YAMASHIN-FILTER | 6240 (TSE Prime)

Company Report

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Strategy Advisors Inc.
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Strategy Advisors

A Global Filter Manufacturer with a High Market Share for Construction Machinery, Which Aims to Become a "Comprehensive Filter Manufacturer". The Medium-Term Management Plan (Till FY03/2028) is Driven by Re-Acceleration of Growth in the Mainstay, Construction Machinery Filters

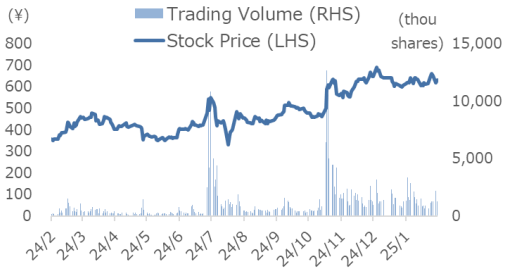
Yamashin-Filter is a filter manufacturer with a high market share for construction machinery filter industry. Sales from filters for construction machinery account for more than 80% of their total sales. The company has succeeded in developing a completely new material in its in-house development of core filter components; and by expanding into areas other than construction machinery, the company aims to become a comprehensive filter manufacturer in the medium to long term.

The company was founded by the father of the current CEO Mr. Atsuhiko Yamazaki and started out by manufacturing filter cloth for filtering sake shortly after the war, before expanding into the manufacture of vehicle filters. Later, the company abandoned automobile filters and specialized in filters for construction machinery, growing by increasing the competitiveness of those filters. After management was taken over by Mr. Atsuhiko Yamazaki, the company began full-scale in-house development of core filter components and with that development capability as a backdrop, it has come to capture a large share of the market in the field of filters for construction machinery.

The company's "corporate DNA" is "a strong commitment to being a partner to its customers, making proposals that focus on the final products and end users of the customers, even though they are a manufacturer of filter components". The company's DNA has been cultivated and strengthened based on the desire of the founding president, who focused on business with construction machinery manufacturers with whom it accepts direct transactions; and the desire of the current president, who has fully begun in-house development of core filter components.

The medium-term business plan, which ends in FY03/2028, calls for the construction machinery filter business, which is expected to see a re-accelerated growth, to drive overall performance. In parallel with the re-accelerated growth of the construction machinery filter business, the company will prepare to expand its business domain based on new materials, aiming to become a "comprehensive filter manufacturer" from FY03/2029 onwards.

Stock Price & Trading Volumes



Source: Strategy Advisors

Key Indicators

Stock Price (2/19/2025)	634
52-Week High (12/23/2024)	688
52-Week Low (8/5/2024)	331
Historical High (1/12/2018)	1,552
Historical Low (1/22/2016)	73
Number of Shares Issued (mn)	71.0
Market Capitalization (¥bn)	45.0
EV (¥bn)	39.8
Equity Ratio (FY03/24, %)	82.1
ROE (FY03/24 Actual, %)	3.7
PER (FY03/25 CoE, Times)	29.8
PBR (FY03/24 Actual, Times)	2.1
Yield (FY03/25 CoE, %)	1.9

Source: Strategy Advisors

The company's stock price fell between 2021 and mid-2023, and significantly lagged TOPIX, but the relative stock price has recovered since the second half of 2023 due to expectations of a recovery in performance.

The company manages its business based on an indicator called MAVY's (=ROIC-WACC) and is very conscious of capital costs, setting targets based on a projected balance sheet before implementing capital policies such as shareholder return measures.

In the medium-term management plan, attention is focused on the increase in ROIC, centered on the re-acceleration of growth in the construction machinery filter business; and also, the capital policy aimed at lowering WACC. We believe we can expect a rise in the stock price in recognition of the turnaround of MAVY's, which had been negative for a long time.

In the medium to long term, as the reality of the scenario of "becoming a comprehensive filter manufacturer" becomes more widely recognized, the evaluation of the company's business is likely to be reflected in the stock price through an increase in valuation.

Japanese GAAP - Consolidated

FY	Net Sales (¥ mn)	YoY (%)	Operating profit (¥ mn)	YoY (%)	Ordinary Income (¥ mn)	YoY (%)	Net Income (¥ mn)	YoY (%)	EPS (¥)	DPS (¥)
03/2021	14,587	15.1	-146	-	-135	-	751	23.4	10.7	6.0
03/2022	18,822	29.0	1,344	-	1,317	-	47	-93.7	0.7	6.0
03/2023	18,606	-1.1	1,235	-8.1	915	-30.5	645	1,270.5	9.0	6.0
03/2024	18,025	-3.1	1,411	14.3	1,416	54.7	786	21.9	11.0	6.0
03/2025 CoE	19,780	9.7	2,454	73.9	2,498	76.5	1,511	92.1	21.3	12.0

Source: Strategy Advisors. Based on Company Data.

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Executive Summary

A Filter Manufacturer with Large Market Share in Construction Machinery

Yamashin-Filter is a filter manufacturer that mainly produces filters for the construction machinery. By doing business directly with major construction machinery manufacturers in Japan, the US and Europe, the company has been increasing the number of filters installed on construction machinery and has a high share of the global market in the field of construction machinery filters. The company also aims to become a comprehensive filter manufacturer by expanding its business area based on new materials it has developed and it also handles air filters used in air conditioning, etc.

President Yamazaki's View of the Origins of Yamashin-Filter

The company's business began with the manufacture of filter cloth for filtering sake shortly after the war. Filter cloth is like a filter and the company later entered the vehicle filter market, but grew by abandoning automobile filters and specializing in filters for construction machinery. Mr. Atsuhiko Yamazaki, the son of the founder and current CEO, joined the company in 1982 and became CEO in 1990, taking over management from the founder. Under President Yamazaki, the company deepened its relationship with construction machinery manufacturers by fully developing its own filter media, a core component that competitors do not do. After going public in 2014, the company aimed to expand beyond construction machinery, developing completely new material through its own development of filter media in 2017 and then launching an air filter business by acquiring AQC Corporation in 2019, moving toward becoming a comprehensive filter manufacturer.

The company's "corporate DNA" is "a strong commitment to being a partner to its customers, making proposals that focus on the final product and end user, even as a manufacturer of filter components". The strong desire of the founding president was sublimated into the company's DNA by concentrating its business on construction machinery manufacturers with which it accepts direct transactions. Then, under the leadership of the current president, the company came to develop the core components of filters in-house and as the company's competitive advantage was honed, it can be said that the company's corporate DNA has been further cultivated and strengthened.

Yamashin-Filter's Business Strategy from the Perspective of Porter's Positioning Theory

Looking back at the company's past developments in filters for construction machinery, the factors that led to its success were the concentration of management resources by abandoning automobile filters and focusing on construction machinery and the in-house development of core components that other companies do not carry out. Based on Michael Porter's positioning theory, it can be said that by adopting both a focus strategy and a differentiation strategy, the company has gained a large share of the construction machinery filter market.

Difficulty in Imitation that Interact with Each Other

What makes the company's business difficult to imitate is its "development capabilities, which allow it to manufacture even the core components of filters for construction machinery" and "strong relationships with client companies, backed by its ability to make proposals". These two factors interact with each other to form a virtuous cycle, further enhancing the company's competitive advantage.

Earnings Trends

The company was listed in 2014, and now sales for FY03/2024 were 1.7 times higher and operating profit was 2.0 times higher. Sales have expanded in stages every few years. The operating profit margin reached the 14% range in the latter half of the 2010s, but the company posted an operating loss in FY03/2021 due to the impact of COVID-19 and has fluctuated between 6% and 7% since FY03/2022. In the most recent FY03/2024, the company reversed its initial plan numbers, which had forecasted an operating loss but ended up with increased profits due to an upturn in its construction machinery filter business.

Medium-Term Plan: Re-Accelerate Growth in Construction Machinery Filters and Prepare to Become a "Comprehensive Filter Manufacturer"

The current medium-term management plan, which was announced in November 2024 and will end in FY03/2028, calls for the construction machinery filter business, which is expected to see a re-accelerated growth, to drive overall performance.

In parallel with the re-accelerated growth of construction machinery filters, the company will continue to prepare for its goal of becoming a comprehensive filter manufacturer from FY03/2029 onwards by expanding its business area based on new materials. The capital investment required to expand its business area was completed in the early 2020's.

Stock Price Outlook: Phase 1 to Phase 3

In the latter half of the 2010's, the stock price rose significantly due to expectations for the launch of a new filter business using a new material developed in 2017. After that, the company's stock price continued to stagnate due to the impact of COVID-19 and other factors. After hitting bottom in October 2023, expectations of a recovery in business performance grew and the company's stock price outperformed TOPIX and other similar companies' stocks. This trend continued in FY03/2025 and the company's stock price rose significantly compared to others, but it still has not reached the stock price level of 2020.

If the "first phase" there is rise in stock price due to anticipation of short-term performance from the second half of 2023, then the "second phase" will look at performance during the medium-term management plan period, which will focus on the re-acceleration of growth in the construction machinery filter business.

The company manages its business based on an indicator called MAVY's (=ROIC-WACC), and is extremely conscious of capital costs, making it a rare company that sets targets based on a projected balance sheet before planning capital policies, including shareholder return measures.

In the "second phase", the company plans to improve ROIC, primarily by re-accelerating the growth of the construction machinery filter business, as well as improve WACC through capital policies. If MAVY's turns positive, the stock price will likely be reevaluated.

The "third phase" will involve looking at scenarios aimed at "becoming a comprehensive filter manufacturer" from FY03/2029 onwards. The focus of the "third phase" will be on the progress of business performance in the air filter business, which was a new business in 2019, during the medium-term management period, and whether there are any moves that will lead to new businesses. When the realization of the scenario of "becoming a comprehensive filter manufacturer" in the medium to long term becomes widespread, the evaluation of the company is likely to be reflected in the stock price through an increase in valuation.

1. A Filter Manufacturer with a Large Market Share in Construction Machinery

A Filter Manufacturer with a Large Market Share in Construction Machinery

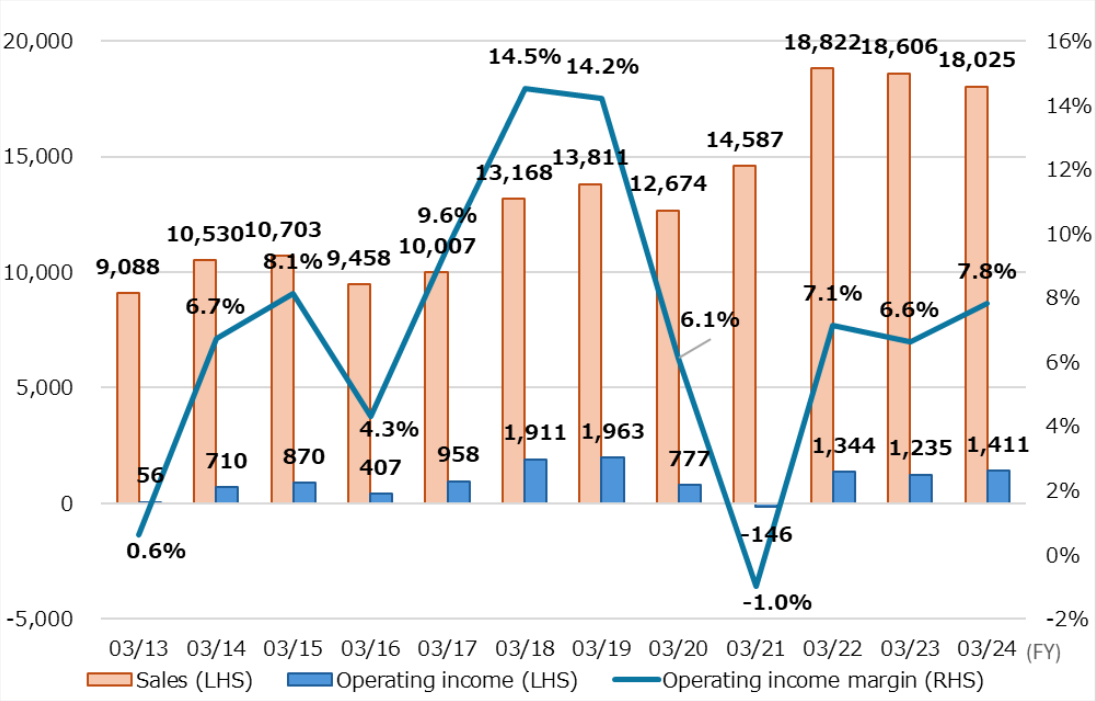
Yamashin-Filter (hereinafter referred to as the Company) is a filter manufacturer with a high market share for construction machinery.

A filter is a device used to filter solids, separating them from liquids or gases that contain them. They are used in a variety of situations, including industrial applications. One type of filter is the oil filter, which removes sludge and debris from various types of oil. Oil filters are used in vehicles with internal combustion engines, such as automobiles and gas turbines used in jet planes, but they are also used in hydraulic machines that are driven by hydraulic pressure. Hydraulic machines include construction machines with hydraulic circuits.

The company's original business was sewing and processing canvas, which was started by the father of the current CEO shortly after the World War II, but as it began to handle filter fabric manufacturing, it began to manufacture vehicle filters. By abandoning automobile filters and specializing in filters for construction machinery, the company has grown by increasing its competitiveness. Under the current CEO, the company began to fully develop its own filter media, which competitors did not do, and this led to an increase in the number of filters being installed in construction machinery, leading to the company taking a large share of the market in the construction machinery filter field.

When the company was listed on the second section of the Tokyo Stock Exchange in October 2014, it had sales of ¥10.53 billion and operating profit of ¥710 million (actual results for FY03/2014). Since then, over the 10 years up to FY03/2024, sales have increased 1.7 times and operating profit has increased 2.0 times. Sales have fluctuated depending on the period, but from FY03/2014 to FY03/2017, it fluctuated around ¥10 billion. But since FY03/2018, demand was driven for construction machinery in China, which activated public investment to support the economy and sales have been close to ¥13 billion, finally, since FY03/2022, when demand for construction machinery increased worldwide during the recovery phase from COVID19, it has fluctuated but moved to over ¥18 billion. The operating profit margin on sales has fluctuated widely, rising to the 14% range in FY03/2018 and FY03/2019, but operating losses occurred in FY03/2021 due to the impact of the global spread of COVID19 and has moved in the 6-7% range since FY03/2022.

Figure 1. Trends in Sales and Operating Profits for Yamashin-Filter



Source: Strategy Advisors. Based on Company Data.

2 Business Segments, But Construction Machinery Filters are the Main Focus

Currently, the company's business consists of two segments: the Construction Machinery Filter Business and the Air Filter Business. The highly competitive Construction Machinery Filter Business continues to expand, accounting for approximately 85% of total sales. Sales in the Air Filter Business remain flat. In addition, in relation to COVID-19, the company launched the Healthcare Business by starting sales of masks using the company's filter technology, but this business was not continued and has disappeared as a segment since FY03/2023 (the mask-related business is included in the construction machinery filters business).

Figure 2. Sales and Operating Profit by Segment

(¥ mn)

FY	Sales	By Segment					
		Construction filter	Sales composition	Air filters	Sales composition	Healthcare	Sales composition
03/21	14,587	10,970	75.2%	2,610	17.9%	1,010	6.9%
03/22	18,822	15,593	82.8%	2,577	13.7%	652	3.5%
03/23	18,606	15,946	85.7%	2,660	14.3%	–	–
03/24	18,025	15,383	85.3%	2,642	14.7%	–	–
03/25 Q1-Q3	14,945	13,032	87.2%	1,912	12.8%	–	–

FY	Operating Profit	By Segment						
		Construction filter	Profit Margin	Air filters	Profit Margin	Healthcare	Profit Margin	Adjustment
03/21	-146	1,290	11.8%	124	4.7%	-150	-14.9%	-1,409
03/22	1,344	3,116	20.0%	70	2.7%	-330	-50.6%	-1,512
03/23	1,235	1,150	7.2%	85	3.2%	–	–	–
03/24	1,411	1,320	8.6%	91	3.5%	–	–	–
03/25 Q1-Q3	2,051	2,001	15.4%	49	2.6%	–	–	–

Source: Strategy Advisors. Based on Company Data.

The Company's Management Philosophy - "*Rokajinitsukafuru*"

Since its establishment in 1956, the company has adopted the management philosophy of "*Rokajinitsukafuru*", which expresses its commitment to contributing to society through the filter business.

The company's vision for the future is to become a "true comprehensive filter manufacturer" by adhering to the philosophy "*Rokajinitsukafuru*". The company aims to be a company that contributes to solving social issues through manufacturing, expands into various fields such as construction machinery, healthcare and air filters, and makes society happier with the wisdom and technology of filtration.

Shareholder Structure: Large Shareholding by the Founding Family

The company was listed on the Second Section of the Tokyo Stock Exchange (TSE) in October 2014 and moved to the First Section in March 2016 (following a review of the TSE's market classification in April 2022, it is now on TSE Prime). As of the end of July 2014, just before the company was listed on the Second Section of the TSE, Yamabiko Holdings, Mr. Atsuhiko Yamazaki 's asset management company, held 50.21% of the stock, Mr. Atsuhiko Yamazaki held 11.88% and Mr. Hiroaki Yamazaki (Mr. Atsuhiko Yamazaki 's eldest son and current Executive Vice President) and Mr. Takaaki Yamazaki (Mr. Atsuhiko Yamazaki 's second son and current Director) each held 7.50%. Although some venture capital firms held shares, the shareholder structure was centered around the founding family.

By 2024, Asama Holdings had 33.87%, Mr. Hiroaki Yamazaki had 3.07%, Mr. Takaaki Yamazaki had 2.93%, Minato Holdings had 2.53%, Mr. Atsuhiko Yamazaki had 1.99%, Keyaki Holdings and Shirakaba Holdings each had 1.26% (after taking into account treasury stock). The total of these was 46.91%. Asama Holdings is Mr. Hiroaki Yamazaki's asset management company and in FY03/2025, Yamabiko Holdings' holdings were transferred to Asama Holdings. The transfer of shares within the founding family is progressing.

In addition, the ownership ratio by category as of the end of FY03/2024 (after taking into account treasury stock) was 40.88% for other corporations, 39.21% for individuals and others, 11.78% for financial institutions and 6.24 % for foreign corporations, etc.

Figure 3. Shareholder Composition of Yamashin-Filter

Classification	Shareholding Ratio		
	End of March 2024	(Excluding Treasury Stock)	End of Q2 FY03/25 (Excluding Treasury Stock)
Individuals And Others	39.83%	39.21%	-
Foreign Corporations, etc.	6.18%	6.24%	-
Financial Institutions	11.66%	11.78%	-
Other Corporations	40.47%	40.88%	-
Government And Local Publics	0.00%	0.00%	-
Other (Financial Instruments Firms)	1.86%	1.88%	-
Detailed Breakdown			
Yamabiko Holdings Co., Ltd.	16.90%	17.07%	0.00%
Asama Holdings Co., Ltd.	16.82%	16.99%	33.87%
Mr. Hiroaki Yamazaki	2.96%	2.99%	3.07%
Mr. Takaaki Yamazaki	2.88%	2.91%	2.93%
Minato Holdings Co., Ltd.	2.52%	2.54%	2.53%
Mr. Atsuhiko Yamazaki	1.81%	1.83%	1.99%
Keyaki Holdings Co., Ltd.	1.26%	1.27%	1.26%
Shirakaba Holdings Co., Ltd.	1.26%	1.27%	1.26%

Note: The ownership ratio is calculated using the number of shares issued minus the number of treasury shares. Fractional shares are included in "Other (Financial Instruments Business Operators)"

Source: Strategy Advisors. Based on Company Data.

2. The History of Yamashin-Filter as Seen by President Atsuhiko Yamazaki

1) Founded by Mr. Masahiko Yamazaki, Father of the Current CEO

The Company's Original Business was Sewing and Processing Canvas. Started by the Father of the Current CEO Shortly after WWII

The company was founded by Mr. Masahiko Yamazaki, father of the current CEO, Mr. Atsuhiko Yamazaki.

Mr. Masahiko Yamazaki was born in Kashima City, Saga Prefecture. As his family was poor, he got a job at Yawata Iron & Steel Co., Ltd. after graduating from elementary school to support his family. He is the type of person that once he decided on something, he would see it through. So, when he dreamed of becoming a judge, he quit Yawata Steel and started working at a law firm in Kokura, Fukuoka Prefecture while preparing for university entrance exams in Tokyo.

He then entered the Faculty of Law at Chuo University, but during the World War II, he was drafted into the student army and sent to China.

