COMPANY RESEARCH AND ANALYSIS REPORT

Nippon Piston Ring Co., Ltd.

6461

Tokyo Stock Exchange Prime Market

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Summary

Aiming to realize growth by both reinforcing the earning capabilities of the automobile engine business and establishing and cultivating a non-automobile engine business

1. Company profile

Nippon Piston Ring Co., Ltd. <6461> (hereafter, also "the Company") is a major manufacturer of products including piston rings and valve seat inserts that are used as vehicle engine parts. It supplies a wide range of products to the world's leading auto manufacturers. Applying the core technologies that it has cultivated across its history of approximately 90 years since its establishment (tribology: Technologies relating to friction, wear, and lubrication; surface treatment technologies; powder metallurgy technologies; and precision processing technologies), the Company is also increasing sales for applications other than automobile engines as new product businesses, primarily in the industrial equipment and medical fields.

The Company's main products of piston rings and valve seat inserts are parts performing important functions related to automobile engine performance, contributing to enhanced fuel efficiency by improving heat and abrasion resistance. In actuality, there are only five manufacturers in the world that are able to provide high-quality piston rings, including the Company. For valve seat inserts as well, its strength is its expertise in sintered alloy powder blending, and it holds a leading share of the market for Japanese auto manufacturers.

2. Outline of results

In the FY3/22 consolidated results, net sales increased 12.2% year on year (YoY) to ¥50,783mn, operating income was ¥2,627mn (compared to a loss of ¥165mn in the previous fiscal year), ordinary income increased 759.7% to ¥3,058mn, and net income attributable to owners of parent was ¥1,928mn (a loss of ¥813mn). Although adjustments to production by auto manufacturers continued to have an effect, demand in global markets recovered leading to year on year increases in both sales and profit. In regard to profit, in addition to the effects of production increases, the Company continued activities to reduce costs, such as improving productivity and spending effectively, resulting in a large profit increase. Additionally, although the Company has been negotiating with customers regarding the adjustment of sales prices to reflect the rising cost of raw materials, there have been delays to the application of some new prices, meaning that efforts to partially reflect these in sales prices have stalled. Looking at the automobile engine business and non-automobile engine business separately, demand is recovering from the impact of the COVID-19 pandemic leading to year on year increases in sales and profit in both segments, showing the Company has established a stable revenue base. The non-automobile engine business performed particularly well with factors such as efforts to reinforce the earning capabilities of piston rings for marine engines and an increase in demand for METAMOLD products for industrial equipment pushing the business back into profitability.

For the FY3/23 consolidated results, the Company is forecasting net sales to increase 8.3% YoY to ¥55,000mn, operating income to increase 2.8% to ¥2,700mn, ordinary income to decrease 8.5% to ¥2,800mn, and net income attributable to owners of parent to decrease 1.5% to ¥1,900mn. The expected foreign currency exchange rates are for a stronger yen than current real rates, with ¥115 to the U.S. dollar (compared to ¥109.90 in the previous fiscal year) and ¥130 to the euro (¥129.91). The outlook for the global economy is more uncertain than usual due to shortages of parts such as semiconductors, rising resource prices, as well as risks such as the situation in Ukraine. However, the Company expects that auto manufacturers will have returned to normal production levels by the second half of the fiscal year, and it will continue to reduce costs and adjust sales prices to reflect increases in the prices of raw materials. In addition to this, in January 2022 the Company consolidated Normeca Asia Co., Ltd. as a subsidiary, and this is expected to realize net sales of around ¥1.8bn and an operating income margin of around 10%.

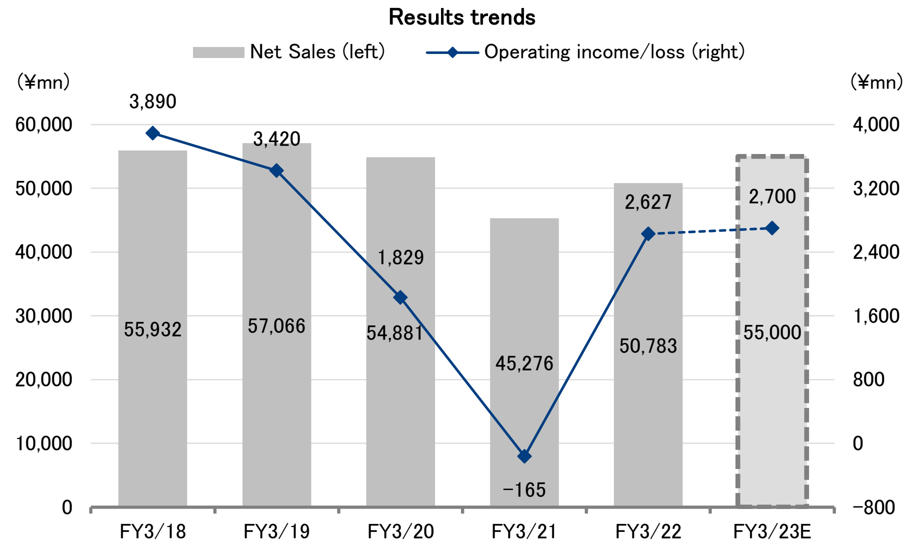
3. Growth strategy

The Company has formulated The Next NPR 2030 long-term vision in order to respond to the big changes in the business environment surrounding the auto industry. Its numerical targets are net sales of ¥100bn, an operating income margin of at least 10%, for non-automobile engine sales to provide at least 40% of net sales, and a reduction in the CO_2 emissions volume of 46% (compared to FY3/14) in FY3/31. In May 2021, it also formulated the 8th Medium-term Management Plan (FY3/22 to FY3/24) by backcasting from its ideal vision of the future. The plan has been positioned as a period for building a foundation for achieving the long-term vision and its targets are net sales of at least ¥54bn, an operating income margin of at least 8%, for non-automobile engine sales to provide at least 15% of net sales, and a reduction of the CO_2 emissions volume of 25% (compared to FY3/14) in FY3/24.

To achieve the targets in the long-term vision and medium-term management plan, the Company assumes that the possibility of an immediate, complete conversion to electric vehicles (EV) is low, so it plans to develop technology that will help evolve automobile engines, such as making gasoline engines more fuel efficient or adapting engines to use new clean fuels, while also expanding non-automobile engine sales through new product businesses based on the assumption of a gradual shift to EV. Specifically, taking into account automobile industry trends, it is focusing resources on three priority initiatives: (1) Reinforce earning capabilities in existing businesses (automobile engine business), (2) establish and cultivate new product businesses (non-automobile engine business), and (3) promote sustainability management. In regard to initiative (2), it is aiming to steadily develop new product businesses in the medical and industrial equipment fields among others, and to use M&A and open innovation to establish business operations swiftly. As examples of this, it is aiming to launch and establish a business around NiFreeT, a new medical-use material of a titanium-tantalum alloy that is highly biocompatible being nickel-free and non-magnetic, and it is advancing new product development through a joint development program for implantable medical devices with Medtronic <MDT>, a major global medical equipment manufacturer. Additionally, in January 2022, it made Normeca Asia Co., Ltd., a trading company specializing in medical equipment for emergencies and disasters, into a consolidated subsidiary. It will work to grow sales in the non-automobile engine business by realizing Group synergies through the combination of Normeca Asia's broad customer base and ability to develop and deliver solutions and the Company's core technologies, manufacturing and sales capabilities, and organizational adaptability.

