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Editorial Policy

This report is published to provide stakeholders with an understanding of the Piolax Group's sustainability efforts to achieve a sustainable society. Through this report, the Group hopes to expand the circle of communication with more stakeholders.

Reporting organizations

PIOLAX, INC.

Piolax Group

(If certain information does not refer to the entire Piolax Group, its scope is indicated separately.)

Period covered

April 1, 2023 to March 31, 2024

* For activities outside the period covered, the year and month are listed.

* Some photos are taken outside the period covered.

Referenced guidelines

GRI Sustainability Reporting Standards

Date of publication

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Disclaimer

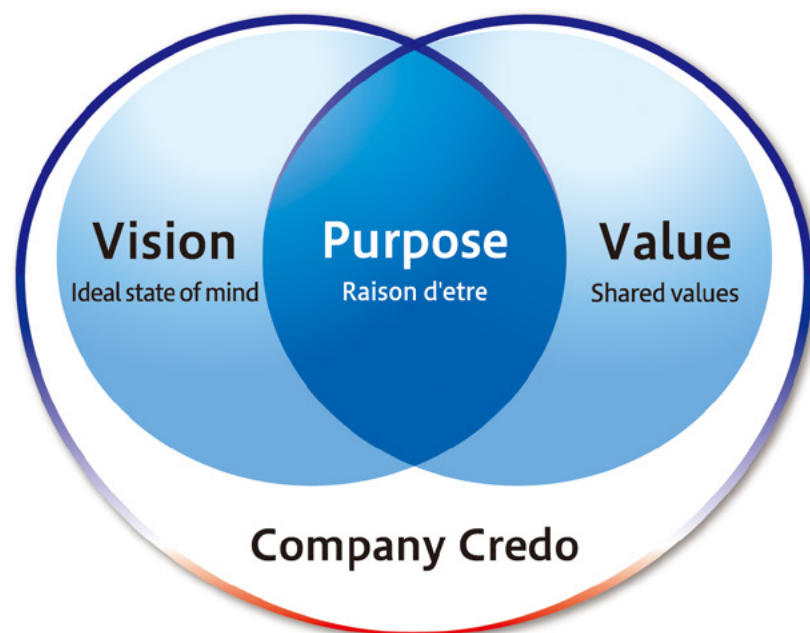
This report contains forward-looking statements regarding the Piolax Group's plans, forecasts, strategies and performance. These statements are based on judgments made referring to information available at the time of publication. We thank you for your understanding.

Company Profile

Business name	PIOLAX, INC.	Listed exchange	Tokyo Stock Exchange, Prime Market
Representative	Satoshi Yamada, President	Sales amount	29.1 billion yen (non-consolidated)/ 64.5 billion yen (consolidated) (as of March 31, 2024)
Head office	6-145 Hanasaki-cho, Nishi-ku, Yokohama, Kanagawa, Japan	Business activities	Production and sales of coil springs, flat springs, wire forms, metal/plastic fasteners, and unit assembly parts
Date of establishment	September 1939		
Capital	2,960.97 million yen (as of March 31, 2024)		

Piolax Corporate Philosophy

Our new corporate philosophy, the PIOLAX WAY, serves as a guiding principle for contributing to societal development and realizing a more prosperous, secure, and comfortable future. We aim to achieve this by connecting people from all walks of life through the technology and spirit we have cultivated over the years as a pioneer in elastic technology. By adhering to the PIOLAX WAY, we will pursue management strategies that meet the expectations of all stakeholders, including customers, shareholders, and employees, while continuously enhancing our corporate value.



Purpose

**Connect people and society with technology
for an exciting future**

Vision

Create new value

-As pioneers of elasticity, we will create a next future-

Value

- 1) Pioneer new ideas and open to change
- 2) Strive for excellence with passion and trust
- 3) Respect creativity and free thinking

Company Credo

“Sincerity, Cooperation, and Contribution”



Message from the President

With a 90-year legacy under the principle that “a company should serve the public good,” we are advancing towards the future with our new corporate philosophy, the PIOLAX WAY.

Effective June 2024, Yukihiro Shimazu has assumed the role of Chairman, and Executive Officer Satoshi Yamada has taken on the role of President. As a new leader in this challenging business environment, President Yamada is committed to leading the company to further enhance its corporate value and achieve a sustainable society.

Revising Our Raison d’Etre and Corporate Philosophy

Piolax was founded in 1933 as a manufacturer of precision metal springs for automobiles as well as of electrical and telecommunications equipment. Since then, we have continued to grow as a development-focused company, with our core technologies centered around elasticity, of springs and other materials. Having celebrated our 90th anniversary, we uphold our founder’s belief that a company should serve the public good, seamlessly integrating this principle into our ESG management efforts. It is now widely recognized that a company cannot survive if it only pursues its own profit; a social perspective is also essential. And this is precisely what our founder’s mindset alluded to.

With the automotive industry in which we operate undergoing a once-in-a-century transformation, we must respond to the

demands of a drastically changing society while cherishing the spirit of our company’s foundation. In order to achieve this, we revised our corporate philosophy on the occasion of our 90th anniversary in 2023. In that process, we involved the junior employees who will be our future leaders as project members, reevaluated our raison d’etre, and explored our ideal vision for the company. This has culminated in our new philosophy, the PIOLAX WAY.

