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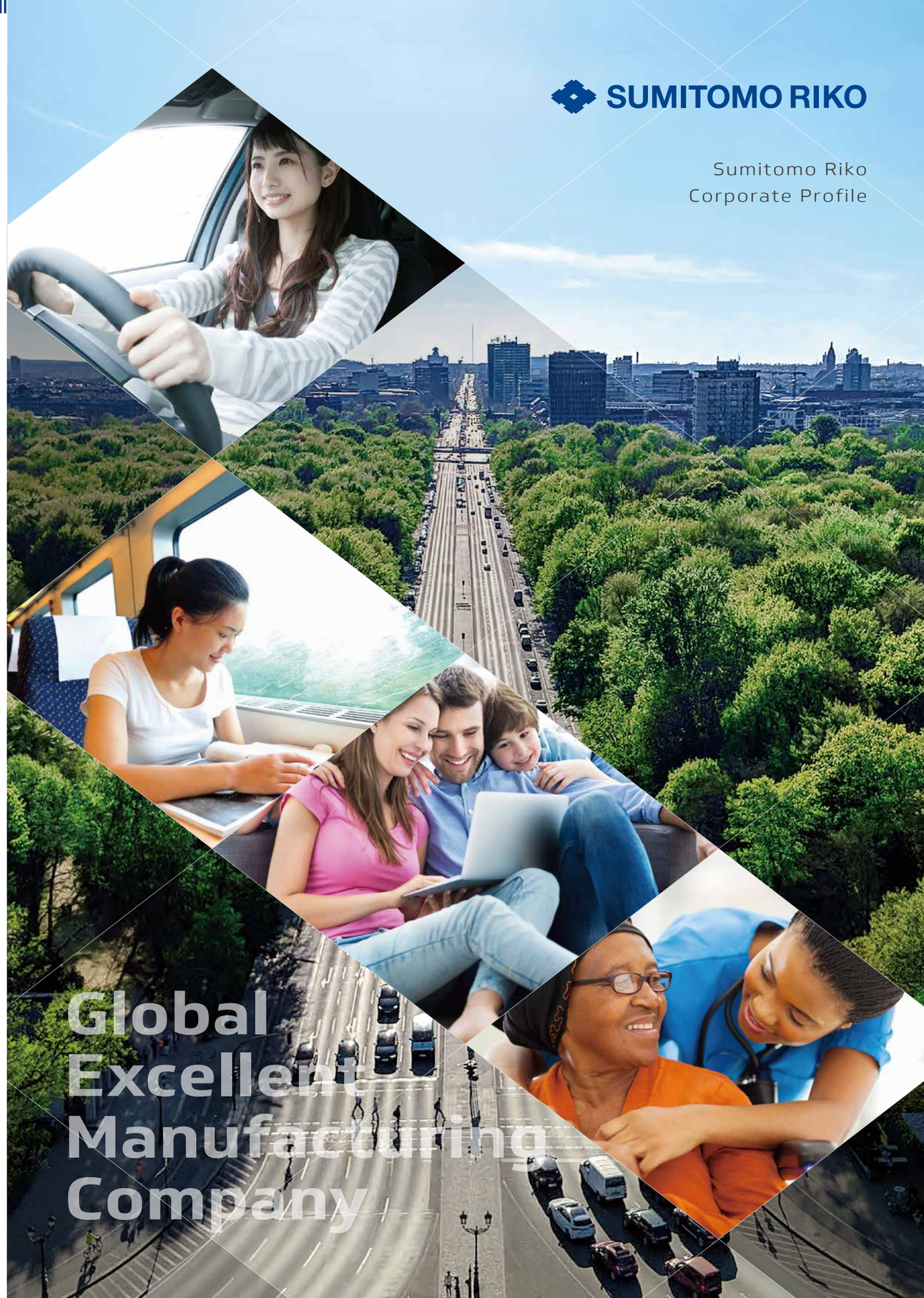
SUMITOMO RIKO

# Sumitomo Riko Corporate Profile



# Global Excellent Manufacturing Company

## Sumitomo Riko's Goals

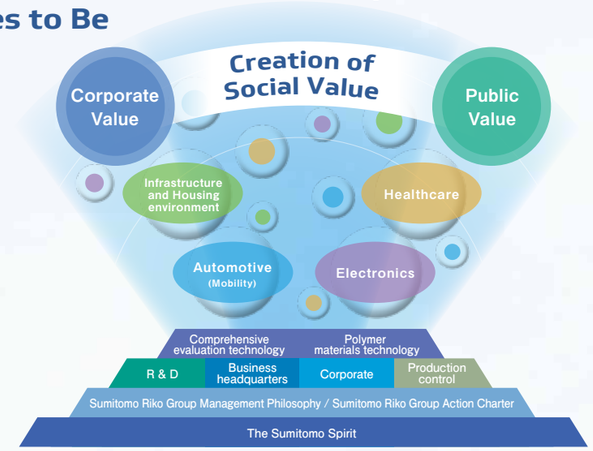
**A smarter, more comfortable lifestyle is what we are aiming for.**

**The Sumitomo Riko Group aspires to be a "Global Excellent Manufacturing Company" serving the world as a stable source of high-quality products across the four fields of "Automotive (Mobility)", "Infrastructure and Housing environment", "Electronics", and "Healthcare".**

### Sumitomo Riko - Creating New Values

Sumitomo Riko's products and services.
These are the crystallization of our continuous efforts
at the coalface of MONOZUKURI, under the motto of "Creating New Value",
in order to further improve Safety, Comfort and the Environment of people.
"Safety, Environment, Compliance, and Quality (S.E.C.-Q.)" are the basic tenets of our business, and it is our utmost aim to provide our customers with an enriched standard of living , ensuring our quality control is of the highest standard. But we have only but started our journey. Sumitomo Riko pursues its business activities unceasingly.

## What the Sumitomo Riko Group Aspires to Be




## Sumitomo Riko's Technologies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## The Sumitomo Spirit

The Sumitomo Spirit has been refined through the generations for 400 years based on the Founder's Precepts "Monjuin Shiigaki," which Masatomo Sumitomo, the founder of the Sumitomo family, wrote and handed on to describe how a merchant should conduct business. The basic points of the Sumitomo Spirit have been passed on in the form of the two articles of the Business Principles as management guidelines of Sumitomo companies.

## Business Principles

*Quoted from the Sumitomo Goshi Kaisha Administrative Regulations formulated in 1928

Article 1.
Sumitomo shall achieve prosperity based on a solid foundation by placing prime importance on integrity and sound management in the conduct of its business.

Article 2.
Sumitomo's business interests must always be in harmony with the public interest. Sumitomo shall adapt to good times and bad times but will not pursue immoral business.

## Sumitomo Riko Group Management Philosophy

In light of the Sumitomo Spirit, all of us at the Sumitomo Riko Group will:

1. We will provide superior products and services to meet customer needs based on technological innovation.
2. We will place top priority on safety and work to ensure the safety of people and society.
3. We will strive to protect the global environment and to contribute to creating better communities.
4. We will maintain a high standard of corporate ethics and observe all laws and regulations to earn public trust and confidence worldwide.
5. We will foster an invigorating corporate culture that respects our employees' diversity, personal qualities, and individuality.

Since its founding in 1929, Sumitomo Riko has steadily expanded its business fields while grasping the direction of the times and market needs with great accuracy. Doing so, we have delivered high value-added products to the world. In recent years, Sumitomo Riko has established a platform for rapidly supplying products to the world, accelerating this process even further as a company active on a global scale.
At the same time, even as the automotive industry undergoes a major transformation on a once-in-a-century scale, we believe we must never forget our pride as a Japanese manufacturing company that is committed to detailed craftsmanship and high quality. We must further refine "Polymer Materials Technology" and "Comprehensive Evaluation Technology," our core competencies developed over many years, and respond swiftly to changes in the business environment as we produce products adapted to new eras.
Moving forward, we will continue to evolve as we make strides toward our aspiration of being a "Global Excellent Manufacturing Company" that plays a critical role around the world, while also remaining committed to the Sumitomo Spirit of Shinyo-kakujitsu*1 and Fusu-furi*2 We ask for your continued understanding and support of our Group's corporate activities.

*1:Place importance on integrity and sound management. *2:Do not act rashly or carelessly in pursuit of easy gains.

Sumitomo Riko Company Limited Representative Director and President & CEO **Kazushi Shimizu**

# History

## The footprint of innovation taken by Sumitomo Riko

**Based on the technologies of compounding, synthesizing, and modifying, our "Polymer Materials Technology" gives form to superior functional materials and creates products with exceptionally high added value. On top of this is our "Comprehensive Evaluation Technology" that enables us to evaluate and verify the required performance and reliability by ourselves. With these strengths supporting research and development at Sumitomo Riko as our core competencies, we are reaching out to new markets and regions, as well as aggressively expanding our existing business. We continue our challenge to create value that plays a vital role for people, society, and the earth's environment.**

## First Founding

1929 Established in Yokkaichi-shi, Mie as Showa Kogyo Co., Ltd.

1930 Company name changed to Kabata Chotai (Belt) Co., Ltd.

1937 Joined the Sumitomo Group. Company name changed to Tokai Rubber Industries, Ltd. (using Kanji for Rubber in the Japanese name)

1943 Matsusaka Factory (current Matsusaka Plant) started operation

1949 Listed on the Nagoya Stock Exchange (NSE)

1960 Komaki Factory (current Komaki Plant) started operation

1961 Company name changed to Tokai Rubber Industries, Ltd. (Changed Kanji for Rubber to Katakana, different Japanese character)

1964 Moved the head office from Yokkaichi-shi to Komaki-shi, Aichi

1976 Foreman Training (F-Ken) started as part of efforts to develop human resources as part of the general improvement activities at workplaces

1986 Opened the Technical Center at the head office (Komaki-shi, Aichi)

## Second Founding,

### first expansion overseas

1988 Established DTR Industries, Inc. (current SumiRiko Ohio, Inc.), the Company's first overseas production base in the U.S.

