

Functional Solutions Business

Enhancing Market Presence by Expanding Globally and Possessing Differentiated Technologies

In the plastic films business, we are expanding globally into the domain of high-value-added packaging films and new business domains leveraging our core multi-layer extrusion and stretching technologies. By expanding sales of resource-recycling products and establishing model use cases, we aim to balance social and economic value in our environmental strategy.

In the engineering plastics business, we have expanded our market share by continuously developing products that meet user needs in the OA market which constitute our core products. We are now building up production capacity for semiconductor-related products while strengthening initiatives in healthcare, industrial equipment, and energy-related applications.

Actions Implemented in VISION 2030 stage1

Plastic films business

To meet society's increasing demands that it be recycling oriented, we advanced initiatives to create new value by shifting to a recycling-oriented and environmentally friendly business model. Alongside the proactive introduction of environmentally friendly new products, we commenced the full-scale operation of our Circular Factory and established a recycling center as the foundation for our transformation into a circular manufacturer. We also promoted production innovation through the automation of

facilities and the use of renewable energy, and also strengthened our expansion in overseas markets such as the United States, China and ASEAN countries.



Received the Resource Circulation Technology and System Award Encouragement Prize (sponsored by the Ministry of Economy, Trade and Industry)

Engineering plastics business

While OA-related products remained our core business, we strengthened non-OA categories, including semiconductors and

medical applications. To support growth in these areas, we expanded our cleanroom-equipped plant in 2025.

In addition, as part of a strategic review of the business portfolio, the electronic components business was terminated following the completion of the transfer of the shares of the relevant subsidiary.

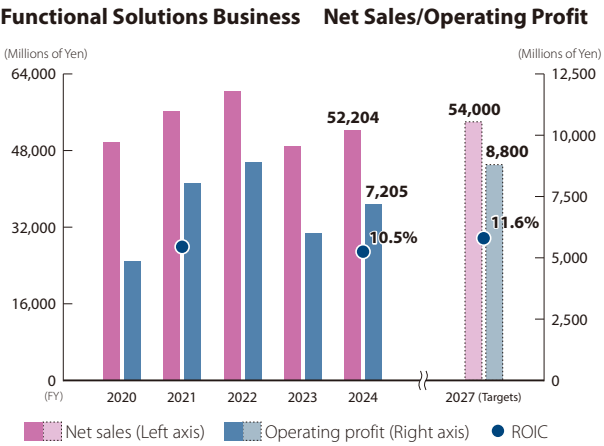
FY2024 Business Overview

Plastic films business

Although overseas demand remained sluggish, domestic business was generally solid.

In Japan, our core shrink films performed steadily, supported by proposals for recycling-oriented products. Nylon grew due to the increased sales of general-purpose films, and exports were also recovering. Semiconductor applications expanded strongly on the back of a market recovery, and oriented polypropylene (OPP) films performed well, driven by the increasing demand for packaged cut vegetables.

In contrast, our overseas operations faced challenges. The U.S. business performed sluggishly due to the discontinuation of a major beverage product in the previous fiscal year, and our businesses in China and Vietnam struggled amid intensified price competition.



Engineering plastics business

In OA equipment, performance remained strong throughout the year. This was driven by the recovery of the small printer market, the key volume zone, the stabilization of the office multifunction

device market and the start of the mass production of new models. In non-OA fields, both semiconductor- and general industrial-related products expanded steadily on the back of stable orders.

As a result, net sales reached ¥52,204 million (up 6.6% year-on-year), and operating profit reached ¥7,205 million (up 19.5% year-on-year).

Initiatives for VISION 2030 stage2

Plastic films business

The stage2 vision for the Plastic Film Company is “The global expansion of our fully developed resource-recycling model, with a focus on balancing social and economic value.” Our goal is to pursue economic value through the rigorous reduction of cost while delivering recycling-oriented products of high social value at practical prices to become a preferred company in the environmental business. One specific initiative is our achievement of “zero waste” at the MoriYama Plant. This was the culmination of our recycling technologies. We will also enhance productivity by utilizing new functions of recently installed equipment to reduce the labor required on production lines and make unstaffed night operations possible. In addition, through the upgrading of core systems, we will push forward with comprehensive operational efficiency by promoting the reduction of labor, improving yields, optimizing

inventory and integrating information management activities. Regarding recycling-oriented products, we are accelerating the rollout of GEOPLAS®, which leverages our strength in multilayer films to achieve both thinner films and the use of recycled materials. While environmentally friendly products have traditionally faced cost barriers that limited market adoption, our resource-recycling model delivers a balance of functionality, cost and environmental performance. Looking ahead, we plan to expand this resource-recycling model globally and establish ourselves as a “circular manufacturer” that contributes to the realization of a sustainable society.



Engineering plastics business

The vision of the Engineering Plastics Division is “Contributing to a better environment and comfortable living through the integration of unique technologies.” Looking toward 2027 and 2030, we will advance our business by leveraging our strengths in differentiated product development based on core technologies, and by leveraging our production capabilities that enable us to swiftly transition from development to mass production.

