

Results Briefing for the First Nine-month of the Fiscal Year Ending December 31, 2023 (FY2023/12 Q1-Q3)

**Nabtesco Corporation
October 31, 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. Unauthorized copying and replication of this material including text and image are prohibited.

1

Increase both in sales and O.P. (YoY)

Consolidated Sales: 243.6 JPY billion (YoY + 11%)

Consolidated O.P.: 12.9 JPY billion (YoY+13%)

- FY2023/12 first nine-month sales was recorded historical high
 - Demand of Precision Reduction Gears was favorable in H1
 - ACB has been steady domestic demand and positive FOREX effect
- FY2023/12 first nine-month O.P. was increased YoY due to sales increase in TRS, ACB and MFR

2

Compared to the guidance* Inline both in sales and O.P.

(Progress toward the full-year guidance) Sales : 74%, O.P. : 68%

- Chinese economy downturn last longer than expectation (larger impact on CMP)
- Tackling on profit improvement measures

*The plan disclosed on July 31st, 2023

Summary for the FY2023/12 Q1-Q3 (YoY)

Sales

JPY billion
250.0

240.0

230.0

220.0

210.0

200.0

- **CMP:** Demand of Precision Reduction Gears (PRG) was favorable in H1
- **TRS:** Market recovery in Aircraft and demand for marine vessels remained strong
- **ACB:** FOREX impact and steady demand in Japan

218.9

2022/12
Q1-Q3 results

CMP

6.1

PRG +8.2
HE -2.0

TRS

7.6

Railroad -0.4
Aircraft +3.4
Marine +3.7
Commercial vehicle +0.4

ACB

10.5

MFR

0.5

Packaging machines +0.7

+24.7

243.6

2023/12
Q1-Q3 results

O.P.

- **CMP:** Decrease due to the impact of higher procurement costs and labor costs in Precision Reduction Gears and sales decrease in Hydraulic Equipment (HE)
- **TRS/ACB:** Increase due to sales increase
- **MFR:** Gain on sales of business in Q3

JPY billion

18.0

15.0

12.0

9.0

6.0

3.0

0.0

11.5

2022/12
Q1-Q3 results

CMP

2.4

TRS

2.0

ACB

1.4

MFR

1.8

HQ

1.4

+1.5

12.9

2023/12
Q1-Q3 results

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

- Final valuation gain confirmed with the completion of the sale of HDS*¹ in 2023 Q2.

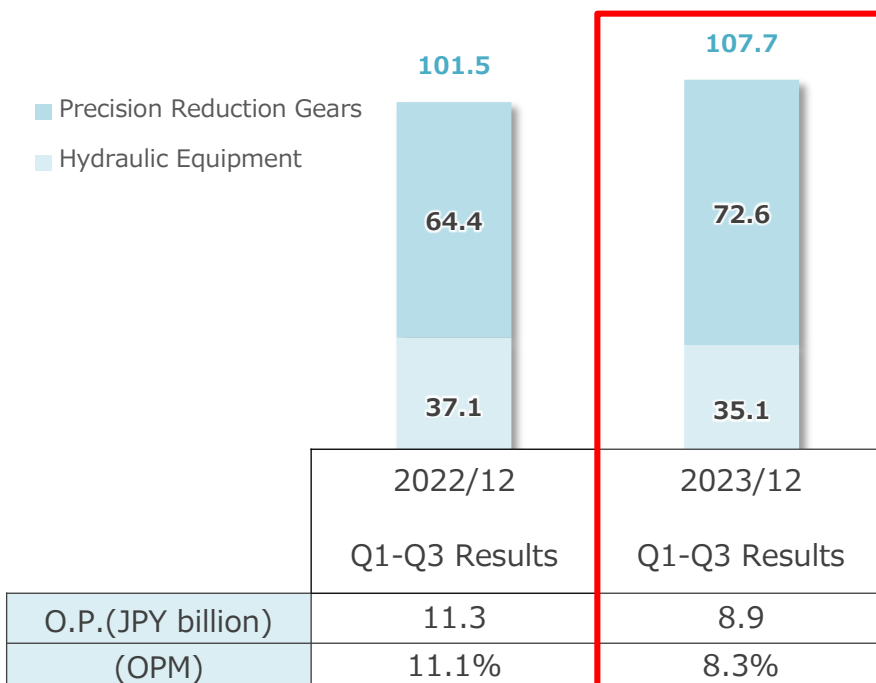
(JPY billion)	2022/12 Q1-Q3 result (A)	2023/12 Q1-Q3 result (B)	Variation (B-A)
Sales	218.9	243.6	24.7
O.P.	11.5	12.9	1.5
Operating profit margin	5.2%	5.3%	0.1pt
Finance Income and Cost	3.2	4.7	1.5
(Revaluation share of HDS)	1.4	3.5	2.0
Equity in earnings of affiliates	2.2	3.4	1.3
Profit before tax	16.9	21.1	4.2
Net profit*²	10.6	13.3	2.7
Total basic earnings per share(JPY Yen)	88.52	110.74	22.22

2022/12 Full year result (C)	2023/12 Full year plan (D) (as of July 31st)	Variation (D-C)
308.7	330.0	21.3
18.1	19.0	0.9
5.9%	5.8%	-0.1pt
-5.1	4.4	9.5
-5.6	3.5	9.1
2.8	3.7	0.9
15.8	27.0	11.2
9.5	17.8	8.3
78.87	148.30	69.43

*¹ Harmonic Drive Systems Inc. *² Net profit attributable to owners of the parent

Component Solution Segment (CMP)

Sales (JPY billion)



Profitability

FY2023/12 Q1-Q3 :

- Profit decrease due to the delay of price pass-through for procurement cost increase in PRG.
- Profit decrease due to sales decrease by Chinese economy downturn in HE.

Q4 forecast :

- Progress of price pass-through and cost reduction activities in PRG.
- Sales increase due to the seasonality is expected in HE.

