

**Results Briefing for the First
Six-month of the Fiscal Year Ending
December 31, 2023
(FY2023/12 H1)**

**Nabtesco Corporation
August 8, 2023**

The forecast data presented herein reflects assumed results based on conditions that are subject to change.
Nabtesco Corporation does not make representations as to, or warrant, in whole or in part, the attainment or realization of any of the forecasted results presented in this document.
Numerical figures presented herein are rounded down to the nearest whole unit for monetary value and rounded off to one decimal place for percentage.
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1. Results for FY2023/12 H1

2. Outlook for FY2023/12 Full Year

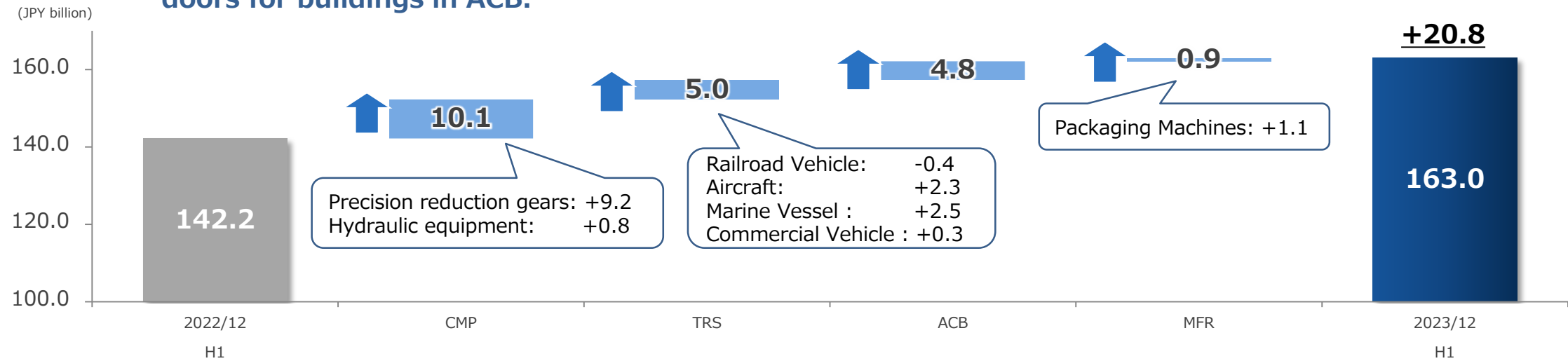
3. Topics

1. Results for FY2023/12 H1

Summary for the FY2023/12 H1 Results (YoY)

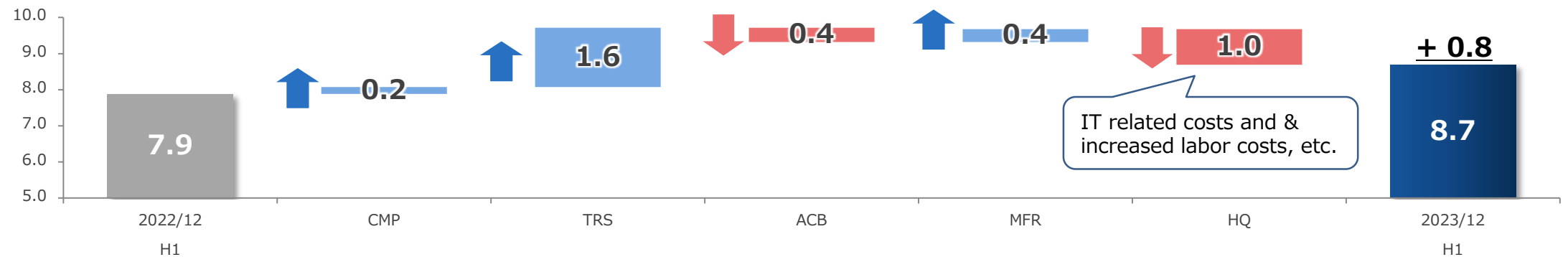
Sales

Sales increased in all segments, with the strong demand of precision reduction gears for industrial robots due to EV-related investment, the recovery of demand in TRS, and the favorable demand of automatic doors for buildings in ACB.



O.P.

Although there was an increase in profit due to higher sales, the increase in profit was limited, due to higher procurement costs at CMP caused by soaring utility costs, as well as higher labor costs to establish a production capacity in anticipation of higher demand for precision reduction gears, and a one-off cost increase in ACB.



CMP: Component Solution Segment TRS: Transport Solution Segment ACB: Accessibility Solution Segment MFR: Manufacturing Solution Segment

Summary for the FY2023/12 H1 Results 【P/L】

Final valuation gain confirmed with the completion of the sale of HDS*¹.

The dividend amount remained unchanged, despite a decrease in profit compared to the initial plan.

(JPY billion)	2022/12 H1 result (A)	2023/12 H1 plan (B)	2023年12月期 H1 result (C)
Sales	142.2	161.0	163.0
O.P.	7.9	10.5	8.7
Operating profit margin	5.5%	6.5%	5.3%
Finance Income and Cost	-14.7	0.9	4.5
(Revaluation share of HDS)	-16.6	0.9	3.5
Equity in earnings of affiliates	1.1	1.3	2.3
Profit before tax	-5.7	12.7	15.5
Net profit* ²	-5.1	7.4	9.5
Total basic earnings per share (JPY Yen)	-42.56	61.67	78.74
DPS (JPY Yen)	39	40	40

YOY Variation (C-A)	Plan Variation (C-B)
20.8	2.0
0.8	-1.8
-0.2pt	-1.2pt
19.2	3.6
20.1	2.6
1.2	1.0
21.2	2.8
14.6	2.1

*¹ HDS: Harmonic Drive Systems Inc.

*² Net profit attributable to owners of the parent

Cash and cash equivalents decreased due to investments in M&A and capital expenditures, while non-current assets increased. The sale of HDS*¹ share was completed in 2Q.

(JPY billion)	2022/12 (As of December 30, 2022)	2023/12 Q2 (As of June 30, 2023)	Variation	
Assets	459.3	425.5	-33.8	
(Cash and cash equivalents)	124.4	103.7	-20.7	-Acquisition of Copas Systèmes -Settlement of sale of HDS share -Dividends paid/income taxes paid
(Trade receivable)	79.4	73.4	-6.0	
(Inventories)	49.2	60.4	11.2	
(Assets held for sale)	34.0	0.0	-34.0	-Decrease due to completion of the sale of HDS
(Other non-current financial assets)	163.8	180.1	16.3	
Liabilities	196.1	151.0	-45.0	
(Borrowings)	20.3	22.7	2.4	-Increase in assets due to capital investment -Increase in goodwill due to the acquisition of Copas Systèmes
(Other non-current financial liabilities)	47.3	0.1	-47.2	
(Income taxes payable and deferred tax liabilities)	15.8	9.0	-6.8	
Total equities	263.2	274.4	11.2	
(Treasury shares)	-4.6	-4.5	0.1	-Decrease in financial liabilities due to completion of sale of HDS
(Non-controlling interests)	14.5	14.5	-0.1	
Equity attributable to owners of parent	248.7	260.0	11.3	


























Ratio of equity attributable to owners of parent :

54.1%

61.1%

*¹ HDS: Harmonic Drive Systems Inc.

2. Outlook for FY2023/12 Full Year

Business			Market	Market trend	Demand outlook for FY2023/12 H2
CMP	Precision reduction gears		During the 2Q, global demand for industrial robots, including China, began to decline due to a drop in demand related to EVs. Customers are reducing production due to an increase in inventories of industrial robots. Machine Tool Order (June) : YoY -21% QoQ +2% (Source: Japan Machine Tool Builders' Association)		
	Hydraulic equipment		Demand in the Chinese market is expected to remain sluggish. H1 sales of construction machinery in China: YoY-24% (Source: China Construction Machinery Association)		
			Demand in Japan, Europe, the US and South-East Asia is expected to remain at the same level as the previous year. H1 sales of construction machinery (domestic & export): YoY + 33% (Source: Japan Construction Equipment Manufacturers Association)		
TRS	Railroad Vehicle Equipment		Despite strong domestic MRO demand, investment in new vehicles continues to be restrained. Investment in Chinese railways is expected to be stagnant.		
	Aircraft Equipment		Recovery trend in both civilian and defense demand		
	Commercial Vehicle Equipment		Despite the shortage of electronic components is on the way to being resolved, other component shortage are causing delays in the production of commercial vehicles.		
	Marine Vessel Equipment		Shipbuilding and MRO markets is expected to remain strong.		
ACB	Automatic Doors		Orders are expected to increase due to the steady demand for MRO and redevelopment projects in Tokyo Metropolitan Area. Demand for platform doors is also expected to be strong due to the implementation of the Barrier-Free Access Law.		
MFR	Packaging Machines		Although some domestic and overseas capital investment will be postponed, demand is expected to remain strong, particularly in the food industry due to the growing needs for automation and labor saving.		

1

Sales: downward revision

Consolidated sales: 330.0 billion yen

(compared to the initial plan: -9.0 billion yen, YoY: +21.3 billion yen)

【Factors of the downward revision】

Decrease in demand for precision reduction gears due to rapid decline in demand for large industrial robots in China and other countries since June.

2

O.P.: downward revision

Consolidated O.P.: 19.0 billion yen

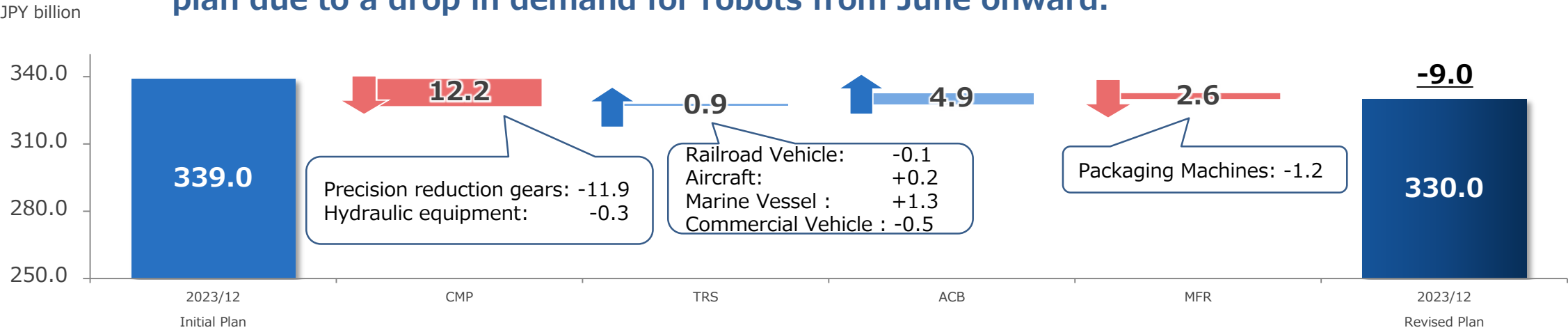
(compared to the initial plan: -7.2 billion yen, YoY: -0.9 billion yen)

【Factors of the downward revision】

- Decrease in income due to lower sales in CMP
- Higher-than-expected procurement costs mainly in CMP

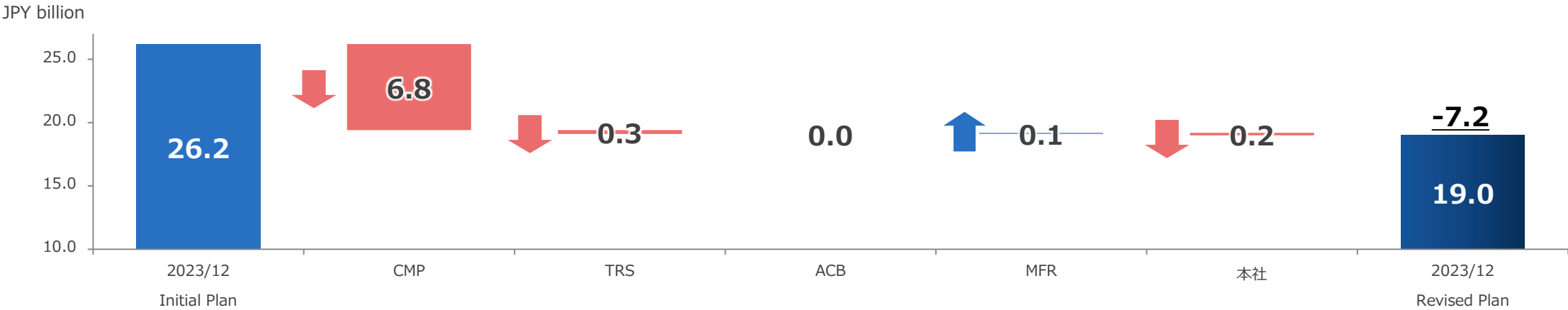
Sales

Despite positive factors such as acquisition effects in marine vessel equipment and ACB as well as foreign exchange effects, sales of precision reduction gears declined from the initial plan due to a drop in demand for robots from June onward.

