

### Financial Results

for 1st half of the Fiscal Year Ending March 2024

日本発条株式会社(東証プライム市場 5991) NHK Spring Co., Ltd.(5991/ TSE Prime Market)





### Overview of the Financial Results for 1<sup>st</sup> half of the Year Ending March 2024 Overview of the Financial Forecast for the Year Ending March 2024

Executive Vice President & CFO and Representative Member of the Board

Hidefumi Yoshimura

### Results for 1<sup>st</sup> half of the year ending March 2024



(100 million yen)

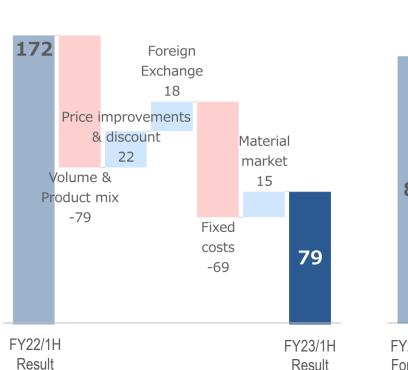
							(100 million yen)
			FY2022	FY2023	1st half	Vs. FY2022	Vs. Forecast
			1st half Results	Forecast as of '23/5	Results	1st half Results	as of '23/5
Net Sales			3,326	3,450	3,621	295	171
Operating profit	t		172	80	79	-93	-0
Ratio			5.2%	2.3%	2.2%	-3.0%	-0.1%
Ordinary profit			279	110	187	-92	77
Ratio			8.4%	3.2%	5.2%	-3.2%	2.0%
Profit Attribute	Profit Attribute to Owners of Parent		198	60	143	-55	83
Extraordinary profits	s/losses		_	_	13	13	13
Average Rate	US\$		133.5	130.0	141.3	7.9	11.3
	Thai Baht		3.6	3.8	3.9	0.3	0.1
Current Rate	US\$	this year	144.8	130.0	149.6	4.8	19.6
		previous year	122.4	133.5	133.5	11.1	-
	Thai Baht	this year	3.9	3.8	4.1	0.2	0.3
		previous year	3.4	3.8	3.8	0.4	-

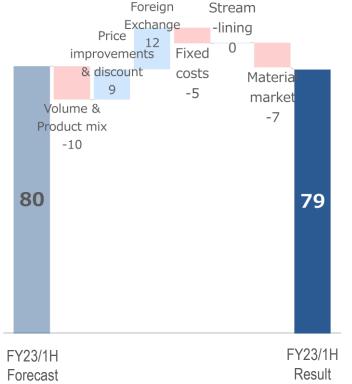
### Variable Factor Analysis for Operating Profit



					(100 Million 1611)	
	FY2022	FY2023	1st half	Vs. FY2022	\/a	
	1st half Results	Forecast	Results	1st half Results	Vs. Forecast	
Net Sales	3,326	3,450	3,621	295	171	
Operating Profit	172	80	79	-93	-0	
Ratio	5.2%	2.3%	2.2%	-3.0%	-0.1%	

#### Variable Factor Analysis (Vs. 1H Previous year / Forecast)





#### Vs. FY2022 1st half

(100 Million Yen)

Of the increase in sales, 40% was due to the impact of yen depreciation on foreign subsidiaries, and 30% was due to the reflection of soaring steel material prices in selling prices, which were significantly affected by exchange rate and material market fluctuations.

The automotive-related business showed an upward trend in sales as automakers began to recover from production adjustments due to semiconductor supply shortages.

On the other hand, operating profit fell below the previous year's level due to a decline in the volume of HDD-related components and semiconductor processing components, which had been strong until the first half of the previous year.

#### Vs. Forecast

Operating profit was in line with the initial forecast due to a larger than expected volume decline in the relatively profitable HDD-related business, which offset the positive impact of increased volume and yen depreciation in the automotive seating business.

### Forecast for the year ending March 2024



(100 million yen)

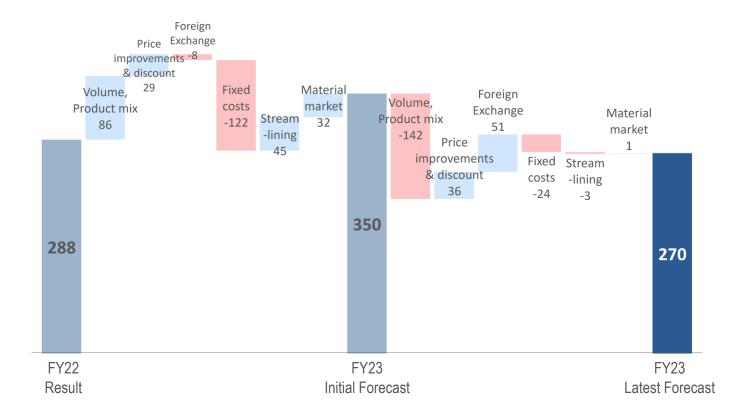
			FY2022	FY2	023	Vs. FY2022	Vs. Initial	
			Results	Initial Forecast	Latest Forecast	Results	Forecast	
Net Sales			6,932	7,500	7,600	667	100	
Operating Profit	t		288	350	270	-18	-80	
Ratio			4.2%	4.7%	3.6%	-0.6%	-1.1%	
<b>Ordinary Profit</b>			373	400	400	26	-	
Ratio			5.4%	5.3%	5.3%	-0.1%	-0.0%	
Profit Attribute	Profit Attribute to Owners of Parent		215	250	250	34	-	
Extraordinary profits	s/losses		-70	_	13	83	13	
Average Rate	US\$		135.0	130.0	143.0	8.0	13.0	
	Thai Baht		3.7	3.8	4.0	0.3	0.2	
Current Rate	US\$	this year	133.5	130.0	145.0	11.5	15.0	
		previous year	122.4	133.5	133.5	-	-	
	Thai Baht	this year	3.8	3.8	4.0	0.2	0.2	
		previous year	3.4	3.8	3.8	-	-	

### Variable Factor Analysis for Operating Profit



					(100 Million Yen)
	FY2022	FY2	023	Vs. FY2022	Vs. Initial
	Results	Initial Forecast	Latest Forecast	Results	Forecast
Net Sales	6,932	7,500	7,600	667	100
Operating Profit	288	350	270	-18	-80
Ratio	4.2%	4.7%	3.6%	-0.6%	-1.1%

#### **Variable Factor Analysis**



#### Vs. Forecast

The impact of the volume decline in the relatively profitable HDD-related business is expected to be significant, resulting in higher sales and lower profit for the group as a whole, although the increase in unit volume and the weaker yen in the automotive seating business will contribute to the increase.

### **Result Trends**

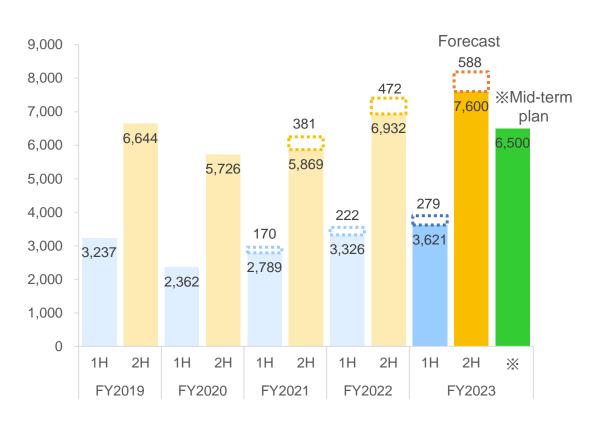


#### **Net Sales**

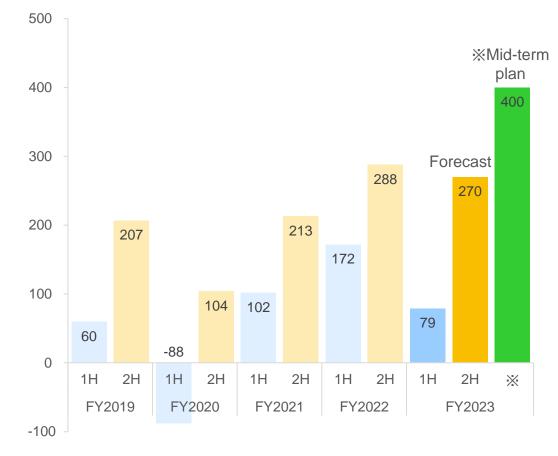
(100 million Yen)

### **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.

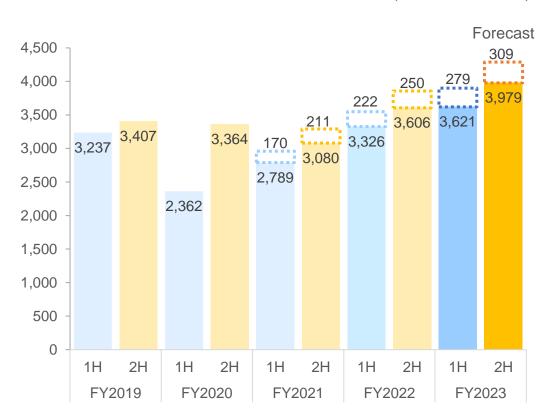


### Result Trends in each half-year period



#### **Net Sales**

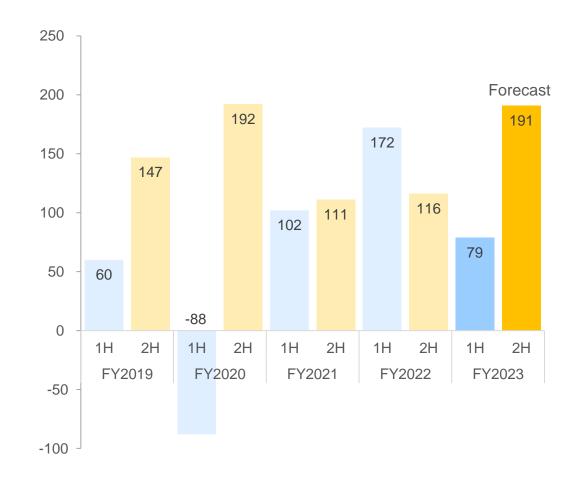
(100 million Yen)



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### **Operating Profit**

(100 million Yen)



#### Results for 1st half of the year ending March 2024

### **Extraordinary Profits/Losses**

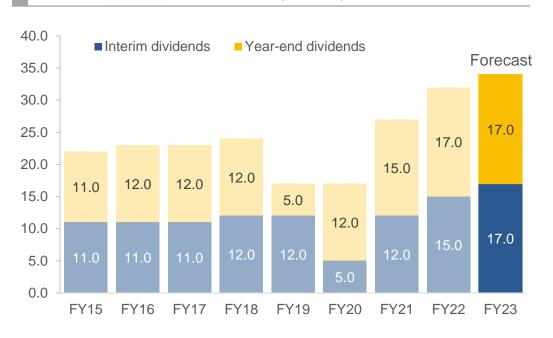


Extraordina	(100 million yen)		
Breakdown		Details	Amount
Extraordinary profits	Gain on sales of investment securities	Profits from sale of stocks	13
	Total		13