As pioneers in the field of elasticity, we have cultivated technologies and a particular mindset over the years. Through these, we seek to connect people from all walks of life and thereby realize a more prosperous, secure, and comfortable future. This aspiration is encapsulated by our raison d’etre, or purpose, which is at the core of our philosophy. With this as our basis, we aim to carefully capture societal needs and contribute to societal development.

Responding to Environmental Issues - Turning the EV Shift into a Business Opportunity

To implement our new corporate philosophy, we restructured our organization in July 2024. As part of this, we established the Business Development Department to oversee the planning and carrying out of business strategies for the entire group. In addition, we integrated the separate product development groups from each of our Strategic Business Units (SBUs) into our Product Development Department. This reorganization is expected to facilitate resource sharing among previously independent units and promote sharing of expertise. We need a cross-disciplinary product development system and synergy between different fields to quickly address the increasingly complex needs of society. This new structure enables us to adapt flexibly and swiftly to emerging





Top Message

areas. In recent years, the shift towards the electric vehicle (EV) market has accelerated, highlighting the need for the entire industry to address environmental challenges within the supply chain to achieve carbon neutrality. Developing new products that maintain performance while reducing CO₂ emissions requires significant research and development investment. We have risen to this challenge to consistently advance the development of such products and proactively suggest prototypes to our customers. By leveraging the technology and high flexibility we have cultivated over the years, we will use this period of transformation as a business opportunity. Our goal is to contribute to the reduction of the environmental impacts on society as a whole, alongside the development of the automotive industry.

We announced our Medium-Term Management Plan (FY2024-FY2026) in June. This Plan positions ESG management as the base of our business activities, actively promoting initiatives and investments with a view to a sustainable future. One such initiative is the wholesale renovation of our Moka Plant, aiming at further growth. The new facility will be equipped with advanced technology and will make it easier to meet diverse and increasing needs for environmentally friendly automotive parts. Through its high-level production system, we also aim to improve productivity by 200% by 2030. Additionally, this renovation is expected to help alleviate the industry-wide challenge of labor shortages. We plan to position the Moka Plant as our global “mother plant,” to share our expertise with group companies both in Japan and overseas.

Looking to the future of our company, I recognize that nurturing talent is as crucial as enhancing our physical infrastructure. As a development-focused company, we need passionate engineers to drive our continued progress. We are also facing new challenges in passing down the expertise of our innovators to the next generation. We are therefore intensifying our efforts in human

resource development by revisiting the fundamentals of education in design and development.

Listening to Employees: to Create a Thriving Workplace for All

In recent years, I have noticed a significant increase in requests from overseas business partners to strengthen our human rights initiatives. To ensure that our workplace remains a safe and secure environment for all employees, it is imperative to prioritize not only safety in our manufacturing sites but also the improvement of working conditions and environments. As a first step, we established a subcommittee under our Sustainability Committee and formulated and announced our Human Rights Policy. Currently, this subcommittee is discussing human rights due diligence, including perspectives on the role of improving working conditions under the umbrella of human rights. We are committed to addressing these issues promptly.

A well-developed and rewarding work environment naturally attracts prospective employees. When I was the president of our subsidiary in Mexico, I saw employees working hard and sweating in the hot workplace. To make their work more comfortable, I installed additional air conditioning and made other improvements. As word spread about the comfortable work conditions, more employees joined us, and the factory became more vibrant. While not all situations can be improved in such a straightforward manner, this experience made me deeply aware of the importance of a good work environment.

As president, I always strive to be very accessible to employees. By fostering open dialogue, I can better understand their needs and reflect these in management decisions. The societal role of the company, particularly the office, has shifted from being merely a place to work to being a space for communication. By attentively listening



to employees, I aim to enhance the work environment and improve both the quality and quantity of communication.

Embracing Changes to Remain the Preferred Choice



Since joining the company, I have had a long career in the development field, tackling various challenges from designing and developing products to launching new organizations. Leveraging this experience, I will continue to drive new product development and the transformation of our existing businesses to enhance corporate value. To achieve this, I am sincerely committed to gathering and understanding opinions from all corners. I use this understanding to meet, and even surpass, the expectations of all stakeholders involved in our business activities, from our suppliers on. I will ensure our newly established corporate philosophy is well instilled within the company so that we can contribute to a future that offers happiness and excitement to all.

We have long been in an era of high uncertainty, and I predict that the next decade will not follow the trajectory of the past. In these rapidly changing times, the company will work together as a whole and with sincerity on various initiatives to build a business that can and will continue to be the first choice of our customers.



Our Journey with Motorization

Since its founding in 1933, Piolax has consistently expanded its business, with the elasticity of springs as its core technology, primarily contributing to the development of the automotive industry. Leveraging its expertise in developing and manufacturing products with metals and synthetic resins, Piolax has supported motorization in Japan and overseas from the early days of Japanese car production. This section traces a 90-year journey of its global expansion.