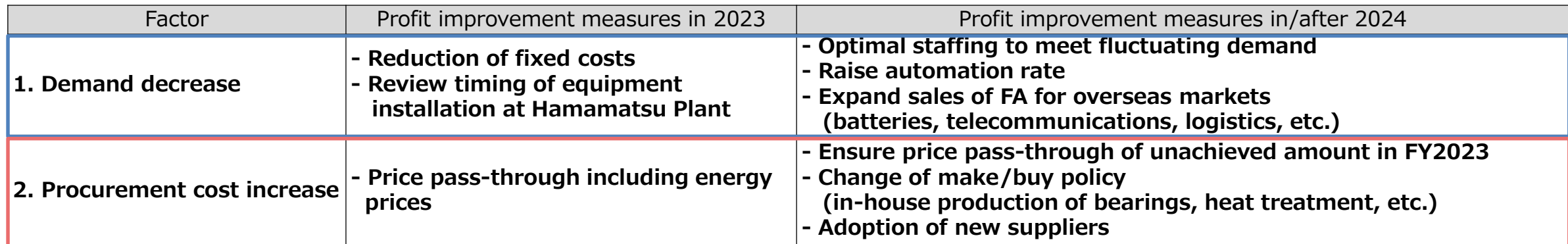


O.P.

In addition to decrease in income due to lower sales, O.P. decreased from the initial plan mainly due to lower demand for FA in CMP and higher-than-expected procurement costs.



CMP: Component Solution Segment TRS: Transport Solution Segment ACB: Accessibility Solution Segment MFR: Manufacturing Solution Segment



Net sales were revised down mainly due to lower demand for precision reduction gears for industrial robots in China and inventory adjustments at industrial robot manufacturers. Operating income was revised down due to lower sales at CMP and higher-than-expected procurement costs. The annual dividend plan was left unchanged.

(JPY billion)	2022/12 Result (A)	2023/12 Initial Plan (B)	2023/12 Revised Plan (C)
Sales	308.7	339.0	330.0
O.P.	18.1	26.2	19.0
(O.P.M.)	5.9%	7.7%	5.8%
Financial Income and cost	-5.1	0.9	4.4
(Revaluation of HDS^{*1} shares)	-5.6	0.9	3.5
Income before tax	15.8	29.2	27.0
Net profit^{*2}	9.5	19.5	17.8
ROIC	4.6%	6.5%	4.7%
DPS (JPY yen)	78.00	80.00	80.00
Payout ratio	98.9%	49.2%	53.9%

YOY Variation (C-A)	Plan Variation (C-B)
21.3	-9.0
0.9	-7.2
-0.1pt	-2.0pt
9.5	3.5
9.1	2.6
11.2	-2.2
8.3	-1.7
0.1pt	-1.8pt

*1 HDS: Harmonic Drive Systems Inc.

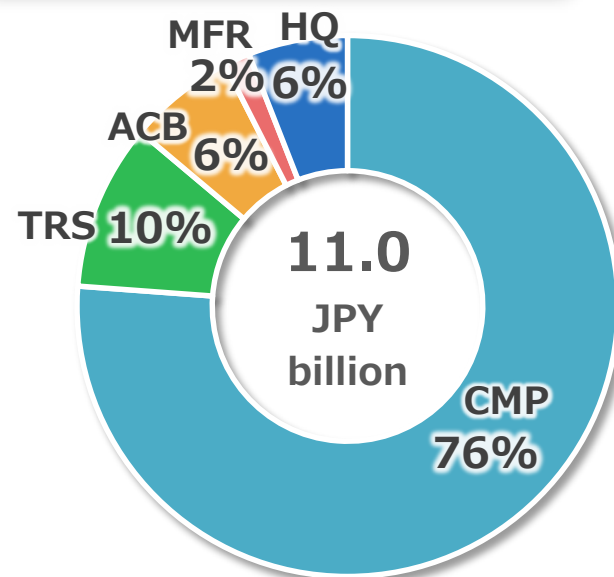
*2 Net profit attributable to owners of the parent

Timing of capital investment postponed due to the decline in demand for precision reduction gears.

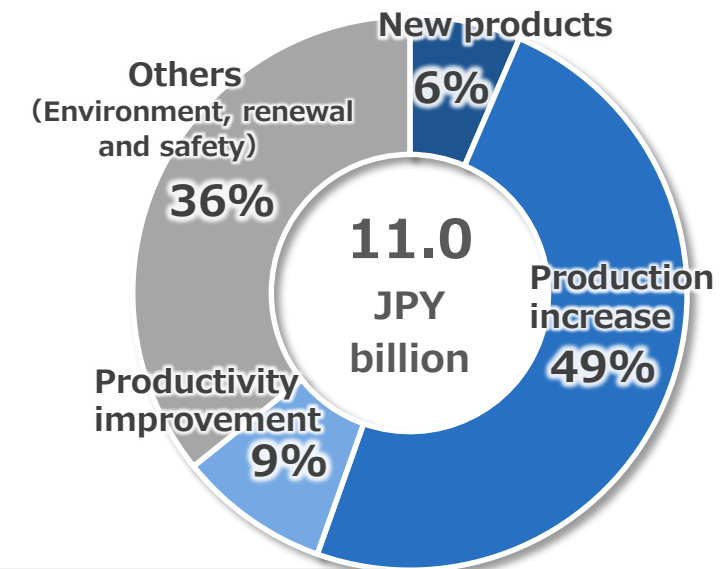
(JPY billion)	2022/12 H1 (A)	2023/12 H1 (B)	YoY (B-A)
CAPEX	7.0	11.0	4.0
R&D	5.4	5.4	0.0
Depreciation	7.1	7.4	0.3

2022/12 Full-year	2023/12 Revised Plan (C)	2023/12 Initial Plan (D)	2023/12 Plan Variation (C-D)
18.8	34.5	39.4	-4.9
10.9	12.9	13.9	-1.0
14.5	15.3	15.8	-0.5

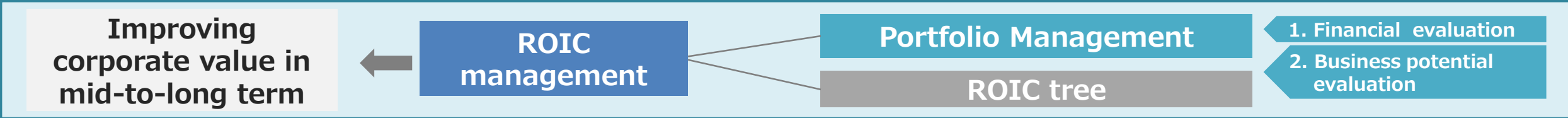
2023/12 H1 Results



Precision Reduction Gears
-Construction of Hamamatsu Plant
-Renewal of facilities



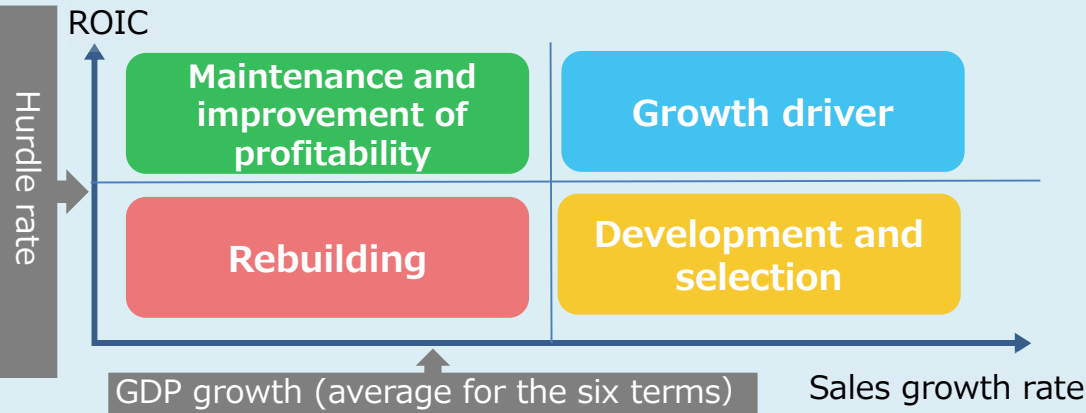
3. Topics



【Assessment】

1. Financial evaluation:
Capital efficiency (ROIC) + Sales growth rate

Evaluate whether or not each of the units has generated returns beyond the cost of capital and has achieved sustainable growth



