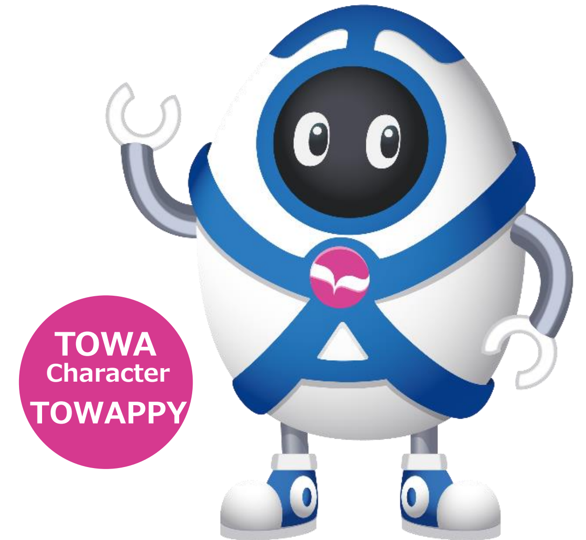
TOWA

FY2023
Business Results



May 10, 2024

TOWA CORPORATION

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FY2023 Summary

(100M¥)

Orders	Net Sales	Operating Profit	Ordinary Profit	Net Profit
527.1	504.7	86.6	90.7	64.4

Orders increased +20.6% YoY

Orders recovered by 20.6% YoY due to increased investment for in-house manufacturing of semiconductor in China and for generative AI-related product, and continuous investment for automotive and power semiconductor in Other Asia.

Both orders and net sales of TOWA's original compression equipment and molds reached records high.

Due to the increased investment related to communicate device in China and for generative-AI-related product, both orders and net sales of our original compression equipment and molds reached records high.

Although revenue and profit decreased compared to previous year, profits at each stage exceeded the initial guidance

Due to the sluggish demands of consumer goods, profits at each stage exceeded the initial guidance, with the improvement in product mix, driven by an increased sales of compression equipment for generative AI-related product, although the revenue and profit decreased compared to previous year.

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FY2023 Consolidated Financial Results

(100M¥)

	FY2022 Results	FY2023 Forecast	FY2023 Results	YoY	Vs.Fcst
Net Sales	538.2	510.0	504.7	▲33.5 (▲6.2%)	▲5.2 (▲1.0%)
Operating income	100.3	81.6	86.6	▲13.7 (▲13.7%)	+5.0 (+6.1%)
Operating margin	18.6%	16.0%	17.2%	▲1.4pt	+1.2pt
Ordinary income	102.0	81.6	90.7	▲11.2 (▲11.0%)	+9.1 (+11.3%)
Net income	73.4	57.1	64.4	▲9.0 (▲12.3%)	+7.3 (+12.9%)

※Net Profit= Profit attributable to the shareholders of TOWA CORPORATION

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FY2023 Net Sales by Business Segment

(100M¥)

	FY2022 Results	FY2023 Guidance	FY2023 Results	YoY	Vs.Fcst
Net Sales	538.2	510.0	504.7	▲ 33.5 (▲ 6.2%)	▲ 5.2 (▲ 1.0%)
Semiconductor	412.6	370.6	383.2	▲ 29.4 (▲ 7.1%)	+ 12.6 (+ 3.4%)
Fine Plastic	19.5	20.0	21.5	+ 2.0 (+ 10.3%)	+ 1.5 (+ 7.5%)
New Business	80.1	93.4	75.8	▲ 4.3 (▲ 5.5%)	▲ 17.6 (▲ 18.9%)
Laser Processing Machine	25.8	26.0	24.2	▲ 1.6 (▲ 6.6%)	▲ 1.8 (▲ 7.0%)

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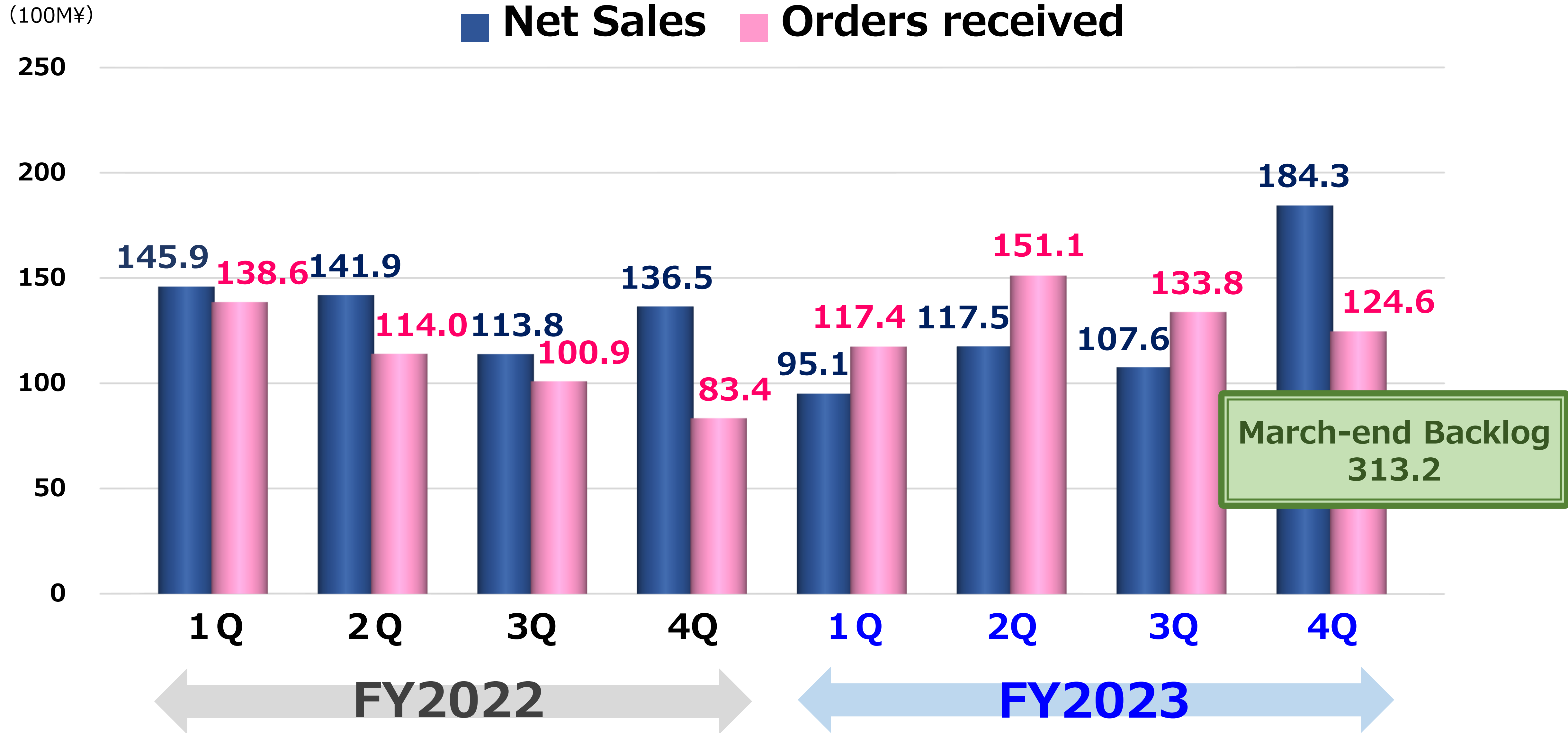
Net Sales and Orders Trend



