

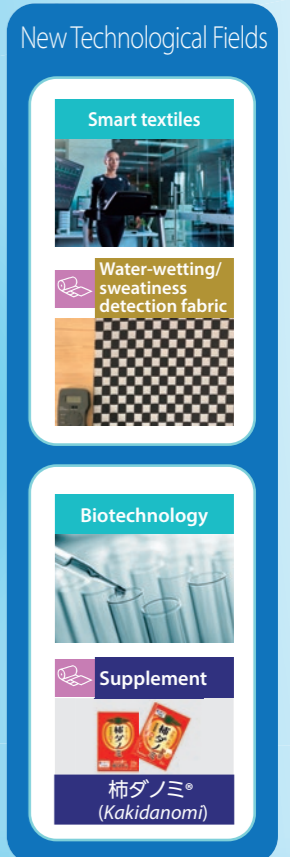
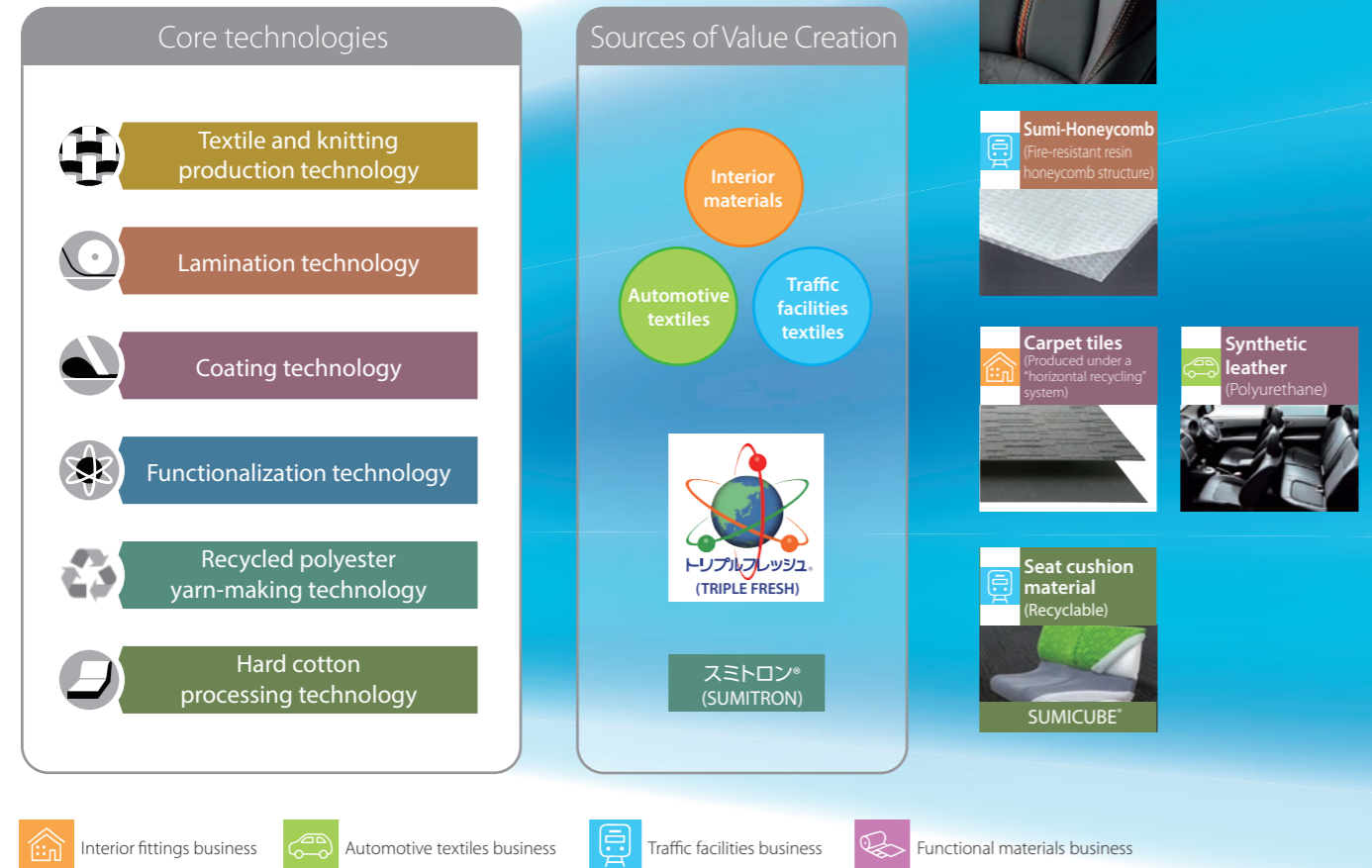
Suminoe Textile Group's Core Technologies and Expanding Product, Business and Market Fields

For details of our core technologies, please visit the Suminoe Textile website.