Business Environment (Q3 onward)

Business	Market		Trend
Precision Reduction Gears (PRG)	For robots	EV investment decline and business sentiment downturn from Q3 onward	
	For FA	Cautious view on CAPEX	
Hydraulic Equipment (HE)	China	Stagnant demand continues (Sales of construction machinery in China*1 from Jan. to Sep. in 2023; YoY-26%)	
	Non-china	Uncertainty in demand -Sales of construction machinery (domestic & export) from Jan. to Aug. in 2023; YoY + 29%	

*1 Source: China Construction Machinery Association *2 Source: Japan Construction Equipment Manufacturers Association

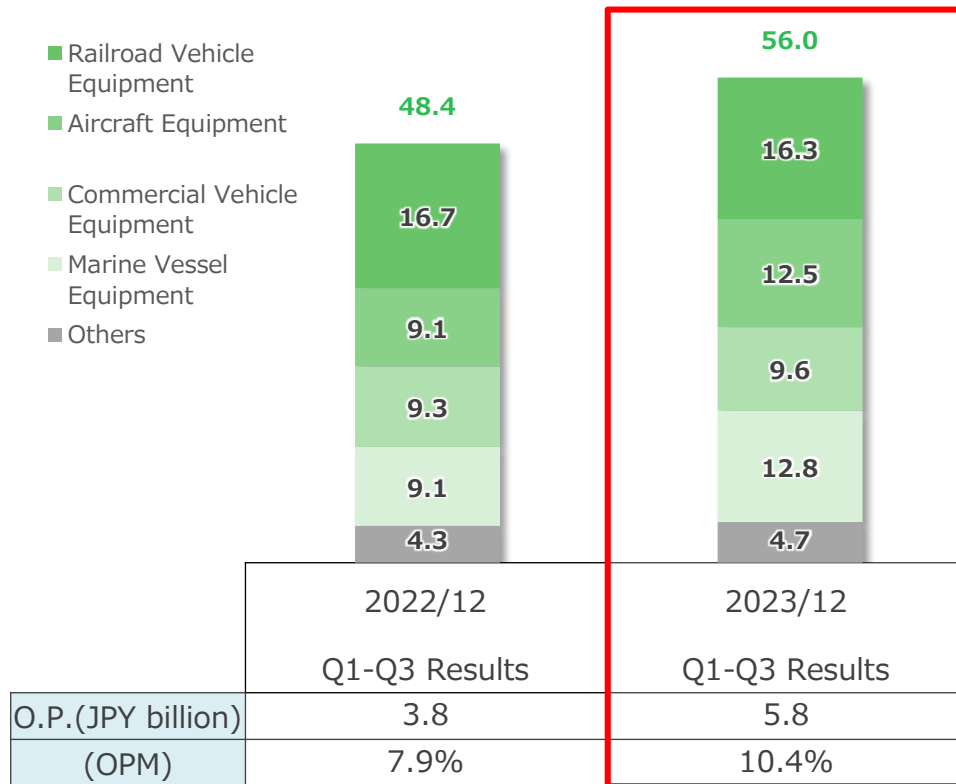
Actions for profit improvement for PRG

Actions	Details
Price pass-through	<ul style="list-style-type: none"> • List price to be raised for all customers • Pass-through for FY23 cost increase mainly start from FY24
Operation of the Hamamatsu Plant	<ul style="list-style-type: none"> • Plan to start operation from FY24 • Distribute the optimal production capacity by plants
Optimal staffing to meet fluctuating demand	<ul style="list-style-type: none"> • Flexible and optimal relocation of staff • Adjustment by contract term basis
Proceed cost reduction activities	<ul style="list-style-type: none"> • Change of make/buy policy (in-house production of bearings, heat treatment, etc.) • Design change and production improvement by process improvement • Adoption of new suppliers (in Hamamatsu)

Transport Solution Segment (TRS)

Sales (JPY billion)

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



Business Environment (Q3 onward)

Business	Market	Trend
Railroad Vehicle Equipment	Despite strong domestic MRO demand, investment in new vehicles continues to be restrained. Investment for new vehicles will be recovered from 2024.	
Aircraft Equipment	Civil aviation: Aircraft demand recovery according to passenger demand expansion. (Worldwide RPK* for civil aviation in Aug. 2023 YoY +28%)	
	Defense: Demand increase due to the budget expansion in MOD	
Commercial Vehicle Equipment	Mitigation of electric component shortage contribute to recover the truck productions in Japan although export demand is sluggish due to the economy downturn.	
Marine Vessel Equipment	New shipbuilding : Shipbuilders have sufficient backlog.	
	MRO : High demand continues including the environmental regulations.	

* RPK : Revenue Passenger Kilometers (Source : IATA)

