

**Briefing Materials of
Financial Results
for Q2 FY2024
(Interim Period)**

TSE Prime: 5991

NHK Spring Co., Ltd.

November 28, 2024



Consolidated Financial Results for the
First Half Ended September 30, 2024
Forecast of Consolidated Results for the
Year Ending March 31, 2025

Executive Vice President & CFO and
Representative Member of the Board

Hidefumi Yoshimura

Consolidated Financial Results for the First Half Ended September 30, 2024

Results for 1st Half Ended September 30, 2024

Automotive-related market : Production volume decreased year-on-year both in Japan and overseas

Information and communications related : Although the global production volume of HDDs decreased year-on-year, the total demand for our main product, HDD suspension, increased.

(100 million yen)

	FY2023		FY2024 1st half		Results	Vs. FY2023 1st half	Results Vs. May forecast	Vs. August forecast
	1st half results		May forecast	August forecast				
Net Sales	3,621		3,777	3,950	3,912	290	135	-37
Operating Profit	79		142	220	229	149	87	9
Ratio	2.2%		3.8%	5.6%	5.9%	3.7%	2.1%	0.3%
Ordinary Profit	187		195	275	269	82	74	-5
Ratio	5.2%		5.2%	7.0%	6.9%	1.7%	1.7%	-0.1%
Interim Profit Attributable to Owners of Parent	143		150	200	215	71	65	15
Extraordinary profits/losses	13		-	20	20	6	20	-
Average Rate	US\$	141.3	150.0	153.7	152.3	11.0	2.3	-1.4
	Thai Baht	3.9	4.0	4.2	4.2	0.3	0.2	-
Current Rate	US\$	This year 149.6	150.0	150.0	142.7	-6.9	-7.3	-7.3
		Previous year 133.5	151.4	151.4	151.4	17.9	-	-
	Thai Baht	This year 4.1	4.0	4.4	4.4	0.3	0.4	-
		Previous year 3.8	4.1	4.1	4.1	0.3	-	-

Variable Factor Analysis for Operating Profit

(100 million yen)

	FY2023	FY2024 1st half		Results	Vs. FY2023	Vs. May	Vs. August
	1st half results	May forecast	August forecast		Results	forecast	forecast
Net Sales	3,621	3,777	3,950	3,912	290	135	-37
Operating Profit	79	142	220	229	149	87	9
Ratio	2.2%	3.8%	5.6%	5.9%	3.7%	2.1%	0.3%

Vs. FY2023 1st half

About half of the increase in sales reflected the impact of the weaker yen on overseas subsidiaries. Sales were therefore significantly impacted by fluctuations in exchange rates.

In terms of profit and loss, factors such as a recovery in the volume of HDD-related components, which had been sluggish in the previous year, and profit boosts from the shifts in exchange rates contributed to higher sales and increased profits.

Vs. May forecast

Although there were negative impacts from the slowdown in the automotive market, particularly in Thailand, stronger-than-expected recovery in demand for HDD-related components contributed to increased revenue and profit.

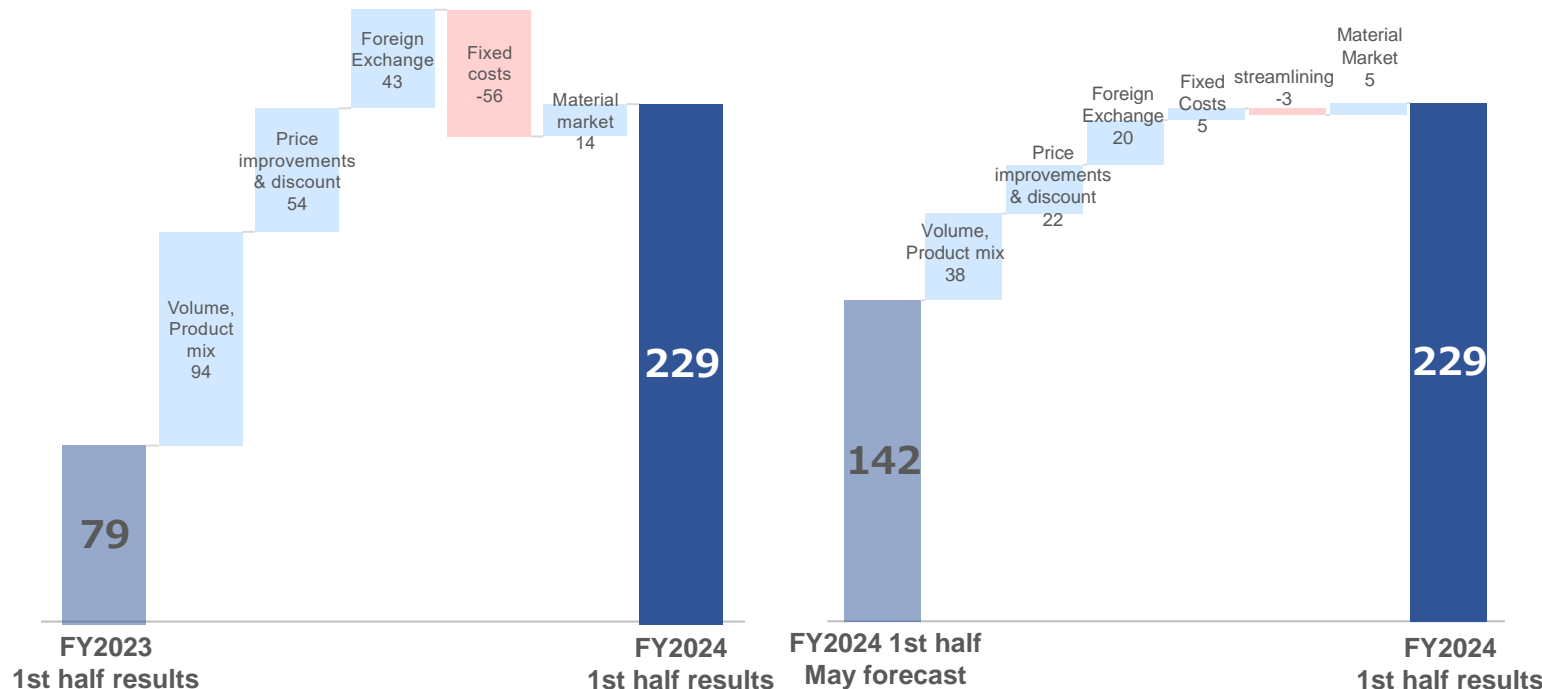
Vs. August forecast

Operating profit landed roughly in line with expectations. In the automotive-related business, despite a decline in volume in North America and delays in price revisions, profit growth was secured through measures such as offsetting the impact of rising steel prices and other material costs in Japan. In the non-automotive-related business, results slightly underperformed projections due to lower volumes of HDD-related components and the impact of yen appreciation.

Variable Factor Analysis for Operating Profit

(Vs. Previous year)

(Vs. May forecast)



Non-operating and Extraordinary Profits/Losses

Non-operating profits/losses

(100 million yen)

Breakdown	FY2023 1st half results	FY2024 1st half results	Vs. FY2023 Results
Non-operating profits/losses			
Exchange rate profits/losses (Japan)	52	△28	△ 80
Exchange rate profits/losses (Asia, America & Europe & Others)	18	35	17
Dividend income	15	16	1
Equity in profits/losses of affiliates	9	10	1
Other	13	7	△ 6
Total	108	40	△ 68

Extraordinary profits/losses

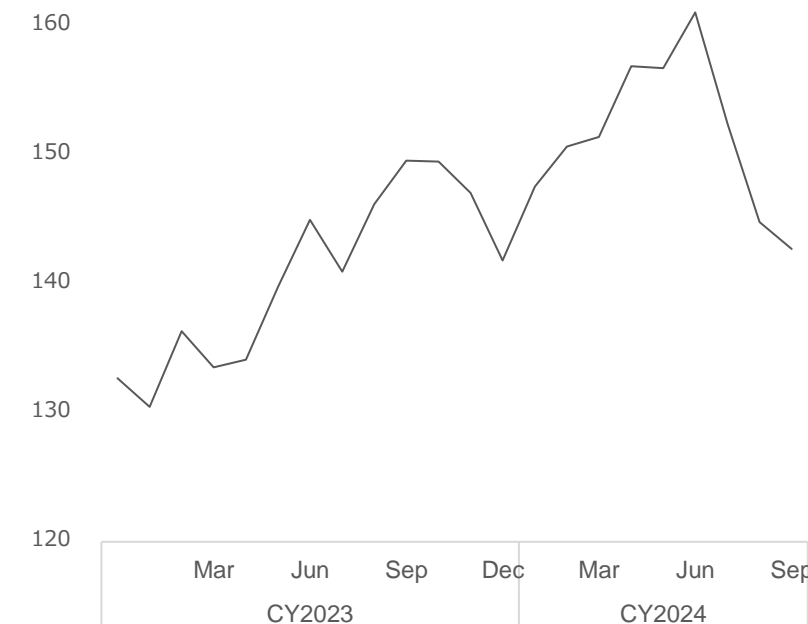
(100 million yen)

Breakdown	FY2023 1st half results	FY2024 1st half results	Vs. FY2023 Results
Extraordinary profits			
Gain on sale of investment securities	13	—	△ 13
Settlement proceeds received	—	20	20
Total	13	20	6

▽ Exchange gain or loss

Due to the rapid depreciation of the dollar in the foreign exchange market towards the end of September, foreign exchange losses were incurred at business sites in Japan, but at some overseas business sites that use a December accounting period, foreign exchange gains were recorded due to the appreciation of the dollar towards the end of June.

▽ Dollar-Yen Exchange Rate Fluctuations



Net Sales/Operating Profit by Business Segment

(100 million yen)

		FY2023	FY2024 1st half		Vs. FY2023 Results	Vs. May forecast
		1st half results	May forecast	Results		
■ Automotive Suspension Spring	Net Sales	786	865	835	49	-29
	Operating Profit	-35	4	-6	28	-10
	Ratio	-4.5%	0.5%	-0.8%	3.7%	-1.2%
■ Automotive Seating	Net Sales	1,555	1,516	1,508	-46	-7
	Operating Profit	77	43	54	-22	11
	Ratio	5.0%	2.8%	3.6%	-1.3%	0.8%
■ Precision Springs & Components	Net Sales	454	483	498	43	15
	Operating Profit	-7	9	17	24	8
	Ratio	-1.5%	1.9%	3.4%	5.0%	1.6%
■ Disk Drive Suspension	Net Sales	293	359	519	226	160
	Operating Profit	13	58	126	112	68
	Ratio	4.6%	16.2%	24.3%	19.7%	8.1%
■ Industrial Machinery & Others	Net Sales	532	554	550	17	-3
	Operating Profit	31	28	37	6	9
	Ratio	5.8%	5.1%	6.9%	1.0%	1.8%
Total	Net Sales	3,621	3,777	3,912	290	135
	Operating Profit	79	142	229	149	87
	Ratio	2.2%	3.8%	5.9%	3.7%	2.1%

Vs. FY2023 1st half

With the exception of the seat business, which performed strongly in the previous term, sales and profits increased in all businesses.

In particular, the DDS business performed strongly and drove overall performance.

Suspension springs also improved significantly compared to the previous term.

Vs. May forecast

With the exception of the suspension springs business, each business secured operating profit that exceeded the initial plan.

In particular, the DDS business performed more strongly than initially expected, and this greatly boosted overall operating profit.

Net Sales/Operating Profit by Region Segment

(100 million yen)

		FY2023	FY2024 1st half		Vs. FY2023	Vs. May
		1st half results	May forecast	Results	Results	forecast
● Japan	Net Sales	2,084	2,083	2,194	110	111
	Operating Profit	84	68	154	70	86
	Ratio	4.0%	3.3%	7.0%	3.0%	4.2%
● Asia	Net Sales	896	960	1,014	118	54
	Operating Profit	36	85	113	77	28
	Ratio	4.1%	8.9%	11.2%	7.2%	2.1%
● America & Europe & Others	Net Sales	640	734	702	62	-31
	Operating Profit	-40	-11	-38	2	-27
	Ratio	-6.4%	-1.5%	-5.5%	0.9%	-5.0%
Total	Net Sales	3,621	3,777	3,912	290	135
	Operating Profit	79	142	229	149	87
	Ratio	2.2%	3.8%	5.9%	3.7%	2.1%

Vs. FY2023 1st half

In Japan, sales and profits increased compared to the same period of the previous year, driven significantly by the recovery in HDD-related components. Additional contributions came from the effects of yen depreciation, increased volumes of semiconductor process components, and the turnaround to profitability in the motor core business.

In Asia, despite a decline in the automotive market in Thailand, the recovery in volumes in the HDD-related sector led to higher sales and profits.

In Europe, America, and other regions, although losses in the U.S. suspension springs business narrowed, declines in profitability in the Mexico and U.S. automotive seating business limited operating profit growth to a slight increase.

Vs. May forecast

In Japan, sales and profits increased due to a recovery in the volume of HDD-related parts that exceeded expectations. The automotive-related business also secured an increase in profits. In Asia, despite the downturn in the Thai automotive market, sales and profits increased due to the strong performance of HDD-related parts.

In Europe, America, and other regions, both sales and operating profits fell short of the initial plan, affected by a decline in volumes and delays in sales price adjustments in the U.S. suspension springs business and adverse changes in the product mix in the automotive seating business.

Automotive Suspension Spring

(100 million yen)

	FY2023	FY2024 1st half		Vs. FY2023 Results	Vs. May forecast
	1st half results	May forecast	Results		
Net Sales	786	865	835	49	-29
Operating Profit	-35	4	-6	28	-10
Ratio	-4.5%	0.5%	-0.8%	3.7%	-1.2%

Vs. FY2023 1st half

Although costs increased due to the launch of new products in Mexico, the effects of improved sales prices and productivity enhancements at U.S. operations and the reduction in fixed costs in China primarily contributed to a narrowing of the deficit.

Vs. May forecast

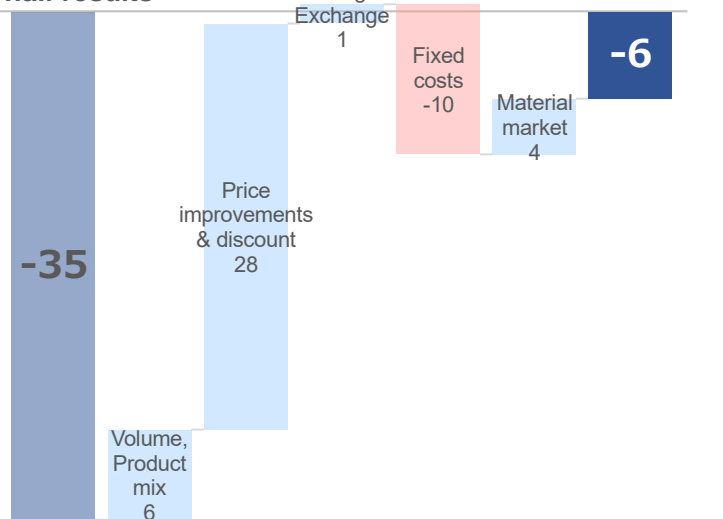
In Japan, despite a decline in volume, improved sales prices and the incorporation of higher raw material costs into pricing contributed to profits exceeding the initial forecast. However, in North America, volume declines, delays in sales price improvements, as well as increased costs due to changes in supply bases, and the slowdown in Thailand's automotive market resulted in both sales and operating profits falling short of the initial plan.

Variable Factor Analysis for Operating Profit

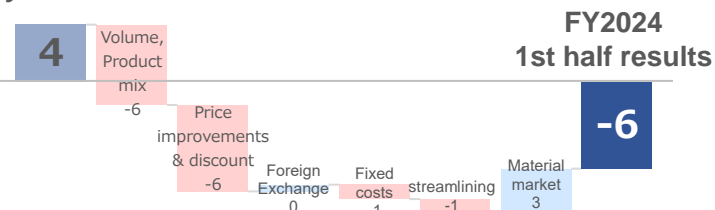
(Vs. Previous year 1st half)

(Vs. May forecast)

FY2023 1st half results



FY2024 1st half May forecast



FY2024 1st half results



Automotive Seating

(100 million yen)

	FY2023	FY2024 1st half		Vs. FY2023 Results	Vs. May forecast
	1st half results	May forecast	Results		
Net Sales	1,555	1,516	1,508	-46	-7
Operating Profit	77	43	54	-22	11
Ratio	5.0%	2.8%	3.6%	-1.3%	0.8%

Vs. FY2023 1st half

Although efforts were made to reflect higher costs and improve sales prices, a decline in production volumes in Thailand and Japan, a decrease in development revenue in Japan, and adverse changes in the product mix in North America led to lower sales and profits.

Vs. May forecast

Despite challenges such as the slowdown in Thailand's automotive market, product mix changes in North America efforts to manage price cooperation and incorporate higher raw material costs into pricing resulted in increased profits despite a decline in sales.

Variable Factor Analysis for Operating Profit

(Vs. Previous year 1st half)

(Vs. May forecast)



Precision Springs & Components

(100 million yen)

	FY2023	FY2024 1st half		Vs. FY2023 Results	Vs. May forecast
	1st half results	May forecast	Results		
Net Sales	454	483	498	43	15
Operating Profit	-7	9	17	24	8
Ratio	-1.5%	1.9%	3.4%	5.0%	1.6%

Vs. FY2023 1st half

The sales growth and productivity improvements in the domestic motor core business, along with the recovery in the volume of HDD mechanical components, contributed to improved profitability. Additionally, the boost in profits from yen depreciation led to increased sales and profits.