Creating a Synergy by Integrating Technologies of the Group

Based on our core technologies, we will refine unique technologies to create high-value products, keeping pace with various changes.



From Manufacturing to Value Creation

We consider that it is our corporate responsibility to contribute to society by creating innovative technologies and highly functional products through our manufacturing activities. We are committed to manufacturing higher value products by anticipating and satisfying the needs of our customers both at home and abroad.

To this end, we are not only utilizing our Group's traditional technology and production but also making efforts to advance into new fields through cooperation with companies from other business fields as well as with universities and research institutions.

Manufacturing = Technology × Quality

Basic Policy for Quality Management

We strive to maintain and improve our product and service quality on a continuous basis so as to meet customer needs, aiming to enhance customer satisfaction.

Status of Acquisition of External Certifications for Quality Management System

Organization		
ISO9001:2015	Suminoe Techno Co., Ltd. Nara Factory Including Suminoe Techno Co., Ltd. Shiga Factory and Suminoe Logistics Co. Ltd. Nara Center	
	Suminoe Teijin Techno Co., Ltd.	
	Teijin Tecloth Ltd.	
	Owari Seisen Co., Ltd.	
	Suzhou Suminoe Textiles Co., Ltd.	
	Suminoe Textile of America Corporation	
	Suminoe Textile de Mexico, S.A. de C.V.	
	JIS Q 9100:2016	Suminoe Textile Co., Ltd. (Functional Materials Business Division, Osaka First Sales Department and Quality Assurance Department)
	IATF16949:2016	Suzhou Suminoe Koide Automotive Accessories Co., Ltd.
		T.C.H. Suminoe Co., Ltd.
SPM Automotive Textile Co., Ltd.		
JIS Q 17025	Bondtex, Inc.	
	Suminoe Textile de Mexico, S.A. de C.V.	
	Kansai Laboratory Co., Ltd. (Osaka Laboratory)	
	Kansai Laboratory Co., Ltd. (Nara Laboratory)	

Overview and Growth Strategies of Each Business Segment

Automotive Textiles Business

Suminoe Textile 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. (Guangzhou), 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.

Creating a globally optimized supply system for automotive textiles

Business Overview

The greatest feature of our Company is that we can supply a total line of automotive textiles, from floors to ceilings, including headliners, seat covering materials, car mats, and floor carpets. Outside Japan, the Suminoe Textile Group has now expanded its overseas presence by setting up 12 manufacturing and sales sites in six countries (the United States, Mexico, China, Thailand, Indonesia, and India), thereby creating a globally optimized supply system.

Advantages

- 1 Expertise in proposing optimal solutions as a total supplier of automotive textiles
- 2 Global manufacturing system that enables production at optimal sites
- 3 Development capabilities to expand the fields of new materials and conventional textile products
- 4 Sophisticated textile processing technologies and planning and design capabilities
- 5 Comprehensive strength based on integrated expertise of the interior fittings and automotive textile businesses

Identified Issues

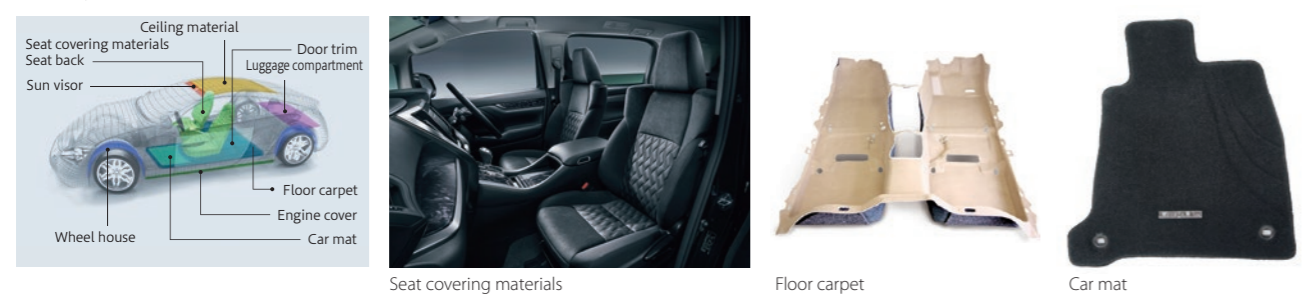
- 1 Response to the transformation of the automobile industry
- 2 Responsibility for supplying products even in the event of a disaster based on BCPs
- 3 Response to global risks
- 4 Global contraction of demand for automobiles
- 5 Business management to securely capture new markets in line with the SDGs and ESG

Policy and Growth Strategy

Overcome the difficult situations and cultivate a new market using our organizational strength in response to changes.

