

Overview of business results for FY ended May 2023

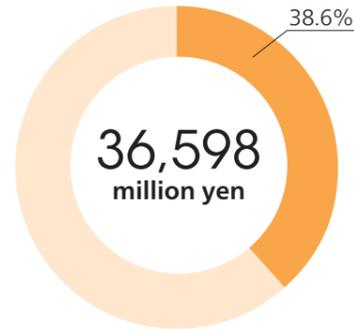
Net sales and percentage to total

Trends in business results

(For each FY ended May 31)

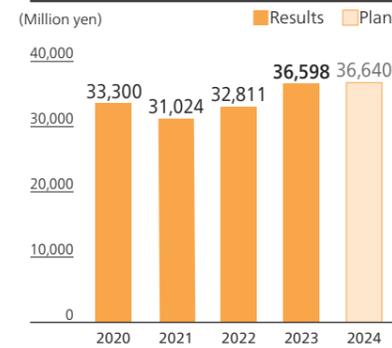


Interior Fittings

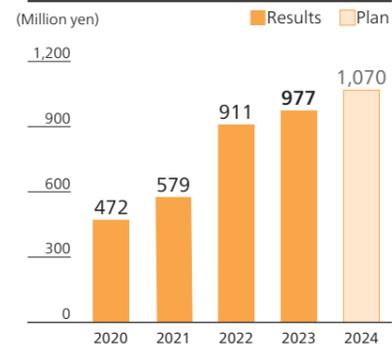


Although sales of household carpets were affected by a reactionary decline after the high demand during the COVID-19 pandemic, sales of commercial carpets increased thanks to a large order intake. Total net sales in the Interior Fittings segment increased also because of the contribution from sales of the space design business due to the adoption of comprehensive proposals for interior materials and furniture. Sales of wall coverings also remained firm owing to the effect of price revisions and other factors.

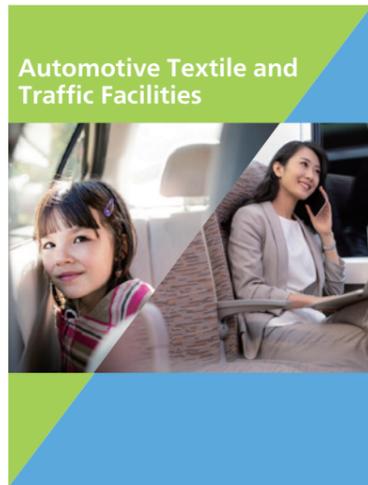
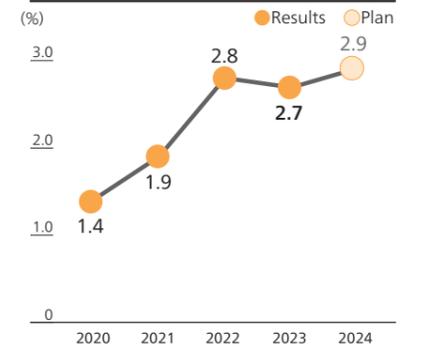
Net sales



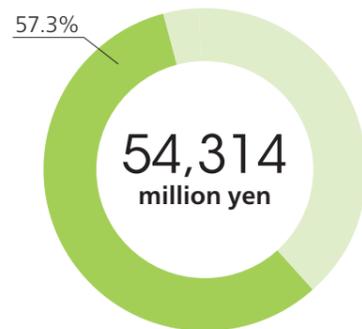
Segment income



Ratio of segment income

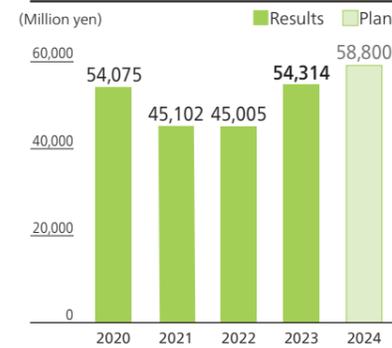


Automotive Textile and Traffic Facilities

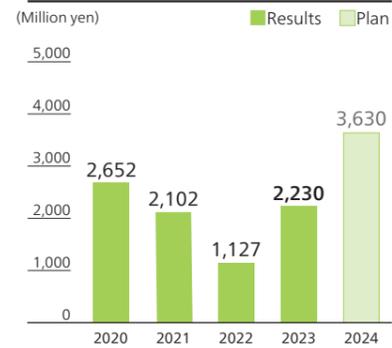


Automotive-related sales increased, backed by a recovery in domestic automobile production in addition to the favorable impact of foreign exchange rates. The traffic facilities business saw a rebound in demand for products for railway refurbishing works as well as interior textiles for buses. Segment income increased, reflecting the gradual spread of transactions at reasonable prices as well as the business structural reform at the Company's subsidiary in the United States.

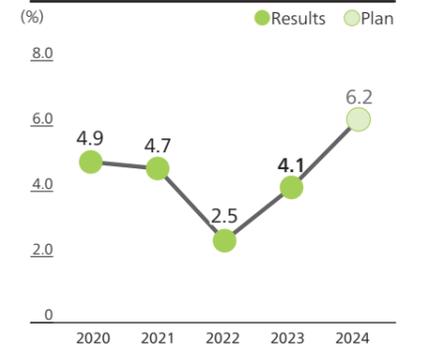
Net sales



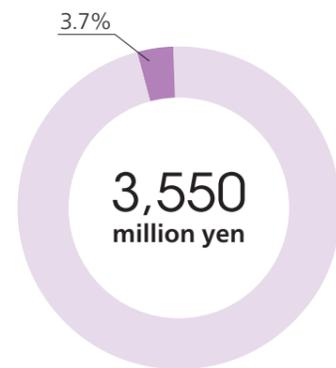
Segment income



Ratio of segment income

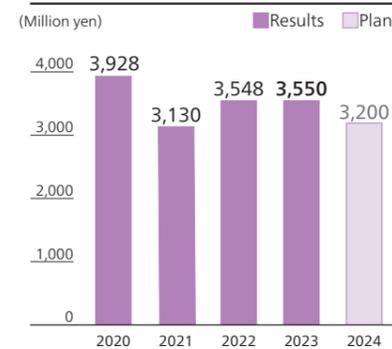


Functional Materials

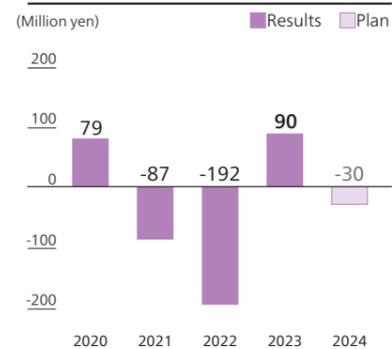


Sales of fabric-coated heating products increased because of price revisions to cover higher raw material prices and surging import costs, despite a decrease in new orders. Orders for floor materials for bathrooms also remained steady. Other contributing factors to the increase in segment income include the completion of the consolidation of factories in China and Vietnam in the previous fiscal year.