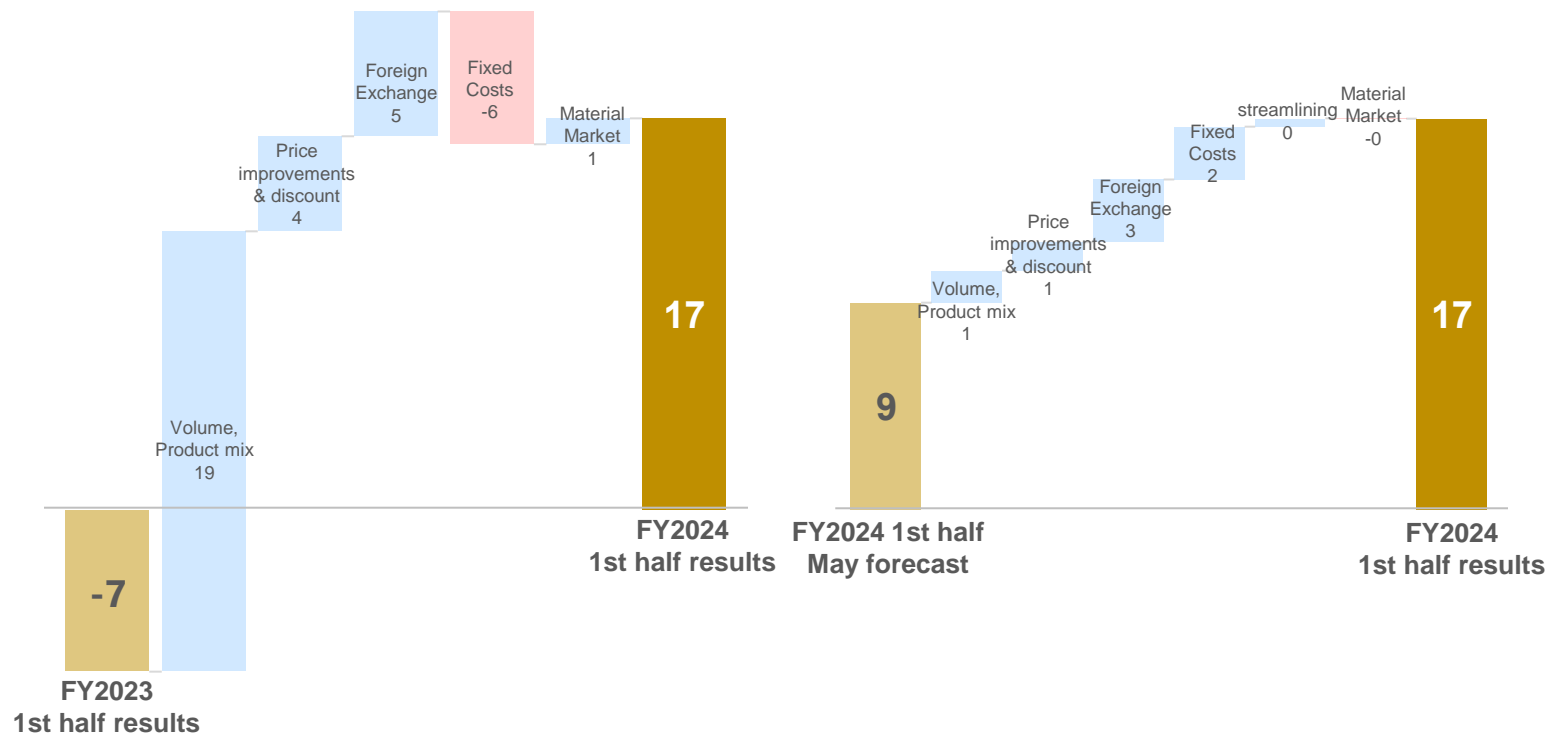
Vs. May forecast

The increase in HDD mechanical component volumes, sales growth and productivity improvements in the domestic motor core business, and profit gains from yen depreciation all contributed to higher sales and profits.

Variable Factor Analysis for Operating Profit

(Vs. Previous year 1st half)

(Vs. May forecast)



DDS (Disk Drive Suspension)

(100 million yen)

	FY2023	FY2024 1st half		Vs. FY2023 Results	Vs. May forecast
	1st half results	May forecast	Results		
Net Sales	293	359	519	226	160
Operating Profit	13	58	126	112	68
Ratio	4.6%	16.2%	24.3%	19.7%	8.1%

Vs. FY2023 1st half

During this period, demand for high-capacity HDDs for data centers recovered, leading to a significant increase in sales volumes of HDD suspensions compared to the previous year. Additionally, the boost in profits from exchange rate effects led to increased sales and profits.

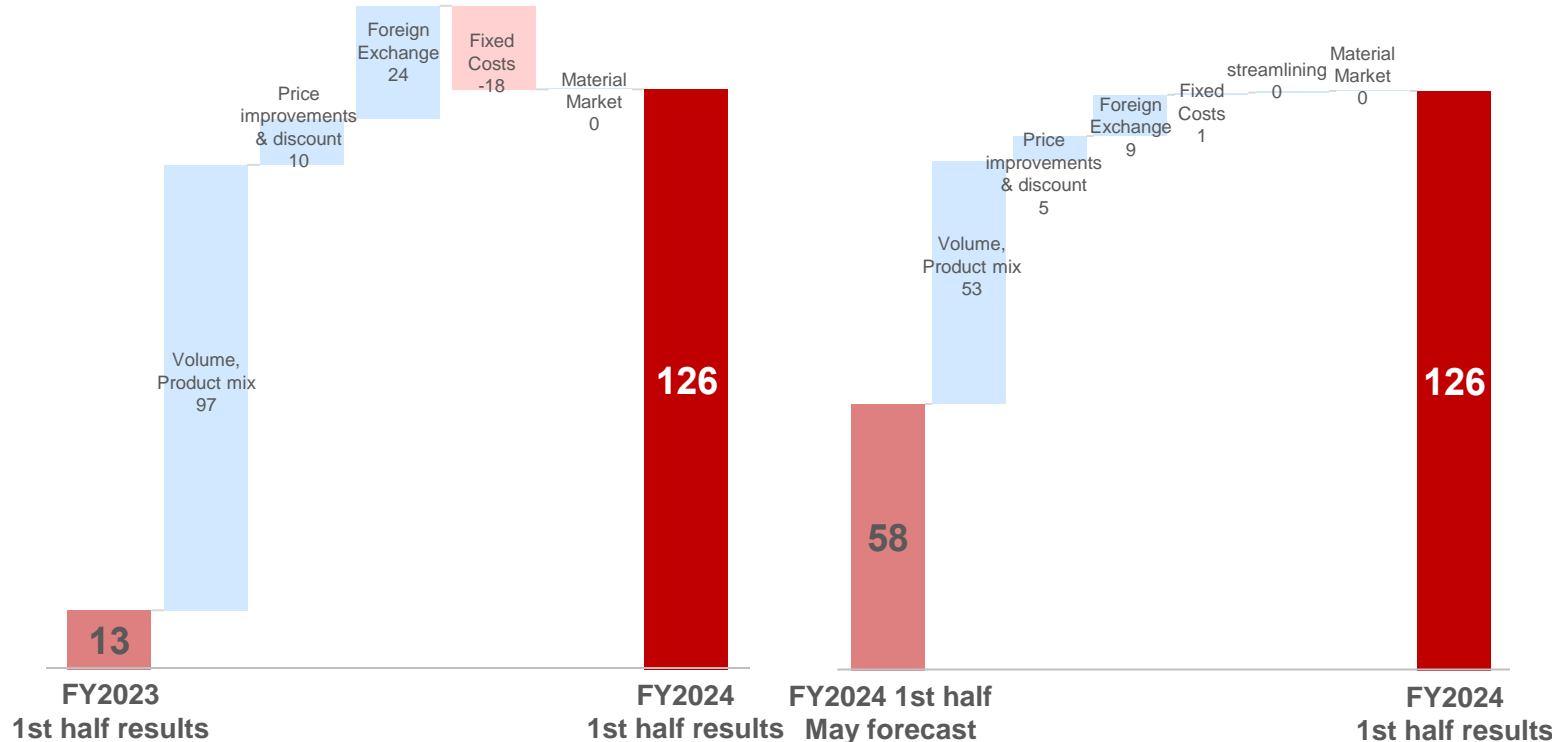
Vs. May forecast

Demand for HDD suspensions exceeded initial expectations in Japan, Thailand, and China. In addition to volume growth, the profit contribution from yen depreciation resulted in a substantial increase in both sales and profits.

Variable Factor Analysis for Operating Profit

(Vs. Previous year 1st half)

(Vs. May forecast)



Industrial Machinery & Others

(100 million yen)

	FY2023	FY2024 1st half		Vs. FY2023 Results	Vs. May forecast
	1st half results	May forecast	Results		
Net Sales	532	554	550	17	-3
Operating Profit	31	28	37	6	9
Ratio	5.8%	5.1%	6.9%	1.0%	1.8%

Vs. FY2023 1st half

Although volumes decreased in the leisure sector, including golf shafts and marine products, as well as in integrated metal substrates, the recovery in semiconductor process component volumes, driven by a rebound in the semiconductor market, and profit boosts from exchange rate effects contributed to higher sales and profits.

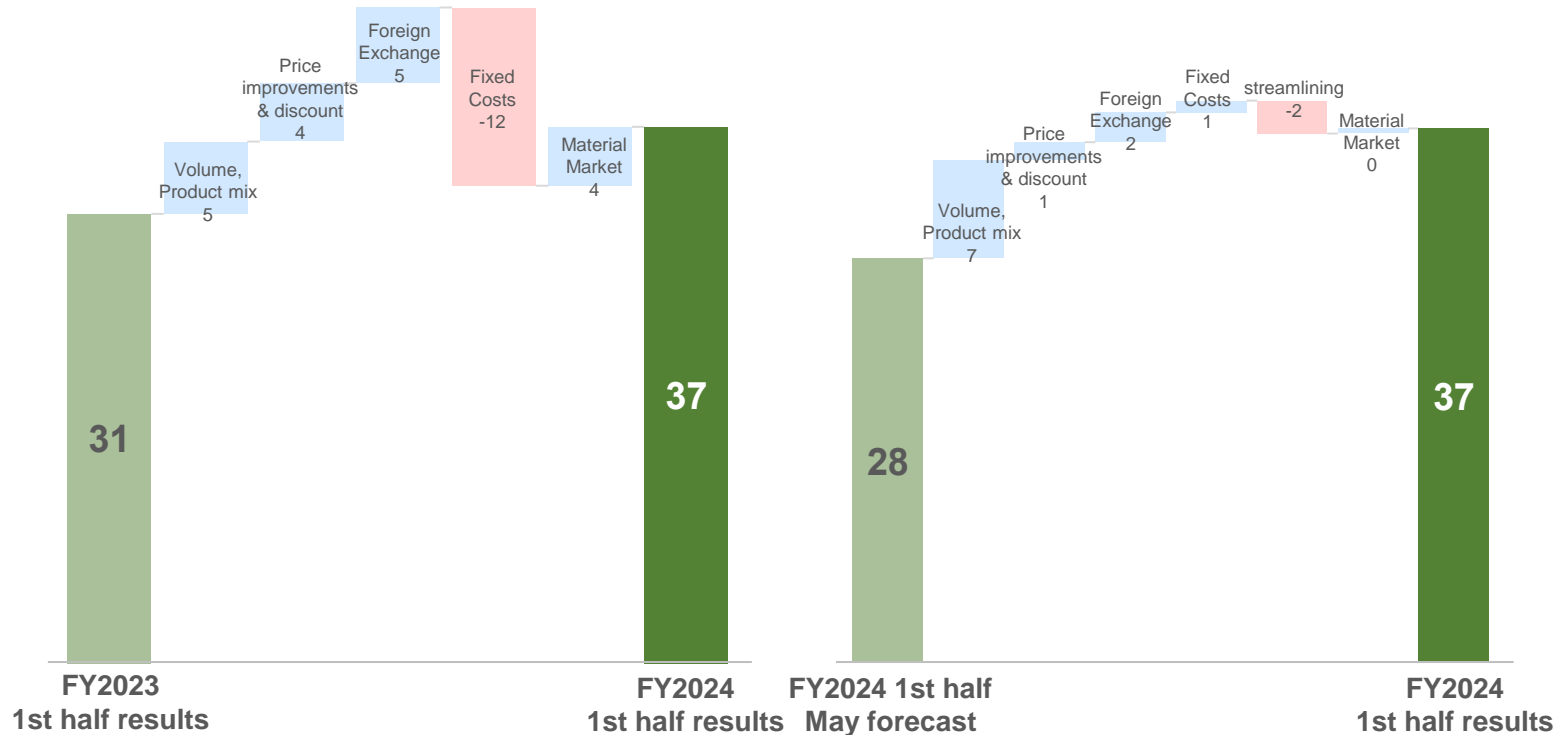
Vs. May forecast

Although the fact that there were upfront costs for expanding the metal substrate business, a decrease in the volume of existing products, a decline in volumes in the leisure sector, steady sales of semiconductor process components and parking devices, along with profit gains from yen depreciation, contributed to increased profits despite a decline in sales.

Variable Factor Analysis for Operating Profit

(Vs. Previous year 1st half)

(Vs. May forecast)



Forecast of Consolidated Results for the
Year Ending March 31, 2025

Forecast for the year ending March 2025

	FY2023 Results	FY2024			Vs. FY2023 Result	Results Vs. May forecast	Vs. August forecast		
		May forecast	August forecast	Latest Forecast					
Net Sales	7,669	7,800	8,000	8,000	330	200	-		
Operating Profit	346	400	480	500	153	100	20		
Ratio	4.5%	5.1%	6.0%	6.3%	1.7%	1.1%	0.3%		
Ordinary Profit	478	470	550	550	71	80	-		
Ratio	6.2%	6.0%	6.9%	6.9%	0.6%	0.8%	-		
Profit Attributable to Owners of Parent	391	400	450	450	58	50	-		
Extraordinary profits/losses	90	85	105	105	14	20	-		
Average Rate	US\$	144.4	148.0	152.1	148.9	4.5	0.9	-3.2	
	Thai Baht	4.0	4.0	4.2	4.2	0.2	0.2	0.0	
Current Rate	US\$	This year	151.4	145.0	145.0	145.0	-6.4	-	-
		Previous year	133.5	151.4	151.4	151.4	17.9	-	-
	Thai Baht	This year	4.1	4.0	4.0	4.2	0.1	0.2	0.2
		Previous year	3.8	4.1	4.1	4.1	0.3	-	-

Variable Factor Analysis for Operating Profit

(100 million yen)

	FY2023	FY2024			Vs. FY2023	Vs. May	Vs. August
	Results	May forecast	August forecast	Latest Forecast	Results	forecast	forecast
Net Sales	7,669	7,800	8,000	8,000	330	200	-
Operating Profit	346	400	480	500	153	100	20
Ratio	4.5%	5.1%	6.0%	6.3%	1.7%	1.1%	0.3%

Vs. FY2023

Although the automotive seating business, which performed well in the previous year, declined, strong performance in HDD-related components and semiconductor process components and profit gains from yen depreciation are expected to contribute to higher sales and profits.

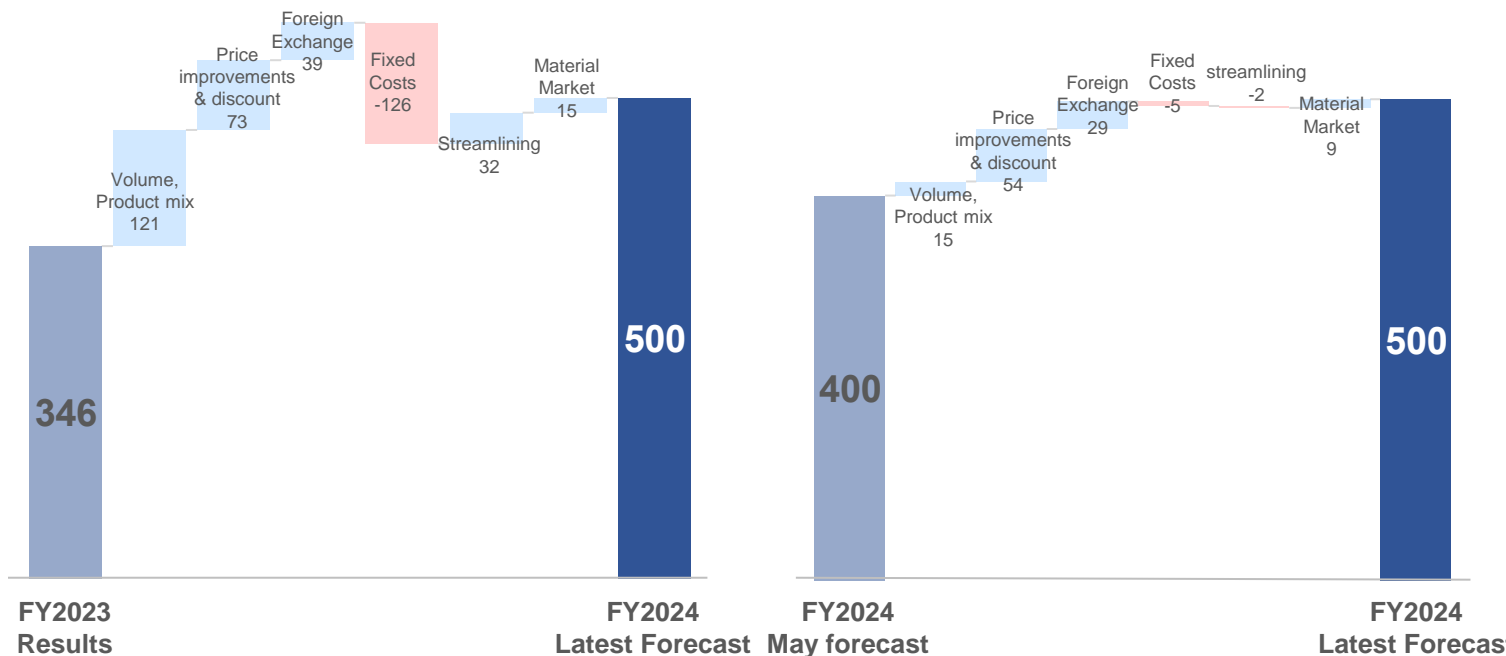
Vs. May forecast

In the automotive-related business, a slowdown primarily in automotive suspension springs and seating is expected to continue, similar to the first half of the year. However, stronger-than-anticipated demand recovery in HDD-related components is projected to drive overall group performance, leading to higher sales and profits.

Variable Factor Analysis for Operating Profit

(Vs. Previous year)

(Vs. May forecast)



Net Sales/Operating Profit by Business Segment

		FY2023 Results	FY2024		Vs. FY2023 Results	Vs. May forecast
			May forecast	Latest Forecast		
■ Automotive Suspension Spring	Net Sales	1,711	1,800	1,700	-11	-100
	Operating Profit	15	42	15	0	-27
	Ratio	0.9%	2.3%	0.9%	-0.1%	-1.5%
■ Automotive Seating	Net Sales	3,241	3,100	3,050	-191	-50
	Operating Profit	191	116	110	-81	-6
	Ratio	5.9%	3.7%	3.6%	-2.3%	-0.1%
■ Precision Springs & Components	Net Sales	945	990	1,010	64	20
	Operating Profit	6	40	45	38	5
	Ratio	0.7%	4.0%	4.5%	3.8%	0.4%
■ Disk Drive Suspension	Net Sales	671	740	1,100	428	360
	Operating Profit	64	116	245	180	129
	Ratio	9.6%	15.7%	22.3%	12.7%	6.6%
■ Industrial Machinery & Others	Net Sales	1,099	1,170	1,140	40	-30
	Operating Profit	68	86	85	16	-1
	Ratio	6.2%	7.4%	7.5%	1.3%	0.1%
Total	Net Sales	7,669	7,800	8,000	330	200
	Operating Profit	346	400	500	153	100
	Ratio	4.5%	5.1%	6.3%	1.7%	1.1%

Vs. FY2023

Sales and operating profit for suspension springs are expected to be about the same as in the previous term.

Although sales and profits for seats, which were strong in the previous term, are expected to decrease, non-automotive related businesses, centered on DDS, are expected to perform well, and overall sales and profits are expected to increase.

Vs. May forecast

The automotive business continues to slow down. Non-automotive business is generally strong, but the market for leisure products is sluggish, and there are also factors such as increased costs due to upfront investment to expand orders for the metal substrate business and a decrease in existing products, so industrial equipment and other products are expected to fall slightly short of the initial operating profit target.

DDS continues to perform well and is driving the overall business.