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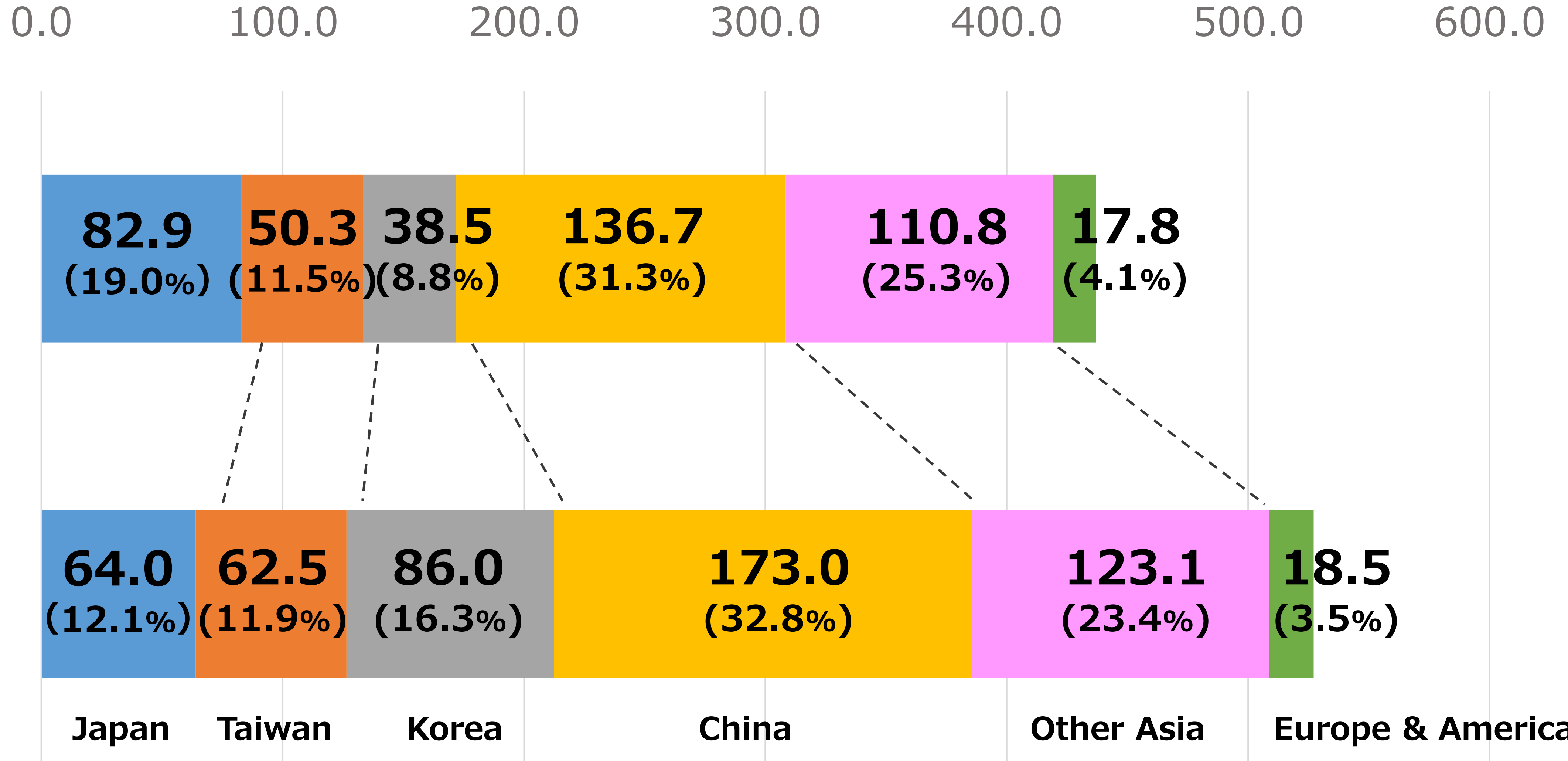
Orders Distribution Ratio by Geographic Area (Place of destination)



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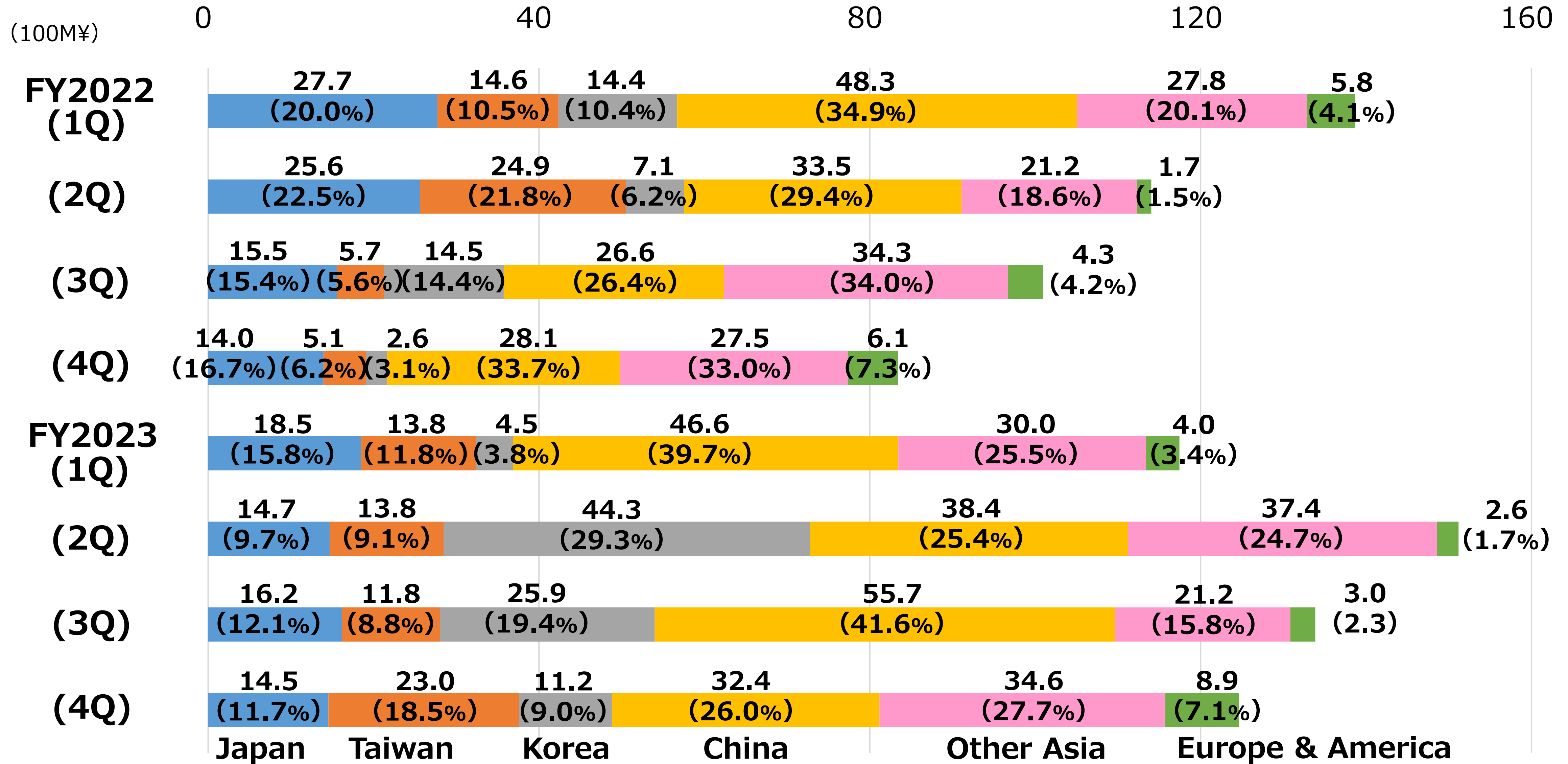
Trend of Orders Distribution Ratio by Geographic Area (Place of destination)



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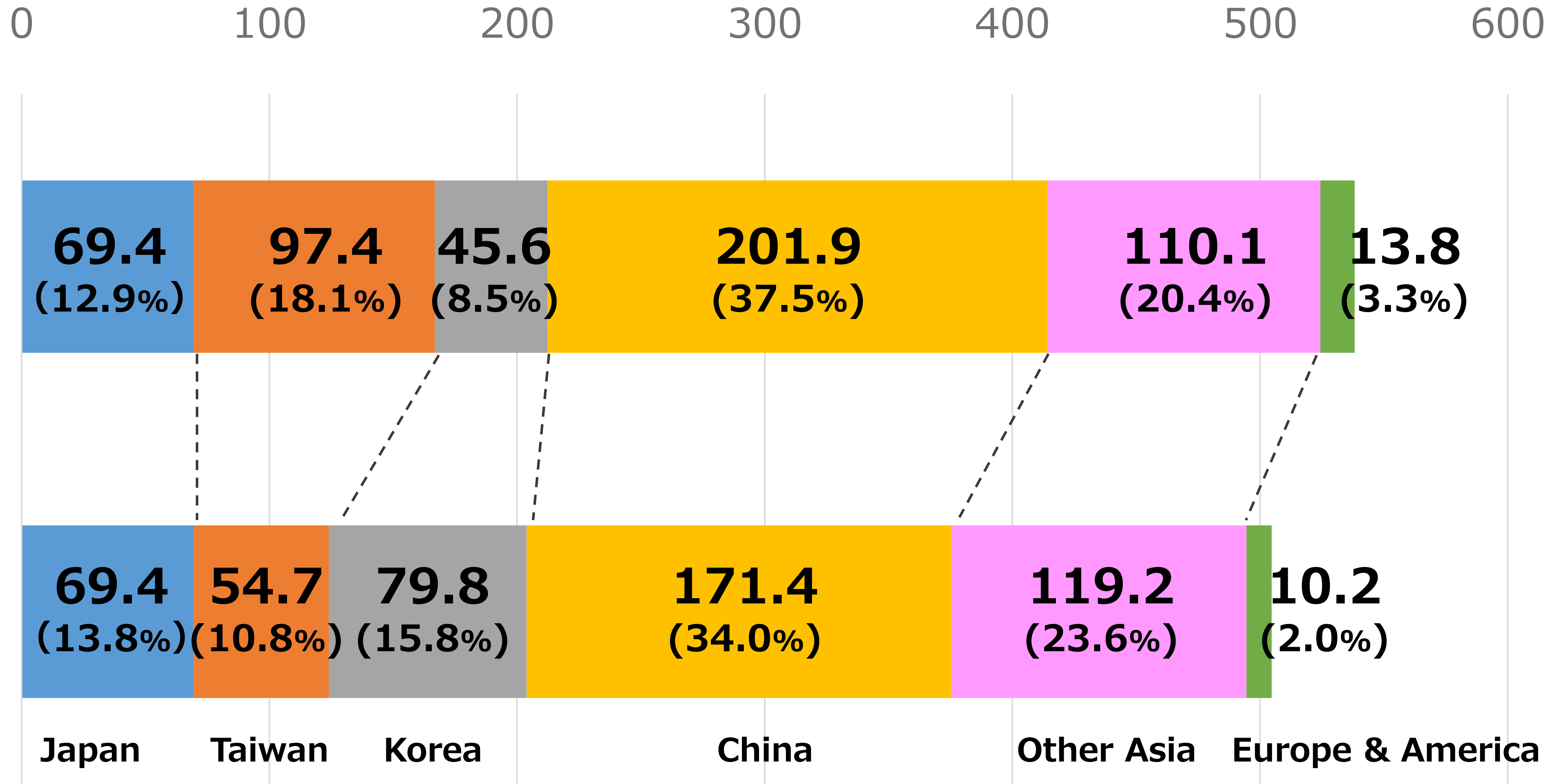
Sales Distribution Ratio by Geographic Area (Place of destination)



