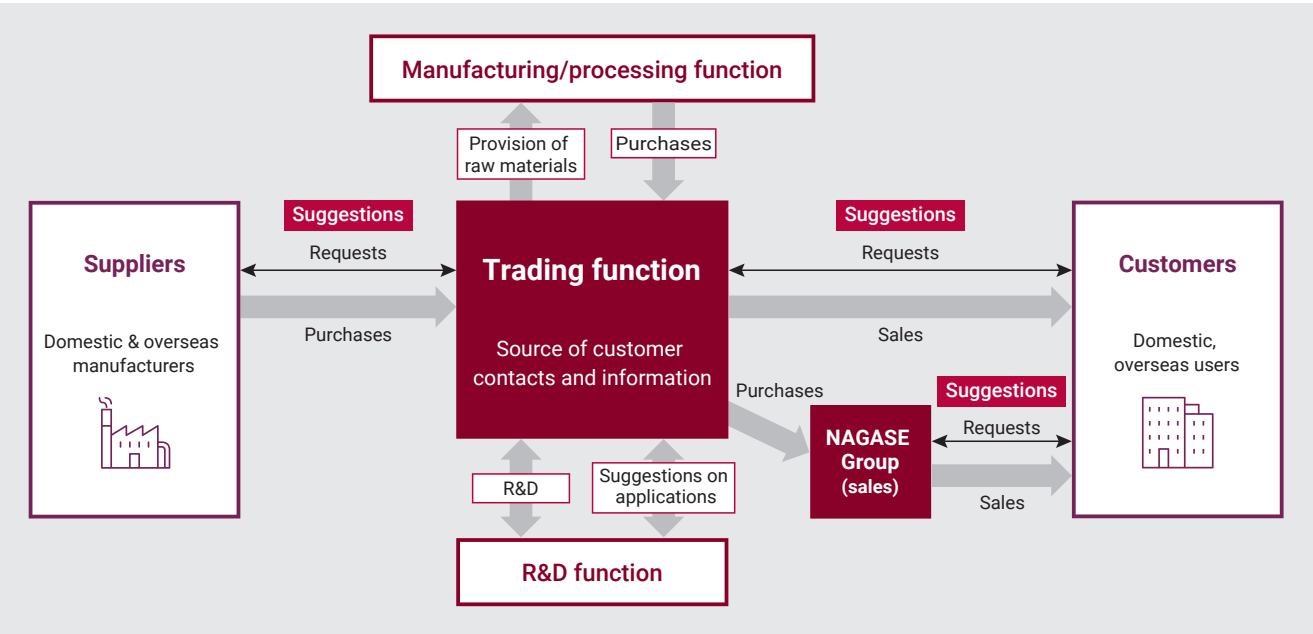


Roles and strengths of NAGASE’s trading businesses

Of all the functions NAGASE possesses, our trading function in particular is positioned as our Foundation, and is the source of cash, connections with customers, and information. We dig up new business opportunities by providing materials and services in the following five segments while gathering customer feedback and needs: Functional Materials, Advanced Materials & Processing, Electronics & Energy, Mobility, and Life & Healthcare. NAGASE’s on-site prowess comes from its dedication

to this process over the decades. Achieving contacts with society and customers through our trading function allows us to acquire high value-added information. Based on this information, we are able to maximize the strengths of each of our functions and therefore create new value.

At the same time, functions including credit and inventory management, as well as support for meeting regulatory requirements for chemical products, allow us to provide a steady supply of materials, thereby contributing to maintaining the supply chain even as our business partners’ production systems become increasingly diverse.



Initiatives leveraging our strengths as a trading company

Nagase & Co., Ltd. is contributing to solving industrial challenges by leveraging the network it has built as a dedicated chemicals trading company, its expertise in chemicals, and its solutions for the safe transportation of dangerous substances. We were selected by Rapidus Corporation, who aims for domestic production of cutting-edge semiconductors, as one of the service coordinators organizing the transportation of the semiconductor materials to its semiconductor plant in Chitose City, Hokkaido. In this capacity, it consolidates the materials delivered by suppliers at terminal hubs and supports their mass transportation from Honshu to Hokkaido.

In addition, it provides the chemical industry with the Chemicals AI Cooperative Logistics Matching Service, an application that matches hazardous chemicals with appropriate transportation services. In this way, it

contributes to solving issues at manufacturing sites caused by labor shortages in logistics by, among other things, improving efficiency and reducing CO₂ emissions.

Issues of our foundational businesses

- Optimization of working capital through proper inventory management
- Need for BCP assuming supply chain disruption due to tariffs disputes and other geopolitical risks
- Assuring the supply chain is ready for the reorganization of the domestic petrochemical industry
- Expanded sales of Nagase Viita products using Prinova’s food industry networks
- Increasing marketing reach and operational efficiency activities through digitalization
- Further collaboration beyond industry and business boundaries

Manufacturing Function Semiconductors Special Feature

Contributing to Industry through the Synergy of Semiconductors, the Environment, and Technology

Our growth alongside the domestic semiconductor industry

The semiconductor industry in Japan began when NAGASE Group established a joint venture company as a sole agent for America's Eastman Kodak Company (currently Kodak) and started importing video film that would later be used for semiconductor photolithography technology. Since 1974, NAGASE has held the NAGASE Microelectronics Seminar, a cross-industry workshop for domestic semiconductor-related companies aimed at improving semiconductor technology.

Connections with the full value chain

As a manufacturer and supplier of both materials and equipment, NAGASE expands globally while connected to the full value chain in the semiconductor industry and has carved its unique position. It is because the Company has manufacturing functionality within the Group, that we can solve critical problems at key processes and respond quickly to changing customer needs or technology trends. Moving toward our customers' next goals we improve the surrounding processes and involve relevant parties when offering suggestions.

Number of semiconductor-related business partners
Approx.
300 companies

Number of business partners as a chemical trading company
Approx.
18,000 companies

Issues in the semiconductor industry

- Growing importance of semiconductors (growth of IoT, advancement in communication technology, etc.)
- Economic security (geopolitical risks ⇒ local production and consumption needs, rebuilding the supply chain)
- Technology trends, such as Chiplets
- Environmental regulations, recycling (changes in products handled)

NAGASE's value provided

Semiconductors (digital industry)

Ability to make suggestions to the electronics industry
Rebuilding each supply chain

Environment (greenification)

Materials / processing / low-consumption electrical products

Technology

Customization / sheeting technology / recycling technology

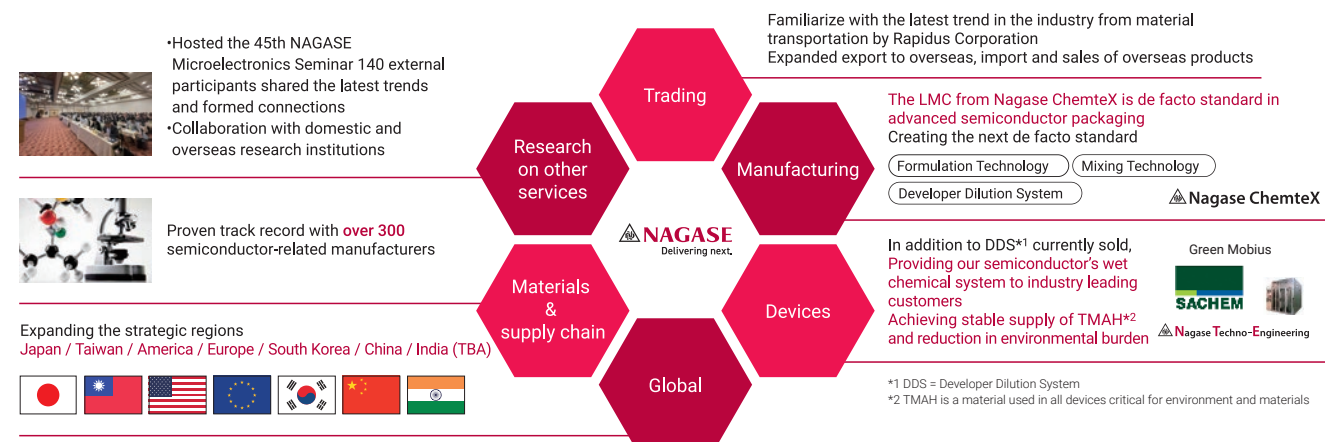
Strengths (resources) and strategies behind the value offered by NAGASE

The Company uses its **proprietary technology to develop products** not yet found, and avoids imitating what other companies may have achieved

First, we produce results with **industry-leading customers, and strive to become the de facto standard**

Involving the peripheral materials and device manufacturers with our internal products, we secure our position as the de facto standard, and continue to **expand our business range as a trading company**

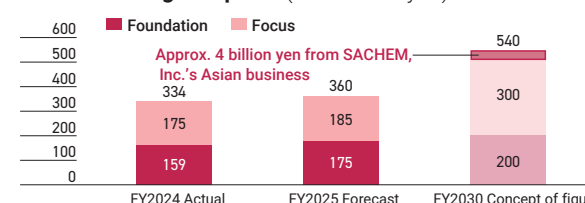
To improve the NAGASE model, we will provide with more comprehensive strategic measures that can be used to **tackle clients' concerns**



Announcement of the acquisition of SACHEM's Asian business

In preparation for the full-scale launch of our recycling business for high-purity developer (TMAH: tetramethyl ammonium hydroxide), a chemical solution essential to the semiconductor manufacturing process, we acquired the semiconductor-grade high-purity chemicals business of US-based SACHEM, Inc. (hereinafter, SACHEM) in the Asia region in June 2025. SN Tech Corporation (hereinafter, SN Tech), a joint venture between NAGASE, Nagase ChemteX, and SACHEM, which has advanced technological capabilities and expertise in the area of high-purity chemicals, has been working on the recycling of developer for LCD panels since 2008. Based on the know-how we have accumulated, we will launch a business that recovers and recycles developer for advanced semiconductors, leading to the expansion of our semiconductor manufacturing business.

Semiconductor gross profit (100 million yen)

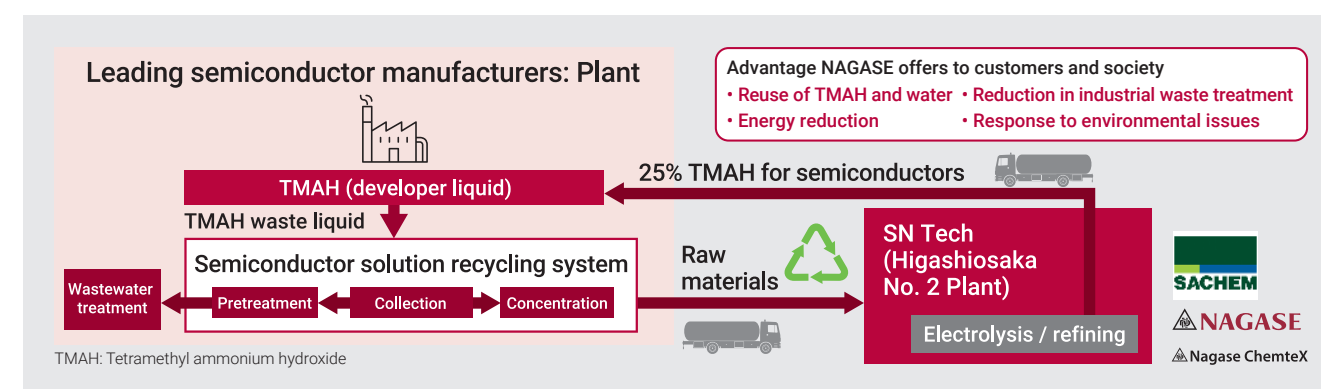


Contributing to the industry's environmental efforts through developer recycling

Until now, used developer has been treated as chemical waste, posing environmental and financial challenges for the semiconductor manufacturing industry. In this business, we will use advanced electrolysis and refining technologies to recover and recycle these materials and deliver them back to semiconductor manufacturers. This cutting-edge initiative is the first of its kind in Japan, and one of only just a handful in the world. The new plant is equipped with electrolysis and refining facilities for the manufacture and purification of TMAH. In addition to reducing the environmental impact of TMAH, this initiative will also reduce the costs associated with procuring a stable supply of the material, as well as its disposal as industrial waste, thereby contributing to improved profitability.