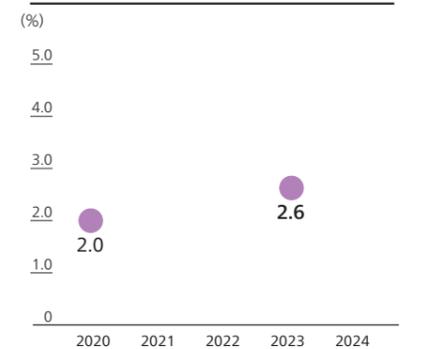
Net sales



Segment income



Ratio of segment income



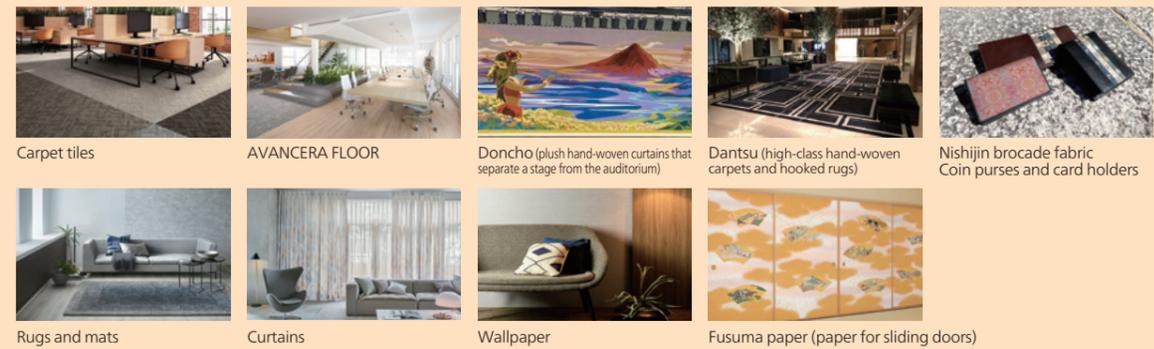
\* The above data for the fiscal year ending May 2024 are the forecast figures for consolidated financial results that were disclosed on July 14, 2023.

## Interior Fittings

### Business Details

Wholesale of interior textiles for commercial use (in Japan and overseas), interior finishing work (curtains, carpets, wallpaper, plush hand-woven curtains, hand-woven carpets and hooked rugs, etc.), wholesale of household interior textile products, EC business, store design and construction (Space Design Business), sales of curtains and other optional items, and production and sales of arts and crafts

### Major Products



### SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>The appeal of eco-friendly products cultivated through many years of our efforts to address environmental issues</li> <li>Sales capabilities taking advantage of the Group's multiple functions as a manufacturer, wholesaler, and constructor</li> <li>System covering from designing of the entire space to final delivery</li> <li>Capabilities for manufacture and development of traditional craftwork based on techniques refined for many years</li> <li>Product development and sales capabilities through cooperation with other segments</li> </ul>	<ul style="list-style-type: none"> <li>Low brand awareness due to insufficient public relations</li> <li>Decreased demand for roll carpets, one of the mainstay products of this segment</li> <li>Disadvantageous location and limited accessibility of local showrooms</li> <li>Inefficient logistics because of the fact that wallpaper and interior products are handled by different management systems at different operation bases</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>Increased demand for carpet tiles due to the addition of "disclosure of CO<sub>2</sub> emissions" to evaluation criteria for carpet tile procurement under the Act on Promoting Green Purchasing</li> <li>Growing interest in interior materials due to lifestyle changes</li> <li>Increased demand in overseas markets after the removal of restrictions on overseas travel</li> <li>Improved evaluation of Japanese textiles of traditional arts and crafts due to consumer preference for high-end products</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in the interior market scale due to the decreased number of new housing starts, etc.</li> <li>Soaring prices of raw materials such as crude oil, and rising energy and logistics costs</li> <li>Unstable supply of raw materials due to fewer supply chains</li> <li>Shortage of certified skilled workers due to aging and decreased demand</li> <li>Rising transportation expenses due to a shortage of transportation drivers</li> </ul>

### Companies Engaged in the Business

Suminoe Textile Co., Ltd., SUMINOE Co., Ltd., RUNON CO., LTD., Suminoe Logistics Co., Ltd., TANGO TEXTILE Co., Ltd., Suminoe Works Co., Ltd., Sewing Hyogo Co., Ltd., CPO Co., Ltd., PRETERIOR-TEXTILE Inc., Kyoto Traditional Art and Craft Factory of Suminoe Textile Co., Ltd., Suminoe Techno Co., Ltd.

### SGW SUMINOE GROUP WAY 2022~2024~2027 Strategies and Measures and Progress Assessment for FY Ended May 2023

Strategies and measures	Progress	Strategies and measures	Progress
Expand lineups of environmentally friendly products and increase sales of these products.	○	Reduce inventory levels.	○
Commercialize and launch anti-virus wallpapers.	○	Strengthen directly operated EC business.	○
Enhance transmission and penetration of our brand image.	○	Simplify delivery.	×
Develop new products for housing.	△	—	—

### Review and Future Prospects by the Officer in Charge

Against the backdrop of the economic recovery trend, we achieved both sales and profit growth in FY2023. We will strengthen the space design business.

Norihisa Murase  
Director  
Division Manager  
Interior Textile Business Headquarters



### Review of FY Ended May 2023 (Results and Future Challenges)

In fiscal year ended May 2023, the Interior Fittings segment achieved both sales and profit growth. This was due primarily to a large order for products adopted by building redevelopment projects, mainly in the Tokyo metropolitan area, and renovations of accommodation facilities that were resumed in response to the recovery in demand from inbound tourists. The profit growth is attributable to solid performance of RUNON CO., LTD., a subsidiary that handles wall coverings, which made a revision of product prices in FY2022 because of soaring raw material costs. In the space design business, CPO Co., Ltd., which is engaged in designing various retail stores, and PRETERIOR-TEXTILE Inc., which sells

interior products, generated synergy effects together with our existing businesses. Our comprehensive proposals for interior materials and furniture were adopted by large stores, representing the first step toward market penetration.

As for products, encouraged by further growing environmental awareness, both sales quantity and market recognition of ECOS®, eco-friendly carpet tiles under the horizontal recycling system, greatly improved. Moreover, for general household use, we launched rugs and mats for pets, such as dogs and cats. In this manner, we were vigorous in business expansion into other industries.