2. Business potential evaluation: Industry attractiveness + Strength of the Company + ESG-related risks/opportunities

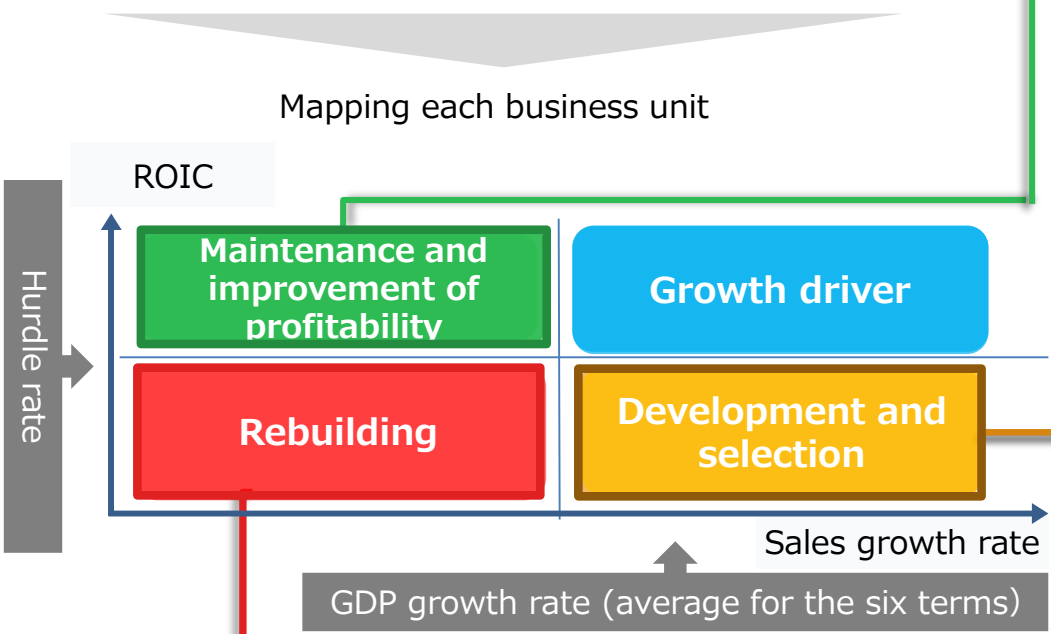
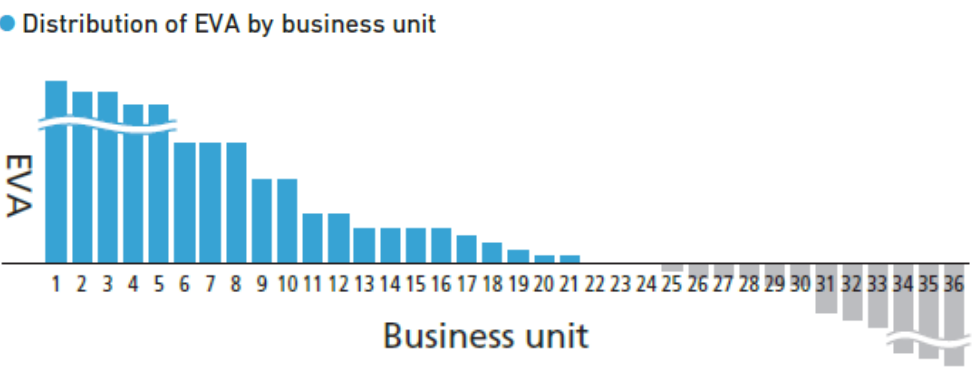
- Evaluate whether or not each of the business units has objective market potential and possibilities that cannot be identified through financial evaluation
- Evaluate ESG-related risks and opportunities posed to the business unit

Industry attractiveness	<ul style="list-style-type: none">• Market size• Growth potential• Attractiveness of the industry
Strength of the Company	<ul style="list-style-type: none">• Market share, competitive advantage• Inimitability• Brand value• Synergies with other businesses
ESG-related risks	<ul style="list-style-type: none">• Environment (Amount of CO₂ emissions and others)• Social (Occupational accidents and others)• Governance (Frequency of product defect-related incidents and others)
ESG-related opportunities	<ul style="list-style-type: none">• Initiatives implemented to solve social challenges through business

Businesses to be evaluated: Categorize all of the businesses into 36 business units

The Board of Directors discuss the evaluations in 1 & 2

Visualize the current situation with portfolio management analysis



Clarification of actions

Jan. 2023 : Acquisition of Copas Systèmes

Acquired Copas Systèmes, an European automatic door distributor, to stablish a value chain that will serve as a revenue base

Jul. 2023 : Deep Sea technologies became a wholly owned subsidiary of the Company

Nabtesco	Marine Engine Control System	=	<ul style="list-style-type: none">- Accelerate digital transformation (DX) in maritime industry- Contributing to autonomous vessel operation and fuel saving by utilizing optimal operation control algorithms
Deep Sea	Optimal routing and speed proposals by world-leading AI technology		

Using as a driving force for DX across the Group

Jul. 2023 : Intrapreneurship program

The projects to be commercialized were selected in the first business contest.

Jul. 2023 : Transfer all shares of TS Precision Co., Ltd.

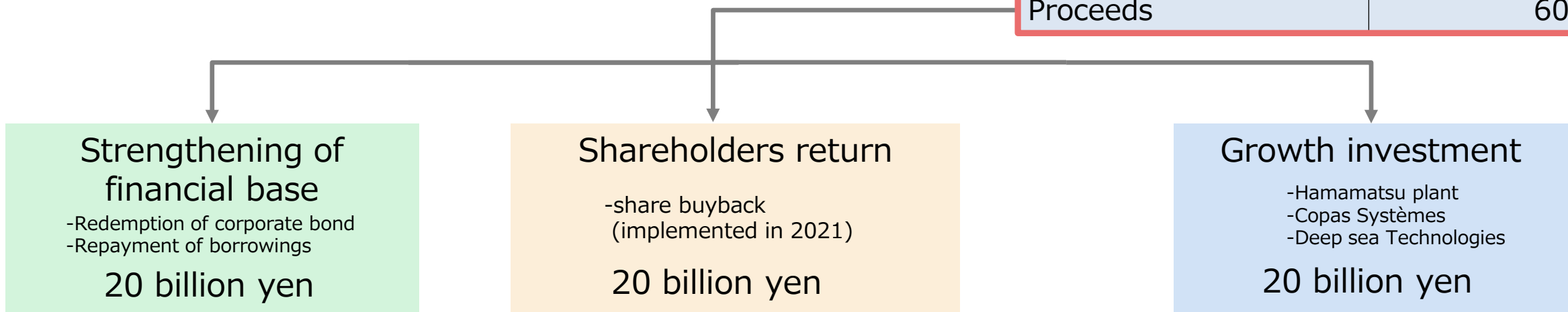
Transferred all shares of TS Precision to Maruka Co., Ltd. which has customers and sales network that our group does not have, could be the best owner

Appendix

Total cash proceeds from the sale of HDS shares: 60.8 billion yen (after tax)

Used for strengthening the financial base, shareholders returns and growth investments

Phase	Duration	Number of shares	Sales price (billion yen)
Phase 1	Feb. 10 th 2021~Jul. 11 th 2022	9,160,200	49.4
Phase 2/part.1	Nov. 16 th 2022~Feb. 1 st 2023	4,580,100	17.9
Phase 2/part.2	Nov. 16 th 2022~Jun. 23 th 2023	4,580,100	19.6
Subtotal			86.9
			Tax 26.1
			Proceeds 60.8



■ FOREX rate

	2022/12 H1 results	2022/12 Full Year results	2023/12 H1 results	2023/12 Initial plan	2023/12 Revised plan
USD	¥124.52	¥131.12	¥136.54	¥125.00	¥125.00
RMB	¥19.12	¥19.46	¥19.54	¥18.50	¥18.50
EUR	¥135.16	¥136.43	¥147.93	¥130.00	¥140.00
CHF	¥131.83	¥136.81	¥149.75	¥135.00	¥145.00

■ FOREX sensitivity (This represents the effect to be expected on operating profit if the exchange rate fluctuates by one yen)

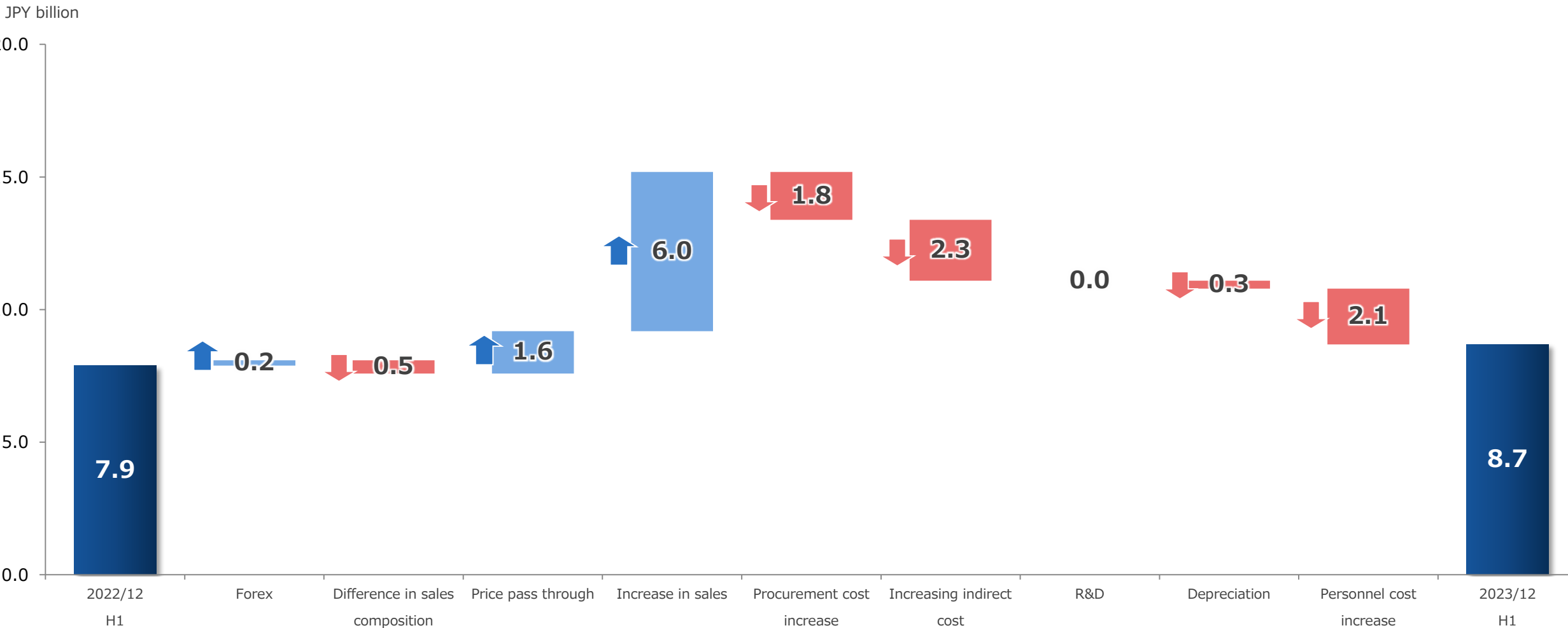
(Million Yen)

	2023/12 H1 results	
	Sales	O.P.
USD	67	30
RMB	988	-66
EUR	Minimal	Minimal
CHF	110	Minimal

2023/12 Revised plan	
Sales	O.P.
179	57
1,531	162
82	Minimal
246	Minimal

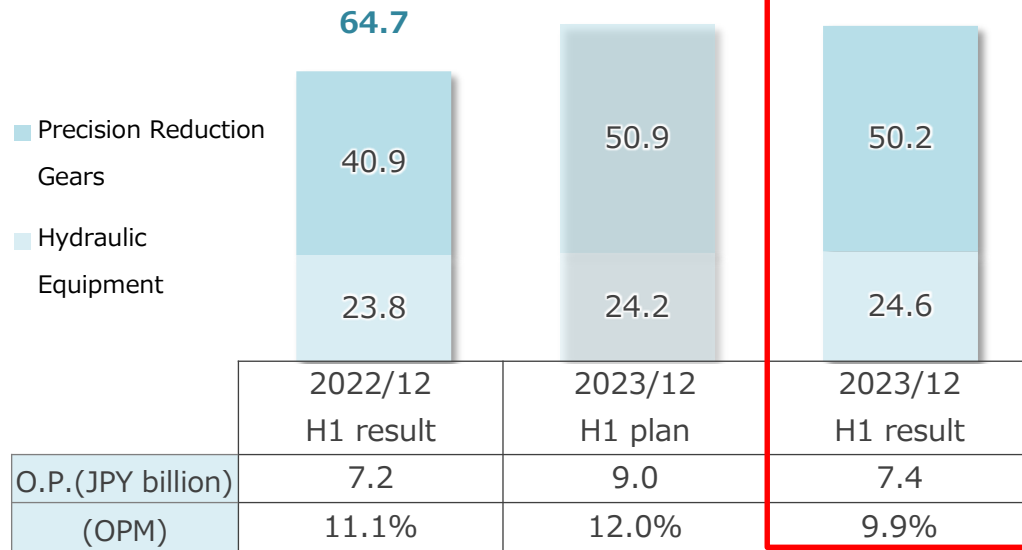
Results details for FY2023/12 H1

Analysis of Factors Caused Changes in O.P. (FY2022/12 H1 Results vs. FY2023/12 H1 Results)



Component Solution Segment (CMP)

Sales (JPY billion)



[Sales]

• Precision reduction gears:

Increased YoY due to strong demand for industrial robots related to EV-investment.