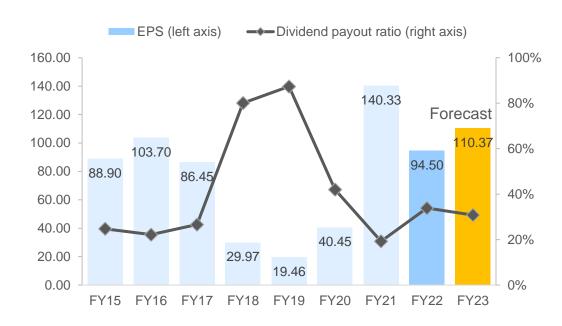
### **Dividends**



### Dividend Per Share (DPS)



### Earnings Per Share (EPS)



	End of Q2	Year end	Total	Dividend payout ratio
Result for the year ended Mar.2023	15.0 yen	17.0 yen	32.0 yen	33.9%
Forecast for the year ending Mar.2024	17.0 yen	17.0 yen	34.0 yen	30.8%



## Details of the Financial Results for 1<sup>st</sup> half of the Year Ending March 2024

### **Net Sales / Operating Profit by Business Segment**



(100 million yen)

		FY2022	FY2023	1st half	Vs. FY2022	Vs. Forecast	
		1st half	Forecast	Results	1st half	vs. Forecast	
	Net Sales	681	754	786	104	32	
Automotive Suspension Spring	Operating Profit	-17	-8	-35	-17	-27	
	Ratio	-2.6%	-1.1%	-4.5%	-1.9%	-3.4%	
	Net Sales	1,247	1,426	1,555	307	129	
Automotive Seating	Operating Profit	25	40	77	51	37	
	Ratio	2.1%	2.8%	5.0%	2.9%	2.2%	
	Net Sales	840	736	747	-92	11	
Precision Springs & Components	Operating Profit	98	19	6	-91	-12	
	Ratio	11.7%	2.6%	0.9%	-10.8%	-1.7%	
	Net Sales	556	534	532	-23	-1	
ndustrial Machinery & Others	Operating Profit	66	29	31	-35	2	
indoninion, di canono	Ratio	11.9%	5.4%	5.8%	-6.1%	0.4%	
	Net Sales	3,326	3,450	3,621	295	171	
Total	Operating Profit	172	80	79	-93	-0	
	Ratio	5.2%	2.3%	2.2%	-3.0%	-0.1%	

#### Vs. FY2022 1st half

In the automotive-related business, despite a decline in volume at some bases in China, overall sales increased due to a recovery from production adjustments by automakers caused by semiconductor supply shortages. In addition, sales increased significantly due to the impact of the yen's depreciation on the yen value of overseas subsidiaries, as well as the reflection of soaring steel material prices in selling prices.

In the non-automotive business, slowdown in the HDD market that has continued since the second half of the previous year and a decline in orders for semiconductor process parts led to lower sales and profits, although the weak yen boosted profits.

#### Vs. Forecast

In the automotive business, sales increased, but operating profit was in line with the initial forecast due to the impact of higher labor and power costs in North America in the suspension spring business and lower sales in the profitable HDD-related business.

### **Net Sales / Operating Profit by Region**



(100 million yen)

		FY2022	FY2023	1st half	Vs. FY2022	Va Faragast
		1st half	Forecast	Results	1st half	Vs. Forecast
	Net Sales	1,842	1,990	2,084	241	94
Japan	Operating Profit	123	55	84	-39	29
	Ratio	6.7%	2.8%	4.0%	-2.7%	1.3%
	Net Sales	948	890	896	-52	6
Asia	Operating Profit	74	36	36	-38	0
	Ratio	7.9%	4.0%	4.1%	-3.8%	0.0%
	Net Sales	534	570	640	106	70
America & Europe & Others	Operating Profit	-25	-11	-40	-14	-29
	Ratio	-4.8%	-1.9%	-6.4%	-1.5%	-4.4%
	Net Sales	3,326	3,450	3,621	295	171
Total	Operating Profit	172	80	79	-93	-0
	Ratio	5.2%	2.3%	2.2%	-3.0%	-0.1%

#### Vs. FY2022 1st half

In Japan, sales increased mainly in the automotive seating business, but both sales and profits declined in profitable HDD-related business and semiconductor process components.

In Asia, both sales and profits declined due to lower orders for products for Japanese automakers in China and lower orders for HDD-related components in Thailand and China.

In America, Europe and Others, sales increased due to the recovery of the North American automobile market and the impact of yen conversion, but higher fixed costs, including labor and energy costs, pushed down profits.

#### Vs. Forecast

In Japan, sales and income increased due to strong performance of the automotive seating business and the positive impact of yen depreciation, despite a decline in HDD-related components sales volume.

In America, Europe and others, sales increased, but higher fixed costs at the U.S. base pushed down profits.

### **Operating Profit Trends by Segment**

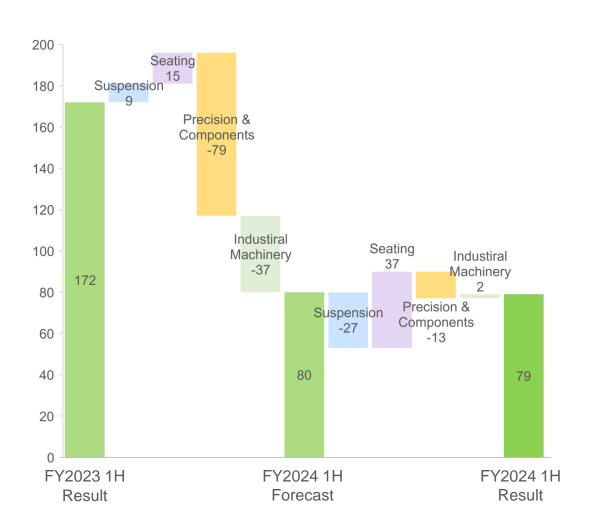
(100 million Yen)

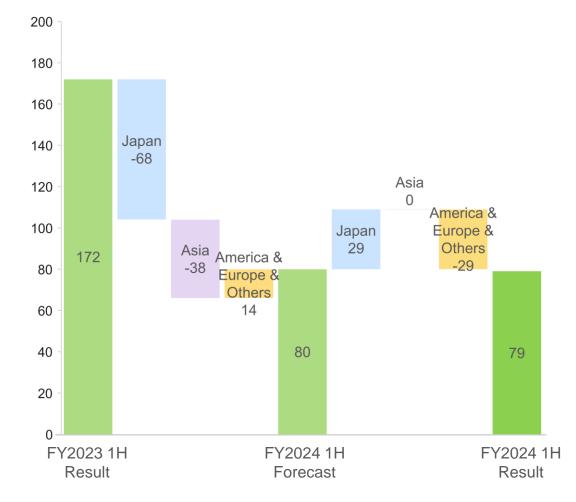




By Region

(100 million Yen)





#### Results for 1<sup>st</sup> half of the year ending March 2024 : Analysis by Business Segment

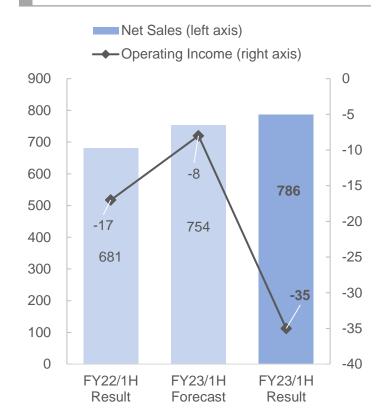
### **Automotive Suspension Spring**



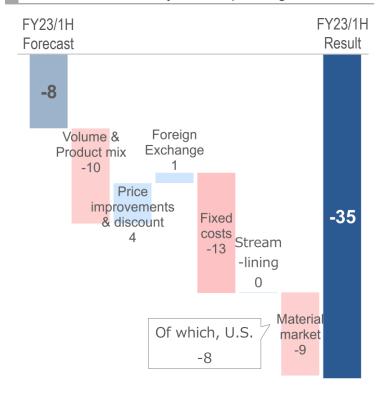
(100 Million Yer	1)
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	FY2022 <b>FY2</b>		1st half	Vs. FY2022	\/a_Faraaaat	
	1st half Results	Forecast	Results	1st half Results	Vs. Forecast	
Net Sales	681	754	786	104	32	
Operating Profit	-17	-8	-35	-17	-27	
Ratio	-2.6%	-1.1%	-4.5%	-1.9%	-3.4%	

#### Results Trends



#### Variable Factor Analysis for Operating Profit



#### Vs. FY2022 1st half

The impact of the semiconductor shortage has eased, and the domestic business showed a general trend toward volume growth.

The U.S. and European operations also reported higher sales due to the effect of exchange rates, but profits declined due to soaring labor costs caused by the tight labor market, deterioration in productivity due to lack of retention of human resources and higher fixed costs such as power and utility expenses.

#### Vs. Forecast

Sales increased from the initial forecast due to the effect of exchange rate changes at overseas subsidiaries.

In terms of profit and loss, the drop in orders for products for Japanese automakers in China and increased expenses due to delayed productivity improvement in the North American business had a significant impact, resulting in higher sales and lower profit.

#### Results for 1st half of the year ending March 2024: Analysis by Business Segment

### **Automotive Seating**

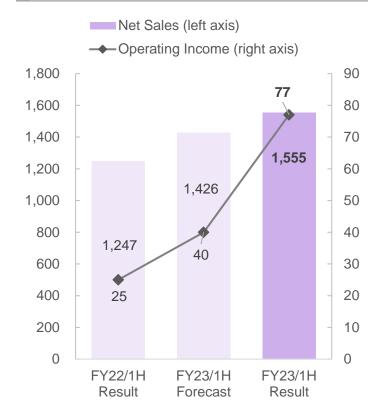


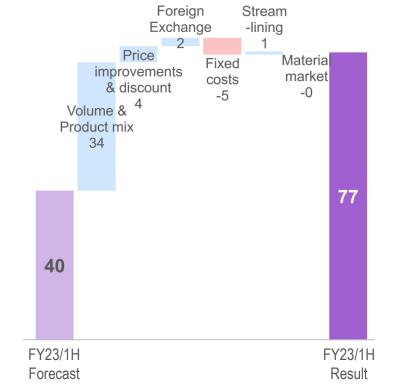
(100 Million Yen)	)
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	FY2022	FY2023	1st half	Vs. FY2022		
	1st half Results	Forecast Results		1st half Results	Vs. Forecast	
Net Sales	1,247	1,426	1,555	307	129	
Operating Profit	25	40	77	51	37	
Ratio	2.1%	2.8%	5.0%	2.9%	2.2%	

#### Results Trends

#### Variable Factor Analysis for Operating Profit





#### Vs. FY2022 1st half

The impact of the decrease in production volume due to the shortage of semiconductors has been mostly resolved, and volume recovered mainly in Subaru, Toyota, and Nissan. Both sales and income increased significantly due to the increase in yen equivalent value of overseas subsidiaries as a result of yen depreciation.

#### Vs. Forecast

Subaru business in Japan and the U.S. performed better than expected, resulting in an increase in both sales and profit, although the Chinese market and some customers in Japan didn't reach the expected volume.