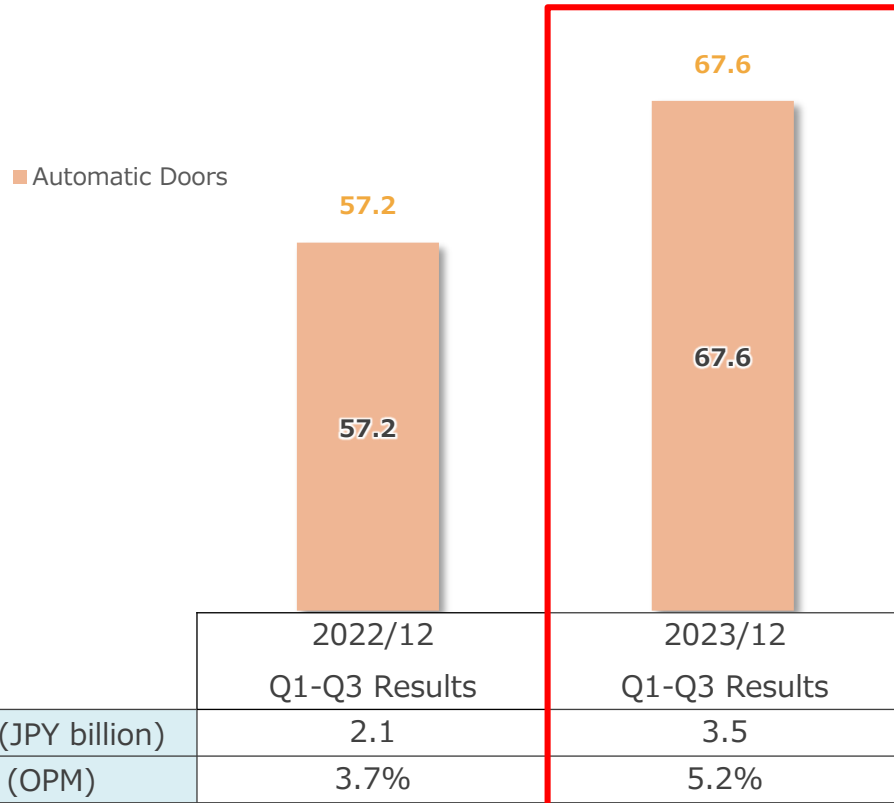
Profitability

2023/Q3: Profit increase due to sales increase and MRO contribution.





Q4 forecast: Profit increase due to favorable demand.

Accessibility Solution Segment (ACB)

Sales (JPY billion)



Business Environment (Q3 onward)

Business	Market	Trend
Automatic Doors	Japan: Solid door demand for reconstruction projects in Tokyo Metropolitan Area and steady demand of MRO	
	Europe and the US : Cautious view on demand by economic downturn	
Platform Door (PD)	Japan: Orders for projects after 2024 are becoming more active due to governmental support programs (railroad station barrier-free fee system)	
	Oversea: Delay in some projects.	

Profitability

2023/Q3 : Profit increase due to the MRO increase backdrop of resolving the electric component shortage and collection of additional bills for overseas PD projects.

Q4 forecast : Steady automatic door demand in Japan and foresee the seasonality in overseas.

Manufacturing Solution Segment (MFR)

Sales (JPY billion)

■ Packaging Machines

■ Others

11.9

10.7

1.2

2022/12
Q1-Q3 Results

12.3

11.4

0.9

2023/12
Q1-Q3 Results

O.P.(JPY billion)

0.6


2.4

(OPM)

4.8%

19.4%

Business Environment (Q3 onward)

Business	Market	Trend
Packaging Machines	Japanese food manufacturers improve their investment capability due to mark up. Economic downturn make customers discourage their CAPEX in oversea.	

Profitability



2023/Q3 : Packaging machines increase O.P. due to sales increase and contribution of product mix.
Segment O.P. increase due to the recognition of profit of subsidiary on Q3

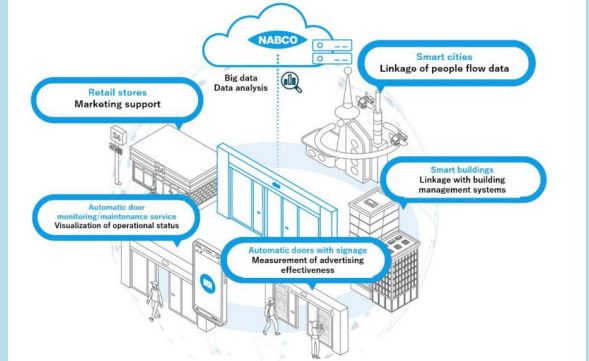
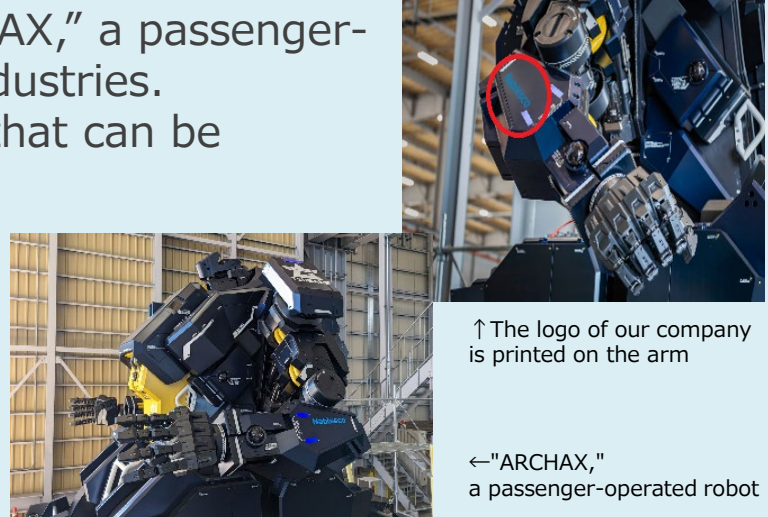
Q4 forecast : Profitability remain as the same level as Q4 in 2022

- Cash and cash equivalents decrease and non-current asset increase due to M&A and CAPEX. Sales of HDS* shares completed on 2023 Q2.

(JPY billion)	2022/12 (As of December 31, 2022)	2023/12 Q3 (As of September 30, 2023)	Variation	
Assets	459.3	423.2	-36.1	
(Cash and cash equivalents)	124.4	81.0	-43.4	<ul style="list-style-type: none"> • Acquisition of Copas Systèmes • Settlement of sale of HDS share • Acquisition of Deep Sea Technologies • Payment for Tax
(Trade receivable)	79.4	75.9	-3.5	
(Inventories)	49.2	59.4	10.2	<ul style="list-style-type: none"> • Decrease due to completion of the sale of HDS*
(Assets held for sale)	34.0	0.0	-34.0	
(Non-current assets)	163.8	197.5	33.7	<ul style="list-style-type: none"> • Hamamatsu plant (PRG) • Increase of asset due to M&A (Copas & Deep Sea)
Liabilities	196.1	147.5	-48.6	
(Borrowings)	20.3	21.0	0.7	
(Other non-current financial liabilities)	47.3	0.1	-47.2	<ul style="list-style-type: none"> • Decrease in financial liabilities due to completion of sale of HDS
(Income taxes payable and Deferred tax liabilities)	15.8	8.1	-7.7	
Total equities	263.2	275.8	12.5	
(Non-controlling interests)	14.5	15.1	0.5	
Equity attributable to owners of parent	248.7	260.7	12.0	
Ratio of equity attributable to owners of parent :	54.1%	61.6%		

* HDS: Harmonic Drive Systems Inc.