1930s to 1950s	1960s	1970s	1980s	1990s	2000s	2010s to the present
Founding of major automaker predecessors <p>The predecessors of Japan's current major automakers were established one after another. They laid the foundation for the later era of mass production of passenger cars, while American cars dominated the market and Japanese car production primarily focused on military vehicles.</p>  <p>First company building in Hodogaya-ku, Yokohama City</p> <p>1933 Founded Kato Hatsujo Seisakusho in Honjo Kikukawa, Tokyo City</p> <p>1936 Moved headquarters to Iwai-cho, Hodogaya-ku, Yokohama City</p> <p>1937 Began business with Japan Ford</p> <p>1939 Incorporated as Kato Hatsujo Co., Ltd.</p> <p>1957 Built Yokohama Plant in Kariba-cho, Hodogaya-ku, Yokohama City</p>	Blossoming of the Japanese automobile industry <p>Major Japanese automakers began designing and developing unique models without relying on Western models and created numerous iconic cars. Mass production was further accelerated by rapid economic growth and opening of expressways.</p> <p>1969 Started manufacturing plastic fasteners</p>	Air pollution from exhaust emissions <p>Air pollution from automobile exhaust became a serious social issue, particularly in urban areas, leading to stricter emission regulations. This spurred the development of low-pollution engines and other eco-friendly parts and technologies.</p>  <p>Moka plant at the time of its establishment</p> <p>1970 Established Moka Plant in Tochigi Prefecture</p>	Dramatic advancements in performance <p>The performance of Japanese cars significantly advanced, with electronic engine control becoming common. Exterior designs also became more stylish. Metal bumpers were replaced with resin ones. Such improvements represented a remarkable leap in both performance and design.</p> <p>1988 Started production in the US</p>	Significant improvements in safety <p>Features that are now standard, such as airbags, ABS, and collision safety bodies, began to become widespread, greatly enhancing automobile safety. Driving support systems, such as car navigation, also became commonly installed in vehicles.</p>  <p>Spin-off of the medical device division</p> <p>1995 Changed company name to PIOLAX, INC.</p> <p>1995-1996 Established bases in the UK and South Korea</p> <p>1998 Listed on the Second Section of the Tokyo Stock Exchange</p> <p>Established Fuji Plant in Shizuoka Prefecture</p> <p>1999 Spun off the medical device business</p>	Boom of eco-friendly cars <p>Growing environmental awareness accelerated the research and development of hybrid cars, electric vehicles (EVs), and fuel cell vehicles. The popularity of eco-cars increased remarkably.</p>  <p>Aerial view of the Thai plant</p> <p>2000 Established a base in Thailand</p> <p>2003 Established a base in Dongguan, China</p> <p>2004 Listed on the First Section of the Tokyo Stock Exchange</p> <p>2009-2012 Established bases in India, Mexico, Indonesia, and Wuhan, China</p>	Towards further technological innovations <p>Automakers are focusing on developing not only eco-friendly technologies but also autonomous driving, electrification, and connected technologies that support these advancements. We are entering an era where CASE (Connected, Autonomous, Shared, and Electric) is the central theme.</p>  <p>Transition to the Prime Market</p> <p>2017 Signed a cooperation agreement with ARaymond (France)</p> <p>2019 Established a base in Shanghai, China</p> <p>2021 Converted the Shanghai base into the China headquarters</p> <p>2022 <ul style="list-style-type: none"> Moved the headquarters from Hodogaya-ku to Nishi-ku, Yokohama City Transitioned from the First Section of the Tokyo Stock Exchange to the Prime Market </p>

Topic



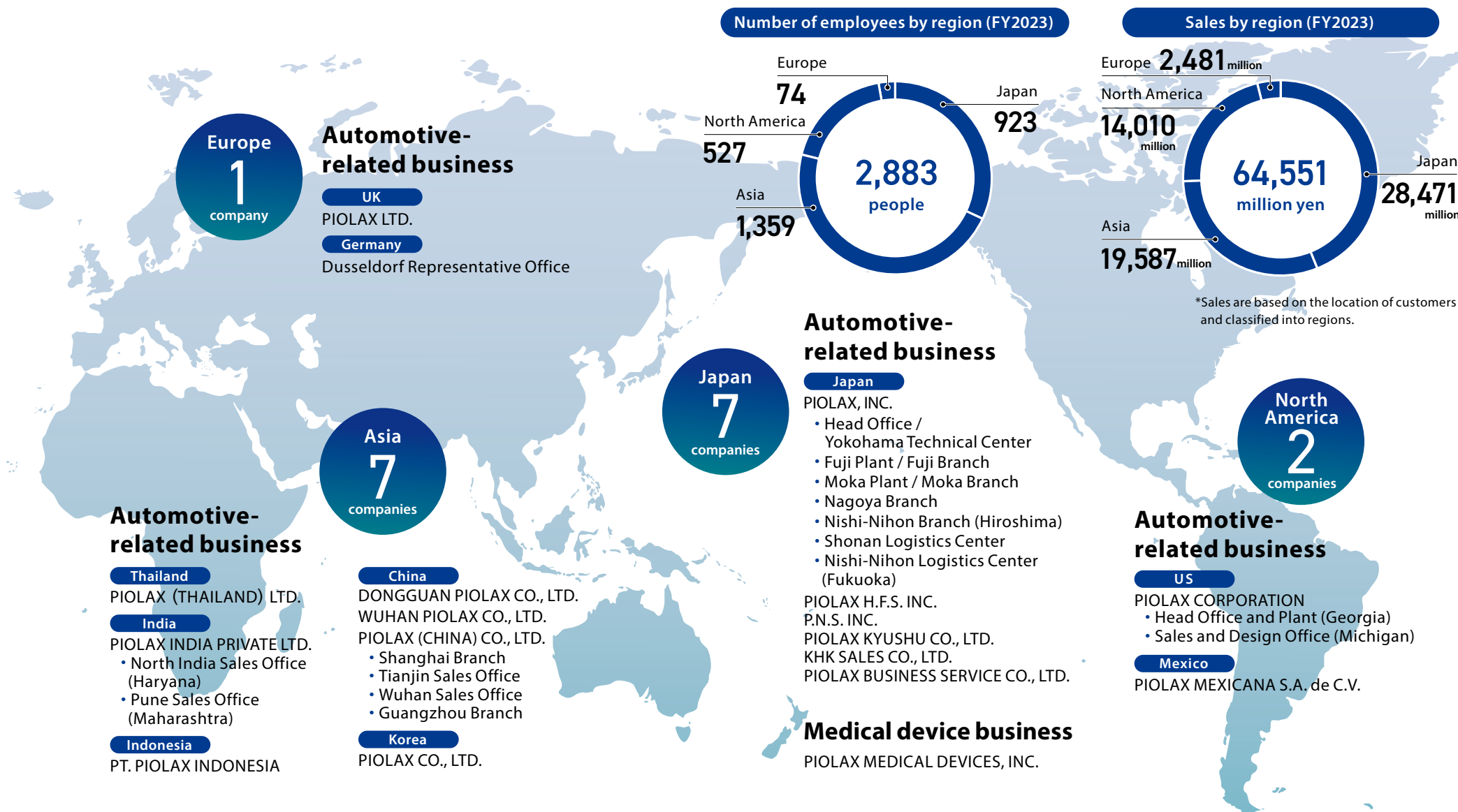
The future of mobility created through small parts

