



# CORPORATE PROFILE





# Fluid Control Technology & People

**Committed to Helping Local Communities Develop, and  
Delivering Value to Our Customers**

We will respond swiftly to changes in the business climate and bring about market and social development through our ability to see beyond the changes and take bold action.  
And as a good corporate citizen, we are committed to contributing to the development of local communities and continuing to provide products that make our customers happy.



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Being an Indispensable Presence  
in a Sustainable Society

President  
*Y. Inamura*

Since our founding in 1924, PILLAR Corporation has offered products and services based on fluid control technologies and material technologies, contributing to the advancement of global society based on promoting a clean environment, safety, and frontier innovation. The markets for our innovative, high-quality products are wide-ranging and include semiconductors, energy, chemicals, automobiles, shipbuilding, civil engineering and construction, medical care and pharmaceuticals, and batteries.

We are focused on the development of technologies, products, services, and production technologies, and will continue striving to maintain an indispensable presence in a global society that is advancing through technological innovations in the semiconductor market

and initiatives such as efforts to achieve carbon neutrality.

Furthermore, we are strengthening our ESG initiatives and working to meet sustainable development goals so that we will be able to contribute to building a sustainable society throughout our corporate activities.

Taking guidance from our corporate principles—Quality First, Cooperation and Harmony, and Steady Research—we will work to enhance corporate value, contribute to a sustainable society, and further evolve as PILLAR Corporation.

Even beyond our 100th anniversary, we will continue to innovate, grow, and strive to be an indispensable presence in society.

Motto

Quality First      Cooperation and Harmony      Steady Research

Purpose

Creating a future that supports society

CLEAN      SAFETY      FRONTIER

PILLAR CORE VALUES

|                 |   |
|-----------------|---|
| Integrity       | To maintain integrity and uphold high ethical standards in your professional conduct.   |
| Innovation      | To embrace the challenge of innovation to help create a better future society.  |
| Progress        | To pursue continuous improvement and reform to drive real evolution.  |
| Human Resources | To use business activities to develop individuals who possess high levels of expertise, leadership, as well as social skills. |
| Team            | To build a team where the wisdom and abilities of diverse colleagues generate synergy.  |

Group Code of Conduct

The Group Code of Conduct of PILLAR Corporation and its Group companies stipulates important action guidelines to which officers and company employees shall adhere in the conduct of their daily business activities.

Employees have the essential obligation to take the initiative in adhering to this Code of Conduct.

Please refer to our website for details of the Group Code of Conduct  
<https://www.pillar.co.jp/en/about/philosophy/>







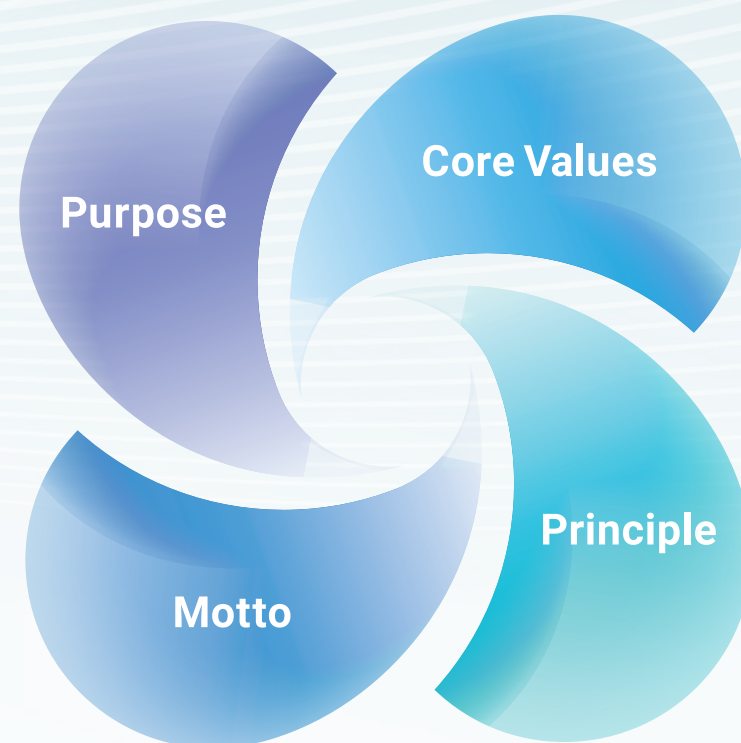
## Formulating PILLAR CORE VALUES on Our 100th Anniversary

At the significant milestone of our 100th anniversary, we have newly formulated our PILLAR CORE VALUES as a company philosophy for all PILLAR GROUP employees to hold dear.

In place of the management philosophy that existed until now, these represent the connection between the Company's approach and the values and conduct of each of our employees.

By linking our Motto, Purpose, PILLAR CORE VALUES, and Group Code of Conduct, we will generate value that contributes to the realization of a sustainable society.

## An Evolving Approach for the Next 100 Years



## A Philosophy Inherited from the Past 100 Years

### Electronic Equipment Business

¥40,475 million  
69.1 %



FY2023 sales

¥58,605 million



### Industrial Equipment Business

¥18,093 million  
30.9 %

### Electronic Equipment Business

We are specialists in the high-tech sector, especially in the semiconductor, LCDs, and medical sectors. In particular, we offer fittings, pumps and other components made from fluororesin, which offer high chemical resistance, heat-resistance, and cleanliness. Because they are unaffected by various chemical solutions, these products are ideal for use in silicon wafer cleaning systems.

### Industrial Equipment Business

We handle mainly mechanical seal products that control fluids in rotating equipment such as centrifugal pumps that transfer fluids, gland packing products used as sealing materials for valve stem components, and gasket products used for mating pipes.



# Contributing to the Safety and Security of Society and the Environment through the Control of a Wide Range of Fluids

We are a manufacturer skilled in the design, development, and manufacture of equipment to control fluids such as water, oil, toxic gases and chemicals, and more.

Our products are used in facilities that are essential to the functioning of daily life.

Moreover, they contribute to environmental preservation, resource conservation, and the protection of lives and property.



## Electronic Equipment Business (Fluororesin Products)

Fluororesins exhibit many desirable characteristics such as chemical stability, low coefficient of friction, and low dielectric constant. Various technologies are used to commercialize fluororesin products and supply them to the semiconductor, construction, and communications markets.

### Circulation products (Fittings, tubes, and pumps)

Contributing to improved performance through semiconductor miniaturization and integration

By providing chemical solution piping materials for semiconductor and liquid crystal manufacturing equipment, we meet a variety of needs that include safety, cleanliness, and adaptability of pipe size.

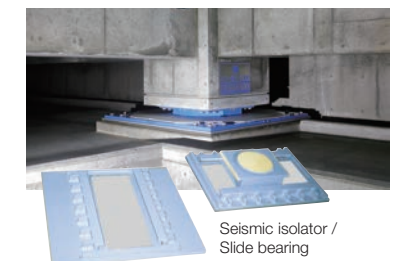


Circulation

### Seismic isolator/Slide bearing

Protecting buildings from earthquakes

Our rotating and sliding mechanisms absorb and reduce the forces that act on the supporting structures used in seismically isolated buildings, roofs, and connecting bridges. These innovations contribute to improved earthquake resilience and greater durability of buildings and other structures.