Net Sales/Operating Profit Forecast by Region

		FY2023	FY2024		Vs. FY2023	Vs. May
		Results	May forecast	Latest Forecast	Results	forecast
● Japan	Net Sales	4,377	4,365	4,565	187	200
	Operating Profit	299	234	337	37	103
	Ratio	6.8%	5.4%	7.4%	0.5%	2.0%
● Asia	Net Sales	1,869	1,983	2,040	170	57
	Operating Profit	79	171	210	130	39
	Ratio	4.2%	8.6%	10.3%	6.1%	1.7%
● America & Europe & Others	Net Sales	1,423	1,452	1,395	-28	-57
	Operating Profit	-31	-5	-47	-15	-42
	Ratio	-2.2%	-0.3%	-3.4%	-1.1%	-3.0%
Total	Net Sales	7,669	7,800	8,000	330	200
	Operating Profit	346	400	500	153	100
	Ratio	4.5%	5.1%	6.3%	1.7%	1.1%

Vs. May forecast

● Japan

Despite the slowdown in the automotive-related business, including suspension springs and seats, the sluggishness of the leisure sector, and the burden of upfront costs for metal substrates, strong performance in HDD-related components and semiconductor process components and profit gains from yen depreciation are expected to contribute to higher sales and profits.

● Asia

Although there are expected to be effects from the decline in automobile production in Thailand and the integrated metal substrates business in Malaysia is projected to experience lower volumes compared to the plan, higher-than-anticipated demand for HDD suspensions is expected to drive increased sales and profits.

● America & Europe & Others

Due to factors such as a decrease in sales volume in North America, increased costs due to a change in the supply base for the suspension spring business, and a deterioration in the product mix in the seat business, as well as increased expenses associated with the launch of new products in Mexico, the forecast is for results to fall below the initial plan.

Automotive Suspension Spring

(100 million yen)

	FY2023	FY2024		Vs. FY2023 Results	Vs. May forecast
	Results	May forecast	Latest Forecast		
Net Sales	1,711	1,800	1,700	-11	-100
Operating Profit	15	42	15	0	-27
Ratio	0.9%	2.3%	0.9%	-0.1%	-1.5%

Vs. FY2023

Although sales price improvements, particularly in the U.S., are anticipated, factors such as reduced volumes and increased costs related to the launch of new products in Mexico are expected to result in operating profit remaining at a similar level to the previous year.

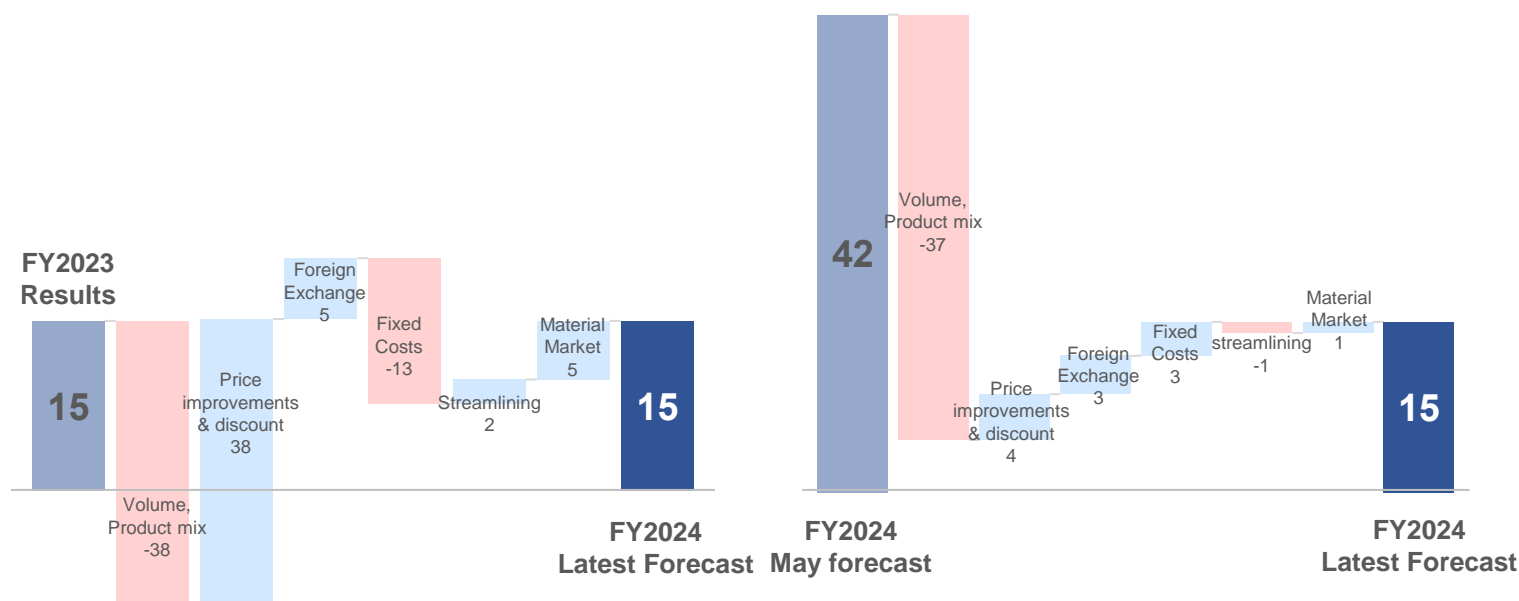
Vs. May forecast

In addition to the impact of a decrease in global sales volume, there were also additional costs in Mexico and increased costs due to a change in the supply base for North America, and the forecast is expected to fall below the initial forecast.

Variable Factor Analysis for Operating Profit

(Vs. Previous year)

(Vs. May forecast)



Automotive Seating

(100 million yen)

	FY2023	FY2024		Vs. FY2023 Results	Vs. May forecast
	Results	May forecast	Latest Forecast		
Net Sales	3,241	3,100	3,050	-191	-50
Operating Profit	191	116	110	-81	-6
Ratio	5.9%	3.7%	3.6%	-2.3%	-0.1%

Vs. FY2023

Sales volumes declined compared to the previous term due to factors such as the slowdown in the automobile markets in Thailand and Japan. Additionally, factors such as a decrease in development cost recovery, adverse product mix changes in the U.S., are projected to result in lower sales and profits.

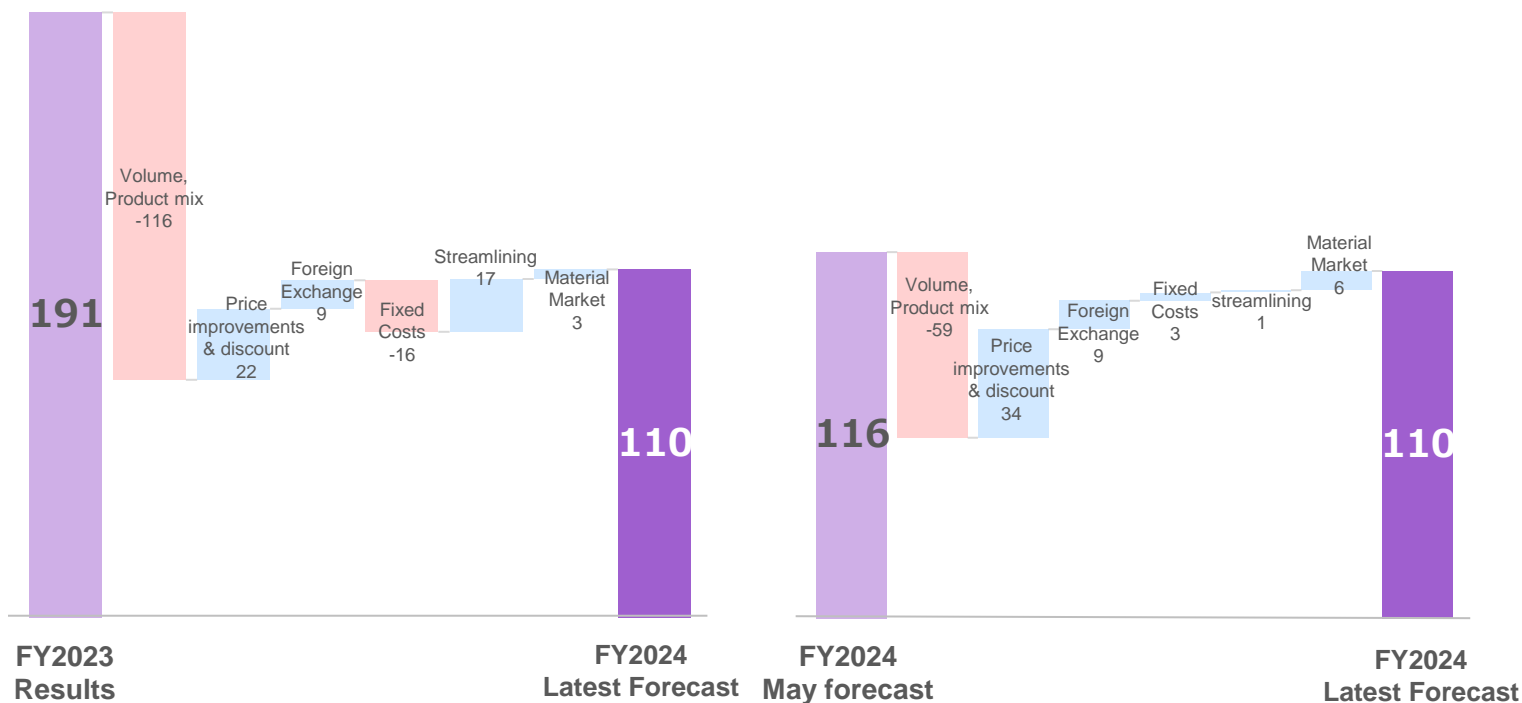
Vs. May forecast

While efforts to improve sales prices and incorporate higher material costs into pricing are included, the slowdown in Thailand's automotive market, product mix changes in North America, are expected to lead to lower sales and profits.

Variable Factor Analysis for Operating Profit

(Vs. Previous year)

(Vs. May forecast)



Precision Springs & Components

(100 million yen)

	FY2023	FY2024		Vs. FY2023 Results	Vs. May forecast
	Results	May forecast	Latest Forecast		
Net Sales	945	990	1,010	64	20
Operating Profit	6	40	45	38	5
Ratio	0.7%	4.0%	4.5%	3.8%	0.4%

Vs. FY2023

HDD mechanical components performed better than initially expected. In addition, sales growth and productivity improvements in the domestic motor core business, along with the positive effects of yen depreciation, have contributed to higher sales and profits.

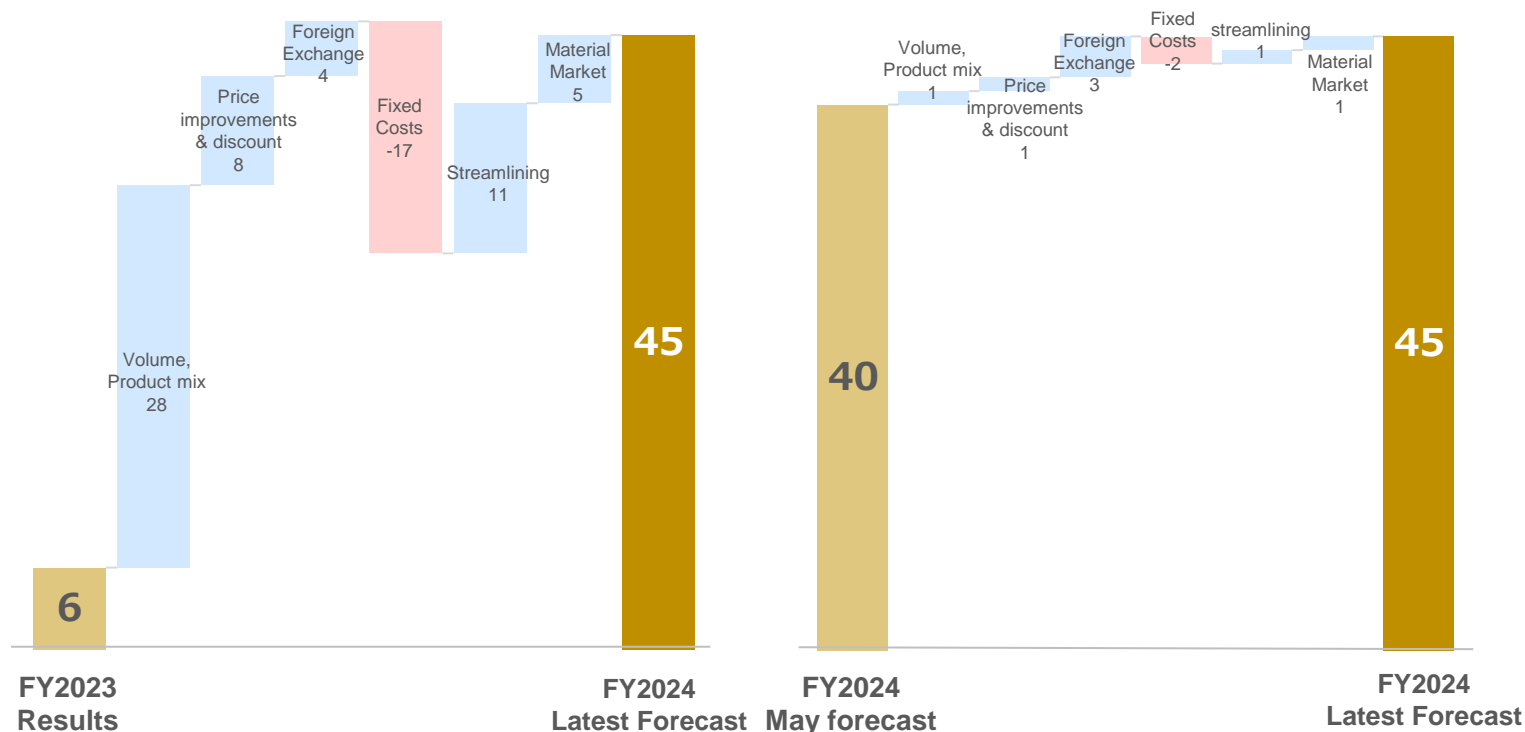
Vs. May forecast

Although sales of existing products in the automotive sector are expected to decline, the company is forecasting increased sales and profits thanks to factors such as improved productivity in the production of motor cores, strong sales of mechanical components for HDDs, and the boost to profits from the depreciation of the yen.

Variable Factor Analysis for Operating Profit

(Vs. Previous year)

(Vs. May forecast)



DDS (Disk Drive Suspension)

(100 million yen)

	FY2023	FY2024		Vs. FY2023 Results	Vs. May forecast
	Results	May forecast	Latest Forecast		
Net Sales	671	740	1,100	428	360
Operating Profit	64	116	245	180	129
Ratio	9.6%	15.7%	22.3%	12.7%	6.6%

Vs. FY2023

Demand for HDDs, which was sluggish in the previous term, has recovered, leading to a significant increase in sales of HDD suspensions.

Additionally, profit boosts from yen depreciation are expected to contribute to higher sales and profits.

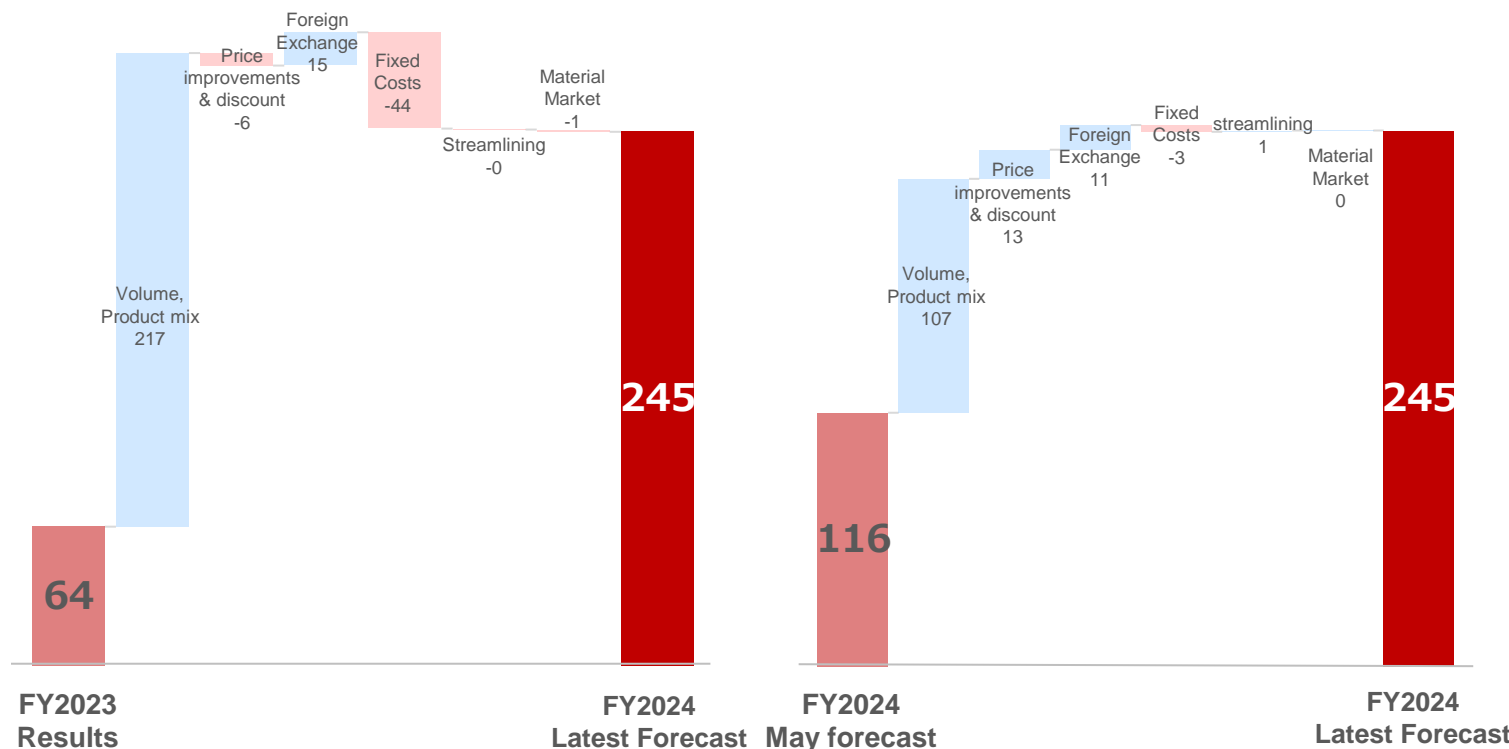
Vs. May forecast

Demand for HDD suspensions is projected to increase beyond initial expectations. Combined with volume growth and profit contributions from yen depreciation, significant increases in both sales and profits are anticipated.

Variable Factor Analysis for Operating Profit

(Vs. Previous year)

(Vs. May forecast)



Industrial Machinery & Others

(100 million yen)

	FY2023	FY2024		Vs. FY2023 Results	Vs. May forecast
	Results	May forecast	Latest Forecast		
Net Sales	1,099	1,170	1,140	40	-30
Operating Profit	68	86	85	16	-1
Ratio	6.2%	7.4%	7.5%	1.3%	0.1%

Vs. FY2023

Despite upfront costs associated with increasing production of integrated metal substrates, a decrease in the volume of existing products, and a decline in volumes in the leisure sector, strong performance in semiconductor process components and the positive effects of yen depreciation are expected to contribute to higher sales and profits.