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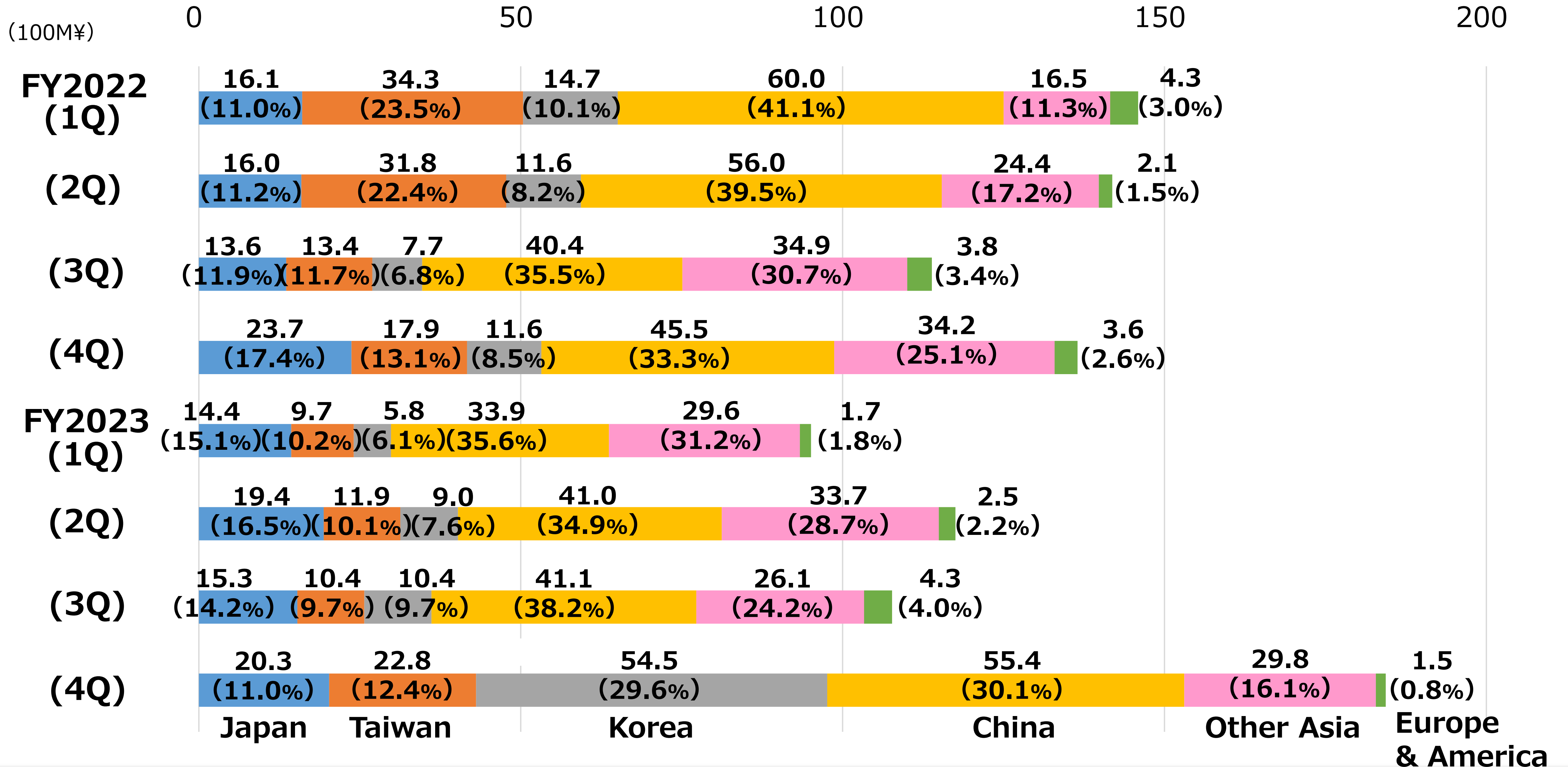
Trend of Sales Distribution Ratio by Geographic Area (Place of destination)



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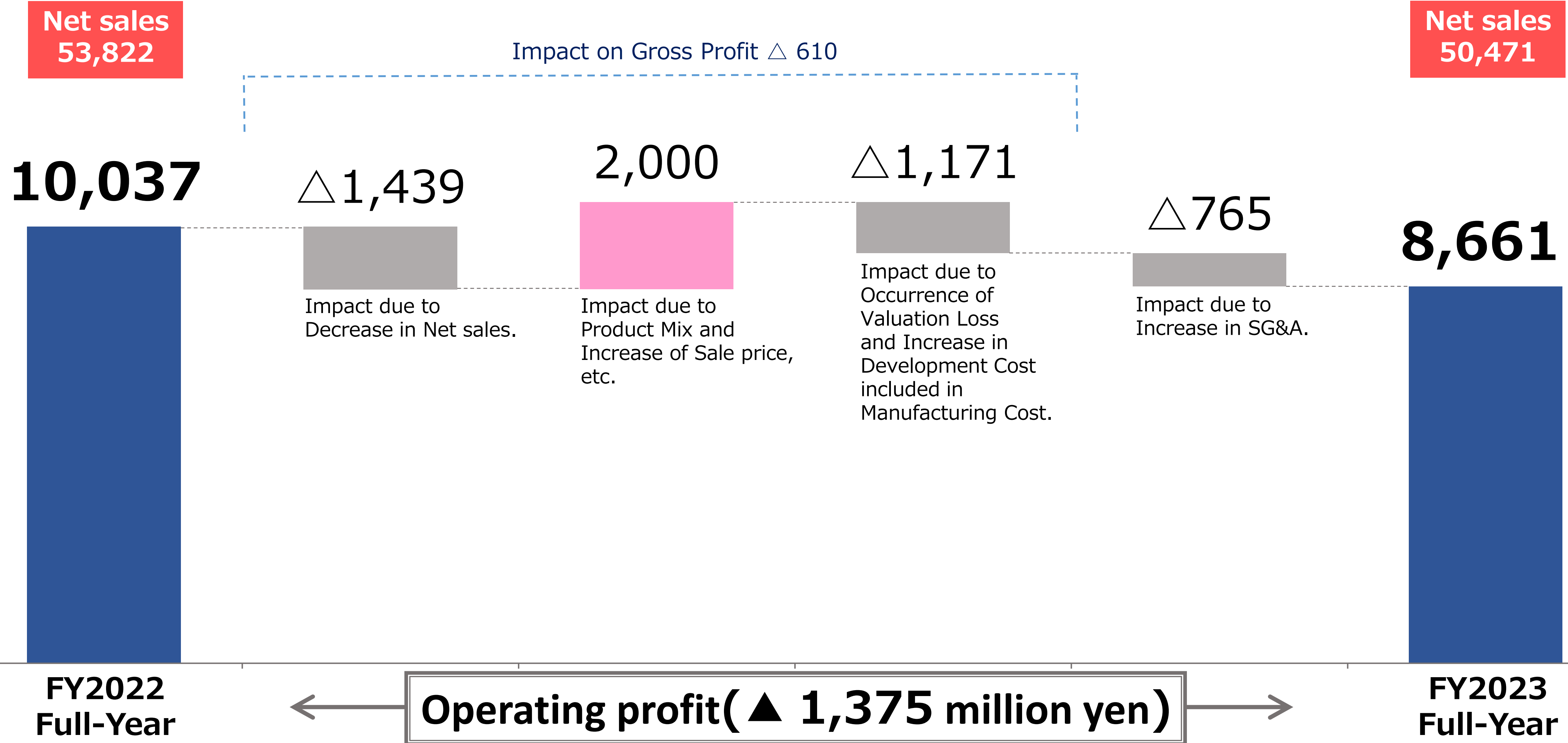
FY2023 Operating Profit Variance Analysis（YoY）



※Yen amounts are rounded down to millions.