### Future Prospects (Toward Achieving the SGW 2024)

As in FY2023, we will first work to expand sales of environmentally friendly products, centering on ECOS®, and our original highly functional products. Along with such efforts, we will strengthen the space design business to offer people- and society-friendly spaces that are more comfortable and ensure greater safety and peace of mind on a one-stop basis.

To improve the profitability, I think it is important to develop and launch high-grade products, which have still been in the planning stage until now. We will improve the profitability by proposing products that differentiate us from other companies. Primary among them are more luxurious carpets for general household use, such as hand-made rugs manufactured by TANGO TEXTILE Co., Ltd., which has a track

record of delivering products to renowned hotels. Meanwhile, the prices of raw materials still continue to surge, exceeding the maximum we can absorb as a manufacturer. By selling products at reasonable prices, we will maintain our product quality and secure proper inventory, thereby ensuring profit.

The economy has begun to move forward along with the easing of behavioral restrictions against COVID-19. The Interior Fittings segment will keep pace with this positive trend, with determination to aggressively expand business both in Japan and abroad. The SUMINOE GROUP commemorated its 140th anniversary in 2023. I will strive to better operate this business segment so that it can play a role in supporting people's daily life.

### Progress Increasing the recognition of SUMINOE Co., Ltd. through public relations —Measures to enhance transmission and penetration of our brand image

SUMINOE Co., Ltd., which plays a pivotal role in the Interior Fittings segment, has been working to strengthen PR activities.

In the fiscal year ended May 2023, the company put a tie-up advertisement featuring an interview in an architecture journal, with the purpose of improving the brand image and recognition of SUMINOE Co., Ltd. and ECOS®.

The company also actively implements measures through the web. For example, it has been continuing to

disseminate information while making effective use of several building materials databases. SUMINOE also plans to redesign its website after reviewing all the contents from the viewpoint of users. In parallel with such activities, the company strives to continuously improve information sharing via social media. In so doing, it aims to widely publicize various brand products of SUMINOE Co., Ltd. to not only B-to-B suppliers but also B-to-C end users.



Website of SUMINOE Co., Ltd. (Japanese only)

Strategies by Segment

## Automotive Textiles and Traffic Facilities (Automotive Textiles)

### Business Details

Development, production and sales of automotive interior products (ceiling materials, seat covering materials, floor carpets, luggage compartment, car mats, and other interior products in general), automotive exterior textile products (wheel houses, engine covers, and other textile products). Our products are supplied to all Japanese automobile manufacturers.

### Major Products



### SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>● Capability for total coordination of automotive interior products</li> <li>● Global manufacturing system that enables stable quality and supply</li> <li>● Strong global supply chain</li> <li>● Capability for development and proposals of new materials through integration of technologies developed in multiple businesses</li> <li>● Capability to adopt to the environment as a manufacturer</li> </ul>	<ul style="list-style-type: none"> <li>● Insufficient consolidation of technologies and expertise possessed by overseas operation sites</li> <li>● Capability to deal with price fluctuations caused by external factors</li> <li>● Delay in launching the restructuring of the North and Central American business</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>● Response to the automotive industry, which is in the age of transformation represented by CASE and NEVs</li> <li>● Increased demand for environmentally friendly products</li> <li>● Increased demand for textile-based products that are lightweight and excel in noise-absorbing performance</li> </ul>	<ul style="list-style-type: none"> <li>● Sluggish sales of Japanese manufacturers in China</li> <li>● Intensified price competition</li> <li>● New entry of overseas manufacturers that produce automotive interior textiles and seat covering materials into the market</li> <li>● Increasing cost of production due to soaring energy costs</li> </ul>

### Companies Engaged in the Business

Suminoe Textile Co., Ltd., Suminoe Logistics Co., Ltd., Suminoe Teijin Techno Co., Ltd., Teijin Teclath Ltd., Owari Seisen Co., Ltd., Suminoe Techno Co., Ltd., Suminoe Textile of America Corporation, Bondtex, Inc., Suminoe Textile de Mexico, S.A. de C.V., SPM Automotive Textile Co., Ltd. Suzhou Suminoe Koide Automotive Accessories Co., Ltd., Suminoe Textile Shanghai Co., Ltd., T.C.H. Suminoe Co., Ltd., Suminoe Koide (Thailand) Co., Ltd., PT. Sinar Suminoe Indonesia, PT. Suminoe Surya Techno, Suminoe Teijin Techno Krishna India Pvt. Ltd.

### SGW SUMINOE GROUP WAY 2022~2024~2027 Strategies and Measures and Progress Assessment for FY Ended May 2023

Strategies and measures	Progress	Strategies and measures	Progress
Development, sales promotion and effective use of environmentally friendly products	○	Development of products, focusing on "new parts" and "production with less man-hours" as key words	○
Development of interior materials for next-generation vehicles	△	Development of fabric materials using new production methods	○
Cost reduction through the optimization of material procurement	△	Development in accordance with the situations and issues of each global operation site	△
Horizontal development to overseas markets	△		—

### Review and Future Prospects by the Officer in Charge

## Promoting new projects to meet the needs of a once-in-a-century transformation period

**Toshiro Maruyama**  
 Managing Director  
 Division Manager  
 Automotive Textiles Business Headquarters



### Review of FY Ended May 2023 (Results and Future Challenges)

In the fiscal year ended May 2023, the Automotive Textile business continued to confront extremely harsh conditions, such as the confusion in supply chains caused by the spread of COVID-19, the shortage of semiconductors, suspended operations by automotive manufacturers, the impact of the weaker yen on imported materials, and soaring prices of raw materials and energy due to high crude oil prices. Under such circumstances, net sales and segment income fell significantly below the planned figures. However, by focusing on cost saving, cost reduction and quality improvement measures with the understanding and cooperation of the entire automotive industry, we were able to minimize the impact of inflated raw material prices.

As for profitability improvement of a North American subsidiary, which was one of our concerns, it is almost certain to achieve profitability as a result of measures to restructure the production system and strengthen coordination with a subsidiary in Mexico.

Regarding capital investment, we promoted the development of products that are expected to be profitable in the future and activities to propose these products. In addition, we introduced machines to develop new technologies in Thailand, China and Mexico and made preparations for a new factory for synthetic leather production.

The automotive industry has entered a once-in-a-century period of transformation, with carmakers accelerating the development of electric vehicles toward 2030 while promoting initiatives for ESG and the SDGs. As part of our efforts to respond to the transformation, we launched a new fabric development project. Project members gathered from development, sales and technological departments to work together to create products that add further value to conventional sustainable materials and design items using embossing and embroidery.