1990 Fuji-Susono factory (current Fuji-Susono Plant) started operation

1994 Listed on the second section of the Tokyo Stock Exchange (TSE)

1995 Established subsidiaries in Thailand and China, the Company's first bases in Asia

1996 Listed on TSE and NSE changed to first section

1999 Established a subsidiary in Poland, the Company's first base in Europe

2002 Established TRI Technical Center USA, Inc. (current SumiRiko Technical Center America, Inc.), the Company's first overseas development base in the U.S.

2008 Construction of Technopia, an R&D laboratory, completed (Komaki-shi, Aichi)

## Third Founding,

### Enhancing our global reach through mergers and acquisitions

2013 Acquired Dytech-Dynamic Fluid Technologies S.p.A. (current SumiRiko Italy S.p.A.), an Italian automotive hose manufacturer, and Anvis Group GmbH (current SumiRiko AVS Holding Germany GmbH), a German automotive anti-vibration rubber manufacturer, and made them into consolidated subsidiaries

Completed Training Center "Unuma Sangakukan" (Kakamigahara-shi, Gifu)

2014 Company name changed to Sumitomo Riko Company Limited

2015 SumiRiko FC Seal, Ltd. established to take on the manufacturing functionality of "cell gaskets", the rubber seal components(Komaki-shi, Aichi)

SumiRiko Yamagata Company Limited established as the first manufacturing base in the North-eastern region of Japan to manufacture anti-vibration rubber for automobiles (Yonezawa-shi, Yamagata)



2016 Established Global Headquarters (Nakamura-ku, Nagoya-shi)

Established collaborative venture between industry, academia, and government at the "Kyushu University Health Care System Lab Itoshima" (Itoshima-shi, Fukuoka)

Established Advanced Automotive Systems R&D Center (current Advanced Systems R&D Center) (Komaki-shi, Aichi)

2018 Integrated two industrial hose subsidiaries to form Sumitomo Riko Hosetex, Ltd. (Ayabe-shi, Kyoto)

2019 Absorbed and merged with SumiRiko Fine Elastomer, Ltd., rubber seal manufacturing company and established Saitama Plant (Ageo-shi, Saitama)

2020 Established the "Sumitomo Riko-AIST Advanced Devices of Polymer Materials Cooperative Research Laboratory" with the National Institute of Advanced Industrial Science and Technology (Tsukuba-shi, Ibaraki)

2021 Established automotive hose manufacturing company, SumiRiko Vietnam Co., Ltd. in Vietnam

## History of product development

**1930** Started production of conveyor belts

**1945** Started production of industrial hoses

**1954** Entered automotive anti-vibration rubber products business

**1959** Commercialized radiator hoses; full-scale launch of the automotive hose business

Started production of hydraulic hoses

**1968** Entered automobile interior business

**1971** Started production of seals for wire harness connectors, entered business of producing seals for automobiles

**1984** Entered precision parts for office automation business

**1994** Entered sound controlling/insulation products business

**2000** Entered business of producing rubber bearings for bridges

**2001** Developed damping devices for housings and entered the housing market

**2003** Started mass production of electrical active control mounts (E-ACM)

**2004** Started sales of the "GRAN MAX" series of hydraulic hoses for industry

**2005** Started sales of earthquake countermeasure for high-rise buildings

**2008** Started sales of "TRC Damper", earthquake countermeasures for wooden houses

**2010** Started sales of window films with high transparency, reflecting and insulating against heat "Refleshine" series, entered market for window films

**2013** Started sales of "SR Soft Vision" series body pressure sensors, entered health and nursing business

**2014** Started sales of water-washable flexographic printing plates "AquaGreen", entered flexographic printing business

Started mass production of "cell gaskets", the rubber seal components used for FC stacks in fuel cell vehicles (FCEV)

**2019** Released a "Body Motion Sensor", a device that diagnoses biometric information

**2020** Released a Thin-film High-heat Insulation Materials "Finesulight"

Started the mass production of the steering touch sensors and entered the autonomous driving field

1929

1988

2013

2022

## Mid-term Business Vision "2022 Sumitomo Riko Group Vision (2022V)"

## Toward becoming a Global Excellent Manufacturing Company

**A corporation that contributes to safety, comfort, and the environment for people, society, and the earth**

### Corporate Strategy

**■ Creation of new businesses and new customers**

- Creation of new businesses
- Global sales expansion

**■ MONOZUKURI innovation**

- Development of strong workplaces to prevail over competition (SRIM 22 Act)
- Technological innovation (environmental technology) / World's top quality

**■ Reinforcement of global business foundations**

- Strengthening of global human resources
- Strengthening of global infrastructure

# CASE

## Materials designed for the future.

Innovation by Materials

Sumitomo Riko Accelerates “CASE”

### Mission

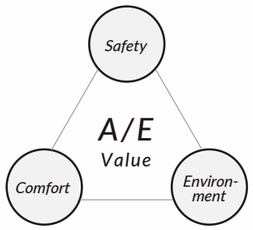
## We aim to create the ideal car-oriented society.

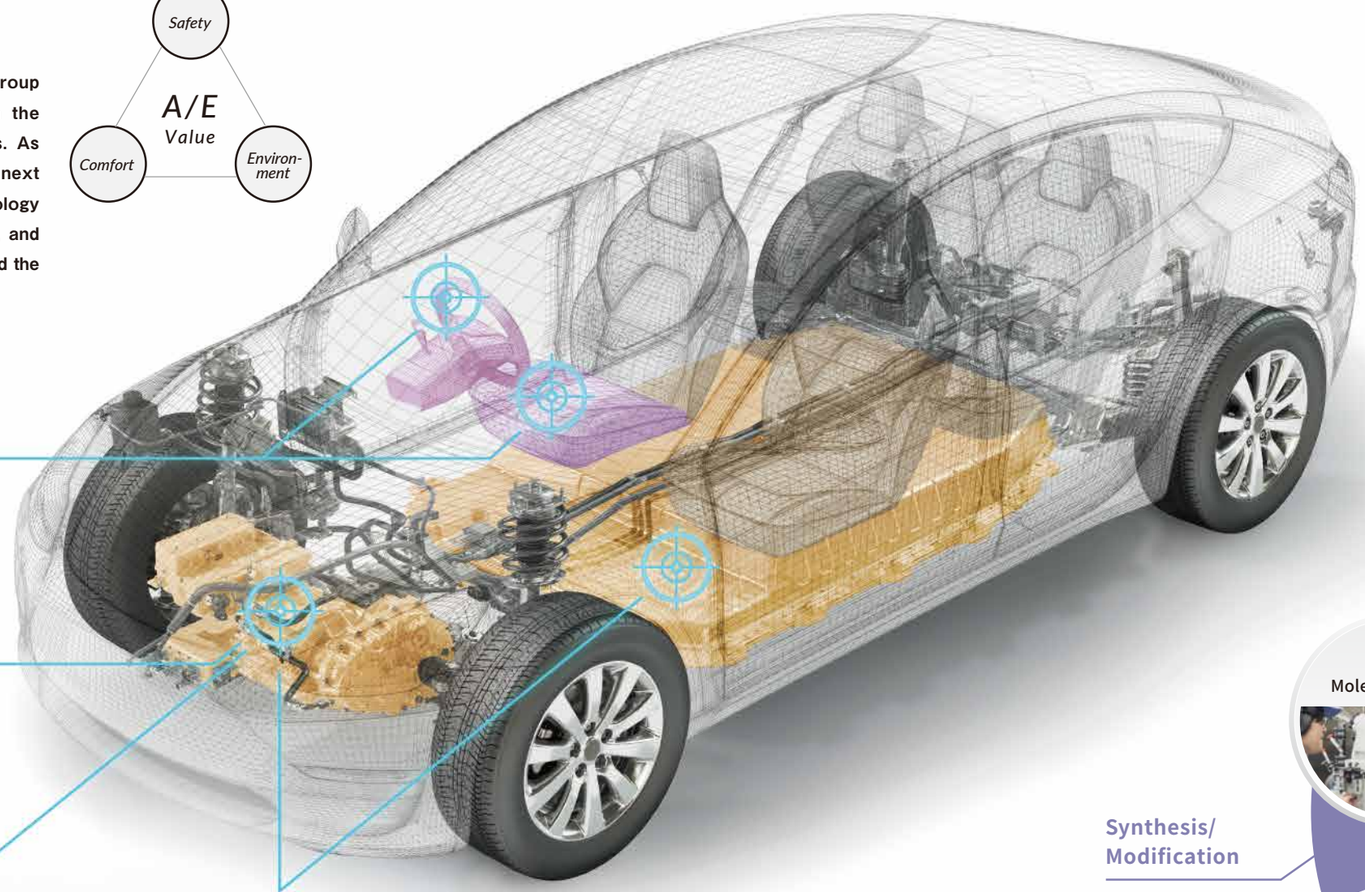
The automotive industry is currently facing a once-in-a-100-year paradigm shift, and the key is “CASE” or “Connected”, “Autonomous”, “Shared & Services”, and “Electric”. We are helping to accelerate the advancement of CASE. However, there is an ideal car-oriented society in the future which we, the automotive industry aim to create.

### Value

## We aim to create and provide value.

Since our founding in 1929, the Sumitomo Riko Group has supported the automotive industry through the development of its anti-vibration rubber and hoses. As the world moves towards the development of the next generation of mobility, we will further develop technology and contribute to society from a safety, comfort, and environmental viewpoint, particularly centered around the “Autonomous” and “Electric” fields of CASE.