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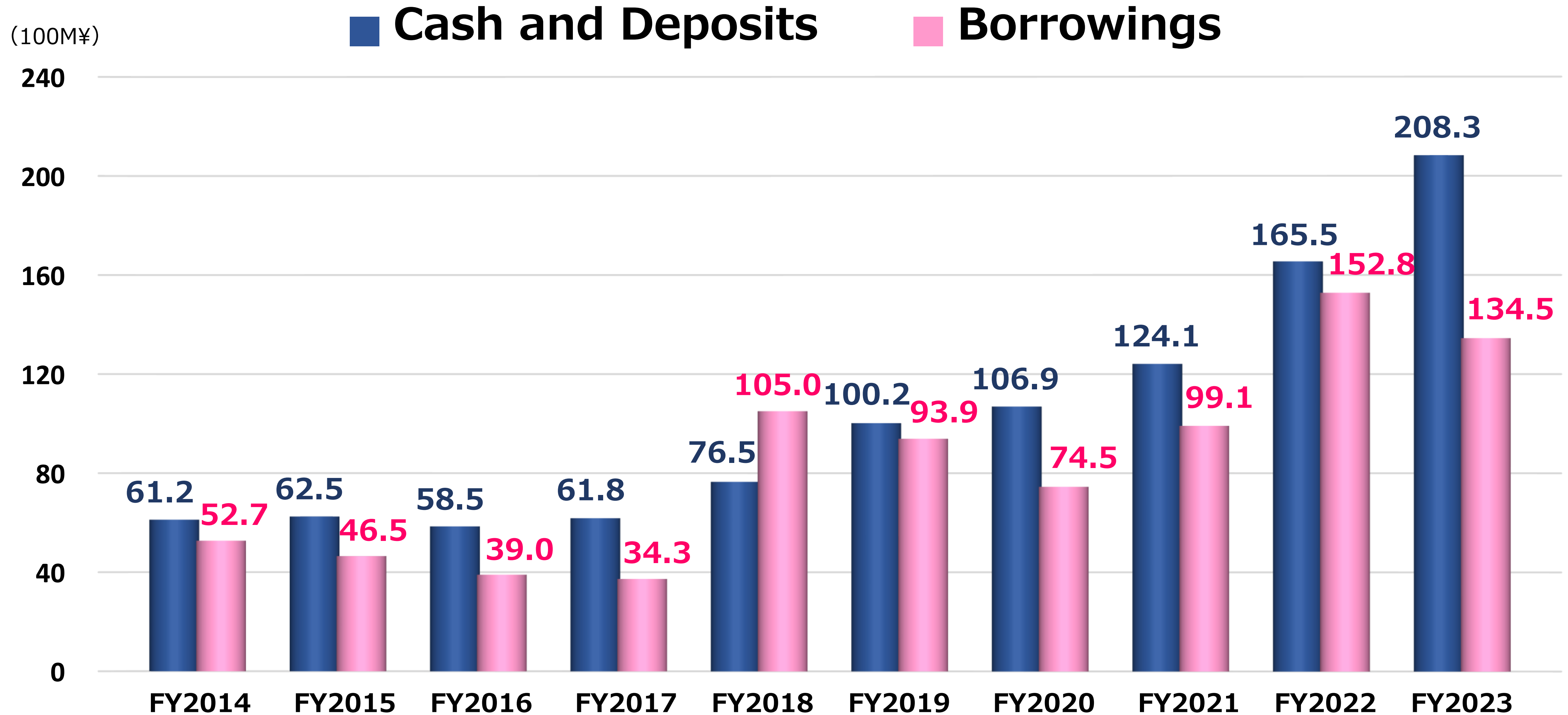
Trend of Cash Flow



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FY2024 Forecast of Consolidated Financial Results

(100M¥)

	FY2023 Results	FY2024 Forecast	Variance	YoY
Net Sales	504.7	600.0	+ 95.2	+ 18.9%
Operating Profit	86.6	126.0	+ 39.3	+ 45.5%
Operating Margin	17.2%	21.0%	–	+ 3.8pt
Ordinary Profit	90.7	126.0	+ 35.2	+ 38.8%
Net Profit	64.4	88.3	+ 23.8	+ 37.0%

※Net Profit= Profit attributable to the shareholders of TOWA CORPORATION

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FY2024 Forecast of Consolidated Financial Results by business segment

(100M¥)

	FY2023 Results	FY2024 Forecast	Variance	YoY
Net Sales	504.7	600.0	+ 95.2	+ 18.9%
Semiconductor	383.2	443.0	+ 59.8	+ 15.6%
Fine Plastic	21.5	22.0	+ 0.5	+ 2.3%
New Business	75.8	104.0	+ 28.2	+ 37.2%
Laser Processing Machine	24.2	31.0	+ 6.8	+ 28.3%

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Capital Investment & Dividend Forecast

	FY2023 Records	FY2024 Forecast
Capital Expenditure (100M¥)	20.0	60.0
Dividends (Yen)	40.0	60.0

▶ Major plan of Capital Expenditure

- New plant in South Korea
- Regarding to smart factory
- Increase production capacity by introducing new production facilities or updating facilities at each factory
- Expansion of laboratory function at each base.
- Investment for expansion of Fine plastic business

◆Proactive M&A etc.

※Based on the dividend policy "Stable and Continuous Dividend", we are planning to pay 60.0 yen which is an increase of 20 yen.

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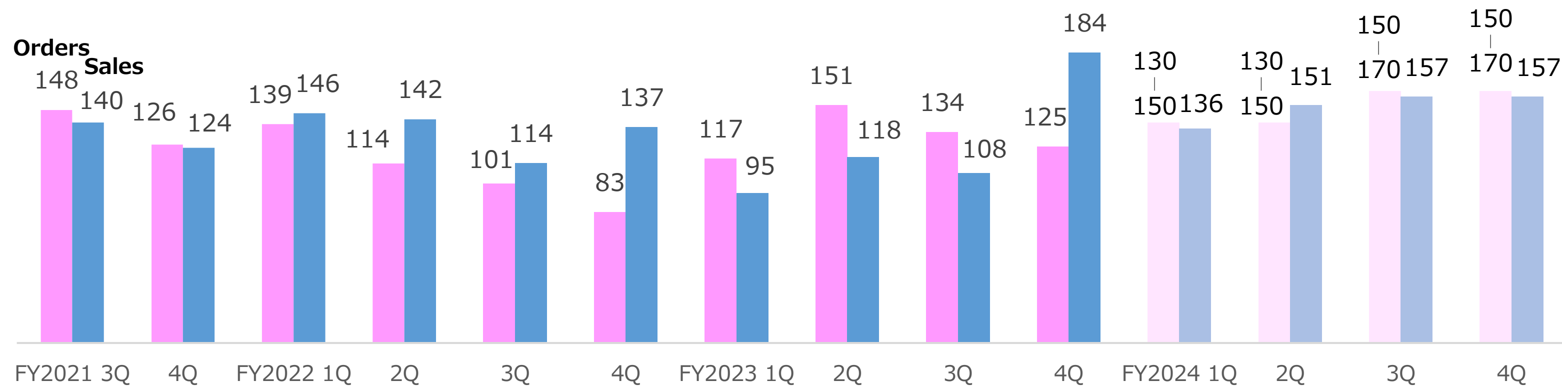
Market Outlook

Market Outlook of this Fiscal Year

- It is expected that brisk investment for generative AI-related product will be continued onwards.
- It is expected that active investment for in-house semiconductor manufacturing in China will be continued onwards.
- Utilization rate of OSAT has recovered and capital expenditure is expected that it will be recovered from the 2Q. Regarding TOWA's sales, it is expected to increase from the 2Q.



(100M¥)

Orders Forecast

1Q	2Q
130-150	130-150
3Q	**4Q**
150-170	150-170

Profit & Loss Forecast

Net Sales	600.0
Operating Profit	126.0
Ordinary Profit	126.0
Net Profit	88.3

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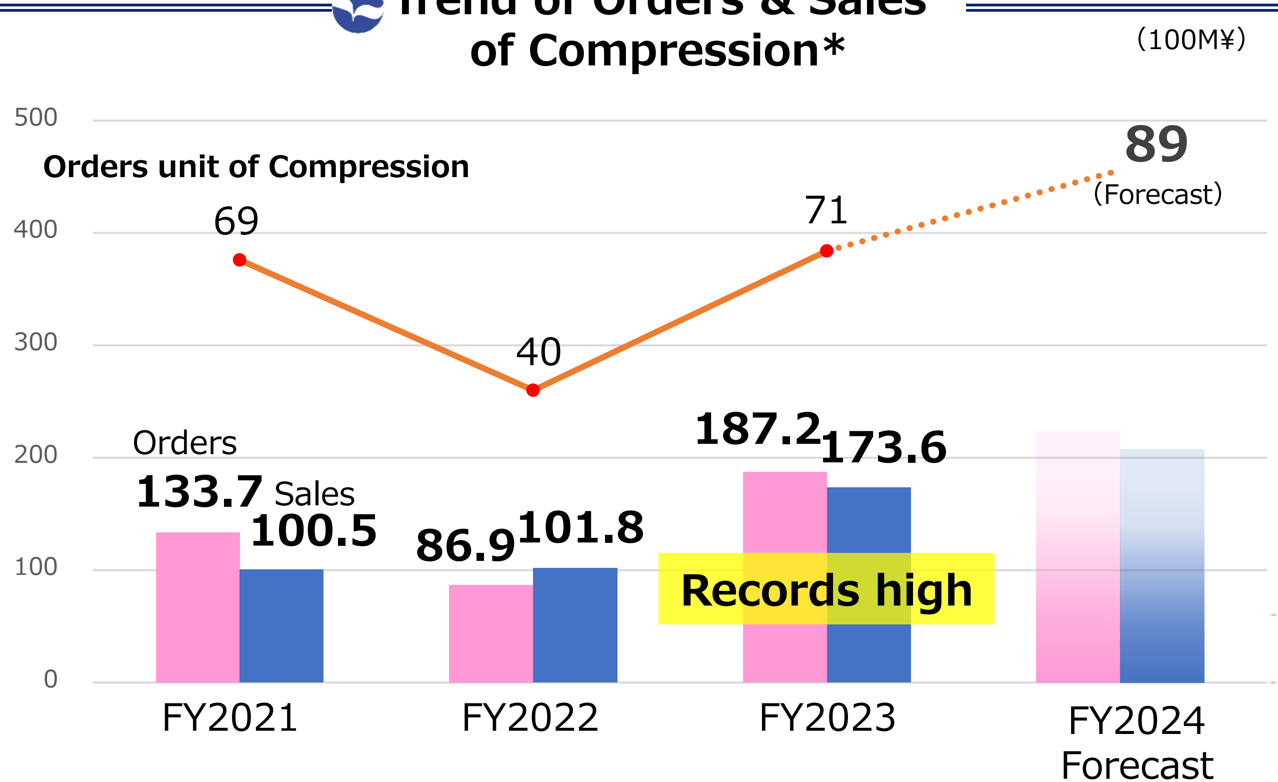
TOWA Original Compression Equipment