Key Points

- Is a major manufacturer of automobile engine-use parts including piston rings and valve seat inserts
- In the FY3/22 results, significant increases in sales and profits were realized after demand recovered following the pandemic
- Forecasts increases in sales and profits in FY3/23 as production increases and cost reductions will absorb rising raw materials prices
- Aiming to realize growth by both reinforcing the earning capabilities of the automobile engine business and establishing and cultivating a non-automobile engine business



Source: Prepared by FISCO from the Company's financial results

Company overview

A major manufacturer of piston rings and valve seat inserts

1. Company overview

The Company is a major manufacturer of products including piston rings and valve seat inserts that are used as vehicle engine parts. Its corporate philosophy is to advance all things while placing the customer first, respond flexibly to environmental changes, secure profits appropriately, and reward our shareholders and other stakeholders; act in harmony with society, secure a position as a global comprehensive parts manufacturer, and contribute to the advancement of humanity; and always strive to innovate and improve results, promote the prosperity of the company and improve the lives of employees.

As of the end of FY3/22, the head office was located in Saitama City, Saitama Prefecture, and total assets were ¥67,375mn, net assets were ¥35,006mn, capital was ¥9,839mn, the equity ratio was 49.2%, and the number of outstanding shares was 8,374,157 shares (including 645,290 treasury shares).

Normeca Asia Co., Ltd., a trading company specializing in medical equipment for emergencies and disasters, was made into a consolidated subsidiary on January 11, 2022. As a result, the Group consists of 14 companies in total—the Company and 13 consolidated subsidiaries. Normeca Asia has been included in the scope of consolidation from FY3/22.

2. History

Nippon Piston Ring Co., Ltd. was established in December 1934 in Tamura-cho, Shiba Ward, Tokyo City, at which time it also opened the Kawaguchi Plant. It then opened the Yono Plant in April 1939, and was listed on the Tokyo Stock Exchange (TSE) in May 1949 (transferred to the TSE Prime Market as part of the exchange's restructuring in April 2022). Subsequently, it started overseas business development from the 1970s, providing a wide range of products to the world's leading auto manufacturers. Since the 2000s, it has been accelerating business development for the growth markets of China, ASEAN, and India.

Also, the Company acquired a dental implant business and obtained approval for medical equipment manufacturing and marketing in October 2014, aiming to increase sales for non-automobile engines as new product businesses applying the core technologies accumulated since its establishment. Utilizing this, it began imports and sales of radiology medical equipment in September 2020, and started a technological investigation in April 2021 toward a specific project jointly with Professor Noriyuki Hisamori of Sophia University for NiFreeT, which is a new medical-use material of a titanium-tantalum alloy. In June 2021, it began a joint development program for implantable medical devices with Medtronic, a medical equipment manufacturer that ranks first for global sales (consolidated net sales of US$28.9bn in FY4/20). Additionally, Normeca Asia Co., Ltd., a trading company specializing in medical equipment for emergencies and disasters, was made into a consolidated subsidiary in January 2022.

History

Date	Event
December 1934	Established Nippon Piston Ring Co., Ltd., in Tamura-cho, Shiba Ward, Tokyo City, and opened the Kawaguchi Plant
April 1939	Opened the Yono Plant
May 1949	Listed on the Tokyo Stock Exchange
June 1964	Established Nippon Ring Service Co., Ltd.
January 1973	Established Schöttle Motorenteile GmbH in West Germany
July 1973	Established NPR of America, Inc. in U.S.A.
April 1974	Established NPR FUKUSHIMA WORKS CO., LTD.
September 1982	Established NPR Kawaguchi Works Co., Ltd., and NPR Distribution Center Co., Ltd.
December 1983	Established NPR Imanishi Works Co., Ltd., (currently NPR Shimane Co., Ltd.)
October 1984	Relocated the Kawaguchi Plant. Opened the Tochigi Plant
June 1989	Opened the Nogi Branch Plant of the Yono Plant (currently the Nogi Branch Plant of the Tochigi Plant)
April 1990	Established NPR IWATE CO., Ltd.
February 1996	Capital participation in IP Rings Ltd., in India
July 1997	Established Siam NPR Co., Ltd. in Thailand as a joint venture with Siam Cement Public Co., Ltd. (currently Cement Thailand Holdings)
May 1998	Transferred the headquarters to Yono City (currently Saitama City), Saitama Prefecture
December 1999	Established NPR of Europe GmbH. in Germany
December 2000	Established PT. Nippon Piston Ring Indonesia (currently PT. NT PISTON RING INDONESIA) in Indonesia
December 2001	Converted Siam NPR Co., Ltd., (Thailand) into a wholly-owned subsidiary
September 2002	Opened the Ichinoseki Plant of NPR IWATE CO., Ltd.
October 2004	Established NPR Manufacturing Michigan, Inc. in U.S.A.
January 2005	Merged Schöttle Motorenteile GmbH. with NPR of Europe GmbH
February 2005	Established NPR Auto Parts Manufacturing (Yizheng) Co., Ltd. in China
March 2005	Established NPR SINGAPORE PTE. LTD. in Singapore
February 2006	Established NPR Trading (Shanghai) Co., Ltd. in China (liquidated in December 2009)
March 2006	Established PT. NPR MANUFACTURING INDONESIA in Indonesia.
April 2006	Established NPR Auto Parts Manufacturing (Zhenjiang) Co., Ltd. in China.
May 2006	Established NPR Manufacturing Kentucky, LLC. in U.S.A. (absorbed and merged in January 2011)
January 2011	Merged the four US subsidiaries, of NPR US Holdings, Inc., NPR of America Inc., NPR Manufacturing Michigan, LLC. and NPR Manufacturing Kentucky, LLC. Changed the company name to NPR of America, Inc.
March 2011	Transferred all stocks held of NPR Shimane Co., Ltd.
December 2011	Established NPR AUTO PARTS MANUFACTURING INDIA PRIVATE LIMITED in India
March 2012	Absorbed and merged NPR Kawaguchi Works Co., Ltd. and NPR Distribution Center Co., Ltd.
July 2012	Conducted an absorption merger of NPR Auto Parts Manufacturing (Yizheng) Co., Ltd., and NPR Auto Parts Manufacturing (Zhenjiang) Co., Ltd.
December 2012	Established NPR Powdered Metals Manufacturing (Yizheng) Co., Ltd. in China.
July 2013	Converted PT. NT PISTON RING INDONESIA into a wholly-owned subsidiary, and it ceased to be a joint venture
October 2013	Transferred shares of NPR Powdered Metals Manufacturing (Yizheng) Co., Ltd. to Yizheng Shuanghuan Piston Ring Co., Ltd. (currently ASIMCO Shuanghuan Piston Ring (Yizheng) Co., Ltd.) and made it a joint venture. Changed the company name to NPR ASIMCO Powdered Metals Manufacturing (Yizheng) Co., Ltd.
May 2014	Acquired the metal injection molding business of Sumitomo Metal Mining Co., Ltd.
October 2014	Acquired the dental implant business of ISHIFUKU Metal Industry Co., Ltd.
October 2015	Established the Dental Implant Medical Device Center in the Tochigi Plant
October 2018	Transferred a part of the equity intertest in NPR of Europe GmbH. to Daido Metal Co., Ltd. <7245>
September 2020	Started imports and sales of radiology medical devices
April 2021	Conducted an absorption merger of Nippon Ring Service Co., Ltd., and NPR Business Services Co., Ltd. Started a technological investigation with Sophia University for NiFreeT, which is a new medical-use material of a titanium-tantalum alloy
June 2021	Stated a joint development program with Medtronic <MDT> for implantable medical devices
August 202	Developed cobalt-free valve seat inserts
October 2021	Established the Sustainability Promotion Office
January 2022	Made Normeca Asia Co., Ltd., a trading company specializing in medical equipment for emergencies and disasters, into a consolidated subsidiary
April 2022	Transferred to the TSE Prime Market as part of the exchange's restructuring

Source: Prepared by FISCO from the Company's securities report and press releases

