

# Improving Earning Power in Core Businesses



**YAMASHIN-FILTER CORP.**  
Financial Results for the Fiscal Year  
Ended March 31, 2023

May 24, 2023

- While sales and income decreased due to various factors such as Chinese market stagnation, high marine transportation costs, soaring raw material costs, and depreciation of the yen, strive to improve profitability through price pass-on and cost improvement

## Construction machinery filter business (Market Environment)

The market

Japan

North America

Europe

Asia

China



Construction equipment uptime and demand for new vehicles remains strong



Sluggish

Logistics costs and raw material prices

Exchange (e.g. foreign)

Sudden price jump

Weakening of the yen

## Air Filter Business (Market Environment)

Demand for filter replacement of office buildings, etc. is recovering

Under the environmental issues such as CO2 reduction and reduction of industrial waste

Opportunities to expand our business are coming

Business Results for FY2022

**Consolidated sales: 18,650 million yen**  
YoY: **1.1% decrease in sales**

**Consolidated operating income: 1,235 million yen**  
YoY: **8.1% decrease in profit**  
**\*Shareholders' equity ratio: 82.0%**

Construction machinery filter

Sales decreased 1.8% YoY to 15,945 million yen

Despite firm operating hours and demand for new construction equipment, demand declined due to sluggish economic activity in the Chinese market

Air filter

Sales increased 3.2% YoY to 2,659 million yen

Demand for filters for building air-conditioning systems is recovering in line with the recovery in economic activity, and is on a par with the previous year

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**Business Performance Results for Q4 FY2022 and Full-Year Forecasts for FY2023 (Ending March 31, 2024)**

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## I BUSINESS PERFORMANCE RESULTS FOR Q4 FY2022 AND FULL-YEAR FORECASTS FOR FY2023 (ENDING MARCH 31, 2024)

# **Business Performance Results for Q4 FY2022 (Jan to Mar 2023)**

# Q4 FY2022 Financial Results (Jan to Mar 2023)

(million yen)		Q4 FY2021 Results	Q4 FY2022 Results	Difference	
		Amount	Amount	Amount	%
<b>Net sales</b>		4,633	4,486	△146	△3.2%
	Construction machinery filters, etc. *1 *2	3,950	3,794	△155	△3.9%
	Air filters	683	692	9	1.3%
<b>Operating income (segment income)</b>		230	167	△63	△27.4%
	Construction machinery filters, etc. *3	272	127	△144	△53.1%
	Air filters*3	△41	39	81	—
<b>Operating income margin</b>		<b>5.0%</b>	<b>3.7%</b>	<b>△1.2Pt</b>	
	Ordinary profit	238	75	△162	△68.1%
<b>Ordinary profit margin</b>		<b>5.1%</b>	<b>1.7%</b>	<b>△3.5Pt</b>	
	Net income	135	98	△36	△27.1%
<b>Net income margin</b>		<b>2.9%</b>	<b>2.2%</b>	<b>△0.7Pt</b>	
Exchange rates (ave.)	USD	112.4	135.5	23.1	20.5%
	EUR	130.6	141.0	10.4	8.0%

\*1 "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

\*2 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2022, to reflect the degree of impact on YAMASHIN's performance.

\*3 With respect to operating income for the fiscal year ending March 31, 2022, general and administrative expenses and other expenses of the administrative divisions of the head office and subsidiaries, which were separately presented as corporate expenses, are included in the operating income of each segment.

(million yen)	FY2021	FY2022	Change (Amount)	Change (%)
<b>Current assets</b>	13,964	12,923	△ 1,040	△ 7.5%
Cash and deposits	3,750	4,113	363	9.7%
Notes and accounts receivable-trade	4,696	4,446	△ 249	△ 5.3%
Merchandise and finished goods, Raw materials and Supplies	4,775	4,141	△ 633	△ 13.3%
Other	742	221	△ 520	△ 70.2%
<b>Fixed assets</b>	12,747	12,658	△ 89	△ 0.7%
Tangible fixed assets	11,609	11,683	74	△ 0.6%
Intangible fixed assets	236	172	△ 63	△ 26.9%
Investments and other assets	901	801	△ 100	△ 11.1%
<b>Total assets</b>	26,712	25,581	△ 1,130	△ 4.2%

	FY2021	FY2022	Change (Amount)	Change (%)
<b>Current liabilities</b>	4,634	3,343	△ 1,290	△ 27.9%
Notes and accounts payable-trade	2,213	1,453	△ 760	△ 34.4%
Corporate bonds payable within one year and short-term loans payable	403	683	280	69.4%
Other	2,016	1,206	△ 810	△ 40.2%
<b>Fixed liabilities</b>	1,506	1,260	△ 245	△ 16.3%
Corporate bonds and long-term debt	1,126	722	△ 403	△ 35.8%
Net defined benefits Liability	232	257	24	10.6%
Other	147	280	132	89.9%
<b>Total net assets</b>	20,571	20,977	406	2.0%
<b>Total of liabilities and net assets</b>	26,712	25,581	△ 1,130	△ 4.2%
<b>*Shareholders' equity ratio</b>	77.0%	82.0%		

# Q4 FY2022 Sales by Product Category (Jan to Mar 2023)

(million yen)	Q4 FY2021 Results	Q4 FY2022 Results	Difference	
	Amount	Amount	Amount	%
<b>Construction machinery filters</b>	3,509	3,415	△93	△2.7%
Line parts	1,465	1,585	120	8.2%
Service parts	2,043	1,830	△213	△10.5%
<b>Industrial filters *</b>	234	178	△55	△23.8%
<b>Process filters</b>	206	200	△6	△2.9%
<b>Subtotal (Construction machinery filters, etc.)</b>	3,950	3,794	△155	△3.9%
<b>Air filters</b>	683	692	9	1.3%
<b>Total</b>	4,633	4,486	△146	△3.2%

\* The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2022, to reflect the degree of impact on YAMASHIN's performance.



# Q4 FY2022 Sales by Region (Jan to Mar 2023)

(million yen)	Q4 FY2021 Results		Q4 FY2022 Results		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
<b>Construction machinery filters, etc. *1*2</b>	3,950	85.3%	3,794	84.6%	△155	△3.9%
Japan	1,873	40.4%	1,848	41.2%	△24	△1.3%
North America	692	14.9%	677	15.1%	△14	△2.1%
China	392	8.5%	419	9.3%	26	6.7%
Other Asian countries	595	12.9%	422	9.4%	△172	△29.0%
Europe	395	8.5%	426	9.5%	31	7.9%
Others (Middle East, etc.)	0	0.0%	0	0.0%	0	△79.9%
<b>Air filters (Japan)</b>	683	14.7%	692	15.4%	9	1.3%
<b>Total sales</b>	<b>4,633</b>	<b>100.0%</b>	<b>4,486</b>	<b>100.0%</b>	<b>△146</b>	<b>△3.2%</b>

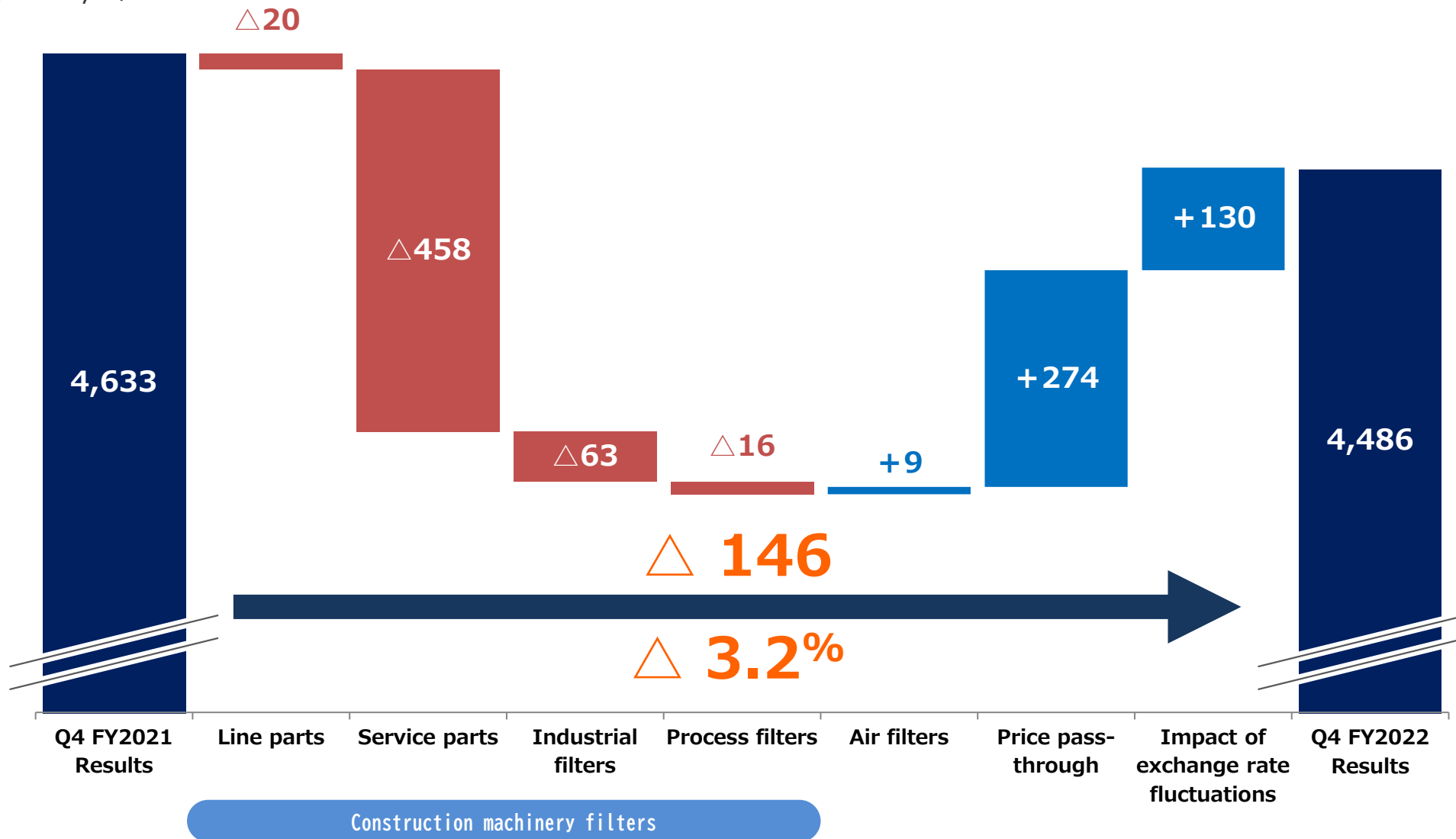
\*1 "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

\*2 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2022, to reflect the degree of impact on YAMASHIN's performance.

\*The above figures by region are based on the billing address.

# Changes in Sales (Jan to Mar 2023)

(million yen)

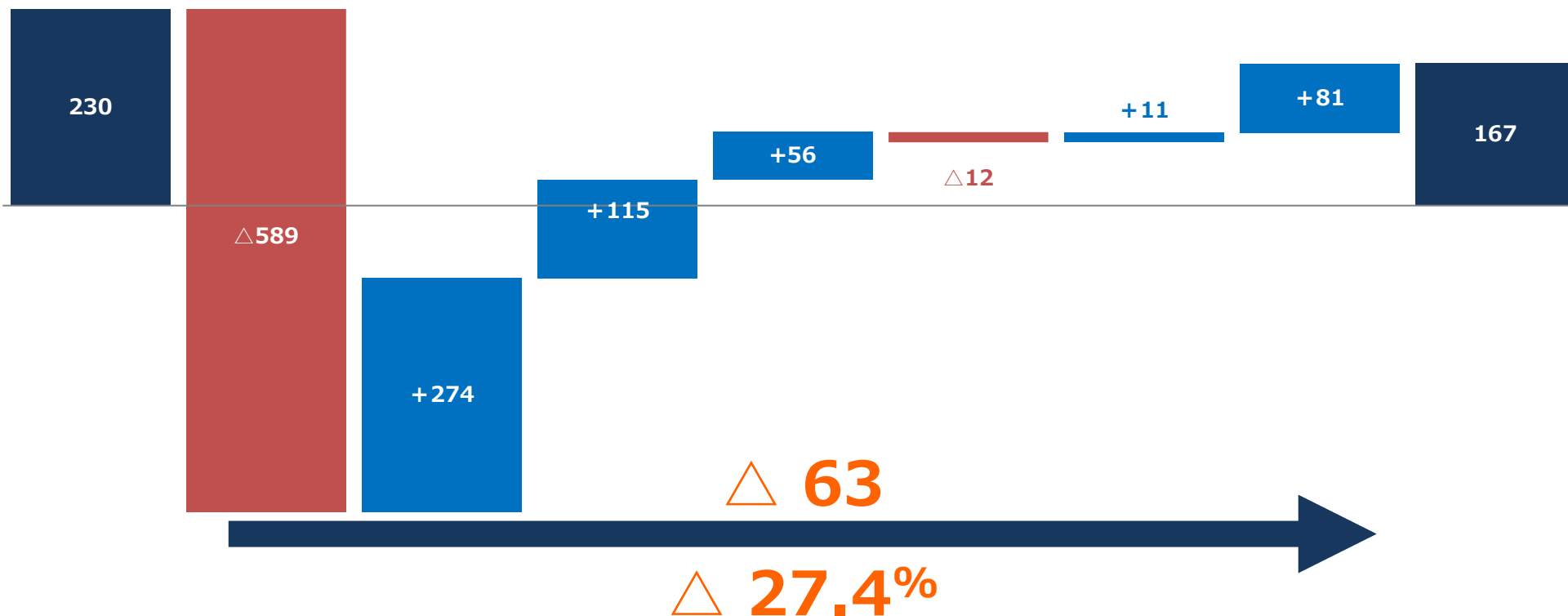


# Changes in Operating Income (Jan to Mar 2023)

(million yen)

Operating income  
Margin 5.0%

Operating income  
Margin 3.7%



Q4 FY2021  
Results

[Construction machinery]  
Decrease in profit due to reduction in sales volume

[Construction machinery]  
Increase in profit due to price pass-through

[Construction machinery]  
Increase in profit due to decrease in marine freight costs

[Construction machinery]  
Increase in profit due to decrease in airfare

[Construction machinery]  
Decrease in profit due to soaring raw material costs

[Construction machinery]  
Increase in profit due to other impact

[Air filters]  
Increase in profit due to price pass-through and cost improvement

Q4 FY2022  
Results

# **Business Performance Results for FY2022 (Apr 2022 to Mar 2023)**

# FY2022 Financial Results (Apr 2022 to Mar 2023)

(million yen)		FY2021 YTD Results	FY2022 YTD Results	Difference	
		Amount	Amount	Amount	%
<b>Net sales</b>		18,821	18,605	△216	△1.1%
	Construction machinery filters, etc.*1,2	16,244	15,945	△298	△1.8%
	Air filters	2,577	2,659	82	3.2%
<b>Operating income (segment income)</b>		1,344	1,235	△109	△8.1%
	Construction machinery filters, etc.*3	1,467	1,150	△317	△21.6%
	Air filters*3	△123	84	208	—
<b>Operating income margin</b>		<b>7.1%</b>	<b>6.6%</b>	<b>△0.5Pt</b>	
	Ordinary profit	1,317	915	△402	△30.5%
<b>Ordinary profit margin</b>		<b>7.0%</b>	<b>4.9%</b>	<b>△2.1Pt</b>	
	Net income	47	645	598	1,270.5%
<b>Net income margin</b>		<b>0.3%</b>	<b>3.5%</b>	<b>3.2Pt</b>	
Exchange rates (ave.)	USD	112.4	135.5	23.1	20.5%
	EUR	130.6	141.0	10.4	8.0%

\*1 "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

\*2 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2022, to reflect the degree of impact on YAMASHIN's performance.