The prosperity brought by automobiles has also introduced challenges such as environmental issues and traffic accidents. We have strived to improve both environmental and safety standards without compromising on any detail of our small parts. This is because we follow the principle, "God is in the details," even though they are only a fraction of the tens of thousands of automobile components. In the CASE era, we continue to tackle the challenge of creating new value through small parts to realize a sustainable society.



Business Overview (At a Glance)

As of the end of March 2024, the Piolax Group has been in possession of seven group companies in Japan and ten overseas, engaging in extensive transactions primarily with Japanese and international automobile manufacturers.



Business Overview (At a Glance)

Automotive parts

Powertrain parts

Retainer assemblies, snap rings, etc. used in the transmission and other powertrain mechanism.



Open & close mechanism parts

Air dampers, latches, etc. used in the opening and closing mechanism of the glove box.



EV-related parts

Battery and motor related parts such as bus bars and gas vent valves.



Clamps

Hose clamps to fasten pipes and rubber hoses to prevent their separation or leaks.



Harness parts

Band clips, taping clips, etc. to bundle wires and harnesses running in a vehicle like blood vessels and fix them to the vehicle body.



Fasteners

Metal and plastic fasteners like trim clips to fix interior and exterior parts and pipes to the vehicle body.



Fluid control parts

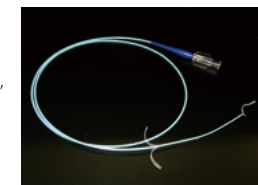
Valves, connectors, filters, etc. to refuel, store and supply fuel safely and reliably.



Medical devices

Endovascular products

Guidewires, catheters and implantable medical devices to treat cancer and vascular lesions. These products reduce the burden on patients' bodies by providing treatment through blood vessels.



Gastrointestinal endoscopy products

Guidewires, stents, and treatment devices for endoscopic procedures and diagnosis, mainly in the biliary and pancreatic regions. These products contribute to more accurate diagnosis and effective treatment.



Neurosurgery products

Plates for fixing skulls removed during surgery, as well as custom-made artificial bones made of titanium. These products contribute to improving patients' recovery and quality of life (QOL).



Abbreviations used in the report have the following meanings.

ICE: Internal Combustion Engine / BEV: Battery Electric Vehicle / HEV: Hybrid Electric Vehicle / PHEV: Plug-in Hybrid Electric Vehicle / FCEV: Fuel Cell Electric Vehicle.



Fasteners Business

The main products in our fasteners business are fasteners that secure interior and exterior automotive parts and piping to vehicle bodies. For interior use, we offer concealed types for better appearance, reusable types for repeated attachment and detachment, and less harmful types with reduced VOCs (Volatile Organic Compounds).

Strengths and Uniqueness

- 1) Reduced VOCs to lessen environmental impact
- 2) Lighter parts and lower running resistance to improve vehicle fuel efficiency and help reduce CO₂ emissions
- 3) Adapting to multi-material body construction (from steel to aluminum and resin)

Utilizing Eco-Friendly Materials and Adapting to Multi-Material Vehicle Construction

The proliferation of electric vehicles (EVs) has created a demand for quietness in vehicles. To meet this need, we are focusing on the development of new materials that absorb vibration and noise. We are also committed to improving energy efficiency through lightweighting, as well as using eco-friendly materials.

Additionally, in response to the shift to multi-material car bodies (use of aluminum and resin) to reduce weight and the number of parts, we are expanding our range of fasteners for each material. We will continue to develop products that respond to changes in vehicles, such as the use of biomass materials and giga casting.