Business	Topics	Details
Precision Reduction Gears (PRG)	<p>Completion of the New Hamamatsu Plant (Sep. 18th)</p> <p>Our challenges in mid-term management plan</p> <p>Realization of smart manufacturing through minimization of environmental burden and digital technology</p>	<p>Establishing the new plant in Hamamatsu, which will be the third production base for PRG, based on the concept of “the world’s No.1 smart plant with manufacturing innovation and high evaluation for SDGs.” Aiming for an automation ratio of 90% or higher, with highly efficient manufacturing small mix and high volume models.</p> <p>【Outline of the Hamamatsu Plant】</p> <ul style="list-style-type: none"> ● Annual production capacity: 1.2 million units per year (by 2030) ● Start of operation: 2024 (The date of the start is to be determined) ● Investment amount: About 47 billion yen (2022-2026) 
Corporate	<p>Revision of the Nabtesco Way (Oct. 1st)</p> <p>Our challenges in mid-term management plan</p> <p>Raise motivation of all employees for “Change ourselves” and enjoy challenges</p>	<p>The Nabtesco Way, which was established in 2012, under the recent changes both of the external and internal environment, our Corporate Philosophy has been retained, while Our Promises and Action Guidelines have been revised to reorganize the principles to be passed on to the next generation, and to incorporate a new Perspective that takes on challenges. The New Nabtesco Way has been consolidated to the six points of “The Principles We Value,” so that our diverse employees throughout the world can understand and sympathize with them, and enhance motivation to take action.</p> 

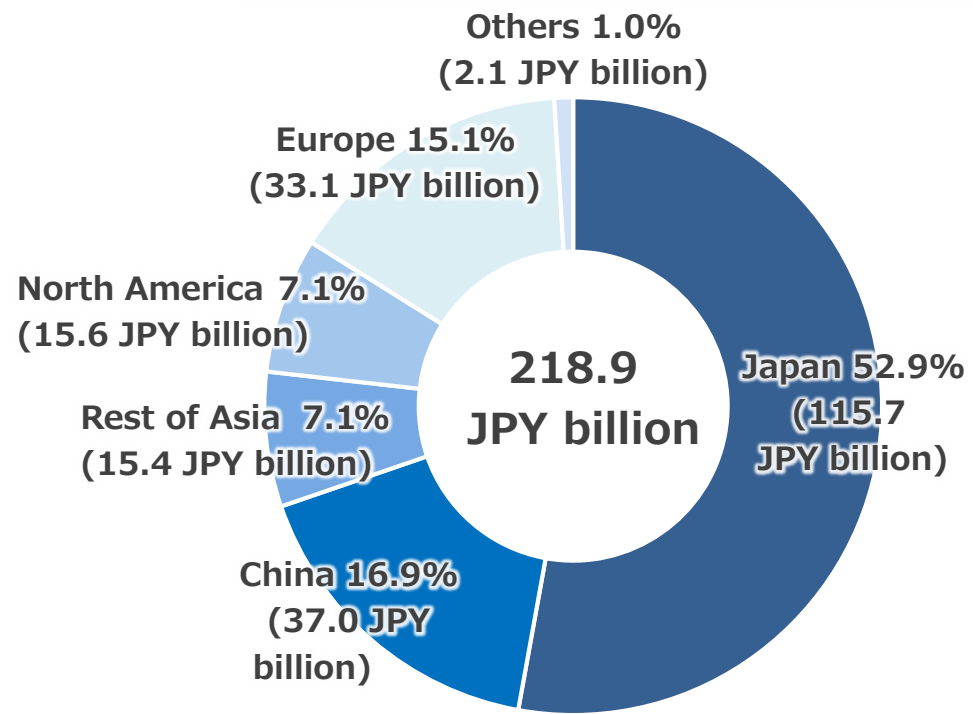
Business	Topics	Details
Automatic Door	<p>Development of Automatic Door Platform AD-LINK and Launch of Service (Aug. 31st)</p> <p>Our challenges in mid-term management plan</p> <p>Realization of smart manufacturing through minimization of environmental burden and digital technology</p>	<p>AD-LINK providing timely reports on operational status to building managers and contributing the safety and convenience of building operation. Going forward, we will utilize AD-LINK for the marketing efforts of retail stores and verification of the advertising effectiveness of digital signage through gathering and analyzing people flow data around automatic doors. We will also create new added value for building owners and users through automatic doors by, for example, applying the product to facilitate the passage of self-propelled robots by connecting it with smart building system networks.</p>  <p>Future image of AD-LINK utilization (includes services not yet launched)</p>
Precision Reduction Gears (PRG)	<p>Supplying precision reduction gears to "ARCHAX," a passenger-operated robot (Oct. 25th)</p> <p>Our challenges in mid-term management plan</p> <p>Create new value with innovative products and services</p>	<p>Nabtesco has supplied our PRG for "ARCHAX," a passenger-operated robot developed by Tsubame Industries. "ARCHAX" is a large passenger-type robot that can be operated by a person. Nine precision reduction gears RV™ per robot, including those for waist turning and traveling, play a role in ensuring smooth operation. The robot is currently on display at the JAPAN MOBILITY SHOW 2023.</p>  <p>↑ The logo of our company is printed on the arm</p> <p>← "ARCHAX," a passenger-operated robot</p>

Appendix

- Review the investment timing due to the demand stagnation in Precision Reduction Gears
- Investment items should be selective because of the progress of financial forecast