### Future Prospects (Toward Achieving the SGW 2024)

We regard the third year of the SGW as a breakthrough year, in which we will promote initiatives on four key themes, aiming at winning customer trust through our high capabilities for product development and production proposals.

The first theme is to "further strengthen operation bases in North and Central America." At our subsidiary in Mexico, we plan to complete the construction of a new synthetic leather factory and hold its opening ceremony within 2023. It is the first time in several years for the Group to construct a new factory. We will move to the next step through manufacturing of products that will trigger a revitalization of struggling subsidiaries in North and Central America, development of new products, and expansion of our market share.

The second theme is to "reinforce the fabric business." We will promote the adoption of ECONIX\*, a seat covering material that utilizes

スミトロン® (SUMITRON), and sales expansion of decorative fabric materials by further strengthening product planning, development and production, aiming at increasing orders received for fabric products.

The third is "human resources development." We will nurture personnel who can play multiple roles, and we will develop the practical skills of employees.

The fourth is "specific strategies on a medium- to long-term basis." We will design specific strategies tailored to the situations and features of the respective 17 operation sites in Japan and abroad, and we will visualize a roadmap to the achievement of their business targets.

\* ECONIX: Fabric using an eco-friendly yarn made from recycled chips. It is highly durable and excels in stain resistance and prevention of fibrillation by friction.

### Progress Applying products of other businesses as automotive textiles —Development of products, focusing on "new parts" and "production with less man-hours" as key words

We have started to promote sales of floor signage film for trains and buses, which is originally a product of the Traffic Facilities business, as an interior item that is used to prevent scratches in a car. First, the film was adopted by Nissan Motor Co., Ltd. as a protection film for the luggage compartment of SERENA e-POWER (launched in April 2023). Going forward, we will develop a product making effective use of the film's scratch-resistant and decorative properties, with a view to

proposing its applications to other components, such as interior panels, sidestep garnishes, and luggage entry guards. To expand sales of such film, we will promote it to automobile manufacturers.



Luggage protection film

## Automotive Textiles and Traffic Facilities (Traffic Facilities)

### Business Details

Production and sales of interior materials mainly for trains and buses (seat coverings, wall materials, curtains, flooring materials, seat cushion materials, etc.) We have supplied our products to a variety of customers. For trains, these customers include JR, private railways and publicly operated transportation services. Our products have also been used in pickup buses, route buses and sightseeing buses.

### Major Products



Moquette (woven velour), curtains Carpets Floor signage film SUMICUBE®, knit fabric

### SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>The industry's top market share percentage</li> <li>Capability to offer total proposals for interior materials for public transportation systems</li> <li>Environmentally friendly products with excellent safety performance</li> <li>Technological and development capabilities taking advantage of possessing the Group's own factories</li> </ul>	<ul style="list-style-type: none"> <li>Aging facilities of manufacturing factories</li> <li>Aging human resources</li> <li>Significant impact of the decline in the traffic industry</li> <li>Insufficient track records of delivery to overseas customers</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>Increase in travelers and foreign visitors to Japan in the post-pandemic era</li> <li>Increase in users of public transportation facilities owing to practical application of MaaS</li> <li>Increased demand for environmentally friendly products</li> <li>Increased demand for products for EV buses</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in users of public transportation facilities owing to declining birthrate and aging population</li> <li>Decrease in the number of trains/buses owned because of decreased business trips and reduced rush-hours due to the spread of teleworking and staggered working hours</li> <li>Soaring materials prices</li> </ul>

### Companies Engaged in the Business

Suminoe Textile Co., Ltd., Marunaka Soei Co., Ltd., Seki Textile Co., Ltd., Teijin Teclath Ltd., Owari Seisen Co., Ltd., Suminoe Techno Co., Ltd.

### SGW SUMINOE GROUP WAY 2022~2024~2027 Strategies and Measures and Progress Assessment for FY Ended May 2023

Strategies and measures	Progress
Increase order receipts for renovation and replacement work, both of which show signs of recovery.	×
Develop and increase sales of new products.	○
Develop environmentally friendly fabrics.	△
Increase market shares.	○
Propose and receive orders for SUMICUBE® (seat cushion material) with a new tactile impression.	△



### Review and Future Prospects by the Officer in Charge

Improving performance by expanding sales channels, viewing post-pandemic recovery in demand as business opportunities

Sadahiro Seto  
Operating Officer  
Division Manager  
Traffic Facilities Business Headquarters



### Review of FY Ended May 2023 (Results and Future Challenges)

In the fiscal year ended in May 2023, sales were sluggish in the Traffic Facilities business since orders received from transportation operators, who are our customers, remained low due to a lack of recovery in demand for updating and maintaining train seats as well as for new sightseeing buses.

However, I realize that the passenger demand has been on a recovery trend after the reclassification of COVID-19 under the Infectious Diseases Control Act to Category V. Although demand for new sightseeing buses is still low, there is a resurgence in orders received for covering materials for updating and

maintaining train seats and for SUMICUBE® cushion material for train cars. We also see recovering demand for route buses and emerging demand for EV buses.

On the occasion of these changes, we recognize that we are in the period of being more responsive to the needs of our customer companies. Making the most of our strong proposal-making capability and high market share, we strive to offer proposals that give greater satisfaction to customers and ensure a stable supply of products.

### Future Prospects (Toward Achieving the SGW 2024)

In 1896, the Company succeeded in manufacturing moquette, a pile fabric for seat coverings, as the first of its kind in Japan. Since then, we have been maintaining the top market share in the area of seat coverings used in public transportation facilities. Seat covering materials account for roughly 50% of sales in this business segment. In July 2022, to maintain and improve our development and production system, we acquired Seki Textile Co., Ltd., which has been functioning as a moquette manufacturing factory of the SUMINOE GROUP. The Group will continue to pursue design and functionality that satisfy customer needs, aiming to enhance its brand value.

The passenger demand in society as a whole has recovered only up to around 80% of pre-pandemic levels. To achieve the

SGW in such a situation, we will focus efforts on further promoting our functional products and enhancing the functionality of SUMICUBE® and floor signage film while bringing their prices down, thereby increasing order intake.

We have worked to strengthen cooperation with other business segments and apply know-how of the Traffic Facilities business to other segments. As a result, now we have a good track record at selling products that we had not handled previously. We will continue to reinforce cooperation with other business segments to promote sales of seat upholstery materials for theaters and halls. Through these endeavors, the Group will increase customer acquisition by leveraging its existing know-how, which will enable the business to turn around.