Product Topics

Anti-vibration parts using elastic technology

Unlike conventional internal combustion engines (ICEs), EVs demand a higher level of quietness inside the vehicle. This requires anti-vibration performance to suppress piping vibration. We have incorporated thermoplastic elastomer into our existing piping clip structures, as this material offers excellent processability and anti-vibration properties. We are also re-evaluating the shape of the piping to prevent issues such as floating, tilting, collapsing, and falling.

Main products



Trim clips

Used to secure plastic covers to the vehicle body, designed to allow repeated attachment and detachment.



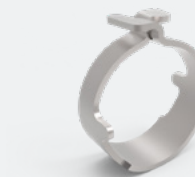
Piping clips

Used to secure fuel and cooling pipes to the vehicle body.



Garnish clips

Used to secure plastic decorative covers, designed to allow repeated attachment and detachment.



Hose clamps

Used to secure cooling hoses to piping, designed for ease of installation and maintenance.

Anti-vibration clips

Anti-vibration function with thermoplastic elastomers

Thermoplastic elastomer is soft resin with rubber-like elasticity. It becomes soft and pliable when heated. We have long manufactured products with elastomer using injection molding technology, such as hole plugs. Now, we are molding this material into shapes suitable for the structure of piping clips to enhance their anti-vibration functions.





Open & Close Mechanism Parts Business

The main products in our open and close mechanism parts business are latches for glove boxes and console boxes, as well as dampers that ensure storage boxes open softly, providing a sense of luxury. These parts enhance comfort in the vehicle cabin.

Strengths and Uniqueness

- 1) Our dampers hold the No. 1 global market share, and our latches hold the No. 1 market share in Japan*
- 2) Enhancing comfort in vehicle cabins, especially through automotive interior parts
- 3) Local production with locally made molds helps reduce CO₂ emissions during transportation

* Based on data from FY2021. Calculated using our sales volume and global automobile sales.

Safety-First Design for Frequently Touched Parts

Our open and close mechanism parts are often directly touched by users, and we provide added value that improves passenger comfort, such as tactile feeling and soft operation, through the parts. Our design focuses on user safety, such as preventing fingers from being pinched while handling and ensuring that storage boxes do not open upon impact during accidents.

For products for vehicles in Europe and North America, we have established an integrated system to locally manage everything from development to delivery, reducing the environmental impact associated with transportation. In addition, by standardizing designs and using resin, we are trying to minimize loss relating to molds to make efficient use of resources. We are also aiming to apply the technologies developed in the automotive field to other fields, contributing to solving social issues.

Product Topics

Resource and energy savings through standardized molds

The shape of glove box differs by vehicle model, and its latch was designed and manufactured with a mold unique to each model. However, by promoting the shared use of components, including appearance, we avoid creating new molds if possible, thereby saving materials and energy consumption for mold fabrication.

Glove box



Main products



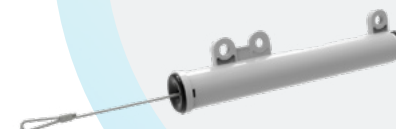
Latches

Used to lock or unlock the glove boxes, console boxes and trays, while ensuring the box surfaces and surrounding components are well aligned.



Spring cushions

This suppresses the rattling of storage box lids. Its functionality is semi-permanent compared to conventional rubber parts, and good feeling when closing the lid lasts longer.



Dampers

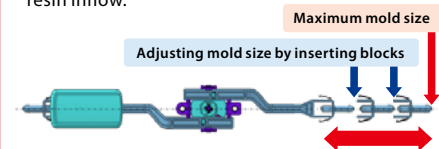
Used to open and close small storage like glove boxes and assist grips. It provides a sense of luxury by ensuring smooth opening and closing motions.



Plastic hinges

These hinges hold lids at any position with clicks. Using resin as the material increases design flexibility and contributes to product lightweighting.

To manufacture multiple products with a single mold, the mold is made to the maximum size (indicated by the red arrows) and a block is placed in an area (indicated by the blue arrows) to stop resin inflow.





Powertrain Parts Business

The main products in our powertrain parts business are metal and resin parts used in automotive transmissions, such as snap rings and coil springs.

Strengths and Uniqueness

- 1) Replacing metal parts with hybrid metal-resin parts reduces overall vehicle weight, contributing to higher fuel efficiency and lower CO₂ emissions
- 2) Developing products that function under extreme temperature conditions, enhancing vehicle reliability

Withstanding Harsh Temperature Conditions and Improving Fuel Efficiency Through Lightweight Resin

Our reduction gear parts for EVs and other types of vehicles with electric motors include detent springs and torsion springs used in parking mechanisms, as well as shims used to select plate thickness for bearing clearance adjustment.

As these parts are used in transmissions that experience significant temperature changes, they must have extremely high durability to withstand temperatures ranging from 170°C to -35°C. In line with the recent transformation in the automotive industry, our powertrain parts business has also evolved, shifting from conventional metal parts to hybrid metal-resin parts that can be used in high-temperature oil. This reduces parts weight, improving vehicle fuel efficiency.

We also focus on enhancing the durability and precision of parts to constantly provide high-quality products. We will continue to pursue products that have a positive impact on environmental preservation by, for example, expanding the use of recycled materials, reducing further parts weight, and developing metal products for EVs.