New TMAH recovery/recycling plant in HigashiOsaka City (opened March 2025)



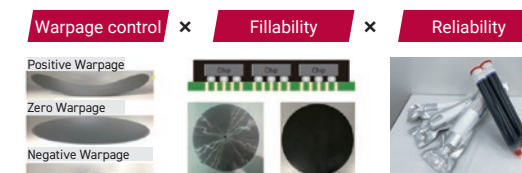
Solving the challenges of advanced semiconductor packaging with liquid molding compounds (LMC)

We began manufacturing epoxy resins in 1970, and introduced the technology for processing it into liquid molding compounds to Japan in the 1980s. Since then, the technology has evolved to become applicable to a wide variety of purposes and shapes. Nagase ChemteX's liquid molding compounds have become the de facto standard for applications involving advanced semiconductor packaging, which are essential for technologies such as generative AI. As the semiconductor encapsulation process grows increasingly complex, with semiconductors stacking ever more layers, we respond to customers' needs with our advanced

formulation technology and highly reliable molding compounds. In 2000, we succeeded in developing sheet molding compounds, benefiting customers through improved processes and reduced cost.

Complexity of semiconductor package configuration

Functions required for a semiconductor molding compound



Manufacturing Function

Prinova

A key driving force in food, one of our focus areas

Realizing rapid and sustainable growth

The US-based Prinova Group, which joined the NAGASE Group in 2019, operates a business in the food and nutrition field with a vertically integrated value chain that handles everything from material supply to product development and final product manufacturing. It is one of the world’s biggest players in the field of food ingredients, including vitamins, amino acids,



Carried products

minerals, sweeteners, and caffeine. Doing business primarily in Europe and the Americas, Prinova has particularly extensive experience in the sports nutrition market, where it has a wide network.

Prinova is still actively investing in expanding its business, and continuing its work to strengthen its manufacturing capabilities and expand into new business areas.

Investments to strengthen/expand businesses		
Objective	Examples of investments and their generated value	
Acquire high value-added services	Acquisition of sweetener distributor TIH in 2021	Expansion into the sweeteners market
Increase capacity/efficiency	Acquisition of powder milling and micronation service provider Lakeshore in 2021	Expansion of powder processing function
Advance Prinova's regional strategy	Acquisition of essential oil distiller Flavor Tec in 2023	Expansion of essential oils manufacturing function
	Building of new plant in Utah (USA) in 2022	Expansion of contract manufacturing
	Acquisition of food ingredient trading company Aplinova in 2025	Expansion into the South American market

*TIH: The Ingredient House, LLC *Lakeshore: Lakeshore Technologies, LLC
*Flavor Tec: Flavor Tec - Aromas De Frutas Ltda

Message from the Prinova Group President & CEO

A partner who continuously provides value by evolving and adapting to the Global market

Prinova has leveraged its strength as a global trading company with one of the world’s largest distribution networks for food and nutritional ingredients to expand its contract manufacturing business for premixes, flavors, and other products. In doing so, our business model has evolved into a hybrid combination of trading and manufacturing. Since becoming part of the NAGASE Group in 2019, we have further expanded the scale of sales of the 23 Prinova group companies, which are located primarily in the US and Europe. We have also steadily strengthened our manufacturing capabilities and broadened our market access.

Our growth extends beyond mere expansion of scale. By integrating the scale of our trading function with innovation in manufacturing technology, we have been able to create new value across the entire supply chain. Moving forward, we will continue to develop our hybrid business model, aiming to become a trusted partner in the global nutrition industry.



Masaya Ikemoto
Chairman, President & CEO, Prinova Group LLC

Restoring profitability in the nutrition business

The state of the nutrition business

The launch of the Utah Plant in the United States is not proceeding as planned, resulting in targets for the overall nutrition business not being met. Prinova is investing resources into achieving profitability as soon as possible, which is the company’s top priority. Currently, it is working to reduce costs through efficiency improvements and improve its topline.

Cost reductions through efficiency improvements

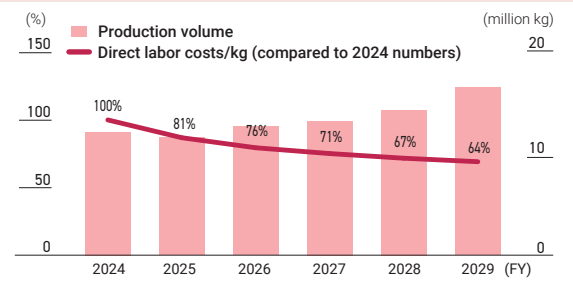
By getting automated equipment introduced in fiscal 2024 operating at full capacity, and implementing advanced process controls, the Company will increase productivity and improve

the efficiency of each process. This will enable it to curb fixed and variable costs, eliminate waste, and improve profitability, allowing the business to return to profitability in the future.

Improving topline performance

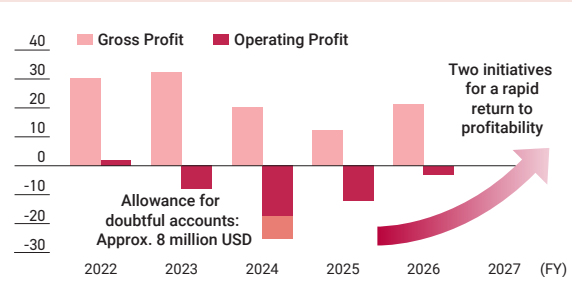
Prinova is working to improve its project management and revitalize its sales organizations. It is identifying the priorities and necessary resources for each customer segment, while also expanding its focus to include the life and wellness market in order to capture market growth. The Company is also offering convenient packaging such as stick packs.

Outlook for efficiency improvements



* Starting from fiscal year 2025, the Prinova Group partially changed the classification of manufacturing costs and selling, general and administrative expenses. The figures, including those for prior years, represent approximate amounts after reclassification reflecting this change.

Nutrition business profit recovery (million USD)



Allowance for doubtful accounts: Approx. 8 million USD

Two initiatives for a rapid return to profitability

Concrete Growth Measures

Strengthening supply chain initiatives (Expansion into South America through acquisition of Aplinova)

As the major global players it supplies expand into the South American market, the Prinova Group launched its full-scale expansion into the Global South by acquiring Brazil-based food ingredient trading company Aplinova in April 2025. With

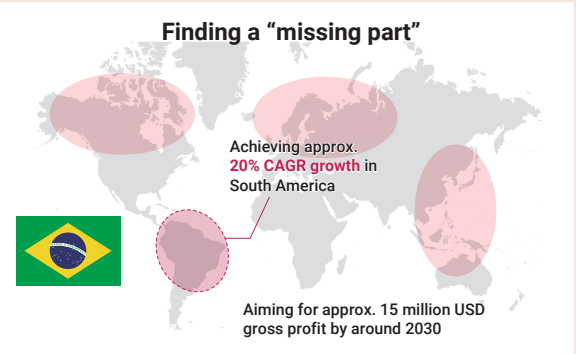
Aplinova serving as Prinova’s local point of contact, adoptions of products carried by Prinova in the region have expanded, and the Group has increased its presence in Brazil. Moving forward, Prinova will leverage its customer base of more than 1,000 companies with an aim to achieve gross profit of approximately 2 billion yen by 2030.

Expanding the product portfolio

In addition to strengthening its supply chain, Prinova also invests in the research and development of unique products that leverage its manufacturing technology. Such expansion of the product lineup contributes to its trading business in terms of both volume growth and market expansion. By deepen cooperation between its bases, it will accelerate the creation of unique and innovative products.

Collaboration within the NAGASE Group

Collaboration within the NAGASE Group, such as the global distribution of Nagase Viita’s enzyme products via Prinova, is generating a variety of synergies including the expansion of sales channels. Moving forward, we will accelerate our global expansion into food through further collaborations of this nature.



APLINOVA

Network of 1,000+ customer companies

Prinova

NAGASE Group

Product lineup



Manufacturing Function Life Sciences

Launch of Nagase Diagnostics Co., Ltd.

In July 2025, the NAGASE Group incorporated Nagase Diagnostics Co., Ltd. (NDX), which took over the diagnostics business of Asahi Kasei Pharma Corporation, in order to strengthen its manufacturing capabilities and functions in the life sciences field. NDX develops, manufactures, and sells diagnostic reagents, enzymes, and other life science-related materials.

Diagnostics business

Diagnostic reagents are used to analyze body fluids (blood, urine, etc.) as part of routine health checkups and to monitor the effectiveness of disease diagnosis and treatment. They are widely used by medical and research institutions. Diagnostic enzymes are the raw materials used to manufacture diagnostic reagents. By reacting with specific substances (chemical components, proteins, metabolites) contained in blood and other body fluids, they generate and/or amplify optical signals, enabling precise measurement of the concentration of the target substance.

Building a foundation for synergy through human and technical exchanges

The NAGASE Group believes that in order to achieve the

true purpose of Nagase Diagnostics' incorporation into the Group, which is to generate synergy, it is essential to understand the new company's business and get to know its people. On the first day of the incorporation, a kickoff ceremony was held in the Ohito District of Shizuoka Prefecture's Izunokuni City, where the company's manufacturing and development base is located, with approximately 200 employees in attendance. At a later Group employee exchange event held at NAGASE'S Tokyo Head Office in July, NDX Representative Director Hironao Makise introduced the company's business and its employees, helping to deepen its ties with the Group.



Uniqueness of Nagase Diagnostics



In vitro diagnostic (IVD) assay kit using a unique enzymatic method

Utilizing a unique enzymatic method, NDX developed the Lucica™ GA-L assay kit for measuring glycated albumin (GA), an indicator of blood sugar management, and has been manufacturing and selling it since 2004. In 2022, it launched Lucica™ GA-L2, an assay kit compatible with a standard reference material for GA assays, allowing for higher reliability in medical and laboratory settings. It also manufactures and sells Lucica™ MI, an assay kit for measuring myo-inositol in urine samples, helping to screen for impaired glucose tolerance, which cannot be determined by fasting plasma glucose testing alone.

Strengthening the diagnostics business and contributing to long-term Group growth

NDX develops, manufactures, and sells various diagnostic reagent enzymes used in a wide range of applications, including the analysis of blood glucose and lipids, kidney function, and liver function. Its strength lies in the manufacture of a wide variety of enzymes using its unique microbial culture technology, among other capabilities. The NAGASE Group has long engaged in the research, development, manufacture, and sale of industrial enzymes and enzymatic reaction products, primarily through our core manufacturing company in the biotechnology business, Nagase Viita, providing products to a wide range of industries. Moving forward, the NAGASE Group will combine NDX's diagnostic enzyme manufacture technology and application know-how with its existing businesses to create technological synergy. At the same time, we will leverage NAGASE's global network to accelerate our expansion into the medical and healthcare markets in India and Southeast Asia, which we expect to grow in the future.

New Regions Global South



We are working to strengthen the next base by accelerating our investment into human and other resources in India, Indonesia, Mexico, and Brazil (the Global South), positioned as new regions expected to see continued growth moving forward.