After the WWⅡ, Mr. Masahiko Yamazaki returned to Japan and stayed in Saga Prefecture for a while but soon moved to Tokyo. One of the jobs he struggled with was

to make a living was sewing canvas that he had purchased. It was entirely by chance that he started a canvas business.

At that time, a sake brewery requested that the company make filter cloths for filtering sake. In response to this request, the company began to manufacture filter cloths for use in the production of sake and miso. Filter cloths are used when squeezing a mixture of solids and liquids to extract only the liquid. So, the filter cloths for filtering's sake can be said to be the first filters the company manufactured.

Entry into the Vehicle Filter Market and Establishment of Yamashin Industry Inc.

After a short time, Mr. Masahiko Yamazaki began to deal with vehicle filters, anticipating that automobiles would become more common as the country recovered from the WWII. At first, the company manufactured filters as subcontractors for a filter manufacturer, but with the outbreak of the Korean War in 1950, the company's vehicle filters were adopted by GHQ, which led to an expansion of business. In 1956, Yamashin Industry Inc., which is the current company, was established.

Decided To Abandon Automobile Filters, which Accounted for 80% of Sales, and Specialize in Construction Machinery Filters

The automobile filter market continued to boom, and about 10 years after the company was founded, automobile filters accounted for approximately 80% of the company's total sales (the remaining 20% was for construction machinery).

However, from the viewpoint of automobile manufacturers, automobile filters are a sub-subcontracted job. No matter how many proposals the company made to improve the functions, the subcontractor manufacturer that placed the order would say, "You don't need to make any unnecessary proposals". To begin with, the company's profits from automobile filters were thin and they were unable to make filters that they themselves consider to be good. Having come to this realization, Mr. Masahiko Yamazaki made the management decision to abandon automobile work, which accounted for approximately 80% of total sales and to specialize in construction machinery filters, which would allow them to do business directly with construction machinery manufacturers.

Continuing To Make Direct Proposals to Construction Machinery Manufacturers to Strengthen Proposal and Development Capabilities

Specializing in sales to construction machinery manufacturers resulted in a sharp drop in sales, but it seems that many employees who could not keep up with Mr. Masahiko Yamazaki's thinking left the company.

Mr. Atsuhiko Yamazaki describes his father, Mr. Masahiko Yamazaki, as a person who, "once he made a decision, as someone who would stubbornly see it through". By specializing in filters for construction machinery and continuing to make proposals directly to construction machinery manufacturers, Mr. Masahiko Yamazaki honed his proposal capabilities and the development capabilities that underpinned them. As a result, the company's filters were increasingly adopted and its business began to expand again.

After Yamashin Industry Inc. was established, the factory was located in Ota ward, Tokyo (first in Hon-Kamata, Ota ward and later in Omori-Minami, Ota ward). However, as the business expanded, the Saga Factory was opened in Miyaki District, Saga Prefecture in 1975 and since then, the Saga Factory has been the company's production base in Japan. Saga is the hometown of Mr. Masahiko Yamazaki. Miyaki District, Saga Prefecture is a distance from where Mr. Masahiko Yamazaki was born

and raised, but local friends and others cooperated with the opening of the Saga Factory.

2) Succession Of Management to Current CEO, Mr. Atsuhiko Yamazaki

The Current CEO's Background

Current CEO and President, Mr. Atsuhiko Yamazaki was born in 1953 and is the eldest of three siblings. When Mr. Atsuhiko Yamazaki was a high school student, student activism was at its height when the Yasuda Auditorium incident at the University of Tokyo took place in 1969. This was a time when Mr. Sho Shibata's novel "*Saredo Wareraga Hibi*", which won the Akutagawa Prize and depicts the lives of young people during the height of the student movement, was called the "bible for young people". Mr. Atsuhiko Yamazaki was also influenced by Mr. Sho Shibata and enrolled in the School of Letters, Arts and Sciences at Waseda University with the goal of becoming a writer.

However, his mother told him, "The eldest son should take over the family business", so he re-enrolled at the University of Tokyo. At the Faculty of Agriculture, he specialized in paper pulp, the material used in filters at the time and it was from this time that he began to think about taking over the company.

Although he studied filter materials at university, he had no idea about the machines that process and manufacture filters. So, after graduating from university, he joined Komatsu Ltd. (6301 TSE Prime) in 1980. At Komatsu, he learned production management at the production base in Awazu, Ishikawa Prefecture and the relationships he built there would have a major impact on the company's later business development. After working at Komatsu for two years, Mr. Atsuhiko Yamazaki joined the company in 1982 as director and head of the corporate planning department.

The Sudden Appreciation of the Yen Led to the Relocation of the Production Base Overseas

The rapid appreciation of the yen, triggered by the Plaza Accord in 1985, three years after Mr. Atsuhiko Yamazaki joined the company, caused difficulties for manufacturers producing in Japan. Like many other manufacturers, the company decided to move its production base overseas to reduce production costs, and in 1989, it established YAMASHIN CEBU FILTER MANUFACTURING CORP. on Cebu Island in the Philippines and opened the Cebu Factory. The Cebu Factory continues to operate as a major overseas production base even today.

Succession Of Management to the Current President and CEO

Mr. Atsuhiko Yamazaki became the company's president and representative director in 1990, taking over management from his father.

After the management succession was complete, the company accelerated its overseas expansion. It established local subsidiaries in Chicago, USA in 1995, Rotterdam, Netherlands in 1996 (later integrated into the sales base in Brussels, Belgium established in 2010), Ayutthaya, Thailand in 2001 and Shanghai, China in 2007, and promoted sales expansion to construction machinery manufacturers around the world. In 2002, it also built a factory in Ayutthaya, Thailand, expanding production capacity. This led to sales expansion in response to demand for construction machinery in emerging countries since the 2000's.

In-House Development of Filter Media

The filter media used in construction machinery filters are made from paper and initially the company procured it from a filter paper manufacturer. However, since the products purchased were not good enough to meet the demand for small-lot, wide-variety construction machinery filters, the company was conscious of developing its own filter media from an early stage.

In fact, filters using glass fiber filter media, which were later adopted throughout the construction machinery industry, were developed as early as 1976. Initially, adoption in construction machinery was slow, but as energy-saving and mechatronic construction machinery became a requirement, glass fiber filters, which have low oil leakage and are good at picking up dust, attracted attention; and in 2000, filters using glass fiber filter media were commercialized and began to be adopted by construction machinery manufacturers. This was the catalyst that led to the company's current competitive advantage.

The Challenge of Going Public

As the company expanded, it began aiming to go public around 2003. Mr. Atsuhiko Yamazaki said that he made preparations with an eye on not only expanding business performance but also running the business as an organization. In 2005, the company changed its name from Yamashin Industry to Yamashin-Filter, the current name, in order to clarify its business.

However, like many other companies, the company was hit hard by the collapse of Lehman Brothers in 2008, which saw its sales revenue halved and its IPO was postponed.

After the collapse of Lehman Brothers, the company once again began preparations for an IPO, aiming to go public in the early 2010's. However, the IPO was postponed again due to the chaos that ensued in Japan following the Great East Japan Earthquake in 2011, as well as the fact that the company's factory was damaged in the major floods in Ayutthaya, Thailand, that autumn, forcing it to withdraw from the market as a production base.

The company has consistently aimed for an IPO, although it has had to postpone it several times. During this period, it has made progress in improving its management system.

3) After Listing in 2014

Listed in 2014

The company was eventually listed on the Second Section of the Tokyo Stock Exchange in October 2014 and then transferred to the First Section of the Tokyo Stock Exchange in March 2016.

The Challenge to Become a Comprehensive Filter Manufacturer

The company's medium to long-term goal, with construction machinery filters accounting for the majority of its sales, was to "become a comprehensive filter manufacturer". Shortly after going public, the company gained a powerful tool to become a comprehensive filter manufacturer.

(1): New Material

One of the sources of the company's competitiveness is that it develops its own filter media, which determines the performance of filters for the construction machinery, and in the process, the company has long been researching the materials themselves,

"YAMASHIN Nano Filter™"

which resulted in the development of a new material, "YAMASHIN Nano Filter™", in 2017.

The "YAMASHIN Nano Filter™" not only enhances the competitiveness of the company's construction machinery filters, but due to the characteristics of its materials, it is a groundbreaking product that can be used in a wide range of fields. For the company, whose sales revenue comes from construction machinery filters, expectations were high for the product to broaden the scope of its business operations.

(2): Acquiring AQC as a Wholly Owned Subsidiary

With the YAMASHIN Nano Filter™ in hand, the company needed to secure the production technology and production capacity for nano filters in order to achieve its goal of becoming a comprehensive filter manufacturer. To that end, in 2019, the company acquired 100% ownership of AQC, a company that handles air filters, a field adjacent to construction machinery filters.

Since Covid-19 Began in 2020, it Has Been a Time of Patience

However, the global spread of COVID-19 in 2020 and afterwards derailed the company's plans. Although the decline in demand for construction machinery recovered in a relatively short time, profitability declined due to rising raw material and transportation costs. Furthermore, sales of masks, which began in response to the spread of COVID-19, did not last long, resulting in impairment losses. As will be described later, the company manages its performance using an indicator called MAVY's, but since FY03/2020, MAVY's has continued to trend negatively.

The Current Medium-Term Business Plan is Laying the Foundations for a Renewed Challenge to Achieve the Goal of "Becoming a Comprehensive Filter Manufacturer"

It was only in FY03/2025 that the company became confident that its performance recovery would progress in earnest. The medium-term management plan, which was announced in November 2024 and will end in FY03/2028, depicts a scenario in which the performance recovery of the company's main business, the filter business for construction machinery, will lead the way. But at the same time, it clearly states that the company's vision for FY03/2029 and beyond is to be "the one and only comprehensive filter manufacturer that sets the next global standard". This can be seen as a preparatory period for the company to re-challenge its goal of "becoming a comprehensive filter manufacturer", which it set out in the latter half of the 2010's.

4) Company DNA

Company DNA

Every company has DNA. A company's DNA is the unique values and management philosophy that are rooted in the organization and all employees, and they are often the source of a company's competitiveness. A company begins to grow in earnest when a founder starts a business with passion and its products and services are widely accepted by the public. As the company grows, the founder's passion is thought to evolve into the company's DNA.

There are also cases where a succession of management takes place, such as a change in management, which evolves the founding philosophy or instills a new corporate culture. A change in management can be a major opportunity for a company. In any case, creating a business strategy that utilizes the company's DNA and putting it into practice is thought to increase the probability of success. In the case

of the company, this is the case with Mr. Atsuhiko Yamazaki, who became president and CEO in 1990.

Core competence (the core capabilities of a company) is the result of resources that are difficult to imitate and the major factor that forms it is thought to be the company's DNA. Just as people can win by competing in their areas of expertise, the formula for success for companies is to expand their business in areas that are rooted in their DNA.

Yamashin-Filter's DNA is "a Strong Commitment to Being a Partner to its Customers, Even as a Component Manufacturer"

Given the company's origins, it can be said that its corporate DNA is "a strong commitment to being a partner to its customers, making proposals that take into account the customer's final products and end users, even as it is a manufacturer of filter components".

There were two major turning points in the company's history. One of them was when the first president, Mr. Masahiko Yamazaki, abandoned sub-subcontract work for automobiles, which accounted for about 80% of the company's total sales, and turned to specializing in filters for the construction machinery, which allowed direct transactions with construction machinery manufacturers. Behind this business decision was a strong desire to "make filters that are the best for both the end user and the manufacturer" and, to achieve this, to "collaborate with the staff of end user companies at the manufacture's production site". At the time, concentrating business on construction machinery manufacturers that accepted direct transactions, which only accounted for about 20% of sales, was a big gamble; but as sales of construction machinery filters increased and the company got on track, the founder's strong desire became sublimated into the company's DNA.

Another turning point was the in-house development of filter media, a core component, which began in earnest after Mr. Atsuhiko Yamazaki became president. This was a move to meet the demand of client companies that was gained through collaboration at the production site. As the company is the only filter manufacturer that thoroughly develops materials, it can be said that this has solidified the company's current competitive advantage.

Strategy Advisors believes that a "strong commitment to being a partner to client companies" is one of the types of DNA that successful manufacturers share, and in the case of Yamashin-Filter, the corporate DNA that evolved from the aspirations of the first president has been further cultivated and strengthened by the thorough commitment to technology brought about by the second-generation president.

3. Yamashin-Filter's Business Strategy

1) Approach from Michael Porter's Positioning Theory

Yamashin-Filter Focuses on Focus

Michael Porter argues that in order to succeed in an industry, it is necessary to take a clear position. In positioning theory, there are three basic strategies for taking a specific position and building a competitive advantage: 1) cost leadership strategy, 2) focus strategy and 3) differentiation strategy, and it is considered essential to steer

and Differentiation Strategies

toward one of them. It can be said that the company has achieved a high global presence in construction machinery filters because it focused on a 2) focus strategy and 3) differentiation strategy.

A Focus Strategy to Abandon Automobile Filters & Focus on Construction Machinery Filters

Focus strategy is a strategy that concentrates management resources in a narrow, specific market (customer segment, region, specific product, etc.) to gain a competitive advantage. In order to gain a competitive advantage, it is essential to make choices different from competitors, that is, to make trade-offs and take risks.

In the past, the company made the bold decision to stop handling automobile filters, which accounted for 80% of its sales and focused its business on construction machinery filters, which accounted for only 20% of its sales. It can be said that concentrating management resources on construction machinery filters is one of the reasons why the company has come to hold a large global share of the construction machinery filters market.

Realizing a High Market Share in Construction Machinery Filters through the Differentiation Strategy of In-House Production of Core Parts

A differentiation strategy is a strategy that aims at a wide range of targets, but rather than offering low cost, it is a strategy that gives an advantage over competitors by providing unique added value that customers recognize. It can also be said to be a strategy that provides value that other companies do not offer and that customers are willing to pay for.

By concentrating management resources on filters for construction machinery, it became essential for the company to further increase the value it provided to its customers. In order to provide the best filters for the construction machinery products of its customers, the company began to develop its own filter media, a core component that other companies had previously sourced. This not only increased customer satisfaction but also enabled the company to gain a major differentiating factor from its competitors. In this way, the company's success in construction machinery filters can be attributed to the successful combination of a focus strategy and a differentiation strategy.

2) Resource-Based View (RBV) Approach

Core Competence in Filters for Construction Machinery is "the Ability to Propose Solutions to Make the Best Products for Customers, Backed by Development Capabilities"

In contrast to Porter's positioning theory, there is an approach called the "resource-based view (RBV)" that focuses on a company's management resources. Within the RBV approach, some emphasize core competence (a company's core ability that provides value that is unique to the company and cannot be imitated by other companies), while others emphasize capabilities (organizational capabilities that span the entire value chain).

In the case of the company's construction machinery filters, in which it holds a large market share, its core competency is "the ability to make proposals to optimize customers' products, backed by the development capabilities that enable it to manufacture even the core components of construction machinery filters in-house", and its capability is "an in-house integrated system from development to sales".

Jay Barney, a leading authority on RBV, discusses both core competencies and capabilities as resources in a broad sense and advocates VRIO as a framework for

checking the strength of a company's resources. Barney lists "Value", "Rarity", "Inimitability" and "Organization" as evaluation criteria for the possibility of effectively utilizing a company's resources. VRIO is an acronym for these four evaluation criteria, and Barney believes that resources that are particularly "inimitable" and backed by "organization" contribute to competitive advantage.

3) Two Mutually Interacting Difficulties in Imitation of Yamashin-Filter

Whether a product is difficult to imitate is evaluated based on whether it is impossible to imitate in the first place and whether attempting to imitate it would require enormous costs. The company has become highly competitive in the field of filters for construction machinery because of two factors that make it difficult to imitate: (1) the development capabilities to in-house manufacture even the core components of filters for construction machinery and (2) strong relationships with customer companies backed by the company's ability to make proposals.

As written in the section 2. History of Yamashin-Filter from President Atsuhiko Yamazaki's perspective, 2) Management succession to current President and Representative Director Atsuhiko Yamazaki," a typical example of Yamashin-Filter's development capability of in-house production of even core components of filters for construction machinery is that filters using filter media made of glass fiber developed by the company have become a standard in the entire construction machinery industry. This is an example of the company's ability to develop even the core components of construction equipment filters in-house. Other filter manufacturers still rely on purchasing core components and even if they were to try to develop similar capabilities now, they would still have an unassailable time advantage.

Furthermore, the company has completed the development of a new nano-filter material, "YAMASHIN Nano Filter™", which is a potential next-generation core component to replace glass fiber and is working tirelessly to further strengthen its leading advantage in the construction machinery filter business, based on its difficulty to imitate. In addition, this new material is expected to be implemented in various fields other than construction machinery filters and the company's development capabilities, which covers even materials, are the foundation for realizing the company's dream of becoming a "comprehensive filter manufacturer" (for more details on nano-filters, see "6. New Material "YAMASHIN Nano Filter™"").

(2) The strong relationships with customer companies, backed by the proposal capabilities of the company, can also be seen in the awards it has received from construction machinery manufacturers. A recent example is the 2024 Supplier Excellence Award from Caterpillar. This award is the highest honor given to the top 4% of Caterpillar's approximately 12,000 suppliers and is in recognition of their contributions to the manufacturing activities of Caterpillar's products.

(1) and (2) interact with each other. The company's development capabilities as a base (1) allow it to better propose products to its client companies and as more products are adopted and put to practical use, backed by these proposal capabilities, the company's client companies trust it more and (2) strengthens its relationships with its client companies. Based on these strengthened relationships, the company can

further develop its products based on the trends in customer demand, which strengthens its development capabilities (1). This virtuous cycle is the source of the company's competitive advantage in the area of filters for the construction machinery. Strategy Advisors believes that it is now difficult for other filter manufacturers to build such a virtuous cycle.

The details of how difficult it is to imitate each of these products will be described in section "4. Construction machinery filter business 3) Three sources of competitiveness in construction machinery filters".

4. Construction Machinery Filter Business

1) 3 Types of Filters Handled in The Construction Machinery Filter Business:

The construction machinery filter business is the company's core business, which involves the development, manufacture and sale of hydraulic filters for construction machinery (hereinafter referred to as "construction machinery filters"), hydraulic filters for industrial machinery (hereinafter referred to as "industrial filters") and process filters.

Filters for construction machinery are filters used to filter hydraulic oil in the hydraulic circuits that are essential for driving construction machinery, diesel oil as fuel and lubricating oil required to drive the engine. They are installed on all types of construction machinery.

Industrial filters are filters used to filter hydraulic oil and lubricating oil in hydraulic units used in a variety of industries. The company's industrial filters are used in industrial machinery equipped with hydraulic units, such as machine tools, refrigeration compressors, agricultural machinery, ships, railroad cars, aircraft, and helicopters. Customers are the manufacturers of these industrial machines.

Process filters are filters used for filtration and separation in the manufacturing process of customers' products. They are used in industries such as electronic parts, precision parts, liquid crystal displays and food. They specialize in fields that require finer filtration, such as precision cleaning of electronic parts and nano-level classification related to capacitors and films (the process of separating the target objects).

For now, we will focus on construction machinery filters and provide an overview of the construction machinery filter business.

2) Mainstay Filters for Construction Machinery

Hydraulic Excavators Make Up a Large Portion of

There are a wide variety of types of construction machinery depending on the purpose, work type and work location. According to the Japan Construction Machinery Manufacturers Association, an industry group for the construction machinery industry,

the Construction Machinery Market

the largest market size in terms of production value is excavation machinery used in general civil engineering, and hydraulic excavators account for a large proportion of this.

For our purposes here, we will use a hydraulic excavator as an example.