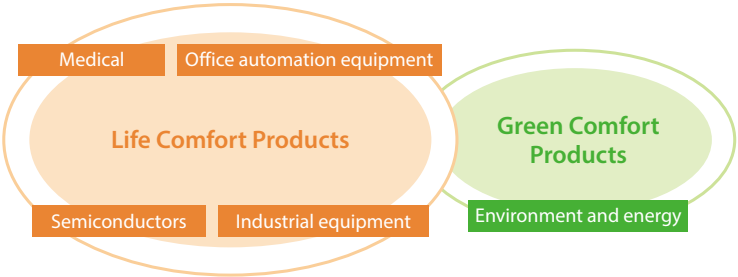
In stage2, alongside our core OA business, we will position medical, industrial and semiconductor-related products as Life Comfort Products and work to strengthen them accordingly. With the expansion of our clean plant in April 2025, we plan to meet the growing demand in the semiconductor and medical fields and use differentiated technologies to enhance our market presence.

We will also promote environmental and energy-related fields as Green Comfort Products our new focus area going forward. Aiming to create new environmentally friendly products, we are committed to the early establishment of production technologies and to developing these fields into the next pillars of our growth.

By 2030, we will steadily advance these initiatives to realize our vision for the engineering plastics business: to deepen our core technologies as fundamental enablers of a sustainable society, and to establish a virtuous cycle of growth through the transformation into a balanced business portfolio, thereby contributing to the resolution of diverse social issues.



Expanded Konan Plant, Engineering Plastics Division



## Medical Business

### Creating a Brighter Future Through Innovation in Biomaterials and Devices

The medical business advances the research and development of medical devices that leverage the functions of bioabsorbable polymers. Since beginning basic research in 1982, we have applied the technologies we have developed over many years in the manufacturing and sale of medical devices. Our product portfolio centers on bioabsorbable medical devices ranging from reinforcement felts and bone fixation devices to artificial dermis and adhesion barriers, and it also included outstanding technologies and innovative products from external partners. Through this, we continue to broaden our reach to include more medical specialties and geographic markets.

#### Actions Implemented in VISION 2030 stage1

Under VISION 2030 stage1, the medical business was positioned as a growth driver for the Gunze Group. In FY2023, it was separated from the functional solutions business to become an independent segment. The business was subsequently transferred to Gunze Medical Limited through an absorption-type split, accelerating its growth into a fully integrated medical devices company involved in everything from research to sales. This reorganization has accelerated product development to reflect clinical needs, improved organizational agility so that the medical business can respond to the rapid changes in the medical device industry and increased efficiency.

After years of development, the medical business launched a new adhesion barrier in 2023 targeting the large-scale market. As the product addresses clinical needs, it has been rapidly adopted. To support the growing demand for this new growth-driving product, we built a new plant to expand production capacity. To fulfill the higher volume of products required because of the growth of sales, our flagship Ayabe Plant in Kyoto Prefecture introduced automation and labor-saving equipment, establishing continuous processing and automated packaging lines for reinforcement felts.

#### FY2024 Business Overview

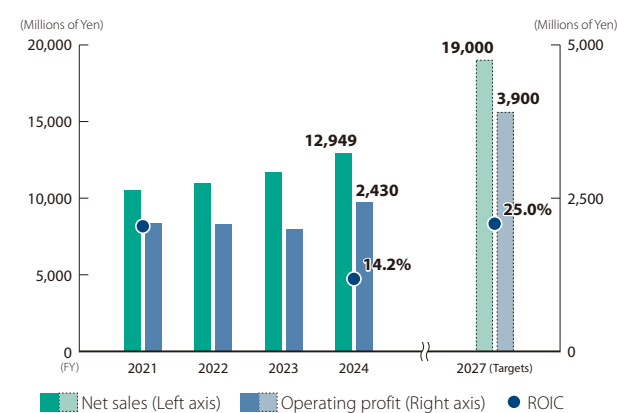
In FY2024, we worked to increase the percentage of our product portfolio that is responsible for overseas sales, the domestic sales ratio of our in-house products, and the percentage of our domestic sales that are from new products. By product category, reinforcement felts performed steadily. We defended our position against new competition in Japan while achieving strong growth in China through strengthened collaboration with distributors and increased usage in medical facilities. Bone fixation devices continued to grow, driven by market share gains in Japan following the launch of our new early-degradation product, although performance in China was constrained due to purchasing controls enacted under medical regulations focused on high-cost products and services. Artificial dermis performed well, supported by increased new account acquisition in the United States. Adhesion barriers advanced due to strengthened sales efforts, with new accounts received and their penetration of existing facilities increasing market share.

Among imported products, medical lasers remained sluggish despite signs that the market was recovering, as they were impacted by industry restructuring. In contrast, sales grew for a human amnion-based material that promotes tissue healing

(dehydrated human amnion/chorion membrane allografts, dHACM). This material is used in the treatment of intractable diabetic foot ulcers and venous leg ulcers.

As a result, net sales amounted to ¥12,949 million (up 10.7% year on year), and operating profit reached ¥2,430 million (up 22.0%).