### Passengers

A

Sensing

HEV / PHEV | BEV | FCEV

### Motor

E

Sound / Vibration Control

HEV / PHEV | BEV | FCEV

### Body / Chassis / Vehicle Pipework, etc.

E

Heat Control

HEV / PHEV | BEV | FCEV

Sound / Vibration Control

HEV / PHEV | BEV | FCEV

Fluid Control

HEV / PHEV | BEV | FCEV

### Energy Source

E

Heat Control

HEV / PHEV | BEV | FCEV

Sealing

HEV / PHEV | BEV | FCEV

### Core Competencies

## We will refine the power of materials and beyond.

Sumitomo Riko's core competence is the foundation of the development of products to meet the needs of customers. Polymer Materials Technology to create high performance raw materials based on "compound", "synthesis", and "modification" and Comprehensive Evaluation Technology to conduct in-house evaluations and assessments of the required performance and reliability of products. These two strengths are not only used to expand existing business, but also actively advance business development in new markets and fields.

### Polymer Materials Technology Development Process


**Watch Special Movie**

**The power of Sumitomo Riko technology is standing up the challenge of CASE.** 〈YouTube channel〉 Sumitomoriko

# CASE Related Products

**Materials designed for the future.**
CASE Special Web page〈The Power of Materials × CASE〉
https://www.sumitomoriko.co.jp/english/rd/strategy/

## A 〈 Autonomous 〉 Sensing Technology

### Promotion of Autonomous Driving, Sensors to Ascertain Safety

In level 2 autonomous driving the driver is the driving entity and in level 3 the system is the driving entity. Sumitomo Riko sensing technology detects whether the driver is holding the steering wheel correctly as it is necessary for the driver to hold the steering wheel when driving at unconventional times or at times of emergency. Furthermore, by installing a sensor in the seats, the sensor can detect the pulse and breathing of the driver and passenger and support a safer and more comfortable drive.

#### Steering Touch Sensors

The SR sensor is made of a special flexible material that conveys electricity and can be installed in the steering wheel. It detects the position that the driver is holding the steering wheel and supports the safe transition from autonomous driving to manual driving.

#### Driver Monitoring Systems

The System with SR Sensor is installed in the driver's seat and detects the pulse, breathing, and body movement, etc., of the driver. It can also ascertain tiredness, sleeping at the wheel, medical emergencies and other conditions that might affect the driver and connects such information to a warning and driver support system and other external traffic reporting services.

## E 〈 Electric 〉 Sealing Technology

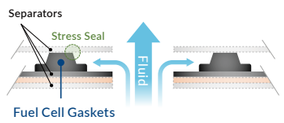
### Sealing technology to support the safe expansion of clean vehicles

In the same way electric vehicles (BEVs) send electricity from the battery to the motor, fuel cell vehicles (FCEVs) convey hydrogen to the FC stack, and hybrid vehicles (HEVs/PHEVs) send electricity and fuel to the motor and engine, respectively. At such time, sealing technology that ensures that electricity and hydrogen does not leak is essential for safety. FCEVs that use hydrogen as fuel particularly require a higher level of technology. Sealing technology is the technology that creates this kind of insulation and sealing environment. This technology can also be used for the development of commercial vehicles such as trucks and buses, and train carriages. The application of this technology into fields outside of the motor vehicle framework will also contribute to the creation of a decarbonized society.

#### Hydrogen Hoses

These hoses supply hydrogen stored in the hydrogen tank to the FC stack. They correspond to the extremely advanced sealing requirements needed to seal small particle hydrogen and do not leak any hydrogen externally under any circumstances.

Cross section of a fuel cell




#### Fuel Cell Gaskets

The FC stack contains hydrogen, oxygen and rubber sealing material to prevent water from leaking. The material is capable of sealing in temperatures ranging from sub-zero to 100℃ or higher and it contributes to the long-term stability and highly efficient power generation of FCEVs.

### Major products installed in Toyota's new "Mirai"

#### Anti-vibration Rubber for FCEVs

- FC stack frame mount
- Regulator mount
- Hydrogen tank mount
- Air compressor mount

#### Hoses for FCEVs

- Hydrogen hose
- Air hose
- FC cooling hose

## E 〈 Electric 〉 Heat Control Technology

### Controlling heat, more vehicle comfort, more environmentally-friendly.

Maintaining the appropriate system temperature in motor vehicles is an extremely important part of demonstrating the vehicle's original high-performance capacity. In comparison to engine vehicles, electric vehicles (BEV) produce less heat, and not only do they cool the heat source, its cruise distance and performance is greatly impacted by how efficient the heat generated in the vehicle is used. It is in this way that heat control technology efficiently uses heat without waste.

#### Thin-film High-heat Insulation Materials "Finesulight™"

Utilizing our polymer materials technology, we made a high-heat insulating filler (silica aerogel) containing nanopores small enough to block the passage of air, into a coating liquid. This exhibits high-heat insulation properties at a level of still air or higher by coating base materials such as non-woven fabric and molded resin. In addition to vehicle use, it can also be used for a broad range of insulation applications, including electrical appliances, residences and food deliveries.

#### Cooling Hoses

These hoses are used to transport cooling liquid to cool the vehicle such as radiator hoses and bypass hoses. In addition to cooling, these hoses can also be used to transport waste heat generated from electrical parts to other circuits.

## E 〈 Electric 〉 Sound / Vibration Control Technology

### Improving in-vehicle quietness, safety and comfort

Vibration and noise occurring from the engine and road while driving greatly affects comfort. Particularly in the case of electric vehicles (BEVs), high frequency motor noise buried in the sound of the engine is audible, and as the use of vehicles as a living room or space will increase with the development of autonomous driving, quietness is now more important than ever. Consequently, sound / vibration control technology blocks out vibrations and noise as much as possible and make the ride more comfortable.

* Product cut sample

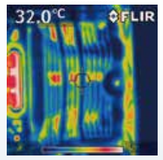
#### Damper braces for vehicles

Damper braces contain "high damping special viscoelastic material" that absorb the heat energy transformed from the vibration energy and thermal energy utilizing our polymer materials technology. This can also be installed in limited and narrow spaces by utilizing its highly free design, a characteristic of rubber materials.

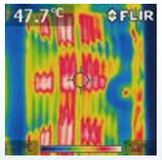
#### MIF (Magnetic Induction Foaming)

While this is a foam substance, we have achieved heat dissipation performance 10-50 time of general soundproof urethane as material that balances "heat dissipation" and "soundproofing" utilizing the mixing technology developed by Sumitomo Riko. We anticipate that this heat dissipation soundproofing materials will meet a broad range of need including electrical appliances in the future.

When general products are installed




When MIF is installed




**Heat dissipation test**

This measures the surface temperature of the soundproofing cover installed on the motor using infrared thermography. In comparison to general installation, the temperature is 15℃ or more at the time of MIF installation and it removes the heat from the motor, and it effectively disperses heat externally.

When not installed

When MIF is installed

**Soundproofing test**

Noise generated from the motor can be observed by the sound camera. When MIF has been installed, the amount of noise is clearly smaller than when it is not installed. It can achieve a noise reduction effect of approximately 10dB in some circumstances.

# Products

## Sumitomo Riko Group's Products

**Sumitomo Riko manufactures advanced products based on our core competency, "polymer materials technology" cultivated since the company's founding. With our continuous creation of new value, we are helping to build a society that is safe, secure, comfortable and environmentally friendly across the four fields of "Automotive (Mobility)", "Infrastructure and Housing environment", "Electronics", and "Healthcare".**

# [Automotive (Mobility)]

The automobile is the most familiar form of getting around there is. Sumitomo Riko's automotive products provide further comfort as well as safety and security to drivers and passengers. We are the world's top supplier* of anti-vibration rubber products that reduce vibration and noise caused by the engine and road surface. Our wide-ranging products include automotive hoses for which we have the largest market share in Japan*, sound controlling/insulation products and interior equipment, such as engine covers and seats. Through our global development and supply network covering five key regions, we are a stable source of consistently high-quality products for automotive manufacturers worldwide.

*Estimate by Sumitomo Riko

## Topics

### Sumitomo Riko has the anti-vibration rubber development technology that supports safe, secure, and comfortable automobile rides around the world.


Toyopet Crown

Sumitomo Riko first started the development of anti-vibration rubber in 1953. Ever since the company was established in 1929, though we have produced rubber products like conveyor belts, rubber thread, industrial hoses, with the growing importance of the automobile in society, the president at the time expressed his desire to develop products that made full use of the elasticity in rubber as a spring, and this led to our involvement in the anti-vibration rubber field. The first item we developed was the supports for engines that keep the engine in place and fix it to the chassis. During the early development phase there was a long period of trial and error finding ways to attach the rubber to the metal so that vibration could be reduced and how to improve durability so that deterioration could be dealt with. When we learned that a major US manufacturer had developed a material that could prevent deterioration of rubber, we implemented that technology as fast as possible and repeated our trials and improvements. Our efforts were rewarded when Toyota Motor Corporation evaluated our products and praised them as having superior durability and little variation in quality, so that our products were used in a luxury passenger vehicle developed as a purely domestic design, the Toyopet Crown, which went on sale in 1955. With our first product being used in a Toyota vehicle, we soon received orders from other manufacturers, and this marked the beginning of our development of anti-vibration rubber business for other fields as well. Since then, for more than 60 years this product has been a pillar of Sumitomo Riko, being the main support to provide safe and comfortable rides for automobiles manufactured both domestically and all over the world.

Engine Supports

## Topics

### Sumitomo Riko's gaskets for cells are continued to be used Toyota's new "Mirai".

Sumitomo Riko first started developing products for FC in fuel cell vehicles (FCEV) in early 2000s. In 2008, the company started joint development with Toyota Motor Corporation of "seal components", the basis of the "cell gaskets". Toyota has used the complete rubber sealing component “cell gasket” in the FCEV “Mirai” (first model) from the time of its launched in 2014 and have continued its use in the 2020 “Mirai” new model.