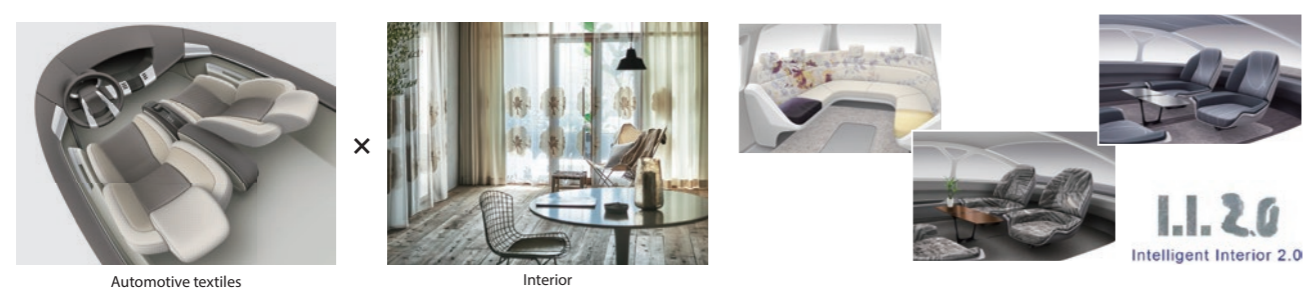
- 1 Expand the markets for new products and new components.
- 2 Improve quality, cost competitiveness, and delivery systems (QCD).
- 3 Promote initiatives to help achieve the SDGs (environmentally friendly products).
- 4 Make effective use of systems (restructure the core information system).
- 5 Develop human resources (strengthen our response to globalization).

Major Product Lineup



Topics

Under the slogan of "Intelligent Interior 2.0," proposing new car interior design by leveraging the Group's comprehensive strength



The automotive industry is currently experiencing a once-in-a-century transformation, where the ways cars are used are significantly changing, as exemplified by the emergence of autonomous driving technology and car-sharing. In particular, autonomous driving technology is considered to turn a car as a mere means of transportation to a third living space that is comparable to one's home or workplace. The Suminoe Textile Group has therefore started to propose new car interior design to automobile manufacturers, under the slogan of "Intelligent Interior 2.0" through collaboration among designers from the automotive, traffic facilities, and interior fittings businesses.

The Group has been accumulating know-how about various types of interior textiles for building interior, cars and public transportation facilities. We are also able to deal with all kinds of interior materials, including carpets, curtains, seat fabric, ceiling

materials and flooring. Furthermore, we can make new design proposals by reusing and reconstructing our in-house resources that have been developed by individual segments. We have earned a favorable reputation for these new design proposals that only our Group can offer. Meanwhile, since car-sharing is a service to be used by a large number of unspecified individuals, automotive textiles used for the service must have ease of maintenance, not to mention lightweight, noise-absorbing and other conventional properties. In this respect, the Group can also meet such requirements by taking advantage of its expertise cultivated through producing interior materials for trains and buses.

We expect that as autonomous driving technology and car-sharing come into widespread use while changing the quality of automotive textiles, the Group's business will achieve further development.

Delivery Track Records (Progress in Value Creation)



Highly functional carpet mats treated with multifunctional processing adopted for Daihatsu ROCKY and Toyota RAIZE

Daihatsu Motor Co., Ltd. has announced its new direction: to focus on the compact car segment. Jointly with Toyota Motor Corporation, Daihatsu developed new compact SUV models, for which our carpet mats were adopted. At the outset, the customer required us to develop carpet mats not only with excellent design but also "reliable functionality." We therefore made a proposal placing the greatest emphasis on the Company's strong point, i.e., our トリプルフレッシュ® (TRIPLE FRESH) deodorization technology plus other useful functions. To be more specific, we suggested the idea of enhancing the conventional トリプルフレッシュ® (TRIPLE FRESH), which has been used in many interior fittings and automotive textiles, by adding anti-virus, antibacterial, anti-allergen, and anti-mite functions. As a result, the customer decided to adopt our products. We are planning to develop this multi-functional processing technology as a new key product following トリプルフレッシュ® (TRIPLE FRESH).



Hiromasa Ito
Osaka Automotive Accessories Department
Suminoe Textile Co., Ltd.