Product Topics

Cooling pipes to maintain EV motor output

The motor, which is the driving source of EVs, generates a large amount of heat during rotation, resulting in reduced driving output and thermal effects on surrounding parts. To address this issue, cooling pipes are used to cool the motor by circulating cooling oil over it.





Fluid Controls Business

The main products of our Fluid Controls (FC) business are products that control fluids such as air, coolant, and fuel evaporation gases (gasoline vapor)*. These include connectors and joints for connecting pipes through which fluids flow, filters to trap foreign matter, and valves. For EVs, we offer products like cooling pipes that play a crucial role in motor thermal management, as well as pressure-regulating valves.

*Fuel evaporation gases: emissions released into the atmosphere during gasoline refueling and one of the causative agents of PM2.5.

Strengths and Uniqueness

- 1) Our extensive experience in fuel system parts
- 2) Our expertise in fluid control technology
- 3) Flexible adaptation to various environmental regulations

Developing Energy Management Products to Enhance EV Range and Durability

Valves prevent fuel blowback, detect a full tank during refueling, and prevent fuel leak from a tank in case of a rollover. In recent years, the expansion of cabin space and the spread of HEVs have increasingly constrained the capacity and shape of gasoline tanks. By integrating valve functions and improving fluid level control, we help create a spacious and comfortable cabin environment.

The strength of our FC business lies in the integration of fluid control and resin processing technologies. The thermal management of EV batteries and motors affects vehicle range and durability and is crucial for performance improvement. We are focusing on developing products for the thermal management of EVs, applying our expertise accumulated through fuel system parts.

We will further reduce parts weight, improve thermal efficiency, and enhance recyclability. We will also promote product development that addresses new environmental technologies, such as FCEVs.

Product Topics

Quick connector for battery cooling

Amid the global trend towards electrification, we are focusing on products related to the cooling function of EV batteries. Our quick connectors, resin joints, and resin tubes are adopted as components in cooling pipe function products by OEMs and their Tier 1 suppliers.

At the same time, we are closely monitoring the trend towards Battery Electric Vehicles (BEVs). During the transition period to BEVs, we continue to develop PHEV-related products that comply with environmental regulations by leveraging conventional internal combustion engine (ICE) technologies. In this way, we contribute to achieving carbon neutrality.

Main products

Connectors

Used to join numerous piping systems in automobiles. Quick connectors provide easy and secure pipe connections.



Valves

Control fuel by adjusting pressure and vapor within a fuel tank and help ensure vehicle safety by preventing fuel leak from a tank in case of a rollover.

Compact filters

Designed to trap foreign matter in fuel, oil, etc. Compact and versatile, it supports vehicle safety.



No conventional clamping or press-fitting into a plastic tube is required; assembly is achieved simply by inserting into the mating part. This not only simplifies assembly but also provides audible clicks to ensure secure attachment in visually inaccessible locations.



New Business Domains (CASE*)

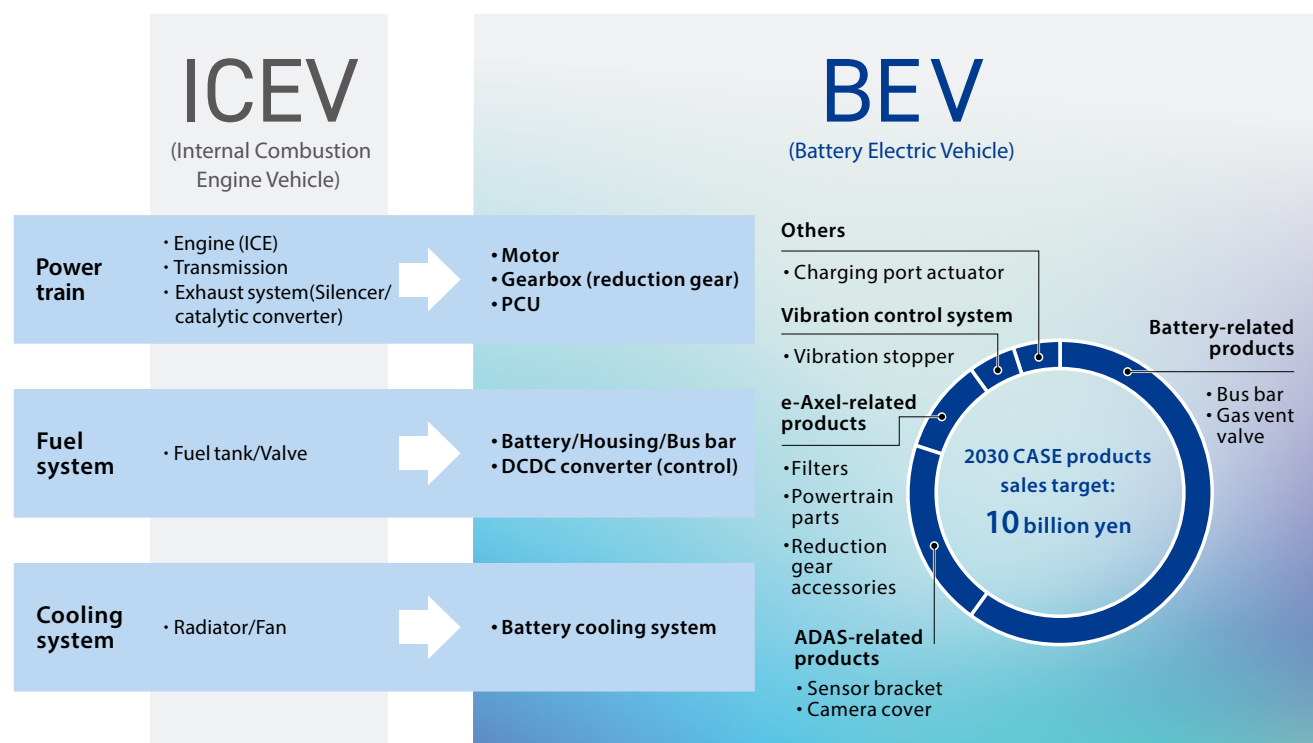
Our challenge in the automotive industry amidst a once-in-a- century transformation