The Mirai is fueled by hydrogen and produces only water as its exhaust, making it extremely ecological. Its power source is an FC stack of 300 or more cells. With separate channels for hydrogen, oxygen and cooling liquid, and the development of cell gaskets with highly reliable seal, the FC stack has achieved a high level of performance. The new Mirai has succeeded in the development of a smaller and lighter burr-less gasket through the introduction of new manufacturing methods.

Furthermore, we fused our precision processing technology built up through developing products such as automobile anti-vibration rubber, and the high-performance rubber, which has long-terms ealing properties across a wide range of temperatures, thereby ensuring the long-term reliability of FCs.

Sumitomo Riko is committed to flexibly responding to the needs of our customers in the evolving automobile market, while solving issues in society, and contributing to the production of people and earth-friendly vehicles.

The new “Mirai”

# Anti-vibration Rubber

Sumitomo Riko's anti-vibration rubber products use rubber developed using our polymer materials technology, boasting flexibility, damping, and reliability, efficiently abs orbing the vibrations from the engine and road surface to help contribute to a comfortable vehicle space.

Global share


*Estimate by Sumitomo Riko

## Heat-resistant Rubber Products

1 Engine Mounts
2 Exhaust Pipe Supports

Our heat-resistant rubber, an achievement of our high-polymer materials technology, delivers twice the heat-resistance of conventional mounts for long-lasting reliability. This contributes to long-term reliability.

1 Adaptive Hydraulic Engine Mounts

Appropriately tuned, adaptive hydraulic engine mounts reduce the vibration generated by engines, contributing to both comfort and stable handling.

## Chassis Parts

3 Suspension Bushes
4 Suspension Member Mounts
5 Strut Mounts

Our rubber materials endowed with twice the durability of conventional materials contribute to improved reliability and product downscaling.

3 Adaptive Hydraulic Suspension Bushes

Sealing the insides of rubber bushes with liquid for greater damping force and an optimal spring constant realizes both a smooth ride and stable handling.

## Lightweight Parts

1 Engine Mounts with resin brackets
1 Torque Rods with resin brackets

Our products designed by exploiting the characteristics of glass fiber-reinforced resins are robust and lightweight, helping improve automotive fuel efficiency.

5 Urethane Bound Stoppers
5 Resin Dust Covers

The shape design in combination with meticulous material selection to exploit key material characteristics delivers gains in performance and reliability. These easily recyclable, lightweight products have excellent environmental credentials.

## Active Control Products

1 Electrical Active Control Mounts (E-ACM)
6 Vibration Cancellation Systems (VCS)

These high-performance devices are optimized for engines which comply with environmental regulations. Real-time modulation of the spring constant and phase realizes a quiet ride in a wide range of conditions.

## Dampers

7 Dynamic Dampers

Installed in automotive subassemblies, devices which control vibrational eigenvalues suppress vibration to deliver more comfortable and quieter driving.

Senior Product Engineer,
Anti-Vibration Products Engineering,
SumiRiko Technical Center America, Inc.
Hirotaka Matsui

**Anti-vibration rubber continues to evolve along with the automobiles it helps support. For a safe and comfortable ride and to contribute to the environment.**

In one vehicle there may be 60 or 70 parts using anti-vibration rubber, including engine mounts and suspension parts on the chassis. Anti-vibration rubber has continued to evolve along with automobiles. A prime example is the Electrical Active Control Mount (E-ACM). The shaking of the engine is examined as waveforms by computer, and then by transmitting the reverse phase electro-magnetically, the vibrations can be canceled. There will be demand in the future for products that can stand up to any kind of environmental conditions. Saving fuel by reducing weight is just one of the contributions we can make. We will tirelessly continue our research and development to bring you both a safe and smooth ride and contribute to the environment.



# Sound Controlling & Insulation Products

There are many sources of noise in an automobile, including engine.Sumitomo Riko's sound controlling and insulation products shut out these noises and keep the inside of the cabin quiet. Our original urethane is used for the engine cover due to its heat resistant and sound absorption and insulating properties, realizing a high degree of noise reduction even on the engine parts with high temperatures.

1 Engine Covers

Installing a cover over the top of the engine reduces engine noise. We use materials with excellent heat-resistant and fire proofing properties to enable applications at extremely high temperatures. Optimized cover design also contributes to an improved engine compartment appearance.

2 Standing Wave Spacers

These products fill airspace to reduce noise generated in gaps between the engine body and its peripheral equipment. Our mold-casting technology enables fitting into spaces with complex shapes.

# Interior Equipment

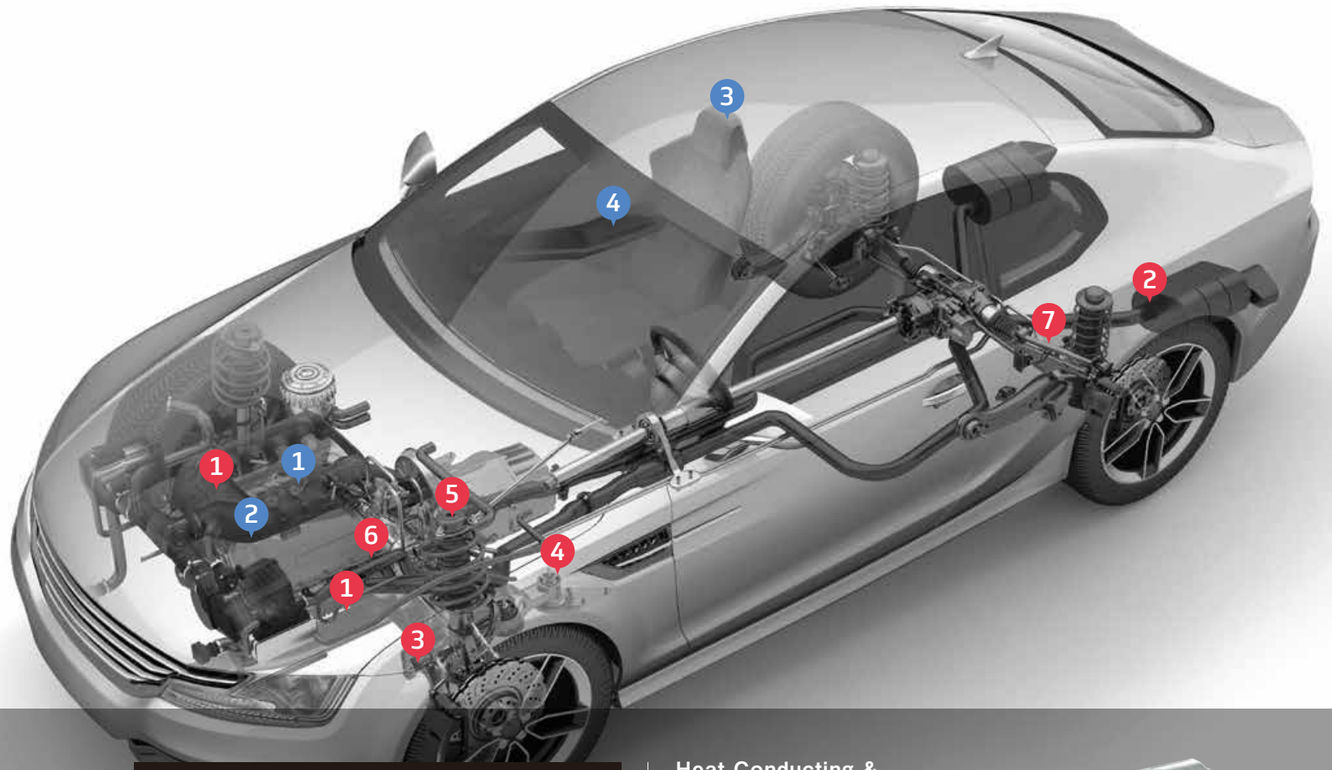
Inside equipment in automobiles directly contacts the body of the user, so apart from the obvious requirements for safety, it is also important that the equipment satisfies the five senses. We manufacture interior parts such as headrests and armrests that have a pleasant texture but also have excellent shock resistance.

3 Headrests

Our interior equipment contributes to comfort and safety in the car. Our unique urethane material and comprehensive production capabilities covering the entire manufacturing processes from cutting, sewing to integrated foaming result in products of consistently high quality.

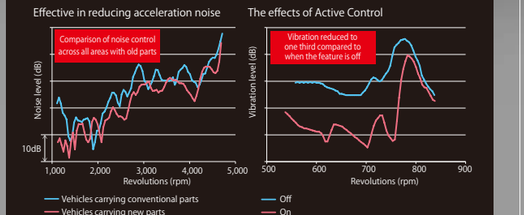
4 Armrests

Situated on the central parts of the doors on both sides, these provide comfort during the ride by proving a place to rest your arm. We adopt integrated molding techniques with outstanding design flexibility to provide products that provide comfort to drivers and passengers.




### Development of anti-vibration rubber with dramatically high-performance

This is a graph showing a comparison between the noise during acceleration of a vehicle using the new parts and old parts (on the left), and a graph comparing the vibration control effect when Active Control is on and when it is off (on the right).




