

In 2018, Nihon Parkerizing Group launched its life science business, which was spun off from the traditional business field. We believe that the technologies we nurtured in the steel and automotive industries will enable the "creation of new value" in surface modification technologies in other business areas. Our life science business initially created therapeutic medical device products by utilizing non-stick functions. However, we have expanded market domains, and medical devices and functional chemicals are the pillars. As a leader in surface modification, we will continue to explore new horizons through the growth of our life science business.

# Medical devices

In the medical device field, we aim to apply the core surface modification technologies we help develop to help create a happier society based on the idea of "contributing to people's lives and health." We apply our surface treatment technology to medical devices, providing products that reduce the burden on patients and enhance functionality for medical providers.

Electric scalpels CHIDORI® and RAIKIRI® are manufactured in Cleanroom No. 1 at our Utsunomiya Site. The cleanroom has a production capacity of 100,000 units per month.

Cleanroom No. 2 is mainly used to provide toll coating services, including applying PTFE coatings to catheters.

# Functional materials

We use our technologies to add functions to the surface of various materials, such as fabrics, resin and wood, based on the idea of "making everyday life more comfortable." In addition to developing and selling products for general

consumers, we are also focusing on cooperation with companies to develop technologies and resolve issues that arise in the development stages.

# Hot Topic: Participated in the exhibition at the 48th Annual Scientific Congress of The Royal College of **Surgeons of Thailand**

The 48th Annual Scientific Congress of The Royal College of Surgeons of Thailand was held from July 27 to 29, 2023, at the Royal Cliff Hotel Group, Pattaya, Chonburi. The theme was "How to Improve Quality of Surgical Treatment."

This congress aims to share scientific knowledge and advances across all kinds of surgical fields.

It offers a wide range of events, including seminars, group discussions, paper presentations and pharmaceutical exhibitions. Highly qualified speakers deliver presentations and exchange ideas. Thai Parkerizing participated in this exhibition, with support from Nihon Parkerizing.

# Hot Topic: Technologies supporting life

KOBA-GUARD N, a long-lasting antimicrobial agent sold by Kobayashi Pharmaceutical Co., Ltd. (Kobayashi Pharmaceutical), was granted the "JAXA LABEL COLLAB" logo by the Japan Aerospace Exploration Agency (JAXA). Kobayashi Pharmaceutical and Nihon Parkerizing were involved in joint research with JAXA on technology for combatting microbes in spacecraft

from March 2020 to March 2023. KOBA-GUARD N was used in this joint research and was granted the JAXA LABELCOLLAB label based on its performance in this

From now on, we will further contribute to solving issues such as infectious diseases caused by microorganisms both in space and on Earth by continuing to develop technologies that will support life in space in the future and utilizing these technologies on Earth.



# **Business Overview**

In FY2023, sales increased 6.3% year-on-year to 56,269 million yen, and operating income rose 31.1% year-on-year to 10,062 million yen. This segment manufactures and sells surface treatment chemicals for cleaning materials, rust prevention, paint base, lubrication, and aesthetic design in all industrial fields. We also provide the latest know-how and technical support in these areas.

In Japan, sales recovered moderately alongside a rebound in production at major customers. Overall sales of the chemicals business increased thanks to higher sales prices in Japan and overseas and the expansion of sales in India and Indonesia. Operating income increased on the back of higher sales despite stubbornly high raw material prices.

Our products demonstrate their ability in the world of ultrathin films at the nanometer to sub-nanometer level. They enhance material characteristics by adding many functions to the surface, for example, protection from rust or corrosion, smoothing, or enhancement of hydrophilic properties.

We also consider active initiatives for global environment preservation to be one of the top priorities of our management, as well as proactively developing environment-conscious products.

#### **Future outlook**

We will offer customers a wide range of products by driving the development of environmentally friendly products based on a Life Cycle Assessment (LCA) methodology, which will help realize a decarbonized society.