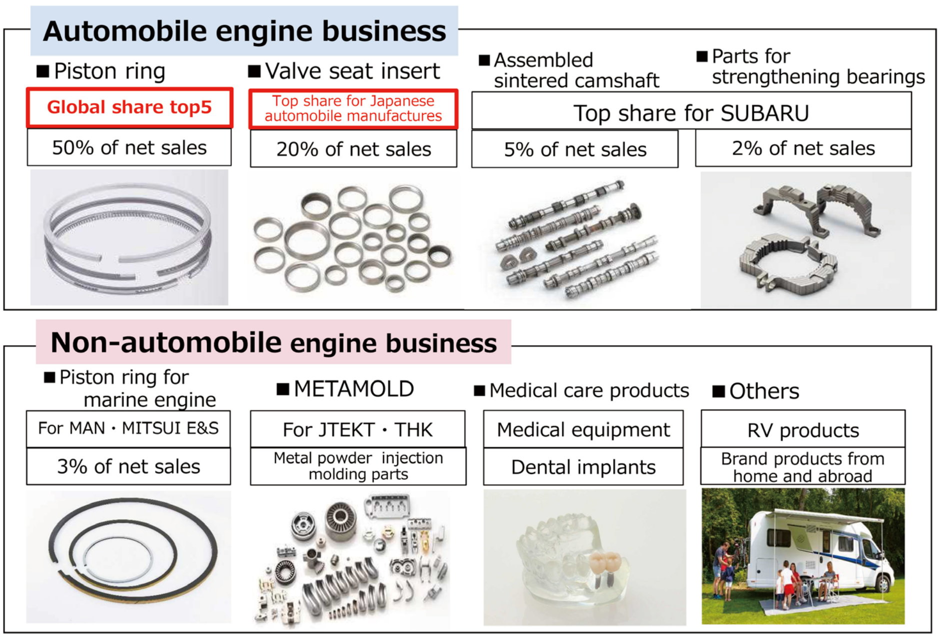
Business summary

Main products are automobile engine-use piston rings and valve seat inserts and provides a wide range of products to the world's leading auto manufacturers

1. Business summary

The business segments are the Products for Automobiles Business, Products for Marine Engines and Other Products Business, and Others (merchandise sales, etc.). Separate to these segments, the Company also classifies its business as automobile engine business (existing business) and non-automobile engine business (new product businesses that utilize core technologies), and it is working to reinforce the earning capabilities of the automobile engine business and cultivate and establish the non-automobile engine business toward achieving the goals of the long-term vision and mid-term management plan. Its main products include piston rings, valve seat inserts, and assembled sintered camshafts, which are all important functional components of a vehicle's engine, and it holds a top-five share of the global market for piston rings, as well as a leading share of the market for valve seats for Japanese auto manufacturers.

Products

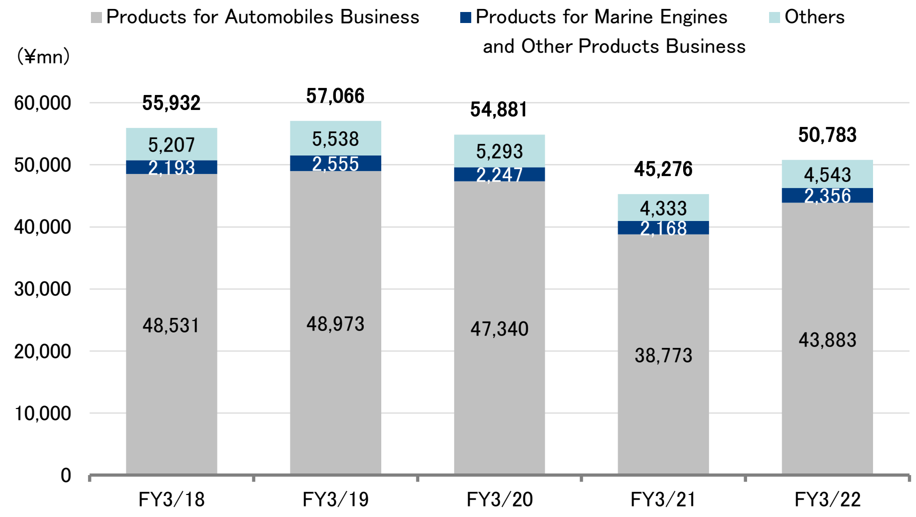


Source: The Company's results briefing materials

In net sales by segment, the Products for Automobiles Business provides the majority of net sales*. Furthermore, in the composition of net sales by product, roughly speaking, piston rings provide 50% and valve seat inserts 20%, and this has not changed greatly in the last six fiscal years. Looking at sales composition by region in FY3/22, Japan accounted for 38.7% of sales while overseas sales accounted for 61.3% (Asia: 27.4%, Europe: 14.1%, North America: 10.4%, other: 9.5%).

* Due to the impact of COVID-19, particularly in FY3/21, the number of vehicles produced globally declined, and therefore the Company's net sales decreased similarly.

Trends in net sales by segment



Source: Prepared by FISCO from the Company's financial results

2. Characteristics and strengths

The Company's main products of piston rings and valve seat inserts are parts performing important functions related to automobile engine performance, contributing to enhanced fuel efficiency by improving heat and abrasion resistance.

The main roles of piston rings include functions to seal gas leaks in an engine's combustion chamber, control lubricating oil (engine oil), transfer combustion heat that escapes, and minimize piston abrasion. They are used within the combustion chamber in the harsh conditions of a temperature of 300°C, and are an important functional component related directly to engine performance. Therefore, in actuality there are only five companies in the world (one in the U.S., one in Germany, and three in Japan), including the Company, that are able to provide high-quality piston rings. In terms of technological trends, there are requirements such as for lower friction and improved abrasion resistance, high-performance and high-quality materials, and surface treatment. The Company's strengths include its advanced precision processing, surface treatment, and materials and powder metallurgy technologies that it has cultivated across its history of 90 years since its establishment.

Valve seat inserts are the seats of the valves and exhaust valves and play the role of maintaining the airtightness of the combustion chamber. They are required to have durability that does not deteriorate even when impacted at high temperatures and airtightness that reliably seals in combustion gas. Therefore, sintered alloy is used as a material with high heat resistance and abrasion resistance. One of the Company's strengths is its expertise in sintered alloy powder blending, for which it holds the top share, approximately 40%, for Japanese auto manufacturers.

3. Main customers

As its customers, the Company supplies a wide range of products to the world's leading auto manufacturers, including Toyota Motor Corporation <7203>, and one of its features is that it does not rely on any specific auto manufacturer for more than 10% of net sales. Moreover, its supply of products to major auto manufacturers in the U.S. and Europe and local auto manufacturers in China is increasing.

Main customers

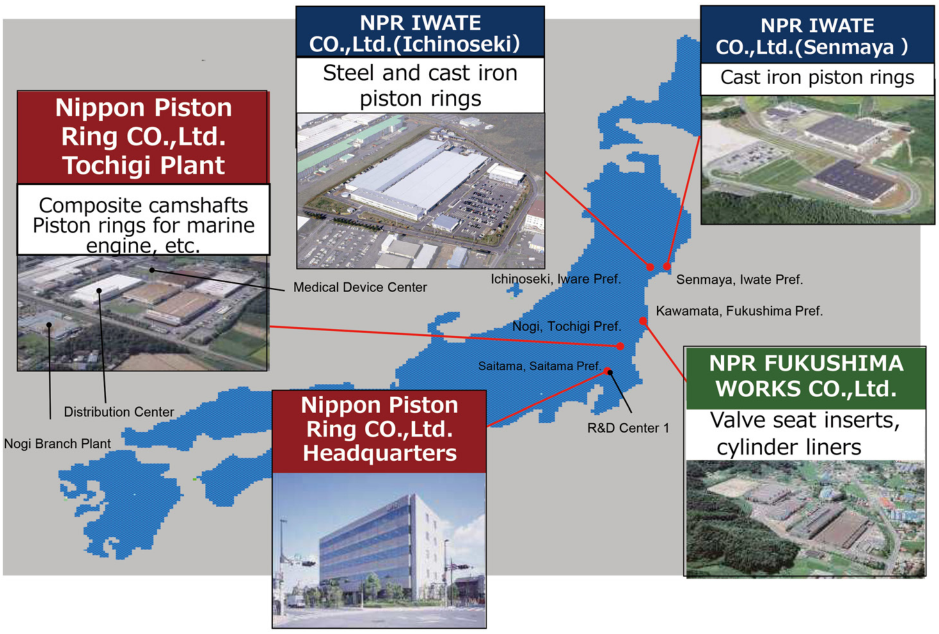
Source: The Company's results briefing materials