The automotive industry is undergoing technological innovation in new areas known as CASE. As a result, orders for some of our products are expected to decline or disappear. To turn this risk into a business opportunity, we established the e-Products Development Department in April 2022.

*CASE : Connected
Autonomous
Shared & Services
Electric

Shift from Engines to EVs Changes Product Development

The shift from engines to motors entails changing parts; for example, radiators are replaced by battery cooling systems (see the diagram below). We are not only responding to these changes but also developing products in new areas, such as sensor and camera peripherals related to advanced driver assistance systems (ADAS), products related to e-Axle (EV drive motor system), which is said to accelerate electrification, and vibration control products to meet the demand for in-vehicle quietness.

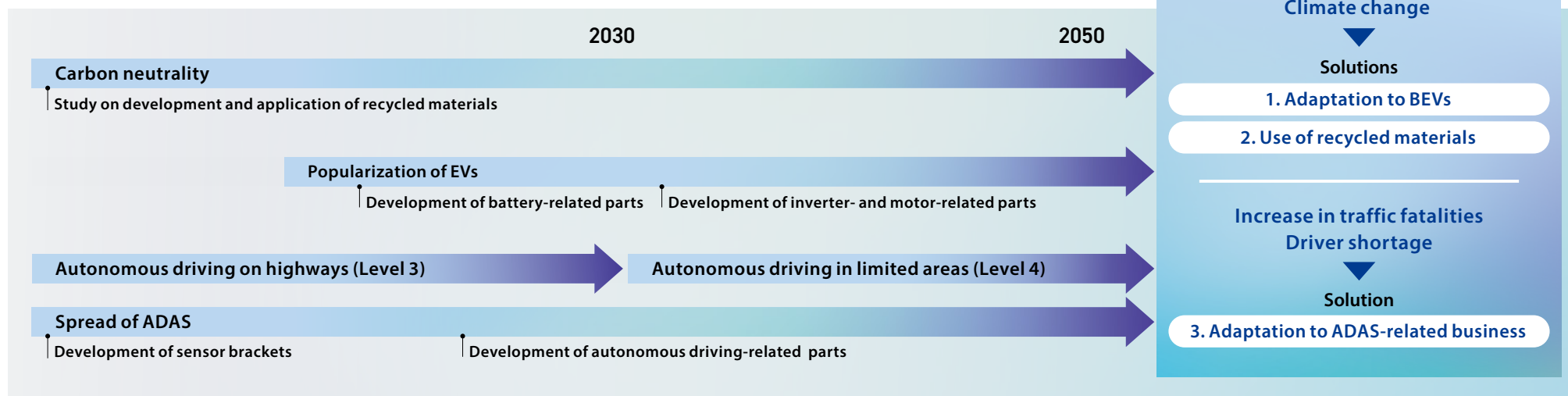




New Business Domains (CASE)

Our Contribution to Solving Social Infrastructure Issues, such as Climate Change, Traffic Fatalities, and Driver Shortage

Although our products are only a small portion of the tens of thousands of parts that make up an automobile, our product development includes many key devices such as bus bars and cooling pipes used around EV batteries. In this way, we contribute to solving social issues.



Solution 1 Adaptation to BEVs

In response to the popularization of BEVs, we are focusing on the development of battery-related parts. One such part is the bus bar, designed to handle higher current of batteries, and we are strengthening our capital investments in this area. Compared to conventional products, our bus bars offer higher wiring flexibility, save more space, improve efficiency, and contribute to vehicle weight reduction.

Additionally, we are working on developing parts for battery cooling systems and cooling pipes for motors and inverters. We will continue to support the proliferation of BEVs and contribute to achieving carbon neutrality.

Solution 2 Use of Recycled Materials

To reduce environmental impact, we actively promote the use of recycled materials. As a member of the Advanced Material Recycle and Innovation Alliance, we are exploring the recycling of difficult-to-recycle materials, the use of packaging materials in automotive parts, and the potential application of biomass materials in automotive parts.

Through these efforts, we are promoting the efficient use of resources and the waste reduction to help achieve a circular society.

Solution 3 Adaptation to ADAS-related Business

As autonomous driving technology advances, we are accelerating the development of ADAS-related parts, with a primary focus on brackets for peripheral devices such as cameras, sensors, and sonars.

The advancement of autonomous driving technology not only enhances vehicle safety and reduces traffic accidents but also addresses the driver shortage in the logistics industry. We will continue to support the realization of a safe and efficient mobility society by providing more precise and reliable ADAS parts.