#### Medical Business Net Sales/Operating Profit



#### Initiatives for VISION 2030 stage2

The mission of the medical segment is to deliver a brighter future for patients by providing innovative biomaterials and devices. Guided by the motto "With compassion and dedication," we are committed to contributing to the advancement of medicine and to becoming one of Japan's leading medical device manufacturers.

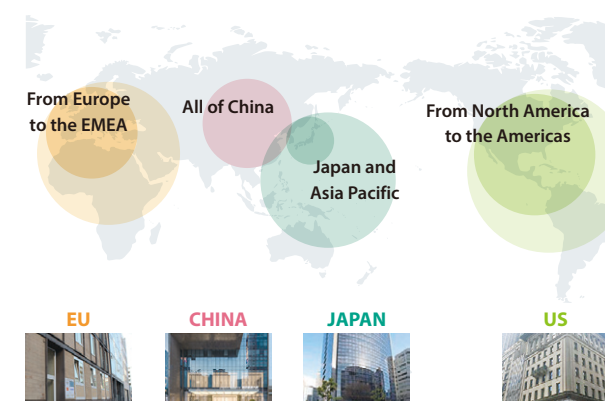
Our portfolio spans five medical fields, neurosurgery, Respiratory/abdominal surgery, craniomaxillofacial surgery, wound care and aesthetic medicine, and we aim to continuously provide new value and expand our business by remaining the trusted choice in each area.

<b>Neurosurgery</b> <b>[NEURO]</b> Bone fixation devices Artificial dural substitutes  Bone fixation devices: <b>No. 1 in Japan</b> Artificial dural substitutes: No. 2 in Japan	<b>Respiratory/Abdominal</b> <b>[Surgical]</b> Reinforcement felts Adhesion barriers  Reinforcement felts: <b>No. 1 in Japan</b> <b>No. 1 in China</b> Adhesion barriers: No. 4 in Japan	<b>Craniomaxillofacial</b> <b>[CMF]</b> Bone fixation devices  Bone fixation devices: <b>No. 1 in Japan</b> No. 2 in China	<b>Wound</b> <b>[WOUND]</b> Artificial dermis Human amnion/chorion membrane  Artificial dermis: <b>No. 1 in Japan</b> <b>No. 1 in China</b> Human amnion/chorion membrane: Japan exclusive	<b>Aesthetic</b> <b>[Aesthetic]</b> Medical lasers Cranial reshaping helmets  Medical lasers: No. 2 in Japan Cranial reshaping helmets: No. 3 in Japan
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Through our sales activities to date, our products have strongly penetrated the Japanese and Chinese markets, securing a large or the largest share of these markets. Looking ahead, we aim to continue to expand our global presence by establishing four hubs in Japan, Shenzhen (China), New York (U.S.), and Düsseldorf (Germany) to serve the Asia Pacific, China, the Americas, and the EMEA (Europe, Middle East, and Africa), delivering our products as quickly as possible to the countries where they are needed.

business development to enable us to consistently deliver innovative products to our portfolio in a timely manner. To enhance collaboration, we established the Ayabe Interactive Center (AIC) in Gunze's birthplace, Ayabe. It is a new R&D facility for the exchange of technologies. In addition to Ayabe, we have people assigned in Tokyo, Osaka and Shenzhen, creating an environment where diverse R&D talent can fully demonstrate their capabilities.

We have also strategically invested in the establishment of a four-plant system. The first plant in Ayabe, our mother factory, has expanded its production capacity for the mass production of existing products. The second plant, positioned as our development facility, has enhanced its incubation functions for the development of new products. The third plant, newly constructed and dedicated to adhesion barriers, is equipped with the latest automation technologies. The Pingshan Plant in China has broadened its product lineup. By fully leveraging the distinct roles of these four plants, we aim to further strengthen our position as a manufacturer with in-house development capabilities while bearing BCP in mind.



Leveraging Gunze's strength in product development, we pursue a pipeline strategy aligned with our global portfolio, advancing the dual pillars of materials and devices in collaboration with physicians and partners. This is supported by a robust development framework that spans the entire cycle from concept planning and research to product development, clinical development and

<b>First plant</b> Mass production plant of existing products 	<b>Second plant</b> Laboratory plant of development products 
<b>Third plant</b> Mass production plant of adhesion barriers 	<b>China Pingshan plant</b> Proactive localization in China 

Apparel Business

Pushing Forward with Structural Reforms to Rebuild the Apparel Business Into a Profit Engine for Growth Under Vision 2030 stage3

Profitability and other challenges emerged during stage1, underscoring the need to review our strategies for the apparel business. Given that the apparel business is synonymous with Gunze's corporate image, transforming it into a sustainable business model will lead to the enhancement of the corporate value of the Group as a whole. To withstand external pressures, such as exchange rate fluctuations, climate change, and the decrease of Japan's population, we will fundamentally review our business model while advancing the reform of our organization and our mindset to strengthen the structure of our business. To push forward with this reform, we launched a company-wide project this fiscal year led by the Management & Strategy Department at our headquarters. We will implement structural reforms without any sacred cows in the two years through FY2026, and we will shift our focus from expanding production and sales to pursuing profit. We will work to improve capital efficiency and rebuild the apparel business into a profit-generating business.