4. Manufacturing bases

The Group's manufacturing bases are the Company's Tochigi Plant (which includes the Medical Device Center and the Nogi Branch Plant), while manufacturing is also conducted within Japan by the manufacturing subsidiaries NPR Fukushima Works Co., Ltd. and NPR IWATE Co., Ltd. (Ichinoseki and Senmaya), and overseas by the manufacturing subsidiaries NPR of America, Inc. (NOA, U.S.), NPR Auto Parts Manufacturing (Yizheng) Co., Ltd (NAMY, China), NPR ASIMCO Powdered Metals Manufacturing (Yizheng) Co., Ltd. (NAPM, China), PT. NT Piston Ring Indonesia (NTRI, Indonesia), PT. NPR Manufacturing Indonesia (NPMI, Indonesia), SIAM NPR Co., Ltd. (SNPR, Thailand), and NPR Auto Parts Manufacturing India Pvt. Ltd. (NPRI, India).

As the Group's overseas sales bases, it has sales offices for NOA in the U.S., NAMY in China, SNPR in Thailand, and NPRI in India. Furthermore, its sales subsidiaries include NPR of Europe GmbH. (NOE, Germany), NPR Singapore Pte. Ltd. (NPRS, Singapore), E.A. Associates Sdn. Bhd (EAA, Malaysia), and an office in South Korea.

Bases in Japan



Source: The Company's results briefing materials

Overseas bases

Source: The Company's results briefing materials

5. New product businesses

In order to increase sales for non-automobile engines, the Company is progressing new product businesses as non-automobile engine businesses centered on the industrial equipment and medical fields.

Regarding the industrial equipment field, the Company is working to grow sales of METAMOLD (metal powder injection molding parts) for industrial equipment as deflectors for ball screws for vehicles' electric power steering and for SCARA robots. Furthermore, utilizing its superiority in terms of the degree of freedom for shaping and use of materials, the Company's policy is also to develop businesses for CASE*-related parts and the robot, sensor, and medical fields.

* An acronym for Connected, Autonomous, Shared & Services, Electric.

In the medical field, the Company acquired a dental implant business and obtained approval to conduct medical equipment manufacturing and marketing in October 2014. Utilizing this, it began imports and sales of radiation treatment products in September 2020, started sales of oral scanners in April 2021, and began a technological investigation into a specific project involving NiFreeT. Additionally, in January 2022 it made Normeca Asia Co., Ltd., a trading company specializing in medical equipment for emergencies and disasters, into a consolidated subsidiary (details to follow).

6. Risk factors and earning characteristics

A risk factor is that the number of vehicles produced may decrease due to changes in demand and the impact of infectious diseases, disasters, and other factors. However, in the medium term, the global automobile market will grow, due in part to vehicle use expanding in emerging countries. So rather than a change in the number of vehicles produced, a risk factor for the Company at the current time is the impact of medium- to long-term environmental regulations (greater fuel efficiency of engines, declining use of gasoline engines, increased use of new clean fuel engines, spread of electric vehicles, etc.) driven by global movement toward decarbonization. The Company anticipates that the probability that widespread use of electric vehicles will quickly increase is low. Its policy is to develop technologies for the evolution of the automobile engine, including responses to the further improved fuel performance of gasoline engines and new clean fuel engines. In addition, based on the trend of the gradual shift to EV, it is also working to increase sales for non-automobile engines through new product businesses.

Regarding competition risk, only a limited number of manufacturers can globally supply high-quality piston rings and valve seat inserts. So, the market structure is that fluctuations in share are comparatively small in the context of the integration of auto manufacturers and their acquisitions of companies to join their respective groups. Furthermore, as the Company provides a wide range of products to the world's leading automobile manufacturers, the risk of it relying on a specific automobile manufacturer is small.

Results trends

In the FY3/22 results, significant increases in sales and profits were realized after demand recovered following the pandemic

1. Outline of results for FY3/22

In the FY3/22 consolidated results, net sales increased 12.2% year on year (YoY) to ¥50,783mn, operating income was ¥2,627mn (compared to a loss of ¥165mn in the previous fiscal year), ordinary income increased 759.7% to ¥3,058mn, and net income attributable to owners of parent was ¥1,928mn (compared to a loss of ¥813mn). The average foreign currency exchange rates were ¥109.90 to the U.S. dollar (compared to ¥106.76 in the previous fiscal year) and ¥129.91 to the euro (¥121.88). Additionally, the Company is applying the Accounting Standard for Revenue Recognition (ASBJ Statement No. 29, March 31, 2020) from the beginning of FY3/22 but the effect on financial results is negligible.

Consolidated results for FY3/22

(¥mn)

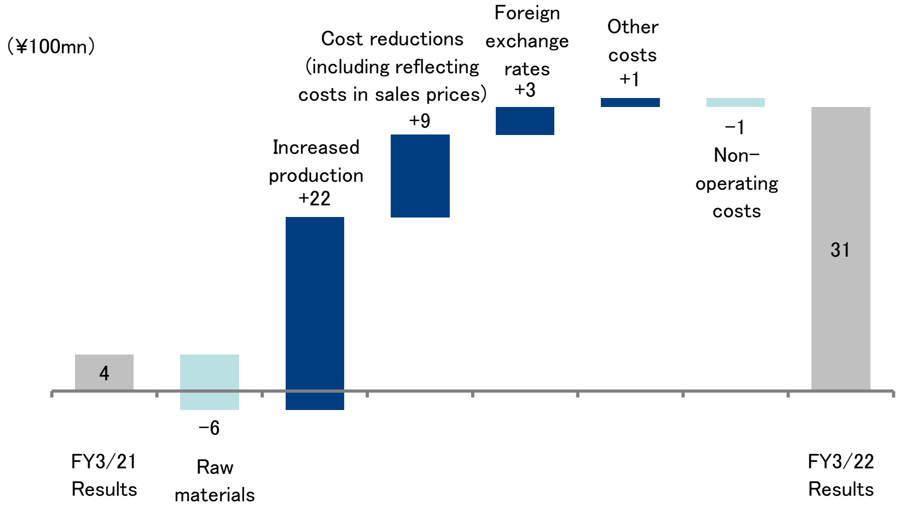
	FY3/21		FY3/22		
	Results	%	Results	%	YoY
Net sales	45,276	100.0%	50,783	100.0%	12.2%
Products for Automobiles Business	38,773	85.6%	43,883	86.4%	13.2%
Products for Marine Engines and Other Products Business	2,168	4.8%	2,356	4.6%	8.7%
Others	4,333	9.6%	4,543	8.9%	4.8%
Gross profit	8,163	18.0%	11,558	22.8%	41.6%
SG&A expenses	8,328	18.4%	8,930	17.6%	7.2%
Operating income (loss)	-165	-0.4%	2,627	5.2%	-
Products for Automobiles Business	-24	-0.1%	2,632	6.0%	-
Products for Marine Engines and Other Products Business	137	6.3%	371	15.7%	171.0%
Others	146	3.4%	177	3.9%	21.2%
Adjustment	-424	-	-553	-	-
Ordinary income	355	0.8%	3,058	6.0%	759.7%
Net income (loss) attributable to owners of parent	-813	-1.8%	1,928	3.8%	-
Exchange rate					
US$/¥	106.76	-	109.90	-	-
Euro/¥	121.88	-	129.91	-	-

Note: The percentage for operating income (loss) by segment shows the ratio compared to the net sales of each segment (segment operating income margin)
Source: Prepared by FISCO from the Company's financial results and results briefing materials

Although production adjustments by auto manufacturers due to the shortage of in-vehicle semiconductors, stagnation of the supply of parts, and supply chain disruptions continued to have an impact, demand in the global markets showed signs of recovering and the Company achieved significant year-on-year increases in sales and profit. In regard to profit, in addition to the effects of production increases, the Company continued activities to reduce costs, such as improving productivity and spending effectively, resulting in a large profit increase. Additionally, although the Company has been negotiating with customers regarding adjustment of sales prices to reflect the rising cost of raw materials, there have been delays to the application of some new prices, meaning that efforts to partially reflect these in sales prices have stalled. Gross profit increased 41.6% YoY and the gross profit margin rose 4.8 percentage points (pp) to 22.8%. SG&A expenses increased 7.2%, but the SG&A expenses ratio fell 0.8 pp to 17.6%. For non-operating income, subsidy income decreased by ¥445mn but foreign exchange gains increased by ¥152mn.