Latest initiatives in the Global South

India		Expanding the market for mobility, life & healthcare products, semiconductors, smartphones, etc.
Indonesia		Pioneering markets in the area of food (food materials) as population grows
Mexico		Strengthening local manufacturing function in the area of mobility China → Creating new businesses through talent exchanges between overseas locations in Mexico and other countries
Brazil		Expanding our agricultural products



Become a reliable partner for seizing opportunities in rapidly growing India



CEO, Nagase India Pvt. Ltd.
Eiroku Oki

With the Indian market growing rapidly in recent years due to population growth and the international situation, Japanese companies in the automotive, food, and many other industries have been expanding their presence in the country. There are also expectations for a future revitalization of the semiconductor sector. Nagase India, which celebrated its 60th anniversary this year, aims to become a reliable partner for companies taking on the challenge of doing business in a different cultural and business environment. We will do this by further leveraging strengths including the know-how and networks we have built in India, as well as our excellent Indian staff with many years of experience, and by providing support such as back-office development. We will also expand our businesses that utilize India's highly competitive materials.

Establishing a joint venture to expand the connector business

NAGASE established a joint venture with Japan Aviation Electronics Industry, Ltd. (JAE) in March 2025 with an aim of expanding sales of automotive and motorcycle USB chargers and connectors in the Indian market. Already one of the world's leading markets, the Indian market for these products is expected to grow even further as government policies accelerate the country's transition to electric vehicles. Building on its know-how on doing business in India, as well as its local networks, NAGASE will grow this business alongside JAE, which is a global supplier of automotive connectors and harnesses. We aim to strengthen our customer support, establish production capabilities through collaboration with local partners, and reinforce the supply chain.

Expansion of our high-value-added plastic and resin business

While our plastic and resin business has long led the ASEAN and Chinese market, we established a joint venture company in June 2025 with the aim of expanding it into the Indian market. The new company, NAGASE WAHLEE INDIA PRIVATE LIMITED (NWI), is a partnership between Taiwan-based Nagase Wahlee Plastics Corp. (NWP), our main distributor of plastics in Greater China, and Nagase India (NIN).

NWI will combine NWP's expertise in the needs and business practices of Chinese and Taiwanese customers with NIN's insights on the Indian legal and regulatory system. In this way, it will carefully identify new business needs in India, thereby maximizing business opportunities.



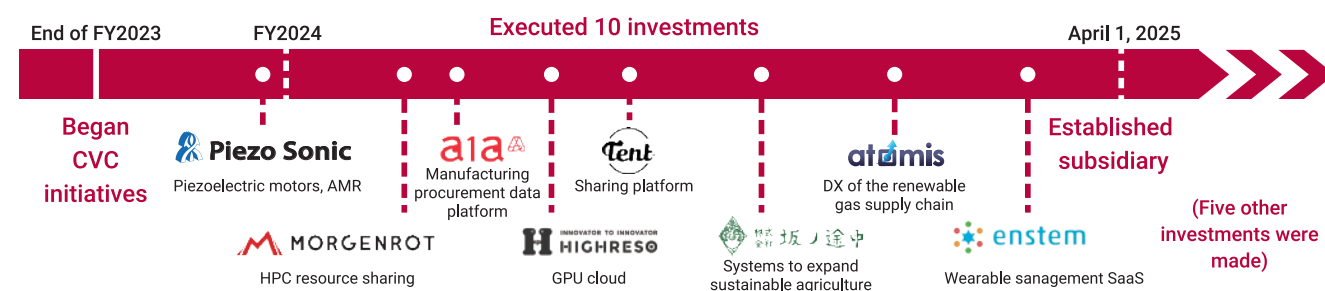
Developing Next Generation Businesses Corporate Venture Capital

Entering new business areas and acquiring new technologies through CVC investment

The Company has begun initiatives with CVC starting from fiscal 2023 in order to elevate our investment in start-up companies who have new business ideas, and to acquire a broad array of knowledge of cutting-edge technology and business models. Spearheaded by Nagase Future Investments established in April 2025, this initiative is promoting the creation of a foundation for the creation of next-generation businesses as a

business intelligence function. As of the end of fiscal 2024, we have invested in 10 start-up companies in areas outside those of NAGASE's existing businesses.

For example, we have invested in Highreso Co., Ltd., which operates a GPU cloud service, SAKA NO TOCHU Co., Ltd., which promotes ecological agriculture, and enstem Inc., which provides vital signs monitoring services using wearable devices, among other companies developing next-generation businesses. NAGASE continues to invest and form partnerships through CVC, accelerating its search for new business opportunities.



R&D Bio

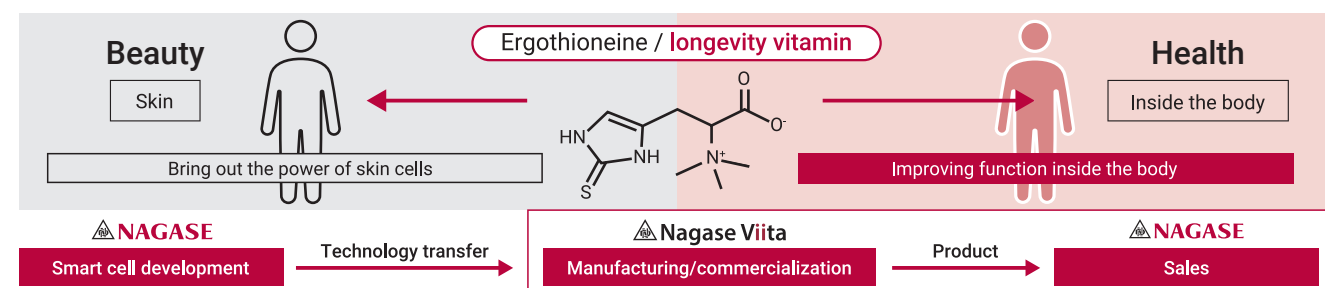
Commercialization of the longevity vitamin ergothioneine

Present in fungi in small quantities, ergothioneine (EGT) is a next-generation functional material expected to have a wide range of applications including treating the symptoms of neurodegenerative diseases (such as Alzheimer's disease and Parkinson's disease), depression, skin aging (wrinkles and spots) due to UV light, and cataracts, as well as controlling glycativ stress. EGT cannot be produced in the human body, and it decreases with age and with stress. EGT is difficult

to naturally extract with high purity and leaves a large environmental footprint when chemically synthesized so there were issues with commercialization.

In 2020, Nagase Bio Innovation Center succeeded in raising the production of EGT about 1000x over the conventional method using smart cell technology (biosynthesis technology that artificially maximizes the substance production capability of cells).

The center is currently working toward launching products in the cosmetics field, and plans to eventually expand into food products, aiming to contribute to the extension of human healthspan worldwide.



Initiatives to Improve Profitability



Recognizing withdrawal losses early, aiming for future business growth

We are working to ensure that future losses are as close to zero as possible. Regarding the assets of unprofitable operating subsidiaries and assets of concern for impairment loss, we have formulated and are implementing a concrete action plan for reducing losses, without eliminating the possibility of withdrawals or sales.

Further, the Company utilizes its conference bodies, with the corporate divisions and business departments collaborating, as it aims to strengthen its monitoring. Regarding fixed assets and investment securities at risk of impairment losses, the Company clarified the items to be monitored by establishing criteria for listing. Furthermore, the supervising organization formulated countermeasures and plans for those items, and submitted them to the corporate division. By establishing and deploying this kind

of monitoring process, the Company is working to prevent the occurrence of losses in advance.

Previous withdrawals

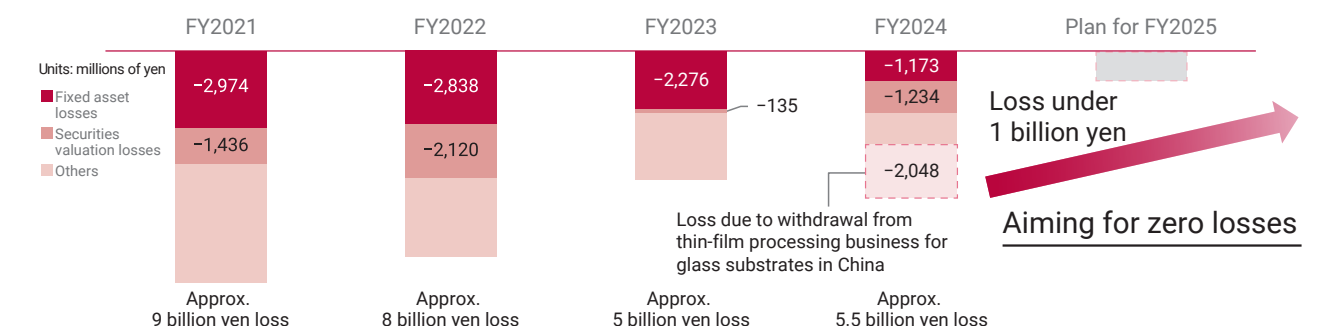
In fiscal 2024, the Company decided to reorganize and withdraw from the three businesses in the table below, and then executed those withdrawals. In addition, the Company recorded impairment losses of approximately 5.5 billion yen, including valuation losses on certain securities, as well as impairment losses on goodwill, etc. in the United States.

We will make improvements with an aim of keeping losses in fiscal 2025 under 1 billion yen.

By the end of 2025, the Company plans to transfer all of its shares of optical device functional material developer and manufacturer Inkron Oy to an electronics parts manufacturer in Taiwan as part of an effort to optimize the allocation of management resources.

Challenges and improvement measures	FY2024 withdrawals	
1. Operating losses of our operating subsidiaries and equity losses of our affiliates Rapidly formulate and implement improvement plans. Consider withdrawing from operations that seem unlikely to improve	Sakai Display Products Corporation On-Site Factory LCD market downturn Closure of Sakai Display Products, a customer we supplied	Decision to withdraw in 2024 Closure
2. Assets at risk of impairment loss Strengthen monitoring of assets at risk of impairment loss and minimize that impairment	U.S. color former business Intensifying price competition due to market glut Thermal paper market downturn	Decision to withdraw in 2023 Liquidation and withdrawal
3. Unprofitable business Arrangements List and monitor all dealings. Return business rights when improvement seems unlikely	Thin-film processing business for glass substrates in China We started this processing business in Taiwan, and later transferred it to China, but there was increased internalization of production, and intensifying price competition	Decision to withdraw in 2020 Decision to dispose after withdrawal

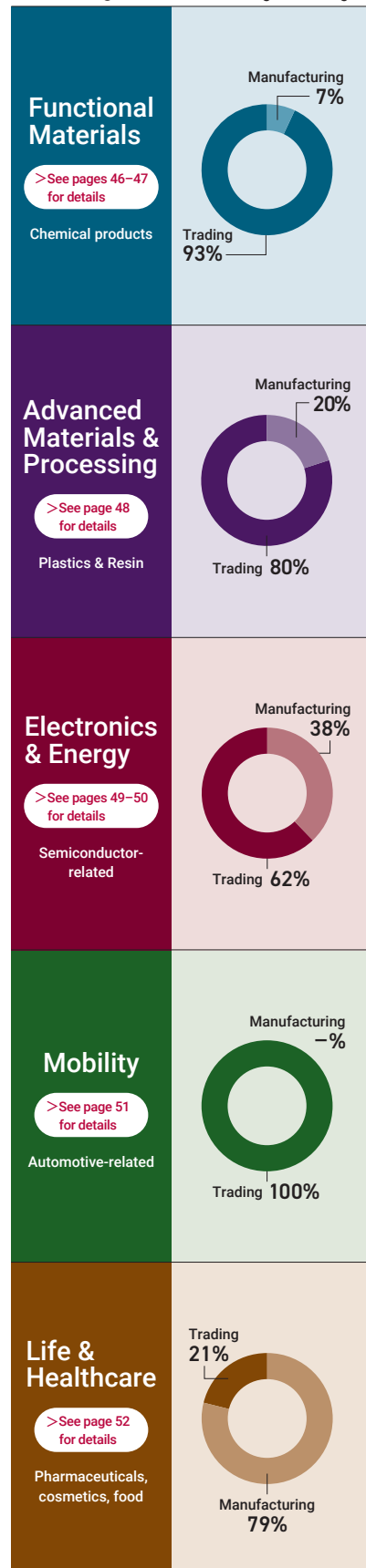
Financial scale of operating subsidiaries' operating losses, equity losses, impairment losses, and unprofitable business arrangements



List of Segments (As of the end of March 2025)

Business segments

Shares of gross profit held by manufacturing and trading^{*1}



Departmental initiatives

Performance Chemicals Dept.