• Hydraulic equipment:

Increased YoY due to remaining strong demand from Japan, Europe, and the U.S, despite the continued sluggish demand in China

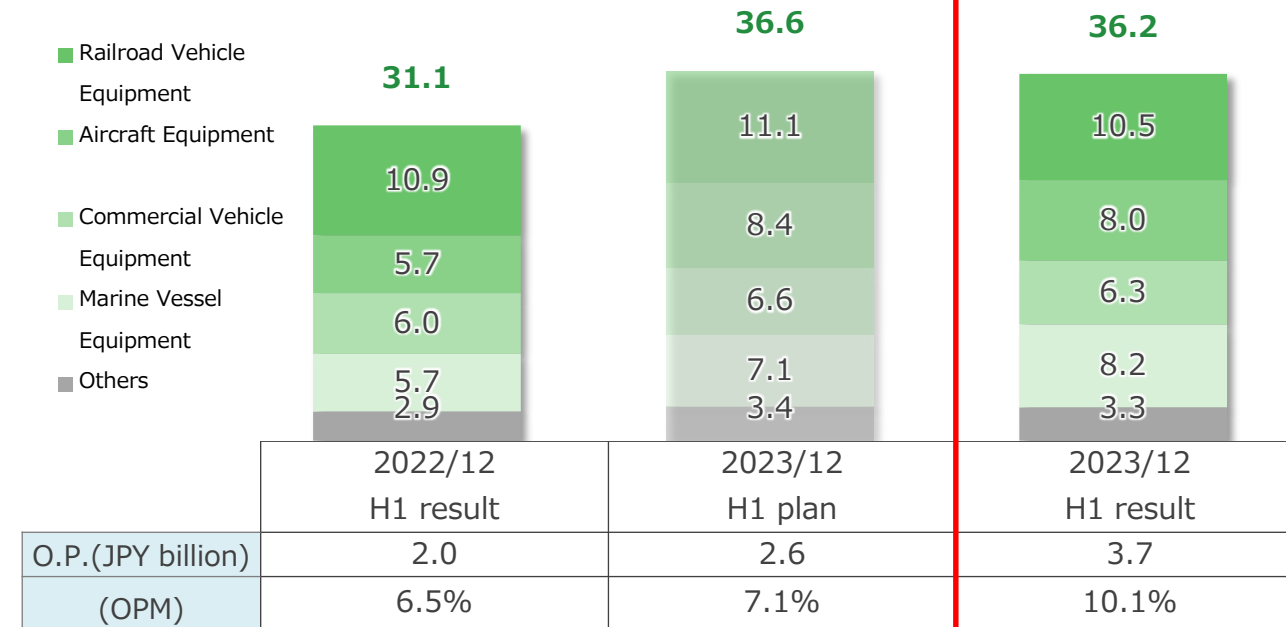
[Segment O.P.]

Same level as the previous year due to the impact of higher procurement costs and labor costs resulting from increased utility costs.

Transport Solution Segment (TRS)

Sales (JPY billion)

■ Railroad Vehicle Equipment
 ■ Aircraft Equipment
 ■ Commercial Vehicle Equipment
 ■ Marine Vessel Equipment
 ■ Others



[Sales]

• Railroad Vehicle Equipment:

Decreased YoY due to sluggish domestic demand for new vehicles

• Aircraft Equipment:

Increased YoY due to recovering in demand from both the Ministry of Defense and commercial aircrafts.

• Commercial Vehicle Equipment:

Increased YoY due to easing the impact of semiconductor shortages

• Marine Vessel Equipment:

Increased YoY due to shipbuilding and shipping market conditions remained strong

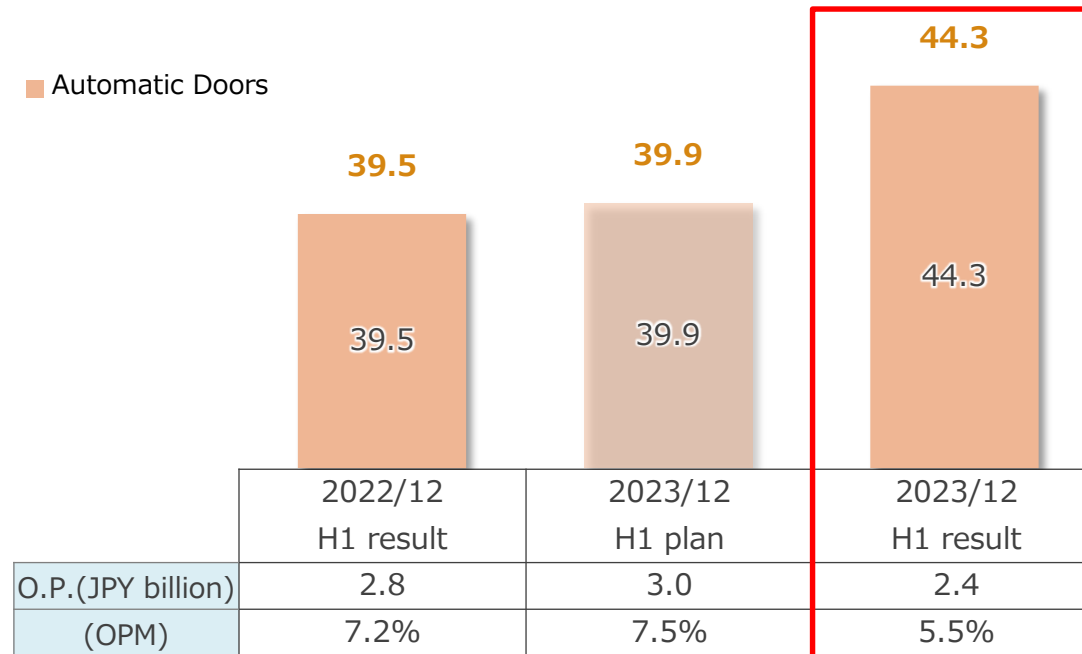
[Segment O.P.]

Increased YoY due to higher sales and MRO sales expand

Accessibility Solution Segment (ACB)

Sales (JPY billion)

Automatic Doors



[Sales]

• Automatic Doors:

Increased YoY due to the elimination of shortages of electronic components, strong demand for automatic doors in Japan and forex effects

[Segment O.P.]

Decreased YoY due to the recognition of one-off costs in overseas platform door projects.

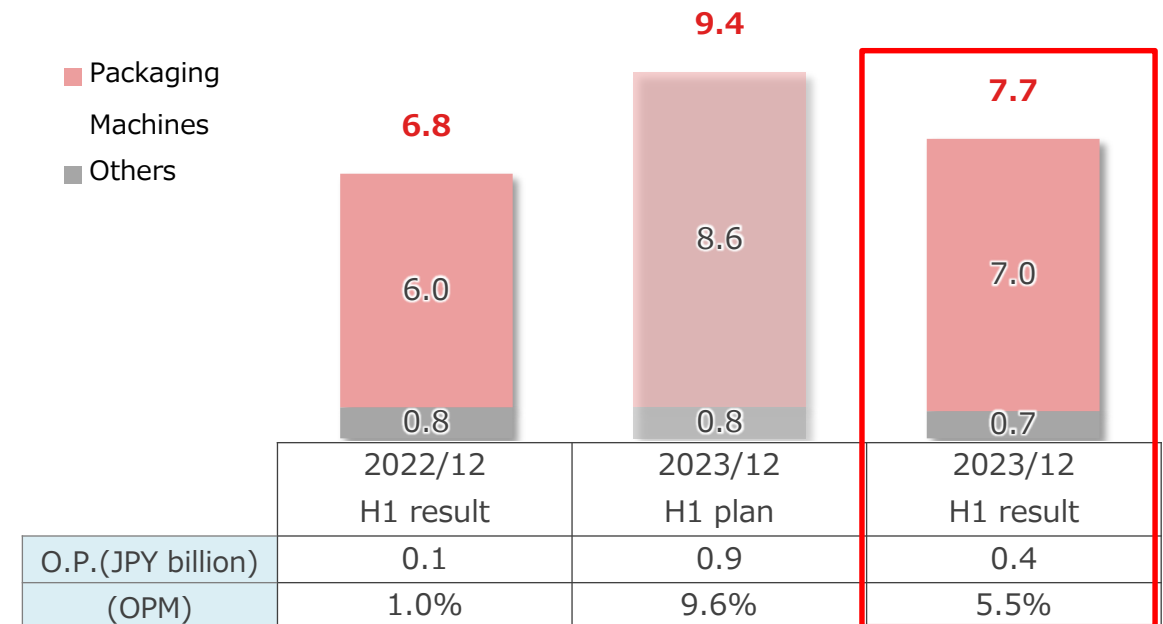
Manufacturing Solution Segment (MFR)

Sales (JPY billion)

Packaging

Machines

Others



[Sales]

• Packaging Machines:

Increased YoY as production delays caused by shortages of electronic components have eased.

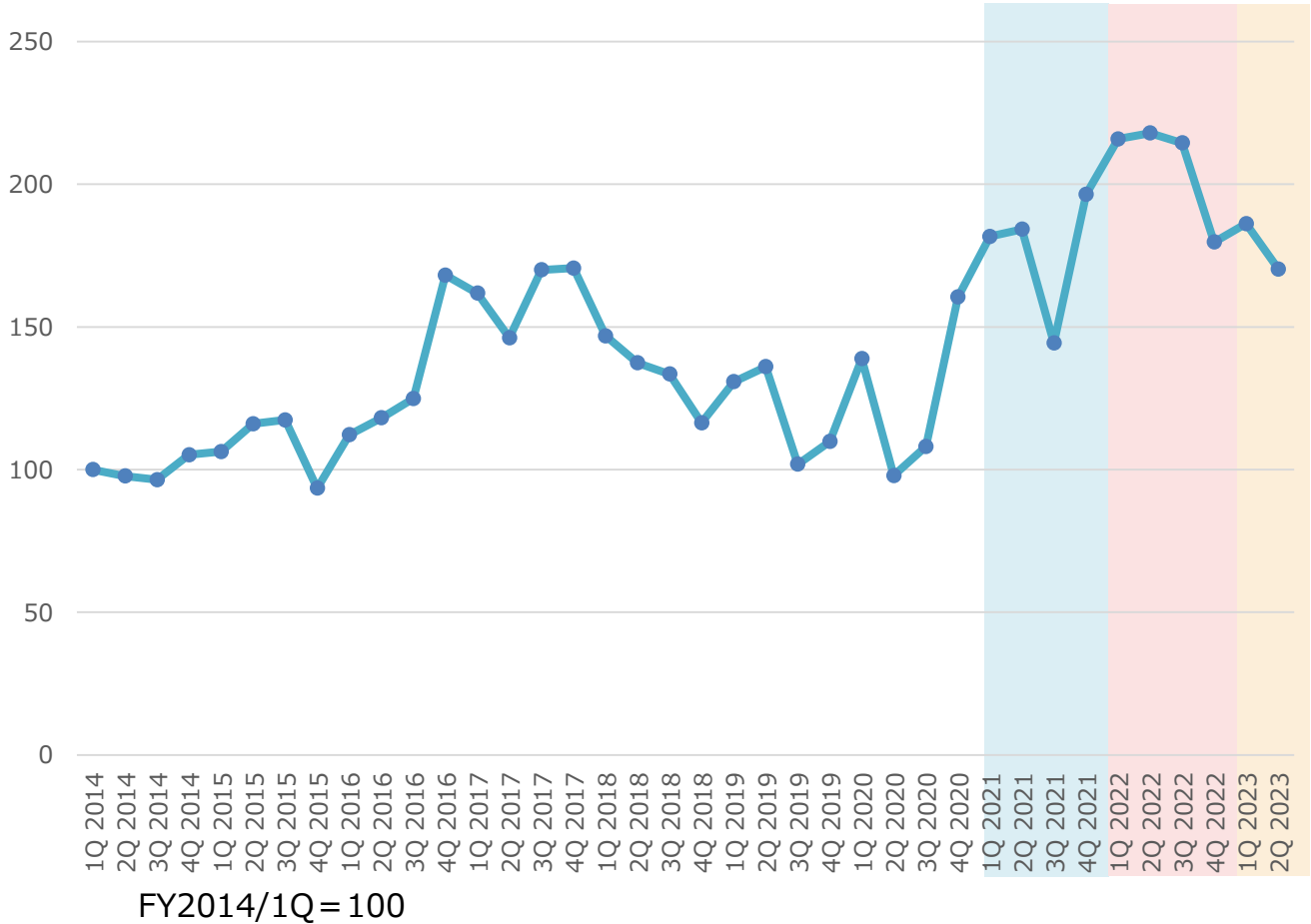
[Segment O.P.]

