



For Enhancement of Corporate Value

February 12th, 2025

Makino Milling Machine Co., Ltd.



1. About Makino

- Who We Aspire to Be ...P3
- Our Value Creation ...P4

2. Business Plan FY2029

- Financial Targets ...P7
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Trust is Our Foundation

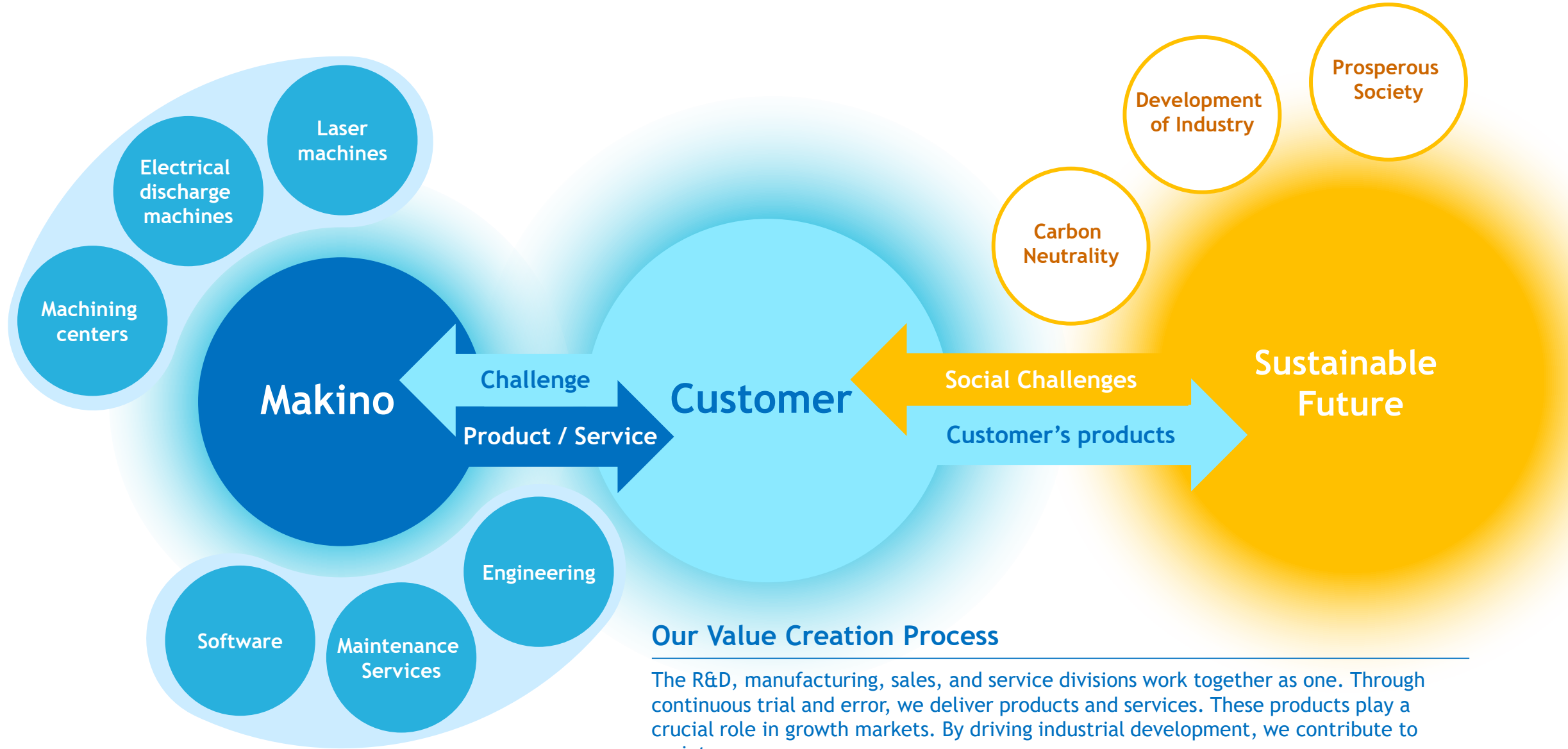
As a Specialized Machine Tool Manufacturer, we have built strong trust-based relationships with our customers by addressing their challenges through their individual workpieces. This trust is the foundation of our existence, and it will remain unchanged in the future.

Our Products and Services :

1. Products and technologies optimized for the specific industries that our customers are engaged in
2. Products that pursue quality, usability and safety
3. Engineering support for our customers' successes and the advancement of industries

We remain committed to our mission with sincerity.





Our Value Creation Process

The R&D, manufacturing, sales, and service divisions work together as one. Through continuous trial and error, we deliver products and services. These products play a crucial role in growth markets. By driving industrial development, we contribute to society.

Our Strengths History: Sales Trend

Always Leading the Industry by Developing New Products for Growth Markets



Growth Market



1: RJ=Regional jet



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Financial Targets

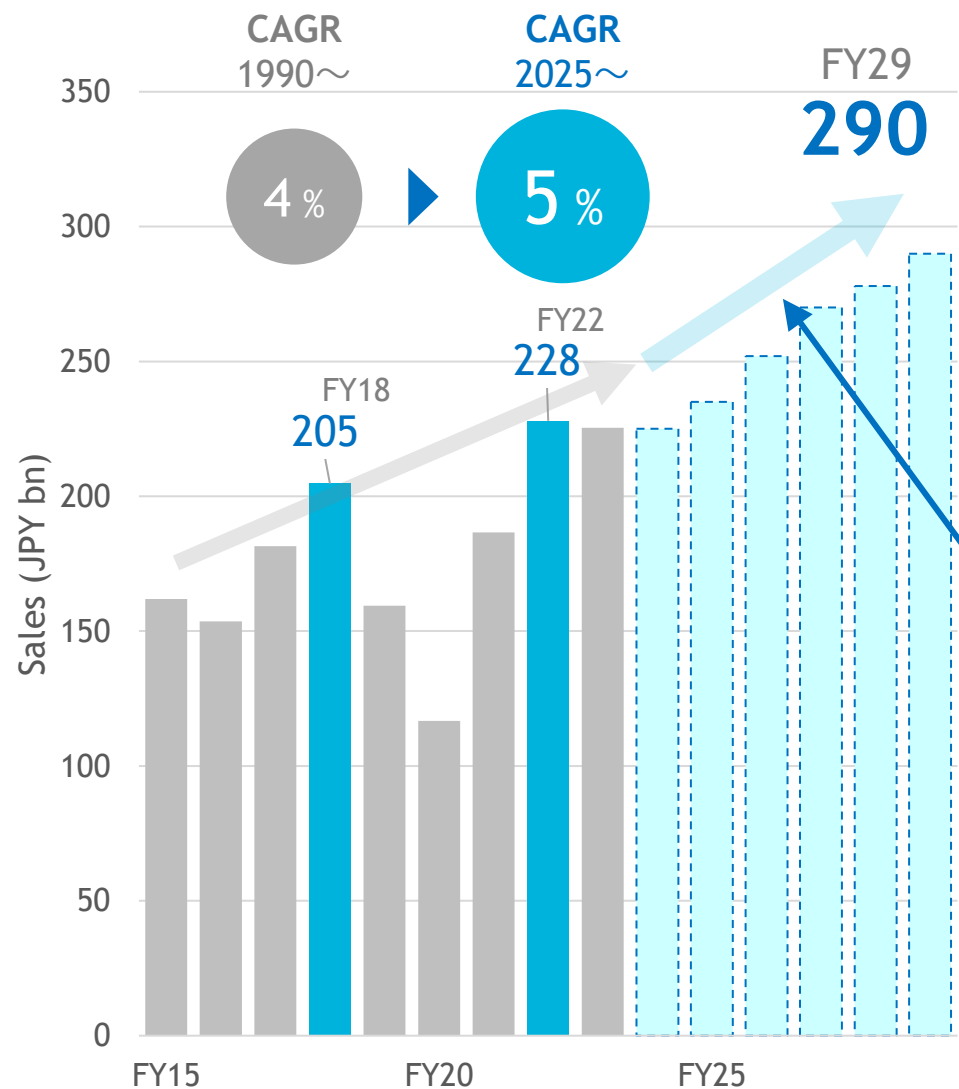


FY27 Targets Partially Updated, New Five-Year Plan Starting From FY25 Formulated

KPI	Original Plan (As of October 2023)		Updated Plan (As of February 2025)	
	FY23 Actual	FY27 Target	FY27 Target	FY29 Target
① Sales (JPY)	225.3 _{bn}	270.0 _{bn}	270.0 _{bn}	290.0 _{bn}
② OP Margin	7.3%	12.0%	12.0%	12.5%
③ Capex (JPY)	43.5 _{bn} (FY19-23 Act.)	85.0 _{bn} (FY23-27)	47.0 _{bn} (Total for FY25-27)	63.0 _{bn} (Total for FY25-29)
④ ROE	7.6%	11.0%	12.5%	11.3%
⑤ Asset Turnover	0.63	0.68	0.70	0.72
⑥ Total Payout Ratio	34% (FY19-23Act.)	35-45% (FY23-27Avg.)	60% (FY25-27Avg.)	60% (FY25-29Avg.)