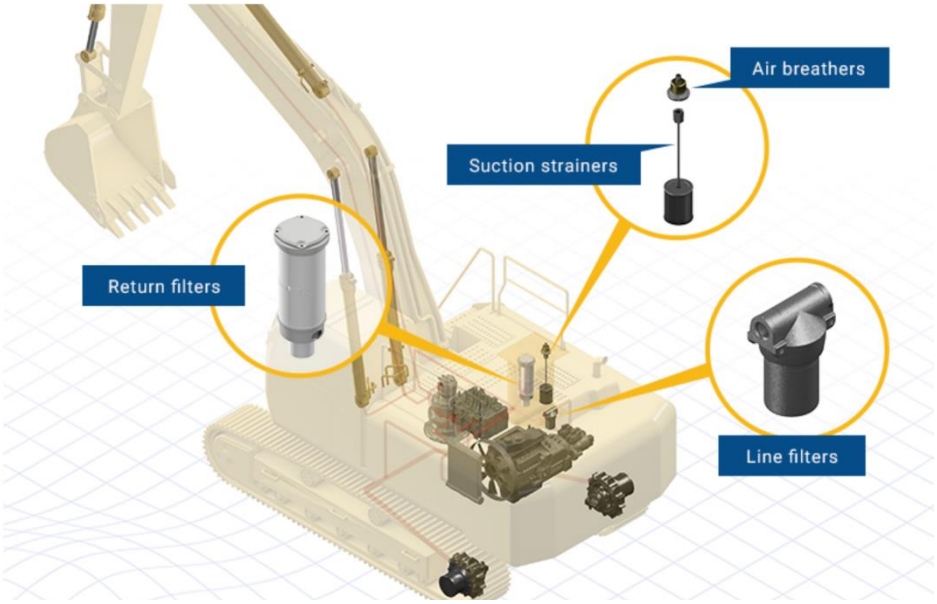
If Comparing a Hydraulic Excavator to the Human Body, the Hydraulic Oil Would be Like the Blood & the Hydraulic Filters Would be Like the Kidneys

As the name suggests, a hydraulic excavator is one that uses hydraulic pressure to control the movements of the machine, such as the movement of the vehicle body, the operation of the shovel and the rotation of the upper body. These movements of the excavator are achieved by hydraulic oil circulating through the hydraulic circuits that run throughout the entire construction machine and being converted into motion by hydraulic equipment. The hydraulic oil is sent from the oil tank to the entire construction machine and then returns to the oil tank after circulating. If we compare it to the human body, the oil tank is the heart, the hydraulic circuits are the valves, and the hydraulic oil is the blood.

As this hydraulic oil circulates, various types of dust (dirt and debris) get mixed in. Some dust enters from the outside through cylinders and tanks, while other dust is generated internally due to wear in the pump. Hydraulic filters are installed at key points in the circuit to remove this dust and keep the circuit and hydraulic oil clean.

The most important hydraulic filter is the return filter, which is installed at the point where the oil returns to the oil tank. If we were to compare the return filter to the human body, it would correspond to the kidneys. The hydraulic filter is composed mainly of a return filter, with line filters and air breathers.

Figure 4. Main Filters Used in Hydraulic Excavators



Source: Company Data.

In addition to hydraulic oil filters for hydraulic excavators, there are many other types of filters for construction machinery, including transmission filters, fuel filters, engine

oil filters, etc. The company has a wide variety of filter products for construction machinery and is prepared to meet the demands of its client companies.

Figure 5. Main Products for Construction Machinery Filters

Product		Features	Main use cases
Hydraulic Fluid Filters	Return Filters	Removes fine impurities from hydraulic oil before it returns to the oil tank. Replacement cartridges that are installed for this purpose are specifically called filter elements.	Hydraulic excavator Other construction machinery General Hydraulic Systems
	Suction Strainers	Attached directly to the suction port of the oil tank in order to remove relatively large impurities from inside the oil tank.	Hydraulic excavator Other construction machinery General Hydraulic Systems
	Line Filters	A filter used in hydraulic circuits and installed in places where pressure is applied.	Hydraulic excavator Other construction machinery General Hydraulic Systems
	Air Breathes	Used for various purposes such as: Preventing impurities from outside air from entering the oil tank of construction machinery. Maintaining pressure in the oil tank while the hydraulic system is in operation. Maintaining oil cleanliness in the oil tank.	Hydraulic excavator Other construction machinery
	Relief Valve	A valve that distributes the hydraulic oil so that when the temperature of the hydraulic oil is high, it passes through the oil cooler, and when the temperature is low and differential pressure is applied, the hydraulic oil flows to the oil tank without passing through the oil cooler.	Medium to large hydraulic excavators Mini hydraulic excavator
	Nylon Strainer	Attached to the filler neck of various oil tanks, it prevents contaminants from entering the oil tank when refueling.	Hydraulic excavator Other construction machinery
Transmission Filters		Used to filter impurities such as metal powder generated by friction of gears mixed into high viscosity lubricating oil.	Bulldozers, wheel loaders, etc. Construction machinery with a transmission mechanism
Fuel Filters		Used to remove impurities and moisture contained in diesel fuel for construction machinery.	-
Engine Oil Filters		A filter that removes fine impurities from engine oil used in diesel engines.	-

Source: Company Data.

The company's share of the domestic market for hydraulic filters for construction machinery is approximately 70%. A wide variety of filters are used in construction machinery and adoption status varies by customer and product. The company believes that increasing adoption among customers and models that have not yet adopted its filters will provide room for growth.

Figure 6. Adoption Status by Client

Customer	Hydraulic Filters	Transmission Filters	Fuel Filters	Cabin Filters	Engine Oil Filters	Engine Air Filters
Company A	80%+	80%+	80%+	80%+	50%	50%
Company B	50%	80%+	50%	50%	80%+	50%
Company C	50%~80%	80%+	50%	50%	50%	50%
Company D	80%+	80%+	50%	50%	NA	50%
Company E	80%+	50%~80%	50%	50%	NA	50%

Note: "80%+": Share of ⩾80%　"50%~80%": Share is between 50% and 80%
"50%-": Less than ⩽50% share

Source: Company Data.

3) Three Sources of Competitiveness in Filters for Construction Machinery

In Construction Machinery Filters 3-Sources of Competitiveness

The company's competitive edge in construction machinery filters is believed to come from the following three sources.

1: Development capabilities to produce even core components in-house

2: Dual structure targeting both Line parts for new vehicle market and service parts for aftermarket

3: Strong relationships based on direct transactions with construction machinery manufacturers

Of these, as mentioned earlier, "Source of competitiveness 1: development capabilities to produce even core components in-house" and "Source of competitiveness 3: strong relationships based on direct transactions with construction machinery manufacturers" are difficult for other companies in the same industry to imitate.

Source of Competitiveness 1: Development Capability to Produce Even Core Components In-House

1: In-House Production of Core Components Development Capabilities

One of the sources of competitiveness is the development capability that allows the company to produce even core components in-house.

Taking a hydraulic excavator as an example, a return filter is a cylindrical device consisting of an outer cylinder, band, filter media and inner cylinder. Among these, the most important component is the filter media that removes dust. The performance of this filter media is determined by the balance of the following 3 elements:

- Longevity: how long it will be used
- High Filtration Accuracy: How fine particles can be removed
- Low Passage Resistance: How much oil passes through (pressure loss)

In order to provide the best filters for the hydraulic excavators that construction machinery manufacturers intend to manufacture, the company considers the optimal combination of these three elements and develops its own filter medium, which is the core component. This means that construction machinery manufacturers can use the company's filters to commercialize a wide variety of concepts. Being able to respond to the product development needs of construction machinery manufacturers, which are characterized by their multi-product production, has further strengthened the company's ability to make proposals that meet customer demand; and is a major differentiating factor from competitors who are forced to rely on purchasing filter media.

In fact, as mentioned in "The History of Yamashin-Filter from the Perspective of President Atsuhiko Yamazaki", the commercialization of the world's first filter using glass fiber filter media at a time when paper was the mainstream filter media material is considered a breakthrough in the construction machinery industry. This succeeded in dramatically improving the performance of filter media and currently most of the filter

media used in return filters are made of glass fiber. Furthermore, the company continues to develop its own materials, which led to the development of the "YAMASHIN Nano Filter™" in 2017 (see below).

Source of Competitiveness
2: Dual Structure Targeting Both Line Parts for the New Vehicle Market & Service Parts for the Aftermarket

2: Dual Structure for Both Line Parts and Service Parts

The second source of competitiveness is its business structure, which targets both line parts (for the new vehicle market) and service parts (for the aftermarket) that are replaced as supplies.

The company offers two types of filters for construction machinery: line parts that are installed in new vehicles and service parts that are used as supplies and they are established as different markets.

Competition for Line Parts: The Key Point is the Adoption Rate of Construction Machinery in the New Vehicles Market

Line parts are filters that are installed in new construction machinery. The factors that determine the company's sales in the new vehicle market are (1) the adoption rate, or whether or not the company's filters are used and (2) the production volume of models that use the company's filters.

Regarding (1), in the case of construction machinery, the filters to be used are decided through a competition every 4 years when the model is changed. Since the company develops the core components in-house, it has the advantage of being able to propose products for construction machinery, which requires high-mix low-volume production. Regarding (2), the number of new construction machinery vehicles produced is easily affected by economic fluctuations.

The Key for Aftermarket Products is Genuineness

The market for service parts as supplies separate from the one for line parts for new vehicles. According to the company, the market size of service parts is estimated to be about 10 times the one of line parts for new vehicles. Service parts have higher profit margins than Line parts and are characterized by a stable stock business, so they are less susceptible to economic fluctuations than line parts.

The factors that determine sales in service parts are (1) the number of construction machines in operation, (2) the lifespan of the construction machine (which affects how many times filters are replaced during its life per vehicle) and (3) the genuine filter usage rate, which indicates the percentage genuine filters are used.

Factor (1), the number of construction machines in operation, is difficult for the company to control, as it is determined by the adoption rate at the time of model changes that occur once every 4 years, the number of units sold for each model and the operating rate. Factor (2), the lifespan of construction machine, is also roughly fixed. On the other hand, there is room for the company to increase the genuine filter usage rate, Factor (3), through its own efforts.

According to the company, counterfeit filters are often used, especially in emerging countries and the genuine filter usage rate in the entire market is thought to be about half. In order to increase the genuine filter usage rate, in addition to developing its filters that make it impossible to use counterfeit filters, the company has been working with construction machinery manufacturers and their agents to provide support

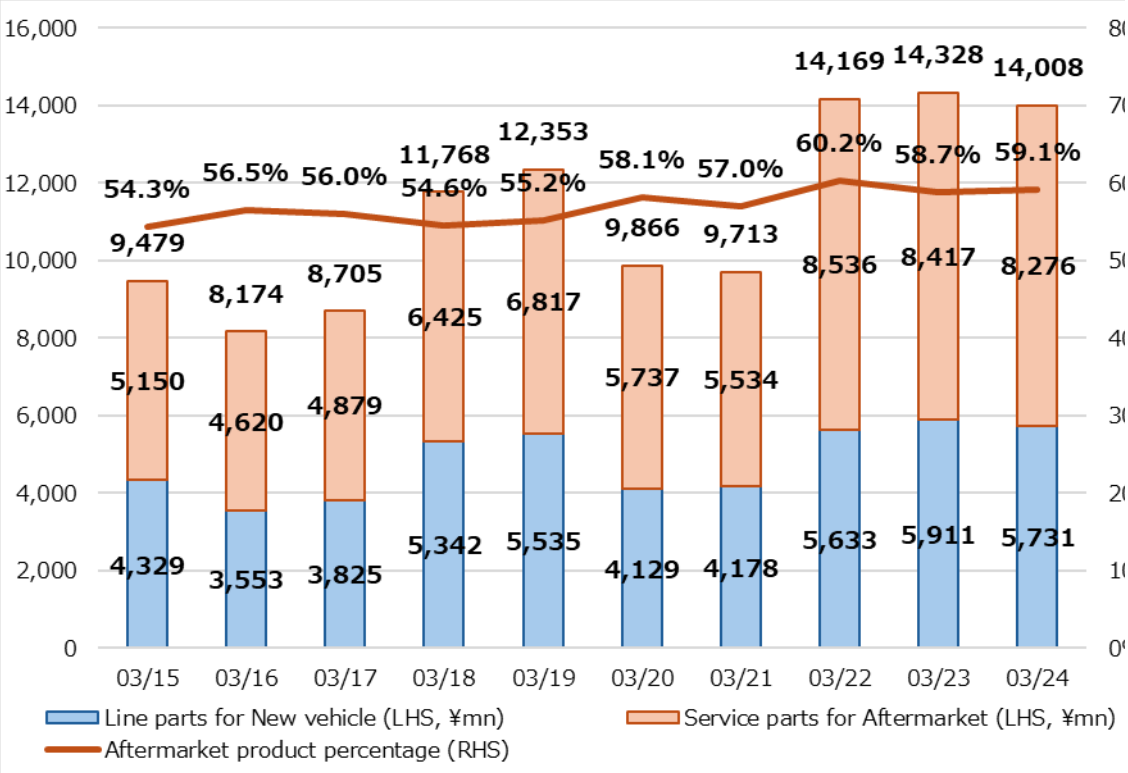
activities in the aftermarket for end users (such as holding educational seminars to inform them that it is more economically rational to use genuine filters).

Strengths of Having Both Line Parts and Service Parts

Support activities in the aftermarket not only have the direct effect of increasing the genuine filter usage rate of service parts but also lead to the establishment of a virtuous cycle in which market information and demand trends obtained through support activities are utilized in the development of products for line parts of new vehicles. Furthermore, the company has achieved a stable profit structure overall by combining flow revenue from line parts with stock revenue from service parts.

Of the Company's sales to construction machinery, service parts accounted for 63% in FY03/2024. By securing a certain level of sales in service parts, the impact of line parts for the new vehicle market, which is easily affected by economic trends, has been mitigated, leading to overall sales stability.

Figure 7. Changes in the Composition Ratio of Line Parts for New Vehicle & Aftermarket Products



Source: Company Data.

Source of Competitiveness
3: Strong Relationships Based on Direct Transactions with Construction Machinery Manufacturers

3: Strong Relationships Based on Direct Transactions with Construction Machinery Manufacturers

The third source of competitiveness is the strong relationships based on direct transactions with construction machinery manufacturers.

For line parts of new vehicle, interactions with the customer company's production site occur from the new vehicle development stage, so direct transactions are the key.

On the other hand, when it comes to selling service parts, while competitors are involved in the aftermarket on their own, the company has concentrated its sales channels on direct transactions with construction machinery manufacturers.

If they were to sell directly to end users (customers of construction machinery manufacturer) or through agents, (1) it would create a conflict of interest with the construction machinery manufacturer and put them in competition with it and (2) even if sales increased, they would need to spend money on maintaining sales channels and on marketing, making it difficult to increase profits.

Because the company focuses on direct transactions with construction machinery manufacturers, it has built strong relationships with major manufacturers and their local subsidiaries in Japan and the U.S. Therefore, the company's expansion moves in tandem with the global expansion of its construction machinery manufacturers' clients.

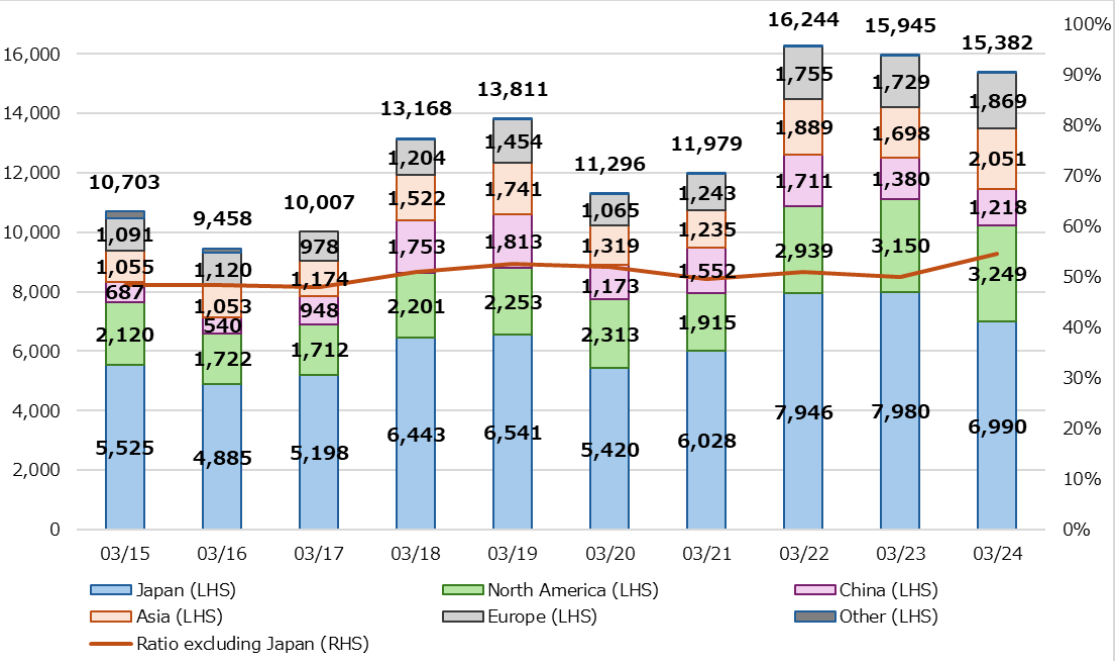
Regarding the Chinese market, direct transactions with local Chinese manufacturers are limited, with the most of exports to China being made by Japanese and American construction machinery manufacturers.

More than Half of the Sales of Construction Machinery Filters are Outside Japan

The company's regional sales are classified according to the location of the customer who sends the invoice. Therefore, the region in which sales are recorded does not necessarily match the region in which the construction machinery equipped with the company's filters is actually used. For example, if a construction machinery made by a Japanese manufacturer is exported to China, the actual place of use is China, but the regional sales are recorded as Japan.

Therefore, while sales by region are for reference only, sales outside Japan for construction machinery filters accounted for 54.5% of total sales in FY03/2024, the highest levels ever.

Figure 8. Sales of Construction Machinery Filters by Region



Note: Construction machinery filters include industrial and process filters. The calculation is based on the billing address, so it may differ from the region where the filter is actually used.

Source: Company Data.

Integrated In-House Operations, from Development to Sales, Support its Competitiveness

The company's integrated in-house operations, from development to sales, support the competitiveness mentioned above. It has a single base for research and development in Yokosuka, Kanagawa Prefecture. Production is carried out at 3 locations: the Saga facility in Japan, the Cebu factory in the Philippines (YAMASHIN CEBU FILTER MANUFACTURING CORP.) and the Vietnamese factory (YAMASHIN VIETNAM CO., LTD).

When the company was founded, its production base was located in Omori, Tokyo, but in 1975 it moved to Saga, the hometown of the founder and first president. In response to the strong yen following the Plaza Agreement (Agreement of G5 nations) in 1985, the company established a production base in Cebu, Philippines in 1989, where it remains to this day. In 2002, the company also established a factory in Ayutthaya, Thailand, but was hit by floods in 2011 and it closed the factory at the end of 2012.

In addition to its headquarters in Yokohama, the company has 5 sales bases in the U.S.: Chicago (YAMASHIN AMERICA INC.), Belgium: Brussels (YAMASHIN EUROPE BRUSSELS BV), Thailand: Bangkok (YAMASHIN THAI LIMITED) and in China: Suzhou, to support construction machinery manufacturers in each region.

This integrated in-house operation supports the company's three sources of competitiveness mentioned above.

4) Industrial And Process Filters

The Construction Machinery Filter Business includes industrial and process filters that are not directly related to construction machinery.

Industrial Filters Used in a Variety of Industries

Industrial filters are used to filter hydraulic oil and lubricate oil in hydraulic units used in a variety of industries. The company's industrial filters are used in industrial machinery equipped with hydraulic units, such as machine tools, refrigeration compressors, agricultural machinery, ships, railroad cars, aircraft and helicopters. Customers are the manufacturers of these industrial machines.

Process Filters Used in Manufacturing Processes

Process filters are used for filtration and separation in the manufacturing process of customers' products. They are used in industries such as electronic parts, precision parts, liquid crystal displays and food. They specialize in fields that require finer filtration, such as precision cleaning of electronic parts and nano-level classification related to capacitors and films (the process of separating the target objects).

Figure 9. Main Products of Industrial Filters and Process Filters

Item Name	Product Name	Features
Industrial Filters	Line Filter	Hydraulic circuits of machine tools, presses, hydraulic transport units, etc. Used for filtering hydraulic oil, etc.
Process Filters	Bobbin Filter	In the semiconductor, chemical and food industries Used to filter out larger materials before fine filtration
	Non-Woven Filter	In the semiconductor, chemical and food industries. Used for precision cleaning filters
	Membrane Filter	In the semiconductor, chemical and food industries. Used in the final filtration process of precision cleaning filters

Source: Company Data.

5. Air Filter Business

Business Segmentation from 2H FY03/2020

The Air Filter Business was launched as the second business segment in October 2019 (2H of FY03/2020) following the acquisition of AQC Corporation as a wholly owned subsidiary in August 2019. The business was launched using the "YAMASHIN Nano Filter™" developed in 2017, which will be described later.

Founded in 1962, AQC is a filter manufacturer specializing in air filters and holds a large share of the market for coarse dust and medium to high performance filters. The company is characterized by a production system that can handle small and short delivery times, enabling it to respond to customer requests. With this acquisition, AQC's development capabilities, manufacturing technology and sales channels for air conditioning air filters would be incorporated; and it was expected that, together with the "YAMASHIN NANO FILTER™", the expansion into air filters, an adjacent field to construction machinery filters, would be accelerated.