\*3 With respect to operating income for the fiscal year ending March 31, 2022, general and administrative expenses and other expenses of the administrative divisions of the head office and subsidiaries, which were separately presented as corporate expenses, are included in the operating income of each segment.

# FY2022 Sales by Product Category (Apr 2022 to Mar 2023)

(million yen)	FY2021 Results	FY2022 Results	Difference	
	Amount	Amount	Amount	%
<b>Construction machinery filters</b>	14,169	14,328	159	1.1%
Line parts	5,633	5,911	278	4.9%
Service parts	8,536	8,417	△119	△1.4%
<b>Industrial filters*</b>	1,174	749	△425	△36.2%
<b>Process filters</b>	900	867	△32	△3.6%
<b>Subtotal (Construction machinery filters, etc.)</b>	16,244	15,945	△298	△1.8%
<b>Air filters</b>	2,577	2,659	82	3.2%
<b>Total</b>	18,821	18,605	△216	△1.1%

\* The healthcare business is included in the product lineup of the industrial filters from the fiscal year ending March 31, 2022, to reflect the degree of impact on YAMASHIN's performance.

# FY2022 Sales by Region (Apr 2022 to Mar 2023)

(million yen)	FY2021 Results		FY2022 Results		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
<b>Construction machinery filters, etc. *1*2</b>	16,244	86.3%	15,945	85.7%	△298	△1.8%
Japan	7,951	42.2%	7,980	42.9%	29	0.4%
North America	2,939	15.6%	3,150	16.9%	211	7.2%
China	1,711	9.1%	1,380	7.4%	△330	△19.3%
Other Asian countries	1,884	10.0%	1,698	9.1%	△186	△9.9%
Europe	1,755	9.3%	1,729	9.3%	△26	△1.5%
Others (Middle East, etc.)	2	0.0%	6	0.0%	4	175.5%
<b>Air filters (Japan)</b>	2,577	13.7%	2,659	14.3%	82	3.2%
<b>Total sales</b>	18,821	100.0%	18,605	100.0%	△216	△1.1%

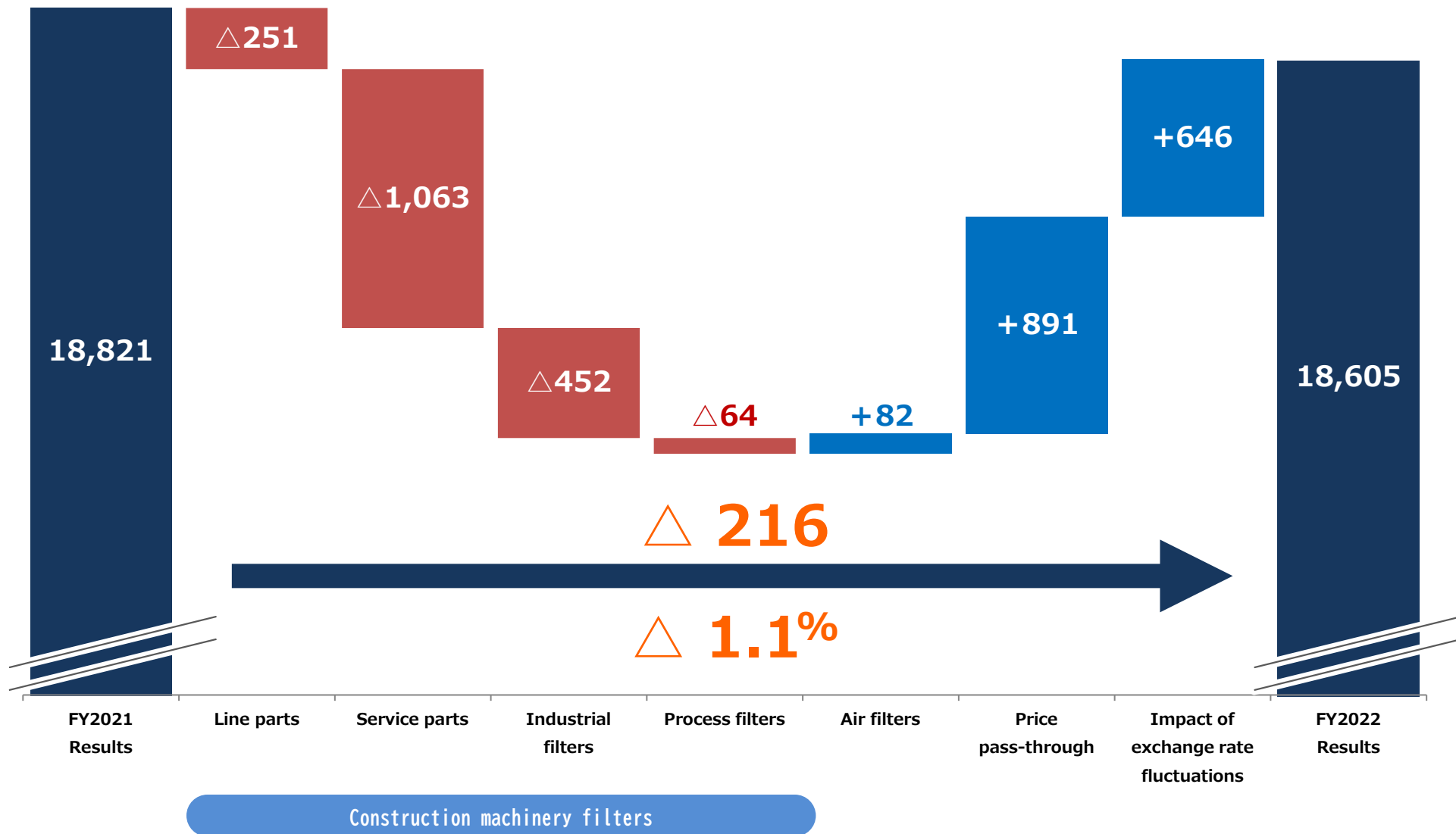
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\*2 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2022, to reflect the degree of impact on YAMASHIN's performance.

\* The above figures by region are based on the billing address.

# Changes in Sales (Apr 2022 to Mar 2023)

(million yen)

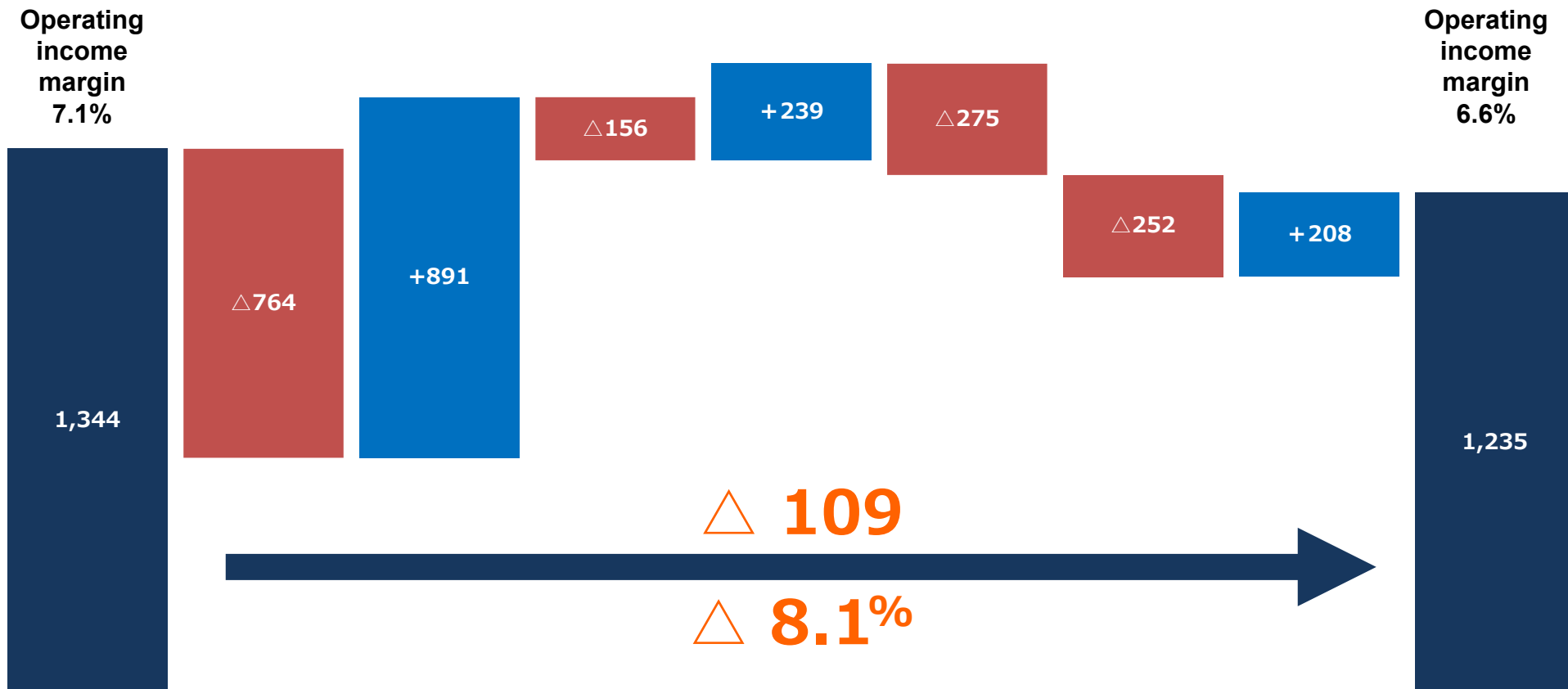


\*The "Industrial" segment includes the Healthcare product line.



# Changes in Operating Income (Apr 2022 to Mar 2023)

(million yen)



FY2021 Results

[Construction machinery] Decrease in profit due to decrease in sales volume

[Construction machinery] Increase in profit due to price pass-through

[Construction machinery] Decrease in profit due to increase in marine freight costs

[Construction machinery] Increase in profit due to decrease in airfare

[Construction machinery] Decrease in profit due to soaring material costs

[Construction machinery] Decrease in profit due to impact of exchange rate fluctuations

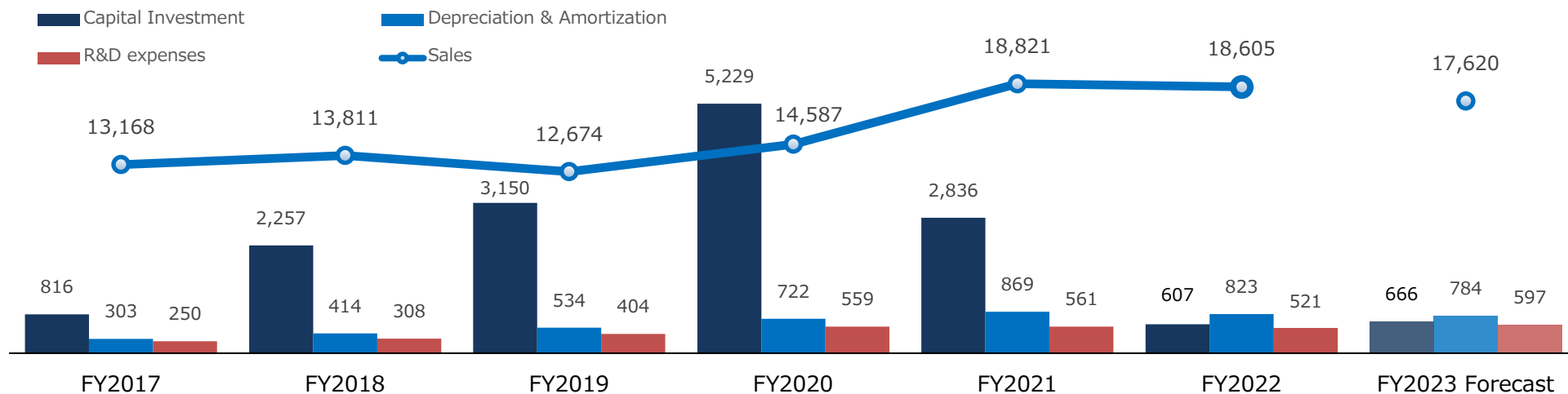
[Air filters] Increase in profit due to price pass-through and cost improvement

FY2022 Results

# Capital Investment, Depreciation & Amortization and R&D Expenses

(million yen)	FY2017 Results	FY2018 Results	FY2019 Results	FY2020 Results	FY2021 Results	FY2022 Results	FY2023 Forecast
<b>Net sales</b>	13,168	13,811	12,674	14,587	18,821	18,605	17,620
Capital investment	816	2,257	3,150	5,229	2,836	607	666
Land and building	—	1,588	2,682	3,194	1,488	34	24
Facilities and others	816	669	468	2,036	1,347	573	642
<b>Expense to sales ratio</b>	<b>6.2%</b>	<b>16.3%</b>	<b>24.9%</b>	<b>35.9%</b>	<b>15.1%</b>	<b>3.3%</b>	<b>3.8%</b>
Depreciation and amortization	303	414	534	722	869	823	784
<b>Expense to sales ratio</b>	<b>2.3%</b>	<b>3.0%</b>	<b>4.2%</b>	<b>5.0%</b>	<b>4.6%</b>	<b>4.4%</b>	<b>4.5%</b>
R&D expenses	250	308	404	559	561	521	597
<b>Expense to sales ratio</b>	<b>1.9%</b>	<b>2.2%</b>	<b>3.2%</b>	<b>3.8%</b>	<b>3.0%</b>	<b>2.8%</b>	<b>3.4%</b>

## Change in net sales and capital investment and depreciation & amortization & R&D expenses



Up to FY2022

FY2023

Implement comprehensive improvements in production technology, management and systems to strengthen the profit structure

## PAC22



romptly



ctivated



ost reduction

20



### Reduction Targets and Results

(million yen)		Q1 Target	Q1 Results	Q2 Target	Q2 Results	Q3 Target	Q3 Results	Q4 Target	Q4 Results	Full-year Target	Full-year Results
PAC22	Mfg. Costs	38	37	37	36	55	53	96	76	228	203
	SG & A	24	25	23	24	23	24	8	7	80	82
Total		63	62	61	60	79	78	104	84	308	286