### Progress Generating synergies through the acquisition of Seki Textile Co., Ltd. as a Group company –Measures to develop and increase sales of new products and to increase market share

In July 2022, Suminoe Textile Co., Ltd. acquired Seki Textile Co., Ltd. as a Group company, with the expectation of generating synergies between the Company's stable supply system and Japan's leading weaving technology owned by Seki Textile (see p. 30). With strong capabilities for selling moquette not only for trains and buses but also for household furniture, Seki Textile contributes to expanding the Group's market share and to improving its competitiveness.

The Company appointed the Director of the Traffic Facilities Textiles Planning Division of the Traffic Facilities Textiles Business Department of Suminoe Textile Co., Ltd. as a Director of Seki Textile Co., Ltd. She is the Group's first female to be internally promoted to a Director, although

until then there had been examples of appointment of female Outside Directors for the entire Group. Before being engaged in the Traffic Facilities business, she dealt with general household products in the Interior Fittings segment. Capitalizing on her experience in production and quality control she had accumulated in the previous segment, she is now in charge of management and administration of both the Company's Traffic Facilities business and Seki Textile Co., Ltd. We will continue to encourage our personnel to utilize their experience, knowledge and personal connections cultivated in other business segments for developing and increasing sales of new products in the Traffic Facilities business as a whole.

## Functional Materials

### Business Details

Moving beyond its conventional business segments, the Group has been active in advancing into new business fields, handling a wide range of products, including textiles, non-textiles, interior materials, household appliances and food. Household appliance business: Development, production and sales of fabric-coated heating products Functional materials business: Development, production and sales of floor materials for bathrooms, deodorizing products, interior materials for aircraft, water shielding/thermal insulation sheets, and food products

### Major Products

**Electric carpets**

**Deodorant air filters for air purifier**

**Roofing materials**

**CLOTHCABIN®**

**Floor materials for bathrooms**

**Interior materials for aircraft**

The Tispa® Series "Real Odor Deodorization without Disguising with a Scent"

"Kakidanomi" supplement containing persimmon (kaki) polyphenol

\* CLOTHCABIN is a registered trademark of TEIJIN FRONTIER CO., LTD.

### SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>Functional materials and functional treatment technologies that are unique to the Group</li> <li>Eco-friendly technology capability</li> <li>Organizational structure to realize high-quality products and high-level development</li> </ul>	<ul style="list-style-type: none"> <li>OEM business that is vulnerable to demand fluctuations</li> <li>Household appliances only limited to fiber-coated types of products</li> <li>Delayed brand penetration</li> <li>Dispersion of capabilities due to business operations in multiple fields</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>Trend toward a decarbonized society, a declining birthrate and aging population, increasing health and hygiene awareness, and the emergence of new needs due to external environmental changes, such as digital transformation (DX)</li> <li>New demand from existing customers in many fields</li> <li>Discovering overseas demand, with a footing in overseas affiliates</li> </ul>	<ul style="list-style-type: none"> <li>Unexpected changes in the external environments caused by a pandemic and other events</li> <li>Market maturity, lowering of product prices, intensified price competition</li> <li>Changes in consumer trends due to a declining birthrate and aging population and other factors</li> <li>Changes in situations of the countries where overseas operation sites are located</li> </ul>

### Companies Engaged in the Business

Suminoe Textile Co., Ltd., Suminoe Techno Co., Ltd., Suminoe Textile Vietnam Co., Ltd., Suzhou Suminoe Textiles Co., Ltd., Owari Seisen Co., Ltd.

### SGW SUMINOE GROUP WAY 2022~2024~2027 Strategies and Measures and Progress Assessment for FY Ended May 2023

Strategies and measures	Progress	Strategies and measures	Progress
Consolidate overseas factories of fabric-coated heating products, optimize the production and supply systems for these products, and strengthen the business capability.	△	Develop new health foods and everyday items using persimmon polyphenols and other functional natural substances and expand sales of these products.	△
Promote development of new products by using functional products and processing technologies and increase sales of these products.	△	Promote new commercialization utilizing smart textiles.	△
Develop and increase sales of products made by functionally processing technologies, such as deodorant treatment and anti-virus processing technology.	△	Cooperate with the technology development sections to strengthen the capability of sales and development.	△
Maintain and promote appropriate quality management and product supply systems in accordance with the JIS Q 9100 quality management standard for the aerospace industry.	○	—	—

### Review and Future Prospects by the Officer in Charge

Striving to enlarge the business scale and improve profitability while flexibly responding to major environmental changes

**Masaya Fukuoka**  
Operating Officer  
Division Manager  
Functional Materials Business Headquarters



### Review of FY Ended May 2023 (Results and Future Challenges)

In the fiscal year ended May 2023, the performance in the Functional Materials segment exceeded the results for the fiscal year ended May 2022, thanks to robust demand for bathroom floor materials, despite the negative impact of soaring prices of resources and raw materials, drastic fluctuations in foreign exchange rates, an increase in import costs, and other factors.

In the household appliance business, the fiscal year under review was the first year for our new production system that was established after the consolidation of overseas factories. Beginning in FY2023, the factory in Vietnam has been in charge of manufacturing fabric-coated heating products. The factory is making steady preparations for producing main components in-house, establishing a production system toward achieving the SGW 2024. Going forward, we will expand the scope of the business license for the Vietnamese factory, while strengthening its corporation with its counterparts in Japan and

China, not only to promote the production business but also to undertake a new business with added value. In doing so, we will strive to improve profitability.

In the functional materials area, demand for bathroom flooring materials has remained firm. By improving the operations management of production, inventory and delivery of these materials, we are working to reinforce the supply system.

In the area of functional processing, although demand for deodorizing filters for air purifiers was slack, initiatives are under way to develop new demand and products toward attainment of the SGW 2024.

In all areas, we will remain committed to augmenting the above-stated initiatives toward the SGW 2024, with the awareness that we should take on challenges to enhance cost competitiveness to resist environmental changes and our capabilities for promoting development to advance into a new field.

### Future Prospects (Toward Achieving the SGW 2024)

There has been a move toward the normalization of social and economic activities as represented by the easing of behavioral restrictions and the increase in inbound tourism demand. On the other hand, future prospects still remain unpredictable due to the lingering Russia-Ukraine conflict, financial tightening mainly in Western countries, rising prices of resources and raw materials, fluctuations in foreign exchange rates, and so forth. It is also expected that people's sense of value will become further diversified along with changes in lifestyles and that public awareness of sustainability will continue to increase.

Although this business segment is susceptible to these trends, we will strengthen and promote the strategies and measures specified under the SGW, in order to expand the business while keeping pace with environmental changes, with a focus on the six initiatives shown on the right.