What is an Air Filter?

An air filter is a filter used to remove dirt, dust, etc. from the air. While construction machinery filters are used to separate solids from liquids, air filters are used to separate solids from gases.

The Strengths of Filter Media are High Collection Efficiency & Low-Pressure Loss

While the fiber diameter of resin fiber filter media used in existing air filters is 1.5μm to 20μm, the fiber diameter of the "YAMASHIN Nano Filter™" used in the company's air filters is as thin as 150nm to 10μm. Therefore, compared to existing air filters, the company's air filters have the advantages of high collection efficiency and low-pressure loss.

Nano Fiber Air Filter "NanoWHELP" with Wide Lineup

The company's nanofiber air filters (called, NanoWHELP) are used in buildings and factories that manufacture food and pharmaceuticals, as well as in power distribution panels and railway vehicles. NanoWHELP 's high collection efficiency and low-pressure loss not only reduce CO2 emissions by about 30% per year compared to air filters made by other companies, but also significantly reduce utility bills. NanoWHELP is the only product in Japan to have obtained three MERV ratings, MERV 14, 15 and 16, (16 is the highest performance rating), in the air filter performance rating system established by the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), proving its high competitiveness and reliability.

Furthermore, due to its ability to manufacture filters with fine fiber diameters, the company’s air filters can meet a wide range of customer demands. As a result, the company's product lineup is wide, including not only pre-filters that remove relatively large particles, but also HEPA filters used in spaces that require a high level of cleanliness, such as semiconductor manufacturing plants and hospitals (operating rooms) and insect-proof filters used in food factories where contamination by foreign objects is not permitted.

Figure 10. Main Products of Air Filters

Product Name	Features	Features
Pre-Filter	Removes relatively large dust particles (5μm or larger) from the air. Installed at the outside air intake etc. to extend the life of the next stage filter. Filters used	Buildings and structures Various factories Various environmental equipment, etc.
Medium to High Performance Filters	Removes dust particles (5μm or less) from the air and provides moderately clean air. A filter installed for the purpose of obtaining	A ceiling-mounted packaged air conditioner found in a typical building
HEPA Filter	Ultra-efficient, removing more than 99.97% of particles 0.3μm in size filter	Clean rooms and air purifiers in semiconductor factories and hospitals
Oil Mist Filter	Used to remove oil mist from indoor spaces	The kitchen equipment fryer is used
Insect Filter	Used to prevent insects from entering buildings	Food industry Air conditioning systems for general households
Deodorizing Filter	Installed to remove odors and gas components from the air	Art museums, museums, animal hospitals, livestock industry, etc.
Casing	Mounting frame for installing and mounting various filters	-

Source: Company Data.

Importantly, by changing the materials used for filtering media, it becomes possible to meet demand that was previously unmet.

For example, the nanofiber HEPA filter is made of thermoplastic polymer nonwoven fabric that utilizes the technology developed by NanoWHELP; but unlike conventional glass fiber HEPA filters, it is a "PFAS FREE" product that does not use PFAS (Per- and Polyfluoroalkyl Substances). PFAS have been recognized as carcinogenic and regulations on the manufacture and sale of products that use PFAS are being strengthened in the EU and other countries. In response to these changes in the market environment, it is expected that the demand for nanofiber HEPA filters will increase.

6. New Material "YAMASHIN Nano Filter™"

1) An Innovative Material with the Potential to Spark a Paradigm Shift

Innovative Material Development is

In "4. Construction Machinery Filter Business", it was pointed out that the source of the company's competitiveness in construction machinery filters is "its development

One Source of the Company's Competitiveness

"Development Capabilities to Produce even Core Components In-House"

capabilities to produce even core components in-house". In fact, it was because of the company's development capabilities, even going as far as to develop materials in-house, that the company was able to change the technological trend in the construction machinery industry by changing the filter material used in construction machinery filters from paper to glass fiber; and as a result, it became the company with the top share of the global market for construction machinery filters.

Using this material development capability, the new material "YAMASHIN Nano Filter™" was developed in 2017. Nanofibers are defined as fibrous materials with diameters between 1nm (nanometer) and 1000nm. "YAMASHIN Nano Filter™" is a material developed by applying the fact that by thinning fibers to the nano level, it is possible to give them new physical properties not found in conventional fibers. Due to the following characteristics, there are high expectations for this material as a solution to various issues that conventional materials have.

2) Unique Manufacturing Process

The Company's Unique Method of Manufacturing: "Yamashin's Melt-Blown Method"

The "YAMASHIN Nano Filter™" was made possible in large part by the "Yamashin's melt-blown method" that the company developed independently, making use of the knowledge it has accumulated over the years.

There are existing methods for producing nanofibers, such as the composite spinning method, the electrospinning method and the melt-blown method. Compared to the existing methods, the Yamashin's melt-blown method has the following features: (1) various thermoplastic resin raw materials can be used , (2) the fiber diameter can be controlled in a wide range from 150 nm to 10 μm , (3) various forms (sheet, cotton, etc.) can be processed, (4) the equipment can be easily maintained and (5) high productivity.

3) Features of the YAMASHIN Nano Filter™

Diverse Functional Properties Realized by Easy Resin Selection and High Degree of Freedom in Adjusting Fiber Diameter

Nanofibers are defined as fibrous materials with diameters between 1 nm and 1000nm and are made by turning the target resin into nanofibers. The company has developed a unique manufacturing method that expands the possibilities of nanofibers and using this method, the "YAMASHIN Nano Filter™" has made it possible to give nanofibers new physical properties and functions that were not found in conventional fibers.

Feature 1: Ease Of Resin Selection

The company's manufacturing method can handle a wide melting point range of 200 to 320 degrees Celsius, making it possible to select the resin to be used as the fiber depending on the application. This widening range of resin options allows the selection of resins to match the application of the product. As a result, it is now possible to apply the technology to products in fields that were previously difficult to handle.

Feature 2: High Degree of Freedom in

When turning resin into nanofibers, the fiber diameter determines the product's performance. Fiber diameters for paper are 20 to 30 μm, for general synthetic fibers 1.5 to 20 μm and for glass fibers 800 nm to 3 μm; but the company's manufacturing

Adjusting Fiber Diameter

method makes it possible to produce fiber diameters in the range of 150 nm to 10 μm. Furthermore, the fiber diameter distribution can be freely adjusted.

Feature 3: Three-Dimensional Structure

Furthermore, due to the manufacturing process used, conventional nanofibers end up with a flat, two-dimensional structure. This inevitably results in a high porosity in the fibers. The company's manufacturing process makes it possible to create a nanofiller with a three-dimensional structure, which provides better insulation and soundproofing than those made using conventional manufacturing methods. Also, when used as a filter, it can capture a large amount of dust (high performance).

Feature 4: Small Lot Production Possible

In relation to features 1 and 2, the company's unique manufacturing method allows it to produce fibers with the required fiber distribution from various types of polymers, making it easy to change polymers, which makes it possible to handle small-lot production.

4) Hidden Potential of The YAMASHIN Nano Filter™

Due to the above-mentioned characteristics, products using "YAMASHIN Nano Filter™" can have a wide variety of functional properties. Possible functional properties include high porosity, super specific surface area effect, thermal effect, sound insulation effect, and self-extinguishing properties (non-flammable and flame retardant), which is one of the reasons why it is expected to be applied to many product fields.

Possibilities for Construction Machinery Filters

As mentioned in "4. Construction Machinery Filter Business 3) Three Sources of Competitiveness in Construction Machinery Filters", glass fiber is used as the filter material in conventional construction machinery filters. By changing this filter material to the nanofiber material produced by the "YAMASHIN Nano Filter™", it is said that the dust capture capacity of the filter material is improved by about three times and the filter accuracy is improved by about two times compared to conventional products. As will be described later, the company has placed the conversion of filter material to nanofiber at the center of its strategy for the medium-term management period.

Possibilities Other Than Construction Machinery Filters

Due to its characteristics of sound absorption, heat insulation and non-flammability, the "YAMASHIN Nano Filter™" is expected to be used for purposes other than construction machinery filters. The company envisions its use in fields such as the environment, energy, health and medicine, social infrastructure and information and electronics.

In addition, as mentioned in "3. Yamashin's Management Strategy 3) The two mutually interacting difficulties of imitation of Yamashin-Filters", the company has become highly competitive in the field of filters for construction machinery because of the interaction of two mutually interacting difficulties: (1) the development capability to in-house manufacture even the core components of filters for construction machinery and (2) strong relationships with client companies backed by the ability to make proposals. It is believed that once the company has the ability to develop products using the "YAMASHIN Nano Filter™" and the ability to make proposals that

get to the heart of clients, it will be able to establish a strong business in areas other than filters for construction machinery as well.

Figure 11. Potential of "YAMASHIN Nano Filter™"

Area	Field	Already Commercialized	Commercialization to Begin During the Medium-Term Plan
Filters	Construction Machinery Filters	✓	
	Air Filters	✓	
	Liquid Filters	✓	
	Bag Filters		
Sound Absorbing & Heat Insulating Materials	Vehicles		✓
	Airplane		✓
	Buildings		
Medical/Biomaterials	Wound treatment		
	Drug Delivery System		
	Artificial blood vessels		
Electronics	Ships		
	Battery Separators		
Other General Field Materials	Apparel (High-Performance Materials)		✓
	Bedding/Daily Necessities		✓
	Cosmetics (Skin Care)		
	Agriculture (Plastic Sheets)		

Source: Company Data.

7. Earnings Trends

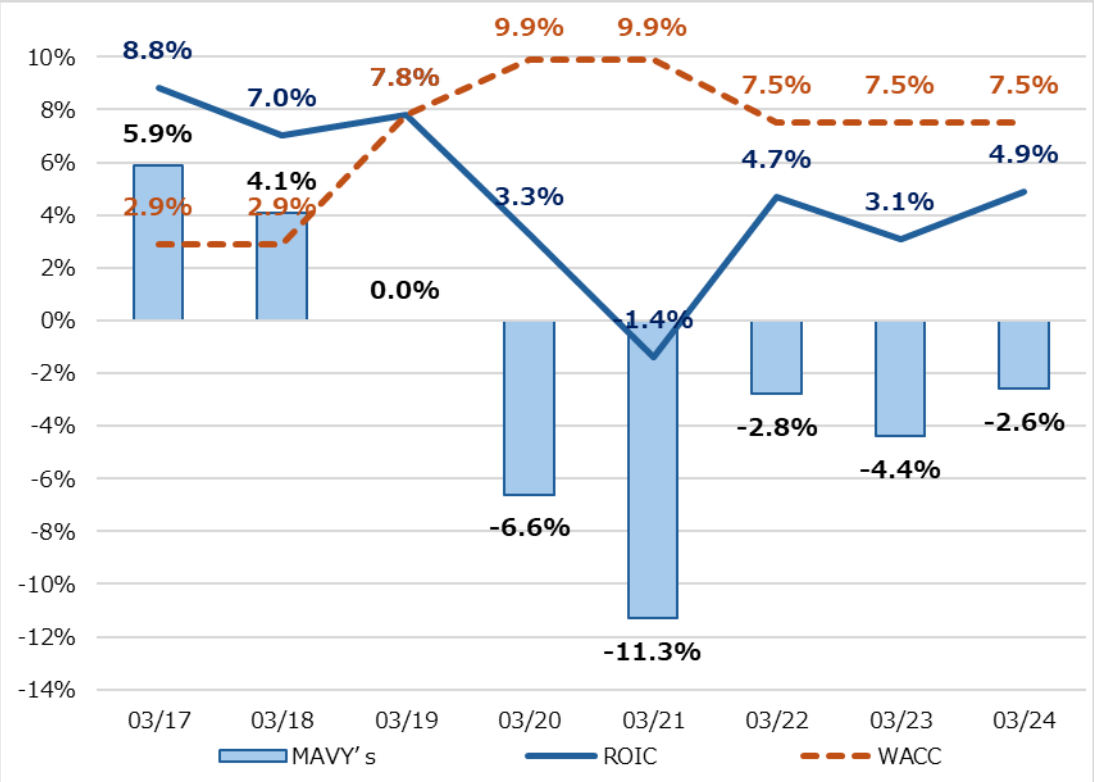
1) MAVY's (Maximizing Added Value of Yamashin-Filter Spread)

Manage the Company's Business Performance with MAVY'S

The company uses MAVY's, which stands for Maximizing Added Value of Yamashin-Filter Standard, as a performance management indicator.

MAVY's is calculated by "ROIC (Return on Invested Capital) - WACC (Weighted Average Cost of Capital)". Aiming to maximize profits from invested capital, MAVY's is the most important KGI (Key Goal Indicator) that clarifies the departments responsible for the indicators that make up ROIC and enables each responsible department to set KPI's (Key Performance Indicators) and operate business operations toward achieving their goals.

Figure 12. MAVY's Trends



Source: Company Data.

2) Review of the Early 2020's

MAVY'S Has Been Negative since FY 03/2020

MAVY's had maintained a positive figure until FY03/2018, but in FY03/2019, while ROIC increased, WACC rose sharply, causing MAVY's to fall to zero. Then, from FY03/2020, it has been negative.

COVID19 Had an Impact in the Early 2020's

The impact of COVID-19, which began in earnest at the beginning of 2020, hit the company hard and profitability rapidly deteriorated, including a sharp decline in the operating profit margin due to a decline in global demand for construction machinery. The operating profit margin fell further in FY03/2021 due to the slump in demand for construction machinery.

From the end of FY03/2021, demand for construction machinery started to recover, returning to pre-COVID-19 levels outside of China and the company's operating profit margin also started to rise in FY03/2022. However, the impact of rising raw material and logistics costs due to the full-scale rise in prices triggered by the war in Ukraine and the weak yen continued and the company was unable to pass on the increased costs to sales prices, which meant it was unable to fully return to pre-COVID-19 levels.

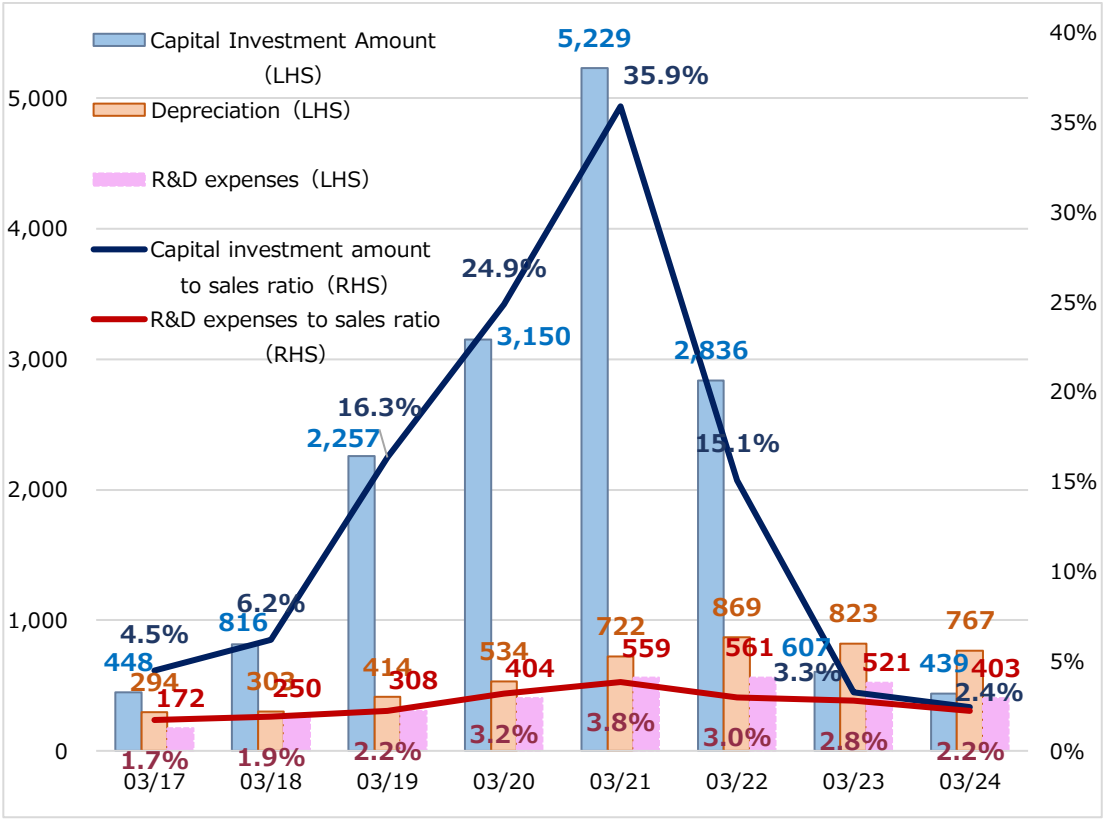
Reasons for Struggles in the Early 2020's

Additionally, there were other factors specific to the company that were separate from the changes in the external environment caused by the outbreak of COVID-19.

In the Construction Machinery Filter Business, communication with the management at the US base did not work well and sales were prioritized over maintaining and improving profit margins, leading to a decline in profitability. In the Air Filter Business, AQC, which became a wholly owned subsidiary in August 2019, originally sold through distributors, a sales format that was unfamiliar to the company; and the company was slow to switch to direct sales, leading to poor profitability. In addition, the mask business that was launched in response to COVID-19 was also unfamiliar to the company as it was a B to C type of business, so it did not last long and the company was forced to record an impairment loss (the mask business disappeared as a segment).

Even in these difficult times, investments were made for the "YAMASHIN Nano Filter™", with capital investments of approximately ¥5.3 billion, equivalent to approximately 36% of sales, being made in FY03/2021. According to the company, capital investments up to FY03/2022 mark the end of capital investments related to the "YAMASHIN Nano Filter™".

Figure 13. Trends in Capital Investment, Depreciation and Research & Development Expenses



Source: Company Data.

3) FY03/2024

At the Beginning of the Fiscal Year, Profits Were Expected to Decrease. But in FY03/2024 Profits Increased

In FY03/2024, sales were down 3.1% YoY to ¥18.02 billion, operating profit was up 14.3% YoY to ¥1.41 billion and net income attributable to owners of parent was up 21.9% YoY to ¥780 million, resulting in a decrease in sales but an increase in profit.

Compared to the company's initial plan of ¥17.62 billion in sales and ¥600 million in operating profit, sales were up by about 4%, but operating profit, which was planned to decrease by 51.4% YoY, turned out to be up. This can be explained almost entirely by the upswing in the Construction Machinery Filter Business.

The Construction Machinery Filter Business Turned a Profit in FY03/2024, which was the Main Factor behind the Increase in Overall Profits

By segment, sales in the Construction Machinery Filter Business decreased by 3.5% YoY, while segment profit increased by 14.7%. However, the company's initial plan for the fiscal year was for sales to decrease by 7.1% and segment profit to decrease by 55.7%, so the increase in profits in the Construction Machinery Filter Business was a major factor.

Demand for construction machinery remained strong in North America and Japan, where public investment and capital investment remained stable, but market demand in Europe and Asia decreased due to rising interest rates and in China, demand continued to decline significantly due to sluggish market conditions. As a result, overall revenues decreased. On the other hand, profits increased due to the promotion of "Project PAC23", an initiative to reduce costs in response to rising raw material and energy costs; with the implementation of price transfer to fair prices and the progress of supplying high value-added products such as nanofiber filters and filters equipped with sensors that detect filter usage status, driving profitability.

Profits from the Air Filter Business for FY03/2024 were Almost in Line with Initial Plan

In the Air Filter Business, sales decreased 0.7% YoY, while segment profit increased 7.7%. Sales were slightly below the initial plan, but segment profit was almost in line with the initial plan.

Although replacement demand for the mainstay building air conditioning filters was strong, sales declined slightly due to the impact of delivery date adjustments, etc. On the other hand, profits increased due to the implementation of price pass-through, increased sales of highly profitable medium-performance filters and progress in cost reductions.

Operating Profit Margin Improved 1.2 % YoY

As a result, the operating profit margin for FY03/2024 increased by 1.2 percentage points YoY to 7.8%.

Furthermore, while foreign exchange losses decreased by ¥182 million compared to the previous term, extraordinary losses included business restructuring expenses of ¥125 million for a North American subsidiary and a quality assurance loss of ¥122 million to address defects in supplied products. As a result, net income attributable to parent company shareholders increased 21.9% compared to the previous term.

4) Cumulative Q3 of FY03/2025

Significant Increase in Profits in Cumulative Q3 FY03/2025

The results for the third quarter cumulative period of FY03/2025 (hereinafter, Q3 cumulative) were notable for their significant increase in profits. Sales increased 12.3 % YoY to ¥14.94 billion, operating profit increased 118.5 % YoY to ¥2.05 billion and net profit attributable to owners of the parent increased 92.7 % YoY to ¥1.22 billion.