## Heat Conducting & Sound Reducing Materials Magnetic Induction Foaming (MIF)

Recently, a greater variety of motors are being used in cars. With the increasing demand for materials that can cut down on motor noise while also alleviating the damage caused by heat, Sumitomo Riko has successfully developed "MIF", a sound reducing material that also conducts heat. Through our exclusive compounding technology, we have been able to achieve a material that has between 10 and 50 times higher thermal conduction properties than general sound proofing urethanes. This material has a wide range of possible applications, and we expect to see it in a variety of household appliances in the future. *16V constant voltage motor Measured at a distance of 100 mm

With a motor by itself

Realized a reduction in noise of approx. –10dB*

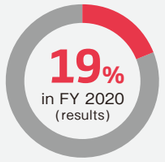
With MIF

# Hoses

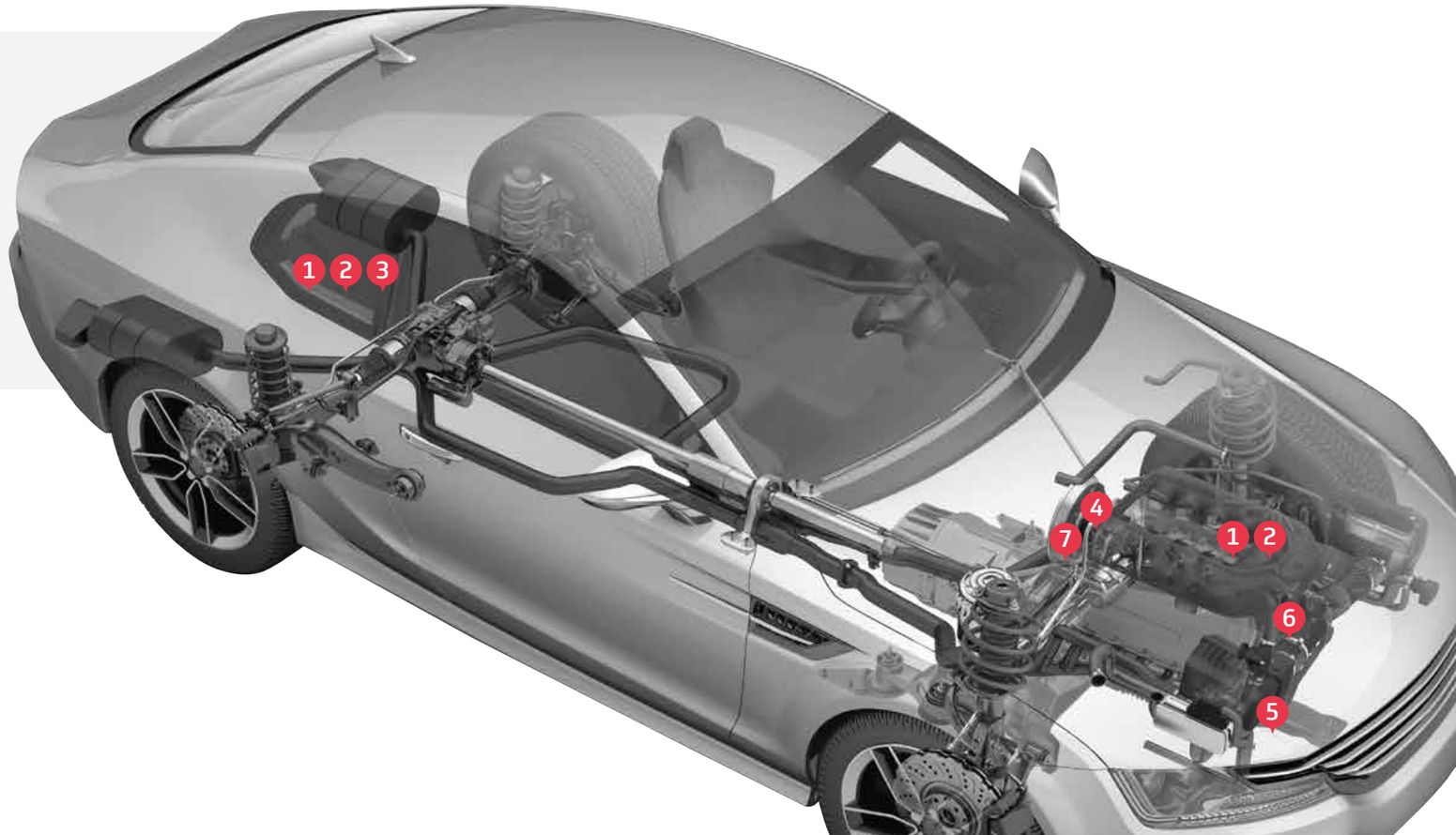
Sumitomo Riko automotive hoses run the length and breadth of the inside of vehicle chassis and are prized for their technology which combine rubber and resin. They are used in many parts of the vehicle from around the engine to around the fuel tank due to their superior heat resistance, impact and vibration absorption and light weight properties. Starting with "CASE*", we think this is a major opportunity for great change in the automotive industry, and we will create new technologies and products that are suited to electrification and environmental regulations.

*C : Connected, A : Autonomous, S : Shared & Services, E : Electric

Global share




*Estimate by Sumitomo Riko




### 1 Rubber Fuel Hoses

These products are mainly used around the engine and fuel tank, so require the use of materials with extremely good fuel resistance and durable structures. They are used in extremely severe environments where flexibility is required.

### 2 Resin Fuel Hoses

This product is mainly used around the engine and fuel tank. These resin hoses have low permeability and are made up of multiple layers of polymer materials, complying with the world's strictest gasoline evaporation regulations.

### 3 Canisters

These are mainly found around the gasoline tank, repeatedly absorbing and releasing gasoline vapor. They comply with the world's strictest gasoline evaporation regulations.

### 4 Air Control Hoses

We have developed the polymer materials technology to make these hoses extremely heat resistant. The product line-up includes heat-resistant turbo air hoses for attachment to ultra- high-temperature turbochargers.

### 5 Water Hoses

These water line hoses include radiator and heater hoses. We use polymer materials technology to make them extremely heat resistant.

### 6 Oil Hoses

This product is expected to be highly heat-resistant due to the extreme heat in the environment it is used. It maximizes the performance of automatic transmission systems and contributes to the fuel efficiency of the vehicle. It is used in circuits that maintain transmission fluids at a constant temperature.

### 7 Air Conditioning Hoses

These hoses are used in refrigerant circulation systems for automobile air conditioning. Advanced technology is used to attach aluminum fittings to both ends of a flexible hose.

### Hydrogen Hoses

Hydrogen hoses are used to transport hard to seal small gaseous matter at high pressure. Installed in fuel cell vehicles (FCEV), these hoses require a high level of reliability and durability to ensure that hydrogen is not leaked outside the vehicle under any circumstances.

# Seal Products

There are bundles of cables that carry power and signals and wire harnesses threaded throughout vehicles. There are about 500 waterproof seals used in each vehicle for the wire harnesses in and around the car, and we are able to provide a stable supply of these using our precision rubber molding technology and quality assurance system.

### Connector Seals

These waterproof connector seals are fastened to wire harnesses. Precision metal molding and liquid silicone molding technologies eliminate burrs and losses. In-line inspection assures the quality of all seals.

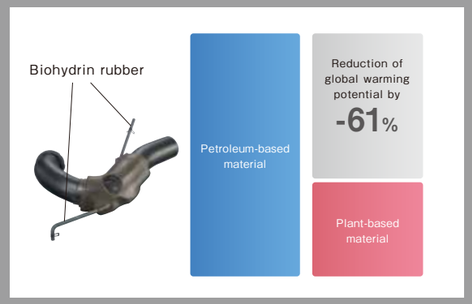
### Wire Seals

These seals provide waterproof effect to each wire in the connectors. They are produced by the fully automated processes, from the material feeding to inspection and packing.

## Biohydrin rubber

### Environmentally friendly rubber from plant-based materials.

Automotive hoses require high degrees of oil and heat resistance, and as such have been made with petroleum-based materials. Biohydrin rubber is being developed by Sumitomo Riko in partnership with Toyota Motor Corporation and Zeon Corporation. It is a synthetic rubber composed of a variety of compound technologies that bond plant-derived materials with petroleum-based materials at the molecular level. It maintains the same levels of durability and resistance to oil and heat as conventional petroleum-based hydrin rubbers. The further benefits of this is that the raw materials are plants which absorb $CO_2$ from the atmosphere as they grow, and with the reduction in power consumption during the production process, when compared to the manufacturing process for conventional products, the life-cycle carbon emissions are reduced by about 20% between production to disposal.




*Reduction at the raw materials production stage

### Overcoming a variety of hurdles on the way to commercialization.

Many people questioned the profitability of the concept when we were looking at productization, because there were not even any biomaterials available in the market. Furthermore, as well as making them the same as petroleum-based materials, we had to go through a lot of effort to prove that they were absolutely the same. Biohydrin rubber is used in the vacuum sensing hoses in domestically produced Toyota Motor Corporation. We are currently proceeding with the development of materials to use in parts that work under more severe conditions, such as brake hoses and fuel hoses.

General Manager,
Engineering Division,
Automotive Hose Business Headquarters
Kazushige Sakazaki

# infrastructure

# [Infrastructure]

Sumitomo Riko's industrial hoses used in construction machinery and construction sites and our rubber bearings for bridges used for protecting infrastructure networks such as elevated highways and bridges from the threat of earthquakes contribute to the development of building the foundation of industry and public transport. We have achieved the largest share of the market* for anti-vibration rubber for rolling stock used in Shinkansen and trains in Japan, and it is also widely utilized overseas.
Sumitomo Riko also contributes to earthquake disaster reconstruction in Japan, and infrastructure improvement around the world, particularly in emerging countries.

*Estimate by Sumitomo Riko

Topics

**The Shinkansen is the envy of the world.
And Sumitomo Riko is the company that has supported its continued safe running.**

Sumitomo Riko has been developing anti-vibration rubber for rolling stock ever since the 0 series Shinkansen. The Shinkansen is a stand out achievement in high speed rail. Many of the anti-vibration rubber products used in the rolling stock are from Sumitomo Riko. Along with safety, the environmental credentials of the product are also very important considerations during development. Furthermore, increasing the durability of the product lengthens its life cycle and reduces maintenance costs. Finding a comprehensive solution to these issues is our mission. We will continue to strive to get the most out of the know-how we have built up and deploy it as widely as possible around the world.



## Heavy Machinery

We utilize our rubber compounding, molding technology, metal fitting processing, and bonding technology to provide ultra-durable hoses that meet the needs of various industrial machines. Our hydraulic hoses feature a multi-layered structure consisting of layers of rubber and wire to provide both resistance and flexibility. The use of special compound rubber imparts resistance to weather and long-term durability.