From the development stage, we were required to create highly functional and high-grade mats. To meet the customer specifications, we worked to make prototypes with considerable difficulty in cutting, sewing and bringing the components nearer to perfection. However, through repeated adjustments with the production plant, we were finally able to achieve the texture corresponding to high functions and receive high evaluation from the customer. After Toyota Motor Corporation launched the new RAIZE, the car's cumulative sales volume ranked top in the first half (January to June) of 2020. We will continue to improve our skills to supply products with a quality that goes beyond customer expectations, in cooperation with automotive accessories departments of Tokyo and Osaka and the design department.



Mayumi Ozawa
Functional Processing and Development Group
Department
Technical Center
Suminoe Textile Co., Ltd.

The multi-functional processing technology that was employed this time features five functions, developed based on トリプルフレッシュ® (TRIPLE FRESH) by applying our original compounding technique and evaluation technology. At the development phase, it took a lot of trial and error to select suitable raw materials for the functional agents that enable each function to effectively work without damaging the carpet texture, determine their optimal additive amounts, and consider how to better demonstrate the functions and performance of the technology. By emphasizing its appealing features to the customer, we managed to succeed in its commercialization. In the future we will continue to work on product development so that we can propose technology with functions that make interior environments clean and comfortable.

Overview and Growth Strategies of Each Business Segment

Interior Fittings Business

Suminoe Textile Co., Ltd., SUMINOE Co., Ltd., RUNON Co., Ltd., Suminoe Logistics Co., Ltd., Suminoe Works Co., Ltd., Sewing Hyogo Co., Ltd., TANGO TEXTILE Co., Ltd., Suminoe Techno Co., Ltd.

Exhibiting our unique technological development capabilities to create environmentally friendly products at the industry's top level

Business Overview

The Suminoe Textile Group provides a wide variety of interior products that feature both excellent design and functionality to public facilities, hotels, schools, hospitals, and office buildings, as well as for general households. We are also committed to developing eco-friendly products under the theme of KKR+A, or *Kenko* (Health), *Kankyo* (Environment), Recycle and Amenity.

Advantages

- 1 Preserving traditional techniques and handing them down to future generations (arts and crafts, hand-woven carpets and hooked rugs, and plush hand-woven curtains)
- 2 Credibility based on track record of delivering products to renowned facilities
- 3 Exceptional skills to meet customer needs through trinity of merchandizing, design and sales staff
- 4 Sales promotion targeting customers and design offices by sharing information between Group companies
- 5 Strong lineup of high value-added products based on the philosophy of environmental protection

Identified Issues

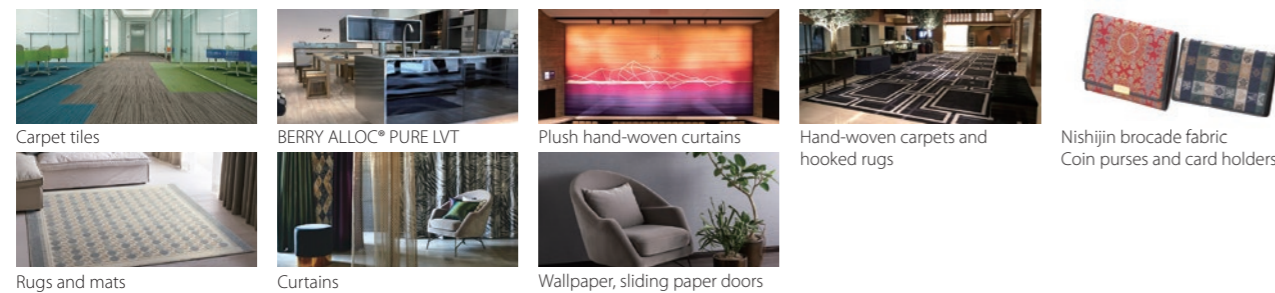
- 1 Declining private demand and shrinking market size
- 2 Measures to deal with rising logistics costs
- 3 Shortage of interior finish technicians and problems regarding succession of the techniques
- 4 Discerning the market trends in accordance with changes in sales channels
- 5 Product lineups as a comprehensive interior manufacturer