Sales Target

Timely Launch of New Products into Growth Markets, with FY29 Sales Target of JPY 290bn



Market Growth Forecast and Key Products for Major Segments



New Products

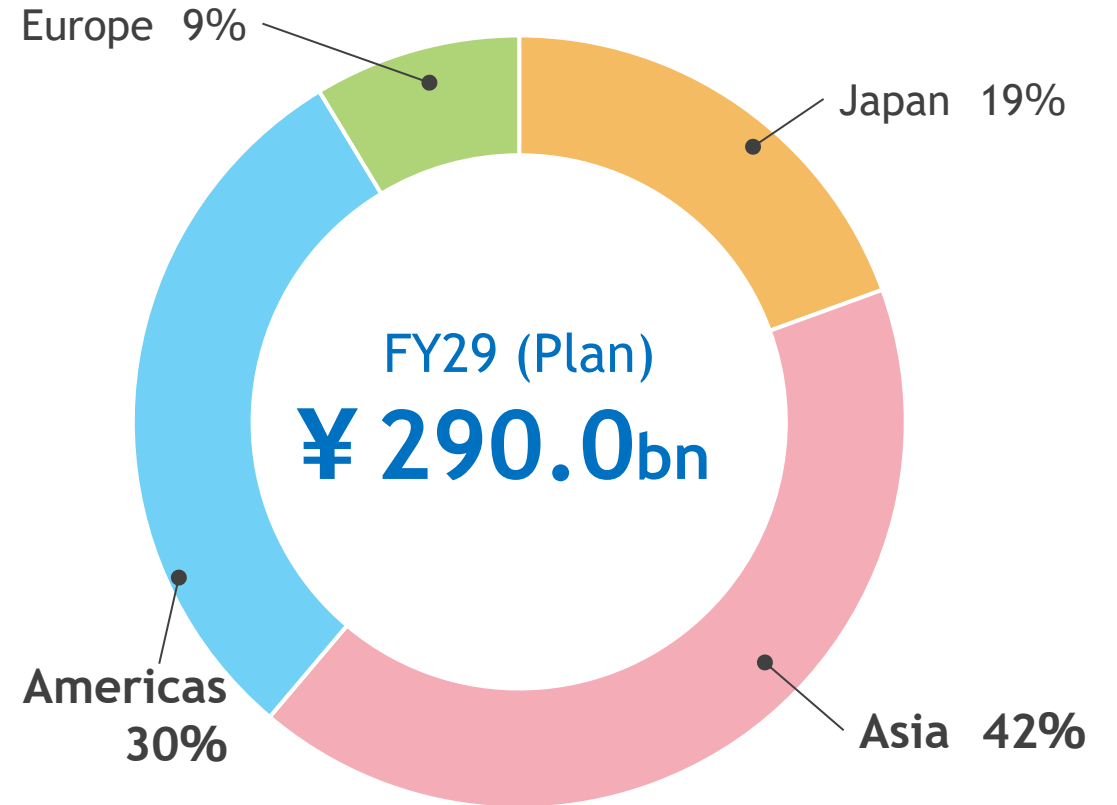
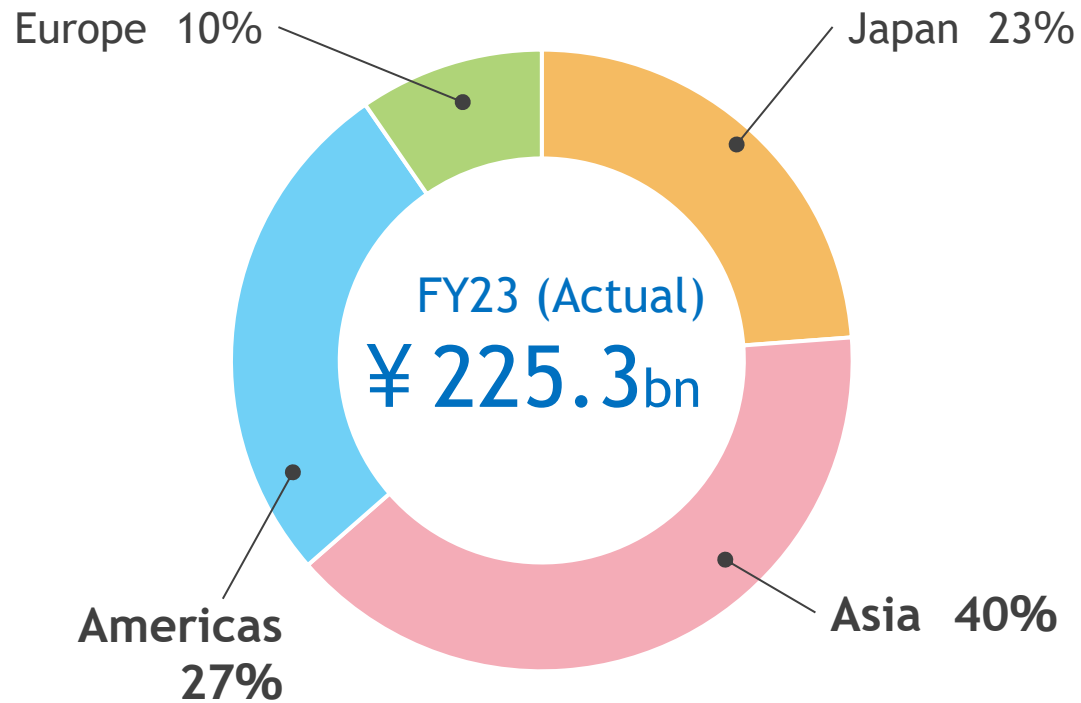


Sales Target (By Segment)



Profitability

Asian and Americas Markets Driving Our Sales Growth



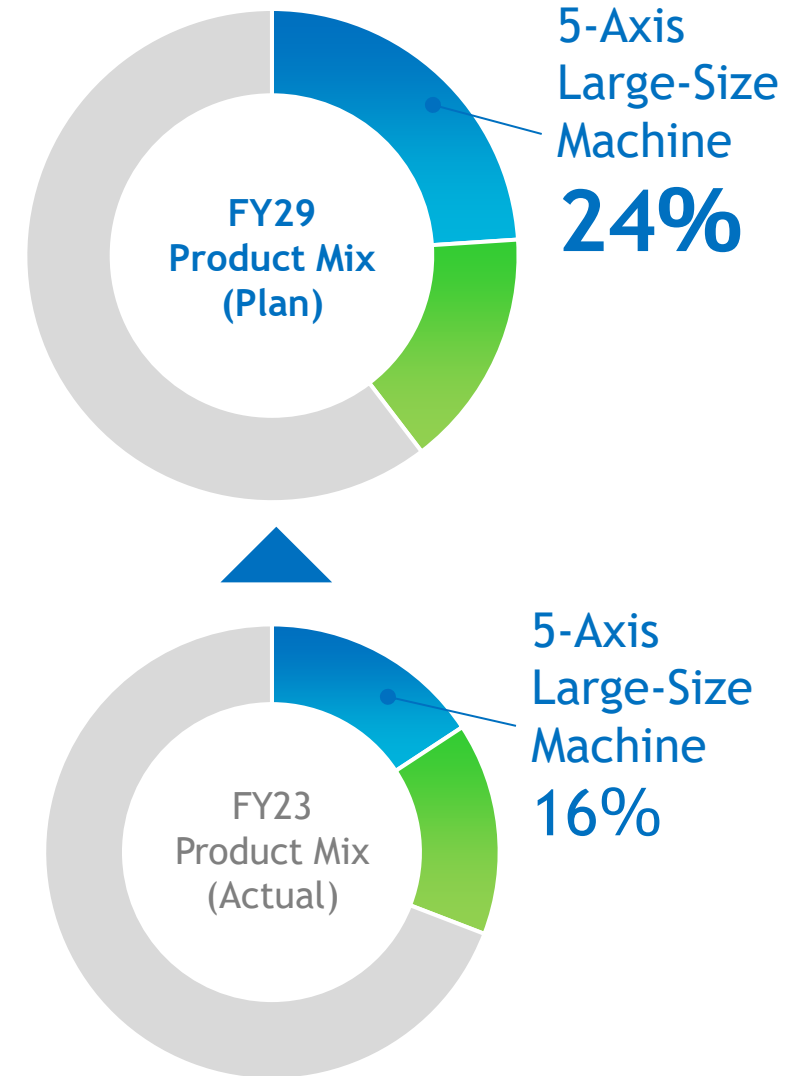
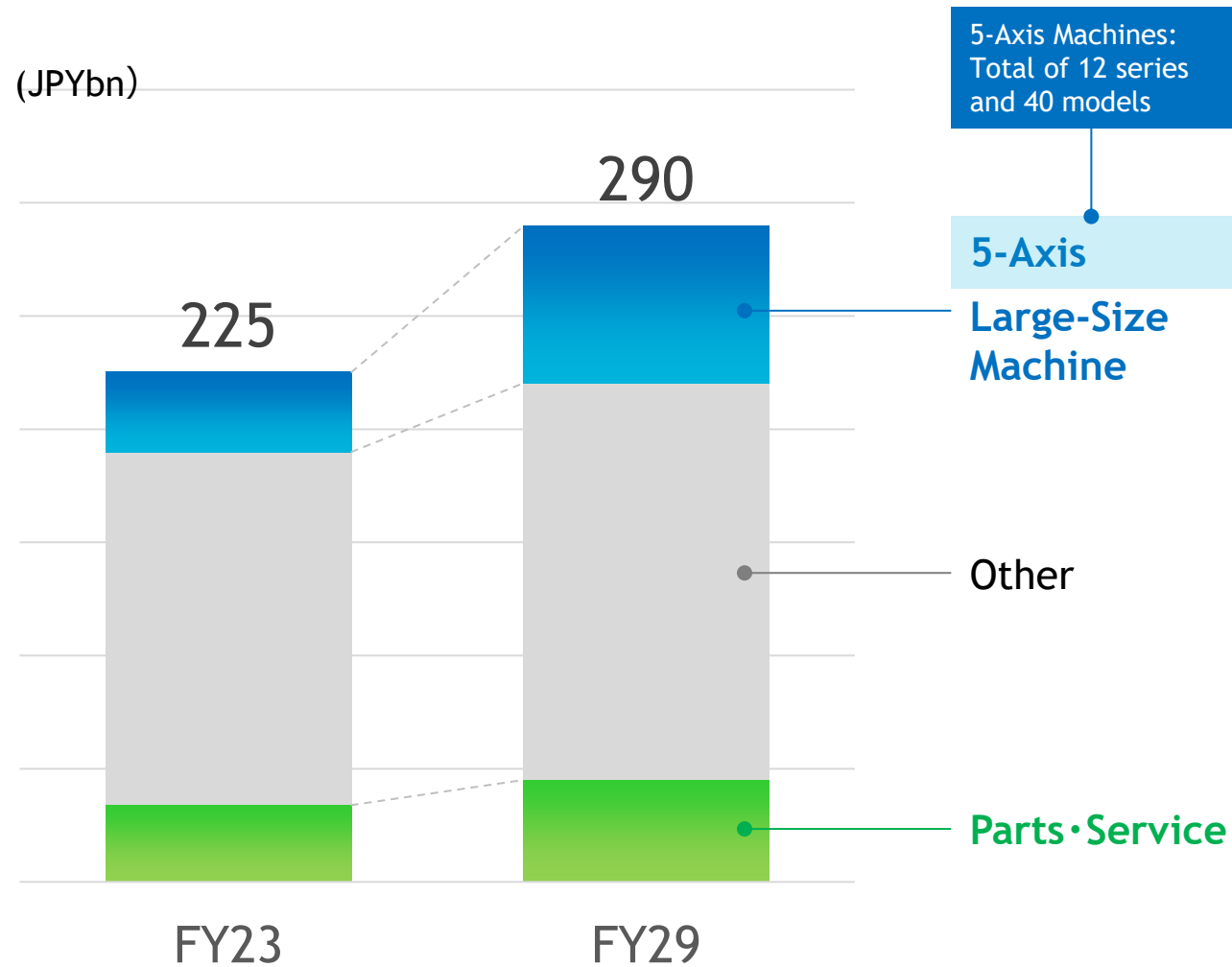
Sales Target (By Product)



Profitability



5-Axis Machines and Large-Size Machines are driving Sales Growth



Note: As of FY23, 5-axis machines consist of a total of 11 series and 26 models.