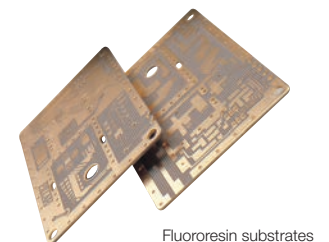


Seismic isolator / Slide bearing

### Fluororesin substrates

Contributing to increasingly advanced communications

Thanks to their excellent low electrical loss characteristics in the high frequency bands, these products contribute to improved performance and lower power consumption in millimeter-wave and microwave equipment such as auto collision prevention radar, antennas for 5G/6G mobile base stations, and multilayer boards for high-speed servers used in data centers.



Fluororesin substrates

## Industrial Equipment Business

These products support a wide range of industries as sealing parts that control various fluids used in plants and equipment involved in the energy, oil refining, chemical, automotive, marine, medical, and food industries.

### Gland packings

Enhancing the safety and security of our everyday lives

Our gland packings prevent leakage of internal fluids around rotating or reciprocating shafts, such as valve stems and pump shaft seals.

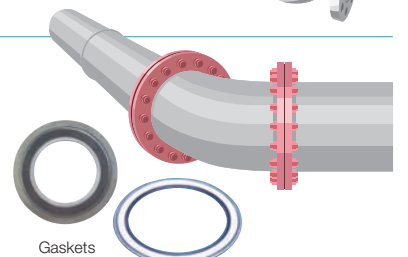


Gland packing

### Gaskets

Contributing to safer and more secure equipment applications

These products seal the joints between stationary parts, such as pipe joints and equipment joints as well as joints linking equipment and pipes.

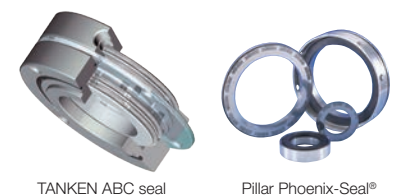


Gaskets

### Mechanical seals/Rotating equipment seals

Contributing to safer and more secure plant operation

These products prevent leakage of internal fluids from shaft seals in pumps, agitators, compressors, rotary joints, and a variety of other industrial devices.



TANKEN ABC seal

Pillar Phoenix-Seal®



# Committed to Working as One Team for the Next 100 Years

Since our founding in 1924, we have responded to the demands of growth industries by focusing on the development and commercialization of innovative materials while contributing to the emergence of a prosperous society committed to sustainability.

Going forward, we will continue to provide original, high-quality products and services while further improving our fluid control technologies.

## 1920-

### Founding period

From our founding to the establishment of our production system

Our founder, Kaju Iwanami, succeeded in developing a highly wear-resistant cylindrical packing for use in ships. In 1924, he launched Nippon Pillar Packing Industries as a private entity, and in 1926 he began full-scale production of industrial-use sealing packings. In 1932, he began production of gaskets for automotive and marine internal combustion engines. In 1948, Mr. Iwanami established Nippon Pillar Packing Co., Ltd., and in 1951, he developed and began production of Japan's first mechanical seal. In 1967, the Sanda Factory was constructed in Sanda, Hyogo Prefecture.

- 1924** Nippon Pillar Packing Industries is established in Nada-ku, Kobe.
- 1926** Our new factory is established in Yodogawa-ku, Osaka to begin full-scale production of industrial leak prevention packings.
- 1930** Our Pillar packing is registered as the Company's first utility model patent.
- 1932** Production of gaskets begins.
- 1948** Nippon Pillar Packing Co., Ltd. is established.
- 1951** The Company develops and starts production of Japan's first mechanical seal.
- 1952** Production of fluororesin products begins. (Series name: Pilaflon™)
- 1967** The Sanda Factory is completed as the industry's first JIS-certified manufacturing facility for spiral-wound gaskets for piping compliant with the JIS B 2404 standard.
- 1970** The Company develops and starts production of carbonized fiber, an innovative new material.
- 1974** 50th anniversary



Founder Kaju Iwanami



Developed and started production of Japan's first mechanical seal (1951)



Completed construction of the Sanda Factory in Sanda, Hyogo, Japan (1967)

## 1980-

### Global expansion

Establishment of our brand and global expansion

In 1980, the head office building was constructed. Production of ISO series mechanical seals began the following year. The Company developed a series of new products to meet emerging needs and, in quick succession, started production of fluororesin fittings and expanded graphite braided packing for semiconductor manufacturing equipment. In 1995, the Company obtained ISO certification and established a brand that was soon to earn the confidence of customers.

- 1980** New head office building is completed.
- 1984** The Company's shares are listed as a specially designated share issue on the Second Section of the Osaka Securities Exchange.
- 1989** The Fukuchiyama Factory is completed.
- 1995** The Company's shares are redesignated to the Second Section of the Osaka Securities Exchange.



Started production of ISO series mechanical seals for agitators (1981)



Completed construction of the Fukuchiyama Factory (currently Fukuchiyama Factory No. 1) in Fukuchiyama, Kyoto Prefecture, Japan (1989)

## 2000-

### New businesses

Developing new businesses that lead to ongoing breakthroughs

In 2002, the Company began production of the Super 300 Type Pillar Fitting, a groundbreaking sealing mechanism that represented an industry first. The following year saw the start of production of Pillar Techno Black No. 2603-EEE, which contributed to the early conversion to asbestos-free sealing products. In 2012, we began production of a novel type of rotary joint for the semiconductor industry.

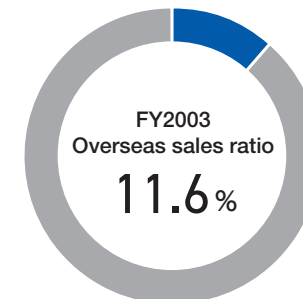
- 2001** The Company's shares are listed on the First Sections of the Tokyo Stock Exchange and Osaka Securities Exchange.
- 2004** Construction of the Kyushu Factory is completed in Koshi, Kumamoto Prefecture.
- 2012** Production of a new type of rotary joint for the semiconductor market begins.
- 2017** The head office is relocated to Nishi-ku, Osaka.



Began production of Super 300 Type Pillar Fitting with a revolutionary sealing mechanism, the first of its kind in the world (2002)



Completed construction of the Kyushu Factory in Koshi, Kumamoto Prefecture, Japan (2004)



## 2020-

### Toward next 100 years

Identifying market changes with the goal of sustainable growth

In preparation for the development of next-generation products and the expansion of the semiconductor market, the Company completed construction of the new Sanda Factory in 2020. We are continuing to transform our business and organizational structure with the aim of further enhancing our corporate value. Moreover, we remain focused on the development of new materials and technologies.

- 2022** The Company's shares are moved to the Prime Market of the Tokyo Stock Exchange.
- 2023** TANKEN SEAL SEIKO CO., LTD. becomes a member of our Group. Construction of Fukuchiyama Factory No. 2 is completed. Construction of the R&D Center at the Sanda Factory is completed.
- 2024** To mark the Company's centennial, the Company is renamed PILLAR.