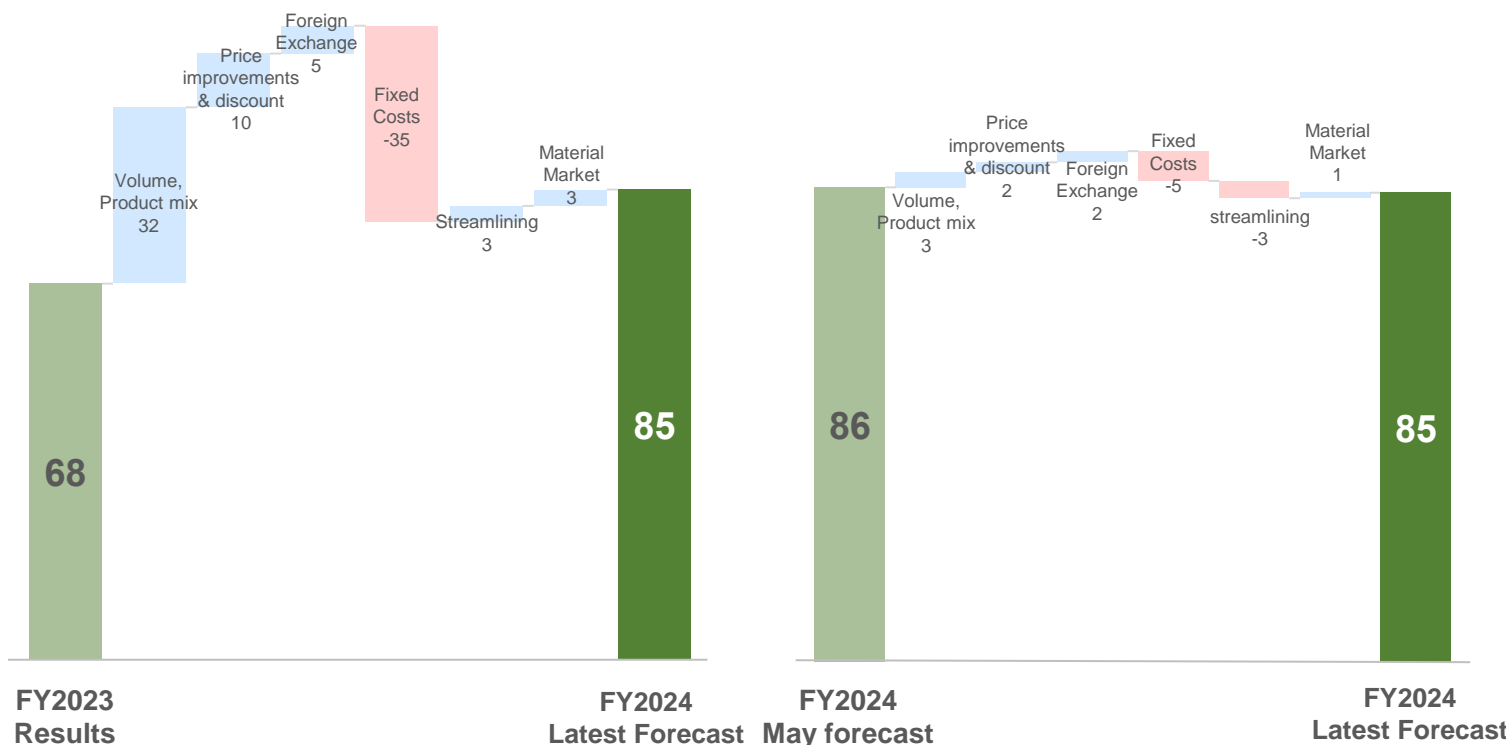
Vs. May forecast

While increases in semiconductor process component volumes and the effects of yen depreciation are expected, the impact of a decrease in profits in integrated metal substrates and a decrease in volume in the leisure sector is projected to result in operating profits slightly falling short of the initial target.

Variable Factor Analysis for Operating Profit

(Vs. Previous year)

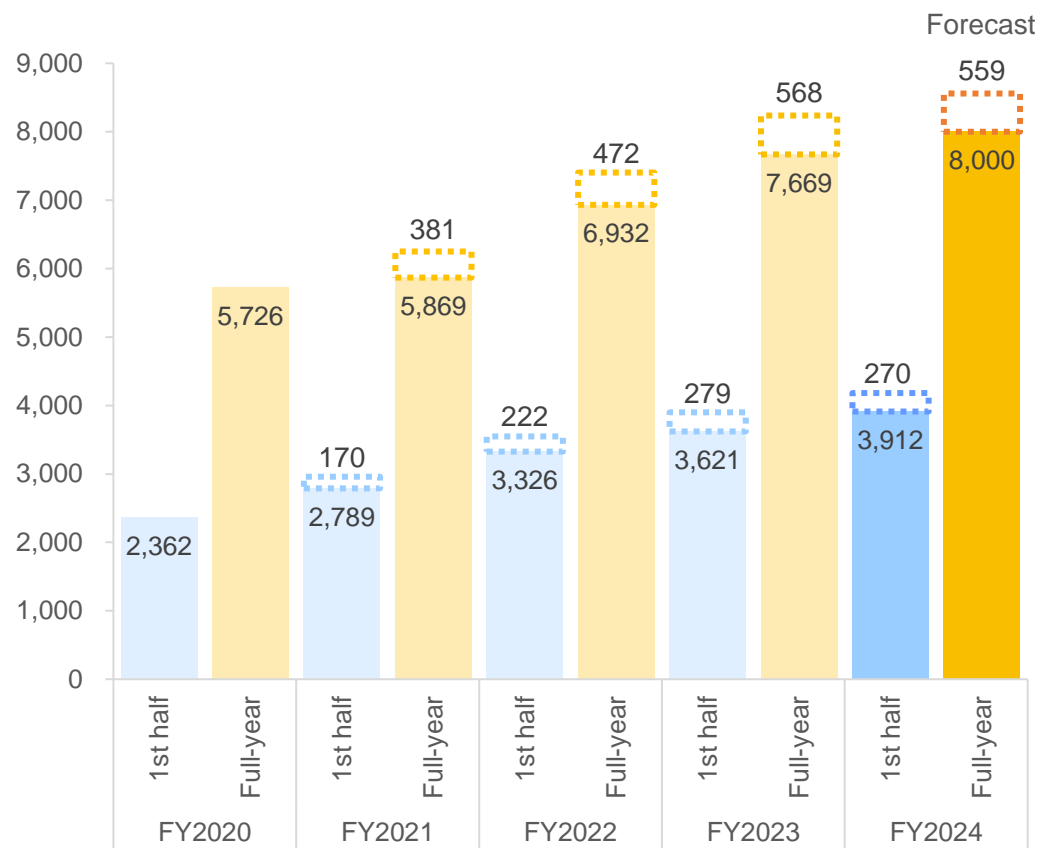
(Vs. May forecast)



Results Trends

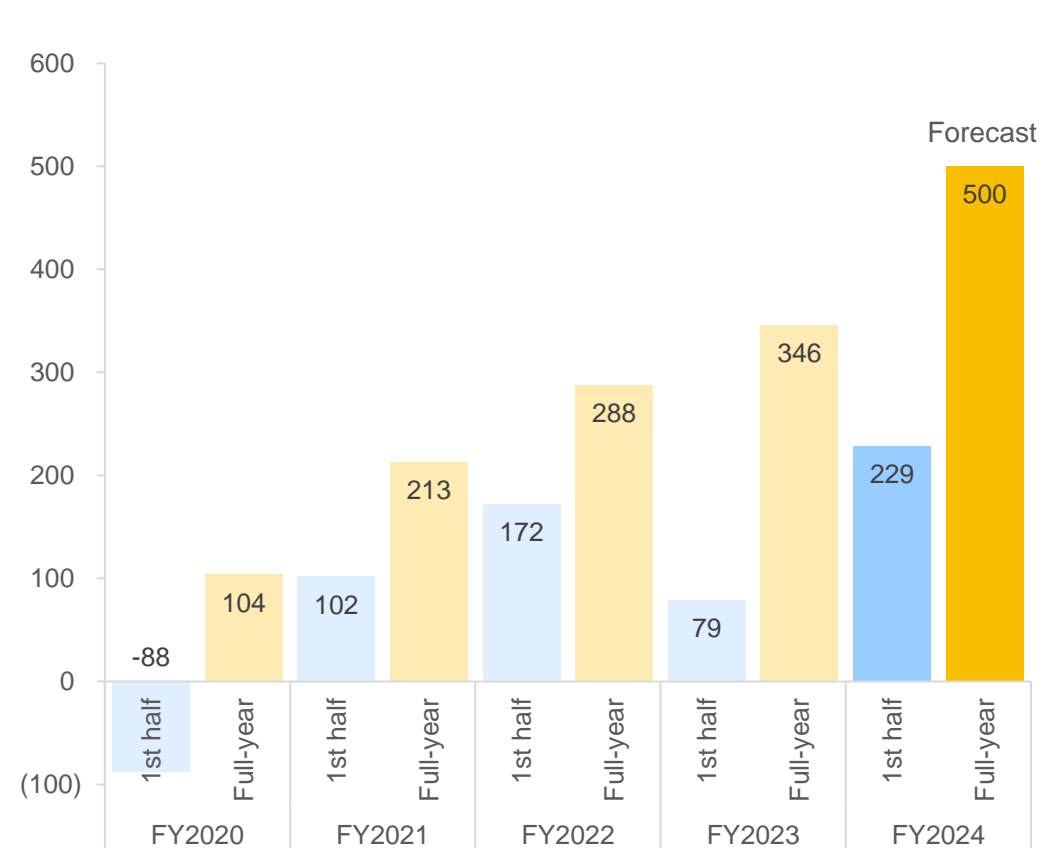
Net Sales

(100 million yen)



Operating Profit

(100 million yen)

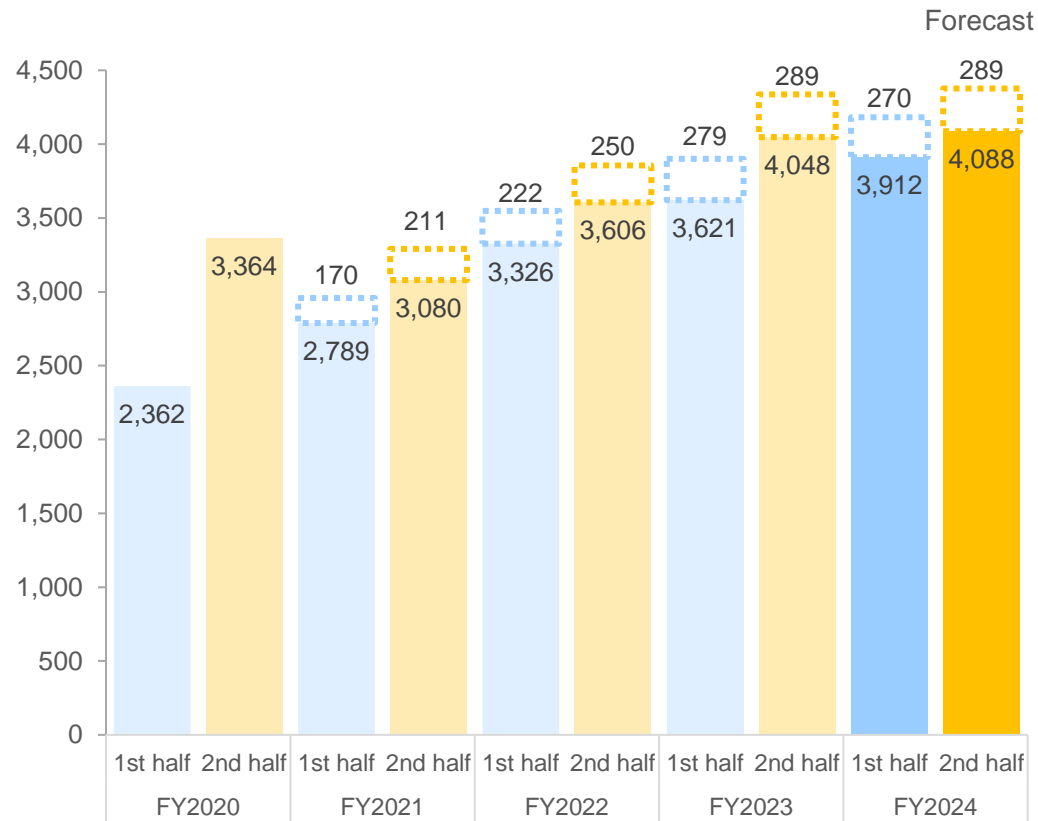


As a result of the adoption of the "Accounting Standard for Revenue Recognition (Revised ASBJ Statement No. 29)," the amount paid by customers, which was previously recorded as net sales, is offset against the cost of sales from the fiscal year ended March 31, 2022.

Results Trends (Semi-Annual Basis)

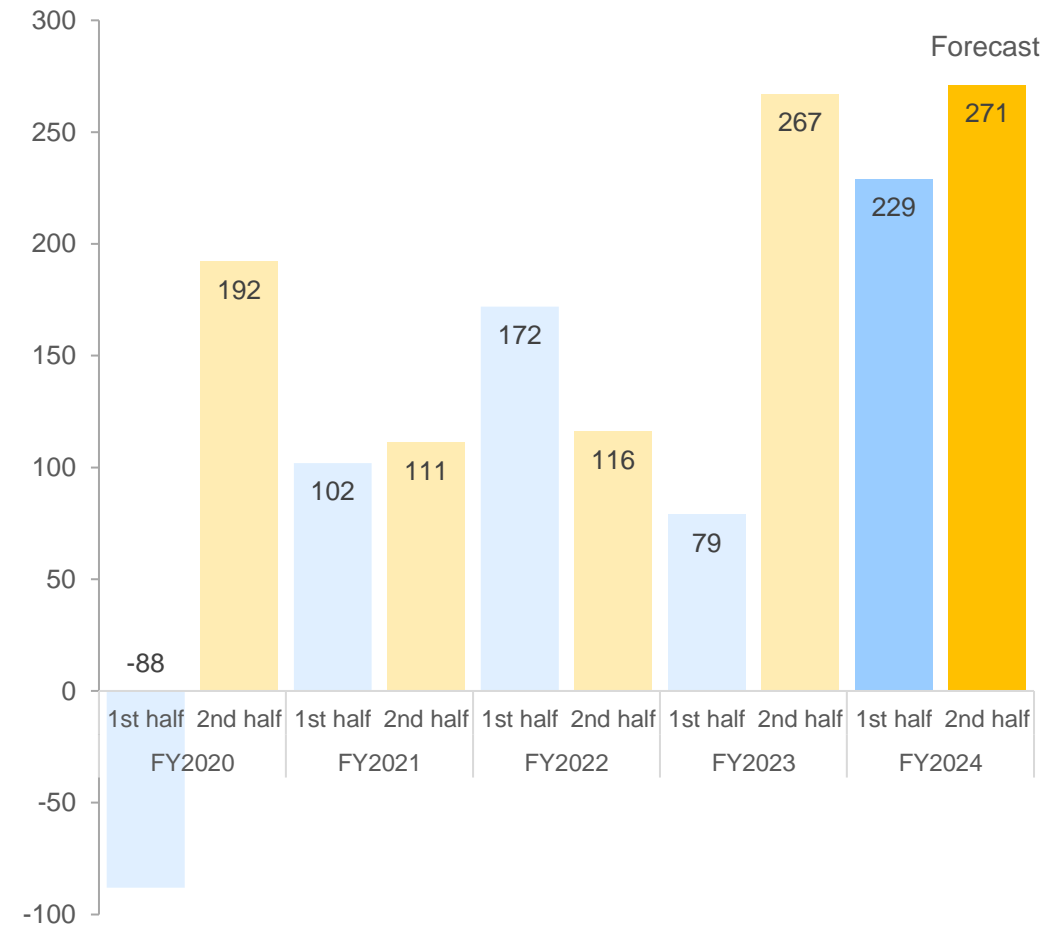
Net Sales

(100 million yen)



Operating Profit

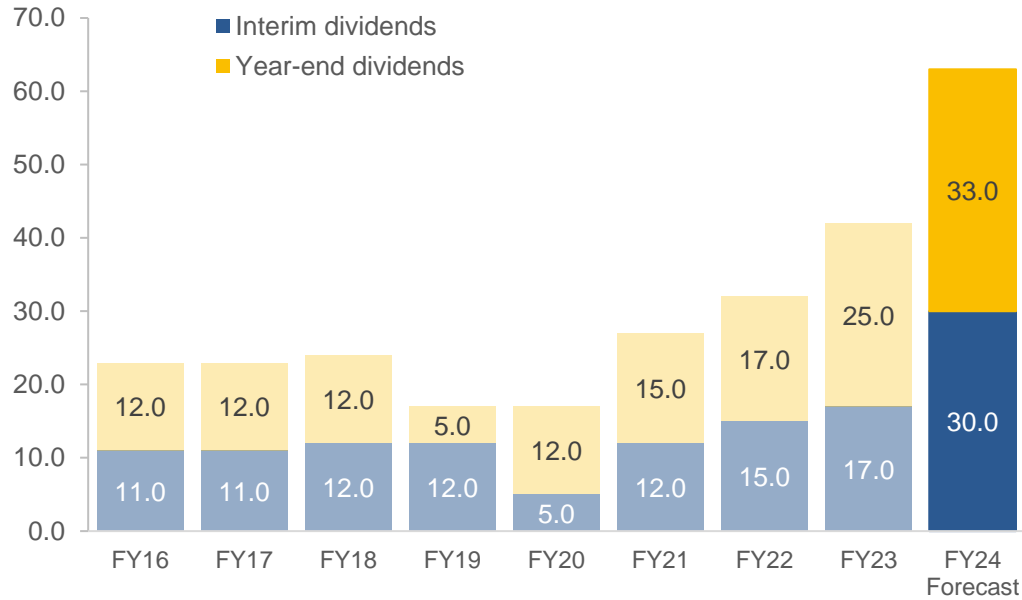
(100 million yen)



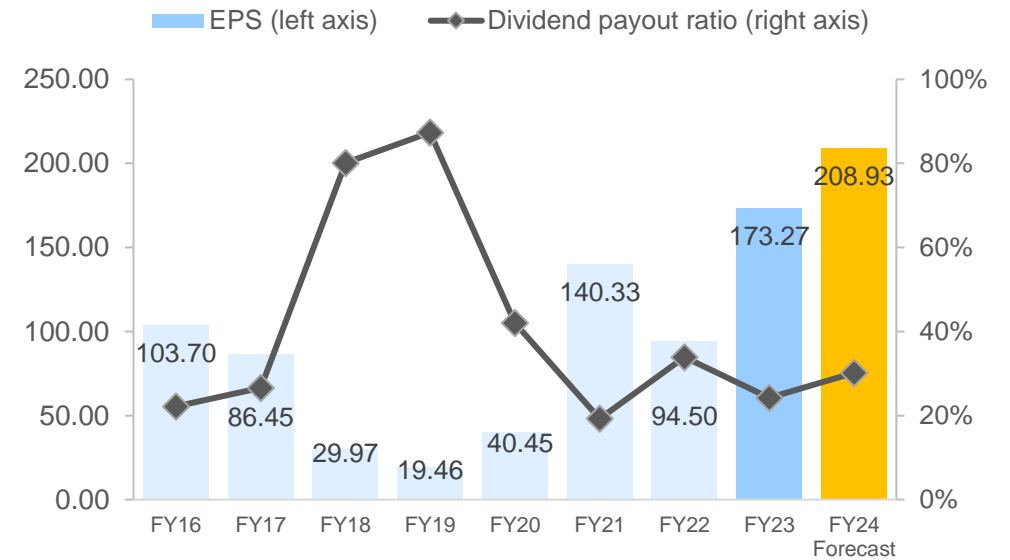
As a result of the adoption of the "Accounting Standard for Revenue Recognition (Revised ASBJ Statement No. 29)," the amount paid by customers, which was previously recorded as net sales, is offset against the cost of sales from the fiscal year ended March 31, 2022.