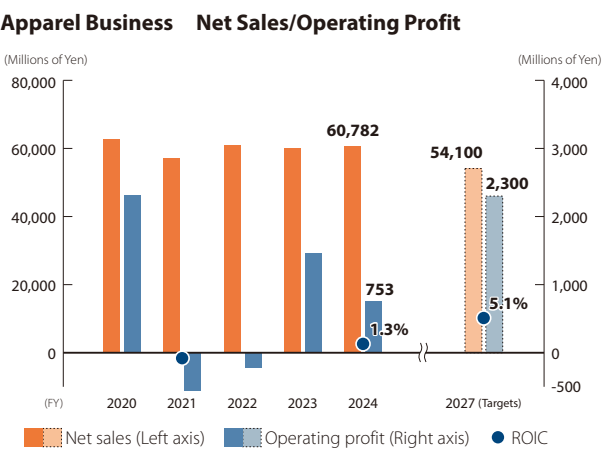
Actions Implemented in VISION 2030 stage1

In stage1, launched in FY2022 amid the impact of the COVID-19 pandemic, the key strategies formulated at that time included the promotion of business operations aligned with the growing awareness of the SDGs, such as sustainable procurement and operations that reduce CO<sub>2</sub> emissions and waste, and the review of product categories in line with consumption trends, including health, femtech and casual wear. We also focused on product strategies to capture demand in the expanding e-commerce market, prompted by the decline of apparel purchases at mass retailers. Despite the challenging external environment, including the prolonged impact of the pandemic and exchange rate fluctuations, we continuously revised prices and implemented an

organizational restructuring (including the abolition of the divisional system). We also advanced structural reforms in the legwear business (including the closure of overseas factories and the consolidation of operations into a single domestic plant) and accelerated the shift toward D2C channels. As a result, operating profit improved ¥1.9 billion between FY2022 and FY2023, enabling us to return to profitability. However, in FY2024, the final year of stage1, the sales volume declined within the innerwear group and the losses in the outerwear group increased amid the ongoing contraction of the domestic market, leading to increasingly severe business conditions.

FY2024 Business Overview

In FY2024, the weaker yen drove consumer sentiment toward two extremes: a preference for low-priced items reflecting thrift-consciousness, and for quality products that could be used for the long term. As the low-price segment expanded, we sought to counter the declining innerwear sales volume by promoting high-value-added products featuring differentiated technologies, such as KIREILABO women's innerwear and the newly launched Asedoron. Positive results were achieved through these initiatives, but the business was impacted by the rapid structural changes in the sales channels. In contrast, in the textile materials field, the local production for local consumption strategy implemented at our five sewing thread production and sales bases across Asia worked well. As a result, net sales in the apparel business totaled ¥60,782 million (up 1.1% year on year), but operating profit declined significantly to ¥753 million (down 48.6% year on year).



Initiatives for VISION 2030 stage2

Fundamental structural reforms in the apparel business

1. Focused specialization strategy

In the apparel business, product diversification has diluted value appeal and lowered efficiency due to the reduced production and sales volumes. We will narrow our focus to profit-generating categories where we can leverage our strengths and pursue unique value propositions while eliminating inefficient low-margin brands. By strengthening value-based marketing and ensuring appropriate price pass-through, we will work to improve profitability.

2. Value chain reform

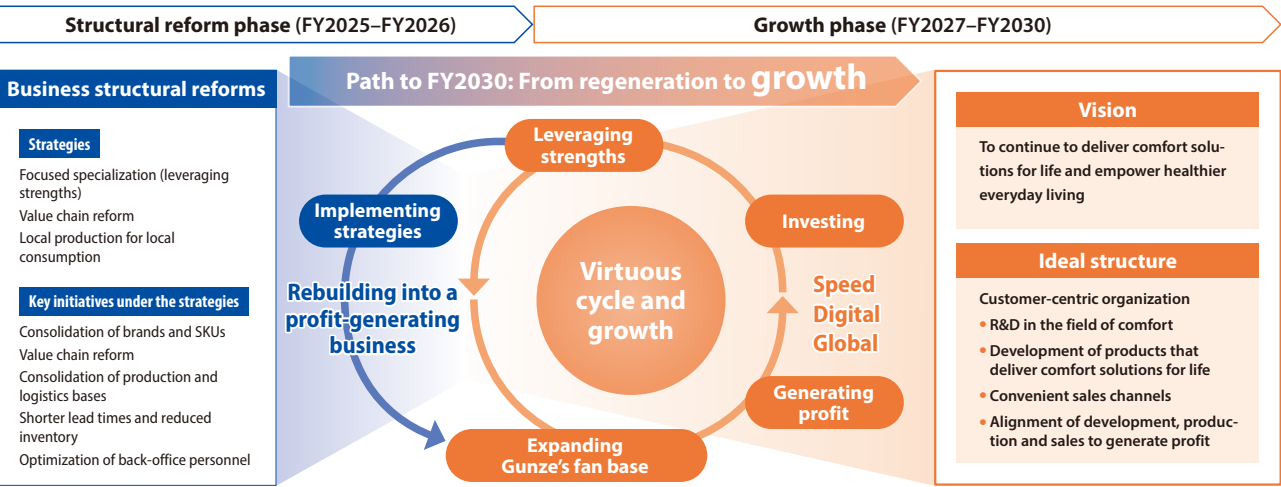
Aligned with the focused specialization strategy, we will review back-office processes and structures from planning and development through to production and sales while optimizing production and logistics bases. We will reform production to consolidate operations into sites that have sustainable advantages, and we will reform logistics to centralize facilities based on our inventory optimization and functional restructuring efforts. We will also implement the Next Challenge Program, a voluntary retirement scheme designed to support employees transitioning in their careers, as we aim to enhance efficiency through advanced management and resource concentration. Leveraging the product planning data and digital technologies we have accumulated, such as task navigation technologies, and our agile operations, we will also accelerate the shortening of lead times from planning to delivery. Through this asset-light approach, we aim to improve capital efficiency and build a leaner, more resilient value chain.