Ordinary income increased by 759.7% YoY and looking at the factors behind this, increasing factors were ¥2,200mn from increased production, ¥900mn from cost reductions (including reflecting rise of raw material costs in sales prices), ¥300mn from exchange rates (mainly the effects of the weak yen against the euro), and ¥100mn from a decrease in various other costs. Decreasing factors were ¥600mn from rising raw material prices and ¥100mn from non-operating costs.

Ordinary income increasing and decreasing factors

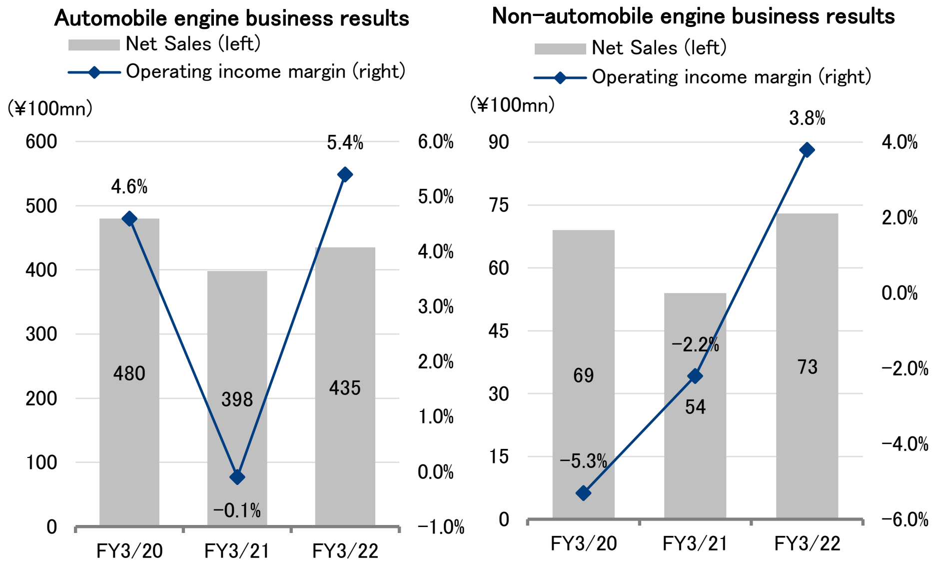


Source: Prepared by FISCO from the Company's results briefing materials

2. Segment trends

Looking at results by segment, in the Products for Automobiles Business, net sales increased 13.2% YoY to ¥43,883mn and operating income was ¥2,632mn (compared to a loss of ¥24mn in the same period in the previous fiscal year). Although the suspension of operations of auto manufacturers due to the shortage of in-vehicle semiconductors had an impact, an increase in the number of vehicles produced globally and other factors resulted in increases in both sales and operating income and a return to profitability. As for the composition of total net sales by region, Japan provided 36.9%, Asia 30.2%, Europe 10.3%, North America 11.7%, and other regions 10.9%. Furthermore, in the Products for Marine Engines and Other Products Business, net sales increased 8.7% to ¥2,356mn and operating income increased 171.0% to ¥371mn. This increase in sales and significant increase in profit was primarily driven by demand for METAMOLD products for industrial equipment. In Others, net sales increased 4.8% to ¥4,543mn and operating income rose 21.2% to ¥177mn.

Looking at results in terms of automobile engine business and non-automobile engine business, demand is recovering from the impact of the pandemic leading to year on year increases in sales and profit in both segments, showing the Company has established a stable revenue base. In the automobile engine business, net sales increased 9.3% to ¥43,500mn and the operating income margin increased by 5.5 pp to 5.4%. Although net sales have not yet returned to the pre-pandemic levels recorded in FY3/20, the effects of cost reductions and exchange rates led to the operating income margin exceeding the FY3/20 result. In the non-automobile engine business, net sales increased 35.2% to ¥7,300mn and the operating income margin increased by 6.0 pp to 3.8%. This return to profitability was mainly due to the reinforcement of the earning capabilities of piston rings for marine engines and an increase in demand for METAMOLD products for industrial equipment.



Source: Prepared by FISCO from the Company's results briefing materials

3. Financial condition

At the end of FY3/22, total assets had increased ¥5,566mn compared to the end of the previous fiscal period to ¥67,375mn. This was mainly due to an increase of ¥1,838mn in inventory assets, an increase of ¥1,223mn in cash and deposits, and an increase of ¥1,002mn in investment securities. The increase in inventory assets is a temporary, strategic increase, taking into account the effects of increases in the cost of raw materials, production adjustments by auto manufacturers, and supply chain disruptions. Total liabilities increased ¥827mn to ¥32,368mn, which was mainly due an increase of ¥1,085mn in notes and accounts payable – trade, an increase of ¥1,022mn in current liabilities – other, an increase of ¥322mn in electronically registered obligations, and an increase of ¥284mn in electronically recorded obligations - non-operating. Total net liabilities increased ¥4,738mn to ¥35,006mn, primarily because of an increase of ¥1,795mn in foreign currency translation adjustment, an increase of ¥1,605mn in retained earnings, and an increase of ¥696mn in valuation difference on available-for-sale securities.

As a result, the equity ratio improved to 49.2% (compared to 46.4% at the end of the previous fiscal year) and interest-bearing debt decreased by ¥2,079mn YoY, lowering the net D/E ratio to 0.27 (compared to 0.43 at the end of the previous fiscal year). There are no particularly major concerns in this regard. Cash and cash equivalents at the end of the period also rose YoY and it can be said that the Company is maintaining its fiscal soundness.

Consolidated balance sheet

(¥mn)

	End of FY3/19	End of FY3/20	End of FY3/21	End of FY3/22	Change
Total assets	65,793	63,608	61,809	67,375	5,566
Current assets	28,489	27,623	26,131	30,166	4,035
Non-current assets	37,304	35,985	35,678	37,208	1,530
Total liabilities	33,298	32,319	31,541	32,368	827
Current liabilities	23,001	22,050	19,254	20,959	1,705
Non-current liabilities	10,296	10,269	12,287	11,409	-878
Net assets	32,495	31,289	30,267	35,006	4,738
Shareholders' equity	30,189	29,950	28,299	29,969	1,670
Equity ratio	47.4%	46.9%	46.4%	49.2%	2.8pt

Source: Prepared by FISCO from the Company's financial results

Consolidated Cash flow

(¥mn)

	FY3/19	FY3/20	FY3/21	FY3/22
Cash flow from operating activities	5,129	3,669	4,358	6,498
Cash flow from investing activities	-4,604	-3,606	-3,489	-3,079
Cash flow from financing activities	-845	-919	596	-2,511
Cash and cash equivalents at the end of the period	4,386	3,514	4,766	5,989

Source: Prepared by FISCO from the Company's financial results

Outlook

Forecasts increases in sales and profits in FY3/23 as production increases and cost reductions will absorb rising raw materials prices

● **FY3/23 results outlook**

In FY3/23, although auto industry demand is expected to boom, there are concerns that factors such as stagnation of the supply of parts, production adjustments by auto manufacturers due to logistics disruptions, and rising raw materials prices will have an impact on results. Accordingly, although a certain amount of recovery is anticipated, the outlook continues to remain unclear. Therefore, for the FY3/23 consolidated results, the Company is forecasting net sales to increase 8.3% YoY to ¥55,000mn, operating income to increase 2.8% to ¥2,700mn, ordinary income to decrease 8.5% to ¥2,800mn, and net income attributable to owners of parent to decrease 1.5% to ¥1,900mn. The expected foreign currency exchange rates are for a stronger yen than current real rates, with ¥115 to the U.S. dollar (compared to ¥109.90 in the previous fiscal year) and ¥130 to the euro (¥129.91). Exchange rate sensitivity (the amount that operating income is affected by a ¥1 fluctuation in an exchange rate) is approximately ¥5mn for the dollar-yen rate and ¥27mn for the euro-yen rate.