Dividends

Dividend Per Share (DPS)



Earnings Per Share (EPS)



	End of Q2	Year-end	Total	Dividend payout ratio
Result for the year ended Mar. 2024	17.0 yen	25.0 yen	42.0 yen	24.2%
Forecast for the year ending Mar. 2025	30.0 yen	33.0 yen	63.0 yen	30.2%

Management Indicators

Trends in Key Management Indicators

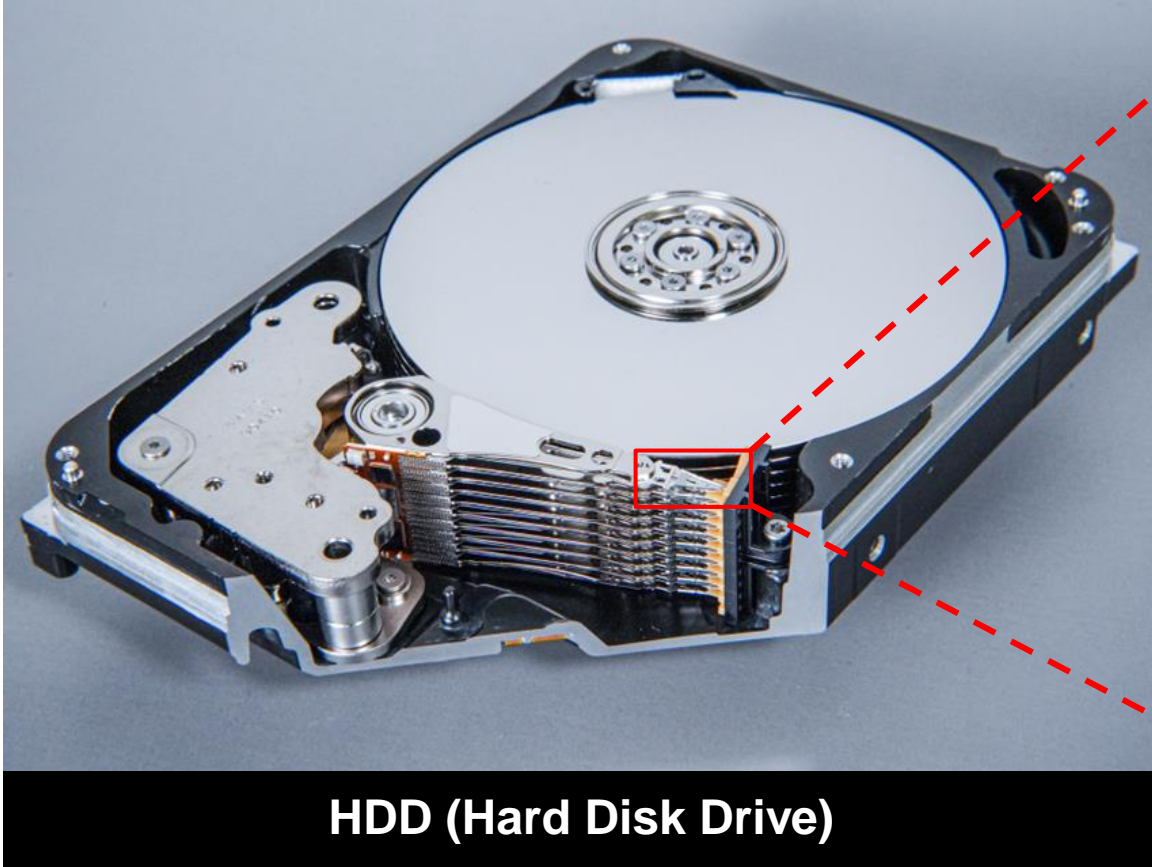
(100 million yen)

		21.3	22.3	23.3	24.3	25.3 (Forecast)	27.3 Mid-term plan
Profitability	Net Sales	5,726	5,869	6,932	7,669	8,000	8,500
	Operating Profit Ratio	104 1.8 %	213 3.6 %	288 4.2 %	346 4.5 %	500 6.3 %	520 6.1 %
	Ordinary Profit Ratio	145 2.5 %	306 5.2 %	373 5.4 %	478 6.2 %	550 6.9 %	570 6.7 %
	Net Income Ratio	93 1.6 %	319 5.5 %	215 3.1 %	391 5.1 %	450 5.6 %	430 5.1 %
Investment Efficiency	ROE	3.4 %	10.5 %	6.4 %	10.4 %	10.8 %	Over 10%
	ROIC	2.4 %	4.4 %	5.5 %	6.1 %	7.9 %	Over 7%
Soundness	Stockholder's Equity to Total Assets Ratio *	50.6 %	54.9 %	57.6 %	58.7 %	60.5 %	Over 50%

About DDS

President & COO
Representative Member of the Board

Kazuhisa Uemura



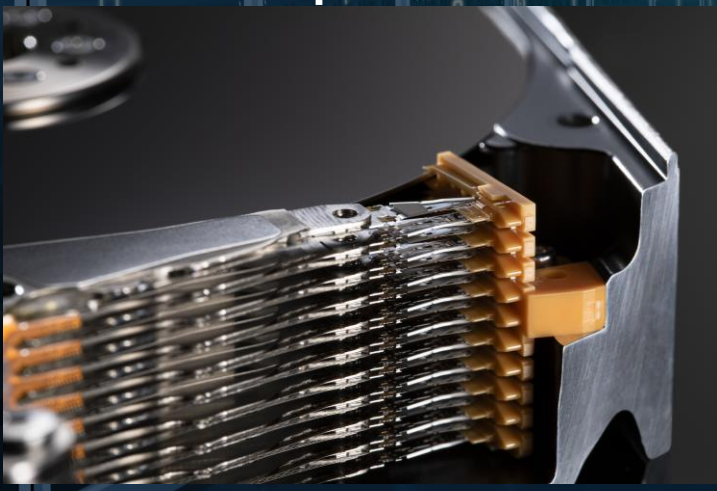
A tiny leaf spring that controls the position of the magnetic head that reads magnetic data on a disk

HDDs at Data Centers

HDDs for storing data are used in large quantities in data centers, which support video services, etc. NHK Spring's products are used for reading and writing HDD data.

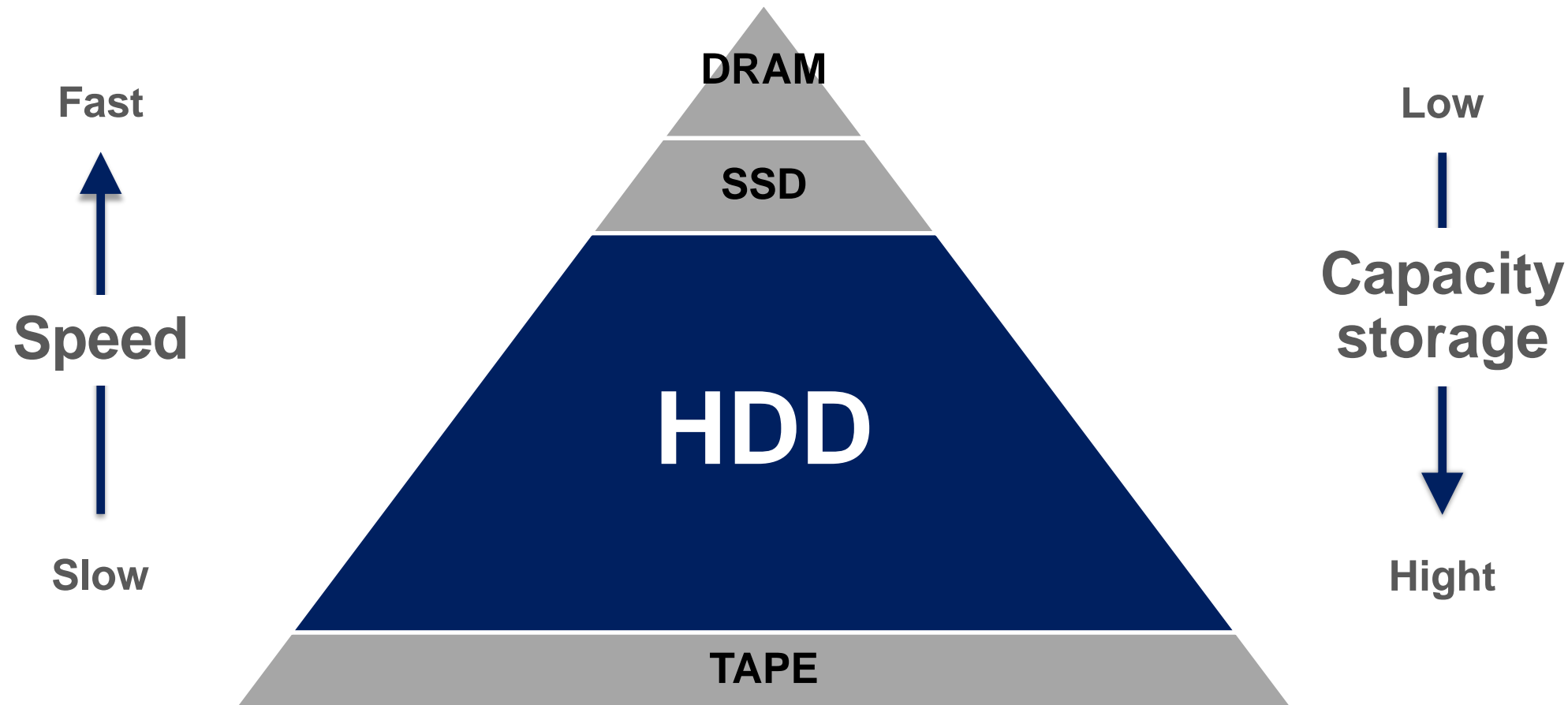


HDD suspensions



HDDs are used in key data storage equipment at data centers

Configuration of Storage at Data Centers



Nearline HDDs, which offer an excellent balance of capacity, speed, cost, and quality, are responsible for key storage areas at hyperscale data centers

Strengths of NHK Spring

- Original design
- High-precision
- High-speed mass production

Production equipment development

Product development

- Development of next-generation products
 - ✓ Design proposals
 - ✓ Elementary technology
 - ✓ Supporting parts supplier development

- One Quality
- One Standard

Quality

Evaluation technology

- Original evaluation technology
 - ✓ Suspension level
 - ✓ HDD level
- Supporting customer product development
 - ✓ Failure analysis
 - ✓ Developed component evaluation

- Multiple production sites (Japan, China, Thailand)
- BCP adaptation

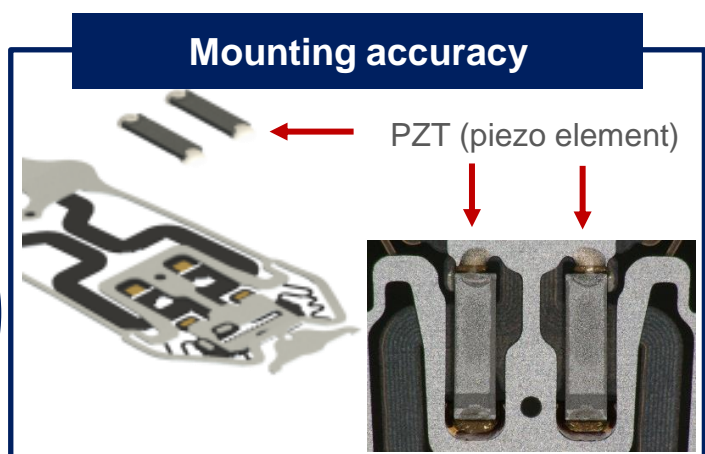
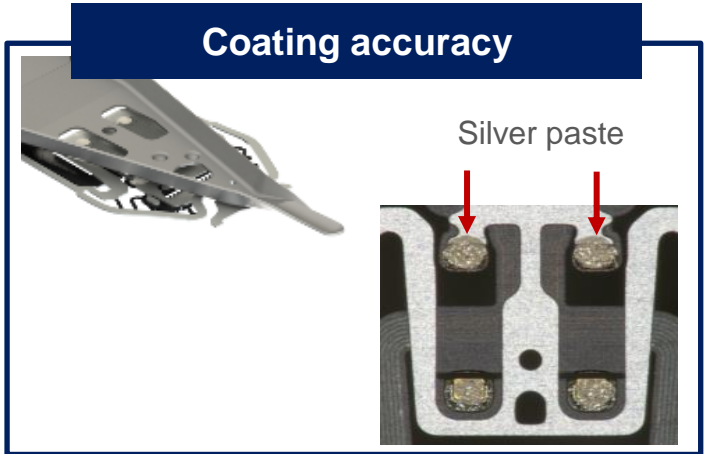
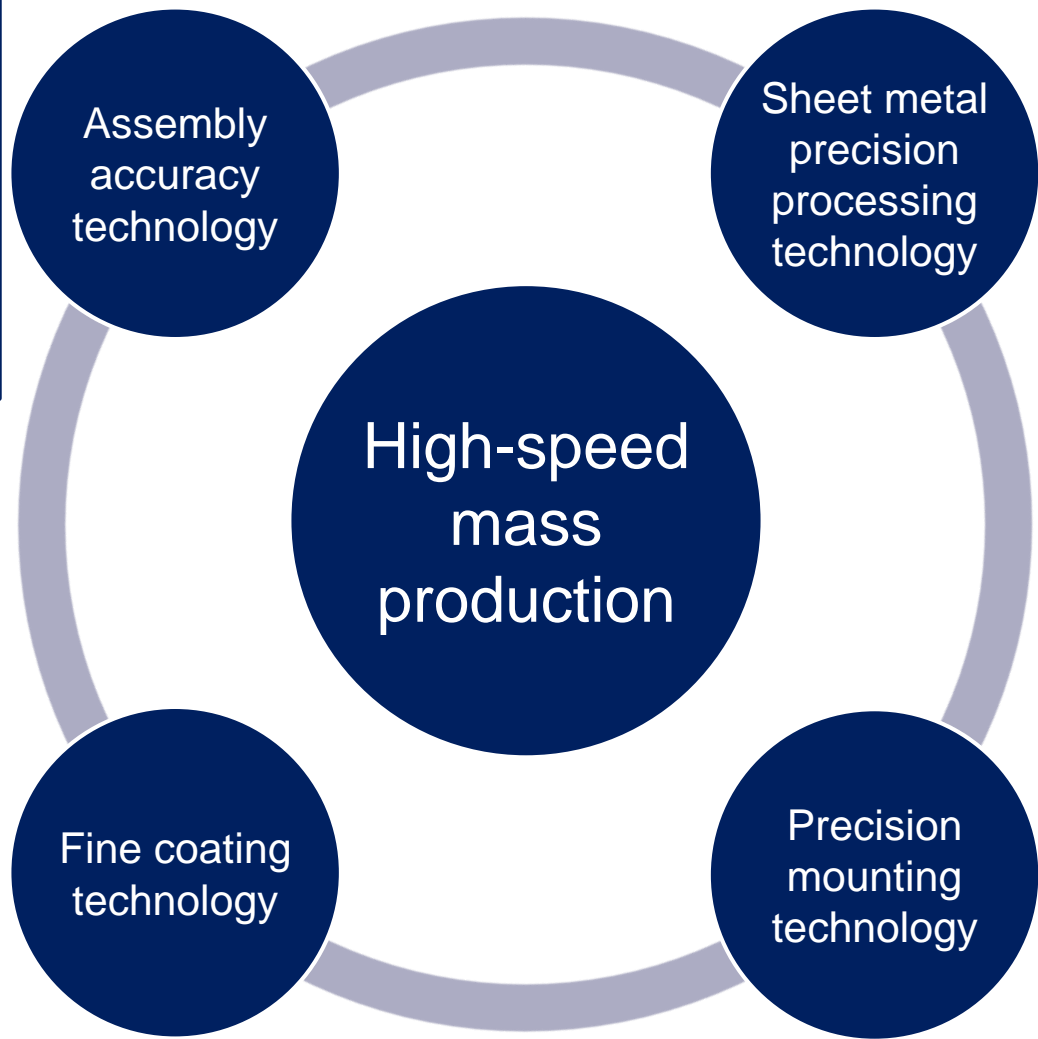
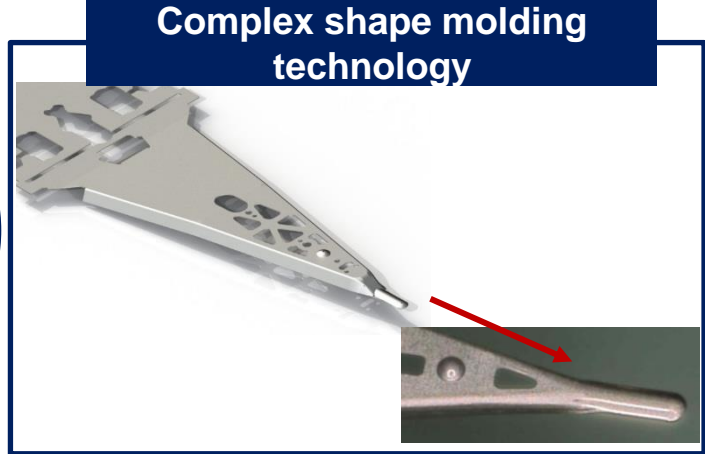
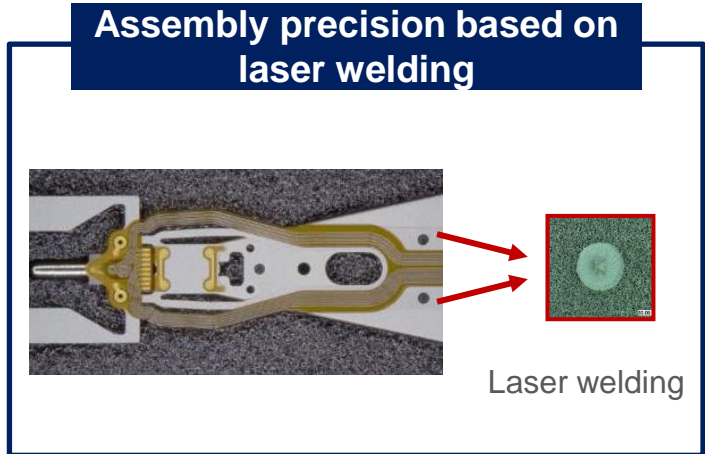
Global production