The Performance Chemicals Department provides high-performance materials for a wide range of industries, including coatings, inks, paints, urethane, toner, textiles, paper-making, and LCD. It is also responding to customers' needs by developing sustainable products, demand for which is rapidly increasing, based on the key words "environment" and "bio," and by effectively utilizing the functions of the NAGASE Group as a whole, including manufacturing, R&D, and processing.

Speciality Chemicals Dept.

The Speciality Chemicals Department provides chemical materials, devices and processing services for the chemical industry, with a focus on semiconductor materials, oils and surfactants, organic synthesis, petrochemicals, polymers, etc. Playing an important role in the chemical industry's supply chain with an extensive network of business partners globally, and the know-how obtained through handling over 10,000 product items, it is also developing new businesses with unique technologies, thereby helping to solve the issues of customers all over the world.

Polymer Global Account Dept.

With a well-developed sales network and experienced local staff in the Asia Pacific region, the Polymer Global Account Department works with global companies to sell plastic resins for a wide range of industries, including office equipment and the electrical and electronics industries. It is also focusing on eco-friendly businesses and providing environmentally friendly materials and services, such as recycled materials and biomass plastics.

Electronics Dept.

In addition to providing functional materials and their constituent components to the silicon wafer, semiconductor, electronic components and display industries, the Electronics Department is working with partner companies to develop products that align with market and customer needs.

Advanced Functional Materials Dept.

The Advanced Functional Materials Department offers products and services developed based on Nagase ChemteX's formulation, compounding, precision cleaning, surface treatment, and photosensitive materials design technologies. These include but are not limited to formulated epoxy resins, developer, re-claiming of stripper, and high-performance materials for 3D printing. Its customers include domestic and foreign companies in key sectors such as the electric/electronics industry, mobility, energy and the environment, semiconductors (photolithography and encapsulants), and displays.

Mobility Solutions Dept.

The Mobility Solutions Department contributes to the realization of a safe, secure and comfortable mobility society by grasping the needs of the mobility industry, including automobiles and motorcycles, agricultural machinery, construction machinery, and aircraft, and by offering diverse solutions through pursuing new technological innovations.

Life & Healthcare Products Dept.

In the pharmaceutical, medical, cosmetics, household goods, and food products (processed foods and nutrition) sectors, we provide a wide range of solutions throughout the world through the NAGASE Group's manufacturing, processing, procurement, logistics, research, application development and regulatory-related functions. The Life & Healthcare Products Department is striving to contribute toward the realization of healthy, enriched lifestyles.

Main products and services

Performance Chemicals Dept.

Raw resin materials, plastics and resins, solvents, pigments and dispersions, dyes, colorants, additives, raw urethane materials, release agents, conductive materials, functional films, adhesives, sanitary product materials, the Mixing Concierge™ service, the Dispersion Processing Total Coordination service, the Chemical Search service (for the CASE field), the Chemicals AI Cooperative Logistics Matching Service, and NAGASE's original Chemical Industry Safety Education VR Goggles

Speciality Chemicals Dept.

Organic chemicals, inorganic chemicals, high-purity chemicals, various types of additives, polymers, bio-products, specialty epoxy resins, specialty acrylic rubber materials, polymer filters, enzymes, water treatment equipment, metal organic framework (MOF), and contract manufacturing matching services

Polymer Global Account Dept.

Engineering plastics, commodity plastics, packaging materials and other plastics-related products and services

Electronics Dept.

High-precision abrasive materials, optical materials for displays, touch panel components, functional coating, conductive and insulating materials, adhesive and encapsulating materials, high-heat-resistant films, optical lenses, high-frequency devices, low dielectric materials, sensing modules, optical materials for XR, semiconductor and electronic device-related equipment

Advanced Functional Materials Dept.

Formulated epoxy resins and related materials, photolithography materials for flat panel displays and semiconductors

Mobility Solutions Dept.

Various plastics, functional paints, adhesives, lightweight components, decorative components, HMI components

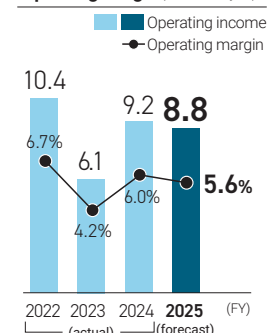
CASE-related:

xEV-related components, heat management components, battery materials, sensors, LiDAR devices, autonomous driving technologies

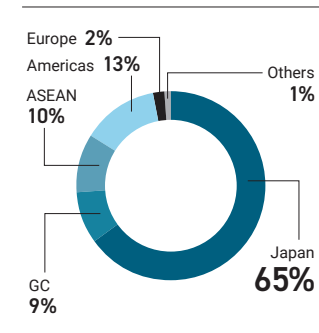
Life & Healthcare Products Dept.

Pharmaceutical products (APIs, additives, intermediates, and other materials), materials for in vitro diagnostics, raw materials for cosmetics and household goods (active ingredients, additives, emulsifiers, and fragrances), food ingredients (nutritional materials, functional saccharides such as TREHA™, glycosides, enzymes, and other processing aids), premixes (OEM/ODM), agricultural applications (including livestock raising) and fisheries, and endotoxin removal services

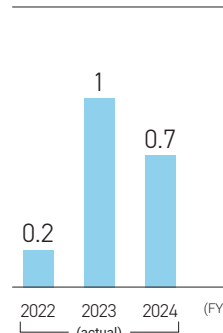
Operating income and operating margin (Billions of yen)^{*2}



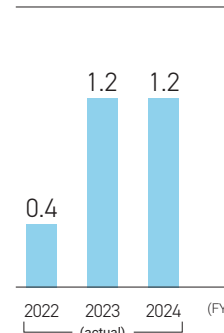
Gross profit by area



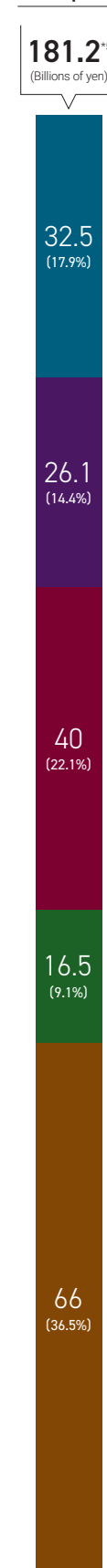
R&D expenses (Billions of yen)^{*3}



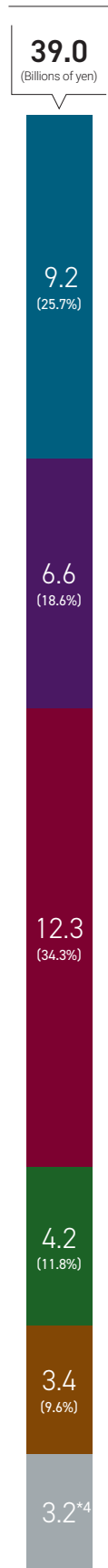
Capital investment (Billions of yen)^{*3}



Gross profit



Operating income



^{*1} The trading portion of gross profit includes Other/Corporate, and takes into account the effect of consolidated adjustments.

^{*2} In order to realize more appropriate management of the reported segments, starting from the fiscal year ended March 31, 2025, the method used for allocating company-wide common expenditures is being partially adjusted, with part of the company-wide common expenditures that were previously included under "Other" being allocated to individual segments. Data for fiscal 2022 are presented prior to this allocation; data for fiscal 2023 and fiscal 2024 are presented after this allocation.

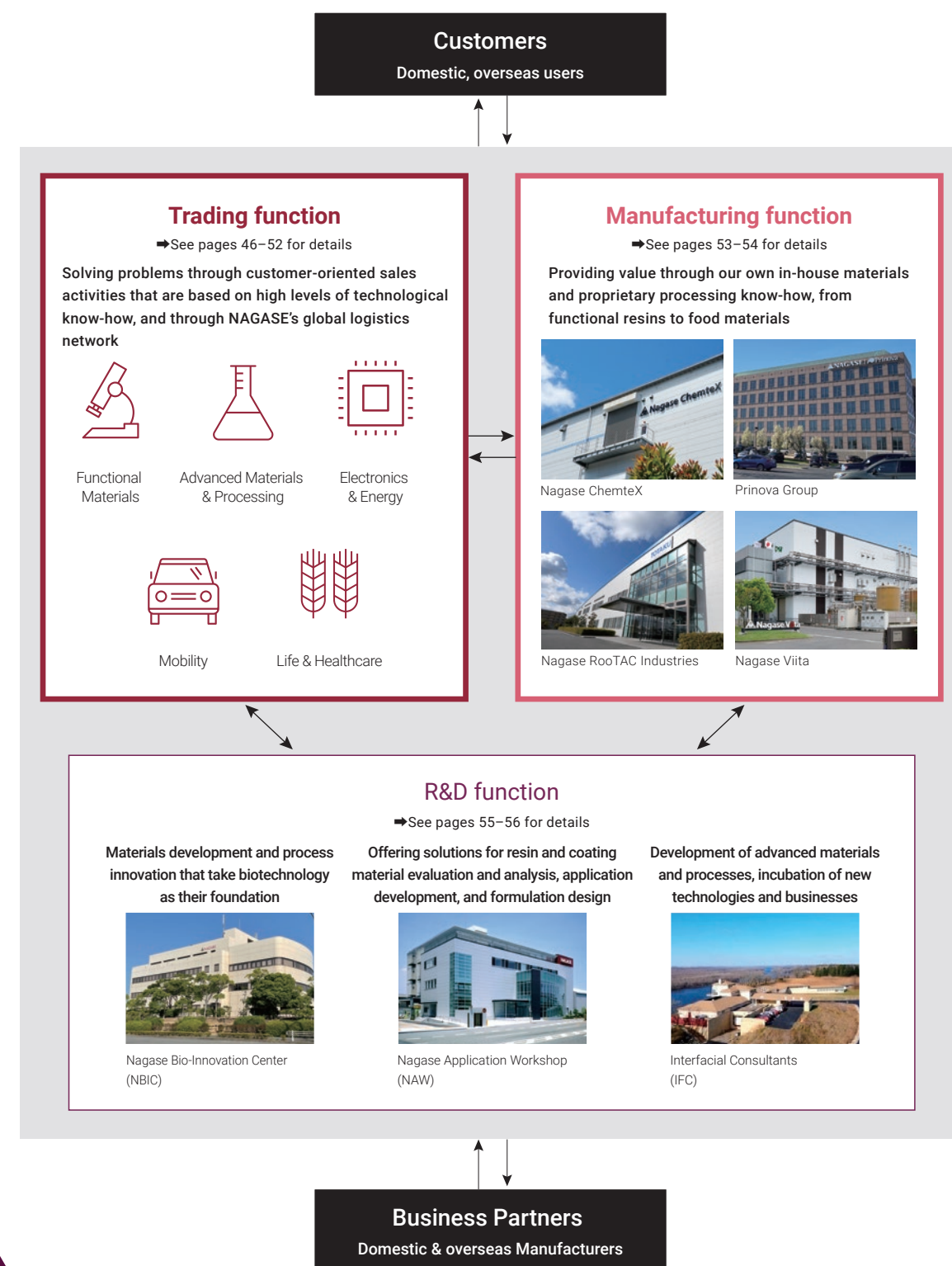
^{*3} These data were calculated based on the business classification adjustment conducted to accompany the business restructuring implemented in October 2023. (This does not apply to the actual performance data for R&D expenditure and capital investment for FY2022.)