#### Results for 1st half of the year ending March 2024: Analysis by Business Segment

### **Precision Springs & Components**

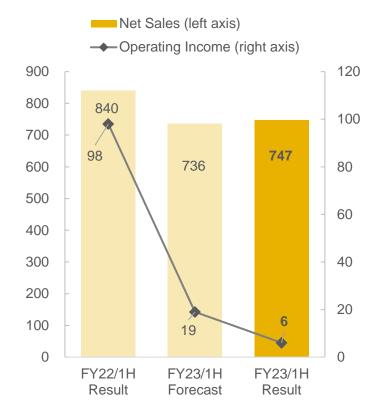


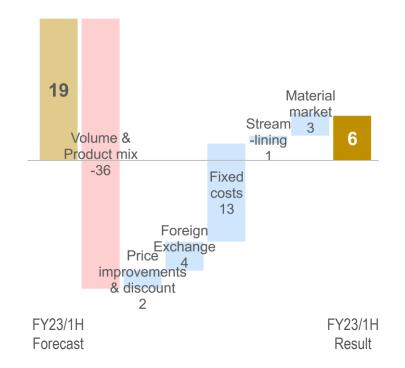
(100 Million Yen)

	FY2022	FY2023	1st half	Vs. FY2022	Vs. Forecast	
	1st half Results	Forecast	Results	1st half Results		
Net Sales	840	736	747	-92	11	
Operating Profit	98	19	6	-91	-12	
Ratio	11.7%	2.6%	0.9%	-10.8%	-1.7%	

#### Results Trends

Variable Factor Analysis for Operating Profit





#### Vs. FY2022 1st half

In the automotive-related field, sales were generally on a recovery trend due to the recovery from production adjustments caused by semiconductor supply shortages and other factors.

In the non-automotive sector, sales and profits declined sharply due to decline in HDD-related product volumes, which had been highly profitable until the first half of the previous fiscal year.

#### Vs. Forecast

Sales of automotive-related components in all regions except China generally increased in volume.

While HDD-related components were affected by lower-than-expected volume due to production adjustments by HDD manufacturer.

In terms of profit and loss, resulting in lower sales and profit.

#### Results for 1st half of the year ending March 2024: Analysis by Business Segment

### **Industrial Machinery & Others**

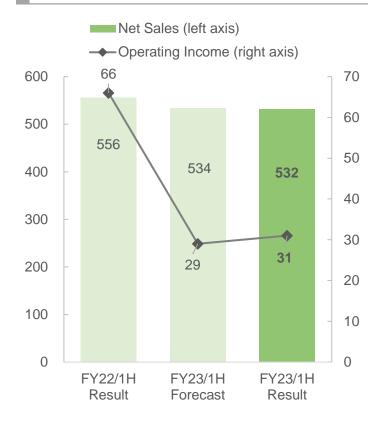


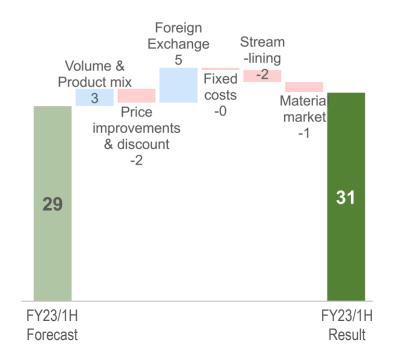
(100 Million Yen)

	FY2022	FY2023	1st half	Vs. FY2022	Vs. Forecast	
	1st half Results Forecast		Results	1st half Results	vs. Forecast	
Net Sales	556	534	532	-23	-1	
Operating Profit	66	29	31	-35	2	
Ratio	11.9%	5.4%	5.8%	-6.1%	0.4%	

#### Results Trends

Variable Factor Analysis for Operating Profit





#### Vs. FY2022 1st half

The volume of semiconductor process components decreased due to the sluggish semiconductor market, resulting in lower sales and profit, although sales of related businesses increased due to the recovery of automobile production and the positive impact of yen depreciation.

#### Vs. Forecast

The weaker yen contributed to lower sales and higher income, although sales and profit were in line with the initial forecast due to lower orders for Integrated Metal Substrates for automotive applications, golf shafts, marine products, and other products.



Details of the Financial Forecast for the Year Ending March 2024

### Forecast for the year ending March 2024



(100 million yen)

			FY2022	EV2	023		(100 million yen)
			Results	Initial Forecast	Latest Forecast	Vs. FY2022 Results	Vs. Initial Forecast
Net Sales			6,932	7,500	7,600	667	100
Operating Profi	t		288	350	270	-18	-80
Ratio			4.2%	4.7%	3.6%	-0.6%	-1.1%
<b>Ordinary Profit</b>			373	400	400	26	-
Ratio			5.4%	5.3%	5.3%	-0.1%	-0.0%
Profit Attribute	to Owners of F	Parent	215	250	250	34	-
Extraordinary profits	s/losses		-70	_	13	83	13
Average Rate	US\$		135.0	130.0	143.0	8.0	13.0
	Thai Baht		3.7	3.8	4.0	0.3	0.2
Current Rate	US\$	this year	133.5	130.0	145.0	11.5	15.0
		previous year	122.4	133.5	133.5	-	-
	Thai Baht	this year	3.8	3.8	4.0	0.2	0.2
		previous year	3.4	3.8	3.8	-	-

### **Net Sales / Operating Profit by Business Segment**



(100 million yen)

						(100 million yen)
		FY2022	FY2	2023	Vs. FY2022	Vs. Initial
		Results	Initial Forecast	Latest Forecast	Results	Forecast
	Net Sales	1,468	1,591	1,695	226	104
Automotive Suspension Spring	Operating Profit	-27	21	0	27	-21
cuopendien opinig	Ratio	-1.9%	1.3%	0.0%	1.9%	-1.3%
	Net Sales	2,737	2,975	3,245	507	270
Automotive Seating	Operating Profit	73	118	162	89	44
	Ratio	2.7%	4.0%	5.0%	2.3%	1.0%
	Net Sales	1,594	1,797	1,560	-34	-237
Precision Springs & Components	Operating Profit	114	125	44	-70	-81
opinigo a componente	Ratio	7.2%	7.0%	2.8%	-4.4%	-4.2%
	Net Sales	1,131	1,137	1,100	-31	-37
ndustrial Machinery & Others	Operating Profit	127	86	64	-63	-22
machiniony a canons	Ratio	11.3%	7.6%	5.8%	-5.5%	-1.7%
	Net Sales	6,932	7,500	7,600	667	100
Total	Operating Profit	288	350	270	-18	-80
	Ratio	4.2%	4.7%	3.6%	-0.6%	-1.1%

#### **A**utomotive Suspension Springs

Profits are expected to be almost in line with the initial forecast, except for in the US and Europe, are expected to fall far short of the initial profit/loss target.

#### **Automotive Seating**

The volume forecast is higher than the previous forecast, and profit/loss is also expected to exceed the plan in line with the increase in volume.

#### **Precision Springs & Components**

In automotive parts, the trend of volume increase continued from the first half, except in China.

Sales and profits of HDD-related components are expected to fall far short of the initial sales plan due to a delayed recovery in customer demand, resulting in lower sales and profits.

#### **Industrial Machinery & Others**

Sales and profits are expected to decline due to lower volumes of semiconductor processing components and Integrated Metal Substrates.

### **Net Sales / Operating Profit by Region**



						(100 million yen)
		FY2022	FY2	023	Vs. FY2022	Vs. Initial
		Results	Initial Forecast	Latest Forecast	Results	Forecast
	Net Sales	3,910	4,280	4,350	439	70
Japan	Operating Profit	247	217	219	-28	2
	Ratio	6.3%	5.1%	5.0%	-1.3%	-0.0%
	Net Sales	1,867	2,012	1,843	-24	-169
Asia	Operating Profit	104	125	81	-23	-44
	Ratio	5.6%	6.2%	4.4%	-1.2%	-1.8%
	Net Sales	1,153	1,208	1,407	253	199
America & Europe & Others	Operating Profit	-63	8	-30	33	-38
	Ratio	-5.5%	0.7%	-2.1%	3.4%	-2.8%
	Net Sales	6,932	7,500	7,600	668	100
Total	Operating Profit	288	350	270	-18	-80
	Ratio	4.2%	4.7%	3.6%	-0.6%	-1.1%

#### **J**apan

In Japan, HDD-related component volume is expected to decline more than initially anticipated, but we expect to secure higher sales and profit due to higher sales in the automotive-related sector, especially in the automotive seating business, and the positive effect of the weaker yen.

#### Asia

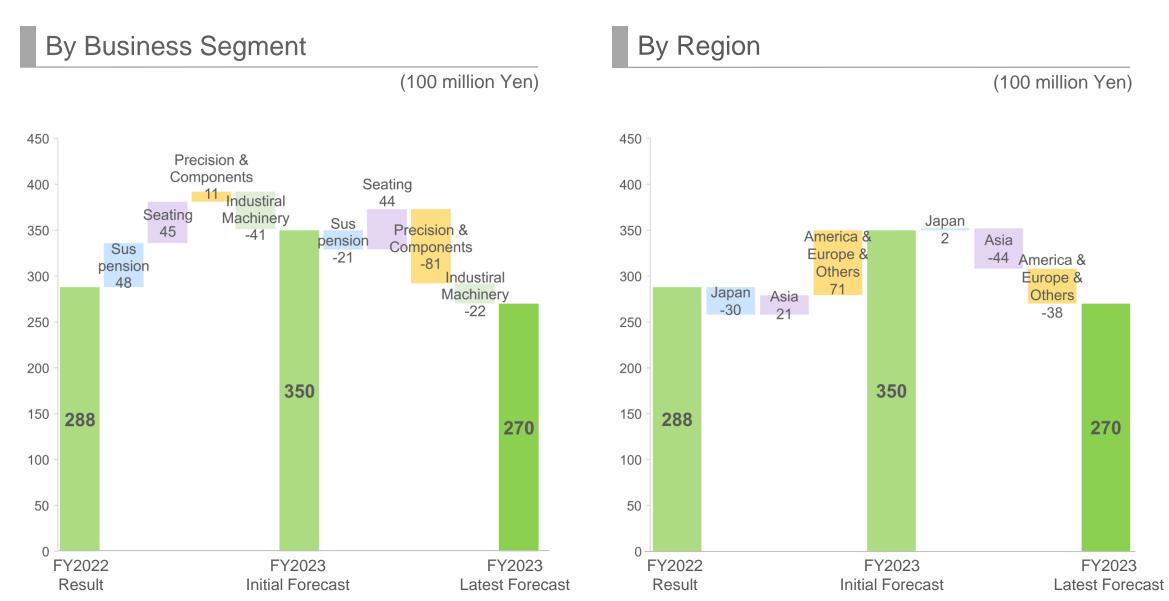
Sales and profits are expected to decrease from the initial plan due to decrease in orders for products for Japanese automaker in China and for HDD-related products in Thailand and China.

#### America, Europe & Others

Sales are expected to increase due to the recovery of the North American automobile market and the impact of yen conversion. Operating profit is expected to fall short of the initial plan, as the deficit in the first half of the fiscal year could not be covered, although we will try to recover in the second half of the fiscal year.