Analysis technology

- Vibration characteristics
- Shock-resistance characteristics
- Electrical signal transmission characteristics
- Presswork analysis
- Thermal deformation analysis



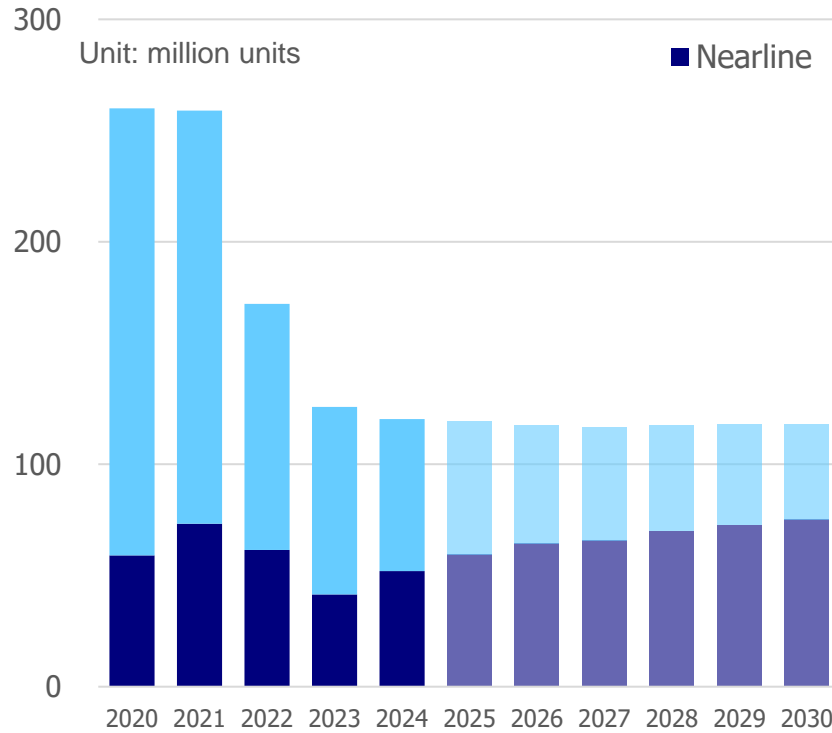
Core Technology for Suspension Manufacturing



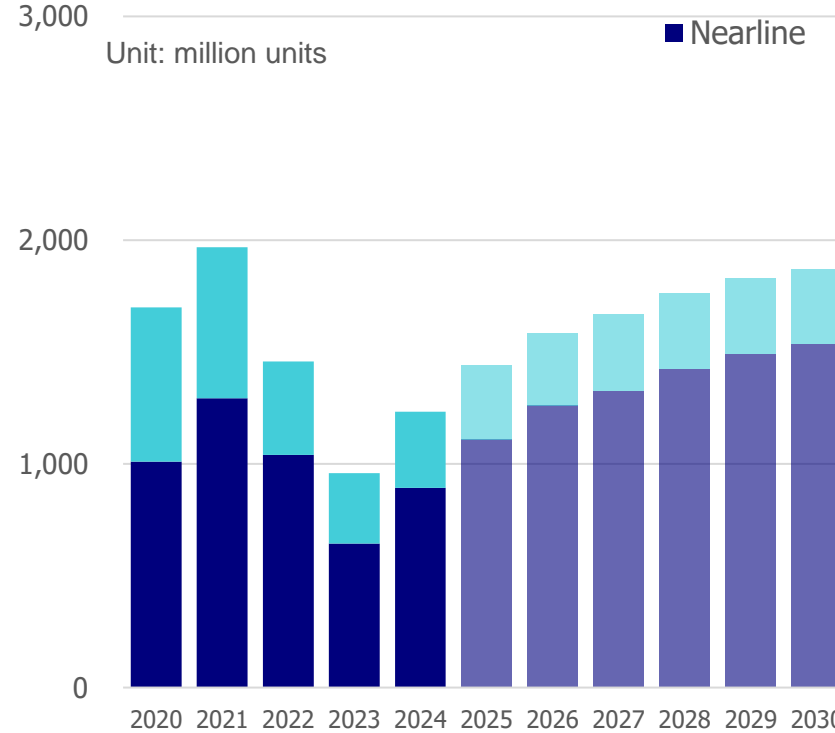
Market Environment



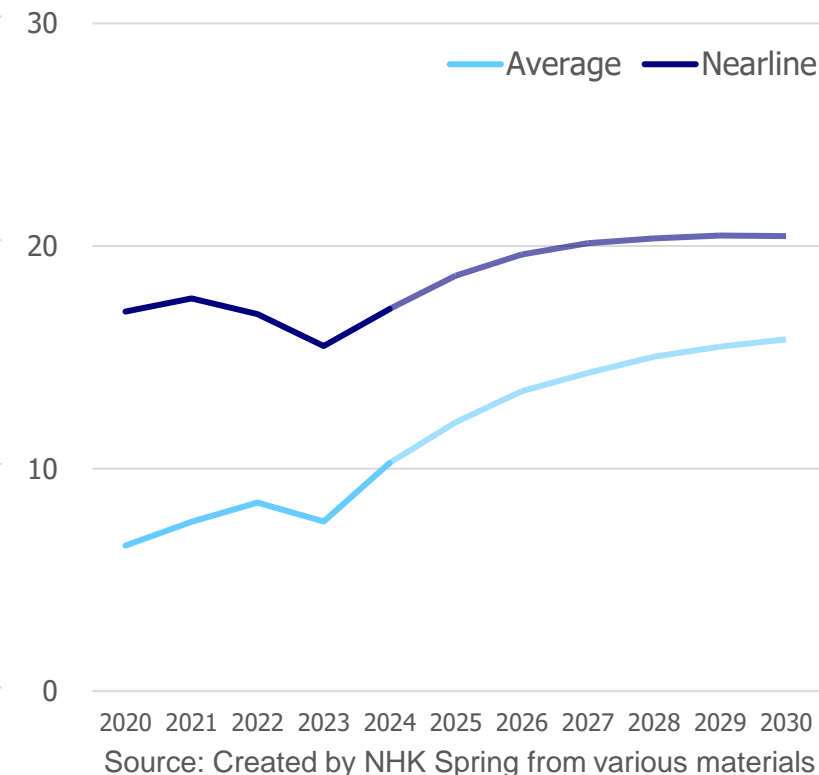
Number of HDDs shipped



Total amount of suspensions



Number of suspensions used



The overall number of HDDs produced is forecast to remain stable in the future, but after bottoming out in CY23, Nearline data center demand will increase from CY24 onward
High capacity = increase in number of disks -> Suspension demand will increase further

Outlook for HDD Suspension Business

Market Environment

HDD suspension demand is forecast to keep increasing in the future as data centers expand.

The HDD and HDD suspension markets have already become an oligopoly.

NHK Spring's Initiatives

Offering products and services that enable the development of high-capacity HDDs (customer focus)

Maximizing production output and enhancing cost competitiveness by pursuing automation

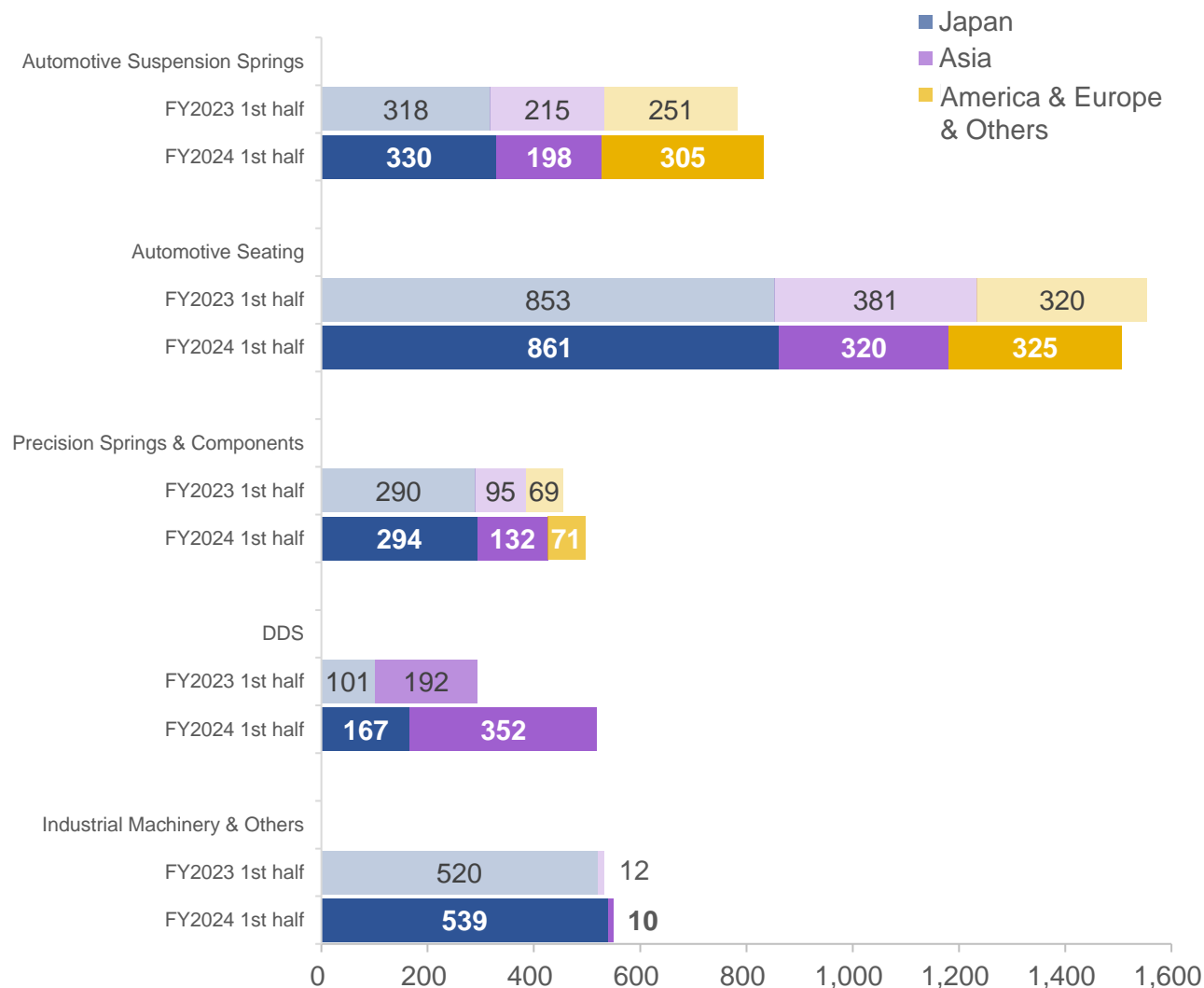
▼
Maintaining and expanding market share

▼
Enhancing sales and profits

Supplying key parts that support information infrastructure in advanced digital societies

Supplementary Materials

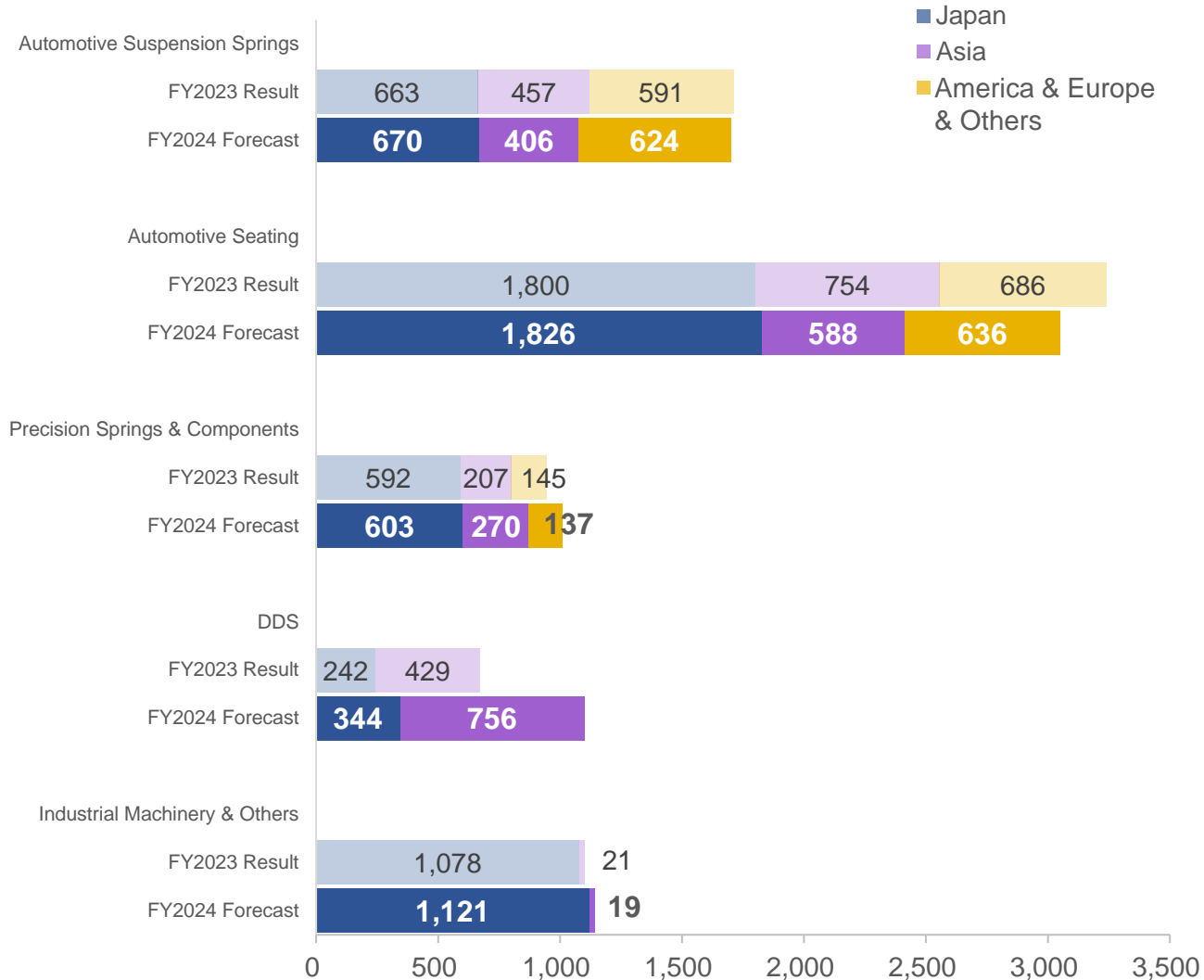
Details of Net Sales (1st Half)



(100 million yen)

		Japan	Asia	America & Europe & Others	Total
Automotive Suspension Springs	FY2023 1st half	318	215	251	786
	FY2024 1st half	330	198	305	835
Automotive Seating	FY2023 1st half	853	381	320	1,555
	FY2024 1st half	861	320	325	1,508
Precision Springs & Components	FY2023 1st half	290	95	69	454
	FY2024 1st half	294	132	71	498
Disk Drive Suspension	FY2023 1st half	101	192	-	293
	FY2024 1st half	167	352	-	519
Industrial Machinery & Others	FY2023 1st half	520	12	-	532
	FY2024 1st half	539	10	-	550
Total	FY2023 1st half	2,084	896	640	3,621
	FY2024 1st half	2,194	1,014	702	3,912

Details of Net Sales (full-year)



(100 million yen)

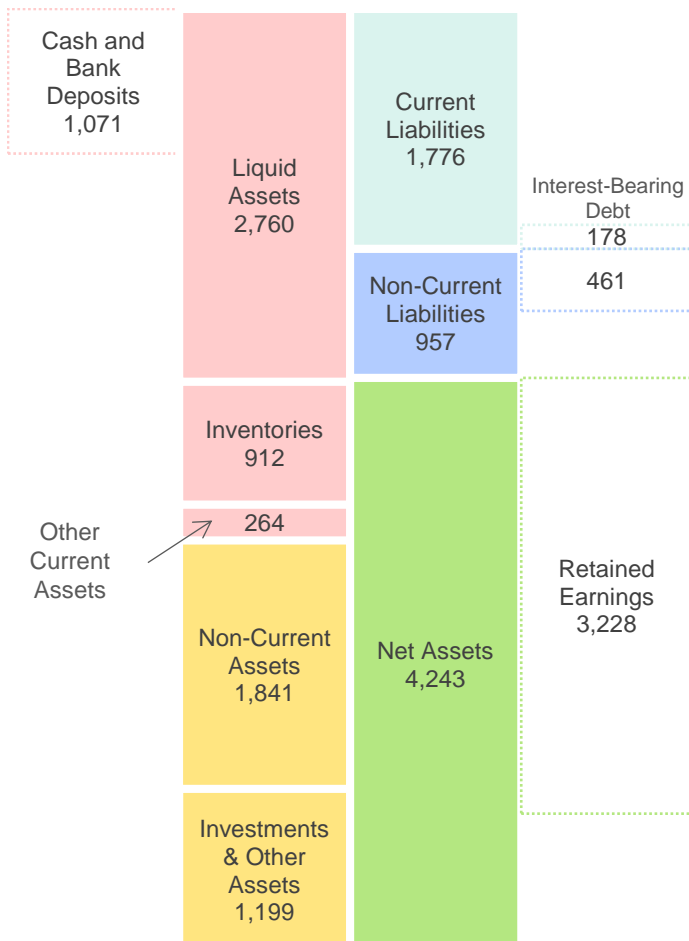
		Japan	Asia	America & Europe & Others	Total
Automotive Suspension Springs	FY2023 Result	663	457	591	1,711
	FY2024 Forecast	670	406	624	1,700
Automotive Seating	FY2023 Result	1,800	754	686	3,241
	FY2024 Forecast	1,826	588	636	3,050
Precision Springs & Components	FY2023 Result	592	207	145	945
	FY2024 Forecast	603	270	137	1,010
Disk Drive Suspension	FY2023 Result	242	429	-	671
	FY2024 Forecast	344	756	-	1,100
Industrial Machinery & Others	FY2023 Result	1,078	21	-	1,099
	FY2024 Forecast	1,121	19	-	1,140
Total	FY2023 Result	4,377	1,869	1,423	7,669
	FY2024 Forecast	4,564	2,039	1,397	8,000

(100 million yen)

	FY2020 Results	FY2021 Results	FY2022 Results	FY2023 Results	FY2024 1st half results	Increase/ Decrease
Total Assets	5,607	5,880	6,060	6,902	6,976	74
Stockholder's Equity	2,839	3,226	3,492	4,050	4,092	42
Stockholder's Equity to Total Assets Ratio	50.6%	54.9%	57.6%	58.7%	58.7%	-0.0%
Cash and Bank Deposits	793	921	729	1,032	1,071	39
Interest-Bearing Debt	697	505	500	474	640	166
Net Cash	95	416	229	558	431	-127