Implementation	Goals
<b>Consolidation and reorganization of production bases</b> <ul style="list-style-type: none"><li>Consolidating domestic innerwear production from three factories into one</li></ul>	<b>Aiming to strengthen Gunze's unique value while enhancing cost competitiveness</b> <ul style="list-style-type: none"><li>Concentrating domestic production at the Miyazu Plant (Kyoto), which also serves as a development hub, to establish a sustainable production base for value-added products, such as the Kaiteki Kobo natural material brand</li><li>Transferring domestic technologies for the KIREILABO bonded and seamless brand to overseas production sites to further improve cost competitiveness</li></ul>
<b>Consolidation and reorganization of logistics bases</b> <ul style="list-style-type: none"><li>Reducing logistics centers from nine to seven</li></ul>	<b>Reducing inventory through consolidation and strengthening functions through reorganization</b> <ul style="list-style-type: none"><li>Reducing logistics inventory by increasing production agility and shortening lead times in alignment with production-base consolidation and the focused specialization strategy</li><li>Reorganizing logistics functions to better serve key customers and e-commerce channels, with greater use of outsourcing</li></ul>

3. Local production for local consumption strategy

The apparel business has largely relied on importing products manufactured overseas for domestic sale, what is called a "bring-back" business model, so it has been highly vulnerable to exchange rate fluctuations. To drive growth in the future, we will review overseas sales channels, explore new alliances, and focus on ASEAN markets, where consumer body types are closer to those in Japan and production know-how can be effectively transferred. We will also allocate workforce resources (planning, development, and sales personnel) locally to increase the agility of our operations.

Apparel business structural reform roadmap





# Lifestyle Creations Business

## Shift Low-Profit Assets to Growth Areas and New Businesses, Enhance Group Growth and ROIC

In the lifestyle creations business, Gunze engages in real estate development in the real estate-related business, based on the utilization of Company-owned land. We operate shopping centers that are closely tied to local community life as well as businesses for housing and office building rentals, supplying our customers with pleasant spaces that provide a feeling of comfort. In the landscaping and greening business, we are developing environmental businesses that create a sustainable society where people can live in safety and health by providing greenery. Our main business areas are tree sales, by which we supply plant materials and seedlings, flower sales that add color to everyday life, and landscaping that contributes to creating living environments with an abundance of greenery. In addition, the mission of the sports club business is to foster fertile minds and healthy bodies through sports and to support people's happiness. By operating 14 sports clubs, mainly in the Kansai region, we are providing essential services that complement social infrastructure as bases for local communities.

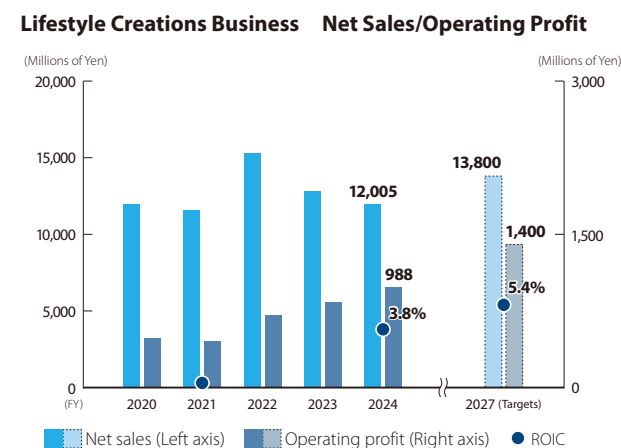
## Actions Implemented in VISION 2030 stage1

In the real estate business, we renovated our flagship shopping center, Gunze Town Center Tsukashin (Amagasaki City, Hyogo Prefecture), guided by the concept of creating a facility that is both people-friendly and environmentally friendly. In the landscaping and greening business, we carried out large-scale deliveries for major projects, such as the Expo 2025 Osaka, Kansai, Japan and the Osaka Station redevelopment, guided by the strategy of

"increasing greenery for society" to contribute to local communities. In the sports club business, we launched new initiatives to revitalize our fitness operations, which had been affected by a decline in membership due to COVID-19. At the same time, we also expanded our core school operations. As part of structural reforms, we reviewed our business and closed unprofitable locations, steadily improving profitability.