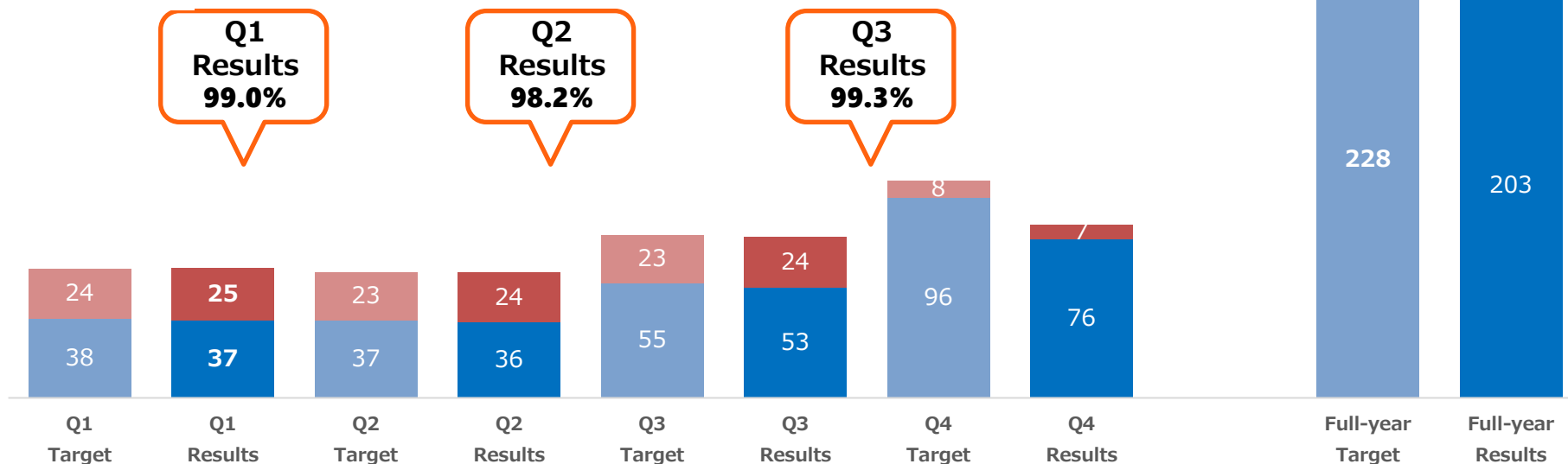
Full-year Results  
**92.8%**

### Progress

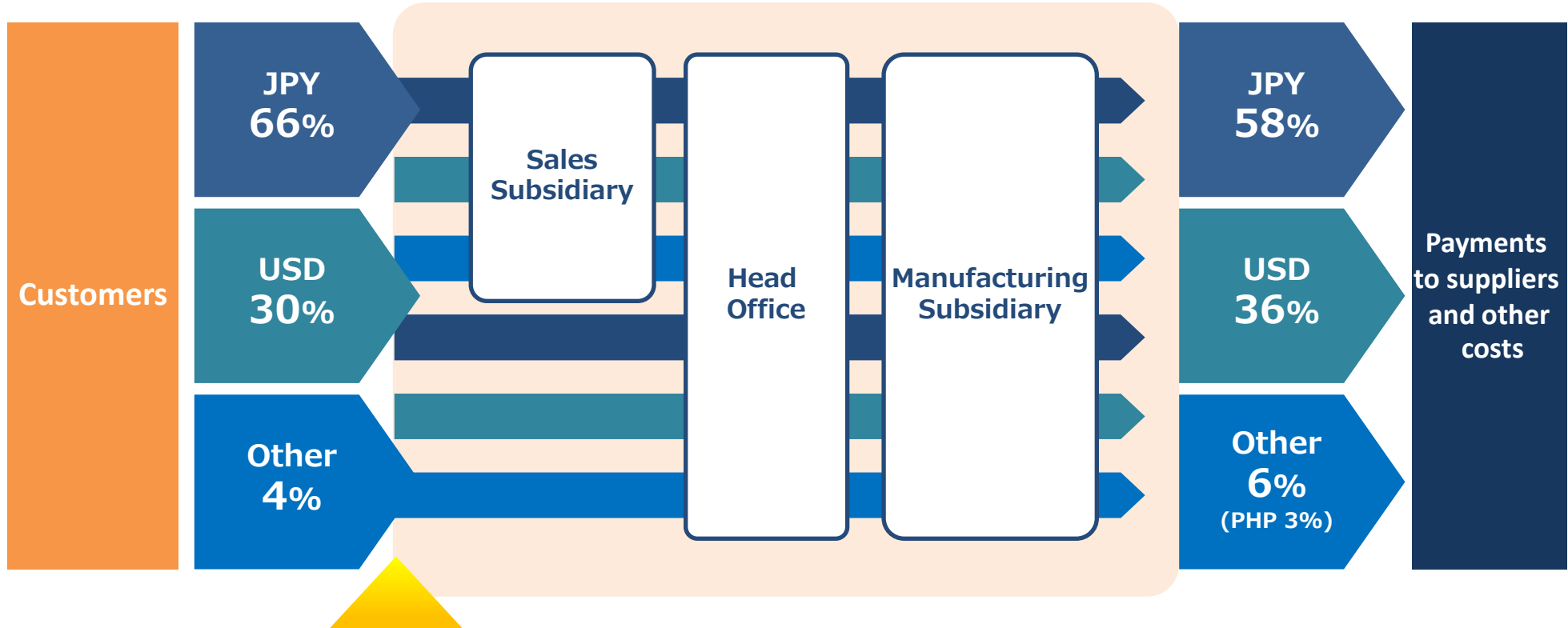
(million yen)

■ Mfg. Costs

■ SG & A



Negative impact of approx. 252 million yen on operating income due to the depreciation of the yen



**70% of transaction currency is JPY.**

- Operating income impact of a 1-yen depreciation of the yen would be a decrease of approximately 10 million yen.
- Strengthening of exchange rate marie by reviewing settlement currency

Target figures are set at each department (administrative and other operation departments) to achieve the overall company target for MAVY's

## What is **MAVY'S**? (ROIC - WACC)

**M**aximizing  
**A**dded  
**V**alue of  
**Y**amashin Filter  
**S**pread

The key goal indicator (KGI), based on which each relevant department sets its KPIs and KSFs, and works on measures to attain targets, with the goal of maximizing return on invested capital.

Meet the expectations of stakeholders by improving MAVY's (key goal indicator).

Assign KPIs to relevant departments who are responsible for target setting and implementing actions for achieving the targets in a company-wide coordinated effort.

# MAVY's: The Big Picture and the Department (FY2022)

Key Goal Indicator (KGI)	Key Performance Indicator (KPI)	Key Success Factor (KSF)	Relevant Departments	Targets for FY2022 (Action plan)	FY2022 Progress	
<p>*KPI figures are based on the following. Prv : Annual results for FY2021 Cur : Annual results for FY2022</p> <p><b>MAVY's</b> Prv: -2.8% Cur: -4.4%</p> <p><b>ROIC</b> Prv: 4.7% Cur: 3.1%</p> <p><b>WACC</b> Prv: 7.5% Cur: 7.5%</p> <p><b>ROE</b> Prv: 0.2% Cur: 3.1%</p> <p><b>ROA</b> Prv: 0.2% Cur: 2.5%</p>	<p><b>Operating income</b> Prv: 7.1% Cur: 6.6%</p> <p><b>Gross profit ratio</b> Prv: 40.4% Cur: 39.3%</p> <p><b>SG&amp;A ratio</b> Prv: 33.3% Cur: 32.7%</p> <p><b>Operating capital turnover rate</b> Prv: 3.1 Cur: 2.7</p> <p><b>Investment capital turnover rate</b> Prv: 0.9 Cur: 0.8</p> <p><b>FA turnover rate</b> Prv: 1.5 Cur: 1.5</p>	<p><b>Sales growth ratio</b> Prv: 29.0% Cur: -1.1%</p>	<p><b>New product development Enhance market share of genuine products</b></p>	<p><b>Sales / R&amp;D</b></p>	<p>Construction machinery: - Expand share of major customers (long-life, sensors), - Expand and accelerate entry into the Chinese market - Air filters: Expand sales through new products (NanoWhelp) (direct sales, domestic and overseas) - Enter new business domains</p>	<ul style="list-style-type: none"> <li>Made progress on proposals involving hybrid filters</li> <li>Improve adoption rates of new models for Chinese construction machinery manufacturers</li> <li>Continued progress in sales for new air filter products</li> <li>Continued progress in supply to the apparel industry (not using down materials)</li> </ul>
		<p><b>Cost to sales ratio</b> Prv: 59.6% Cur: 60.7%</p>	<p><b>Enhance buying power Improve yield ratio</b></p>	<p><b>Production / SCM</b></p>	<p>- PAC22 - Reform and improve purchasing power and reduce logistics costs - Improve production management</p>	<ul style="list-style-type: none"> <li>Revised supplier evaluation standards and completed the consolidation process</li> <li>Reduced procurement costs through joint procurement with AQC</li> <li>Improved yields through planned service and maintenance, progress in manufacturing cost reduction measures</li> </ul>
		<p><b>Depreciation cost ratio</b> Prv: 4.6% Cur: 4.4%</p>	<p><b>Investment plan</b></p>	<p><b>Management Planning / Finance and accounting</b></p>	<p>- M&amp;A (for revenue expansion stabilizing management) --Research potential M&amp;A targets --Acquire nonwoven fabrics manufacturing entities (downstream) --Acquire new material development entities (upstream)</p>	<ul style="list-style-type: none"> <li>Exploring opportunities and gathering data for M&amp;A (domestic and overseas), enhanced communication (through conference calls) with possible M&amp;A target companies</li> </ul>
		<p><b>R&amp;D cost ratio</b> Prv: 3.0% Cur: 2.8%</p>	<p><b>Narrowing down themes Prioritization</b></p>	<p><b>R&amp;D</b></p>	<p>- Develop new materials (Recycling, Biomass, etc.) - Actions to achieve IoT - Develop aeration and other technologies</p>	<ul style="list-style-type: none"> <li>Accelerated the commercialization of nanofiber air filters</li> <li>Supplied various trial sensor products to clients</li> <li>Accelerated new materials development through industrial/academic collaborations</li> </ul>
		<p><b>Personnel cost ratio</b> Prv: 13.7% Cur: 14.7%</p>	<p><b>Optimal staffing</b></p>	<p><b>HR and General Affairs</b></p>	<p>- Establish and implement the talent management system</p>	<ul style="list-style-type: none"> <li>Efforts to identify the next generation of management talent</li> <li>Increased R&amp;D staff for product development</li> <li>Hired specialist staff members to assist in company reorganization and growth</li> </ul>
		<p><b>Accounts receivable turnover rate</b> Prv: 4.2 Cur: 4.1</p>	<p><b>Credit management</b></p>	<p><b>Sales / Finance and accounting</b></p>	<p>- Further optimize AR debt collection - Promote paperless systems</p>	<ul style="list-style-type: none"> <li>Streamlined and optimized AR debt collection for improving working capital</li> </ul>
		<p><b>Inventory turnover rate</b> Prv: 4.8 Cur: 4.2</p>	<p><b>Set appropriate inventory level</b></p>	<p><b>Production / Sales</b></p>	<p>- Reduce company-wide inventory assets</p>	<ul style="list-style-type: none"> <li>Determined suitable inventory levels based on pareto analysis; currently implementing inventory reduction plans</li> </ul>
		<p><b>Accounts payable turnover rate</b> Prv: 4.8 Cur: 5.4</p>	<p><b>Debt management</b></p>	<p><b>SCM Production</b></p>	<p>- Improve working capital - Promote paperless systems</p>	<ul style="list-style-type: none"> <li>Optimized AP debt turnover ratio for improving working capital</li> </ul>
		<p><b>Tangible fixed asset turnover rate</b> Prv: 1.7 Cur: 1.6</p>	<p><b>Facilities planning (R&amp;D, production)</b></p>	<p><b>Management Planning Administration / Production / R&amp;D</b></p>	<p>- Optimize investment recovery effect (Return on Investment)</p>	<ul style="list-style-type: none"> <li>Prioritized R&amp;D and capital investments by analyzing the validity of investment return period</li> </ul>
		<p><b>Intangible fixed asset turnover rate</b> Prv: 66.4 Cur: 90.8</p>	<p><b>Investment plan</b></p>	<p><b>Management Planning / Finance and Accounting</b></p>	<p>- Formulate IP strategies and action plans</p>	<ul style="list-style-type: none"> <li>Established strategies, devised action plans, and enhanced training for targeted group, stakeholders</li> <li>Actively applied for patents in Chinese market</li> </ul>

# Full-year Forecasts for FY2023 (Ending March 31, 2024)

## Construction machinery filters

- The Chinese market will continue to be sluggish, and construction equipment market demand in each market will remain slightly below the previous year's level
- Prices will continue to rise for key raw materials, particularly aluminum and steel, and fixed costs will increase due to higher salaries as part of investments in human capital
- We will carry out cost reduction through further price pass-through, cost reduction at the design and development stage, reduction of raw material costs, improvement of manufacturing processes, and further enhancement of quality control

## Air filters

- Progress in efforts to adopt our products in office buildings, commercial facilities, factories, etc. through recovery in replacement demand for existing products and development of high-value-added products such as nanofiber air filters.
- Expect to improve profitability by increasing production efficiency and reducing expenses



(million yen)		FY2021	FY2022	FY2023	Difference
		Results	Results	Full-year Forecasts	
<b>Net sales</b>		18,821	18,605	17,620	△985
	Construction machinery filters, etc.*1,2	16,244	15,945	14,820	△1,125
	Air filters	2,577	2,659	2,800	140
<b>Operating income (segment income)</b>		1,344	1,235	600	△635
	Construction machinery filters*3	1,467	1,150	510	△640
	Air filters*3	△123	84	90	5
<b>Operating income margin</b>		7.1%	6.6%	3.4%	△3.2Pt
	Ordinary profit	1,317	915	650	△265
<b>Ordinary profit margin</b>		7.0%	4.9%	3.7%	△1.2Pt
	Net income	47	645	450	△195
<b>Net income margin</b>		0.3%	3.5%	2.6%	△0.9Pt
Exchange rates (ave.)	USD	112.4	135.5	130.0	△4.0%
	EUR	130.6	141.0	140.0	△0.7%

\*1 "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

\*2 The healthcare business is included in the product lineup of the construction machinery filter business to reflect the degree of impact on YAMASHIN's performance.

\*3 With respect to operating income for the fiscal year ending March 31, 2022, general and administrative expenses and other expenses of the administrative divisions of the head office and subsidiaries, which were separately presented as corporate expenses, are included in the operating income of each segment.

# Sales Forecast by Product Category

(million yen)	FY2021 Results		FY2022 Results		FY2023 Full-year Forecasts		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
<b>Construction machinery filters</b>	14,169	75.3%	14,328	77.0%	13,304	75.5%	△1,024	△7.2%
Line parts	5,633	29.9%	5,911	31.8%	6,190	35.1%	278	4.7%
Service parts	8,536	45.4%	8,417	45.2%	7,114	40.4%	△1,303	△15.5%
<b>Industrial filters*</b>	1,174	6.2%	749	4.0%	703	4.0%	△45	△6.1%
<b>Process filters</b>	900	4.8%	867	4.7%	812	4.6%	△55	△6.4%
<b>Subtotal (Construction machinery filters, etc.*)</b>	16,244	86.3%	15,945	85.7%	14,820	84.1%	△1,125	△7.1%
<b>Air filters</b>	2,577	13.7%	2,659	14.3%	2,800	15.9%	140	5.3%
<b>Total</b>	18,821	100.0%	18,605	100.0%	17,620	100.0%	△985	△5.3%

\* The healthcare business is included in the product lineup of the construction machinery filter business to reflect the degree of impact on YAMASHIN's performance.