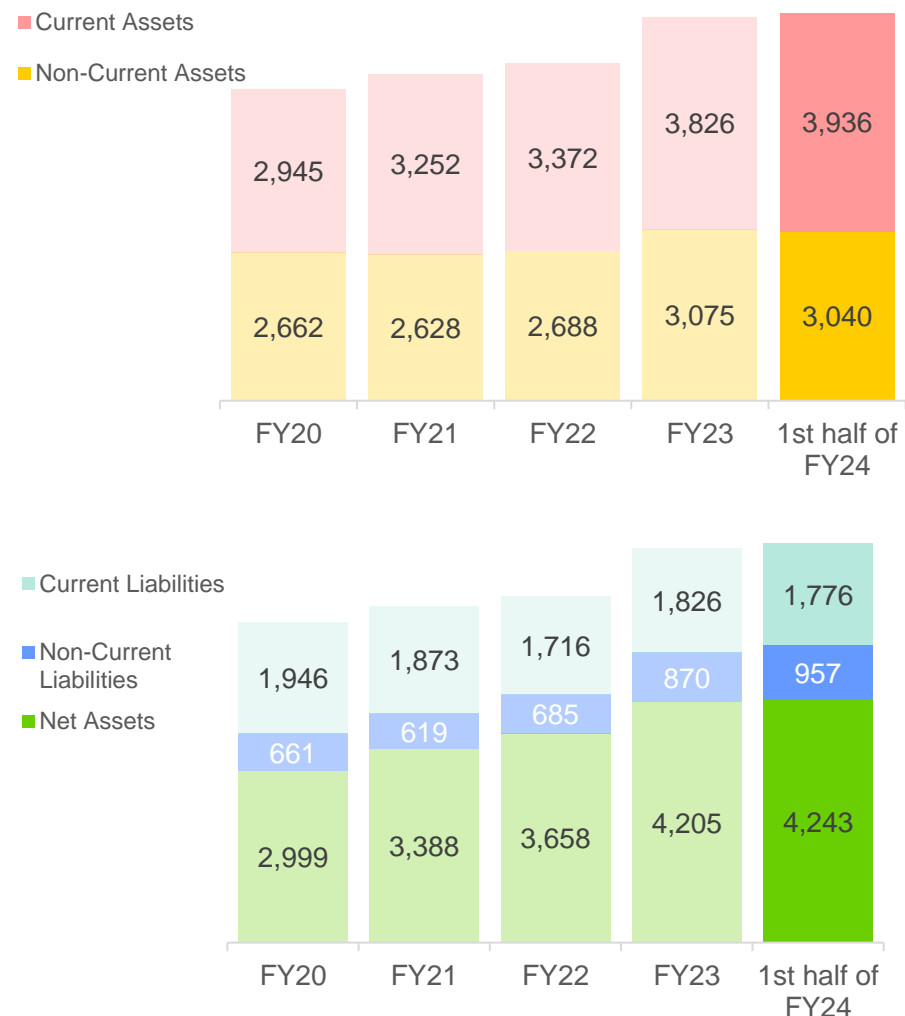
FY2024 1st half results

(100 million yen)



Balance Sheet Trends

(100 million yen)



▼ Assets

Although investment securities decreased due to market valuation adjustments, the yen-converted value of assets held by overseas subsidiaries increased due to exchange rate fluctuations. Additionally, property, plant, and equipment assets increased as a result of higher capital expenditures.

▼ Liabilities

While income taxes payable decreased due to tax payments, overall liabilities increased due to a rise in long-term borrowings.

▼ Net Assets

Despite a reduction from the acquisition of treasury shares, net assets increased due to the accumulation of retained earnings from interim profit attributable to the owners of the parent company.

Capital Investment/Depreciation & Amortization by Business Segment

(100 million yen)

		FY2022 Results	FY2023 Results	FY2024		
				May forecast	Latest Forecast	Variance
Capital Investments	Automotive Suspension Springs	45	58	88	101	13
	Automotive Seating	46	49	61	69	8
	Precision springs & components	121	107	84	125	41
	DDS		45	74	64	-10
	Industrial Machinery & Others	58	82	163	95	-68
	Company-wide sharing	9	27	42	34	-8
	Total	280	370	512	488	-24
	Vs. Previous year	20.7%	31.8%	38.4%	31.9%	
Depreciation & Amortization	Automotive Suspension Springs	66	63	66	58	-8
	Automotive Seating	55	56	48	49	1
	Precision Springs & Components	113	47	53	53	0
	DDS		63	68	66	-2
	Industrial Machinery & Others	35	35	45	42	-3
	Company-wide sharing	17	19	27	25	-2
	Total	288	286	307	293	-14
	Vs. Previous year	2.0%	-0.7%	7.1%	2.2%	

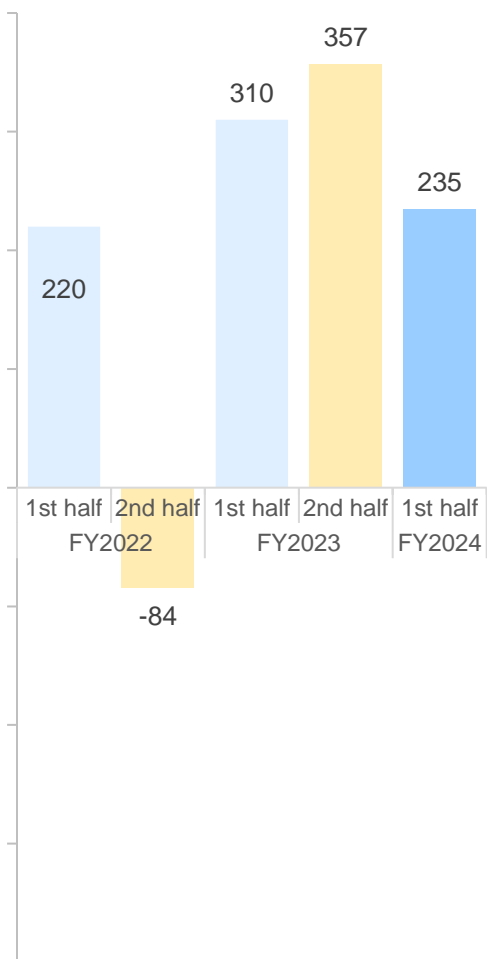
Capital Investment/Depreciation & Amortization by Region Segment

(100 million yen)

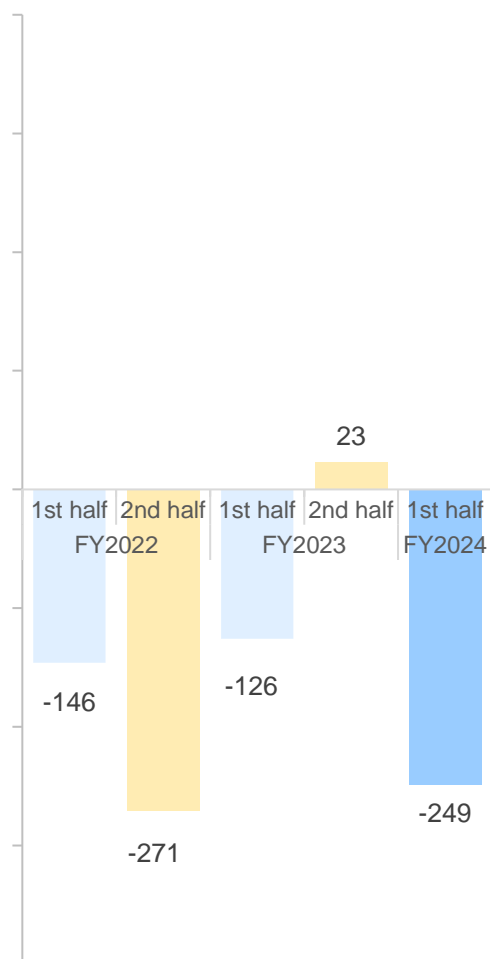
		FY2022 Results	FY2023 Results	FY2024		
				May forecast	Latest Forecast	Variance
Capital Investments	Japan	178	259	280	298	18
	Asia	61	75	172	92	-80
	America & Europe & Others	40	34	60	98	38
	Overseas total	102	110	232	190	-42
	Total	280	370	512	488	-24
Depreciation & Amortization	Japan	149	146	178	168	-10
	Asia	86	92	88	83	-5
	America & Europe & Others	52	47	41	42	1
	Overseas total	139	139	129	125	-4
	Total	288	286	307	293	-14

Cash Flow Status (Semi-Annual Basis)

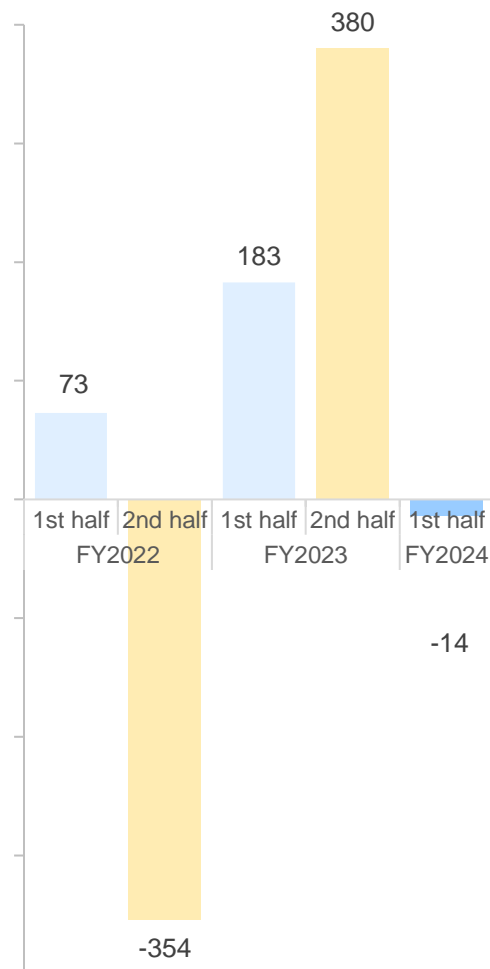
Operating CF



Investment CF

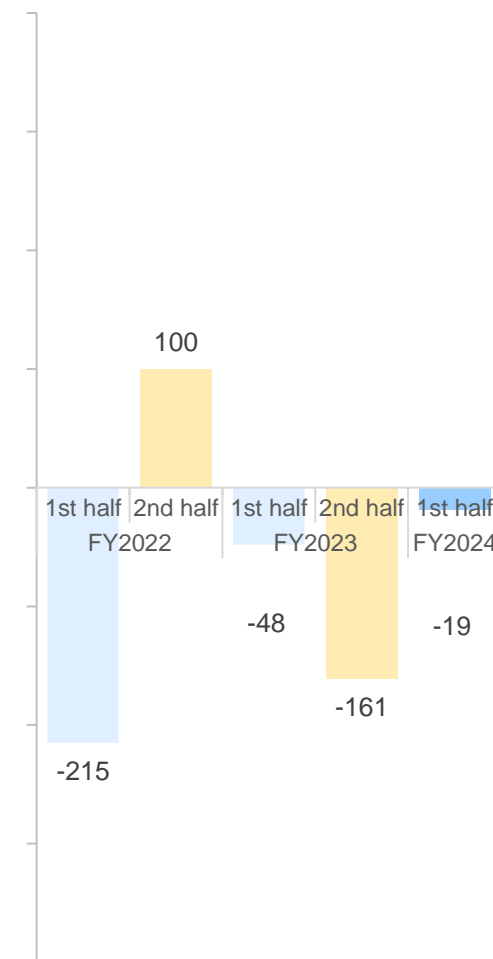


Free CF



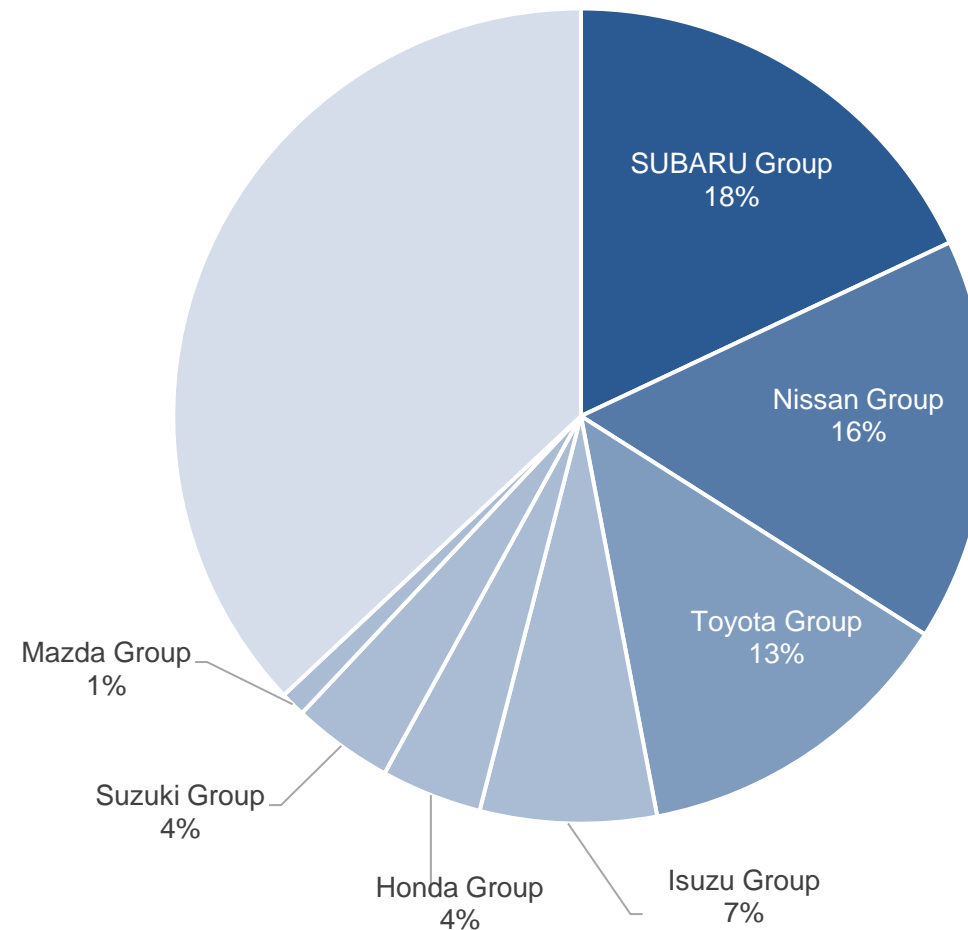
Financial CF

(100 million yen)



Sales Breakdown to Each of the Major Car Makers

Major car makers	FY2022	FY2023
SUBARU Group	16%	18%
Nissan Group	15%	16%
Toyota Group	14%	13%
Isuzu Group	7%	7%
Honda Group	4%	4%
Suzuki Group	4%	4%
Mazda Group	1%	1%
Top 3 Companies	45%	47%



(Note) The percentages show share versus total net sales.

Quarterly Sales Trends

(Motor Core, Semiconductor Process Components, Integrated Metal Substrates, Leisure Sector)

(100 million yen)

		FY2023						FY2024					
		1Q	2Q	1st half	3Q	4Q	2nd half	Full-year	1Q	2Q	1st half	2nd half	Full-year
Precision Springs & Components	Motor Core	28	28	57	28	33	62	119	29	31	61	69	131
Industrial Machinery & Others	Semiconductor process components	31	40	72	39	41	81	154	37	47	84	117	202
	Integrated metal substrates	21	21	42	22	19	41	84	19	19	39	34	73
	Leisure Sector (Golf Shafts, Marine Products, etc.)	40	40	81	34	33	67	148	34	32	66	72	139

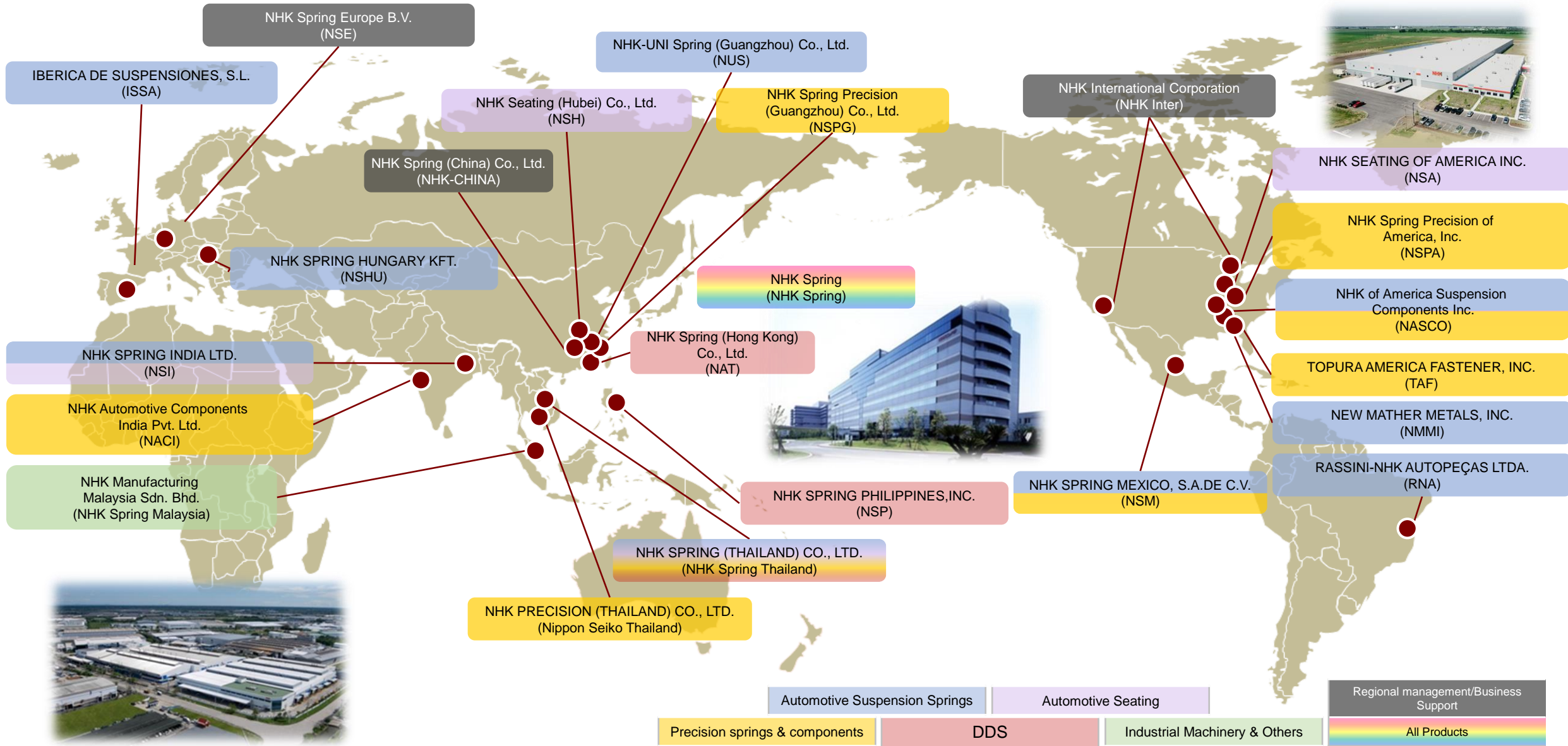
ROIC by business segment

(100 million yen)

		Automotive Suspension Spring	Automotive Seating	Precision Springs & Components	Disk Drive Suspension	Industrial Machinery & Others	Total
FY2024	Operating Profit	15	191	6	64	68	346
	ROIC *	1.1 %	20.2 %	0.6 %	10.9 %	6.2 %	6.1 %
FY2025 (Forecast)	Operating Profit	15	110	45	245	85	500
	ROIC *	0.9 %	11.5 %	3.3 %	37.0 %	6.5 %	7.9 %

*ROIC by business segment is calculated simply by aggregating non-current assets and inventories from the perspective of management efficiency

Major Overseas Operations



Reportable segment classification

The classification of reporting segments has been changed from the existing "Automotive Suspension Springs Business", "Automotive Seating Business", "Precision Springs and Components Business", and "Industrial Machinery and Equipment, and Other Operations" to "Automotive Suspension Springs Business", "Automotive Seating Business", "Precision Springs and Components Business", "DDS (Disk Drive Suspension) Business", and "Industrial Machinery and Equipment, and Other Operations", effective from the beginning of the year ending March 31, 2025.