Consolidated outlook for FY3/23

(¥mn)

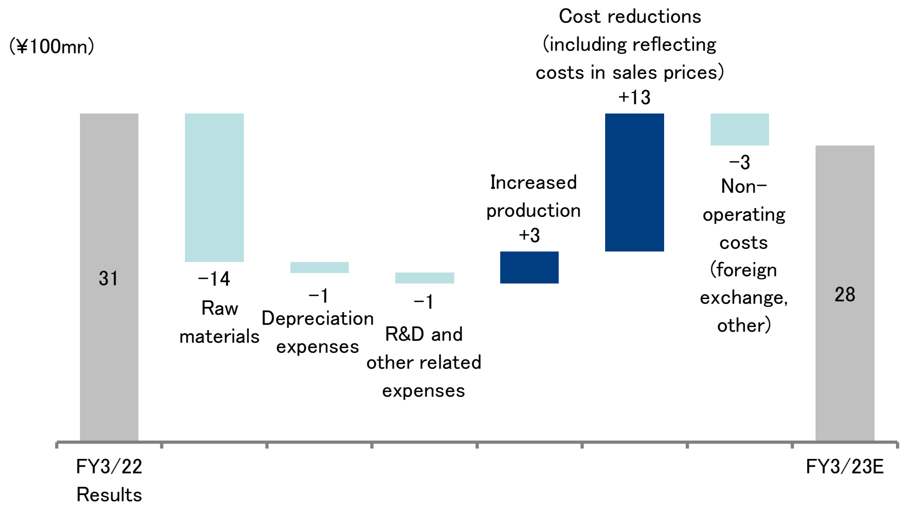
	FY3/22		FY3/23		
	Results	% of net sales	Forecast	% of net sales	YoY
Net sales	50,783	100.0%	55,000	100.0%	8.3%
Operating income (loss)	2,627	5.2%	2,700	4.9%	2.8%
Ordinary income	3,058	6.0%	2,800	5.1%	-8.5%
Net income (loss) attributable to owners of parent	1,928	3.8%	1,900	3.5%	-1.5%
Exchange rate					
US$/¥	109.90	-	115.00	-	-
Euro/¥	129.91	-	130.00	-	-

Source: Prepared by FISCO from the Company's financial results

The outlook for the global economy is more uncertain than usual due to shortages of parts such as semiconductors, rising resource prices, as well as risks such as the situation in Ukraine. However, the Company expects that auto manufacturers will have returned to normal production levels by the second half of the fiscal year, and it will continue to reduce costs and adjust sales prices to reflect increases in the prices of raw materials. In addition to this, in January 2022 the Company consolidated Normeca Asia Co., Ltd. as a subsidiary, and this is expected to realize net sales of around ¥1.8bn and an operating income margin of around 10%.

Ordinary income is forecast to decrease 8.5% YoY, mainly as a result of foreign exchange gains recorded in FY3/22. Expected increasing factors are ¥300mn from increased production, and ¥1,300mn from cost reductions (including reflecting rise of raw material costs in sales prices) while expected decreasing factors are ¥1,400mn from rising raw material prices, ¥100mn from increases in depreciation expenses, ¥100mn from increases in R&D and other related expenses, and ¥300mn from non-operating costs (including a decrease in foreign exchange gains compared to the previous fiscal year). It is anticipating capital investment to increase ¥2,100mn to ¥4,900mn. In FY3/21 and FY3/22, the amount invested was lower than usual as the installation of some equipment was pushed back due to stagnation of parts procurement at equipment manufacturers and the impact of production adjustments at auto manufacturers, but in FY3/23, the Company plans to resume investment at pre-pandemic levels. It is prioritizing DX-related investments and environmental investments that will contribute to reductions in CO_2 emissions, mainly focusing on streamlining and R&D in Japan and new and increased production overseas (China). It is also actively allocating R&D expenses to differentiating existing products and developing new products and businesses, and it will increase this spending by ¥100mn to ¥1,900mn.

Ordinary income increasing and decreasing factors (forecast)



Source: Prepared by FISCO from the Company's results briefing materials

Growth strategy

In The Next NPR 2030 long-term vision, is aiming for non-automobile engine sales to provide at least 40% of net sales in FY3/31

1. Long-term vision and 8th Medium-term Management Plan

The Company formulated The Next NPR 2030 long-term vision in order to respond to the major changes to the business environment surrounding the automobile industry, including those related to environmental contribution such as exhaust gas regulations, cost reductions, the spread of EVs, technological solutions such as CASE, and globalization. Its numerical targets for FY3/31 are net sales of ¥100bn, an operating income margin of at least 10%, for non-automobile engine sales to provide at least 40% of net sales, and a reduction of CO_2 emissions of 46% (compared to FY3/14).

In May 2021, it also formulated the 8th Medium-term Management Plan (FY3/22 to FY3/24) by backcasting from its ideal vision of the future. The plan has been positioned as a period for building a foundation for achieving the long-term vision and its targets are net sales of at least ¥54bn, an operating income margin of at least 8%, for non-automobile engine sales to provide at least 15% of net sales, and a reduction of the CO_2 emissions volume of 25% (compared to FY3/14) in FY3/24.

Numerical targets

	8th Medium-term Management Plan FY3/24	The Next NPR 2030 FY3/31
Net sales	At least ¥54bn	At least ¥100bn
Operating income margin	At least 8%	At least 10%
Percentage of net sales from non-automobile engine sales	At least 15%	At least 40%
CO_2 emissions (compared to FY3/14)	-25%	-46%

Source: Prepared by FISCO from the Company's results briefing materials

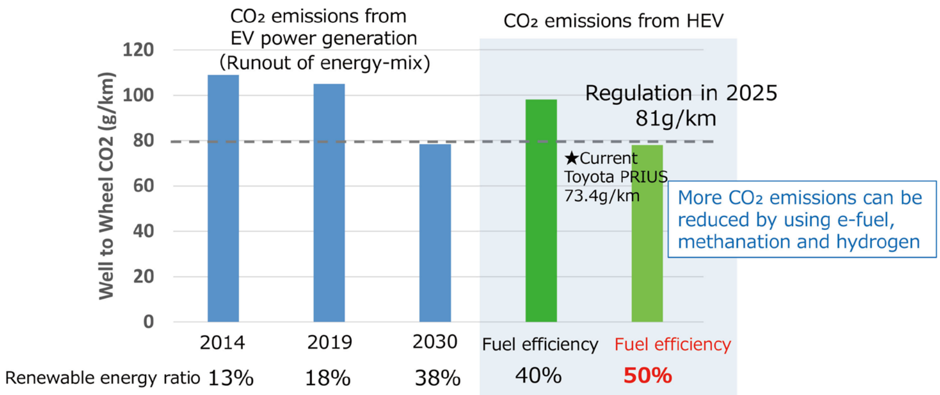
2. Market environment

In the global automobile market, demand for vehicles is forecast to grow, especially in emerging countries. However, movements such as the introduction of environmental regulations and a shift to EV are expected to accelerate in response to global warming and energy issues and a decline in the use of internal combustion engines (ICE) will prompt changes in powertrain composition.