Policy and Growth Strategy

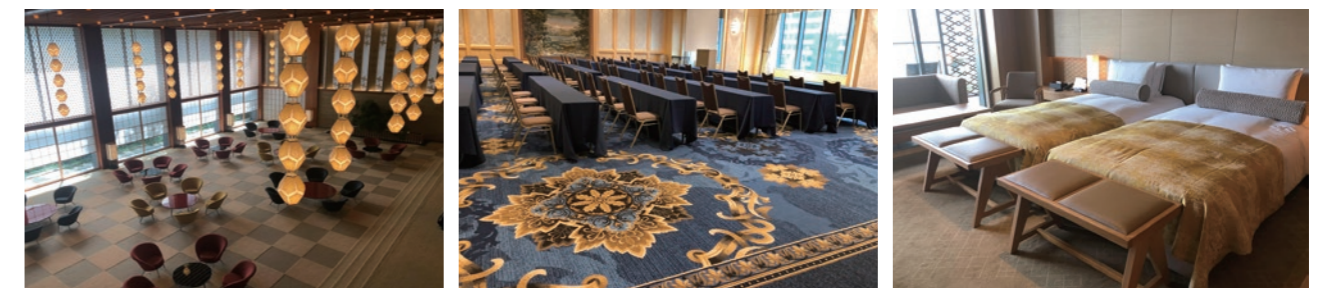
Expand sales of environmentally friendly products and realize optimal product lineups to fulfill our roles as a manufacturer, and increase revenues.

- 1 Attempt to open up new routes.
- 2 Reinforce web marketing.
- 3 Optimize procurement.
- 4 Strengthen the "development and sales category" for design of small and medium-sized facilities and store design.
- 5 Augment eco-friendly products for ESG, based on the KKR+A philosophy.

Major Product Lineup

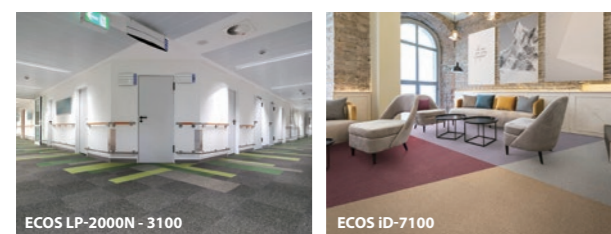


Delivery Track Records (Progress in Value Creation)



Topics

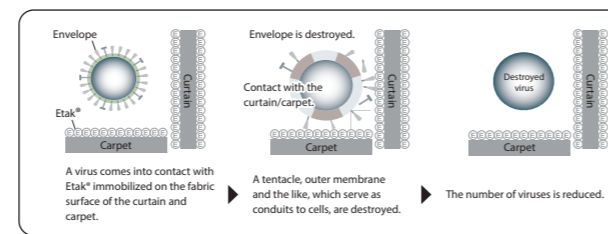
Launch of three series of ECOS® Recycled Carpet Tiles Produced Using Horizontal Recycling Technology —ECOS LP-2000N, ECOS LP-3100, and ECOS iD-7100



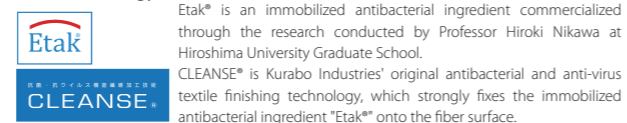
All these new products use solution-dyed nylon yarn for piles. As compared with products produced with the continuous dyeing method, these new products are superior in terms of color fastness to light, color fastness to rubbing, chemical resistance, and yellowing resistance to NOx. They can also save water and materials and require less dyeing effluent treatment. Furthermore, similarly to the conventional series, the newly added ECOS® series only use waste carpet tiles as recycled materials for the backing material. In this manner, while securing safety by controlling the origin of materials in a visible manner, we have realized both waste reduction and resource recycling. ECOS® has also achieved the same quality and cost performance level as virgin tiles, using the recycling system in consideration of ESG. Going forward, the Suminoe Textile Group remains committed to contributing to the realization of a sustainable society by offering ECOS®.

Topics

Enhancing a lineup of products that decrease the number of specific viruses on the fiber surface with the addition of "antibacterial and anti-virus" functions

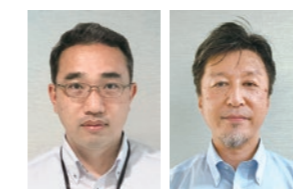


Viruses are lurking in our everyday life. It is important to constantly take anti-virus measures, such as washing hands, gargling, and wearing a mask. In addition, to have safe and comfortable lives, applying anti-virus finishing technology to interior materials is expected to reduce the risk. CLEANSE® is an antibacterial and anti-virus textile finishing technology using "Etak®", which was commercialized through research by a Doctor of Medical Dentistry. The immobilized antibacterial ingredient "Etak®" is strongly fixed onto the fiber surface. In collaboration with Kurabo Industries Ltd., SUMINOE has produced anti-virus curtains and carpets by applying this technology.