### Strengths and risks

- A wide variety of products that add various functions to surfaces
- A tailored service system that enables us to respond rapidly to customer demands and issues
- R&D system with state-of-the-art facilities and unique development utilizing in-house technologies
- Stable supply of high-quality products that customers
- Supporting our customers' overseas expansion with a broad global network
- <sup>2</sup> Risks
- Structural changes in the automotive and steel markets attributed to the shift to EVs
- Intensifying price competition due to product commoditization

- Rising prices of phosphoric acid and other raw materials
- Tightening of chemical and environmental regulations
- Supply chain disruptions due to natural disasters and international conflicts
- 3 Remedies
- Developing products for EVs, such as ones with improved sliding properties and insulation
- Developing new markets
- Developing high value-added products by strengthening research and development
- Developing environmentally friendly products that do not contain hazardous substances
- Securing appropriate margins by shifting from higher raw material prices to selling prices and reducing costs
- Collecting information on country risks and developing and strengthening BCPs

# Growth strategies to achieve Vision2030

# We aim for the No.1 share of the global market in sales of surface treatment chemicals.

Find solutions for environmental issues by developing, manufacturing, and commercializing chemicals that contribute to decarbonizing society and reducing the environmental load, such as chromium-free chemicals. Develop new businesses globally in various fields such as automobiles, steel, electricals/electronics, non-ferrous metals, and life sciences.

Points of

- Product development for Electric Vehicles
- → Improving energy efficiency and functionality with durability, sliding property and improved insulation
- Developing new markets
- → Electricals/electronics, non-ferrous metals, life sciences, and more
- Expanding sales of environmentally friendly products
- → Chromium-free, phosphorous-free, reducing CO<sub>2</sub> emissions, reducing sludge, reducing load of wastewater treatment, and more
- Development, manufacturing, and sales of diverse functional coatings other than metal surface treatment chemicals
- Business expansion overseas countries

# **Business Overview**

In FY2023, sales increased 0.2% year-on-year to 46,822 million yen, and operating income decreased 5.9% year-on-year to 5,724 million yen. In Japan, sales were on a recovery path in the first half of the fiscal year due to a recovery in production at auto parts manufacturers, our significant customers; however, the second half saw a slowdown in growth, with sales remaining

flat. Overall net sales in the toll processing business increased due to recovery in Mexico, Indonesia and India, as well as a weaker yen. On the other hand, slow growth in sales volume in China, Thailand and Taiwan, as well as high raw material prices and utility expenses both in Japan and overseas, led to lower profitability and a fall in operating income.

#### uture outlook

Although global price hikes are putting pressure on earnings in this business segment, we will promote a certain degree of price pass-through and productivity improvement through automation, robotization, DX, and other initiatives. Although we are facing an uphill struggle in regions where we rely heavily on Japanese customers, in overseas markets generally, we are gradually reaping the rewards of customer development.

### Strengths and risks

# 1 Strengths

- Various technologies such as conversion coatings, heat treatment (carburizing, nitriding), and electroless plating
- A tailored service system that enables us to respond rapidly to customer demands and issues
- Unique technologies and know-how cultivated over more than 90 years of history since our foundation
- Timely suggestion and provision of surface modification treatments that satisfy customers' demands
- Supporting our customers' overseas expansion with a broad global network

#### 2 Risks

- Structural changes in the automotive parts market due to the shift to EVs
- Intensifying price competition due to the commoditization of technologies
- Insourcing surface modification treatment and relocating it

overseas by customers

- Tightening of chemical and environmental regulations
- Supply chain disruptions due to natural disasters and international conflicts

# 3 Remedies

- Developing new and differentiated technologies for new markets, such as technologies for improving heat resistance and wear resistance and technologies for bonding heterogeneous materials
- Strengthening collaboration with mega-suppliers
- Strengthening overseas business and exploring new local customers
- Developing new processing technologies that contribute to the reduction of CO<sub>2</sub> and hazardous substance
- Collecting information on country risks and developing and strengthening BCPs

# Growth strategies to achieve Vision2030

# We aim to be recognized worldwide and the most trusted partner for our customers.

Strengthen ties with mega-suppliers targeting critical components for electric vehicles (BEV, HEV, PHEV, FFCEV) as demand will continue to increase in this area, and further strengthen business ties with group companies in Japan and overseas to reactivate business in existing fields and develop new fields globally to reinforce our business foundation.