### Variable Factor Analysis for Operating Profit





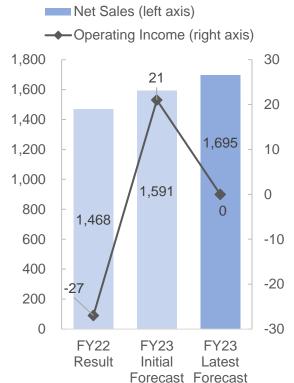
### **Automotive Suspension Spring**

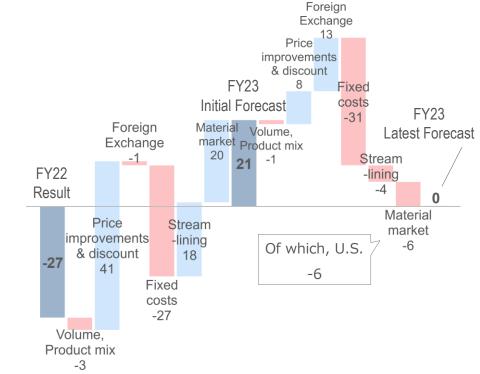


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Net Sales	1,468	1,591	1,695	226	104
Operating Profit	-27	21	0	27	-21
Ratio	-1.9%	1.3%	0.0%	1.9%	-1.3%



Variable Factor Analysis for Operating Profit





#### Vs. Initial Forecast

(100 Million Von)

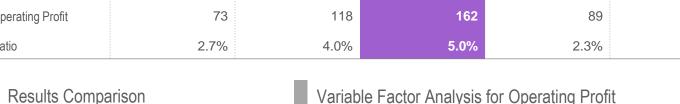
Profit levels in Japan, Thailand, and China are expected to be generally in line with the initial forecast due to improved selling prices, the effect of yen depreciation, and recovery of material market conditions.

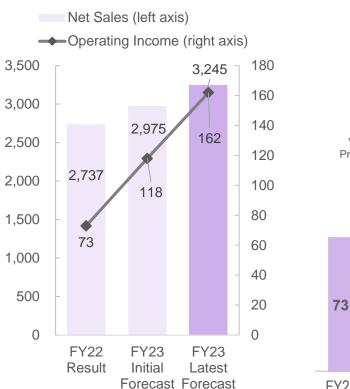
For the US/Europe business in the second half, the loss is expected to narrow compared to the first half due to improved selling prices and productivity improvement efforts, but on a full-year basis, it is expected to fall short of the initial profit target.

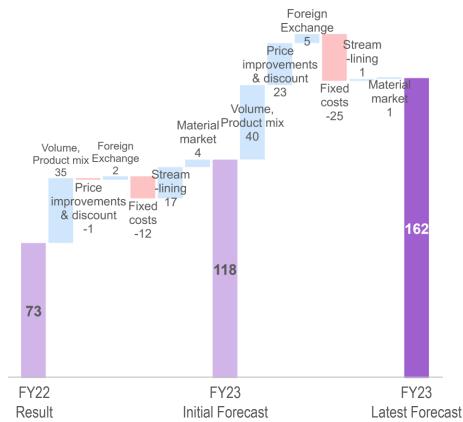
### **Automotive Seating**



					(100 Million Ten)
	FY2022	FY2023		Vs. FY2022	Vs. Initial
	Results	Initial Forecast	Latest Forecast	Results	Forecast
Net Sales	2,737	2,975	3,245	507	270
Operating Profit	73	118	162	89	44
Ratio	2.7%	4.0%	5.0%	2.3%	1.0%







#### Vs. Initial Forecast

(100 Million Van)

Sales are expected to exceed the previous forecast at all bases except China.

Business in the Subaru, Toyota, and Nissan regions are expected to be particularly strong, and the automotive seating business is expected to drive the consolidated group's overall income and expenditures in the current fiscal year.

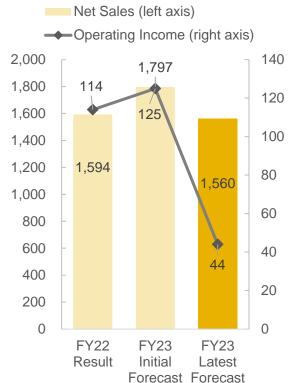
### **Precision Springs & Components**

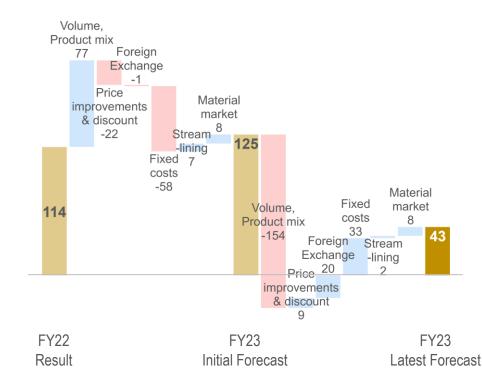


	<u> </u>				(100 Million Ten)
	FY2022	FY20	023	Vs. FY2022	Vs. Initial
	Results	Initial Forecast	Latest Forecast	Results	Forecast
Net Sales	1,594	1,797	1,560	-34	-237
Operating Profit	114	125	44	-70	-81
Ratio	7.2%	7.0%	2.8%	-4.4%	-4.2%

#### Results Comparison

Variable Factor Analysis for Operating Profit





#### Vs. Initial Forecast

(100 Million Van)

In the automotive parts business, volume is generally on an upward trend, with the exception of the China base.

Sales of HDD-related components fell far short of the initial sales plan due to a delay in the recovery of customer demand, although a recovery was initially expected in the second half of the year or later. Despite efforts to boost profits due to the weak yen and curb fixed costs, we expect to fall short of its initial profit target.

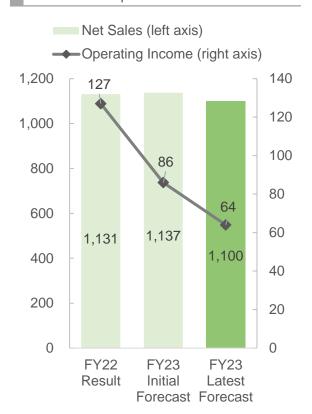
### **Industrial Machinery & Others**

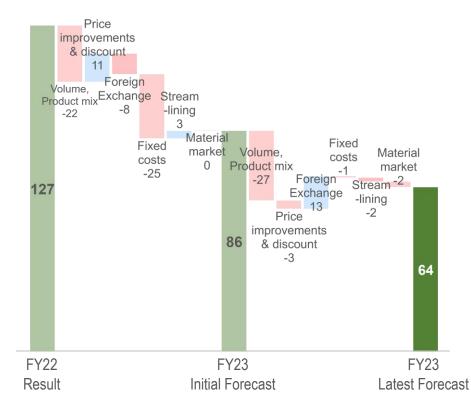


					(100 Million Ten)
	FY2022	FY2	023	Vs. FY2022	Vs. Initial
	Results	Initial Forecast	Latest Forecast	Results	Forecast
Net Sales	1,131	1,137	1,100	-31	-37
Operating Profit	127	86	64	-63	-22
Ratio	11.3%	7.6%	5.8%	-5.5%	-1.7%

### Results Comparison

Variable Factor Analysis for Operating Profit





#### Vs. Initial Forecast

(100 Million Van)

Sales volume of semiconductor processing components and Integrated Metal Substrates are expected to fall below the initial forecast, although the weak yen will contribute to sales.

Sales of leisure products such as golf shafts and marine products are also expected to fall short of the initial revenue/expense target due to customers' inventory adjustments.



# FY2023 Medium Term Plan State of progress

### **2023 Medium Term Plan Target**



(100 million Yen)

### Target for Net Sales and Income

Net Sales 6,500

Operating Profit 400 (Ratio 6.2%)

Ordinary Profit 420 (Ratio 6.5%)

Profit Attributable to Owners of Parent
 250 (Ratio 3.8%)

### **Target for Financial Indicator**

• Ordinary margin : 6.5%

• ROE : 8.0%

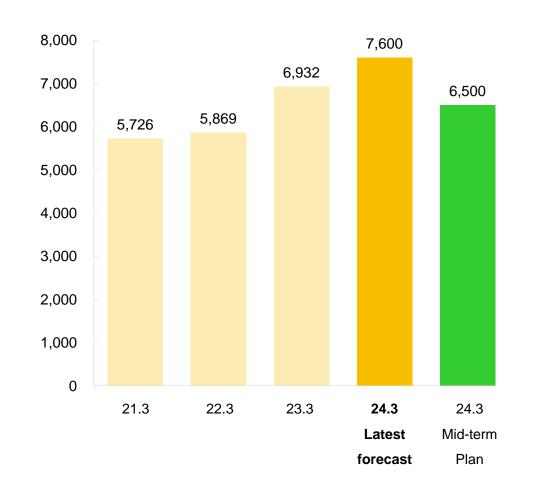
• Dividend payout ratio: aiming approx. 30%