Many hand-tufted carpets and Wilton carpets adopted at The Okura Tokyo

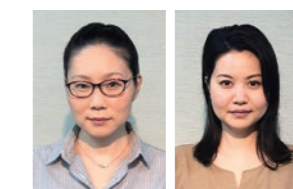
The Hotel Okura Tokyo, which had been rebuilt since 2015, marked its grand opening as "The Okura Tokyo" on September 12, 2019. The Okura Tokyo comprises two distinctly branded wings: the Okura Heritage, which is restrained and elegant, and the Okura Prestige, a high-quality, contemporary urban hotel. We were pleased that the Okura Tokyo adopted many carpets of our Group. These carpets have been installed primarily in the guestrooms, corridors and restaurants of the Okura Heritage Wing, as well as the lobby, entrance and banquet rooms of the Okura Prestige Tower. In particular, the hand-tufted carpet with checkerboard patterns laid on the floor of the lobby, which features the traditional design taken over from the main building, enjoys great popularity among guests from home and abroad.



Kenji Kido **Chiaki Matsuda**
The Second Block
East Japan Branch, SUMINOE Co., Ltd.

Since the customer, Hotel Okura, has a profound knowledge about carpets, our project members undertook the task while studying the past designs and traditional patterns. To fulfill many orders received for our products to embellish major interior spaces of the hotel, we delivered and installed custom-made hand-tufted carpets and Wilton carpets, among other things.

We are proud to have been able to complete our task through combined efforts of the entire SUMINOE Group—including the Design Department, Suminoe Works, Tango Textile and cooperative factories in Japan—and to have been involved in this project for Japan's most sophisticated hotel.



Miho Akahori **Saori Ichikawa**
Design Department, SUMINOE Co., Ltd.

We worked on this project for approximately two years, from the design meetings to product installation. Our company was in charge of about 30 areas, and four design offices took part in the project. For this reason, two of us were assigned to arrange design-related matters.

We closely consulted with the respective designers in charge by holding many meetings, and produced many prototypes. Then we were finally able to see the delivered carpets, which moved us very deeply. It was a great honor for us to be engaged in the rebuilding work of the Hotel Okura, which is a high-class hotel attracting a great deal of attention in the industry.

Overview and Growth Strategies of Each Business Segment

Traffic Facilities Business Suminoe Textile Co., Ltd., Marunaka Souei Co., Ltd., Suminoe Techno Co., Ltd.

Contributing to Creating Safe and Comfortable Train Cars

Business Overview

We have supplied our products to JR, private railways and publicly operated transportation services, maintaining the top market share for more than a century.

Currently, the Suminoe Textile Group offers total proposals for seat coverings, curtains, wall materials, flooring materials and other interior materials for public transportation systems, such as Shinkansen bullet trains and other trains, buses, and ships. We also deliver environmentally friendly products, including SUMICUBE® seat cushion material, which excels in terms of both safety and environmental performance.

Advantages

- 1 The industry's top market share held for more than a century
- 2 120 year-long credibility and track record as a pioneer of the industry
- 3 Capability to offer total proposals for seat coverings, curtains, wall materials, flooring materials and other interior materials
- 4 Environmentally friendly products with excellent safety performance (SUMICUBE® seat cushion material)
- 5 Wide sales network established across Japan

Identified Issues

- 1 Decreasing numbers of procurement networks and production sites in Japan
- 2 Shortage of human resources who carry on traditional techniques
- 3 Enhancing our brand value
- 4 Improving product added value
- 5 Strengthening our competitiveness by establishing differentiated products

Policy and Growth Strategy

- Win success through the combination of logic and passion.
- 1 Augment functional products for trains, and expand sales by heightening the appeal of our products (development of lightweight and highly functional moquette).
 - 2 Expand our market share by strengthening sales in the bus category.
 - 3 Expand sales of products for improvement of vehicle safety (floor signage film).
 - 4 Restructure our production system (introduction of a new production system).
 - 5 Promote sustainability (strike a balance between economy and environment).

Major Product Lineup



Topics

Seat cushion materials for train cars "SUMICUBE®/ hybrid cushion material" adopted for the new 7000 series vehicles for the new transportation system (Astram Line) operated by Hiroshima Rapid Transit



The new 7000 series vehicles for the new transportation system (Astram Line) of Hiroshima Rapid Transit went into operation on March 26, 2020. These new train cars are designed to offer novelty while taking over the image and symbol colors of the previous models. The seats of these cars use a hybrid cushion material, which is created by combining SUMICUBE® and the new resin spring material SUMICUBE AIR. The hybrid cushion material is safer, more breathable, more durable, and more comfortable to sit on.

SUMICUBE® is made from safe materials that do not generate cyanide or other poisonous gases when combusted. This eco-friendly product that does not cause air pollution is widely used in train cars all across Japan.