Profitability

- Timely launch of new products into growth markets
- Increase in sales unit price through expansion of large-size machines and 5-axis machines
- Proposal with combinations of our unique technologies (machines, automation equipment, software, etc)
- Reduction in new model launch lead time through the implementation of a new PLM
- Introduction of modular production methods for large-size machines and EDM



Asset Efficiency

- Actively investing in manufacturing and human capital to improve production efficiency
- Reduction of investment securities, etc
- Aiming for a CCC* of 165 days or less through inventory optimization and operational improvements

* CCC: Cash Conversion Cycle



Shareholder Returns

- Stable and consistent dividend payments
 - Flexible share buybacks
- ▶ Total Payout Ratio: 60%



Sustainability

- Address climate change
- Enhancement of human capital investment



Climate Changes

- Shift to EVs in the automotive industry
- Promotion of renewable energy
- Shift to energy-saving equipment



Digital Technology

- Changes in workstyle due to the emergence of generative AI
- Emergence of new services
- Advancement of sensor and IoT technologies



Demographic Changes

- Shrinking workforce due to declining birthrate and aging population in Japan
- Changes in the consumption (Increase in demand for medical services)
- Necessity to maintain and improve manufacturing capacity



Technological Innovations

- New materials (silicon carbide (SiC), difficult-to-cut materials, etc.)
- Manufacturing process re-engineering (EVs, power semiconductors, etc.)
- Cost reduction to improve product competitiveness



Geopolitical Tensions

- Rebuilding of supply chains
- Relocation of manufacturing sites
- Increased tariffs, transportation, and energy costs



Business Sustainability

- Enhancement and review of supply chains
- Strengthening of backup systems (data centers, etc.)
- Enhanced succession of technologies

Productivity Improvement × Automation Systems

Through continuous long-hour operations enabled by various automation systems, on-site personnel can focus on tasks that require uniquely human skills, thereby achieving improved productivity. Additionally, we provide diverse automation solutions tailored to customer needs, ranging from standalone machines to pallet transport systems and mobile robots.

e.g. Pallet transfer system and Shopfloor Management System MAS-NX (software)

Automation through systems (PZ1) + software + engineering



◀ Automation is achieved not only in transportation systems but also in engineering.

▼ The system is also used as an in-house processing system (a900Z x pallet transfer system at Atsugi Plant)



▼ a900Z 5-axis horizontal MC



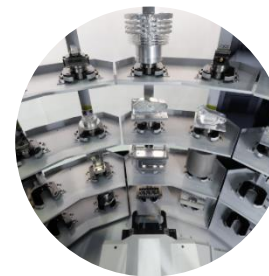
e.g. iAssist manufacturing support mobile robots



◀ iAssist is an autonomous guided vehicle that allows the automation of work processes with minimal changes in equipment for manufacturing worksites.



e.g. DA300 automation package (5-axis vertical MC)



▲ Work stocker for continuous operation



◀ Proposals for automation can be made not only based on large-scale systems but also using standalone cells



Gigacasting × Large-Size machines

The demand for large and ultra-large molds, such as gigacastings, is increasing due to advances in automotive technology and design evolution. We provide total solutions tailored to customers' processes, from cutting to EDM machining

e.g. Products that address large die casting needs



Machining



5-axis control
Machining Center
(D2)



Sinker EDM



Large-Size
Sinker EDM
(EDNC series)



Wire EDM



Large-Size
Wire EDM
(U1310)



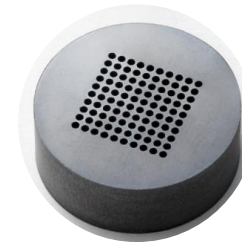
Power semiconductors × Laser/SMART TOOL

With the growing demand for power semiconductors, including those used in EVs, we support our customers in achieving high productivity in areas such as brittle material machining and component processing for semiconductor manufacturing equipment. This is made possible through our range of products, including Laser Machines and SMART TOOL solutions.

e.g. Laser machines (LB500)

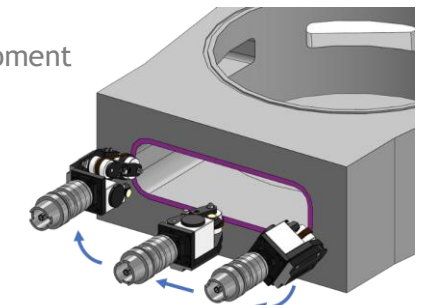
- Hole drilling and shaping of silicon carbide and other brittle materials
- Cutting of silicon wafers and other thin materials

SiC sample work ▶



e.g. SMART TOOL (Belt track finisher)

Solution for semiconductor manufacturing equipment

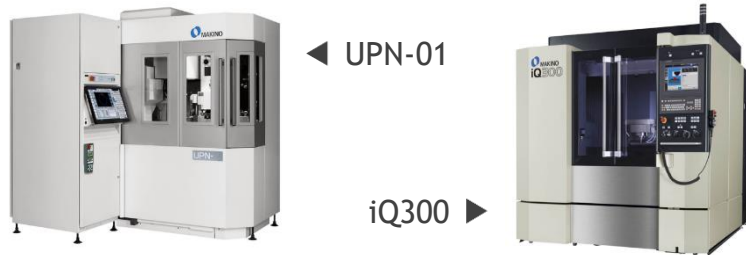




AI (data centers) × Ultra-precision machines

With the rapid expansion of data center demand driven by the proliferation of cloud services and generative AI, the need for high-precision connectors for high-speed communication is also increasing. To meet the rising demand for molds required in their production, we deliver ultra-precision and exceptional productivity through our ultra-precision machines.

e.g. Ultra-precision wire EDM (UPN-01) (Left)
Ultra-precision machining center (iQ300) (Right)



Aerospace / Energy × Machines for difficult-to-cut materials

Demand for power generation and other energy-related applications has been growing due to the increased need for data centers to power generative AI and the popularization of EVs, etc. Gas turbines in particular present challenges, as many of their components are made of materials that are not easy to process, such as heat-resistant alloys. Our machining centers and EDMs for difficult-to-cut materials help our customers address these challenges and improve productivity

e.g. Machining center for difficult-to-cut materials (T1)

- A 5-axle control horizontal machining center that can be used to process difficult-to-cut materials such as titanium alloy, Inconel, and stainless steel



e.g. Hole-Drilling EDM (BX3)

- Pipe electrodes enable high-speed processing of the cooling holes in gas turbine engines blades, among other applications



Expansion of the Product



Timely Development of New Products that Help Customers Overcome their Challenges

■ Japanese Products
■ Asian Products

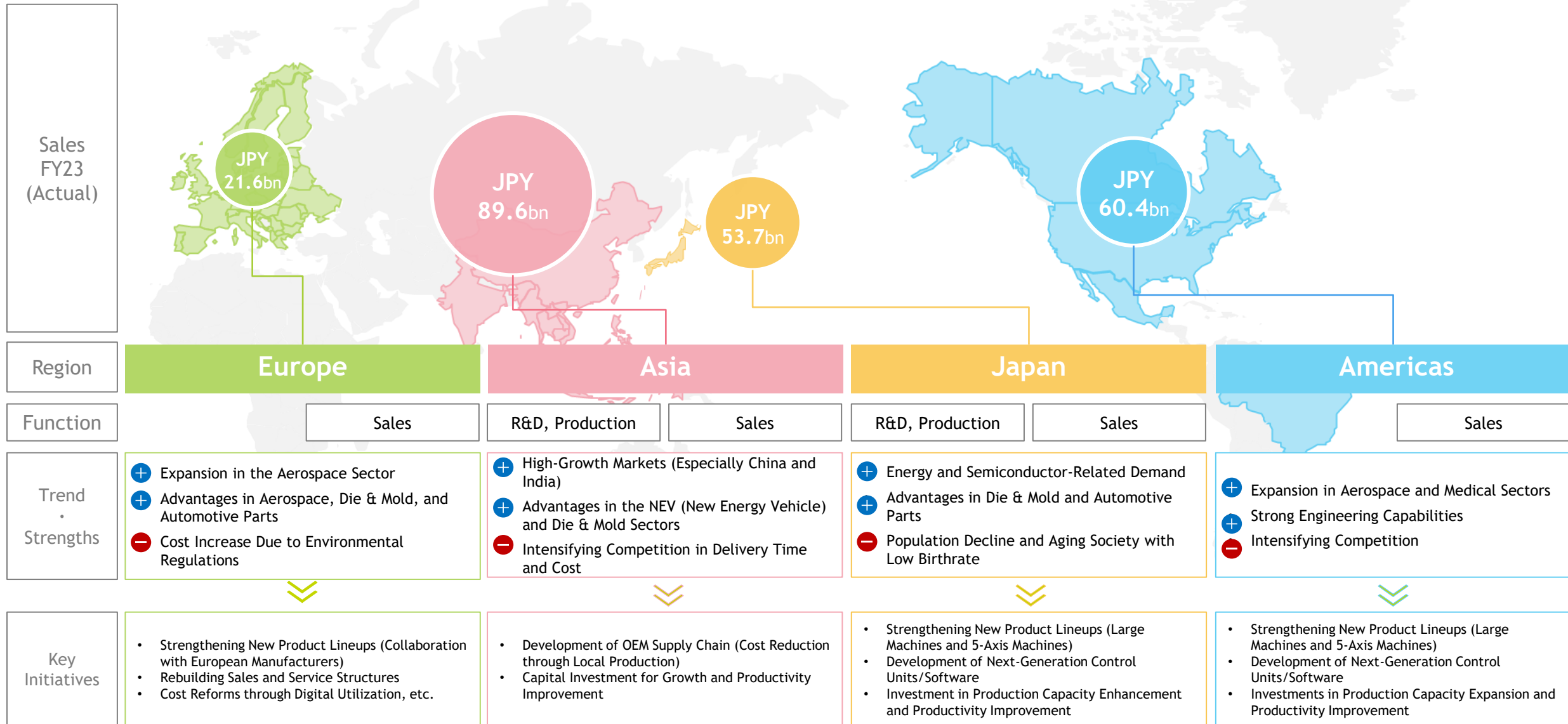
		2020 - 2024			2025 - 2029		
Machining Center (MC)	Sm. Med.	Horizontal MC JA6	Vertical MC V300	Vertical MC Slim8n	New machine Horizontal MC	New machine Horizontal MC	
	Lg.	Horizontal MC a91nx	Vertical MC PS155	Vertical MC V900	New machine Vertical MC		
	5-axis	Sm. Med.	5-axis vertical MC DA300 Automation PKG	5-axis vertical MC DA500	5-axis horizontal MC a500iR	New machine Small-Size 5-axis MC	
		Lg.	5-axis horizontal MC a800Z	5-axis vertical MC V1005	5-axis horizontal MC a900Z	5-axis horizontal MC MAG4	New machine Large-Size 5-axis MC
Electrical Discharge Machine (EDM)	Laser Machine	Large-Size Sinker EDM EDNC22	Laser machine LB300/LB500	Hole-Drilling EDM EDBV3*	New machine Wire/ Sinker EDM		
Automation Software	SMART TOOL	SMART TOOL Rapid Calibrator	SMART TOOL Belt track finisher	Automatic pallet transfer system PZ1/PZ2	SMART TOOL Flush set mill	Operation software for the pallet transfer system MAS-NX	
					Next-Generation Control Unit	Next-Generation Automation Software	