Construction Machinery Filter Business Saw a Large Increase in Replacement Demand in the Cumulative Q3 FY03/2025

By segment, sales in the construction machinery filter business increased 15.1 % YoY, and segment profit increased 131.1 %.

Demand for new construction machinery in North America, Asia, Europe and Japan decreased compared to the same period of the previous year, but replacement demand increased significantly. Demand in the Chinese market continued to decline due to the sluggish market conditions. Sales increased significantly due to the large increase in replacement demand.

On the other hand, profits increased due to an increase in sales of spare parts due to increased demand for replacement filters for construction machinery, continued cost reduction efforts in response to rising raw material and energy costs and improved sales prices.

Air Filter Business Saw a Decrease in Sales & Profits in the Cumulative Q3 FY03/2025 Period Due to Delivery Date Adjustments & Other Factors

In the air filter business, sales decreased 3.5 % YoY, and segment profit decreased 32.1% YoY. The decrease in sales and profits was due to the impact of delivery adjustments on the mainstay filters for building air conditioning.

As a result, driven by the construction machinery filter business, the operating profit margin on sales for the cumulative Q3 FY03/2025 increased by 6.7% YoY to 13.1%.

Extraordinary Losses Increased Due to Business Restructuring

The company is continuing with its business restructuring, and as part of this, it is restructuring its overseas subsidiaries in Suzhou, China and Brussels, Europe; and recorded business restructuring costs of approximately ¥198 million as an extraordinary loss in Q3 (approximately ¥51 million YoY).

Despite this increase in extraordinary losses, net income attributable to owners of the parent for cumulative Q3 increased 92.7% YoY.

5) Company Plan for FY03/2025

Due to Strong Q3 Progress, the Company Revised its FY03/2025 Plan Upward for the Second Time since

The company's forecasts for FY03/2025 are sales of ¥19.78 billion (up 9.7% YoY), operating profit of ¥2.45 billion (up 73.9% YoY) and net profit attributable to owners of the parent of ¥1.51 billion (up 92.1% YoY). In response to the strong performance in the cumulative third quarter, the company announced a second upward revision of its forecast following the announcement of its Q2 financial results.

the Q2 Results Announcement

In the initial plan, the company expected a decrease in both sales and operating profit, with sales of ¥17.69 billion (down 1.9% YoY), operating profit of ¥1.41 billion (down 0.1%) and net profit attributable to owners of parent of ¥980 million (up 24.5%). However, in response to the strong performance in cumulative Q2 performance, the company revised its forecasts at the time of the announcement of the Q2 financial results to turn the decrease in sales and operating profit into a large increase in sales and operating profit, with sales of ¥19.30 billion (up 7.1%), operating profit of ¥2.22 billion (up 57.3%) & net profit attributable to owners of parent of ¥1.49 billion (up 89.4%).

The second upward revision reflects stronger-than-expected demand for construction machinery. Sales were raised 2.5% compared to the company's plan at the time of the Q2 settlement; but by segment, construction machinery filters were raised 4.2%, while air filters were lowered 7.9%. Similarly, operating profit was raised 10.5% compared to the company's plan at the time of the Q2 settlement, but this is expected to be driven by a 14.3% increase in segment profit for construction machinery filters.

Furthermore, net income attributable to the parent company is only 1.4% higher than the company's plan at the time of the Q2 settlement. This is because the company decided to accelerate the restructuring of its subsidiaries in China and Europe and an increase in business restructuring costs recorded as extraordinary losses is expected.

Figure 14. Sales & Profit Trends (¥ mn)

FY	03/21	03/22	03/23	03/24	03/25 CoE (Beginning of Period)	03/25 CoE (Q3)
Sales	14,587	18,822	18,606	18,025	17,690	19,780
YoY Change	15.1%	29.0%	-1.1%	-3.1%	-1.9%	7.8%
Operating profit	-146	1,344	1,235	1,411	1,410	2,454
YoY Change	-	-	-8.1%	14.3%	-0.1%	73.9%
Operating Profit Margin	-1.0%	7.1%	6.6%	7.8%	8.0%	12.4%
Net Income to Owners of the Parent	751	47	645	786	980	1,511
YoY Change	23.4%	-93.7%	1,270.5 %	21.9%	24.6%	92.1%
Net Income Margin	5.1%	0.3%	3.5%	4.4%	5.5%	7.6%

Source: Strategy Advisors. Based on Company Data.

Figure 15. Half-Year/Quarterly Performance Trends (¥ mn)

FY	03/23		03/24		03/25
	1H	2H	1H	2H	1H
Income Statement					
Net Sales	9,123	9,483	8,709	9,316	9,909
Cost Of Sales	5,607	5,686	5,235	5,232	5,473
Gross Profit	3,516	3,797	3,474	4,084	4,436
Gross Profit Margin	38.5%	40.0%	39.9%	43.8%	44.8%
SG&A Expenses	2,995	3,083	3,053	3,093	3,060
SG&A to Sales Ratio	32.8%	32.5%	35.1%	33.2%	30.9%
Operating Profit	521	714	421	990	1,376
Operating Profit Margin	5.7%	7.5%	4.8%	10.6%	13.9%
Non-Operating Profit & Expenses	-63	-257	-3	7	59
Ordinary Income	458	457	418	998	1,436
Ordinary Income Margin	5.0%	4.8%	4.8%	10.7%	14.5%
Extraordinary Income/Loss	-16	-9	-68	-218	-56
Pretax Profit	443	447	350	789	1,380
Total Income Taxes	171	74	124	228	510
(Corporate Tax Rate)	38.6%	16.6%	35.4%	28.9%	37.0%
Net Income to Owners of the Parent	271	374	226	561	870
Net Income Margin	3.0%	3.9%	2.6%	6.0%	8.8%

FY	03/23				03/24				03/25		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Income Statement											
Net Sales	4,170	4,953	4,996	4,487	4,302	4,407	4,599	4,717	4,818	5,091	5,036
Cost Of Sales	2,586	3,021	2,946	2,740	2,665	2,570	2,534	2,698	2,696	2,777	2,798
Gross Profit	1,584	1,932	2,049	1,748	1,638	1,836	2,065	2,019	2,122	2,314	2,239
Gross Profit Margin	38.0%	39.0%	41.0%	39.0%	38.1%	41.7%	44.9%	42.8%	44.0%	45.5%	44.5%
SG&A Expenses	1,489	1,506	1,503	1,580	1,525	1,528	1,547	1,546	1,522	1,538	1,564
SG&A to Sales Ratio	35.7%	30.4%	30.1%	35.2%	35.4%	34.7%	33.6%	32.8%	31.6%	30.2%	31.1%
Operating Profit	94	427	546	168	113	308	518	472	599	777	674
Operating Profit Margin	2.3%	8.6%	10.9%	3.7%	2.6%	7.0%	11.3%	10.0%	12.4%	15.3%	13.4%
Non-Operating Profit and Expenses	-37	-26	-166	-91	-18	15	5	2	-40	99	-12
Ordinary Income	57	401	381	76	95	323	523	475	559	877	662
Ordinary Income Margin	1.4%	8.1%	7.6%	1.7%	2.2%	7.3%	11.4%	10.1%	11.6%	17.2%	13.1%
Extraordinary Income/Loss	-2	-14	1	-10	-40	-28	-10	-218	31	-87	-76
Pretax Profit	56	387	381	66	55	295	532	257	590	790	586
Total Income Taxes	43	128	106	-32	35	89	120	108	204	306	227
(Corporate Tax Rate)	76.8%	33.1%	27.8%	-	63.6%	30.2%	22.6%	42.0%	34.6%	38.7%	38.7%
Net Income to Owners of the Parent	12	259	276	98	20	206	412	149	386	484	359
Net Income Margin	0.3%	5.2%	5.5%	2.2%	0.5%	4.7%	9.0%	3.2%	8.0%	9.5%	7.1%

Source: Strategy Advisors. Based on Company Data.

8. Medium to Long-Term Outlook

1) Global Construction Machinery Market Expected to Continue Expanding

The construction machinery market, which is equipped with the company's mainstay construction machinery filters, is expected to continue expanding in the future.

The Global Construction Machinery Market is Expected to Continue Expanding at an Average Annual Rate of 6%

According to consulting firm SDKI, the global construction machinery market is expected to continue growing at an average annual rate of about 6% from 2024 onwards, reaching $331 billion by 2036.

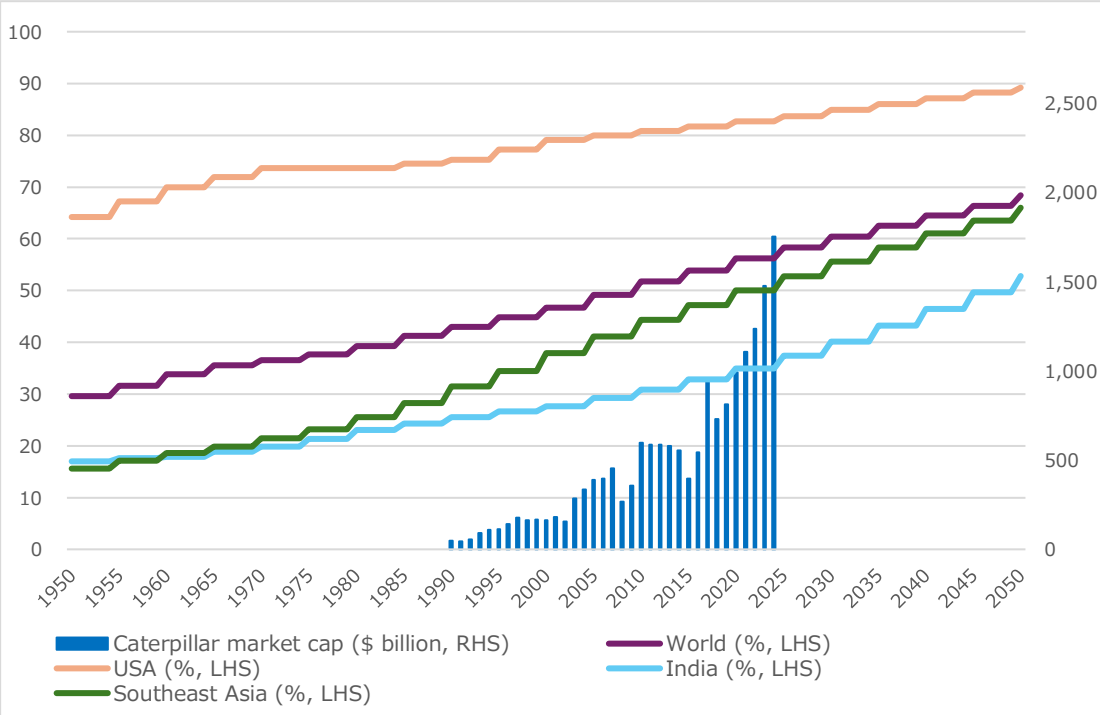
Trends in Global Urbanization Rates also Suggest Growth in the Construction Machinery Market

From a long-term perspective, the global construction machinery market appears to be highly correlated with trends in global urbanization rates.

According to the United Nations' World Urbanization Prospects: The 2018 Revision, the global urbanization rate was 29.6% in 1950 but rose to 46.7% in 2000 (the breakdown is 79.1% for the United States, 27.7% for India, and 37.9% for Southeast Asia). The global urbanization rate is expected to reach 58.3% in the most recent year of 2025, and is projected to reach 68.4% in 2050. The breakdown between 2025 and 2050 is that the United States will increase from 83.7% to 89.2%, India will increase from 37.4% to 52.8%, and Southeast Asia will increase from 52.8% to 66.0%, and it is expected that the increases in India and Southeast Asia will lead the overall increase.

While the global urbanization rate will rise from 43.0% in 1990 to 58.3% in 2025, the market capitalization of U.S. construction equipment manufacturer Caterpillar (CAT) will increase approximately 37-fold, from $4.7 billion in 1990 to $175.1 billion in 2024.

Figure 16. Rising Global Urbanization Rates



Note: CAT market capitalization is based on stock price at the end of each year.

Source: United Nations World Urbanization Prospects: The 2018 Revision, Speeda, Caterpillar websites. Prepared by Strategy Advisors

2) Medium-Term Management Plan

"Medium-Term Management Plan 2027": FY03/2025 till FY03/2028

November 2024, the company announced its “Medium-Term Management Plan 2027”, covering the period from FY03/2025 to FY03/2028. Called "Fly to the next stage!", the period covered by the plan is positioned as one in which the company aims to achieve rapid growth as a global top company. The company plans to pursue the following 3 growth strategies in the Medium-Term Management Plan:

① Initiatives to create new values

② Strengthening management with a focus of capital costs

③ Promoting ESG management

Of these, "Promoting ESG management" will be touched upon in "12. ESG Initiatives".

As for the vision for FY03/2029 and beyond following the Medium-Term Management Plan, the company has set "Evolving into the one and only comprehensive filter manufacturer that sets the next global standard"; and has set three goals and strategies for achieving this: expanding the economic sphere for filters, developing products that address environmental challenges and social demands and finally, striving to redefine and broaden the filter business domain.

Based on the figures in the Medium-Term Management Plan, the driving force behind the company's performance in the FY03/2028 will be the re-acceleration of growth in its core business, the Construction Machinery Filter Business. In parallel with the growth of the Construction Machinery Filter Business, the company will be preparing to expand its business domain in order to become a "comprehensive filter manufacturer" from FY03/2029 onwards. Capital investments in new materials were mostly completed in the early 2020's and the company believes that no major capital investments will be necessary in the future.

Figure 17. Medium-Term Management Plan (¥ bn)

Financial Items	FY03/24 Actual	FY03/25 CoE Beginning	FY03/25 CoE Q3 Settlement Date	FY03/26 Medium-Term Plan	FY03/27 Medium-Term Plan	FY03/28 Medium-Term Plan	Comparison Of FY03/28 With FY03/24	FY03/24～FY03/28 Average Growth Rate
Sales	18.02	17.69	19.78	20.42	22.03	23.79	+32.0%	7.2%
Operating Profit	1.41	1.41	2.45	2.72	3.22	3.88	2.7x	28.7%
Operating Profit Margin	7.8%	8.0%	12.4%	13.3%	14.6%	16.3%	+8.5%	-
MAVY's	-2.6%	-3.0%	-1.0%	0.2%	1.3%	2.9%	+5.5%	-
ROIC	4.9%	4.5%	7.1%	8.1%	8.9%	10.2%	+5.3%	-
WACC	7.5%	7.5%	8.1%	7.9%	7.6%	7.3%	-0.2%	-
EPS (¥)	11.0	13.9	21.3	27.5	33.2	41.0	3.7x	-
Total Assets	25.94	-	26.5	28.0	30.0	32.0	+23.3%	5.4%
Capital Adequacy Ratio	82.1%	-	84.9%	79.2%	73.2%	67.7%	-14.4%	-
Financial Leverage (Times)	1.22	-	1.18	1.26	1.37	1.48	+1.2x	-
WACC	7.5%	7.5%	8.1%	7.9%	7.6%	7.3%	-0.2%	-
Dividend Per Share (¥)	6.0	10.0	12.0	-	-	-	-	-
DOE	2.0%	3.3%	3.9%	5.0%	7.4%	10.3%	+8.3%	-
Dividend Payout Ratio	54.5%	72.0%	56.4%	58.1%	72.2%	82.9%	+28.4%	-
Total Return Ratio	121.0%	78.0%	60.4%	113.5%	119.3%	122.0%	+1.0%	-

Source: Strategy Advisors. Based on Company Data.

Figure 18. Medium-Term Management Plan (By Segment) (¥ bn)

Construction Machinery Filter Financial Items	FY03/24 Actual	FY03/25 CoE Beginning	FY03/25 CoE Q3 Settlement Date	FY03/26 Medium-Term Plan	FY03/27 Medium-Term Plan	FY03/28 Medium-Term Plan	Comparison Of FY03/28 With FY03/24	FY03/24～FY03/28 Average Growth Rate
Sales	15.38	14.89	17.2	17.52	19.03	20.69	+34.5%	7.7%
Operating Profit	1.32	1.29	2.4	2.6	3.07	3.71	2.8x	29.5%
Operating Profit Margin	8.6%	8.7%	14.0%	14.8%	16.1%	17.9%	+9.3%	-
MAVY's	-1.7%	-	0.8%	1.5%	2.6%	4.3%	+6.0%	-
ROIC	5.8%	-	9.0%	9.4%	10.2%	11.6%	+5.8%	-
WACC	7.5%	-	8.1%	7.9%	7.6%	7.3%	-0.2%	-

Air Filter Financial Items	FY03/24 Actual	FY03/25 CoE Beginning	FY03/25 CoE Q3 Settlement Date	FY03/26 Medium-Term Plan	FY03/27 Medium-Term Plan	FY03/28 Medium-Term Plan	Comparison Of FY03/28 With FY03/24	FY03/24～FY03/28 Average Growth Rate
Sales	2.64	2.8	2.58	2.9	3.0	3.1	+17.3%	4.1%
Operating Profit	0.09	0.12	0.05	0.12	0.15	0.17	1.8x	16.0%
Operating Profit Margin	3.5%	4.3%	2.1%	4.1%	5.0%	5.3%	+1.8%	-
MAVY's	-6.0%	-	-9.0%	-5.8%	-5.1%	-4.6%	+1.4%	-
ROIC	1.5%	-	-0.8%	2.1%	2.5%	2.7%	+1.2%	-
WACC	7.5%	-	8.1%	7.9%	7.6%	7.3%	-0.2%	-

Source: Strategy Advisors. Based on Company Data.

3) Medium-Term Management Plan: Creating New Value (Construction Machinery Filters)

Value Creation Strategy for Construction Machinery Filters

There is still significant room for growth in construction machinery filters for the following reasons:

① The construction machinery market is still a growing market due to the rising urbanization rate around the world.

② Although the company already does direct business with major construction machinery manufacturers, mainly in Japan, the US and Europe, there are still areas where the company's products have a low market share.

③ There is a high possibility of increasing unit prices and improving cost rates by replacing filters with high-value-added filters that use nanofiber materials.

④ There is a lot of room to develop the market for service parts (aftermarket), which is said to be about 10 times larger than the market for line parts for new vehicles.

In light of the above, the company has set three key strategies for "creating new value" in its core business, the Construction Machinery Filter Business: expanding market share through a variety of approaches, introducing high-value-added products and advancing aftermarket activities.

Expanding Market Share through New Adoption of Filters for Construction Machinery from 2 Perspectives

As shown in Figure 6, when viewed by customer company, there are filter areas for construction machinery where the adoption share is still low. The company plans to further expand its share by promoting adoption in these low and unadopted areas.

Customer Touchpoints and Technology Touchpoints

In doing so, the company has adopted a policy of conducting multi-layered sales activities based on two axes: "customer touchpoints" based on an understanding of the differences in design philosophies and decision-making processes of each construction machinery manufacturer and "technology touchpoints" that connect this to proposals that are adapted to technical requirements, regulatory trends and the company’s technological seeds.

Introduction of High Value-Added Products (1): Penetration of Nanofiber Filters

Of the two axes, "YAMASHIN Nano Filter™" is a powerful weapon in the "technology touchpoints" approach. The company plans to promote the replacement of conventional glass fibers with high-added-value construction machinery filters that use nanofiber material which it wants to penetrate. Construction machinery filters that use the nanofiber material produced by the "YAMASHIN Nano Filter™" are said to capture 3 times as much dust and have twice the accuracy of filters compared to conventional products. Furthermore, the use of the new material is said to have the effect of reducing production costs compared to using conventional materials.

The company plan to increase the proportion of high-value-added products using the "YAMASHIN Nano Filter™" in construction machinery filters to 6% in FY03/2025, 30% in FY03/2028 and 70% in FY03/2031. In fact, the company is beginning to see results,

such as a return filter for construction machinery using the "YAMASHIN Nano Filter™" being adopted for Komatsu's new generation hydraulic excavator that was released in December 2024.

Introduction of High Value-Added Products (2): Reducing Pressure Loss

As mentioned in "4. Construction Machinery Filter Business 3) Three Sources of Competitiveness in Construction Machinery Filters", the performance of construction machinery filters is determined by three conditions: “Longevity (How long it will be used)”, “High filtration accuracy (How fine particles can be removed)” and “Low passage resistance (How much oil passes through pressure loss)”. Of these, the company plans to make a serious effort to reduce the low passage resistance (pressure loss) in the future.