Prior to the previous consolidated fiscal year

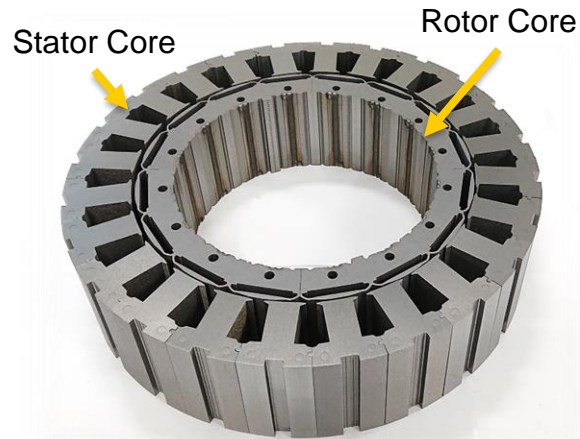
Reportable segments	Major products
Automotive suspension springs	Coil springs, leaf springs, stabilizer bars, accumulators, torsion bars, stabilizer links, stabilinker and others
Automotive seating	Seats, mechanical seating components, trim parts and others
Precision springs and components	HDD suspensions and mechanical components, wire springs, flat springs, motor cores, LCD/semiconductor testing probe units, fastener (screw), precision machine components and others
Industrial machinery and equipment, and other operations	Semiconductor processing products, ceramic products, spring mechanisms, pipe support systems, polyurethane products, metal substrates, automatic parking systems, security products, lighting equipment, golf club shafts and others



From the current consolidated fiscal year onwards

Reportable segments	Major products
Automotive suspension springs	Coil springs, leaf springs, stabilizer bars, accumulators, torsion bars, stabilizer links, stabilinker and others
Automotive seating	Seats, mechanical seating components, trim parts and others
Precision springs and components	HDD mechanical components, wire springs, flat springs, motor cores, fastener (screw), precision machine components and others
Disk Drive Suspension	HDD suspensions, LCD/semiconductor testing probe units and others
Industrial machinery and equipment, and other operations	Semiconductor processing products, ceramic products, spring mechanisms, pipe support systems, polyurethane products, metal substrates, automatic parking systems, security products, lighting equipment, golf club shafts and others

■ Motor Core



NHK produce Motor Cores, which are laminated iron cores used in the motors—drive motors and/or power generators—for EV and HV vehicles.

They are made by some hundred layers of 0.25 to 0.35 mm thickness electromagnetic steel sheets which are stamped out one by one, and are fastened together by caulking or welding.

The motor core consists of the Rotor Core, which has a magnet inserted and serves as the rotating part of the motor, and the Stator Core, which is the fixed winding part.

Electric power from battery is supplied to the motors through inverters, and Rotor Cores—which contains magnets—are pulled and repelled by rotating magnetic field generated in the Stator Cores—which are wound with coils—, causing Rotor Cores high speed rotation.

Thin plate laminated iron cores can easily pass through magnetic field lines, and have ability to generate stronger magnetic force.

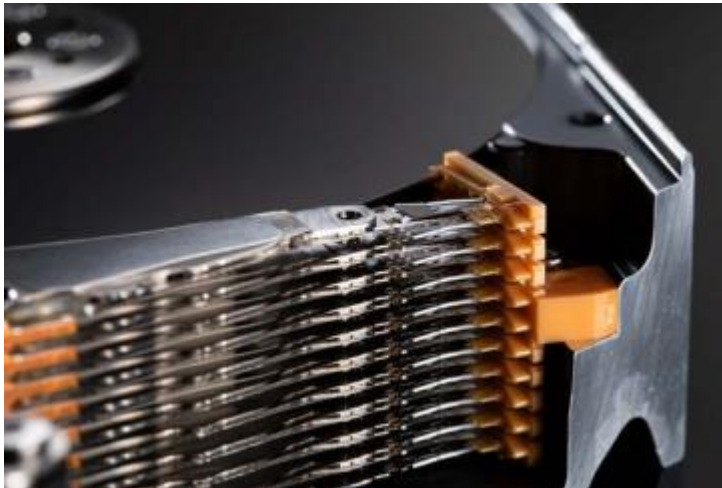
NHK Motor Cores are diameter of around 200 mm and height of around 150 mm, which is a relatively large size for the precision stamped products that NHK produce; but NHK has built up an ability over the many years, to produce dimensional accuracy as micron level, through our production of automotive parts and HDD (hard disk drive) parts, to be able to produce this kind of large, ultra-high precision stamped products.

The press dies essential for motor core production are designed, manufactured, and maintained entirely in-house, enabling the production of the same quality motor cores in our global operations in Mexico and China as well as our Atsugi Plant in Japan.

■ HDD suspensions



■ HDD suspension placement



Suspensions for HDD are unique spring products, holding read-write head in Hard Disk Drive devices.

In recent years, HDDs are increasingly used for data centers, such as those supporting social media and video-sharing sites, rather than for personal computers. Data centers store massive gigabyte-sized files, with hundreds of thousands of large-capacity HDDs aligned in racks. Each of these HDDs contains many HDD suspensions. As shown in the image to the left, 20 suspensions are used in a single HDD, and data centers utilize an enormous number of suspensions in total.

Large-capacity HDD suspensions feature ultra-small actuators that finely control the tiny components used for reading and writing data. These actuators enable higher-density data reading and writing on the disk.

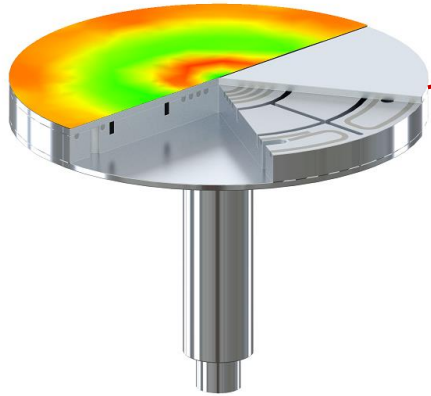
The ultra-small actuators are classified as follows: those integrated into the central section are called DSA, and those embedded in the tip are referred to as CLA. Using a human analogy, DSA corresponds to wrist movement, while CLA represents fingertip motion. To achieve even higher performance, we developed our flagship product, the TSA, which incorporates both DSA and CLA. TSA enables precise yet dynamic movements, significantly contributing to the increasing capacity of HDDs used in data centers.

Our company was the first in the world to mass-produce CLA and TSA, securing a leading global market share.

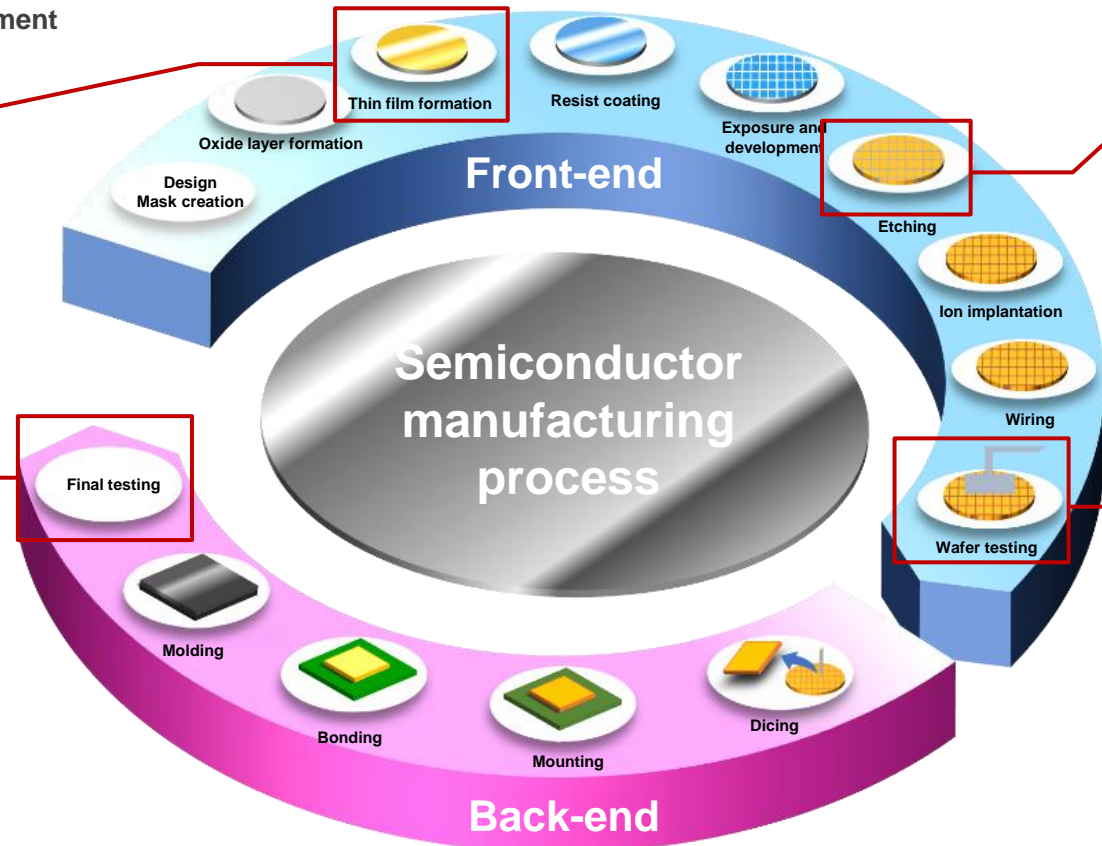
- * DSA stands for “Dual Stage Actuators”
- * CLA stands for “Co-Located Actuators”
- * TSA stands for “Triple Stage Actuator”

Semiconductor-Related Products

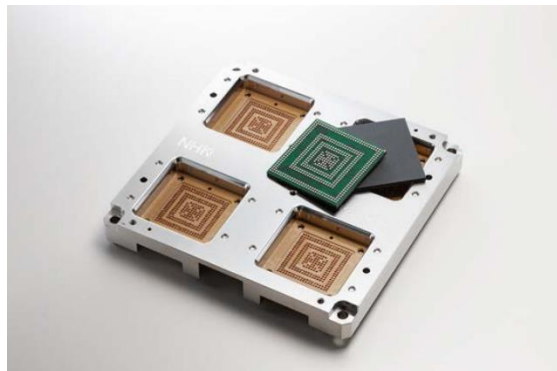
■ Stage heater with multi-zone temperature distribution control function for film deposition equipment



■ Ceramics spray-coated cooling plate for etching equipment



■ Test sockets



■ Probe cards



■ Contact probes (Microcontactors®)



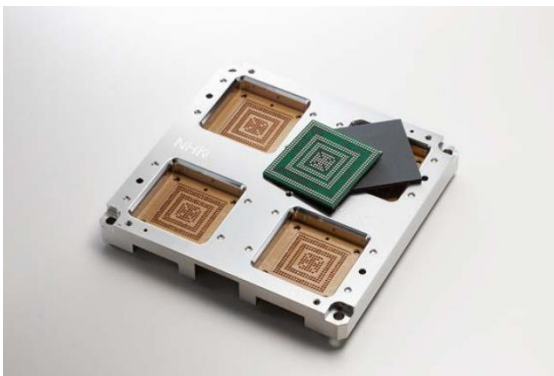
■ Contact probes (Microcontactors[®])



■ Probe cards



■ Test sockets



Semiconductor testing involves inspecting semiconductor products by applying electricity to ensure they operate correctly.

Semiconductor testing tools serve as connectors between the semiconductor and the testing equipment. We provide probe cards used in front-end (wafer processing) inspections, test sockets used in back-end (packaging process*) inspections, and the spring products and contact probes (Microcontactors[®]) incorporated into these tools to semiconductor manufacturers and their related companies worldwide.

Microcontactors

Microcontactors are testing terminals that use fine springs in semiconductor testing. Electrical signals output from the test equipment are transmitted to the semiconductor through the Microcontactors. Each semiconductor terminal requires a uniquely processed tip shape, and we can handle the entire process in-house, from design to manufacturing. We can also propose custom shapes tailored to specific customer requirements.

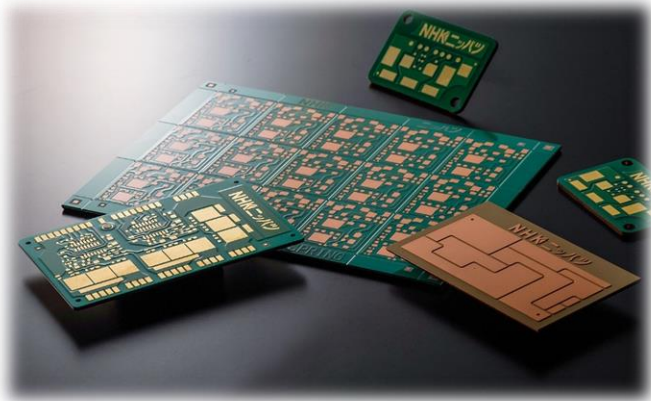
Probe cards

Probe cards are tools used in the front-end process. A disc-shaped plate with fine holes contains anywhere from tens to thousands—or even tens of thousands—of Microcontactors. On the wafer being tested, there are countless small semiconductor terminals, and each one must be precisely contacted by the Microcontactors to inspect the electrical characteristics (pass/fail) of individual semiconductors. Accurate and uniform contact requires the use of high-conductivity, high-precision Microcontactors.

Test sockets

Test sockets are tools used in the back-end process. Individual semiconductor packages inserted into the sockets are connected to the testing equipment through the Microcontactors, where their electrical characteristics and reliability are tested.

* Packaging process (the process of encapsulating ICs, cut from semiconductor wafers, in plastic or ceramic to protect the circuitry and facilitate connection to external peripheral circuits)



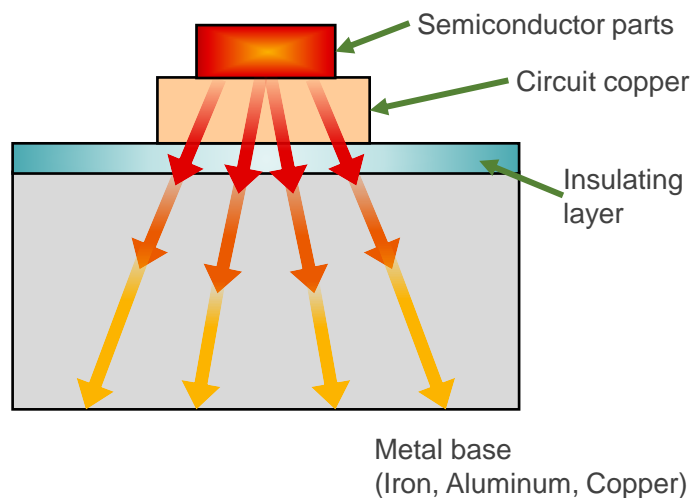
Integrated Metal Substrates (IMS) are circuit plates, circuits are formed via an insulating layer on metal base, such as aluminum or copper, and their excellent heat dissipation are characteristic of IMS. Taking advantage of this heat-radiating performance, IMS is used in the fields of automotive, industrial, and consumer applications, to efficiently dissipate the heat generated by semiconductor components mounted on IMS.

In the automotive field, our products are increasingly used in DC-DC converters and charger modules for electric and hybrid vehicles, and we are aiming to use them in drive inverter circuits in their future. In industrial applications, in addition to general-purpose inverters and inverter circuits for air conditioners, our IMS are widely used as power modules inside power conditioners for renewable energy.

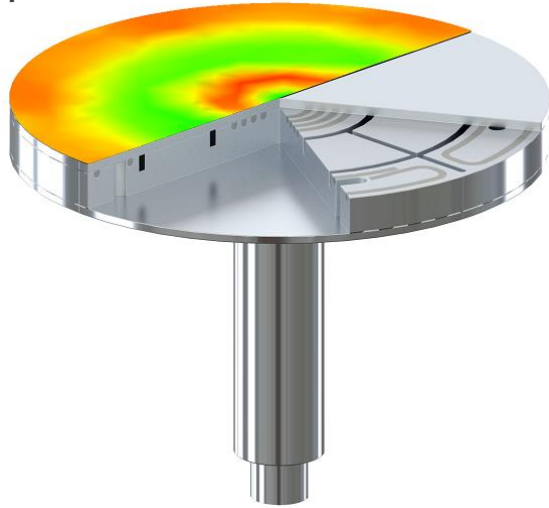
Our IMS is specialized in the development and manufacturing of high heat radiation and highly reliable insulating layers. Our IMS is characterized by our strength in integrated production, from the development of high heat-dissipating and highly reliable insulating layers, to manufacturing and finishing into IMS.

We have been developing IMS since 1980s, and have been leading the industry by introducing high heat dissipation insulating materials to the market successively.

■ Cross-sectional structure of IMS



■ Stage heater with multi-zone temperature distribution control function for film deposition equipment



■ Ceramics spray-coated cooling plate for etching equipment



In semiconductors, conductors and insulators are drawn in a fine and complicated pattern on a silicon substrate to form a circuit. NHK's semiconductor process components are used in the key processes of “film formation” and “etching” in semiconductor manufacturing.

NHK's stage heaters are widely used in film formation processes such as CVD and ALD*. Mainly made of aluminum alloy and stainless steel, advanced joining techniques developed over many years allow for the realization of complex internal structures.

* CVD stands for Chemical Vapor Deposition

* ALD stands for Atomic Layer Deposition

In making full use of our own heater element design technology and analysis technology for simulation, it is possible to arrange multiple heater elements, refrigerant channels, and heat insulating space, which enables to realize not only equalize temperature distribution, but also active temperature distribution control, that partially generates a difference in the range of several tens of degrees.

Regarding to etching equipment, we are manufacturing important stage parts called cooling plates, on which silicon wafers are loaded during process. Most of them are made from aluminum alloy; NHK have the strength of integrated production—from material procurement to precision processing and ceramic spray coating—, and applying our advanced bonding technology, common to the heater manufacturing.

In these years, in addition to the parts at the bottom of the chamber—heater and cooling plate which support work in process wafers—, we have also focused on developing the parts of the upper side of the chamber—called shower heads, for the purpose of supplying required gas in the process—, and this sales are also increasing.



- The predictions and plans by NHK Spring Co., Ltd. listed in this document are forecasts related to future results and performance, and contain risks and uncertainties. Please note that the actual results may differ from the forecasts due to fluctuations in important variables, such as economic conditions, market trends, foreign exchange trends, and so forth.
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