- ① Improve cost competitiveness through optimization of business and work processes, aiming at profit maximization
- ② Promote product development in response to social issues and market needs
- ③ Strengthen proposal-based development and sales for a diverse range of customers
- ④ Develop applications of our unique materials and processing technologies and expand the scope of applications to other fields
- ⑤ Enhance functions of overseas operation sites to promote a production business with added-value features
- ⑥ Strengthen cooperation with technology development divisions to conduct development activities to explore new fields for the next generation

### Progress Optimizing functions of the factory in Vietnam — Measures to consolidate overseas factories of fabric-coated heating products, optimize the production and supply systems for these products, and strengthen business capability

Suminoe Textile Vietnam Co., Ltd., our production base of fabric-coated heating products, started processing and assembly of deodorizing filters. This has enabled us to reduce the physical distance with major customers of deodorizing filters, which will lead to optimization of customer support.

In the fiscal year ending May 2024, the Vietnamese subsidiary will begin in-house manufacturing of nonwoven fabric, which is used for the main component of electric carpets. In this way, we will improve work efficiency and increase profitability.



Production line for nonwoven fabric at Suminoe Textile Vietnam Co., Ltd.

## Interior Fittings

### Resources for the Future—ECOS® carpet tiles produced by recycling otherwise discarded carpet tiles into new products

The shrinking remaining capacity of landfills is one of the environmental problems in need of urgent solutions. It is said that existing landfills across Japan will be filled to capacity only within 20 years or so. In 2011, the Group established the ECOS® Recycle System to recycle used tile carpets, which previously had to be dumped in landfills, into a backing of new carpet tiles. This led to the launch of the ECOS® series, eco-friendly carpet tiles under the horizontal recycling system, which has achieved a recycled material ratio that is one of the highest in the world. We also released products featuring “double recycling” that use the Group’s proprietary recycled materials for both the backing and the surface pile yarn. To be more specific, for these products, スミトロン® (SUMITRON), recycled polyester fiber (developed in 1989), and SEACLE (developed in 2021), recycled fiber made from discarded fishing nets, are used for the pile yarn on the surface of ECOS®. In 2020, our Group factory abolished the dyeing process, which accounted for much of its environmental impact, by changing pile yarn of all the carpet tile products to solution-dyed yarn. As a result, the factory succeeded in reducing water usage, electricity usage and wastewater.

Nowadays there are many environmentally friendly products. In such circumstances, we are pleased that the concept of ECOS®, which we had developed ahead of other companies in the industry, has been highly regarded by major developers. Most recently, ECOS® was adopted by Mori Building Co., Ltd. for the Azabudai Hills and Toranomon Hills Station Tower Project in the metropolitan Tokyo area. In this large-scale project, ECOS® was installed to cover a total area of 350,000 m<sup>2</sup> in the offices on each floor of these buildings. Toward the realization of a sustainable future, we will continue to work together with customers to realize a sustainable future while gaining greater customer support for the concept of ECOS®.



ECOS® series, eco-friendly carpet tiles under the horizontal recycling system

## Automotive Textiles and Traffic Facilities (Automotive Textiles)

### Promoting development and order receipts of fabric materials using a new method

In the fabric business, our “point-raised embroidered fabric,” a decorative material that accentuates car seats, was adopted by Honda Motor Co., Ltd. for the ZR-V (launched in April 2023). We developed this seat covering material with a view to producing a mixed-color fabric that gives an impression of a third dimension or depth and that feels soft and comfortable while providing ample comfort to sink into. To create a sense of a third dimension like a sofa, we employed a new decorative expression using embroideries. Originally, our embroidery technology was used at production sites engaged in the mat business using sewing machines. As such, conventionally, the technology had not been much used in the fabric business, whose strengths lie in dyeing and finishing processing technology. In this project, overseas factories of the respective businesses were encouraged to exchange and share each other’s technologies. Through such activities, the Group successfully combined technologies of these businesses and enhanced our capability of proposing a total coordination of automotive textiles, so we were able to embody the development concept of the ZR-V.

Reinforcement of the decorative seat fabric business is one of our priority strategies for the future. We will promote this business in order to offer high-quality interior spaces with an excellent texture.

#### New embroidery processing technology

Effects	<ul style="list-style-type: none"> <li>● Embroidery expression that creates bumps and dips on the fabric surface and gives an impression of a third dimension</li> <li>● Various expressions, including stitching, plane expression, dot patterns, and overlapping zigzag stitches</li> </ul>
Features	<ul style="list-style-type: none"> <li>● Embroidery processing applicable to a thick fabric, and ease of assembly</li> <li>● Embroidery threads come in nine colors, enabling color changes.</li> <li>● Glossy and three-dimensional effects by using modified cross-section embroidery threads as an aggregate</li> </ul>



Interior of the ZR-V

## Automotive Textiles and Traffic Facilities (Traffic Facilities)

### Generating synergies between the market scale of Suminoe Textile Co., Ltd. and the existing technologies of Seki Textile Co., Ltd.

The Traffic Facilities business of Suminoe Textile Co., Ltd. has been operating as a market leader, based on its track record and customer trust it has built for more than 100 years. In the future, it is predicted that its business environment will be affected by the aging workforce, decrease in the number of users of public transportation facilities and decrease in the number of trains/buses owned due to post-pandemic changes as well as the declining birthrate and aging population, etc. Under these circumstances, in July 2022, the Group acquired Seki Textile Co., Ltd., which is engaged in production and sales of jacquard moquette used in seat coverings for train cars and buses, as a Group company.

The features of Seki Textile include its capability of one-stop production, from weaving to finish processing. The company’s joining the Group has enabled us to further improve production efficiency, leveraging the economies of scale that Suminoe Textile has as a market leader.

We can also expect cost advantages, such as a decrease in raw material procurement prices. By merging the development capability of the Company with the production capability of Seki Textile, the Group will intensify its efforts for new business and technology development and for market expansion. In addition, we plan to re-establish the mother factory in the Traffic Facilities business and make active efforts in maintaining Seki Textile’s looms and taking over its technologies. At the same time, we will heighten awareness of manufacturing among employees working in the Traffic Facilities business.

As SUMINOE GROUP companies engaged in the Traffic Facilities business, Suminoe Textile Co., Ltd., Seki Textile Co., Ltd. and Marunaka Soei Co., Ltd. will work in concert to generate synergies in order to explore new development.



No. 1 factory of Seki Textile Co., Ltd.