# Points of focus

- Respond to requirements of nextgeneration automobiles
- Gain orders for critical components for electric vehicles (BEV, HEV, PHEV and FCEV)
- (Sliding property, insulation, wear resistance)
- Develop applications for next-generation automotive technologies
   (Anti-glare, heat dispersion, heterogeneous material joint)
- Develop new business other than the automotive business

- (Construction machinery, construction, robots, aerospace)
- Strengthen sales activities at key overseas bases (China, India, ASEAN and North America) and gain non-Japanese customers
- Expand services that reduce the environmental load (Low-temperature treatments)
- Expand markets on a global scale through products for which we have already received orders and gain orders for outsourcings for currently insourcing customers' production

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# **Business Overview**

In FY2023, sales increased14.0% year-on-year, to19,149 million yen, with an operating income of 527 million yen (compared to an operating loss of 8 million yen in the previous year). This business segment designs, manufactures and sells pretreatment, coating, and powder coating equipment, mainly for the transportation machinery industry.

Sales volumes in Thailand and other parts of Southeast Asia struggled to grow in the absence of the impact of large projects recorded in the previous fiscal year; however, sales in Japan and North America recovered, reflecting improvement in capital investment. Overall, the equipment business posted higher sales and achieved operating income compared with an operating loss in the previous fiscal year.

# **Future outlook**

Although profits have been squeezed by various cost increases arising from global price hikes and a weaker yen, we have sufficient backorders and are seeing positive signs.

Especially in Japan, sales are expected to increase sharply, with the recording of sales from large projects postponed from previous fiscal years as construction gets underway. In the global automotive market, there is growth potential, with expectations for increased investment not only by Japanese automakers in emerging markets, especially India.

# Strengths and risks

- Handle any scale of equipment for customers in all industrial fields
- Extensive installation in a wide range of industrial fields, from the automotive and steel industries to cutting-edge industries
- A one-stop service from design to maintenance services for all lines related to surface treatment and coating
- Developing and proposing new surface treatments and cutting-edge coating processes that are critical to coating
- Supporting our customers' global strategies with a proven track record of installation record
- 2 Risks
- Significant decrease in demand for capital investment due to an economic downturn
- Additional costs associated with material price hikes and the reworking of design and installation works
- Loss of opportunities to receive orders resulting from

- delays in engineering development
- Occurrence of severe accidents and disasters involving people and construction
- 3 Remedies
- Stabilizing profits by expanding after-sales services such as maintenance and inspections and sales of
- Ensuring thorough construction cost management from design to installation
- Strengthening overseas business development
- Developing equipment systems with a low environmental impact that leads to a reduction in CO<sub>2</sub> emissions
- Developing and selling highly productive facilities integrating IoT equipment management systems (tools for quantifying and centrally managing production, quality, costs and environment)
- Ensuring thorough safety and health management to achieve zero accidents and disasters

# Growth strategies to achieve Vision2030

As a comprehensive engineering company, we contribute to solving issues for various customers, from the automotive industry to the general industry, through collaboration with our chemicals business.

We will promote business expansion in overseas markets, which continue to grow. We will work to create a foundation for sustainable growth by increasing earnings strength and differentiating ourselves from our competitors by developing IoT facility management systems and environmentally friendly products, as well as other measures.

- Improvement of added value through integrated sales of equipment and drugs (Parker Chemical Controller)
- Sales of IoT equipment management systems (PARKER LEAPS)
- Development and sales of environmentally friendly products (DRYCUBE: Filter with high paint dust collection and capture efficiency)
- Expand sales of high value-added products (lonics powder coating equipment)
- Enhance equipment maintenance business
- Expand business in growing markets overseas