Challenge

Trends

Launch new products that address challenges based on the needs of the times and customer requests

Developing Strategies Leveraging our Strengths in Each Segment



Regional Strategy in China and India

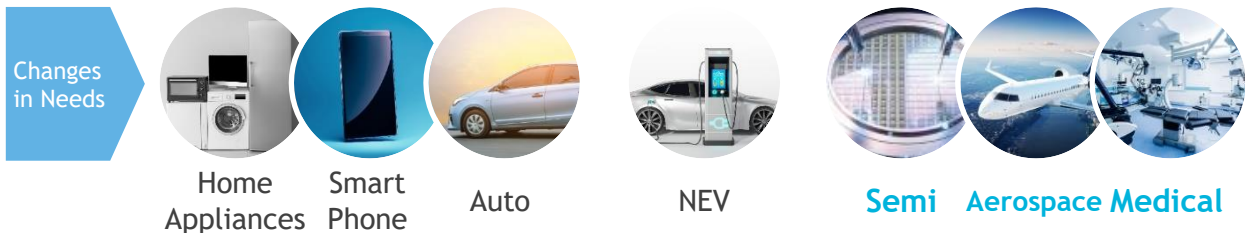
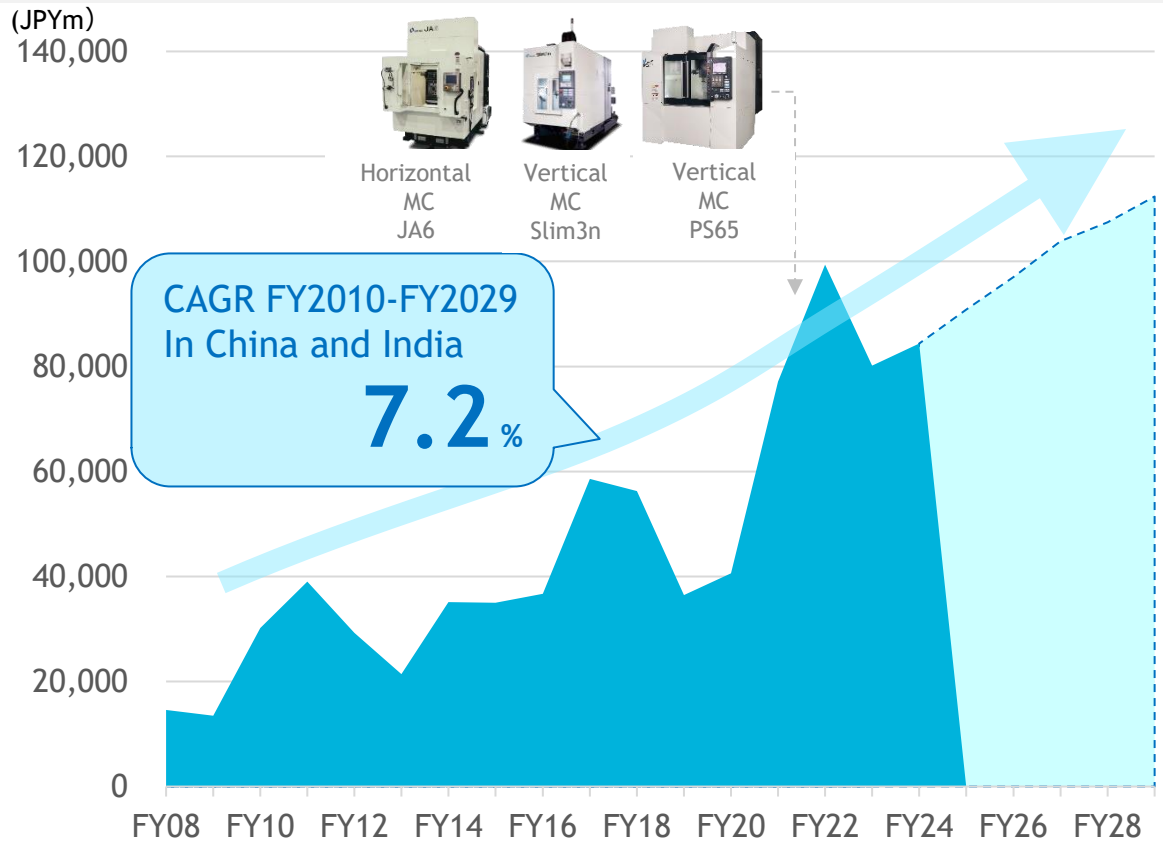
 Asset Efficiency

 Profitability

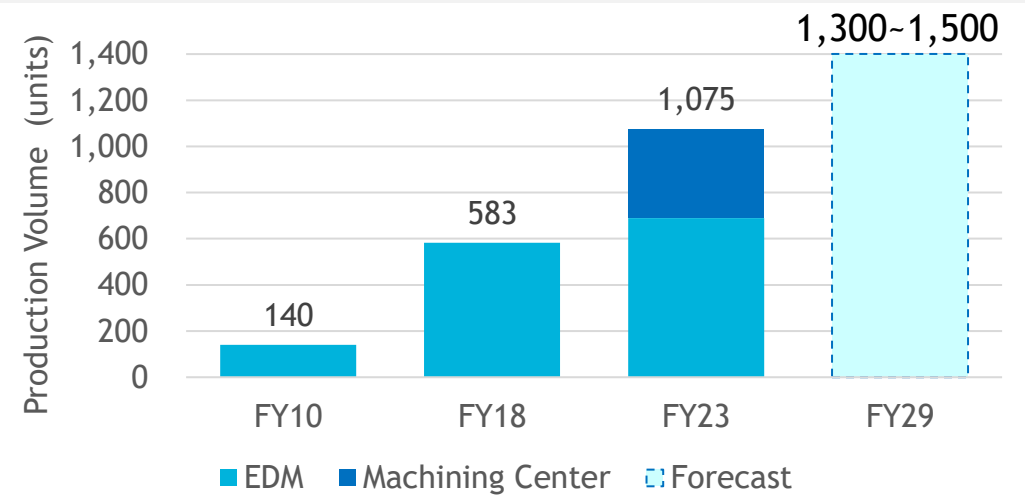


Introducing New Products and Strengthening Services to Respond Swiftly to Changing Customer Needs