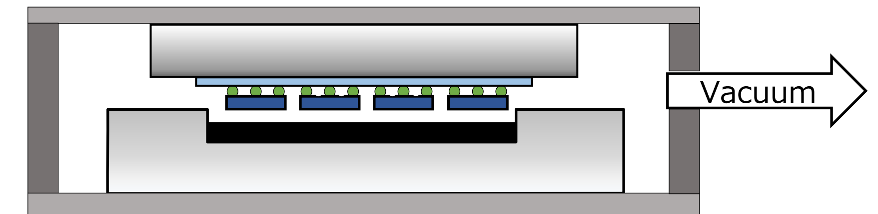
Orders and Sales of Compression reached records high!!

Substantial Increase in Orders and Sales of Compression for Advanced Package such as Generative AI-related Product!



TOWA's Original Structure : Cavity Down

With our original structure of cavity down, it can realize outstanding vacuum state with its quickness and mold narrow gap with high precision technology!



Areas where compression technology can be utilized

- Generative AI
- Next Generation AI Smartphone
- Automated car
- Wafer-level Package
- Panel-level Package
- 2.5D, 3D Package

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Effort to Strengthen Manufacturing System

With the build-up of effort to increase productivity and secure of new factory, we are aiming early construction of manufacturing system for 100 billions yen worth of sales.

Smart Factory Transformation at Mold Factory

Consideration of space for new factory

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Acquisition of Factory Assets in South Korea

With the aim of 100 billions yen worth of sales, we have acquired factory in South Korea, where investment for advanced semiconductor can be expanded !

Location	425, Chaam-dong, Seobuk-gu, Cheonan-si, Chungcheongnam-do, Republic of Korea (6 min by car from the current factory of Korea)
Total Area of Land	Approximately 16,137㎡
Total Floor Area	Approximately6,215㎡
Date of acquisition	April 29, 2024
Use	Assembly of semiconductor manufacturing equipment, Renewal of equipment, Laboratory

- Aim for the operation from the 2Q with early construction of manufacturing system by utilization of existing buildings.
- Aim for the expansion of capacity and short delivery period by strengthening the manufacturing system in South Korea where the demand for molding equipment for advanced semiconductor can be expanded.
- Aim for the expansion of business scale with renewal business of equipment and expansion of laboratory function.

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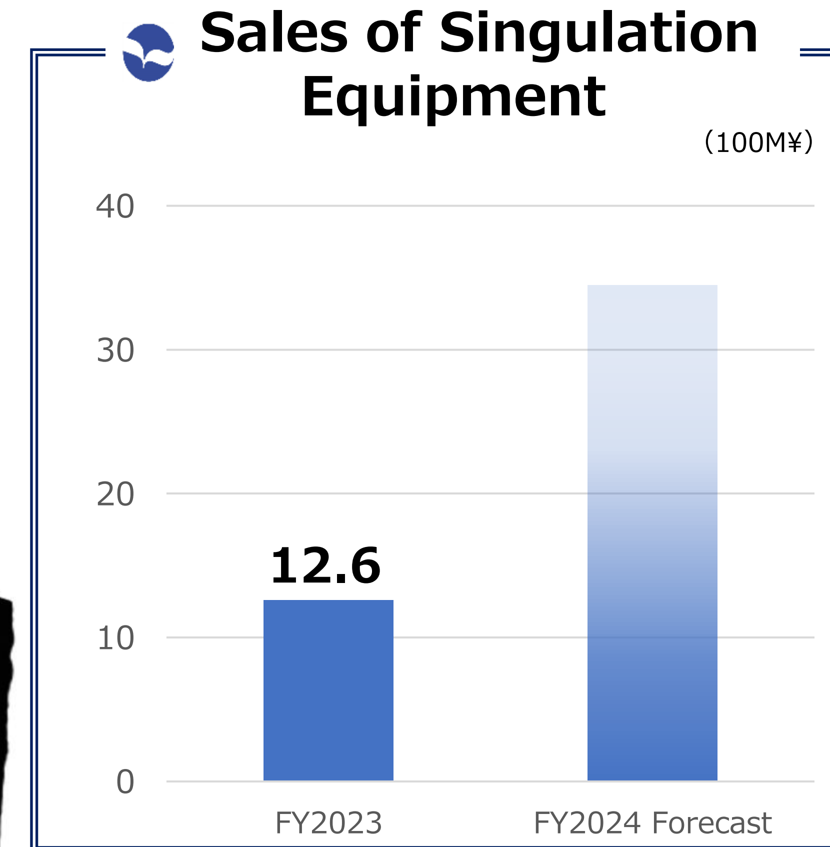
Strengthen Singulation Business

Shift to Business Division System, Strengthen Development and Sales function

▶ From October 2023, with the shift to business division system integrated with development, production and sales function, we have built up the efforts to expand the share when the market recovers.

▶ Aim for the early market inputs of collaborated product by strengthening the connected development with laser business, besides the latest model FMS4040.



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TOWA Technology Exhibition

Introduce TOWA's Superiority in Advanced Packaging

Period	December 2023 ～January 2024
Number of visitor (Company)	Approximately 140 companies
Number of visitor (Person)	Approximately 400 people

The Situation Surrounding Back-end Process

・The limits of miniaturization have emerged in front-end process, prompting active trend towards enhancing performance in back-end process.

・The development and capital expenditure plans for advanced packaging technologies such as "3D integration" and "Chiplets" are increasing among semiconductor manufacturers.

Customer feedback

・ The equipment concept is clear, and they exhibits high level of technological superiority.

・ There is considerable interest in new products aimed at Chiplets.

・ Compression technology has effectiveness for MUF* products, and we keep giving positive consideration to it.

Mold Under Fill (MUF):
A technology that simultaneously fills resin into narrow gap beneath the chip and seals the entire chip.

▶ **Amidst the increasing importance of back-end process, there is a high level of interest and appreciation for TOWA's advanced technology.**

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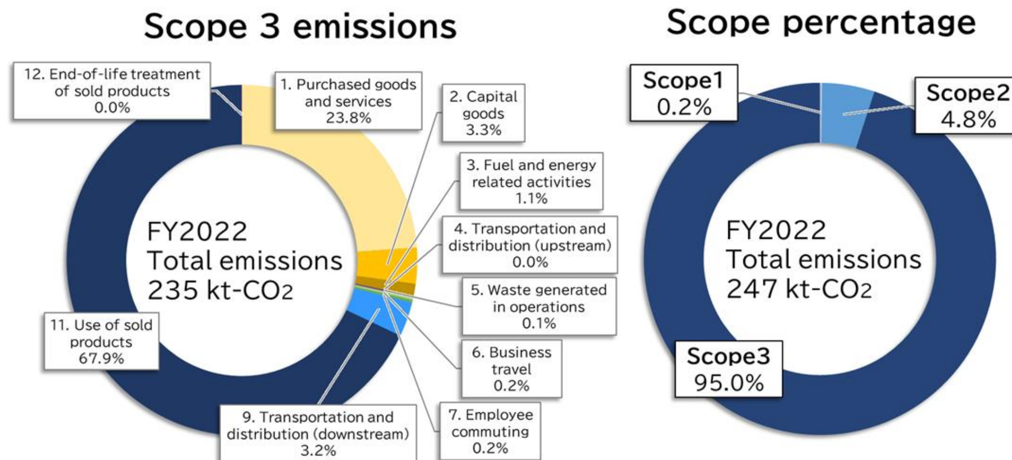
Efforts to Enhance ESG

Scope 3 Emissions Calculation

We have completed the calculation of Scope 3 emissions as part of our decarbonization efforts and have disclosed the data on our company website.
For Scope 1 and Scope 2, we have already established reduction targets and are actively pursuing initiatives towards carbon neutrality.
For Scope 3, we are proactively promoting efforts with a focus on reduction of emission during product use.