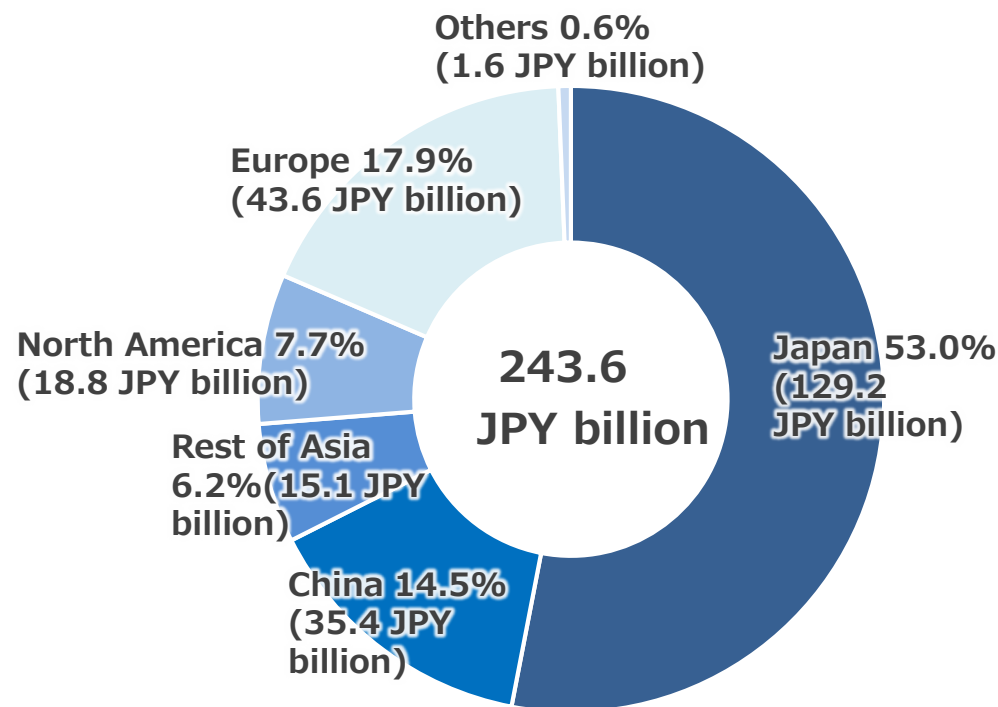
(JPY billion)	2022/12	2023/12	2023/12	YoY	Progress	2022/12
	Q1-Q3 results (A)	Q1-Q3 results (B)	Revised plan As of July 31 st , 2023 (C)	Variation (B-A)	(B/C)	Full year result
CAPEX	15.2	22.1	34.5	6.9	64%	18.8
R&D	8.2	8.1	12.9	-0.1	63%	10.9
Depreciation	10.7	11.4	15.3	0.7	74%	14.5

2022/12 Q1-Q3 result



Oversea sales	103.2 JPY billion
Ratio	47.1%

2023/12 Q1-Q3 result



Oversea sales	114.4 JPY billion
Ratio	47.0%

■ FOREX rate

(JPY)

	2022/12 Q1-Q3 result	2022/12 Full-year result	2023/12 Q1-Q3 result	2023/12 Full-year plan
USD	129.46	131.12	139.55	125.00
RMB	19.45	19.46	19.74	18.50
EUR	136.62	136.43	151.20	140.00
CHF	135.89	136.81	154.49	145.00

■ FOREX sensitivity

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

(JPY million)

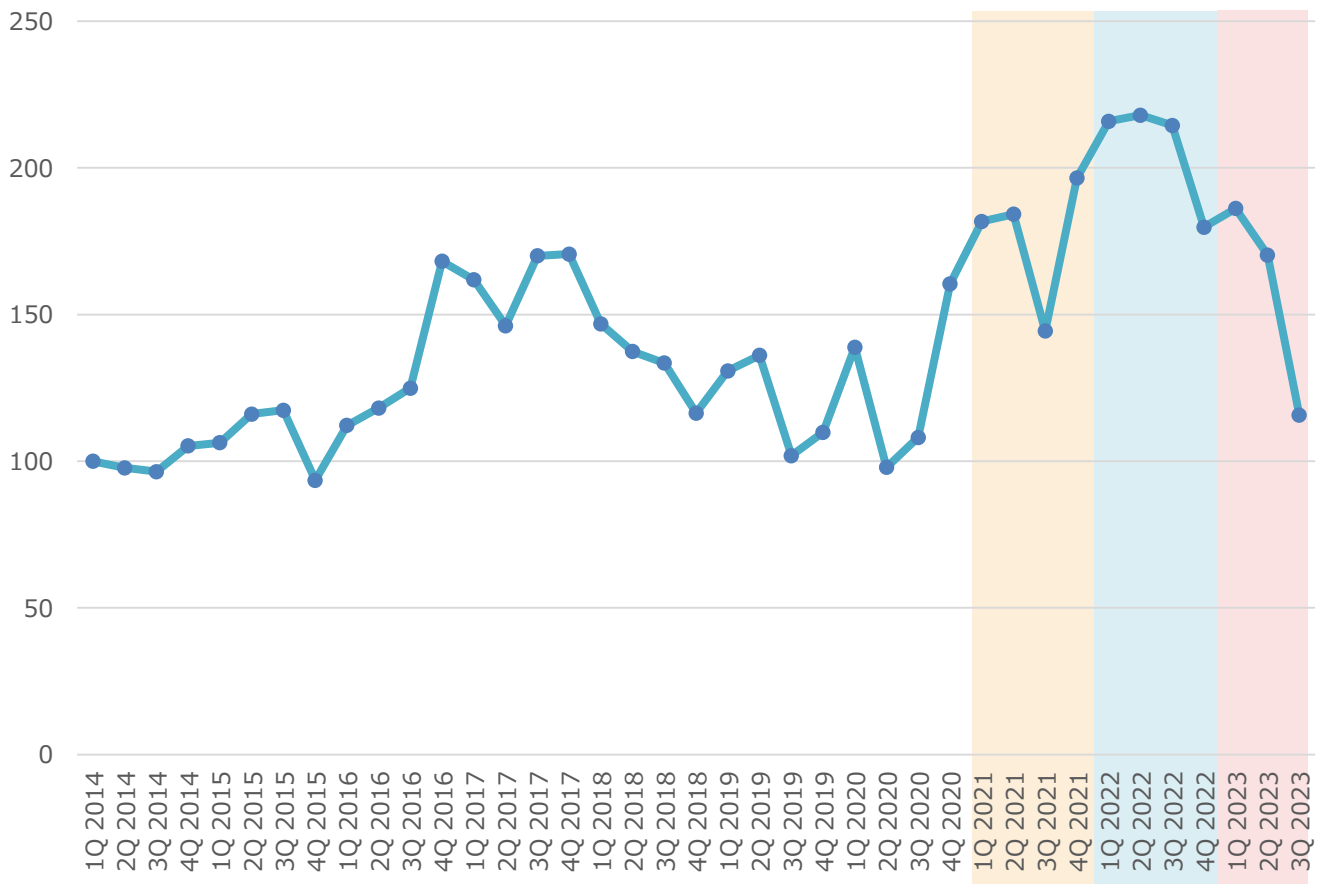
	2023/12	
	Q1-Q3 result	
	Sales	O.P.
USD	152	25
RMB	1,313	31
EUR	67	minimal
CHF	170	minimal