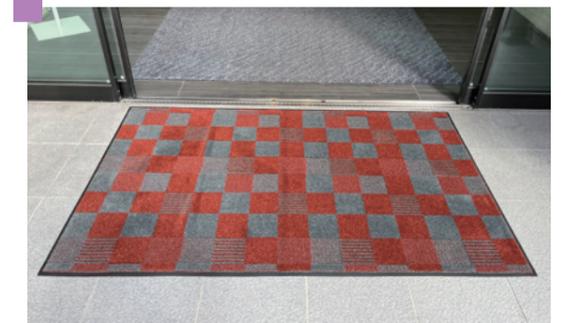
## Functional Materials

### Launching a new material for Kuriyama Pulizia Corporation

Kuriyama Pulizia Corporation handles the planning, production and sales of rental products, including mats, mops, aromatics and other products for rental use. The company has been active in promoting environmentally friendly products as well as hygiene- and safety-conscious products. So far, our unique functional materials, function processing technologies and environmental technologies offered by the Group’s Functional Materials segment have earned high recognition from Kuriyama Pulizia, which has adopted our antibacterial fabrics for entrance and toilet mats, mop threads, etc. These products use スミトロン® (SUMITRON) recycled polyester fiber featuring antibacterial properties, which has been certified with the SEK Mark.\* In May 2023, Kuriyama Pulizia launched the new product “Re.EarthMat,” for which the Group’s mat fabric was employed. “Re.Earth” was so named to convey the message “Restore the original state of the beautiful earth!” For its piles, this mat uses ECONYL® nylon produced by Aquafil, an Italian textile manufacturer, and made of discarded fishing nets, used carpets and recycled waste collected from the textile industry. The Re.EarthMat features a checkerboard design created by combining several woven patterns and using red effectively. This superb design differentiates the mat from conventional rental mats. The Re.EarthMat was developed and commercialized through collaboration among Kuriyama Pulizia Corporation, designers of Suminoe Textile Co., Ltd., and planners of Suminoe Techno Co., Ltd.

Capitalizing on its organizational structure capable of realizing high-quality products and high-level development, the Functional Materials segment will continue to develop and propose products that differentiate itself from others, with outstanding functionality, environmental and safety performance, and other advantages.

\* The certification system of Japan Textile Evaluation Technology Council (industry’s voluntary standards)



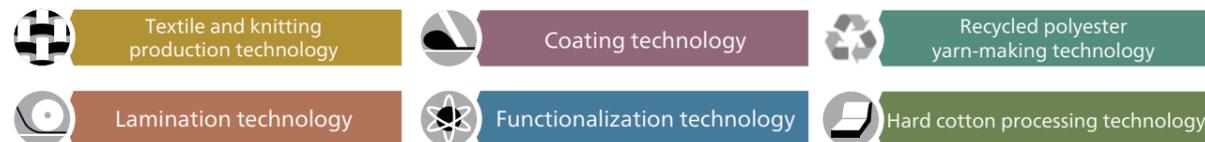
Re.EarthMat

Fundamental Development Philosophy

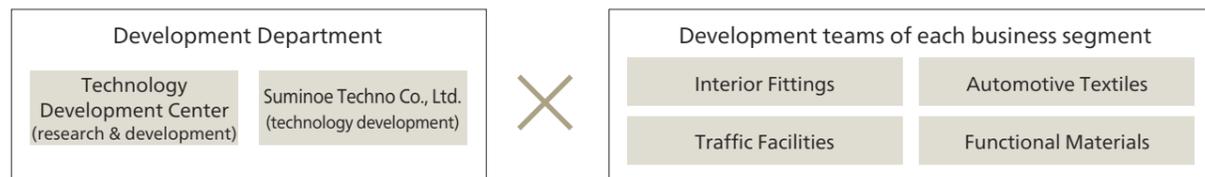


Under its fundamental development philosophy "KKR+A (Kenko [Health], Kankyo [Environment], Recycling and Amenity)," the SUMINOE GROUP has been working on research and development of technology and products that help resolve environmental issues and contribute to society while striving to sow seeds for industry-academia collaboration. We will continue our efforts to develop new technologies and products that are friendly to people and the environment, based on "KKR+A" and core technologies that the Group has cultivated for many years.

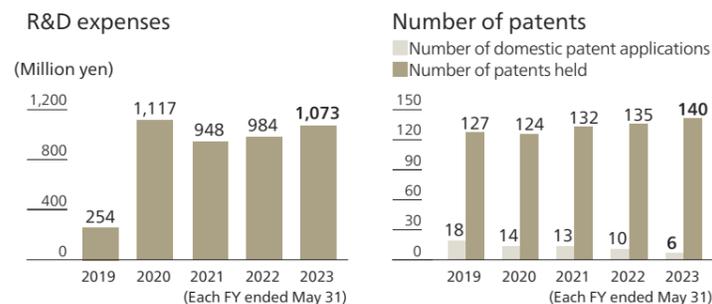
Core Technologies



Research and Development System



The Group carries out research and development based in the Nara Factory, through cooperation between the Development Department, which conducts research and development of core technologies, and the development teams of respective business segments.



Topics

Establishing resin compounding technology that realizes vibration-damping performance adjustable according to the usage

The "lightweight vibration absorbing foam sheet," which is adopted for automotive sound deadening materials, uses a resin with vibration-damping performance. Previously we used only one type of resin. However, in May 2023, we established a technology that allows us to compound several types of resins having different vibration-damping properties while retaining each resin's properties. Using this technology, flexible adjustments can be made according to the temperature and frequency ranges of the vibration source, so now we can design a product that is more suitable to the usage environment. Currently, we are working for the deployment of new products, including "burupita™," which makes effective use of this technology.



SGW SUMINOE GROUP WAY 2022~2024~2027 R&D Challenges and Progress Assessment for FY Ended May 2023

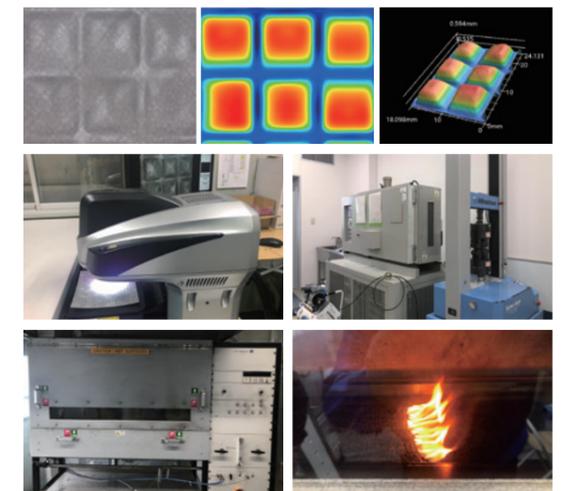
Strategies	Progress	Strategies	Progress
Enhance functionality of bathroom interior products.	○	Basic research using bioplastics	△
Improve floor signage film.	○	Basic research for extracting beneficial substances from woody biomass	×
Develop and commercialize chemicals for multifunctional processing.	△	Smart textiles: Efforts for commercialization of water-wetting detection systems and power generating fibers	○
Develop antibacterial and anti-virus technologies and evaluation techniques.	○		
Develop new products using raw materials derived from nature.	△		—

Endeavoring to raise the level of resin processing technology

One of the Group's strengths is resin processing technology, which we have cultivated through our experience in carpet backing processing.