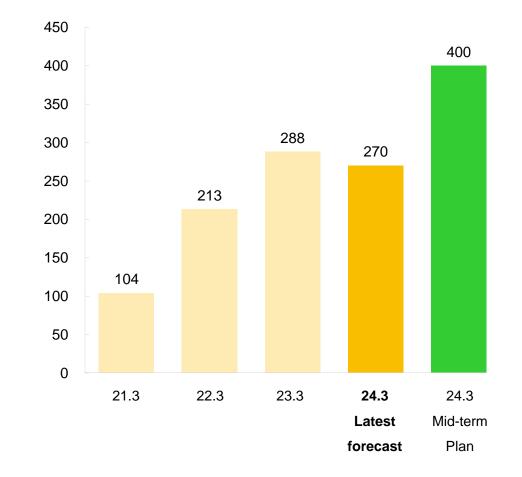
### Trend from FY2020 to 2023



#### **Net Sales**

### **Operating Profit**



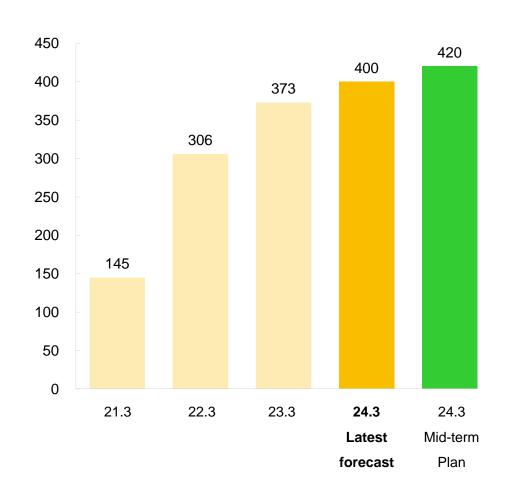


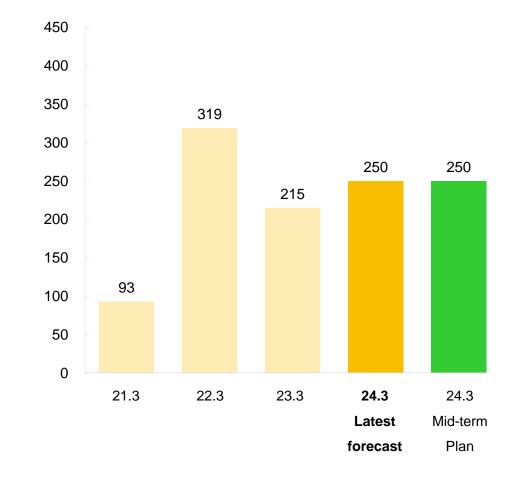
### Trend from FY2020 to 2023 cont'd



### **Ordinary Profit**

#### **Profit Attributable to Owners of Parent**





### Trend from FY2020 to 2023 cont'd

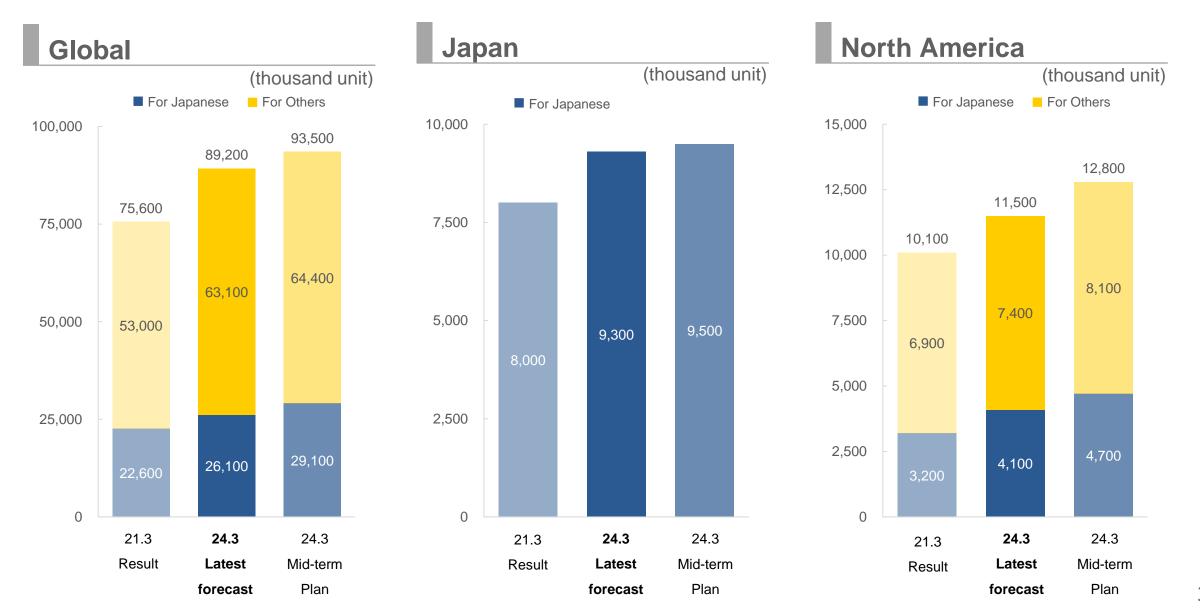


### Ordinary margin / ROE / Dividend payout ratio

	21.3	22.3	23.3	24.3 Latest forecast	24.3 Medium Term plan
Ordinary margin	2.5%	5.2%	5.4%	5.3%	6.5%
ROE	3.4%	10.5%	6.4%	6.8%	8.0%
Dividend payout ratio	42.0%	19.2%	33.9%	30.8%	30.0%

### Sales assumptions (Automobiles production Trend)

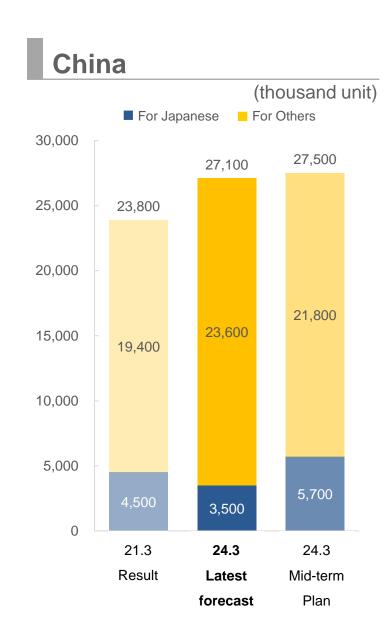




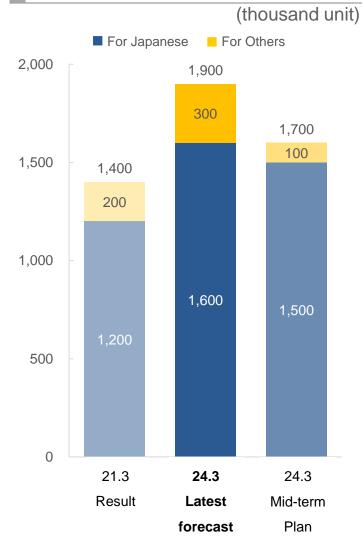
### Sales assumptions (Automobiles production Trend)



Cont'd



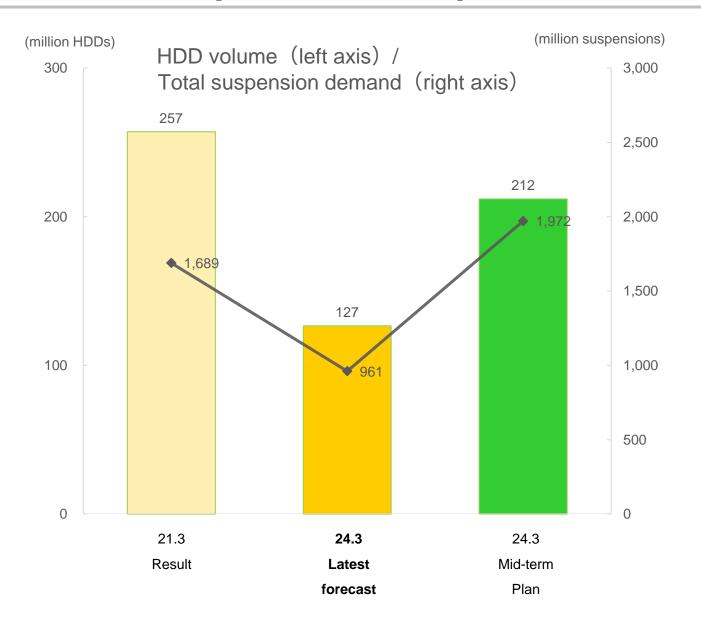




- In the mid-term business plan, based on the assumption of recovery from the effects of the COVID-19, we forecasted a 24% increase in FY 2023 compared to FY 2020 on a global basis, and a significant 16%~27% increase in each region.
- Due to the global shortage of semiconductors, automobile production has not recovered to the volume projected in the mid-term business plan.

### Sales assumptions (HDD production Trend)





- The recovery has been slower than initially expected, as demand for HDDs began slumping in the second half of 2022 in reaction to the panic buy caused by the COVID-19.
  - ⇒The main reason for this is that cloud service providers are directing their investments toward AI, and are restraining their investments in storage.
- Global data creation continues to increase and HDD still have a price advantage over semiconductor memory, so HDD demand is expected to grow steadily in the future.

### Difference from Medium-term Plan (Analysis by Segment / Variable Factor)



- Net Sales increased by 110 billion yen as compared to the FY2023 in the mid-term plan.

  Operating Profit decreased by 13 billion yen as compared to the FY2023 in the mid-term plan.
- Foreign exchange impact is 88.6 billion yen on Net Sales and 1.8 billion yen on Operating Profit.

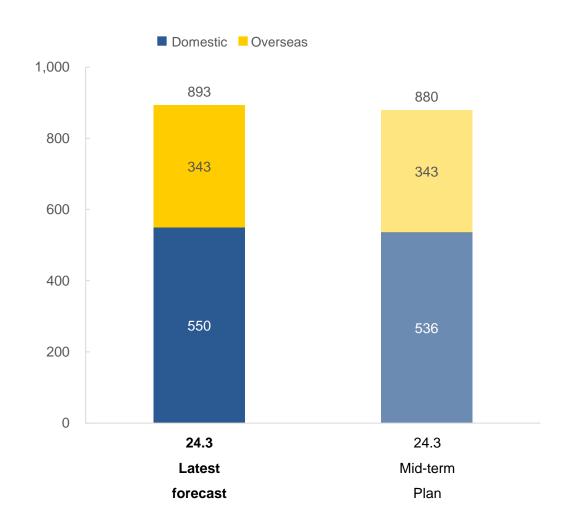
(100 million Yen)

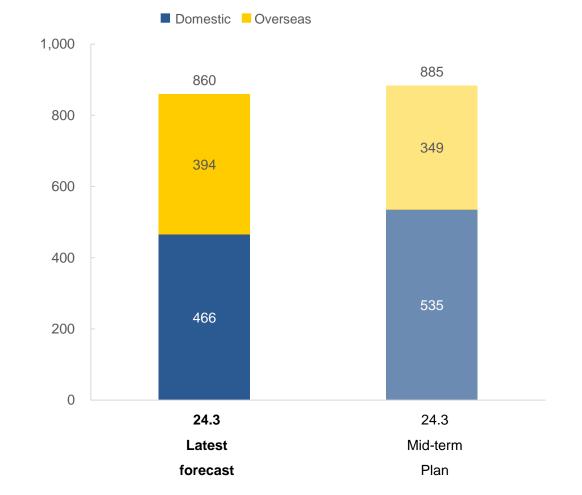
		FY2023	FY2023			Breakdown	of variance	
		Medium Term plan	Latest Forecast	Variance	Exchange impact	Steel Soaring Recovery	Auxiliary cost Escalation recovery	Volume, others
Automotive	Net sales	1,210	1,695	485	288	224	41	-68
Suspension	Operating Profit	30	0	-30	-2	30	3	-60
Spring	Ratio	2.5%	0.0%	-2.5%	-	-	-	-
Automotivo	Net sales	2,400	3,245	845	409	160	9	267
Automotive Seating	Operating Profit	80	162	82	15	16	0	51
	Ratio	3.3%	5.0%	1.7%	-	-	-	_
Precision	Net sales	1,790	1,560	-230	181	73	9	-493
Springs	Operating Profit	180	44	-136	5	5	-2	-144
& Components	Ratio	10.1%	2.8%	-7.3%	-	-	-	-
Industrial	Net sales	1,100	1,100	0	8	36	4	-47
Machinery	Operating Profit	110	64	-46	0	-10	-3	-34
& Others	Ratio	10.0%	5.8%	-4.2%	-	-	-	_
	Net sales	6,500	7,600	1,100	886	493	63	-341
Total	Operating Profit	400	270	-130	18	41	-2	-187
	Ratio	6.2%	3.6%	-2.6%	-	-	-	

#### **Capital Investment / Depreciation & Amortization**



(FY2021~2023 Total) Capital Investment (FY2021~2023 Total)
Depreciation & Amortization



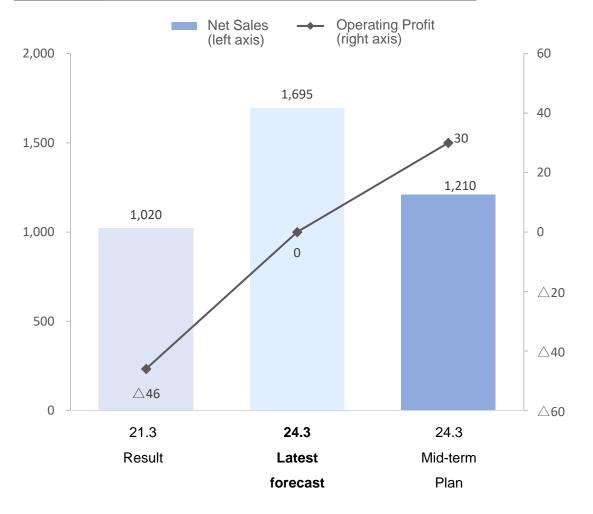




#### Progress of each business (Automotive Suspension Springs)

- Cost of sales increased significantly due to soaring steel market prices and rising labor costs, although sales are on a recovery trend.
- We will promote fixed cost reduction by improving unprofitable products to appropriate selling prices, improving productivity, and reducing manpower through automation.
- In North America in particular, earnings have not improved due to delays in recovering rising labor and material costs and a deteriorating employment environment.