Pressure loss is the resistance that occurs when passing through a filter. Reducing pressure loss is expected to have the effect of extending the product's life (reducing the environmental impact by reducing the number of times the filter needs to be replaced, and shortening the time required for replacement), making the filter more compact, making the design smarter and improving the fuel efficiency of construction machinery. At the same time, it is said that it will make it easier to introduce the " YAMASHIN Nano Filter™". The company has launched "Project Phantom" and is working on reducing pressure loss.

Evolution of Aftermarket Activities

As mentioned in "4. Construction Machinery Filter Business 3) Three Sources of Competitiveness in Construction Machinery Filters", the market for service parts (aftermarket) that are replaced as spare parts is estimated to be about 10 times the size of the market for line parts for new vehicles. Meanwhile, in the company's sales for FY03/2024, sales for service parts were only about 1.4 times the sales for line part; and the company considers the aftermarket to be one with a lot of room for development.

With regard to the service parts market, in order to increase the genuine filter usage rate, (1) the Company has developed filters that make it impossible to use counterfeit filters, and (2) has carried out support activities for end users (construction machine owners) in collaboration with construction machinery manufacturers and their agents (such as holding educational seminars to inform them that it is more economically rational to use genuine filters).

In order to further penetrate the service parts market, the company plans to start a business in which it will approach end users in collaboration with local agents of construction machinery manufacturers, based on its relationships with their local subsidiaries and obtain warranties for construction machinery. The company plans to focus on the Southeast Asian market, where the number of construction machinery owners is increasing; and as the number of warranties accumulates, it appears that it envisions a future in which it can become a hub or platform for the maintenance of construction machinery in operation.

4) Medium-Term Management Plan: Creating New Value (Air Filters)

Value Creation Strategy for Air Filters

The company's three key strategies for creating value for air filters are to strengthen existing sales channels, strengthen the direct sales system and expand sales of filter media. Air filters are characterized by the fact that customers are from a wide variety of industries, including buildings (maintenance), factories and industrial machinery.

Expanding Product Lineup

In order to strengthen the existing sales channels for air filters, the company plans to utilize the agency network it has cultivated to date, and not only customize products for each customer industry, but also expand its product lineup.

To achieve this, the company is looking forward to using the YAMASHIN Nano Filter™, which has material properties such as long life and low air resistance. Products equipped with the YAMASHIN Nano Filter™ will take advantage of its energy-saving and low CO2 emissions characteristics. Specifically, the company will develop a product lineup that includes the NanoWHELP65, which uses the YAMASHIN Nano Filter™ and is aimed at the medium-to-high performance market; as well as the NanoWHELP95, 98 and 99, which are designed for high-purity applications in the medium-to-high performance market, such as hospitals, public facilities and facilities that require salt damage prevention measures.

Developing Direct Sales of Custom-Made Products

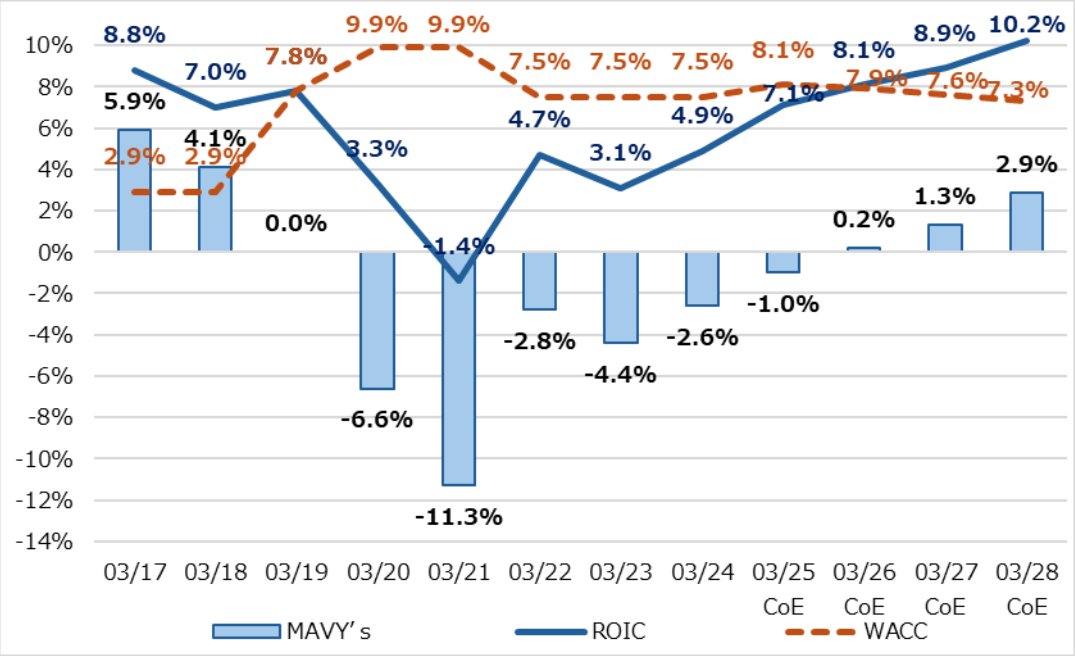
In addition, taking advantage of its strength of being able to customize to meet the needs of each customer, the company also plans to sell custom-made products directly to customers from whom it can expect increased sales and high profit margins.

5) Medium-Term Management Plan: Strengthening Management with an Awareness of Capital Costs

MAVY's is Expected to Turn Positive in FY03/2026

The company will continue to use MAVY's as the basis for performance management. As mentioned above, MAVY's (= ROIC-WACC) has been negative since FY03/2020, but the company expects it to turn positive in FY03/2026.

Figure 19. MAVY's Progress & Plans



Source: Strategy Advisors. Based on Company Data.

ROIC Improvement Driven by Increased Profitability

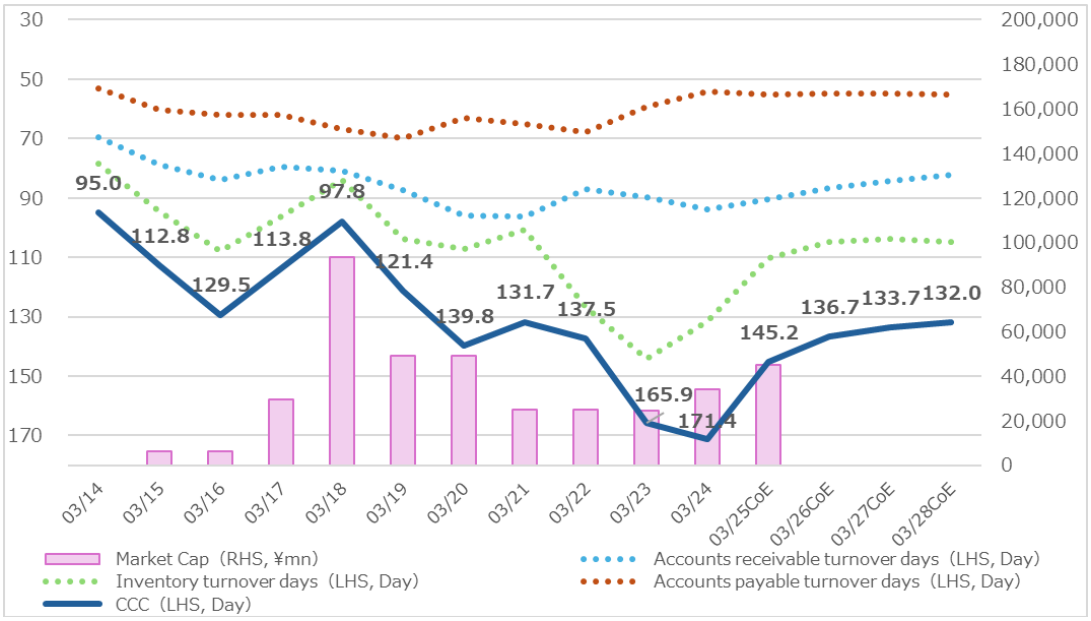
The company plans to increase the ROIC that constitutes MAVY's from 4.9% in FY03/2024 to 10.2% in FY03/2028. As part of the measures to achieve this, the company plans to implement the strategy detailed in the "Creating New Value" section above to improve profitability.

CCC is Also Expected to Continue to Improve

In addition to "creating new value", the company will also work to improve not only profitability but also efficiency. One example of this is shortening the cash conversion cycle (CCC).

CCC is calculated as "accounts receivable turnover period + inventory turnover period - accounts payable turnover period" and the shorter the number of days, the faster and more efficient the cash turnover. When CCC improves (shortens), the improvement in efficiency is likely to be factored into the stock price and in the past, when CCC improved between FY03/2016 to FY03/2018 against the backdrop of increased demand in the Chinese market, market capitalization increased significantly. After that, CCC worsened to 174.5 days in FY03/2023, but has reversed since FY03/2024, and is expected to continue improving to 132.0 days in FY03/2028 in the Medium-Term Management Plan.

Figure 20. Cash Conversion Cycle & Market Capitalization



Note: The higher on the left axis, the smaller the value (the fewer the number of days), indicating that the company is operating with efficient cash circulation. Market capitalization is as of the end of each fiscal period. Market capitalization for FY3/25 is as of February 19, 2025.

Source: Strategy Advisors. Based on Company Data.

Aiming to Reduce WACC by Increasing Financial Leverage

The company is extremely conscious of capital costs and is a rare company that sets targets based on a projected balance sheet before planning capital policies, including shareholder return measures. The company plans to implement capital policies to reduce the WACC that constitutes MAVY's. Specifically, the company plans to increase financial leverage by increasing borrowings.

In Terms of Shareholder Returns, the Goal is a DOE of Over 10% in FY03/2028

As part of its capital policy, the company also aims to improve shareholder returns. To this end, the company places emphasis on DOE (Dividend on Equity: total annual dividends divided by shareholders' equity, or dividend payout ratio x ROE) as an indicator. The company plans to raise DOE to 10.3% in FY03/2028, up from 2.0% in FY03/2024 and 3.9% in FY03/2025.

9. Comparison with Other Companies in the Industry

Domestic Market Share: about 70% in Construction Machinery

The company is said to have a 70% share of the domestic market for hydraulic filters for construction machinery, but it appears that it has several competitors, such as Wako Filter Technology (unlisted), which is developed from automobile filters.

Overseas Competitors

Looking overseas, competitors include Parker Hannifin Corp (USA, PH NYSE), a leader in hydraulic systems and filter technology, Donaldson (USA, DCI NYSE) which is an industrial filter manufacturer with strengths in hydraulic filters for construction

machinery, Hydac International (Germany, unlisted), a manufacturer specializing in hydraulic equipment and filters with strengths in hydraulic filters for construction machinery and MANN+HUMMEL (Germany, unlisted), which mainly deals in automobile filters but also develops hydraulic filter products for construction machinery. Many of these competitors have other core businesses and have expanded their business areas to also handle filters for construction machinery.

Additionally, there are competing construction machinery filter manufacturers in China, such as Shanghai Filter and Xuzhou Hengji Filter.

Lower Profitability Compared to Overseas Construction Machinery Filter Manufacturers

We compared our results with some of the direct competitor construction machinery filter manufacturers listed above, as well as with manufacturers that provide construction machinery-related products and construction machinery manufacturers.

Regarding profitability, the company's operating profit margin was 7.8% in FY03/2024. Although this is higher than domestic manufacturers of hydraulic equipment or construction machinery-related products, it is significantly lower than overseas manufacturers of construction machinery filters and domestic and overseas construction machinery manufacturers. The lower ROE (3.7% in FY03/2024) and ROIC (4.7%) compared to overseas manufacturers of construction machinery filters are also thought to be due to low profitability, but this also suggests that there is a lot of room for improvement in the future.

High Capital Adequacy Ratio Indicates Safety

The company's equity ratio at FY03/2024 was 82.1%, which is higher than any other company this time. This could be seen as a sign of high financial security, but it could also be seen as a sign of low borrowing, meaning that the company is not in a position to make investments that would require increased borrowing.

A high equity ratio is synonymous with low financial leverage, which constitutes ROE. One of the reasons for the company's low ROE of 3.7% for FY03/2024 is low financial leverage.

Figure 21. Profitability Comparison with Other Companies in the Same Industry

Company Name	Code	FY	Sales (¥ mn)	Sales Growth Rate (%)	OP (¥ mn)	OP Growth Rate (%)	OP Margin (%)	ROE (%)	ROIC (%)	Equity Ratio (%)
Yamashin-Filter	**6240**	**03/24**	**18,025**	**5.5**	**1,411**	**-6.4**	**7.8**	**3.7**	**4.9**	**82.1**
Wako Filter Technology	Unlisted	12/23	15,790	-	-13	-	-0.1	5.8	-0.5	53.2
Parker Hannifin (USA)	PH	06/24	2,990,098	6.8	583,017	13.2	19.5	25.4	14.7	41.2
Donaldson (USA)	DCI	07/24	538,008	4.7	81,616	7.0	15.2	29.5	21.8	51.1
[Reference: Hydraulic equipment or construction machinery related]										
Yuken Kogyo	6393	03/24	29,512	-0.3	1,379	-8.4	4.7	3.6	2.8	59.7
KYB	7242	03/24	442,781	1.4	22,417	-	5.1	7.9	5.8	47.5
Topy Industries	7231	03/24	333,992	3.1	10,440	6.8	3.1	3.6	5.6	47.3
[Reference: Construction machinery manufacturer]										
Komatsu	6301	03/24	3,865,122	7.2	607,194	8.8	15.7	14.1	10.6	56.7
Hitachi Construction Machinery	6305	03/24	1,405,928	6.3	162,690	9.7	11.6	13.1	8.6	44.4
Caterpillar	CAT	12/24	9,723,294	3.8	1,961,192	9.5	20.2	55.4	19.5	22.2

Note: Growth rate is the average for the past five periods. Wako Filter Technology's sales growth rate and operating profit growth rate, which do not have data from five year ago, and KYB's operating profit growth rate, which was in the red five years ago, are not applicable.

Note: 1 USD = ¥150.03 as of February 19,2025.

Source: Prepared by Strategy Advisors.

10. Stock Price Trends & Valuations

To see the company's stock price trends to date, we have plotted the stock price trends of listed filter manufacturers, manufacturers providing construction machinery-related products, construction machinery manufacturers and TOPIX (Tokyo Stock Price Index) as an index. Figure 21 shows the relative stock price trends when the stock price at the end of 2019 is set to 100. Figure 22 shows the relative stock price trends when the stock price at the end of 2022 is set to 100 and Figure 23 shows the relative stock price trends when the stock price at the end of 2023 is set to 100.

Since Covid-19 in 2020, Yamashin Has Outperformed TOPIX

According to Figure 21, which shows stock price trends since 2020, in 2020 when COVID-19 began, the overall stock market and comparable companies saw a larger decline in their stock prices. In the second half of 2020, the company's sales of masks utilizing its filter technology were well received and as a result, its stock prices rose significantly above pre-COVID levels.

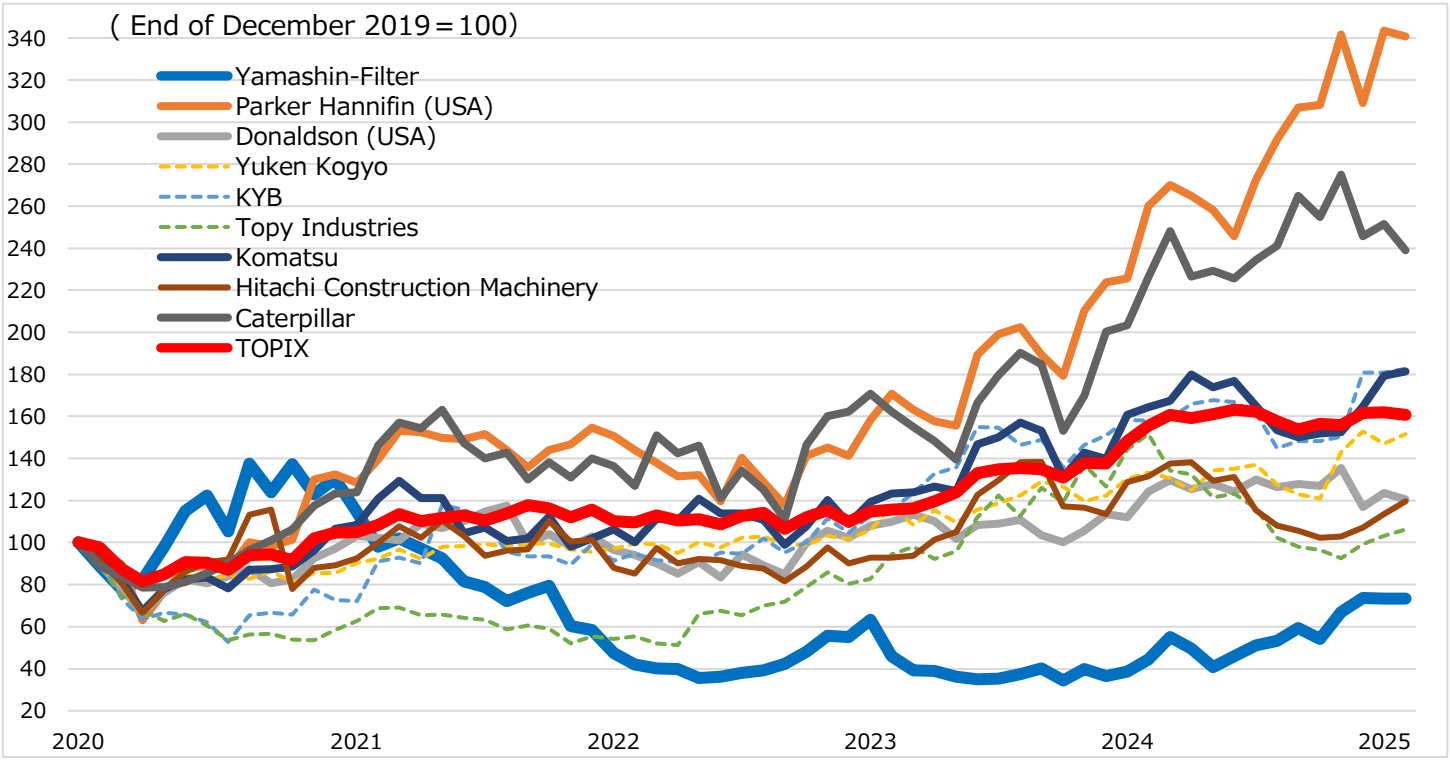
Stock Prices to Slump From 2021 Onwards

However, after the company's operating profit for FY03/2021 fell into the red, the company's stock price began to decline, and even though there was a temporary rise; the company's stock price entered a period of stagnation until it hit bottom for the first time since 2020 in October 2023. The company's stock price has been subdued relative to TOPIX and the stock prices of other similar companies.