# Sales Forecast by Region

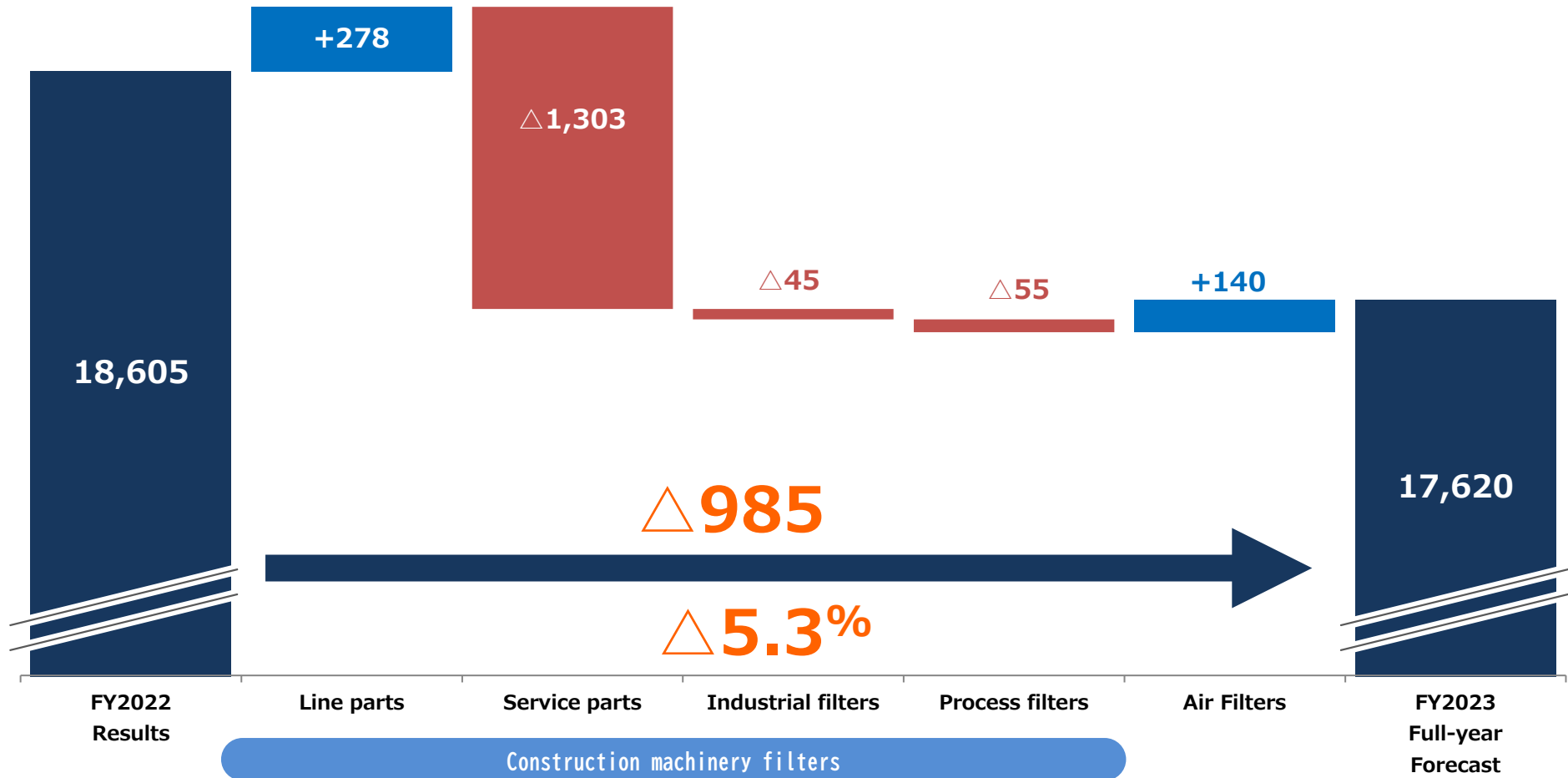
(million yen)	FY2021 Results		FY2022 Results		FY2023 Full-year Forecasts		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
<b>Construction machinery filters*1*2</b>	16,244	86.3%	15,945	85.7%	14,820	84.1%	△1,125	△7.1%
Japan	7,946	42.2%	7,980	42.9%	6,932	39.3%	△1,047	△13.1%
North America	2,939	15.6%	3,150	16.9%	3,172	18.0%	22	0.7%
China	1,711	9.1%	1,380	7.4%	1,252	7.1%	△128	△9.3%
Other Asian countries	1,889	10.0%	1,698	9.1%	1,617	9.2%	△80	△4.7%
Europe	1,755	9.3%	1,729	9.3%	1,700	9.7%	△28	△1.7%
Others (Middle East, etc.)	2	0.0%	6	0.0%	143	0.8%	137	2,105.1%
<b>Air filters (Japan)</b>	2,577	13.7%	2,659	14.3%	2,800	15.9%	140	5.3%
<b>Total sales</b>	18,821	100.0%	18,605	100.0%	17,620	100.0%	△985	△5.3%

\*1 "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

\*2 The healthcare business is included in the product lineup of the construction machinery filter business to reflect the degree of impact on YAMASHIN's performance.

\* The above figures by region are based on the billing address.

(million yen)



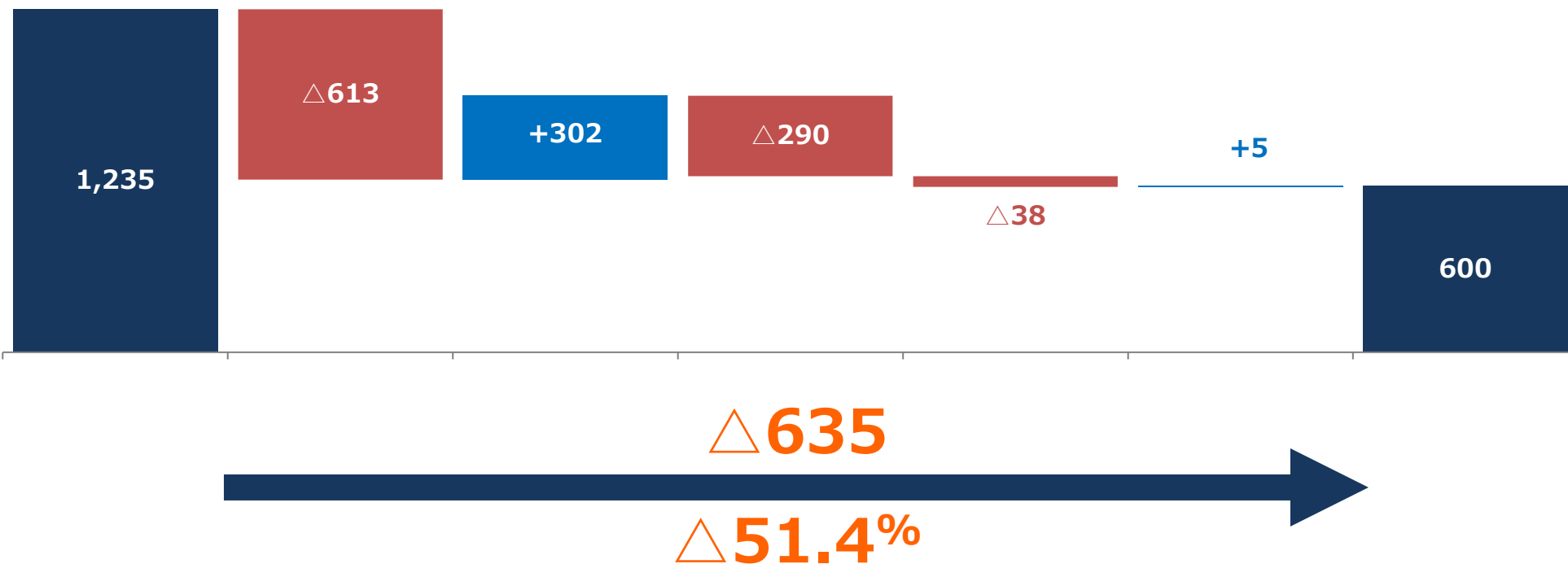
The "Industrial" segment includes the Healthcare product line.

# FY2023 Forecasts : Changes in Operating Income

(million yen)

Operating  
income  
margin  
6.6%

Operating  
income  
margin  
3.4%



FY2022  
Results

[Construction  
machinery]  
Decrease in sales  
volume, etc.

[Construction  
machinery]  
Increased due to  
decrease in marine  
freight  
costs

[Construction  
machinery]  
Decreased due to  
increase in labor cost

[Construction  
machinery]  
Decreased due to  
increase in travel &  
other expenses

[Air filters]  
Increase in sales  
& cost improvement

FY2023  
Full-year  
Forecast

The annual dividend, consisting of the interim dividend of 3.0 yen and the year-end dividend of 3.0 yen, will remain unchanged at 6.0 yen per share.

	FY2020	FY2021	FY2022	FY2023 Forecast
<b>Dividend per share</b>	¥ 6.0	¥ 6.0	¥ 6.0	¥ 6.0
<b>DOE*<sup>1</sup></b>	2.2%	2.1%	2.1%	2.1%
<b>Total return ratio*<sup>2</sup></b>	59.3%	960.4%	75.6%	108.4%

\*1 DOE (Dividend on equity) = (Annual dividend ÷ Shareholders' equity) × 100 = (ROE × Dividend payout ratio)

\*2 Total return ratio = (Total dividend + Treasury stock acquired + Shareholder benefit) ÷ Net income



市場

## II Market Conditions

# Conditions in the Construction Machinery Market



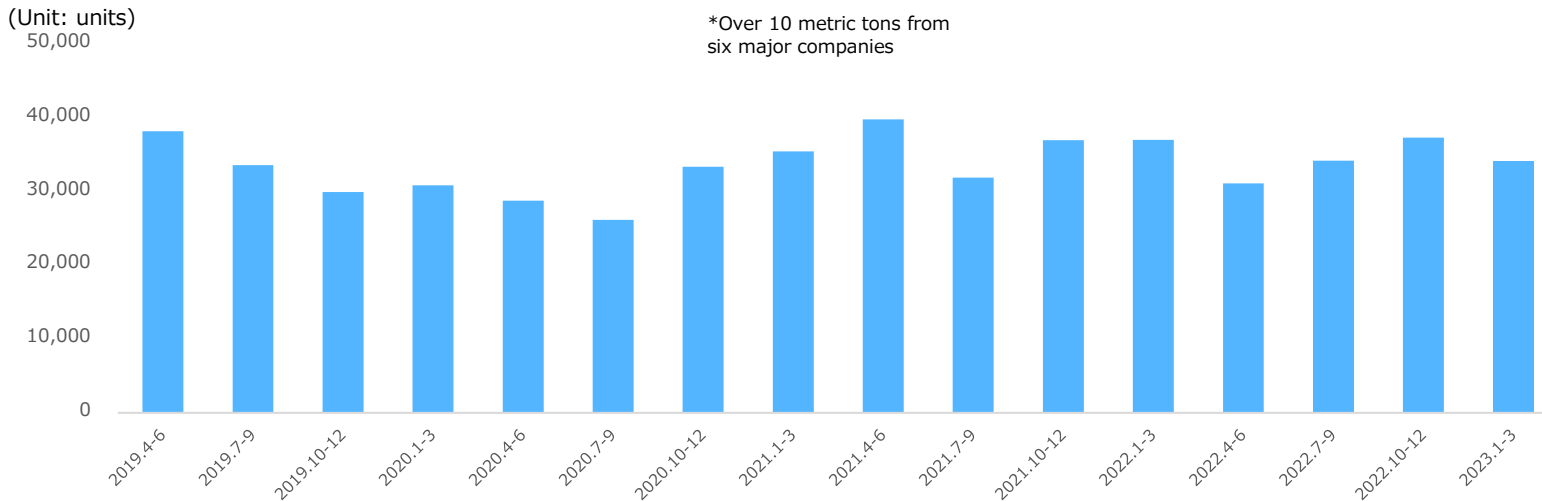
# Summary of External Conditions Impacting the Construction Machinery Market

- The North American market, which has been driving demand, has remained firm, but the future is uncertain
- The Southeast Asian market will maintain strong demand due to continued high resource prices
- Weak demand is expected to continue in the Chinese market this year due to a cooling down of real estate investment

	Q3 FY2022	Q4 FY2022	Future Outlook
Japan	The impact of rising logistic costs and raw material costs while the yen weakens. The demand of construction equipment remains firm.	The impact of rising logistic costs and raw material costs while the yen weakens. The demand of construction equipment remained firm.	Soaring energy and raw material prices and logistics costs will soften demand for construction equipment
North America	Construction equipment operating hours and demand for new vehicles are on a downward trend but remain firm. The impact of logistic costs and soaring material costs continue	Construction equipment operating hours and demand for new vehicles were on a downward trend but remained firm. The impact of logistic costs and soaring material costs continued	Continued impact of price hikes in key raw materials. Construction equipment operating hours and demand for new vehicles on a downward trend
Europe	While the impact of logistic costs and soaring material costs continue, the demand has steady growth with a downward trend	While the impact of logistic costs and soaring material costs continued, the demand had steady growth with a downward trend	Demand expected to decline due to escalation of situation in Russia and Ukraine. Continued impact of price hikes in key raw materials
Asia	The demand in India and Indonesia remains firm. The impact of logistic costs and soaring material costs continue	The demand in India and Indonesia remained firm. The impact of logistic costs and soaring material costs continued	Demand will soften due to expected economic slowdown. Continued impact of price hikes in key raw materials
China	New vehicle sales are expected to fall below the previous year's level due to continued market slump	New vehicle sales fell far below the previous year's level due to market slump	New vehicle sales are expected to fall below the previous year's level due to the sluggish economy

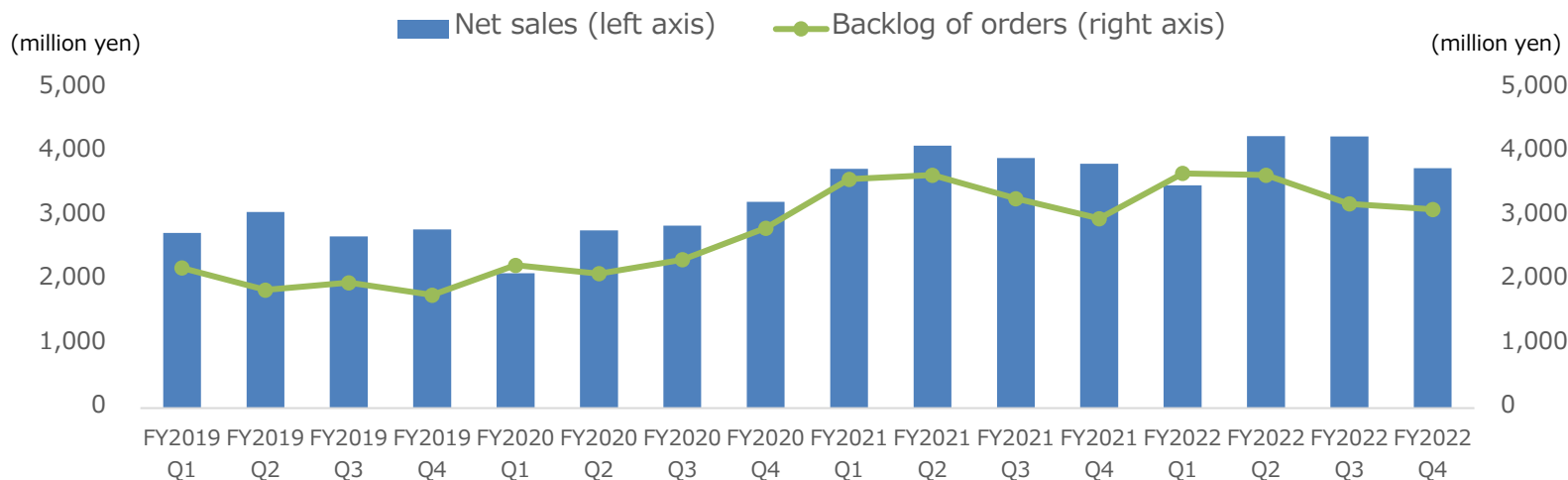
- Production plans remain firm, but there is a sense of uncertainty, so future trends will be closely monitored