#### **Performance Comparison (100 Million Yen)**



#### Challenges and Initiatives of the 2023 mid-term plan

- ◆ Creation of new technologies and products

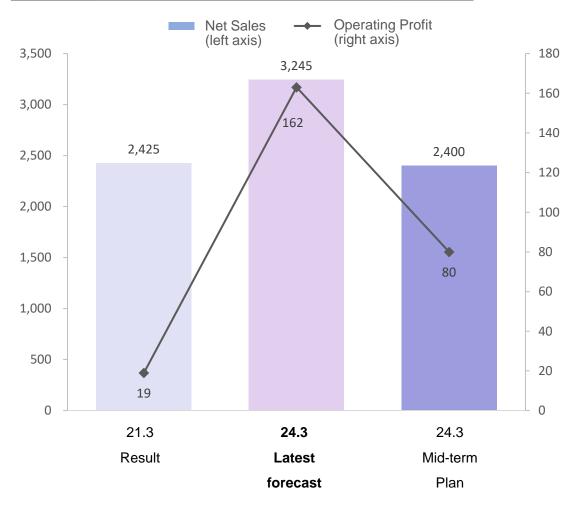
  Development of XT coil springs, etc. with new taper molding that are 34% lighter than conventional products that can withstand the same load.
- ◆ Turnaround of loss-making U.S. bases and improvement of profitability of European bases
  Severe conditions continue due to soaring labor costs and delays in productivity improvement. Continue to promote profit improvement.
- Establishment of optimal production system
   Leaf springs) Completed transfer of assembly processes to affiliated
   companies.
   Coil Spring, Stabilizer) We will consider changing the number of
   production shifts and reviewing the global supply system.
- ◆ Thorough reduction of production costs
  We will continue to strive to reduce and rationalize fixed costs.

#### Progress of each business (Automotive Seating)



Net sales and operating profit are both expected to exceed the mid-term plan by a wide margin.

#### **Performance Comparison (100 Million Yen)**



#### Challenges and Initiatives of the 2023 mid-term plan

- ◆ Steady response to model change Steady response as planned.
- ◆ Improvement of profitability of new plant in North America Completion of transfer to new plant Improved profitability by logistics improvement, etc.
- Reduction of development costs and shortening of development period by improvement of analysis technology Continued activities aimed at halving the number of static strength tests.
- ◆ Steady response to customer quality requirements

  Further improvement by reviewing development procedures, introducing AI visual inspection, etc.
- ◆ Development of seats required in the era of automated driving

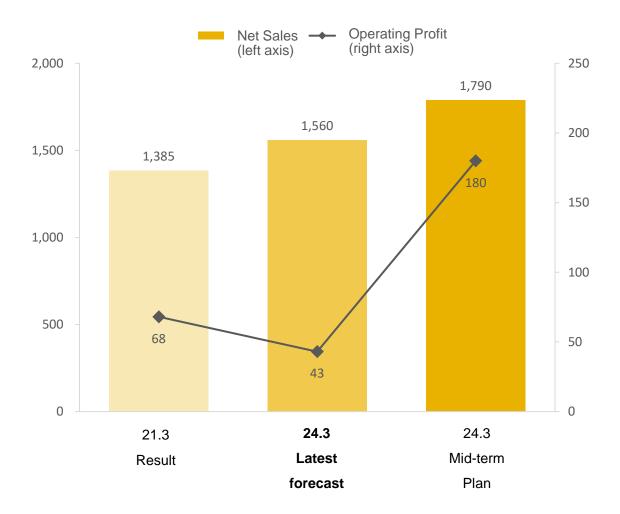
  Promoting development of our original items required for automatic driving.



#### Progress of each business (Precision Springs and Components).

- In the automobile-related business, both sales and profits declined due to decrease in production volume caused by a shortage of semiconductors and other factors.
- In the information and telecommunication related business, both sales and income decreased due to delayed recovery from the slump in demand for HDD caused by the panic buyout in the wake of the COVID-19.

#### **Performance Comparison (100 Million Yen)**



#### Challenges and Initiatives of the 2023 mid-term plan

- **◆** Steady response to accelerating electrification
  - Expansion of motor core production capacity in Mexico
  - Expansion of thin leaf springs for HEVs and EVs
- ◆ Appropriate response to increasing HDD nearline demand and market share increase

Further productivity improvement in anticipation of recovery in HDD demand

Cost reduction through productivity improvement, utilization of AI, etc.

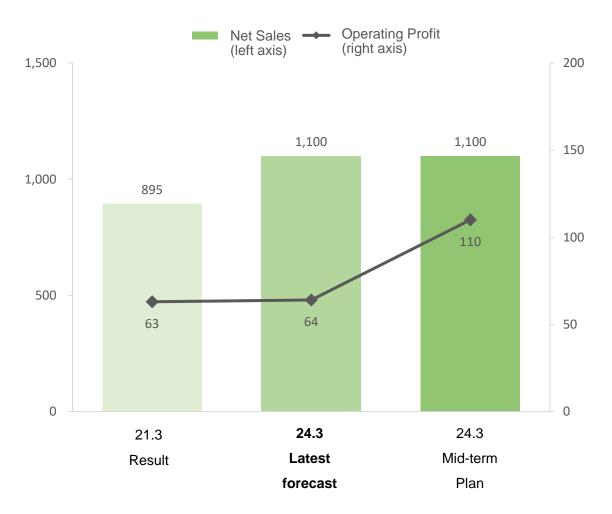
Promote data processing and analysis using Al.

#### Progress of each business (Industrial Machinery and Others)



• Sales and income declined due to a drop in demand for semiconductor production equipment.

#### **Performance Comparison (100 Million Yen)**



#### Challenges and Initiatives of the 2023 mid-term plan

- Semiconductor process components
   Prolonged memory market slump and full-fledged recovery of demand is not expected until FY2024 or later.
- ◆ Integrated Metal Substrates
  Expansion of production capacity in Japan (Komagane Plant) and Malaysia
- ◆ Pipe support products, security-related products
  Improvement of profitability through selection and concentration
- Accelerate each development theme and expand sales of new products

Shower head products and next generation thermal spraying products



# About the progress of the project

President & CEO
Representative Member of the Board

Takashi Kayamoto

## **Background and Project Measures**



Automotive	-Increasing the value of Automotive	Profitability Improvement Project			
Suspension Springs	Suspension Springs -Optimal production system	-Price improvement of Automotive Suspension Springs -Negotiation of appropriate price for cost increase -Productivity improvement			
		SUBARU Project			
Automotive Seating	Improving customer satisfaction	-Price improvement of Automotive Suspension Springs -Negotiation of appropriate price for cost increase -Productivity improvement  SUBARU Project  -Establishment of a management system with QCDD -Development of seats adapted to needs  Motor Core Project			
		Motor Core Project			
Motor Core	Further acceleration of electrification	-Expand new sales by leveraging strengths -Accelerate business by increasing competitiveness and differentiation			



## Automotive Suspension Springs Initiatives Profitability Improvement Project

#### **Details of Measures**



## Increasing the value of **Automotive Suspension Springs**

- -Price improvement
- -Price pass-through of inflationary increases

#### **Labor productivity improvement**

- -Productivity improvement based on rising labor costs
- -Thorough manpower saving

#### **Equipment productivity improvement**

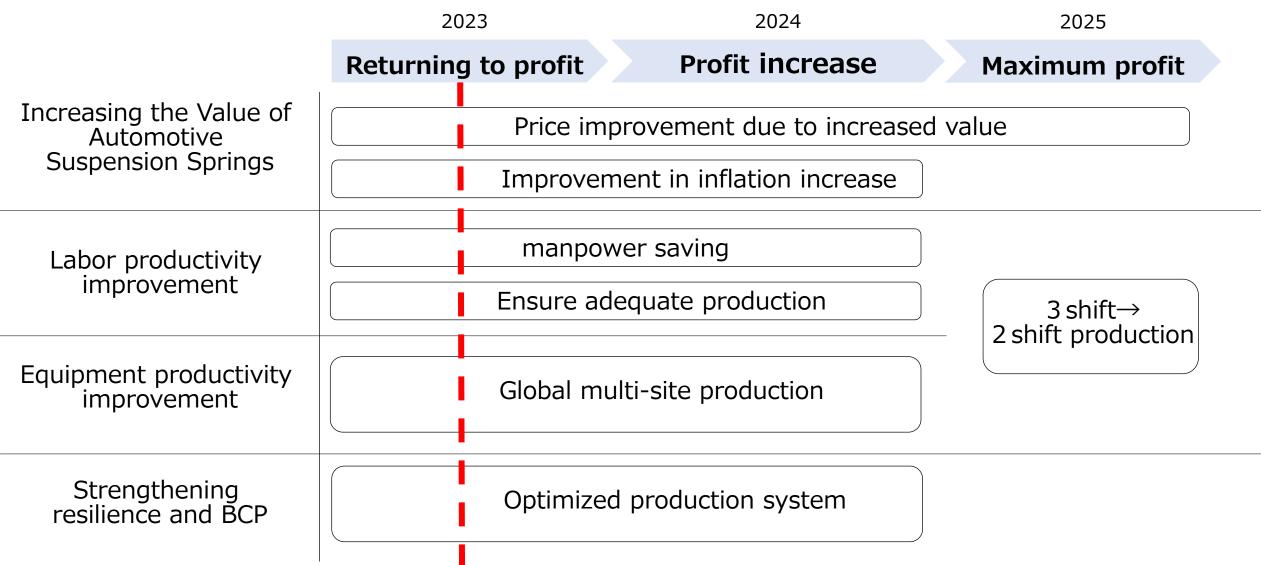
Aim for optimal production between sites based on global utilization rates

#### **Strengthening resilience and BCP**

Review of global supply structure for stable supply and production flexibility

## Roadmap ( At the time of announcement of May 2023 financial results )





#### **Measure Details**



#### Increased the value of Automotive Suspension Springs

Material cost + Auxiliary material cost

► Most of the cost has been recovered , but some under negotiation

#### Labor cost

► Under negotiation

#### Existing product

► Strengthening activities to gain recognition of value

#### New product

► Receive orders at a fair price when changing models

#### **Labor Productivity Improvement**

Productivity improvement based on rising labor costs

Thorough labor saving

► Reduction of labor cost by reducing prototyping time

Reduction of scrap due to improved yield

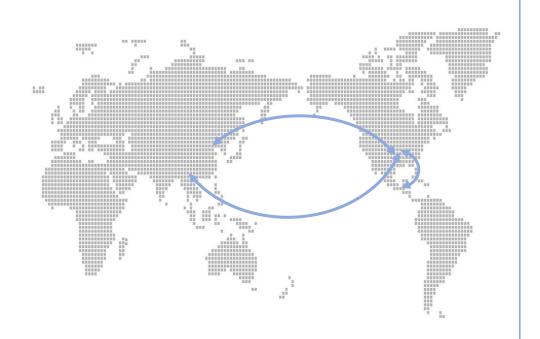
Reduction of auxiliary material costs

#### **Measure Details**



#### Improve facility productivity/Strengthen resilience and BCP

- Stable supply aiming for optimal production between sites based on global capacity utilization ratio
- ▶ <u>15%</u> of North American production switched to other countries





## Automotive Seating Initiatives SUBARU Project

## What's needed to improve customer evaluations and strengthen relationships?



#### Q:Quality

Quality creation from the development and design stages

#### D:Delivery date

Clarification of processes and driving progress by Project Manager

#### C:Cost

Eliminate design rework and achieve cost targets

#### **D**:Development

- -Pursuit of the essence of seating
- -Virtual development

#### Establishment of Project Management (PM) structure

- -Centralized management of the entire project progress and a single point of contact with the client
- -Specialized teams focus on their own tasks to improve efficiency