Increased YoY due to the higher sales

FY2023 Q2 consolidated orders

FY2023 Q2 orders: **QoQ-9%, YoY-22%**

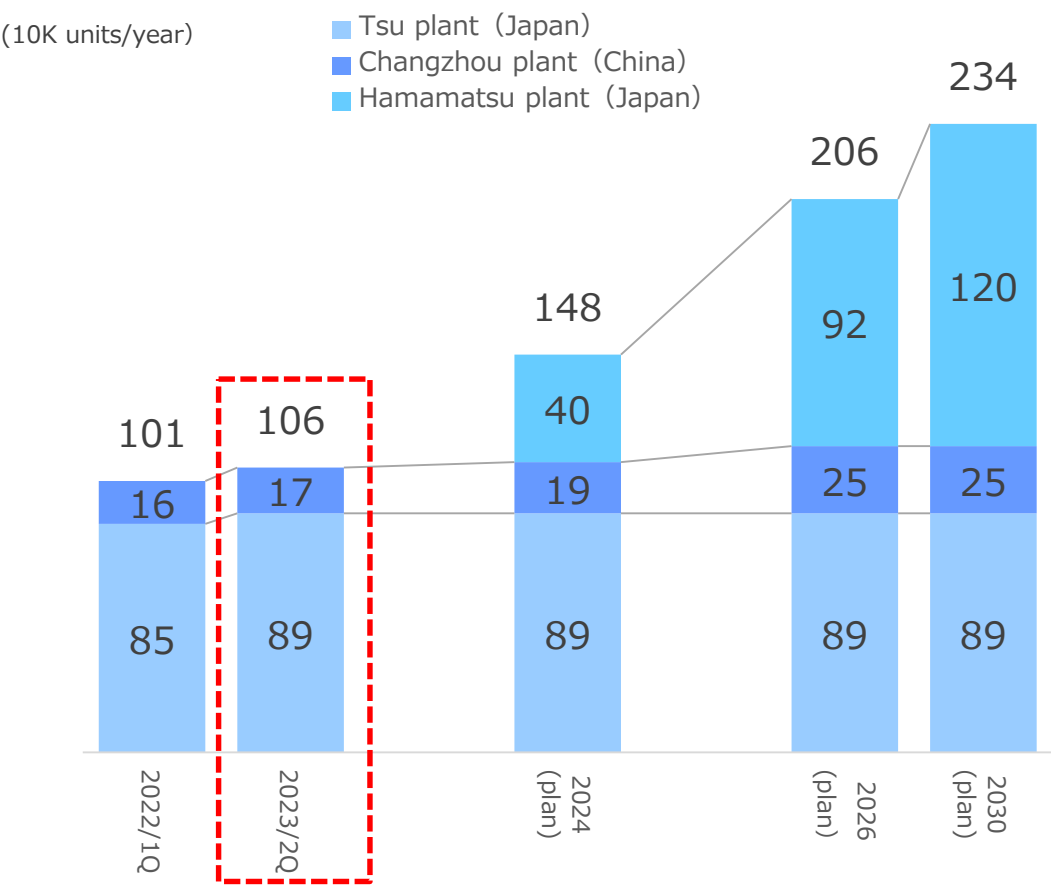
Orders received in FY2023 2Q decreased due to a slowdown in capital investment for EVs in China and other markets.



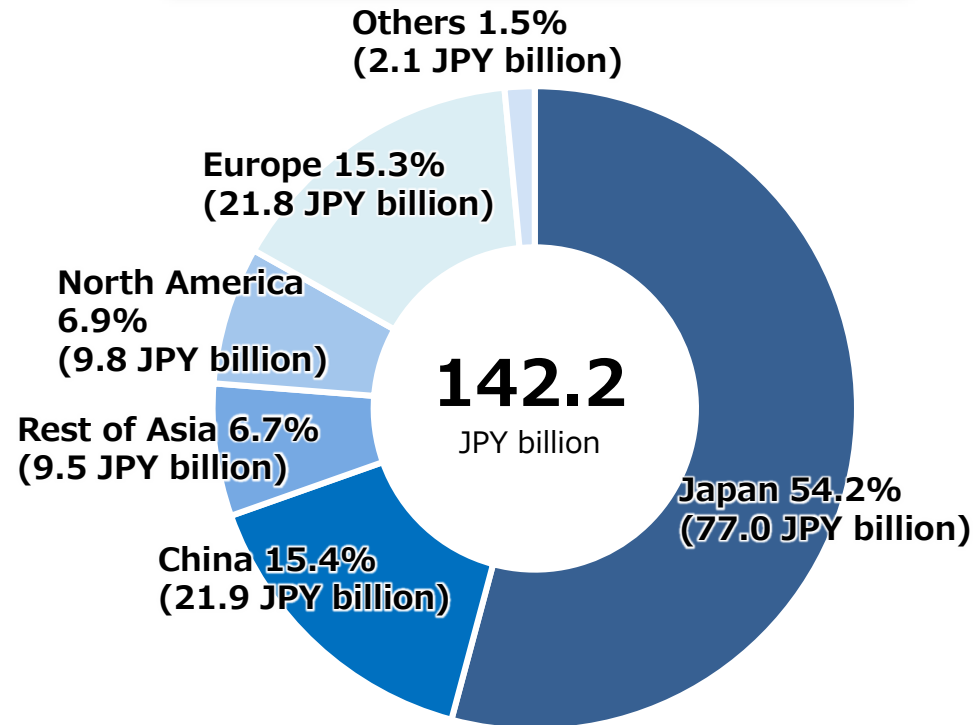
FY2023 Q2 annual production capacity in global:
1.06 million Units.

FY2023 Q2 Utilization ratio

Japan Plant (Tsu) : 110% @890K units/year
China Plant (Changzhou) : 105% @170k units/year

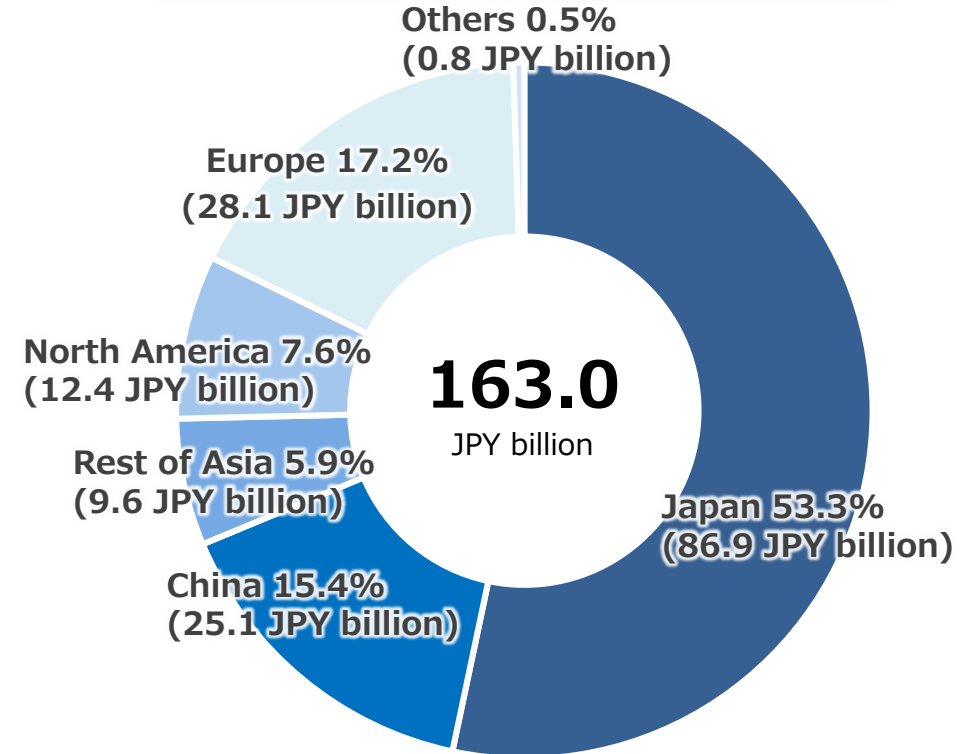


2022/12 H1 Results



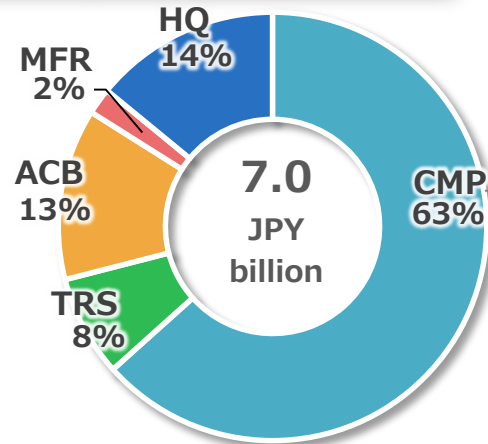
Overseas sales	65.2 JPY billion
Ratio	45.9%