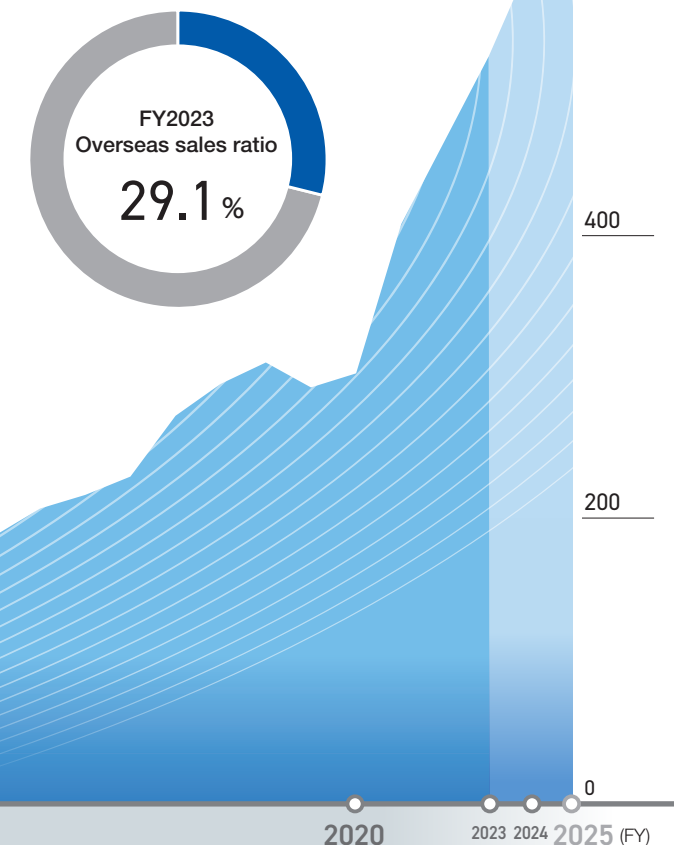


Completed construction of the new Sanda Factory (2020)



TANKEN SEAL SEIKO CO., LTD. became a member of our Group. (2023)

(100 million yen)  
600



[Sales]

[Major Events]

1985 Plaza Accord  
1989 Fall of the Berlin Wall

1991 Collapse of the Japanese economic bubble; Collapse of the Soviet Union  
1993 Establishment of the European Union  
1999 Creation of the Euro

2005 Kyoto Protocol comes into effect.  
2008 Lehman Shock

2011 Great East Japan Earthquake  
2016 Paris Agreement comes into effect.

2020 Brexit comes into effect. COVID-19 pandemic  
2021 The Tokyo Olympic and Paralympic Games are held.

2022 Russian forces invade Ukraine.  
2023 The Palestinian-Israeli conflict begins.  
2024 The Noto Peninsula is struck by a powerful earthquake.



# Manufacturing Capital Supports Growth

## Strengthening technological, development, and production systems through proactive capital investments

By renovating the Sanda Factory and constructing the Fukuchiyama Factory No. 2 and the R&D Center at the Sanda Factory, we are renewing our production system and building systems designed to increase production. Moreover, we are strengthening our engineering and development divisions and enhancing our training facilities. As we construct such new factories, we have also received high ratings from the Comprehensive Assessment System for Built Environment Efficiency (CASBEE) for incorporating environmentally friendly solutions in their design.

### Sanda Factory, a Parent Factory that Provides Fluid Control Technology

As our main factory, the Sanda Factory plays the role of a parent factory. It is responsible for producing sealing products for the industrial equipment market. These products include mechanical seals, gland packings, and gaskets. The factory also incorporates a research and development department.

In March 2020, it was reopened as a state-of-the-art factory following extensive renovation work.



Sanda Factory

#### Concepts

- Improve productivity through a rationalized layout, expanded automation and mechanization, and the introduction of IoT.
- Improve the working environment, safety, and BCP effectiveness.
- Improve visitors' sense of trust and security through the addition of a technology training center, analysis center, and showroom.

### R&D Center at the Sanda Factory

In October 2023, construction was completed at the Sanda Factory on our R&D Center, which is a base for strengthening product development capabilities and generating innovation by combining and fusing together PILLAR's technologies, and by collaborating among industry, government, and academia.

Having acquired CASBEE rank A certification, we have installed equipment for solar power generation for internal consumption on the roof, thereby making the center more environmentally friendly.

The center consists of three floors—the product development floor, the office floor, and the R&D floor—and is intended to generate and utilize comprehensive knowledge by bringing together a diverse range of engineers from the Sanda Factory.



R&D Center at the Sanda Factory

#### Concepts

- A place for the speedy creation of innovative products
- A place for the sustainable development of new materials, technologies, and processing methods

#### TOPIC

### Issuing Green Bonds

As a means of obtaining capital for allocation to business that functions to improve the environment, in December 2023, the Company issued green bonds for the first time.

In a financing context, we are disseminating our ESG management initiatives and endeavoring to strengthen our engagement with stakeholders, with the aim of realizing a sustainable society.

|                                  |   |
|----------------------------------|---|
| Name:                            | First unsecured corporate bond  |
| Total amount of corporate bonds: | 10 billion yen  |
| Use of capital:                  | <ul style="list-style-type: none"><li>• Construction capital for the Fukuchiyama Factory No. 2 (has CASBEE rank S certification)</li><li>• Construction capital for the R&amp;D Center at the Sanda Factory (has CASBEE rank A certification)</li></ul> |

### Acquiring New Key Technologies

When TANKEN SEAL SEIKO CO., LTD. was founded in 1955, it achieved successful domestic production of carbon rings, which are the principal component of mechanical seals. It has developed since then with mechanical seals and carbon technologies as its core technologies.

With the addition of TANKEN SEAL SEIKO to the PILLAR GROUP in April 2023, we acquired new key technologies. Thanks to this, the Group now has the material technologies of silicon carbide (SiC) and carbon, sliding materials that can be described as the heart of mechanical seals. In the process, we have become a seal manufacturer capable of producing both technologies in house.

Furthermore, with porous carbon, a product developed by



TANKEN SEAL SEIKO Head Office/Keihin Sales Branch

TANKEN SEAL SEIKO, we intend to promote further research and development in the Group as a whole, and to strengthen sales by expanding our markets, increasing sales channels, and so on.

### Fukuchiyama Factory No. 2

In September 2023, we completed construction of our Fukuchiyama Factory No. 2 in response to even greater demand for products aimed at the electronic equipment-related market.

By designing the factory to be environmentally friendly, we acquired CASBEE rank S certification. The roof of the building is scheduled to be fitted with equipment for solar power generation for internal consumption.

Furthermore, we own enough land on the same site for further expansion, with space for the construction of three more factory buildings on a similar scale. Going forward, our plan is to augment the factory with a flexible approach.



Fukuchiyama Factory No. 2

#### Concepts

- Significant increase in production capacity (up to an 80% increase)
- Stronger cost competitiveness through constructing a new production system
- Complies with customers' stringent quality requirements
- Highlights our technology through its open concept design

### Large-Scale Industrial Clean Rooms

At the Fukuchiyama Office and Kyushu Factory, we have introduced large-scale industrial clean rooms (spaces intended to minimize airborne microparticles and microorganisms to a level of cleanliness that attains a specific standard in order to prevent the contamination of surfaces with impurities and dust).