#### **Customer Evaluation**

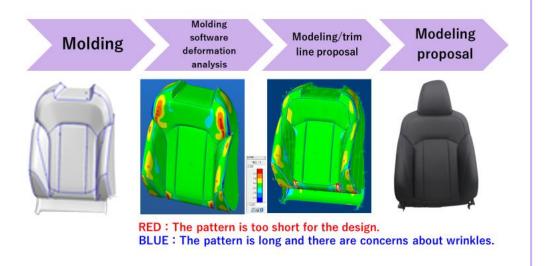
Improve QCDD and respond quickly, leading to evaluation and building even stronger relationships

#### Results for new models



#### **Q**:Quality

- Quality from the development and design stages
- ► Appearance score 14% increase (Compared to previous model)



#### C:Cost

- Eliminate design rework and achieve cost targets
- ► Design changes 35% reduction (Compared to previous model)



#### Results for new models



#### D:Delivery date

- Clarification of processes and driving progress by Project Manager
- ► Smooth start-up by following the cycle below

#### **Project Progress**

Identification of scope of impact Briefing for stakeholders Improve accuracy

#### Promote planning of priority events

Set up preconfirmation meetings Reporting of milestones

#### Planning a recovery plan

As needed across Departments Securing a necessary resources

#### **Changes/Adjustments**

Action Plan **Progress Management** Promotion of stagnant projects

#### D:Development

- Pursuit of the essence of the seat.
- Virtual development
- ► Reduced number of design changes due to Front loading\*

40% test reduced

(compared to previous model)

\*Weave critical quality-related processes into the first half of development





## Motor Core Initiatives Motor Core Project

#### **Details of Measures**



## **Establishment of global production system**

- ~Responding to increased orders~
- -Construction of new production building (Atsugi Plant)
- -Land acquisition (Mexico)
- -Production capacity expansion (China)

#### **Increased die fabrication capacity**

- -Increase and train more designers
- -Expansion of machining facilities
- -Add design and manufacturing base in Thailand

#### <u>Development of</u> <u>new construction methods</u>

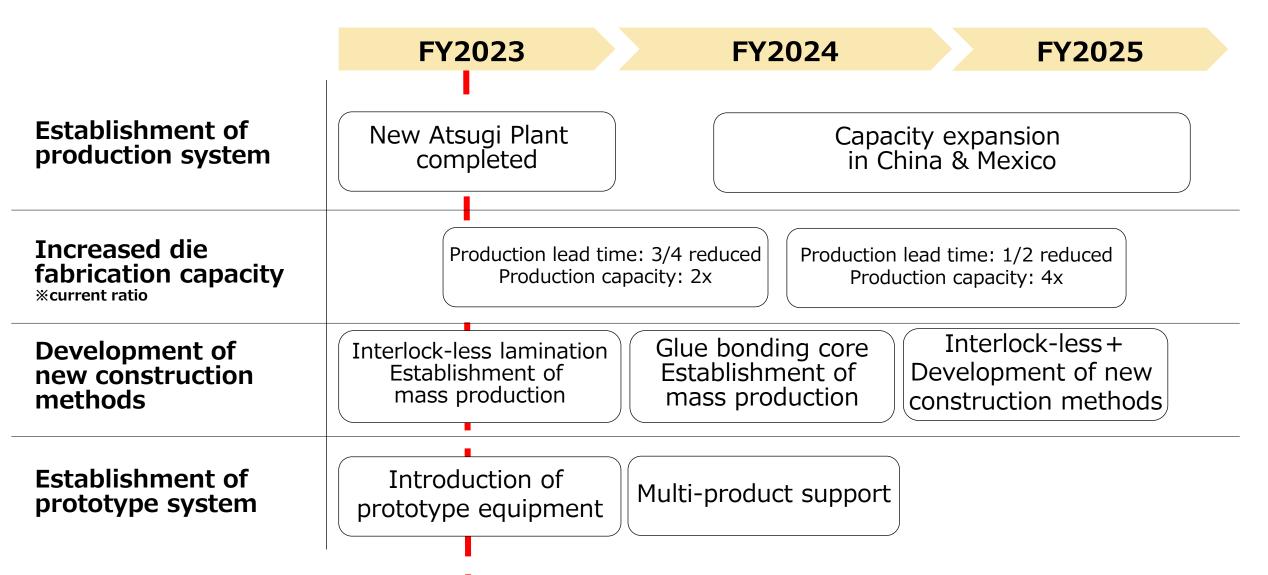
- -Interlock-less lamination
- -Glue bonding core
- -Interlock-less +Development of new construction methods

#### **Proactive response to prototypes**

- -Reinforcement of design system
- -Reinforcement of prototype production system
- -Introduction of dedicated press machine for prototype production

### Roadmap ( At the time of announcement of May 2023 financial results )





### **Progress**



#### **Establishment of Global Production System**

- ~Responding to an increase in orders received~
- Construction of new production building (Atsugi Plant)
  - ► Completed (Mass production scheduled to start in July 2025)
- Land acquisition (Mexico)
  - ▶ New production building to be constructed
- Production capacity expansion (China)
  - ▶ Investment will be postponed due to changes in the market environment.



#### **Increased die fabrication capacity**

- Increase and train more designers
  - ► Completed doubling of design capacity (Atsugi + Thailand)
- Reinforcement of machining facilities
  - ▶Introduction of new machine tools in the second half of 2023
- Die design and manufacturing base added in Thailand
  - ► Die designing is underway in Thailand.

    Parts machining will start in the second half of 2023.



### **Progress**



#### **Development of new construction methods**

- · Interlock-less method
  - ► Establishment of mass production method completed
- Glue bonding core
  - ▶ Trying on a mass production machine
- Interlock-less + new construction methods
  - ► Lightweight and high-strength Amorphous material prototype under evaluation

#### **Proactive response to prototypes**

- Reinforcement of design system
  - ▶ Dedicated project members
- Reinforcement of prototype system
  - ▶ January 2024 voluntary prototype trial
    - System Development
- Introduced press dedicated to prototype
- ► Scheduled for introduction in December 2023

## Reinforcement of organization



#### **Dedicated motor core project members**

Cost Planning and Business Strategy

Equipment

Die

Die · Analysis

Overseas Launch

Patent Strategy

Technology, Design & Evaluation

Quality

▶ Organized by 24 members, with members assigned exclusively to each of the above themes.

#### **Established EV Sales Dept**

▶Organized with 7 members to further expand sales activities.



## Supplementary Materials

#### **Major Overseas Operations**

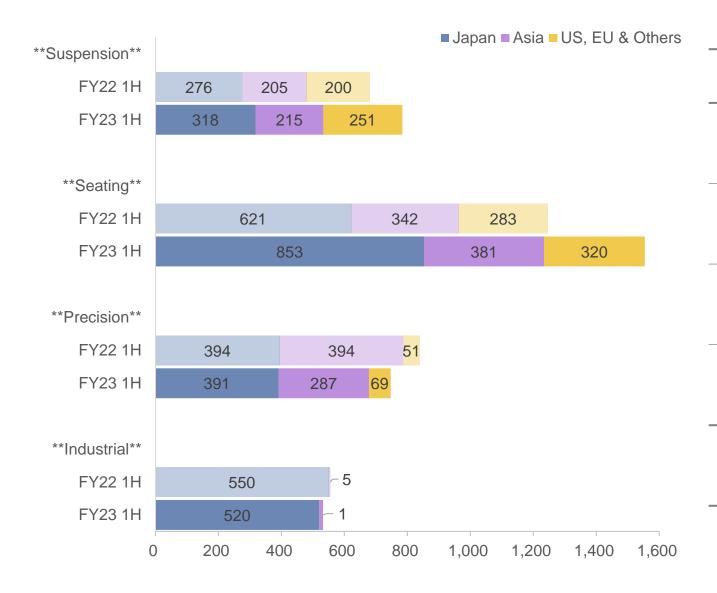




#### **Details of Net Sales (half-year)**



(100 million Yen)



				(100 111	illion renj
		Japan	Asia	America & Europe & Others	Total
Automotive Suspension	FY22 1H	276	205	200	681
Springs	FY23 1H	318	215	251	786
Automotive Seating	FY22 1H	621	342	283	1,247
	FY23 1H	853	381	320	1,555
Precision Springs & Components	FY22 1H	394	394	51	840
	FY23 1H	391	287	69	747
Industrial Machinery & Others	FY22 1H	550	5	-	556
	FY23 1H	520	12	-	532
Total	FY22 1H	1,842	948	534	3,326

2,084

896

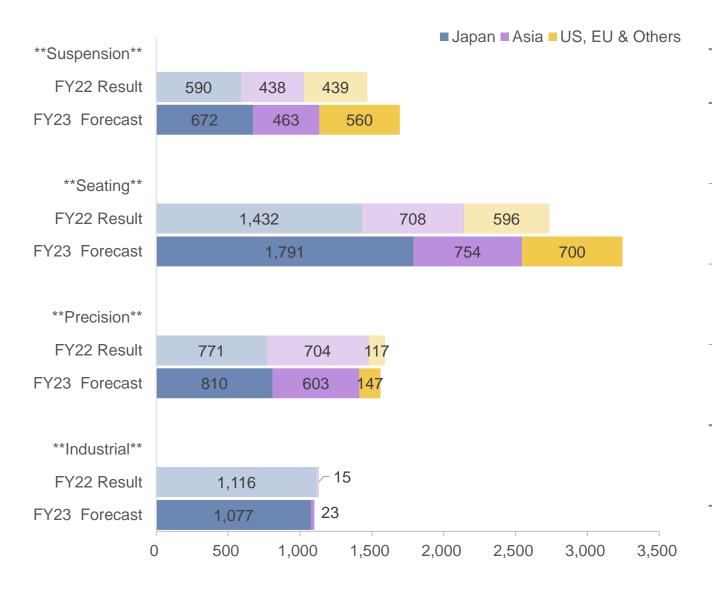
640

3,621

FY23 1H

#### **Details of Net Sales (full-year)**





NHK SPRING CO.,LTD.