<Ref.> https://www.towajapan.co.jp/en/company/esgdata/#scope3

Certification acquisition

Certified by "Health and Productivity Management Organization 2024"

Continuing from last year, we have been certified by "Health and Productivity Management Organization 2024“. Moving forward, we will continue to promote employee’s health maintenance and enhancement, and strive to improve work-life balance for each individual employee.
We remain committed to advancing health management within our organization.

Certified by "SPORTS YELL COMPANY 2024"

We have been certified as "Sports Yell Company“ which is the system, that companies actively promote sports activities to improve the health of their employees, is recognized by Japan Sports Agency.
We will continue to strive to create an environment in which employees can enjoy sports and live a healthy life.

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TOWA Vision 2032

「To the top of the world with change」

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TOWA CORPORATION Corporate Planning Dept.
5 Kamichoshi-cho, Kamitoba, Minami-ku, Kyoto 601-8105
Telephone number : 075-692-0251

This presentation material contains TOWA Group's forward-looking statements regarding, including but not limited to, plans, policies, finances, technologies, products, services and results. Such forward-looking statements are the judgements made by the Group based on available data, assumptions and applicable methods etc. as of the presentation date, and contain various risks and uncertainties. Also, new risks and uncertainties can occur anytime and it is impossible to predict the occurrence and the effect of them. Thus, please understand the actual results could considerably differ from the forward-looking statements.

Appendix

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Corporate Overview

Company name	TOWA CORPORATION
Products	Semiconductor/LED Manufacturing Equipment, Ultra-Precision Molds, Fine Plastic Products, Laser Processing Machines
Established	April 1979
President & CEO	Hirokazu Okada
Number of Employees	1,985 (consolidated) [31th Mar. 2024]
Paid in capital	8,942 million yen
Code Number	6315
Address	5 Kamichoshi-cho, Kamitoba, Minami-ku, Kyoto

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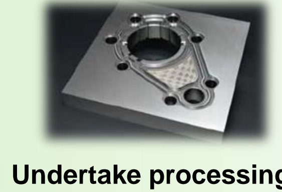
TOWA's Business

New Business

- TSS (Total Solution Service)
- Tools for precision process
- Fine process
- Coating


Undertake processing

Remodeling, repair, Prevention & Upkeep

Fine process technology

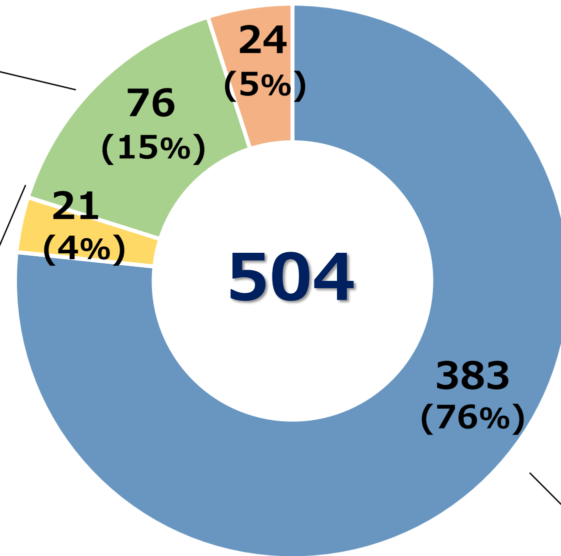
Tool (end mill)

Laser Processing Machines

- Laser Trimmer
- Wafer Marker
- Laser Welder

Laser Trimmer SL432R

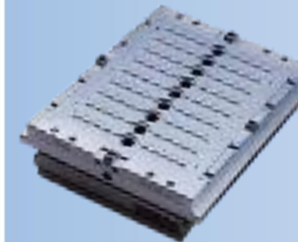
Wafer Marker SL473GS3



Net Sales (100M¥) (FY2023)

Semiconductor Manufacturing (SM) Equipment

- Precision molds for SM
- Molding equipment for SM
- Singulation equipment for SM


Transfer Mold

Molding Equipment PMC2030-D

Molding Equipment CPM1080

Fine Plastic

- Fine plastic products
- Medical products

Parts of drip

Component for syringe

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Factories

● TOWA Corporation ● Affiliated Companies

Korea

● TOWA KOREA Co., Ltd.
Equipment, precision mold and component manufacturing

● TOWA FINE Co., Ltd.
Blade

China

● TOWA (Suzhou) Co., Ltd.
Equipment and precision mold manufacturing

● TOWA (Nantong) Co., Ltd.
Equipment and precision mold manufacturing

Malaysia

● TOWAM Sdn. Bhd.
Equipment manufacturing

● TOWA TOOL Sdn. Bhd.
Mold manufacturing

Kyoto

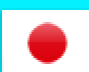
● Headquarters/Factory (Kyoto-shi)
Equipment and precision mold development and manufacturing

Kyoto

● Kyoto East Plant (Ujitawara-cho)
Mold manufacturing

Saga（Tosu-shi）

● Kyushu Work
Mold manufacturing


Japan

Yamanashi（Nirasaki-shi）

● BANDICK Corporation
Fine plastic products manufacturing

Kanagawa（Sagamihara-shi）

● TOWA LASERFRONT Corp.
Laser & Laser Processing machines development and manufacturing

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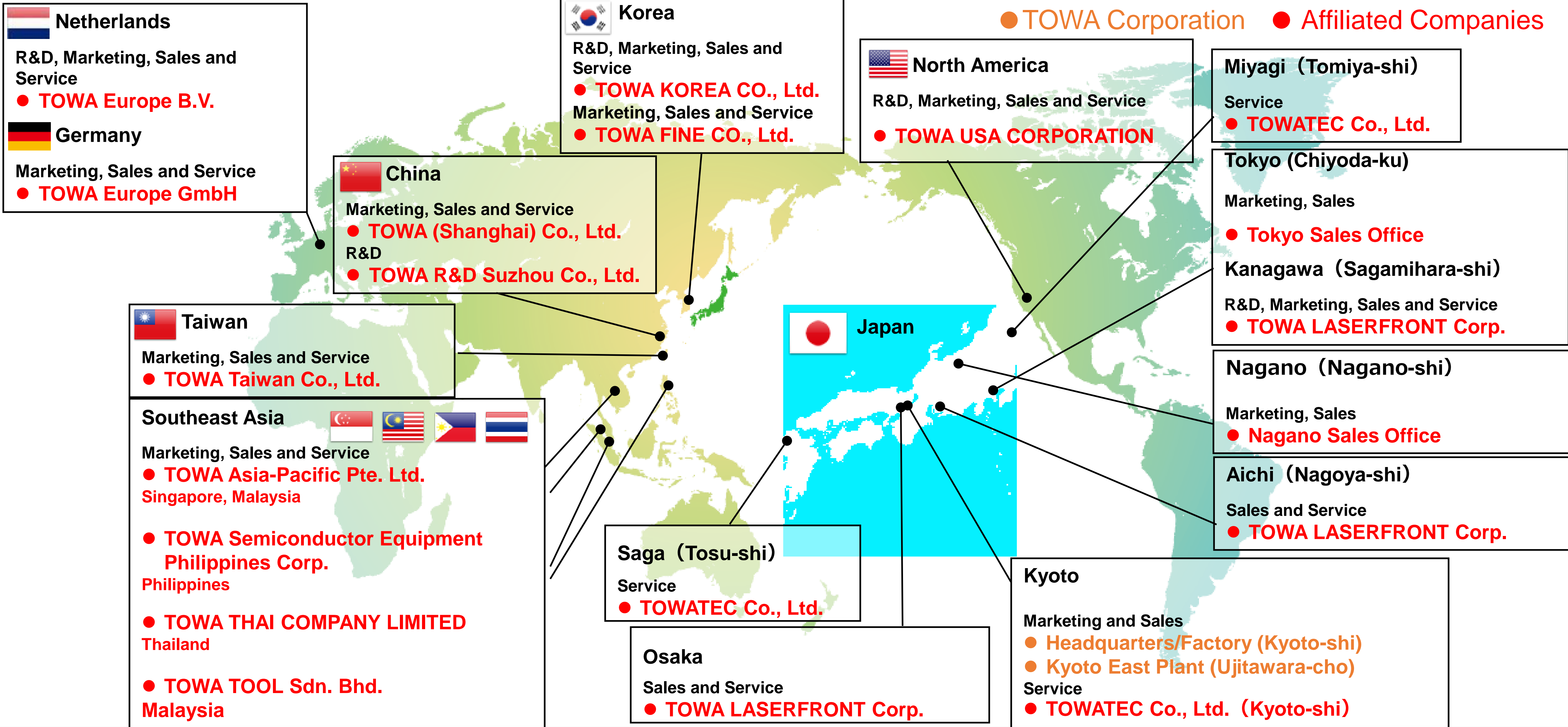
Sales/Service facility



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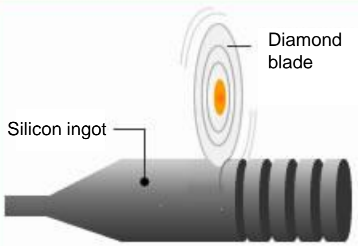
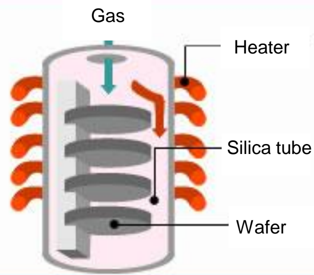
FH-process of Semiconductor Manufacturing

Slice of ingot / polishing



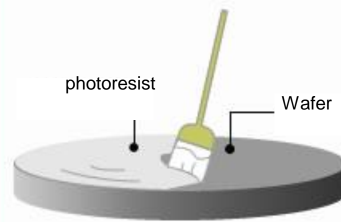
Silicon ingots are sliced into wafers and those surfaces are polished.