Furthermore, progress is being made on the development of hydrogen engines and clean e-fuel engines that use renewable energy to create fuel which is expected to lead to the spread of a new generation of mobility options.

A comparison of CO_2 emissions generated well-to-wheel by EV and hybrid electric vehicles (HEV) show that a HEV equipped with a 50% fuel efficient engine based on the current stage of research and development performs competitively with an EV, so the possibility of an immediate, complete conversion to EV is forecast to be low and current engines are expected to survive and remain in developed countries. In May 2021, a Toyota Motor vehicle installed with a clean hydrogen engine participated in and completed the Super Durable Series 2021 Powered by Hankook 3rd NAPAC Fuji SUPER TEC 24-Hour Race, thereby showcasing the hydrogen engine as a new clean fuel option for the carbon-neutral era.

CO_2 emissions generated well-to-wheel by EV and HEV



Source: The Company's results briefing materials

3. Management strategy

In the 8th Medium-term Management Plan, the Company has set "Change as Chance" (finding opportunities within change) as its basic policy and its action guidelines to be "The New 5S" (Speed = speed of responding to changes; Skill = skill for planning and carrying out strategy; Science = taking decisions scientifically based on data; Spirit = enthusiasm to want to improve the organization; Safety = a safe and secure working environment and safety awareness). Additionally, the Company has set the five priority measures of (1) build an overall optimized product manufacturing system, (2) promote technical solution proposal-oriented sales by utilizing core technologies and products, (3) strengthen the development and creation of new products and businesses, (4) conduct structural reforms of people and organizations (awareness reforms), and (5) take a leap forward toward becoming a sustainable company.

To achieve the targets in the long-term vision and medium-term management plan, and taking into account automobile industry trends, the Company is focusing resources on three priority initiatives: (1) Reinforce earning capabilities in existing businesses (automobile engine business), (2) establish and cultivate new product businesses (non-automobile engine business), and (3) promote sustainability management.

(1) Reinforce earning capabilities in existing businesses (automobile engine business)

The Company plans to reinforce earning capabilities in existing businesses by contributing to engine development by customers through the provision of high-quality ICE parts adapted to environmental regulations. Specifically, it will develop products that contribute to realizing 50% fuel efficiency through differentiated technology, as well as consider methods for achieving carbon neutrality, such as e-fuel and hydrogen fuel. It will also strengthen efforts to leverage its core technologies to grow sales in markets in emerging countries. In emerging countries such as India and many African countries, the shift to EV has not manifested and the use of ICE vehicles is expected to continue growing for the foreseeable future. Therefore, the Company will aim to increase its market share in these countries, where there is still room for growth. Additionally, the electrification of large commercial vehicles is also facing many challenges and it is expected that diesel engines will continue to be used for the time being, so the Company will aim to expand its share of the market for large-scale commercial vehicles in China, where it has already successfully acquired many customers. Furthermore, even in markets where new cars tend to be EV, demand for engine maintenance is forecast to remain steady, so it will continue efforts to expand its share of the aftermarket business in North America, Central America, and Africa.

(2) Establish and cultivate new product businesses (non-automobile engine business)

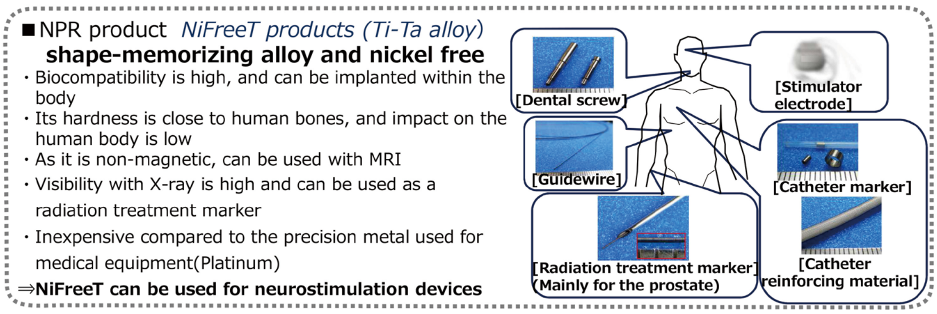
In the non-automobile engine business, the Company is aiming to steadily develop new product businesses in the medical and industrial equipment fields among others, and to use M&A and open innovation to establish business operations swiftly.

a) Medical field

Since FY3/15, the Company has been developing a business in the medical equipment field using the metal materials technology and precision processing expertise it has accumulated in its core business of manufacturing and selling auto engine parts. It is also working with influential medical device manufacturers, universities, and other partners in the medical field, both in Japan and overseas, with a focus on developing “people-friendly medical equipment” that takes the perspectives of both medical professionals and patients into account.

NiFreeT, a new medical-use material of a titanium-tantalum alloy, is highly biocompatible being nickel-free and non-magnetic. It can also be retained within the body and it is less expensive than the precious metals conventionally used in medical equipment (platinum). NiFreeT was initially developed in-house by the Company for use with piston rings as a shape-memorizing alloy, but it was then re-classified as a medical-use material because it is nickel-free and presents excellent processability. It is expected to be used in medical implants such as dental screws, guidewires, and catheter reinforcing materials, and the Company is aiming to develop products and a business swiftly. In 2022, it is estimated that sales in the medical implant market will amount to around US$4bn (approx. ¥500bn) and there is plenty of room for further market cultivation.

NiFreeT products (Ti-Ta alloy)



Source: The Company’s results briefing materials

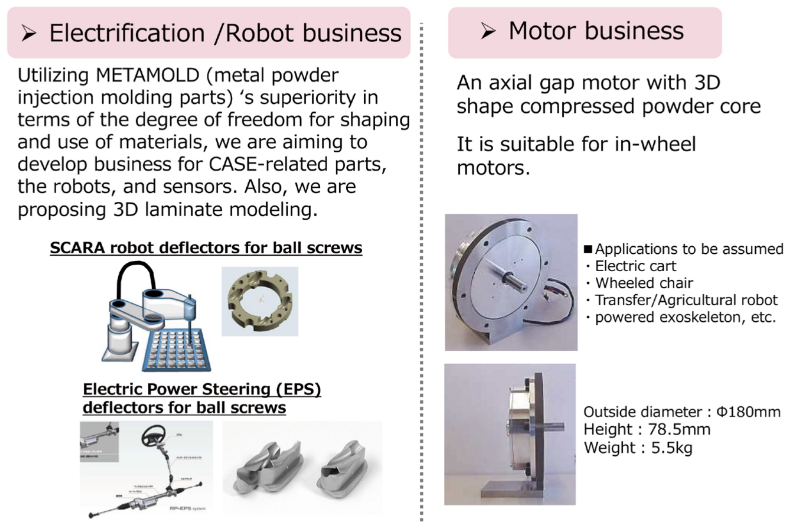
Additionally, Normeca Asia Co., Ltd., a trading company specializing in medical equipment for emergencies and disasters, was made into a consolidated subsidiary in January 2022. Normeca Asia is advocating the immediate introduction of disaster medical care in Japan and has a wealth of knowledge and experience in the disaster and emergency field as the first trading company in Japan to specialize in disaster medical care equipment. In addition to handling medical equipment for emergencies and disasters and products to help prevent the spread of infections, it also provides services such as planning for disaster medical care training drills. The Company aims to grow sales in the non-automobile engine business by realizing Group synergies through the combination of Normeca Asia's broad customer base and ability to develop and deliver solutions and the Company's core technologies, manufacturing and sales capabilities, and organizational adaptability that leverages locations in Japan and overseas.