(100 million Yen)

				(100 1111	mon ven)
		Japan	Asia	America & Europe & Others	Total
Automotive Suspension	FY22 Result	590	438	439	1,467
Springs	FY23 Forecast	672	463	560	1,695
Automotive	FY22 Result	1,432	708	596	2,736
Seating	FY23 Forecast	1,791	754	700	3,245
Precision Springs & Components	FY22 Result	771	704	117	1,592
	FY23 Forecast	810	603	147	1,560
Industrial Machinery & Others	FY22 Result	1,116	15	-	1,131
	FY23 Forecast	1,077	23	-	1,100
Total	FY22 Result	3,910	1,867	1,153	6,932
	FY23 Forecast	4,350	1,843	1,407	7,600

#### **Assets Status**



(100 million yen)

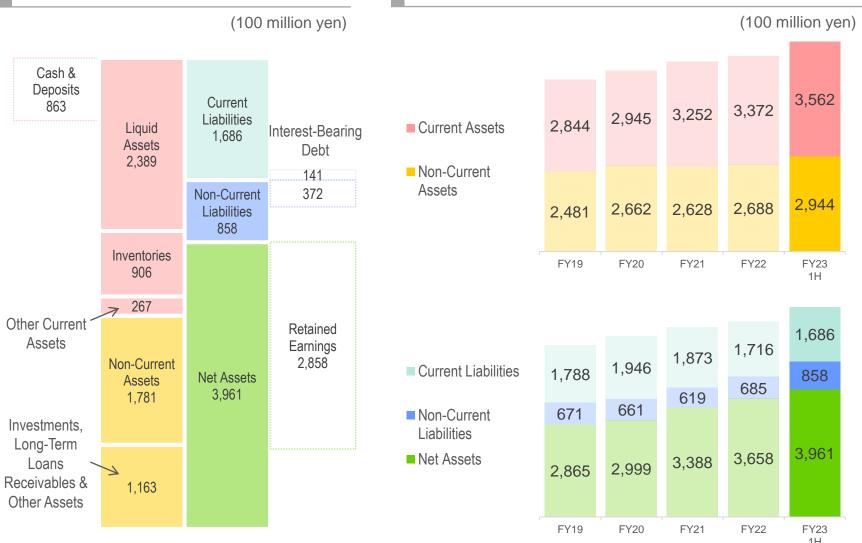
	:	:				(100 million yen)
	FY2019	FY2020	FY2021	FY2022	FY2023 1st half	Increase /Decrease
Total Assets	5,326	5,607	5,880	6,060	6,507	447
Stockholder's Equity	2,709	2,839	3,226	3,492	3,800	308
Stockholder's Equity to Total Assets Ratio	50.9%	50.6%	54.9%	57.6%	58.4%	0.8%
Cash and Bank Deposits	745	793	921	729	863	134
Interest Bearing Debt	581	697	505	500	513	13
Net Cash	164	95	416	229	350	121

#### **Balance Sheet Status**





#### **Balance Sheet Trends**



#### Assets

Cash and deposits, etc. increased due to the impact of a weaker yen, and investment securities increased due to the rise in the market value of listed shares held.

#### Liabilities

Deferred tax liabilities increased due to the rise in the market value of investment securities.

#### **Net Assets**

Net unrealized gains on available-forsale securities and foreign currency translation adjustments increased.

Retained earnings also increased due to the profit attribute to owners of parent.

#### **Capital Investment / Depreciation & Amortization**



by Business Segment

(100 million Yen)

		FY2021	FY2022	FY2023		
		Results	Results	Initial Forecast	Latest Forecast	Variance
Capital Investments	Automotive Suspension Springs	30	45	78	73	-5
	Automotive Seating	50	46	59	58	-1
	Precision Springs & Components	113	121	196	145	-51
	Industrial Machinery & Others	30	58	63	66	3
	Company-wide sharing	7	9	40	39	-1
	Total	232	280	436	381	-55
	Vs. Previous year	-6.9%	20.7%	55.3%	35.7%	
Depreciation	Automotive Suspension Springs	66	66	62	66	4
& Amortization	Automotive Seating	48	55	48	54	6
	Precision Springs & Components	114	113	122	112	-10
	Industrial Machinery & Others	36	35	39	38	-1
	Company-wide sharing	17	17	25	20	-5
	Total	283	288	296	290	-6
	Vs. Previous year	2.9%	2.0%	2.5%	0.4%	

#### Capital Investment / Depreciation & Amortization Cont'd



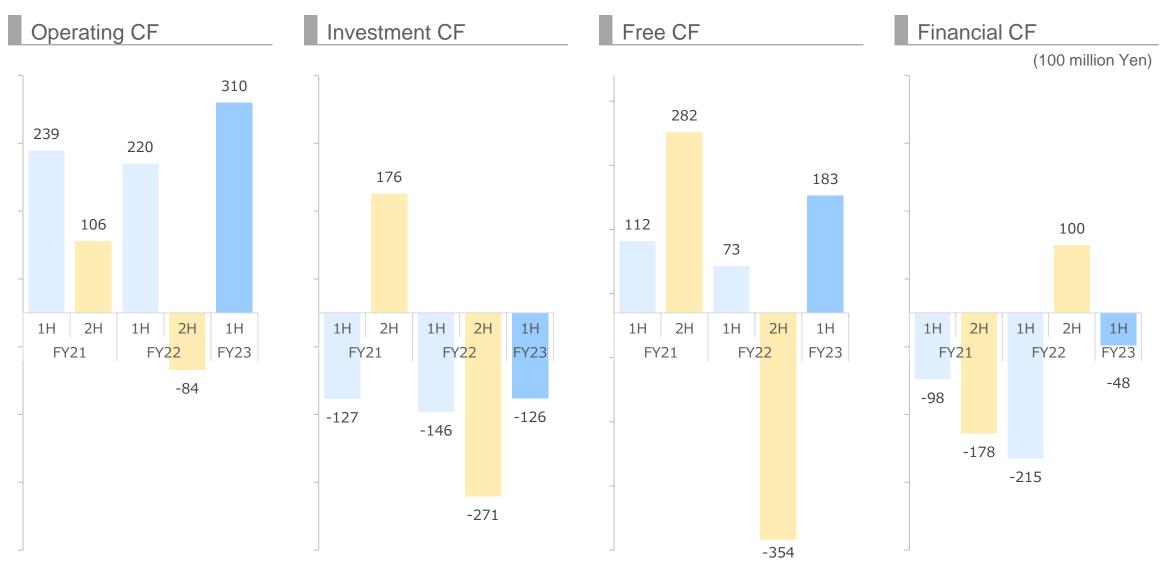
by Region

(100 million Yen)

		FY2021	FY2022		FY2023	
		Results	Results	Initial Forecast	Latest Forecast	Variance
Capital Investments	Japan	130	178	252	242	-10
	Asia	73	61	126	89	-37
	America, Europe & Others	28	40	58	50	-8
	Overseas total	102	102	184	139	-45
	Total	232	280	436	381	-55
Depreciation	Japan	165	149	162	152	-10
& Amortization	Asia	73	86	91	89	-2
	America, Europe & Others	44	52	43	49	6
	Overseas total	117	139	134	138	4
	Total	283	288	296	290	-6

#### Cash Flow Status in each half-year period



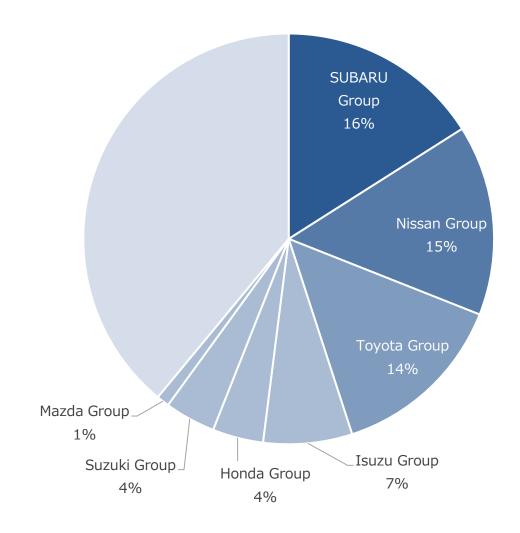


#### Sales Breakdown to Each of the Major Car Makers



Major car makers	FYE'22/3	FYE'23/3
SUBARU Group	15%	16%
Nissan Group	14%	15%
Toyota Group	13%	14%
Isuzu Group	6%	7%
Honda Group	4%	4%
Suzuki Group	4%	4%
Mazda Group	1%	1%
Top 3 Companies	42%	45%
		_

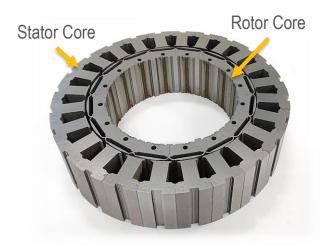




#### **Motor Core**



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 0.25-0.35 mm thickness electromagnetic steel sheets which are stamped out one by one, and are fastened together by caulking or welding.

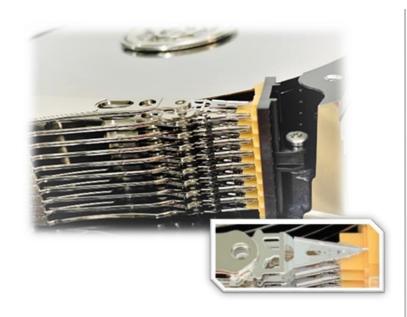
The motor core consists of the Rotor Core, which has a magnet inserted and serves as the rotating part of the motor, and the Stator Core, which is the fixed winding part. Electric power from battery is supplied to the motors through inverters, and Rotor Cores --which contains magnets-- are pulled and 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 200mm and height of around 150mm, 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 --which is the key to the production of Motor Core-- are manufactured in-house, from designing, production to maintenance. In addition to our Atsugi Plant in Japan, NHK is able to produce the same quality motor cores, at our global operations in Mexico and China.

#### Suspension for HDD (Hard Disk Drive) Read-Write Head







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

In these days, there are much more HDDs in the Data Center in the companies ,who operates SNS and/or Video sharing sites --rather than used in Personal computers--; In these Data Centers, Ultra-large capacity HDDs line up with unit of hundreds of thousands.

A lot of CLA type suspensions (Refer Note 1. :hereinafter CLA) are used in these kind of HDDs; for example, in the picture (left), 18 pieces of CLA are used in 1 HDD equipment. The CLA is an Ultra-small actuator, built into the tip of the suspension, which moves read-write head. The CLA types can make finer movement at higher speed, rather than DSA type suspensions (Refer Note 2. :hereinafter DSA), a conventional product with a small actuator built into the center.

If you compare it to a human part, DSAs use up to the wrist, and CLAs use up to the fingertips; It has become an indispensable product for ultra-large capacity HDDs, by improving positioning accuracy and speed, with speedy & fine movements.

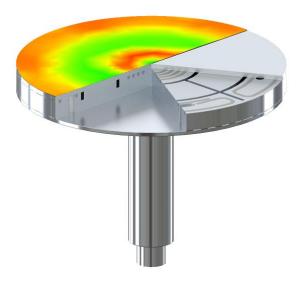
NHK Spring had started CLA mass-production from January 2016 --first in the world– and have top share of the world.

\*Note 1 : CLA stands for "Co-Located Actuators" \*Note 2 : DSA stands for "Dual Stage Actuators"

#### Parts for Semiconductor Manufacturing Equipment



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.

Our stage heaters, which are mainly made of metal such as aluminum alloy and stainless steel, are broadly adopted in film deposition processes such as CVD and ALD\*, and they make it possible to realize a complicated internal structure by the advanced bonding technology that we have cultivated over many years.

\*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.

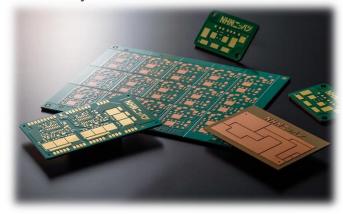
Regarding to etching equipment, we are manufacturing important stage parts called cooling plates, on which silicon wafers are loaded during process. Most of them are made from aluminum alloy; NHK have the strength of integrated production --from material procurement to precision processing and ceramic 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.

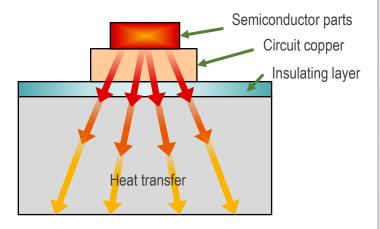
#### IMS (Integrated Metal Substrate)



#### MS with high heat dissipation and high reliability insulation layer



#### Cross-sectional structure of IMS



Metal base (Iron, Aluminum, Copper)

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 heatdissipating 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.



# NHK SPRING CO.,LTD.

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