At PILLAR, the cleanliness in our clean rooms is monitored and constantly maintained at an appropriate level.

Furthermore, at the Fukuchiyama Factory No. 2, we have adopted a downflow system that emits clean air from the ceiling and draws it away through the floor. This system provides stable, high levels of cleanliness. Going forward, we will continue to respond to cleanliness needs in the market.



Clean room



## R&amp;D

With the evolution of our core technologies and the increasing strength of our fundamental technologies focused on our key concepts of *Clean*, *Safety*, and *Frontier*, we will create unique value and achieve our goal of “Creating a future that supports society.”



### PILLAR Corporation's Core Technologies and R&D Concepts

Since our founding, we have been utilizing our fluid control technology and material development expertise to explore little-known materials while pursuing research and development targeting the most advanced technologies. This effort is part of our initiative to create value that adapts to market trends while addressing societal issues.

Our fundamental technologies—which include sealing, material engineering, mechanical engineering, injection molding, analysis, and mold design—support the evolution of the core technologies of both our Electronic Equipment Business and our Industrial Equipment Business.

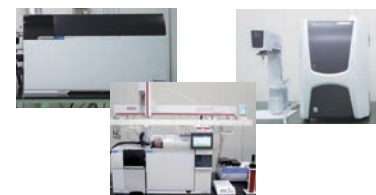
In our Electronic Equipment Business, our core technologies include the manufacture of resin seals, fluororesin injection molding, microscopic analysis, and computer-aided engineering (CAE). These technologies are used mainly in the development of products for the semiconductor

market, an industry noted for requiring high levels of cleanliness. In our Industrial Equipment Business, our core expertise includes tribology, material formulation, and CAE, which are mainly used in the development of products for the power and petrochemical markets.

The core technologies that have evolved in each of our business segments are disseminated to our personnel through the normal rotation of roles across our various businesses. We are combining these core technologies to promote value creation even as we accelerate the evolution of these technologies. In addition, by appropriately reviewing our development portfolio, we are examining the balance between R&D and product development, and between the acquisition of new technologies and the strengthening of existing technologies. At the same time, we are promoting technological development for the short term as well as the medium and long terms.

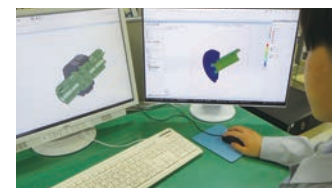
### Analysis and Testing Equipment

As the owner of many patented products, we conduct a number of experiments under actual operating conditions before introducing our products to society. Our research and development, supported by the latest verification technologies, continues to evolve toward even higher goals.



#### Microscopic analysis technology

In order to meet the ever more stringent cleanliness requirements associated with the increasing miniaturization of semiconductors, we are building a system capable of performing multifaceted analysis of both organic and inorganic substances.



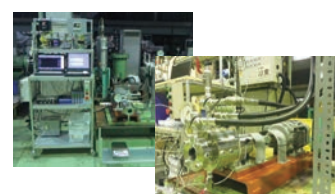
#### Design with 3D CAD

We undertake basic structural analysis and design in a seamless manner, which leads to faster product designs and targeted solutions.



#### Test equipment for semiconductor and liquid crystal manufacturing devices

To evaluate performance under the harsh operating conditions that exist in the semiconductor fabrication industry, we utilize thermal cycle test equipment capable of cycling between high and low temperatures.



#### Data collection and analysis test equipment for failure prediction

This test equipment is used to collect and analyze data on pressure, temperature, torque, vibration, etc. under operating conditions, including failure modes, in order to establish technology for predicting mechanical seal failures.



#### X-ray Photoelectron Spectroscopy (XPS)

This analytical device can determine the bonding state of atoms and molecules on and below the surface of a material. This innovation helps to elucidate the tribological phenomena of sealing products for the hydrogen market.



#### 1000 kN universal testing equipment

The device is capable of performing sealing, compression, and tensile tests while precisely controlling the load on products and materials. With 24-hour continuous operation possible, continuous data can be obtained on changes that occur over time.

### Innovation through Collaboration among Industry, Government, and Academia

As part of our effort to improve sealing technology through collaboration among industry, government, and academia, we are conducting research into the optimal sliding interface and optimal lubrication of gland packings. In today's market, gland packings used for valves are expected to be more environment-friendly than ever before. We select materials that provide sealing performance fully compliant with international standards as well as levels of friction low enough to avoid impeding valve function. In our work, we also consider their

environmental impact; toward that end, we use Materials Informatics (MI), which applies information science technology to improve the efficiency of material development. Through our comprehensive research on optimal lubrication and various analyses related to the ideal sealing surface, we are developing products that meet emerging market needs.



EDP® Packing

### Efforts Aimed at the Semiconductor Market

Accompanying the miniaturization of semiconductors, particle reduction demands are increasing year by year, and there is a need to improve the cleanliness of individual components. In terms of materials, we employ our in-house microanalysis technology to develop products offering even higher levels of cleanliness. As for product designs for piping and pump-wetted parts, we engage in “front-loaded” development that uses the data we possess in combination with CAE to identify and solve problems at the initial stage of development.

As a sustainability initiative, we are employing the “3Rs” (reduce, reuse, recycle) for fluororesin and are considering ways to utilize this approach in compliance with the specifications required for semiconductors.



Super 300 Type PILLAR Fitting

### Initiatives Targeting Our Solutions Business

Our objective is to provide the market with value through innovation, not only by improving the functionality and versatility of our products, but also by leveraging the expertise in fluid control technology we have refined over the years. Toward that end, we are focused on establishing a mechanical seal condition monitoring service. Building on our many years of experience in design and development, we have produced a sensor that provides a visual representation of the operating status of a mechanical seal. This breakthrough reduces the risk of production loss due to issues arising with our customers' production equipment.

Moreover, we provide a service that incorporates condition-based maintenance (CBM) as a means of optimizing equipment maintenance. We remain focused on accumulating actual equipment condition monitoring data as we work to establish technologies capable of failure prediction.