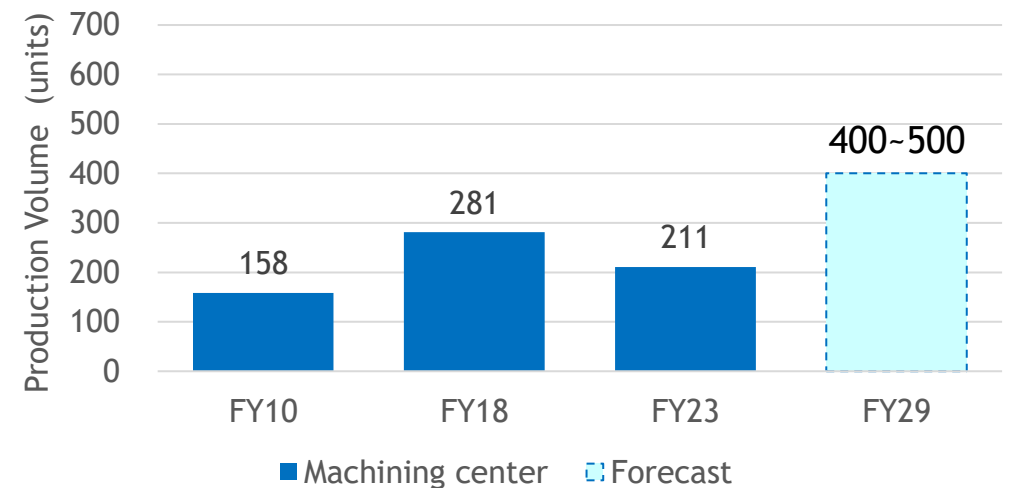
Sales in China and India



Local Production Output in China



Local Production Output in India

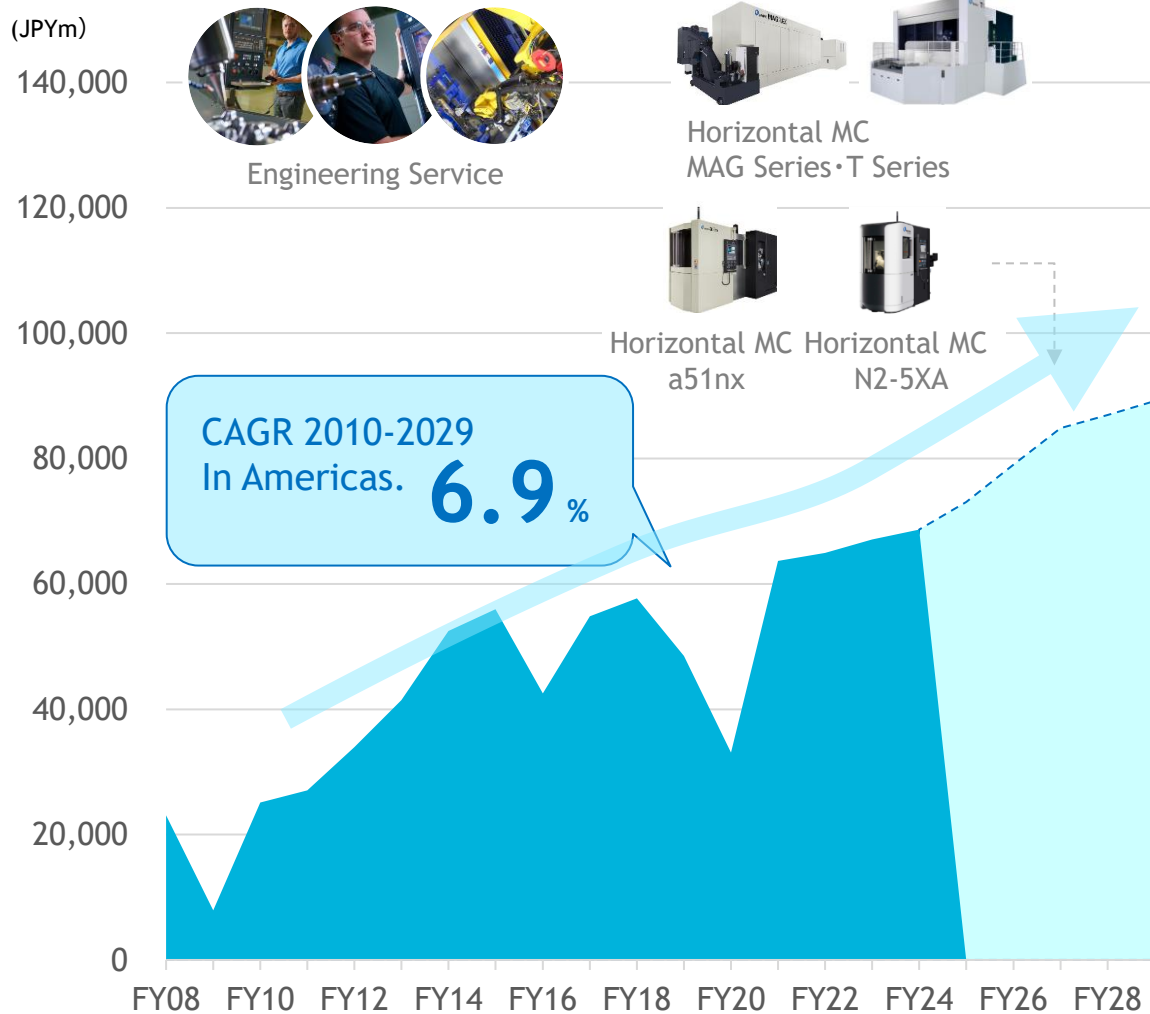


Regional Strategy in Americas



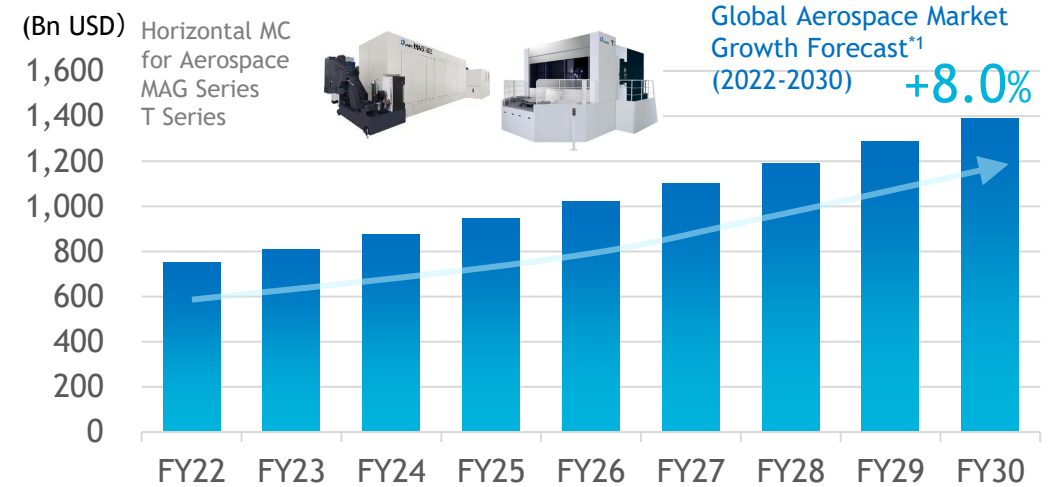
Further Sales Expansion in Growth Markets including Aerospace and Medical Sectors

Sales in Americas

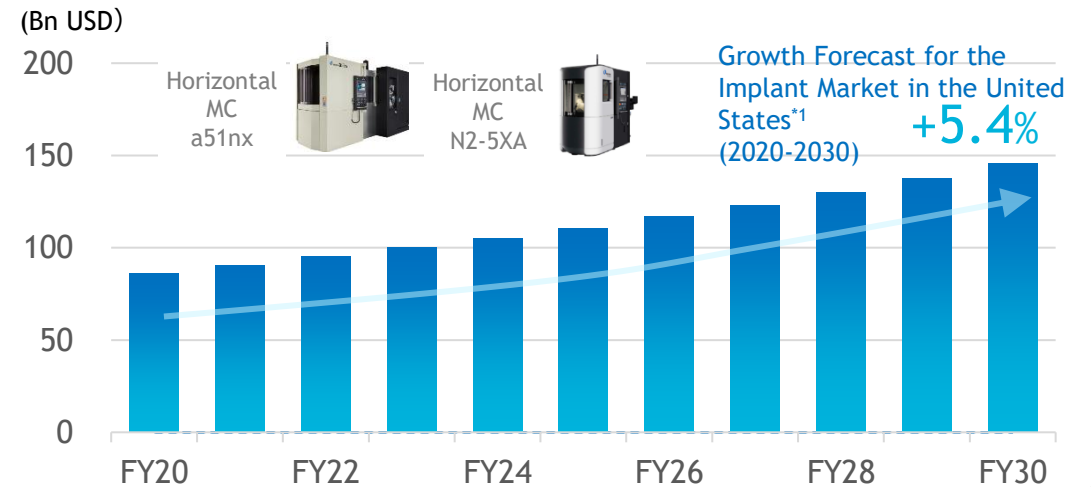


1: Our estimation

Global Growth Forecast for the Aerospace Market



Forecast for the Medical (Implant) Market in the United States



Capital Investment Plan




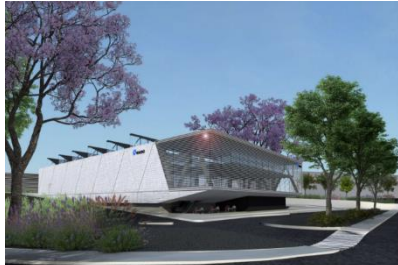



Asset Efficiency



Profitability



Improving Productivity through Strengthening Sales, Production and Service Functions

	Kunshan, China	Queretaro, Mexico	Hanoi, Vietnam	Fuji Yoshida, Japan	Asia/Japan
Completion Schedule	FY25	FY25	FY25	FY26	5-Year Cumulative Total (FY25-29)
Detail	Renovation of Factory	Establishment of Factory	Establishment of Factory	Facility Expansion	Renovation and New Construction
	Assembly Plant Logistics Warehouse	Technical Center	Assembly Plant (Unit, Equipment)	Assembly Plant Logistics Warehouse	Machining Equipment
CapEx	26 M-SGD	11.5 M-USD	23 M-SGD	27 bn-JPY	8 bn-JPY
Purpose	<ul style="list-style-type: none"> Responding to the Demand for Large Machines and Improving Logistics Efficiency 	<ul style="list-style-type: none"> Enhancing Sales, Service, and Engineering Capabilities 	<ul style="list-style-type: none"> Cost Reduction 	<ul style="list-style-type: none"> Responding to the Demand for Large Machines and Improving Logistics Efficiency 	<ul style="list-style-type: none"> Labor Saving and In-House Production
Completion Image					

Production Capacity

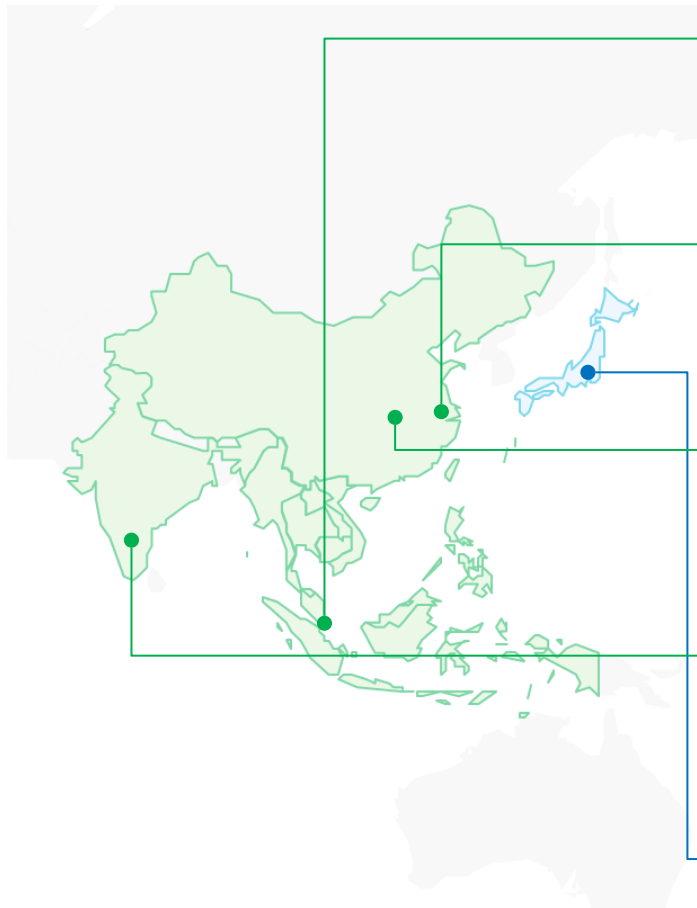
















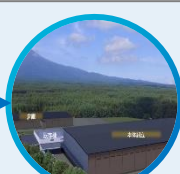

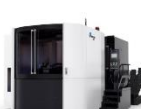


Profitability



Enhancing Global Capacity by 15% through Investment and Productivity Improvement

Production Bases in Japan and Asia



Country / Plant	Key Products	(Unit) FY2023	(Unit) FY2029	Increase
 Singapore 	 MC  EDM  Laser(AM)	1,200	▶ 1,300	+100 (+8%)
 Kunshan, China 	 EDM	1,100	▶ 1,300	+200 (+18%)
 Wuhan, China 	 MC	600	▶ 750	+150 (+25%)
 India 	 MC	600	▶ 600	—
 Japan 	 MC  EDM  Laser	3,300	▶ 3,900	+600 (+18%)