2023/12	
Full-year plan	
Sales	O.P.
179	57
1,531	162
82	minimal
246	minimal

2023/Q3 consolidated orders

-YoY -46% QoQ -32%

-Order decline both in YoY and QoQ due to the economic downturn especially in China



FY2014/1Q = 100

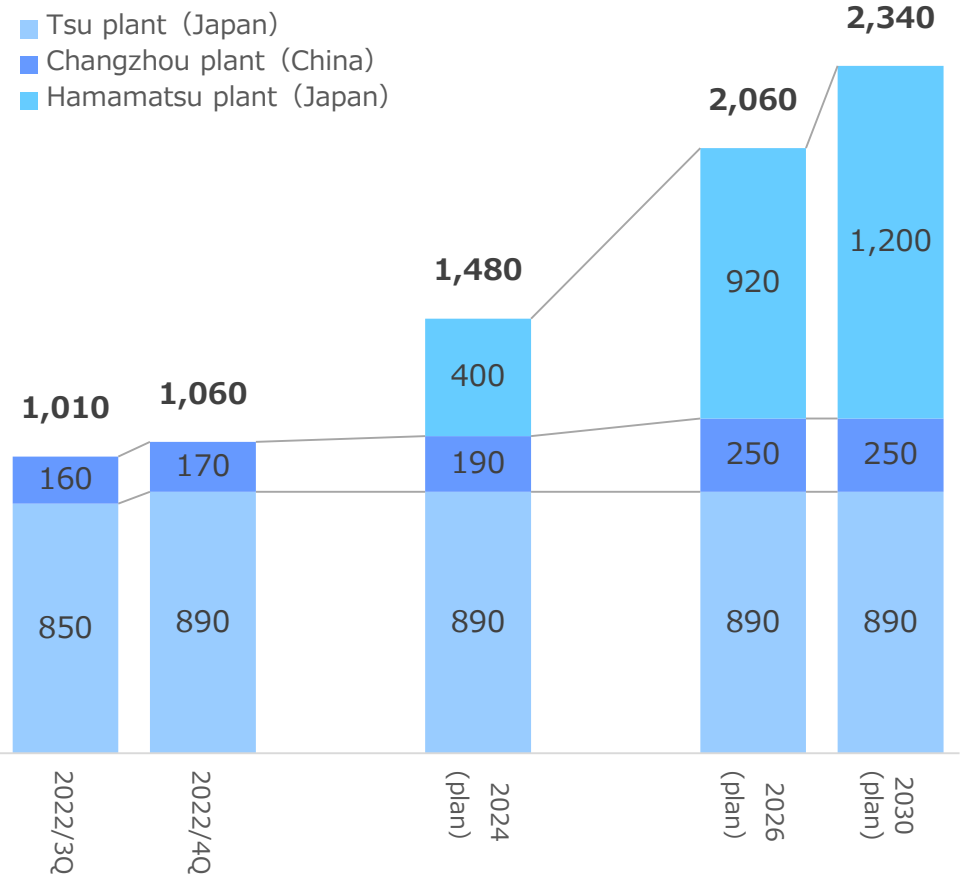
2023/Q3 Utilization ratio of Precision Reduction Gears

FY2023 Q3 Utilization ratio

Japan Plant (Tsu) : 100% @890K units/year

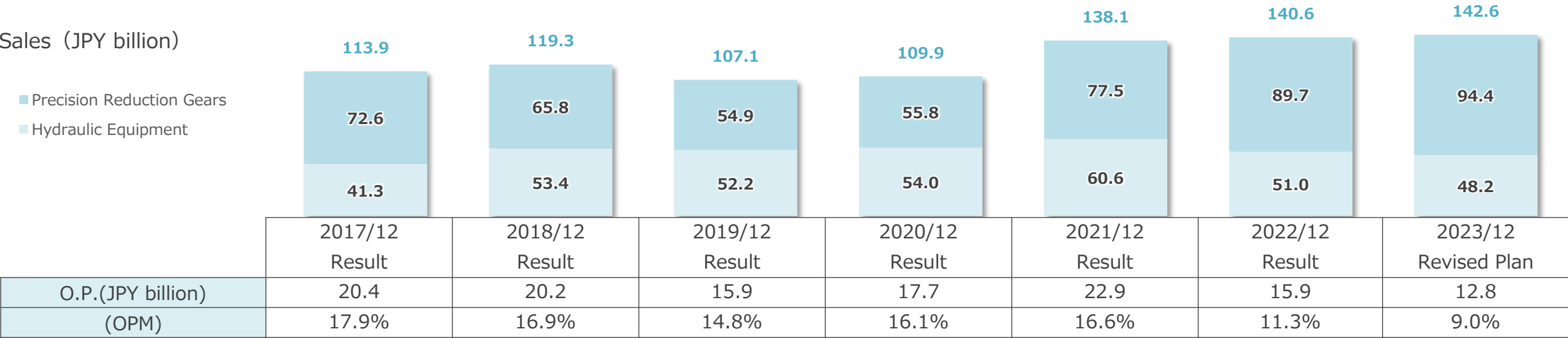
China Plant (Changzhou) : 55% @170k units/year