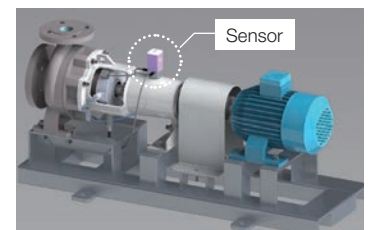


Illustration of a pump-mounted sensor

### TOPIC



### Applying Digital Transformation to Material Development: Front-Loading of Powder Compression Molding

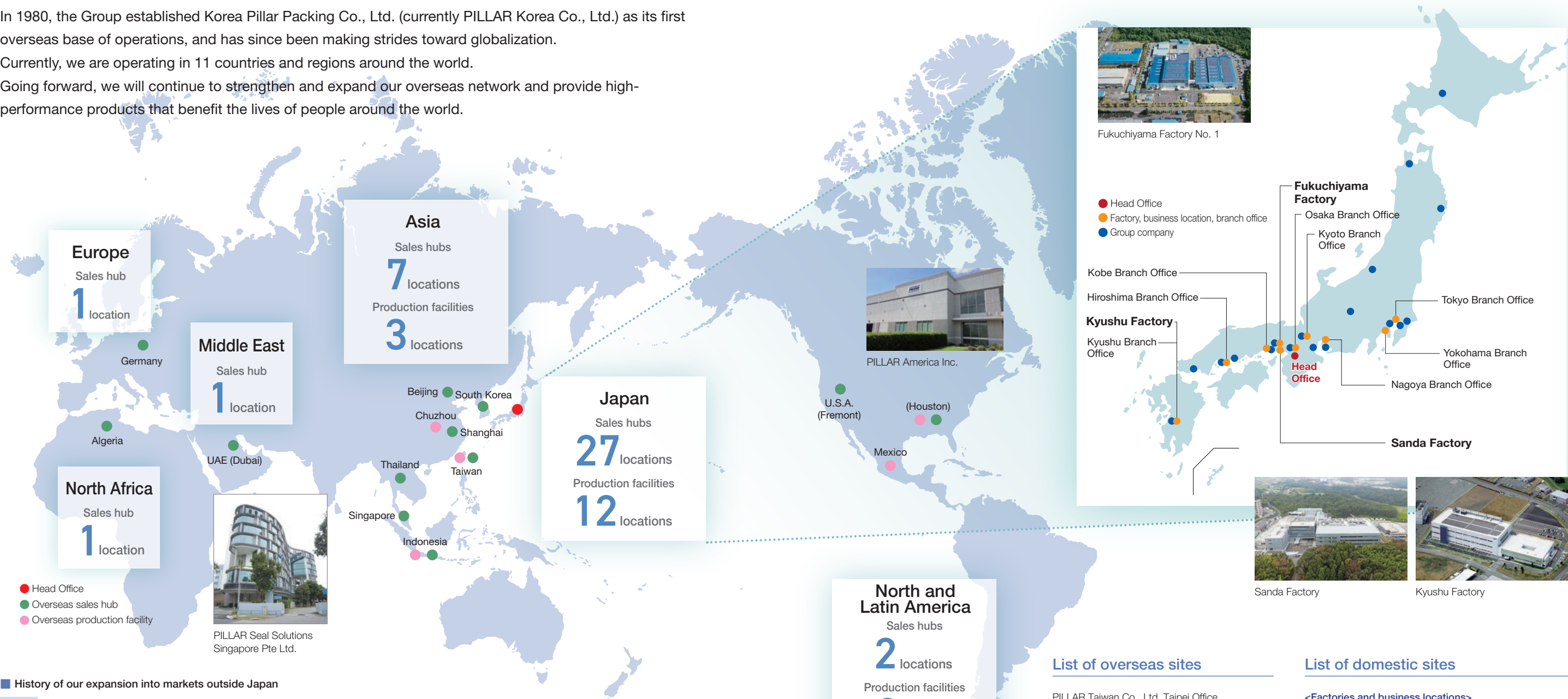
Many of our main materials are available in powder form. Unlike liquids, powders generally undergo plastic deformation in which the volume changes. We therefore need to develop “front-loaded” materials requiring no rework. Toward this end, it is essential that we have access to analysis technology that accurately predicts phenomena such as complex constitutive equations and the identification of cracks and chips. To address this need, we developed an AI algorithm that accurately identifies the parameters of the constitutive equation and the corresponding test device. This approach provides us the ability to predict phenomena with an error rate of less than 5%, thus minimizing density unevenness in molded bodies and reducing the amount of material used.

Digital transformation is enabling us to perform comprehensive desktop research on the powder molding process, which is resulting in the development of materials that require no rework.



# Serving as a Bridge of Technology in the Global Field

In 1980, the Group established Korea Pillar Packing Co., Ltd. (currently PILLAR Korea Co., Ltd.) as its first overseas base of operations, and has since been making strides toward globalization. Currently, we are operating in 11 countries and regions around the world. Going forward, we will continue to strengthen and expand our overseas network and provide high-performance products that benefit the lives of people around the world.



History of our expansion into markets outside Japan

|      |   |
|------|---|
| 1980 | Korea Pillar Packing Co., Ltd. (currently PILLAR Korea Co., Ltd.) is established.   |
| 1993 | Nippon Pillar Singapore Pte Ltd. (currently PILLAR Seal Solutions Singapore Pte Ltd.) as a sales hub for Southeast Asia is established.   |
| 1999 | Nippon Pillar Corporation of America (currently PILLAR America Inc.) in the U.S.A. is established.  |
| 2001 | Taiwan Pillar Industry Co., Ltd. (currently PILLAR Taiwan Co., Ltd.) in Taiwan is established.  |
| 2003 | Suzhou Pillar Industry Co., Ltd. in China is established.   |
| 2007 | Shanghai Pillar Trading Co., Ltd. (currently PILLAR Shanghai Co., Ltd.) in China is established.  |
| 2010 | Nippon Pillar Packing Co., Ltd. Alger Liaison Office in Algeria is established.   |
| 2015 | Nippon Pillar Middle East FZCO (currently PILLAR Middle East FZCO) in the UAE is established.<br>Nippon Pillar (Thailand) Co., Ltd. (currently PILLAR Seal Solutions (Thailand) Co., Ltd.) in Thailand is established.  |
| 2016 | NPK Fluid Control Systems Mexico S.A. de C.V. (currently PILLAR Seal Solutions Mexico S.A. de C.V.) in Mexico is established.   |
| 2018 | Nippon Pillar Europe GmbH (currently PILLAR Europe GmbH) in Germany is established.   |
| 2019 | PT. Nippon Pillar Manufacturing Indonesia (currently PT. PILLAR Manufacturing Indonesia) and PT. Nippon Pillar Indonesia (currently PT. PILLAR Seal Solutions Indonesia) in Indonesia are established.<br>A production facility in Nippon Pillar Corporation of America Houston Office (currently PILLAR America Inc. Houston Office) is added. |
| 2020 | Pillar Technology (Chuzhou) Co., Ltd. in China is established.  |
| 2021 | Operation of Pillar Technology (Chuzhou) Co., Ltd. begins.  |
| 2023 | Beijing Office of Shanghai Pillar Trading Co., Ltd. (currently PILLAR Shanghai Co., Ltd.) opens.  |

List of overseas sites

PILLAR Taiwan Co., Ltd. Taipei Office  
PILLAR Taiwan Co., Ltd. Takao Factory  
PILLAR Shanghai Co., Ltd.  
PILLAR Shanghai Co., Ltd. Beijing Office  
Pillar Technology (Chuzhou) Co., Ltd.  
PILLAR Seal Solutions Singapore Pte Ltd.  
PT. PILLAR Seal Solutions Indonesia  
PT. PILLAR Manufacturing Indonesia  
PILLAR Seal Solutions (Thailand) Co., Ltd.  
PILLAR Korea Co., Ltd.  
PILLAR Middle East FZCO  
PILLAR Europe GmbH  
PILLAR America Inc. Houston Office  
PILLAR America Inc. Fremont Office  
PILLAR Seal Solutions Mexico S.A. de C.V.  
Nippon Pillar Packing Co.,Ltd. Alger Liaison Office

List of domestic sites

**<Factories and business locations>**  
Sanda Factory (Sanda City, Hyogo Prefecture)  
Fukuchiyama Factory (Fukuchiyama City, Kyoto Prefecture)  
Kyushu Factory (Koshi City, Kumamoto Prefecture)

**<Branch offices>**  
Tokyo Branch Office  
Yokohama Branch Office  
Nagoya Branch Office  
Kyoto Branch Office  
Osaka Branch Office  
Kobe Branch Office  
Hiroshima Branch Office  
Kyushu Branch Office

**<Domestic Group companies>**  
TANKEN SEAL SEIKO CO., LTD.  
PILLAR Seal Solutions Corporation  
PILLAR Precision Corporation  
NP Kogyo Corporation  
NP Sangyo Corporation  
NP Real Estate Corporation  
PILLAR Kyushu Corporation  
Masuko Manufacturing Corporation



Electronic Equipment Business

Strengthening Our Production and Sales Systems in Markets Outside Japan While Improving Our Productivity and Production Capacity

We are engaged in market development in China, Europe, and North America in the interests of further expanding our business. In addition, we have demonstrated our commitment to strengthening our competitiveness by improving the productivity of Fukuchiyama Factory No. 2, which began operating in fiscal 2023.