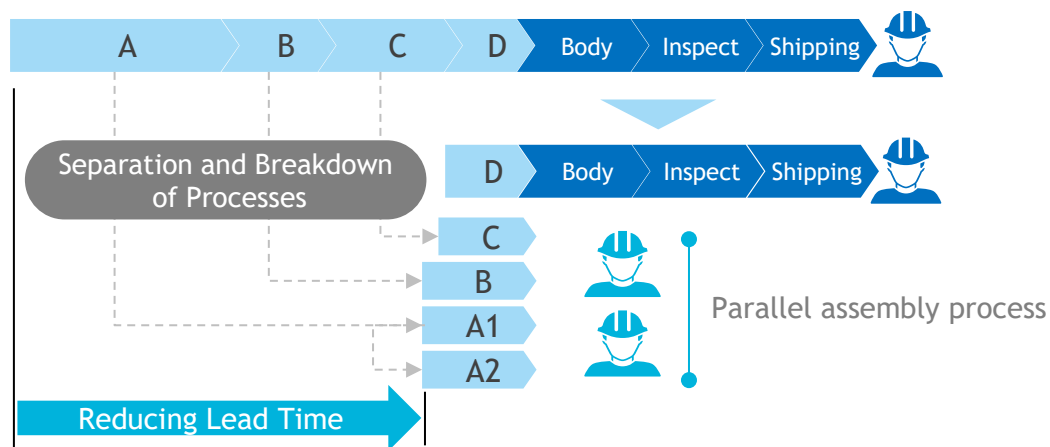
Profitability Improvement × Reduction of Lead Times / Factory Automation

Aiming of “Achieving Both Quality and Productivity” we will work on improving production processes to accommodate diversifying products and specifications.

Assembly Lead Time Reduction by Modular Production Concept

By fundamentally revising the product assembly method, we are transitioning from a comprehensive production method relying on **skilled workers** to a **modular production method** that assigns personnel based on the required skill level for each task. This will enable us to **shorten the overall lead time of the assembly process**. Additionally, through systematic training of workers, we aim to improve work quality and strengthen our ability to respond to products portfolio expansion.

e.g. Assembly Lead Time Reduction by 1/2 with Paralleled process



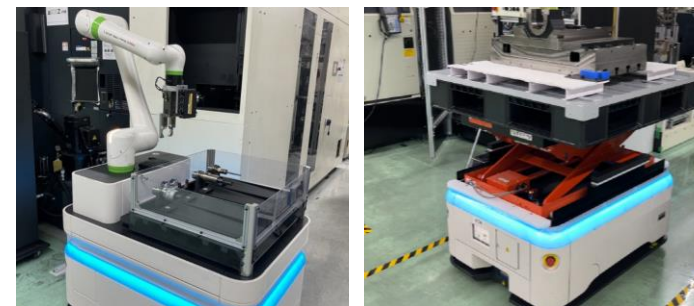
1: M/M ratio=Machine/Man

Automating Pre- and Post-Processes to Improve Shop Floor Efficiency

To enhance the in-house production and to reduce costs, we are advancing automation of pre- and post- machining operations by **introducing the latest hardware and software**. We are also working toward long-unmanned operation of equipment and workforce reduction at machining sites.

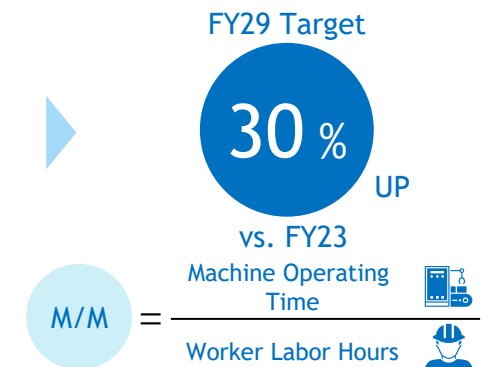
In addition, we are aiming for a balance between **improving the productivity of equipment and people, lead time and cost reduction in the overall machining process** through day-to-day “Kaizen” activities.

e.g. Utilizing in-house AGVs for tool/workpiece exchange and transport to improve the M/M ratio^{*1} of Automated lines.

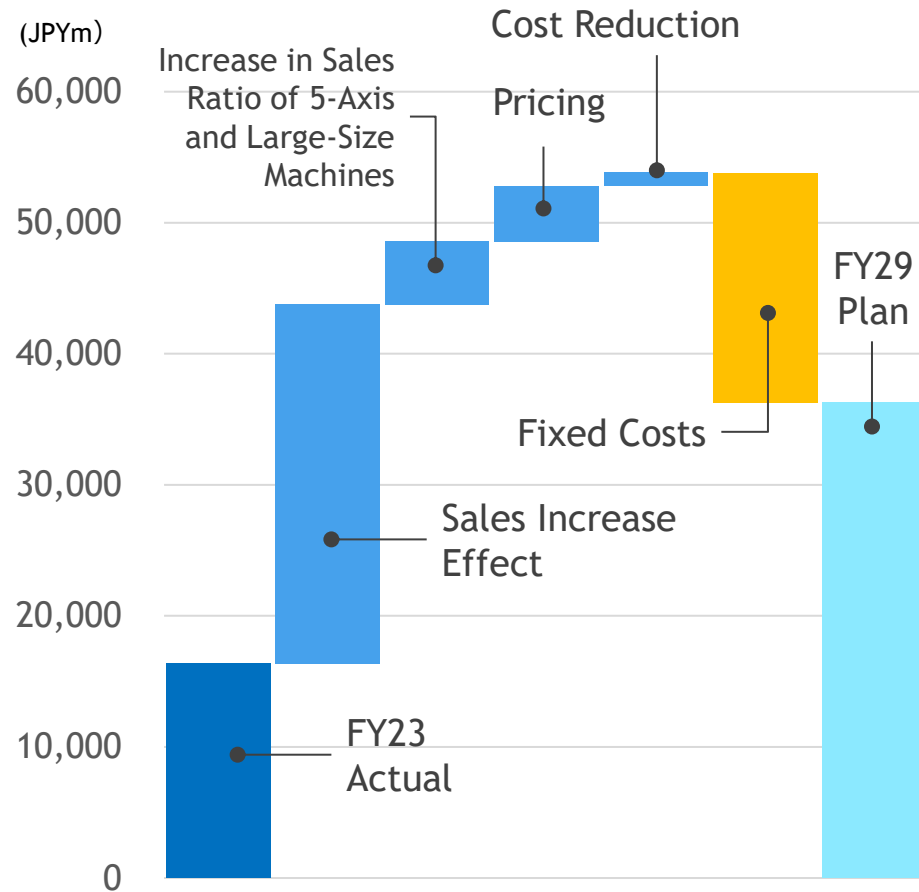


AGV for Tool Change and Transportation AGV for Material Transportation

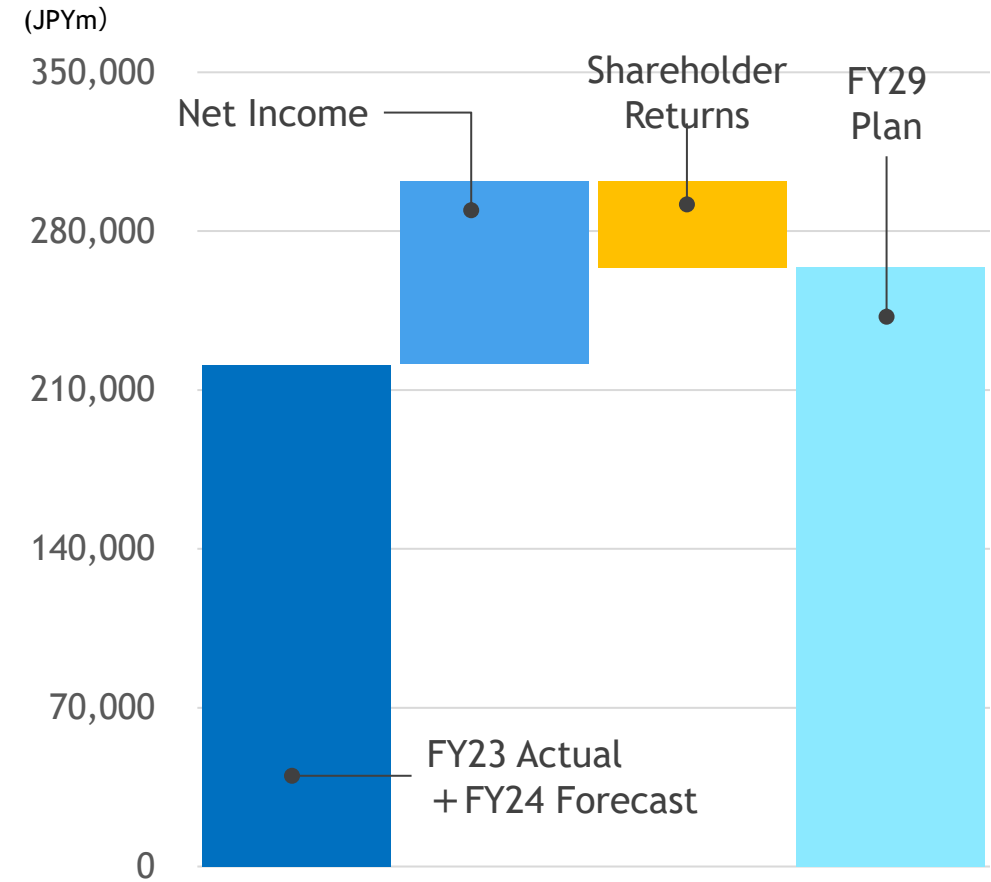
M/M ratio Improvement



Change in Operating Income (R)