2023/12 H1 Results

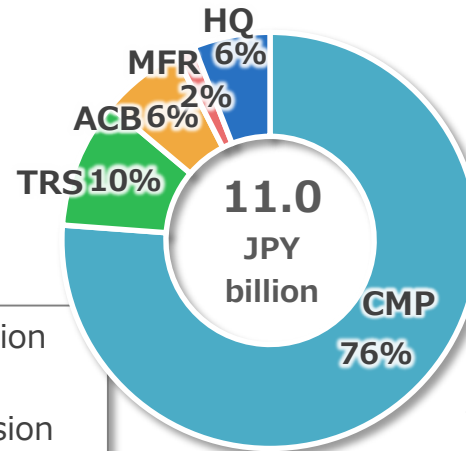


Overseas sales	76.1 JPY billion
Ratio	46.7%

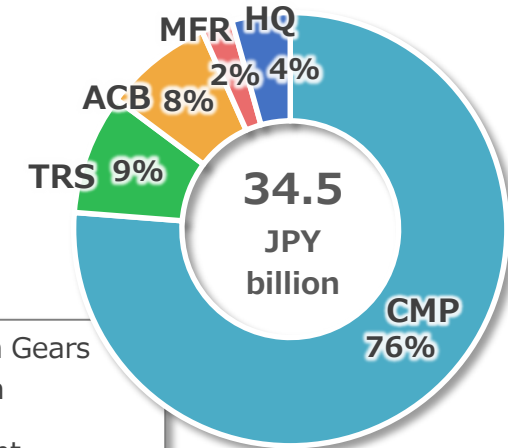
By Segment



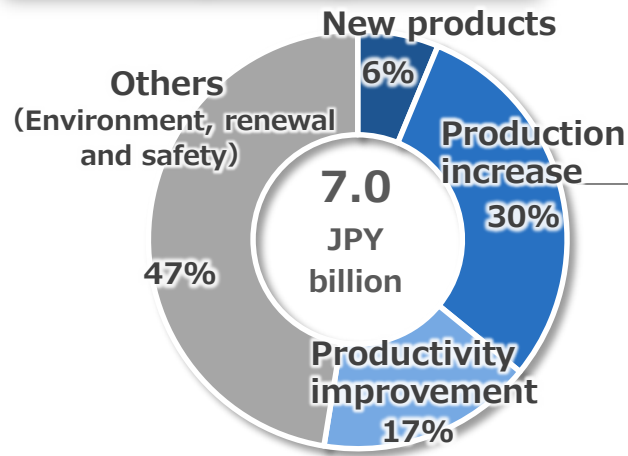
- Precision Reduction Gears
-Capacity expansion
(Tsu Plant and Hamamatsu plant)



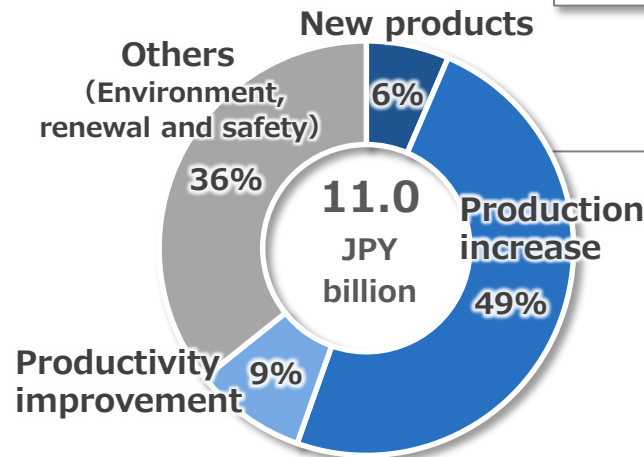
- Precision Reduction Gears
-Capacity expansion
(Hamamatsu plant)
- Hydraulic Equipment
-Renew facilities
(Tarui Plant)



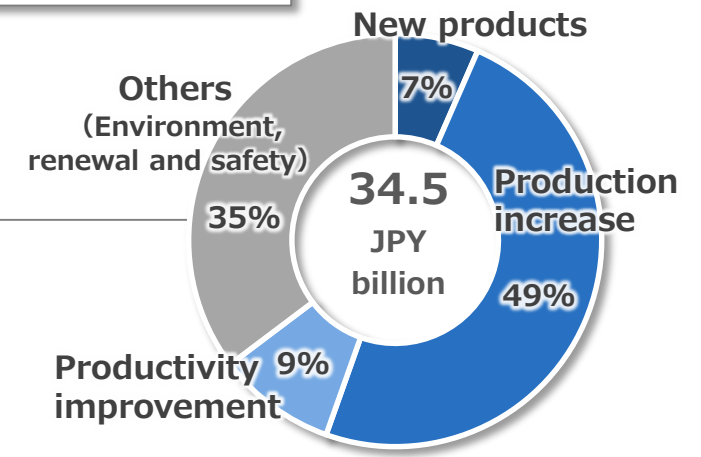
By Usage



2022/12 H1



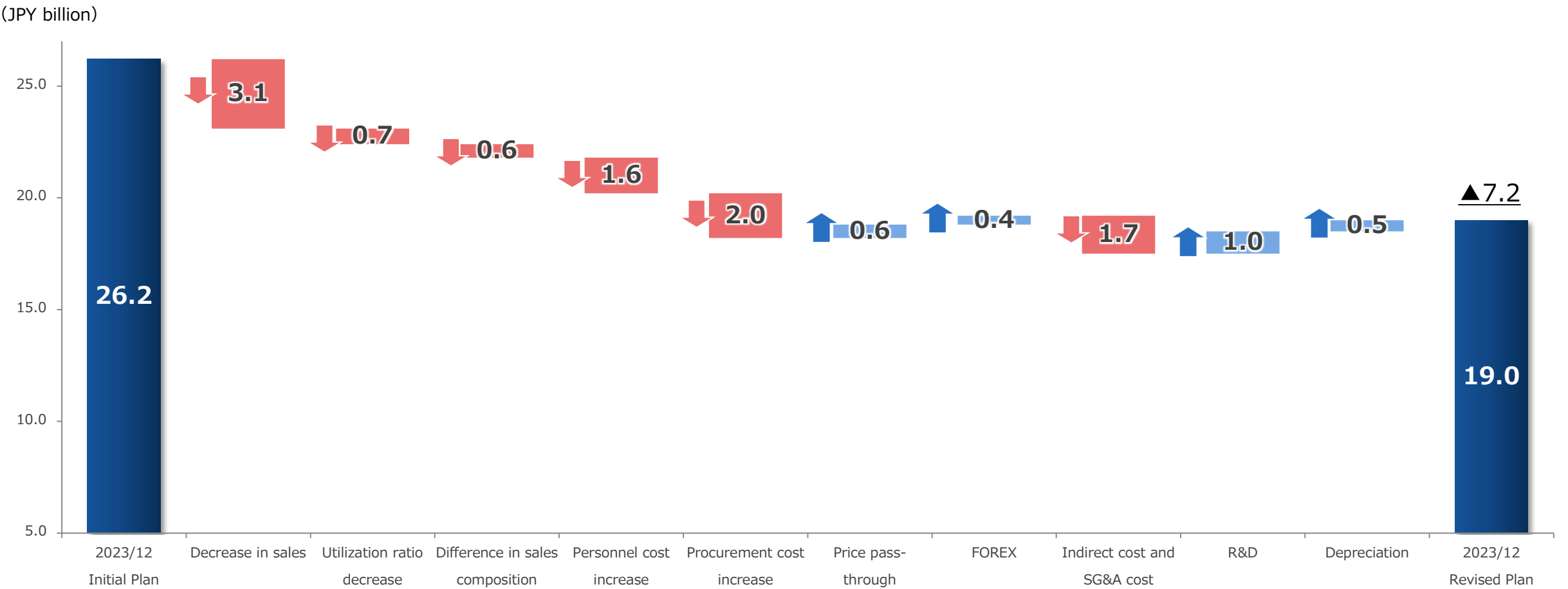
2023/12 H1



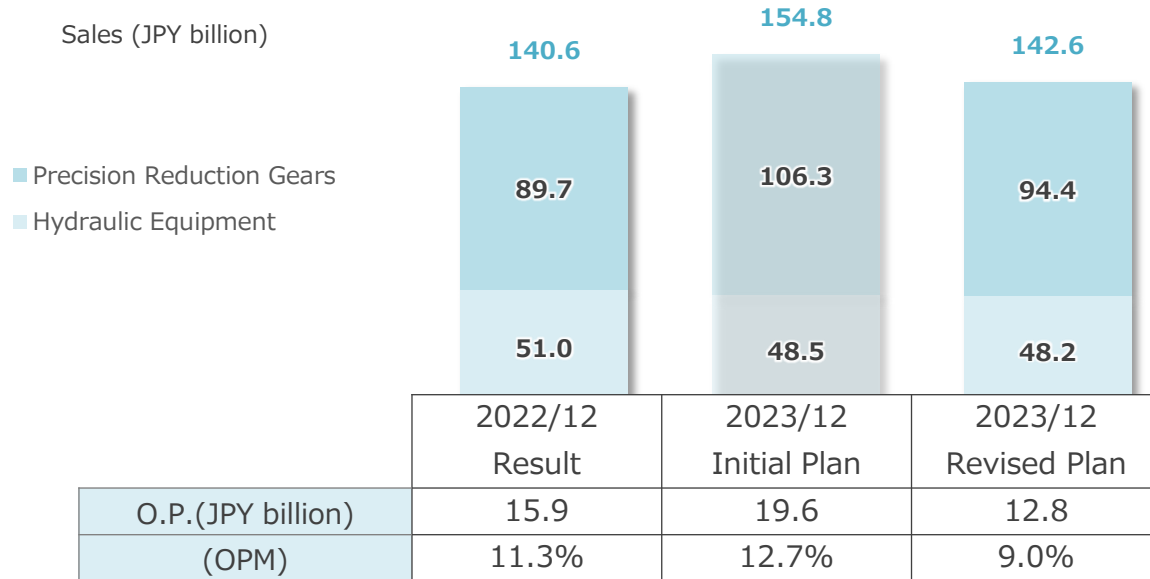
2023/12 Revised Plan

Outlook details for FY2023/12 Full Year

Analysis of Factors Caused Changes in O.P. (FY2023/12 Initial Plan vs Revised Plan)



Component Solution Segment (CMP)



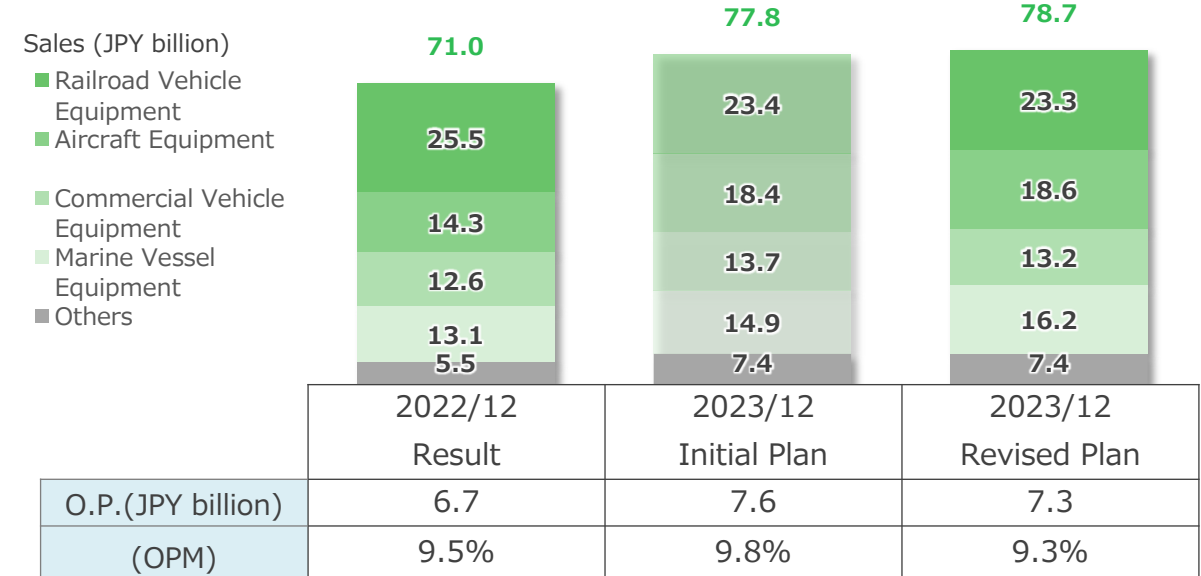
[Sales]

- **Precision reduction gears:**
Revised downwards due to sharp decline in demand from China and other markets since June
- **Hydraulic equipment:**
In line with initial plan due to strong demand in other than China regions despite a weaker-than-expected demand in China

[Segment O.P.]