Expectations for a Recovery in Earnings Built-Up from the End of 2023. The Stock Price is Expected to Outperform Other Companies

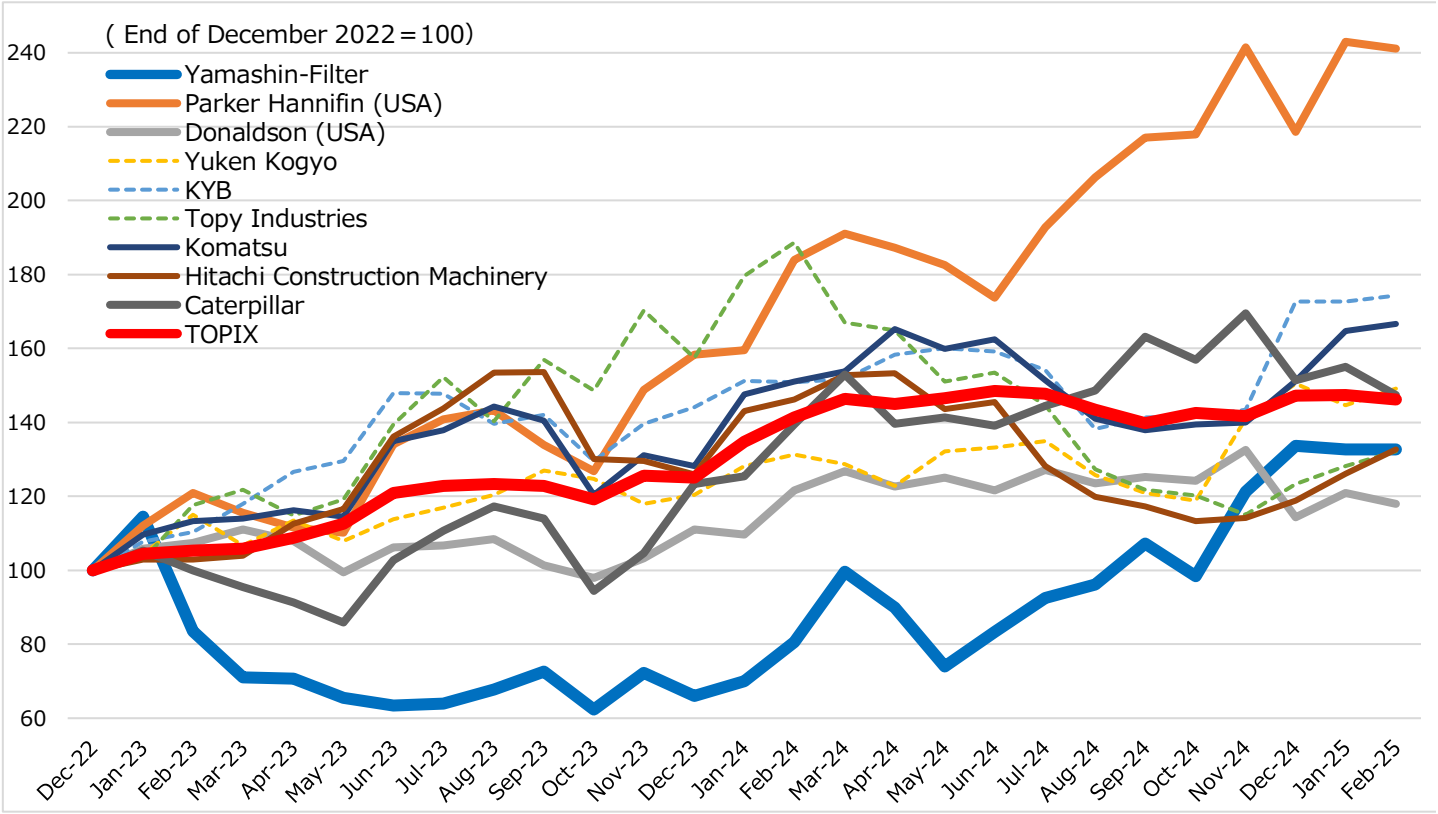
Looking at the details in Figure 22, which shows the stock price trend from 2023 onwards, the stock price remained sluggish until October 2023. After that, as the results for FY03/2024 were expected to exceed the initial plan, expectations for a recovery in performance grew and the stock price began to outperform TOPIX and other companies in relative terms. This trend continued in FY03/2025, with the company's stock price rising significantly compared to others, but it still has not reached the stock price level of 2020.

Figure 22. Stock Price Trends of Filter Manufacturers, Manufacturers Providing Construction Machinery-Related Products & Construction Machinery Manufacturers (Since 2020)



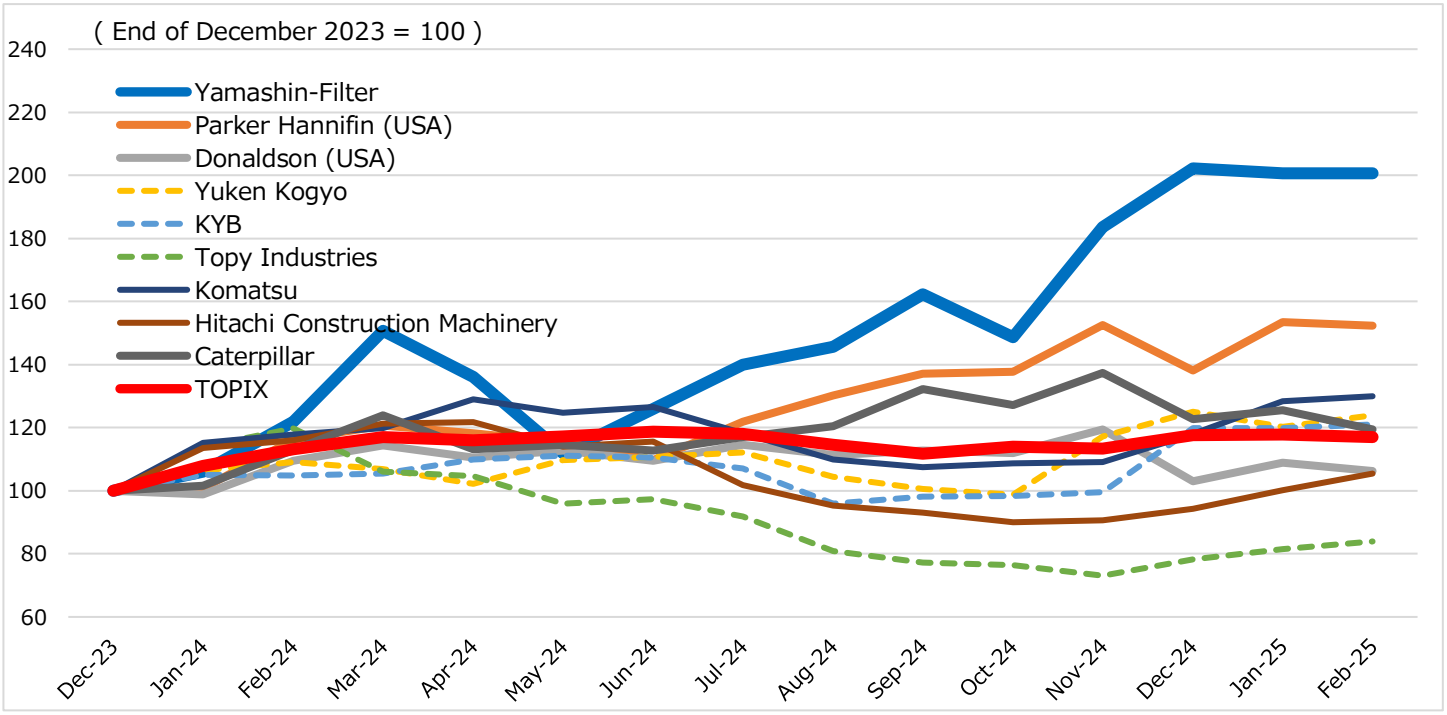
Source: Prepared by Strategy Advisors.

Figure 23. Stock Price Trends of Filter Manufacturers, Manufacturers Providing Construction Machinery-Related Products & Construction Machinery Manufacturers (Since 2023)



Source: Prepared by Strategy Advisors.

Figure 24. Stock Price Trends of Filter Manufacturers, Manufacturers Providing Construction Machinery-Related Products & Construction Machinery Manufacturers (Since 2024)



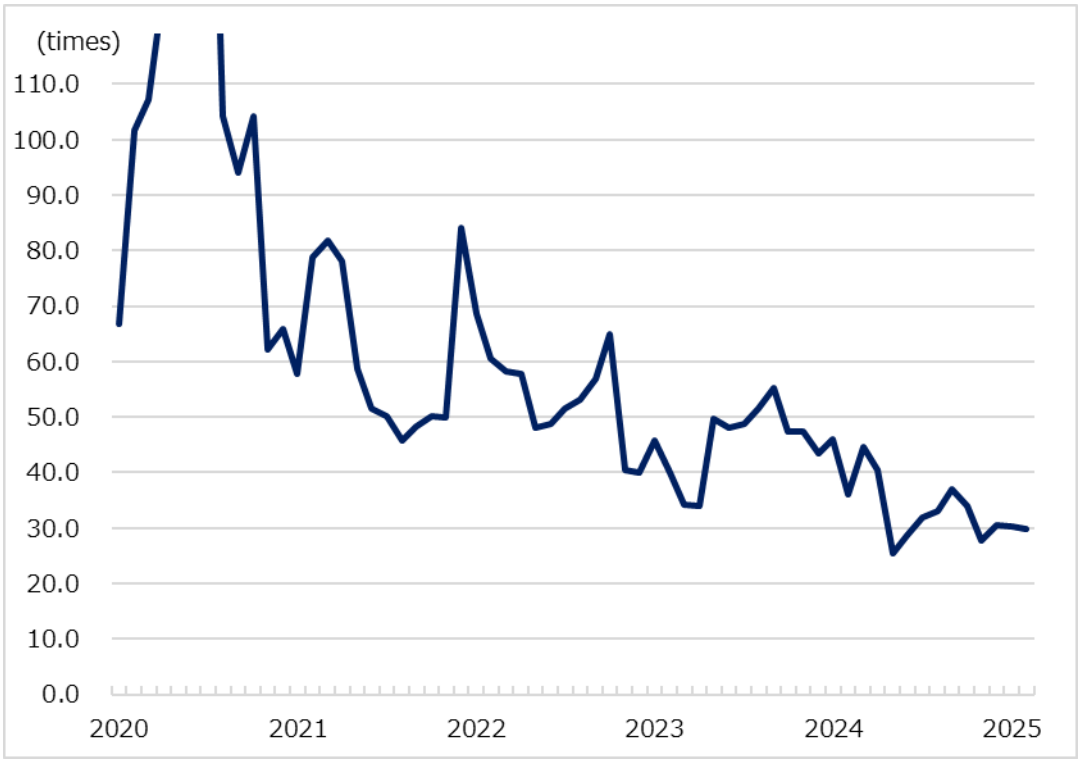
Source: Prepared by Strategy Advisors.

The Stock Has Mellowed Since its High Valuation 5 Years Ago, But...

In terms of valuation, the PER was at a high level of over 100 times until around 2021, but the stock price has since fallen and the PER is now at around 30 times. The PBR was at a level of 3.0 to 4.5 times until around 2021 but has since fallen to a level of 1.0 times. Due to the recovery of the stock price since 2024, the PBR is currently at a level of 2.0 times.

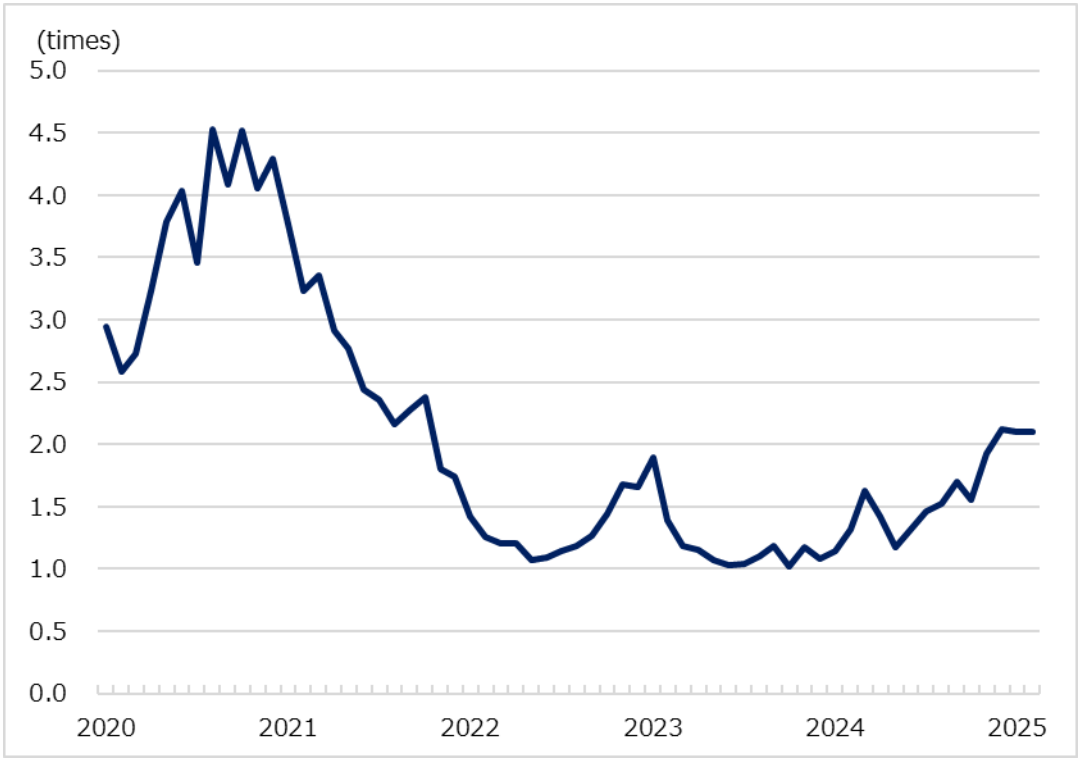
Compared to similar companies, the PER appears higher than any other company. The medium-term management plan announced in November 2024 includes forecasts up to FY03/2028 and the PER is expected to fall to 15.6 times based on the company's expected EPS for FY03/2028. In addition, the plan also expects ROIC to increase significantly from 4.9% in FY03/2024 to 10.2% in FY03/2028, which is thought to explain the high level of PER based on the current FY03/2025 standard. In addition, although the PBR is higher than domestic construction machinery-related companies, which are all below 1.0 times, it is far lower than US filter companies. This is largely due to not only profitability but also capital policy, so it is thought that there is room for improvement through capital policies aimed at improving ROIC and lowering WACC in the future.

Figure 25. PER Trends



Source: Strategy Advisors.

Figure 26. PBR Trends



Source: Strategy Advisors.

Figure 27. Comparison of Valuations with Peers

Company Name	Code	FY	Stock Price (Feb 19)	Market Cap (¥ mn)	PER CoE (Times)	PBR Actual (Times)	Dividend Yield CoE (%)	ROE Actual (%)
Yamashin-Filter	**6240**	**03/24**	**634**	**45,016**	**29.8**	**2.1**	**1.9**	**3.7**
Parker Hannifin (USA)	PH	06/24	701.55	13,536,024	26.2	7.5	0.9	25.4
Donaldson (USA)	DCI	07/24	69.44	1,251,316	19.1	5.6	1.5	29.5
[Reference: Hydraulic equipment or construction machinery related]								
Yuken Kogyo	6393	03/24	2,683	10,252	10.3	0.5	4.8	3.6
KYB	7242	03/24	2,968	146,893	11.8	0.4	6.7	7.9
Topy Industries	7231	03/24	2,145	49,017	9.6	0.4	4.8	3.6
[Reference: Construction machinery manufacturer]								
Komatsu	6301	03/24	4,793	4,423,176	11.8	1.5	3.5	14.1
Hitachi Construction Machinery	6305	03/24	3,928	835,501	9.9	1.1	4.5	13.1
Caterpillar	CAT	12/24	353.00	25,569,505	17.3	8.7	1.5	55.4

Note: US companies do not disclose EPS forecasts, so PER is calculated using consensus EPS forecasts. Since US companies do not disclose dividend forecasts, dividend yields are calculated using the most recent actual dividend per share.

Note: 1 USD = ¥150.03 as of February 19, 2025.

Source: Strategy Advisors.

From H2 2023 Onwards, the Company Exceeding TOPIX Due to Earnings Expectations

As seen in the Nikkei Stock Average reaching the ¥40,000 level for the first time in history in February 2024, the Japanese stock market as a whole had been rising mainly in large-cap stocks, driven by foreign purchases, until mid-2024. Even under these circumstances, the company's stock price outperformed TOPIX due to expectations for earnings in FY03/2024.

After that, the company's plan for FY03/2025 was cautious, so the relative stock price was at the same level as the TOPIX. It is thought that the stock market will end its overall factor-driven stock price rise from mid-2024 onwards and will be more responsive to individual factors such as performance and corporate actions. In this market environment, as the progress of the company's performance against the company's plan for FY03/2025 was confirmed, expectations for the company's performance rose and the stock price once again exceeded TOPIX in the second half of 2024. As a result, the current valuation of the company's stock is 29.8 times PER and 2.1 times PBR.

If the recovery in relative stock prices from the second half of 2023 onwards is defined as the "first phase", this is likely to be based on an evaluation of short-term performance up to FY03/2025 or 2026.

The Evaluation Criteria for the "Second Phase" are the Focus is on Whether MAVY'S will Turn Positive in FY03/2026

The evaluation axis for the "second phase" will be MAVY's (= ROIC-WACC), which the company considers important and the focus will be on whether it will turn positive in FY03/2026.

Regarding ROIC, a component of MAVY's, the focus will be on the progress of business performance, with sales of ¥23.79 billion and operating profit of ¥3.88 billion as targets for FY03/2028, which is the final year of the medium-term management plan. The medium-term management plan states that the main construction machinery filter business will drive overall performance, but this is based on a clear story of further penetration among major construction machinery manufacturers and the spread of high-performance filters based on the "YAMASHIN Nano Filter™ ". And unless there are sudden changes in the external environment such as interest rates, exchange rates and the economy, it is considered highly likely that the construction machinery filter business will achieve its plan.

MAVY's is also planned to gradually decline from FY03/2026. WACC is largely determined by the company's capital policy, so we would like to pay attention to the specific measures related to the capital policy, including shareholder returns.

Evaluation of the "Third Phase" Scenario:

"Becoming a Comprehensive Filter Manufacturer"

The "third phase" is an evaluation of the scenario of "becoming a comprehensive filter manufacturer" and is a move aimed at FY03/2029 and beyond.

Around 2018-2019, before the COVID-19 outbreak, the company was highly valued based on its "becoming a comprehensive filter manufacturer" based on its new material, YAMASHIN Nano Filter™. This scenario was no longer viewed favorably due to the outbreak of COVID-19 and the subsequent deterioration of business performance, as well as the sluggish growth of the air filter business, which led to a decline in the company's valuation.

The company continues to nurture its dream of "becoming a comprehensive filter manufacturer". It has also made clear its policy of moving forward steadily and realistically, rather than getting ahead of itself with expectations. This is evidenced by the fact that no new businesses have contributed to the company's performance during the medium-term management plan period. On the other hand, it is believed that the company will steadily move forward with its moves aimed at FY03/2029 and beyond, so we will be keeping a close eye on (1) the performance progress of the air filter business, which was a new business in 2019 and (2) trends that could lead to new businesses.

As awareness of the feasibility of the "becoming a comprehensive filter manufacturer" scenario in the medium to long term spreads, the evaluation of the company's business is likely to be reflected in the stock price through an increase in valuation.

Due To the Upward Revision of the Company Plan, the Dividend for FY03/2025 Will be Increased by ¥2.0 from Initial Levels

The company plans to pay a dividend of ¥12.0 per share (¥5.0 interim, ¥7.0 at the end of term) for FY03/2025. The dividend for FY03/2024 was ¥6.0 (¥3.0 interim, ¥3.0 end of term), so this is an increase of ¥6.0 from the previous term. The initial plan was ¥10.0 (¥5.0 interim, ¥5.0 at the end of term), but due to the upward revision of the company plan at the time of the announcement of the Q2 settlement, the dividend was increased by ¥2.0 from the initial plan levels. When the company plan was revised upward at the time of the announcement of the Q3 settlement, it was left unchanged at ¥12.0. The dividend payout ratio was 54.5% in FY03/2024, but after the revision of the company plan at the time of the announcement of the Q3 settlement, it is expected to be 56.4% for FY03/2025.

11. Risk Factors

At present, there do not appear to be any major risks requiring attention in terms of business operations or performance. However, if risks were to be identified, the following three points could be pointed out.

The first is short-term business performance trends. In particular, the company's main product, filters for construction machinery, depends on the number of construction machinery units produce, and is therefore vulnerable to sudden changes in the macro environment, such as interest rates, exchange rates, economic conditions or major geopolitical changes.

The second issue, which is also related to exchange rate fluctuations, is the possibility of rising costs for raw materials and transportation.

The third is the possibility of accidents or natural disasters at production sites. The company has three production sites: Saga in Japan, Cebu in the Philippines and Vietnam. If an accident or disaster causes production to halt, it could have an adverse effect on business performance.

12. ESG Initiatives

Corporate Governance System

Yamashin Group is comprised of Yamashin-Filter and seven consolidated subsidiaries and is organized as a company with an audit and supervisory committee. The board of directors consists of nine directors (including two women), five of whom are independent outside directors. There are three audit and supervisory committee members (all outside directors). In addition to President Atsuhiko Yamazaki, who is from the founding family, the internal directors include Vice President Hiroaki Yamazaki and Executive Officer Takaaki Yamazaki. The founding family holds 47% of the company's shares.

The Company has established a Nomination Committee and a Remuneration Committee under the Board of Directors. Independent outside directors make up the majority of the committee members and they consider officer candidates and remuneration. Remuneration for directors (excluding directors who are audit and supervisory committee members) consists of a fixed remuneration called "basic remuneration", a short-term incentive called "performance-linked remuneration" and a medium to long-term incentive called "restricted stock remuneration". In addition, the Company established a Governance Committee composed of independent directors in 2023, which provides advice to the Board of Directors to continuously improve governance.

Of the nine directors, five are outside directors, accounting for 56% of the total. Principle 4-8 of the Corporate Governance Code requires that companies listed on the Prime Market appoint at least one-third of independent outside directors, so this standard is met. All five outside directors meet the independence criteria. In addition, of the nine directors, two are female (female director ratio 22%). The company has set a goal of increasing the female director ratio to 30% or more by 2030.