## FY2024 Business Overview

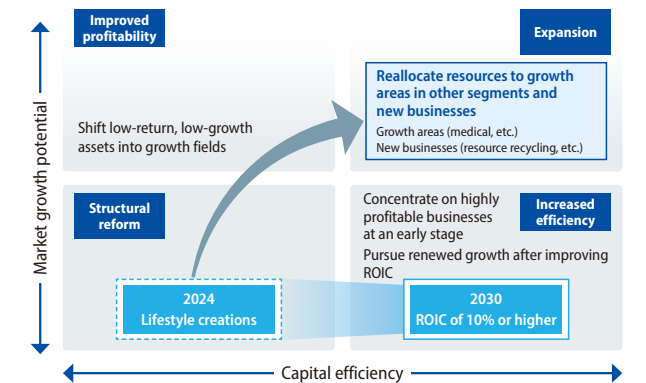
In the real estate business, overall revenue declined due to the absence of sales from idle land development projects recorded in the previous fiscal year. In shopping center operations, however, foot traffic recovered in Tsukashin, supported by its renovation. In the landscaping and greening business, large-scale deliveries for major projects in the Kansai area were moved forward, but nationwide performance was impacted by economic uncertainty. We continued the structural reforms in the sports club business, including the closure of unprofitable locations, in an effort to improve profitability, and strengthened new service initiatives, such as school swimming classes in swimming operations and health support programs for seniors in fitness operations. As a result, net sales amounted to ¥12,005 million (a 6.4% decrease from the previous fiscal year), while operating profit reached ¥988 million (an 18.7% increase from the previous fiscal year).



## Initiatives for VISION 2030 stage2

### Real estate business

As the real estate business continues to post a negative Gunze Value Added (GVA), which is a financial indicator, it is necessary, as part of structural reforms, to assess the efficiency of the retained assets and determine whether to continue each business. We will work to improve the profitability of low-return assets, and in cases where improvement is difficult, proceed with their disposal or downsizing to convert them into cash. These funds will then be shifted into growth areas, enabling us to build a leaner business, improve ROIC, and contribute to the growth of the Group as a whole.



### Landscaping and greening business

Gunze Green Co., Ltd. pursues its philosophy of "Creating the future through greenery" by engaging in environmental businesses that use flowers and trees to help realize a sustainable and comfortable society. By harnessing the power of flowers and greenery, we create new value to enhance urban landscapes and enrich people's lives, contributing to safe, comfortable and verdant communities. We are also developing our e-commerce business by integrating our flower and greening operations, leveraging our dedicated VENTO PIANTA website and external online malls to serve the diverse needs of both individual and corporate customers. Our services are a combination of our strong proposal capabilities, convenience and quality. In collaboration with Kyushu University, the Natural Capital Credit Consortium and Gunze's Environmental

Impact Strategy Promotion Office, we are advancing projects to secure carbon credits through the supply of greenery, and projects to visualize and leverage CO<sub>2</sub> fixation. Looking ahead, Gunze will continue to accelerate initiatives that contribute to the realization of a carbon-neutral society.



Trees supplied for the Forest of Tranquility at Expo 2025 to move toward a comfortable society where people and nature are in harmony

### Sports club business

In the sports club business, we support our members in the maintenance of their health and fitness while also aiming to create communities that enrich their lives. During stage2, we will continue to strengthen these efforts, expanding into the fields of education and healthcare to become an indispensable presence in local communities. In our school operations, we have long practiced our Three Disciplines that embody Gunze's founding spirit, exchange greetings, participate in cleaning, keep your personal belongings in order, to facilitate children's personal growth. In stage2, we will provide high-quality instruction from professional instructors to expand commissioned school swimming programs, particularly in elementary schools where there are challenges, such as aging facilities and the reform of teacher workloads. Through these efforts, we aim to help address social issues. We will also broaden the range of services and programs that we provide to meet diverse needs, creating welcoming spaces for children and parents alike. In our fitness operations, in addition to providing the enjoyment of exercise to relieve stress and promote health, in stage2, we will increase our focus on services in the healthcare domain, such as

frailty prevention and health maintenance services for middle-aged and older adults. We will also expand our participation in local government-commissioned health support programs, helping to reduce medical costs, extend people's healthy life expectancy and solve other social issues. By enhancing our services for senior people and the younger generations alike, we will continue contributing to the well-being of local communities.



Instruction in contracted swimming lessons (Kyoto Yawata club)



On-site classes in frailty-prevention classes to extend people's healthy life expectancy (Kobe City)

## Cross-Functional Engineer Strategy



**Hiroyuki Yoshizaki**

Deputy Section Manager,  
Technical Development Section,  
Technical Department,  
Plastic Film Company

[Career]

Joined Gunze mid-career in 2004 and assigned to the Technical Development Section of the Plastic Business Department. He was transferred to Fukushima Plastics Co., Ltd. in 2010 and to Plastic Film Company's Technical Development Section in 2015 and gained experience there. In 2022, he became a manager of the Manufacturing Section of Gunze Plastics & Engineering of Vietnam Co., LTD. to supervise local production. As a manager of Plastic Film Company's Technical Development Section, he has assumed the heavy responsibility of leading our product development efforts since 2024.