^{*4} ■ Other/Corporate: Includes businesses not included in reported segments and eliminated inter-segment transactions, etc.

^{*5} Starting from the first quarter of the fiscal year ending March 31, 2026, the classification of manufacturing costs and selling, general, and administrative expenses at the Prinova Group were partially changed. However, the figures for the fiscal year ended March 31, 2025 are those prior to the retrospective application of the updated accounting policy. Note: Other/Corporate is not included in the calculations of segment composition ratios for gross profit and operating income.

NAGASE's Unique Functions

NAGASE offers a uniqueness only possible through their integration of the functions of Trading, Manufacturing, and R&D.



Trading Manufacturing R&D

Functional Materials Segment

Performance Chemicals Dept.

GM, Performance Chemicals Department Masuo Higuchi



Examples of products

- Coating materials used in automotive manufacturing and construction
- Dyes used in garment manufacturing
- Toner materials
- Materials used in displays for TVs, smartphones, office equipment

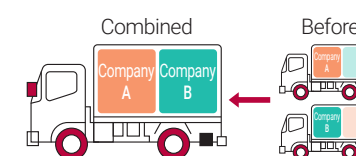
Examples of products and services contributing to solving societal and customer issues

- Joint development of adult diapers utilizing bio-derived super-absorbent polymers
- Chemicals AI Cooperative Logistics Matching Service
- Mixing Concierge™ which visualizes the mixing process (P. 59)

Results Effective utilization of digital technology

Meeting the needs of individual customers and industries with our unique technologies

As the needs of manufacturers become more diversified, we are promoting the commercialization of a service model that not only involves offering customers proposals for raw materials, but also leverages digital transformation (DX). For example, our Chemicals AI Cooperative Logistics Matching Service optimizes logistics between multiple companies, helping solve logistical problems and reduce GHG emissions. Meanwhile, our Mixing Concierge™ service visualizes liquid mixing processes, which are an essential part of manufacturing, improving productivity and facilitating the transmission of skills to the next generation. Furthermore, we started offering Chemical Search, a material search service designed specifically for the CASE* field. Going forward, we will



(Matching inefficient loads)

Chemicals AI Cooperative Logistics Matching Service

support the continued development of the chemical industry by combining unique materials and technologies with our digital insights.

*Coatings, adhesives, sealants, and elastomers.

Challenges Unprofitable business reorganization and growth strategy

Integrating manufacturing function to improve profitability

We achieved profitability in our color former business by withdrawing from the U.S. color former business, as well as by revising unprofitable business arrangements and streamlining operations at our manufacturing sites in Japan. Furthermore, in April 2025, the functional dyes business (Fujita Plant) of Nagase Viita was integrated into Nagase ChemteX's Okayama Office, and Fukui Yamada Chemical Industry was made a subsidiary of Nagase ChemteX, with the aim of strengthening our chemical manufacturing function. Moving forward, we will aim to strengthen our profit base and achieve sustainable growth across the entire Group by enhancing production efficiency and strengthening our development capability through technology synergies, promoting business continuity planning (BCP) measures as part of our strategy to develop our network of business locations, and making talent cultivation more efficient through the flow of talent between business locations.



Fukui Yamada Chemical Industry Co., Ltd.



NAGASE has solutions

Customer's voices **NATOCO Co., Ltd.**

Providing immersive VR-based educational content as a partner for eliminating accident

We introduced NAGASE's safety education VR goggles as a measure to prevent occupational accidents, which is a major issue in the chemical industry. By adding immersive VR-based education to the case studies used in our traditional classroom training, participants can now benefit from both experience-based learning and detailed explanations. This has proved especially useful in promoting the understanding of participants, particularly new employees and those coming from other industries, and instilling in them a safety mindset. We feel that the educational content, which was supervised by the Japan Paint Manufacturers Association, is both practical and of high quality, owing to its industry-specific nature, as well as its high functionality that allows it to be adapted to group training. The elimination of accidents is an important issue that directly affects the sustainability of our production activities, our customers' peace of mind, and employees' safety. Like the saying goes, "NAGASE has solutions." We are looking forward to more of such unique proposals from NAGASE.



Tomoaki Kogure
Plant Manager, Gunma Plant,
Production Department
NATOCO Co., Ltd.

Jumpei Yamada
Total Solution Office
Performance Chemicals Dept.
Nagase & Co., Ltd.

Trading

Manufacturing

R&D

Functional Materials Segment



Speciality Chemicals Dept.

Executive officer
GM, Speciality Chemicals Department **Kenichi Kurimoto**

Final products in people's lives

- Raw materials for semiconductors used in generative AI servers
- Raw materials for 3D printers inks
- Raw materials for oils used in the manufacture and processing of textile fibers, metal car parts, etc.
- Polymer filters used in EV battery components

Examples of products and services contributing to solving societal and customer issues

- Environmental solutions: Managing operation and reducing the costs of factory wastewater treatment
- Flow synthesis: Improving the safety, working environment, and production efficiency of organic synthesis reactions using batch methods
- Semiconductor business proposals: to deal with mitigating geopolitical risks in raw chemical material procurement (multiple sourcing and contract manufacturing)

Results ROIC-focused management

Building a system for monitoring ROIC improvement

We worked to promote ROIC-focused management, and were especially particular about our results. We established a new planning office to conduct organization-wide monitoring of three themes: (1) pursuing profits commensurate with functionality, (2) reorganizing unprofitable businesses, and (3) reducing long-term inventory. As a result, we were able to make significant improvements in each area. In fiscal 2025, in addition to continuing this monitoring, we will also aim to maintain close communication with our consolidated subsidiaries and promote improvement activities as a unified Group. As an extension of ROIC-focused management, we will advance initiatives aimed at improving the productivity of each and every employee. More specifically, we have begun work to revise our business department's internal education system and make operational efficiency improvements utilizing tools such as generative AI and RPA. As a measure to address last year's issue, "evolution of our business models," we developed five-year growth scenarios for each of our businesses. In our trading business, we spelled out the direction that the semiconductor-related business will take globally, and expanded its resources. In our manufacturing business, we formulated a growth strategy together with Group companies, and are currently turning the PDCA cycle.

Challenges Develop Human Resources

Building an organization capable of recognizing individual and organizational issues and taking action

Our business department is working to build a framework that allows employees to recognize individual and organizational issues and encourages their continuous self-driven growth. We began implementing new initiatives in fiscal 2024, and have created a variety of venues where employees can discuss issues, including dialogue meetings with general managers. One of the concrete measures to address issues we are trialing is a buddy system for our younger employees. Another is an award system aimed at boosting motivation and fostering healthy competition between organizations. We will also create a framework for employee skill development by using external training programs and other means to systematize their acquisition of the basic knowledge needed by business professionals.

Trading

Manufacturing

R&D

Advanced Materials & Processing Segment



Polymer Global Account Dept.

GM, Polymer Global Account Department **Koji Yoshida**

Final products in people's lives

- Office equipment
- Smart devices
- Cosmetics containers
- Laptop computers
- Game consoles
- Food packaging

Examples of products and services contributing to solving societal and customer issues

- A post-consumer recycle that contributes to a circular society
- Biomass-derived plastics which contribute to a carbon-neutral society
- PFAS* alternatives that contribute to human and environmental safety

*Per- and polyfluoroalkyl substances: A general term for synthetic chemicals primarily composed of carbon and fluorine with water and oil repelling properties.

Results Utilization of digital technology × speedier management

Enhancing decision-making processes with digital infrastructure

As manufacturing grows increasingly diverse on a global scale, we may be entering an age where businesses can no longer survive by relying solely on the experience and intuition of their sales reps. This sense of impending crisis has driven us to create a framework for leveraging digital technology in management decision-making. We are now utilizing it to make decisions and revise our growth strategies based on analysis of sales performance data, customer trends, economic forecasts, etc. To be more specific, our newly launched system is being used to achieve more detailed understandings of the profit structures of business attributes that are complicated to categorize because they span national and regional borders. As a result, we are now able to implement management strategies and allocate personnel in response to changes in market trends. Such multi-axis, multi-faceted analyses are steadily contributing to improved profitability. Moving forward, we will continue to leverage digital infrastructure to maximize ROIC and sustainably enhance business value.

Challenges Successor development and human resource development

Responding to global consolidation by strengthening our human resource strategy and regional collaboration

Industries are increasingly consolidating around major suppliers, while supply chains are becoming increasingly diverse and multipolar. As these processes accelerate, we feel that the traditional Japan-led management structure and Japanese management models are reaching their limits. Keeping a pulse on and correctly responding to the global trend of industry consolidation requires developing human resources with a business integration perspective and building a human resource network. For example, we expect the Indian market to see significant growth, and believe it is important to win the business of Taiwanese and Chinese companies that are transferred to India, especially from China. For this reason, we established NAGASE WAHLEE INDIA in June 2025. Going forward, the implementation of growth strategies for the department's business in India will be led by local staff in Taiwan in collaboration with Taiwan, China, and ASEAN countries.



NAGASE has solutions

Customer's voices **SANKO SEIKA Co., Ltd.**

NAGASE shows great potential as a partner for tackling management issues

In 2024, we declared our commitment to implementing initiatives aimed at realizing a sustainable society as a company rooted in food and health. At the time, one our biggest challenges was our need to cut the cost of our wastewater treatment facilities while also keeping their greenhouse gas emissions low and reducing waste. This is when we received a proposal from NAGASE regarding the introduction of turbo blowers and sludge dehydrator machines, as well as the optimization of their operational management methods. As a result of testing, we cut power consumption by more than 30% while reducing and stabilizing the moisture content of the dehydrated cake, resulting in reduced wastewater treatment costs. During this time, I was reassured by the prompt service of NAGASE's representatives, as well their willingness to engage in discussion, their wide range of capabilities, and their wealth of ideas. We look forward to having a long relationship with NAGASE as partners we can grow with as we expand our business, improve operational efficiency, and address environmental issues.



"Yuki no Yado" crackers
made by SANKO SEIKA



Yuma Nagaoka
SANKO SEIKA Co., Ltd.
Director, Production Section,
Production Division



NAGASE has solutions

Customer's voices **Ishikawa Jyushi Co., Ltd.**

Developing new products with NAGASE's all-in-one resin solution

Through our tableware brand ARAS, we have pursued the concepts of strength, beauty, and form and a value of years and years of use. As part of these efforts, we were searching for new materials that met our high requirements in terms of physical properties and moldability. This search was greatly aided by NAGASE's substantial material proposal capabilities, the rapid formulation design capabilities of the engineers at Nagase Application Workshop, and their ability to flexibly develop materials using prototype equipment. During the material selection stage, NAGASE provided us with suggestions for compounds. They then provided us with all-in-one support for everything from resin formulation design and prototyping to physical property evaluation, mass production, and achieving a stable supply of products. As a result, we were able to go from development to commercialization in a short period of time. We are now offering a lineup of products that combine design with functionality. With deep scoop dish, for example, we were able to achieve a weighty and luxurious feel that belies its resin construction, while with our curry spoon, we were able to achieve an ultra-thin 0.5 mm edge. We look forward to continuing to developing more new products with NAGASE in the future.



ARAS deep scoop dish and cutlery



Tsutomu Ishikawa
COO
Ishikawa Jyushi Co., Ltd.

Trading

Manufacturing

R&D

Electronics & Energy Segment



Electronics Dept.