Production Base (Moka Plant)

Worker-Friendly Plant through Automation and Manpower Saving



- Next-generation equipment and molding lines
- Automated lines with AI/IoT technology
- Efficient production through DX
- Detailed energy management through FEMS

New Moka Plant's Mission

Following the completion of Phase I of construction at a site adjacent to the Moka Plant, the new facility officially began operations in January 2024. Phase II started in FY2024 and is scheduled to finish in FY2025. As a global mother plant, this plant aims to play a central role in the Piolax's medium- to long-term strategy. Its mission is to be a state-of-the-art facility by integrating the following four functions.

Beyond our dream

- 1) Function to support the sustainable growth of the company
- 2) Function to adapt to environmental changes
- 3) Function to tackle new business and technological development
- 4) Function to develop human resources, the core of manufacturing

Investing in Energy-Efficient Equipment

The new Moka Plant is a smart factory with superior energy efficiency, achieving an A rank in the Comprehensive Assessment System for Built Environment Efficiency (CASBEE). It features state-of-the-art equipment that contributes to carbon neutrality,

including solar panels, energy-saving air conditioning systems, and water circulation systems. The plant also utilizes the Factory Energy Management System (FEMS) for integrated data management and efficient operation within the building.

Automation and Manpower Saving to Reduce Worker Burden

At the new Moka Plant, we are driving automation and reducing manpower in tasks such as weighing, bagging, and transporting materials. Reducing human errors is expected to improve production efficiency. Our goal is to achieve 200% productivity by 2030. Rising temperatures due to recent abnormal weather patterns causes some workplaces to become dangerously hot in the summer, putting workers at risk of heat stroke. To avoid

such risk, we are creating a worker-friendly work environment by revising air conditioning systems but also transforming tasks into automated and manpower-saving ones that do not require human intervention.

World-Class Monozukuri Education Center

The new Moka Plant is expected to be a hub for nurturing skills and fostering a sense of accomplishment through the development of new technologies and the transfer of existing ones. We plan to create a "Monozukuri Dojo" (tentative name) within the plant and equip it with appropriate facilities and systems to facilitate technology transfer on a global basis. Additionally, we are considering providing a venue where employees can learn about safety manufacturing through hands-on experiences.



Interior of the new plant



Exterior of the new plant

Medical Device Business

For a Healthy and Enriched Life in the Era of 100-Year Lifespans

Our subsidiary, PIOLAX MEDICAL DEVICES, INC. (PMD), has cultivated the technologies necessary for medical devices by leveraging our expertise in elasticity technology accumulated through automotive parts. It develops, manufactures, and sells medical devices designed for minimally invasive treatments that reduce patient burden. One of its flagship products, the RevoWave series, consists of guidewires for gastrointestinal endoscopy. This series has evolved to meet contemporary needs and is widely used in many medical institutions. By providing medical devices that minimize physical burden, shorten surgery time, enhance treatment accuracy, and thereby make patients smile, PMD contributes to medical advancements and improving the quality of life (QOL) for patients.

Business Areas Targeted by PMD

Keyword

Minimally invasive treatment

This treatment method, which places less burden on patients' bodies, enables the treatment of elderly patients and others who cannot tolerate conventional surgery. It also contributes to shorter hospital stays and reduced medical costs.

Societal needs

Improved QOL for
patients

Addressing an aging
society

Shorter hospitalization
periods

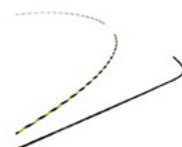
Lower medical costs

Bring smiles to patients around the world

Vascular IVR devices


Intra-arterial
catheter

Embolization
coil

Emulsion
connector

Endoscopic
guidewire


Cannula



Biopsy device



Basket catheter

Neurosurgical plates

Digestive endoscopy devices

Technologies

Elasticity
application

Material
processing

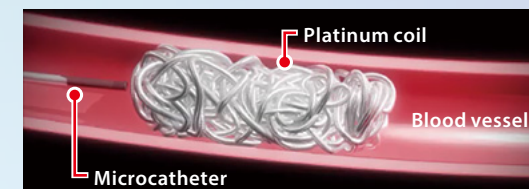
Precision
microfabrication

Hydrophilic
treatment

Topic

Joint development with a medical institution

Embolization coil C-STOPPER



A platinum coil inserted into a blood vessel through a microcatheter, used in treatments to stop blood flow.

Products that meet both medical and societal needs have longer product life cycles in the market. One such product is the C-STOPPER vascular embolization coil manufactured and sold by PMD, and it continues to increase its market share.

The success of this product stems from the involvement of a doctor who consistently approached clinical and societal challenges with an objective perspective. He had recognized the need to enhance embolization force to maintain long-term vascular occlusion while using preceding overseas products to treat patients. He had also been conscious of the impact on healthcare economics: because increasing the number of coils used in a single treatment would raise treatment costs and pressure healthcare finances, he sought a way to reduce the costs. Through these two approaches, he effectively communicated the product concept that would solve these problems. This bore fruit. PMD drew a product design (specifications) critical to achieving the concept as a hypothesis and repeatedly verified and demonstrated the reproducibility of its effects together with the doctor, resulting in the creation of this long-seller product.