### Hydraulic Hoses

**Products Compatible with international standards**

These are used in heavy construction equipment and forklifts, with compact piping achievable due to their flexibility. They are to be found playing their part in building the infrastructure and working in logistics all around the world.

## Construction and Civil Engineering

Industrial hoses are used at building construction and civil engineering sites. Sumitomo Riko offers high-durability hoses that utilize special rubber materials and structural design technology based on our material development technology. These include abrasion-resistant hoses used to deliver raw concrete and drain mud from underground construction sites and oil-resistant hoses for industrial machinery.

### Industrial Hoses

**High Arrow**

Used by attaching to the end of a concrete pump that pumps ready-mixed concrete at construction sites. It is lightweight, flexible, and features excellent workability. A special rubber compound and structural design provides improved abrasion resistance and realize a longer service life.

**ELSTAR**

They are used to convey water, mud, and concrete, and you can find them helping with construction deep underground. Over many years, they have contributed to the development of our towns and cities, being used in a variety of major projects.

## Bullet Trains and Railway Rolling Stock

Sumitomo Riko's rubber products are more than a match for the requirements of infrastructure where long life and durability are required. The anti-vibration rubber for railway rolling stock reduces the vibrations from rails, are able to withstand constant vibration and harsh environmental conditions and are widely used widely in high-speed railways both in Japan and around the world.

### Anti-vibration Rubber for rolling stock

**Cylinder Rubber Axle Springs**

**Mono-link Bushes (Link Bushes)**

**Radius Arm Rubber Bushes**

These rubber products are used in the truck parts of trains to significantly reduce vibration generated from the track. They are used for the Shinkansen as well for most domestic railroad rolling stock. They are also widely used overseas.

## Bridges, Highways and Railways

We develop rubber bearings that safeguard bridges such as elevated highways and bridges from environmental changes and disasters. These have the effect of reducing the inertial force felt when an earthquake occurs and contribute to the improvement of the seismic perform ance of the bridge. We safeguard social infrastructure with our main products, our "HDR-S" high damping rubber bearings. and "DRB", disc rubber bearings of high contact pressure that can be installed in space-saving areas.

**Example of rubber bearings for bridges in use**

"Bizen ♡ Hinase Bridge" in Okayama

**Disc rubber bearings of high contact pressure "DRB"**

Able to be installed in small spaces at new and existing bridge. Utilizing urethane rubber and a disk bearing structure, this is a product that realizes high contact pressure.

## Landscape Materials

We can offer products for a variety of aesthetics needs.
“MOLD STAR” is a special resin cosmetic mold rubber with a design that harmonize with the natural surroundings when used for civil engineering purposes and rich variety of designs for wall surfaces when used for construction purposes.
In addition, “PATWALL” can be used for a broad range of purposes including soil erosion prevention and steel sheet pile coating due to reduced constructing time and waste reduction.

**Example of landscape materials in use**

**MOLD STAR**

**PATWALL**

**NS MOLD & NS COATING**

This product provides a tile-type design for concrete. It reduces the risk of title pealing and detachment, and reduces maintenance costs for existing apartments and buildings.

# [Housing Environment]

Protecting people's livelihoods is "TRC Damper", Sumitomo Riko's earthquake countermeasure systems. These dampers absorb the shaking during earthquakes and greatly reduce the shaking of buildings. Furthermore, "Refleshine", our highly transparent reflecting and insulating films for windows, are not only used in factories and offices but can also be found on trains, providing comfortable spaces wherever used.

**housing environment**


SumiRiko Corporation

Yosuke Kawabata

**Sumitomo Riko is the driving force in the new technology of seismic control, born of necessity in earthquake-prone Japan.**

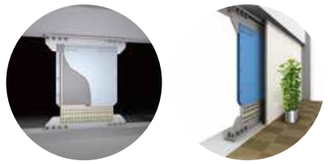
In Japan, where earthquakes are common, the possibility of a massive earthquake occurring sometime in the future is quite high, so measures to protect against earthquakes are absolutely necessary. There are three types of measures that can be taken; earthquake resistance, seismic isolation, and seismic control. Earthquake resistance means making the entire building stronger so that it can resist the shocks from earthquakes. Seismic isolation means separating the building from the ground using seismic isolation devices to make it harder for the shaking of the earthquake to reach the building. And finally, seismic control is the system of installing dampers in walls to absorb vibrations to reduce the shaking of the building. It is this method that Sumitomo Riko is putting the most energy into. Seismic isolation involves high costs, and there are cases where it is not suitable due to the ground. Seismic control works irrespective of the ground and buildings can be provided for much less money, and right now it is gaining a lot of attention.



## Housing environment

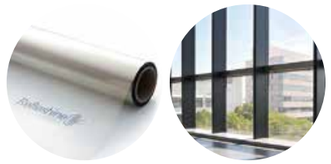
Sumitomo Riko is also deploying its polymer materials technology in devices for the housing environment. TRC damper is able to reduce the shaking and deformation caused to buildings during earthquakes. A special viscoelastic rubber, developed using our advanced compounding technology, used in the dampers reduce shaking by instantly converting earthquake energy into thermal energy.


**1 Seismic control systems for buildings "TRC Damper" (for office buildings and condominiums)**



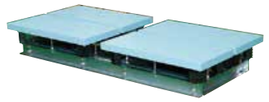
Using our unique viscoelastic rubber, this is an effective earthquake countermeasure system for high-rise buildings including office buildings and condominiums. Its thinness and compactness are also features.

**2 Window films with high transparency, reflecting and insulating against heat "Refleshine"**



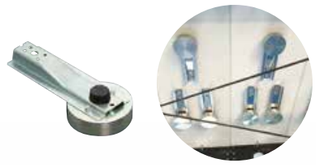
This window film keeps heat from sunshine out in summer (heat shielding) and stops indoor heat from escaping in winter (heat insulation). It is transparent but also maintains safety if the glass breaks, improving comfort year round near the windows and contributing to savings in air-conditioning power. There is also expanding use in train windows, not just in buildings.

**3 Dampers for traffic vibration mitigation "Multi-type TMD:Tuned Mass Damper"**



This device reduces the lateral shaking caused by nearby traffic or other sources of vibration inside or outside the house. Its mass moves in the direction opposite to that of the vibration of the building, thus canceling the vibration.

**4 Heavy Floor Impact Noise Countering Dampers**



This device reduces noise from the floor above, for example, the noise of children jumping or people walking around, by the complex damping effect of springs, mass, and high-damping rubber. It absorbs vibration and mutes noise transmitted to lower floors in condominiums and two family houses.

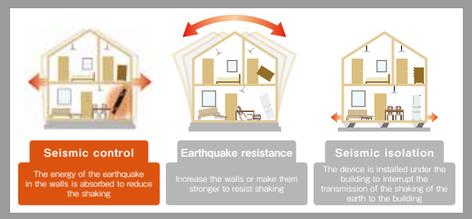
**5 Seismic control systems for wooden houses "TRC Damper"**

Seismic control system to reduce damage to wooden houses during earthquakes. The energy from earthquakes is instantly converted to thermal energy to reduce shaking. These dampers are not only suitable for new houses, but can also be applied to existing structures, and they are effective against repetitive quakes such as from after shocks.

**6 Concrete molds "MOLD STAR"**

These concrete molds have been widely used in construction and building. The exteriors of buildings can be decorated beautifully and given personality by adding these richly designed molds along with concrete placers.


**Taking the world-class anti-vibration technology develop over years in the automotive field and applying it to seismic control technology in construction.**




Making the most of its core competencies of polymer materials technology and comprehensive evaluation technology, Sumitomo Riko has gained a strong reputation for providing world-class anti-vibration technology to the automotive field. We have seen massive growth over the last few years by applying the knowhow we have gained to earthquake measures. Resistant to repetitive shaking, seismic control also has the benefit of being low-cost, and the dampers used are born of the best anti-vibration technology in the world, so we see them having a great potential as a solution in the housing environment. The technology for controlling the damage from earthquakes is a relatively new field, and we anticipate seeing Sumitomo Riko's seismic control devices used across a broad spectrum of the market.

# [Electronics]

From charging rollers, which Sumitomo Riko was the first to develop and productize, through to cleaning blades and developer rollers, wherever you look in the vital parts of devices such as printers and copiers you will find Sumitomo Riko parts performing vital functions that influence the quality of the picture. We provide solutions to the advanced needs of modern society as IT becomes more important through our innovative formulation design technology, compounding technology to bring together different materials, and our precision processing technology. Along with this, other important issues are the innovative technologies to build societies beneficial to both people and the earth with the burgeoning population putting pressures on resources and energy and causing conflicts, while concern over the global environment grows. At Sumitomo Riko we have been able to produce water-washable flexographic printing plates, a revolutionary concept that contributes to a reduced burden on the environment because organic solvents are not used in the production of the plates. We have been able to enter the environmental solutions field, including plate production systems, and we will continue to move into other business fields with our technologies.

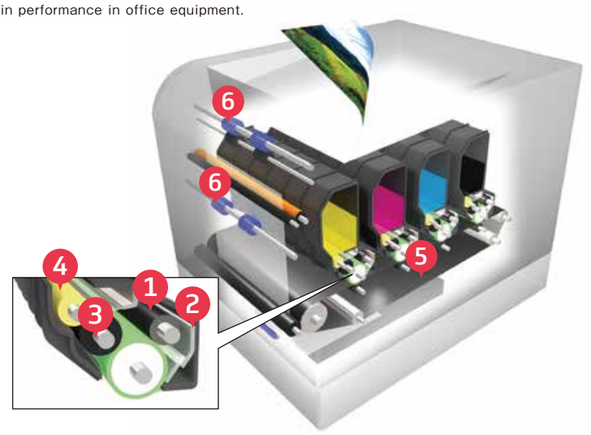
Rollers and blades

**electronics**

## Components for office automation equipment

Office equipment such as printers and copiers are indispensable in the modern world.
Sumitomo Riko has developed a great variety of functional parts, beginning with the charging rollers,
by making the most of its innovative formulation design technology, compounding technology to bring together different materials,
and precision processing technology, contributing to the improvements in performance in office equipment.