(K units/year)



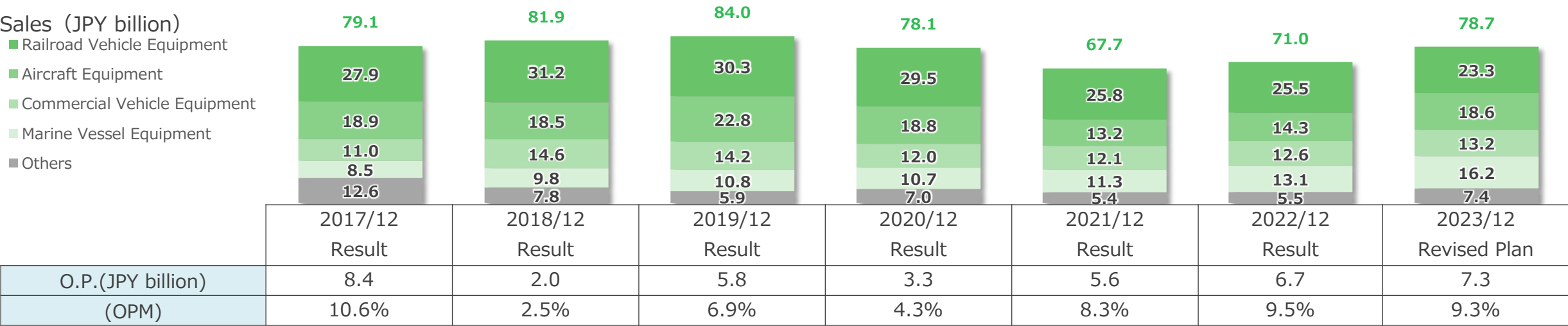
Sales and Overview by Segments

Sales (JPY billion)



Transport Solutions Segment (TRS)

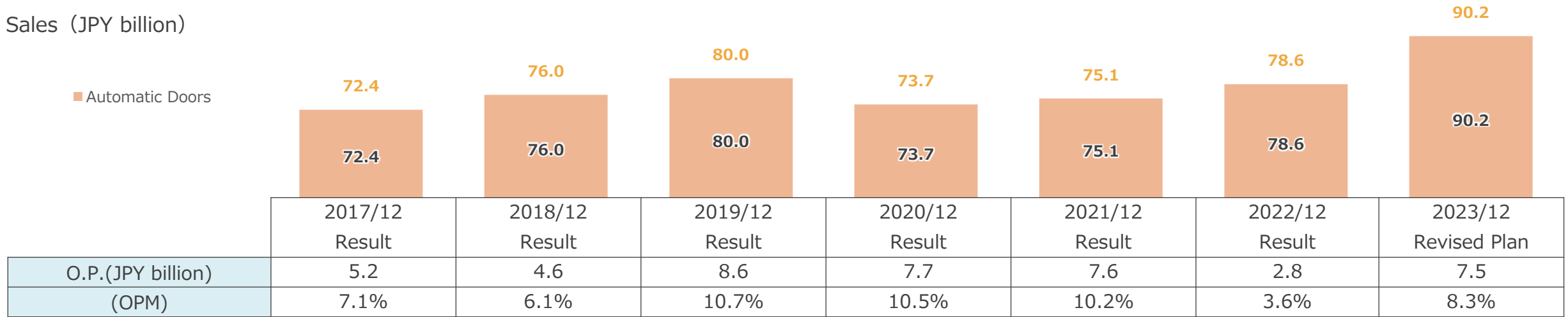
Sales (JPY billion)



Accessibility Solution Segment (ACB)

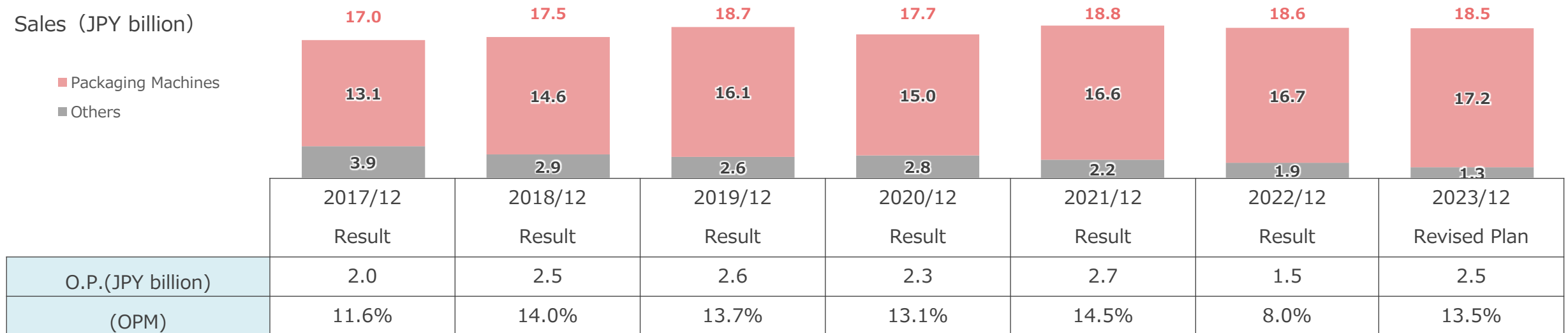
Innovation In Action
Vision 2030

Sales (JPY billion)



Manufacturing Solutions Segment (MFR)