GM, Electronics Department **Kazuyuki Sato**

Final products in people's lives

- Semiconductors
- Smartphones
- Displays

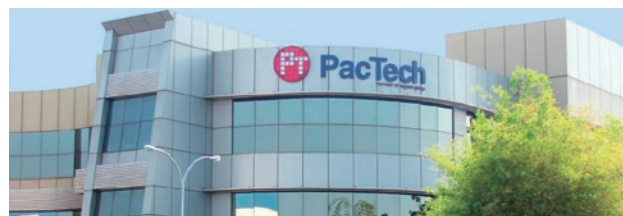
Examples of products and services contributing to solving societal and customer issues

- Materials to achieve low power consumption for use in power semiconductors, and for use in new types of displays
- Heat dissipation and insulation materials for heat management

Results Growth strategy

Accelerating capital investment and personnel allocation in line with regional needs

Last fiscal year, the semiconductor wafer bumping line in Malaysia began operations and contributed to sales. As the focus on semiconductor stacking technology increases, demand for wafer bumping services continues to grow. We will continue to expand our facilities and strengthen our development efforts with the aim of further expanding this business. In terms of our regional strategy, we will promote the allocation of personnel based on market trends in each region. By leveraging our ability to globally respond to the needs of each region, such as by strengthening our marketing structure in the United States, dispatching personnel to India, and seconding overseas subsidiary staff, we aim to solve customers' issues and accelerate their business growth.



PacTech, the Group company that launched our wafer bumping line in Malaysia

Challenges Digital technology + strengthening on-site prowess (global)

Building a growth structure by leveraging digital technology and strengthening our on-site prowess

Our business department is continuing its focus on the utilization of digital tools. In fiscal 2024, we encouraged the utilization of CRM. In fiscal 2025, we will continue this initiative while also promoting the data utilization and analysis with the aim of facilitating information sharing across organizations. Externally, we plan to utilize MA tools and hold online exhibitions. Our aim is to expand online customer contact points and create opportunities for sustainable business development. In terms of strengthening our on-site prowess, we will strengthen collaboration not only between Japan and overseas locations, but among overseas locations. By establishing a system for rapidly sharing the knowledge cultivated in each region, and strengthening our capabilities centered on our on-site prowess, we will aim to achieve further growth.

Trading

Manufacturing

R&D

Electronics & Energy Segment



Advanced Functional Materials Dept.

GM, Advanced Functional Materials Department
Executive officer **Ryuhei Tashima**

Examples of products

- Liquid molding compounds (LMC) for advanced semiconductor packaging used in generative AI and smartphones
- LMC for power semiconductors
- LMC for mobile devices including smartphones

Examples of products and services contributing to solving societal and customer issues

- LMC for advanced semiconductor packaging to increase AI server speed and energy efficiency
- Chemical solution (developer, stripping agent) recycling business to reduce the environmental impact

Results Growth strategy

Further contributing to solving customer issues through dialogue and business investment

In fiscal 2024, sales of liquid molding compounds for advanced semiconductor packaging for generative AI applications grew significantly. Furthermore, we have continued to work with Group manufacturer Nagase ChemteX to propose solutions to various technical issues faced by both domestic and international customers, particularly those arising from the increasing complexity of semiconductor packaging due to Chip-let technology. Ultimately, we were able to realize the mass production of LMCs for next-gen 2.XD packaging.



Semiconductor developer fluid (tetramethyl ammonium hydroxide) storage tank

In addition, we previously established SN Tech as a joint venture to take over the Asian semiconductor developer fluid recycling business of US-based SACHEM, Inc. This will contribute in terms of performance, quality, the environment, and many other aspects. Moving forward, we will strengthen such efforts to contribute to the growth of the semiconductor industry.

Challenges Speeding up management execution and cultivating human talent

Growing into an organization and individuals capable of responding to environmental changes

In the generative AI field where Nagase ChemteX's liquid molding compounds for semiconductors are used, the environment surrounding the semiconductor market is constantly changing due to the growth of the data center market, as well as the impact of the Trump administration in the United States. As a result, our businesses are required to make management decisions more quickly than ever before. In fiscal 2024, our business department further strengthened its human resources, made an all-hands effort to identify potential issues for customers in the market, and strove to provide customers with products and solutions tailored to their pre-, intermediate, and post- processes in a timely manner.

Our aim this fiscal year will be to continue making significant contributions to the full value chain of the semiconductor industry by leveraging the extremely high technology capabilities of our manufacturing function, as well as the sales capabilities of our trading function, which come from the high value-added information we provide.



NAGASE has solutions

Employee's voice

Supporting global procurement in the semiconductor field on assignment to Japan

I am currently working in Kumamoto Prefecture on behalf of NAGASE's Taiwanese subsidiary to build a structure for Taiwanese suppliers to do business with Japanese semiconductor-related customers. Taiwanese suppliers have often encountered difficulties when expanding into Japan, such as dealing with import/export procedures, handling chemicals, and differences in business practices. This is why NAGASE leverages its industry and material handling knowledge, its hazardous material and high-pressure gas licenses, and its regulatory compliance know-how to guide these suppliers to success in the Japanese market. We receive many direct consultations from customers, and we handle each of them with the comprehensive capabilities we have cultivated through our long history as a chemical trading company, our extensive network, and our strong desire to solve customers' problems. I believe this last element, above all, is what has earned it the reputation that "NAGASE has solutions!"



Jack Lee
Nagase (Taiwan) Co., Ltd.



NAGASE has solutions

Customer's voices

SACHEM, Inc.

A reliable partner entrusted with the future

In pursuit of further growth in our semiconductor chemical business, we have sold all our Asian operations—including our advanced factory in China—to Nagase. This decision followed extensive discussions, and reflects our trust in NAGASE, our long-standing partner and the only company with whom we have established a joint venture. By combining our DNA and technologies, we expect the entrusted Asian business to evolve further and reinforce leadership in the semiconductor industry.

NAGASE's unmatched technical expertise and global network enable swift responses to change, and we look forward to continuing our strong collaboration in other regions as well.



John Mooney
CEO
SACHEM, Inc.

Trading

Manufacturing

R&D

Mobility Segment



Mobility Solutions Dept.

Executive Officer
GM, Mobility Solutions Department **Daiji Matsuoka**

Final products in people's lives

- Automobiles
- Motorcycles
- Rolling stock
- Construction equipment
- Agricultural machinery

Examples of products and services contributing to solving societal and customer issues

- Shift to xEVs: Batteries, inverters, and motor components for the electrification of vehicles
- Environmental compliance: Recycled, bio-derived, and other low environmental impact materials
- Fuel economy: Weight-reducing technologies for automotive components

Results Effective utilization of digital technology

Strengthening communications through the NAGASE Mobility solution brand

While our business department handles a wide variety of products, including electric vehicle components and sustainable materials, we are sometimes perceived as a trading company that handles a limited range of products, particularly overseas. To remedy this issue, we established the NAGASE Mobility solution brand. We aim to expand our recognition by customers as a partner capable of providing advanced solutions that integrate diverse technologies, products, and networks, ultimately making customers think "NAGASE has solutions!" when they face challenges. As for fiscal 2024's issue of effective utilization of digital technology, we have launched an email newsletter, developed a multilingual version of our website, and begun utilizing social media in an effort to strengthen our communications. We will deliver value to many customers in multiple languages and through multiple channels.

Challenges ROIC-focused management

ROIC-focused management through inventory optimization

We are advancing multifaceted initiatives towards achieving sustainable profitability and capital efficiency. This includes reviewing and revising low-margin businesses, building an order management system, and conducting training on the utilization of generative AI. As part of these efforts, we have been focusing on reducing inventory since fiscal 2024 with an aim of improving ROIC, launching a Project for Inventory Optimization (PIO) directly supervised by the General Manager. We have also begun work to establish systems for managing inventory and ordering on a global scale. We have set goals for the end of fiscal 2025 of having zero dead stock, minimizing long-term inventory, and optimizing inventory levels. By reducing long-term inventory levels at an early juncture through careful monitoring, and by creating clear ordering rules for each unit, we are working to achieve healthy and efficient inventory levels.



NAGASE Mobility logo



Official website



Official LinkedIn page



NAGASE has solutions

Customer's voices

JAE Electronics India Pvt. Ltd.

The next stage of JAE and NAGASE's ventures in the growing Indian market

JAE Electronics India Pvt. Ltd. (JAE India) is a joint venture established in 2025 by Japan Aviation Electronics Industry, Ltd. (JAE) and NAGASE. The company has begun selling automotive and motorcycle connectors in India. JAE highly evaluated NAGASE's insights about the Indian market, its extensive network, and its business infrastructure, including its warehousing function, leading to the decision to work together. Currently, JAE handles design, quality assurance, and production management, while NAGASE handles sales, procurement, and logistics, creating a structure that combines the strengths of both companies. Moving forward, we will also work to expand our local production systems and strengthen our supply chain, aiming for further growth. In the rapidly evolving Indian market, NAGASE's promptness and operational reliability provide invaluable support for our company. Through this powerful partnership, we will continue to strive to create new value in India.



Yuji Muroga
President, JAE Electronics
India Pvt. Ltd.

Trading

Manufacturing

R&D

Life & Healthcare Segment



Life & Healthcare Products Dept.

Executive Officer
GM, Life & Healthcare Products Department **Kenji Okino**

Final products in people's lives

- Food
- Pharmaceuticals
- Diagnostic reagents
- Cosmetics and other consumer products relating to daily living and health

Examples of products and services contributing to solving societal and customer issues

- Stable procurement and supply of raw materials, quality risks management, inventory and manufacturer management (auditing, etc.)
- Proposal of biotech-based alternative materials

Results Organizational restructuring

Organizational structure and key initiatives for strengthening global expansion

To increase the sophistication and enhance the expertise of our business, we have established new specialized organizations such as Nagase Viita within our Group's functional organizations. In the biotechnology area, we strengthened our research and manufacturing functions, and are currently preparing to take ergothioneine and low-endotoxin products to market. As for fiscal 2024's issue of "expansion of our overseas business," we conducted a Japan-led survey of suppliers and acquired new commercial rights. Our local subsidiaries collaborated with distributors to transition to a basket-based sales approach of combining multiple solutions into a single proposal. In fiscal 2025, we will focus on expanding into Southeast Asia as a priority area. We are also working to strengthen our regulatory compliance



efforts by verifying the structures and systems of local subsidiaries, and by raising internal compliance awareness. Moving forward, we will also proceed with the verification of in vitro diagnostic (IVD) assay kits, in addition to pharmaceuticals and food.

Challenges Cross-functionality

Transition to a functional organization and strengthening cross-functional collaboration

Our traditional vertically integrated organization limited business growth and global collaboration. Considering such issues, we are currently transitioning to a cross-functional structure that spans business departments and locations. By using a matrix-style organizational design, we are building a framework that prevents functional silos and promotes collaboration. We expect functional organizations will be particularly effective overseas, where our human resources are limited. At the same time, we are also working to change mindsets and revise how work is done, striving to achieve a gradual dissemination. In the future, we will establish, share, and standardize systems while at the same time developing practical human resources and building an organization that is both up to the task of handling global M&A and developing new products.



NAGASE has solutions

Employee's voice

Building a global procurement system to support the stable supply of raw pharmaceutical materials

Following the COVID-19 pandemic, the need for a stable supply of raw pharmaceutical materials is higher than ever, leading to more and more manufacturers seeking to secure multiple sources in addition to their traditional suppliers. There is also an increased demand for the procurement of more cost-competitive raw materials in the domestic market, which is affected by Japan's drug pricing system. To address these challenges, we are focusing on India as its biggest source of raw materials after China. While Indian products excel in terms of price and production capacity, issues with quality and delivery times are not uncommon due to differences in culture and business practices. In order to mitigate such risks, we are collaborating with our Indian subsidiary to build a system for reliable communication and procurement. At the same time, we are helping customers achieve both stable procurement and cost optimization by leveraging the NAGASE Group's global network to swiftly consolidate supply information gathered from exhibitions and business partners worldwide, collaborate with local staff in each country who understand the Japanese market, and provide flexible and speedy procurement proposals.



Shuhei Tanaka
Life & Healthcare Products
Dept.