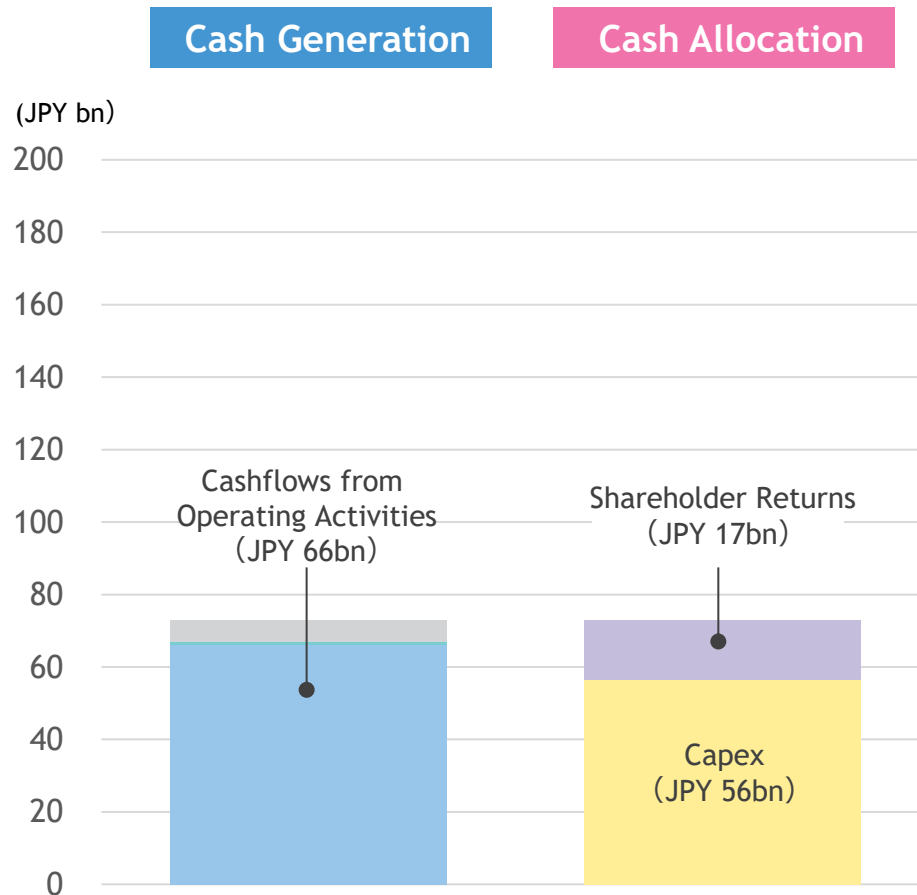


Change in Shareholders' Equity (E)

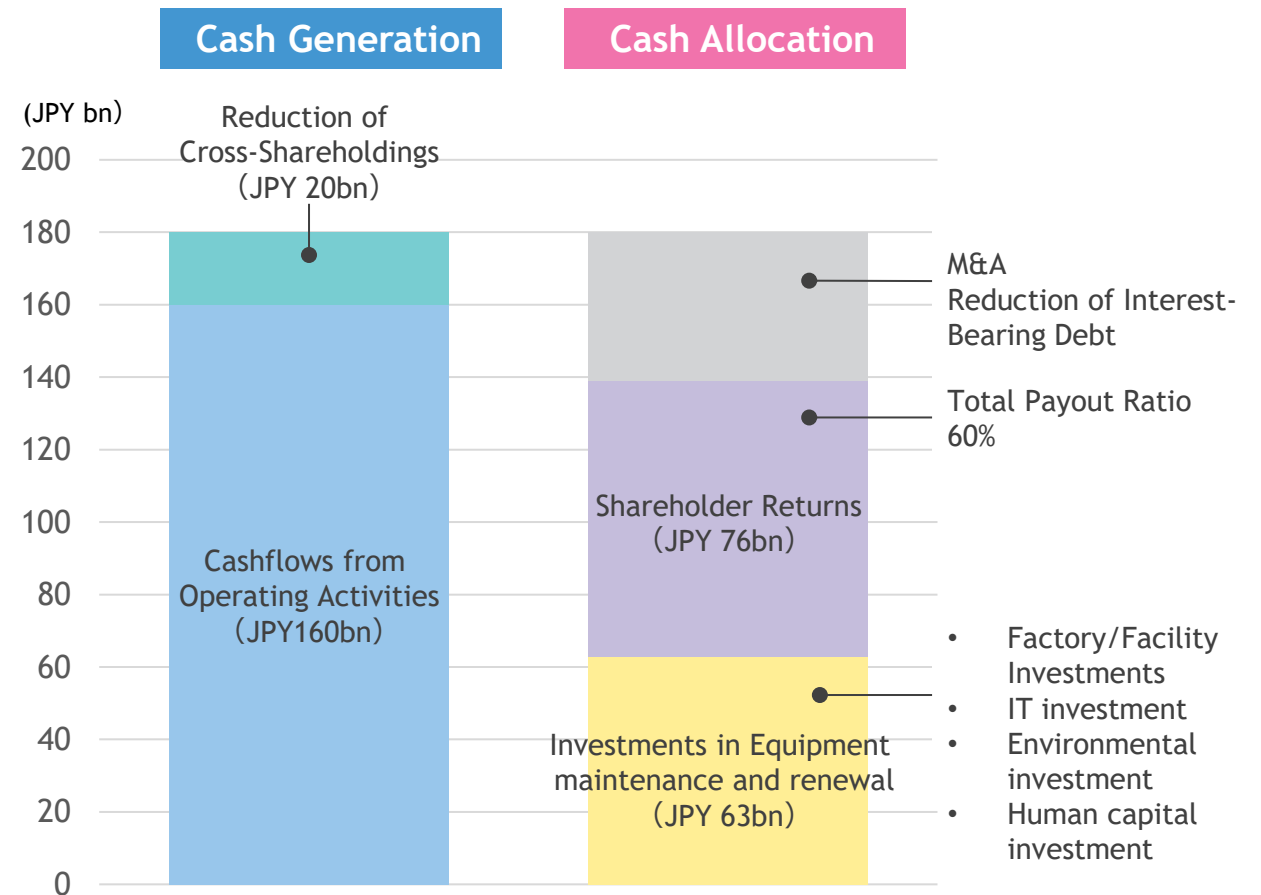


Cash Allocation Plan

FY20-24 (Forecast)



FY25-29 (Plan)

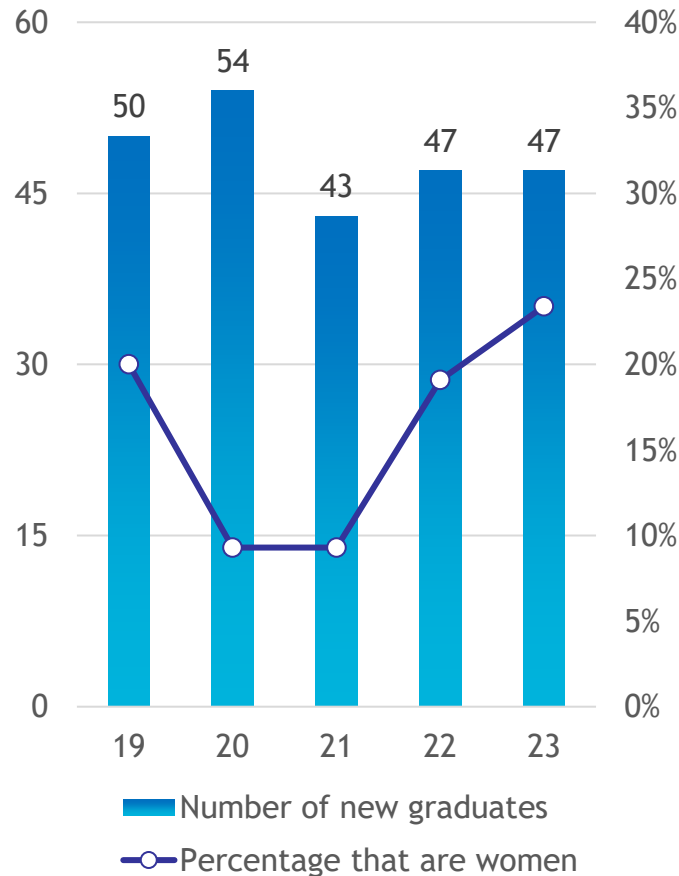


Enhancement of Human Capital Investment

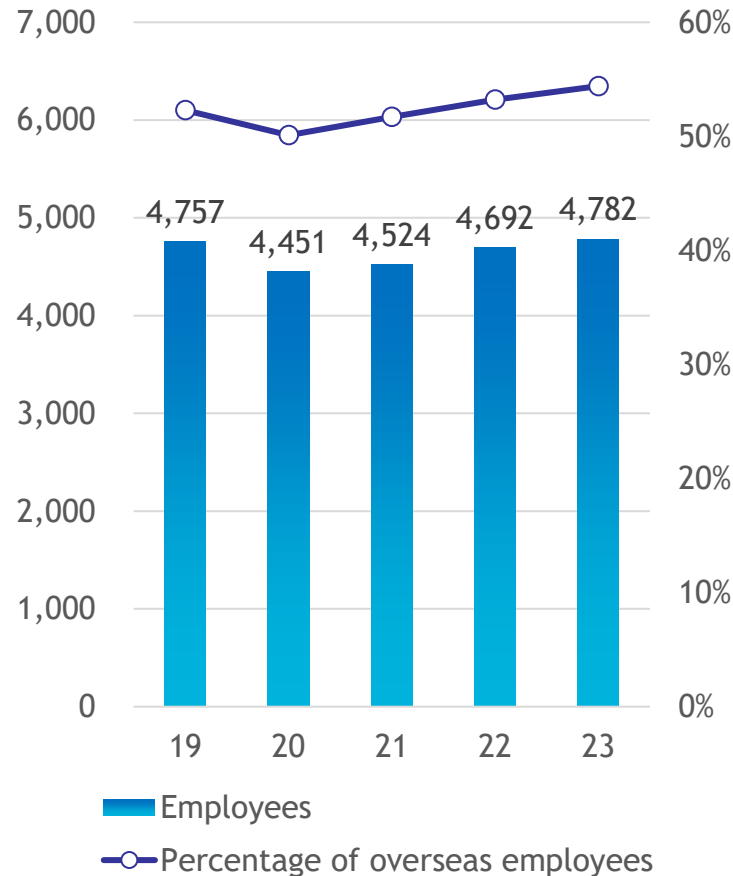
Unique Ideas Generated by Diverse Talent Serving as Driving Force for Growth

Recruitment of Diverse Talent

Number of new graduates hired/Percentage that are women (Group companies in Japan)



Employees/percentage of overseas employees (consolidated)



➔ Diversity

Singapore, where Makino Asia is headquartered, is a cosmopolitan and diverse city with a variety of people of Chinese and Indian descent. With roots in such an international hub for over 50 years, Makino Asia has fostered a climate of acceptance of all races and cultures. The Singapore site employs approximately 600 people of about 20 different nationalities from not only Southeast Asia, but also Japan, South Korea, China, India, Germany, Switzerland, Italy, and other countries. We will continue to position diversity as part of our corporate culture and hire talented people regardless of nationality in order to achieve sustainable growth as a company.