Topics

Moquette seat coverings designed in the image of the SDGs adopted for the E235 Series "SDGs Wrapping Train" for the Yamanote Line



From October 2019 to the end of January 2020, as part of its efforts toward achieving the Sustainable Development Goals (SDGs), East Japan Railway Company (JR East) operated the "SDGs Wrapping Train" (E235 series single-car train), which was wrapped in SDGs logos, on the Yamanote Line. The E235 series railcar for the Yamanote Line improved environmental performance by curbing power consumption and using LED lighting. The Suminoe Textile Group is also promoting its SDGs initiatives. Fully understanding the significance of the social significance of operating the train, we offered seat coverings designed in the image of the 17 SDGs. In return for our cooperation, JR East presented us with a commemorative item.

Delivery Track Records (Progress in Value Creation)



Our interior materials adopted for the "Saphir ODORIKO" sightseeing limited express train by JR East Japan

The "Saphir ODORIKO" sightseeing limited express that connects Tokyo and Izu has been in commercial operation since March 14, 2020. The Saphir ODORIKO, a new train replacing its predecessor for the first time in 30 years, features JR East's first ever Premium Green seats. The Premium Green Car represents the operator's desire to provide passengers with a refined, high-quality, and elegant journey. All the train cars, including Green Cars with private compartments and a cafeteria car with an open-kitchen, have skylights, allowing passengers to experience a sense of openness and comfort. Moreover, barrier-free facilities and storage areas for large luggage are equipped to provide passenger services caring about the slightest details.

The total car design was supervised by KEN OKUYAMA DESIGN, a renowned industrial design company. These train cars have employed the seat covering materials, curtains, hand-tufted carpets, and Wilton carpets of Suminoe Textile Co., Ltd. "Saphir" is the French word for sapphire, a precious gemstone. As its name suggests, the Saphir ODORIKO is highlighted by train cars whose attractive design fully evokes images of the beautiful sapphire-esque Izu sea and a brilliant blue sky.



Shuta Muraoka
Tokyo Traffic Sales Group
Traffic Sales Department
Suminoe Textile Co., Ltd.

We worked on the development of interior materials for Green Car seating throughout the train, which comprises the Premium Green Car, the Green Cars with private compartments, and the conventional Green Cars.

To realize both a high-grade texture and quality that conform to the train concept, we held many discussions and produced many prototypes, which earned high praise from the customer, resulting in the adoption of our products.

It is delightful that I can help passengers enjoy a journey on the Saphir ODORIKO through offering its interior materials. At the same time, I am determined to continue striving for the development of products that meet customer demand.

Mr. Hideaki Amanuma
Rolling Stock Technology
Center
Transport & Rolling Stock
Department
East Japan Railway Company

The Saphir ODORIKO train was introduced with the purpose of providing passengers with a sophisticated journey experience. The materials used for train cars must be durable and burn-resistant. These materials are also required to achieve a tasteful design compatible with the texture, both of which are in line with the railcar concept. In this project, Suminoe Textile Co., Ltd. greatly supported us in completing the Saphir ODORIKO by offering a wide variety of materials for seat and sofa coverings, fabrics and carpets, which passengers actually see and touch.

Overview and Growth Strategies of Each Business Segment

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

Delivering products that incorporate our unique technologies and offering value in new fields

Business Overview

The Suminoe Textile Group has delivered products that incorporate its unique technologies it has accumulated, such as トリプルフレッシュ® (TRIPLE FRESH) deodorizing filters and olefin bathroom flooring. In addition, the Group is pursuing endless business possibilities, offering new value in the fields of smart textiles and functional food based on biotechnology, in keeping with the theme of KKR+A, or Kenko (Health), Kankyo (Environment), Recycle and Amenity.

Advantages

- 1 Expanding business fields transcending the boundaries of our traditional business segments
- 2 System to promote the development of diverse applications
- 3 Effective use of functional processing technologies, including our proprietary deodorant treatment technology
- 4 Promoting the development of products that satisfy customer needs, paying attention to fine details
- 5 Providing reliable products through stringent quality management endorsed by obtaining JIS Q 9100 certification, a quality management system standard for the aerospace industry

Identified Issues

- 1 Dealing with matters related to overseas office reorganization
- 2 Preparation for and response to major social and economic changes
- 3 Quick response to changing customer needs
- 4 Development of products and their applications in accordance with the concepts of the SDGs and ESG
- 5 Development of our proprietary technologies following the principles of deodorant treatment technology

Policy and Growth Strategy

- Enhance business and product value and strengthen business development capabilities.
- 1 Optimize the production and supply system of the household appliance business.
 - 2 Develop new product applications, taking advantage of functional materials and processing technologies.
 - 3 Expand sales of deodorant treatment and other functional treatment products.
 - 4 Strengthen cooperation with the development department and reinforce the development and sales functions.
 - 5 Promote commercialization of smart textiles.