Oxidation on wafer surface



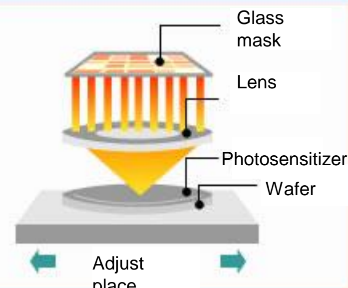
Wafers are placed in a high-temperature furnace and oxidized film is formed on surfaces.

Photoresist coating



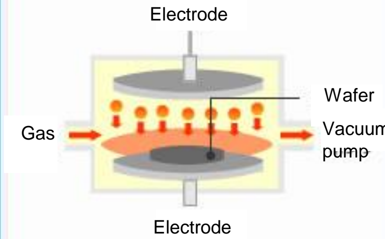
Wafers are covered with a uniform coat of photoresist.

Exposure



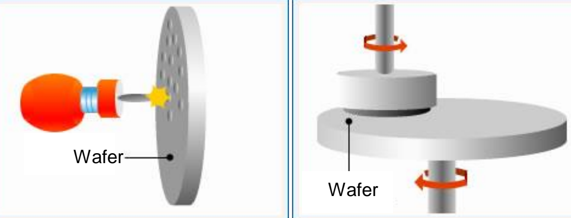
UV light is applied through the glass mask to the photoresist and the pattern of glass mask is transferred to the photoresist.

Etching



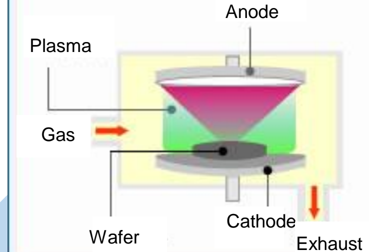
Unnecessary oxidized films and photoresist are stripped.

Oxidation・Diffusion CVD・ion injection



Necessary ion is injected into wafers and then surface of wafers are flattened out.

Electrode formation



Metal film is formed on wafer surfaces.

Inspection

Each chip on a wafer is tested, and those are sorted as pass or not.

LH-process

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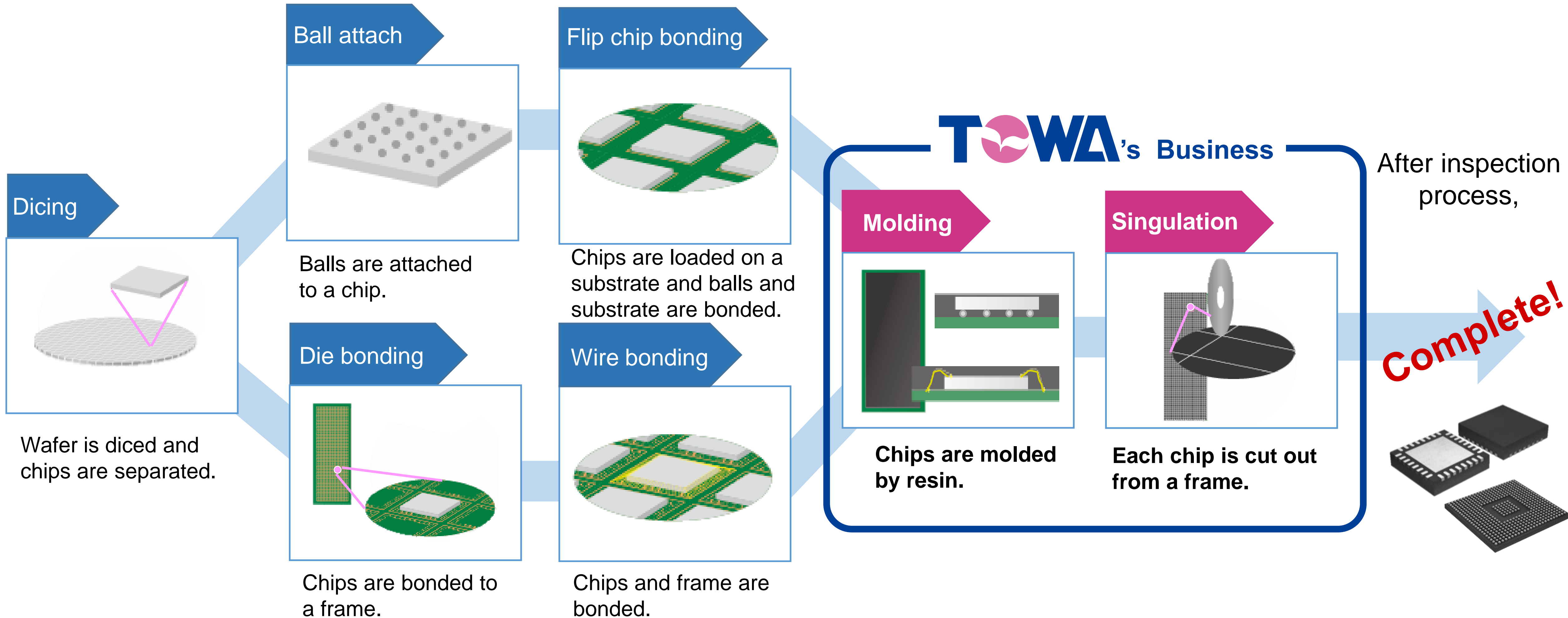
LH-process of Semiconductor Manufacturing



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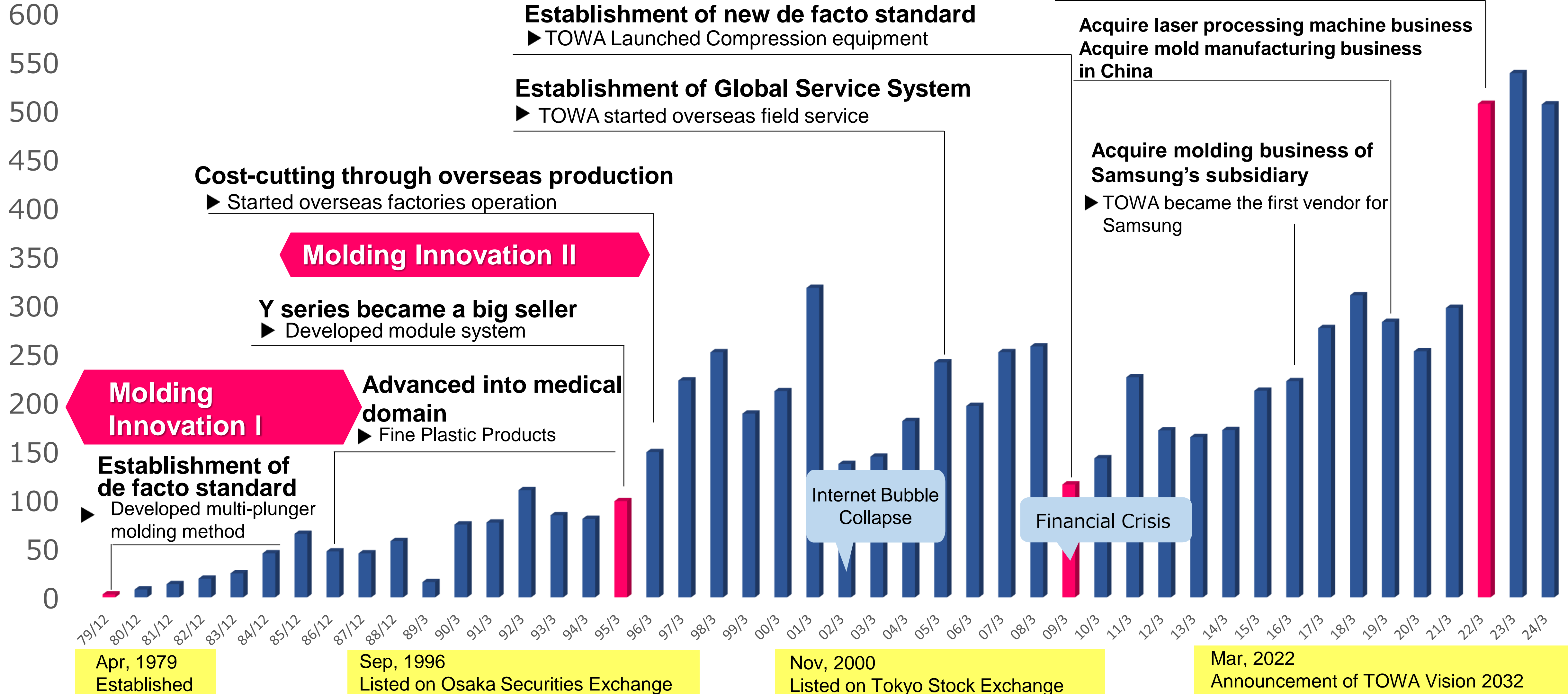
Progress of TOWA