Figure 28. Director Skills Matrix

Name	Title	Corp Mngt	Sustainability, ESG	Technology development, engineering	Production	Sales	Global	Finance, Accounting	Human Resources, Labor
Atsuhiko Yamazaki	Representative Director/ President	◎		○	○	○			
Hiroaki Yamazaki	Director/Senior Executive Vice President	○			◎				
Chikahisa Ioka	Director/Senior Executive Vice President	○	○				◎		
Takaaki Yamazaki	Director/Executive Officer			◎					
Miyoko Yoshikawa	Outside Director	○	○						◎
Kumiko Igushi	Outside Director	◎						○	○
Hideaki Morita	Outside Director (Audit & Supervisory Committee Member)	◎			○				○
Hiroshi Itano	Outside Director (Audit & Supervisory Committee Member)	◎			○				
Naruhiko Takatsuji	Outside Director (Audit & Supervisory Committee Member)	○	◎				○		

Note: The areas in which each director has expertise, such as experience, are indicated with a "○", and the areas in which he/she is expected to demonstrate particular ability, such as in providing useful advice to the executive divisions, are indicated with a "◎".

Source: Company Data.

Sustainability Initiatives

The company's management philosophy is "*Rokajinitsukafuru*", which reflects the will of the company's founder, Mr. Masahiko Yamazaki, to contribute to society through the filteration business. Through the filter business, the company works to solve problems for the realization of a sustainable society with the themes of "environment", "air quality" and "health".

The company aims to increase its corporate value by balancing its core business with sustainability. The company is proactively working on sustainability and has been disclosing a sustainability report every year since 2021. In fiscal 2021, the company established the "YSS (Yamashin Sustainable Solutions) Committee" as an advisory body to the president and CEO. The YSS Committee discusses the promotion of SDG's and ESG initiatives once a month and reports the results to the board of directors and management meetings.

In 2022, the company declared its support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). In addition, the company has been selected for the second consecutive year as a constituent stock of the FTSE Blossom Japan Sector Relative Index, which reflects the performance of Japanese companies with relatively excellent ESG response.

In the medium-term management plan announced in November 2024, the company has set three strategies: "Undertake initiatives to create new value", "Strengthen management with a focus on capital costs" and "Promoting ESG management". As part of "Promoting ESG management", the company aims to realize a sustainable society, setting non-financial KPI's and promoting sustainability initiatives. As non-financial KPI's for FY03/2028, the company aims to achieve a FTSE ESG score of 4.0 or higher (2.7 in FY03/2024). 2) The company aims to obtain a CDP climate change score of A's (the current score is a B).

As shown in the table below, we have identified materiality (important sustainability issues) based on the GRI Sustainability Reporting Standards. Based on the identified materiality, we have established a management system that sets policies to be implemented, KPI's related to each materiality, management supervisors and methods and is promoting initiatives.

Figure 29. Identifying Materiality (Important Sustainability Issues)

	Materiality	Commitment	Indicators
Environment	Measures in response to climate change	Climate change response measures and contribution to the realization of the post-carbon society ▪ Realization of a business model that contributes to climate change response strategies from the perspective of both products and production, with the aim of helping to realize carbon neutrality demanded throughout the world	▪ Reduction of CO2 emissions in view of achieving carbon neutrality by FY03/2051 ▪ Expanding the use of electric power derived from renewable energy sources
	Designing value-added products	Using filter technology to contribute toward reducing the burden on the environment and toward the realization of a resource-circulating society ▪ Realization of a business model that achieves both high economic efficiency and high environmental efficiency throughout the value chain, with a focus on resource circulation and reducing the burden on the environment	▪ Creating environmentally friendly products
	Resource circulation and minimizing environmental impact		▪ Reducing water usage ▪ Reducing the amount of waste generated
Air and Health	Contributing to health and safety for people	Preventing harm to health caused by environmental pollution - contributing to enabling people to live with safety and peace of mind ▪ Using filter technology to protect people from harm to their health caused by environmental pollution and particulate matter (pm2.5) ▪ Using filter technology to further enhance indoor air quality ▪ Using high-level, high-functionality filter technology to protect people from infectious diseases	▪ Providing products that reduce health risks
People and Work	Contributing to filter technology innovation and to address society's problems	Refinement and application of technology - striving to provide the filter technology needed by society ▪ Applying our unique technology to generate new value ▪ Refining our unique technology to create unprecedented new types of filters	▪ New product development ▪ Number of new patents secured ▪ Implementing communication and exchange with customers to address society's problems ▪ Training participation
	Creating high motivation workplaces	Motivated and engaged talent - realizing "仕濾過事" (*rokajinitsukafuru*: contributing to society through the filtration business) ▪ Undertaking work with high motivation and gratitude to and from customers, colleagues, and family members ▪ Building workplaces that give due consideration to work-life balance, diversity, talent cultivation, and labor safety with the aim of enabling diverse human talent to fulfill their potential	▪ Instilling our corporate philosophy of "仕濾過事"(*rokajinitsukafuru*: contribute to society through the filtration business) in our employees ▪ Teleworking implementation rate ▪ Data relating to diversity & inclusion ▪ Hours of training per employee ▪ Number of serious occupational accidents
	Creating a workplace where a diverse workforce can realize their full potential		
	Promoting human rights awareness management	Promoting human rights due diligence - aiming to be a company that is trusted by society ▪ Demonstrating respect for human rights throughout the value chain, and fulfilling our corporate responsibility ▪ Promoting human rights due diligence throughout the value chain	▪ Putting in place the systems needed to ensure respect for human rights ▪ Implementing an ESG survey of key suppliers, including human rights issues

Source: Company Data.

Climate Change Response

The company agreed with the TCFD recommendations in 2022 and is actively disclosing information in line with the TCFD recommendations. In 2024, the company submitted a commitment letter to the Science Based Targets (SBT) initiative and in the future, based on the SBT approach, the company aims to be certified at the 1.5°C level for Scope 1 and 2 and at the WB2°C level (well below 2°C) for Scope 3.

In assessing risks and opportunities based on the TCFD recommendations, a quantitative assessment is conducted based on six items: frequency of occurrence, duration of impact, magnitude of impact, impact on core business, likelihood of manifestation and timing of manifestation. In addition, in accordance with the TCFD classification, risks and opportunities related to climate change are identified and scenario analysis is conducted based on the "4°C scenario" of the IPCC (Intergovernmental Panel on Climate Change) and the "1.5°C and 2°C scenarios" of the IEA (International Energy Agency).

The total of Scope 1 (direct emissions within the company), Scope 2 (indirect emissions from electricity use, etc.) and Scope 3 (emissions in the value chain) emissions for FY03/2024 was 74,082 t-CO2. Scope 1 and 2 emissions were 2,928 t-CO2, achieving a reduction of 17.1% compared to FY03/2023. Detailed data on renewable energy adoption rate, energy consumption; and Scope 1, 2, and 3 are disclosed in the "Sustainability Report 2024".

Other KPI’s for environmental materiality in FY03/2024 were 43.9% renewable energy electricity adoption rate, 20.2% waste reduction rate compared to the previous fiscal year and 98.6% recycling rate (domestic bases). Medium to long-term targets are: 1) Reduce the Group's water withdrawal by 25% compared to FY03/2023 by FY03/2033, 2) Reduce the water withdrawal intensity, 3) Reduce the Group's waste emissions by 20% compared to FY03/2023 by FY03/2033 and 4) Achieve a domestic recycling rate of 95% or more.

Figure 30. Climate-Related Risks and Opportunities

	Category	Risk and Opportunity	Time Axis	Impact on business	
				1.5℃	4℃
Transition Risk	Policy & Regulation	Increased response costs resulting from taxation of the company's own emissions due to introduction of a carbon tax	Long-term	Small	Small
		Increase in costs relating to the imposition of an EU Carbon Border Tax in Europe targeting filter products whose main raw materials are aluminum and steel responsible for the highest share of greenhouse gas emissions	Medium-term	Small	Small
	Technology	An increase in raw materials costs resulting from the conversion of existing raw materials for filtration media (from petroleum-derived plastics to non-petroleum-derived materials)	Long-term	Small	Medium
	Market	The automotive industry's accelerating shift to EVs as a measure against climate change could result in drastic increases in the price of aluminum, a key raw material in filter products	Long-term	Medium	Medium
	Assessment	Stricter trade conditions imposed by customers such as mining-related companies could reduce demand for products that lack evident potential to reduce CO2 emissions	Long-term	—	—
Physical Risk	Acute (Typhoon, etc.)	Supply chain disruptions or shutdowns resulting from cyclones, typhoons, etc., could reduce production capacity	Short-term	Small	Small
	Chronic (Climate Change, Increase in Average Temperatures, Sea Level Rise)	Supply chain disruptions or shutdowns resulting from cyclones, typhoons, etc., could reduce production capacity A rise in atmospheric temperatures could increase the costs of coping with the resulting worsening of factory work environments and the impact on the supply chain	Long-term	Small	Small
Opportunity	Products & Services	Expanded opportunities to manufacture and sell long-life filters for construction machinery	Long-term	Large	Large
		Expanded opportunities for NanoWHELP® manufacturing and sales	Medium-term	Large	Large
		Expanded opportunities in business related to masks to counter the spread of infectious disease accompanying rising atmospheric temperatures	Long-term	Medium	Medium
		Expanded opportunities to manufacture and sell high-performance filter products for construction machinery for compliance with exhaust gas regulations	Short-term	Large	Large
	Assessment	Increased investment in plant and equipment resulting from expanded financing opportunities through Sustainable FITs, etc.	Long-term	—	—

Source: Company Data.

Human Capital Strategy

The company bases its management on diversity management, where employees respect each other's experiences, abilities and ways of thinking, regardless of differences in nationality, age, gender, culture, religion, etc. As materiality related to human capital, "Creating high motivation workplaces" and "Creating a workplace where a diverse workforce can realize their full potential" have been specified. The KPI's for materiality are the average training hours per employee (Non-consolidated) of 15.5 hours, the ratio of female managers (group) of 20.3% and the teleworking implementation rate (Yokohama, where the office is located) of 51% (FY03/2024).

On a consolidated basis, the ratio of women is 52.3% and the ratio of female managers is 20.3%, both of which are high levels. According to statistics compiled by the Japan Productivity Center, the ratio of female managers at companies listed on the Tokyo Stock Exchange Prime for FY03/2024 is 8.5% overall and 6.0% in the manufacturing industry, both of which are significantly higher than the market and industry averages.

On the other hand, the ratio of female managers on a standalone basis is 5.9%, while that of the subsidiary AQC is 0%, both of which are low levels and are recognized as issues. Therefore, in order to improve these issues, the company has set the following medium to long-term goals for promoting women's participation in the workforce.

5-Year Target: By 2028, increase the percentage of female employees to 35% on a non-consolidated basis and maintain the percentage of female employees and female managerial positions at or above the levels as of the end of March 2023 on a group-wide basis.

10-Year Target: Achieve or exceed the levels of each ratio set out in the above 5-year target by 2033. Achieve a female executive ratio of 30% or more by 2030.

Currently, the ratio of foreigners in managerial positions is 0%, but the goal is to increase this to 5% by 2028. As of the end of March 2024, the ratio of mid-career hires in managerial positions is 74.5% and the company will continue to actively promote them in the future. In addition, the gender wage gap, assuming that men account for 100%, is 77.0% for all workers and 75.3% for regular employees. According to the Japan Productivity Center, the wage gap for the entire Tokyo Stock Exchange Prime Market is 71.4% and for the manufacturing industry it is 73.6%, making the wage gap lower than the market and industry average.

Figure 31. Diversity and Inclusion Data

(%)	Scope	FY 03/22	FY 03/23	FY 03/24
Ratio of Females	Group	-	51.7	52.3
	Non-Consolidated	23.3	31.6	32.5
	AQC Corporation	-	37.6	39.7
Ratio of Female Directors	Non-consolidated	0	10	22
Ratio of Female Managers	Group	17.9	21.6	20.3
	Non-Consolidated	2.2	6.1	5.9
	AQC Corporation	-	0	0
Ratio of Non-Japanese Managers	Non-Consolidated	-	-	0
Ratio of Mid-Career Hires to Managerial Positions	Non-Consolidated	-	-	74.5
Rate of Male Childcare Leave	Non-Consolidated	-	100	100
	AQC Corporation	-	100	0
Pay Differential Between Men & Women	Non-Consolidated	75.2	73.4	77.0
	AQC Corporation	-	69.5	70.6
Employment Rate of People with Disabilities	Non-Consolidated	1.59	1.61	1.48

Note: As of the end of March of each fiscal year. The ratio of female executives is as of the end of June of each year, and the employment rate of people with disabilities is as of June 1 of each year. The survey covers all workers, including part-time and fixed-term workers, and the ratio of women's wages to men's wages.

Source: Company Data.

Figure 32. Consolidated Statement of Income (¥ mn)

FY	03/18	03/19	03/20	03/21	03/22	03/23	03/24	03/25 CoE
Sales	13,168	13,811	12,674	14,587	18,822	18,606	18,025	19,780
Cost of Sales	7,094	7,332	7,152	8,785	11,218	11,293	10,467	
Gross Profit	6,074	6,479	5,522	5,803	7,604	7,313	7,558	
Gross Profit Margin	46.1%	46.9%	43.6%	39.8%	40.4%	39.3%	41.9%	
SG&A	4,163	4,516	4,745	5,948	6,259	6,078	6,146	
Operating Profit	1,911	1,963	777	-146	1,344	1,235	1,411	2,454
Operating Profit Margin	14.5%	14.2%	6.1%	-1.0%	7.1%	6.6%	7.8%	12.4%
Non-Operating profit	18	10	28	50	39	38	128	
Non-Operating Expenses	104	58	202	40	66	358	124	
Ordinary Profit	1,825	1,916	603	-135	1,317	915	1,416	2,498
Ordinary Profit Margin	13.9%	13.9%	4.8%	-0.9%	7.0%	4.9%	7.9%	12.6%
Extraordinary Income	35	1	17	1,267	44	1	9	
Extraordinary Loss	4	6	23	176	1,024	26	286	
Pretax Profit	1,856	1,911	597	956	337	890	1,139	
Corporate Tax, Resident Tax, Business Tax	604	517	161	262	394	231	423	
Corporate Tax Adjustments	2	-20	-172	-57	-104	13	-71	
Total Corporate Tax, etc.	606	497	-11	205	290	245	352	
(Corporate Tax Rate)	32.7%	26.0%	-1.8%	21.4%	86.1%	27.5%	30.9%	
Net Income to Owners of The Parent	1,250	1,414	608	751	47	645	786	1,511
Net Profit Margin	9.5%	10.2%	4.8%	5.1%	0.3%	3.5%	4.4%	7.6%
EPS (¥)	19.71	20.44	8.79	10.69	0.66	9.03	11.01	21.28
Capital Investment	816	2,257	3,150	5,229	2,836	607	439	
Depreciation	303	414	622	723	870	823	767	
Operating Cash Flow	1,064	800	2,099	87	290	2,408	2,632	
CFPS (¥)	15.4	11.6	30.3	1.2	4.1	33.6	36.9	
ROE	10.6%	8.1%	3.3%	3.9%	0.2%	3.1%	3.7%	
ROIC	7.0%	7.8%	3.3%	-1.4%	4.7%	3.1%	4.9%	
Dividend (¥)	9.20	6.00	6.00	6.00	6.00	6.00	6.00	12.00
Average number of shares during the period (Million Shares)	63.4	69.1	69.1	70.2	71.3	71.5	71.4	
End of period shares (Million Shares)	69.1	69.1	69.1	71.3	71.4	71.5	70.5	

Source: Strategy Advisors. Based on Company Data.

Figure 33. Consolidated Statement of Income (¥ mn)

FY	03/18	03/19	03/20	03/21	03/22	03/23	03/24
Current Assets	17,198	15,391	13,983	15,323	13,965	12,924	13,488
Cash and Deposits	11,620	9,490	8,507	7,230	3,751	4,114	5,065
Accounts Receivable	3,366	3,253	3,406	4,286	4,696	4,447	3,484
Inventory	1,799	2,370	1,827	3,022	4,775	4,141	3,408
Others	413	278	243	785	743	222	1,531
Fixed Assets	3,568	5,641	7,608	12,868	12,748	12,658	12,456
Tangible Fixed Assets	1,654	3,540	6,637	10,814	11,609	11,684	11,328
Intangible Fixed Assets	413	347	367	330	237	173	210
Investments and Other Assets	1,501	1,755	604	1,725	902	801	918
Investment Securities	1,356	1,364	28	1,010	27	32	-
Deferred Tax Assets	-	-	411	463	553	542	619
Others	145	391	165	252	322	227	299
Total Assets	20,766	21,033	21,591	28,191	26,712	25,582	25,944
Current Liabilities	2,969	2,354	2,810	5,540	4,634	3,343	3,828
Trade Payables	1,518	1,289	1,187	1,953	2,214	1,453	1,647
Accounts Payable and Accrued Expenses	341	310	356	1,649	449	394	442
Interest-Bearing Debt	350	200	765	1,089	487	767	718
Short-Term Borrowings	-	-	520	600	-	280	225
Current Portion of Long-Term Borrowings	350	200	245	489	487	487	493
Deferred Tax Liabilities	-	-	-	160	129	-	26
Others	760	555	502	689	1,355	729	995
Fixed Liabilities	797	566	578	1,969	1,507	1,261	817
Interest-Bearing Debt	400	200	150	1,702	1,255	991	517
Long-Term Borrowings	-	-	150	1,702	1,255	991	517
Deferred Tax Liabilities	175	190	250	225	233	258	290
Others	222	176	178	42	19	12	10
Net Assets	16,999	18,113	18,202	20,682	20,571	20,978	21,299
Capital Stock	16,969	18,063	18,222	20,586	20,255	20,523	20,557
Capital Surplus	10,608	10,608	10,608	12,638	12,688	12,740	12,882
Retained Earnings	6,361	7,455	7,614	7,949	7,568	7,784	7,907
Treasury Stock	0	0	0	0	0	0	-233
Accumulated Other Comprehensive Income	30	50	-20	72	316	454	742
Stock Acquisition Rights	-	-	-	24	-	-	-
Non-Controlling Interests	-	-	-	-	-	-	-
Total Assets	20,766	21,033	21,591	28,191	26,712	25,582	25,944
Interest-Bearing Debt	750	400	915	2,791	1,742	1,759	1,234
Capital Adequacy Ratio	81.9%	86.1%	84.3%	73.3%	77.0%	82.0%	82.1%
D/E Ratio	0.04	0.02	0.05	0.13	0.08	0.08	0.06

Source: Strategy Advisors. Based on Company Data.

Figure 34. Consolidated Statement of Cash Flow (¥ mn)

FY	03/18	03/19	03/20	03/21	03/22	03/23	03/24
Cash Flows from Operating Activities							
Income before income taxes	1,856	1,911	597	956	337	890	1,13
Depreciation	303	414	622	723	870	823	76
Working Capital	-791	-694	992	-1,277	-1,760	239	68
Others	-304	-831	-112	-315	843	456	3
Total	1,064	800	2,099	87	290	2,408	2,63
Cash Flows from Investing Activities							
Payments for Acquisition of Property, Plant and Equipment	-602	-2,251	-3,042	-3,494	-3,132	-1,012	-27
Payments for Acquisition of Intangible Fixed Assets	-224	-18	-130	-84	-46	-29	-9
Others	714	21	120	-821	901	-129	-16
Total	-112	-2,248	-3,052	-4,399	-2,277	-1,170	-54
Cash Flows from Financing Activities							
Net Increase/Decrease in Short-Term Borrowings	-	-	520	80	-600	280	-5
Net Increase/Decrease in Long-Term Borrowings	-500	-350	-200	1,608	-403	-403	-40
Issuance of Shares	9,184	-	-	1,980	-	-	
Purchase of Treasury Stock	0	0	-	-	-	-	-47
Dividend Payment	-174	-325	-449	-415	-428	-429	-43
Others	-2	-1	-140	-40	-123	-166	-10
Total	8,508	-676	-269	3,213	-1,554	-718	-1,46
Effect of Exchange Rate Changes on Cash and Cash Equivalents	34	-7	-31	96	63	-156	11
Cash Increase/Decrease	9,485	-2,131	-1,253	-1,004	-3,479	363	74
Cash Beginning Balance	2,100	11,586	9,455	8,202	7,198	3,719	4,08
Ending Cash Balance	11,586	9,455	8,202	7,198	3,719	4,082	4,82

Source: Strategy Advisors. Based on Company Data.

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