Trading

Manufacturing

R&D

Manufacturing Function

Nagase ChemteX Corporation (NCX)

Representative Director, President Yoshiyuki Morita



Company overview

Established: 1970

Location: Osaka City, Osaka Prefecture

Net sales: approx. 25.8 billion yen

Employees: approx. 520

Business overview

As the core manufacturing function of the NAGASE Group, we provide high-performance chemical products in fields ranging as far from electronics (including advanced semiconductors) to life sciences. Building upon our core technologies in chemical synthesis, formulation design, processing, and evaluation, we leverage our creativity to deepen and integrate our technologies and create innovative products that meet market needs.

A management approach that maximally leverages resources and flexibly responds to change

Building on our chemical products business, we are working to cultivate new pillars of growth by focusing on the cutting-edge semiconductor field and by advancing R&D in areas such as life sciences and agriculture. Our entire company is committed to reducing the impact on the environment through, among other things, the development of products such as biodegradable superabsorbent polymers (SAPs) and easily dismantlable

adhesives, as well as the improvement of our manufacturing processes. In this way, we seek to become a chemical company that is kind to both people and the plant. Following the consolidation of the NAGASE Group's chemical businesses into our company, we will promote a robust yet flexible management approach that gives us the ability to flexibly adapt to change and transform it into opportunity. We will do this by maximally leveraging all of our diverse management resources—including our technologies, expertise, facilities, and human resources—to achieve high operational efficiency.



Advanced semiconductors

Molding compounds (liquid and sheet), photolithography materials



Life sciences and agriculture

Biodegradable SAP, low endotoxin materials, soil amendments



Chemical products

Special epoxy compounds, conductive coatings



Nagase Viita Co., Ltd.

Representative Director and President Takahiko Mandai

Company overview

Established: 1932

Location: Okayama City, Okayama Prefecture

Net sales: approx. 35 billion yen

Employees: approx. 800

Business overview

We are the core biotechnology company of the NAGASE Group. Originally Hayashibara Co., Ltd., our name was changed to Nagase Viita, Co., Ltd. in April 2024. We develop and manufacture bio-derived multi-functional materials by leveraging the enzyme and fermentation technologies we have cultivated since our founding in 1883, providing products and solutions for markets ranging as far from food and pharmaceuticals to personal care and agriculture.

Realizing a sustainable society with technologies that leverage microorganisms and enzymes

We leverage the power of microorganisms and enzymes to provide functional materials. We handle the whole process from R&D to manufacturing and sales entirely in-house. We have earned high trust from society through our rigorous focus on quality, safety, and the environment. In 2024, we achieved the platinum rating in the EcoVadis sustainability assessment for the second year in a row. In fiscal 2025, we will strive to enhance the value of existing products such as trehalose and AA2G™, which both reached their 30th year in the market, while also investing in the development of new materials, with a focus on personal care. To achieve our goal, we will build a stronger organizational foundation by enhancing collaboration among our production, research, and business departments, while pursuing swift business development. With an aim to embody our stated

purpose to "respect life, and embrace the well-being of people and the planet," we will accelerate the growth of our business through the dual engines of manufacturing and value creation, which each turn on our technological capabilities.



Food Ingredients

TREHA™, PULLULAN, DENABAKE™ EXTRA



Personal care Ingredients

AA2G™, Lissenare™, Glucosyl Naringin



Pharmaceutical Ingredients

SOLBIOTE™ (TREHALOSE SG, MALTOSSE PH, SUCROSE SG)

Prinova Group LLC

Chairman, President and CEO Masaya Ikemoto



Company overview

Established: 1978

Location: Illinois (United States)

Net sales: approx. 199.6 billion yen

Employees: 1,370

Business overview

The Prinova Group is in the business of selling vitamins and other food ingredients and manufacturing compounds, with a focus on Europe and North America. We also handle contract manufacturing of finished products for the markets including the sports nutrition market and the life & wellness market. We aim to achieve further growth by leveraging strengths that include the world's largest handling volume of food ingredients, our R&D capabilities, and our customer network.

Pursuing sustainable growth by leveraging our extensive product knowledge and R&D capabilities

Prinova is responding to rapid market changes by leveraging strengths such as its extensive product knowledge, vertically integrated business model, and its ability to co-develop solutions tailored to the needs of customers. In fiscal 2025, we will be placing an even greater emphasis on ROIC to enhance profitability

and strengthen our business resilience. By maintaining stable supply, aiming to provide innovative solutions that anticipate future consumer needs, collaborating with the NAGASE Group, investing in human resources and technology, and engaging in partnerships with suppliers, we will pursue sustainable growth.



Utah Plant in the United States



Solution development



Contract manufacturing of end products for the sports nutrition market

Nagase RooTAC Industries, Inc.

President Toshihiro Nakanishi



Company overview

Established: 1952

Location: Osaka City, Osaka Prefecture

Net sales: approx. 12.5 billion yen

Employees: 400

Business overview

We manufacture and sell plastic flexible hoses, pipes, and other related products including industrial hose, protective conduit for electrical, power, and communications cables, collecting and drainage pipe for civil engineering applications, and bridge-related materials. We also contribute to the National Resilience Plan through infrastructure-supporting products such as built-in hoses for semiconductor manufacturing equipment, underground piping for utility pole elimination projects, and large-diameter pipes for heavy rain and flood countermeasures.

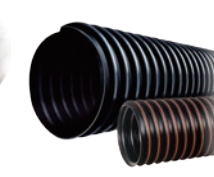
Continuing to be a manufacturer that supports people, society, and community building with unique new technologies

We are a specialized manufacturer of industrial hoses and plastic pipes that has been in business for over 70 years. Remaining steadfast as a pioneer, and adhering to a fundamental principle of "earning customer satisfaction and trust through manufacturing that prioritizes quality above all else," we handle everything from material research to the design of manufacturing equipment entirely in-house. We see our mission as supporting people, society, and community building through high-quality products. In November 2025, our name was changed to Nagase RooTAC Industries, Inc. as we entered a new stage of growth as part of the NAGASE Group's manufacturing division. We look forward to leveraging the NAGASE's global network as we continue to build upon the

trusted Totaku brand and support connecting, protecting, and developing people and society. We will continue to focus on creating safe, pleasant, and fulfilling work places while maintaining our position as a leading company in pipes and hoses with world-class technology.



Electrical conduit



Underground drainage pipe



Industrial hose

Trading

Manufacturing

R&D

R&D Function

Nagase Application Workshop (NAW)

General Manager Akihiro Taniguchi



Location overview

Established: 2007

Location: Amagasaki City, Hyogo Prefecture

Functions: We support innovation in the fields of plastics, coatings, and 3D printing, evaluate and analyze unique new technologies and materials, develop formulations, and explore new applications.

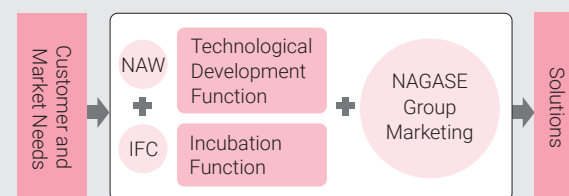
Creating innovation in the fields of plastics, coatings, and 3D printing

We are an open innovation lab with the sort of free-thinking approach you should expect of a research institute operated by a trading company. Our strength lies in our technical staff, who have extensive development experience in the plastics, resins, and coating fields. We turn free-thinking ideas into solutions for customers' issues. In recent years, we have been focusing particularly on themes aimed at solving

environmental issues. In order to meet the need for interdisciplinary fusion of technologies, such as that between resin materials and biotechnology, we will work to expand the areas we are capable of handling. As the lab closest to users, and as customers' development partner, we leverage the NAGASE network to propose "One NAGASE" solutions that bring Group's technologies together.

The NAW × IFC collaboration framework

Taking cue from the keywords Open, Collaborative, and Speed, we are working to enhance our ability to propose solutions to clients by incorporating the unique development methodologies and ideas of Interfacial Consultants (IFC), one of our Group companies. We also seek to bring together all the technologies the Group has in its possession, thereby expanding the fields for which we can provide proposals. By combining the power of NAW's technological development with the marketing skills of our sales department, NAGASE provides the sort of comprehensive support that only it can, covering everything from new material development to marketing.



NAW Development Projects

Collaboration with IFC

We are leveraging the properties of AquaSys®, the water-soluble support material developed by IFC for the 3D printing market, to develop a new application for it as a sacrificial layer.

Developing environmentally and people-friendly materials

Working with our partner companies, we are tackling challenges such as developing formulations and applications that use marine-degradable resins, proposing alternatives to fluorinated compounds for food packaging materials, and developing coating materials utilizing silica aerogel.



Interfacial Consultants LLC (IFC)

CEO Jeffrey Cernohous



Company overview

Established: 2014

Location: Wisconsin (United States)

Functions: Development of advanced materials and processes, incubation of new technologies and businesses

Building the future with a "NAGASE ONLY" strategy

One of NAGASE Group's strengths is creating value by matching partners' technologies and products worldwide with customer needs. At the same time, new technologies like artificial intelligence (AI) have simplified complex information and relationships, making them easily accessible. This brings both a serious threat and a great opportunity. We may become less valuable to partners, yet

rapid technological change enables us to develop unique business models, technologies, and products that deliver highly distinctive "NAGASE ONLY" solutions. By increasing development speed and focusing on commercialization through global sales channels, we can accelerate growth, profitability, and sustainability. IFC looks forward to working with everyone at NAGASE to turn this challenge into success.

Nagase Bio-Innovation Center (NBIC)

Executive Officer and General Manager Xiaoli Liu



Location overview

Established: 1990

Location: Kobe City, Hyogo Prefecture

Functions: Develop unique technologies, initiate and develop new ingredients, scout and evaluate external technologies

Shaping the future with biotechnology as an innovation hub for sustainable ingredients

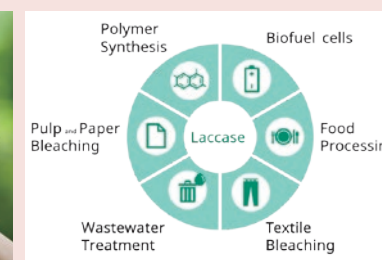
NBIC continuously produces the seeds of next-gen ingredients that leverage biotechnology to contribute to longer healthspans and the realization of a low-carbon, circular economy. We uncover latent needs through dialogue with the market, and then leverage our unique technology platform to meet those needs by creating ingredients from the ground up. Our

philosophy is "Unavailable Made Available & Sustainable." In addition to enhancing our R&D efficiency through collaboration both within and outside the Group, we support its existing businesses with unique techniques that have a competitive edge. Furthermore, we will create new business opportunities and contribute to the growth of the Group's overall biotechnology business.

NBIC Development Projects

Green Catalysts

Aiming to contribute to a circular society, we are working to develop laccases, a category of environmentally friendly enzymes regarded as Green Catalysts. They catalyze the redox reactions that occur in paper bleaching and biofuel cells and are expected to have wide-ranging applications. NBIC is working to develop diverse laccases with unique characteristics that allow them to function under a wide range of temperature and pH conditions. We will accelerate their development into marketable products in collaboration with Life & Healthcare Products Department and subsidiary Nagase (Europa) GmbH.



Enzymes that enrich our food experience

Over many years of work, we developed N-StePP™, a unique technology platform for producing materials using streptomyces bacteria in collaboration with Nagase Viita. We are leveraging this platform to enhance the taste and texture of food, reduce food waste, and advance R&D of various new products that meet the diverse needs of consumers. By working closely with our sales departments and the Group's overseas locations to expand the potential of enzymes, we will provide new value for the future of food.



Initiatives of the Nagase Biotech Office (NBT)

Creating new value by bringing together the Group's biotechnologies

The mission of the NBT is to promote the creation of sustainable businesses by bringing the Group's biotechnologies together.