Business Overview

The main product groups of our Electronic Equipment Business benefit from the unique properties of fluororesins. These include piping components (fittings, pipes, pumps, and valves) that carry chemical solutions used in semiconductor and liquid crystal manufacturing equipment; sealing parts for reciprocating and rotating equipment; sliding supports, slide bearings and other seismic isolators; and high-frequency PCB materials suitable for millimeter wave applications.

In fiscal 2023, we posted a decrease in profit despite an increase in sales, which attained a record high for the fourth consecutive fiscal year.

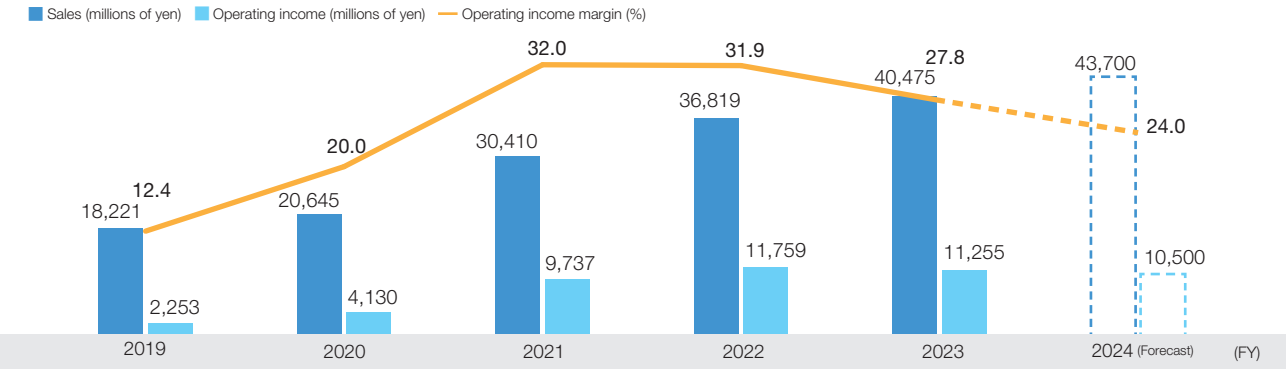
Regarding our mainstay products for the semiconductor market, sales declined due to a softening trend in orders, but this was offset

by the elimination of our backlog. In addition, sales of seismic isolators for semiconductor factories and public facilities increased to 40,475 million yen, which represents a 9.9% increase in sales for the segment as a whole compared to the preceding fiscal year.

Operating income decreased 4.3% year on year to 11,255 million yen, as rising raw material prices had a significant impact despite our efforts to improve productivity and sell at appropriate prices.

Regarding the shortage of resin used as the raw material, which has become an issue in recent years, we are continuing to test innovative production technology and apply our technical expertise in consultation with our customers. Our objective is to enable increased use of recycled resin and alternative materials.

Trends in Sales, Operating Income, and Operating Income Margin



Progress, Challenges, and Initiatives of Medium-Term Management Plan One2025

① Strengthening the foundation for further improving our competitiveness

With the completion of Fukuchiyama Plant No. 2, we are planning to increase production capacity by up to 1.8 times. As part of this effort, we will further improve productivity by expanding the number of multi-cavity molds and by achieving full-scale operation of our automated transport equipment and

automated warehouse. Moreover, we will meet the challenge of fluororesin recycling with the aim of initiating in-house production with recycled resin in addition to conserving resources and reducing our environmental impact. Our goal is to produce these recycled resins in a clean room ensuring very high levels of cleanliness.

② Strengthening existing markets and products

We continue to strengthen our production and sales systems outside Japan.

In the Chinese market, we are opening a new sales base in Beijing to expand our customer base. In the area of production, we are expanding the range of products produced by Pillar Technology (Chuzhou) Co., Ltd.

In the European and North American markets, we are building on our track record of success with major manufacturers, who have been incorporating our products in their new models.

③ Developing new businesses

In the realm of market development, we systematically monitor market needs. As for new material development, we have achieved success using recycled fluororesins and alternative materials.

Looking to product development, we are capitalizing on our successful sweep elbow project by developing the next generation of related products.

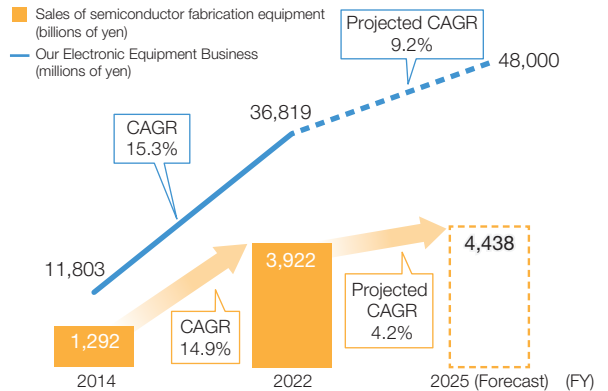
|  | Results for the Fiscal Year Ended March 31, 2024   | Future Action Plan   |
|--|--|--|
| Strengthening the foundation for further improving our competitiveness | <ul style="list-style-type: none"><li>Completed our new Fukuchiyama Factory No. 2 and started operation as planned, thus increasing our production capacity to meet market demand.</li><li>Developed new sources for procuring fluororesins.</li></ul>   | <ul style="list-style-type: none"><li>To expand production capacity by up to 1.8 times in response to semiconductor market conditions</li><li>To strengthen competitiveness by promoting greater production efficiency and automation</li><li>To strengthen the supply chain through in-house production of recycled materials and the like and fulfill our responsibilities as a supplier</li></ul> |
| Strengthening existing markets and products                            | <ul style="list-style-type: none"><li>Opened our Beijing sales office and expanded the range of products produced by Pillar Technology (Chuzhou) Co., Ltd. for the semiconductor market.</li><li>Major European and North American manufacturers of semiconductor fabrication equipment incorporated our products as standard parts in new equipment.</li><li>Semiconductor factories and public facilities adopted our seismic isolators.</li></ul> | <ul style="list-style-type: none"><li>To expand our customer base in the Chinese market</li><li>To develop products that are differentiated through improved cleanliness</li><li>To expand business in the European and North American markets by proactively devising solutions and strengthening our supply system</li></ul>   |
| Developing new businesses  | <ul style="list-style-type: none"><li>Developed and prototyped fluororesin substrates and sensors.</li><li>Engaged in product development and public relations in preparation for entering the medical care and pharmaceutical markets and other new markets.</li></ul>  | <ul style="list-style-type: none"><li>To introduce a line of fluororesin sensors</li><li>To continue development of fluororesin substrates for 5G base stations and data centers</li></ul>   |

Outlook and Prospects

We expect to experience increasing demand for semiconductors for use in personal computers and smartphones as well as in EVs and other motor vehicles. This demand will be further accelerated by the evolution of 5G communication standards and data centers incorporating semiconductors. In addition, we expect the market to continue growing as a result of the expansion of IoT, AI, and other new applications.