Major Product Lineup



Topics

Our deodorizing filter adopted for the Plasmacluster antibacterial deodorizer DY-S01 by Sharp Corporation



Our deodorant treatment technology トリプルフレッシュ®バイオ (TRIPLE FRESH BIO) was adopted as a deodorizing filter for Sharp's Plasmacluster antibacterial deodorizer DY-S01.

This product is equipped with Plasmacluster NEXT, which has increased the ion concentration to more than 50,000 plasma clusters/cm³. It also incorporates a photocatalyst deodorizing filter that decomposes the absorbed odors with high efficiency. Even after ten years, the filter can maintain 94% of its deodorizing performance. These two features have enhanced the disinfecting and deodorizing effects of the products.

In recent years, more and more odor problems have arisen in our daily lives, along with increasing numbers of pets kept indoors, high airtight houses, and households with members in need of nursing care at home. Against such a social background, we will contribute to creating comfortable indoor air environments in accordance with various living settings.

Topics

Establishment of a new company in Vietnam Suminoe Textile Vietnam Co., Ltd.



Electric carpets constitute the core of our functional materials business. Currently, we have a production site of electric carpets in Suzhou, China. To further strengthen our production and supply system, we have established a new company in Vietnam. The new company is located in the Dong Van III Industrial Zone, Ha Nam Province, in northern Vietnam. It will be mainly engaged in production and sales of textile-based heating appliances (electric carpets and blankets, etc.). In the future, we are planning to expand the plant's role to include the development and production of health appliances as well as small appliances other than electric carpets and blankets.

Delivery Track Records (Progress in Value Creation)



Our flooring materials for TOTO's "SAZANA" bathroom unit have been revamped.

Since 2014, Suminoe Textile Co., Ltd. has supplied the flooring material for the Hokkarari Floor used in the bathroom unit "SAZANA" line of TOTO Ltd. The flooring material is characterized by the use of olefin, which makes it friendly to both people and the environment. Olefin comprises carbon (C), hydrogen (H) and oxygen (O) and does not emit toxic gas during burning. In conjunction with the full model changeover of the SAZANA series, a rug-like flooring material was launched in February 2020. Major changes from the previous material are found in the external appearance. We were entrusted to design a newly added brown version. Also, the embossed pattern on the surface was changed in size from 14 x 14 mm to 8 x 8 mm.

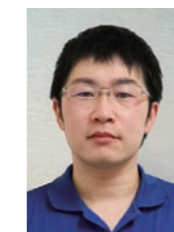
In meeting the requirements from TOTO Ltd., we worked not only to maintain strength and physical properties necessary for bathroom floors but also to reproduce various functionalities. The densely embossed surface is slip-resistant as it fits to the soles of the feet. The soft texture realized by olefin material offers a space with a sense of security. The entire floor surface is treated with special hydrophilicity. The floor is stain-resistant, and even if stained, it is easy to clean. It is also designed to dry completely by the next morning after bathing; water remaining on the surface can flow along grooves that are cut more finely. The new flooring material helps users enjoy a comfortable and relaxing time.



Kota Yokoyama
Osaka Second Sales Department
Functional Materials Business Division
Suminoe Textile Co., Ltd.

This full model changeover of the Hokkarari Floor was the first major task for me. I worked on prototype fabrication many times in collaboration with the Company's technological and production staff as well as members from related companies. Although there were plenty of challenges, I think I was able to produce a good product that satisfied the requirements from TOTO thanks to great support and contribution of all those involved.

Through this task, I learned a lot of lessons about the pleasure and pain of manufacturing as a maker. I would like to continue striving for good manufacturing by leveraging this experience.



Naofumi Sumi
Processing Section,
Production Department
Nara Plant
Suminoe Techno Co., Ltd.

It was the most important mission I ever had because the full model changeover and in-house manufacturing of lamination in the production process were themes that could not fail. We worked out processing conditions from scratch, in order to realize fine embossing by multilayer sheet processing using heat lamination technology that the Company introduced for the first time, while also fulfilling the high quality requirements. Making prototypes by trial and error entailed constant efforts to accumulate and analyze huge amounts of data. Through these endeavors, we made a breakthrough, which led us to the successful commercialization. We are grateful to those who cooperated with us in this project. Aiming at stable production of even higher quality products, I will pursue further study.