Production Results and Plans of Major Construction Machinery Manufacturers (Quarterly)



**Demand for new vehicles remains strong**

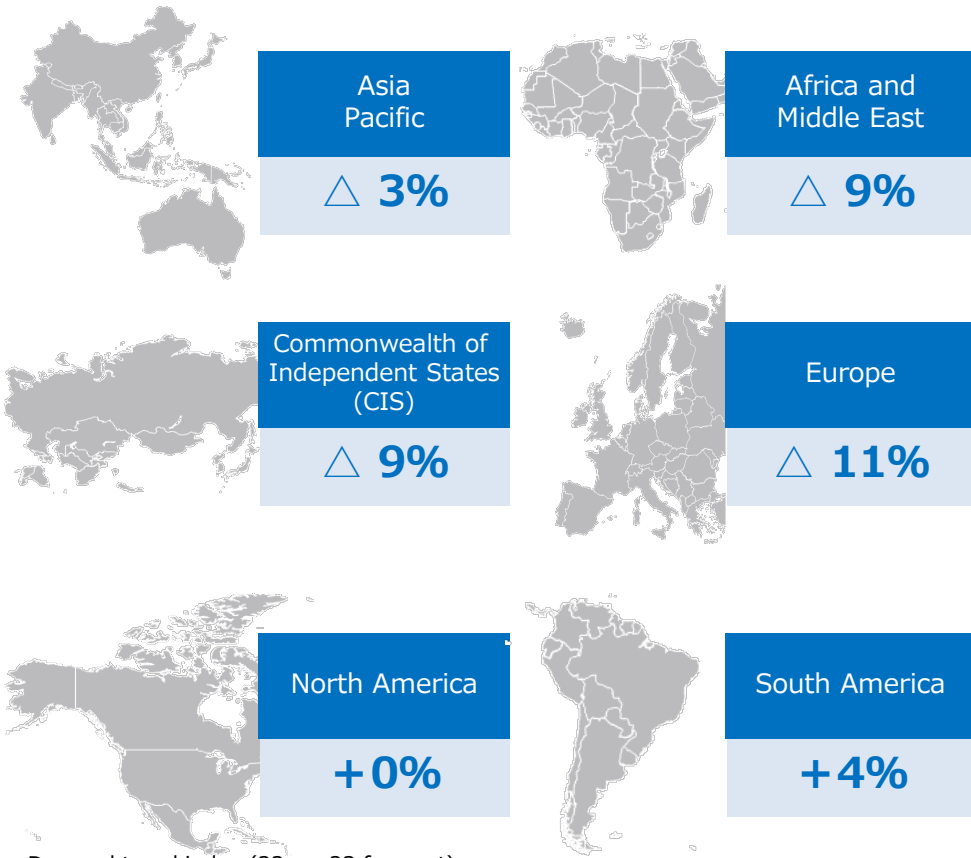
Sales and Backlog Orders: YAMASHIN Construction Machinery Filters (Quarterly)



**No major change, order backlogs remain high**

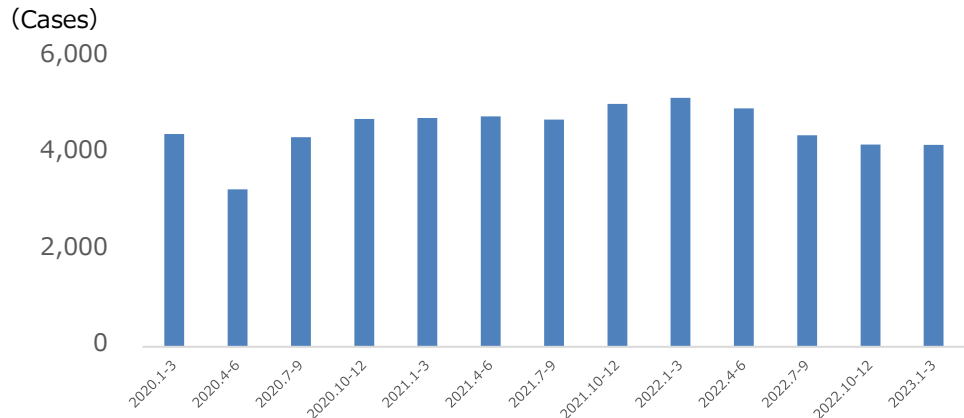
- Demand trends in each region appear to be moving toward a slowdown phase due to the effects of factors such as continuing inflation
- In the North American market, housing starts remain at the same level, but housing inventories are at the lowest level

## Growth in demand for construction machinery by region



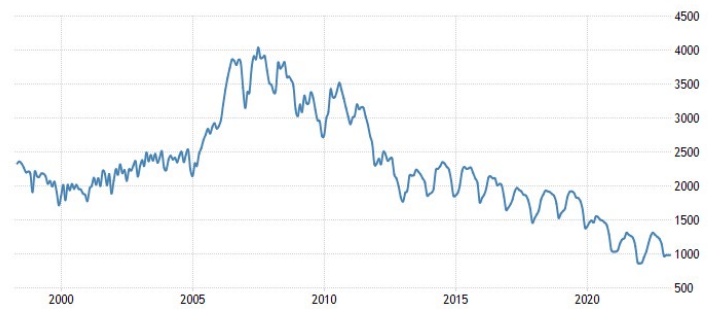
Demand trend index (22 vs. 23 forecast)

## North American market: Trends in housing starts



(Compiled by the Company from Bureau of the Census)

## North American market: Trends in gross housing inventories



(Adapted from TRADINGECONOMICS)

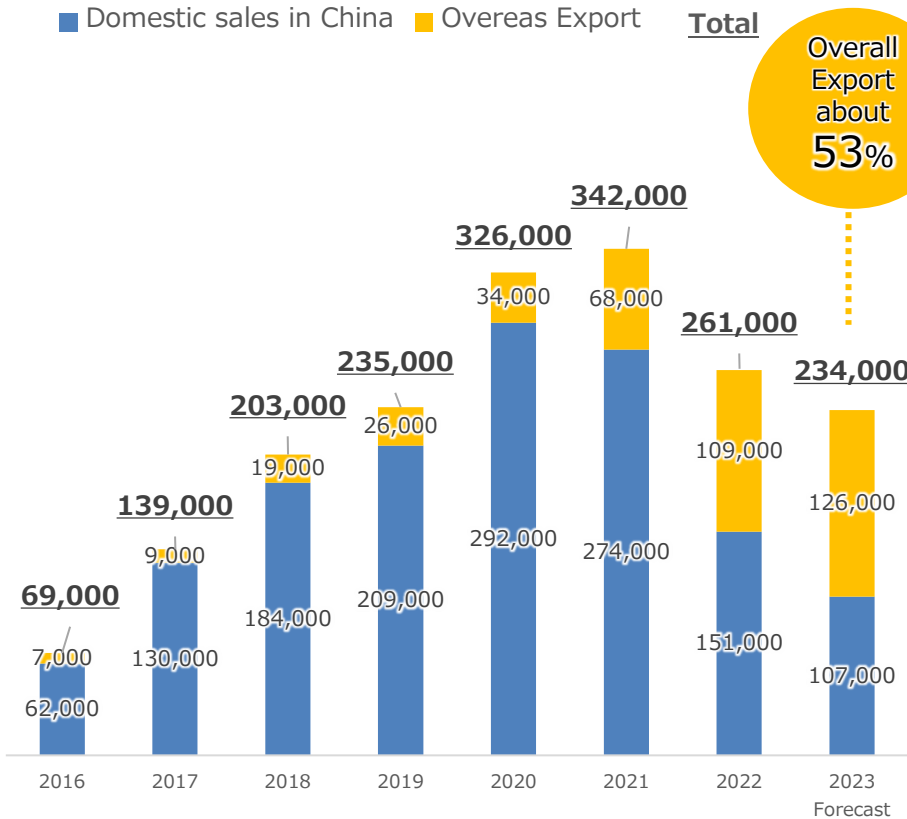
TRADINGECONOMICS.COM | NATIONAL ASSOCIATION OF REALTORS

- Demand is expected to remain weak even after the Covid policy change due to the sluggish real estate market
- Export ratio is expected to increase further this fiscal year due to strong demand in the Southeast Asian market

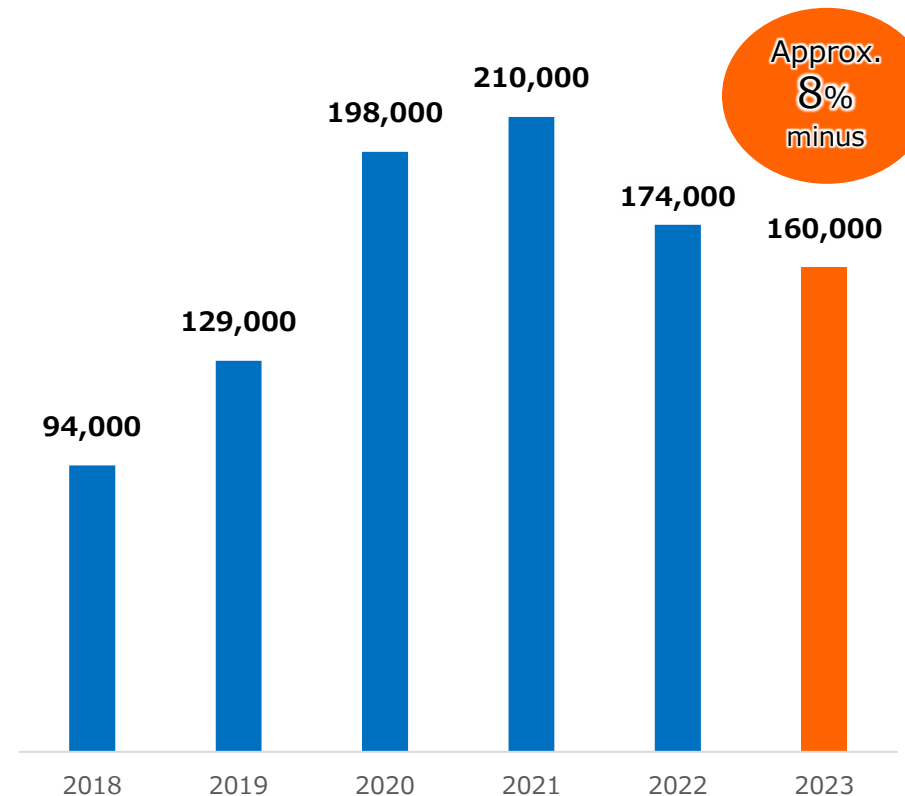
## Annual sales volume in China

## Production volume (forecasts) of five major Chinese construction equipment manufacturers

(Number of vehicles)



(Number of vehicles)



- Share of major North American customers is growing as planned, and we expect to shift to expansion of strategic products in the future
- The market share in Chinese customers has been achieved as planned during the coronavirus pandemic but struggled with emission controlled-models

## Share information for a major North American construction equipment manufacturer

### Hydraulic Filter Share

	2021	2022	2023	2021 vs. 2023 Difference
Vehicle	39%	50%	52%	+ 13%
Mining	20%	37%	40%	+ 20%
Forestry	30%	45%	46%	+ 16%

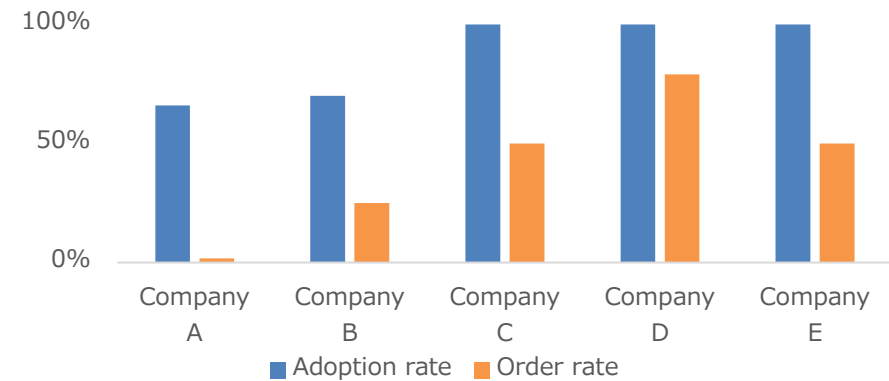
### TM Filter Share

	2021	2022	2023	2021 vs. 2023 Difference
Vehicle	88%	94%	95%	+ 7%
Mining	54%	68%	71%	+ 17%
Forestry	71%	75%	75%	+ 4%

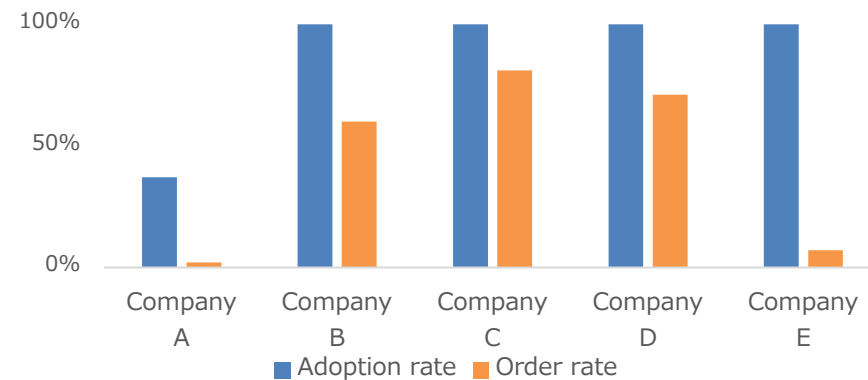
### Others

	2021	2022	2023	2021 vs. 2023 Difference
Vehicle	17%	40%	42%	+ 25%
Mining	12%	33%	36%	+ 24%
Forestry	15%	20%	27%	+ 12%

## Adoption of current models in China (main products)



## Adoption of new models in China (main products)



- It will take time to reach a scale in terms of market volume, but the actual and planned introductions are progressing steadily
- In addition to specific construction equipment, the full lineup is being considered at the same time