Our company's sales in the Electronic Equipment Business have exceeded the market's compound annual growth rate (CAGR) in both actual and forecast terms, and we expect this trend to continue in the years ahead. In addition to the growth of the market itself, we intend to expand the scale of our business by developing new customers, applications, and business segments.

Trends in the Market for Semiconductor Fabrication Equipment and Sales Trends in Our Main Business



Source: Company forecasts based on "Market Forecast Report—Semiconductor and FPD Manufacturing Equipment" issued by the Semiconductor Equipment Association of Japan (SEAJ) in January 2024

TOPIC

Opening of the Beijing Office of PILLAR Shanghai

In July 2023, we opened the Beijing office of Shanghai Pillar Trading Co., Ltd. (currently PILLAR Shanghai Co., Ltd.) as a new sales hub with the aim of strengthening our sales capabilities in China.

Through on-site sales activities, we are meeting the needs of the Chinese market, which is expected to continue expanding in the years ahead.





Industrial Equipment Business

Promoting the Shift to Carbon-neutral Markets and Maximizing Synergies with TANKEN SEAL SEIKO

By utilizing our existing products and products under development, we intend to enter the carbon-neutral product market characterized by hydrogen, EVs, and next-generation batteries.

We are also committed to strengthening our competitiveness through synergies with TANKEN SEAL SEIKO CO., LTD., which joined the Group in fiscal 2023.



Business Overview

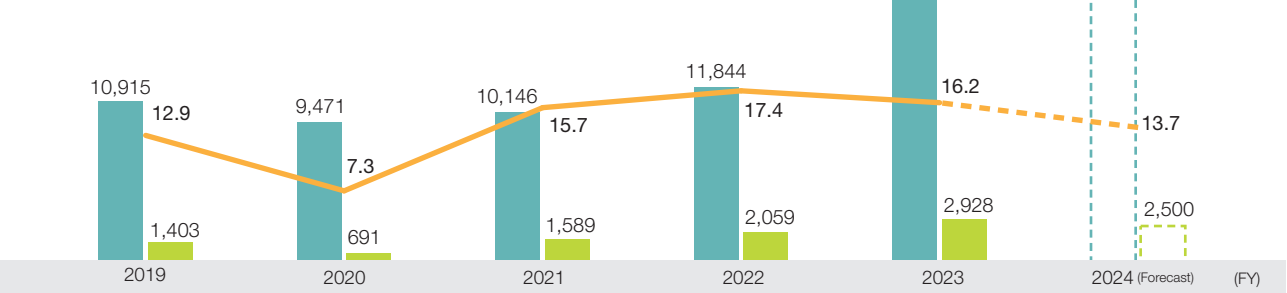
The main products that support our Industrial Equipment Business are mechanical seals, gland packings, and gaskets. These sealing components control various fluids in equipment used in plants across a wide range of industries. These plants are engaged in energy production, oil refining, chemical processing, automaking, marine vessels, the environment, water supply and sewage facilities, medical care, and food processing.

In fiscal 2023, we increased our revenue and profits, with both sales and operating income reaching consecutive record highs.

Although sales were sluggish for mechanical seals used in precision machinery, sales increased 52.8% year-on-year to 18,093 million yen due to demand for repair parts at plants outside Japan, projects related to the restart of Japan's nuclear power plants, and capital investment in safety measures in the petrochemical market.

Operating income increased 42.2% year-on-year to 2,928 million yen due to the better-than-expected performance of TANKEN SEAL SEIKO, which joined the Group in April 2023.

Trends in Sales, Operating Income, and Operating Income Margin



Progress, Challenges, and Initiatives of Medium-Term Management Plan One2025

① Strengthening the foundation for further improving our competitiveness

We are steadily reducing cycle times and costs by incorporating automation into production and shortening development lead times using artificial intelligence and by implementing digital transformation.

In addition, now that TANKEN SEAL SEIKO has joined our Group, we have been able to strengthen our after-sales support, particularly in the area of repairs and spare parts. We aim to further

expand our business while providing solutions to growing needs by improving maintenance skills and incorporating peripheral services.

② Strengthening existing markets and products

In the mechanical seal market, we are focusing on the semiconductor segment. We see this as a growth market, as we foresee the need for new functional parts in response to the demand for higher levels of cleanliness in rotary joints for chemical mechanical polishing (CMP) equipment used in high-performance chip applications, such as AI, and in the field of advanced packaging.

In the gland packing market, we aim to further expand sales by focusing on products with high sealing performance that meet European and North American standards. We will also launch new products that incorporate innovative high-performance materials that are friendly to the environment as well.

③ Developing new businesses

The R&D Center at the Sanda Factory was completed in October 2023. In addition to promoting the reciprocal adoption of

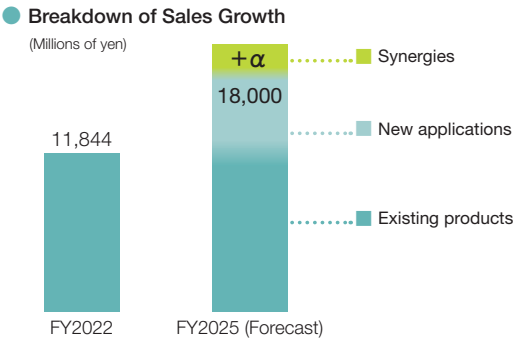
technologies by consolidating previously fragmented product development functions, we will accelerate and strengthen product development and R&D through initiatives on advanced technologies. We will achieve this through collaboration among industry, government, and academia.