**Plastic Films**

### Resource-recycling strategy in plastic films

Easy to process and durable, plastics are a material that is rooted in people's every-day lives. However, plastics are derived from petroleum, so we are facing global problems. As a plastic film manufacturer and distributor, we are using our collective expertise to fulfill our responsibility to help establish a sustainable society by addressing three global issues: global warming, the depletion of the earth's resources and marine pollution. One initiative we are engaged in is the complete elimination of waste from factories. Simply put, this means recycling all of the plastic waste generated at manufacturing sites. We have a good chance of achieving this at our Moriyama Plant, our core plant, and we are expanding these efforts to our overseas production bases. One of Gunze's strengths is multilayer-oriented films, and some of these products

are hard to recycle as they are. We are working to establish a technology for separating different types of materials leveraging the differences in the solubility of the different resins. Going forward, we will collect printing scraps generated at customers' sites and try to reuse them. To date, these scraps have been disposed of. Our initiatives utilize the in-house knowledge we have accumulated in many different businesses and fields. We will promote technological innovation and contribute to the development of a recycling-oriented society.

The Medical Group is reorganizing to combine research, development, manufacturing and sales into a one-stop system. This narrows the distance between us and our customers. We have many more opportunities to listen directly to the opinions of healthcare professionals. Consequently, we are aware of problems and complaints which we have tended to overlook. Now we have a system for providing correct feedback to our product development personnel. As Gunze's credibility has increased in healthcare

### Combining biomaterials and medical devices Product development that is reactive to the opinions and complaints of healthcare professionals



**Masato Sasaki**

Senior Manager,  
Development & Research Department  
Development Group  
Gunze Medical Limited

[Career]

Joined the company in 2006 as a salesperson. As a sales office manager, he gained experience in team management. He then worked as a promotion manager and became involved in global operations as a manager of a division introducing overseas products into the domestic market. Leveraging his experience, he is currently a senior manager leading the development division.

**Medical**

Combining the technological strength we have accumulated and the creativity and communication skills of our human resources, we take sustainability one step further. Seek to create new products and services sincerely, steadily and adventurously. This is a unique characteristic of Gunze. Here are a few examples of our efforts in many different divisions and fields.

## Gunze, a technology-driven company. We continue to take on challenges.



**Takashi Kuraoka**

Manager,  
Product Development Section,  
Technical Development Center,  
Engineering Plastics Division

[Career]

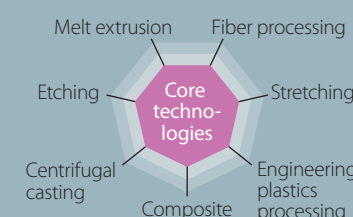
Joined Shiga Research Center in 1992. He was transferred to the Management Strategy Office of the Management & Strategy Department in 2012 and was involved in the formulation of strategies for the whole company. He became a manager of the Technical Development Center in the Engineering Plastics Division in 2016. Since 2018, he has been working as a manager of the Product Development Section of the Technical Development Center promoting development operations of the engineering plastics business.

**Engineering Plastics**

### Collaborating in the development of customer-friendly optimized custom products

Our engineering plastics business is characterized by its customer-oriented solution proposals. To solve the problems customers face, our engineers accompany salespeople and directly communicate with customers to propose products and technologies that may be the solutions they need. To propose valuable solutions, you must have communication skills so that you can investigate the problems customers are experiencing and get down to their root causes, and you must have the technical skills to create solutions. To continue to refine these two different skills, we have defined seven core technologies and combine them to provide customized products. To continue to expand into new markets and products, we must continue to refine our technologies. This is a sort of technology cross-training. For example, the tube extrusion and stretching technology

developed in the office automation field has evolved into a more powerful technology by matching it up in the healthcare, semiconductor and electronic component markets. This has improved engineers' skills and we are achieving customer-friendly and collaborative product development activities.



The environment surrounding our business operations has rapidly changed in recent years. Today, we are in what we call an age of uncertainty that is characterized by the difficulty of foreseeing the future. To increase our competitive advantage, quickly adapt to changes in the market and continue our business operations, we must transform our operational processes using digital technologies. Regarding indirect operations, sales and product divisions, the Technology & Development Department is pursuing initiatives such as the

### Providing DX-based support from a position that is close to the Company's divisions

streamlining of operations using RPA\*1 and OCR\*2 tools and the development of data-driven sales processes and production processes where the goal is for them to be automated and autonomously controlled. In developing a production process with the goal of it being automated and autonomously controlled, we are pursuing a shift to a smart factory to increase productivity and quality with initiatives such as reducing the dependence on specific individuals by using robotics, sensing technologies and other measures to address the labor shortage and maximizing equipment efficiency via optimized AI-based production plans.

\*1 Robotic Process Automation (RPA) is the robot-based automation of formulaic operations using computers, etc.

\*2 Optical Character Recognition (OCR) is the digitalization of handwritten and printed data



**Takahiro Yoshioka**

Manager  
Process Development Office,  
Technology &  
Development Department

[Career]

Joined Kyoto Research Center Mechatronics Laboratory in 1996. He was transferred to Laboratory 3 of the Research & Development Department in 2002 and to the Design Sub-department of the Mechatronics Department in 2017. Since 2024, he has worked in the Process Development Office of the Technology & Development Department. Currently, he is promoting automation that is optimized for different business departments' manufacturing processes and production process innovation.