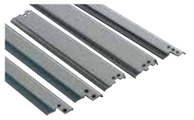
### Peripheral Parts for Photoconductors




**1 Charging Rollers**

Our rubber rolls uniformly charge the surface of photoconductor drums. They are highly functional components with a decisive influence on image quality. We were the first in the world to develop and commercialize the charging rollers.

**2 Cleaning Blades**



Cleaning blades remove toner that remains on photoconductor drums. Molding and adhesion of different materials—metal and urethane—are performed simultaneously. This micron-level, high-precision processing technology is our proprietary technology.

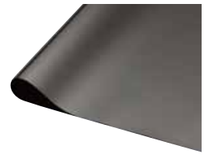
**3 Developer Rollers**

Molding and adhesion of different materials—metal and urethane—are performed simultaneously. This enables advanced electrical property control, dimensional accuracy, and high durability.

**4 Sponge Rollers**

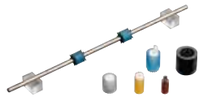
Sponge rollers uniformly supply and remove toner. Our processing technology realizes surface design for dimensional accuracy and high durability, thereby contributing to product differentiation.

**5 Intermediate Transfer Belts**



These belts perform the essential function of generating full color images by superposing four-color toners. These seamless belts achieve uniform electrical properties over the entire surface and high durability.

**6 Paper Feeder Rollers**



These rollers precisely feed sheets of paper one sheet at a time. The combination of our proprietary urethane formulation technology and surface design molding prevents adhesion of paper dust to sheets of paper, thus helping ensure stable paper feeding.

## Flexographic printing

**Water-washable flexographic printing plates "AquaGreen"**

Flexographic printing is a printing method that uses flexible rubber plates. AquaGreen from Sumitomo Riko is a water-washable flexo printing plate (where other companies use solvents), meaning it is environmentally-friendly and gentle on those working with it. This is a printing plate with top environmental credentials that also provides high resolution and great productivity.

Photosensitive Water-Wash
AquaGreen
Flexo Plate

**Aiming for a completely environmental printing process. Sumitomo Riko technology has enabled flexographic printing to evolve.**

Flexographic printing enables you to use any type of ink or printing medium, and from an environmental perspective it is currently receiving a lot of attention. Conventionally, the plates used were made of resin, and it was necessary to develop the plates with solvents. Sumitomo Riko used its compounding knowhow to develop a rubber plate that was compatible with flexographic printing. While image quality remains high, water based inks can be used meaning that the plates can be developed with just water, so they are kinder to the environment. We believe that this has the potential to become the new standard in the next generation of printing for flexible packaging, a market that is growing.

# [Healthcare]

We developed our unique Smart Rubber (SR) Sensor, a body pressure detection sensor made of rubber that "visualizes" pressure. These sensors are utilized at medical and nursing care workplaces. Sumitomo Riko continues to develop products and technologies that are useful in keeping us healthy while we live our lives.

## Topics

**New research and development efforts looking into solving the issues we will face in a super-aged society, with collaborative ventures between industry, academia, and government.**



In April 2016, the city of Itoshima (Fukuoka Prefecture), Kyushu University, and Sumitomo Riko opened the Kyushu University Health Care System Lab Itoshima (nickname: Fureai Lab). This collaborative venture between industry, academia, and government in the areas of health, medical care, and long-term care have delivered a variety of results. These include the launch of a mattress that prevents bedsores and the start of frailty checks. In April 2019, the second phase of the three-party venture began with the goal of establishing a frailty prevention project and implementing it in society. Sumitomo Riko aims to create new health care businesses through such collaborations by industry, academia, and government.


## Health & Nursing products

Products using the soft sensor technology are being deployed in the medical, nursing, and health care fields. Using SR Soft Vision to make it possible to visualize pressure, that is, advanced uses of new technology that seems like something already in use, we can develop devices that make manageable those issues in the frontline of nursing and health care, thereby contributing to the quality of life (QOL) of the patients receiving care.

### Body pressure sensors "SR Soft Vision" Series

A body pressure distribution sensor that can display the distribution and balance of body pressure using Smart Rubber (SR) sensor technology. It is being used in a variety of health and nursing applications such as the selection of cushions, and mattresses and in rehabilitation.

*The computer and mobile device are not included with the product.

### Training and evaluation system for chest compression "Shinnosuke-Kun"

A training and evaluation system for chest compressions (cardiac massage) that uses SR sensor technology. It is in accordance with the 2020 American Heart Association (AHA) Guidelines, evaluating the quality of chest compressions and giving points for each item, improving the results of training exercises such as life-saving certification.

*The computer, mobile device, and training dummy are not included with the product.

### SR active mattress "Taiatsu Bunsan" Series

This mattress system, a welfare device that uses SR sensor technology, has been developed through collaborative research between Kyushu University and Sumitomo Riko. Air cells installed in the mattress expand and deflate according to the user's build and sleeping posture, delivering custom body weight dispersion to support the prevention of bedsores.

*The bedframe is not included in the system.

### Body Motion Sensors

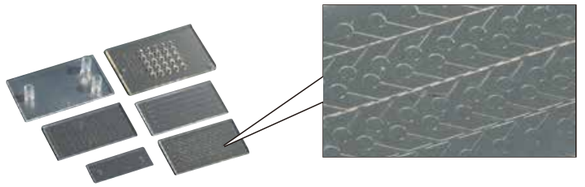
Made from thin, soft material, this sensing device measures biometric information (body movement, heart rate and breathing) when the body is secured in bed or while seated without putting a burden on the body. It can broaden the possibilities for remote medicine and various services in the nursing and sleep fields.

### SR-DMS (Separate Type)

This seat-type sensing device obtains biometric information (heart rate, breathing, movement) and pressure changes in the seat even during vibration in moving passenger vehicles, trucks and buses in all types of mobility environments. Such data is then connected to driver drowsiness and fatigue detection, passenger irregularity response and industry operated transportation management and fatigue management services.

When SR-DMS driver's seat (separate type) has been installed.

## Medical Supplies



### Micro-fluid Chips

Used in bacteria testing and for diagnoses of antigen-antibody reactions. Production of these were made possible by injection molding of liquid silicone rubber. Disposal of this type is much easier than the glass ones that were being used, so they also contribute to a better environment.

# Quality

## Sumitomo Riko's Quality

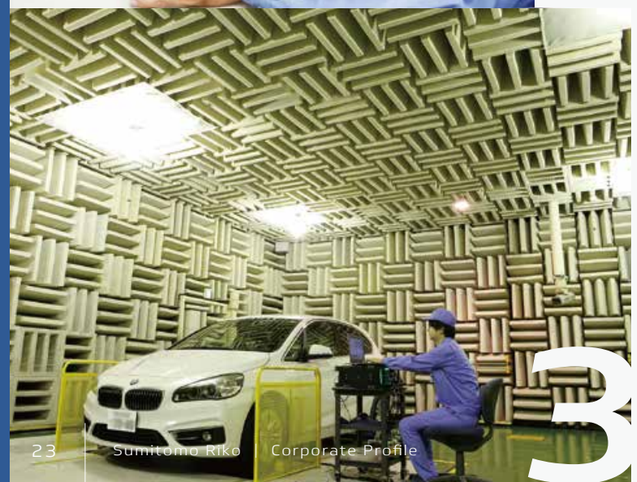
**With Safety, Comfort and the Environment as our keywords,
we want to continue offering joy to our customers around the world.
As a global system supplier constantly creating new value,
Sumitomo Riko places importance on the true meaning of MONOZUKURI,
while providing world-class quality products.**

## 1 Research and Development

The properties and characteristics required of products are becoming more sophisticated, with more demands for safety, comfort, and environmental compliance. One of Sumitomo Riko's core competencies is "polymer materials technology", which is based on the technologies of compounding, synthesizing, and modifying, and we will use this to provide solutions to the demands of society through research and development to create new functional materials and parts.

## 2 Design and Analysis

Product design technology that ensures the final product, not just the individual parts, meet the required performance and reliability benchmarks. Along with this is our CAE analysis technology the enables precise performance predictions and optimized design for our rubber and resin products. By making the most of such technology at the design stage, Sumitomo Riko can foresee the needs of our customers so that we are able to develop and provide even more reliable, even higher quality products.



## 3 Prototypes and Evaluation

As a system supplier, Sumitomo Riko's core competency, "Comprehensive Evaluation Technology", is the process of analyzing and verifying materials, meticulously and from a variety of perspectives. For example, we have established evaluation technology for evaluating a completed vehicle with all the parts fitted which gives us an insight into the necessity of the part that we cannot see by just examining the part by itself, and this enables us to accurately perceive the sophisticated needs of the end user, our customers, and provide solutions, while providing products with a high degree of reliability.