We are well-versed particularly in olefin resins with high safety and environmental performance, which are used for floor signage film and bathroom interior products. These products are required to achieve a higher level of performance and functionality. To develop a resin that can live up to such requirements, the Group is promoting the upgrade of various features, such as anti-slip property, anti-fouling property, high shaping property, fire retardancy, high strength, and thermal resistance.

By sophisticating our resin processing technology as well as textile weaving and knitting technologies, we will realize innovative designs and comfortable functions in a variety of interior textile materials.



Evaluation and measurement instruments to assess three-dimensional shape, high strength, thermal resistance, and fire retardancy (examples)

Comments on Research and Development Strategies by the Officer in Charge of Research and Development

Aiming to resolve social issues, achieve the growth of existing businesses and create new value through innovations

Eiichiro Kimura  
Director  
General Manager  
Development Department



The Development Department, which is tasked with R&D activities, strives to develop new products and facilitate the growth of existing businesses, taking advantage of our core technologies and core facilities.

In the fiscal year ended May 2023, we succeeded in developing a technology for customizing vibration-dumping functions of resins by fusing the design and compounding technologies related to resins used in automotive carpet backing with the forming technology of extrusion processing machines. This customization technology is incorporated into a new product, "burupita™," a vibration absorption sheet. This technology has widely expanded the lineup of resin products that the Group can

offer. In the future, we aim to enter into a new market and a new industrial field.

As for fiber processing technologies, in which the Group is strong, we are working to create a successor to トリプルフレッシュ® (TRIPLE FRESH) deodorizing treatment technology through the active use of nano materials and R&D of original processing technologies.

It has been more than one year since the Nara Factory reorganization project was completed. In order to steadily evolve the Nara Factory into a "manufacturing base that creates a rich environment," we will continue to advance waste reduction, introduction of renewable energy, and other initiatives.

# Toward System Optimization and Improvement in Technological Capabilities in Response to the Transformation in the Automotive Industry

The automotive industry is on the cusp of a once-in-a-century transformation as represented by the keywords CASE<sup>\*1</sup> and MaaS<sup>\*2</sup>. This provides the Group with a great business opportunity. With this recognition, we are implementing various initiatives. Introduced here are initiatives undertaken in the synthetic leather and decorative fabric businesses, which are explained by employees of our overseas Group companies.

<sup>\*1</sup> CASE, the acronym for Connected, Autonomous, Shared & Services, and Electric, is a keyword that indicates the trend in the next-generation automotive industry.  
<sup>\*2</sup> MaaS stands for "Mobility as a Service," which integrates various forms of transportation into a single, next-generation transportation service.

## Synthetic leather business

### Striving to optimize the production system, viewing the expansion of the synthetic leather market as a business opportunity



**Masakazu Aoyama**  
 COO  
 Suminoe Textile de Mexico,  
 S.A. de C.V.  
 Guanajuato, Mexico

The trend toward vehicle electrification has accelerated from the viewpoint of environmental conservation. As in the case of the fuel economy of gasoline-powered cars, the electricity economy of electric vehicles needs to be improved. There are calls for weight reduction of various products. This also holds true for automotive seat coverings—nowadays we see an increasing preference for synthetic leather over real leather because of the former's lighter weight. In addition, the need for synthetic leather is growing in terms of animal welfare. Due to these influencing factors, the synthetic leather market in the United States has expanded to reach a level of roughly 140 billion yen, as of 2022.

In response to this market expansion, the Group has been promoting the restructuring of the North and Central American business. In December 2023, a new factory equipped with a synthetic leather production line will be completed in Mexico, which is home to a concentration of assembly factories of automotive seats. By establishing a production base in the country, the Group expects to achieve higher efficiency in supplying our products to manufacturers that are engaged in cutting and sewing car seat components destined for Mexico as well as for North America. The new factory is designed to handle PU and PVC in view of future diversification of demand for synthetic leather. We have also worked to develop relevant technologies and a production environment and to cultivate human resources. We have therefore mostly completed the preparations for supplying value-added synthetic leather.

At present, import of car parts made in Mexico to North America is largely increasing, reflecting the rising import costs from China due to the US-China trade conflict and the necessity for procuring key parts made in North America as required by the United States-Mexico-Canada Agreement (USMCA). The production volume also continues strong growth, and this trend is expected to become stronger. The Group has conventionally responded to the trend by exporting synthetic leather products from Japan or China to Mexico. Going forward, however, these products will be supplied directly from our new factory in Mexico. We have already been receiving various inquiries from overseas automotive manufacturers. By promoting the optimization of the production system, the Group aims to bolster the global supply chain.



Artist rendering of the new factory in Mexico

## Decorative fabric business

### Adding value to materials with excellent technological capability in order to meet the market needs



**Makoto Konda**  
 Chairman and  
 General Manager  
 Suminoe Textile Shanghai Co.,  
 Ltd.  
 Shanghai, China

If automated driving further advances in the future, there will be increasing need for vehicle interiors as a private space, rather than as a space to simply spend time during transportation. For this reason, the market for new designs is expected to expand in the future. We have offered automotive textiles leveraging one of our strengths, "total coordination of automotive interior textiles, from ceilings to floors." To provide customers a total coordination of automotive textiles with further added value, such as superior comfort and design, our decorative fabric technology is becoming increasingly important.

When it comes to seat fabric decoration for automotive interiors, methods of creating patterns, such as print processing and embossing, have been the mainstream so far. However, these days this trend is changing—much importance is placed on the texture of plain fabric, and need is growing for solid-color fabrics using embroideries, design perforations, and other decorative techniques that add value to these fabrics. In fact, our Group's fabric products decorated with embroideries were adopted by Honda Motor Co., Ltd. for the ZR-V (Japan and China) and the HR-V (China). To produce these products, my company introduced embroidery equipment made in Japan into the two factories in China, and it has been managing raw material procurement, production and sales of these fabrics. Moreover, we are considering a "decorative combination" of several techniques, for example, combining an embroidery and perforation, as a method to broaden the range of new design renderings.

In the future, we will continue working to add high value to our mainstay fabric products and synthetic leather seat covering materials, on which the Group places greater emphasis, by using our design development and procurement capabilities as well as production capability for decorative processing. Through such efforts, we aim to differentiate our products from others to expand sales. Especially in the Chinese market, where automobile production is the largest in the world, we plan to approach not only Japanese carmakers but also other various companies.



Japanese-made embroidery equipment used in China