The Company is also advancing new product development through a joint development program for implantable medical devices with Medtronic, a major global medical equipment manufacturer.

b) Industrial equipment field

In the industrial equipment field, the Company will utilize the METAMOLD production method's superiority in terms of the degree of freedom for shaping and use of materials to develop businesses in areas such as CASE-related parts, robots, and sensors. Also, its axial gap motor with 3D shape compressed powder core is perfectly suited for in-wheel motors and it is expected to be used for electric carts, wheelchairs, robot carriers, agricultural robots, and powered exoskeletons.

Establishing and cultivating industrial equipment businesses

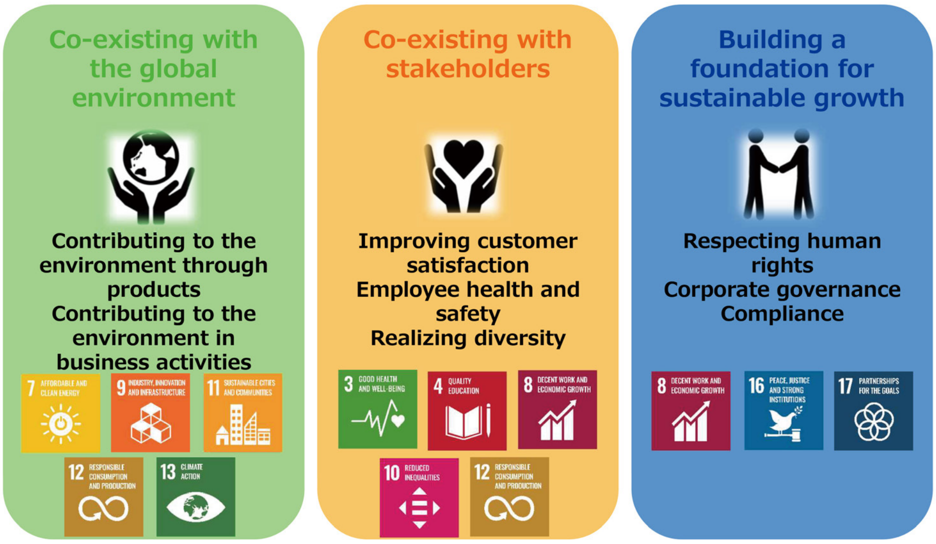


Source: The Company's results briefing materials

(3) Promote sustainability management

For its initiatives toward the SDGs as important issues that the Company will tackle as a priority from among the various issues that exist in society, it has specified co-existing with the global environment (contributing to the environment through products and in business activities), co-existing with stakeholders (improving customer satisfaction, employee safety and health, and realizing diversity), and building a foundation for sustainable growth (respecting human rights, corporate governance, and compliance), and it is conducting activities toward realizing a sustainable society.

Taking a leap forward toward becoming a sustainable company



Source: The Company's results briefing materials

Within these, the Company plans to address "contributing to the environment in business activities" by aiming to reduce CO_2 emissions by 25% (compared to FY3/14) by FY3/24, 46% by FY3/31, and to have become carbon neutral by around 2050. Initiatives to date have included the introduction of innovative production lines, the reuse of waste heat, switching lighting to LED, and the use of J-credits related to prefectural forests in Iwate Prefecture. It is also considering initiatives such as upgrading equipment to energy-saving and high-efficiency models and switching to electricity from renewable sources.

For "improving employee safety and health," the Company was certified as an Excellent Health Management Corporation 2022 (large-scale corporations section) in the Excellent Health Management Corporations Certification System initiated by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi (the third consecutive year it has received such certification since 2020). It also received a Bronze Medal in the 2022 sustainability assessment carried out by EcoVadis, a France-based international sustainability assessment body. Regarding "realizing diversity," the Company has received a Platinum Rating in the Companies Implementing Diverse Working Styles accreditation system operated by Saitama Prefecture, the prefecture in which the Company's head office is located.

As initiatives to strengthen corporate governance, the Company established a nomination and remuneration advisory committee in June 2020 and transitioned to being a company with an audit and supervisory committee in June 2021.

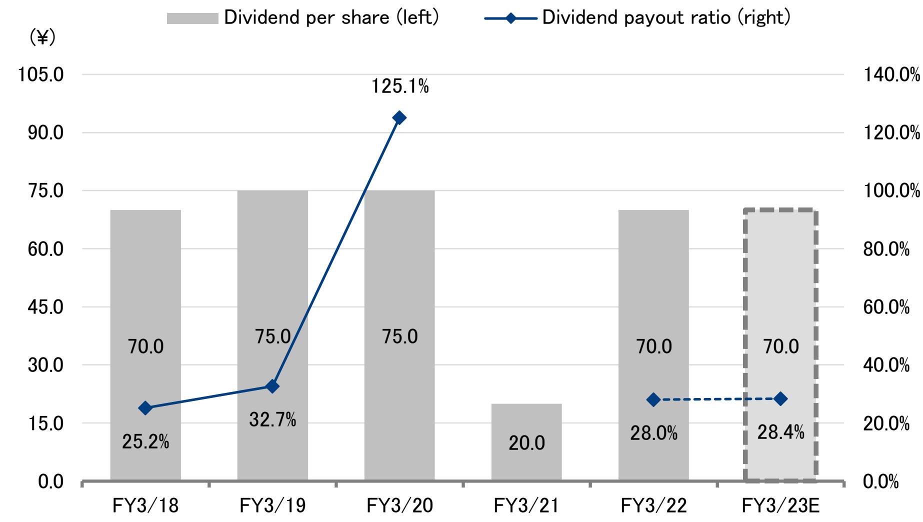
In addition, in August 2021, the Company developed cobalt-free valve seat inserts that do not use cobalt as a raw material. It previously used cobalt as a material for valve seat inserts in order to improve abrasion resistance. As background to this new product, being an essential material for batteries used in electric vehicles, cobalt's market price is soaring, and it's a resource that presents many issues including from the sustainability perspective, such as risks related to responsible mineral procurement as it is a rare metal. By developing cobalt-free valve seat inserts, the Company has been able to ensure the same level of functionality as before without having to rely on cobalt. It is working to increase sales of this product, and at the same time its policy going forward is to continue to actively conduct measures to respond to environmental, human rights, and other social issues and contribute to building a sustainable society.

Furthermore, in October 2021, the Company newly established the Sustainability Promotion Office. Previously, various measures toward realizing a sustainable environment and society were progressed centered on the CSR Promotion Committee. However, in order to further strengthen these measures, it established the Sustainability Promotion Office within the Corporate Planning Department as a specialist organization to plan and progress the execution of sustainability-related operations.

Shareholder return policy

The Company considers appropriately and stably returning profits to shareholders to be its most important management issue, and it does so after comprehensively considering factors such as results trends and business development in the future. In accordance with this basic policy, in FY3/22 it paid an annual dividend of ¥70.0 (interim dividend of ¥20.0, period-end dividend of ¥50.0), an increase of ¥50.0 YoY, resulting in a dividend payout ratio of 28.0%. For FY3/23, it plans to pay the same annual dividend of ¥70.0 (interim dividend of ¥20.0, period-end dividend of ¥50.0) with an expected dividend payout ratio of 28.4%.

Dividend per share and dividend payout ratio



Source: Prepared by FISCO from the Company's financial results

Following the restructuring of the TSE in April 2022, the Company's listing was transferred to the TSE Prime Market. However, the results of an initial evaluation of whether the Company fulfills the market's listing criteria warned that as of the effective date of the transfer (June 30, 2021), it did not fulfill the market's criteria for tradable share market capitalization. Accordingly, the Company has formulated a Plan to Meet Continued Listing Criteria for the New Market Segment. It aims to fulfill the Prime Market's listing criteria by March 2024 by raising corporate value (increasing tradable share market capitalization) through the effects produced by the steady implementation of the priority measures of the 8th Medium-term Management Plan and making results visible.

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