- Revised downwards due to lower sales of CMP (decrease FA in precision reduction gears) and higher procurement costs than expected at the initial plan

Transport Solution Segment (TRS)



[Sales]

- **Railroad Vehicle Equipment :** In line with initial plan
- **Aircraft Equipment :** In line with initial plan
- **Commercial Vehicle Equipment :** Downward revision due to prolonged production cutbacks due to parts shortages at customers
- **Marine Vessel Equipment :**
Upward revision due to strong shipbuilding and shipping markets

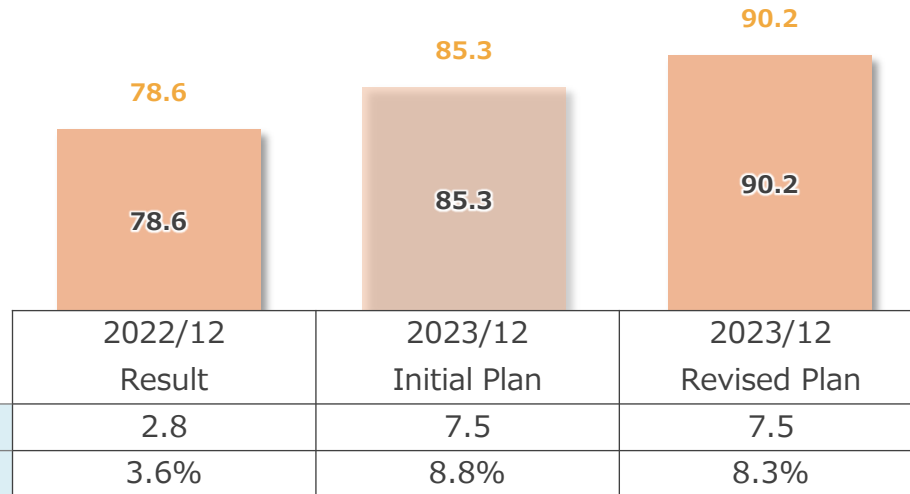
[Segment O.P.]

- In line with initial plan due to TRS businesses well except OVALO despite OVALO's larger-than-expected losses

Accessibility Solution Segment (ACB)

Sales (JPY billion)

■ Automatic Doors



[Sales]

• Automatic doors:

Revised upward due to strong demand for automatic doors in Japan/overseas, MRO sales increase by the elimination of shortages of electronic components, and forex effects

[Segment O.P.]

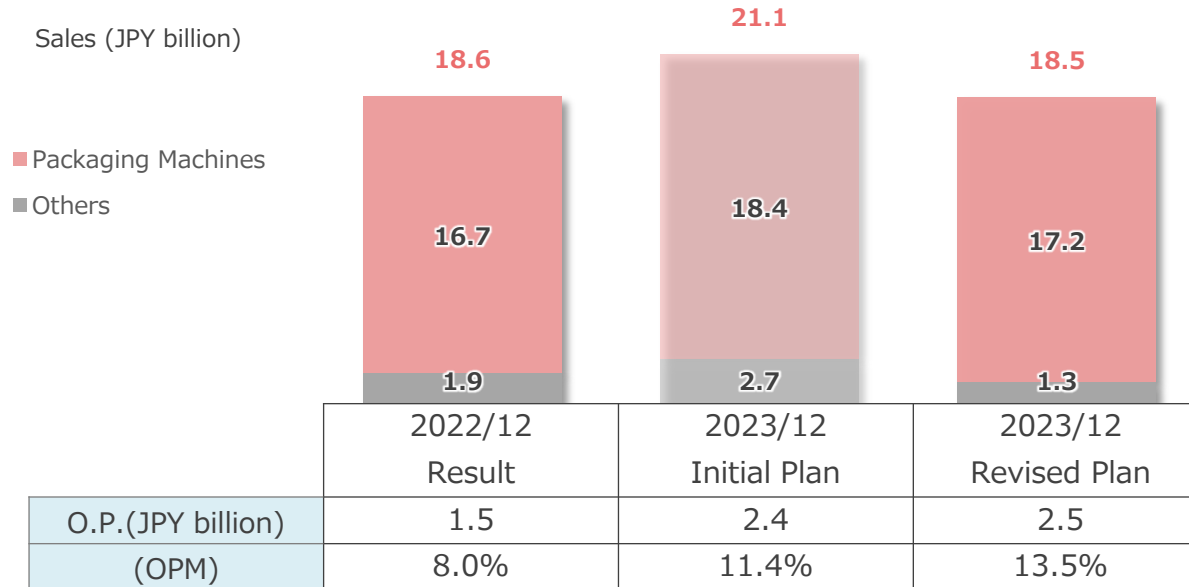
In line with initial plan due to strong demand for automatic doors in Japan/overseas despite one-off costs in overseas at Q2

Manufacturing Solution Segment (MFR)

Sales (JPY billion)

■ Packaging Machines

■ Others



[Sales]

• Packaging Machine:

Revised downwards due to the postponement of the timing of capital investment at some customers

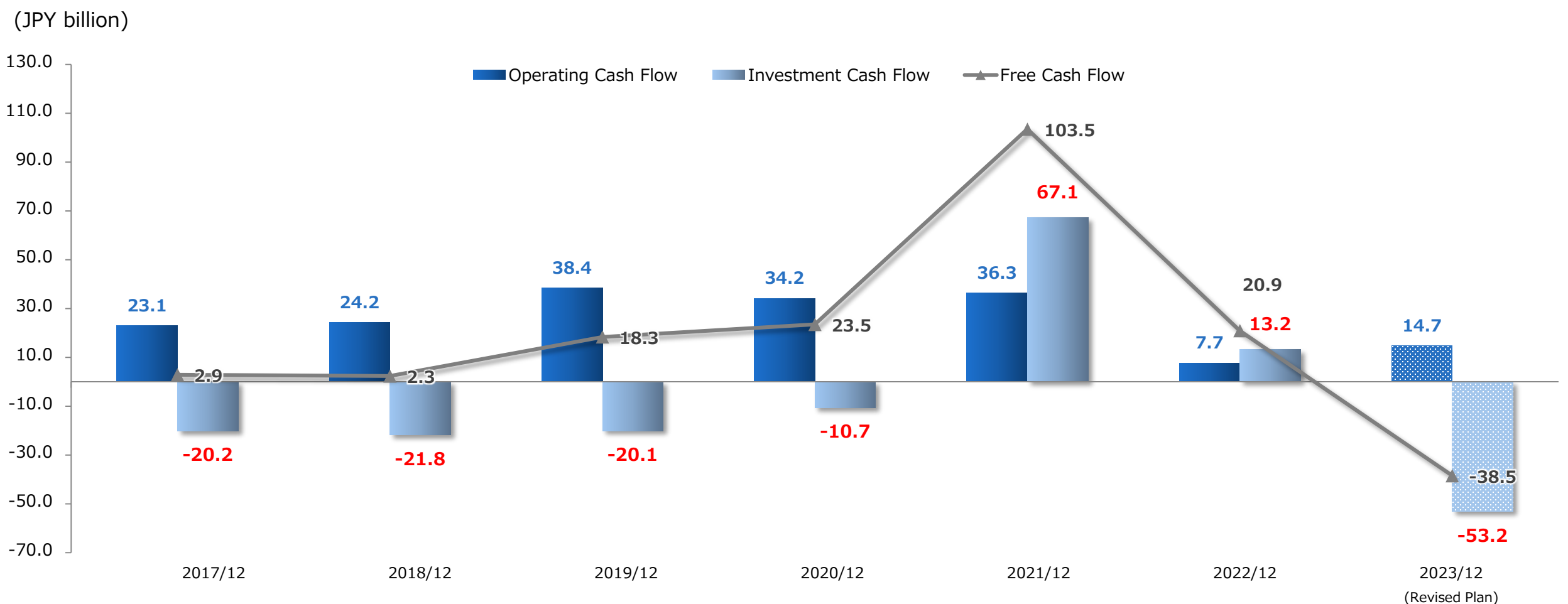
• Other business:

Revised downwards due to transferred all shares of TS Precision

[Segment O.P.]

In line with initial plan due to gain on sale of business

Expect negative free cash flow in FY2023/12 due to increased capital expenditures for the construction of a new precision reduction gear plant, and settlement of M&A and sale of HDS*¹ shares.



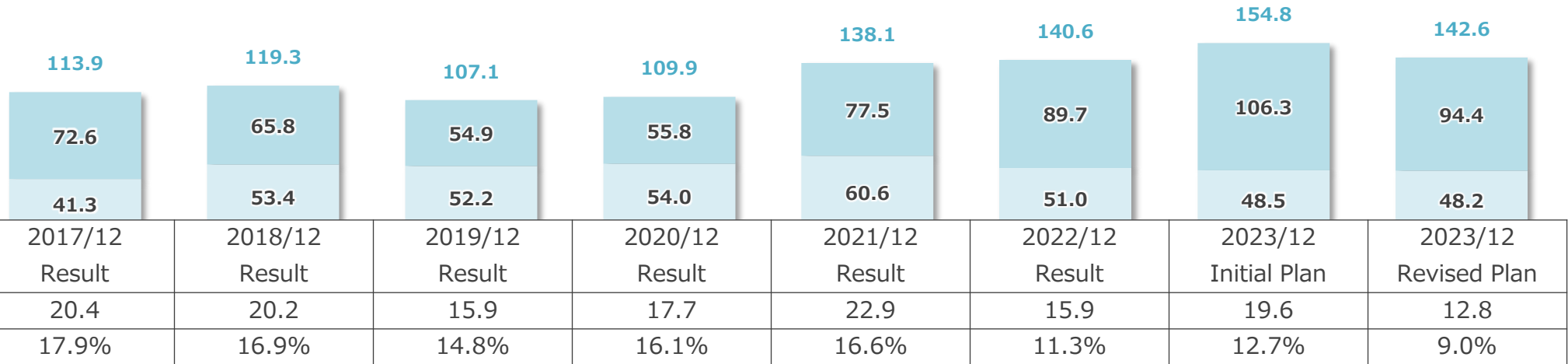
* 1 HDS: Harmonic Drive Systems Inc.