## Diverse lineup

### Wheel loader



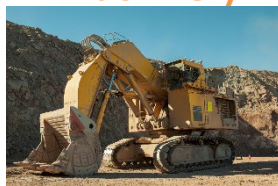
### Excavator



### Dump truck



### Very large machinery

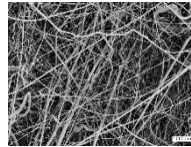


### Bulldozer



## New model that contributes to long-life

### YAMASHIN NANO FILTER®



Unit sales price is approx. **Twice** that of existing products, contributing longer product life

Main filters planned for adoption

### Return Filter



### Attachment Filter



### TM Filter



Actual & planned introductions on various models are progressing steadily

- We are not only passing on prices, but also continuing to strengthen our unique earning power
- In the Development Division, reorganization was implemented to further improve cost quality
- In the Production Division, the theme is to localize the supply chain by utilizing the Vietnam Plant

## Reorganization of development organization (separation of functions)

**Strengthening R&D structure for elemental technologies including new exploration**

### R & D

Filtration media development  
Intellectual property management  
Product evaluation (testing)  
Elemental technology development

## Reorganization

**Improve earning power by improving quality of creativity and reducing costs**

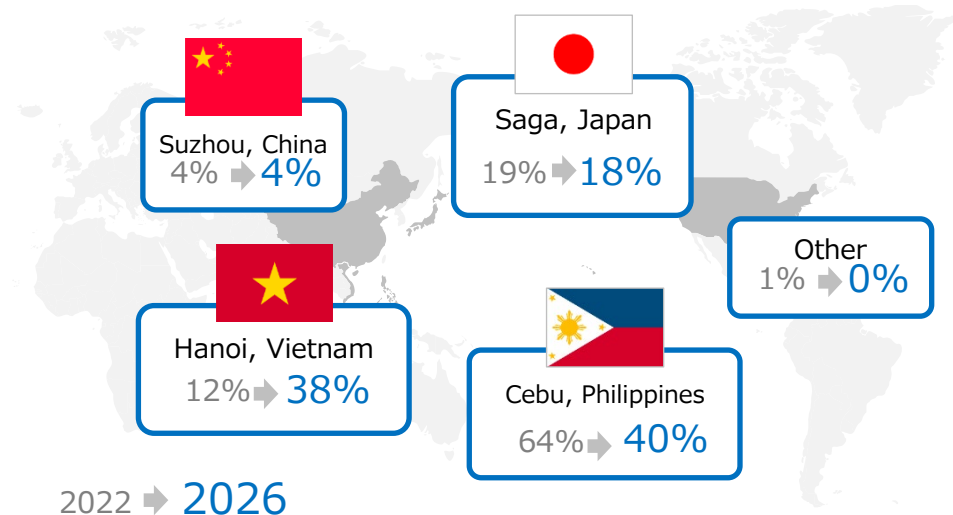
**Development Design**  
New development (structural design)  
VE/VA design  
**Development cost improvement**

## Supply Chain Optimization

Localization based on geopolitical risks

## Reorganization of global production system











Shifting production to Vietnam, which has an advantage in parts procurement prices, establishing BCP with two mass production plants in Cebu and Vietnam



# Conditions in the Air Filter Market



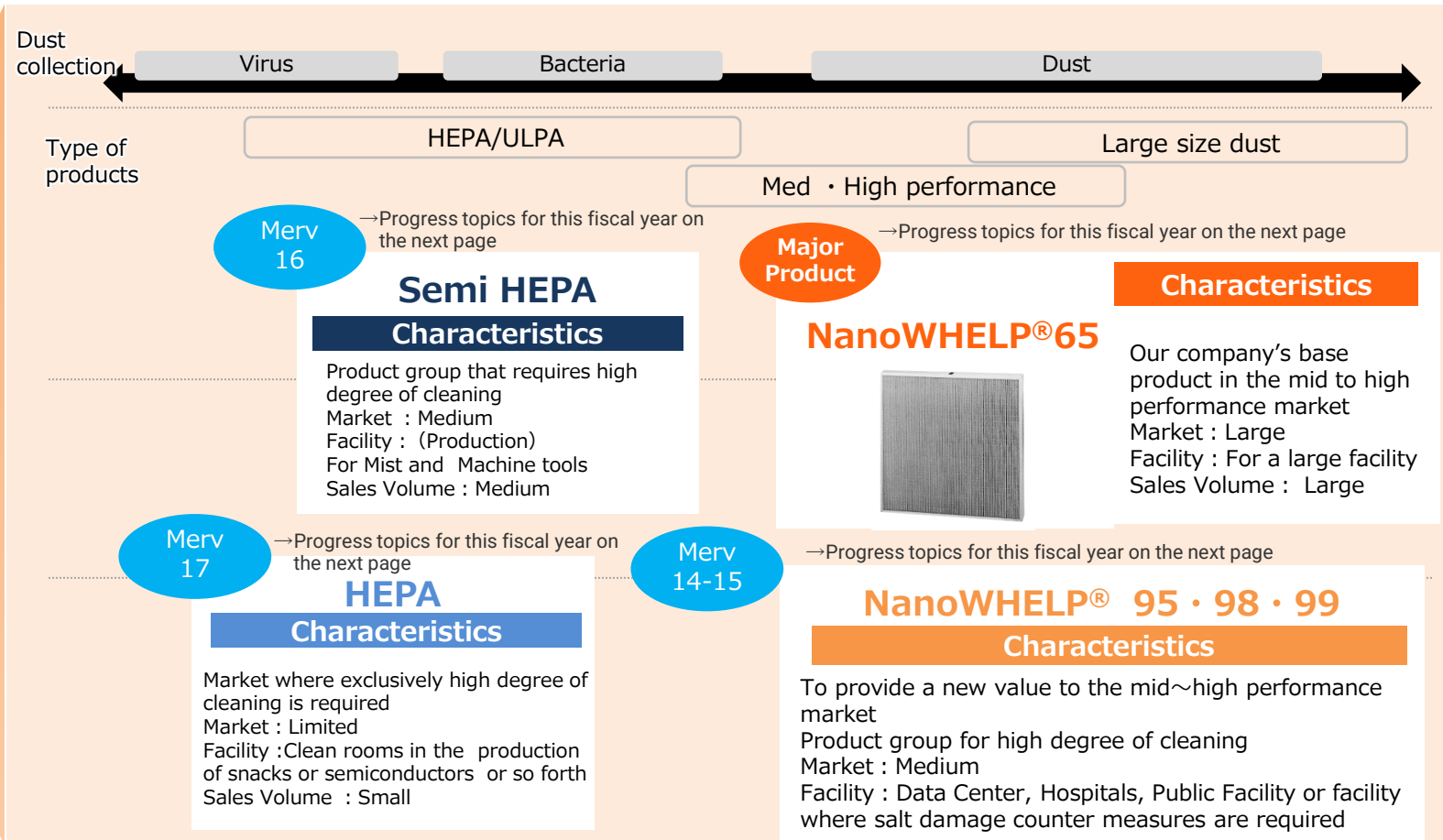
- Stable demand environment in all segments, but almost the same level as the previous year excluding the impact of price pass-through
- In building construction, recovery of repeat demand, including office, started as planned

		Market environment	
Market overview		Previous year	Forecast for the current year
<b>Buildings</b>	Air filters for outdoor air intake units, indoor air conditioning, etc. installed in offices, commercial buildings, etc.	 Demand is on a recovery trend, especially for large projects in urban areas. New projects are slow	 Repeat projects in urban areas are firm. Although there is a trend of local buyers being reluctant to buy, the impact is minimal
<b>General factories</b>	Air filters for outdoor air intake units, indoor air conditioning, etc. installed in factories	 The trend is expected to continue with the previous period	 There are signs of recovery in large-scale projects. Inquiries for capital investment are also on the rise
<b>Semiconductor factories</b>	Chemical filter replacement market	 Capital investment remained strong	 Capital investment remained strong, but was unstable due to construction schedule delays
<b>Environmental equipment</b>	Air filters for residential air conditioning and air purifiers used in homes	 Demand exists, although the number of housing starts is trending downward due to a decrease in the distribution of housing materials	 The downward trend in housing starts has subsided and is recovering
<b>Vehicles</b>	Air filters for air conditioning of railways, etc. Air filters for construction machinery dust	 Demand exists, although the number of housing starts is trending downward due to a decrease in the distribution of housing materials	 Construction machinery (Kobelco) is expected to be firm for the full year

- Sales expansion of the NanoWHELP® series using the market's only proprietary nanofiber filter media
- Build up market performance by capturing needs in all directions in response to high performance requirements

**YAMASHIN Nano Filter™**

**A uniquely developed material**  
**YAMASHIN NANO FILTER® is the base of development of each backbone product line**



- Achieves approximately twice the service life of conventional products in oil mist applications where wear and tear is severe
- Medium-performance filter that can withstand salt damage and has been adopted by many large commercial facilities
- Received many orders to replace other companies' products due to the balance of high performance and cost

## HEPA

### Dust collector manufacturer OEM

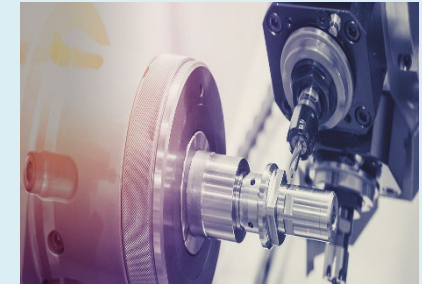
Switching from genuine products. A long-term performance comparison was conducted with a competitor's current product, which was comparable in cost, and the decision was made to adopt the product because it was evaluated to be superior in terms of both performance and service life.



## Semi HEPA

### Machine tool manufacturer OEM

While the OEM industry as a whole tends to be filter-less, the company has proven that there is demand for a high-precision route that meets customer needs by leveraging filter performance.



## NanoWHELP® 95 · 98 · 99



## NanoWHELP® 65

### Commercial complex @ Minato Mirai

Orders received continued from the previous year. Requested a high-precision filter for a commercial facility in a salt-affected area. The system has received high marks for both cost and performance since its initial introduction last year.



### Development base for precision equipment manufacturer

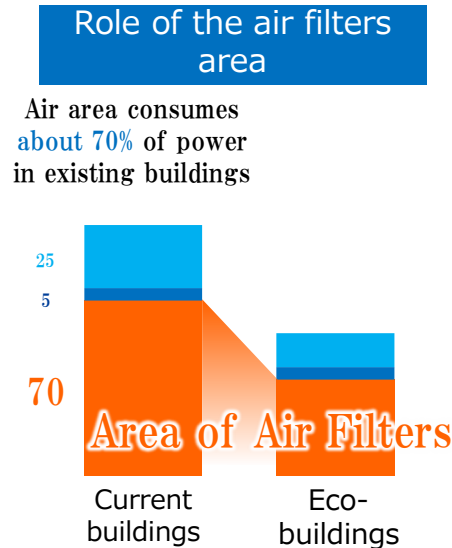
The company received an order for this product because it was evaluated for its increased dust retention compared to conventional products, long-term performance, and good cost balance.



- Since the reduction of electricity consumption by air-conditioning equipment is a large part of ZEB certification, it is assumed that it will attract more attention
- Expanding sales activities to new commercial distribution channels and partners while maintaining existing commercial distribution channels
- Grows to comprise approximately 10% of medium- to high-performance filter sales

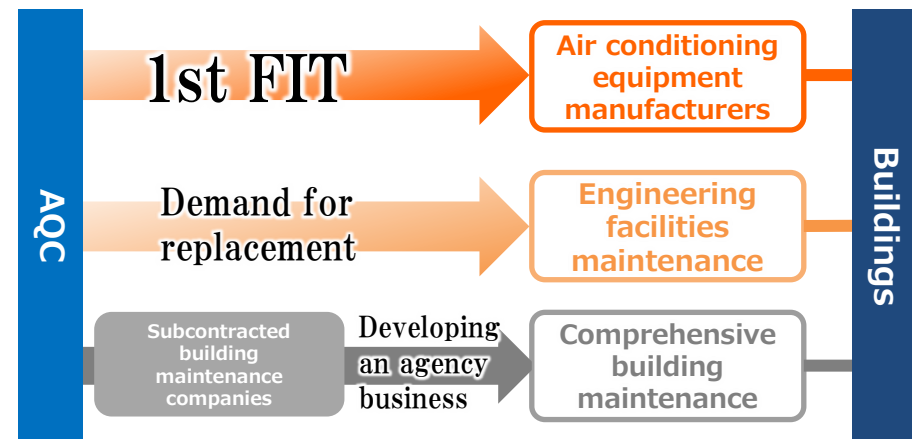
## Emergence of environmentally friendly buildings (ZEB certification)

The Ministry of the Environment encourages buildings that create their own energy and save energy, rather than conventional buildings that consume energy



## Expanding sales of NanoWHELP

Strengthen sales activities to air conditioning equipment manufacturers that deliver our products and to engineering companies that have the advantage of purchasing filters due to their own facility management practices and establish a sales structure by increasing the number of sales personnel





# III Future Strategies

# Improving Earning Power in Core Businesses

## Appropriate prices

### Continued negotiations with key customers

- ◆ We will continue to negotiate with our key customers to pass on appropriate prices, taking into account the recent sharp rise in raw material costs and the impact of the yen's rapid depreciation.

## Improving costs

### Reviewing development costs

- ◆ We will review raw materials and production processes at the design and development stage and standardize parts.

### Reviewing the value chain

- ◆ We will review the supply chain and reduce costs by establishing a global production and supply system.