By combining PILLAR's technological expertise with that of TANKEN SEAL SEIKO, we are developing unique products noted for offering a strong competitive advantage in the marketplace.

|  | Results for the Fiscal Year Ended March 31, 2024  | Future Action Plan   |
|--|---|--|
| Strengthening the foundation for further improving our competitiveness | <ul style="list-style-type: none"><li>Expanded the scale of our business by acquiring TANKEN SEAL SEIKO CO., LTD.</li><li>Completed construction of the R&amp;D Center at the Sanda Factory to gather the expertise of engineers.</li><li>Introduced an initiative to reduce manufacturing costs through automation and labor-saving, including a review of production processes.</li></ul> | <ul style="list-style-type: none"><li>To maximize synergies with TANKEN SEAL SEIKO through cross-selling, bulk material purchases, and other initiatives</li><li>To accelerate product development by using artificial intelligence and implementing digital transformation</li><li>To further reform and streamline production processes by introducing automated equipment and systems</li></ul>                                 |
| Strengthening existing markets and products                            | <ul style="list-style-type: none"><li>Developed prototype rotary joints for the semiconductor market at Pillar Technology (Chuzhou) Co., Ltd.</li><li>Developed IoT devices for monitoring the status of mechanical seals.</li><li>Developed and introduced environmental contribution products.</li></ul>  | <ul style="list-style-type: none"><li>To establish a rotary joint production system at Pillar Technology (Chuzhou) Co., Ltd.</li><li>To strengthen sales activities through collaboration with TANKEN SEAL SEIKO, including integration of business locations</li><li>To strengthen our global sales capabilities and expand our presence</li></ul>  |
| Developing new businesses  | <ul style="list-style-type: none"><li>Undertook market research and promoted development of products related to hydrogen, EVs, and next-generation batteries.</li><li>The R&amp;D Center at the Sanda Factory developed an improved sealing technology to support a society committed to decarbonization.</li><li>Launched new maintenance contract services to retain customers.</li></ul> | <ul style="list-style-type: none"><li>To accelerate development of products for the hydrogen market by introducing testing equipment for a liquid hydrogen environment</li><li>To strengthen sales promotion in preparation for entry into new markets such as sustainable aviation fuel (SAF)</li><li>To develop and introduce EV parts using injection molding technology refined in our Electronic Equipment Business</li></ul> |

Outlook and Prospects

In terms of decarbonization initiatives, we are making significant capital expenditures on a commercial basis that are intended to reduce environmental impacts while utilizing existing infrastructure. These efforts include the adoption of sustainable aviation fuel and the use of ammonia co-firing at power plants. At the same time, investments are progressing on a demonstration basis in the application of hydrogen and next-generation battery development. We will continue to focus on these growth areas for our Industrial Equipment Business.



TOPIC

Track Record of Adoption in New Markets and New Applications

Our mechanical seals have been adopted in projects outside Japan that utilize sustainable aviation fuel, which is attracting attention as an innovative solution with environmental benefits. Our mechanical seals have been incorporated into pumps manufactured by a Japanese pump manufacturer and are scheduled to begin commercial operation at the end of 2024. In addition, we are building on the success of this project by continuing our sales activities in five projects both inside Japan and elsewhere.

In the advanced semiconductor market, which is a new area of application for us, our mechanical seals have been adopted in a manufacturing plant for packaging materials. In the field of advanced semiconductors, which are used mainly for AI applications, technological innovation in back-end processes such as lamination and chiplets is progressing rapidly. In March 2024, we delivered mechanical seals to a major semiconductor material maker via a Japanese equipment manufacturer.



ISO Certification and IATF Certification

Under its quality-first approach, the Group has obtained both ISO 9001 and IATF certification.

ISO Certification

In 1995, the Group became the first domestic seal manufacturer to obtain ISO 9001 certification for its quality management system. The current certifying body is the Japan Quality Assurance Organization, while accreditation is provided by JAB (in Japan) and UKAS (the UK). (The head office and the Sanda and Fukuchiyama Factories have obtained ISO 9001 certification.)



IATF Certification

In 2019, products for automotive use produced at the following factory have obtained IATF 16949 certification, an international quality management system standard for the automobile industry. IATF 16949 was developed by Western automobile manufacturers and automobile industry-related organizations to prevent defects, reduce inconsistency and waste in the supply chain, and bring about continuous improvement by standardizing requirements for parts manufacturers. Based on ISO 9001, this quality management system incorporates a large number of unique requirements.

Registered site: PILLAR Corporation Sanda Factory  
Scope of certification: Design and manufacturing of gaskets, packing, exhaust system molded products, and fluorocarbon resin substrate



Non-Use of Asbestos

Our products do not use asbestos.

ESG-Related External Assessments

We have been assessed by an externally based ESG evaluation organization and have been selected as a member of the ESG Index.



FTSE Blossom Japan Sector Relative Index



Won the Plunkett Award

Our Pilaflon™ products, Super type fitting gained global recognition and the Company has won the DuPont Plunkett Award three times.



Participated in International Exhibitions



**Valve World Expo**  
We exhibit our products at the Valve World Expo, a global trade fair for valve products and technologies.

SEMICON Japan

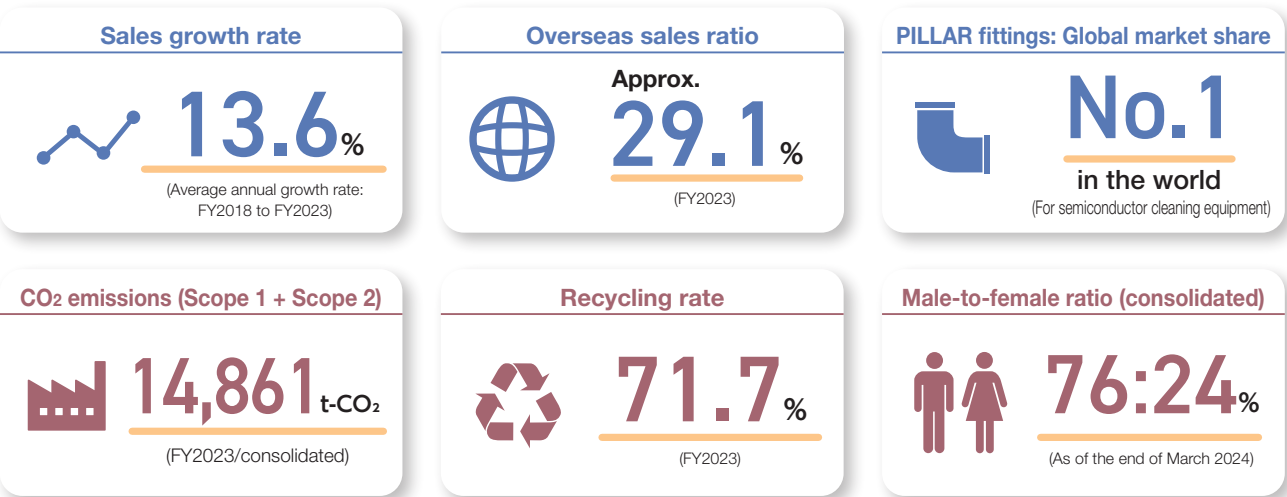
SEMICON Japan is a general exhibition for worldwide semiconductor-related industries. We publicize our products and also take the opportunity to gather the latest information.



Company Profile (As of July 1, 2024)

|                       |   |
|-----------------------|---|
| Company name          | PILLAR Corporation  |
| Head Office address   | 7-1, Shinmachi 1-chome, Nishi-ku, Osaka 550-0013, Japan   |
| Establishment         | 1924  |
| Representative        | President Yoshinobu Iwanami   |
| Capital               | ¥4,966 million  |
| Listed stock exchange | Tokyo Stock Exchange Prime Market   |
| Number of employees   | 1,132 (consolidated, as of March 31, 2024)  |
| Main products         | Pilaflon™ products (fluorocarbon polymers products), mechanical seal products, gland packings and gasket products |
| URL                   | <a href="https://www.pillar.co.jp/en/">https://www.pillar.co.jp/en/</a>   |

PILLAR by the Numbers



Business Performance