Component Solutions Segment (CMP)

Innovation In Action
Vision 2030

Sales
(JPY billion)

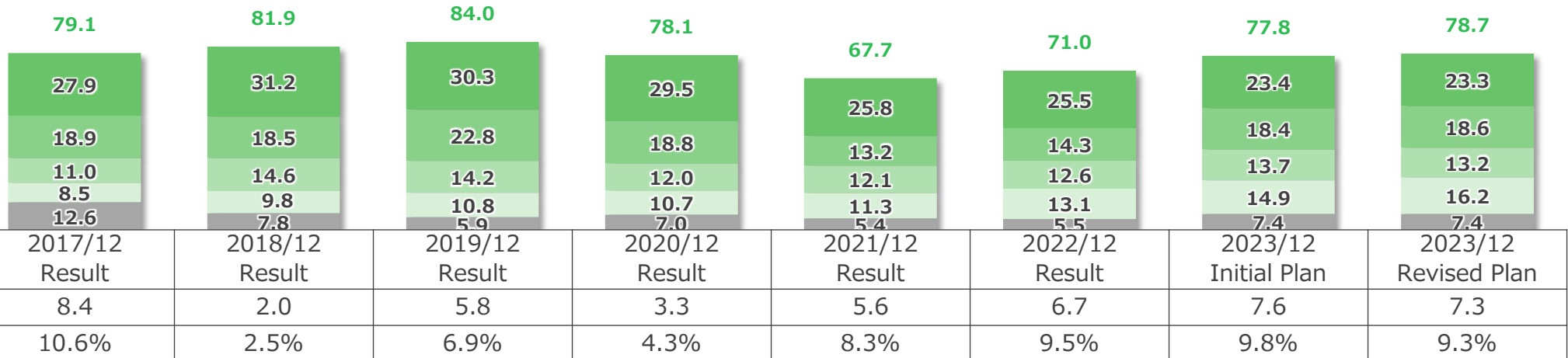
■ Precision Reduction Gears
■ Hydraulic Equipment



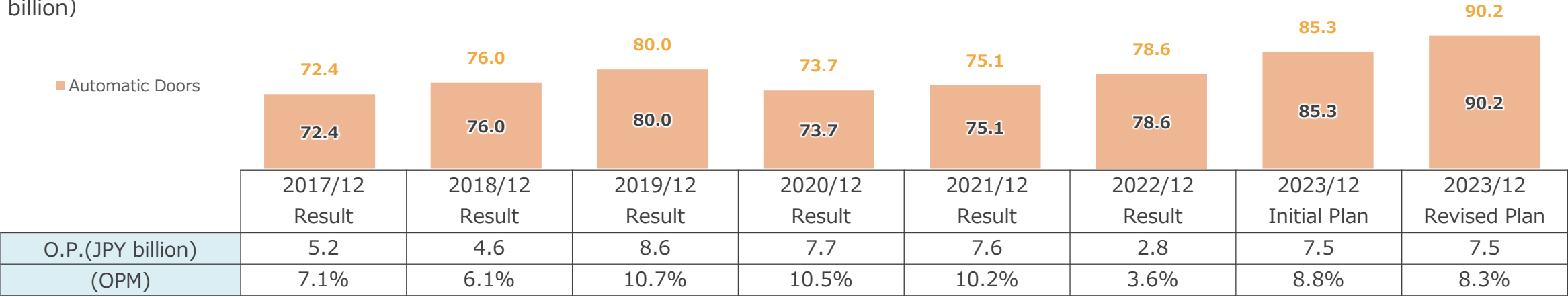
Transport Solutions Segment (TRS)

Sales
(JPY billion)

■ Railroad Vehicle Equipment
■ Aircraft Equipment
■ Commercial Vehicle Equipment
■ Marine Vessel Equipment
■ Others

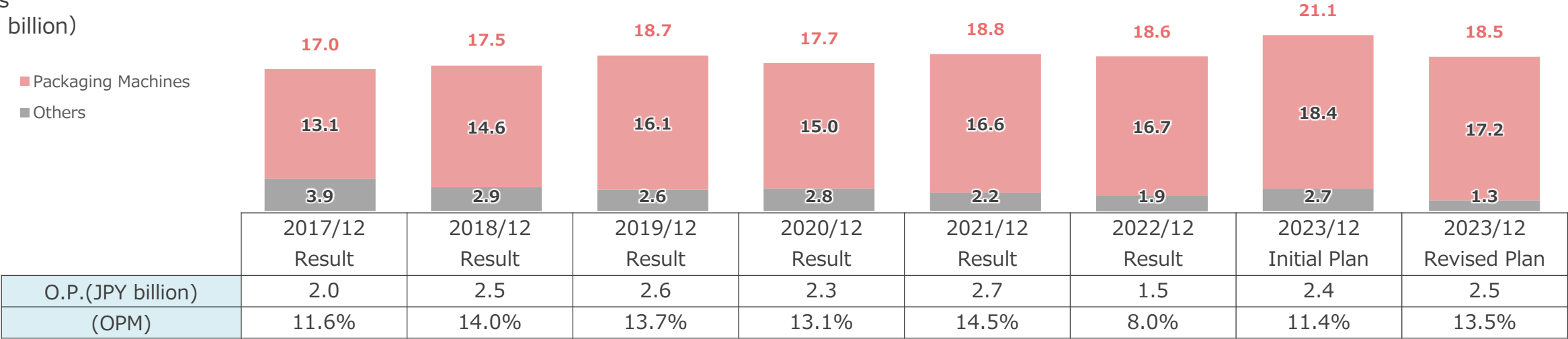


Sales
(JPY billion)



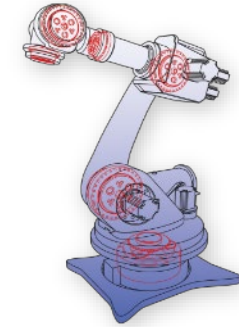
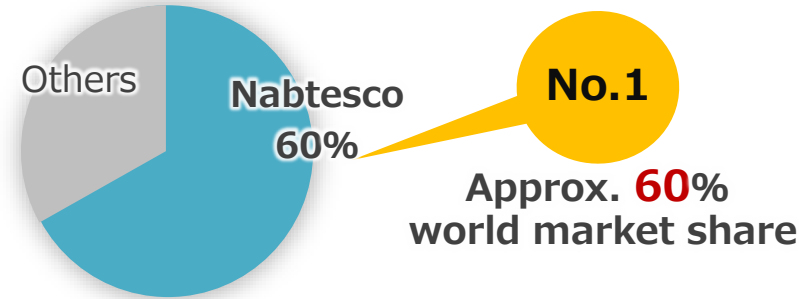
Manufacturing Solutions Segment (MFR)

Sales
(JPY billion)



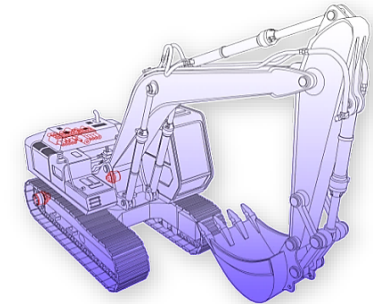
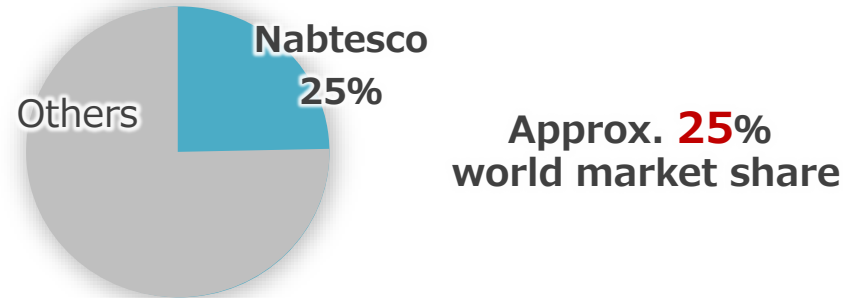
Precision Reduction Gears

- Joints of Medium and Large Size Industrial Robots



Hydraulic Equipment

- Traveling Units for Hydraulic Excavators



Main Customers

■ Precision Reduction Gears

Industrial Robots: Fanuc, Yaskawa Electric, KHI, KUKA Roboter (Germany), ABB Robotics (Sweden)

Machine Tools: Yamazaki Mazak, Okuma, DMG Mori Seiki

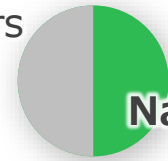
■ Hydraulic Equipment

Traveling Units: Komatsu, Sumitomo Construction Machinery, Kobelco Construction Machinery, Sany (China), XCMG (China), Liu Gong (China)

Railroad Vehicle Equipment

■ Brake Systems

Others



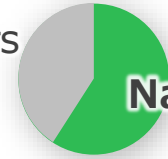
Nabtesco 50%

No.1

Approx. **50%** Domestic Market Share

■ Door Operating Systems

Others



Nabtesco 60%

No.1

Approx. **60%** Domestic Market Share



Aircraft Equipment

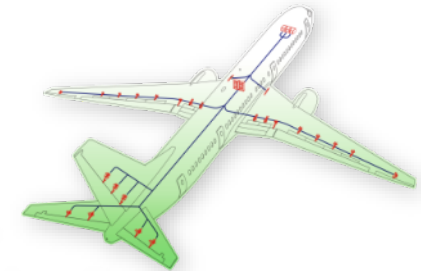
■ Flight Control Actuation Systems (FCA)



Nabtesco
100%

No.1

Approx. **100%**
market share for
domestically-produced aircrafts



Main Customers

■ Railroad Vehicle Equipment

JR Companies, Private railway companies, Hitachi, KHI, Bullet train and subway projects in China

■ Aircraft Equipment

Boeing, KHI, MHI, IHI, Japanese Ministry of Defense, Airline operators

Commercial Vehicle Equipment

■ Wedge Chambers

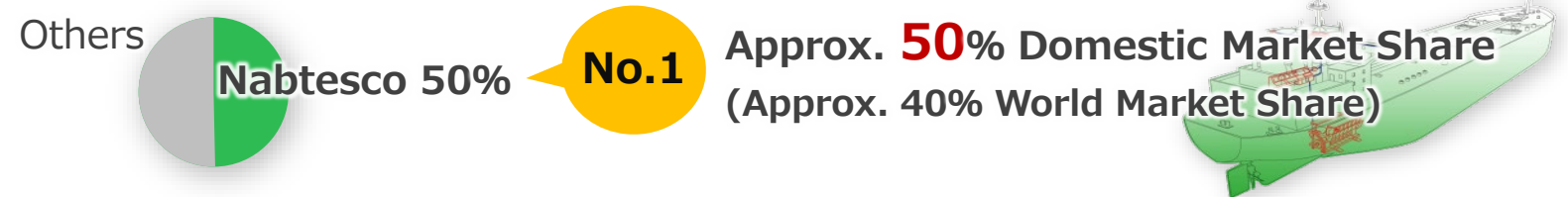


■ Air Dryers



Marine Vessel Equipment

■ 2ST Main Engine Control Systems



Main Customers

■ Commercial Vehicle Equipment

Isuzu, Hino, Mitsubishi Fuso Truck & Bus, UD Trucks

■ Marine Vessel Equipment

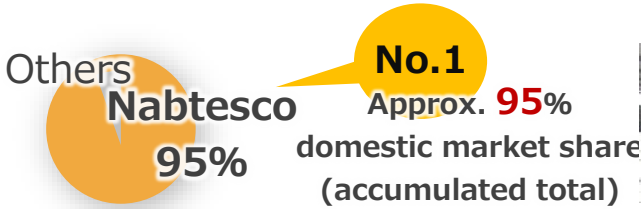
KHI, Japan Engine Corporation, Makita Corporation, Hitachi Zosen, Mitsui Engineering & Shipbuilding, Hyundai Heavy Industries (Korea), Hudong Heavy Machinery (China), HSD Engine Co., Ltd. (Korea), MAN Diesel (Denmark)

Automatic Doors

■ Automatic Doors Others



■ Platform Screen Doors



Main Customers

Automatic Doors for buildings: Major general contractors, sash manufacturers, hospitals, banks, public institutions, etc.
Platform Doors : JR Companies, Private railway companies, Subway projects in various countries

Main Products: Manufacturing Solutions Segment (MFR)

Packaging Machines

■ Packaging Machines for Retort Pouch Foods



Main Customers

■ Packaging Machines

DM Mitsui Sugar, Ajinomoto, Marudai Food Co., Ltd., ARIAKE Japan, KENKO Mayonnaise, P&G, Kao, Lion, beverage companies in North America, food companies in China

Nabtesco

moving it. stopping it.