As part of this effort, we are advancing projects that integrate the respective fundamental research being conducted by NBIC and Nagase Viita, to create new materials and expand into new application fields centered on enzymes, enzymatic reactions, and fermentation, thereby leading to new business opportunities. We are also engaging in open innovation with external partners with an aim of creating new businesses. Moving forward, we look to expand the Group's technological base through personnel and technological exchanges with Nagase Diagnostics, which joined the Group in July 2025.



Toshio Kondo
Nagase Biotech Office
Manager

From the Front Lines of Combining Functions to a Sustainable Society

We present here examples of NAGASE Group initiatives, which combine our trading, manufacturing, and R&D functions to take on customer challenges and address societal challenges.

An aging society

Circular economy

Toward closed loop recycling of disposable diapers with bio-based super-absorbent polymers (SAP)

Considering that used disposable diapers generate CO₂ when incinerated as waste and are made with petroleum-derived materials that have an environmental impact, NAGASE, Nagase Viita, and Nagase ChemteX have collaborated to create a bio-based super-absorbent polymer (SAP) made from starch.

As part of recycling initiatives for sanitary product materials such as disposable diapers that make use of SAP, Nagase ChemteX has been verifying the separation and recycling processes, while NAGASE collaborates with government bodies, municipalities, industrial waste processors, and nursing care facilities to establish recycling systems. Our SAP is biodegradable and is not only highly absorbent but also easily decomposes, which facilitates the previously difficult separation of post-use SAP from other materials for disposable diapers. This makes recycling easier, contributing to resource circulation, and should reduce CO₂ emissions by decreasing the amount of waste from used disposable diapers, etc.



Koji Uenaka

Green Materials Section, Product Development Division,
Functional Materials Department
Nagase ChemteX Corporation

Trading

We are working to build a recycling system for diapers that use biodegradable SAP. We are holding ongoing discussions connecting government, municipalities, industrial waste disposal companies, and nursing care facilities. Ordinances and standards differ by municipality, as does the level of enthusiasm for recycling, so we visit localities for repeated discussions with the various stakeholders. There are still many challenges to realizing a resource-recycling society, and there have only been limited number of cases where monetization has been achieved. Going forward, we aim to build a recycling system in which all involved parties can benefit and contribute to a circular society.



Kaiyou Kitakoshi

Total Solution Office,
Performance Chemicals
Department
Nagase & Co., Ltd.

Manufacturing

I develop and explore applications for biodegradable SAPs. We are currently investigating methods to clean disposable diapers and pads with biodegradable SAPs with an eye toward recycling. We have been steadily conducting tests and making improvements with the aim of achieving both clean washing technology and environmentally friendly wastewater from this process. We hope to change the image of recycled products as being expensive, making them a more familiar and sustainable option for society.



Food Loss

Prinova has started supplying a premix product to a nationwide US convenience store chain

Prinova has begun supplying bakery premix products to a major US convenience store chain. The premix is a proprietary blend proposed by Prinova that used Nagase Viita's functional ingredients to improve the texture and extend the shelf life of bakery products.

These products have excellent freeze-thaw resistance, which contributes to reduced food waste and lower operating costs.



PFAS-free molded paper cup

Manufacturing

We were in uncharted territory with paper and pulp molding, so we built testing methods and evaluation criteria from scratch before proceeding with formulation design. Optimizing chemical combinations and mixing ratios for internal addition to the pulp slurry in order to enhance performance proved particularly difficult, but the advice of NAW's engineers with their extensive testing experience and their measurement and analysis equipment proved to be a great help. We will expand the technology gained from this project into even more diverse applications in order to contribute to a sustainable society.

Manufacturing

I worked hard to gather information about material characteristics and production systems. Doing it speedily was a major challenge. Stabilized plant operations are needed to deal with increased shipping volumes, so we worked together with various departments to increase the speed of the response. Going forward, we would like to deepen collaboration within the Group to expand sales and ensure stable supply while also pursuing the development of other materials that will create new value.



Masatoshi Shiojiri
Sales Development Department,
Bio Chemicals Division
Nagase Viita Co., Ltd.

Manufacturing and R&D

As the chef for the new business development department, I developed SOFT TEX, a bakery blend that uses ingredients from Nagase Viita. We are currently building a foundation to expand business in the bakery sector and other areas.



Mark Susz
New Business Development,
Ingredients
Prinova Group LLC

PFAS regulations

Less plastic

Development of eco-friendly pulp molds that comply with PFAS regulations

Paper pulp molds are in the spotlight in response to stricter regulations on per- and polyfluoroalkyl substances (PFAS). However, the molds are vulnerable to water, oil, and friction. To address these vulnerabilities, NAGASE collaborated with pulp mold manufacturers and subsidiary Nagase Chemical to consider over 1,000 formulations at the Nagase Application Workshop (NAW). We have successfully commercialized a PFAS-free product that is water-, oil-, and abrasion-resistant.

Trading

Leveraging the Group's extensive network of business partners meant that we were able to quickly arrange consultations and get additional samples even when the prototyping process had some difficulties, which was a significant help for this project. We were also able to rapidly move forward with development with Nagase Chemical's specialized facilities and expertise in the paper sector together with NAW's analysis using their extensive testing and analytical equipment. We were able to reaffirm the strengths of the NAGASE Group through collaboration with NAW and Nagase Chemical.



Masashi Hachida

Coating Technological Development
Section, Nagase Application
Workshop (NAW)
Nagase & Co., Ltd.



Yasuaki Yoshida

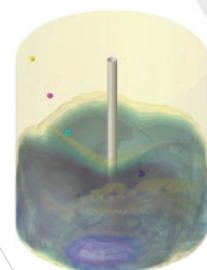
Market Development Team, Product
Management Section and Functional
Color Materials Division, Coating
Materials Division, Performance
Chemicals Department
Nagase & Co., Ltd.

Japan's shrinking work population

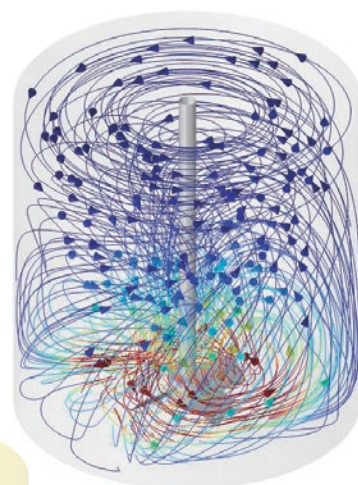
Increased workforce mobility

In-house development of analysis software to visualize the mixing and agitation processes essential to manufacturing

Our Mixing Concierge™ is specialized fluid analysis software for mixing and agitation processes. Many manufacturing sites face significant time constraints and costs when establishing new processes needed for changing equipment or raw materials in mixing and agitation processes, which are essential at the manufacturing and R&D stages. While conventional analysis software is often complex and time-consuming to master, Mixing Concierge™ is designed to be used easily and immediately by engineers without specialized analysis knowledge. Delivering analysis results quickly significantly reduces investigation workloads, which contributes to solving issues such as technology transfer and increased productivity at manufacturing sites. Because one of NAGASE's strengths lies in the diversity of its customer contacts, we are able to accurately grasp onsite needs and, by leveraging our company's advanced process expertise and analysis technology, can provide more practical, site-oriented proposals.



Mixing Concierge
concentration diffusion
analysis



Mixing Concierge
fluid analysis

Trading

We visit many manufacturing sites and carefully identify and visualize the potential issues each site faces. The use of evaluation and analysis technology helps minimize the use of valuable resources such as people, time, and raw materials while also creating an environment that makes multiple trials and errors possible, which supports our customers' passion and efforts for making better products. We are working to lead Japan's manufacturing industry towards a strong future that stands proud on the world stage.



Yoshiaki Kanatsuka
Third Sales Section, Functional
Materials Division, Performance
Chemicals Department
Nagase & Co., Ltd.



Seitaro Kato
Group Manufacturing
Management Innovation Section,
Risk Management Division
Nagase & Co., Ltd.

R&D

We are protecting Japan's advanced mixing technologies with analysis and are working to pass on manufacturing know-how to the next-generation. As a process engineer, I carefully gathered feedback from the manufacturing floor and handled the fundamentals of software development, such as designing computational models. Since then, we have continued to improve the quality of the service through refinements based on software implementation results. CAE* connects the passion of the workplace to the future!

*CAE: Computer Aided Engineering

CO₂ emissions from chemical fertilizers

Harmful effects of chemical pesticides on the human body

Biofertilizer technology to support the future of Brazilian agriculture

Brazil is a major agricultural nation, but CO₂ emissions from the use of fertilizers and pesticides are an issue. NAGASE and Nagase Viita have collaborated to propose a method to prolong fertilizer effectiveness by adding trehalose to biofertilizer to stably preserve bacterial active ingredients. Verification tests have yielded good results, which have led to trust from farmers and fertilizer manufacturers. NAGASE's combination of trading and R&D functions enabled us to respond quickly to local issues and customer needs.



Biofertilizer-treated soybean roots. The bulbous parts host Rhizobium bacteria, which assists the plant to absorb nutrients.

Advancing manufacturing

Visualizing material functions

Evaluation technology that illuminates the value of materials with nano-level visualization

NanoTerasu is a cutting-edge, high-brilliance synchrotron radiation facility at Tohoku University that can visualize material properties at the nano level. NAGASE Group established the Co-Creation Research Center with the university and is using NanoTerasu as a base to evaluate the materials and products handled by the Group. Visualizing what was previously invisible will enable us to create new value in materials. We are also using multifaceted data analysis to advance our product and technology development in a wide range of fields that include biotechnology, food ingredients, and semiconductor materials.



GeV High-Brilliance
Synchrotron
Radiation Facility
NanoTerasu



Yumi Sasano
Foundation R&D Section
Nagase Bio-Innovation Center (NBIC)
Nagase & Co., Ltd.

R&D

We are discovering new value in bio-derived materials by combining NanoTerasu's strengths in microstructural analysis using high-intensity synchrotron radiation and precise evaluation of properties with microorganism-based biomanufacturing technologies.

R&D

I feel that the greatest advantages of using NanoTerasu are ease of use, regardless of level of experience, and the comprehensive support through industry-academia collaborations. In order to generate results and further enhance our use of NanoTerasu by Group employees and for customers, we are working hard to acquire and perfect various measurement techniques and know-how.



Takahiro Sato
Group Manufacturing
Management Innovation Section,
Risk Management Division
Nagase & Co., Ltd.



Masataka Mitsumoto
Coating Technological Development
Section
Nagase Application Workshop
(NAW)
Nagase & Co., Ltd.

R&D

We used NanoTerasu to observe an ultralight insulating film. We were able to clearly see in three dimensions that the built-up insulating layers with clusters of small holes were firmly adhered to the film. This visualized data will clarify paths for creating lighter, thinner, and more efficient insulation films, which will be useful for saving energy in various areas, from smartphones to buildings.

Trading function

NAGASE is committed to delivering safe and secure food through the power of biotechnology. We build relationships of trust by sincerely addressing our customers' needs and working together from a common viewpoint. For our manufacturing processes, we also pay close attention to detail from start to finish in order to be a reliable bio-agro science partner. We hope to cherish the blessings we receive from the Earth and give back to society.



Armando Tomomitsu
Nagase do Brasil Comércio de
Produtos Químicos Ltda.



Takanobu Higashiyama
Bio-Agri Science Unit, Research,
Technology & Value Creation
Division
Nagase Viita Co., Ltd.

R&D

We are conducting research and development for the global expansion of trehalose in the agricultural sector. We are also advancing the establishment of our own evaluation system, aiming to build a framework that can lead the integration of biotechnology and agriculture within the Group. Specifically, we are planning to introduce a crop cultivation system to Nagase Viita and build an evaluation system through Nagase do Brasil that will enable Brazilian users to obtain the data they require.