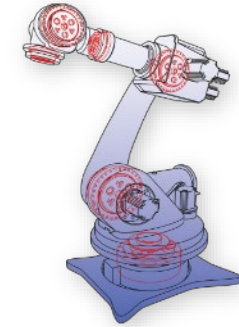
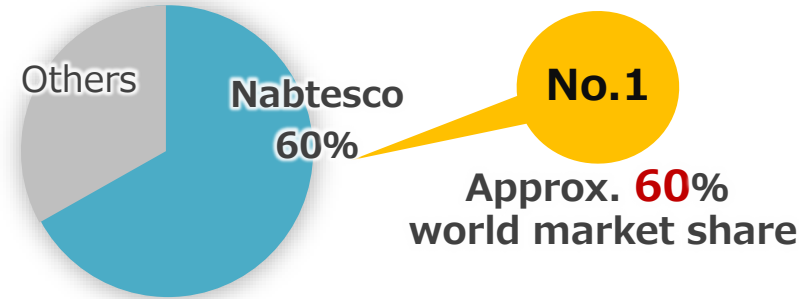
Sales (JPY billion)



The market share is estimated by Nabtesco

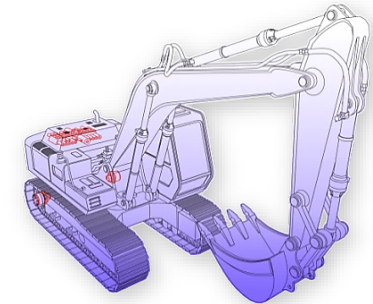
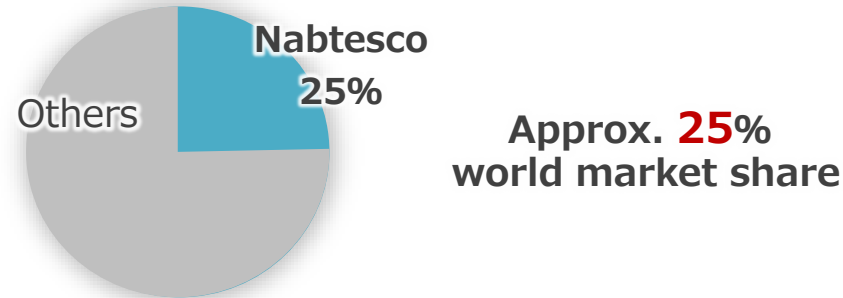
Precision Reduction Gears

- 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

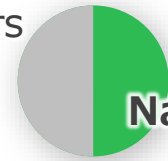
Traveling Units: Komatsu, Sumitomo Construction Machinery, Kobelco Construction Machinery, Sany (China), XCMG (China), Liu Gong (China)

Railroad Vehicle Equipment

The market share is estimated by Nabtesco

■ Brake Systems

Others



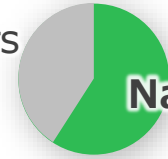
Nabtesco 50%

No.1

Approx. **50%** Domestic Market Share

■ Door Operating Systems

Others



Nabtesco 60%

No.1

Approx. **60%** Domestic Market Share



Aircraft Equipment

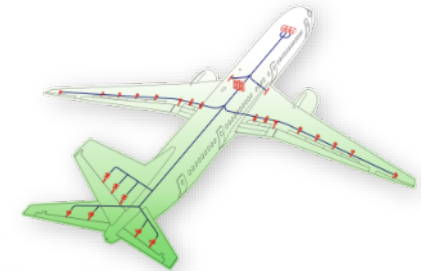
■ Flight Control Actuation Systems (FCA)



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

The market share is estimated by Nabtesco

Commercial Vehicle Equipment

■ Wedge Chambers

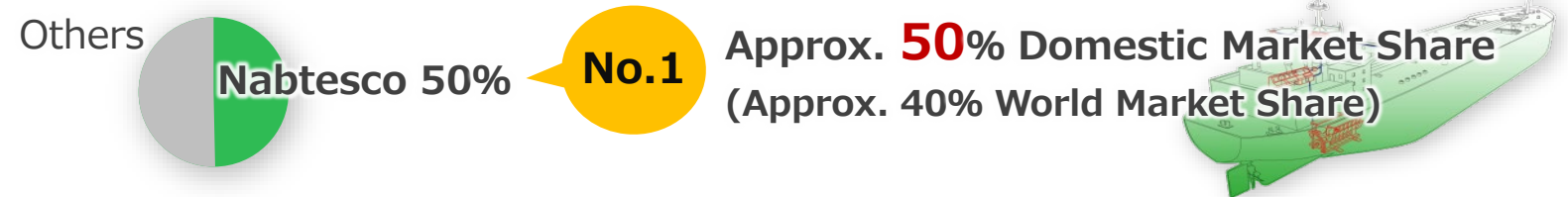


■ Air Dryers



Marine Vessel Equipment

■ 2ST Main Engine Control Systems



Main Customers

■ Commercial Vehicle Equipment

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

■ Marine Vessel Equipment

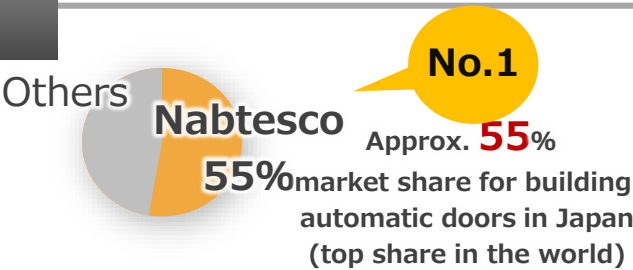
KHI, Japan Engine Corporation, Makita Corporation, Hitachi Zosen, Mitsui Engineering & Shipbuilding, Hyundai Heavy Industries (Korea), Hudong Heavy Machinery (China), HSD Engine Co., Ltd. (Korea), MAN Diesel (Denmark)

Main Products: Accessibility Solution Segment (ACB)

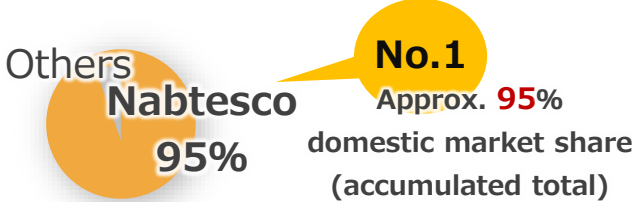
Automatic Doors

The market share is estimated by Nabtesco

■ Automatic Doors



■ 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

Mitsui DM 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.