**Technology & Development**



## Global Strategy

# Entering a New Global Stage

With business locations worldwide, Gunze is expanding its global strategy. We are committed to sustainable efforts such as the overseas expansion of the resource-recycling model established in Japan and the development of our global human resources and network. We are also developing products in consideration of local needs and the global market.



**Our global strategy is the core of the growth story described in VISION 2030. We interviewed the managers of business divisions who are actively working to implement the strategy.**

### Q.1

**How are your global strategies progressing in each business area?**

#### Ishikawa

In the textile materials field, we make and sell products in four countries, Vietnam, Indonesia, China and Bangladesh. About 15% of textile materials are sold in Japan, and the remaining products are sold locally in different countries. We will expand these local sales. If we divide local sales by customer type, Japanese, local and Western, Japanese customers make up 60% of sales. Major SPA retailers account for a large portion of sales to Japanese customers—more than 30%. With production factories in four countries, Gunze's sales to Japanese customers have been strong as these customers shift their production operations overseas.

**Overseas, local sales will be expanded.**

— Textile materials



#### Matsuda

In the medical field, products made in Japan are exported overseas (to the United States, for example) for sale, and we sell products made in China in both China and Latin America. We also import products made by foreign companies to Japan for sale. We are expanding globally. We have overseas offices in China, the United States and Germany.

#### Hanaoka

In the plastic films field, we have production bases in the United States, China and Vietnam, and we are implementing a strategy of local production for local consumption. For sustainability reasons,

the global market is pursuing increased recyclability through the shift to mono-materials. At the same time, we have to address problems such as the deterioration of functionality and the increase of costs. Companies are looking for solutions.

### Q.2

**Where is the global strategy in the Medium-term Management Plan going?**

#### Matsuda

In the medical field, we primarily target China, United States, Europe and Asia. Our attention is on the worldwide increase of the urban population and the advances in healthcare standards. To meet the needs of emerging markets, we will work to deliver our products wherever they are needed as quickly as possible.

Innovative medical devices are being developed all over the world. We will work on product development from a global perspective and continue to deliver excellent products developed by our partner companies all over the world to patients in Japan, in addition to selling our products overseas.

#### Hanaoka

Against the backdrop of the changes in the global petrochemical industry, Gunze is maximizing its strengths, and it seeks to establish sustainable competitive advantages. The advantages of Gunze's plastic films lie in its multilayer-oriented film technology. Products can be made

**We use our multilayer-oriented film technology to roll out competitive products that are a balance of functionality and cost.**

— Plastics



multifunctional by layering multiple resins, and, by thinning the films, costs can be reduced while retaining the functionality of the resins. Through efforts such as these, we will roll out GEOPLAS®, a competitive product that balances functionality and cost, in a global market where price competition is fierce.

#### Ishikawa

Going forward, we will expand our operations by acquiring customers from Western countries which occupy an enor-

mous part of the market. In Bangladesh, the percentage of customers that are Western customers has increased in the last few years. Today, they account for more than 60% of sales. Globally, China, Bangladesh, Vietnam, Turkey, India and Indonesia are the largest exporters of clothing in terms of value, in that order. Gunze has production and sales bases in China, Bangladesh, Vietnam and Indonesia, and we are considering establishing bases in the fourth- and fifth-ranked countries, Turkey and India. Growth has been slowing in China and Indonesia, but we will continue to operate in these countries while achieving significant growth in Vietnam and Bangladesh to explore new bases and expand our strategy of local production for local consumption.

### Q.3

**What is needed to achieve a more sustainable global strategy?**

#### Hanaoka

The resource-recycling model established in Japan will also be expanded overseas and, even in the rapidly changing market environment, we will flexibly and quickly make decisions to provide high-quality products and innovative technologies and strive to be a globally trusted manufacturer of materials.

#### Ishikawa

We will remain committed to the contin-

## GUNZE'S NEW INITIATIVE

ued improvement of our product development capabilities and the training of global human resources to support these capabilities. They are the most important factors for sustainable growth.

#### Matsuda

By engaging in human resources development activities, we will increase the diversity of our workforce, including people



**Continue to improve product development capabilities and train global human resources to support these capabilities**

— Medical

who wish to work overseas, were born overseas and are active overseas. The scope of these people's activities will be broadened. We will also deepen our partnership with overseas companies and human resources and pursue the development of a global network. Our basic product development policy is to meet local needs in light of the global market. First, we visit a country, understand their rules, learn about the latest technologies and also look for local partners who are willing to sell our products and overseas partners who will let us sell their products in Japan. In this way, we will increase our cooperation with partners all over the world.

CULTIVATION  
EXPANSION  
CREATION

#### Kenzo Ishikawa

Corporate Officer  
General Manager,  
Threads &  
Accessories Division



#### Shojiro Matsuda

Director and  
Corporate Officer  
Representative Director and  
President of  
GUNZE MEDICAL LIMITED



#### Yuji Hanaoka

Corporate Officer  
President,  
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