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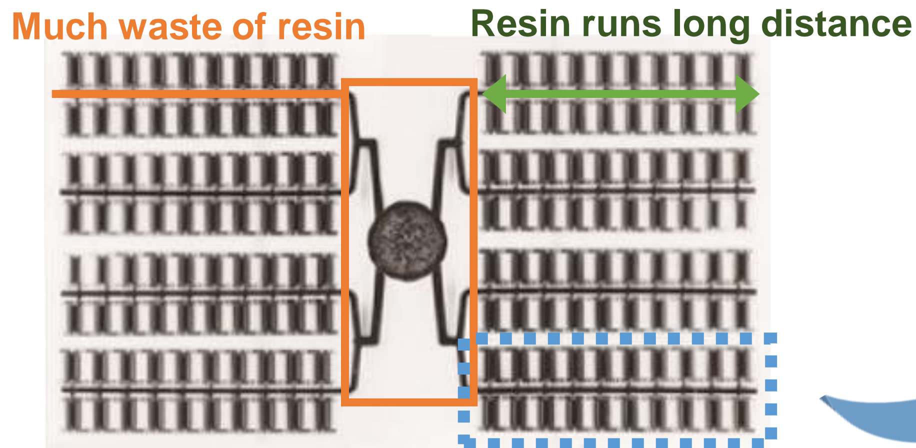
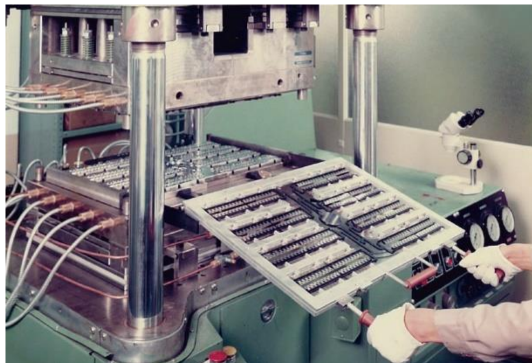
Molding innovation I（1979）

Conventional Mold

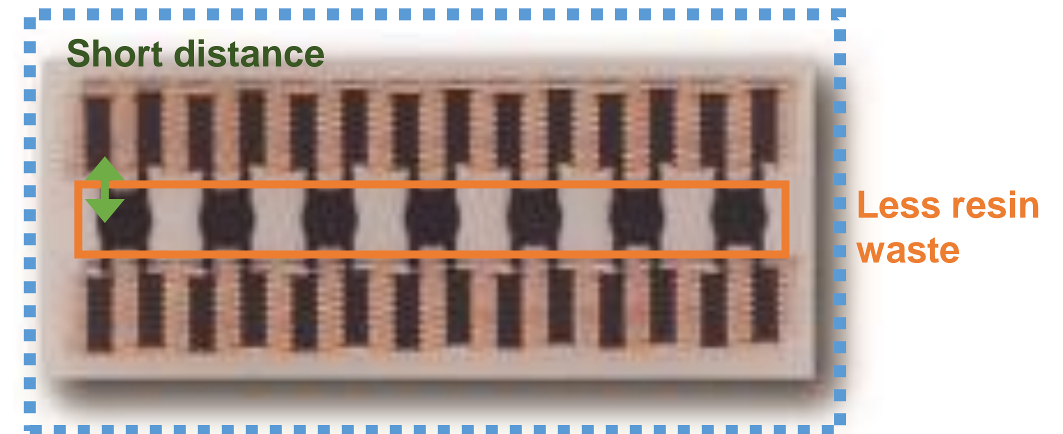
Manual molding by putting one palm size resin into the central pod. Resin runs **long distance**. Molding quality is **not homogeneous**. And **much waste of resin**.





Multi-Plunger Mold

Auto molding by putting finger size resins into several pods. This realized **short** runner, **homogeneous** molding quality and **less waste of resin**.



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Molding innovation II（1995）

Module System (Y series)

Molding equipment before Module System are・・・

・Each equipment design was unique. Semiconductor manufacturers had to buy another equipment when they manufacture another type product.

・Manufactures had to have several equipment in accordance with their manufacturing volume.

Module System enables to adjust press number!!

・Can manufacture many types of products by just having one Y series.

・Can make an additional capital investment in accordance with manufacturing volume.

Y series meet the needs of the era that companies expert in assembly undertake LF-process from IDM!!

Big seller semiconductor molding equipment TOWA is proud of.

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Molding innovation III（2009）

Compression Molding Equipment

Original compression molding method enabled to mold cutting-edge products and cut the cost significantly!!

The compression technology is unrivaled from its launch in 2009 due to the patent and technical difficulty.

PMC2030-D

Features

- 100% resin efficiency
  （CO_2 emissions reduced by about 70%）
- Compression molding with no resin fluidity
  (reduce defective products)
- Most suitable for cutting-edge such as memory and 5G
- Applicable to both granular type and liquid type resin
- Applicable to both panel size and wafer size

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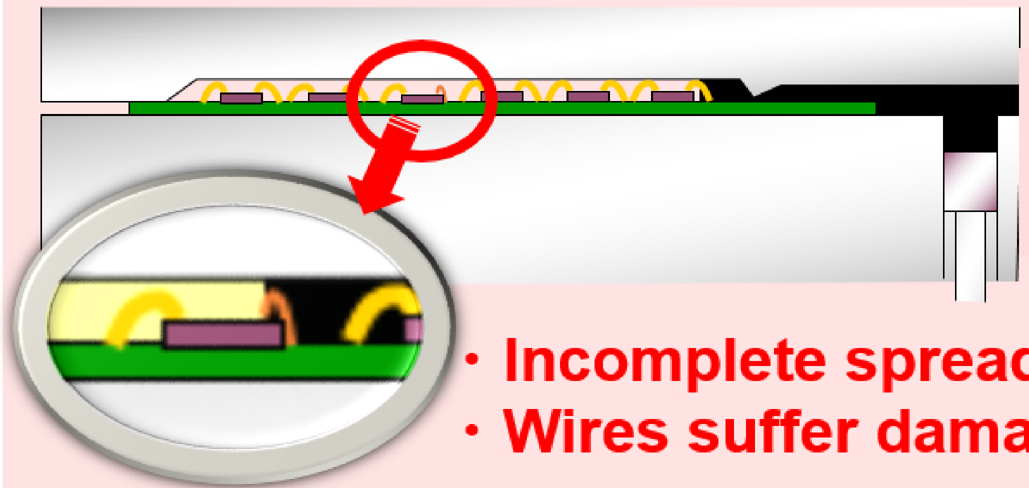
Encapsulation（Molding） Process

Transfer molding

Injecting resin type

Resin flows

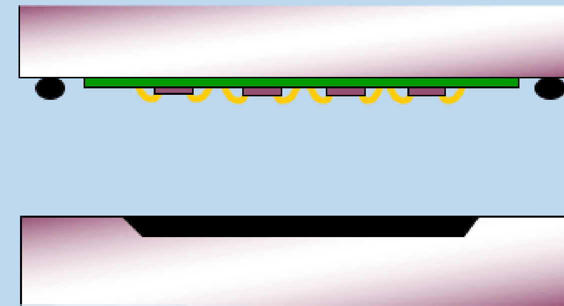


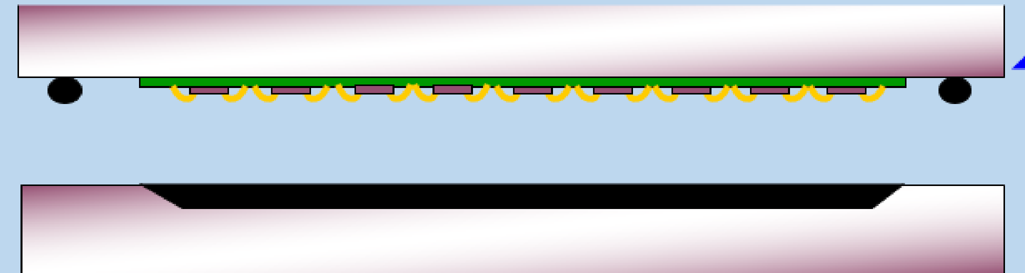
- Incomplete spreading
- Wires suffer damage

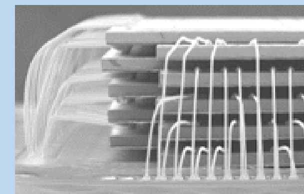
Compression molding

Compressing resin type

No Resin fluidity







- TOWA enabled large size panel molding
- No damage to products

This material is the property of TOWA CORPORATION TOWA

Singulation Process

After molding, frames are cut to each semiconductor chip

Smallest !
Realized 1.0×1.0mm Size dicing

FMS4040

Dicing

This material is the property of TOWA CORPORATION

TOWA

Semiconductor Manufacturing Equipment Line-Up

～Compression Mold～

CPM 1180

Work max size：625x620mm

CPM 1080

Work max size：φ300mm、320x320mm

PMC 2030-D

Work max size：100x300mm

～ Transfer Mold～

YPM 1180

Work max size：100x300mm

～ Singulation～

FMS4040

Work max size：100x300mm

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