## Business restructuring

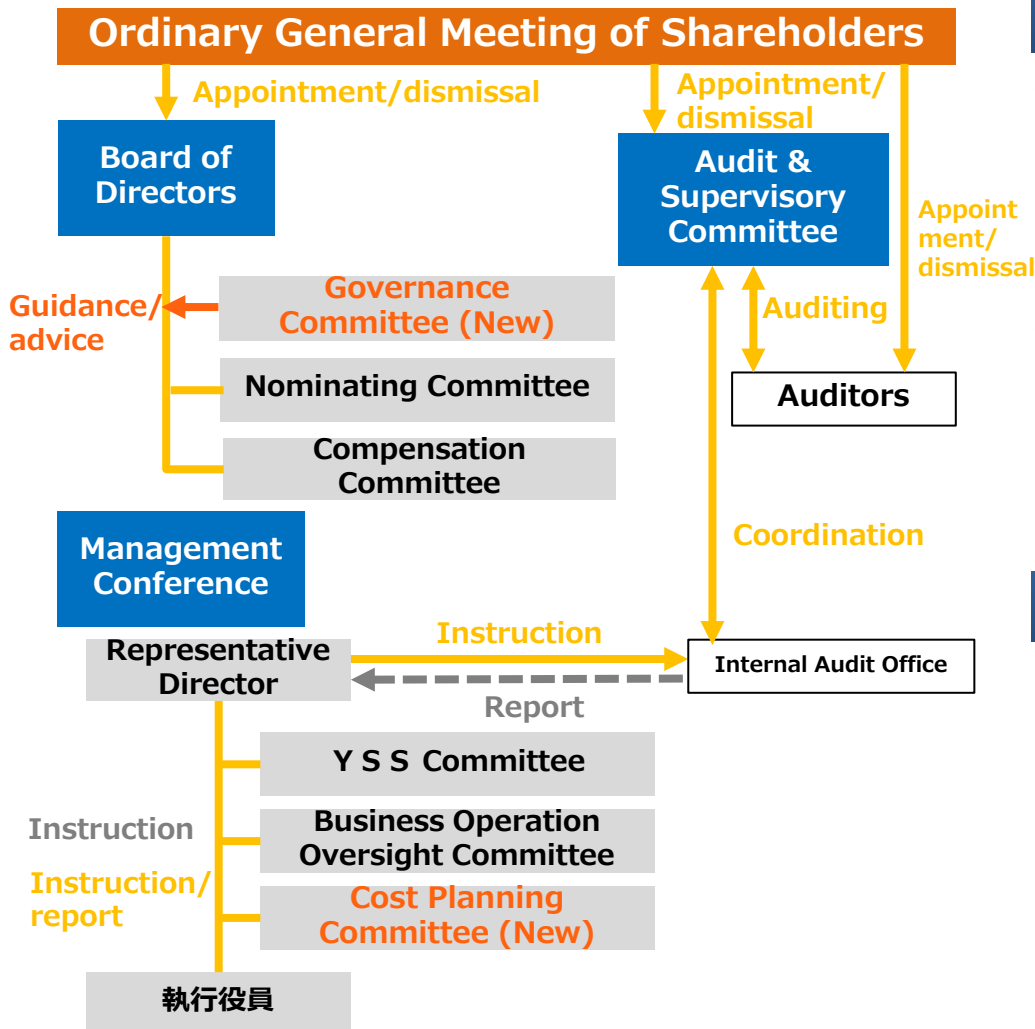
### Strengthening revenue management system

- ◆ We will establish a **new Cost Planning Committee** and strengthen our product and business revenue management system.
- ◆ We will thoroughly implement a cost management system by introducing BI tools and strengthen the management system for products and business earnings.

### Strengthening group governance

- ◆ We will establish a **new Governance Committee** to improve management efficiency and strengthen governance across the entire group.

- Further strengthened management structure to respond to the recent business environment



## Strengthening group governance

- ◆ We will establish a **Business Operation Oversight Committee** for the purpose of improving management efficiency and strengthening control of the entire group, as well as manage and monitor risks related to business operations of group companies on a cross-sectional basis.
- ◆ In order to continuously improve corporate governance, we plan to establish a **Governance Committee** to evaluate the effectiveness of the Board of Directors' management oversight functions, provide advice to the Board of Directors, and propose improvements.

## Strengthening revenue management system

- ◆ We will establish a **Cost Planning Committee** to strengthen the profit management system for the entire group. The committee monitors the performance of existing products, promotes cost reduction activities, and implements cost planning, Value Analysis (VA) and Value Engineering (VE) activities to achieve the quality and functions demanded by customers at the lowest possible cost from the new product development stage.

- Further strengthened management structure to respond to the recent business environment

## Appointment of Outside Director

**Miyoko Yoshikawa**, who has deep knowledge and experience in compliance, corporate governance, and human resource diversity, was appointed as an outside director.

## Issue to Date

- While the management structure is specialized in the construction equipment industry, it lacks diversity in human resources due to the characteristics of belonging to an industry that has developed mainly by men.



## Expected Effects

- Ensure transparency, objectivity, and diversity in board decision-making and increase awareness of governance and compliance
- Aiming to improve corporate value over the medium to long term by stimulating discussion through a new sense of value and creating new innovations.

## Miyoko Yoshikawa

Director (Outside & Independent)

### Skill Matrix

Category	Skill
Corporate management	○
Sustainability & ESG	◎
R&D and Technology	
Production	
Sales	○
Global	
Finance & Accounting	
Human resources & Labor	○
Legal & Compliance	◎



**In the first half of FY2023, we will improve earning power in core businesses to strengthen our foundation**

**Afterwards, in the 2nd half of FY2023,  
we will develop a new  
management plan for growth**

## What to aim for Achieving Sustainable Society

Our themes

Health



Air  
Quality



Environ  
ment



Demonstrating our strengths through business

The Specialist in Filtration  
**YAMASHIN**

**ESG** management practices

Technical Meister to master the art of manufacturing  
Ability to create innovation

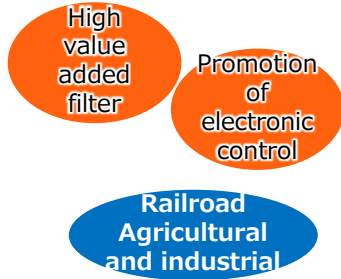
Construction  
machinery

Air filters

*Rokajinitsukafuru*

## Construction machinery filters

Deepening of existing business areas



Exploration of new areas

**Filter business for construction machinery**  
High value-added filter product development

- For hydraulic
- For transmission
- For fuel

Focusing on next-generation hydraulic systems electronic control by sensors

**Development of new business areas**

- For freight railway
- For agricultural and industrial machinery

## Filtration media development

**Long Life/**  
**Development of**  
**eco-friendly**  
**materials**

- Petroleum-derived PET resin
- Development of Biomass PET filter media
- Development of biodegradable materials recycling circulation

# Filter media

## New business domain

**Entering the new materials field by applying YAMASHIN NANO FILTER®**



Conductive material

Biomass raw materials

Sheet material

New Heat-Resistant Material

Mergers and acquisitions

## Air filters

**Sales strategy enhancement**



Distributor business (product diversity /small lot)

- For building air conditioning (Pre-filter, medium-high performance filter)
- Direct sales (high cleanliness HAPA/ULPA)

**NanoWHELP®**












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REFERENCE MATERIALS

① BASIC COMPANY INFORMATION

YAMASHIN Group purchases glass fibers and non-woven fabrics, which are the main materials to manufacture filter media (the key parts of filters). Our Group also purchases metal processed products and resin processed products used in filter components to manufacture construction machinery filters, industrial filters, process filters and air filters. From May 2020, we started to sell filter masks and mask inner sheets made from our proprietary synthetic polymer nanofibers.

Field	Products	Product Image	Composition ratio (Forecast of FY2023)
Construction Machinery Filters	Filters used for filtering hydraulic oil in hydraulic circuits, diesel oil for fuel, and lubricating oil for engine drive, which are indispensable for driving construction machinery. Applications: Various types of construction equipment		
Healthcare	Highly performance masks and replacement inner sheets that utilize the characteristics of synthetic polymer-based nanofibers, such as high filtration performance, excellent sealing performance, and high air permeability. Applications: For general consumers in Japan and around the world		
Industrial Filters	Filters used for filtration of hydraulic oil and lubricating oil in hydraulic units applied in various industries. Applications: Machine tools, refrigeration compressors, agricultural machinery, ships, railway vehicles, aircraft, and helicopters		
Process line Filters	Filters required for filtration and separation in the manufacturing process of customer products Applications: Electronic components, precision components, liquid crystal displays and food industries, etc.		
Air filters	Coarse dust removal air filters, medium- to high-performance air filters Applications: Dust removal, deodorization, etc. for general buildings, hotels, various factories, etc.		

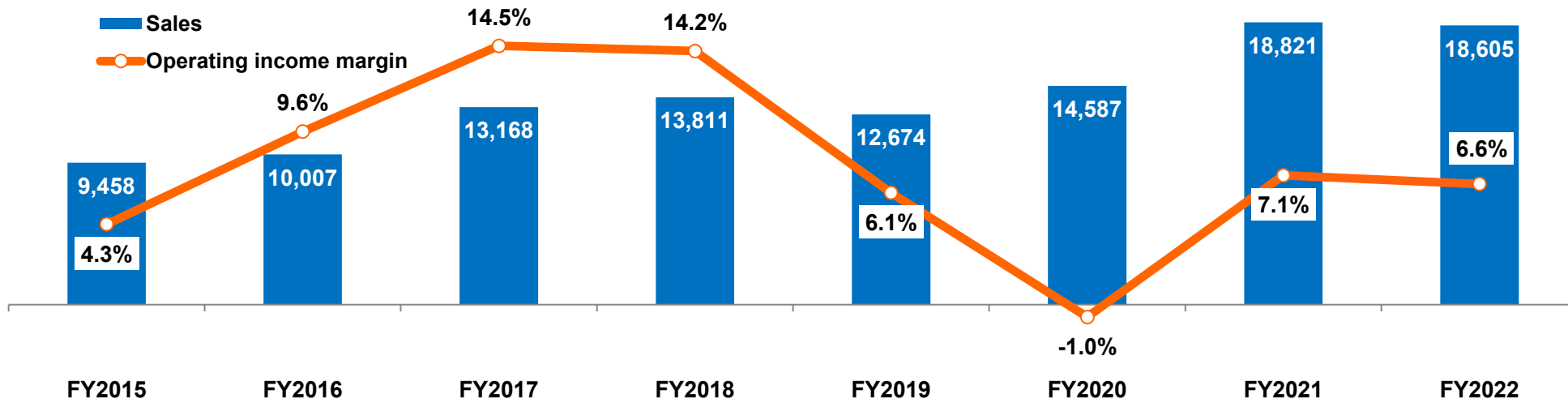
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REFERENCE MATERIALS

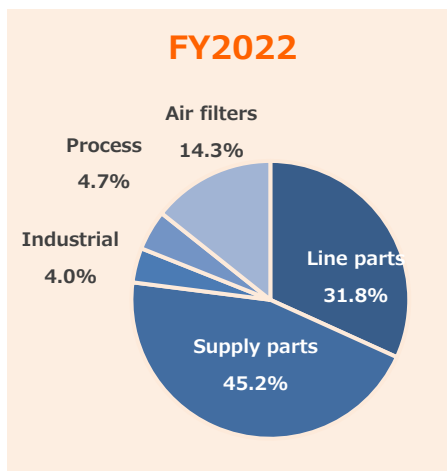
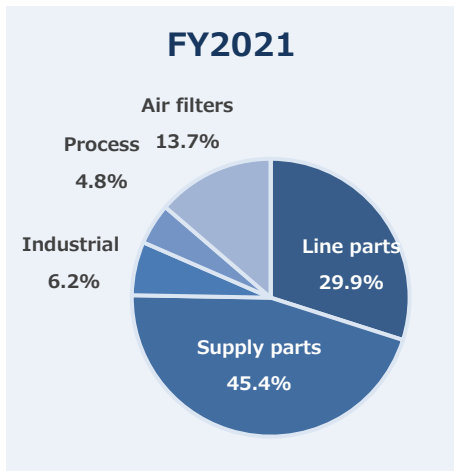
② FINANCIAL HIGHLIGHTS

## Net sales, Operating income margin

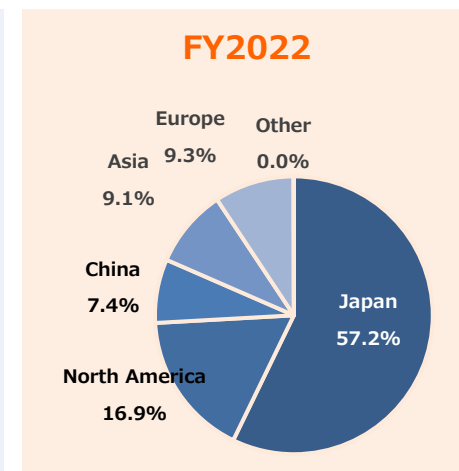
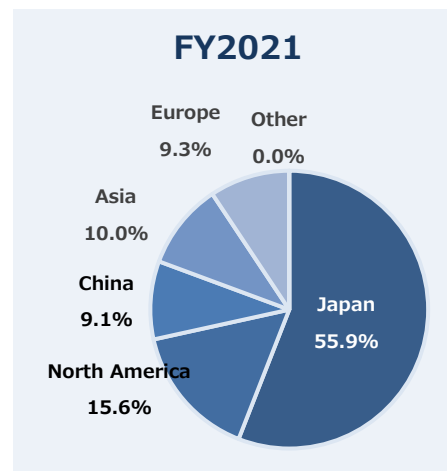
(million yen)



## Sales breakdown by product category

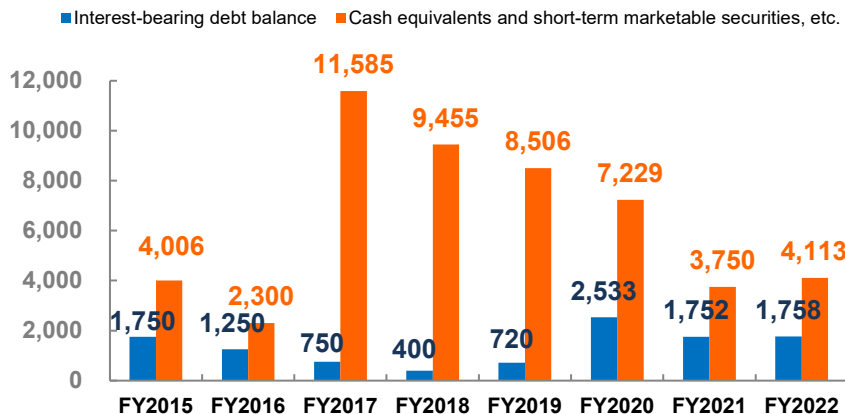


## Sales breakdown by region

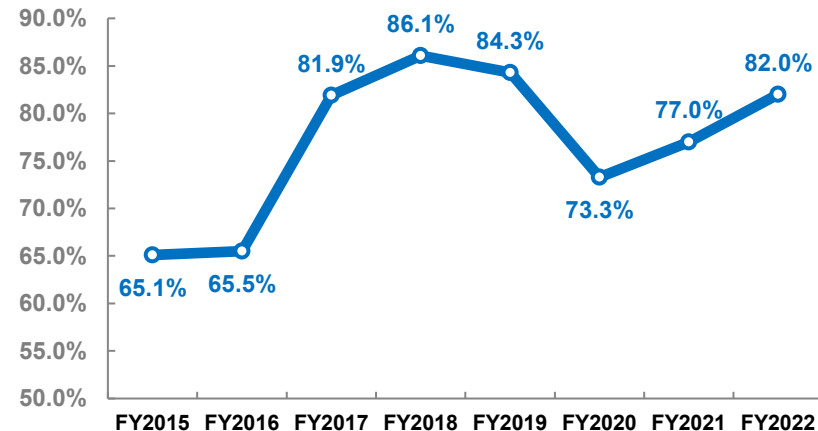


## Interest-bearing debt, cash equivalents short-term investment securities, etc.

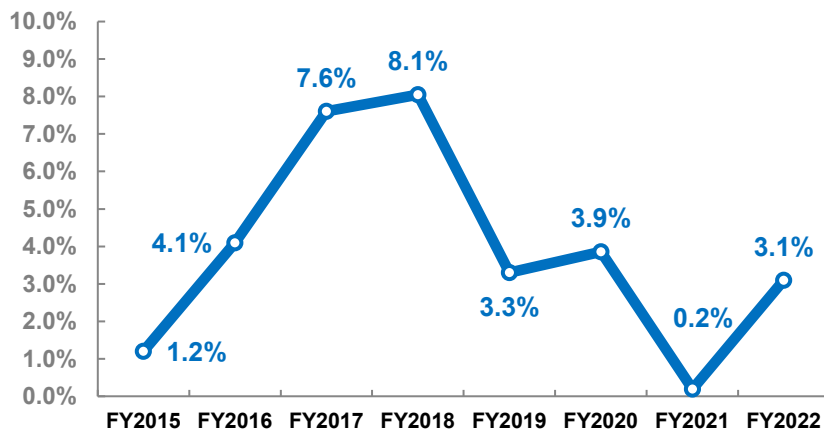
(million yen)