Unique Ideas Generated by Diverse Talent Serving as Driving Force for Growth

Education/Training

We are working to enhance our education programs based on our human resource development policies. We provide growth opportunities for all levels of employees and encourage the drawing up of personalized career plans. In order to accelerate the development of employee skills, in 2021 we established an in-house university called MAKINO Business Academy. We provide various other learning opportunities, too, such as level-based training, joint research in collaboration with universities, and support for obtaining degrees. In addition, we are creating an environment where employees can proactively design their careers through regular career interviews and an internal recruitment system.



► Growth Support System Examples

Level-based Training

Academic support for personal development

Support for the acquisition of doctoral and other degrees

In-house university: "MAKINO Business Academy"

Contribution to the Local Community

➔ Makino Technical Training Center

In 2006, Makino established a fully residential vocational training school in Bangalore, India. The school recruit students from across India and provides them with stipends while they learn about operating machine tools and gain general education. Many graduates go on to work for various Indian companies, contributing significantly to the country's industrial development.



➔ Makino Park (Mason, Ohio, USA)

In Mason, Ohio, a key business hub in the Americas, we have contributed to regional development by providing funding to establish a community park open to the public.



Tackling Climate Change

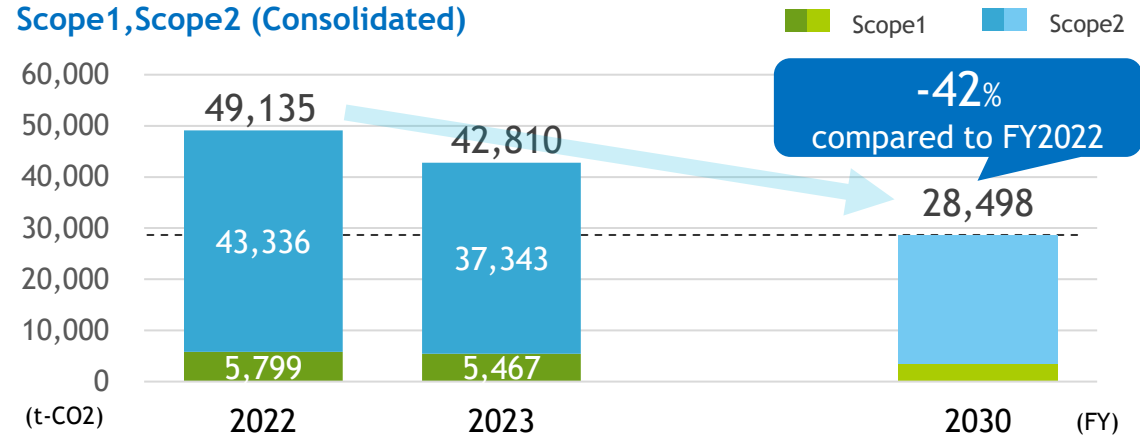
Contributing to Carbon Neutrality by Creating and Providing Machine Tools with Superior Environmental Performance

Long-term Greenhouse Gas Emission Reduction Targets

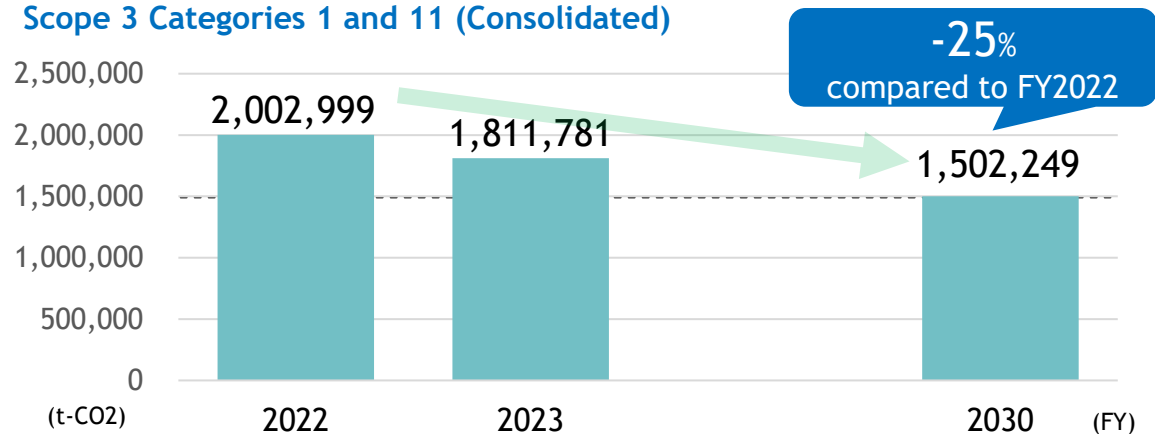
Achieving carbon neutrality by 2050 in Scope 1 and Scope 2.

Mid-term Greenhouse Gas Emission Reduction Targets

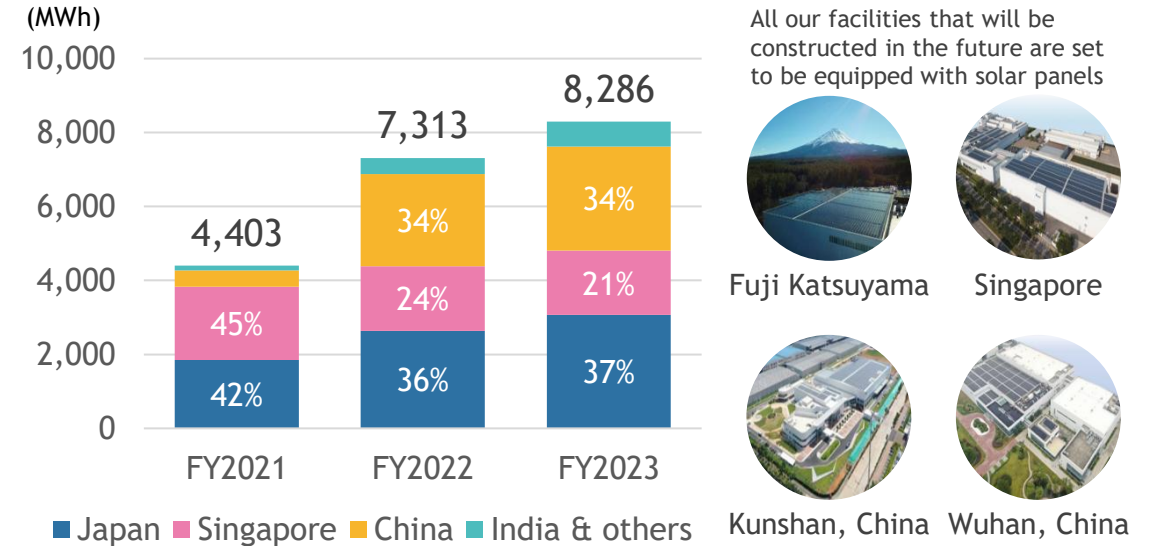
Scope 1, Scope 2 (Consolidated)



Scope 3 Categories 1 and 11 (Consolidated)



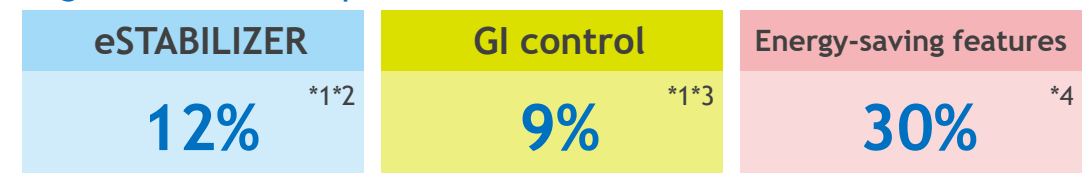
Solar power generation at each location (consolidated)



Development of Environment-Friendly Products and Technologies

Promoting product development that achieves high productivity and energy efficiency.

e.g. Power consumption reduction rate



Note: *1 Compared with 2013 *2 Reduction rates differ depending on machine installation environment and size *3 Reduction rates differ depending on processing program *4 Reduction rates differ depending on machine type and usage conditions

Summary of Business Plan



For Enhancement of Corporate Value, all Makino members will work together

KPI	FY23 Actual		FY29 Target	Key Initiatives
1 Sales (JPY)	225.3 _{bn}	»	290.0 _{bn}	<ul style="list-style-type: none"> Timely launch of new products in growth markets Increase in sales unit price through the expansion of large-size machines and 5-axis machines
2 OP Margin	7.3%	»	12.5%	<ul style="list-style-type: none"> Proposal with combinations of our unique technologies (machines, automation equipment, software, etc) Reduction in new model launch lead time through the implementation of a new PLM
3 Capex (JPY)	43.5 _{bn} (FY19-23 Actual)	»	63.0 _{bn} (Total for FY25-29)	<ul style="list-style-type: none"> Enhancement and Efficiency of Production Capacity (Automation) Development of new products and enhancement of sales and service functions
4 ROE	7.6%	»	11.3%	<ul style="list-style-type: none"> Profitability Enhancement Enhanced Shareholder Returns
5 Asset Turnover	0.63	»	0.72	<ul style="list-style-type: none"> Inventory Optimization and Operational Improvements Reduction of investment securities, etc.
6 Total Payout Ratio	34% (FY19-23 Actual)	»	60% (FY25-29 Average)	<ul style="list-style-type: none"> Stable and Sustainable Dividend Policy Implementation of Flexible Share Buybacks



Quality First

Trust is the foundation of a company's existence.

Makino pursues “**Quality First**” in all of its products and services, as well as in its own organization and employees, with a strong belief in mutual trust among everyone involved in building, selling and using Makino products.





Thank you