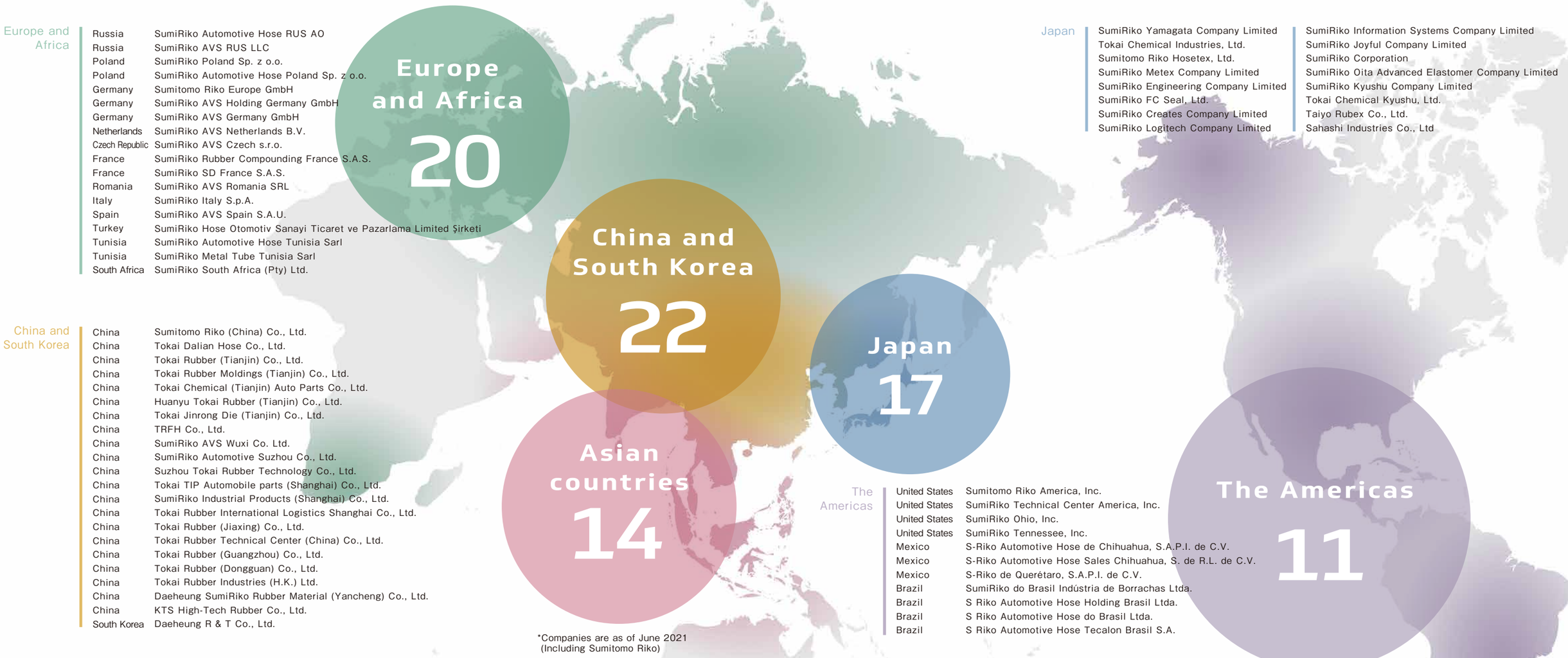
## 4 Manufacturing

Sumitomo Riko, as a manufacturer of highly functional components, has 5 manufacturing bases in Japan (Komaki, Saitama, Fuji-Susono, Matsusaka, and Kyoto plants), as well as subsidiary manufacturers in the Sumitomo Riko Group spread throughout Japan, so that we are able to respond to the sophisticated needs of our customers in a timely fashion.
With the knowledge about production technologies we have built up and the promotion of automation in our factories, we continue to output high quality products across a variety of fields, including parts for the motor industry, railway parts for the Shinkansen, heavy machinery and industrial plant, urban construction, infrastructure such as road and rail bridges, precision parts for printers and copiers and similar office automation devices, and parts for homes and nursing.
In the motor parts field, there is an increasing demand for parts from overseas auto makers, so as well as building the structures required to manufacture locally in the Americas, Europe, and Asia, we are also proceeding with setting up manufacturing capabilities for general industrial parts outside of the motor industry.


## 5 Sales

In order to be able to satisfy the demands for our products around the world, we have established product development and supply infrastructure in each of the world's five key regions (Japan; the Americas; Europe and Africa; China and South Korea; and the rest of Asia) in the auto parts field. With other general industrial parts as well, such as "Infrastructure and Housing environment", "Electronics", and "Healthcare", we are making use of this network of bases to provide world-class products to our customers.

# Global network




*Companies are as of June 2021 (Including Sumitomo Riko)

## Global Network

**With the changing development environment and manufacturing systems of our customers, particularly automobile manufacturers, there is a growing need for a stable supply of goods with a unified quality around the world.**
**In response to these market needs, the Sumitomo Riko Group is actively expanding on a global scale.**
**We are developing products and maintaining supply systems at five different axes around the world in order to establish ourselves as a global system supplier. We currently do business in more than 20 countries worldwide.**

### Europe and Africa

| | |
|---|---|
| Russia | SumiRiko Automotive Hose RUS AO |
| Russia | SumiRiko AVS RUS LLC |
| Poland | SumiRiko Poland Sp. z o.o. |
| Poland | SumiRiko Automotive Hose Poland Sp. z o.o. |
| Germany | Sumitomo Riko Europe GmbH |
| Germany | SumiRiko AVS Holding Germany GmbH |
| Germany | SumiRiko AVS Germany GmbH |
| Netherlands | SumiRiko AVS Netherlands B.V. |
| Czech Republic | SumiRiko AVS Czech s.r.o. |
| France | SumiRiko Rubber Compounding France S.A.S. |
| France | SumiRiko SD France S.A.S. |
| Romania | SumiRiko AVS Romania SRL |
| Italy | SumiRiko Italy S.p.A. |
| Spain | SumiRiko AVS Spain S.A.U. |
| Turkey | SumiRiko Hose Otomotiv Sanayi Ticaret ve Pazarlama Limited Şirketi |
| Tunisia | SumiRiko Automotive Hose Tunisia Sarl |
| Tunisia | SumiRiko Metal Tube Tunisia Sarl |
| South Africa | SumiRiko South Africa (Pty) Ltd. |

### China and South Korea

| | |
|---|---|
| China | Sumitomo Riko (China) Co., Ltd. |
| China | Tokai Dalian Hose Co., Ltd. |
| China | Tokai Rubber (Tianjin) Co., Ltd. |
| China | Tokai Rubber Moldings (Tianjin) Co., Ltd. |
| China | Tokai Chemical (Tianjin) Auto Parts Co., Ltd. |
| China | Huanyu Tokai Rubber (Tianjin) Co., Ltd. |
| China | Tokai Jinrong Die (Tianjin) Co., Ltd. |
| China | TRFH Co., Ltd. |
| China | SumiRiko AVS Wuxi Co. Ltd. |
| China | SumiRiko Automotive Suzhou Co., Ltd. |
| China | Suzhou Tokai Rubber Technology Co., Ltd. |
| China | Tokai TIP Automobile parts (Shanghai) Co., Ltd. |
| China | SumiRiko Industrial Products (Shanghai) Co., Ltd. |
| China | Tokai Rubber International Logistics Shanghai Co., Ltd. |
| China | Tokai Rubber (Jiaxing) Co., Ltd. |
| China | Tokai Rubber Technical Center (China) Co., Ltd. |
| China | Tokai Rubber (Guangzhou) Co., Ltd. |
| China | Tokai Rubber (Dongguan) Co., Ltd. |
| China | Tokai Rubber Industries (H.K.) Ltd. |
| China | Daeheung SumiRiko Rubber Material (Yancheng) Co., Ltd. |
| China | KTS High-Tech Rubber Co., Ltd. |
| South Korea | Daeheung R & T Co., Ltd. |

### Japan

| | |
|---|---|
| SumiRiko Yamagata Company Limited | SumiRiko Information Systems Company Limited |
| Tokai Chemical Industries, Ltd. | SumiRiko Joyful Company Limited |
| Sumitomo Riko Hosetex, Ltd. | SumiRiko Corporation |
| SumiRiko Metex Company Limited | SumiRiko Oita Advanced Elastomer Company Limited |
| SumiRiko Engineering Company Limited | SumiRiko Kyushu Company Limited |
| SumiRiko FC Seal, Ltd. | Tokai Chemical Kyushu, Ltd. |
| SumiRiko Creates Company Limited | Taiyo Rubex Co., Ltd. |
| SumiRiko Logitech Company Limited | Sahashi Industries Co., Ltd |

### The Americas

| | |
|---|---|
| United States | Sumitomo Riko America, Inc. |
| United States | SumiRiko Technical Center America, Inc. |
| United States | SumiRiko Ohio, Inc. |
| United States | SumiRiko Tennessee, Inc. |
| Mexico | S-Riko Automotive Hose de Chihuahua, S.A.P.I. de C.V. |
| Mexico | S-Riko Automotive Hose Sales Chihuahua, S. de R.L. de C.V. |
| Mexico | S-Riko de Querétaro, S.A.P.I. de C.V. |
| Brazil | SumiRiko do Brasil Indústria de Borrachas Ltda. |
| Brazil | S Riko Automotive Hose Holding Brasil Ltda. |
| Brazil | S Riko Automotive Hose do Brasil Ltda. |
| Brazil | S Riko Automotive Hose Tecalon Brasil S.A. |

### Asian Countries

| | |
|---|---|
| India | Tokai Imperial Rubber India Pvt. Ltd. |
| India | Tokai Imperial Hydraulics India Pvt. Ltd. |
| India | Tokai Rubber Auto-Parts India Pvt. Ltd. |
| Vietnam | SumiRiko Vietnam Co., Ltd. |
| Vietnam | SumiRiko Hose Vietnam Co., Ltd. |
| Thailand | Sumitomo Riko (Asia Pacific) Ltd. |
| Thailand | Inoac Tokai (Thailand) Co., Ltd. |
| Thailand | SumiRiko Eastern Rubber (Thailand) Ltd. |
| Thailand | SumiRiko Rubber Compounding (Thailand) Ltd. |
| Thailand | SumiRiko Chemical and Plastic Products (Thailand) Ltd. |
| Thailand | SumiRiko Fine Elastomer (Thailand) Ltd. |
| Indonesia | PT. Tokai Rubber Indonesia |
| Indonesia | PT. Tokai Rubber Auto Hose Indonesia |
| Indonesia | PT. Fukoku Tokai Rubber Indonesia |

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