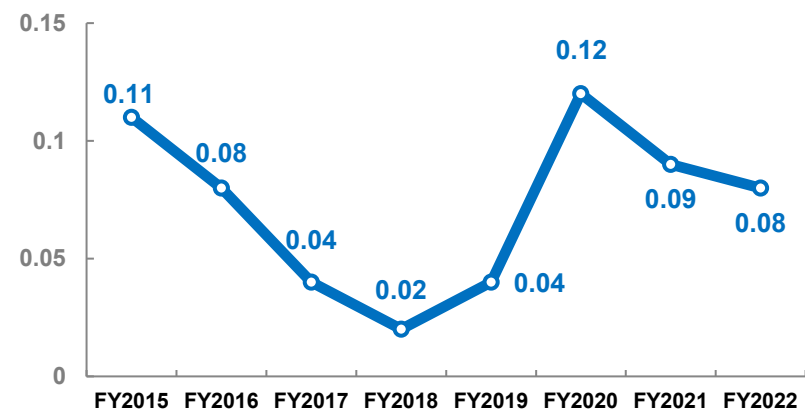
## Shareholders' Equity Ratio



## ROE



## D/E Ratio



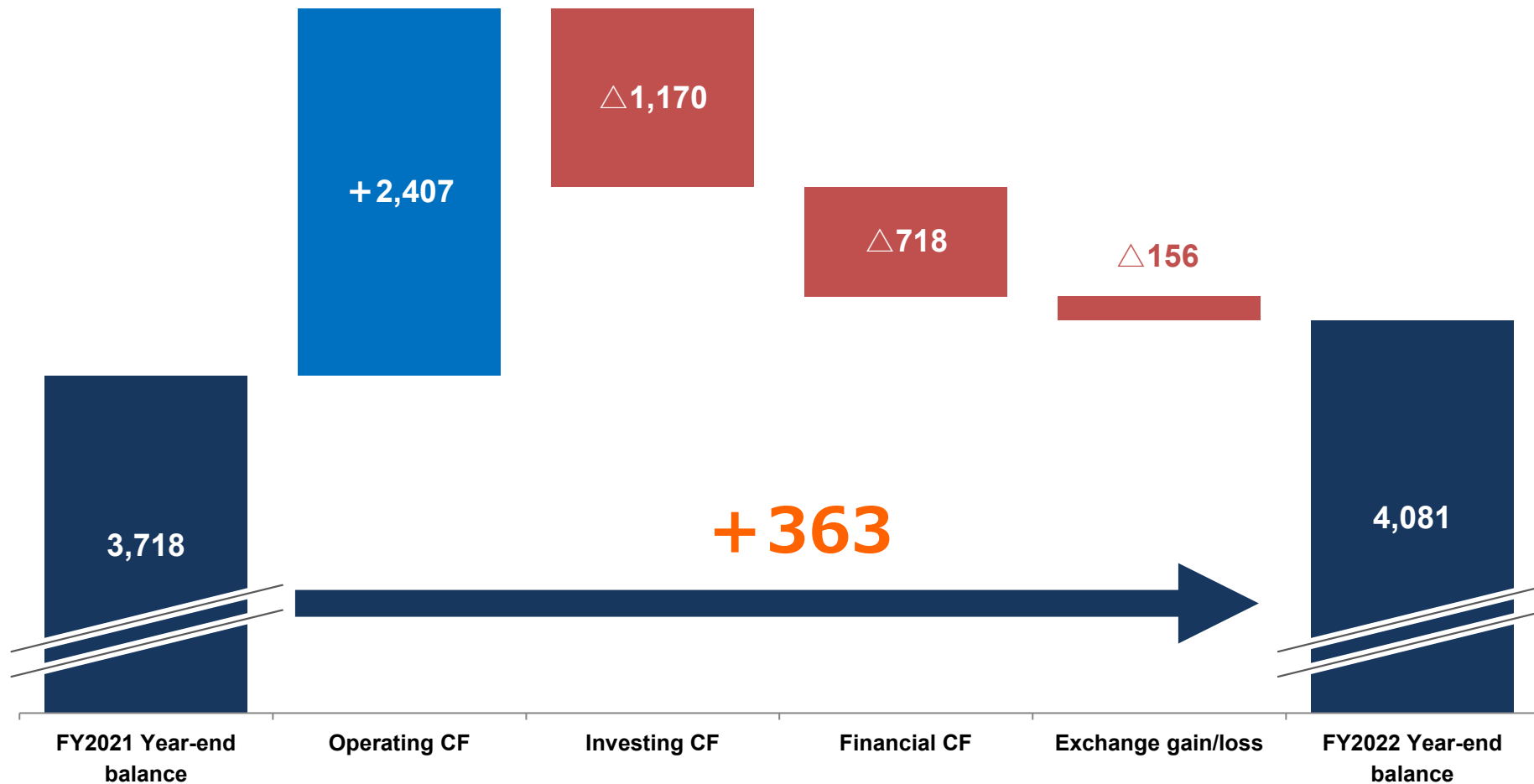
• Calculations are based on the assumption that the third-party allotment of new shares conducted in FY2017 was conducted from prior periods.

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# Changes in Cash Balance

(million yen)



\*For long-term deposits with maturities of less than one year (¥32 million at the end of FY2021 and ¥32 million at the end of FY2022), cash and cash equivalents are not included in the ending balance of cash and cash equivalents.

# Conditions of Operational Hedge – “Marry and Netting” and Foreign Exchange Sensitivity

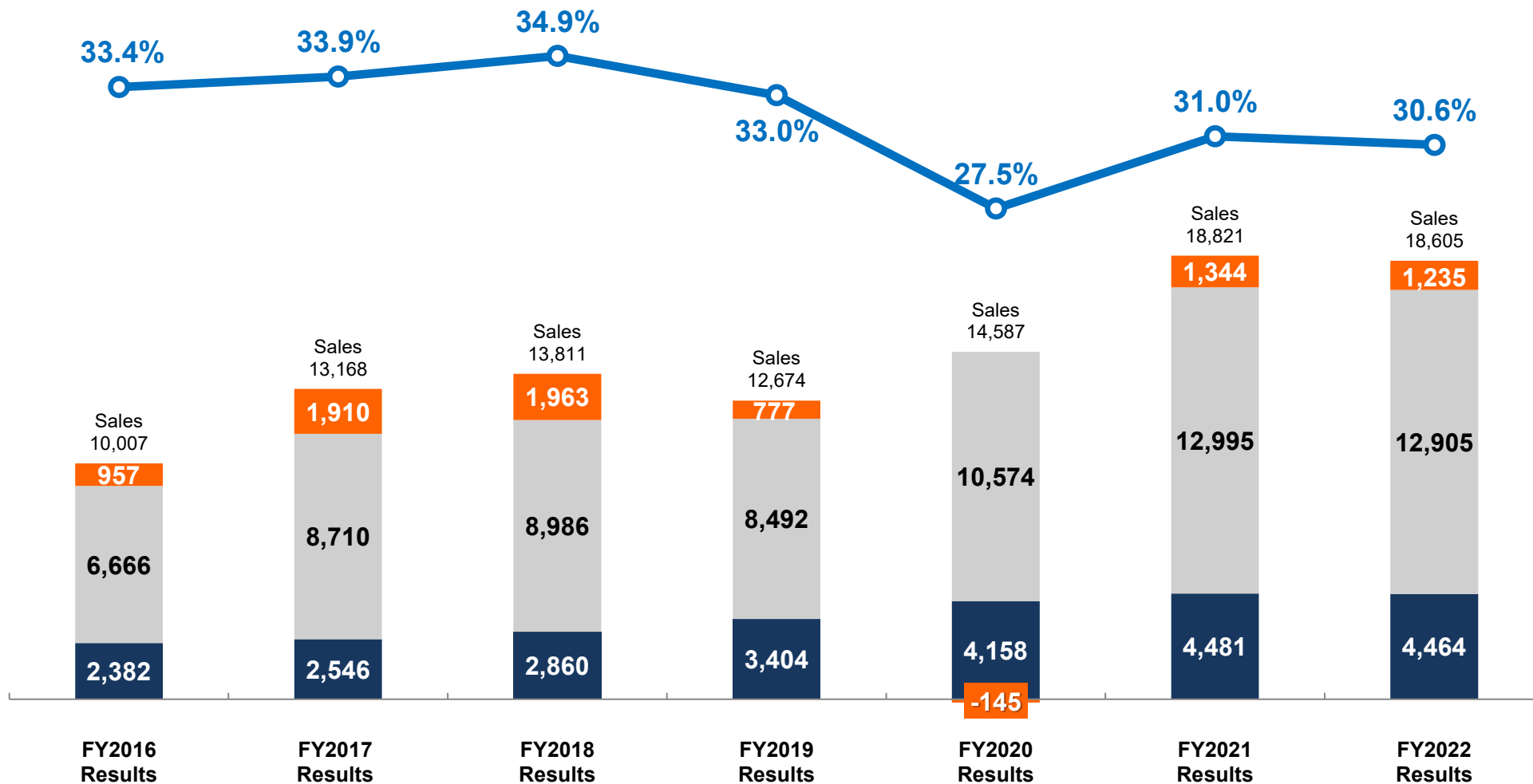
(million yen)

Currency	Incoming		Outgoing		Net	Average rate during the term (JPY)	In case of yen appreciation (10%)			In case of yen depreciation (10%)		
	Amount by currency	Composition ratio	Amount by currency	Composition ratio	Amount by currency		If yen is appreciated ▲10% (JPY)	Difference	Affected amount (YTD)	If yen is depreciated +10% (JPY)	Difference	Affected amount (YTD)
JPY	¥20,000	66%	¥17,400	58%	¥2,600	-	-	-	-	-	-	-
USD	\$65.4	29%	\$79.3	36%	\$-13.9	¥135.5	¥121.93	¥-13.55	¥188.32	¥149.03	¥13.55	¥-188.32
EUR	€6.2	3%	€4.3	2%	€1.9	¥141.0	¥126.88	¥-14.1	¥-26.79	¥155.08	¥14.10	¥26.79
PHP	PP4.4	0%	PP424.3	3%	PP-419.9	¥2.5	¥2.21	¥-0.2	¥102.88	¥2.70	¥0.25	¥-102.88
THB	฿108.40	1%	฿41.10	1%	฿67.30	¥3.9	¥3.47	¥-0.4	¥-25.91	¥4.24	¥0.39	¥25.91
VND	0.00 đ	0%	395.30 đ	1%	-395.30 đ	¥0.6	¥0.52	¥-0.1	¥22.68	¥0.63	¥0.06	¥-22.68
<b>Total</b>	-	<b>100%</b>	-	<b>100%</b>	-	-	-	-	¥261.17	-	-	¥-261.17

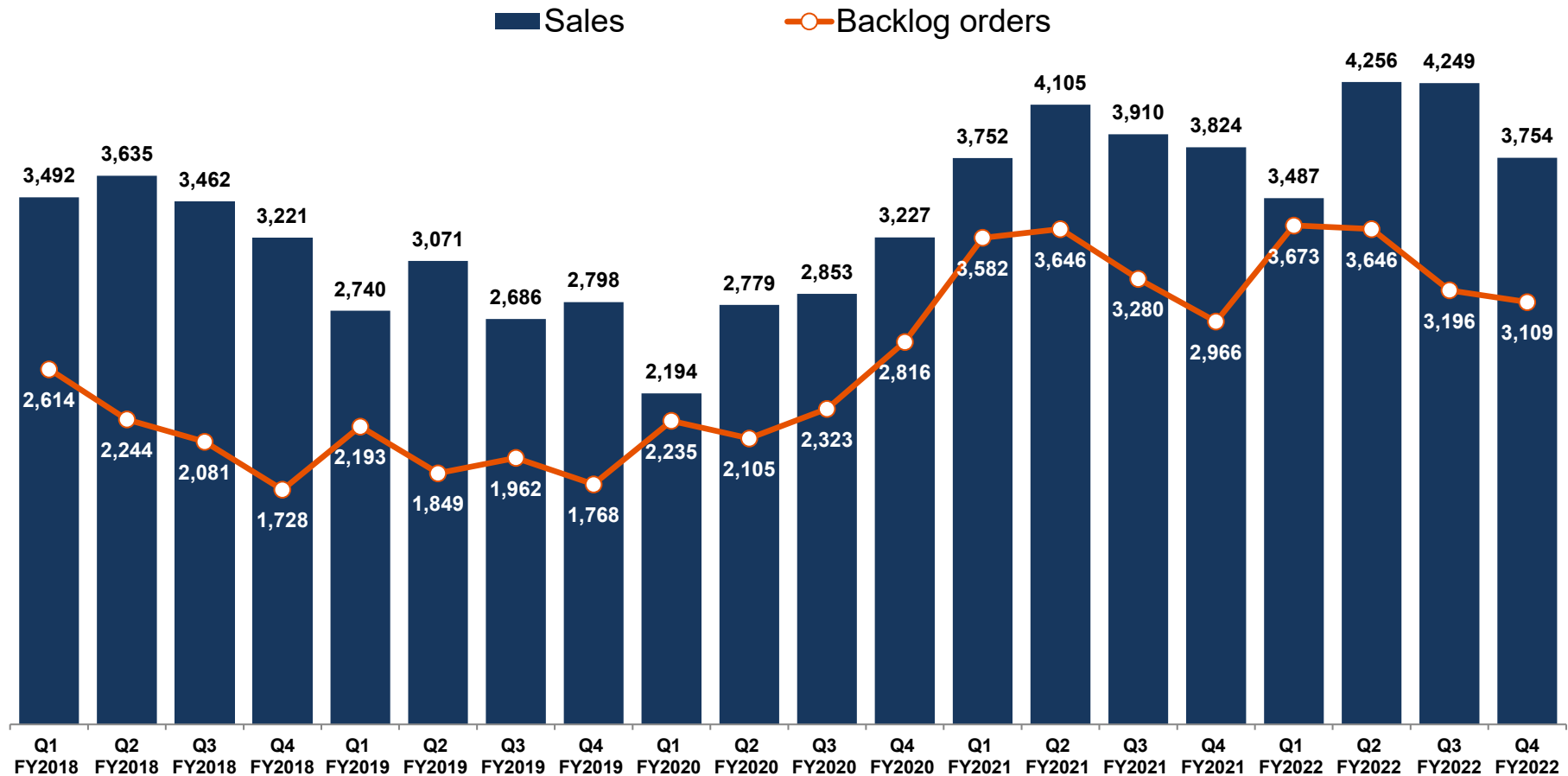
# Variation in Marginal Profit Ratio

(million yen)

■ Fixed cost    ■ Variable cost    ■ Operating income    ● Marginal profit ratio



(million yen)



\*Sales do not include healthcare sales.



The forward-looking statements in this document, including the forecast of results of operations, are based on information currently available to YAMASHIN. Actual results may differ from these forecasts due to a variety of factors, including market trends and business conditions.

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